

Cleco[®]
Production Tools

ZAMPINI
INDUSTRIAL GROUP

**2019 Zampini Industrial
Cleco Product Catalog**
AirToolPro.com
1-800-353-4676



Manufacturing and delivering world-class assembly solutions for over 120 years.



Founded in 1894 as Cleveland Pneumatic Tool Company in Cleveland, Ohio.

Since inception, Cleco has grown to become a global manufacturing solutions provider, headquartered in the United States, with locations across North America, Europe and Asia. As our product offerings expanded globally, we transitioned trusted and recognized brands for fixtured assembly solutions (DGD) and material removal and drilling (Master Power, Recoules Quackenbush and Dotco) to our Cleco Production Tools brand umbrella. Combining our brands enhances our extensive history as a solutions provider, while providing clarity and an improved experience for our customers.

Cleco Production Tools is more than just a tool company. We are a global support partner focused on building long-term relationships with our customers.

Our mission is to be a solution-driven partner that consistently turns obstacles into opportunities. We deliver smart tool solutions for every industrial and manufacturing challenge.

Throughout our over 120-year history, we have provided innovative tool solutions for the following industries:

- Automotive
- Aerospace
- Appliances, Electronics & Industrial Assembly
- Agriculture & Off-Road
- Oil, Gas & Petrochemical

Impact Wrenches

MP Series - Impacting Drivers

Smooth and efficient impacting mechanism creates no reaction for the operator

- Smooth and efficient impacting mechanism creates no reaction for the operator
- One-hand forward reverse switch
- Rugged metal housing and components outlasts the competition
- Efficient and balanced design maximizes accessibility while minimizing operator fatigue



| MODEL | TORQUE RANGE MAX | | BLOWS PER MINUTE | FREE SPEED | AIR CON-SUMPTION | WEIGHT | DRIVE SIZE | DRIVE TYPE | AIR INLET SIZE |
|---------|------------------|-----|------------------|------------|------------------|--------|------------|-------------------|----------------|
| | FT LB | NM | | R/MIN | SCFM | LB | IN | | IN |
| MP2264B | 111 | 150 | 2000 | 10000 | 33.0 | 2.16 | 1/4" | HEX QUICK CHANGE | 1/4 |
| MP2265B | 111 | 150 | 2000 | 10000 | 33.0 | 2.16 | 3/8" | PIN-DETENT SQUARE | 1/4 |

MP Series - Inline Impacting Driver

Smooth and efficient impacting mechanism creates no reaction for the operator

- Smooth and efficient impacting mechanism creates no reaction for the operator
- One-hand forward reverse switch
- Rugged metal housing and components outlasts the competition
- Efficient and balanced design maximizes accessibility while minimizing operator fatigue



Impact Wrenches

| MODEL | TORQUE RANGE MAX | | BLOWS PER MINUTE | FREE SPEED | AIR CON-SUMPTION | WEIGHT | DRIVE SIZE | DRIVE TYPE | AIR INLET SIZE |
|--------|------------------|------|------------------|------------|------------------|--------|------------|------------|----------------|
| | FT LB | NM | | R/MIN | SCFM | LB | IN | | IN |
| MP2271 | 65 | 88.1 | 900 | 10500 | 22.0 | 2.20 | 3/8" | SQUARE | 1/4 |

Impact Wrenches

CV Composite Series - Impact Wrench

Excellent combination of performance, comfort, and value



- Excellent combination of performance, comfort, and value
- Powerful twin hammer mechanism
- Variable speed trigger
- Light-weight and ergonomically balanced
- Ideal for general industrial production, maintenance, and overhaul

| MODEL | TORQUE RANGE MAX | | BREAKAWAY TORQUE | BLOWS PER MINUTE | FREE SPEED | AIR CON-SUMPTION | WEIGHT | DRIVE SIZE | DRIVE TYPE | AIR INLET SIZE |
|-----------|------------------|-------|------------------|------------------|------------|------------------|--------|------------|-----------------------|----------------|
| | FT LB | NM | FT LB | | R/MIN | SCFM | LB | IN | | IN |
| CV-375P | 420 | 569.4 | 511 | 1600 | 8000 | 32.0 | 2.91 | 3/8" | PIN ANVIL OR PIN HOLE | 1/4 |
| CV-375R | 420 | 569.4 | 511 | 1600 | 8000 | 32.0 | 2.91 | 3/8" | RETAINING RING | 1/4 |
| CV-500P | 780 | 1058 | 1100 | 1200 | 8500 | 40.5 | 4.8 | 1/2" | PIN ANVIL OR PIN HOLE | 1/4 |
| CV-500R | 780 | 1058 | 1100 | 1200 | 8500 | 40.5 | 4.8 | 1/2" | RETAINING RING | 1/4 |
| CV-750P | 1300 | 1763 | 1501 | 1000 | 5500 | 64 | 8.2 | 3/4" | PIN ANVIL OR PIN HOLE | 3/8 |
| CV-750P-8 | 1300 | 1763 | 1501 | 1000 | 5500 | 64 | 8.3 | 1" | PIN ANVIL OR PIN HOLE | 3/8 |

CWC Premium Composite Series - Impact Wrench

Ultimate combination of power, durability, and features



- Ultimate combination of power, durability, and features
- Triple heat treated twin hammer mechanism
- Variable speed trigger
- User-preferred one-hand direction control
- Ideal for heavy industries and fast-paced production environments

| MODEL | TORQUE RANGE MAX | | BREAKAWAY TORQUE | BLOWS PER MINUTE | FREE SPEED | AIR CON-SUMPTION | WEIGHT | DRIVE SIZE | DRIVE TYPE | AIR INLET SIZE |
|------------|------------------|------|------------------|------------------|------------|------------------|--------|------------|-----------------------|----------------|
| | FT LB | NM | FT LB | | R/MIN | SCFM | LB | IN | | IN |
| CWC-250QC | 50 | 68 | 75 | 1200 | 13000 | 19.5 | 1.90 | 1/4" | QUICK CHANGE | 1/4 |
| CWC-250R | 50 | 68 | 75 | 1200 | 13000 | 19.5 | 1.90 | 1/4" | RETAINING RING | 1/4 |
| CWC-375P | 450 | 610 | 550 | 1600 | 10000 | 37.5 | 2.91 | 3/8" | PIN ANVIL OR PIN HOLE | 1/4 |
| CWC-375R | 450 | 610 | 550 | 1600 | 10000 | 37.5 | 2.91 | 3/8" | RETAINING RING | 1/4 |
| CWC-375R-4 | 450 | 610 | 550 | 1600 | 10000 | 37.5 | 2.91 | 1/2" | RETAINING RING | 1/4 |
| CWC-500P | 800 | 1085 | 1180 | 1250 | 8000 | 40.5 | 4.41 | 1/2" | PIN ANVIL OR PIN HOLE | 1/4 |
| CWC-500R | 800 | 1085 | 1180 | 1250 | 8000 | 40.5 | 4.41 | 1/2" | RETAINING RING | 1/4 |
| CWC-750P | 1401 | 1898 | 1800 | 1200 | 6500 | 69 | 7.6 | 3/4" | PIN ANVIL OR PIN HOLE | 3/8 |

Impact Wrenches

CWM Metal Housing Series - Impact Wrench

Engineered to outperform the competition in the harshest environments

- Engineered to outperform the competition in the harshest environments
- Triple heat treated twin hammer mechanism
- Variable speed trigger
- Durable all-metal housing
- Ideal for heavy industries and demanding environments



| MODEL | TORQUE RANGE MAX | | BREAKAWAY TORQUE | BLOWS PER MINUTE | FREE SPEED | AIR CONSUMPTION | WEIGHT | DRIVE SIZE | DRIVE TYPE | AIR INLET SIZE |
|----------|------------------|------|------------------|------------------|------------|-----------------|--------|------------|-----------------------|----------------|
| | FT LB | NM | FT LB | | R/MIN | SCFM | LB | IN | | IN |
| CWM-375P | 340 | 450 | 450 | 1400 | 12000 | 26.9 | 3.31 | 3/8" | PIN ANVIL OR PIN HOLE | 1/4 |
| CWM-375R | 340 | 450 | 450 | 1400 | 12000 | 26.9 | 3.31 | 3/8" | RETAINING RING | 1/4 |
| CWM-500P | 850 | 1200 | 1201 | 1200 | 9000 | 39.8 | 5.8 | 1/2" | PIN ANVIL OR PIN HOLE | 1/4 |
| CWM-500R | 850 | 1200 | 1201 | 1200 | 9000 | 39.8 | 5.8 | 1/2" | RETAINING RING | 1/4 |
| CWM-750P | 1350 | 2339 | 1726 | 1200 | 6000 | 54 | 10.4 | 3/4" | PIN ANVIL OR PIN HOLE | 3/8 |

WP Metal Housing Series

- Heavy-duty patented telescoping impact mechanism delivers durable performance with minimal reaction to the operator
- Rugged thru-bolt construction eliminates stripped housing threads and expensive repairs
- Positive oil-foam lubrication reduces maintenance and repair costs
- Durable sand casted housing and steel impact housing withstands abusive environments
- Ideal for heavy industries and harsh conditions



| MODEL | TORQUE RANGE MAX | | BREAKAWAY TORQUE | BLOWS PER MINUTE | FREE SPEED | AIR CONSUMPTION | WEIGHT | DRIVE SIZE | DRIVE TYPE | AIR INLET SIZE |
|--------------|------------------|--------|------------------|------------------|------------|-----------------|--------|------------|------------|----------------|
| | FT LB | NM | FT LB | | R/MIN | SCFM | LB | IN | | IN |
| WP-2059-8-6E | 750 | 1016.9 | 1501 | 1000 | 4000 | 60 | 14.2 | 1" | SQUARE | 3/8 |
| WP-2059-8 | 801 | 1084.7 | 1501 | 1000 | 4000 | 60 | 12.1 | 1" | SQUARE | 3/8 |
| WP-2110B-8 | 1651 | 2237.1 | 2502 | 880 | 4600 | 100 | 20.7 | | SQUARE | 1/2 |

Impact Wrenches

WT Metal Housing Series -Impact Wrench

Heavy-duty patented telescoping impact mechanism delivers durable performance with minimal reaction to the operator

- Heavy-duty patented telescoping impact mechanism delivers durable performance with minimal reaction to the operator
- Rugged thru-bolt construction eliminates stripped housing threads and expensive repairs
- Positive oil-foam lubrication reduces maintenance and repair costs
- Durable sand casted housing and steel impact housing withstands abusive environments
- Ideal for heavy industries and harsh conditions



| MODEL | TORQUE RANGE MAX | | BREAKAWAY TORQUE | BLOWS PER MINUTE | FREE SPEED | AIR CONSUMPTION | WEIGHT | DRIVE SIZE | DRIVE TYPE | AIR INLET SIZE |
|------------|------------------|--------|------------------|------------------|------------|-----------------|--------|------------|------------|----------------|
| | FT LB | NM | FT LB | | R/MIN | SCFM | | LB | | IN |
| WT-2109-8 | 1651 | 2237.1 | 2502 | 880 | 4300 | 100 | 21.0 | 1" | SQUARE | 1/2 |
| WT-2119-12 | 2602 | 3525.1 | 3502 | 820 | 3300 | 105 | 29.0 | 1-1/2" | SQUARE | 1/2 |
| WTS-2119 | 2502 | 3389.6 | 3502 | 820 | 3300 | 105 | 29.0 | #5 | SPLINE | 1/2 |

TULMan Electronic Counter

Cycle or Run Time Counter for Small Pneumatic Tools Up to 20cfm / 570 lpm



- First ever odometer and tripometer for small pneumatic tools
- Useable on any small pneumatic device with suitable air flow, including Cleco & Dotco products
- Manage tool service and tool calibration, quantify & compare tool consumable life
- Monitor workforce productivity, improve quality of product or process and realize cost savings
- LED indicator lights blink yellow (warning) and red as cycle and run time limits are reached.
- Easy-to-use monitoring software included
- Tamper-proof cover for micro-USB access

| MODEL | MAX PRESSURE | MAX FLOW | MIN FLOW | WEIGHT |
|----------|----------------------------------|-------------|-------------|--------|
| | LB/IN ² BAR | CFM L/MIN | CFM L/MIN | LB |
| 240461PT | 100 LB/IN ² 6.9 BAR | 20 570 | 5 145 | 0.176 |

Pulse Tools

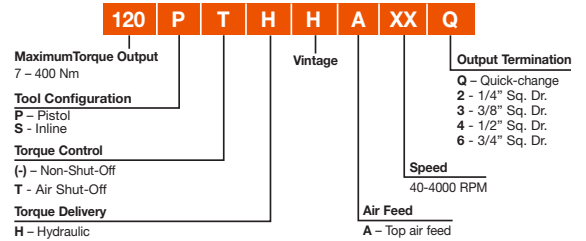
H Series 4-120Nm Torque - Pistol Grip - Shut-Off Model - Cleco

Market leading repeatability unmatched accuracy, low maintenance, inertia shut-off, low noise level, efficient 3 chamber air motor, external speed control, oil less blades reversible torque signal port



- Durable, Economical low maintenance

Model Number Nomenclature



| MODEL | DRIVE TYPE | TORQUE RANGE | | | | FREE SPEED R/MIN | WEIGHT LB | AIR CONSUMPTION | | |
|-------------|--------------|--------------|-----------|--------|--------|---------------------|--------------|-----------------|-----------|-------|
| | | MIN FT LB | MAX FT LB | MIN NM | MAX NM | | | NPT | HOSE I.D. | SCFM |
| 7PTHH352 | SQUARE | 2.95 | 2.95 | 5.2 | 7 | 3500 | 1.74 | 1/4 | 3/8 | 7.06 |
| 7PTHH35Q | QUICK CHANGE | 2.95 | 2.95 | 5.2 | 7 | 3500 | 1.74 | 1/4 | 3/8 | 7.06 |
| 7PTHHA352 | SQUARE | 2.95 | 2.95 | 5.2 | 7 | 3500 | 1.94 | 1/4 | 3/8 | 7.06 |
| 7PTHHA35Q | QUICK CHANGE | 2.95 | 2.95 | 5.2 | 7 | 3500 | 1.94 | 1/4 | 3/8 | 7.06 |
| 20PTHH403* | SQUARE | 14.8 | 14.8 | 25.1 | 34 | 4000 | 1.90 | 1/4 | 1/2 | 8.70 |
| 20PTHH40Q | QUICK CHANGE | 14.8 | 14.8 | 25.1 | 34 | 4000 | 1.92 | 1/4 | 1/2 | 8.70 |
| 20PTHHA403* | SQUARE | 14.8 | 14.8 | 25.1 | 34 | 4000 | 2.03 | 1/4 | 1/2 | 8.70 |
| 20PTHHA40Q | QUICK CHANGE | 14.8 | 14.8 | 25.1 | 34 | 4000 | 2.05 | 1/4 | 1/2 | 8.70 |
| 35PTHH40Q | QUICK CHANGE | 14.8 | 14.8 | 25.8 | 35 | 4000 | 2.31 | 1/4 | 1/2 | 15.90 |
| 35PTHHA403* | SQUARE | 14.8 | 14.8 | 25.8 | 35 | 4000 | 2.45 | 1/4 | 1/2 | 15.90 |
| 35PTHHA40Q | QUICK CHANGE | 14.8 | 14.8 | 25.8 | 35 | 4000 | 2.45 | 1/4 | 1/2 | 15.90 |
| 55PTHH403* | SQUARE | 22.1 | 22.1 | 40.6 | 55 | 4000 | 2.54 | 1/4 | 1/2 | 15.90 |
| 55PTHHA403* | SQUARE | 22.1 | 22.1 | 40.6 | 55 | 4000 | 2.67 | 1/4 | 1/2 | 15.90 |
| 80PTHH354 | SQUARE | 36.9 | 36.9 | 59 | 80 | 3500 | 3.09 | 1/4 | 3/8 | 19.40 |
| 80PTHH35Q | QUICK CHANGE | 36.9 | 36.9 | 59 | 80 | 3500 | 3.20 | 1/4 | 3/8 | 19.40 |
| 80PTHHA354 | SQUARE | 36.9 | 36.9 | 59 | 80 | 3500 | 3.31 | 1/4 | 3/8 | 19.40 |
| 80PTHHA35Q | QUICK CHANGE | 36.9 | 36.9 | 59 | 80 | 3500 | 3.33 | 1/4 | 3/8 | 19.40 |
| 110PTHH30Q | QUICK CHANGE | 55 | 55 | 81 | 110 | 3000 | 3.75 | 3/8 | 1/2 | 19.40 |
| 110PTHHA30Q | QUICK CHANGE | 55 | 55 | 81 | 110 | 3000 | 3.86 | 3/8 | 1/2 | 19.40 |
| 11PTHH352* | SQUARE | 4.43 | 4.43 | 81 | 110 | 3500 | 1.81 | 1/4 | 3/8 | 7.06 |
| 11PTHH353* | SQUARE | 4.43 | 4.43 | 81 | 110 | 3500 | 1.83 | 1/4 | 3/8 | 7.06 |
| 11PTHH35Q | QUICK CHANGE | 4.43 | 4.43 | 81 | 110 | 3500 | 1.87 | 1/4 | 3/8 | 7.06 |
| 11PTHHA352* | SQUARE | 4.43 | 4.43 | 81 | 110 | 3500 | 1.94 | 1/4 | 3/8 | 7.06 |
| 11PTHHA353* | SQUARE | 4.43 | 4.43 | 81 | 110 | 3500 | 1.96 | 1/4 | 3/8 | 7.06 |
| 11PTHHA35Q | QUICK CHANGE | 4.43 | 4.43 | 81 | 110 | 3500 | 2.01 | 1/4 | 3/8 | 7.06 |
| 120PTHH304 | SQUARE | 55 | 55 | 89 | 120 | 3000 | 3.75 | 3/8 | 1/2 | 19.40 |
| 120PTHHA304 | SQUARE | 55 | 55 | 89 | 120 | 3000 | 3.86 | 3/8 | 1/2 | 19.40 |

* 7/16" QUICK CHANGE CHUCK AVAILABLE SEPARATELY AS AN ACCESSORY

Pulse Tools

Pulse Tools

H series - Pistol Grip - Non Shut-Off Model 4-120Nm Torque - Cleco

Durable, Economical low maintenance low noise levels efficient air motor external speed control, external speed control, oil less blades reversible



- Durable, Economical low maintenance

| MODEL | DRIVE TYPE | TORQUE RANGE | | | | FREE SPEED | WEIGHT | AIR CONSUMPTION | | |
|------------|--------------|--------------|-----------|--------|--------|------------|--------|-----------------|-----------|------|
| | | MIN FT LB | MAX FT LB | MIN NM | MAX NM | R/MIN | LB | NPT | HOSE I.D. | SCFM |
| 7PHH602 | SQUARE | 2.95 | 2.95 | 5.2 | 7 | 6000 | 1.70 | 1/4 | 3/8 | 8.7 |
| 7PHH60Q | QUICK CHANGE | 2.95 | 2.95 | 5.2 | 7 | 6000 | 1.74 | 1/4 | 3/8 | 8.7 |
| 7PHHA602 | SQUARE | 2.95 | 2.95 | 5.2 | 7 | 6000 | 1.81 | 1/4 | 3/8 | 8.7 |
| 7PHHA60Q | QUICK CHANGE | 2.95 | 2.95 | 5.2 | 7 | 6000 | 1.85 | 1/4 | 3/8 | 8.7 |
| 11PHH652 | SQUARE | 4.43 | 4.43 | 8.1 | 11 | 6500 | 1.72 | 1/4 | 3/8 | 10.5 |
| 11PHH653* | SQUARE | 4.43 | 4.43 | 8.1 | 11 | 6500 | 1.74 | 1/4 | 3/8 | 10.5 |
| 11PHH65Q | QUICK CHANGE | 4.43 | 4.43 | 8.1 | 11 | 6500 | 1.76 | 1/4 | 3/8 | 10.5 |
| 11PHHA652 | SQUARE | 4.43 | 4.43 | 8.1 | 11 | 6500 | 1.85 | 1/4 | 3/8 | 10.5 |
| 11PHHA653* | SQUARE | 4.43 | 4.43 | 8.1 | 11 | 6500 | 1.85 | 1/4 | 3/8 | 10.5 |
| 11PHHA65Q | QUICK CHANGE | 4.43 | 4.43 | 8.1 | 11 | 6500 | 1.96 | 1/4 | 3/8 | 10.5 |
| 20PHH753* | SQUARE | 7.4 | 7.4 | 14.8 | 20 | 7500 | 1.85 | 1/4 | 3/8 | 17.3 |
| 20PHH75Q | QUICK CHANGE | 7.4 | 7.4 | 14.8 | 20 | 7500 | 1.90 | 1/4 | 3/8 | 17.3 |
| 20PHHA753* | SQUARE | 7.4 | 7.4 | 14.8 | 20 | 7500 | 1.94 | 1/4 | 3/8 | 17.3 |
| 20PHHA75Q | QUICK CHANGE | 7.4 | 7.4 | 14.8 | 20 | 7500 | 2.03 | 1/4 | 3/8 | 17.3 |
| 35PHH653* | SQUARE | 14.8 | 14.8 | 25.8 | 35 | 6500 | 2.25 | 1/4 | 3/8 | 19.4 |
| 35PHH65Q | QUICK CHANGE | 14.8 | 14.8 | 25.8 | 35 | 6500 | 2.29 | 1/4 | 3/8 | 15.9 |
| 35PHHA653* | SQUARE | 14.8 | 14.8 | 25.8 | 35 | 6500 | 2.36 | 1/4 | 3/8 | 19.4 |
| 35PHHA65Q | QUICK CHANGE | 14.8 | 14.8 | 25.8 | 35 | 6500 | 2.43 | 1/4 | 3/8 | 15.9 |
| 55PHH603* | SQUARE | 22.1 | 22.1 | 40.6 | 55 | 6000 | 2.47 | 1/4 | 3/8 | 22.9 |
| 55PHHA603* | SQUARE | 22.1 | 22.1 | 40.6 | 55 | 6000 | 2.58 | 1/4 | 3/8 | 22.9 |
| 80PHH604 | SQUARE | 36.9 | 36.9 | 59 | 80 | 6000 | 3.09 | 1/4 | 3/8 | 26.5 |
| 80PHH60Q | QUICK CHANGE | 36.9 | 36.9 | 59 | 80 | 6000 | 3.11 | 1/4 | 3/8 | 26.5 |
| 80PHHA604 | SQUARE | 36.9 | 36.9 | 59 | 80 | 6000 | 3.20 | 1/4 | 3/8 | 26.5 |
| 80PHHA60Q | QUICK CHANGE | 36.9 | 36.9 | 59 | 80 | 6000 | 3.24 | 1/4 | 3/8 | 26.5 |
| 110PHH55Q | QUICK CHANGE | 55 | 55 | 81 | 110 | 5500 | 3.66 | 3/8 | 1/2 | 30 |
| 110PHHA55Q | QUICK CHANGE | 55 | 55 | 81 | 110 | 5500 | 3.79 | 3/8 | 1/2 | 30 |
| 120PHH554 | SQUARE | 55 | 55 | 89 | 120 | 5500 | 3.64 | 3/8 | 1/2 | 30 |
| 120PHHA554 | SQUARE | 55 | 55 | 89 | 120 | 5500 | 3.75 | 3/8 | 1/2 | 30 |

* 7/16" QUICK CHANGE CHUCK AVAILABLE SEPARATELY AS AN ACCESSORY

Pulse Tools

C Series - High Torque Pistol Grip Non-Shut-off 100-400 nm Torque - Cleco

Durable, Economical low maintenance low noise levels efficient air motor external speed control, oil less blades reversible

- Durable, Economical low maintenance



| MODEL | DRIVE TYPE | TORQUE RANGE | | | | FREE SPEED R/MIN | WEIGHT LB | AIR CONSUMPTION | | |
|------------|--------------|--------------|-----------|--------|--------|---------------------|--------------|-----------------|-----------|------|
| | | MIN FT LB | MAX FT LB | MIN NM | MAX NM | | | NPT | HOSE I.D. | SCFM |
| 140PH45Q | QUICK CHANGE | 74 | 74 | 103 | 140 | 4500 | 5.7 | 3/8 | 1/2 | 31.7 |
| 160PH456 | SQUARE | 74 | 74 | 118 | 160 | 4500 | 5.7 | 3/8 | 1/2 | 31.7 |
| 250PHAF406 | SQUARE | 118 | 118 | 185 | 250 | 4000 | 8.6 | 3/8 | 1/2 | 40.6 |
| 400PHF356 | SQUARE | 185 | 185 | 295 | 400 | 3500 | 11.5 | 3/8 | 1/2 | 42.3 |

C Series 100-160Nm Torque - Pistol Grip - Shut-Off Model - Cleco

Durable, Economical low maintenance low noise levels, external speed control efficient air motor reversible torque signal port

- Durable, Economical low maintenance



| MODEL | DRIVE TYPE | TORQUE RANGE | | | | FREE SPEED R/MIN | WEIGHT LB | AIR CONSUMPTION | | |
|-----------|--------------|--------------|-----------|--------|--------|---------------------|--------------|-----------------|-----------|------|
| | | MIN FT LB | MAX FT LB | MIN NM | MAX NM | | | NPT | HOSE I.D. | SCFM |
| 140PTH25Q | QUICK CHANGE | 74 | 74 | 103 | 140 | 2500 | 5.7 | 3/8 | 1/2 | 25.4 |
| 160PTH256 | SQUARE | 74 | 74 | 118 | 160 | 2500 | 5.7 | 3/8 | 1/2 | 25.4 |

C series 160-250Nm Torque - Pistol Grip - Shut-Off Model - Trigger Throttle - Cleco

Durable, Economical low maintenance low noise levels, external speed control efficient air motor reversible torque signal port

- Durable, Economical low maintenance
- Motor governor equipped
- External torque adjustment
- External speed control
- Reversible
- Oilless blades
- Torque Signal port



| MODEL | DRIVE TYPE | TORQUE RANGE | | | | FREE SPEED R/MIN | WEIGHT LB | AIR CONSUMPTION | | |
|-------------|------------|--------------|-----------|--------|--------|---------------------|--------------|-----------------|-----------|------|
| | | MIN FT LB | MAX FT LB | MIN NM | MAX NM | | | NPT | HOSE I.D. | SCFM |
| 250PTHFC226 | SQUARE | 118 | 118 | 185 | 250 | 2200 | 8.8 | 3/8 | 1/2 | 33.5 |
| 400PTHFC206 | SQUARE | 185 | 185 | 295 | 400 | 2000 | 11.7 | 3/8 | 1/2 | 33.5 |

Pulse Tools

In-Line - Push-to-Start - 2.6-35Nm Torque - Cleco

Durable, Economical low maintenance low noise levels, external speed control, efficient air motor, reversible, torque signal port



- Durable, Economical low maintenance

| MODEL | DRIVE TYPE | TORQUE RANGE | | | | FREE SPEED | WEIGHT | AIR CONSUMPTION | | |
|------------|--------------|--------------|-----------|--------|--------|------------|--------|-----------------|-----|------|
| | | MIN FT LB | MAX FT LB | MIN NM | MAX NM | | | R/MIN | LB | NPT |
| 7STHFA55Q | QUICK CHANGE | 1.92 | 1.92 | 4.9 | 6.6 | 5500 | 1.83 | 1/8 | 1/4 | 7 |
| 35STHFA404 | SQUARE | 11.1 | 11.1 | 25.8 | 35 | 4000 | 2.87 | 1/4 | 3/8 | 15.9 |
| 35STHFA40Q | QUICK CHANGE | 11.1 | 11.1 | 25.8 | 35 | 4000 | 3.09 | 1/4 | 3/8 | 15.9 |

Pulse Tools - Rubber Tool Stand

Rubber tool stand for pulse tools.



| MODEL | DESCRIPTION |
|--------|--|
| 930119 | RUBBER TOOL STAND FOR C SERIES 140 / 160PTH / PH / 250PTH / 400PTH |
| 931041 | RUBBER TOOL STAND FOR D & H SERIES 7PTH – 120PTH |

Pulse Tools - TVP-100 - Torque Signal Kit

For indicating shut-off

| MODEL | DESCRIPTION |
|--------|---------------------------------|
| 934918 | AIR SIGNAL TO INDICATE SHUT-OFF |

PTH Series pulse tools and vintage shut-off tools only

Air Motors

Choose the right Air Motor to fit your application

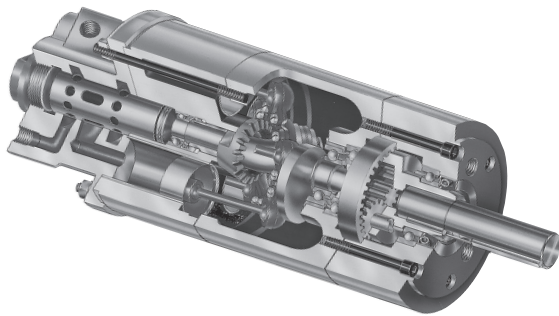
Rotary Vane Air Motors

Apex Tool Group offers two types of rotary vane air motors, the large Cleco MR series (1.0 to 7.5 hp) with spring loaded blades and small to medium sizes (.14 to 2.3 hp). All motors feature durable construction with precision heavy-duty bearings throughout, and multiple blade rotors for smooth power. There is a wide range of speeds and torques as well as a choice of foot, face, or flange mounting. These motors require air line lubrication for long, trouble-free service. Mount the lubricator as close to the motor as possible. These motors perform satisfactorily in high temperature areas up to 200°F (93° C).

Rotary Vane



Rotary Vane



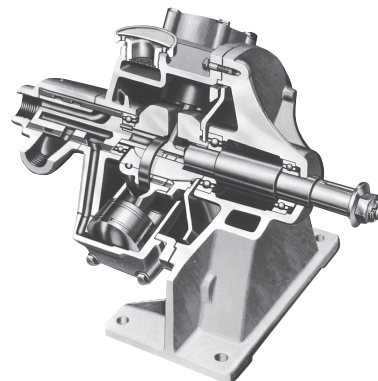
Axial Piston

Axial Piston

These small, lightweight Cleco motors are ideal for installation in close quarters. The rugged construction and precision manufacturing of these motors allows long life with minimum maintenance. Generous size spindle bearings permit overhung weight on spindle with no external support. Their enclosed type construction allows operation in corrosive or dusty atmospheres. These motors perform satisfactorily in high temperature areas up to 200° (93° C). Grease fittings are provided for lubrication. It is recommended that air lines be equipped with filters and lubricators. Mount the lubricator as close to the motor as possible.

Radial Piston

Heavy-duty construction make these motors suitable for continuous operation. The counterbalanced crankshaft is supported by anti-friction bearings. A slinger distributes oil to all moving parts of the motor. Oil level and drain plugs are easily accessible. These motors perform satisfactorily in high temperature areas up to 200° (93° C). It is recommended that air lines be equipped with lubricators. Mount the lubricator as close to the motor as possible.



Radial Piston

Air Motors

Air Motor Selection

To assist in the selection of an air motor, we need any two of the following three items of information:

- | | | |
|-------------------------|---------------------------------------|--|
| 1. Horsepower required. | 2. Speed (RPM) required against load. | 3. Work load expressed in foot pounds or inch pounds of dynamic torque (moving torque load). |
|-------------------------|---------------------------------------|--|

As air motors are dependent upon input air pressure for performance, these factors must also be considered:

- | | | |
|---|--|--|
| 1. Air pressure (psig or bars) at motor location. | 2. Pipe size of air supply system to assure adequate volume (cfm or m ³ /min) so as to minimize line loss (air pressure drop during motor operation). | 3. Plant air system pressure may vary during the day due to use by other equipment; therefore, base the selection of the air motor on the lowest psig or bars that can be expected. Then, by using a pressure regulator in the line at the motor, a uniform air supply is assured. |
|---|--|--|

In applications of intermittent short service, Cleco air motors can be operated over the complete range indicated for each without harm or significant wear. In applications involving sustained continuous operation for long periods, however, some guidelines are suggested. Do not operate piston and MR motors at more than 75% of free speed. Consult the factory for applications requiring continuous operation of rotary vane motors at maximum HP or for any applications requiring vertical operation of these motors. Review service manuals carefully.

For two known and one unknown, the following formulas can be used:

$$\text{Ft. lbs. Torque} = \frac{1000 \times \text{HP}}{0.19 \times \text{RPM}}$$

$$\text{Horsepower (HP)} = \frac{0.19 \times \text{Torque (ft. lbs.)} \times \text{RPM}}{1000}$$

$$\text{Speed (RPM)} = \frac{1000 \times \text{HP}}{0.19 \times \text{Torque (ft. lbs.)}}$$

When working with Newton meters (Nm), substitute .0258 in place of 0.19 in the formula.

Use the performance charts provided for each motor size and type for obtaining this same data procedure:

- | | | | | |
|-------------------------------|---|--|--|--|
| 1. Select operating pressure. | 2. Select torque required from the left hand scale. * Torque and horsepower curves may be interpreted for approximate performance at other psi pressure. | 3. Extend that point position across chart until it intersects with torque performance curve of the selected pressure. | 4. Draw a vertical line from the above mentioned intersection to the corresponding motor scale at the bottom of the chart to determine the operating speed at the required torque and psig pressure. | 5. Extend the vertical line until it intersects the horsepower curve of selected operating pressure and read horsepower from the motor scale on the right side of the chart. |
|-------------------------------|---|--|--|--|

Air Motors

21 Series - Air Motor - Rotary Vane - Rear Exhaust

Maximum Power 0.3 hp | 0.22 kw



- Maximum Power 0.3 hp | 0.22 kw
- Torque Range 0.2 - 15.2 ft. lbs. | 0.27 - 20.6 Nm
- Non-Reversible
- Rear Exhaust

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|------------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 21M1041-49 | FLANGE AND BASE MOUNTING | 3/8 IN KEYED SPINDLE | 300 | 600 | 9.9 13.41 | 2.1 | 0.95 | 44.82-1 | 5.66 144 | 0.3 | 12 | NON-REVERSIBLE |
| 21M1340-49 | FLANGE AND BASE MOUNTING | 3/8 IN KEYED SPINDLE | 1600 | 3200 | 1.8 2.44 | 2.1 | 0.95 | 8.3-1 | 4.34 110 | 0.3 | 12 | NON-REVERSIBLE |
| 21-1041-49 | ROUND | 3/8 IN KEYED SPINDLE | 300 | 600 | 9.9 13.41 | 2.1 | 0.95 | 44.82-1 | 5.66 144 | 0.3 | 12 | NON-REVERSIBLE |
| 21-1340-49 | ROUND | 3/8 IN KEYED SPINDLE | 1600 | 3200 | 1.8 2.44 | 2.1 | 0.95 | 8.3-1 | 4.34 110 | 0.3 | 12 | NON-REVERSIBLE |
| 21-1940-49 | ROUND | 3/8 IN KEYED SPINDLE | 15000 | 30000 | 0.2 0.27 | 2.1 | 0.95 | 1-1 | 3 76.2 | 0.3 | 12 | NON-REVERSIBLE |
| 21M1540-49 | FLANGE AND BASE MOUNTING | 3/8 IN KEYED SPINDLE | 2500 | 5000 | 1.2 1.63 | 2.1 | 0.95 | 5.4-1 | 4.34 110 | 0.3 | 12 | NON-REVERSIBLE |

Air Inlet: 1/4" NPT – Side and rear

All tools performance rated @ 90psi (620 kPa) air pressure.

*Optional Terminations:

Replace -49 in model number with the desired termination when ordering.

-38 0"-1/4" Capacity Drill Chuck (5000 RPM or less)

-51 1/16"-3/8" Capacity Drill Chuck (5000 RPM or less)

-40 3/8"-24 Threaded Spindle

-01 Series 200 Collet Chuck (for milling and routing)

-36 Series 300 Collet Chuck (for milling and routing)

Standard Equipment:

Hex socket screw provided for closure of unused inlet. Flush fitting for lubrication of gears. Wrench for threaded spindle and collet chuck models. 1/4" collet included with series 200 & 300 collet chuck.

Optional Equipment:

Any series 200 collet may be substituted at no additional cost. On series 300 collet chuck, collets 301, 302, and 303 are available at extra cost.

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

21 Series - Air Motor - Rotary Vane - Side Exhaust

Maximum Power 0.3 hp | 0.22 kw

- Maximum Power 0.3 hp | 0.22 kw
- Torque Range 0.2 - 15.2 ft. lbs. | 0.27 - 20.6 Nm
- Non-Reversible
- Side Exhaust



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|------------|--------------------------|----------------------|---------------|------------|--------------|------------|------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | | IN MM | HP | SCFM | |
| 21M1000-49 | FLANGE AND BASE MOUNTING | 3/8 IN KEYED SPINDLE | 190 | 380 | 15.2 20.6 | 68.9-1 | 5.66 144 | 0.3 | 12 | NON-REVERSIBLE |
| 21M1002-49 | FLANGE AND BASE MOUNTING | 3/8 IN KEYED SPINDLE | 450 | 900 | 6.4 8.67 | 29.1-1 | 5.66 144 | 0.3 | 12 | NON-REVERSIBLE |
| 21-1900-49 | ROUND | 3/8 IN KEYED SPINDLE | 15000 | 30000 | 0.2 0.27 | 1-1 | 3 76.2 | 0.3 | 12 | NON-REVERSIBLE |
| 21M1300-49 | FLANGE AND BASE MOUNTING | 3/8 IN KEYED SPINDLE | 1600 | 3200 | 1.8 2.44 | 8.3-1 | 4.34 110 | 0.3 | 12 | NON-REVERSIBLE |

Air Inlet: 1/4" NPT – Side and rear

All tools performance rated @ 90psi (620 kPa) air pressure.

*Optional Terminations:

Replace -49 in model number with the desired termination when ordering.

-38 0"-1/4" Capacity Drill Chuck (5000 RPM or less)

-51 1/16"-3/8" Capacity Drill Chuck (5000 RPM or less)

-40 3/8"-24 Threaded Spindle

-01 Series 200 Collet Chuck (for milling and routing)

-36 Series 300 Collet Chuck (for milling and routing)

Standard Equipment:

Hex socket screw provided for closure of unused inlet. Flush fitting for lubrication of gears. Wrench for threaded spindle and collet chuck models. 1/4" collet included with series 200 & 300 collet chuck.

Optional Equipment:

Any series 200 collet may be substituted at no additional cost. On series 300 collet chuck, collets 301, 302, and 303 are available at extra cost.

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

22 Series - Air Motor - Rotary Vane - Rear Exhaust

Maximum Power 0.9 hp | 0.67 kw



- Maximum Power 0.9 hp | 0.67 kw
- Torque Range 0.8 - 41.2 ft. lbs. | 1.08 - 55.83 Nm
- Non-Reversible
- Rear Exhaust

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|------------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 22M5042-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 470 | 940 | 19.6 26.56 | 2.1 | 0.95 | 24-1 | 7.94 202 | 0.9 | 29 | NON-REVERSIBLE |
| 22M5340-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 1600 | 3200 | 5.8 7.86 | 2.1 | 0.95 | 7.1-1 | 6.19 157 | 0.9 | 29 | NON-REVERSIBLE |
| 22M5440-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 2350 | 4700 | 4.0 5.42 | 2.1 | 0.95 | 4.9-1 | 6.19 157 | 0.9 | 29 | NON-REVERSIBLE |
| 22-5040-50 | ROUND | 1/2 IN KEYED SPINDLE | 215 | 430 | 41.2 55.83 | 2.1 | 0.95 | 50.4-1 | 7.94 202 | 0.9 | 29 | NON-REVERSIBLE |
| 22-5041-50 | ROUND | 1/2 IN KEYED SPINDLE | 320 | 640 | 28.4 38.48 | 2.1 | 0.95 | 34.8-1 | 7.94 202 | 0.9 | 29 | NON-REVERSIBLE |
| 22-5042-50 | ROUND | 1/2 IN KEYED SPINDLE | 470 | 940 | 19.6 26.56 | 2.1 | 0.95 | 24-1 | 7.94 202 | 0.9 | 29 | NON-REVERSIBLE |
| 22-5340-50 | ROUND | 1/2 IN KEYED SPINDLE | 1600 | 3200 | 5.8 7.86 | 2.1 | 0.95 | 7.1-1 | 6.19 157 | 0.9 | 29 | NON-REVERSIBLE |
| 22-5940-50 | ROUND | 1/2 IN KEYED SPINDLE | 11500 | 23000 | 0.8 1.08 | 2.1 | 0.95 | 1-1 | 4.38 111 | 0.9 | 29 | NON-REVERSIBLE |
| 22M5940-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 11500 | 23000 | 0.8 1.08 | 2.1 | 0.95 | 1-1 | 4.38 111 | 0.9 | 29 | NON-REVERSIBLE |

Air Inlet: 1/4" NPT – Side and rear

Air consumption: 29 cfm (.82 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

*Optional Terminations:

Replace -50 in model number with the desired termination when ordering.

-38 0"-1/4" Capacity Drill Chuck (5000 RPM or less)

-51 1/16"-3/8" Capacity Drill Chuck (5000 RPM or less)

-53 5/64"-1/2" Capacity Drill Chuck (5000 RPM or less)

-60 1/2"-20 Threaded Spindle

-01 Series 200 Collet Chuck (for milling and routing)

-62 Series "K" Collet Chuck (for milling and routing)

Standard Equipment:

Hex socket screw provided for closure of unused inlet. Flush fitting for lubrication of gears. Wrench for threaded spindle and collet chuck models. 1/4" collet included with series 200 & "K" collet chuck.

Optional Equipment:

Any series 200 and "K" collet may be substituted at no additional cost.

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

22 Series - Air Motor - Rotary Vane - Side Exhaust

Maximum Power 0.9 hp | 0.67 kw



- Maximum Power 0.9 hp | 0.67 kw
- Torque Range 0.8 - 41.2 ft. lbs. | 1.08 - 55.83 Nm
- Non-Reversible
- Side Exhaust

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|------------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 22M5000-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 215 | 430 | 41.2 55.83 | 2.1 | 0.95 | 50.4-1 | 7.94 202 | 0.9 | 29 | NON-REVERSIBLE |
| 22-5000-50 | ROUND | 1/2 IN KEYED SPINDLE | 215 | 430 | 41.2 55.83 | 2.1 | 0.95 | 50.4-1 | 7.94 202 | 0.9 | 29 | NON-REVERSIBLE |
| 22M5002-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 470 | 940 | 19.6 26.56 | 2.1 | 0.95 | 24-1 | 7.94 202 | 0.9 | 29 | NON-REVERSIBLE |

Air Inlet: 1/4" NPT – Side and rear

Air consumption: 29 cfm (.82 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

*Optional Terminations:

Replace -50 in model number with the desired termination when ordering.

-38 0"-1/4" Capacity Drill Chuck (5000 RPM or less)

-51 1/16"-3/8" Capacity Drill Chuck (5000 RPM or less)

-53 5/64"-1/2" Capacity Drill Chuck (5000 RPM or less)

-60 1/2"-20 Threaded Spindle

-01 Series 200 Collet Chuck (for milling and routing)

-62 Series "K" Collet Chuck (for milling and routing)

Standard Equipment:

Hex socket screw provided for closure of unused inlet. Flush fitting for lubrication of gears. Wrench for threaded spindle and collet chuck models. 1/4" collet included with series 200 & "K" collet chuck.

Optional Equipment:

Any series 200 and "K" collet may be substituted at no additional cost.

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

22 Series - Air Motor - Rotary Vane - Reversible

Maximum Power 0.7 hp | 0.52 kw



- Maximum Power 0.7 hp | 0.52 kw
- Torque Range 0.6 - 28.4 ft. lbs. | 0.81 - 38.48 Nm
- Reversible
- Side Exhaust

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|------------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 22M5070-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 165 | 330 | 28.4 38.48 | 2.1 | 0.95 | 50.4-1 | 7.88 200 | 0.7 | 29 | REVERSIBLE |
| 22M5071-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 250 | 500 | 19.6 26.56 | 2.1 | 0.95 | 34.8-1 | 7.88 200 | 0.7 | 29 | REVERSIBLE |
| 22M5072-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 350 | 700 | 13.5 18.29 | 2.1 | 0.95 | 24-1 | 7.88 200 | 0.7 | 29 | REVERSIBLE |
| 22-5070-50 | ROUND | 1/2 IN KEYED SPINDLE | 165 | 330 | 28.4 38.48 | 2.1 | 0.95 | 50.4-1 | 7.88 200 | 0.7 | 29 | REVERSIBLE |
| 22-5370-50 | ROUND | 1/2 IN KEYED SPINDLE | 1750 | 3500 | 2.8 3.79 | 2.1 | 0.95 | 4.9-1 | 6.16 156 | 0.7 | 29 | REVERSIBLE |
| 22M5270-50 | FLANGE AND BASE MOUNTING | 1/2 IN KEYED SPINDLE | 1200 | 2400 | 4.0 5.42 | 2.1 | 0.95 | 7.1-1 | 6.16 156 | 0.7 | 29 | REVERSIBLE |

Air Inlet: 1/4" NPT – Side and rear

Air consumption: 29 cfm (.82 m3/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

*Optional Terminations:

Replace -50 in model number with the desired termination when ordering.

-38 0"-1/4" Capacity Drill Chuck (5000 RPM or less)

-51 1/16"-3/8" Capacity Drill Chuck (5000 RPM or less)

-53 5/64"-1/2" Capacity Drill Chuck (5000 RPM or less)

-60 1/2"-20 Threaded Spindle

-01 Series 200 Collet Chuck (for milling and routing)

-62 Series "K" Collet Chuck (for milling and routing)

Standard Equipment:

Hex socket screw provided for closure of unused inlet. Flush fitting for lubrication of gears. Wrench for threaded spindle and collet chuck models. 1/4" collet included with series 200 & "K" collet chuck.

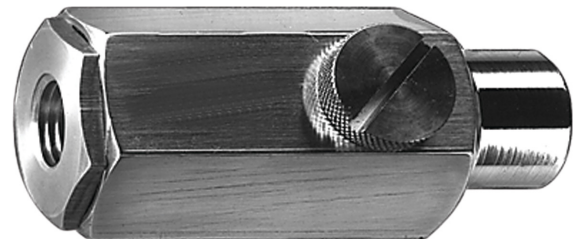
Optional Equipment:

Any series 200 and "K" collet may be substituted at no additional cost.

**Please visit clecotools.com for dimensional diagrams and power curves.

Airline Filter & Lubricator

Mounts in Hose Line.



- One ounce reservoir good for average 8-hour shift.

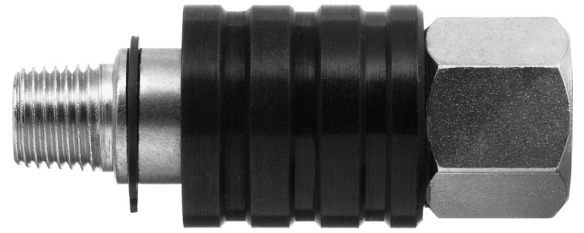
| MODEL | DESCRIPTION | MAX PRESSURE | AIR INLET SIZE |
|---------|-------------|----------------------|----------------|
| | | LB/IN² BAR | IN |
| 45-0201 | LUBRICATOR | 100 LB/IN² 6.9 BAR | 1/4 |
| 45-0301 | LUBRICATOR | 100 LB/IN² 6.9 BAR | 3/8 |

Air Motors

Push Pull Sleeve Valve

Available for all 1/4" npt air tools

- Air inlet 1/4" female NPT; outlet is 1/4" male NPTF



| MODEL | DESCRIPTION |
|---------|------------------------|
| 14-2209 | PUSH PULL SLEEVE VALVE |

Flexible Air Hose

-



| MODEL | DESCRIPTION | FITTINGS (NPT) | DIAMETER | | LENGTH | |
|---------|-------------------|----------------|----------|--|-----------------|--|
| | | | IN | | IN MM | |
| 45-1307 | AIR HOSE | 1/4 X 1/8 IN | 3/16 | | 7 FT 2134 MM | |
| 45-1408 | AIR HOSE | 1/4 X 1/4 IN | 1/4 | | 8 FT 2438 MM | |
| 45-1508 | AIR HOSE | 1/4 X 1/4 IN | 5/16 | | 8 FT 2438 MM | |
| 45-1610 | FLEXIBLE AIR HOSE | 3/8 X 3/8 IN | 3/8 | | 10 FT 3048 MM | |
| 45-1812 | AIR HOSE | 1/2 X 1/2 IN | 1/2 | | 12 FT 3658 MM | |
| 45-1825 | AIR HOSE | 1/2 X 1/2 IN | 1/2 | | 25 FT 7620 MM | |

General: 3/16" & 1/4" hoses have braided covers, all others have neoprene covers.

Air Motors

21MF Series - Air Motor - Rotary Vane

Maximum Power 0.3 hp | 0.22 kw

- Maximum Power 0.3 hp | 0.22 kw
- Torque Range 0.24 - 11.3 ft. lbs. | 0.3 - 15.3 Nm
- Non-Reversible
- Side Exhaust
- Threaded or Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|--------|-------------------------|---------------|------------|--------------|------------|------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | | IN MM | HP | SCFM | |
| 21MFN907M | THREAD | 3/8 IN THREADED SPINDLE | 250 | 500 | 11.3 15.3 | 48.0-1 | 6.75 171 | 0.3 | 12 | NON-REVERSIBLE |
| 21MFN916M | THREAD | 3/8 IN KEYED SPINDLE | 325 | 650 | 9.30 12.6 | 36.9-1 | 6.75 171 | 0.3 | 12 | NON-REVERSIBLE |
| 21MFN902M | THREAD | 3/8 IN THREADED SPINDLE | 1750 | 3500 | 1.70 2.3 | 6.8-1 | 5.69 145 | 0.3 | 12 | NON-REVERSIBLE |
| 21MFN917M | THREAD | 3/8 IN KEYED SPINDLE | 250 | 500 | 11.3 15.3 | 48.0-1 | 6.75 171 | 0.3 | 12 | NON-REVERSIBLE |

21MR Series - Air Motor - Rotary Vane

Maximum Power 0.25 hp | 0.19 kw

- Maximum Power 0.25 hp | 0.19 kw
- Torque Range 1.6 - 10.0 ft. lbs. | 2.2 - 13.6 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | SPINDLE TYPE | RPM AT MAX HP | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|----------------------|---------------|--------------|--------|------|------------|------------|------------|-----------------|------------|
| | | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 21MRR912M | 3/8 IN KEYED SPINDLE | 1500 | 1.6 2.2 | 2.1 | 0.95 | 6.8-1 | 6.5 165 | 0.25 | 12 | REVERSIBLE |
| 21MRR917M | 3/8 IN KEYED SPINDLE | 200 | 10.0 13.6 | 2.1 | 0.95 | 48.0-1 | 7.56 192 | 0.25 | 12 | REVERSIBLE |

General:

Air Inlet: 1/4" NPT

Air consumption: 12 cfm (.34 m³/min)

Offset (Side-to-Center) - 47/64"

Achieves full speed within a half revolution

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

1015869 Muffler

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

31MF Series - Air Motor - Rotary Vane

Maximum Power 0.5 hp | 0.37 kw

- Maximum Power 0.5 hp | 0.37 kw
- Torque Range 0.5 - 23.6 ft. lbs. | 0.68 - 32 Nm
- Non-Reversible
- Side Exhaust
- Threaded or Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|--------|-------------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 31MFN905M | THREAD | 3/8 IN THREADED SPINDLE | 550 | 1100 | 8.8 11.9 | 2.1 | 0.95 | 16.0-1 | 7.56 192 | 0.5 | 18 | NON-REVERSIBLE |
| 31MFN902M | THREAD | 3/8 IN THREADED SPINDLE | 1500 | 3000 | 3.5 4.7 | 2.1 | 0.95 | 6.44-1 | 6.18 157 | 0.5 | 18 | NON-REVERSIBLE |
| 31MFN912M | THREAD | 3/8 IN KEYED SPINDLE | 1500 | 3000 | 3.5 4.7 | 2.1 | 0.95 | 6.44-1 | 6.18 157 | 0.5 | 18 | NON-REVERSIBLE |
| 31MFN901M | THREAD | 3/8 IN THREADED SPINDLE | 2500 | 5000 | 2.2 3 | 2.1 | 0.95 | 4.0-1 | 6.18 157 | 0.5 | 18 | NON-REVERSIBLE |
| 31MFN900M | THREAD | 3/8 IN THREADED SPINDLE | 10000 | 20000 | 0.5 0.68 | 2.1 | 0.95 | 1-1 | 6.18 157 | 0.5 | 18 | NON-REVERSIBLE |
| 31MFN917M | THREAD | 3/8 IN KEYED SPINDLE | 225 | 450 | 23.6 32 | 2.1 | 0.95 | 43.06-1 | 7.56 192 | 0.5 | 18 | NON-REVERSIBLE |

General:

Air Inlet: 1/4" NPT

Air consumption: 18 cfm (.51 m3/min)

Offset (Side-to-Center) – 15/16"

Achieves full speed within a half revolution

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

1015869 Muffler

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

31MR Series - Air Motor - Rotary Vane

Maximum Power 0.3 hp | 0.22 kw

- Maximum Power 0.3 hp | 0.22 kw
- Torque Range 2 - 21.6 ft. lbs. | 2.7 - 29.3 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|--------|----------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 31MRR914M | THREAD | 3/8 IN KEYED SPINDLE | 500 | 1000 | 6.5 8.8 | 2.1 | 0.95 | 14.28-1 | 7.62 194 | 0.3 | 12 | REVERSIBLE |
| 31MRR911M | THREAD | 3/8 IN KEYED SPINDLE | 1750 | 3500 | 2.0 2.7 | 2.1 | 0.95 | 4.0-1 | 6.93 176 | 0.3 | 12 | REVERSIBLE |
| 31MRR917M | THREAD | 3/8 IN KEYED SPINDLE | 150 | 300 | 21.6 29.3 | 2.1 | 0.95 | 43.06-1 | 8.31 211 | 0.3 | 12 | REVERSIBLE |

General:

Air Inlet: 1/4" NPT

Air consumption: 12 cfm (.34 m³/min)

Offset (Side-to-Center) – 47/64"

Achieves full speed within a half revolution

Can be reversed instantaneously and continuously.

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

1015748 Muffler

**Please visit clecotools.com for dimensional diagrams and power curves.

41MR Series - Air Motor - Rotary Vane

Maximum Power 0.6 hp | 0.45 kw

- Maximum Power 0.6 hp | 0.45 kw
- Torque Range 2.9 - 39.6 ft. lbs. | 3.9 - 53.7 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|--------|----------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 41MRR914M | THREAD | 1/2 IN KEYED SPINDLE | 600 | 1200 | 9.1 12.3 | 2.1 | 0.95 | 12.37-1 | 8.92 227 | 0.6 | 25.1 | REVERSIBLE |
| 41MRR912M | THREAD | 1/2 IN KEYED SPINDLE | 1250 | 2500 | 4.4 6 | 2.1 | 0.95 | 6.0-1 | 8.42 214 | 0.6 | 25.1 | REVERSIBLE |
| 41MRR918M | THREAD | 1/2 IN KEYED SPINDLE | 138 | 275 | 39.6 53.7 | 2.1 | 0.95 | 54.5-1 | 9.92 252 | 0.6 | 25.1 | REVERSIBLE |

General:

Air Inlet: 1/4" NPT

Air consumption: 25 cfm (.71 m³/min)

Offset (Side-to-Center) – 1-7/32"

Can be reversed instantaneously and continuously.

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

1024078 Muffler

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

61MF Series - Air Motor - Rotary Vane

Maximum Power 1.5 hp | 1.12 kw

- Maximum Power 1.5 hp | 1.12 kw
- Torque Range 6.9 - 110 ft. lbs. | 9.4 - 149.2 Nm
- Non-Reversible
- Side Exhaust
- Threaded or Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|--------|----------------------|---------------|------------|---------------|--------|------|------------|-------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 61MFN915M | THREAD | 3/4 IN KEYED SPINDLE | 113 | 225 | 110.0 149.2 | 2.1 | 0.95 | 66.3-1 | 12.28 312 | 1.5 | 55 | NON-REVERSIBLE |

General

Air Inlet: 3/8" NPT

Air consumption: 55 cfm (1.56 m³/min)

Offset (side-to-center) - 1-1/4"

Achieves full speed within a half revolution

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

1015870 Muffler

**Please visit clecotools.com for dimensional diagrams and power curves.

61MR Series - Air Motor - Rotary Vane

Maximum Power 1.0 hp | 0.75 kw

- Maximum Power 1.0 hp | 0.75 kw
- Torque Range 5.2 - 83 ft. lbs. | 7.1 - 112.5 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|--------|----------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 61MRR915M | THREAD | 3/4 IN KEYED SPINDLE | 100 | 200 | 83.0 112.5 | 2.1 | 0.95 | 66.3-1 | 12.59 320 | 1.0 | 50 | REVERSIBLE |

General

Air Inlet: 3/8" NPT

Air consumption: 50 cfm (1.42 m³/min)

Offset (side-to-center) - 1-1/2"

Achieves full speed within a half revolution

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

1015869 Muffler

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

Accessories for MF & MR Motors

- Mufflers for 21, 31, 41 and 61 series rotary vane motors.



| MODEL | DESCRIPTION | TYPE |
|---------|-------------------------------|------|
| 1015748 | ACCESSORIES FO MF & MR MOTORS | 41MF |
| 1015869 | ACCESSORIES FO MF & MR MOTORS | 61MR |
| 1015870 | ACCESSORIES FO MF & MR MOTORS | 61MF |
| 1024078 | ACCESSORIES FO MF & MR MOTORS | 41MR |

Foot Mounts

- Foot mount brackets for 21, 31, 41 and 61 series rotary vane motors.



| MODEL | TYPE |
|---------|-------------|
| 1024282 | 41MF & 41MR |
| 1024283 | 41MF & 41MR |
| 1024284 | 61MF & 61MR |

Flange Mounts

- Flange mount brackets for 21, 31, 41 and 61 series rotary vane motors.



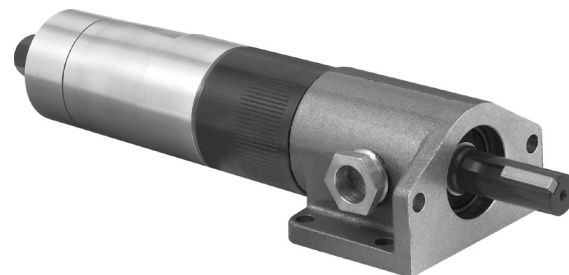
| MODEL | TYPE |
|---------|-------------|
| 1024279 | 31MF & 31MR |
| 1024280 | 41MF & 41MR |
| 1024281 | 61MF & 61MR |

Dimensional drawings are available on Clecotools.com

Air Motors

C3N Series - Air Motor - Rotary Vane

Maximum Power 0.65 hp | 0.48 kw



- Maximum Power 0.65 hp | 0.48 kw
- Torque Range 1.5 - 30.5 ft. lbs. | 2.0 - 42 Nm
- Non-Reversible
- Side Exhaust
- Keyed Spindle

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| C3N041M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 7500 | 15000 | 1.5 2 | 2.1 | 0.95 | 1-1 | 9.22 234 | 0.65 | 27.9 | NON-REVERSIBLE |
| C3N055M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 600 | 1200 | 12.5 17 | 2.1 | 0.95 | 12.56-1 | 10.09 256 | 0.65 | 27.9 | NON-REVERSIBLE |

*All models assume overhung load located at .94" (23.81mm) from face of motor.

General:

Air Inlet: 1/4" NPT

Air consumption: 28 cfm (.79 m3/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Air strainer intake fitting. Foot and flange type mount.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

C3R Series - Air Motor - Rotary Vane

Maximum Power 0.45 hp | 0.34 kw

- Maximum Power 0.45 hp | 0.34 kw
- Torque Range 4.0 - 28 ft. lbs. | 5.4 - 38 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| C3R039M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 150 | 300 | 28.0 38 | 2.1 | 0.95 | 33-1 | 10.09 256 | 0.45 | 27.9 | REVERSIBLE |
| C3R040M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 200 | 400 | 20.0 27 | 2.1 | 0.95 | 23.47-1 | 10.09 256 | 0.45 | 27.9 | REVERSIBLE |
| C3R047M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 400 | 800 | 11.5 15.6 | 2.1 | 0.95 | 12.56-1 | 10.09 256 | 0.45 | 27.9 | REVERSIBLE |
| C3R048M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 1400 | 2800 | 4.0 5.4 | 2.1 | 0.95 | 3.55-1 | 9.22 234 | 0.45 | 27.9 | REVERSIBLE |
| C3R050M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 700 | 1400 | 6.5 8.8 | 2.1 | 0.95 | 6.6-1 | 9.22 234 | 0.45 | 27.9 | REVERSIBLE |

*All models assume overhung load located at .94" (23.81mm) from face of motor.

General:

Air Inlet: 1/4" NPT

Air consumption: 28 cfm (.79 m3/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Air strainer intake fitting. Foot and flange type mount.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

41N Series - Air Motor - Rotary Vane

Maximum Power 1.25 hp | 0.93 kw

- Maximum Power 1.25 hp | 0.93 kw
- Torque Range 13 - 68.5 ft. lbs. | 17.6 - 92.8 Nm
- Non-Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|----------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 41N075M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 375 | 750 | 39.5 53.6 | 2.1 | 0.95 | 22.6-1 | 12 305 | 1.25 | 39.9 | NON-REVERSIBLE |

*All models assume overhung load located at .94" (23.81mm) from face of motor.

General:

Air Inlet: 3/8" NPT

Air consumption: 40 cfm (1.13 m3/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Air strainer intake fitting. Foot and flange type mount.

Optional Equipment:

Pilot Ring - Part 520886

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

41R Series - Air Motor - Rotary Vane

Maximum Power 1.0 hp | 0.75 kw

- Maximum Power 1.0 hp | 0.75 kw
- Torque Range 12 - 63 ft. lbs. | 16.3 - 85.4 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CON-SUMPTION | CONTROL |
|---------|--------------------------|----------------------|---------------|------------|--------------|--------|------|------------|----------|------------|------------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 41R032M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 160 | 320 | 63.0 85.4 | 2.1 | 0.95 | 39-1 | 12 305 | 1.0 | 32.8 | REVERSIBLE |
| 41R044M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 220 | 440 | 45.5 61.7 | 2.1 | 0.95 | 28.4-1 | 12 305 | 1.0 | 32.8 | REVERSIBLE |
| 41R056M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 255 | 560 | 36.0 48.8 | 2.1 | 0.95 | 22.6-1 | 12 305 | 1.0 | 32.8 | REVERSIBLE |
| 41R075M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 375 | 750 | 27.0 36.6 | 2.1 | 0.95 | 16.8-1 | 12 305 | 1.0 | 32.8 | REVERSIBLE |
| 41R128M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 640 | 1280 | 16.5 22.4 | 2.1 | 0.95 | 9.86-1 | 12 305 | 1.0 | 32.8 | REVERSIBLE |
| 41R176M | FLANGE AND BASE MOUNTING | 5/8 IN KEYED SPINDLE | 880 | 1760 | 12.0 16.3 | 2.1 | 0.95 | 7.2-1 | 12 305 | 1.0 | 32.8 | REVERSIBLE |

*All models assume overhung load located at 1.0" (25.40mm) from face of motor.

General:

Air Inlet: 3/8" NPTF

Air consumption: 33 cfm (.93 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Air strainer intake fitting. Foot and flange type mount.

Optional Equipment:

Pilot Ring - Part 520886

Lubricating Oil - Part 533485 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

60N Series - Air Motor - Rotary Vane

Maximum Power 2.3 hp | 1.72 kw

- Maximum Power 2.3 hp | 1.72 kw
- Torque Range 50 - 120 ft. lbs. | 68 - 163 Nm
- Non-Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|--------------------------|------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|----------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 60N196M | FLANGE AND BASE MOUNTING | 1 1/8 IN KEYED SPINDLE | 345 | 690 | 67.0 91 | 2.1 | 0.95 | 19-1 | 17.03 433 | 2.3 | 70 | NON-REVERSIBLE |

*All models assume overhung load located at 2.0" (50.80mm) from face of motor.

General:

Air Inlet: 1/2" NPTF

Air consumption: 70 cfm (1.98 m3/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Air strainer intake fitting. Foot and flange type mount.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

60R Series - Air Motor - Rotary Vane

Maximum Power 1.9 hp | 1.42 kw

- Maximum Power 1.9 hp | 1.42 kw
- Torque Range 43 - 101 ft. lbs. | 58 - 137 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|--------------------------|------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| 60R201M | FLANGE AND BASE MOUNTING | 1 1/8 IN KEYED SPINDLE | 245 | 490 | 57.0 77 | 2.1 | 0.95 | 19-1 | 17.03 433 | 1.9 | 70 | REVERSIBLE |
| 60R204M | FLANGE AND BASE MOUNTING | 1 1/8 IN KEYED SPINDLE | 135 | 270 | 101.0 137 | 2.1 | 0.95 | 33.7-1 | 17.03 433 | 1.9 | 70 | REVERSIBLE |

*All models assume overhung load located at 2.0" (50.80mm) from face of motor.

General:

Air Inlet: 1/2" NPTF

Air consumption: 70 cfm (1.98 m3/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Air strainer intake fitting. Foot and flange type mount.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

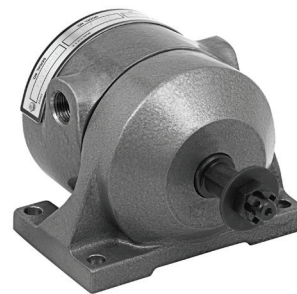
**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MR10 Series - Air Motor - Rotary Vane

Maximum Power 1.0 hp | 0.75 kw

- Maximum Power 1.0 hp | 0.75 kw
- Torque Range 2.5 - 74 ft. lbs. | 3.4 - 100 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|---------------|----------------------|---------------|------------|--------------|--------|------|------------|------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MR10R097M | FOOT MOUNTING | 5/8 IN KEYED SPINDLE | 8500 | 17000 | 2.5 3.4 | 2.1 | 0.95 | 1-1 | 6.75 171 | 1.0 | 54 | REVERSIBLE |

*Non-geared models assume overhung load located at 0.5" (12.70mm) from face of motor.

Geared models assume overhung load located at 0.75" (19.05mm) from face of motor.

General:

Air Inlet: 3/8" NPTF

Air consumption: 54 cfm (1.53 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Air strainer intake fitting. Foot and flange type mount.

Optional Equipment:

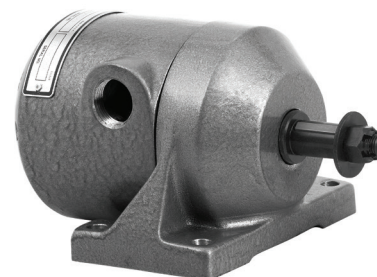
Lubricating Oil - Part 533485 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MR30 Series - Air Motor - Rotary Vane

Maximum Power 3.0 hp | 2.24 kw



- Maximum Power 3.0 hp | 2.24 kw
- Torque Range 7.2 - 209 ft. lbs. | 10 - 283 Nm
- Reversible
- Side Exhaust
- Keyed Spindle

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|-----------------|------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MR30R111M | FLANGE MOUNTING | 1 1/8 IN KEYED SPINDLE | 366 | 670 | 91.0 123 | 2.1 | 0.95 | 16.4-1 | 14.19 360 | 3.0 | 124 | REVERSIBLE |
| MR30R104M | FLANGE MOUNTING | 3/4 IN KEYED SPINDLE | 6000 | 11000 | 7.2 10 | 2.1 | 0.95 | 1-1 | 8.75 222 | 3.0 | 124 | REVERSIBLE |
| MR30R107M | FOOT MOUNTING | 1 1/8 IN KEYED SPINDLE | 177 | 325 | 209.0 283 | 2.1 | 0.95 | 23.8-1 | 14.19 360 | 3.0 | 124 | REVERSIBLE |
| MR30R103M | FOOT MOUNTING | 3/4 IN KEYED SPINDLE | 6000 | 11000 | 7.2 10 | 2.1 | 0.95 | 1-1 | 8.75 222 | 3.0 | 124 | REVERSIBLE |
| MR30R112M | FLANGE MOUNTING | 1 1/8 IN KEYED SPINDLE | 177 | 325 | 209.0 283 | 2.1 | 0.95 | 23.8-1 | 14.19 360 | 3.0 | 124 | REVERSIBLE |

*Non-geared models assume overhung load located at 0.625" (15.88mm) from face of motor.

Geared models assume overhung load located at 0.875" (22.023mm) from face of motor.

General:

Air Inlet: 3/4" NPTF

Air consumption: 124 cfm (3.51 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Foot and flange type mount.

Optional Equipment:

Lubricating Oil – Part 533485 (1 gallon)

Gear Oil – Part 535090 (1 gallon)

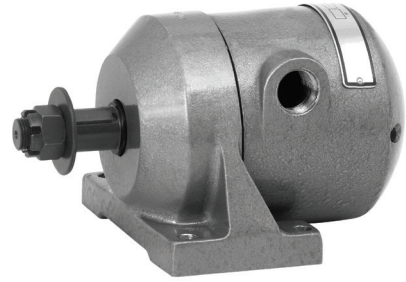
**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MR50 Series - Air Motor - Rotary Vane

Maximum Power 5.5 hp | 4.10 kw

- Maximum Power 5.5 hp | 4.10 kw
- Torque Range 11.9 - 356 ft. lbs. | 16 - 483 Nm
- Reversible
- Side Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|-----------------|------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MR50R114M | FLANGE MOUNTING | 1 IN KEYED SPINDLE | 5700 | 10500 | 11.9 16 | 2.1 | 0.95 | 1-1 | 9.38 238 | 5.5 | 172 | REVERSIBLE |
| MR50R116M | FOOT MOUNTING | 1 1/8 IN KEYED SPINDLE | 181 | 330 | 356.0 383 | 2.1 | 0.95 | 31.58-1 | 15.25 387 | 5.5 | 172 | REVERSIBLE |
| MR50R115M | FOOT MOUNTING | 1 1/8 IN KEYED SPINDLE | 247 | 450 | 245 332 | 2.1 | 0.95 | 23.1-1 | 15.25 387 | 5.5 | 172 | REVERSIBLE |
| MR50R118M | FLANGE MOUNTING | 1 1/8 IN KEYED SPINDLE | 181 | 330 | 356.0 383 | 2.1 | 0.95 | 31.58-1 | 15.25 387 | 5.5 | 172 | REVERSIBLE |

*Non-geared models assume overhung load located at 0.625" (15.88mm) from face of motor.

Geared models assume overhung load located at 0.875" (22.023mm) from face of motor.

General:

Air Inlet: 3/4" NPTF

Air consumption: 172 cfm (4.87 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Foot and flange type mount.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

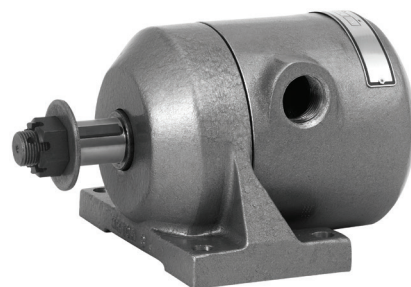
Gear Oil - Part 535090 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MR70 Series - Air Motor - Rotary Vane

Maximum Power 7.5 hp | 5.59 kw



- Maximum Power 7.5 hp | 5.59 kw
- Torque Range 17 - 472 ft. lbs. | 23 - 640 Nm
- Reversible
- Side Exhaust
- Keyed Spindle

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|-----------|-----------------|------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MR70R123M | FLANGE MOUNTING | 1 1/4 IN KEYED SPINDLE | 257 | 465 | 340.0 461 | 2.1 | 0.95 | 21.8-1 | 16.63 422 | 7.5 | 212 | REVERSIBLE |
| MR70R122M | FOOT MOUNTING | 1 1/4 IN KEYED SPINDLE | 169 | 310 | 472.0 640 | 2.1 | 0.95 | 32.5-1 | 16.63 422 | 7.5 | 212 | REVERSIBLE |
| MR70R121M | FOOT MOUNTING | 1 1/4 IN KEYED SPINDLE | 257 | 465 | 340.0 461 | 2.1 | 0.95 | 21.8-1 | 16.63 422 | 7.5 | 212 | REVERSIBLE |
| MR70R119M | FOOT MOUNTING | 1 1/8 IN KEYED SPINDLE | 5500 | 10200 | 17.0 23 | 2.1 | 0.95 | 1-1 | 10.63 270 | 7.5 | 212 | REVERSIBLE |
| MR70R124M | FLANGE MOUNTING | 1 1/4 IN KEYED SPINDLE | 169 | 310 | 472.0 640 | 2.1 | 0.95 | 32.5-1 | 16.63 422 | 7.5 | 212 | REVERSIBLE |

*Non-g geared models assume overhung load located at 0.75" (19.05mm) from face of motor.

G geared models assume overhung load located at 1" (25.40mm) from face of motor.

General:

Air Inlet: 1" NPTF

Air consumption: 212 cfm (6.00 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Foot and flange type mount.

Optional Equipment:

Exhaust Muffler – Part 524302

Lubricating Oil – Part 533485 (1 gallon)

Gear Oil – Part 535090 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

A2 Series - Air Motor - Axial Piston

Maximum Power 0.6 hp | 0.45 kw

- Maximum Power 0.6 hp | 0.45 kw
- Torque Range 2 - 107 ft. lbs. | 2.7 - 145 Nm
- Reversible
- Rear Exhaust
- Keyed Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|----------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| A2R305M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 75 | 150 | 63.0 85 | 2.1 | 0.95 | 31.4-1 | 14.28 363 | 0.6 | 21.2 | REVERSIBLE |
| A2R304M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 99 | 200 | 48.0 65 | 2.1 | 0.95 | 23.8-1 | 14.28 363 | 0.6 | 21.2 | REVERSIBLE |
| A2R303M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 169 | 345 | 28.0 38 | 2.1 | 0.95 | 13.9-1 | 14.28 363 | 0.6 | 21.2 | REVERSIBLE |
| A2R302M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 255 | 520 | 19.0 26 | 2.1 | 0.95 | 9.25-1 | 12.12 308 | 0.6 | 21.2 | REVERSIBLE |
| A2R301M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 575 | 1170 | 8.0 11 | 2.1 | 0.95 | 4.1-1 | 12.12 308 | 0.6 | 21.2 | REVERSIBLE |
| A2R306M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 44 | 90 | 107 145 | 2.1 | 0.95 | 53.6-1 | 14.28 363 | 0.6 | 21.2 | REVERSIBLE |

* All models assume overhung load located at 1.75" (44.45mm) from face of motor.

** These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 3/8" NPTF

Air consumption: 21 cfm (6.00 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Foot and flange type mount.

Optional Equipment:

Exhaust Muffler – Part 524302

Lubricating Oil – Part 533485 (1 gallon)

Gear Oil – Part 535090 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

B4 Series - Air Motor - Axial Piston

Maximum Power 0.9 hp | 0.67 kw



- Maximum Power 0.9 hp | 0.67 kw
- Torque Range 4 - 232 ft. lbs. | 6.8 - 315 Nm
- Reversible
- Rear Exhaust
- Keyed Spindle

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|----------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| B4R317M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 46 | 90 | 232.0 315 | 2.1 | 0.95 | 46.4-1 | 15.21 386 | 0.9 | 39.9 | REVERSIBLE |
| B4R322M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 79 | 150 | 136.0 184 | 2.1 | 0.95 | 27.2-1 | 15.21 386 | 0.9 | 39.9 | REVERSIBLE |
| B4R320M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 154 | 300 | 70.0 95 | 2.1 | 0.95 | 13.9-1 | 15.21 386 | 0.9 | 39.9 | REVERSIBLE |
| B4R318M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 270 | 525 | 40.0 54 | 2.1 | 0.95 | 8-1 | 13.19 335 | 0.9 | 39.9 | REVERSIBLE |
| B4R319M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 525 | 1020 | 21.0 28 | 2.1 | 0.95 | 4.1-1 | 13.19 335 | 0.9 | 39.9 | REVERSIBLE |
| B4R321M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 2150 | 4200 | 5.0 6.8 | 2.1 | 0.95 | 1-1 | 13.19 335 | 0.9 | 39.9 | REVERSIBLE |
| B4R323M | FACE MOUNTING | 7/8 IN KEYED SPINDLE | 90 | 175 | 119.0 161 | 2.1 | 0.95 | 23.8-1 | 15.21 386 | 0.9 | 39.9 | REVERSIBLE |

* All models assume overhung load located at 1.75" (44.45mm) from face of motor.

** These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 3/8" NPTF

Air consumption: 40 cfm (1.13 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Exhaust Muffler – Part 813485

Pendent Control Kits – See page 51

Lubricating Oil – Part 533485 (1 gallon)

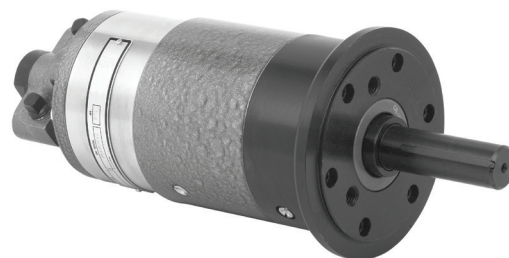
Motor and Gear Lube – Part A123771 (1 pound)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

A6 Series - Air Motor - Axial Piston

Maximum Power 1.9 hp | 1.42 kw



- Maximum Power 1.9 hp | 1.42 kw
- Torque Range 11 - 370 ft. lbs. | 15 - 502 Nm
- Reversible
- Rear Exhaust
- Keyed Spindle

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CON-SUMPTION | CONTROL |
|---------|---------------|----------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|------------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| A6R331M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 54 | 100 | 370.0 502 | 2.1 | 0.95 | 33.6-1 | 19.06 484 | 1.9 | 62 | REVERSIBLE |
| A6R333M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 89 | 170 | 223.0 302 | 2.1 | 0.95 | 20.3-1 | 19.06 484 | 1.9 | 62 | REVERSIBLE |
| A6R332M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 152 | 290 | 130.0 176 | 2.1 | 0.95 | 11.9-1 | 19.06 484 | 1.9 | 62 | REVERSIBLE |
| A6R307M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 315 | 605 | 64.0 87 | 2.1 | 0.95 | 5.8-1 | 15.88 403 | 1.9 | 62 | REVERSIBLE |
| A6R308M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 1820 | 3500 | 1.0 15 | 2.1 | 0.95 | 1-1 | 15.88 403 | 1.9 | 62 | REVERSIBLE |
| A6R335M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 535 | 1030 | 37.0 50 | 2.1 | 0.95 | 3.4-1 | 15.88 403 | 1.9 | 62 | REVERSIBLE |

* All models assume overhung load located at 2.25" (57.15mm) from face of motor.

** These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 3/8" NPTF

Air consumption: 62 cfm (1.76 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Exhaust Muffler – Part 813485

Pendent Control Kits – See page 51

Lubricating Oil – Part 533485 (1 gallon)

Motor and Gear Lube – Part A123771 (1 pound)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

A8 Series - Air Motor - Axial Piston

Maximum Power 2.7 hp | 2.01 kw



- Maximum Power 2.7 hp | 2.01 kw
- Torque Range 19 - 638 ft. lbs. | 26 - 865 Nm
- Reversible
- Rear Exhaust
- Keyed Spindle

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|----------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| A8R336M | FACE MOUNTING | 3/8 IN KEYED SPINDLE | 38 | 75 | 638.0 865 | 2.1 | 0.95 | 33.6-1 | 20.63 524 | 2.7 | 112 | REVERSIBLE |
| A8R337M | FACE MOUNTING | 3/8 IN KEYED SPINDLE | 109 | 215 | 226.0 306 | 2.1 | 0.95 | 11.9-1 | 20.63 524 | 2.7 | 112 | REVERSIBLE |
| A8R311M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 225 | 450 | 110.0 149 | 2.1 | 0.95 | 5.8-1 | 17.5 445 | 2.7 | 112 | REVERSIBLE |
| A8R310M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 375 | 765 | 64.0 87 | 2.1 | 0.95 | 3.4-1 | 17.5 445 | 2.7 | 112 | REVERSIBLE |
| A8R309M | FACE MOUNTING | 1/8 IN KEYED SPINDLE | 1300 | 2600 | 19.0 26 | 2.1 | 0.95 | 1-1 | 17.5 445 | 2.7 | 112 | REVERSIBLE |
| A8R338M | FACE MOUNTING | 3/8 IN KEYED SPINDLE | 65 | 125 | 385.0 522 | 2.1 | 0.95 | 20.3-1 | 20.63 524 | 2.7 | 112 | REVERSIBLE |

* All models assume overhung load located at 2.25" (57.15mm) from face of motor.

** These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 1/2" NPTF

Air consumption: 83 cfm (3.18 m³/min)

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Exhaust Muffler – Part A19509

Pendent Control Kits – See page 51

Lubricating Oil – Part 533485 (1 gallon)

Motor and Gear Lube – Part A123771 (1 pound)

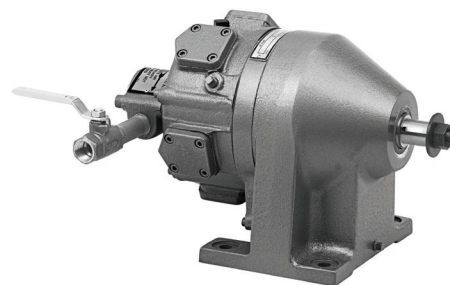
**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MA2 Series - Air Motor - Radial Piston

Maximum Power 1.5 hp | 1.12 kw

- Maximum Power 1.5 hp | 1.12 kw
- Torque Range 8.6 - 262 ft. lbs. | 12 - 355 Nm
- Threaded Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|----------|---------------|--------------------------------------|---------------|------------|----------------|--------|------|------------|------------|------------|-----------------|--------------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MA2R353M | FOOT MOUNTING | 5/8 IN THREAD- ED SPIN- DLE | 60 | 120 | 262.0 355 | 2.1 | 0.95 | 30.4-1 | 14.6 371 | 1.5 | 58 | REVERSIBLE VALVING |
| MA2W403M | FOOT MOUNTING | 5/8 IN THREAD- ED SPIN- DLE | 60 | 120 | 262.0 355 | 2.1 | 0.95 | 30.4-1 | 14.6 371 | 1.5 | 58 | NO VALVING |

*All models assume overhung load located at 0.625" (15.88mm) from face of motor.

**These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 1/2" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Lubricating Oil – Part 533485 (1 gallon)

Gear Oil – Part 535090 (1 gallon)

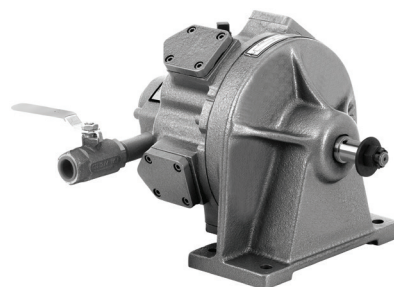
**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MA3 Series -Air Motor - Radial Piston

Maximum Power 3.0 hp | 2.24 kw

- Maximum Power 3.0 hp | 2.24 kw
- Torque Range 24 - 588 ft. lbs. | 33 - 797 Nm
- Threaded Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CON- SUMPTION | CONTROL |
|----------|---------------|-------------------------|------------------|---------------|-----------------|--------|------|---------------|-------------|------------|----------------------|--------------------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MA3R361M | FOOT MOUNTING | 5/8 IN THREADED SPINDLE | 48 | 100 | 588.0 797 | 2.1 | 0.95 | 24.6-1 | 16.56 421 | 3.0 | 95 | REVERSIBLE VALVING |
| MA3W407M | FOOT MOUNTING | 5/8 IN THREADED SPINDLE | 48 | 100 | 588.0 797 | 2.1 | 0.95 | 24.6-1 | 16.56 421 | 3.0 | 95 | NO VALVING |
| MA3S370M | FOOT MOUNTING | 5/8 IN THREADED SPINDLE | 104 | 200 | 299.0 405 | 2.1 | 0.95 | 12.5-1 | 16.56 421 | 3.0 | 88 | SINGLE DIRECTION VALVING |
| MA3W406M | FOOT MOUNTING | 5/8 IN THREADED SPINDLE | 1190 | 2600 | 24.0 33 | 2.1 | 0.95 | 1-1 | 13.76 350 | 3.0 | 80 | NO VALVING |
| MA3S358M | FOOT MOUNTING | 5/8 IN THREADED SPINDLE | 1300 | 2600 | 24.0 33 | 2.1 | 0.95 | 1-1 | 13.76 350 | 3.0 | 90 | SINGLE DIRECTION VALVING |
| MA3W409M | FOOT MOUNTING | 5/8 IN THREADED SPINDLE | 183 | 400 | 155.0 210 | 2.1 | 0.95 | 6.5-1 | 16.56 421 | 3.0 | 87 | NO VALVING |

* Non-geared models assume overhung load located at 0.625" (15.88mm) from face of motor.

Geared models assume overhung load located at 1" (25.40mm) from face of motor.

**These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 3/4" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Lubricating Oil – Part 533485 (1 gallon)

Gear Oil – Part 535090 (1 gallon)

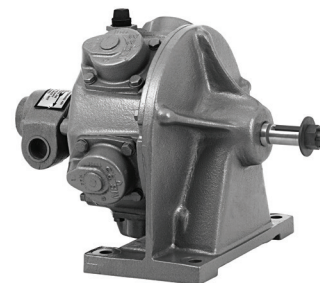
**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MB Series - Air Motor - Radial Piston

Maximum Power 5.5 hp | 4.10 kw

- Maximum Power 5.5 hp | 4.10 kw
- Torque Range 34 - 700 ft. lbs. | 46 - 949 Nm
- Threaded Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|-------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|--------------------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MBR377M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 74 | 150 | 700.0 949 | 2.1 | 0.95 | 20.4-1 | 18.12 460 | 5.5 | 154 | REVERSIBLE VALVING |
| MBW411M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 74 | 150 | 700.0 949 | 2.1 | 0.95 | 20.4-1 | 18.12 460 | 5.5 | 154 | NO VALVING |
| MBS376M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 75 | 150 | 700.0 949 | 2.1 | 0.95 | 20.4-1 | 18.12 460 | 5.5 | 167 | SINGLE DIRECTION VALVING |
| MBW412M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 133 | 270 | 388.0 526 | 2.1 | 0.95 | 11.3-1 | 18.12 460 | 5.5 | 148 | NO VALVING |
| MBR381M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 268 | 540 | 192.0 260 | 2.1 | 0.95 | 5.6-1 | 18.12 460 | 5.5 | 140 | REVERSIBLE VALVING |
| MBS380M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 270 | 540 | 192.0 260 | 2.1 | 0.95 | 5.6-1 | 18.12 460 | 5.5 | 144 | SINGLE DIRECTION VALVING |
| MBW410M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 1500 | 3000 | 34.0 46 | 2.1 | 0.95 | 1-1 | 17.5 445 | 5.5 | 152 | NO VALVING |
| MBW413M | FOOT MOUNTING | 3/4 IN THREADED SPINDLE | 268 | 540 | 192.0 260 | 2.1 | 0.95 | 6.5-1 | 18.12 460 | 5.5 | 140 | NO VALVING |

* All models assume overhung load located at 1" (25.40mm) from face of motor.

**These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 1" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

Gear Oil - Part 535090 (1 gallon)

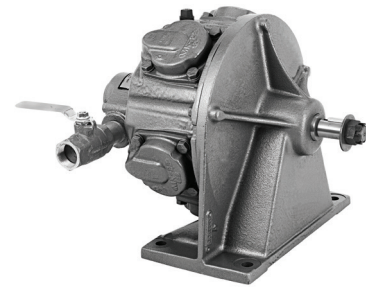
**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

MK Series - Air Motor - Radial Piston

Maximum Power 11 hp | 8.20 kw

- Maximum Power 11 hp | 8.20 kw
- Torque Range 117 - 1654 ft. lbs. | 159 - 2243 Nm
- Threaded Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|---------------------------|---------------|------------|---------------|--------|------|------------|-------------|------------|-----------------|--------------------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MKW419M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 67 | 135 | 1654.0 2243 | 2.1 | 0.95 | 14.2-1 | 20.88 530 | 11 | 288 | NO VALVING |
| MKS392M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 69 | 135 | 1654.0 2243 | 2.1 | 0.95 | 14.2-1 | 20.88 530 | 11 | 293 | SINGLE DIRECTION VALVING |
| MKR395M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 183 | 375 | 606.0 822 | 2.1 | 0.95 | 5.2-1 | 20.88 530 | 11 | 299 | REVERSIBLE VALVING |
| MKW418M | FOOT MOUNTING | 1 IN THREADED SPINDLE | 975 | 1900 | 117.0 159 | 2.1 | 0.95 | 1-1 | 20.42 519 | 11 | 311 | NO VALVING |
| MKW420M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 183 | 375 | 606.0 822 | 2.1 | 0.95 | 5.2-1 | 20.88 530 | 11 | 299 | NO VALVING |

* All models assume overhung load located at 1" (25.40mm) from face of motor.

**These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 1-1/4" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

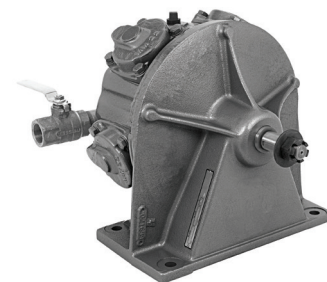
Gear Oil - Part 535090 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

MM Series - Air Motor - Radial Piston

Maximum Power 15 hp | 11.19 kw

- Maximum Power 15 hp | 11.19 kw
- Torque Range 138 - 1952 ft. lbs. | 187 - 2647 Nm
- Threaded Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|---------------------------|---------------|------------|---------------|--------|------|------------|-------------|------------|-----------------|--------------------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MMW422M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 71 | 150 | 1952.0 2647 | 2.1 | 0.95 | 14.2-1 | 20.88 530 | 15 | 345 | NO VALVING |
| MMS400M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 206 | 400 | 715.0 970 | 2.1 | 0.95 | 5.2-1 | 20.88 530 | 15 | 336 | SINGLE DIRECTION VALVING |

* All models assume overhung load located at 1" (25.40mm) from face of motor.

**These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 1-1/4" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Lubricating Oil - Part 533485 (1 gallon)

Gear Oil - Part 535090 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Air Motors

| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|---------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|--------------------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MMW421M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 1010 | 2100 | 138.0 187 | 2.1 | 0.95 | 1-1 | 20.42 519 | 15 | 352 | NO VALVING |
| MMS396M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 1070 | 2100 | 138.0 187 | 2.1 | 0.95 | 1-1 | 20.42 519 | 15 | 348 | SINGLE DIRECTION VALVING |
| MMW423M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 194 | 400 | 715.0 970 | 2.1 | 0.95 | 5.2-1 | 20.88 530 | 15 | 332 | NO VALVING |

* All models assume overhung load located at 1" (25.40mm) from face of motor.

**These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 1-1/4" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Lubricating Oil – Part 533485 (1 gallon)

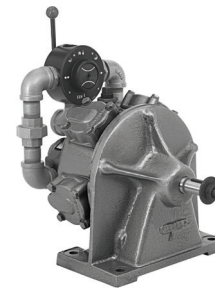
Gear Oil – Part 535090 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

ME Series - Air Motor - Radial Piston

Maximum Power 5.5 hp | 4.10 kw

- Maximum Power 5.5 hp | 4.10 kw
- Torque Range 34 - 700 ft. lbs. | 46 - 949 Nm
- Threaded Spindle



| MODEL | MOUNT | SPINDLE TYPE | RPM AT MAX HP | FREE SPEED | TORQUE STALL | WEIGHT | | GEAR RATIO | LENGTH | HORSEPOWER | AIR CONSUMPTION | CONTROL |
|---------|---------------|---------------------------|---------------|------------|--------------|--------|------|------------|-------------|------------|-----------------|--------------------------|
| | | | R/MIN | R/MIN | FT LB NM | LB | KG | | IN MM | HP | SCFM | |
| MER385M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 60 | 120 | 985.0 1336 | 2.1 | 0.95 | 20.4-1 | 18.12 460 | 6.5 | 167 | REVERSIBLE VALVING |
| MEW415M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 60 | 120 | 985.0 1336 | 2.1 | 0.95 | 20.4-1 | 18.12 460 | 6.5 | 167 | NO VALVING |
| MES384M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 61 | 120 | 985.0 1336 | 2.1 | 0.95 | 20.4-1 | 18.12 460 | 6.5 | 168 | SINGLE DIRECTION VALVING |
| MEW417M | FOOT MOUNTING | 1 1/4 IN THREADED SPINDLE | 219 | 440 | 270.0 366 | 2.1 | 0.95 | 6.5-1 | 18.12 460 | 6.5 | 152 | NO VALVING |

* All models assume overhung load located at 1" (25.40mm) from face of motor.

**These motors must be operated with sufficient load to prevent speed from exceeding maximum allowable speed shown on performance curve.

General:

Air Inlet: 1" NPTF

All tools performance rated @ 90psi (620 kPa) air pressure.

Optional Equipment:

Lubricating Oil – Part 533485 (1 gallon)

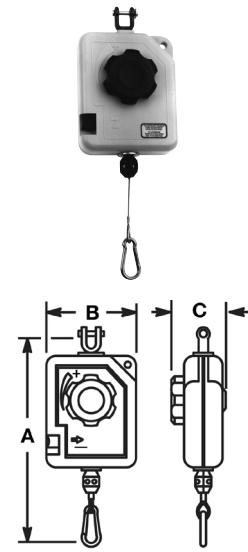
Gear Oil – Part 535090 (1 gallon)

**Please visit clecotools.com for dimensional diagrams and power curves.

Accessories

BL Series - Balancers 1.0 - 4.0 lbs

- External tension adjustment
- 360° Swivel
- Retracting In-Line Cable

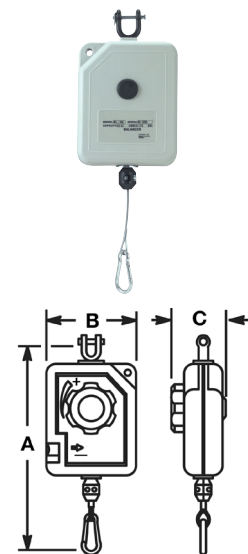


Light Duty (BL Series)

| MODEL | CABLE LENGTH | CAPACITY | | DIMENSION A | | DIMENSION B | | DIMENSION C | | WEIGHT | |
|-------|-----------------|----------|--|-------------|--|-------------|--|-------------|--|--------|-----|
| | | LBS | | IN | | IN | | IN | | LB | KG |
| BL-2A | 5.2 FT 1.6 M | 2.0-10 | | 10.4 | | 4.0 | | 2.2 | | 1.1 | 0.5 |
| BL-4A | 5.2 FT 1.6 M | 4.0-20 | | 10.4 | | 4.0 | | 2.2 | | 1.1 | 0.5 |

BL Series - Balancers 4.0 - 8.0 lbs

- External tension adjustment
- 360° Swivel
- Retracting In-Line Cable



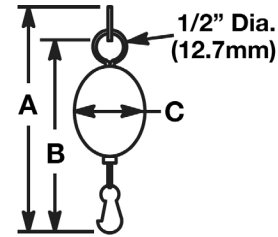
Light Duty (BL Series)

| MODEL | CABLE LENGTH | CAPACITY | | DIMENSION A | | DIMENSION B | | DIMENSION C | | WEIGHT | |
|--------|-----------------|----------|--|-------------|--|-------------|--|-------------|--|--------|-----|
| | | LBS | | IN | | IN | | IN | | LB | KG |
| BL-6A | 6.7 FT 2.0 M | 6.0-4.0 | | 12.9 | | 5.5 | | 3.1 | | 3.3 | 1.5 |
| BL-8A | 6.7 FT 2.0 M | 8.0-6.0 | | 12.9 | | 5.5 | | 3.1 | | 3.3 | 1.5 |
| BLL-8A | 6.7 FT 2.0 M | 8.0-6.0 | | 12.9 | | 5.5 | | 3.1 | | 3.3 | 1.5 |

Accessories

PL Series - Balancers 1.0 - 12.0 lbs

- External tension Adjustment
- 360° Swivel
- Retracting In-Line Cable

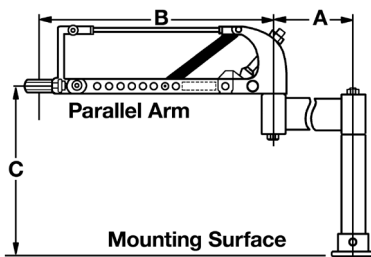
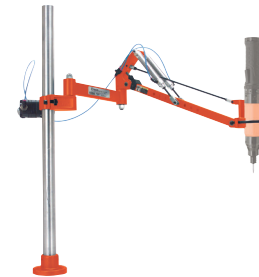


Light Duty (PL Series)

| MODEL | CABLE LENGTH | CAPACITY | DIMENSION A | DIMENSION B | DIMENSION C |
|--------|-----------------|----------|-------------|-------------|-------------|
| | | LBS | IN | IN | IN |
| PL-12A | 4.6 FT 1.4 M | 12.0-1.0 | 6.8 | 5.1 | 2.3 |

Balance Arms - Air Cylinder - Parallel

- Ball bearing construction
- Support tools weighing up to 10 lbs.
- Post, wall, or adjustable height post mounting
- Parallel arms



XX BA - XX - XX - XX

| | |
|---------------------------------|---------------------------------|
| Series | Mount |
| CS - Air cylinder, single arm | - - Post |
| S - Spring, single arm | AH - Adjustable Height |
| CP - Air cylinder, parallel arm | WM - Wall Mount |
| P - Spring, parallel arm | |
| Tool Type | Adjustable Arm Extension |
| BA - Balance Arm | 12" 24" |
| | 18" 30" |

| MODEL | CODE NO. | DIMENSION A | DIMENSION B | DIMENSION C | DIMENSION D |
|------------|----------|-------------|-------------|-------------|-------------|
| | | IN | IN | IN | IN |
| CPBA-12-AH | 520178 | 12 | 12 | | 30 |
| CPBA-18 | 520170 | 12 | 18 | 18 | |
| CPBA-18-AH | 520172 | 12 | 18 | | 30 |

Tool weight capacity: 10 lbs. (4.6 kg) Air Cylinder models, 5 lbs. (2.3 kg) Spring models. Torque capacity: 10 ft. lbs. (13.5 Nm) Standard Equipment: Operating Instructions and Service Manual. Regulator for Air Cylinders. Threaded Nipples for CSBA Models 1/4 NPT Hex Nipple: 204032 1/4 NPT x 1/8 NPT Hex Reducer nipple: 204137

Accessories

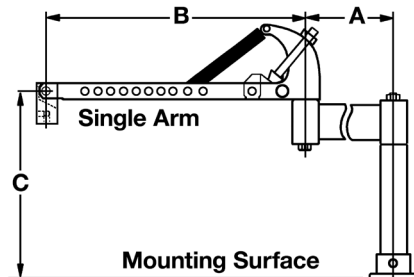
Balance Arms - Air Cylinder - Single

- Ball bearing construction
- Supports tools weighing up to 10 lbs.
- Post, wall, or adjustable height post mounting
- Single arm



XX BA - XX - XX - XX

| | | |
|---------------------------------|---|---|
| Series | Arm Extension | Mount |
| CS - Air cylinder, single arm | 12" 24" 18" 30" <i>(12" unless specified)</i> | - - Post AH - Adjustable Height WM - Wall Mount |
| S - Spring, single arm | | Adjustable Arm Extension |
| CP - Air cylinder, parallel arm | | 12" 24" 18" 30" |
| P - Spring, parallel arm | | |
| Tool Type | | |
| BA - Balance Arm | | |



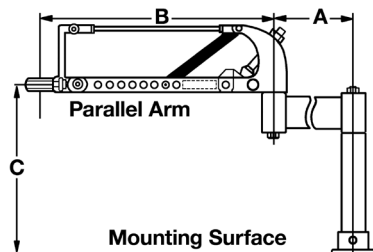
| MODEL | CODE NO. | DIMENSION A | | DIMENSION B | | DIMENSION C | |
|------------|----------|-------------|--|-------------|--|-------------|--|
| | | IN | | IN | | IN | |
| CSBA18 | 520160 | 12 | | 18 | | 18 | |
| CSBA-18-AH | 520162 | 12 | | 18 | | | |

Tool weight capacity: 10 lbs. (4.6 kg) Air Cylinder models, 5 lbs. (2.3 kg) Spring models. Torque capacity: 10 ft. lbs. (13.5 Nm) Standard Equipment: Operating Instructions and Service Manual. Regulator for Air Cylinders. Threaded Nipples for CSBA Models 1/4 NPT Hex Nipple: 204032 1/4 NPT x 1/8 NPT Hex Reducer nipple: 204137

Accessories

Balance Arms - Spring - Parallel

- Ball bearing construction
- Supports tools weighing up to 5 lbs.
- Post, wall, or adjustable height post mounting
- Parallel arm



XX BA - XX - XX - XX

| | | |
|---------------------------------|--|---------------------------------|
| Series | | Mount |
| CS - Air cylinder, single arm | | - - Post |
| S - Spring, single arm | | AH - Adjustable Height |
| CP - Air cylinder, parallel arm | | WM - Wall Mount |
| P - Spring, parallel arm | | |
| Arm Extension | | Adjustable Arm Extension |
| 12" 24" | | 12" 24" |
| 18" 30" | | 18" 30" |
| (12" unless specified) | | |
| Tool Type | | |
| BA - Balance Arm | | |

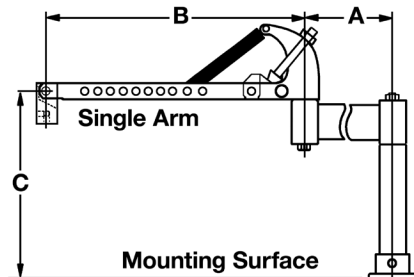
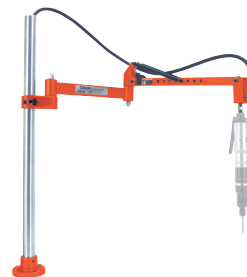
| MODEL | CODE NO. | DIMENSION A | DIMENSION B | DIMENSION C | DIMENSION D |
|--------------|----------|-------------|-------------|-------------|-------------|
| | | IN | IN | IN | IN |
| PBA-12 | 520007 | 12 | 12 | 18 | |
| PBA-12-AH | 520009 | 12 | 12 | | 30 |
| PBA-18 | 520010 | 12 | 18 | 18 | |
| PBA-18-18-AH | 520036 | 12 | 18 | | 30 |
| PBA-18-AH | 520012 | 12 | 18 | | 30 |
| PBA-24 | 520045 | 12 | 24 | 18 | |
| PBA-24-AH | 520047 | 12 | 24 | | 30 |
| PBA-30-AH | 520050 | 12 | 30 | | 30 |

Tool weight capacity: 10 lbs. (4.6 kg) Air Cylinder models, 5 lbs. (2.3 kg) Spring models. Torque capacity: 10 ft. lbs. (13.5 Nm) Standard Equipment: Operating Instructions and Service Manual. Regulator for Air Cylinders. Threaded Nipples for CSBA Models 1/4 NPT Hex Nipple: 204032 1/4 NPT x 1/8 NPT Hex Reducer nipple: 204137

Accessories

Balance Arms - Spring - Single

- Ball bearing construction
- Supports tools weighing up to 5 lbs.
- Post, wall, or adjustable height post mounting
- Single arm



XX BA - XX - XX - XX

| | | | | |
|---------------------------------|--|--|--|---------------------------------|
| Series | | | | |
| CS - Air cylinder, single arm | | | | Mount |
| S - Spring, single arm | | | | - - Post |
| CP - Air cylinder, parallel arm | | | | AH - Adjustable Height |
| P - Spring, parallel arm | | | | WM - Wall Mount |
| Tool Type | | | | Adjustable Arm Extension |
| BA - Balance Arm | | | | 12" 24" |
| | | | | 18" 30" |
| | | | | (12" unless specified) |

| MODEL | CODE NO. | DIMENSION A | DIMENSION B | DIMENSION C | DIMENSION D |
|-----------|----------|-------------|-------------|-------------|-------------|
| | | IN | IN | IN | IN |
| SBA-12 | 520001 | 12 | 12 | 18 | |
| SBA-12-AH | 520003 | 12 | 12 | | 30 |
| SBA-18 | 520004 | 12 | 18 | 18 | |
| SBA-18-AH | 520006 | 12 | 18 | | 30 |
| SBA-24-AH | 520110 | 12 | 24 | | 30 |

Tool weight capacity: 10 lbs. (4.6 kg) Air Cylinder models, 5 lbs. (2.3 kg) Spring models. Torque capacity: 10 ft. lbs. (13.5 Nm) Standard Equipment: Operating Instructions and Service Manual. Regulator for Air Cylinders. Threaded Nipples for CSBA Models 1/4 NPT Hex Nipple: 204032 1/4 NPT x 1/8 NPT Hex Reducer nipple: 204137



Solutions are in our DNA.

Cleco[®]
Production Tools

Material Removal

SOLUTIONS ARE IN OUR DNA.



Surface Preparation Tools

Designed for operators. Built for production.



Use top-quality, precision components
and motor assemblies to deliver
unmatched productivity.

Manufactured from the finest materials available, Cleco tools deliver efficiency and precision. When it comes to fine finishing applications such as die grinding and de-burring, no tools are better suited for the job than Cleco grinders. Our reputation for durability, dependability and versatility is among the highest for fine finishing applications. Designed for the toughest work environments, Cleco material removal tools are built for you industry's most demanding projects.



Surface Preparation Tools



With **interchangeable parts**, you can rely on a single tool for a range of industrial applications.

We design versatile tools with interchangeable parts to make our products more affordable, easier to repair, and faster to use. Cleco's Dotco sanders, buffers and polishers are available in a variety of styles and power ratings to provide flexibility in choosing the best tool for the job. Disc sanding and polishing, wire brushes, buffing wheels, abrasive sheets, woven or non-woven belts. No matter the application, we have a quality tool solution.



Designed for operator **comfort and productivity**.

Cleco grinders are designed with the operator in mind: small, lightweight and comfortable to use, without sacrificing durability. Plus, they incorporate elastomer coatings, and perfectly balanced moving parts to keep vibration to a minimum. This optimal combination of tool characteristics allows the operator to focus on doing the best job possible, in the least amount of time.



High performance for high-volume, high-repetition tasks.

Cleco's Dotco drills have long been the industry workhorse for daily high-volume, high-precision use in applications ranging from appliances to aerospace manufacturing.

Be it aluminum, steel, titanium, composite, or wood, many industries require hand-drilled holes, and Cleco's Dotco tools offer some of the industry's most durable and reliable hand-held drills, available in pistol, angle and in-line configurations.

Grinders

10-90 Series - Precision Grinder - Turbine - Cleco Dotco

100,000 RPM 0.06 hp (0.044 kW)



- Requires no air line lubrication - High precision ball bearings for long life expectancy
- Two-stage turbine motor with roll throttle
- Achieves a superb finish with its high speed and precision spindle
- Light weight and durable aluminum housing
- Low vibration and quiet operation minimizes operator fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|-------------|---------|------------|---------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 10R9000-03 | 3 MM | FRONT | 100000 | 3/16" CARBIDE BURR, 3/16" DIAMOND PIN | ALUMINUM | 0.441 | 5.4 | 1/8 |
| 10R9000-08 | 1/8 IN | FRONT | 100000 | 3/16" CARBIDE BURR, 3/16" DIAMOND PIN | ALUMINUM | 0.441 | 5.4 | 1/8 |

CAUTION: Use dry air at 90 psi maximum: Do not lubricate turbine grinders. Lubrication will be detrimental to the operation and life of turbine tools. Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Applicable collet, collet wrenches, 7 ft./2.1 m air supply hose, replaceable cartridge hose filter.

10-95 Series - Precision Grinder - Turbine - Cleco Dotco

80,000 RPM 0.1 hp (0.074 kW)



- Requires no air line lubrication - High precision ball bearings for long life expectancy
- Maximizes productivity with two-stage turbine motor
- Achieves a superb finish with its high speed and precision spindle
- Light weight and durable aluminum housing
- Low vibration and quiet operation minimizes operator fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|---------------|-------------|---------|------------|--------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 10L9500-36 | 1/8 IN | FRONT | 80000 | 1/4" CARBIDE BURR, 3/16" DIAMOND PIN | ALUMINUM | 1.98 | 5.8 | 1/4 |
| 10N9500-36* | 1/8 IN | FRONT | 80000 | 1/4" CARBIDE BURR, 3/16" DIAMOND PIN | ALUMINUM | 1.98 | 5.8 | 1/4 |
| 10N9500-36M3* | 3 MM | FRONT | 80000 | 1/4" CARBIDE BURR, 3/16" DIAMOND PIN | ALUMINUM | 1.98 | 5.8 | 1/4 |

CAUTION: Use dry air at 90 psi maximum: Do not lubricate turbine grinders. Lubrication will be detrimental to the operation and life of turbine tools. Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Applicable collet, collet wrenches, 8 ft./2.4 m air supply hose, built-in air filter, speed regulator

* Tool will start with applied air, intended for fixtured applications

Grinders

12R91 Series - Precision Grinder - Governed - Turbine

65,000 RPM 0.1 hp (0.074 kW)



Grinders

- Requires no air line lubrication - High precision ball bearings for long life expectancy
- Two-stage turbine motor with roll throttle
- Achieves a superb finish with its high speed and precision spindle
- Light weight and durable composite housing
- Low vibration and quiet operation minimizes operator fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | OVERHOSE | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|-------------|---------|------------|-------------------------------------|--------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | | LB | IN | IN |
| 12R9180-03 | 3 MM | REAR | 65000 | 1/8" CARBIDE BURR, 1/8" DIAMOND PIN | COMPOSITE | 2 FT 0.6 M | 0.441 | 5.8 | 1/8 |
| 12R9180-08 | 1/8 IN | REAR | 65000 | 1/8" CARBIDE BURR, 1/8" DIAMOND PIN | COMPOSITE | 2 FT 0.6 M | 0.441 | 5.8 | 1/8 |
| 12R9180-43 | 3 MM | REAR | 65000 | 1/8" CARBIDE BURR, 1/8" DIAMOND PIN | COMPOSITE | 4 FT 1.2 M | 0.441 | 5.8 | 1/8 |
| 12R9180-48 | 1/8 IN | REAR | 65000 | 1/8" CARBIDE BURR, 1/8" DIAMOND PIN | COMPOSITE | 4 FT 1.2 M | 0.441 | 5.8 | 1/8 |

CAUTION: Use dry air at 90 psi maximum: Do not lubricate turbine grinders. Lubrication will be detrimental to the operation and life of turbine tools. Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Applicable collet, collet wrenches, collet guard, 5 ft./1.5m air supply hose

12-03 Series - Precision Grinder - Gearless - Right Angle - Cleco Dotco

80,000 RPM 0.1 hp (0.074 kW)



- Industrial bearing provides long life expectancy
- Designed for precision deburring and metal removal
- Compact and light weight composite housing
- Roll throttle equipped
- Includes over-hose

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | OVERHOSE | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|-------------|---------|------------|-------------------------------------|--------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | | LB | IN | IN |
| 12R0380-13 | 3 MM | REAR | 80000 | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | COMPOSITE | 1 FT 0.3 M | 0.3 | 5.5 | 1/8 |
| 12R0380-18 | 1/8 IN | REAR | 80000 | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | COMPOSITE | 1 FT 0.3 M | 0.220 | 5.5 | 1/8 |
| 12R0380-43 | 3 MM | REAR | 80000 | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | COMPOSITE | 4 FT 1.2 M | 0.220 | 5.5 | 1/8 |

Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Applicable collet, collet wrenches, collet guard, 5 ft./1.5 m air supply hose, 1 ft./0.3 m overhose

Grinders

10-04 Series - Precision Grinder - Inline - Cleco Dotco

60,000 RPM 0.1 hp (0.074 kW)



- Industrial bearing provides long life expectancy
- Designed for precision deburring and metal removal
- Compact and light aluminum weight housing
- Roll throttle equipped

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | OVERHOSE | ABRASIVE CAPACITY GRINDER | WEIGHT | LENGTH | AIR INLET SIZE | COLLET GUARD |
|------------|-------------|---------|------------|--------------|-------------------------------------|--------|--------|----------------|------------------|
| | | | R/MIN | | | LB | IN | IN | |
| 10R0400-13 | 3 MM | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | WITHOUT |
| 10R0400-18 | 1/8 IN | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | WITHOUT |
| 10R0401-13 | 3 MM | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | WITH |
| 10R0401-16 | 3/32 IN | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | WITH |
| 10R0401-18 | 1/8 IN | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | WITH |
| 10R0401-43 | 3 MM | REAR | 60000 | 4 FT 1.2 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | WITH |
| 10R0412-18 | 1/8 IN | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 6.2 | 1/8 | WRENCHLESS CHUCK |
| 10R0414-43 | 3 MM | REAR | 60000 | 4 FT 1.2 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | WITH |

Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Applicable collet, collet wrenches, collet guard, 5 ft/1.5 m air supply hose, 1 ft./0.3 m overhose

12-04 Series - Precision Grinder - Inline - Cleco Dotco

60,000 RPM 0.1 hp (0.074 kW)



- Industrial bearing provides long life expectancy
- Designed for precision deburring and metal removal
- Compact and light weight composite housing
- Roll throttle equipped

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | OVERHOSE | ABRASIVE CAPACITY GRINDER | WEIGHT | LENGTH | AIR INLET SIZE | COLLET GUARD |
|------------|-------------|---------|------------|--------------|-------------------------------------|--------|--------|----------------|--------------|
| | | | R/MIN | | | LB | IN | IN | |
| 12R0400-13 | 3 MM | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | SHORT |
| 12R0400-18 | 1/8 IN | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | SHORT |
| 12R0400-43 | 3 MM | REAR | 60000 | 4 FT 1.2 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | SHORT |
| 12R0410-13 | 3 MM | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | LONG |
| 12R0410-16 | 3/32 IN | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | LONG |
| 12R0410-18 | 1/8 IN | REAR | 60000 | 1 FT 0.3 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | SHORT |
| 12R0410-43 | 3 MM | REAR | 60000 | 4 FT 1.2 M | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | 0.220 | 5.8 | 1/8 | SHORT |

Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Applicable collet, collet wrenches, collet guard, 5 ft/1.5 m air supply hose, 1 ft./0.3 m overhose

Grinders

MP42 Series Pencil Grinders

70,000 RPM 0.06 hp (0.044 kW)



Grinders

- Ideal for precision deburring, blending and smoothing applications
- Lightweight, ergonomically designed to be virtually vibration free
- Rear exhaust directs air away from work
- Standard with 5 ft air hose and 1 ft overhose
- Ideal for tight spots
- Slim comfortable design with ergonomic grip for operator comfort
- Double bearings for increased durability on MP4200 inline
- Includes both 1/8 in and 3 mm collets

| MODEL | TOOL CONFIGURATION | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | OVERHOSE | WEIGHT | LENGTH | AIR INLET SIZE |
|--------|--------------------|-------------|---------|------------|-------------------------------------|--------------|--------------|--------|--------|----------------|
| | | | | R/MIN | | | | LB | IN | IN |
| MP4200 | INLINE | 1/8 IN | REAR | 70000 | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | ALUMINUM | 1 FT 0.3 M | 0.441 | 5.4 | 1/8 |
| MP4201 | RIGHT ANGLE | 1/8 IN | REAR | 70000 | 1/4" CARBIDE BURR, 1/4" DIAMOND PIN | ALUMINUM | 1 FT 0.3 M | 0.441 | 5.9 | 1/8 |

General: Air Inlet 1/4" NPT. Use 1/4" (6.4 mm) I.D. hose. All tools performance rated @ 90psi (620 kPa) air pressure.

Optional:

MP4200 - 70617600 1/8" collet kit (5 pcs.), 70620200PT - 3mm collet kit (5 pcs.)

MP4201 - 70618800 1/8" collet kit (5 pcs.), 70620400PT - 3mm collet kit (5 pcs.)

220G Series - Precision Grinder - Push-Pull Start

60,000 RPM 0.1 hp (0.74 kW)



- Industrial bearing provides long life expectancy
- Designed for precision deburring and metal removal
- Compact and light weight housing
- Available in a kit with a complete set of accessories

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|----------------|-------------|---------|------------|---------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 220G-600-C2 | 1/8 IN | FRONT | 60000 | 1/4" CARBIDE BURR | ALUMINUM | 0.220 | 4.60 | 1/8 |
| 220G-600-C2-K* | | FRONT | 60000 | 1/4" CARBIDE BURR | ALUMINUM | 0.441 | 4.60 | 1/8 |

Standard Equipment: Applicable collet, collet wrenches, 8 ft./2.4m air supply hose, built-in air filter, speed regulator

* Kit includes grinder, hose, collet, collet wrench, cylindrical plain burr 413680, cylindrical radius end burr 413681, cone & taper burr 413682, and tree point burr 413683, carrying case.

Grinders

Grinders

18 Series - Steel

50,000 RPM 0.1 hp (0.074 kW)



- Industrial bearing provides long life expectancy
- Designed for precision deburring and metal removal
- Compact and light weight housing
- Available in a kit with a complete set of accessories

| MODEL | COLLET SIZE | EXHAUST | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|-------------|-------------|---------|---------------------------------------|--------------|--------|--------|----------------|
| | | | | | LB | IN | IN |
| 18G-810D | 1/4 IN | FRONT | 1/4" CARBIDE BURR, 1/2" MOUNTED WHEEL | STEEL | 0.88 | 5.9 | 1/8 |
| 18G-810D-08 | 1/8 IN | FRONT | 1/4" CARBIDE BURR, 1/2" MOUNTED WHEEL | STEEL | 0.88 | 5.9 | 1/8 |

Use dry air at 90psi maximum: Do not lubricate turbine grinders. Lubrication will be detrimental to the operation and life of turbine tools. Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: 1/4" collet - 7808, Nosepiece -1011790, 7/16" Spindle Wrench - 1011691, 11/16" Collet Nut Wrench - 1014472

15Z Series - Air Marking Pen - Cleco Dotco

20,000 RPM 0.06 hp (0.044 kW)



- Sliding sleeve throttle
- Ideal for marking a variety of materials, ranging from Aluminum to Titanium
- Carbide tipped stylus
- Weighs only 4 oz | 113 grams

| MODEL | FREE SPEED | ABRASIVE CAPACITY | WEIGHT | AIR INLET SIZE | LENGTH | DIAMETER |
|---------|------------|-------------------|--------|----------------|--------|----------|
| | R/MIN | | LB | IN | IN | IN |
| 15Z-710 | 20000 | 1/8" STYLUS | 0.220 | 1/4 | 5.5 | 0.6 |

Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Carbide tipped stylus

15Z Series - Air Marking Pen Kit

20,000 RPM 0.06 hp (0.044 kW)



- Includes 15Z-710 air marking pen
- 5' (1.5m) air hose assembly
- 3/16" ID with 1/8" NPT fittings
- Includes two 1/2" wrenches
- Durable and convenient carrying case

| MODEL | FREE SPEED | ABRASIVE CAPACITY | WEIGHT | AIR INLET SIZE | LENGTH | DIAMETER |
|---------|------------|-------------------|--------|----------------|--------|----------|
| | R/MIN | | LB | IN | IN | IN |
| 15Z-720 | 20000 | 1/8" STYLUS | 0.441 | 1/4 | 5.5 | 0.6 |

Do not attach a quick-disconnect fitting directly to the tool.

Standard Equipment: Carbide tipped stylus

Grinders

12-05 Series - Precision Grinder- with Collet Guard - Cleco Dotco

40,000 RPM 0.2 hp (0.15 kW)



Grinders

- Robust design have been continuously improved for six decades
- Compact size for ultimate control - easy access to confined areas
- Ideal for die and mold work as well as deburring
- Comprehensive selection of speed available
- Equipped with dial throttle

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|-------------|---------|------------|---------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12R0500-36 | 1/4 IN | FRONT | 40000 | 1/4" CARBIDE BURR, 7/8" MOUNTED WHEEL | COMPOSITE | 0.66 | 5.9 | 1/8 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Minimum Hose I.D.: 3/16in / 4.8mm

Standard Equipment: Applicable collet, collet wrenches, collet guard, 7 ft / 2.1m air supply hose

12-10 Series - Die Grinder - 300 Series Collet - Cleco Dotco

12,000 - 34,000 RPM 0.3 hp (0.22 kW)



- Durable and ergonomic composite housing
- Compact size for ultimate control - easy access to confined areas
- Ideal for die and mold work as well as deburring
- Comprehensive selection of speed available
- Standard equipped with lock-off lever

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|---------------|---------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12L1045-36 | 1/4 IN | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1045-36M6* | 1/4 IN 6 MM | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1046-36 | 1/4 IN | FRONT | 18000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1028-36 | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1028-36M6* | 1/4 IN 6 MM | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1003-36 | 1/4 IN | FRONT | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1082-36 | 1/4 IN | REAR | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1082-36M6* | 1/4 IN 6 MM | REAR | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1000-36 | 1/4 IN | FRONT | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1000-36M6* | 1/4 IN 6 MM | FRONT | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 6.4 mm

* -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose

Grinders

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------------|---------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12L1080-36 | 1/4 IN | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1080-36M6* | 1/4 IN 6 MM | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1080-36M6OH* | 1/4 IN 6 MM | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1001-36 | 1/4 IN | FRONT | 34000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1081-36 | 1/4 IN | REAR | 34000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12L1081-36M6OH* | 1/4 IN 6 MM | REAR | 34000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |
| 12S1008-36 | 1/4 IN | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 6.4 mm

* -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose

10-10 Series - Die Grinder - 200 & 300 Series Collet - Cleco Dotco

25,000 - 34,000 RPM 0.3 hp (0.22 kW)



- Durable aluminum housing
- Compact size for ultimate control - easy access to confined areas
- Ideal for die and mold work as well as deburring
- Comprehensive selection of speed available

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|-------------|-------------|---------|------------|-------------------------------------|--------------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 10L1003-36 | 1/4 IN | FRONT | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |
| 10L1082-36 | 1/4 IN | REAR | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |
| 10L1000-36 | 1/4 IN | FRONT | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |
| 10L1080-36 | 1/4 IN | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |
| 10L1097-36 | 1/4 IN | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM WITH BAIL | 0.66 | 4.60 | 1/4 |
| 10N1080-01* | 1/4 IN | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |
| 10L1001-36 | 1/4 IN | FRONT | 34000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |
| 10L1081-36 | 1/4 IN | REAR | 34000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |
| 10N1081-36* | 1/4 IN | REAR | 34000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 0.66 | 4.60 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 6.4 mm

* Tool will start with applied air, intended for fixtured applications

Grinders

12-20 Series - Die Grinder - 200 Series Collet - Cleco Dotco

12,000 - 25,000 RPM 0.6 hp (0.45 kW)



Grinders

- Ergonomic composite housing
- Front and rear exhaust models available
- Designed to work comfortably with the operator
- Standard equipped with 200 series collet

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------------|---------------|---------|------------|---------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12L2003-01 | 1/4 IN | FRONT | 12000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2002-01 | 1/4 IN | FRONT | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2001-01 | 1/4 IN | FRONT | 20000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2081-01 | 1/4 IN | REAR | 20000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2081-01M6* | 1/4 IN 6 MM | REAR | 20000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2081-01M6OH* | 1/4 IN 6 MM | REAR | 20000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2000-01 | 1/4 IN | FRONT | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2080-01 | 1/4 IN | REAR | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2080-01M6* | 1/4 IN 6 MM | REAR | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |
| 12L2082-01 | 1/4 IN | REAR | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.9 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4in / 6.4mm

* -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose. -01M6 includes both 1/4" Collet and 6 mm Collet. -01M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose.

10-20 Series - Die Grinder - 200 & 300 Series Collet - Cleco Dotco

18,000 - 25,000 RPM 0.6 hp (0.45 kW)



- Durable aluminum housing
- Front, side, and rear exhaust models available
- Designed to work comfortably with the operator

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|-------------|---------|------------|---------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 10L2002-36 | 1/4 IN | FRONT | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 6.6 | 1/4 |
| 10L2082-01 | 1/4 IN | REAR | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 6.6 | 1/4 |
| 10L2005-01 | 1/4 IN | FRONT | 20000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 5.7 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches Minimum Hose I.D.: 5/16 in / 7.9 mm

Termination -01 = 200 Series collet

Termination -36 = 300 series collet

* -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose. -01M6 includes both 1/4" Collet and 6 mm Collet. -01M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose.

** Tool will start with applied air, intended for fixtured applications

Grinders

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|---------------|---------------|---------|------------|---------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 10L2081-01 | 1/4 IN | REAR | 20000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 5.8 | 1/4 |
| 10L2081-01M6* | 1/4 IN 6 MM | REAR | 20000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 5.8 | 1/4 |
| 10L2000-01 | 1/4 IN | FRONT | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 5.8 | 1/4 |
| 10L2000-36 | 1/4 IN | FRONT | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.10 | 6.4 | 1/4 |
| 10L2080-01 | 1/4 IN | REAR | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 5.8 | 1/4 |
| 10L2080-01M6* | 1/4 IN 6 MM | REAR | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 5.8 | 1/4 |
| 10L2080-36 | 1/4 IN | REAR | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 6.4 | 1/4 |
| 10N2080-01** | 1/4 IN | REAR | 25000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 5.8 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches Minimum Hose I.D.: 5/16 in / 7.9 mm

Termination -01 = 200 Series collet

Termination -36 = 300 series collet

* -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose. -01M6 includes both 1/4" Collet and 6 mm Collet. -01M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose.

** Tool will start with applied air, intended for fixtured applications

216 Series - 200 Series Collet

25,000 RPM 0.7 hp (0.45 kW)



- Designed for demands of heavy industries, such as shipbuilding, foundries, metal fabrication, etc.
- Rugged advanced alloy housing
- Front and side exhaust models available

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|----------------|-------------|---------|------------|---------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 216GLFB-250-C4 | 1/4 IN | FRONT | 25000 | 3/4" CARBIDE BURR | ALUMINUM | 1.32 | 0.63 | 1/4 |
| 216GLSB-250-C4 | 1/4 IN | SIDE | 25000 | 3/4" CARBIDE BURR | ALUMINUM | 1.32 | 0.63 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4in / 6.4mm

Grinders

236 Series - 200 Series Collet

18,000 - 25,000 RPM 0.6 hp (0.45 kW)



- Designed for demands of heavy industries, such as shipbuilding, foundries, metal fabrication, etc.
- Durable advanced alloy housing
- Front, side, and rear exhaust models available

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|---------------|-------------|---------|------------|---|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 236GLF-180-C4 | 1/4 IN | FRONT | 18000 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 1.32 | 6.8 | 1/4 |
| 236GLR-200-C4 | 1/4 IN | REAR | 20000 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 1.32 | 7.4 | 1/4 |
| 236GLF-250-C6 | 3/8 IN | FRONT | 25000 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 1.32 | 6.8 | 1/4 |
| 236GLR-180-C4 | 1/4 IN | REAR | 18000 | 1" CARBIDE BURR | ALUMINUM | 1.32 | 7.4 | 1/4 |
| 236GLS-240-C4 | 1/4 IN | SIDE | 24000 | 1" CARBIDE BURR | ALUMINUM | 1.32 | 6.8 | 1/4 |
| 236GLR-250-C4 | 1/4 IN | REAR | 25000 | 1" CARBIDE BURR | ALUMINUM | 1.32 | 7.4 | 1/4 |
| 236GLF-250-C4 | 1/4 IN | FRONT | 25000 | 1" CARBIDE BURR | ALUMINUM | 1.32 | 6.8 | 1/4 |
| 236GLS-180-C4 | 1/4 IN | SIDE | 18000 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 1.32 | 6.8 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16in / 7.9mm

12-25 Series - Die Grinder - 200 & 300 Series Collet - Cleco Dotco

12,000 - 23,000 RPM 0.9 hp (0.67 kW)



- Ergonomic composite housing
- Optional over-hose available
- High power-to-weight ratio for optimal productivity

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------------|---------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12L2542-01 | 1/4 IN | REAR | 12000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.4 | 1/4 |
| 12L2562-01 | 1/4 IN | FRONT | 12000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.4 | 1/4 |
| 12L2562-01M6 | 1/4 IN 6 MM | FRONT | 12000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.4 | 1/4 |
| 12L2565-01 | 1/4 IN | FRONT | 15000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.4 | 1/4 |
| 12L2502-01* | 1/4 IN | FRONT | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.3 | 1/4 |
| 12L2568-01 | 1/4 IN | FRONT | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.4 | 1/4 |
| 12L2582-01* | 1/4 IN | REAR | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.3 | 1/4 |
| 12L2500-01* | 1/4 IN | FRONT | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.3 | 1/4 |

Governed Speed

* All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16 in / 7.9 mm

Termination -01 = 200 Series collet

Termination -36 = 300 series collet

** -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose. -01M6 includes both 1/4" Collet and 6 mm Collet. -01M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose.

Grinders

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------------|---------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12L2500-01M6** | 1/4 IN 6 MM | FRONT | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.3 | 1/4 |
| 12L2500-36* | 1/4 IN | FRONT | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 8.0 | 1/4 |
| 12L2580-01* | 1/4 IN | REAR | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.3 | 1/4 |
| 12L2580-01M6OH** | 1/4 IN 6 MM | REAR | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.3 | 1/4 |
| 12L2580-36* | 1/4 IN | REAR | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 8.0 | 1/4 |
| 12L2582-01M6** | 1/4 IN 6 MM | REAR | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 1.76 | 7.3 | 1/4 |

Governed Speed

* All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16 in / 7.9 mm

Termination -01 = 200 Series collet

Termination -36 = 300 series collet

** -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose. -01M6 includes both 1/4" Collet and 6 mm Collet. -01M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose.

10-25 Series - Die Grinder - 200 & 300 Series Collet - Cleco Dotco

12,000 - 23,000 RPM 0.9 hp (0.67 kW)



- Aluminum housing
- Compact, yet powerful motor

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|-------------|-------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 10L2562-01 | 1/4 IN | FRONT | 12000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.98 | 7.0 | 1/4 |
| 10L2565-01 | 1/4 IN | FRONT | 15000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.98 | 7.0 | 1/4 |
| 10L2502-01* | 1/4 IN | FRONT | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 0.63 | 1/4 |
| 10L2568-01 | 1/4 IN | FRONT | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.54 | 7.3 | 1/4 |
| 10B2500-01* | 1/4 IN | FRONT | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 0.63 | 1/4 |
| 10L2500-01* | 1/4 IN | FRONT | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 0.63 | 1/4 |
| 10L2500-36* | 1/4 IN | FRONT | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 7.1 | 1/4 |
| 10L2580-01* | 1/4 IN | REAR | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.32 | 0.63 | 1/4 |
| 10L2580-36* | 1/4 IN | REAR | 23000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.54 | 7.9 | 1/4 |
| 10L2582-01* | 1/4 IN | REAR | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | ALUMINUM | 1.54 | 7.3 | 1/4 |

Governed; * All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16 in / 7.9 mm

Termination -01 = 200 Series collet

Termination -36 = 300 series collet

Grinders

MP44 Series Die Grinder

20,000 RPM 0.3 hp (0.223 kW)

- Ideal for general purpose applications.
- Ergonomic grip for operator comfort
- 360° air inlet swivel



Grinders

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------|-------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| MP4424 | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 1.32 | 6.4 | 1/4 |

General: Air Inlet 1/4" NPT. Use 1/4" (6.4 mm) I.D. hose. All tools performance rated @ 90psi (620 kPa) air pressure.

Optional: MP4424 & MP4430: 70619500 3/16" collet; 70610500 1/4" collet; 70610600 6 mm collet; MP4424: 543944 – 16oz. angle head grease.

MP44 Series Die Grinder

23,000 RPM 0.3 hp (0.223 kW)

- Ideal for general purpose applications.
- Ergonomic grip for operator comfort
- 360° air inlet swivel



| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------|-------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| MP4430 | 1/4 IN | REAR | 23000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 0.88 | 6.0 | 1/4 |

General: Air Inlet 1/4" NPT. Use 1/4" (6.4 mm) I.D. hose. All tools performance rated @ 90psi (620 kPa) air pressure.

Optional: MP4424 & MP4430: 70619500 3/16" collet; 70610500 1/4" collet; 70610600 6 mm collet; MP4424: 543944 – 16oz. angle head grease.

Grinders

MP44 Series Die Grinder

25,000 RPM 0.5 hp (0.373 kW)

- Ideal for general purpose applications.
- Ergonomic grip for operator comfort
- 360° air inlet swivel



| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------|-------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| MP4458 | 1/4 IN | FRONT | 25000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | STEEL | 1.32 | 6.1 | 1/4 |

General: Air Inlet 1/4" NPT. Use 1/4" (6.4 mm) I.D. hose. All tools performance rated @ 90psi (620 kPa) air pressure.

Optional: MP4424 & MP4430: 70619500 3/16" collet; 70610500 1/4" collet; 70610600 6 mm collet; MP4424: 543944 – 16oz. angle head grease.

12-11 Series - Extended - Die Grinder - Cleco Dotco

25,000 - 28,000 RPM 0.3 hp (0.22 kW)

- 3" | 75mm and 5" | 125mm extended housings available
- Overhose available
- Multiple industrial bearings for low vibration and perfect balance



| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | EXTENSION | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|-------------|---------|------------|-----------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | IN | | | LB | IN | IN |
| 12L1111-36 | 1/4 IN | FRONT | 25000 | 3 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 1.10 | 8.9 | 1/4 |
| 12L1112-36 | 1/4 IN | FRONT | 25000 | 5 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 1.32 | 10.9 | 1/4 |
| 12L1100-36 | 1/4 IN | FRONT | 28000 | 3 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 1.10 | 8.9 | 1/4 |
| 12L1101-36 | 1/4 IN | FRONT | 28000 | 5 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 1.32 | 10.9 | 1/4 |
| 12L1180-36 | 1/4 IN | REAR | 28000 | 3 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 1.10 | 8.9 | 1/4 |
| 12L1181-36 | 1/4 IN | REAR | 28000 | 5 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 1.32 | 10.9 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 4.8 mm

Grinders

10-11 Series - Extended - Die Grinder - 300 Series Collet - Cleco Dotco

25,000 - 28,000 RPM 0.3 hp (0.22 kW)



Grinders

- 3" | 75mm & 5" | 125mm extended housing for hard to reach areas
- Available in a variety of speeds
- Balanced and comfortable to minimize fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | EXTENSION | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|---------------|---------------|---------|------------|-----------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | IN | | | LB | IN | IN |
| 10L1111-36 | 1/4 IN | FRONT | 25000 | 3 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 1.10 | 7.6 | 1/4 |
| 10L1112-36 | 1/4 IN | FRONT | 25000 | 5 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 1.10 | 9.8 | 1/4 |
| 10L1100-36 | 1/4 IN | FRONT | 28000 | 3 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 1.10 | 7.6 | 1/4 |
| 10L1101-36 | 1/4 IN | FRONT | 28000 | 5 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 1.10 | 9.8 | 1/4 |
| 10L1101-36M6* | 1/4 IN 6 MM | FRONT | 28000 | 5 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 1.10 | 9.8 | 1/4 |
| 10L1180-36 | 1/4 IN | REAR | 28000 | 3 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 1.10 | 8.4 | 1/8 |
| 10L1181-36 | 1/4 IN | REAR | 28000 | 5 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | ALUMINUM | 1.10 | 9.8 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 6.4 mm

; * -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose

12-26 Series - Extended - Die Grinder - 5" (127mm) Extension - 200 Series Collet - Cleco Dotco

12,000 - 22,000 RPM 0.9 hp (0.67 kW)



- 5" | 125mm Extended housing for hard to reach areas
- Available in a variety of speeds
- Balanced and comfortable to minimize fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|-------------|-------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12L2602-01 | 1/4 IN | SIDE | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 2.87 | 12.9 | 1/4 |
| 12L2668-01* | 1/4 IN | SIDE | 18000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 2.87 | 12.9 | 1/4 |
| 12L2600-01 | 1/4 IN | SIDE | 22000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 2.87 | 12.9 | 1/4 |
| 12L2680-01 | 1/4 IN | REAR | 22000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 2.87 | 12.9 | 1/4 |
| 12L2682-01 | 1/4 IN | REAR | 12000 | 1" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 2.87 | 12.9 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16 in / 7.9 mm

* Governed

Grinders

12-26 Series - Die Grinder - Multiple Extension - 300 Series Collet - Cleco Dotco

18,000 RPM 0.9 hp (0.67 kW)



- Can be customized with multiple extensions for access to the most far-reaching areas
- Multiple industrial bearings provides optimal balance and power transfer
- Designed to work comfortably with the operator
- Available with 300 series 1/4" collet and 3/8"-24" external thread

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|---------------|--------------------|---------|------------|---|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 12S2674-2C | 3/8 IN-24E | REAR | 18000 | 1.25" CONE OR PLUG WHEEL | COMPOSITE | 4.19 | 23.5 | 1/4 |
| 12S2674-4C | 3/8 IN-24E | REAR | 18000 | 1.25" CONE OR PLUG WHEEL | COMPOSITE | 6.6 | 38.0 | 1/4 |
| 12L2674-2A | 1/4 IN | REAR | 18000 | 3/4" CARBIDE BURR, 1-1/2" MOUNTED WHEEL | COMPOSITE | 4.19 | 23.5 | 1/4 |
| 12L2674-3A | 1/4 IN | REAR | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 5.3 | 30.8 | 1/4 |
| 12L2674-5A | 1/4 IN | REAR | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 7.7 | 45.3 | 1/4 |
| 12S2674-2AM6* | 1/4 IN 6 MM E300 | REAR | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 4.19 | 23.5 | 1/4 |
| 12S2674-4A | 1/4 IN | REAR | 18000 | 3/4" CARBIDE BURR, 1.5" MOUNTED WHEEL | COMPOSITE | 6.6 | 38.0 | 1/4 |
| 12S2674-5C | 3/8 IN-24E | REAR | 18000 | 1.25" CONE OR PLUG WHEEL | COMPOSITE | 7.7 | 45.3 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16 in / 7.9 mm

Termination:

A - 1/4" Collet

C - 3/8"-24 e

12L and 12S have the same throttle configuration

* -2AM6 includes both 1/4" Collet and 6 mm e300 Collet.

236 Series - Extended - 200 Series Collet

18,000 - 24,000 RPM 0.9 hp (0.6 kW)



- Rugged all aluminum housing
- Heavy industrial use for shipyards, foundries, metal fabrication, rail yards, etc.
- 5" Extended housing for hard to reach areas
- Offers higher horsepower and torque levels than similar competitive tools

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|----------------|-------------|---------|------------|---|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 236GEL-240-C4 | 1/4 IN | SIDE | 24000 | 1" CARBIDE BURR, 2" MOUNTED WHEEL | ALUMINUM | 2.20 | 12.4 | 1/4 |
| 236GELR-180-C4 | 1/4 IN | REAR | 18000 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 2.20 | 12.3 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16in / 7.9mm

Grinders

25 Series - Grinder - Extended - Governed - 200 Series Collet

18,000 RPM 1.4 hp (1.0 kW)



Grinders

- Lightweight, Ergonomic housing
- Heavy industrial use for shipyards, foundries, metal fabrication, rail yards, etc.
- Extended housing for hard to reach areas
- Offers higher horsepower and torque levels than similar competitive tools

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|---------------|-------------|---------|------------|--------------------------------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | LB | IN | IN |
| 25GELC-120-C4 | 1/4 IN | REAR | 12000 | 1.25" CARBIDE BURR, 2" MTD. WHEEL | ALUMINUM | 3.09 | 14.5 | 3/8 |
| 25GELC-180-C4 | 1/4 IN | SIDE | 18000 | 1.25" CARBIDE BURR, 2" MOUNTED WHEEL | ALUMINUM | 3.09 | 14.5 | 3/8 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 3/8 in / 9.5 mm

Grinders

12LF Series - Die Grinder - Right Angle - 300 Series Collet - Cleco Dotco

12,000 - 20,000 RPM 0.4 hp (0.29 kW)



- Composite housing
- Wide array of speeds; front and rear exhaust models available
- Ergonomic and balanced design minimized operator fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|-----------------|---------------|---------|------------|-------------------------------------|------------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 12LF200-36 | 1/4 IN | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF200-36M6* | 1/4 IN 6 MM | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF280-36 | 1/4 IN | REAR | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF280-36M6* | 1/4 IN 6 MM | REAR | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF280-36M6OH* | 1/4 IN 6 MM | REAR | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF201-36 | 1/4 IN | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF201-36M6* | 1/4 IN 6 MM | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF281-36 | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF281-36M6* | 1/4 IN 6 MM | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF281-36M6OH* | 1/4 IN 6 MM | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 4.8 mm

* -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose

Grinders

10LF Series - Die Grinder - Right Angle - 300 Series Collet - Cleco Dotco

12,000 - 20,000 RPM 0.4 hp (0.29 kW)



Grinders

- Composite housing
- Wide array of speeds; front and rear exhaust models available
- Ergonomic and balanced design minimized operator fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|---------------|---------------|---------|------------|-------------------------------------|-----------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 10LF200-36 | 1/4 IN | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF200-36M6* | 1/4 IN 6 MM | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF280-36 | 1/4 IN | REAR | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF280-36M6* | 1/4 IN 6 MM | REAR | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF201-36 | 1/4 IN | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF201-36M6* | 1/4 IN 6 MM | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF281-36 | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 4.8 mm

* -36M6 includes both 1/4" Collet and 6 mm Collet. -36M6OH termination includes both 1/4" Collet and 6 mm Collet and overhose

Grinders

12-13 Series - Die Grinder - Right Angle - Gearless - 300 Series Collet - Cleco Dotco

20,000 - 30,000 RPM 0.3 hp (0.22 kW)



- Composite housing
- Wide array of speeds offered; front and rear exhaust models available
- Suitable for a wide range of finishing and deburring applications

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|-------------------------------------|-----------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 12L1302-36 | 1/4 IN | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1301-36 | 1/4 IN | FRONT | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1381-36 | 1/4 IN | REAR | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1300-36 | 1/4 IN | FRONT | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 1" (25MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1380-36 | 1/4 IN | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 1" (25MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1382-36 | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
Standard Equipment: Applicable collet, collet wrenches
Minimum Hose I.D.: 1/4 in / 4.8 mm

Grinders

12-23 Series - Die Grinder - Right Angle - Gearless - 200 Series Collet - Cleco Dotco

20,000 RPM 0.5 hp (0.38 kW)

- Composite housing
- Suitable for a wide range of finishing and deburring applications
-



| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|--|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | LB | IN | IN | IN |
| 12L2384-01 | 1/4 IN | FRONT | 20000 | 3/4" CARBIDE BURR, 1.25" MOUNTED WHEEL | COMPOSITE | 1.98 | 7.5 | 5.5 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
 Standard Equipment: Applicable collet, collet wrenches
 Minimum Hose I.D.: 1/4 in / 4.8 mm

12-22 Series - 300 Series Collet

12,000 - 18,000 RPM 0.6 hp (0.45 kW)

- Ergonomic composite housing
- Heavy duty low profile head for greater accessibility
- High output motor in a lightweight package
- 3" | 75mm Extended head available



| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|--------------------------------------|-----------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 12L2278-36 | 1/4 IN | REAR | 14500 | 1/2" CARBIDE BURR 1" MOUNTED WHEEL | 4" (100MM) SANDING/POLISHING DISC | COMPOSITE | 2.20 | 10.0 | 2.70 | 1/4 |
| 12L2218-36 | 1/4 IN | REAR | 18000 | 1/2" CARBIDE BURR 1" MOUNTED WHEEL | 3" (50MM) SANDING/POLISHING DISC | COMPOSITE | 1.76 | 7.5 | 2.70 | 1/4 |
| 12L2277-36 | 1/4 IN | REAR | 12000 | 1/2" CARBIDE BURR 1" MOUNTED WHEEL | 4" (100MM) SANDING/POLISHING DISC | COMPOSITE | 2.20 | 10.0 | 2.70 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
 Standard Equipment: Applicable collet, collet wrenches
 Minimum Hose I.D.: 5/16 in / 7.9 mm

Grinders

12-22 Series - Die Grinder - Right Angle - Heavy Duty Head - 200 Series Collet - Cleco Dotco

9,000 - 11,000 RPM 0.6 hp (0.45 kW)



- Composite housing
- Wide array of speeds; front, side, and rear exhaust models available
- Ergonomic and balanced design minimized operator fatigue

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | | LENGTH | | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|-------------------------------------|--------------|--------|-----|--------|-----|-------------|----------------|
| | | | R/MIN | | | LB | IN | IN | IN | | |
| 12L2251-01 | 1/4 IN | SIDE | 9000 | 3/4" CARBIDE BURR, 2" MOUNTED WHEEL | COMPOSITE | 3.31 | 9.3 | 3.90 | 1/4 | | |
| 12L2252-01 | 1/4 IN | SIDE | 11000 | 3/4" CARBIDE BURR, 2" MOUNTED WHEEL | COMPOSITE | 3.31 | 9.3 | 3.90 | 1/4 | | |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16 in / 7.9 mm

216 Series - Grinder - Heavy Duty Head - 200 Series Collet

11,500 - 16,500 RPM 0.7 hp (0.4 kW)



- Rugged and durable aluminum housing
- Designed for heavy industries such as shipbuilding, foundries, metal fabrication, etc.
- Robust angle head design provides excellent durability

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | | LENGTH | | HEAD HEIGHT | AIR INLET SIZE |
|-----------------|-------------|---------|------------|---------------------------|--------------|--------|-----|--------|-----|-------------|----------------|
| | | | R/MIN | | | LB | IN | IN | IN | | |
| 216GLF-115A-C4 | 1/4 IN | FRONT | 11500 | 1" CARBIDE BURR | ALUMINUM | 2.43 | 7.1 | 2.20 | 1/4 | | |
| 216GLFC-165A-C4 | 1/4 IN | REAR | 16500 | 3/4" CARBIDE BURR | ALUMINUM | 1.76 | 9.1 | 2.20 | 1/4 | | |
| 216GLSC-165A-C4 | 1/4 IN | SIDE | 16500 | 3/4" CARBIDE BURR | ALUMINUM | 1.76 | 9.1 | 2.20 | 1/4 | | |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 4.8 mm

Grinders

236 Series - Heavy Duty Head - 200 Series Collet

11,500 - 16,500 RPM 0.8 hp (0.6 kW)



- Rugged and durable aluminum housing
- Designed for heavy industries such as shipbuilding, foundries, metal fabrication, etc.
- Robust angle head design provides excellent durability

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|-----------------|-------------|---------|------------|---|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | LB | IN | IN | IN |
| 236GLF-115A-C4 | 1/4 IN | FRONT | 11500 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 2.65 | 7.6 | 2.20 | 1/4 |
| 236GLR-115A-C4 | 1/4 IN | REAR | 11500 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 2.20 | 8.3 | 2.20 | 1/4 |
| 236GLFC-165A-C4 | 1/4 IN | FRONT | 16500 | 3/4" CARBIDE BURR | ALUMINUM | 1.98 | 9.6 | 2.20 | 1/4 |
| 236GLSC-115A-C4 | 1/4 IN | SIDE | 11500 | 1" (25MM) CARBIDE BURR, 2" (50MM) MOUNTED WHEEL | ALUMINUM | 1.98 | 9.6 | 2.20 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
Standard Equipment: Applicable collet, collet wrenches
Minimum Hose I.D.: 5/16 in / 7.9 mm

12-27 Series - Die Grinder - Heavy Duty Head - 200 Series Collet - Cleco Dotco

6,000 - 11,000 RPM 0.9 hp (0.67 kW)



- Composite housing
- Front, side and rear exhaust models available
- Robust design perfectly suited for industrial applications

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|-------------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | LB | IN | IN | IN |
| 12L2750-01 | 1/4 IN | SIDE | 6000 | 1" CARBIDE BURR, 1" MOUNTED WHEEL | COMPOSITE | 3.31 | 9.8 | 3.90 | 1/4 |
| 12L2780-01 | 1/4 IN | REAR | 6000 | 3/4" CARBIDE BURR, 2" MOUNTED WHEEL | COMPOSITE | 3.31 | 9.8 | 3.90 | 1/4 |
| 12L2752-01 | 1/4 IN | SIDE | 11000 | 3/4" CARBIDE BURR, 2" MOUNTED WHEEL | COMPOSITE | 3.31 | 9.8 | 3.90 | 1/4 |
| 12L2782-01 | 1/4 IN | REAR | 11000 | 3/4" CARBIDE BURR, 2" MOUNTED WHEEL | COMPOSITE | 3.31 | 9.8 | 3.90 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
Standard Equipment: Applicable collet, collet wrenches
Minimum Hose I.D.: 5/16 in / 7.9 mm

Grinders

12-27 Series - Die Grinder - Right Angle - 300 Series Collet - Cleco Dotco

18,000 RPM 0.9 hp (0.67 kW)



- Composite housing
- Powerful motor with rear exhaust
- Robust design perfectly suited for industrial applications
- Standard 3" | 75mm extension

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|--|------------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 12L2777-36 | 1/4 IN | REAR | 12000 | 3/4" CARBIDE BURR, 1.25" MOUNTED WHEEL | 4" (100MM) SANDING/ POLISHING DISC | COMPOSITE | 2.20 | 10.5 | 2.90 | 1/4 |
| 12L2776-36 | 1/4 IN | REAR | 13500 | 3/4" CARBIDE BURR, 1.25" MOUNTED WHEEL | 4" (100MM) SANDING/ POLISHING DISC | COMPOSITE | 2.20 | 10.5 | 2.90 | 1/4 |
| 12L2718-36 | 1/4 IN | REAR | 18000 | 3/4" CARBIDE BURR, 1.25" MOUNTED WHEEL | 4" (100MM) SANDING/ POLISHING DISC | COMPOSITE | 1.98 | 8.0 | 2.90 | 1/4 |
| 12L2778-36 | 1/4 IN | REAR | 14500 | 3/4" CARBIDE BURR, 1.25" MOUNTED WHEEL | 4" (100MM) SANDING/ POLISHING DISC | COMPOSITE | 2.20 | 10.5 | 2.90 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 5/16 in / 7.9 mm

216 Series - Grinder - Heavy Duty Head - Right Angle - Depressed Center Wheel

11,500 RPM 0.6 hp (0.4 kW)



- Rugged and durable aluminum housing
- Robust and long lasting angle head for the most demanding applications
- Powerful motor stays durable in the harshest environments

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|-------------------|---------|------------|---------------------------|--------------|--------------|--------|--------|-------------|----------------|
| | | R/MIN | | | | LB | IN | IN | IN |
| 216GLF-115A-D3T45 | FRONT | 11500 | 4.5" (115MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 2.65 | 7.1 | 3.20 | 1/4 |
| 216GLF-115A-D3T4 | FRONT | 11500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 2.65 | 7.1 | 3.20 | 1/4 |
| 216GLF-115A-W3T4 | FRONT | 11500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 2.65 | 7.1 | 3.20 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 5/16 in / 7.9 mm

Standard Equipment: Wheel guard, wheel adapter, spindle wrench, Operating instructions & service manual

Grinders

216 Series - Grinder - Extended Head - Right Angle - Depressed Center Wheel

13,500 RPM 0.6 hp (0.4 kW)

- Rugged and durable aluminum housing
- Extended head for better reach and accessibility
- Lock-off lever for safe operation



Grinders

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|-------------------|---------|------------|---------------------------|--------------|--------------|--------|--------|-------------|----------------|
| | | R/MIN | | | | LB | IN | IN | IN |
| 216GLFB-135A-W3T4 | FRONT | 13500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 2.20 | 9.6 | 2.20 | 1/4 |
| 216GLFB-135A-D3T4 | FRONT | 13500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 2.65 | 9.1 | 2.20 | 1/4 |
| 216GLSB-135A-D3T4 | SIDE | 13500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 2.43 | 9.1 | 2.20 | 1/4 |
| 216GLSB-135A-W3T4 | SIDE | 13500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 2.43 | 9.1 | 2.20 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 5/16 in / 7.9 mm

Standard Equipment: Wheel guard, wheel adapter, spindle wrench, Operating instructions & service manual

12-27 Series - Die Grinder - Heavy Duty Head - Cleco Dotco

14,500 RPM 0.9 hp (0.67 kW)

- Ergonomic composite housing
- Durable and low profile angle head
- Low vibration and high output motor provides superior productivity



| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|---------|------------|---------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 12L2714-28 | REAR | 14500 | 4" (100MM) TYPE 1 | COMPOSITE | 3/8" | 3.31 | 8.0 | 1/4 |
| 12L2718-28 | REAR | 18000 | 4" (100MM) TYPE 1 | COMPOSITE | 3/8" | 3.31 | 8.0 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/2 in / 12.7 mm

Standard Equipment: Wheel guard and flange wrench

Grinders

25 Series - Grinder - Governed - Right Angle

6,000 - 8,500 RPM 1.4 hp (1.3 kW)



- Rugged and durable aluminum housing
- Powerful and robust motor with side exhaust
- Heavy duty angle head designed to outperform and outlast

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|---------------|---------|------------|---------------------------|--------------|--------------|--------|--------|-------------|----------------|
| | | R/MIN | | | | LB | IN | IN | IN |
| 25GL-60A-W5T7 | SIDE | 6000 | 7" (180MM) TYPE 1 | ALUMINUM | 5/8" - 11 E | 5.5 | 10.0 | 4.00 | 3/8 |
| 25GL-60A-D5T7 | SIDE | 6000 | 7" (180MM) TYPE 27 | ALUMINUM | 5/8" - 11 E | 5.5 | 10.0 | 4.00 | 3/8 |
| 25GL-77A-D5T7 | SIDE | 7700 | 7" (180MM) TYPE 27 | ALUMINUM | 5/8" - 11 E | 5.5 | 10.0 | 4.00 | 3/8 |
| 25GL-85A-D5T7 | SIDE | 8500 | 7" (180MM) TYPE 27 | ALUMINUM | 5/8" - 11 E | 5.5 | 10.0 | 4.00 | 3/8 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 3/8 in / 9.5 mm

Standard Equipment: Wheel guard, flange wrench, Operating instructions & service manual

2260 Series - Right Angle Grinder

8,400 RPM 2.2 hp (1.6 kW)



- High performance 2.2HP motor, Governed at 8,000 rpm
- Available with 6", 7" guard options
- Reversible safety lever throttle
- Dual auxiliary handle positions
- Maximum material removal for a right angle grinder

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|---------|------------|---------------------------|--------------|--------------|--------|--------|-------------|----------------|
| | | R/MIN | | | | LB | IN | IN | IN |
| 2260AGL-06 | SIDE | 8400 | 6" (150MM), TYPE 27/42 | ALUMINUM | 5/8" - 11 E | 7.3 | 12.1 | 2.90 | 1/2 |
| 2260AGL-07 | SIDE | 8400 | 7" (180MM), TYPE 27/42 | ALUMINUM | 5/8" - 11 E | 7.3 | 12.1 | 2.90 | 1/2 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 3/4 in / 19 mm

Standard Equipment: Wheel guard, adapters, spindle wrenches, operating instructions & service manuals

Grinders

236 Series - Grinder - Right Angle - Heavy Duty Head

11,500 RPM 0.9 hp (0.6 kW)

- Rugged and durable aluminum housing
- Heavy duty and extended head models available
- Designed for heavy duty material removal applications



Grinders

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|-------------------|---------|------------|---------------------------|--------------|--------------|--------|--------|-------------|----------------|
| | | R/MIN | | | | LB | IN | IN | IN |
| 236GLF-115A-W3T4 | FRONT | 11500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 3.09 | 7.6 | 3.20 | 1/4 |
| 236GLR-115A-W3T4 | REAR | 11500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 2.43 | 8.3 | 3.20 | 1/4 |
| 236GLS-115A-W3T4 | SIDE | 11500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 2.43 | 8.3 | 3.20 | 1/4 |
| 236GLSB-115A-W3T4 | SIDE | 11500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 1.98 | 9.6 | 3.20 | 1/4 |
| 236GLF-115A-D3T4 | FRONT | 11500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 3.09 | 7.6 | 3.20 | 1/4 |
| 236GLR-115A-D3T4 | REAR | 11500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 2.43 | 8.3 | 3.20 | 1/4 |
| 236GLFB-135A-D3T4 | FRONT | 13500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 1.98 | 9.6 | 2.20 | 1/4 |
| 236GLRB-135A-D3T4 | REAR | 13500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 1.98 | 7.6 | 2.20 | 1/4 |
| 236GLSB-135A-D3T4 | SIDE | 13500 | 4" (100MM) TYPE 27 | ALUMINUM | 3/8" - 24 E | 1.98 | 9.6 | 2.20 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/2 in / 12.7 mm

Standard Equipment: Wheel guard and flange wrench

Right Angle Grinder

12,000 - 13500 RPM 1.7 hp (1.25 kW)

- High-performance 1.7Hp motor delivers maximum power
- Quick change spindle lock for fast and easy abrasive changes
- Quieter operation with rear exhaust overhose standard
- Ergonomic, anti-vibration handle for increased comfort and less operator fatigue
- Dual-layer, high-impact composite housing for extreme durability
- Versatile 207° adjustable guard for easy access to tight spaces
- Available in 4", 4.5" and 5" disc sizes for all Type 27, Type 27 Threaded Hub and Type 1 Abrasive disc's



| MODEL | FREE SPEED | EXHAUST | WHEEL SIZE | WEIGHT | HEAD HEIGHT | AIR INLET SIZE | AIR CONSUMPTION AT FREE SPEED | VIBRATION | AIR CONSUMPTION AT LOAD |
|----------------|------------|---------|------------|--------|-------------|----------------|-------------------------------|------------------|-------------------------|
| | R/MIN | | IN | LB | IN | IN | SCFM | M/S ² | L/S |
| C3120A45-58OH | 12000 | REAR | 4.5 | 3.98 | 3.03 | 3/8 | 35.7 | 7.3 | 30.9 |
| C3120A45-M14OH | 12000 | REAR | 4.5 | 3.98 | 3.03 | 3/8 | 35.7 | 7.3 | 30.9 |
| C3120A5-58OH | 12000 | REAR | 5 | 4.05 | 3.03 | 3/8 | 35.7 | 9.4 | 31.1 |
| C3120A5-M14OH | 12000 | REAR | 5 | 4.05 | 3.03 | 3/8 | 35.7 | 9.4 | 31.1 |
| C3135A4-38OH | 13500 | REAR | 4 | 3.78 | 3.03 | 3/8 | 49.5 | 4.8 | 32.4 |

Grinders

236 Series - Grinder - Extended Head

13,500 RPM 0.8 hp (0.6kW)



- Rugged and durable aluminum housing
- Heavy duty and extended head models available
- Designed for heavy duty material removal applications

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|-------------------|---------|------------|---------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 236GLFB-135A-W3T4 | FRONT | 13500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 1.98 | 9.6 | 1/4 |
| 236GLRB-135A-W3T4 | REAR | 13500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 1.98 | 7.6 | 1/4 |
| 236GLSB-135A-W3T4 | SIDE | 13500 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 1.98 | 9.6 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Minimum Hose I.D.: 1/2in / 12.7mm
Standard Equipment: Wheel guard and flange wrench

236 Series - Cone/Plug Wheel - Inline

18,000 - 24,000 RPM 0.9 hp (0.7 kW)



- Rugged and durable aluminum housing
- Side and rear exhaust models available

| MODEL | EXHAUST | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------------|---------|---------------------------------|--------------|--------------|--------|--------|----------------|
| | | | | | LB | IN | IN |
| 236GELR-180-P3T | REAR | 1.25" (31MM) CONE OR PLUG WHEEL | ALUMINUM | 3/8" - 24 E | 2.20 | 12.3 | 1/4 |
| 236GEL-240-P3T | SIDE | 1.25" (31MM) CONE OR PLUG WHEEL | ALUMINUM | 3/8" - 24 E | 2.20 | 12.3 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Standard Equipment: Applicable collet, collet wrenches
Minimum Hose I.D.: 5/16in / 7.9mm

Grinders

25 Series - Grinder - Extended

14,000 - 18,000 RPM 1.4 hp (1.3 kW)

- Rugged and durable aluminum housing
- Governor speed control maintains RPM under load
- Safety- lock throttle lever prevents accidental start up



Grinders

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|----------------|---------|------------|------------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 25GELC-140-P3T | SIDE | 14000 | 2" (50MM) CONE OR PLUG WHEEL | ALUMINUM | 3/8" - 24 E | 3.09 | 14.5 | 3/8 |
| 25GELC-180-P3T | SIDE | 18000 | 2" (50MM) CONE OR PLUG WHEEL | ALUMINUM | 3/8" - 24 E | 3.09 | 14.5 | 3/8 |
| 25GELC-180-P5T | SIDE | 18000 | 2" (50MM) CONE OR PLUG WHEEL | ALUMINUM | 5/8" - 11 E | 3.31 | 14.9 | 3/8 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 3/8 in / 9.5 mm

Standard Equipment: Wheel guard, flange wrench, Operating instructions & service manual

500B Horizontal Series - Governed - Rotatable Exhaust Deflector

9,000 - 12,000 RPM 2.1 hp (1.6 kW)

- Rugged and durable all-steel housing
- Air motor is governor- controlled to maintain RPM under heavy load
- High output motor designed to tackle the toughest material removal jobs



| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------|---------|------------|---------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 590BHL-P | SIDE | 9000 | 3" CONE OR PLUG WHEEL | STEEL | 5/8" - 11 E | 7.5 | 17.9 | 1/2 |
| 5120BHL-P | SIDE | 12000 | 3" CONE OR PLUG WHEEL | STEEL | 5/8" - 11 E | 7.5 | 17.9 | 1/2 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Applicable wrenches, operating instructions & service manual

Minimum Hose I.D.: 5/16in / 7.9mm

236 Series - Grinder - Inline

18,000 RPM 0.9 hp (0.7 kW)

- Rugged and durable aluminum housing
- Side and rear exhaust models available



| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------------|---------|------------|---------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 236GLR-180-W3T4 | REAR | 18000 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 1.76 | 7.3 | 1/4 |

Grinders

25 Series - Grinder - Extended

12,000 - 18,000 RPM 1.4 hp (1.0 kW)



- Powerful motor for all cut-off operations
- Governed motor with side exhaust
- Rugged and durable for any environment

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|------------------|---------|------------|---------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 25GELC-120-W3T25 | SIDE | 12000 | 2.5" (63MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 3.31 | 14.4 | 3/8 |
| 25GELC-120-W3T3 | SIDE | 12000 | 3" (75MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 3.75 | 14.4 | 3/8 |
| 25GELC-140-W3T3 | SIDE | 14000 | 3" (75MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 3.75 | 14.5 | 3/8 |
| 25GELC-180-W3T3 | SIDE | 18000 | 3" (75MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 3.75 | 14.9 | 3/8 |
| 25GELC-120-W3T4 | SIDE | 12000 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 3.75 | 14.4 | 3/8 |
| 25GL-120-W3T4* | SIDE | 12000 | 4" (100MM) TYPE 1 | ALUMINUM | 3/8" - 24 E | 3.09 | 10.0 | 3/8 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 3/8 in / 9.5 mm

Standard Equipment: Wheel guard, flange wrench, Operating instructions & service manual

* Non-extended version

500B Series - Horizontal Grinder - Rotatable Exhaust

6,000 RPM 1.9 hp (1.4 kW)



- Safety lever or spade handle available
- Suitable for the most demanding horizontal grinding applications
- Robust and efficient design trusted for decades

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------|---------|------------|-------------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 560BHL-16 | SIDE | 6000 | 6" X 1" (150MM X 25MM) TYPE 1 | STEEL | 5/8" - 11 E | 10.8 | 18.4 | 1/2 |
| 560BHX-16 | SIDE | 6000 | 6" X 1" (150MM X 25MM) TYPE 1 | STEEL | 5/8" - 11 E | 11.7 | 18.8 | 1/2 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/2 in / 12.7 mm

Standard Equipment: Wheel guard and flange wrench

Grinders

1700 Series - Horizontal Grinder - Lock-Off Lever Throttle

6,000 RPM 3.1 hp (2.3 kW)



Grinders

- Spade handle availability
- Safety- lock throttle lever prevents accidental start up
- High output motor designed to tackle the toughest material removal jobs

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------|---------|------------|-------------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 1760HL-16 | SIDE | 6000 | 6" X 1" (150MM X 25MM) TYPE 1 | STEEL | 5/8" - 11 E | 14.6 | 19.6 | 1/2 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
Minimum Hose I.D.: 1/2 in / 12.7 mm
Standard Equipment: Wheel guard and flange wrench

1900 Series - Horizontal Grinder

6,000 RPM 4.1 hp (3.1 kW)



- Governed air motor- controlled to maintain RPM under heavy load
- High output motor designed to tackle the toughest material removal jobs
- Safety- lock throttle lever prevents accidental start up

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|-----------|---------|------------|-------------------------------|--------------|--------------|--------|--------|----------------|
| | | R/MIN | | | | LB | IN | IN |
| 1960HG-16 | SIDE | 6000 | 6" X 1" (150MM X 25MM) TYPE 1 | ALUMINUM | 5/8" - 11 E | 16.8 | 21.4 | 1/2 |
| 1960HL-16 | REAR | 6000 | 6" X 1" (150MM X 25MM) TYPE 1 | ALUMINUM | 5/8" - 11 E | 16.8 | 21.4 | 1/2 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
Minimum Hose I.D.: 1/2 in / 12.7 mm
Standard Equipment: Wheel guard and flange wrench

Grinders

3060 Series - Vertical Grinder

6,000 RPM 3.0 hp (2.3 kW)

- Powerful, governed motor
- Ideally suited for the most rugged environments
- Maximum material removal in an ergonomic package



| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | AIR INLET SIZE |
|------------|---------|------------|---------------------------|--------------|--------------|--------|----------------|
| | | R/MIN | | | | LB | IN |
| 3060AVL-06 | SIDE | 6000 | 6" (150MM) TYPE 11 | ALUMINUM | 5/8" - 11 E | 10.1 | 1/2 |
| 3060AVL-07 | SIDE | 6000 | 7" (180MM) TYPE 27 | ALUMINUM | 5/8" - 11 E | 9.7 | 1/2 |
| 3060AVL-09 | SIDE | 6000 | 9" (230MM) TYPE 27 | ALUMINUM | 5/8" - 11 E | 10.4 | 1/2 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 3/4 in / 19 mm

Standard Equipment: Wheel guard, adapters, spindle wrenches, operating instructions & service manuals

4060 Series - Vertical Grinder

6,000 RPM 4.0 hp (3.1 kW)

- Maximum material removal in any application
- Powerful motor delivering ultimate torque



| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | AIR INLET SIZE |
|------------|---------|------------|---------------------------|--------------|--------------|--------|----------------|
| | | R/MIN | | | | LB | IN |
| 4060AVL-06 | SIDE | 6000 | 6" (150MM) TYPE 11 | ALUMINUM | 5/8" - 11 E | 11.7 | 1/2 |
| 4060AVL-07 | SIDE | 6000 | 7" (180MM) TYPE 27 | ALUMINUM | 5/8" - 11 E | 11.0 | 1/2 |
| 4060AVL-09 | SIDE | 6000 | 9" (230MM) TYPE 27 | ALUMINUM | 5/8" - 11 E | 11.9 | 1/2 |

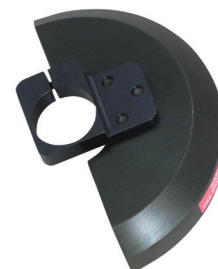
All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 3/4 in / 19 mm

Standard Equipment: Wheel guard, adapters, spindle wrenches, operating instructions & service manuals

Grinders

Cleco Wheel Guards

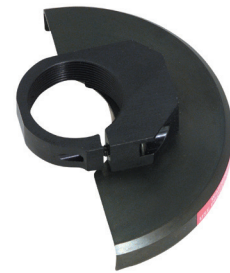


Grinders

| PART NUMBER | WHEEL TYPE | TOOL SERIES | SIZE |
|-------------|-----------------------------|------------------|----------------|
| 202245 | TYPE 1 WHEEL | 236,25 | 4" 100MM |
| 202278 | TYPE 1 WHEEL | 236, 25 | 3" 75MM |
| 865786 | TYPE 1 WHEEL | 15H | 3" 75MM |
| 865988 | TYPE 1 WHEEL | 15H | 4" 100MM |
| 865993 | TYPE 1 WHEEL | 500BH | 6" 150MM |
| 881608 | TYPE 1 WHEEL | 500BH | 4" 100MM |
| T50-1000430 | TYPE 1 WHEEL, TYPE 27 WHEEL | C3 GRINDER | 4" 100MM |
| T50-1000455 | TYPE 1 WHEEL, TYPE 27 WHEEL | C3 GRINDER | 4 1/2" 100MM |
| T50-1000467 | TYPE 1 WHEEL, TYPE 27 WHEEL | C3 GRINDER | 5" 125MM |
| 202226 | TYPE 27 WHEEL | 216RA, 236RA | 3" 75MM |
| 202227 | TYPE 27 WHEEL | 216RA, 236RA | 4" 100MM |
| 203142 | TYPE 27 WHEEL | 216RA, 236RA | 5" 125MM |
| 203382 | TYPE 27 WHEEL | 236V | 4" 100MM |
| 207751PT | TYPE 27 WHEEL | 3060AVL, 4060AVL | 7" 180MM |
| 207752PT | TYPE 27 WHEEL | 3060AVL, 4060AVL | 9" 230MM |
| 208011PT | TYPE 27 WHEEL | 2260AGL | 6" 150MM |
| 208012PT | TYPE 27 WHEEL | 2260AGL | 7" 180MM |
| 889208 | TYPE 27 WHEEL | 216RA, 236RA | 4" 100MM |
| 849760 | TYPE 28 WHEEL | 25V | 7" 180MM |
| 865986 | TYPE 28 WHEEL | 25RA | 7" 180MM |
| 207750PT | TYPE 6 & 11 (CUP) WHEEL | 3060AVL, 4060AVL | 6" 150MM |
| 861893 | TYPE 6 & 11 (CUP) WHEEL | | 6" 150MM |

Grinders

Cleco Dotco Wheel Guards



| PART NUMBER | WHEEL TYPE | ABRASIVE CAPACITY GRINDER | TOOL SERIES |
|-------------|---------------------------------------|---------------------------|-------------------|
| 14-5002 | STATIONARY CUP WHEEL GUARDS | 6" | 10-53, 10-58 |
| 14-1018 | TYPE 1 (CUT-OFF) WHEEL GUARDS | 3" X 3/16" | 12-10 |
| 14-1258 | TYPE 1 (CUT-OFF) WHEEL GUARDS | 3" X 3/16" | 12-22, 12-27 (LP) |
| 14-1259 | TYPE 1 (CUT-OFF) WHEEL GUARDS | 4" X 3/16" | 12-22, 12-27 (LP) |
| 14-2623 | TYPE 1 (CUT-OFF) WHEEL GUARDS | 4" X 3/16" | 12-25 |
| 14-2624 | TYPE 1 (CUT-OFF) WHEEL GUARDS | 3" X 3/16" | 12-20, 12-25 |
| 14-2097 | TYPE 1 WHEEL GUARDS | 3" X 1/2" | 12-26 |
| 14-2551 | TYPE 1 WHEEL GUARDS | 3" X 1/2" | 12-25 |
| 14-3011 | TYPE 1 WHEEL GUARDS | 3" X 1" | 12-41 |
| 14-4074 | TYPE 1 WHEEL GUARDS | 4" X 1" | 12-41 |
| 14-5012 | TYPE 1 WHEEL GUARDS | 6" X 1" | 12-51 |
| 14-5022 | TYPE 1 WHEEL GUARDS | 8" X 1" | 10-56 |
| 14-2123 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 7" | 12-42 |
| 14-2152 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 5" | 12-22, 12-27 |
| 14-2252 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 5" | 12-27 |
| 14-2562 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 4" | 12-22, 12-27 |
| 14-2564 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 3" | 12-28 (NG) |
| 14-2593 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 3" | 12-22, 12-27 (LP) |
| 14-2594 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 4" | 12-22, 12-27 (LP) |
| 14-2672 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 4.5" | 12-27 |
| 14-5017 | TYPE 27 DEPRESSED CENTER WHEEL GUARDS | 9" | 10-53, 10-58 |
| 14-5018 | TYPE 28 DEPRESSED CENTER WHEEL GUARDS | 7" | 10-53, 10-58 |
| 14-5019 | TYPE 28 DEPRESSED CENTER WHEEL GUARDS | 9" | 10-53, 10-58 |

Grinders

Series HG Collets

- For use with Pencil Grinders

| PART NUMBER | COLLET SIZE | TOOL TERMINATION | CAPACITY MAXIMUM | TOOL SERIES |
|-------------|-------------|------------------|------------------|---------------------|
| 01-0100 | 1/8 IN | -18 | 1/8 IN | 12-03 |
| 01-0102 | 3/32 IN | -16 | 3/32 IN | 12-03 |
| 01-0148 | 3 MM | -13 | 3 MM | 12-03 |
| 100 | 1/8 IN | -08 OR -18 | 1/8 IN | 10-04, 10-90, 12-04 |
| 102 | 3/32 IN | -06 OR -16 | 3/32 IN | 10-04, 10-90 |
| 103 | 1/16 IN | -04 OR -14 | 1/16 IN | 10-04, 10-90 |
| 131 | 2.35 MM | -02 OR -12 | 2.35 IN | 10-04, 10-90 |
| 146 | 1 MM | -00 OR -10 | 1 MM | 10-04, 10-90 |
| 148 | 3 MM | -03 OR -13 | 3 MM | 10-04, 10-90, 12-04 |

Universal Collets

- For use with 12-05, 12-22, 12-27 grinders



| MODEL | COLLET SIZE | TOOL TERMINATION | TOOL SERIES |
|---------|-------------|------------------|---------------------|
| | IN | | |
| 7808 | 1/4 IN | -45 | 12-05, 12-22, 12-27 |
| 7809 | 1/8 IN | -4508 | 12-05, 12-22, 12-27 |
| 7811 | 6 MM | -45M6 | 12-05, 12-22, 12-27 |
| 7812 | 3/16 IN | -4512 | 12-05, 12-22, 12-27 |
| LBD3300 | 3 MM | -45M3 | 12-05, 12-22, 12-27 |

Grinders

Termination 01 - Series 200 Collets

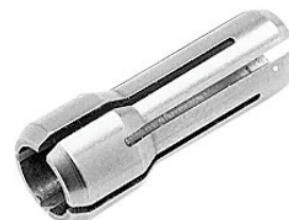
- Series 200 Collet



| MODEL | COLLET SIZE | | TOOL TERMINATION | TOOL SERIES |
|-------|-------------|--|------------------|---|
| | IN | | | |
| 204 | 1/8 IN | | -0108 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 205 | 5/32 IN | | -0110 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 206 | 3/16 IN | | -0112 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 207 | 7/32 IN | | -0114 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 208 | 1/4 IN | | -01 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 209 | 9/32 IN | | -0118 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 210 | 5/16 IN | | -0120 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 212 | 3/8 IN | | -0124 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 213 | 6 MM | | -01M6 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |
| 216 | 6 MM | | -01M8 | 12-20, 12-25, 12-21, 12-22, 12-26, 12-27, 12-31 |

Series 300 Collets

- 300 Series Collets



| MODEL | COLLET SIZE | | TOOL TERMINATION | TOOL SERIES |
|-------|-------------|--|------------------|---|
| | IN | | | |
| 304 | 1/8 IN | | -3608 | 10-95, 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |
| 306 | 3/16 IN | | -3612 | 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |
| 308 | 1/4 IN | | -36 | 10-95, 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |
| XJG38 | 3/64 IN | | -3603 | 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |
| XJG44 | 5/64 IN | | -3605 | 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |
| XJG54 | 5/32 IN | | -3610 | 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |
| XJG68 | 6 MM | | -36M6 | 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |

Grinders

Termination 36 - Series 300 Collets

- Series 300 Collet



| MODEL | COLLET SIZE | | TOOL TERMINATION | TOOL SERIES |
|-------|-------------|--|------------------|--|
| | IN | | | |
| 301 | 3/64 IN | | -3603 | 12-10, 12-11, 12-12, 12-20, 12-25 |
| 302 | 5/64 IN | | -3605 | 12-10, 12-11, 12-12, 12-20, 12-25 |
| 303 | 3/32 IN | | -3606 | 12-10, 12-11, 12-12, 12-20, 12-25 |
| 304 | 1/8 IN | | -3608 | 10-95, 12-10, 12-11, 12-12, 12-20, 12-25 |
| 305 | 5/32 IN | | -3610 | 12-10, 12-11, 12-12, 12-20, 12-25 |
| 306 | 3/16 IN | | -3612 | 12-10, 12-11, 12-12, 12-20, 12-25 |
| 307 | 7/32 IN | | -3612 | 12-10, 12-11, 12-12, 12-20, 12-25 |
| 308 | 1/4 IN | | -36 | 10-95, 12-10, 12-11, 12-12, 12-20, 12-25 |
| 310 | 6 MM | | -36M3 | 12-10, 12-11, 12-12, 12-20, 12-25 |
| 311 | 3 MM | | -36M6 | 12-10, 12-11, 12-12, 12-20, 12-25, 12-05, 12-22, 12-27 |

Termination 62 - Series K Collets

- Series K Collet



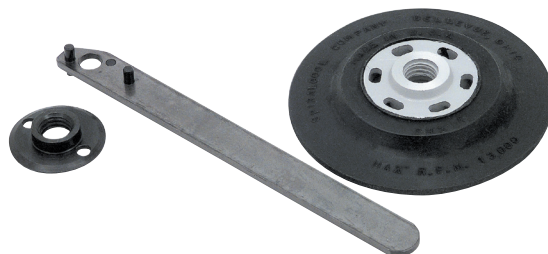
| MODEL | COLLET SIZE | | TOOL TERMINATION | TOOL SERIES |
|-------|-------------|--|------------------|--------------|
| | IN | | | |
| 120 | 1/8 IN | | -6208 | 10-43, 11-43 |
| 121 | 3/16 IN | | -6212 | 10-43, 11-43 |
| 122 | 1/4 IN | | -6216 | 10-43, 11-43 |
| 123 | 5/16 IN | | -6220 | 10-43, 11-43 |
| 124 | 3/8 IN | | -62 | 10-43, 11-43 |
| 125 | 7/16 IN | | -6228 | 10-43, 11-43 |
| 126 | 1/2 IN | | -6232 | 10-43, 11-43 |
| 127 | 9/16 IN | | -6270 | 10-43, 11-43 |
| 134 | 8 MM | | -62M8 | 10-43, 11-43 |
| 135 | 10 MM | | -6270 | 10-43, 11-43 |

Grinders

Grinders

Spiral Cool Sanding Kits

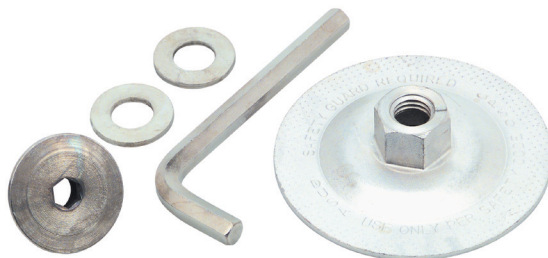
Sanding backing Pads for Grinders



| MODEL | DESCRIPTION | TOOL SERIES | SIZE |
|--------|---------------------|---------------------------|------|
| 861655 | GRINDER ACCESSORIES | 25RA, 15V, 1200V, 2260AGL | 7" |
| 861792 | GRINDER ACCESSORIES | 216RA, 236RA, C3 | 5" |

Type 27 & 28 Wheel Adapter Kit

Used for with Type 27 & Type 28 Wheels



| MODEL | DESCRIPTION | TOOL SERIES |
|--------|---------------------|--|
| 849269 | GRINDER ACCESSORIES | 15V, 1200V, 1700V, 1900V, 3060V, 4060V |

Long Collet Guard

For us with 12-10 grinders

- Completely covers the collet
- For us with 12-10 grinders
- Limits the diameter of the cutting tool used to 5/8"



| MODEL | DESCRIPTION |
|--------|-------------------|
| 1020PT | LONG COLLET GUARD |

Grinders

Noise Suppressor Guard

For use with 12-10 front exhaust tools only

- Completely covers the collet
- For use with 12-10 front exhaust tools only
- Limits the diameter of the cutting tool used to 1/2"
- Air is exhausted at an angle



| MODEL | DESCRIPTION | TOOL SERIES |
|---------|--------------|---------------------|
| 14-2188 | COLLET GUARD | 12-10 FRONT EXHAUST |

Turbine Collet Guard

For use with 10R9000 grinders

- Slips on and off tools with a slight twist



| MODEL | DESCRIPTION | TOOL SERIES |
|---------|---------------------|-------------|
| 14-1280 | GRINDER ACCESSORIES | 10-9000 |

Overhose for 236 Grinders

-



| MODEL | DESCRIPTION |
|--------|------------------|
| 202343 | HOSE CLAMP |
| 869204 | OVERHOSE ADAPTER |
| 869580 | EXHAUST OVERHOSE |

Rear exhaust models only

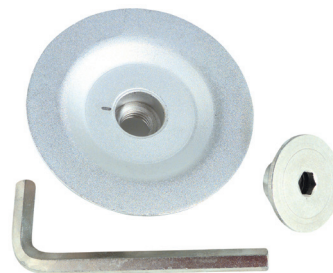
Grinders

Grinders

Depressed Center Wheel Adapter

Adaptor Kit for 7" and 9" Depressed Center Wheels

- Adapt a 7/8" arbor abrasive to a 5/8"-11 threaded spindle



| MODEL | DESCRIPTION |
|---------|--------------------|
| 14-5008 | ADAPTER AND WASHER |

Sanders & Polishers

12LF Series - Sander - Right Angle - 300 Series Collet - Cleco Dotco

12,000 - 20,000 RPM 0.4 hp (0.29 kW)

- Composite housing
- Wide array of speeds; front and rear exhaust models available
- Ergonomic and balanced design minimized operator fatigue
- Tool not supplied with backing pad as shown



| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|-------------|-------------|---------|------------|-------------------------------------|------------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 12LF200-32 | 1/4 IN-28I | FRONT | 12000 | | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF201-32 | 1/4 IN-28I | FRONT | 20000 | | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF280-36* | 1/4 IN | REAR | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF281-36* | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF201-36* | 1/4 IN | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |
| 12LF200-36* | 1/4 IN | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 6.6 | 2.70 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4in / 4.8mm; * All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 4.8 mm

Sanders & Polishers

10LF Series - Sander - Right Angle - 300 Series Collet - Cleco Dotco

12,000 - 20,000 RPM 0.4 hp (0.29 kW)



- Aluminum housing for high durability
- Wide array of speeds; front and rear exhaust models available
- Ergonomic and balanced design minimized operator fatigue
- Tool not supplied with backing pad as shown

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|-------------------------------------|-----------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 10LF200-32 | 1/4 IN-28I | FRONT | 12000 | | 3" (75 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.90 | 1/4 |
| 10LF200-36 | 1/4 IN | FRONT | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF280-36 | 1/4 IN | REAR | 12000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 3" (75 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF281-36 | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF201-36 | 1/4 IN | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.70 | 1/4 |
| 10LF201-32 | 1/4 IN-28I | FRONT | 20000 | | 2" (50 MM) SANDING/POLISHING DISC | ALUMINUM | 1.10 | 6.6 | 2.90 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 4.8 mm

Sanders & Polishers

12-13 Series - Sander - Right Angle - Gearless - 300 Series Collet - Cleco Dotco

20,000 - 30,000 RPM 0.3 hp (0.22 kW)



- Composite housing
- Wide array of speeds offered; front and rear exhaust models available
- Suitable for a wide range of finishing and deburring applications
- Tool not supplied with backing pad as shown

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|-------------------------------------|-----------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 12L1301-32 | 1/4 IN-28I | FRONT | 25000 | | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1300-32 | 1/4 IN-28I | FRONT | 30000 | | 1" (25MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1382-36 | 1/4 IN | REAR | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1302-36 | 1/4 IN | FRONT | 20000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1381-36 | 1/4 IN | REAR | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1300-36 | 1/4 IN | FRONT | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 1" (25MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1380-36 | 1/4 IN | REAR | 30000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 1" (25MM) SANDING/ POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |
| 12L1301-36 | 1/4 IN | FRONT | 25000 | 1/2" CARBIDE BURR, 1" MOUNTED WHEEL | 2" (50 MM) SANDING/POLISHING DISC | COMPOSITE | 1.10 | 7.1 | 3.70 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Standard Equipment: Applicable collet, collet wrenches

Minimum Hose I.D.: 1/4 in / 4.8 mm

Sanders & Polishers

12-22 Series - Right Angle - Grinder/Sander - 300 Series Collet - Cleco Dotco

18,000 RPM 0.6 hp (0.45 kW)



- Ergonomic composite housing
- Heavy duty low profile head for greater accessibility
- High output motor in a lightweight package
- 3" | 75mm Extended head available

| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|-------------|---------|------------|--------------------------------------|-----------------------------------|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | | LB | IN | IN | IN |
| 12L2277-36 | 1/4 IN | REAR | 12000 | 1/2" CARBIDE BURR 1" MOUNTED WHEEL | 4" (100MM) SANDING/POLISHING DISC | COMPOSITE | 2.20 | 10.0 | 2.70 | 1/4 |
| 12L2218-36 | 1/4 IN | REAR | 18000 | 1/2" CARBIDE BURR 1" MOUNTED WHEEL | 3" (50MM) SANDING/POLISHING DISC | COMPOSITE | 1.76 | 7.5 | 2.70 | 1/4 |
| 12L2278-36 | 1/4 IN | REAR | 14500 | 1/2" CARBIDE BURR 1" MOUNTED WHEEL | 4" (100MM) SANDING/POLISHING DISC | COMPOSITE | 2.20 | 10.0 | 2.70 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
Standard Equipment: Applicable collet, collet wrenches
Minimum Hose I.D.: 5/16 in / 7.9 mm

12-22 Series - Right Angle - Grinder/Sander - Heavy Duty Head

9,000 RPM 0.6 hp (0.45 kW)



- Ergonomic composite housing
- Heavy duty low profile head for greater accessibility
- high output motor in a lightweight package
- Tool not supplied with backing pad as shown

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|---------|------------|-----------------------------------|--------------|--------|--------|-------------|----------------|
| | | R/MIN | | | LB | IN | IN | IN |
| 12L2251-80 | FRONT | 9000 | 5" (125MM) SANDING/POLISHING DISC | COMPOSITE | 3.31 | 9.3 | 3.90 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Minimum Hose I.D.: 5/16in / 7.9mm
Standard Equipment: Applicable collet, collet wrenches

Sanders & Polishers

10-27 & 12-27 Series - Heavy Duty Head - Sander/Grinder - 5/8"-11 Threaded Spindle

3,300 - 11,000 RPM 0.9 hp (0.67 kW)



- Aluminum and Composite housing available
- high output motor for demanding sanding applications
- heavy duty low profile head for superior durability
- Tool not supplied with backing pad as shown

| MODEL | EXHAUST | TERMINATION | FREE SPEED | ABRASIVE CAPACITY SANDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE | TABLE SORT ORDER |
|------------|---------|-------------|------------|---|--------------|--------|--------|-------------|----------------|------------------|
| | | | R/MIN | | | LB | IN | IN | IN | |
| 10L2752-80 | FRONT | 5/8" - 11 E | 11000 | 4" (100MM) SANDING/ POLISHING DISCS | ALUMINUM | 3.31 | 8.6 | 3.90 | 1/4 | 10 |
| 12L2752-80 | FRONT | 5/8" - 11 E | 11000 | 4" (102 MM) SANDING/POLISHING DISC | COMPOSITE | 3.31 | 9.8 | 3.90 | 1/4 | 9 |
| 10L2760-80 | FRONT | 5/8" - 11 E | 3300 | 4" (102 MM) WIRE BRUSH, 6" (152 MM) BUFFING WHEEL | ALUMINUM | 3.97 | 9.3 | 3.90 | 1/4 | 1 |
| 12L2760-80 | FRONT | 5/8" - 11 E | 3300 | 7" (178 MM) SANDING/POLISHING DISC | COMPOSITE | 3.97 | 10.5 | 3.90 | 1/4 | 2 |
| 10L2750-80 | FRONT | 5/8" - 11 E | 6000 | 7" (178 MM) SANDING/POLISHING DISC | ALUMINUM | 3.09 | 8.5 | 3.90 | 1/4 | 4 |
| 12L2750-80 | FRONT | 5/8" - 11 E | 6000 | 7" (178 MM) SANDING/POLISHING DISC | COMPOSITE | 3.31 | 9.8 | 3.90 | 1/4 | 5 |
| 12L2761-80 | FRONT | 5/8" - 11 E | 6000 | 7" (178 MM) SANDING/POLISHING DISC | COMPOSITE | 3.97 | 10.5 | 3.90 | 1/4 | 6 |
| 10L2751-80 | FRONT | 5/8" - 11 E | 9000 | 5" (127 MM) SANDING/POLISHING DISC | ALUMINUM | 3.09 | 8.5 | 3.90 | 1/4 | 7 |
| 12L2751-80 | FRONT | 5/8" - 11 E | 9000 | 5" (127 MM) SANDING/POLISHING DISC | COMPOSITE | 3.31 | 9.8 | 3.90 | 1/4 | 8 |
| 12L2762-80 | FRONT | 5/8" - 11 E | 4500 | 7" (178 MM) SANDING/POLISHING DISC | COMPOSITE | 3.97 | 10.5 | 3.90 | 1/4 | 3 |

All tools performance rated @ 90 psi / 620 kPa air pressure.
 Minimum Hose I.D.: 5/16 in / 7.9 mm
 Standard Equipment: Applicable collet, collet wrenches

Right Angle Sander

- High-performance 1.7Hp motor delivers maximum power
- Quick change spindle lock for fast and easy abrasive changes
- Quieter operation with rear exhaust overhose standard
- Ergonomic, anti-vibration handle for increased comfort and less operator fatigue
- Dual-layer, high-impact composite housing for extreme durability



| MODEL | EXHAUST | FREE SPEED | SPINDLE SIZE | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|----------------|---------|------------|--------------|--------|--------|-------------|----------------|
| | | R/MIN | | LB | IN | IN | IN |
| C3120ASDR-58OH | REAR | 12000 | 5/8" - 11 | 4.05 | 8.95 | 3.03 | 3/8 |

Sanders & Polishers

Sanders & Polishers

12-12 Series - Belt Sander - Cleco Dotco

12,000 - 20,000 RPM 0.3 hp (0.22 kW)



- Grind, debur, strap polish, blend
- Choice of geared or gearless
- Ergonomic housing reduces cold air transmission to operator

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------------|---------|------------|-----------------------------|--------------|--------|--------|----------------|
| | | R/MIN | | | LB | IN | IN |
| 12L1280-36B2 | REAR | 12000 | 1/2" W X 12" L SANDING BELT | COMPOSITE | 1.32 | 11.3 | 1/4 |
| 12L1281-36B2 | REAR | 20000 | 1/2" W X 12" L SANDING BELT | COMPOSITE | 1.32 | 11.3 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/4in / 4.8mm

Standard Equipment: No.80 and No.120 grit sanding belt or one medium grit non-woven belt, applicable wrenches, grease gun, gear lube

12LF Series - Belt Sander - Cleco Dotco

12,000 - 20,000 RPM 0.3 hp (0.22 kW)



- Grind, debur, strap polish, blend
- Choice of geared or gearless
- Ergonomic housing reduces cold air transmission to operator

| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------------|---------|------------|---------------------------|--------------|--------|--------|----------------|
| | | R/MIN | | | LB | IN | IN |
| 12LF280-36B2 | REAR | 12000 | 1/2"W X 12"L SANDING BELT | COMPOSITE | 1.32 | 11.3 | 1/4 |
| 12LF281-36B2 | REAR | 20000 | 1/2"W X 12"L SANDING BELT | COMPOSITE | 1.32 | 11.3 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/4in / 4.8mm

Standard Equipment: No.80 and No.120 grit sanding belt or one medium grit non-woven belt, applicable wrenches, grease gun, gear lube

Sanders & Polishers

12-23 Series - Gearless - Woven or Non-Woven Sanding Belt - Cleco Dotco

20,000 RPM 0.5 hp (0.38 kW)

- Grind, debur, strap polish, blend
- Choice of geared or gearless
- Ergonomic housing reduces cold air transmission to operator



| MODEL | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|---------|------------|-------------------------------------|--------------|--------|--------|----------------|
| | | R/MIN | | | LB | IN | IN |
| 12L2384-B1 | FRONT | 20000 | 5/8" OR 3/4" W X 18" L SANDING BELT | COMPOSITE | 2.43 | 15.0 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/4 in / 4.8 mm

Standard Equipment: No.80 and No.120 grit sanding belt or one medium grit non-woven belt, applicable wrenches, grease gun, gear lube

12-10 Series - Buffer - 200 Series Collet - Cleco Dotco

3,200 - 5,000 RPM 0.3 hp (0.22 kW)

- Ergonomic composite housing
- Parts interchangeable with numerous other Dotco products
- Lightweight and compact design with powerful geared motor



| MODEL | COLLET SIZE | EXHAUST | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | SPINDLE SIZE | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|-------------|---------|------------|---|--------------|--------------|--------|--------|----------------|
| | | | R/MIN | | | | LB | IN | IN |
| 12L1092-01 | 1/4 IN | REAR | 3200 | 3" (75 MM) WIRE BRUSH 3" (75MM) BUFFING WHEEL | COMPOSITE | 5/8" - 11 E | 1.54 | 7.2 | 1/4 |
| 12L1093-01 | 1/4 IN | REAR | 5000 | 3" (75 MM) WIRE BRUSH 3" (75MM) BUFFING WHEEL | COMPOSITE | 5/8" - 11 E | 1.54 | 7.2 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/4 in / 6.4 mm

Standard Equipment: Applicable collet, collet wrenches

Sanders & Polishers

12-42 Series - External Threaded Spindle - Cleco Dotco

3,400 RPM 1.7 hp (1.27 kW)



- High output motor for the most demanding applications
- Comfortable and ergonomic composite handle
- Includes auxiliary handle for optimum operator control
- Tool not supplied with backing pad as shown

| MODEL | EXHAUST | TERMINATION | FREE SPEED | ABRASIVE CAPACITY GRINDER | TYPE HOUSING | WEIGHT | LENGTH | HEAD HEIGHT | AIR INLET SIZE |
|------------|---------|-------------|------------|---|--------------|--------|--------|-------------|----------------|
| | | | R/MIN | | | LB | IN | IN | IN |
| 12L4203-80 | SIDE | 5/8" - 11 E | 3400 | 4" (100MM) WIRE BRUSH, 8" (200MM) BUFFING WHEEL | COMPOSITE | 6.4 | 13.6 | 3.90 | 1/2 |
| 12L4206-80 | SIDE | 5/8" - 11 E | 6000 | 9"(225MM) SANDING DISC | COMPOSITE | 6.4 | 13.6 | 3.90 | 1/2 |
| 12L4207-80 | SIDE | 5/8" - 11 E | 7200 | 7" (175MM) SANDING DISC | COMPOSITE | 6.4 | 13.6 | 3.90 | 1/2 |

All tools performance rated @ 90 psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/2 in / 12.7 mm

Standard Equipment: Nut, washer, spacer and wrenches

Sanding Belts - Non-woven

Used on Cleco Dotco Belt Sanders

- Minimum order - 10 of any one belt



| MODEL | ABRASIVE CAPACITY GRINDER 1 | GRIT SIZE |
|---------|-----------------------------|------------|
| 14-1728 | 1/4" X 18" | EXTRA FINE |
| 14-1729 | 1/4" X 18" | FINE |
| 14-1730 | 1/4" X 18" | MEDIUM |
| 14-1731 | 1/4" X 18" | COARSE |
| 14-2327 | 3/4" X 18" | MEDIUM |

Minimum order: 10 of any one belt

Sanders & Polishers

Sanding Belts - Aluminum Oxide, Resin Bond

Used on Cleco Dotco Belt Sanders

- Minimum order - 10 of any one belt



| MODEL | ABRASIVE CAPACITY GRINDER 1 | GRIT SIZE |
|---------|-----------------------------|-----------|
| 14-1344 | 1/2" X 12" | 40 |
| 14-1345 | 1/2" X 12" | 50 |
| 14-1346 | 1/2" X 12" | 60 |
| 14-1348 | 1/2" X 12" | 80 |
| 14-1350 | 1/2" X 12" | 100 |
| 14-1352 | 1/2" X 12" | 120 |
| 14-1355 | 1/2" X 12" | 150 |
| 14-1358 | 1/2" X 12" | 180 |
| 14-1360 | 1/2" X 12" | 240 |
| 14-1362 | 1/2" X 12" | 320 |
| 14-1582 | 1" X 12" | 60 |
| 14-1583 | 1" X 12" | 80 |
| 14-1585 | 1" X 12" | 120 |
| 14-1588 | 1" X 12" | 180 |
| 14-1590 | 1/4" X 12" | 60 |
| 14-1591 | 1/4" X 12" | 80 |
| 14-1593 | 1/4" X 12" | 120 |
| 14-1596 | 1/4" X 12" | 180 |
| 14-1642 | 1" X 24" | 60 |
| 14-1648 | 1" X 24" | 180 |

Belt Sander Attachments - Cleco Dotco

Used on Cleco Dotco Belt Sanders - 12-12 and 12-13 Series

-



| MODEL | DESCRIPTION | SANDING AREA | ABRASIVE CAPACITY GRINDER 1 | TOOL SERIES | TERMINATION |
|---------|-----------------------------|--------------|-----------------------------|--------------|-------------|
| | | IN | | | |
| 14-1463 | COATED ABRASIVE ATTACHMENTS | 1" X 4" | 1" X 12" SANDING BELT | 12-12, 12-13 | 1/4 IN-28I |
| 14-1473 | COATED ABRASIVE ATTACHMENTS | 1" X 4" | 1" X 12" SANDING BELT | 12-12, 12-13 | 300 IN |
| 14-1603 | COATED ABRASIVE ATTACHMENTS | 1" X 10" | 1" X 24" SANDING BELT | 12-12, 12-13 | 1/4 IN-28I |
| 14-1613 | COATED ABRASIVE ATTACHMENTS | 1" X 10" | 1" X 24" SANDING BELT | 12-12, 12-13 | 300 IN |
| 14-1638 | COATED ABRASIVE ATTACHMENTS | 1/4" X 4" | 1/4" X 12" SANDING BELT | 12-12, 12-13 | 1/4 IN-28I |
| 14-1639 | COATED ABRASIVE ATTACHMENTS | 1/4" X 4" | 1/4" X 12" SANDING BELT | 12-12, 12-13 | 300 IN |
| 14-1715 | NON-WOVEN ATTACHMENTS | 1/2" X 6" | 1/2" X 18" SANDING BELT | 12-12 | 300 IN |

Sanders & Polishers

Spiralcool Backing Pads

For Cleco Dotco sanders with 5/8"-11 threaded spindles. Pad contour develops draft action to cool disc and avoid excessive pick-up.



- For Cleco Dotco sanders with 5/8"-11 threaded spindles.
- Pad contour develops draft action to cool disc and avoid excessive pick-up.

| MODEL | DESCRIPTION | SPEED | DIAMETER |
|---------|------------------------|-------|----------|
| | | R/MIN | IN |
| 14-2115 | FLEXIBILITY - FLEXIBLE | 10000 | 5 |
| 14-2116 | FLEXIBILITY - MEDIUM | 10000 | 5 |
| 14-2117 | FLEXIBILITY - RIGID | 10000 | 5 |
| 14-2197 | FLEXIBILITY - FLEXIBLE | 12000 | 4 |
| 14-2198 | FLEXIBILITY - MEDIUM | 12000 | 4 |
| 14-2199 | FLEXIBILITY - RIGID | 12000 | 4 |
| 14-2200 | FLEXIBILITY - MEDIUM | 7000 | 7 |
| 14-2201 | FLEXIBILITY - RIGID | 7000 | 7 |
| 14-2202 | FLEXIBILITY - FLEXIBLE | 6000 | 9 |
| 14-2203 | FLEXIBILITY - MEDIUM | 6000 | 9 |
| 14-2255 | FLEXIBILITY - FLEXIBLE | 11000 | 4.5 |
| 14-2256 | FLEXIBILITY - MEDIUM | 11000 | 4.5 |
| 14-2257 | FLEXIBILITY - RIGID | 11000 | 4.5 |
| 14-2529 | FLEXIBILITY - FLEXIBLE | 7000 | 7 |

Sanders & Polishers

Save-A-Disc Pads

For Cleco Dotco sanders with 5/8"-11 threaded spindles. Ribs on the backing plate cause a flexing action which throws off accumulation.

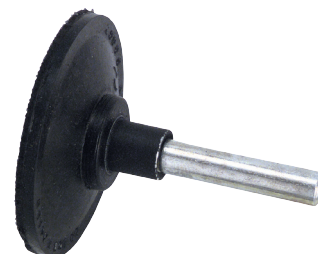


- For Cleco Dotco sanders with 5/8"-11 threaded spindles.
- Ribs on the backing plate cause a flexing action which throws off accumulation.

| MODEL | DESCRIPTION | SPEED | | DIAMETER | |
|---------|--------------|-------|--|----------|--|
| | | R/MIN | | IN | |
| 14-2515 | PAD ASSEMBLY | 7500 | | 5 | |
| 14-2517 | PAD ASSEMBLY | 7500 | | 7 | |
| 14-2519 | PAD ASSEMBLY | 7500 | | 9 | |
| 14-2521 | PAD ONLY | 7500 | | 9 | |
| 14-2522 | PLATE ONLY | 7500 | | 5 | |
| 14-2523 | PLATE ONLY | 7500 | | 7 | |
| 14-2525 | NUT ONLY | 7500 | | 9 | |

PSA Disc Holders

adaptor Kit for 7" and 9" Depressed Center Wheels



- For Collet Chuck - Chuck the PSA disc holder shank directly into the appropriate collet (1/8" or 1/4")
- For Threaded Spindle - Remove the threaded shank from the PSA disc holder.
- Referring to the spindle adapter chart, select the correct spindle and thread it into the PSA holder.

| MODEL | SHANK DIAMETER CAPACITY | DIAMETER | | SPINDLE SIZE |
|---------|-------------------------|----------|--|----------------|
| | | IN | | |
| 14-1105 | 1/4 IN | 1/2 | | 5-40 FEMALE |
| 14-1107 | 1/4 IN | 3/4 | | 5-40 FEMALE |
| 14-1110 | 1/4 IN | 1 | | 5-40 FEMALE |
| 14-1111 | 1/4 IN | 1-1/2 | | 1/4"-20 FEMALE |
| 14-1112 | 1/4 IN | 2 | | 1/4"-20 FEMALE |
| 14-1113 | 1/4 IN | 3 | | 1/4"-20 FEMALE |
| 14-1114 | 1/4 IN | 4 | | 1/4"-20 FEMALE |
| 14-1146 | 1/8 IN | 1/2 | | 5-40 FEMALE |
| 14-1147 | 1/8 IN | 3/4 | | 5-40 FEMALE |
| 14-1170 | 1/8 IN | 1 | | 5-40 FEMALE |

Sanders & Polishers

Sanding Pad Nut

For use with Cleco Dotco sanders with 5/8"-11 threaded spindles



- For use with Cleco Dotco sanders with 5/8"-11 threaded spindles

| MODEL | SPINDLE SIZE |
|---------|--------------------------|
| 14-2118 | 5/8"-11 THREADED SPINDLE |

Spanner Wrench

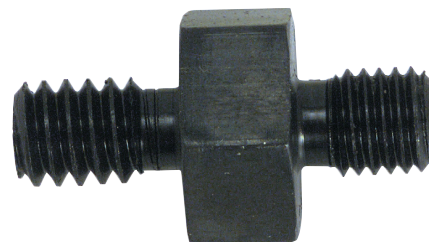
Used with 14-2118 Sanding Pad Nut



| MODEL | SPINDLE SIZE |
|---------|--------------------------|
| 14-2319 | 5/8"-11 THREADED SPINDLE |

Spindle Adapters

For use with PSA Disc holders



- For use with PSA Disc holders

| MODEL | DESCRIPTION | THREAD FOR TOOL SPINDLE / PSA DISC HOLDER | MAX DISC DIAMETER |
|---------|--|---|-------------------|
| | | | IN |
| 14-1142 | TOOL SPINDLE THREAD / PSA DISC HOLDER THREAD | 1/4"-28 MALE / 5-40 MALE | 1 |
| 14-1144 | TOOL SPINDLE THREAD / PSA DISC HOLDER THREAD | 1/4"-28 MALE / 1/4"-20 MALE | 4 |
| 14-1211 | TOOL SPINDLE THREAD / PSA DISC HOLDER THREAD | 5/8"-11 FEMALE / 3/8"-24 MALE | 4 |
| 14-1212 | TOOL SPINDLE THREAD / PSA DISC HOLDER THREAD | 5/8"-11 MALE / 1/4"-20 MALE | 4 |
| 14-2903 | TOOL SPINDLE THREAD / PSA DISC HOLDER THREAD | 5/8"-11 MALE / 5/16"-24 MALE | 4 |

Specialty Tools

12-12 Series - Right Angle Routers

20,000 - 30,000 RPM 0.3 hp (0.22 kW)

- Available in both geared and gearless
- Multiple speed and power options available to find the right tool for the application



| MODEL | EXHAUST | SHANK DIAMETER CAPACITY | | FREE SPEED | DRIVE | WEIGHT | LENGTH | AIR INLET SIZE |
|--------------|---------|-------------------------|-------|---------------------------|-------|--------|--------|----------------|
| | | IN | R/MIN | LB | | | | |
| 12L1201-36RT | FRONT | 1/4 IN | 20000 | GEARED 0.3 HP (0.22 KW) | 1.76 | 6.5 | 1/4 | |
| 12L1281-36RT | REAR | 1/4 IN | 20000 | GEARED 0.3 HP (0.22 KW) | 1.76 | 6.5 | 1/4 | |
| 12L1300-36RT | FRONT | 1/4 IN | 30000 | GEARLESS 0.3 HP (0.22 KW) | 1.54 | 7.4 | 1/4 | |
| 12L1380-36RT | REAR | 1/4 IN | 30000 | GEARLESS 0.3 HP (0.22 KW) | 1.54 | 7.4 | 1/4 | |
| 12L1381-36RT | REAR | 1/4 IN | 25000 | GEARLESS 0.3 HP (0.22 KW) | 1.54 | 7.4 | 1/4 | |

All tools performance rated @ 90psi / 620 kPa air pressure

Minimum hose I.D.: 1/4in | 6.4 mm

Standard Equipment: Collet, applicable wrenches

10-10 & 12-10 Series - Inline Router

30,000 - 34,000 RPM 0.3 hp (0.22 kW)

- Tremendous power for the toughest portable routing operations
- Unique governor design assures minimum air consumption, maximum power all at correct speed and long motor life
- All models oil free



| MODEL | EXHAUST | SHANK DIAMETER CAPACITY | | FREE SPEED | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------------|---------|-------------------------|-------|------------|--------------|--------|--------|----------------|
| | | IN | R/MIN | LB | | | | |
| 10L1000-36RT | FRONT | 1/4 IN | 30000 | ALUMINUM | 1.32 | 6.7 | 1/4 | |
| 12L1000-36RT | FRONT | 1/4 IN | 30000 | COMPOSITE | 1.32 | 6.7 | 1/4 | |
| 12L1001-36RT | FRONT | 1/4 IN | 34000 | COMPOSITE | 1.32 | 6.7 | 1/4 | |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/4in / 6.4mm

Standard Equipment: Collet, applicable wrenches

Specialty Tools

Specialty Tools

10-20 & 12-20 Series - Inline Router

20,000 - 25,000 RPM 0.6 hp (0.45 kW)

- Tremendous power for the toughest portable routing operations
- Unique governor design assures minimum air consumption, maximum power at correct speed and long motor life



| MODEL | EXHAUST | SHANK DIAMETER CAPACITY | | FREE SPEED | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|--------------|---------|-------------------------|-------|------------|--------------|--------|--------|----------------|
| | | IN | R/MIN | LB | | IN | IN | |
| 12L2001-01RT | FRONT | 1/4 IN | 20000 | COMPOSITE | 1.98 | 7.5 | 1/4 | |
| 10L2000-01RT | FRONT | 1/4 IN | 25000 | ALUMINUM | 1.76 | 0.63 | 1/4 | |
| 12L2000-01RT | FRONT | 1/4 IN | 25000 | COMPOSITE | 1.98 | 7.5 | 1/4 | |
| 12L2080-01RT | REAR | 1/4 IN | 25000 | COMPOSITE | 1.98 | 7.5 | 1/4 | |
| 12L2081-01RT | REAR | 1/4 IN | 20000 | COMPOSITE | 1.98 | 7.5 | 1/4 | |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 5/16in / 7.9mm

Standard Equipment: Collet, applicable wrenches

10-25 & 12-25 Series - Inline Router

18,000 - 23,000 RPM 0.9 hp (0.67 kW)

- Sustained power for any routing application
- Composite comfortable grip
- Roll value for easy operation



| MODEL | EXHAUST | SHANK DIAMETER CAPACITY | | FREE SPEED | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|----------------|---------|-------------------------|-------|------------|--------------|--------|--------|----------------|
| | | IN | R/MIN | LB | | IN | IN | |
| 12L2502-01RT | FRONT | 1/4 IN | 18000 | COMPOSITE | 2.65 | 7.1 | 1/4 | |
| 12L2582-0124RT | REAR | 3/8 IN | 18000 | COMPOSITE | 2.65 | 7.1 | 1/4 | |
| 10L2500-01RT | FRONT | 1/4 IN | 23000 | ALUMINUM | 2.43 | 6.9 | 1/4 | |
| 10L2580-01RT | REAR | 1/4 IN | 23000 | ALUMINUM | 2.43 | 6.9 | 1/4 | |
| 12L2500-01RT | FRONT | 1/4 IN | 23000 | COMPOSITE | 2.65 | 7.1 | 1/4 | |
| 12L2580-0124RT | REAR | 3/8 IN | 23000 | COMPOSITE | 2.65 | 7.1 | 1/4 | |
| 12L2580-01RT | REAR | 1/4 IN | 23000 | COMPOSITE | 2.65 | 7.1 | 1/4 | |
| 12L2582-01RT | REAR | 1/4 IN | 18000 | COMPOSITE | 2.65 | 7.1 | 1/4 | |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 5/16in / 7.9mm

Standard Equipment: Collet, applicable wrenches

Specialty Tools

10-40 & 12-40 Series - Inline Router

18,000 RPM 1.7 hp (1.27 kW)



- Maximum power for larger routing application
- Tremendous power for the toughest portable routing operations
- Unique governor design assures minimum air consumption, maximum power at correct speed and long motor life
- All models oil free

| MODEL | EXHAUST | SHANK DIAMETER CAPACITY | FREE SPEED | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|---------|-------------------------|------------|--------------|--------|--------|----------------|
| | | IN | R/MIN | | LB | IN | IN |
| 10L4018-01 | FRONT | 1/4 IN | 18000 | ALUMINUM | 4.19 | 11.3 | 1/2 |
| 12L4018-01 | FRONT | 1/4 IN | 18000 | COMPOSITE | 4.19 | 11.3 | 1/2 |
| 12L4018-03 | FRONT | 3/8 IN | 18000 | COMPOSITE | 4.19 | 11.3 | 1/2 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/2in / 12.7mm

Standard Equipment: Collet, applicable wrenches

10-43 Series - Base Mount Router

9,000 - 18,000 RPM 1.7 hp (1.27 kW)



- Roll valve gives easy, convenient operation
- Cool running pneumatic motor - Stays cool even under heavy load
- Easy-to-use thumb throttle can be operated without releasing hand from handel
- Smooth accurate cuts - assured by precision spindle

| MODEL | EXHAUST | SHANK DIAMETER CAPACITY | FREE SPEED | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|---------|-------------------------|------------|--------------|--------|--------|----------------|
| | | IN | R/MIN | | LB | IN | IN |
| 10T4316-62 | SIDE | 1/2 IN | 16000 | ALUMINUM | 7.5 | 7.1 | 1/2 |
| 10T4309-62 | SIDE | 1/2 IN | 9000 | ALUMINUM | 7.5 | 7.1 | 1/2 |
| 10T4318-62 | SIDE | 1/2 IN | 18000 | ALUMINUM | 7.5 | 7.1 | 1/2 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/2in / 12.7mm

Standard Equipment: Collet, applicable wrenches

Specialty Tools

11-43 Series - Mountable Power Unit

18,000 RPM 1.7 hp (1.27 kW)

- Cool running pneumatic motor stays cool even under heavy load
- Flat top provides firm setting for changing cutters and making adjustments
- Smooth accurate cuts - assured by precision spindle



| MODEL | EXHAUST | SHANK DIAMETER CAPACITY | FREE SPEED | TYPE HOUSING | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|---------|-------------------------|------------|--------------|--------|--------|----------------|
| | | IN | R/MIN | | LB | IN | IN |
| 11T4316-62 | | 1/2 IN | 16000 | ALUMINUM | 5.5 | 7.1 | 1/2 |
| 11T4309-62 | SIDE | 1/2 IN | 9000 | ALUMINUM | 5.5 | 7.1 | 1/2 |
| 11T4318-62 | SIDE | 1/2 IN | 18000 | ALUMINUM | 5.5 | 7.1 | 1/2 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Minimum Hose I.D.: 1/2in / 12.7mm
Standard Equipment: Collet, applicable wrenches

Router Assemblies - Cleco Dotco

For use with Dotco 12-10, 12-20 and 12-25 series

- For use with Dotco 12-10, 12-20 and 12-25 series

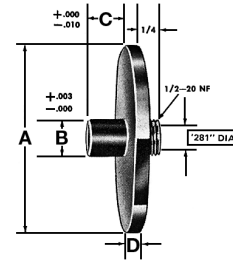


| MODEL | DESCRIPTION | SHANK DIAMETER CAPACITY | TOOL SERIES |
|---------|---------------------|-------------------------|--------------|
| 14-1180 | ROUTER HOUSING | 1/4 IN | 12-10 |
| 14-2080 | ROUTER HOUSING | 3/8 IN | 12-20, 12-25 |
| 14-2082 | LOCK NUT | 3/8 IN | 12-20, 12-25 |
| 14-2176 | NOSE HOUSING | 1/4 IN | 12-20, 12-25 |
| 14-2180 | COMPLETE ATTACHMENT | 1/4 IN | 12-20, 12-25 |
| 14-2187 | COMPLETE ATTACHMENT | 1/4 IN | 12-10 |
| 14-2426 | NOSE HOUSING | 3/8 IN | 12-20, 12-25 |
| 14-2429 | COMPLETE ATTACHMENT | 3/8 IN | 12-20, 12-25 |

Specialty Tools

Router Guides For Router Bits with 3/8" Shanks

- For use on Dotco 12-10, 12-20, 12-20, 12-25 and 12-40 series.
- The minimum router bit length (OAL) to be used is determined by the formula: $OAL = 1-13/16" + C + P$ (series 12-10); $OAL = 2" + C + P$ (series 12-20 & 12-25). "C" is the "C" dimension of the router guide and "P" is the desired protrusion of the router bit.
- Important: Insert bit into collet as far as possible, then pull out 1/16" and tighten collet.
- In an emergency, if it is necessary to pull out the bit more than 1/4", be sure to insert a short length of blank shank (not to exceed 5/8" long) in the bottom of the collet before inserting the bit.

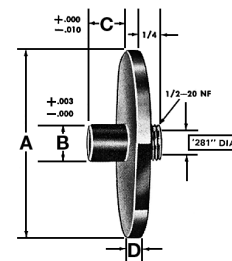


| MODEL | DESCRIPTION | DIMENSION A | DIMENSION B | DIMENSION C | DIMENSION D |
|---------|----------------------------------|-------------|-------------|-------------|-------------|
| | | IN | IN | IN | IN |
| 14-2240 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 3/8 | 3/8 | 1/8 |
| 14-2243 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 5/8 | 3/8 | 1/8 |
| 14-2531 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 1/2 | 3/8 | 1/8 |
| 14-2538 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 1/2 | 1/2 | 1/8 |
| 14-2539 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 1/2 | 5/8 | 1/8 |
| 14-2540 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 9/16 | 3/8 | 1/8 |
| 14-2541 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 9/16 | 1/2 | 1/8 |
| 14-2542 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 9/16 | 5/8 | 1/8 |
| 14-2544 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 5/8 | 5/8 | 1/8 |
| 14-2630 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 9/16 | 1/2 | 1/8 |
| 14-2631 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 5/8 | 5/8 | 1/8 |
| 14-2632 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 1/2 | 1/2 | 1/8 |
| 14-2633 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 1/2 | 5/8 | 1/8 |
| 14-2634 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 9/16 | 3/8 | 1/8 |
| 14-2635 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 9/16 | 5/8 | 1/8 |
| 14-2636 | FOR ROUTER BITS WITH 3/8" SHANKS | 2-1/2 | 5/8 | 1/2 | 1/8 |
| 14-2893 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 5/8 | 3/8 | 1/8 |
| 14-2925 | FOR ROUTER BITS WITH 3/8" SHANKS | 1-1/2 | 5/8 | 1/2 | 1/8 |

Specialty Tools

Router Guides For Router Bits with 1/4" Shanks

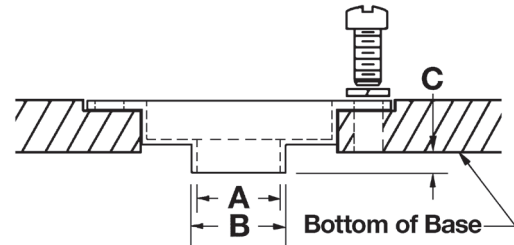
- For use on Dotco 12-10, 12-20, 12-20, 12-25 and 12-40 series.
- The minimum router bit length (OAL) to be used is determined by the formula: $OAL = 1-13/16" + C + P$ (series 12-10); $OAL = 2" + C + P$ (series 12-20 & 12-25). "C" is the "C" dimension of the router guide and "P" is the desired protrusion of the router bit.
- Important: Insert bit into collet as far as possible, then pull out 1/16" and tighten collet.
- In an emergency, if it is necessary to pull out the bit more than 1/4", be sure to insert a short length of blank shank (not to exceed 5/8" long) in the bottom of the collet before inserting the bit.



| MODEL | DESCRIPTION | DIMENSION A | DIMENSION B | DIMENSION C | DIMENSION D |
|---------|----------------------------------|-------------|-------------|-------------|-------------|
| | | IN | IN | IN | IN |
| 14-2400 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 3/8 | 1/8 | 1/8 |
| 14-2401 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 3/8 | 1/4 | 1/8 |
| 14-2402 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 3/8 | 3/8 | 1/8 |
| 14-2406 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 7/16 | 1/8 | 1/8 |
| 14-2407 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 7/16 | 1/4 | 1/8 |
| 14-2408 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 7/16 | 3/8 | 1/8 |
| 14-2411 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 1/2 | 1/4 | 1/8 |
| 14-2412 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 1/2 | 1/2 | 1/8 |
| 14-2413 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 1/2 | 5/8 | 1/8 |
| 14-2414 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 1/2 | 3/4 | 1/8 |
| 14-2417 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 9/16 | 1/8 | 1/8 |
| 14-2420 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 5/8 | 1/8 | 1/8 |
| 14-2421 | FOR ROUTER BITS WITH 1/4" SHANKS | 1 | 5/8 | 5/8 | 1/8 |
| 14-2500 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 3/8 | 1/8 | 1/8 |
| 14-2501 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 3/8 | 1/4 | 1/8 |
| 14-2502 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 3/8 | 3/8 | 1/8 |
| 14-2505 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 7/16 | 1/8 | 1/8 |
| 14-2506 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 7/16 | 1/4 | 1/8 |
| 14-2507 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 7/16 | 3/8 | 1/8 |
| 14-2510 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 1/2 | 1/4 | 1/8 |
| 14-2511 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 1/2 | 3/8 | 1/8 |
| 14-2512 | FOR ROUTER BITS WITH 1/4" SHANKS | 1-1/2 | 1/2 | 1/2 | 1/8 |
| 14-2600 | FOR ROUTER BITS WITH 1/4" SHANKS | 2-1/2 | 1/2 | 1/2 | 3/16 |
| 14-2703 | FOR ROUTER BITS WITH 1/4" SHANKS | 3/4 | 3/8 | 1/2 | 1/8 |

Specialty Tools

10-43 Series Router Template Guides



| MODEL | DESCRIPTION | FOR USE WITH ROUTER BITS UP TO: | DIMENSION A | DIMENSION B | DIMENSION C |
|---------|--------------------|---------------------------------|-------------|-------------|-------------|
| | | | IN | IN | IN |
| 14-4019 | ROUTER ACCESSORIES | 1/4 | 5/16 | 3/8 | 3/16 |
| 14-4020 | ROUTER ACCESSORIES | 5/16 | 3/8 | 7/16 | 5/16 |
| 14-4021 | ROUTER ACCESSORIES | 1/2 | 9/16 | 5/8 | 3/16 |

Rivet Trimmer Attachment

For use on Dotco 12-12 series front or rear exhaust collet models.

- For use on Cleco Dotco 12-12 series front or rear exhaust collet models.
- Trims “pop” or “blind” rivets up to 3/16” diameter, also suitable for shaving small welds.
- Micrometer adjustment controls height of cut to .001”.
- Runner pads minimize scratching of the work surface.



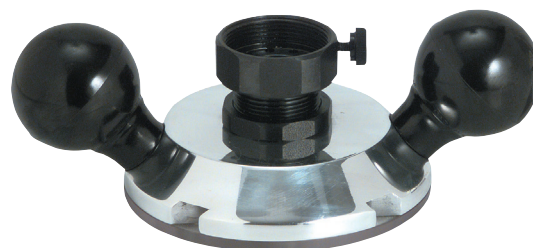
| MODEL | DESCRIPTION | SHANK DIAMETER CAPACITY | RECOMMENDED USE | DIAMETER | | | LENGTH | | |
|---------|----------------------------------|-------------------------|-----------------|----------|------|--------|--------|----|----|
| | | | | IN | IN | MM | IN | MM | MM |
| 14-1332 | CUTTERS - CYLINDRICAL, CARBIDE | 1/4 IN | SHAVING WELDS | 1/2 | 1.88 | 47.625 | | | |
| 14-1723 | TRIMMER | | | | | | | | |
| 14-1732 | CUTTERS - INVERTED CONE, CARBIDE | 1/4 IN | STEEL RIVETS | 3/4 | 1.88 | 47.625 | | | |

Specialty Tools

Two Handed Router Base

Easy depth adjustment. Can also be used with 10-43 template guides.

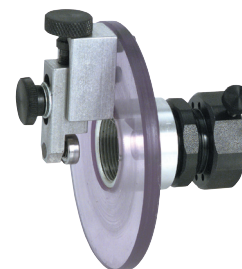
- Two handed control for router applications.
- Easy depth adjustment. Can also be used with 10-43 template guides.
- Cutters: 14-2442 (combination flush/bevel 22°)



| MODEL | DESCRIPTION | TOOL SERIES |
|---------|--|--------------|
| 14-1577 | USE WITH FRONT OR REAR EXHAUST COLLET MODELS | 12-10 |
| 14-2577 | USE WITH FRONT OR REAR EXHAUST COLLET MODELS | 12-20, 12-25 |

Laminate Trimmer Attachment

Used on Dcleco Dotco 12-10, 12-10 and 12-25 Series Routers



| MODEL | DESCRIPTION | TOOL SERIES |
|---------|--------------------|--------------|
| 14-1178 | ROUTER ACCESSORIES | 12-10 |
| 14-2178 | ROUTER ACCESSORIES | 12-20, 12-25 |

Specialty Tools

12-22 Series - Right Angle - Oscillating Saw

14,000 RPM 0.6 hp (0.45 kW)

- Available in right angle or inline
- Excellent control and high productivity with minimum fatigue
- Easy to change blades
- Adjustable depth control



| MODEL | SAW BLADE CAPACITY | | FREE SPEED | CONFIGURATION | TYPE HOUSING | MAXIMUM DEPTH OF CUT | | WEIGHT | LENGTH | AIR INLET SIZE | EXHAUST |
|------------|--------------------|------|------------|---------------|--------------|----------------------|------|--------|--------|----------------|---------|
| | IN | MM | R/MIN | | | IN | MM | LB | IN | IN | |
| 12L2065-90 | 2.50 | 63.5 | 14000 | INLINE | COMPOSITE | 0.56 | 14.3 | 2.20 | 8.9 | 1/4 | REAR |
| 12L2240-90 | 2.50 | 63.5 | 14000 | RIGHT ANGLE | COMPOSITE | 0.56 | 14.3 | 2.20 | 10.9 | 1/4 | REAR |

All tools performance rated @ 90psi / 620 kPa air pressure.
 Minimum Hose I.D.: 5/16in / 7.9mm
 Standard Equipment: Applicable wrenches, oilless blades

Specialty Tools

12-12 Series - Saw

2,400 - 20,000 RPM 0.3 hp (0.22 kW)

- Vacuum ready
- Compact and easy to use
- Easy to change blades
- Adjustable depth control



| MODEL | SAW BLADE CAPACITY | | FREE SPEED | TYPE HOUSING | MAXIMUM DEPTH OF CUT | | WEIGHT | LENGTH | AIR INLET SIZE | EXHAUST |
|------------|--------------------|----|------------|--------------|----------------------|----|--------|--------|----------------|--------------|
| | IN | MM | R/MIN | | IN | MM | LB | IN | IN | |
| 12S1206-02 | 2.01 | 51 | 12000 | COMPOSITE | 0.43 | 11 | 1.32 | 7.1 | 1/4 | FRONT |
| 12S1273-03 | 2.01 | 51 | 12000 | COMPOSITE | 0.43 | 11 | 2.20 | 7.1 | 1/4 | VACUUM READY |
| 12S1282-02 | 2.01 | 51 | 12000 | COMPOSITE | 0.43 | 11 | 1.32 | 7.1 | 1/4 | REAR |
| 12S1207-02 | 2.01 | 51 | 20000 | COMPOSITE | 0.43 | 11 | 1.32 | 7.1 | 1/4 | FRONT |
| 12S1274-03 | 2.01 | 51 | 20000 | COMPOSITE | 0.43 | 11 | 2.20 | 7.1 | 1/4 | VACUUM READY |
| 12S1283-02 | 2.01 | 51 | 20000 | COMPOSITE | 0.43 | 11 | 1.32 | 7.1 | 1/4 | REAR |
| 12S1288-02 | 2.01 | 51 | 2400 | COMPOSITE | 0.43 | 11 | 1.54 | 8.9 | 1/4 | REAR |
| 12S1289-02 | 2.01 | 51 | 3600 | COMPOSITE | 0.43 | 11 | 1.54 | 8.9 | 1/4 | REAR |

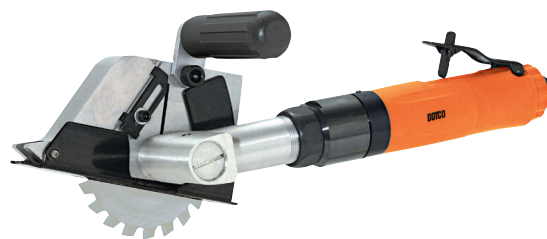
All tools performance rated @ 90psi / 620 kPa air pressure.
 Minimum Hose I.D.: 1/4in / 6.4mm
 Standard Equipment: Applicable wrenches, oilless blades

Specialty Tools

12-27 Series - Saw

430 - 11,000 RPM 0.9 hp (0.67 kW)

- Compact and easy to use
- Excellent control and high productivity with minimum fatigue
- Easy to change blades



| MODEL | SAW BLADE CAPACITY | | FREE SPEED R/MIN | TYPE HOUSING | MAXIMUM DEPTH OF CUT | | WEIGHT LB | LENGTH IN | AIR INLET SIZE IN | EXHAUST |
|------------|--------------------|-----|---------------------|--------------|----------------------|------|--------------|--------------|----------------------|--------------|
| | IN | MM | | | IN | MM | | | | |
| 12S2749-01 | 3.39 | 86 | 11000 | COMPOSITE | 1.00 | 25.4 | 4.9 | 11.4 | 1/4 | FRONT |
| 12S2793-02 | 4.02 | 102 | 3200 | COMPOSITE | 1.00 | 25.4 | 5.3 | 14.5 | 1/4 | REAR |
| 12S2790-02 | 4.02 | 102 | 430 | COMPOSITE | 1.00 | 25.4 | 6.2 | 16.2 | 1/4 | REAR |
| 12S2774-02 | 3.39 | 86 | 7000 | COMPOSITE | 1.00 | 25.4 | 6.4 | 14.1 | 1/4 | VACUUM READY |
| 12S2775-01 | 4.02 | 102 | 8500 | COMPOSITE | 1.00 | 25.4 | 7.3 | 14.1 | 1/4 | VACUUM READY |
| 12S2748-01 | 4.02 | 102 | 9000 | COMPOSITE | 1.00 | 25.4 | 4.9 | 11.4 | 1/4 | FRONT |
| 12S2792-02 | 3.39 | 86 | 940 | COMPOSITE | 1.00 | 25.4 | 6.2 | 16.2 | 1/4 | REAR |
| 12S2794-01 | 2.52 | 64 | 4700 | COMPOSITE | 0.56 | 14.3 | 4.63 | 13.2 | 1/4 | REAR |

All tools performance rated @ 90psi / 620 kPa air pressure.

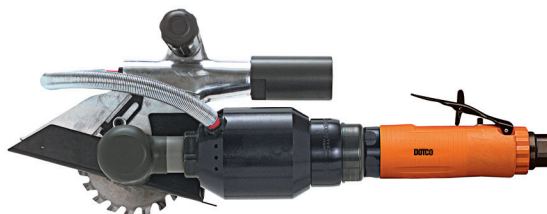
Minimum Hose I.D.: 5/16in / 7.9mm

Standard Equipment: Applicable wrenches, oilless blades, 3/4in Arbor adapter

12-42 Series - Saw

5,800 - 8,600 RPM 1.7 hp (1.27 kW)

- Adjustable depth control
- Easy to change blades
- Compact and easy to use



| MODEL | SAW BLADE CAPACITY | | FREE SPEED R/MIN | TYPE HOUSING | MAXIMUM DEPTH OF CUT | | WEIGHT LB | LENGTH IN | AIR INLET SIZE IN | EXHAUST |
|------------|--------------------|-----|---------------------|--------------|----------------------|------|--------------|--------------|----------------------|--------------|
| | IN | MM | | | IN | MM | | | | |
| 12S4216-01 | 4.02 | 102 | 5800 | COMPOSITE | 1.00 | 25.4 | 7.9 | 15.5 | 1/4 | FRONT |
| 12S4218-01 | 4.02 | 102 | 8600 | COMPOSITE | 1.00 | 25.4 | 7.9 | 15.5 | 1/4 | FRONT |
| 12S4225-03 | 4.02 | 102 | 8500 | COMPOSITE | 1.00 | 25.4 | 9.3 | 17.0 | 1/4 | VACUUM READY |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 1/2in / 12.7mm

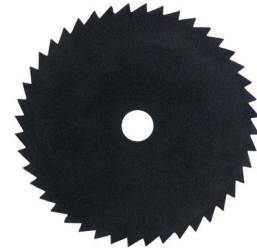
Standard Equipment: Applicable wrenches, oilless blades, 3/4in Arbor adapter

Specialty Tools

Saw Blades - 1/4" arbor hole

Used on Cleco Dotco Saw's

- Used for sawing non-metallic materials



| MODEL | DESCRIPTION | MAXIMUM DEPTH OF CUT | SPEED | DIAMETER | RECOMMENDED USE |
|----------|---------------------------|----------------------|-------|----------|---|
| | | IN | R/MIN | IN | (GUIDELINES ONLY) |
| 14-0930 | HIGH SPEED STEEL 44 TEETH | 3/32" X 1/16" | 12000 | 1-1/4 | FIBERGLASS, RUBBER |
| 14-1395* | CARBIDE CHIP 36/80 GRIT | 7/16" X 3/32" | 20000 | 2 | FIBERGLASS, RUBBER |
| 14-1396* | CARBIDE CHIP 36/80 GRIT | 7/32" X 3/32" | 20000 | 1-1/2 | FIBERGLASS, RUBBER |
| 14-1398* | DIAMOND CHIP 40/60 GRIT | 7/32" X 5/64" | 20000 | 1-1/2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-1400* | DIAMOND CHIP 40/60 GRIT | 7/16" X 5/64" | 20000 | 2 | FIBERGLASS, RUBBER |
| 14-1875 | HIGH SPEED STEEL 22 TEETH | 3/32" X 1/16" | 12000 | 1-1/4 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-1890 | HIGH SPEED STEEL 22 TEETH | 7/16" X 1/16" | 12000 | 2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-1891 | HIGH SPEED STEEL 44 TEETH | 7/16" X 1/16" | 12000 | 2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-1892 | HIGH SPEED STEEL 60 TEETH | 7/16" X 1/16" | 12000 | 2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-1895 | HIGH SPEED STEEL 22 TEETH | 7/32" X 1/16" | 12000 | 1-1/2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |

Note; * CAUTION: Use only for sawing non-metallic materials

Saw Blades - 7/16" arbor hole

Used on Cleco Dotco Saw's

- Used for sawing non-metallic materials



| MODEL | DESCRIPTION | MAXIMUM DEPTH OF CUT | TOOL SERIES | DIAMETER | RECOMMENDED USE |
|---------|---------------------------|----------------------|-------------|----------|---|
| | | IN | | IN | (GUIDELINES ONLY) |
| 14-1887 | HIGH SPEED STEEL 22 TEETH | 7/16" X 1/16" | 12S1288-04 | 2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-1888 | HIGH SPEED STEEL 44 TEETH | 7/16" X 1/16" | 12S1288-04 | 2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-1889 | HIGH SPEED STEEL 60 TEETH | 7/16" X 1/16" | 12S1288-04 | 2 | ALUMINUM, LAMINATED PLASTICS, PRESSED BOARD, WOOD |
| 14-2146 | HIGH SPEED STEEL 80 TEETH | 9/16 | 12S2793-01 | 2-1/2 | 16 GAUGE STEEL |
| 14-2147 | HIGH SPEED STEEL 44 TEETH | 9/16 | 12S2794-01 | 2-1/2 | 1/4" ALUMINUM, 1/2" PLYWOOD, 1/2" PHENOLIC |
| 14-2928 | HIGH SPEED STEEL 60 TEETH | 15/16" | 12S2794-02 | 3-3/8 | 1/4" ALUMINUM, 1/2" PLYWOOD, 1/2" PHENOLIC |
| 14-2929 | HIGH SPEED STEEL 80 TEETH | 15/16" | 12S2792-02 | 3-3/8 | 20 GAUGE STEEL, PANELING, PLYWOOD |

Specialty Tools

Saw Blades - 3/4" arbor hole

Used on Cleco Dotco Saw's

- Used for sawing non-metallic materials



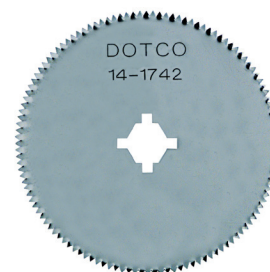
| MODEL | DESCRIPTION | MAXIMUM DEPTH OF CUT | DIAMETER | RECOMMENDED USE |
|----------|-------------------------|----------------------|----------|---|
| | | IN | IN | (GUIDELINES ONLY) |
| 14-2690 | DIAMOND CHIP 60/80 GRIT | 1" X 5/64" | 4 | FIBERGLASS, COMPOSITE, CARBON FIBER |
| 14-2694* | CARBIDE CHIP 36 GRIT | 1" X 11/64" | 4 | HARD RUBBER |
| 14-2697* | CARBIDE CHIP 80 GRIT | 1" X 1/8" | 4 | FIBERGLASS |
| 14-2699* | CARBIDE TIP 20 TEETH | 1" X 7/64" | 4 | THIN FIBERGLASS, PLASTIC LAMINATES TO 1/8" THICK |
| 14-2700* | CARBIDE TIP 20 TEETH | 1" X 7/64" | 4 | THICKER FIBERGLASS, PLASTIC LAMINATES TO 1/2" THICK |
| 14-2701* | CARBIDE CHIP 36/80 GRIT | 1" X 1/8" | 4 | FIBERGLASS, HARD RUBBER |
| 14-2710 | CARBIDE TIP 20 TEETH | 1" X 7/64" | 4 | THIN NON-FERROUS MATERIAL (TO APPROX . 1/8" THICK) |
| 14-2711 | CARBIDE TIP 12 TEETH | 1" X 7/64" | 4 | THICKER NON-FERROUS MATERIAL (TO APPROX . 1/2" THICK) |

Note; * *CAUTION: These carbide chip and tip and diamond blades are not to be used on metallic materials.
**Slim blade for easy cutting of fiberglass, with minimum dust -36 grit on periphery and 80 grit on the sides.

Saw Blades - oscillating saws with 3/8" arbor hole

Used on Cleco Dotco Oscillating Saw

- Used on 12-22 Series



| MODEL | DESCRIPTION | MAXIMUM DEPTH OF CUT | DIAMETER | RECOMMENDED USE |
|----------|---------------------------|----------------------|----------|--|
| | | IN | IN | (GUIDELINES ONLY) |
| 14-1740* | CARBIDE CHIP 36/80 GRIT | 7/16" X 3/32" | 2 | FIBERGLASS |
| 14-1741* | DIAMOND CHIP 40/60 GRIT | 7/16" X 5/64" | 2 | FIBERGLASS, CARBON COMPOSITES |
| 14-1742 | STAINLESS STEEL 124 TEETH | 9/16" X 3/64" | 2-1/2 | WOOD, UNCURED OR CURED COMPOSITES, ALUMINUM, PLASTIC |
| 14-1743 | CARBIDE 120 TEETH | 9/16" X 1/16" | 2-1/2 | CURED GRAPHIC COMPOSITES |
| 14-1744 | RAZOR | 9/16" X 3/64" | 2-1/2 | CARDBOARD, LIGHT PLASTIC |
| 14-1745 | STAINLESS STEEL 120 TEETH | 9/16" X 3/64" | 2-1/2 | CONFINED SPACE |
| 14-1746 | FLUSH STAINLESS 124 TEETH | 9/16" X 3/64" | 2-1/2 | WOOD, UNCURED OR CURED COMPOSITES, ALUMINUM, PLASTIC |
| 14-1747 | RAZOR | 9/16" X 3/64" | 3 | CARDBOARD, LIGHT PLASTIC |

Use only for sawing non-metallic materials. Note:

Specialty Tools

Vacuum Conversion Kits 12-27 series

Converts front exhaust to a one of the configurations shown below

- Refer to the Vacuum Ready 12-27 Models in the catalog



| MODEL | DESCRIPTION | TOOL SERIES |
|-------|----------------------------------|-------------|
| 2704 | OPTION 1 - PORTA BAG | 12-27 |
| 2705 | OPTION 2 - FLOOR BAG | 12-27 |
| 2729 | OPTION 3 - VACUUM SYSTEM ADAPTER | 12-27 |

To convert an existing Cleco Dotco front exhaust series 12-27 saw to Vacuum operation, order any of the conversion kits listed in the table. NOTE: When converting to vacuum, free speed of the tool will be reduced 20%.

Vacuum Conversion Kits 12-42 series

Converts front exhaust to a one of the configurations shown below

- Refer to the Vacuum Ready 12-42 Models in the catalog



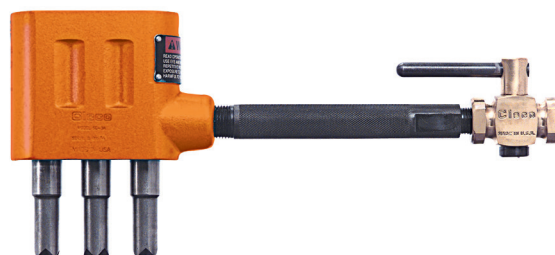
| MODEL | DESCRIPTION | TOOL SERIES |
|-------|----------------------------------|-------------|
| 4131 | OPTION 1 - PORTA BAG | 12-42 |
| 4132 | OPTION 2 - FLOOR BAG | 12-42 |
| 4133 | OPTION 3 - VACUUM SYSTEM ADAPTER | 12-42 |

To convert an existing Cleco Dotco front exhaust series 12-42 saw to Vacuum operation, order any of the conversion kits listed in the table. NOTE: When converting to vacuum, free speed of the tool will be reduced 20%.

SC3A Series - Triple Scaler

Piston Type

- Piston Type
- For maximum material removal
- Heavy duty, rugged application



| MODEL | BORE | STROKE | BLOWS PER MINUTE | AIR INLET SIZE | LENGTH | WEIGHT | AIR INLET SIZE |
|-------|------|--------|------------------|----------------|--------|--------|----------------|
| | IN | IN | | IN | IN | LB | IN |
| SC3A | 0.88 | 0.81 | 5200 | 3/8 | 13.3 | 7.9 | 3/8 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Minimum Hose I.D.: 3/8in / 9.6mm
Standard Equipment: Operating instructions & service manual

Specialty Tools

Specialty Tools

B1 Series - Lever Start - Needle Scaler

Built-in Chisel Retainer

- Built-in Chisel Retainer
- Front Exhaust
- Lever Start
- Needle Type



| MODEL | BORE | | STROKE | | ABRASIVE CAPACITY | BLOWS PER MINUTE | AIR INLET SIZE | | LENGTH | WEIGHT | RETAINER TYPE | AIR INLET SIZE | |
|--------------|------|-----|--|----|-------------------|------------------|----------------|-----|--------|--------|---------------|----------------|--|
| | IN | IN | IN | IN | | | IN | IN | | | | IN | |
| B1-CNB-LT-RD | 1 | 1.1 | 5" 125 MM NEEDLES STANDARD, 7" 180 MM NEEDLES OPTIONAL | | 4600 | 1/4 | 15.0 | 6.4 | PIN | 1/4 | | | |

All tools performance rated @ 90psi / 620 kPa air pressure.
 Minimum Hose I.D.: 5/16in / 7.9mm
 Standard Equipment: Operating instructions & service manual

MP5187 - Lightweight Needle Scaler

Almost half the weight of standard models with similar BPM

- 4200 Blows per minute
- Compact design for work in close quarters
- Almost half the weight of standard models with similar BPM
- Precision heat treated needles for maximum performance



| MODEL | BORE | | STROKE | | BLOWS PER MINUTE | AIR INLET SIZE | | LENGTH | WEIGHT | AIR INLET SIZE | |
|--------|------|------|--------|----|------------------|----------------|-----|--------|--------|----------------|--|
| | IN | IN | IN | IN | | IN | IN | | | | |
| MP5187 | 0.79 | 0.59 | 4200 | | 1/4 | 8.9 | 2.5 | 1/4 | | | |

General: Air Inlet 1/4" NPT Use 1/4" (9.6mm) I.D. Hose All tools performance rated @ 90psi (620 kPa) air pressure. Standard Equipment: MP5187: 12 needles, 1/8" (3mm) dia., 5" (125mm) long. Owners Manual, Parts sheet. Optional Equipment: MP5187: 8913300: 3mm x 7" carbon steel flat tip needle kit (12). 80074300: 3mm x 7" chisel tip needles. 71010300: (12) 3mm x 5" with 3mm needle holder

B1 Series - Lever Start - Needle Scaler Kit

Kit Includes B1-CNB-LT-RD scaler, whip hose, extra set of needles, two chisels, extra chisel retainer, retainer parts and metal case.

- Kit Includes B1-CNB-LT-RD scaler, whip hose, extra set of needles, two chisels, extra chisel retainer, retainer parts and metal case.



| MODEL | BORE | | STROKE | | ABRASIVE CAPACITY | BLOWS PER MINUTE | LENGTH | | WEIGHT | RETAINER TYPE |
|----------------|------|-----|--|----|-------------------|------------------|--------|----------|--------|---------------|
| | IN | IN | IN | IN | | | IN | LB | | |
| B1-CNB-LT-RD-K | 0.04 | 1.1 | 5" 125 MM NEEDLES STANDARD, 7" 180 MM NEEDLES OPTIONAL | | 4600 | 15.0 | 6.4 | BUILT-IN | | |

All tools performance rated @ 90psi / 620 kPa air pressure.
 Minimum Hose I.D.: 5/16in / 7.9mm
 Standard Equipment: Operating instructions & service manual

Specialty Tools

B1 Series - Push-Pull Start - Chisel Scaler

Built-in Chisel Retainer



- Built-in Chisel Retainer
- Chisel Type

| MODEL | BORE | CHISEL | STROKE | ABRASIVE CAPACITY | BLOWS PER MINUTE | AIR INLET SIZE | LENGTH | WEIGHT | RETAINER TYPE |
|---------|------|--------|--------|-----------------------------|------------------|----------------|--------|--------|---------------|
| | IN | IN | IN | | | IN | IN | LB | |
| B1-C-PT | 1 | .500 | 1.1 | 1/2" 12.7 MM SQUARE STOCK | 4600 | 1/4 | 12.0 | 4.41 | BUILT-IN |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 5/16in / 7.9mm

Standard Equipment: Operating instructions & service manual

B Series - Lever Start - Chisel Scaler

Built-in Chisel Retainer



- Built-in Chisel Retainer
- Chisel Type

| MODEL | BORE IN | CHISEL IN | STROKE IN | ABRASIVE CAPACITY | BLOWS PER MINUTE | AIR INLET SIZE IN | LENGTH IN | WEIGHT LBS | RETAINER TYPE |
|---------|---------|-----------|-----------|-----------------------------|------------------|-------------------|-----------|------------|---------------|
| B1-C-LT | 1 | .500 | 1.1 | 1/2" 12.7 MM SQUARE STOCK | 4600 | 1/4 | 10.3 | 4.41 | BUILT-IN |
| BR-C-LT | 1 | .625 | 1.1 | 5/8" 16 MM ROUND STOCK | 4200 | 1/4 | 10.4 | 4.41 | BUILT-IN |

All tools performance rated @ 90psi / 620 kPa air pressure.

Minimum Hose I.D.: 5/16in / 7.9mm

Standard Equipment: Operating instructions & service manual

Specialty Tools

MP5195 - Long Reach Scaler

Long reach scaler design for quick and easy stripping of dirt, grease, paint, glue, resins, floor coverings and tiles



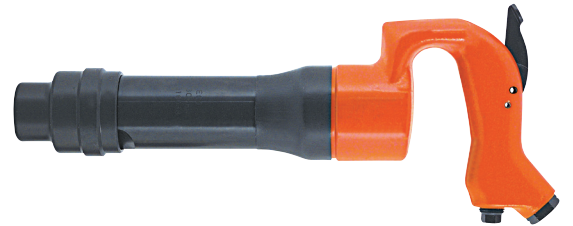
- 2200 Blows per minute
- For rugged scaling applications
- Long reach scaler design for quick and easy stripping of dirt, grease, paint, glue, resins, floor coverings and tiles
- Full Range of chisel blades

| MODEL | STROKE | BLOWS PER MINUTE | LENGTH | PISTON DIAMETER | PISTON STROKE | WEIGHT |
|--------|--------|------------------|--------|-----------------|---------------|--------|
| | IN | | IN | IN | IN | LB |
| MP5195 | 1.5 | 2200 | 60 | 1.1 | 1.5 | 11.5 |

General: Air inlet 1/4" NPT for MP5195 Model. Use 1/4" (9.6mm) I.D. hose. All tools performance rated @ 90psi (620 kPa) air pressure. Standard Equipment: 51741 4" 5/8 hex chisel. Owners Manual, Parts list. Optional Accessories: 51741 4" chisel, 5/8 hex. 51742 2" chisel, 5/8 hex. 51743 8" scraper w/replaceable blade. 51744 12" scraper w/replaceable blade. 51745 2" alum. bronze non-spark pack. 51746 8" replacement blade for 51744 12" scraper. 51749 4" non-spark chisel

CH30 Series Chipping Hammer

Heavy duty for rugged use



- Heavy duty for rugged use
- Ring valve hard hitting hammer
- Forged steel hammer
- Heat treated cylinder & piston for reduced wear
- Replaceable bushing

| MODEL | BORE | CHISEL | STROKE | ABRASIVE CAPACITY | BLOWS PER MINUTE | AIR INLET SIZE | LENGTH | WEIGHT | AIR INLET SIZE |
|----------|-------|--------|--------|-------------------------------|------------------|----------------|--------|--------|----------------|
| | IN | IN | IN | | | IN | IN | LB | IN |
| CH-30-HX | 1.125 | .580 | 2.5 | .580 IN 14.7 MM HEX | 2200 | 3/8 | 17.7 | 15.0 | 3/8 |
| CH-30-RD | 1.125 | .680 | 2.5 | .680 IN 17.3 MM ROUND SHANK | 2200 | 3/8 | 17.7 | 15.0 | 3/8 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Minimum Hose I.D.: 1/2in / 12.7mm
Standard Equipment: Operating instructions & service manual

Specialty Tools

12-20 Series - Nibbler

Great for tight access application

- Great for tight access application
- Suitable for general industry



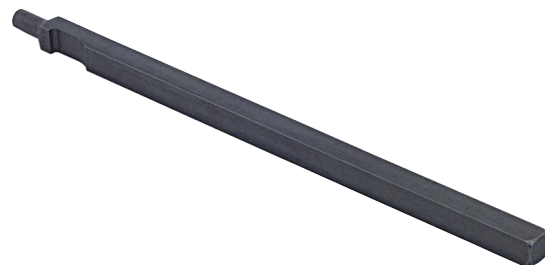
| MODEL | CAPACITY | FREE SPEED | AIR INLET SIZE | LENGTH | WEIGHT | AIR INLET SIZE |
|------------|-------------------|------------|----------------|--------|--------|----------------|
| | | R/MIN | IN | IN | LB | IN |
| 12L2062-96 | 18 GA. MILD STEEL | 6 | 1/4 | 8.3 | 1.10 | 1/4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Accessories

B1 Series Chisels (Safety Retainer Type)

For use with B1 Series Chisels



| MODEL | DESCRIPTION | CUTTING EDGE LENGTH | | STOCK SIZE | | LENGTH | |
|--------|----------------|---------------------|------|------------|------|--------|--------|
| | | IN | MM | IN | MM | IN | MM |
| 839050 | SPOON CHISEL | 1-3/8 IN | 34.9 | 1/2 IN | 12.7 | 7.3 | 184.15 |
| 839051 | COLD CHISEL | 3/4 IN | 19.0 | 1/2 IN | 12.7 | 7.5 | 190.5 |
| 839052 | HARDENED BLANK | | | 1/2 IN | 12.7 | 7.5 | 190.5 |
| 839053 | HARDENED BLANK | | | 1/2 IN | 12.7 | 12.0 | 304.8 |
| 839299 | SPOON CHISEL | 1-3/8 IN | 34.9 | 1/2 IN | 12.7 | 12.0 | 304.8 |
| 839334 | SPOON CHISEL | 1-3/8 IN | 34.9 | 1/2 IN | 12.7 | 18.0 | 457.2 |
| 839335 | COLD CHISEL | 3/4 IN | 19.0 | 1/2 IN | 12.7 | 18.0 | 457.2 |
| 839341 | COLD CHISEL | 3/4 IN | 19.0 | 1/2 IN | 12.7 | 12.0 | 304.8 |
| 839467 | COLD CHISEL | 1-1/2 IN | 38.1 | 1/2 IN | 12.7 | 8.0 | 203.2 |
| 839740 | SPOON CHISEL | 1 IN | 25.4 | 1/2 IN | 12.7 | 7.3 | 184.15 |

BR Series Chisels (Safety Retainer Type)

For use with BR Series Chisels



| MODEL | DESCRIPTION | DIAMETER | | CUTTING EDGE LENGTH | | STOCK SIZE | | LENGTH | |
|--------|-----------------|----------|------|---------------------|------|------------|------|--------|-------|
| | | IN | MM | IN | MM | IN | MM | IN | MM |
| 829150 | COLD | 5/8 | 15.9 | 3/4 X 3/32 | 19.0 | 5/8 IN | 15.9 | 8.5 | 215.9 |
| 829165 | LONG WIDE BLADE | 5/8 | 15.9 | 1-3/4 X 3/32 | 44.5 | 5/8 IN | 15.9 | 7.0 | 177.8 |
| 829173 | BLANK | 5/8 | 15.9 | | | 5/8 IN | 15.9 | 7.5 | 190.5 |
| 829301 | SCALING | 5/8 | 15.9 | 1-1/4 X 3/32 | 31.8 | 5/8 IN | 15.9 | 9.0 | 228.6 |
| 829310 | SPOON | 5/8 | 15.9 | 1-3/8 X 3/32 | 34.9 | 5/8 IN | 15.9 | 7.5 | 190.5 |

Accessories

Air Hoses - Cleco Dotco

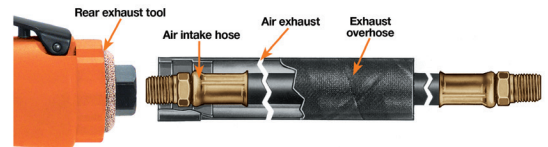


| MODEL | DESCRIPTION | FITTINGS (NPT) | TOOL SERIES | DIAMETER | | LENGTH | |
|---------|-------------|----------------|---------------------|----------|------|--------|--|
| | | | | IN | FT | M | |
| 45-0948 | AIR HOSE | 1/4 | 10-04, 12-03, 12-04 | 1/4 | 5.0 | 1.524 | |
| 45-1409 | AIR HOSE | 1/8 - 1/4 | 10-10, 10-11, 10-12 | 1/4 | 8.0 | 2.4384 | |
| 45-1810 | AIR HOSE | 3/8 - 1/2 | | 1/2 | 10.0 | 3.048 | |
| 46-1610 | AIR HOSE | 3/8 - 3/8 | | 3/8 | 10.0 | 3.048 | |
| A110026 | AIR HOSE | 1/8 - 3/8-24 | | 3/16 | 6.0 | 1.8288 | |
| A139856 | AIR HOSE | 1/8 - 1/8 | | 3/16 | 6.0 | 1.8288 | |

3/16" & 1/4" hoses have braided covers, all others have neoprene covers.

Overhose - Cleco Dotco

- For use with Dotco series rear exhaust tools



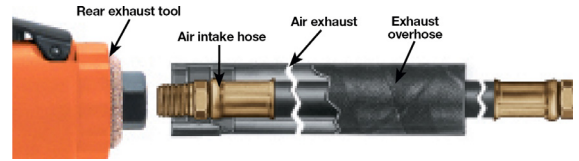
| MODEL | DESCRIPTION | TOOL SERIES | LENGTH | |
|---------|---------------|--|--------|--------|
| | | | FT | M |
| 45-0945 | OVERHOSE ONLY | 10-04 | 1.0 | 0.3048 |
| 45-0955 | OVERHOSE ONLY | 10-04 | 2.0 | 0.6096 |
| 45-0956 | OVERHOSE ONLY | 10-04 | 4.0 | 1.2192 |
| 45-0974 | OVERHOSE ONLY | 12-91 | 4.0 | 1.2192 |
| 45-1901 | OVERHOSE ONLY | 10-10, 10-11, 10-12 | 4.0 | 1.2192 |
| 45-1902 | OVERHOSE ONLY | 10-10, 10-11, 10-12 | 8.0 | 2.4384 |
| 45-1904 | OVERHOSE ONLY | 10-10, 10-11, 10-12 | 2.0 | 0.6096 |
| 45-2629 | OVERHOSE ONLY | 10-20, 10-21, 10-22, 10-25, 10-26, 10-27, 12-20, 12-21, 12-22, 12-25, 12-26, 12-27, 12-28, 15LS, 15LN, 12-10, 12-11, 12-12, 12-13, 15LF, 15-14 | 2.0 | 0.6096 |
| 45-2687 | OVERHOSE ONLY | 10-20, 10-21, 10-22, 10-25, 10-26, 10-27, 12-20, 12-21, 12-22, 12-25, 12-26, 12-27, 12-28, 15LS, 15LN, 12-10, 12-11, 12-12, 12-13, 15LF, 15-14, 14CF, 14CS, 14CN | 4.0 | 1.2192 |
| 45-2688 | OVERHOSE ONLY | 10-20, 10-21, 10-22, 10-25, 10-26, 10-27, 12-20, 12-21, 12-22, 12-25, 12-26, 12-27, 12-28, 15LS, 15LN, 12-10, 12-11, 12-12, 12-13, 15LF, 15-14, 14CF, 14CS, 14CN | 8.0 | 2.4384 |
| 45-6001 | OVERHOSE ONLY | 12-03, 12-04 | 4.0 | 1.2192 |
| 45-6002 | OVERHOSE ONLY | 12-03, 12-04 | 2.0 | 0.6096 |
| 45-6003 | OVERHOSE ONLY | 12-03, 12-04 | 1.0 | 0.3048 |

Accessories

Accessories

Overhose Assemblies and Conversion Kits - Cleco Dotco

For Use with Cleco Dotco Series rear exhaust tools



| MODEL | DESCRIPTION | TOOL SERIES | LENGTHS |
|---------|--|---|---|
| 45-0946 | INCLUDES 45-0945 OVERHOSE AND 45-0948 AIRHOSE | 10-04 | 1.0 FT 0.3 M OVERHOSE 5.0 FT 1.5 M AIRHOSE |
| 45-0953 | INCLUDES 45-0955 OVERHOSE AND 45-0948 AIRHOSE | 10-04 | 2.0 FT 0.6 M OVERHOSE 5.0 FT 1.5 M AIRHOSE |
| 45-0954 | INCLUDES 45-0956 OVERHOSE AND 45-0948 AIRHOSE | 10-04 | 4.0 FT 1.2 M OVERHOSE 5.0 FT 1.5 M AIRHOSE |
| 45-1930 | INCLUDES 45-1904 OVERHOSE AND 45-1409 AIRHOSE | 10-10, 10-11, 10-12 | 2.0 FT 0.6 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-1931 | INCLUDES 45-1901 OVERHOSE AND 45-1409 AIRHOSE | 10-10, 10-11, 10-12 | 4.0 FT 1.2 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-1932 | INCLUDES 45-1902 OVERHOSE AND 45-1409 AIRHOSE | 10-10, 10-11, 10-12 | 8.0 FT 2.4 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-2783 | NON-OVERHOSE TO OVERHOSE CONVERSION KIT. INCLUDES 45-2629 OVERHOSE AND 45-1408 AIRHOSE | 12-10, 12-11, 12-12, 12-13, 15LF, 15-14 | 2.0 FT 0.6 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-2784 | NON-OVERHOSE TO OVERHOSE CONVERSION KIT. INCLUDES 45-2687 OVERHOSE AND 45-1408 AIRHOSE | 12-10, 12-11, 12-12, 12-13, 15LF, 15-14 | 4.0 FT 1.2 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-2785 | NON-OVERHOSE TO OVERHOSE CONVERSION KIT. INCLUDES 45-2688 OVERHOSE AND 45-1408 AIRHOSE | 12-10, 12-11, 12-12, 12-13, 15LF, 15-14 | 8.0 FT 2.4 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-2786 | NON-OVERHOSE TO OVERHOSE CONVERSION KIT. INCLUDES 45-2629 OVERHOSE AND 45-1508 AIRHOSE | 10-20, 10-21, 10-22, 10-25, 10-26, 10-27, 12-20, 12-21, 12-22, 12-25, 12-26, 12-27, 12-28, 15LS, 15LN | 2.0 FT 0.6 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-2787 | NON-OVERHOSE TO OVERHOSE CONVERSION KIT. INCLUDES 45-2687 OVERHOSE AND 45-1508 AIRHOSE | 10-20, 10-21, 10-22, 10-25, 10-26, 10-27, 12-20, 12-21, 12-22, 12-25, 12-26, 12-27, 12-28, 15LS, 15LN | 4.0 FT 1.2 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-2788 | NON-OVERHOSE TO OVERHOSE CONVERSION KIT. INCLUDES 45-2688 OVERHOSE AND 45-1508 AIRHOSE | 10-20, 10-21, 10-22, 10-25, 10-26, 10-27, 12-20, 12-21, 12-22, 12-25, 12-26, 12-27, 12-28, 15LS, 15LN | 8.0 FT 2.4 M OVERHOSE 8.0 FT 2.4 M AIRHOSE |
| 45-6000 | INCLUDES 45-6001 OVERHOSE AND 45-0948 AIRHOSE | 12-03, 12-04 | 4.0 FT 1.2 M OVERHOSE 5.0 FT 1.5 M AIRHOSE |
| 45-6012 | INCLUDES 45-6002 OVERHOSE AND 45-0948 AIRHOSE | 12-03, 12-04 | 2.0 FT 0.6 M OVERHOSE 5.0 FT 1.5 M AIRHOSE |
| 45-6013 | INCLUDES 45-6003 OVERHOSE AND 45-0948 AIRHOSE | 12-03, 12-04 | 1.0 FT 0.3 M OVERHOSE 5.0 FT 1.5 M AIRHOSE |

Accessories

Activeswivel Cleco Dotco

Available for 1/4" NPT inlet only



| MODEL | DESCRIPTION | AIR FLOW VOLUME | MAX PRESSURE | WEIGHT | | AIR INLET SIZE |
|--------|--------------|----------------------|--------------------------|--------|-----------|----------------|
| | | SCFM | LB/IN ² BAR | LB | KG | IN |
| SW-102 | ACTIVESWIVEL | 25 M ³ /M | 150 | 0.200 | 0.0907185 | 1/4 |

Lubricants

| PART NUMBER | SIZE | DESCRIPTION | M.S.D.S. NO. | TABLE SORT ORDER |
|-------------|---------------|---|--------------|------------------|
| 45-0918 | 1 QT. PLASTIC | LUBRICATING OIL - QT. | CPT-155 | 4 |
| 45-0919 | 1 GAL. METAL | LUBRICATING OIL - GAL. | CPT-155 | 5 |
| 45-0980 | 2 OZ. TUBE | MOLY-XL 250 OIL ANGLE HEAD GEAR GREASE FOR GRINDERS | CPT-148 | 9 |
| 45-0983 | 2 OZ. TUBE | DOTCO PLANETARY GEAR GREASE FOR GRINDERS & SANDERS | CPT-147 | 8 |
| 513156 | 18 OZ. CAN | MAGNALUBE-G ASSEMBLY TOOL TEFLON GREASE | CPT-145 | 7 |
| 533485 | 1 GAL. METAL | AIR TOOL OIL (500021) 1 GAL. CAN | CPT-153 | 2 |
| 535090 | | MR SERIES MOTORS - GEARING OIL 1 GAL. CAN | | |
| 536333 | 1 GAL. METAL | HIGH FILM STRENGTH OIL (FOR SEVERE USE) 1 GAL. CAN | CPT-154 | 3 |
| 539317 | 1 QT. PLASTIC | UNIVIS PULSE TOOL HYDRAULIC OIL | CPT-157 | 6 |
| 540397 | 1 QT. PLASTIC | | CPT-153 | 1 |
| 60538 | | AIR LUBE 10W/NR AIR LINE OIL | CPT-153 | |
| 60539 | | AIR LUBE 10W/NR AIR LINE OIL | CPT-153 | |
| 633190 | | LUBE-A-TUBE | | |

Under normal conditions of use, lubrication products sold separately for or used within these tools should not cause an exposure hazard. Refer to the Material Safety Data Sheet M.S.D.S. for Safety and Disposal information. M.S.D.S. sheets shown in the chart are available upon request.

Accessories

Push Type Grease Gun Cleco Dotco

Cleco Dotco Lube sold seperately - see above

- Push Type Grease Gun

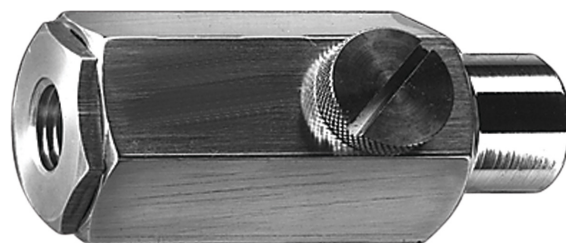


| MODEL | DESCRIPTION |
|---------|-------------|
| 45-1982 | GREASE GUN |

Airline Filter & Lubricator

Mounts in Hose Line.

- One ounce reservoir good for average 8-hour shift.



| MODEL | DESCRIPTION | MAX PRESSURE | AIR INLET SIZE |
|---------|-------------|----------------------------------|----------------|
| | | LB/IN ² BAR | IN |
| 45-0201 | LUBRICATOR | 100 LB/IN ² 6.9 BAR | 1/4 |
| 45-0301 | LUBRICATOR | 100 LB/IN ² 6.9 BAR | 3/8 |



Solutions are in our DNA.

Pneumatic Nutrunners

19 Series - Angle Nutrunner - Clutch Shut-Off - Lever Start - Collar Reverse

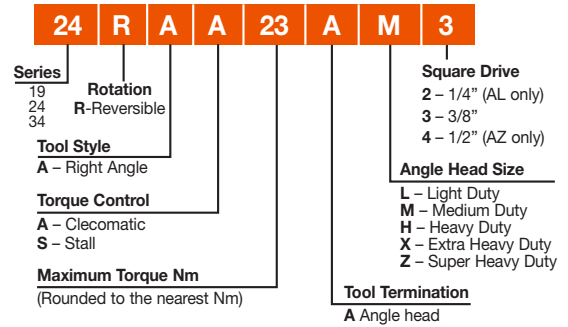
Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle

- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Lightweight, ergonomic and durable handle designed with operator in mind
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace
- Grip material tested to withstand a range of industrial chemicals



Nutrunners & Screwdrivers

Model Number Example



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | SIDE TO CENTER IN | OUTPUT DRIVE | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|------------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|----------------------|------------------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | | | |
| 19RAA02AM2 | 0.5 | 2.1 | 0.3 | 1.5 | 2400 | 11.9 | 1.70 | 0.77 | 0.360 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA02AH2 | 0.5 | 2.4 | 0.3 | 1.7 | 2100 | 12.5 | 1.81 | 0.82 | 0.50 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA02AH3 | 0.5 | 2.4 | 0.3 | 1.7 | 2100 | 12.5 | 1.81 | 0.82 | 0.50 | 3/8 SQUARE DRIVE | 11 | 1/8 |
| 19RAA03AM2 | 0.6 | 3.1 | 0.4 | 2.2 | 1650 | 12.2 | 1.81 | 0.82 | 0.360 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA03AH2 | 0.7 | 3.4 | 0.5 | 2.5 | 1450 | 12.7 | 1.81 | 0.82 | 0.50 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA03AH3 | 0.7 | 3.4 | 0.5 | 2.5 | 1450 | 12.7 | 1.81 | 0.82 | 0.50 | 3/8 SQUARE DRIVE | 11 | 1/8 |
| 19RAA04AM2 | 1.4 | 4.7 | 1 | 3.4 | 950 | 12.0 | 1.70 | 0.77 | 0.360 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA05AM2 | 1.4 | 5.7 | 1 | 4.2 | 570 | 12.4 | 1.81 | 0.82 | 0.360 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA06AH2 | 1.5 | 6 | 1.1 | 4.4 | 850 | 12.5 | 1.81 | 0.82 | 0.50 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA06AH3 | 1.5 | 6 | 1.1 | 4.4 | 850 | 12.5 | 1.81 | 0.82 | 0.50 | 3/8 SQUARE DRIVE | 11 | 1/8 |
| 19RAA07AH2 | 1.5 | 6.8 | 1.1 | 5 | 500 | 12.9 | 1.90 | 0.86 | 0.50 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA07AH3 | 1.5 | 6.8 | 1.1 | 5 | 500 | 12.9 | 1.90 | 0.86 | 0.50 | 3/8 SQUARE DRIVE | 11 | 1/8 |
| 19RAA09AH2 | 2.0 | 8.5 | 1.4 | 6.2 | 500 | 12.9 | 1.90 | 0.86 | 0.50 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA09AH3 | 2.0 | 8.5 | 1.4 | 6.2 | 500 | 12.9 | 1.90 | 0.86 | 0.50 | 3/8 SQUARE DRIVE | 11 | 1/8 |
| 19RAA11AH2 | 2.5 | 11.3 | 1.8 | 8.3 | 340 | 12.3 | 2.09 | 0.95 | 0.50 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA11AH3 | 2.5 | 11.3 | 1.8 | 8.3 | 340 | 12.3 | 2.09 | 0.95 | 0.50 | 3/8 SQUARE DRIVE | 11 | 1/8 |
| 19RAA11AHM | 2.5 | 11.3 | 1.8 | 8.3 | 340 | 12.3 | 2.09 | 0.95 | 0.50 | | | 1/8 |
| 19RAA12AH2 | 2.5 | 11.3 | 1.8 | 8.3 | 200 | 12.9 | 1.90 | 0.86 | 0.50 | 1/4 SQUARE DRIVE | 11 | 1/8 |
| 19RAA12AH3 | 2.5 | 11.3 | 1.8 | 8.3 | 200 | 12.9 | 1.90 | 0.86 | 0.50 | 3/8 SQUARE DRIVE | 11 | 1/8 |
| 19RAA12AHQ | 2.5 | 11.3 | 1.8 | 8.3 | 200 | 12.9 | 1.90 | 0.86 | 0.50 | 1/4 QUICK CHANGE | 11 | 1/8 |

General: Tool performance rated at 90 psi (620kPa) air pressure.

Standard Equipment: Operating instructions & service manual.

All torque springs required to meet indicated torque specification.

Optional Equipment:

Non-Reverse Kit: 207030

Torque Signal Kit: 301106 (Clecomatic clutch only)

Overhose: 207019

Quick Change and 1/4" magnetic hex outputs available on AH3 models only. Quick Change: Change AH3 to AHQ 1/4" Magnetic Hex: Change AH3 to AHM

Pneumatic Nutrunners

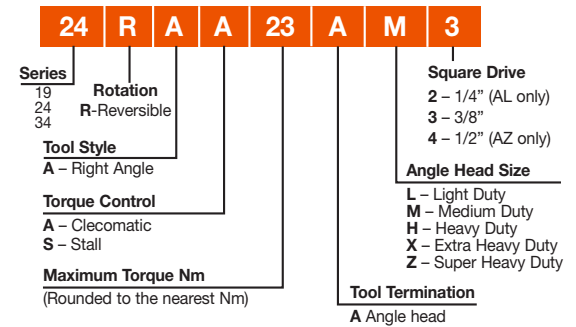
24 Series - Angle Nutrunner - Clutch Shut-Off - Lever Start - Collar Reverse

Lightweight, ergonomic, and easy to service

- Lightweight, ergonomic, and easy to service
- Indexable angle head for added versatility
- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Heavy-duty Cleco motor is the industry standard for reliability
- Oil-less blades reduce oil mist in work area



Model Number Example



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | | HEAD HEIGHT IN | SIDE TO CENTER IN | OUTPUT DRIVE | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|------------|--------------|--------|-----------|-----------|---------------------|--------|------|------|-------------------|----------------------|------------------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | | | |
| 24RAA11AL3 | 7.0 | 10.8 | 5.0 | 8.0 | 1260 | 14.1 | 2.60 | 1.18 | 1.08 | 0.47 | 3/8 SQUARE DRIVE | 23.9 | 3/8 |
| 24RAA12AM3 | 7.0 | 12.2 | 5.0 | 9.0 | 1200 | 14.2 | 2.80 | 1.27 | 1.16 | 0.52 | 3/8 SQUARE DRIVE | 23.9 | 3/8 |
| 24RAA19AM3 | 10.0 | 19 | 7.0 | 14.0 | 700 | 15.0 | 3.20 | 1.45 | 1.16 | 0.52 | 3/8 SQUARE DRIVE | 23.9 | 3/8 |
| 24RAA23AM3 | 12.0 | 23.0 | 9.0 | 17.0 | 600 | 15.0 | 3.20 | 1.45 | 1.16 | 0.52 | 3/8 SQUARE DRIVE | 23.9 | 3/8 |

General: Tool performance rated at 90 psi (620kPa) air pressure.

Standard Equipment:

Operating instructions & service manual

Suspension bail

Clutch adjustment tool

Optional Equipment:

Assembly wrench: 201898

Torque signal kit: 301937PT

Non-reversible kit: 204999

Exhaust Overhose: 204978

Pneumatic Nutrunners

34 Series - Angle Nutrunner - Clutch Shut-Off - Lever Start - Collar Reverse

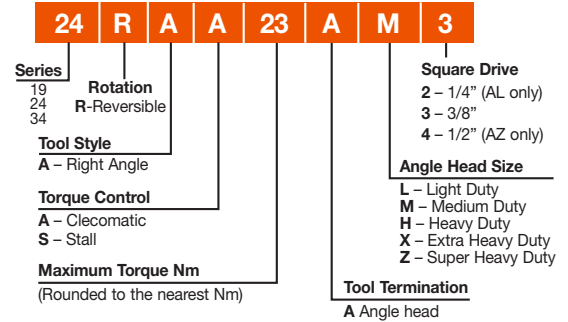
Lightweight, ergonomic, and easy to service

- Lightweight, ergonomic, and easy to service
- Indexable angle head for added versatility
- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Heavy-duty Cleco motor is the industry standard for reliability
- Oil-less blades reduce oil mist in work area



Nutrunners & Screwdrivers

Model Number Example



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | HEAD HEIGHT IN | SIDE TO CENTER IN | OUTPUT DRIVE | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|------------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|-------------------|----------------------|------------------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | | | | |
| 34RAA08AL3 | 5.4 | 8.1 | 4.0 | 6.0 | 2060 | 14.5 | 2.69 | 1.22 | 1.08 | 0.47 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA11AL3 | 6.8 | 10.8 | 5.0 | 8.0 | 1675 | 14.5 | 2.69 | 1.22 | 1.08 | 0.47 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA15AM3 | 9.5 | 14.9 | 7.0 | 11.0 | 1185 | 14.6 | 1.30 | 0.59 | 1.16 | 0.52 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA26AH3 | 13.6 | 25.8 | 10.0 | 19.0 | 710 | 15.4 | 3.20 | 1.45 | 1.22 | 0.57 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA28AH3 | 13.6 | 27.1 | 10.0 | 20.0 | 580 | 15.4 | 3.31 | 1.5 | 1.16 | 0.52 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA33AX3 | 16.3 | 32.5 | 12.0 | 24.0 | 545 | 15.5 | 3.51 | 1.59 | 1.36 | 0.67 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA37AX3 | 19 | 36.6 | 14.0 | 27.0 | 480 | 15.6 | 3.40 | 1.54 | 1.36 | 0.67 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA47AX3 | 23.0 | 47.0 | 17.0 | 35.0 | 385 | 15.6 | 3.40 | 1.54 | 1.36 | 0.67 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA68AZ3 | 34.0 | 68.0 | 25.0 | 50 | 255 | 16.2 | 3.70 | 1.68 | 1.60 | 0.7 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA68AZ4 | 34.0 | 68.0 | 25.0 | 50 | 255 | 16.2 | 1.70 | 0.77 | 1.60 | 0.7 | 1/2 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA75AZ3 | 38.0 | 75.0 | 28.0 | 55 | 155 | 17.0 | 3.90 | 1.77 | 1.60 | 0.7 | 3/8 SQUARE DRIVE | 33.9 | 3/8 |
| 34RAA75AZ4 | 38.0 | 75.0 | 28.0 | 55 | 155 | 17.0 | 3.90 | 1.77 | 1.60 | 0.7 | 1/2 SQUARE DRIVE | 33.9 | 3/8 |

General: Tool performance rated at 90 psi (620kPa) air pressure.

Standard Equipment:

Operating instructions & service manual

Suspension bail

Clutch adjustment tool

Optional Equipment:

Assembly wrench: 201898

Torque signal kit: 301937PT

Non-reversible kit: 204999

Exhaust Overhose: 204978

Pneumatic Nutrunners

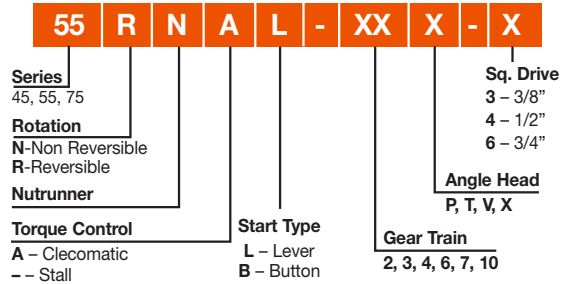
55/75 Series - Angle Nutrunner - Clutch Shut-Off - Lever Start - Collar Reverse

Heavy-duty Cleco motor is the industry standard for reliability

- Heavy-duty Cleco motor is the industry standard for reliability
- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Planetary gears designed for tool speed changes with minimal parts service and replacement
- Heavy-duty spindle bearings and splined retractable spindles reduces friction, improves torque repeatability, and prolongs life.
- External Torque Adjustment
- Rotating Exhaust Deflector



45, 55 & 75 Model Number Example



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | | HEAD HEIGHT IN | SIDE TO CENTER | | OUTPUT DRIVE | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|--------------|--------------|--------|-----------|-----------|---------------------|--------|------|------|-------------------|----------------|------------------|--------------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | IN | IN | | | |
| 55RNAL-6P-4 | 30.0 | 54.0 | 22.0 | 40.0 | 440 | 19.1 | 7.4 | 3.35 | 1.63 | 0.72 | 1/2 SQUARE DRIVE | 55 | 1/2 | |
| 55RNAL-4P-4 | 35.0 | 73.0 | 26.0 | 54.0 | 330 | 19.1 | 7.4 | 3.35 | 1.63 | 0.72 | 1/2 SQUARE DRIVE | 55 | 1/2 | |
| 55RNAL-4T-4 | 39.0 | 87.0 | 29.0 | 64.0 | 280 | 19.3 | 7.8 | 3.52 | 1.97 | 0.88 | 1/2 SQUARE DRIVE | 55 | 1/2 | |
| 55RNAL-3P-4* | 49.0 | 108.0 | 36.0 | 80.0 | 220 | 19.1 | 7.4 | 3.35 | 1.63 | 0.72 | 1/2 SQUARE DRIVE | 55 | 1/2 | |
| 55RNAL-3T-4 | 58.0 | 129.0 | 43.0 | 95.0 | 190 | 19.3 | 7.8 | 3.52 | 1.97 | 0.88 | 1/2 SQUARE DRIVE | 55 | 1/2 | |
| 55RNAL-2T-4* | 68.0 | 170.0 | 50.0 | 125.0 | 140 | 19.3 | 7.8 | 3.52 | 1.97 | 0.88 | 1/2 SQUARE DRIVE | 55 | 1/2 | |
| 75RNAL-3V-4 | 95.0 | 190.0 | 70.0 | 140.0 | 175 | 21.9 | 13.2 | 6.01 | 2.50 | 1.09 | 1/2 SQUARE DRIVE | 70 | 1/2 | |
| 75RNAL-2V-4 | 122.0 | 255.0 | 90.0 | 190.0 | 130 | 21.9 | 13.2 | 6.01 | 2.50 | 1.09 | 1/2 SQUARE DRIVE | 70 | 1/2 | |
| 75RNAL-2X-6 | 203.0 | 410.0 | 150.0 | 305.0 | 80 | 22.6 | 15.0 | 6.8 | 2.75 | 1.44 | 3/4 SQUARE DRIVE | 70 | 1/2 | |
| 75RNAL-3X-6 | 150.0 | 305.0 | 110.0 | 225.0 | 110 | 22.6 | 15.0 | 6.8 | 2.75 | 1.44 | 3/4 SQUARE DRIVE | 70 | 1/2 | |

General:

Tool performance data measured at 6.2 bar inlet air pressure at the air inlet tube.

Standard Equipment:

Operation and maintenance instructions

Torque reaction mounting plate (75 series)

All torque springs necessary to achieve the stated torque.

* Maximum torque of tool exceeds the maximum torque rating for the head, high maintenance should be expected when operated at the upper torque capacity range

Pneumatic Nutrunners

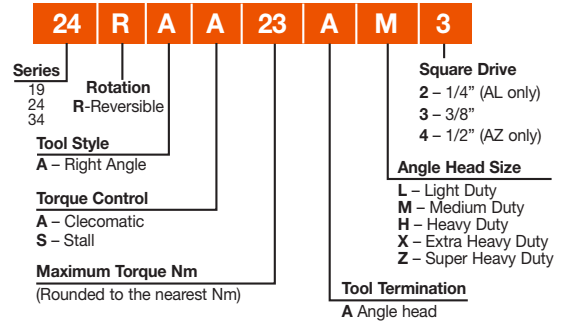
19 Series - Angle Nutrunner - Stall - Lever Start - Collar Reverse

Designed for soft-draw applications

- Designed for soft-draw applications
- Compact angle head provides superb access
- Lightweight, ergonomic, and easy to service
- Grip material tested to withstand a range of industrial chemicals



Model Number Example



Nutrunners & Screwdrivers

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | | HEAD HEIGHT | | SIDE TO CENTER IN | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|-------------|--------------|--------|-----------|-----------|---------------------|--------|------|------|-------------|------|----------------------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | IN | IN | | | |
| 19RAS03AM2 | 0 | 3.2 | 0 | 2.3 | 1700 | 11.4 | 1.30 | 0.59 | 1.06 IN | 0.36 | 11.0 | 1/8 | |
| 19RAS04AH2* | 0 | 3.6 | 0 | 2.6 | 1500 | 11.2 | 1.41 | 0.64 | 1.19 IN | 0.5 | 11.0 | 1/8 | |
| 19RAS05AM2 | 0 | 5.2 | 0 | 3.8 | 850 | 10.6 | 1.19 | 0.54 | 1.06 IN | 0.36 | 11.0 | 1/8 | |
| 19RAS06AH3 | 0 | 6.2 | 0 | 4.6 | 880 | 11.0 | 1.30 | 0.59 | 1.19 IN | 0.5 | 11.0 | 1/8 | |

General: Tool performance rated at 90 psi (620kPa) air pressure.

Standard Equipment:

Operating instructions & service manual

Suspension bail (19 series)

Torque reaction mounting plate (75 series)

Optional Equipment:

19 Series: Non-Reverse Kit: 207030

Overhose: 207019

Quick Change and 1/4" magnetic hex outputs available on AH3 models only.

Quick Change: Change AH3 to AHQ

1/4" Magnetic Hex: Change AH3 to AHM

24/34 Series: Assembly wrench: 201898

Non-reverse kit 204999

* Maximum torque of tool exceeds the maximum torque rating for the head, increased maintenance should be expected when operated at the upper torque capacity range.

Pneumatic Nutrunners

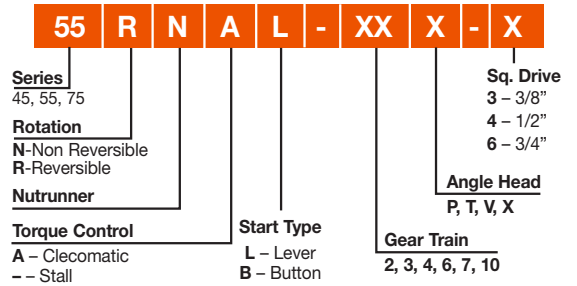
55/75 Series - Angle Nutrunner - Stall - Lever Start - Collar Reverse

Heavy-duty Cleco motor is the industry standard for reliability

- Heavy-duty Cleco motor is the industry standard for reliability
- Engineered for performance, durability, mounting versatility, and serviceability
- Planetary gears designed for tool speed changes with minimal parts service and replacement
- Heavy-duty spindle bearings and splined retractable spindles reduces friction, improves torque repeatability, and prolongs life.



45, 55 & 75 Model Number Example



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | | HEAD HEIGHT IN | SIDE TO CENTER IN | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|-------------|--------------|--------|-----------|-----------|---------------------|--------|------|------|-------------------|----------------------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | | |
| 55RNL-7T-4 | 0 | 55.6 | 0 | 41.0 | 490 | 16.1 | 6.1 | 2.78 | 1.63 | 0.72 | 55 | 1/2 |
| 55RNL-4T-4 | 0 | 92.0 | 0 | 68.0 | 290 | 16.7 | 6.5 | 2.95 | 1.63 | 0.72 | 55 | 1/2 |
| 55RNL-3T-4* | 0 | 135.0 | 0 | 100 | 195 | 16.7 | 6.5 | 2.95 | 1.63 | 0.72 | 55 | 1/2 |
| 55RNL-2T-4 | 0 | 176.0 | 0 | 130 | 145 | 16.7 | 6.5 | 2.95 | 1.63 | 0.72 | 55 | 1/2 |
| 75RNL-3V-4 | 0 | 210.0 | 0 | 155.0 | 190 | 19.4 | 11.4 | 5.16 | 11.4 | 1.09 | 70 | 1/2 |
| 75RNL-2V-4 | 0 | 278.0 | 0 | 205.0 | 140 | 19.4 | 11.4 | 5.16 | 2.50 | 1.09 | 70 | 1/2 |
| 75RNL-3X-6 | 0 | 330.0 | 0 | 245.0 | 120 | 20.1 | 13.1 | 5.95 | 2.75 | 1.44 | 70 | 1/2 |
| 75RNL-2X-6 | 0 | 440.0 | 0 | 325.0 | 90 | 20.1 | 13.1 | 5.95 | 2.75 | 1.44 | 70 | 1/2 |
| 75RNL-4V-4 | 0 | 142.0 | 0 | 105.0 | 280 | 19.4 | 11.4 | 5.16 | 11.4 | 1.09 | 70 | 1/2 |

GENERAL:

Tool performance data measured at 6.2 bar inlet air pressure at the air inlet tube.

STANDARD EQUIPMENT:

Operation and maintenance instructions

Torque reaction mounting plate (75 series)

All torque springs necessary to achieve the stated torque.

* The tool maximum torque exceeds the maximum torque of the output drive; increased maintenance is to be expected if the tool is operated in the upper torque range.

Pneumatic Nutrunners

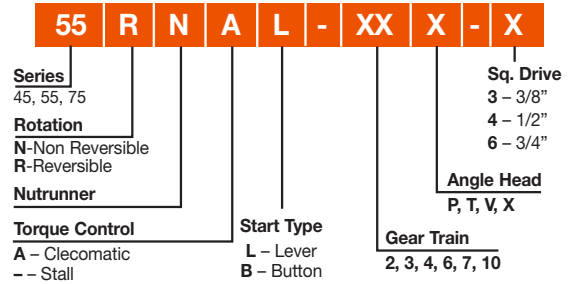
55/75 Series - Angle Nutrunner - Stall - Lever Start - Non-reversible

Heavy-duty Cleco motor is the industry standard for reliability

- Heavy-duty Cleco motor is the industry standard for reliability
- Engineered for performance, durability, mounting versatility, and serviceability
- Planetary gears designed for tool speed changes with minimal parts service and replacement
- Heavy-duty spindle bearings and splined retractable spindles reduces friction, improves torque repeatability, and prolongs life.



45, 55 & 75 Model Number Example



Nutrunners & Screwdrivers

| MODEL | TORQUE RANGE | | | | FREE SPEED | LENGTH | WEIGHT | | HEAD HEIGHT | SIDE TO CENTER | AIR CONSUMPTION | AIR INLET SIZE |
|-----------|--------------|--------|-----------|-----------|------------|--------|--------|------|-------------|----------------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | R/MIN | IN | LB | KG | IN | IN | SCFM | IN |
| 55NL-2T-4 | 0 | 190.0 | 0 | 140 | 210 | 16.7 | 6.4 | 2.89 | 1.97 | 0.88 | 55 | 1/2 |
| 55NL-3T-4 | 0 | 149.0 | 0 | 110.0 | 290 | 16.7 | 6.4 | 2.89 | 1.97 | 0.88 | 55 | 1/2 |

GENERAL:

Tool performance data measured at 6.2 bar inlet air pressure at the air inlet tube.

STANDARD EQUIPMENT:

Operation and maintenance instructions

Torque reaction mounting plate (75 series)

All torque springs necessary to achieve the stated torque.

Maximum torque of tool exceeds the maximum torque rating for the head, high maintenance should be expected when operated at the upper torque capacity range

Pneumatic Nutrunners

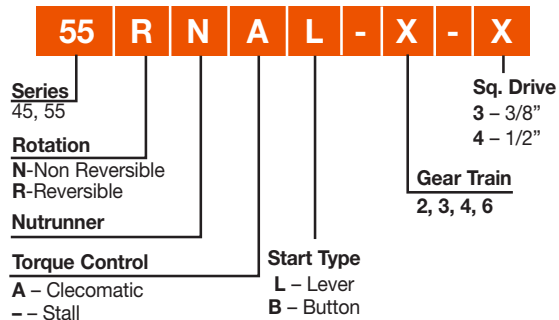
55 Series - Inline Reaction Bar Nutrunner - Lever Start - Collar Reverse

Heavy-duty Cleco motor is the industry standard for reliability

- Heavy-duty Cleco motor is the industry standard for reliability
- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Planetary gears designed for tool speed changes with minimal parts service and replacement
- Heavy-duty spindle bearings and splined retractable spindles reduces friction, improves torque repeatability, and prolongs life.



45 & 55 Model Number Example



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | | WEIGHT | OUTPUT DRIVE | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|------------|--------------|--------|-----------|-----------|---------------------|--------|-----|------|------------------|--------------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | | |
| 55RNAL-2-4 | 46.0 | 91.0 | 30.0 | 67.0 | 270 | 16.1 | 6.5 | 2.95 | 1/2 SQUARE DRIVE | 55 | 1/2 | |
| 55RNAL-3-4 | 34.0 | 69.0 | 25.0 | 51.0 | 370 | 16.1 | 6.5 | 2.95 | 1/2 SQUARE DRIVE | 55 | 1/2 | |

General: Tool performance rated at 90 psi (620kPa) air pressure

Standard Equipment:

Operating instructions & service manual

Aluminum Torque Reaction Bar

Optional Equipment:

Steel Torque Reaction Bar: 869770

Pneumatic Nutrunners

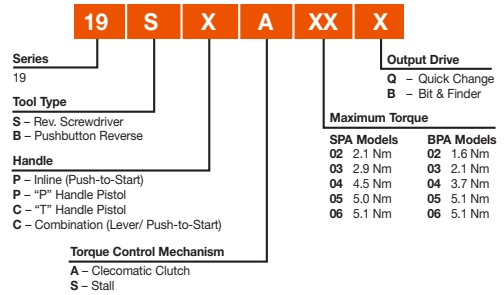
19 Series - Inline - Push-to-Start - Push Button Reverse

Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle

- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Lightweight, ergonomic and durable handle designed with operator in mind
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace
- Grip material tested to withstand a range of industrial chemicals



Cleco 19 Series Inline



Nutrunners & Screwdrivers

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | OUTPUT DRIVE | AIR CONSUMPTION | AIR INLET SIZE |
|----------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|-------------------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | SCFM | IN |
| 19BPA02Q | 0.6 | 2.1 | 3 | 19 | 2300 | 9.3 | 1.41 | 0.64 | 1/4" QUICK CHANGE | 11.0 | 1/8 |
| 19BPA03B | 0.6 | 2.9 | 0.4 | 2.1 | 2300 | 9.9 | 1.41 | 0.64 | BIT & FINDER | 11.0 | 1/8 |
| 19BPA03Q | 0.6 | 2.9 | 3 | 26 | 1600 | 9.3 | 1.41 | 0.64 | 1/4" QUICK CHANGE | 11.0 | 1/8 |
| 19BPA04B | 1.1 | 4.5 | 0.8 | 3.3 | 1600 | 9.9 | 1.41 | 0.64 | BIT & FINDER | 11.0 | 1/8 |
| 19BPA04Q | 1.1 | 4.5 | 3 | 40 | 920 | 9.1 | 1.30 | 0.59 | 1/4" QUICK CHANGE | 11.0 | 1/8 |
| 19BPA05B | 1.1 | 5.1 | 0.8 | 3.7 | 920 | 9.9 | 1.30 | 0.59 | BIT & FINDER | 11.0 | 1/8 |
| 19BPA05Q | 1.1 | 5.1 | 3 | 45 | 560 | 9.5 | 1.50 | 0.68 | 1/4" QUICK CHANGE | 11.0 | 1/8 |
| 19BPA06B | 1.1 | 5.1 | 0.8 | 3.7 | 560 | 9.9 | 1.50 | 0.68 | BIT & FINDER | 11.0 | 1/8 |
| 19BPA06Q | 1.1 | 5.1 | 3 | 45 | 220 | 9.5 | 1.50 | 0.68 | 1/4" QUICK CHANGE | 11.0 | 1/8 |

General: 90 psi (620kPa) required for maximum rated torque.
 Standard Equipment: Operating instructions & service manual
 Suspension bail
 All torque springs required to meet indicated torque.
 Lever Push-to-Start models include kit to convert to lever only. (301409)

Pneumatic Nutrunners

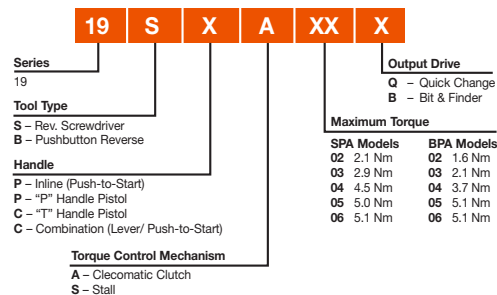
19 Series - Inline - Push-to-Start - Collar Reverse

Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle

- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Lightweight, ergonomic and durable handle designed with operator in mind
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace
- Grip material tested to withstand a range of industrial chemicals



Cleco 19 Series Inline



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | WEIGHT | | OUTPUT DRIVE | AIR CONSUMPTION | AIR INLET SIZE |
|----------|--------------|--------|-----------|-----------|---------------------|--------|------|--------|-------------------|--------------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | SCFM | | IN | |
| 19SPA02B | 0.6 | 2.1 | 3 | 19 | 2800 | 9.7 | 1.41 | 0.64 | BIT & FINDER | 11.0 | 1/8 | |
| 19SPA02Q | 0.6 | 2.1 | 3 | 19 | 2800 | 9.1 | 1.41 | 0.64 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SPA03B | 0.6 | 2.9 | 3 | 26 | 1900 | 9.9 | 1.41 | 0.64 | BIT & FINDER | 11.0 | 1/8 | |
| 19SPA03Q | 0.6 | 2.9 | 3 | 26 | 1900 | 9.3 | 1.41 | 0.64 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SPA04B | 1.1 | 4.5 | 3 | 40 | 1100 | 9.7 | 1.30 | 0.59 | BIT & FINDER | 11.0 | 1/8 | |
| 19SPA04Q | 1.1 | 4.5 | 3 | 40 | 1100 | 9.1 | 1.30 | 0.59 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SPA05B | 1.1 | 5.1 | 3 | 45 | 660 | 10.1 | 1.50 | 0.68 | BIT & FINDER | 11.0 | 1/8 | |
| 19SPA05Q | 1.1 | 5.1 | 3 | 45 | 660 | 9.5 | 1.50 | 0.68 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SPA06Q | 1.1 | 5.1 | 3 | 45 | 260 | 9.5 | 1.50 | 0.68 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |

General: 90 psi (620kPa) required for maximum rated torque.

Standard Equipment: Operating instructions & service manual

Suspension bail

All torque springs required to meet indicated torque.

Lever Push-to-Start models include kit to convert to lever only. (301409)

Pneumatic Nutrunners

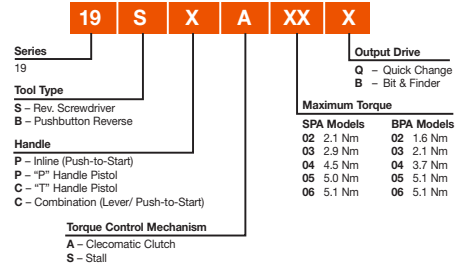
19 Series - Inline - Push and Lever Start - Collar Reverse

Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle

- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- Lightweight, ergonomic and durable handle designed with operator in mind
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace
- Grip material tested to withstand a range of industrial chemicals



Cleco 19 Series Inline



Nutrunners & Screwdrivers

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | | WEIGHT LB KG | OUTPUT DRIVE | AIR CONSUMPTION | AIR INLET SIZE |
|----------|--------------|--------|-----------|-----------|---------------------|--------|------|------|-------------------|--------------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | SCFM | IN |
| 19SCA02Q | 0.6 | 2.1 | 3 | 19 | 2800 | 9.8 | 1.50 | 0.68 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SCA03Q | 0.6 | 2.9 | 3 | 26 | 1900 | 10.0 | 1.50 | 0.68 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SCA04Q | 1.1 | 4.5 | 3 | 40 | 1100 | 9.8 | 1.50 | 0.68 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SCA05Q | 1.1 | 5.1 | 3 | 45 | 660 | 10.2 | 1.61 | 0.73 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |
| 19SCA06Q | 1.1 | 5.1 | 3 | 45 | 260 | 10.2 | 1.61 | 0.73 | 1/4" QUICK CHANGE | 11.0 | 1/8 | |

General: 90 psi (620kPa) required for maximum rated torque.
 Standard Equipment: Operating instructions & service manual
 Suspension bail
 All torque springs required to meet indicated torque.
 Lever Push-to-Start models include kit to convert to lever only. (301409)

Pneumatic Nutrunners

8 Series - Inline - Push-to-Start - Push Button Reverse

Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment



- Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment
- Dependable Clecomatic clutch delivers consistent torque accuracy and repeatability
- Cleco motor is the industry standard for durability
- Easy to repair and maintain, with high parts interchangeability to other Cleco products

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | SIDE TO CENTER IN | OUTPUT DRIVE | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|-----------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|----------------------|-----------------------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | | | |
| 8RSA-40BQ | 0.8 | 2.8 | 0.5 | 2 | 3200 | 8.9 | 2.12 | 0.96 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 8RSA-30BQ | 0.8 | 3.4 | 0.5 | 2.5 | 2500 | 8.9 | 2.12 | 0.96 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 8RSA-20 | 0.8 | 4.5 | 0.5 | 3.3 | 1800 | 9.5 | 2.12 | 0.96 | 0.77 | BIT & FINDER | 19.1 | 1/4 |
| 8RSA-20BQ | 0.8 | 4.5 | 0.5 | 3.3 | 1800 | 8.9 | 2.12 | 0.96 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 8RSA-10 | 0.8 | 7.3 | 0.5 | 5.3 | 800 | 10.2 | 2.38 | 1.08 | 0.77 | BIT & FINDER | 19.1 | 1/4 |
| 8RSA-10BQ | 0.8 | 7.3 | 0.5 | 5.3 | 800 | 9.6 | 2.38 | 1.08 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 8RSA-5BQ | 0.8 | 8.5 | 0.5 | 6.2 | 400 | 9.6 | 2.38 | 1.08 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 8RSA-7BQ | 0.8 | 8.5 | 0.5 | 6.2 | 550 | 9.6 | 2.38 | 1.08 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |

General: 90 psi (620kPa) required for maximum rated torque.

Length and weight of finder type tools includes standard length bit & finder.

Weight does not include dead handle.

Standard Equipment:

Operating instructions & service manual

Suspension bail

Dead handle on models above 100 in lbs torque cap.

All torque springs required to meet indicated torque

Standard Equipment if Specified:

One bit, finder, and finder spring (bit & finder models)

Grip Sleeve (202346; Push-to-Start models only)

Dead handle (861006)

Pneumatic Nutrunners

88 Series - Inline - Push and Lever Start - Push Button Reverse

Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment



- Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment
- Dependable Clecomatic clutch delivers consistent torque accuracy and repeatability
- Cleco motor is the industry standard for durability
- Easy to repair and maintain, with high parts interchangeability to other Cleco products

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | OUTPUT DRIVE | AIR CONSUMPTION | AIR INLET SIZE |
|-------------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|------------------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | SCFM | IN |
| 88RSAL-5C-3 | 1.7 | 18 | 1.2 | 13.2 | 400 | 11.1 | 3.11 | 1.41 | 3/8 SQUARE DRIVE | 19.1 | 1/4 |
| 88RSAL-5CQ | 1.7 | 18 | 1.2 | 13.2 | 400 | 11.1 | 3.11 | 1.41 | 1/4 QUICK CHANGE | 19.1 | 1/4 |

General: 90 psi (620kPa) required for maximum rated torque.

Length and weight of finder type tools includes standard length bit & finder.

Weight does not include dead handle.

Standard Equipment:

Operating instructions & service manual

Suspension bail

Dead handle on models above 100 in lbs torque cap.

All torque springs required to meet indicated torque

Standard Equipment if Specified:

One bit, finder, and finder spring (bit & finder models)

Grip Sleeve (202346; Push-to-Start models only)

Dead handle (861006)

Pneumatic Nutrunners

88 Series - Inline - Push-to-Start - Push Button Reverse

Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment



- Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment
- Dependable Clecomatic clutch delivers consistent torque accuracy and repeatability
- Cleco motor is the industry standard for durability
- Easy to repair and maintain, with high parts interchangeability to other Cleco products

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | SIDE TO CENTER IN | OUTPUT DRIVE | AIR CONSUMPTION | AIR INLET SIZE |
|------------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|----------------------|-----------------------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | | SCFM | IN |
| 88RSA-7C-3 | 1.7 | 10 | 1.2 | 7.3 | 550 | 9.5 | 2.62 | 1.19 | 0.77 | 3/8" SQUARE DRIVE | 19.1 | 1/4 |
| 88RSA-5C-3 | 1.7 | 18 | 1.2 | 13.2 | 400 | 9.5 | 2.62 | 1.19 | 0.77 | 3/8" SQUARE DRIVE | 19.1 | 1/4 |
| 88RSA-5CQ | 1.7 | 18 | 1.2 | 13.2 | 400 | 9.5 | 2.62 | 1.19 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 88RSA-7CQ | 1.7 | 10 | 1.2 | 7.3 | 550 | 9.5 | 2.62 | 1.19 | 0.77 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |

General: 90 psi (620kPa) required for maximum rated torque.

Length and weight of finder type tools includes standard length bit & finder.

Weight does not include dead handle.

Standard Equipment:

Operating instructions & service manual

Suspension bail

Dead handle on models above 100 in lbs torque cap.

All torque springs required to meet indicated torque

Standard Equipment if Specified:

One bit, finder, and finder spring (bit & finder models)

Grip Sleeve (202346; Push-to-Start models only)

Dead handle (861006)

Pneumatic Nutrunners

19 Series - Pistol Grip - "T" Handle - Push and Trigger Start

Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle

- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- 2 grip sizes available for added versatility
- Reverse lever can be rotated to accommodate left-or-right-handed operators
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | WEIGHT | | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|----------|--------------|--------|-----------|-----------|---------------------|--------|------|--------|------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | |
| 19TCA02Q | 0.6 | 2.1 | 0.4 | 1.5 | 2800 | 8.0 | 1.43 | 0.65 | 11.0 | 1/4 | |
| 19TCA03Q | 0.6 | 2.9 | 0.4 | 2.1 | 1900 | 8.2 | 1.54 | 0.7 | 11.0 | 1/4 | |
| 19TCA04Q | 1.1 | 4.5 | 0.8 | 3.3 | 1100 | 8.0 | 1.54 | 0.7 | 11.0 | 1/4 | |
| 19TCA05Q | 1.1 | 5.1 | 0.8 | 3.7 | 660 | 8.4 | 1.54 | 0.7 | 11.0 | 1/4 | |
| 19TCA06Q | 1.1 | 5.1 | 0.8 | 3.7 | 260 | 8.4 | 1.54 | 0.7 | 11.0 | 1/4 | |
| 19TCA07Q | 1.7 | 6.8 | 1.2 | 5 | 660 | 8.4 | 1.54 | 0.7 | 11.0 | 1/4 | |
| 19TCA09Q | 1.7 | 8.9 | 1.2 | 6.5 | 470 | 9.3 | 1.72 | 0.78 | 11.0 | 1/4 | |

General: 90 psi (620kPa) required for maximum rated torque.

Standard Equipment: Operating instructions & service manual

Suspension bail

All torque springs required to meet indicated torque.

Lever Push-to-Start models include kit to convert to lever only. (301409)

Pneumatic Nutrunners

19 Series - Pistol Grip - "T" Handle - Trigger Start

Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle



- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- 2 grip sizes available for added versatility
- Reverse lever can be rotated to accommodate left-or-right-handed operators
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace

| MODEL | TORQUE RANGE | | | | FREE SPEED | LENGTH | WEIGHT | | AIR CONSUMPTION | AIR INLET SIZE |
|----------|--------------|--------|-----------|-----------|------------|--------|--------|------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | R/MIN | IN | LB | KG | SCFM | IN |
| 19TTA02Q | 0.6 | 2.1 | 0.4 | 1.5 | 2800 | 7.9 | 1.43 | 0.65 | 11.0 | 1/4 |
| 19TTA03Q | 0.6 | 2.9 | 0.4 | 2.1 | 1900 | 8.1 | 1.54 | 0.7 | 11.0 | 1/4 |
| 19TTA04Q | 1.1 | 4.5 | 0.8 | 3.3 | 1100 | 7.9 | 1.54 | 0.7 | 11.0 | 1/4 |
| 19TTA05Q | 1.1 | 5.1 | 0.8 | 3.7 | 660 | 8.3 | 1.54 | 0.7 | 11.0 | 1/4 |
| 19TTA06Q | 1.1 | 5.1 | 0.8 | 3.7 | 260 | 8.3 | 1.54 | 0.7 | 11.0 | 1/4 |
| 19TTA07Q | 1.7 | 6.8 | 1.2 | 5 | 660 | 8.3 | 1.54 | 0.7 | 11.0 | 1/4 |
| 19TTA09Q | 1.7 | 8.9 | 1.2 | 6.5 | 470 | 9.3 | 1.72 | 0.78 | 11.0 | 1/4 |
| 19TTA15Q | 5.1 | 14.7 | 3.7 | 10.8 | 260 | 9.6 | 1.94 | 0.88 | 11.0 | 1/4 |

All pistol tools have 1/4" NPT inlet with minimum hose ID recommended at 3/8" (10mm).

Air consumption of pistol tools rated at 11 SCFM.

All performance specifications measured at 90PSI (6.2Bar).

Includes all springs needed for coverage of advertised torque range. Includes suspension bail.

Optional Equipment:

Torque Signal Kit: 302021PT (Trigger w/Clecomatic clutch only)

Overhose: 207107

Push-only Conversion Kit: 301121

Pneumatic Nutrunners

19 Series - Pistol Grip - "P" Handle - Push and Trigger Start

Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle

- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- 2 grip sizes available for added versatility
- Reverse lever can be rotated to accommodate left-or-right-handed operators
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | | WEIGHT | | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|----------|--------------|--------|-----------|-----------|---------------------|--------|------|------|--------|------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | | |
| 19PCA02Q | 0.6 | 2.1 | 0.4 | 1.5 | 2800 | 8.1 | 1.43 | 0.65 | | 11.0 | 1/4 | |
| 19PCA03Q | 0.6 | 2.9 | 0.4 | 2.1 | 1900 | 8.3 | 1.50 | 0.68 | | 11.0 | 1/4 | |
| 19PCA04Q | 1.1 | 4.5 | 0.8 | 3.3 | 1100 | 8.1 | 1.41 | 0.64 | | 11.0 | 1/4 | |
| 19PCA05Q | 1.1 | 5.1 | 0.8 | 3.7 | 660 | 8.5 | 1.50 | 0.68 | | 11.0 | 1/4 | |
| 19PCA06Q | 1.1 | 5.1 | 0.8 | 3.7 | 260 | 8.5 | 1.50 | 0.68 | | 11.0 | 1/4 | |
| 19PCA07Q | 1.7 | 6.8 | 1.2 | 5 | 660 | 8.5 | 1.50 | 0.68 | | 11.0 | 1/4 | |
| 19PCA09Q | 1.7 | 8.9 | 1.2 | 6.5 | 470 | 9.8 | 1.65 | 0.75 | | 11.0 | 1/4 | |

General: Tool performance rated at 90 psi (620kPa) air pressure.

Standard Equipment:

Operating instructions & service manual

Suspension bail

Dead handle on models above 100 in.-lbs torque cap.

All torque springs required to meet indicated torque specification

Optional Equipment:

Torque Signal Kit: 302021PT (Trigger w/Clecomatic clutch only)

Pneumatic Nutrunners

19 Series - Pistol Grip - "P" Handle - Trigger Start

Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle



- Durable Clecomatic Clutch delivers best-in-class torque repeatability and long calibration cycle
- 2 grip sizes available for added versatility
- Reverse lever can be rotated to accommodate left-or-right-handed operators
- Engineered to suit a wide range of applications, from fast-paced assembly to aerospace

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|----------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | |
| 19PTA02Q | 0.6 | 2.1 | 0.4 | 1.5 | 2800 | 8.0 | 1.41 | 0.64 | 11.0 | 1/4 |
| 19PTA03Q | 0.6 | 2.9 | 0.4 | 2.1 | 1900 | 8.2 | 1.50 | 0.68 | 11.0 | 1/4 |
| 19PTA04Q | 1.1 | 4.5 | 0.8 | 3.3 | 1100 | 8.0 | 1.41 | 0.64 | 11.0 | 1/4 |
| 19PTA05Q | 1.1 | 5.1 | 0.8 | 3.7 | 660 | 8.4 | 1.50 | 0.68 | 11.0 | 1/4 |
| 19PTA06Q | 1.1 | 5.1 | 0.8 | 3.7 | 260 | 8.4 | 1.50 | 0.68 | 11.0 | 1/4 |
| 19PTA07Q | 1.7 | 6.8 | 1.2 | 5 | 660 | 8.4 | 1.50 | 0.68 | 11.0 | 1/4 |
| 19PTA09Q | 1.7 | 8.9 | 1.2 | 6.5 | 470 | 9.8 | 1.65 | 0.75 | 11.0 | 1/4 |
| 19PTA15Q | 5.1 | 14.7 | 3.7 | 10.8 | 260 | 9.7 | 1.92 | 0.87 | 11.0 | 1/4 |

General: Tool performance rated at 90 psi (620kPa) air pressure.

Standard Equipment:

Operating instructions & service manual

Suspension bail

Dead handle on models above 100 in.-lbs torque cap.

All torque springs required to meet indicated torque specification

Optional Equipment:

Torque Signal Kit: 302021PT (Trigger w/Clecomatic clutch only)

Pneumatic Nutrunners

19 Series - Pistol Grip - Stall - "T" Handle - Trigger Start

1/4" hex quick change drive

- 1/4" hex quick change drive
- Trigger Start
- "T" style handle
- 2 interchangeable soft-touch grip sizes
- Adjustable reverse lever for true one-hand left or right operation



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|----------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | |
| 19TTS02Q | 0 | 2.1 | 0 | 1.5 | 2800 | 5.8 | 1.19 | 0.54 | 11.0 | 1/4 |
| 19TTS03Q | 0 | 2.9 | 0 | 2.1 | 1900 | 6.1 | 1.19 | 0.54 | 11.0 | 1/4 |
| 19TTS04Q | 0 | 4.5 | 0 | 3.3 | 1100 | 5.8 | 1.19 | 0.54 | 11.0 | 1/4 |
| 19TTS05Q | 0 | 5.1 | 0 | 3.7 | 660 | 6.1 | 1.19 | 0.54 | 11.0 | 1/4 |

General: Tool performance rated at 90 psi (620kPa).

Standard Equipment:

Operating instructions & service manual

Suspension ball

All torque springs required to meet indicated torque

Dead handle on all models above 100 in lbs torque

Standard Equipment if Specified:

Dead handle (861006; 8 series models)

19 Series - Pistol Grip - Stall - "P" Handle - Trigger Start

1/4" hex quick change drive

- 1/4" hex quick change drive
- Trigger Start
- "P" style handle
- 2 interchangeable soft-touch grip sizes
- Adjustable reverse lever for true one-hand left or right operation



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|----------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | |
| 19PTS02Q | 0 | 2.1 | 0 | 1.5 | 2800 | 5.9 | 1.17 | 0.53 | 11.0 | 1/4 |
| 19PTS03Q | 0 | 2.9 | 0 | 2.1 | 1900 | 6.1 | 1.17 | 0.53 | 11.0 | 1/4 |
| 19PTS04Q | 0 | 4.5 | 0 | 3.3 | 1100 | 5.9 | 1.17 | 0.53 | 11.0 | 1/4 |
| 19PTS05Q | 0 | 5.1 | 0 | 3.7 | 660 | 6.1 | 1.17 | 0.53 | 11.0 | 1/4 |

General: Tool performance rated at 90 psi (620kPa).

Standard Equipment:

Operating instructions & service manual

Suspension ball

All torque springs required to meet indicated torque

Dead handle on all models above 100 in lbs torque

Standard Equipment if Specified:

Dead handle (861006; 8 series models)

Pneumatic Nutrunners

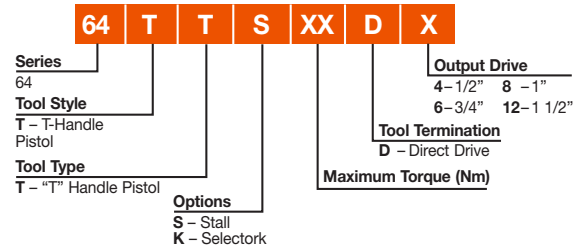
64 Series - Pistol Grip - Swingbar Nutrunner - Trigger Start - Reversible

High power-to-weight ratio and slim profile nose delivers more torque to hard-to-reach joints

- High power-to-weight ratio and slim profile nose delivers more torque to hard-to-reach joints
- Heavy-duty gearing is designed to withstand high torque output
- Top and bottom air inlets adds versatility in manufacturing
- Light weight with soft-touch handle for improved ergonomics



64 Model Number Example



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | WEIGHT | | OUTPUT DRIVE | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|-------------|--------------|--------|-----------|-----------|---------------------|--------|------|--------|------------------|--------------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | | |
| 64TTK75D4 | 56.0 | 75.0 | 41.0 | 55.0 | 340 | 11.5 | 6.3 | 2.86 | 1/2 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS110D4 | 83.0 | 110.0 | 61.0 | 81.0 | 225 | 11.5 | 6.3 | 2.86 | 1/2 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS140D4 | 105.0 | 140.0 | 77.0 | 103.0 | 180 | 11.5 | 6.3 | 2.86 | 1/2 SQUARE DRIVE | 60 | 3/8 | |
| 64TTK150D6 | 113.0 | 150.0 | 83.0 | 111.0 | 160 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS150D6 | 113.0 | 150.0 | 83.0 | 111.0 | 160 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS175D6 | 131.0 | 175.0 | 97.0 | 129.0 | 135 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTK205D6 | 153.0 | 205.0 | 113.0 | 151.0 | 115 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS205D6 | 154.0 | 205.0 | 113.0 | 151.0 | 115 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS255D6 | 191.0 | 255.0 | 141.0 | 188.0 | 95 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTK345D6 | 259.0 | 345.0 | 191.0 | 254.0 | 70 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS345D6 | 259.0 | 345.0 | 191.0 | 254.0 | 70 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTK425D6 | 319.0 | 425.0 | 235.0 | 313.0 | 55 | 12.5 | 8.2 | 3.72 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTK570D6 | 428.0 | 570.0 | 315.0 | 420.0 | 42 | 13.0 | 8.6 | 3.9 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS570D6 | 428.0 | 570.0 | 315.0 | 420.0 | 42 | 13.0 | 8.6 | 3.9 | 3/4 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS640D8 | 480.0 | 640.0 | 354.0 | 472.0 | 32 | 15.9 | 14.5 | 6.58 | 1 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS1260D8 | 945.0 | 1260 | 697.0 | 930.0 | 16 | 15.9 | 14.5 | 6.58 | 1 SQUARE DRIVE | 60 | 3/8 | |
| 64TTS90D4 | 68.0 | 90.0 | 50.0 | 66.0 | 270 | 11.5 | 6.3 | 2.86 | 1/2 SQUARE DRIVE | 60 | 3/8 | |

General: Tool performance rated at 90 psi (620kPa) air pressure.
 Standard Equipment: Operating instructions & service manual
 Aluminum Torque Reaction Bar
 Steel Torque Reaction Bar (tools rated above 50 ft. lbs)
 Slave Square Drive (64TTS3850D12 & 64TTK3850D12)

Pneumatic Nutrunners

88 Series - Pistol Grip - Trigger Start - Sliding Knob Reverse

Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment

- Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment
- Dependable Clecomatic clutch delivers consistent torque accuracy and repeatability
- Cleco motor is the industry standard for durability
- Easy to repair and maintain, with high parts interchangeability to other Cleco products



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | SIDE TO CENTER IN | OUTPUT DRIVE | AIR CONSUMPTION | AIR INLET SIZE |
|--------------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|----------------------|-----------------------|-----------------|----------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | | SCFM | IN |
| 88RSATP-7C-3 | 1.7 | 10 | 1.2 | 7.3 | 550 | 8.9 | 3.13 | 1.42 | 0.81 | 3/8" SQUARE DRIVE | 19.1 | 1/4 |
| 88RSATP-5C-3 | 1.7 | 18 | 1.2 | 13.2 | 400 | 8.9 | 3.13 | 1.42 | 0.81 | 3/8" SQUARE DRIVE | 19.1 | 1/4 |
| 88RSATP-5CQ | 1.7 | 18 | 1.2 | 13.2 | 400 | 8.9 | 3.13 | 1.42 | 0.81 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 88RSATP-2C-3 | 1.7 | 20 | 1.2 | 14.7 | 200 | 9.6 | 3.37 | 1.53 | 0.81 | 3/8" SQUARE DRIVE | 19.1 | 1/4 |
| 88RSATP-2CQ | 1.7 | 20 | 1.2 | 14.7 | 200 | 9.6 | 3.37 | 1.53 | 0.81 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |
| 88RSATP-7CQ | 1.7 | 10 | 1.2 | 7.3 | 550 | 8.9 | 3.13 | 1.42 | 0.81 | 1/4" HEX QUICK CHANGE | 19.1 | 1/4 |

General: Tool performance rated at 90 psi (620kPa).

Standard Equipment:

Operating instructions & service manual

Suspension bail

All torque springs required to meet indicated torque

Dead handle on all models above 100 in lbs torque

Standard Equipment if Specified:

Dead handle (861006; 8 series models)

Pneumatic Nutrunners

88 Series - Pistol Grip - Push and Trigger Start - Sliding Knob Reverse

Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment



- Compact design increases productivity, saves weight, and is easy to integrate into any assembly environment
- Dependable Clecomatic clutch delivers consistent torque accuracy and repeatability
- Cleco motor is the industry standard for durability
- Easy to repair and maintain, with high parts interchangeability to other Cleco products

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | SIDE TO CENTER IN | OUTPUT DRIVE | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|--------------|--------------|--------|-----------|-----------|---------------------|--------------|--------|------|----------------------|-------------------|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | | | |
| 88RSAPT-5C-3 | 1.7 | 18 | 1.2 | 13.2 | 400 | 9.0 | 3.13 | 1.42 | 0.81 | 3/8" SQUARE DRIVE | 19.1 | 1/4 |
| 88RSAPT-5CQ | 1.7 | 18 | 1.2 | 13.2 | 400 | 9.0 | 3.13 | 1.42 | 0.81 | 1/4" QUICK CHANGE | 19.1 | 1/4 |
| 88RSAPT-2CQ | 1.7 | 20 | 1.2 | 14.7 | 200 | 9.8 | 3.37 | 1.53 | 0.81 | 1/4" QUICK CHANGE | 19.1 | 1/4 |
| 88RSAPT-7CQ | 1.7 | 10 | 1.2 | 7.3 | 550 | 9.0 | 3.13 | 1.42 | 0.81 | 1/4" QUICK CHANGE | 19.1 | 1/4 |

General: Tool performance rated at 90 psi (620kPa).

Standard Equipment:

Operating instructions & service manual

Suspension bail

All torque springs required to meet indicated torque

Dead handle on all models above 100 in lbs torque

Standard Equipment if Specified:

Dead handle (861006; 8 series models)

MP Series - Positive Clutch Screwdrivers

Great for soft draw applications such as wood or aluminum



- Great for soft draw applications such as wood or aluminum
- One-hand forward reverse switch
- Rugged metal housing and components outlasts the competition
- Efficient and balanced design maximizes accessibility while minimizing operator fatigue

| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | AIR CONSUMPTION SCFM | AIR INLET SIZE IN |
|--------|--------------|--------|-----------|-----------|---------------------|--------------|--------|-----|-------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | |
| MP2464 | 1.1 | 8.5 | 0.8 | 6.2 | 2800 | 6.8 | 2.43 | 1.1 | 22.0 | 1/4 |
| MP2465 | 1.1 | 11.3 | 0.8 | 8.3 | 1800 | 6.8 | 2.43 | 1.1 | 22.0 | 1/4 |
| MP2466 | 1.1 | 15.8 | 0.8 | 11.6 | 1100 | 8.1 | 3.09 | 1.4 | 22.0 | 1/4 |

Pneumatic Nutrunners

MP Series - Adjustable Clutch Screwdrivers

Clutch shut-off adjusted by spring force

- Clutch shut-off adjusted by spring force
- One-hand forward reverse switch
- Rugged metal housing and components outlasts the competition
- Efficient and balanced design maximizes accessibility while minimizing operator fatigue



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH IN | WEIGHT | | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|--------|--------------|--------|-----------|-----------|---------------------|--------------|--------|-----|--------------------------|-------------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | | LB | KG | | |
| MP2476 | 1.4 | 8.5 | 1 | 6.2 | 2800 | 8.5 | 2.87 | 1.3 | 22.0 | 1/4 |
| MP2477 | 3.4 | 11.3 | 2.5 | 8.3 | 1800 | 7.8 | 2.65 | 1.2 | 22.0 | 1/4 |
| MP2478 | 1.9 | 15.8 | 1.4 | 11.6 | 1100 | 9.1 | 3.31 | 1.5 | 22.0 | 1/4 |

General:

Air Inlet 1/4" NPT

Use 1/4" (6.4 mm) I.D. hose

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Suspension bail (lever style only)

Clutch adjustment wrenches

Owners Manual

Parts Sheet

Standard Clutch Spring

9111500 MP2476

8620800 MP2478

Optional Accessories:

60538 Master Guard oil (4 oz.)

60539 Master Guard oil (1 qt.)

63593 8' Hose Whip 1/4" I.D.

22034 Hose Line Oiler

Pneumatic Nutrunners

MP Series - Versa Clutch Screwdrivers

Ideal “all-purpose” industrial screwdriver

- Ideal “all-purpose” industrial screwdriver
- One-hand forward reverse switch
- Rugged metal housing and components outlasts the competition
- Efficient and balanced design maximizes accessibility while minimizing operator fatigue



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | WEIGHT | | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|--------|--------------|--------|-----------|-----------|---------------------|--------|------|--------|------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | |
| MP2436 | 0.6 | 11.3 | 0.4 | 8.3 | 1800 | 7.8 | 2.65 | 1.2 | 22.0 | 1/4 | |
| MP2437 | 0.6 | 15.8 | 0.4 | 11.6 | 1100 | 9.1 | 3.31 | 1.5 | 22.0 | 1/4 | |

General:

Air Inlet 1/4" NPT

Use 1/4" (6.4 mm) I.D. hose

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Owners Manual

Parts Sheet

Optional Accessories:

60538 Master Guard oil (4 oz.)

60539 Master Guard oil (1 qt.)

63593 8' Hose Whip 1/4" I.D.

22034 Hose Line Oiler

MP Series - Direct Drive Screwdrivers

Ideal “all-purpose” industrial screwdriver

- Torque is set by adjusting air pressure
- One-hand forward reverse switch
- Rugged metal housing and components outlasts the competition
- Efficient and balanced design maximizes accessibility while minimizing operator fatigue



| MODEL | TORQUE RANGE | | | | FREE SPEED R/MIN | LENGTH | | WEIGHT | | AIR CON-SUMPTION SCFM | AIR INLET SIZE IN |
|--------|--------------|--------|-----------|-----------|---------------------|--------|------|--------|------|--------------------------|----------------------|
| | MIN NM | MAX NM | MIN FT LB | MAX FT LB | | IN | LB | KG | | | |
| MP2452 | 1.1 | 7.3 | 0.8 | 5.3 | 2800 | 5.7 | 2.18 | 0.99 | 22.0 | 1/4 | |
| MP2453 | 1.1 | 8.5 | 0.8 | 6.2 | 1800 | 5.7 | 2.18 | 0.99 | 22.0 | 1/4 | |
| MP2454 | 1.1 | 13.6 | 0.8 | 10 | 1100 | 7.0 | 2.87 | 1.3 | 22.0 | 1/4 | |

General:

Air Inlet 1/4" NPT

Use 1/4" (6.4 mm) I.D. hose

All tools performance rated @ 90psi (620 kPa) air pressure.

Standard Equipment:

Owners Manual

Parts Sheet

Optional Accessories:

60538 Master Guard oil (4 oz.)

60539 Master Guard oil (1 qt.)

63593 8' Hose Whip 1/4" I.D.

22034 Hose Line Oiler



Solutions are in our DNA.

Hand Drilling, Countersinking & Spotfacing

14CF Series - Pistol Drill Non-Reversible

0.4hp / 0.30kW

600-29000rpm



- Comfort grip with ergonomic finger and thumb guides to aid control
- Supplied with Jacobs® Keyed Chuck or Threaded Termination for Keyless Chuck/Collet
- Excellent for aerospace, metal fabrication, and wood working applications

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 14CFS97-38 | 1/4" CHUCK | 600 | 1.76 | 6.9 |
| 14CFS97-51 | 3/8" CHUCK | 600 | 1.76 | 6.9 |
| 14CFS97-40 | 3/8" - 24 E | 600 | 1.76 | 6.9 |
| 14CFS96-38 | 1/4" CHUCK | 700 | 1.76 | 6.9 |
| 14CFS96-51 | 3/8" CHUCK | 700 | 1.76 | 6.9 |
| 14CFS96-40 | 3/8" - 24 E | 700 | 1.76 | 6.9 |
| 14CFS95-38 | 1/4" CHUCK | 1000 | 1.76 | 6.9 |
| 14CFS95-51 | 3/8" CHUCK | 1000 | 1.76 | 6.9 |
| 14CFS95-40 | 3/8" - 24 E | 1000 | 1.76 | 6.9 |
| 14CFS94-38 | 1/4" CHUCK | 2400 | 1.54 | 5.7 |
| 14CFS94-51 | 3/8" CHUCK | 2400 | 1.54 | 5.7 |
| 14CFS94-40 | 3/8" - 24 E | 2400 | 1.54 | 5.7 |
| 14CFS93-38 | 1/4" CHUCK | 3200 | 1.54 | 5.7 |
| 14CFS93-51 | 3/8" CHUCK | 3200 | 1.54 | 5.7 |
| 14CFS93-40 | 3/8" - 24 E | 3200 | 1.54 | 5.7 |
| 14CFS92-38 | 1/4" CHUCK | 3800 | 1.54 | 5.7 |
| 14CFS92-51 | 3/8" CHUCK | 3800 | 1.54 | 5.7 |
| 14CFS92-40 | 3/8" - 24 E | 3800 | 1.54 | 5.7 |
| 14CFS91-38 | 1/4" CHUCK | 5200 | 1.54 | 5.7 |
| 14CFS91-51 | 3/8" CHUCK | 5200 | 1.54 | 5.7 |
| 14CFS91-40 | 3/8" - 24 E | 5200 | 1.54 | 5.7 |
| 14CFS90-38 | 1/4" CHUCK | 29000 | 1.54 | 5.7 |
| 14CFS90-51 | 3/8" CHUCK | 29000 | 1.54 | 5.7 |
| 14CFS90-40 | 3/8" - 24 E | 29000 | 1.54 | 5.7 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 5/16in / 7.9mm

Drill Diameter Capacity Matches Chuck Size

Hand Drilling, Countersinking & Spotfacing

14CS Series - Pistol Drill Non-Reversible

0.6hp / 0.45kW

500-20000rpm



- Comfort grip with ergonomic finger and thumb guides to aid control
- Supplied with Jacobs® Keyed Chuck or Threaded Termination for Keyless Chuck/Collet
- Excellent for aerospace, metal fabrication, and wood working applications

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 14CSL97-40 | 3/8" - 24 E | 500 | 2.87 | 8.1 |
| 14CSL97-51 | 3/8" CHUCK | 500 | 2.87 | 8.1 |
| 14CSL95-40 | 3/8" - 24 E | 1300 | 2.87 | 8.1 |
| 14CSL95-51 | 3/8" CHUCK | 1300 | 2.87 | 8.1 |
| 14CSL92-38 | 1/4" CHUCK | 3200 | 2.20 | 0.63 |
| 14CSL92-40 | 3/8" - 24 E | 3200 | 2.20 | 0.63 |
| 14CSL91-38 | 1/4" CHUCK | 5200 | 2.20 | 0.63 |
| 14CSL91-40 | 3/8" - 24 E | 5200 | 2.20 | 0.63 |
| 14CSL98-38 | 1/4" CHUCK | 6000 | 2.20 | 0.63 |
| 14CSL98-40 | 3/8" - 24 E | 6000 | 2.20 | 0.63 |
| 14CSL90-38 | 1/4" CHUCK | 20000 | 2.20 | 0.63 |
| 14CSL90-40 | 3/8" - 24 E | 20000 | 2.20 | 0.63 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 5/16in / 7.9mm

Standard equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

Hand Drilling, Countersinking & Spotfacing

14CN Series - Pistol Drill Non-Reversible

0.9hp / 0.67kW

500-20000rpm



- Comfort grip with ergonomic finger and thumb guides to aid control
- Supplied with Jacobs® Keyed Chuck or Threaded Termination for Keyless Chuck/Collet
- Excellent for aerospace, metal fabrication, and wood working applications
- 1/2" models equipped with dead handle

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 14CNL97-51 | 3/8" CHUCK | 500 | 3.53 | 9.1 |
| 14CNL97-40 | 3/8" - 24 E | 500 | 3.53 | 9.1 |
| 14CNL97-53 | 1/2" CHUCK | 500 | 3.53 | 9.1 |
| 14CNL95-51 | 3/8" CHUCK | 1300 | 2.87 | 8.6 |
| 14CNL95-40 | 3/8" - 24 E | 1300 | 2.87 | 8.6 |
| 14CNL92-38 | 1/4" CHUCK | 3200 | 2.43 | 7.2 |
| 14CNL92-51 | 3/8" CHUCK | 3200 | 2.43 | 7.2 |
| 14CNL92-53 | 1/2" CHUCK | 3200 | 2.43 | 7.2 |
| 14CNL92-40 | 3/8" - 24 E | 3200 | 2.43 | 7.2 |
| 14CNL91-51 | 3/8" CHUCK | 5200 | 2.43 | 7.2 |
| 14CNL91-40 | 3/8" - 24 E | 5200 | 2.43 | 7.2 |
| 14CNL98-38 | 1/4" CHUCK | 6000 | 2.20 | 6.8 |
| 14CNL98-51 | 3/8" CHUCK | 6000 | 2.20 | 6.8 |
| 14CNL98-53 | 1/2" CHUCK | 6000 | 2.20 | 6.8 |
| 14CNL98-40 | 3/8" - 24 E | 6000 | 2.20 | 6.8 |
| 14CNL90-38 | 1/4" CHUCK | 20000 | 2.20 | 6.8 |
| 14CNL90-40 | 3/8" - 24 E | 20000 | 2.20 | 6.8 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 5/16in / 7.9mm

Standard equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

Hand Drilling, Countersinking & Spotfacing

14CH Series - Pistol Drill Non-Reversible

1.4hp / 1.0 kW

3200/6000rpm

High speed/power for Al or Composite Drilling



- Comfort grip with ergonomic finger and thumb guides to aid control
- Supplied with Jacobs® Keyed Chuck or Threaded Termination for Keyless Chuck/Collet
- Excellent for aerospace, metal fabrication, and wood working applications

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 14CHL92-38 | 1/4" CHUCK | 3200 | 2.65 | 6.5 |
| 14CHL92-40 | 3/8" - 24 E | 3200 | 2.43 | 5.5 |
| 14CHL92-51 | 3/8" CHUCK | 3200 | 2.87 | 7.1 |
| 14CHL92-53 | 1/2" CHUCK | 3200 | 3.75 | 7.4 |
| 14CHL98-38 | 1/4" CHUCK | 6000 | 2.65 | 6.5 |
| 14CHL98-40 | 3/8" - 24 E | 6000 | 2.43 | 5.5 |
| 14CHL98-51 | 3/8" CHUCK | 6000 | 2.87 | 7.1 |
| 14CHL98-53 | 1/2" CHUCK | 6000 | 3.75 | 7.4 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 5/16in / 7.9mm

Standard equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

Hand Drilling, Countersinking & Spotfacing

MP14 Series - Pistol Drill Reversible/Non-Reversible

Industrial grade medium duty drills suitable for a wide range of production and MRO applications

MP1457/1463 1.0hp / 0.75 kW

MP1458 1.2hp / 0.90kW

- 2-step throttle for easy starting
- Built-in, no-clog mufflers for quiet operation
- Hardened and ground precision parts for extended service life

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|-----------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| MP1457-51 | 3/8" CHUCK | 2600 | 1.98 | 7.5 |
| MP1458-55 | 1/2" CHUCK | 1200 | 2.20 | 9.0 |
| MP1463-51 | 3/8" CHUCK | 1800 | 2.43 | 6.8 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 5/16in / 7.9mm

Drill Diameter Capacity Matches Chuck Size



15DP Series - Pistol Drill Non-Reversible

1.0hp / 0.75kW

160-1400rpm

Low speed for Ti/Hard Metals

- Powerful motor
- Excellent for slow speed applications
- 1/2" models equipped with dead handle

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|--------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15DP-1.6B-53 | 1/2" CHUCK | 160 | 6.0 | 9.8 |
| 15DP-4B-53 | 1/2" CHUCK | 400 | 5.5 | 8.5 |
| 15DP-8B-53 | 1/2" CHUCK | 800 | 5.5 | 8.5 |
| 15DP-14B-49 | 3/8" CHUCK | 1400 | 4.41 | 8.3 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Operating instructions and service manual Dead handles on all models except 15DP-14B 3-Jaw Chuck and Key

General: Air Inlet: 3/8" NPTF, Minimum Hose Size: 3/8", Spindle Thread: 1/2"-20,

Spindle Offset: Pistol Grip: 31/32"

Drill Diameter Capacity Matches Chuck Size



Hand Drilling, Countersinking & Spotfacing

135DPV Series - Pistol Drill Non-Reversible Variable Speed

0.7hp / 0.5kW

150-2400rpm



Governed Speed Setting/ Control

- Flexible speed setting for range of hole sizes
- Variable speed can replace multiple other tools
- Calibrated governed speed control

| MODEL | TERMINATION | SPEED | GOVERNED RPM RANGE | WEIGHT | LENGTH |
|---------------|-------------|-------|--------------------|--------|--------|
| | | R/MIN | R/MIN | LB | IN |
| 135DPV-7B-43 | 1/2" CHUCK | 600 | 150 – 550 RPM | 3.53 | 9.6 |
| 135DPV-7B-50 | 1/2" CHUCK | 600 | 150 – 550 RPM | 3.53 | 9.6 |
| 135DPV-14B-50 | 1/2" CHUCK | 1250 | 400 – 1,200 RPM | 3.31 | 9.3 |
| 135DPV-14B-51 | 3/8" CHUCK | 1250 | 400 – 1,200 RPM | 3.31 | 9.3 |
| 135DPV-28B-51 | 3/8" CHUCK | 2600 | 700 – 2,400 RPM | 3.31 | 8.5 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Standard Equipment: Operating instructions, service manual, 3-Jaw Chuck and Key-Jaw Chuck and Key

General: Air Inlet: 1/4in NPT, Minimum Hose Size: 1/4in / 6mm, Spindle Offset: 25/32in / 20mm

Drill Diameter Capacity Matches Chuck Size

Hand Drilling, Countersinking & Spotfacing

15LF Series - Inline Drill

0.4hp / 0.30kW

600-28500rpm



- Supplied with Jacobs® Keyed Chuck or Threaded Termination for Keyless Chuck/Collet
- Rear Exhaust
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15LF087-38 | 1/4" CHUCK | 600 | 1.98 | 8.6 |
| 15LF087-40 | 3/8" - 24 E | 600 | 1.98 | 8.6 |
| 15LF086-38 | 1/4" CHUCK | 750 | 1.32 | 8.0 |
| 15LF085-38 | 1/4" CHUCK | 1000 | 1.32 | 8.0 |
| 15LF085-40 | 3/8" - 24 E | 1000 | 1.32 | 8.0 |
| 15LF084-38 | 1/4" CHUCK | 2400 | 1.32 | 8.0 |
| 15LF083-38 | 1/4" CHUCK | 3300 | 1.32 | 8.0 |
| 15LF083-40 | 3/8" - 24 E | 3300 | 1.32 | 8.0 |
| 15LF082-38 | 1/4" CHUCK | 4000 | 1.32 | 8.0 |
| 15LF082-40 | 3/8" - 24 E | 4000 | 1.32 | 7.3 |
| 15LF081-38 | 1/4" CHUCK | 5300 | 1.32 | 8.0 |
| 15LF081-40 | 3/8" - 24 E | 5300 | 1.32 | 8.0 |
| 15LF080-38 | 1/4" CHUCK | 28500 | 0.9 | 0.63 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 1/4in / 6.4mm

Standard Equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

Hand Drilling, Countersinking & Spotfacing

15L14 Series - Right Angle Drill

0.3hp / 0.22kW
1500-20000rpm
Up to 1/4" Capacity

- Chuck, Collet and 1/4"-28 internal output options
- Rear Exhaust
- Lock off Safety lever standard



| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15L1487-32 | 1/4"-28 I | 1500 | 1.2 | 8.0 |
| 15L1487-36 | 1/4" COLLET | 1500 | 1.2 | 8.0 |
| 15L1487-38 | 1/4" CHUCK | 1500 | 1.5 | 8.0 |
| 15L1488-36 | 1/4" COLLET | 2400 | 1.6 | 8.7 |
| 15L1488-38 | 1/4" CHUCK | 2400 | 1.5 | 8.0 |
| 15L1489-32 | 1/4"-28 I | 3600 | 1.6 | 8.7 |
| 15L1489-36 | 1/4" COLLET | 3600 | 1.6 | 8.7 |
| 15L1489-38 | 1/4" CHUCK | 3600 | 1.5 | 8.0 |
| 15L1489-51 | 3/8" CHUCK | 3600 | 1.5 | 8.0 |
| 15L1470-37 | 5/32" CHUCK | 12000 | 1.2 | 6.9 |
| 15L1401-37 | 5/32" CHUCK | 20000 | 1.0 | 6.2 |
| 15L1471-37 | 5/32" CHUCK | 20000 | 1.2 | 6.9 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 1/4in / 6.4mm

Standard Equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

Hand Drilling, Countersinking & Spotfacing

15LF Series - Right Angle Drill - Light Duty/ Small Head Height

0.4hp / 0.30kW

600-5300rpm

Ideal for Restricted Access Applications



- -62 1/4"-28 Internal thread standard
- Other terminations available:
 - 61 10-32 Internal Thread
 - 63 Threaded Collet
 - 64 5/16"-24 Internal Thread
- Other Angle Heads Available:
 - 5X Heavy Duty
 - 7X Compact Style
 - 4X 45 degree Angle Head
 - 9X 360 degree Angle Head
- Rear Exhaust
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15LF287-62 | 1/4"-28 I | 600 | 1.9 | 11.8 |
| 15LF286-62 | 1/4"-28 I | 750 | 1.9 | 11.8 |
| 15LF285-62 | 1/4"-28 I | 1000 | 1.9 | 11.8 |
| 15LF284-62 | 1/4"-28 I | 2400 | 1.8 | 11.1 |
| 15LF283-62 | 1/4"-28 I | 3300 | 1.6 | 10.7 |
| 15LF282-62 | 1/4"-28 I | 4000 | 1.6 | 10.7 |
| 15LF281-62 | 1/4"-28 I | 5300 | 1.6 | 10.7 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 1/4in / 6.4mm

Standard Equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

Hand Drilling, Countersinking & Spotfacing

15LF Series - Right Angle Drill - Heavy Duty Head

0.4hp / 0.30kW

420-3700rpm

Ideal for Restricted Access Applications



- -52 1/4"-28 Internal thread standard
- Other terminations Available:
 - 51 10-32 Internal Thread
 - 53 Threaded Collet
 - 54 5/16"-24 Internal Thread
 - 55 3/8"-24 Internal Thread
 - 59NC 3/8"-24 External Thread
- Other Angle Heads Available:
 - 6X Light Duty
 - 7X Compact Style
 - 4X 45 degree Angle Head
 - 9X 360 degree Angle Head
- Rear Exhaust
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15LF287-52 | 1/4"-28 I | 420 | 2 | 12.0 |
| 15LF286-52 | 1/4"-28 I | 525 | 2 | 12.0 |
| 15LF285-52 | 1/4"-28 I | 700 | 2 | 12.0 |
| 15LF284-52 | 1/4"-28 I | 1700 | 1.8 | 10.6 |
| 15LF283-52 | 1/4"-28 I | 2300 | 1.7 | 11.0 |
| 15LF282-52 | 1/4"-28 I | 2800 | 1.7 | 11.0 |
| 15LF281-52 | 1/4"-28 I | 3700 | 1.7 | 11.0 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Minimum Hose I.D.: 1/4in / 6.4mm

Standard Equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

Hand Drilling, Countersinking & Spotfacing

15LS Series - Right Angle Drill - Light Duty/ Small Head Height

0.6hp / 0.45kW

500-5400 rpm

Ideal for Restricted Access Applications



- -62 1/4"-28 Internal thread standard
- Other terminations available:
 - 61 10-32 Internal Thread
 - 63 Threaded Collet
 - 64 5/16"-24 Internal Thread
 - Quick Change Indexable Heads
- Other Angle Heads Available:
 - 5X Heavy Duty
 - 7X Compact Style
 - 4X 45 degree Angle Head
 - 9X 360 degree Angle Head
- Rear Exhaust
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15LS287-62 | 1/4"-28 I | 500 | 1.9 | 12.7 |
| 15LS286-62 | 1/4"-28 I | 840 | 1.9 | 12.7 |
| 15LS285-62 | 1/4"-28 I | 1360 | 1.9 | 12.7 |
| 15LS284-62 | 1/4"-28 I | 1660 | 1.9 | 12.4 |
| 15LS283-62 | 1/4"-28 I | 2010 | 2.3 | 11.5 |
| 15LS282-62 | 1/4"-28 I | 3370 | 2.3 | 11.5 |
| 15LS281-62 | 1/4"-28 I | 5430 | 2.3 | 11.5 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Standard Equipment: 600 Series Mini Angle Head with 1/4"-28 internal thread

Hand Drilling, Countersinking & Spotfacing

15LS Series - Right Angle Drill - Heavy Duty Head

0.6hp / 0.45kW

350-3800 rpm

Ideal for Restricted Access Applications



- -52 1/4"-28 Internal thread standard
- Other terminations Available:
 - 51 10-32 Internal Thread
 - 53 Threaded Collet
 - 54 5/16"-24 Internal Thread
 - 55 3/8"-24 Internal Thread
 - 59NC 3/8"-24 External Thread
 - Quick Change Indexable Heads
- Other Angle Heads Available:
 - 6X Light Duty
 - 7X Compact Style
 - 4X 45 degree Angle Head
 - 9X 360 degree Angle Head
- Rear Exhaust
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15LS287-52 | 1/4"-28 I | 350 | 2.87 | 12.3 |
| 15LS286-52 | 1/4"-28 I | 590 | 2.87 | 12.3 |
| 15LS285-52 | 1/4"-28 I | 950 | 2.87 | 12.3 |
| 15LS283-52 | 1/4"-28 I | 1410 | 2.43 | 11.0 |
| 15LS282-52 | 1/4"-28 I | 2360 | 2.43 | 11.0 |
| 15LS281-52 | 1/4"-28 I | 3800 | 2.43 | 11.0 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Standard Equipment: 500 Series Heavy Duty Angle Head with 1/4"-28

Hand Drilling, Countersinking & Spotfacing

15LN Series - Right Angle Drill - Light Duty/ Small Head Height

0.9hp / 0.67kW

320-5600 rpm

Ideal for Restricted Access Applications



- -62 1/4"-28 Internal thread standard
- Other terminations available:
 - 61 10-32 Internal Thread
 - 63 Threaded Collet
 - 64 5/16"-24 Internal Thread
- Other Angle Heads Available:
 - 5X Heavy Duty
 - 7X Compact Style
 - 4X 45 degree Angle Head
 - 9X 360 degree Angle Head
- Rear Exhaust
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15LN287-62 | 1/4"-28 I | 320 | 2.5 | 12.0 |
| 15LN286-62 | 1/4"-28 I | 540 | 2.5 | 13.5 |
| 15LN285-62 | 1/4"-28 I | 1000 | 2.5 | 12.0 |
| 15LN284-62 | 1/4"-28 I | 1530 | 2.5 | 12.0 |
| 15LN283-62 | 1/4"-28 I | 1850 | 2.5 | 12.0 |
| 15LN282-62 | 1/4"-28 I | 3100 | 2.5 | 12.0 |
| 15LN281-62 | 1/4"-28 I | 5000 | 2.5 | 12.0 |
| 15LN288-62 | 1/4"-28 I | 5600 | 2.5 | 12.0 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Standard Equipment: 600 Series Mini Angle Head with 1/4"-28 internal thread

Hand Drilling, Countersinking & Spotfacing

15LN Series - Right Angle Drill - Heavy Duty Head

0.9hp / 0.67kW

540-3900rpm

Ideal for Restricted Access Applications



- -52 1/4"-28 Internal thread standard
- Other terminations Available:
 - 51 10-32 Internal Thread
 - 53 Threaded Collet
 - 54 5/16"-24 Internal Thread
 - 55 3/8"-24 Internal Thread
 - 59NC 3/8"-24 External Thread
- Other Angle Heads Available:
 - 6X Light Duty
 - 7X Compact Style
 - 4X 45 degree Angle Head
 - 9X 360 degree Angle Head
- Rear Exhaust
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | LENGTH |
|------------|-------------|-------|--------|--------|
| | | R/MIN | LB | IN |
| 15LN286-52 | 1/4"-28 I | 540 | 3.09 | 12.8 |
| 15LN285-52 | 1/4"-28 I | 870 | 3.09 | 12.8 |
| 15LN284-52 | 1/4"-28 I | 1070 | 3.09 | 12.8 |
| 15LN283-52 | 1/4"-28 I | 1300 | 2.65 | 11.5 |
| 15LN281-52 | 1/4"-28 I | 3500 | 2.65 | 11.5 |
| 15LN288-52 | 1/4"-28 I | 3900 | 2.65 | 11.5 |

All tools performance rated @ 90psi / 620 kPa air pressure.

Air inlet size: 1/4in

Standard Equipment: 500 Series Heavy Duty Angle Head with 1/4"-28

Hand Drilling, Countersinking & Spotfacing

15LQ Series - Right Angle Drill - Quick Change Indexable Heads

15LF 0.4hp/0.3kW, 15LN 0.9hp/0.67kW - Ideal for Application Kits



- Indexable with Quick Release for Range of Angle Head Attachments shown below
- Lock off safety lever standard

| MODEL | TERMINATION | SPEED | WEIGHT | AIR INLET SIZE |
|----------|--------------|-------------------------------------|--------|----------------|
| | | R/MIN | LB | IN |
| 15LF287Q | Q ANGLE HEAD | 420 WITH -5X HEADS/600 ALL OTHERS | 1.43 | 1/4 |
| 15LF286Q | Q ANGLE HEAD | 525 WITH -5X HEADS/750 ALL OTHERS | 1.43 | 1/4 |
| 15LF285Q | Q ANGLE HEAD | 700 WITH -5X HEADS/1000 ALL OTHERS | 1.43 | 1/4 |
| 15LF284Q | Q ANGLE HEAD | 1700 WITH -5X HEADS/2400 ALL OTHERS | 1.43 | 1/4 |
| 15LF283Q | Q ANGLE HEAD | 2300 WITH -5X HEADS/3300 ALL OTHERS | 1.43 | 1/4 |
| 15LF282Q | Q ANGLE HEAD | 2800 WITH -5X HEADS/4000 ALL OTHERS | 1.43 | 1/4 |
| 15LF281Q | Q ANGLE HEAD | 3700 WITH -5X HEADS/5300 ALL OTHERS | 1.43 | 1/4 |
| 15LN287Q | Q ANGLE HEAD | 320 WITH -5X HEADS/460 ALL OTHERS | 2.35 | 1/4 |
| 15LN286Q | Q ANGLE HEAD | 540 WITH -5X HEADS/770 ALL OTHERS | 2.35 | 1/4 |
| 15LN285Q | Q ANGLE HEAD | 870 WITH -5X HEADS/1240 ALL OTHERS | 2.35 | 1/4 |
| 15LN284Q | Q ANGLE HEAD | 1070 WITH -5X HEADS/1530 ALL OTHERS | 2.35 | 1/4 |
| 15LN283Q | Q ANGLE HEAD | 1300 WITH -5X HEADS/1850 ALL OTHERS | 2.35 | 1/4 |
| 15LN282Q | Q ANGLE HEAD | 2170 WITH -5X HEADS/3100 ALL OTHERS | 2.35 | 1/4 |
| 15LN281Q | Q ANGLE HEAD | 3500 WITH -5X HEADS/5000 ALL OTHERS | 2.35 | 1/4 |

Q Indexable Quick Change Angle Head Options - Dotco

- Indexable with Quick Release for Use with 15L..Q Power Units
- -Q5 Heads 90 Degree Heavy Duty, -Q6 and Q7 light duty/compact heads
- -Q4 Heads 45 Degree, - Q9 360 degree head
- 1/4"-28 Internal Thread for Threaded Cutters
- 9/32"-40 Internal Thread for Threaded Collets



| MODEL | DESCRIPTION | SPINDLE SIZE |
|--------------|------------------------------------|--------------------------|
| 302206PT-Q42 | 45° ANGLE HEAD | 1/4"-28 INTERNAL THREAD |
| 302206PT-Q43 | 45° ANGLE HEAD | 9/32"-40 INTERNAL THREAD |
| 302206PT-Q52 | HEAVY DUTY ANGLE HEAD - 500 SERIES | 1/4"-28 INTERNAL THREAD |
| 302206PT-Q53 | HEAVY DUTY ANGLE HEAD - 500 SERIES | 9/32"-40 INTERNAL THREAD |
| 302206PT-Q59 | HEAVY DUTY ANGLE HEAD - 500 SERIES | 3/8"-24 EXTERNAL THREAD |
| 302206PT-Q62 | MINI ANGLE HEAD - 600 SERIES | 1/4"-28 INTERNAL THREAD |
| 302206PT-Q63 | MINI ANGLE HEAD - 600 SERIES | 9/32"-40 INTERNAL THREAD |
| 302206PT-Q72 | COMPACT ANGLE HEAD - 700 SERIES | 1/4"-28 INTERNAL THREAD |
| 302206PT-Q73 | COMPACT ANGLE HEAD - 700 SERIES | 9/32"-40 INTERNAL THREAD |
| 302206PT-Q92 | 360° ANGLE HEAD | 1/4"-28 INTERNAL THREAD |
| 302206PT-Q93 | 360° ANGLE HEAD | 9/32"-40 INTERNAL THREAD |

Hand Drilling, Countersinking & Spotfacing

15L Series - Compact Angle Head

- Compact short reach angle head for restricted access applications
- -71 10-32 Internal Thread for Direct Cutter Mount
- -72 1/4"-28 Internal Thread For Direct Cutter Mount and Collet Adaptor
Option 14-1569 (Mini Collet) Max 1/4"/6.4mm
- -73 Threaded Collet Max #10/5mm - Collets Ordered Separately



| MODEL | DESCRIPTION | TOOL TERMINATION | SPINDLE SIZE |
|---------|------------------------------------|------------------|--------------------------|
| 1021620 | HEAVY DUTY ANGLE HEAD - 500 SERIES | -59NC | 3/8"-24 EXTERNAL THREAD |
| 1025328 | MINI ANGLE HEAD - 600 SERIES | -64 | 5/16"-24 INTERNAL THREAD |
| 1025476 | COMPACT ANGLE HEAD - 700 SERIES | -73 | 9/32"-40 INTERNAL THREAD |
| 1025477 | COMPACT ANGLE HEAD - 700 SERIES | -72 | 1/4"-28 INTERNAL THREAD |
| 1025668 | COMPACT ANGLE HEAD - 700 SERIES | -74 | 5/16"-24 INTERNAL THREAD |

These drill attachments can be ordered as a separate accessory item or as part of a complete model. To order as a complete model, use the basic model number from the appropriate 15LF, 15LS, or 15LN catalog page and replace the termination number -32 for example with the termination number of the desired optional attachment -71 for example from this page.

15L Series - Light Duty Angle Head

- -61 10-32 Internal Thread for Direct Cutter Mount
- -62 1/4"-28 Internal Thread For Direct Cutter Mount and Collet Adaptor
Option 14-1569 (Mini Collet) Max 1/4"/6.4mm
- -63 Threaded Collet Max #10/5mm - Collets Ordered Separately
- -64 5/16"-24 Internal Thread



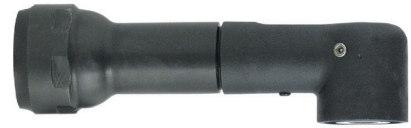
| MODEL | DESCRIPTION | TOOL TERMINATION | SPINDLE SIZE |
|---------|------------------------------|------------------|--------------------------|
| 1025313 | MINI ANGLE HEAD - 600 SERIES | -63 | 9/32"-40 INTERNAL THREAD |
| 1025314 | MINI ANGLE HEAD - 600 SERIES | -61 | #10-32 INTERNAL THREAD |
| 1025409 | MINI ANGLE HEAD - 600 SERIES | -62 | 1/4"-28 INTERNAL THREAD |

These drill attachments can be ordered as a separate accessory item or as part of a complete model. To order as a complete model, use the basic model number from the appropriate 15LF, 15LS, or 15LN catalog page and replace the termination number -32 for example with the termination number of the desired optional attachment -71 for example from this page.

Hand Drilling, Countersinking & Spotfacing

15L Series - Heavy Duty Angle Head

- -52 1/4"-28 Internal Thread For Direct Cutter Mount and Collet Adaptor
Option 14-1569 (Mini Collet) Max 1/4"/6.4mm
- -53 Threaded Collet Max #10/5mm - Collets Ordered Separately
- -54 5/16"-24 Internal Thread
- -59NC 3/8"-24 External Thread for chuck or collet adaptor mounting



| MODEL | DESCRIPTION | TOOL TERMINATION | SPINDLE SIZE |
|---------|------------------------------------|------------------|--------------------------|
| 1021289 | HEAVY DUTY ANGLE HEAD - 500 SERIES | -52 | 1/4"-28 INTERNAL THREAD |
| 1021291 | HEAVY DUTY ANGLE HEAD - 500 SERIES | -54 | 5/16"-24 INTERNAL THREAD |
| 1021292 | HEAVY DUTY ANGLE HEAD - 500 SERIES | -53 | 9/32"-40 INTERNAL THREAD |
| 1025780 | HEAVY DUTY ANGLE HEAD - 500 SERIES | -55 | 3/8"-24 INTERNAL THREAD |

These drill attachments can be ordered as a separate accessory item or as part of a complete model. To order as a complete model, use the basic model number from the appropriate 15LF, 15LS, or 15LN catalog page and replace the termination number -32 for example with the termination number of the desired optional attachment -71 for example from this page.

15L Series - 45 Degree Angle Head

- For difficult access applications
- -42 1/4"-28 Internal Thread For Direct Cutter Mount and Collet Adaptor
Option 14-1569 (Mini Collet) Max 1/4"/6.4mm
- -43 Threaded Collet Max #10/5mm - Collets Ordered Separately
- -44 5/16"-24 Internal Thread



| MODEL | DESCRIPTION | TOOL TERMINATION | SPINDLE SIZE |
|---------|----------------|------------------|--------------------------|
| 1025730 | 45° ANGLE HEAD | -42 | 1/4"-28 INTERNAL THREAD |
| 1025731 | 45° ANGLE HEAD | -43 | 9/32"-40 INTERNAL THREAD |
| 1025733 | 45° ANGLE HEAD | -44 | 5/16"-24 INTERNAL THREAD |

These drill attachments can be ordered as a separate accessory item or as part of a complete model. To order as a complete model, use the basic model number from the appropriate 15LF, 15LS, or 15LN catalog page and replace the termination number -32 for example with the termination number of the desired optional attachment -71 for example from this page.

15 L Series - 360° Angle Head

- Versatile swivel head for very difficult access applications
- -91 10-32 Internal Thread for Direct Cutter Mount
- -92 1/4"-28 Internal Thread For Direct Cutter Mount and Collet Adaptor
Option 14-1569 (Mini Collet) Max 1/4"/6.4mm



| MODEL | DESCRIPTION | TOOL TERMINATION | SPINDLE SIZE |
|---------|-----------------|------------------|-------------------------|
| 1025694 | 360° ANGLE HEAD | -92 | 1/4"-28 INTERNAL THREAD |
| 1025696 | 360° ANGLE HEAD | -91 | #10-32 INTERNAL THREAD |

These drill attachments can be ordered as a separate accessory item or as part of a complete model. To order as a complete model, use the basic model number from the appropriate 15LF, 15LS, or 15LN catalog page and replace the termination number -32 for example with the termination number of the desired optional attachment -71 for example from this page.

Hand Drilling, Countersinking & Spotfacing

Collets

For use on Cleco Dotco 15LF, 15LS & 15LN right angle drills with 9/32"-40 spindles.



- For use on Cleco Dotco 15LF, 15LS & 15LN right angle drills with 9/32"-40 spindles.
- (Termination codes: - 43, -53, -63, -73, & -93)

| MODEL | DRILL SIZE | | |
|---------|------------|--------|-----|
| | NO | IN | MM |
| 1006408 | 53 | 0.0595 | |
| 1005180 | 1/16 | 0.0625 | |
| 316PT | | 0.0630 | 1.6 |
| 1006412 | 51 | 0.0670 | 1.7 |
| 320PT | | 0.0787 | 2 |
| 1005875 | 46 | 0.0830 | |
| 1005182 | 3/32 | 0.0938 | 2.4 |
| 324PT | | 0.0945 | |
| 1005684 | 40 | 0.0980 | 2.5 |
| 325PT | | 0.0984 | |
| 1006395 | 39 | 0.0995 | 2.5 |
| 326PT | | 0.1024 | |
| 1005183 | 7/64 | 0.1094 | 2.8 |
| 330PT | | 0.1181 | 3 |
| 1005873 | 31 | 0.1200 | |
| 1005184 | 1/8 | 0.1250 | 3.2 |
| 332PT | | 0.1260 | |
| 1013904 | 30 | 0.1285 | 3.3 |
| 333PT | | 0.1299 | |
| 1005185 | 9/64 | 0.1406 | |
| 1005872 | 27 | 0.1440 | |
| 1006373 | 26 | 0.1470 | |
| 1005186 | 5/32 | 0.1563 | |
| 1005926 | 22 | 0.1570 | 4.0 |
| 340PT | | 0.1575 | |
| 1005682 | 21 | 0.1590 | |
| 1005876 | 20 | 0.1610 | 4.1 |
| 341PT | | 0.1614 | |
| 1006035 | 19 | 0.1650 | 4.2 |
| 342PT | | 0.1654 | |
| 1005187 | 11/64 | 0.1719 | |
| 1005977 | 17 | 0.1730 | 4.4 |
| 344PT | | 0.1732 | 4.4 |
| 1006346 | 16 | 0.1770 | |
| 345PT | | 0.1772 | 4.5 |
| 1005927 | 13 | 0.1850 | |
| 347PT | | 0.1850 | 4.7 |
| 1005188 | 3/16 | 0.1875 | |
| 1005871 | 12 | 0.1890 | |
| 348PT | | 0.1890 | 4.8 |
| 1005681 | 10 | 0.1910 | |
| 1006001 | 11 | 0.1935 | |
| 350PT | | 0.1969 | 5 |

Hand Drilling, Countersinking & Spotfacing

Jacobs Chucks

Keyed and Keyless up to 1/2" Capacity



| MODEL | DESCRIPTION | CAPACITY | | TERM. |
|----------|--------------------|----------|--|----------|
| | | IN | | IN |
| 1075 | OB | 5/32 | | 5/16"-24 |
| 1001505 | 7 BA | 1/4 | | 3/8"-24 |
| 1005078 | 1 BA | 1/4 | | 3/8"-24 |
| 33633 | KEYLESS | 5/16 | | 3/8"-24 |
| 1001252 | 41 BA (MED. DUTY) | 3/8 | | 3/8"-24 |
| 100442-2 | 2 BA (MED. DUTY) | 3/8 | | 3/8"-24 |
| 1110945 | KEYLESS (31073) | 3/8 | | 3/8"-24 |
| 863420 | 22 BA (LIGHT DUTY) | 3/8 | | 3/8"-24 |
| 33663D | KEYLESS | 25/64 | | 3/8"-24 |
| 1009726 | 33 BA | 1/2 | | 3/8"-24 |

300 Series - Collet Chuck

Up to 1/4" Capacity

- Use with Standard Collet: 1/4" (#308).
- Termination Number: -36



| MODEL | DESCRIPTION |
|---------|---|
| 14-1148 | 1/64"-1/4" CAPACITY WITH A 5/16"-24 FEMALE THREAD |

QRA Series - Quick Change Chuck

For 3/8"-24 Thread | 1/4" Hex



| MODEL | DESCRIPTION | SPINDLE SIZE | CHUCK SIZE |
|--------|-------------------------------|--------------|------------|
| | | IN | IN |
| 849414 | FOR 3/8"-24 THREAD 1/4" HEX | 3/8"-24 | 1/4 |

Hand Drilling, Countersinking & Spotfacing

TULMan Electronic Counter

Cycle or Run Time Counter for Small Pneumatic Tools Up to 20cfm / 570 lpm



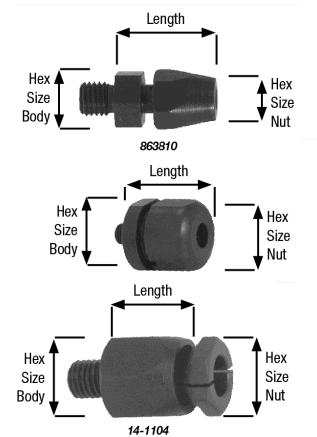
- First ever odometer and tripometer for small pneumatic tools
- Useable on any small pneumatic device with suitable air flow, including Cleco & Dotco products
- Manage tool service and tool calibration, quantify & compare tool consumable life
- Monitor workforce productivity, improve quality of product or process and realize cost savings
- LED indicator lights blink yellow (warning) and red as cycle and run time limits are reached.
- Easy-to-use monitoring software included
- Tamper-proof cover for micro-USB access

| MODEL | MAX PRESSURE | MAX FLOW | MIN FLOW | WEIGHT |
|----------|----------------------------------|-------------|-------------|--------|
| | LB/IN ² BAR | CFM L/MIN | CFM L/MIN | LB |
| 240461PT | 100 LB/IN ² 6.9 BAR | 20 570 | 5 145 | 0.176 |

Straight Shank Drill Adaptors

For use with Cleco Dotco 15LF, 15LS & 15LN right angle drills with 1/4"-28 spindles.

- For use on Cleco 15LF, 15LS & 15LN right angle drills
- Adapts 1/4"-28 output to collet/chuck for straight shank drills



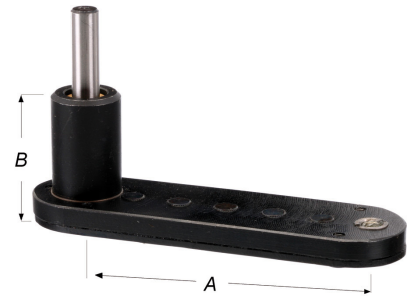
| MODEL | DESCRIPTION | SHANK DIAMETER CAPACITY | LENGTH | HEX SIZE BODY/NUT |
|---------|---------------------------|-------------------------|---------|-------------------|
| | | | IN | IN |
| 1020699 | CONE JAW CHUCK | .040 IN 1/4 IN | 0.9 IN | 0.75 / 0.75 |
| 14-0158 | MINI CHUCK - COLLET ONLY | 1/8 IN | 0.65 IN | |
| 14-1102 | MINI CHUCK - ASSEMBLY | 1/8 IN | 0.65 IN | 0.437 / 0.375 |
| 14-1568 | MINI CHUCK - ADAPTOR ONLY | 1/8 IN | 0.65 IN | |
| 863810 | MINI COLLET NUT | 3/16 IN | 0.8 IN | 0.500 / 0.500 |
| 14-0168 | MINI CHUCK - COLLET ONLY | 1/4 IN | 0.7 IN | |
| 14-1104 | MINI CHUCK - ASSEMBLY | 1/4 IN | 0.7 IN | 0.500 / 0.437 |
| 14-1569 | MINI CHUCK - ADAPTOR ONLY | 1/4 IN | 0.7 IN | |
| 863806 | MINI COLLET NUT | 1/4 IN | 0.8 IN | 0.500 / 0.500 |
| 14-0170 | MINI CHUCK - COLLET ONLY | 6 MM | 0.7 IN | |
| 14-1094 | MINI CHUCK - ASSEMBLY | 6 MM | 0.7 IN | 0.500 / 0.437 |

Hand Drilling, Countersinking & Spotfacing

RB106 - Flat Offset Angle Drill

Use in Pistol Drills for Difficult Access Applications

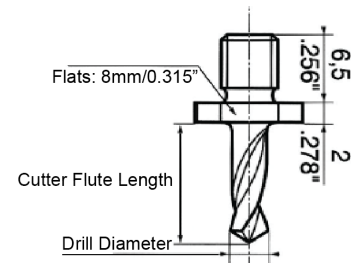
- 10-32 thread for cutter attachment
- 6mm/0.236" Shank Diameter
- Recommended maximum drilling capacity 5mm/0.197" in Aluminium
- Recommended maximum countersinking capacity 10mm/0.394" in Aluminium



| MODEL | A | B | WEIGHT | |
|----------|----|-------|--------|-----|
| | | | LB | G |
| 10080005 | 84 | 28 | 0.220 | 100 |
| 10080010 | 84 | 112.5 | 0.397 | 180 |
| 10080015 | 63 | 28 | 0.287 | 130 |
| 10080020 | 63 | 112.5 | 0.49 | 220 |

Cutters for Flat Offset Angle Drill

- These cutters are designed for use with the flat offset angle drill RB 106 with UNF 10-32 F spindle thread.
- Recommended for use with Dotco hand drills
- Can be used in aluminum



| MODEL | DRILL DIAMETER | | CUTTER FLUTE LENGTH | |
|----------|----------------|-------|---------------------|----|
| | MM | IN | IN | MM |
| 33000020 | 2.5 | 0.098 | 0.472 | 12 |
| 33000625 | 2.5 | 0.098 | 0.79 | 20 |
| 33000025 | 3 | 0.118 | 0.472 | 12 |
| 33000132 | 3.2 | 0.126 | 0.315 | 8 |
| 33000030 | 3.2 | 0.126 | 0.472 | 12 |
| 33000632 | 3.2 | 0.126 | 0.79 | 20 |
| 33000040 | 4 | 0.157 | 0.472 | 12 |
| 33000240 | 4 | 0.157 | 0.59 | 15 |
| 33000248 | 4.8 | 0.189 | 0.59 | 15 |

Hand Drilling, Countersinking & Spotfacing

RB1130/60QBSF/70QBSF - Manual Back Spotfacer

Fixed Speed 0.6hp / 0.4kW 460rpm
Variable Speed 0.7hp / 0.5kW 150-550rpm



- Specially designed for all back-spotfacing operations with an accuracy of 001" / .025mm micro adjustment
- Fixed speed (RB 1130 | 60QBSF) or adjustable speed (RB 1130-2 | 70QBSF) for use in light alloys or steel
- Machine design provides smooth and easy feed without strain on the operator
- Wide range of interchangeable collets
- Feed lever with 360° orientation
- Wide range of cutters available - threaded or with quick bayonet lock

| MODEL | MOTOR | SPEED | FIXTURING | ACCESSORIES | STROKE | WEIGHT |
|----------------------|---------------|---------|-----------|--|--------------|--------|
| | CONFIGURATION | R/MIN | OPTIONS | | IN MM | LB |
| 60QBSF/ RB1130-1 | PISTOL GRIP | 500 | NA | •SPINDLE COLLET •SPINDLE PILOT •BACK SPOT FACING CUTTERS | 0.394 10.0 | 4.9 |
| 70QVBSF/ RB1130-2 | PISTOL GRIP | 150-550 | NA | •SPINDLE COLLET •SPINDLE PILOT •BACK SPOT FACING CUTTERS | 0.591 15.0 | 5.5 |

Air Pressure: 90psi | 6.3bar

Recommended Hose Size: 3/8in | 10mm

Standard Collets



| MODEL | DIAMETER | |
|----------|----------|------|
| | IN | MM |
| 70110200 | 0.0787 | 2 |
| 70110250 | 0.098 | 2.5 |
| 70110300 | 0.1181 | 3 |
| 70110350 | | 3.5 |
| 70110400 | 5/32 | 4 |
| 70110480 | 3/16 | 4.8 |
| 70110500 | 0.1968 | 5 |
| 70110550 | | 5.5 |
| 70110600 | 0.2362 | 6 |
| 70110635 | 1/4 | 6.35 |
| 70110794 | 5/16 | 7.94 |
| 70110952 | 3/8 | 9.52 |

Alternate collet diameters available upon request.

Hand Drilling, Countersinking & Spotfacing

RB 156 - Microstop Cage

Stroke 3.5mm/0.14in

Cutter Thread M6 x 1

- Cemented, hardened and ground chrome-nickel steel spindle mounted on a self lubricating bronze body and a thrust bearing.
- Centring-cone of the cutter (120°) for perfect concentricity.
- Microstop depth adjustment (1 scale division = .001”).
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the lock-nut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-------------|-------------|-------|-----|------------------|--------------|--------|------------------------|----------------|----------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10000010 | FIXED SHANK | 0.189 | 4.8 | M6 X 1 | 3.5 | NO | TAPPED M19F FOR NOSE | SMALL | NYLON | 25 | 55 | 51 | 75 |
| 100000100 | FIXED SHANK | 0.189 | 4.8 | M6 X 1 | 3.5 | NO | OFFSET MOUNTING BASE | SMALL | NONE | 25 | 55 | 51 | 75 |
| 10000010W | FIXED SHANK | 0.189 | 4.8 | M6 X 1 | 3.5 | NO | TAPPED M19F FOR NOSE | LARGE | NYLON | 25 | 55 | 51 | 75 |
| 100000100 W | FIXED SHANK | 0.189 | 4.8 | M6 X 1 | 3.5 | NO | OFFSET MOUNTING BASE | LARGE | NONE | 25 | 55 | 51 | 75 |

Hand Drilling, Countersinking & Spotfacing

RB206 & RB(I) 206 Microstop Cage

Stroke 6mm/0.24in

Cutter Thread RB 206 M6 x 1 RBI 206 1/4"-28

- Different mounting bases available
- For composites mounting base with vacuum
- Cemented, hardened and ground chrome-nickel steel spindle mounted on a self lubricating bronze body and a thrust bearing.
- Centring-cone of the cutter (120°) for perfect concentricity.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-----------|-------------|-------|-----|------------------|--------------|--------|------------------------|----------------|----------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10005355W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | NO | TAPPED M16F FOR NOSE | LARGE | NYLON | 21 | 101 | 95 | 120 |
| 10005355 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | NO | TAPPED M16F FOR NOSE | SMALL | NYLON | 21 | 101 | 95 | 120 |
| 10005050W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | NO | NONE/FLAT BASE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005050 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | NO | NONE/FLAT BASE | SMALL | NONE | 21 | 101 | 95 | 120 |
| 10005250W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | YES | NONE/OFFSET BASE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005250 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | NO | NONE/OFFSET BASE | SMALL | NONE | 21 | 101 | 95 | 120 |
| 10005356W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | YES | TAPPED M16F FOR NOSE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005356 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | YES | TAPPED M16F FOR NOSE | SMALL | NONE | 21 | 101 | 95 | 120 |
| 10005051W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | YES | NONE/FLAT BASE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005051 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 6 | YES | NONE/FLAT BASE | SMALL | NONE | 21 | 101 | 95 | 120 |
| 10005305W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | NO | TAPPED M16F FOR NOSE | LARGE | NYLON | 21 | 101 | 95 | 120 |
| 10005305 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | NO | TAPPED M16F FOR NOSE | SMALL | NYLON | 21 | 101 | 95 | 120 |
| 10005000W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | NO | NONE/FLAT BASE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005000 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | NO | NONE/FLAT BASE | SMALL | NONE | 21 | 101 | 95 | 120 |
| 10005200W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | NO | NONE/OFFSET BASE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005200 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | NO | NONE/OFFSET BASE | SMALL | NONE | 21 | 101 | 95 | 120 |
| 10005306W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | YES | TAPPED M16F FOR NOSE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005306 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | YES | TAPPED M16F FOR NOSE | SMALL | NONE | 21 | 101 | 95 | 120 |
| 10005001W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | YES | NONE/FLAT BASE | LARGE | NONE | 21 | 101 | 95 | 120 |
| 10005001 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 6 | YES | NONE/FLAT BASE | SMALL | NONE | 21 | 101 | 95 | 120 |

Hand Drilling, Countersinking & Spotfacing

Hand Drilling, Countersinking & Spotfacing

RB 256 & RB(I)256 - Microstop Cage

Stroke 7.5mm/0.30in

Cutter Thread RB 206 M6x1 RB(I) 206 1/4"-28

- Different mounting bases available
- For special composites mounting base with vacuum
- Cemented, hardened and ground chrome-nickel steel spindle mounted on a self lubricating bronze body and a thrust bearing.
- Centring-cone of the cutter (120°) for perfect concentricity.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the lock-nut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-----------|-------------|-------|-----|------------------|--------------|--------|------------------------|----------------|----------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10010110W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | NO | M19F | LARGE | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010110 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | NO | M19F | SMALL | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010111W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | YES | M19F | LARGE | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010111 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | YES | M19F | SMALL | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010115W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | NO | M19F | LARGE | NYLON | 28 | 98 | 91 | 175 |
| 10010115 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | NO | M19F | SMALL | NYLON | 28 | 98 | 91 | 175 |
| 10010116W | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | YES | M19F | LARGE | NYLON | 28 | 98 | 91 | 175 |
| 10010116 | FIXED SHANK | 0.236 | 6.0 | 1/4"-28 | 7.5 | YES | M19F | SMALL | NYLON | 28 | 98 | 91 | 175 |
| 10010010W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | NO | M19F | LARGE | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010010 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | NO | M19F | SMALL | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010001W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | YES | M19F | LARGE | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010001 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | YES | M19F | SMALL | HARD CHROME | 28 | 98 | 91 | 175 |
| 10010015W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | NO | M19F | LARGE | NYLON | 28 | 98 | 91 | 175 |
| 10010015 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | NO | M19F | SMALL | NYLON | 28 | 98 | 91 | 175 |
| 10010016W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | YES | M19F | LARGE | NYLON | 28 | 98 | 91 | 175 |
| 10010016 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | YES | M19F | SMALL | NYLON | 28 | 98 | 91 | 175 |
| 10010205W | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | YES | M30 X 1M | LARGE | NYLON | 28 | 98 | 91 | 175 |
| 10010205 | FIXED SHANK | 0.236 | 6.0 | M6 X 1 | 7.5 | YES | M30 X 1M | SMALL | NYLON | 28 | 98 | 91 | 175 |

Hand Drilling, Countersinking & Spotfacing

RB 257 - Microstop Cage

Stroke 6mm/0.24"

Cutter Thread M6 x 1

- Different mounting bases available
- For composites mounting base with vacuum
- High precision microstop cage, body in heat treated chrome steel, fully ground throughout. This ball mounted microstop cage includes two needle bearings for best utilisation.
- When using the RB 257, any misalignment of the microstop cage is corrected by the unique ball pivoting spindle. This assembly ensures perpendicularity throughout the operation at all time.
- Centring cone of the cutter (120°) for perfect concentricity.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|--------------|-------------|-------|-----|------------------|--------------|--------|------------------------|----------------|----------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10015015W | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | M16F AND M26M | LARGE | HARD CHROME | 29 | 92 | 88 | 165 |
| 10015015 | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | M16F AND M26M | SMALL | HARD CHROME | 29 | 92 | 88 | 165 |
| RC-10015020W | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | M16F AND M26M | LARGE | NYLON | 29 | 92 | 88 | 165 |
| RC-10015020 | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | M16F AND M26M | SMALL | NYLON | 29 | 92 | 88 | 165 |
| 10015010W | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | M16F AND M26M | LARGE | ROTARY CELORON | 29 | 92 | 88 | 165 |
| 10015010 | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | M16F AND M26M | SMALL | ROTARY CELORON | 29 | 92 | 88 | 175 |
| 10015200W | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | THREE NYLON PADS | LARGE | NONE | 29 | 92 | 88 | 165 |
| 10015200 | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | NO | THREE NYLON PADS | SMALL | NONE | 29 | 92 | 88 | 165 |
| 10015016W | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | YES | M16F AND M26M | LARGE | HARD CHROME | 29 | 92 | 88 | 165 |
| 10015016 | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | YES | M16F AND M26M | SMALL | HARD CHROME | 29 | 92 | 88 | 165 |
| 10015021W | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | YES | M16F AND M26M | LARGE | CELORON | 29 | 92 | 88 | 165 |
| 10015021 | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | YES | M16F AND M26M | SMALL | CELORON | 29 | 92 | 88 | 165 |
| 10015001W | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | YES | M16F AND M26M | LARGE | ROTARY CELORON | 29 | 92 | 88 | 165 |
| 10015001 | BALL PIVOT | 0.236 | 6.0 | M6 X 1 | 6 | YES | M16F AND M26M | SMALL | ROTARY CELORON | 29 | 92 | 88 | 165 |

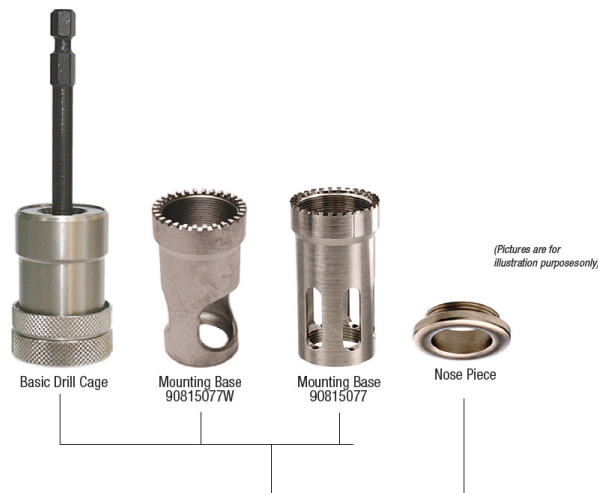
Hand Drilling, Countersinking & Spotfacing

RB(I) 258 - Microstop Cage

Stroke 27mm/1.06"

Cutter Thread M8 x 1 or 1/4"-28

- High precision microstop cage, body in heat treated chrome steel, fully ground throughout. This ball mounted microstop cage includes two needle bearings for best utilisation.
- When using the RB 258, any misalignment of the microstop cage is corrected by the unique ball pivoting spindle. This assembly ensures perpendicularity throughout the operation at all time.
- Centring cone of the cutter (120°) for perfect concentricity.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|------------|-------------|-------|------|------------------|--------------|--------|------------------------|----------------|----------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10015500W | BALL PIVOT | 0.250 | 6.35 | M6 X 1 | 27 | NO | TAPPED M19F FOR NOSE | LARGE | | 29 | 156 | 141 | 250 |
| 10015500PT | BALL PIVOT | 0.250 | 6.35 | M6 X 1 | 27 | NO | TAPPED M19F FOR NOSE | SMALL | NYLON | 29 | 156 | 141 | 250 |
| 10015550W | BALL PIVOT | 0.250 | 6.35 | 1/4"-28 | 27 | NO | TAPPED M19F FOR NOSE | LARGE | | 29 | 156 | 141 | 250 |
| 10015550 | BALL PIVOT | 0.250 | 6.35 | 1/4"-28 | 27 | NO | TAPPED M19F FOR NOSE | SMALL | NYLON | 29 | 156 | 141 | 250 |

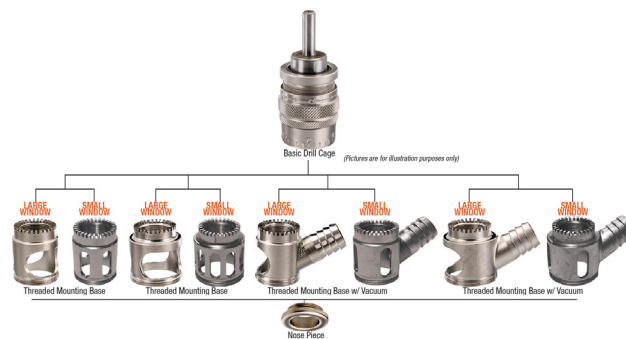
Hand Drilling, Countersinking & Spotfacing

RB 306 - Microstop Cage

Stroke 7.5mm/0.3"

Cutter Thread M8 x 1

- Different mounting bases available
- This cage has been designed for use with cutters greater than 0.394" dia.
- For special composites mounting base with vacuum
- Cemented, hardened and ground chrome-nickel steel spindle mounted on a self lubricating bronze body and a thrust bearing.
- Centring-cone of the cutter (120°) for perfect concentricity.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|--------------|-------------|-------|----|------------------|--------------|--------|------------------------|----------------|----------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10025105W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M30M | LARGE | HARD CHROME | 28 | 98 | 91 | 185 |
| 10025105 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M30M | SMALL | HARD CHROME | 28 | 98 | 91 | 185 |
| RC-10025010W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M26M | LARGE | HARD CHROME | 28 | 98 | 91 | 185 |
| RC-10025010 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M26M | SMALL | HARD CHROME | 28 | 98 | 91 | 185 |
| 10025110W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M30M | LARGE | NYLON | 28 | 98 | 91 | 185 |
| 10025110 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M30M | SMALL | NYLON | 28 | 98 | 91 | 185 |
| RC-10025015W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M26M | LARGE | NYLON | 28 | 98 | 91 | 185 |
| RC_10025015 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | NO | M26M | SMALL | NYLON | 28 | 98 | 91 | 185 |
| 10025117W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M30M | LARGE | HARD CHROME | 28 | 98 | 91 | 185 |
| 10025117 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M30M | SMALL | HARD CHROME | 28 | 98 | 91 | 185 |
| 10025001W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M26M | LARGE | HARD CHROME | 28 | 98 | 91 | 185 |
| 10025001 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M26M | SMALL | HARD CHROME | 28 | 98 | 91 | 185 |
| 10025111W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M30M | LARGE | NYLON | 28 | 98 | 91 | 185 |
| 10025111 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M30M | SMALL | NYLON | 28 | 98 | 91 | 185 |
| 10025016W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M26M | LARGE | NYLON | 28 | 98 | 91 | 185 |
| 10025016 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M26M | SMALL | NYLON | 28 | 98 | 91 | 185 |
| 10025116W | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M30M | LARGE | ROTARY CELORON | 28 | 98 | 91 | 185 |
| 10025116 | FIXED SHANK | 0.236 | 6 | M8 X 1 | 7.5 | YES | M30M | SMALL | ROTARY CELORON | 28 | 98 | 91 | 185 |

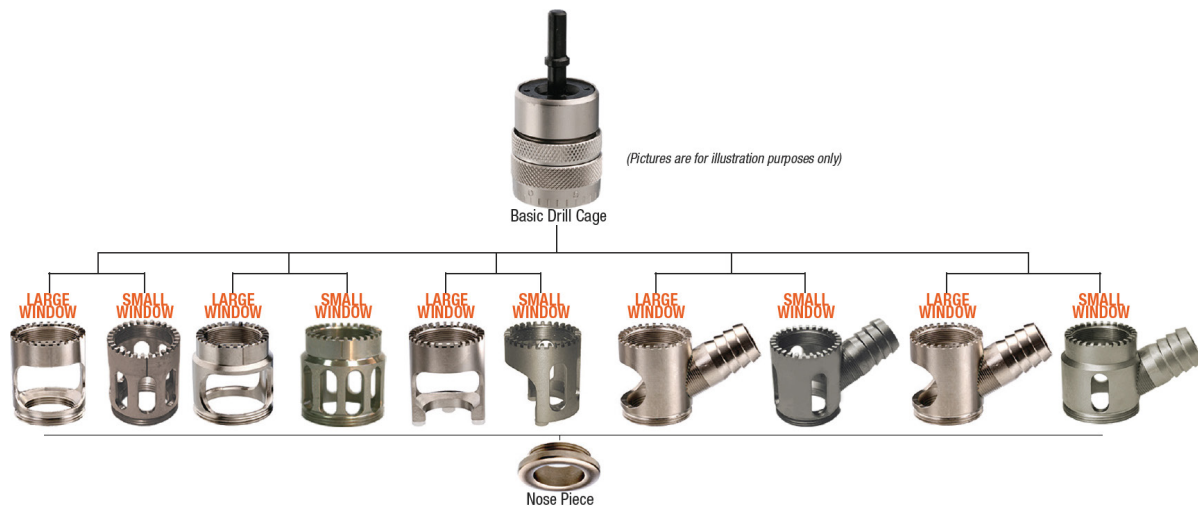
Hand Drilling, Countersinking & Spotfacing

RB(I) 307 - Microstop Cage

Stroke 7mm/0.3"

Cutter Thread M8 x 1 or 1/2"-28

- Different mounting bases available
- Reduced dimensions for tight access areas
- For special composites mounting base with vacuum
- High precision microstop cage, body in heat treated chrome steel, fully ground throughout. This ball mounted microstop cage includes two needle bearings for best utilisation.
- When using the RB 307, any misalignment of the microstop cage is corrected by the unique ball pivoting spindle. This assembly ensures perpendicularity throughout the operation at all time.
- Centring cone of the cutter (120°) for perfect concentricity.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-----------|-------------|-------|----|------------------|--------------|--------|------------------------|----------------|----------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10020160W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | LARGE | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020160 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | SMALL | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020065W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | LARGE | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020065 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | SMALL | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020070W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | LARGE | NYLON | 29 | 98 | 88 | 165 |
| 10020070 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | SMALL | NYLON | 29 | 98 | 88 | 165 |
| 10020060W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | LARGE | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020060 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | SMALL | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020155W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | LARGE | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020155 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | SMALL | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020250W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | 3 NYLON PADS | LARGE | NONE | 29 | 98 | 88 | 165 |

Hand Drilling, Countersinking & Spotfacing

| MODEL | INPUT STYLE | SHANK | | CUTTER | STROKE | VACUUM | MOUNTING | WINDOW | NOSE INSERT | DIAMETER MAX. | OVERALL LENGTH MAX | OVERALL LENGTH MIN | WEIGHT |
|-----------|-------------|-------|----|---------|--------|--------|---------------|--------|----------------|---------------|--------------------|--------------------|--------|
| | | IN | MM | THREAD | MM | | BASE STYLE | SIZE | STYLE | MM | MM | MM | G |
| 10020250 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | 3 NYLON PADS | SMALL | NONE | 29 | 98 | 88 | 165 |
| 10020165W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | LARGE | NYLON | 29 | 98 | 88 | 165 |
| 10020165 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | NO | M19F AND M26M | SMALL | NYLON | 29 | 98 | 88 | 165 |
| 10020166W | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | YES | M19F AND M26M | LARGE | NYLON | 29 | 98 | 88 | 165 |
| 10020166 | BALL PIVOT | 0.236 | 6 | 1/4"-28 | 7 | YES | M19F AND M26M | SMALL | NYLON | 29 | 98 | 88 | 165 |
| 10020110W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | LARGE | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020110 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | SMALL | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020015W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | LARGE | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020015 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | SMALL | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020020W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | LARGE | NYLON | 29 | 98 | 88 | 165 |
| 10020020 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | SMALL | NYLON | 29 | 98 | 88 | 165 |
| 10020115W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M30M | LARGE | NYLON | 29 | 98 | 88 | 165 |
| 10020115 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M30M | SMALL | NYLON | 29 | 98 | 88 | 165 |
| 10020010W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | LARGE | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020010 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | SMALL | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020105W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | LARGE | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020105 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | M19F AND M26M | SMALL | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020200W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | 3 NYLON PADS | LARGE | NONE | 29 | 98 | 88 | 165 |
| 10020200 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | NO | 3 NYLON PADS | SMALL | NONE | 29 | 98 | 88 | 165 |
| 1002001W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | LARGE | HARD CHROME | 29 | 98 | 88 | 165 |
| 1002001 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | SMALL | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020111W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | LARGE | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020111 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | SMALL | HARD CHROME | 29 | 98 | 88 | 165 |
| 10020021W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | LARGE | NYLON | 29 | 98 | 88 | 165 |
| 10020021 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | SMALL | NYLON | 29 | 98 | 88 | 165 |
| 10020116W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M30M | LARGE | NYLON | 29 | 98 | 88 | 165 |
| 10020116 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M30M | SMALL | NYLON | 29 | 98 | 88 | 165 |
| 10020001W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | LARGE | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020001 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | SMALL | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020106W | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | LARGE | ROTARY CELERON | 29 | 98 | 88 | 165 |
| 10020106 | BALL PIVOT | 0.236 | 6 | M8 X 1 | 7 | YES | M19F AND M26M | SMALL | ROTARY CELERON | 29 | 98 | 88 | 165 |

Hand Drilling, Countersinking & Spotfacing

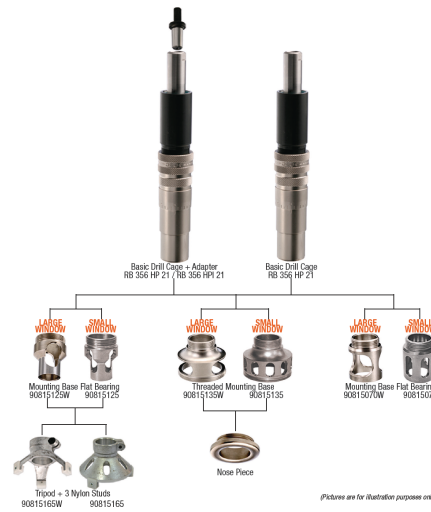
RB 356 HP 21 | RBI 356 HP 21 | RB356 HPI 21 - Microstop Cage

Stroke 21mm/0.83"

Cutter Thread M6 x 1 or 1/4"-28

Input shank 7mm/0.28", No 1 Jacobs Taper, 3/8"-24 Female Thread

- Detachable spindle adaptor provides alternative methods for use:
 - In combination with 3 jaw chuck.
 - Mounting direct onto machine spindle using No 1 Jacobs taper or 3/8"-24 Threaded Input Option. This method provides increased level of concentricity, while reducing the length and weight of the drill / tool assembly. This results in better performance, improved machining and less fatigue on the operator.
- Cemented, hardened and ground chrome-nickel steel spindle mounted on 3 needle-bearings and a thrust bearing.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-----------|------------------|-------|----|------------------|--------------|--------|--------------------------|----------------|------------------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10040050 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE/FLAT BASE | SMALL | NONE | 27 | 136 | 116 | 300 |
| 10040250W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE/FLAT BASE NARROW | LARGE | NONE | 27 | 136 | 116 | 300 |
| 10040250 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE/FLAT BASE NARROW | SMALL | NONE | 27 | 136 | 116 | 300 |
| 10040260W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE/FLAT BASE NARROW | LARGE | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040260 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040455W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | TAPPED M35 FOR NOSE | LARGE | NYLON | 27 | 136 | 116 | 300 |
| 10040455 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | TAPPED M35 FOR NOSE | SMALL | NYLON | 27 | 136 | 116 | 300 |
| 10040555W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE | LARGE | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040650W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 136 | 116 | 300 |

Hand Drilling, Countersinking & Spotfacing

| MODEL | INPUT STYLE | SHANK | | CUTTER | STROKE | VACUUM | MOUNTING | WINDOW | NOSE INSERT | DIAMETER MAX. | OVERALL LENGTH MAX | OVERALL LENGTH MIN | WEIGHT |
|-----------|------------------|-------|----|---------|--------|--------|-----------------------|--------|------------------------|---------------|--------------------|--------------------|--------|
| | | IN | MM | THREAD | MM | | BASE STYLE | SIZE | STYLE | MM | MM | MM | G |
| 10040650 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | 22 | NO | NONE/FLAT BASE | SMALL | NONE | 27 | 136 | 116 | 300 |
| 10040000W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 136 | 116 | 300 |
| 10040200W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | NONE/FLAT BASE NARROW | LARGE | NONE | 27 | 136 | 116 | 300 |
| 10040210W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | NONE/FLAT BASE NARROW | LARGE | NONE | 27 | 136 | 116 | 300 |
| 10040210 | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | NONE/FLAT BASE NARROW | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040405W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | TAPPED M35 FOR NOSE | LARGE | NYLON | 27 | 136 | 116 | 300 |
| 10040405 | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | TAPPED M35 FOR NOSE | SMALL | NYLON | 27 | 136 | 116 | 300 |
| 10040505W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | NONE | LARGE | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040505 | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | NONE | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040600W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 22 | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 136 | 116 | 300 |
| 10040720 | 3/8"-24 | 0.28 | 7 | M6 X 1 | 22 | NO | NONE/FLAT BASE | SMALL | NONE | 27 | 136 | 116 | 300 |
| 10040730 | 3/8"-24 | 0.28 | 7 | M6 X 1 | 22 | NO | NONE | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040740 | 3/8"-24 | 0.28 | 7 | M6 X 1 | 22 | NO | TAPPED M35 FOR NOSE | SMALL | NYLON | 27 | 136 | 116 | 300 |
| 10040750 | 3/8"-24 | 0.28 | 7 | M6 X 1 | 22 | NO | NONE | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 136 | 116 | 300 |
| 10040760 | 3/8"-24 | 0.28 | 7 | M6 X 1 | 22 | NO | NONE/FLAT BASE | SMALL | NONE | 27 | 136 | 116 | 300 |

Hand Drilling, Countersinking & Spotfacing

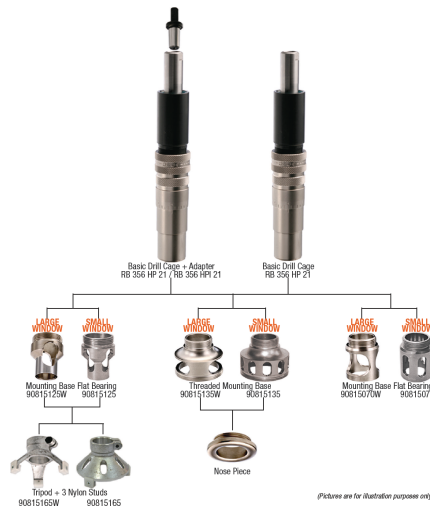
RB 356 HP 38 | RBI 356 HP 38 | RB 356 HPI 38 - Microstop Cage

Stroke 38mm/1.49"

Cutter Thread M6 x 1 or 1/4"-28

Input shank 7mm/0.28", No 1 Jacobs Taper, 3/8"-24 Female Thread

- Detachable spindle adaptor provides alternative methods for use:
 - In combination with 3 jaw chuck.
 - Mounting direct onto machine spindle using No 1 Jacobs taper or 3/8"-24 Threaded Input Option. This method provides increased level of concentricity, while reducing the length and weight of the drill / tool assembly. This results in better performance, improved machining and less fatigue on the operator.
- Cemented, hardened and ground chrome-nickel steel spindle mounted on 3 needle-bearings and a thrust bearing.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | NOSE INSERT STYLE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-----------|------------------|-------|----|------------------|--------------|--------|--------------------------|----------------|------------------------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | | |
| 10045050W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 183 | 168 | 375 |
| 10045050 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | | NO | NONE/FLAT BASE | SMALL | NONE | 27 | 183 | 168 | 375 |
| 10045260W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | | NO | NONE/FLAT BASE NARROW | LARGE | TRIPOD + 3 NYLON STUDS | 27 | 183 | 168 | 375 |
| 10045455 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | | NO | TAPPED M35 FOR NOSE | SMALL | NYLON | 27 | 183 | 168 | 375 |
| 10045555 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | | NO | NONE/FLAT BASE | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 183 | 168 | 375 |
| 10045650W | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 183 | 168 | 375 |
| 10045650 | JT1 WITH ADAPTOR | 0.28 | 7 | 1/4"-28 | | NO | NONE/FLAT BASE | SMALL | NONE | 27 | 183 | 168 | 375 |
| 10045700W | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 183 | 168 | 375 |
| 10045720W | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE NARROW | LARGE | NONE | 27 | 183 | 168 | 375 |
| 10045720 | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE NARROW | SMALL | NONE | 27 | 183 | 168 | 375 |

Hand Drilling, Countersinking & Spotfacing

| MODEL | INPUT STYLE | SHANK | | CUTTER | STROKE | VACUUM | MOUNTING | WINDOW | NOSE INSERT | DIAMETER MAX. | OVERALL LENGTH MAX | OVERALL LENGTH MIN | WEIGHT |
|-----------|------------------|-------|----|--------|--------|--------|-----------------------|--------|------------------------|---------------|--------------------|--------------------|--------|
| | | IN | MM | THREAD | MM | | BASE STYLE | SIZE | STYLE | MM | MM | MM | G |
| 10045730W | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE NARROW | LARGE | TRIPOD + 3 NYLON STUDS | 27 | 183 | 168 | 375 |
| 10045730 | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE NARROW | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 183 | 168 | 375 |
| 10045740W | 3/8"-24 | | | M6 X 1 | 38 | NO | TAPPED M35 FOR NOSE | LARGE | NYLON | 27 | 183 | 168 | 375 |
| 10045740 | 3/8"-24 | | | M6 X 1 | 38 | NO | TAPPED M35 FOR NOSE | SMALL | NYLON | 27 | 183 | 168 | 375 |
| 10045750W | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE | LARGE | TRIPOD + 3 NYLON STUDS | 27 | 183 | 168 | 375 |
| 10045750 | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 183 | 168 | 375 |
| 10045760W | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 183 | 168 | 375 |
| 10045760 | 3/8"-24 | | | M6 X 1 | 38 | NO | NONE/FLAT BASE | SMALL | NONE | 27 | 183 | 168 | 375 |
| 10045200W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 38 | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 183 | 168 | 375 |
| 10045405W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 38 | NO | TAPPED M35 FOR NOSE | LARGE | NYLON | 27 | 183 | 168 | 375 |
| 10045405 | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 38 | NO | TAPPED M35 FOR NOSE | SMALL | NYLON | 27 | 183 | 168 | 375 |
| 10045505 | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 38 | NO | NONE/FLAT BASE | SMALL | TRIPOD + 3 NYLON STUDS | 27 | 183 | 168 | 375 |
| 10045600W | JT1 WITH ADAPTOR | 0.28 | 7 | M6 X 1 | 38 | NO | NONE/FLAT BASE | LARGE | NONE | 27 | 183 | 168 | 375 |

Hand Drilling, Countersinking & Spotfacing

RB 356HP58 - Microstop Cage

Stroke 58mm/2.3"

Cutter Thread M10 x 1 and 7/16"-20

- Detachable spindle adaptor No 1 Jacobs Taper provides alternative methods for use:
 - In combination with 3 jaw chuck with 10mm/0.39" shank input.
 - Mounting direct onto machine spindle using No 1 Jacobs Taper. This method provides increased level of concentricity, while reducing the length and weight of the drill / tool assembly. This results in better performance, improved machining and less fatigue on the operator.
- Cemented, hardened and ground chrome-nickel steel spindle mounted on 3 needle-bearings and a thrust bearing.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | INPUT STYLE | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-----------|------------------|-------|----|------------------|--------------|--------|------------------------|----------------|------------------------|--------------------------------|--------------------------------|-------------|
| | | IN | MM | | | | | | | | | |
| 10050050W | JT1 WITH ADAPTOR | 0.276 | 7 | 7/16"- 20 F | 58 | NO | FLAT BEARING | LARGE | 38 | 292 | 264 | 970 |
| 10050050 | JT1 WITH ADAPTOR | 0.276 | 7 | 7/16"- 20 F | 58 | NO | FLAT BEARING | SMALL | 38 | 292 | 264 | 970 |
| 10050000W | JT1 WITH ADAPTOR | 0.276 | 7 | M10 X 1 | 58 | NO | FLAT BEARING | LARGE | 38 | 292 | 264 | 970 |
| 10050000 | JT1 WITH ADAPTOR | 0.276 | 7 | M10 X 1 | 58 | NO | FLAT BEARING | SMALL | 38 | 292 | 264 | 970 |

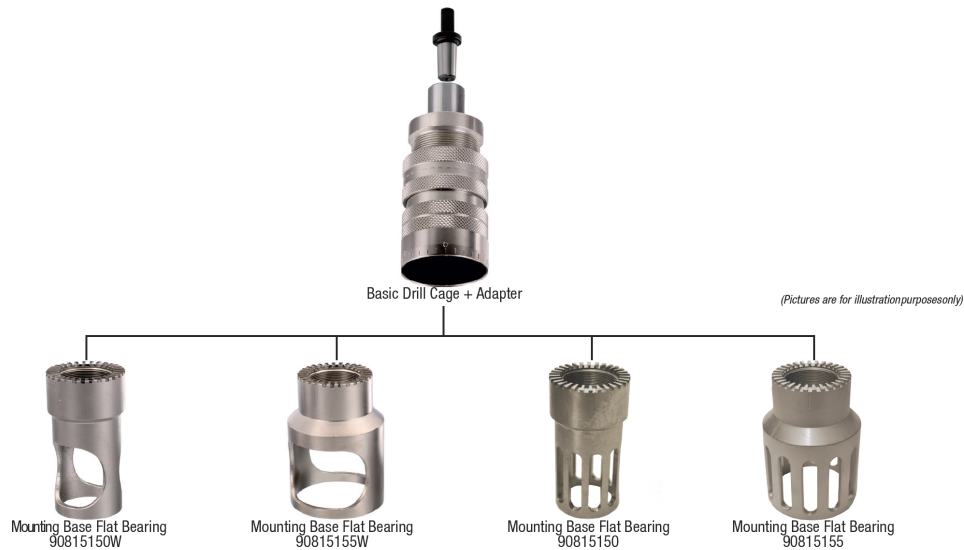
Hand Drilling, Countersinking & Spotfacing

RB 406 - Microstop Cage

Stroke 14mm/0.55"

Cutter Thread M10 x 1

- This drill cage has been designed for use with cutter of 7/8" to 1.1/2" dia.
- Different mounting bases available
- Detachable spindle adaptor Jacobs No 1 taper provides alternative methods for use :
 - - In combination with 3 jaw chuck using 10mm/0.39" shank.
 - - Mounting direct onto machine spindle using Jacobs No 1 taper. This method provides increased level of concentricity, while reducing the length and weight of the drill / tool assembly. This results in better performance, improved machining and less fatigue on the operator.
- Cemented, hardened and ground chrome-nickel steel spindle mounted on 3 needle-bearings and a thrust bearing.
- Microstop depth adjustment (1 scale division = .001").
- Microstop depth setting is held securely in place by locknut with seal. This patented feature allows an easy loosening of the locknut without damage to the drill cage.



| MODEL | SHANK | | CUTTER THREAD | STROKE MM | VACUUM | MOUNTING BASE STYLE | WINDOW SIZE | DIAMETER MAX. MM | OVERALL LENGTH MAX MM | OVERALL LENGTH MIN MM | WEIGHT G |
|-----------|-------|----|------------------|--------------|--------|------------------------|----------------|------------------------|--------------------------------|--------------------------------|-------------|
| | IN | MM | | | | | | | | | |
| 10030105W | 0.39 | 10 | M10 X 1 | 14 | NO | NONE/FLAT BASE | LARGE | 36 | 163 | 136 | 545 |
| 10030010W | 0.39 | 10 | M10 X 1 | 14 | NO | NONE/FLAT BASE | LARGE | 36 | 163 | 136 | 545 |
| 10030010 | 0.39 | 10 | M10 X 1 | 14 | NO | NONE/FLAT BASE | SMALL | 36 | 163 | 136 | 545 |
| 10030105 | 0.39 | 10 | M10 X 1 | 14 | NO | NONE/FLAT BASE | SMALL | 36 | 163 | 136 | 545 |

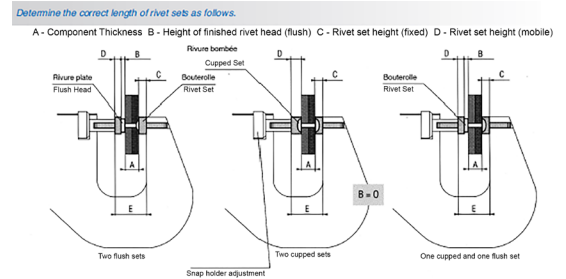
Riveting

RB41/RB42 Series - Compression Riveter - C-Yoke Type

Up to 3/16" | 4.8mm Capacity Al rivets



- Smooth controlled throttle movement for fast and slow approach.
- Equipped with a safety throttle lever.
- Standard C Yoke Jaws - Special Versions Available
- The operator can adjust exactly the position of the rivet by adjusting the snap holder (stroke 3mm/0.12"). This allows the operator to use the same rivet set for different thicknesses.
- Different force/capacity options to suit the specific riveting requirements
- Select Rivet Set from:-
- RB 400 for countersink rivets
- RB 401 for universal head type rivets
- RB 402 for special reduced universal head rivets
- To develop maximum power the riveter must squeeze the rivet near to the end of the riveting stroke. Therefore, the combined length of the two rivets sets must be correct.
- Determine the correct length of rivet sets as shown



| MODEL | RIVET SQUEEZER SET SHANK DIAMETER | CAPACITY ALUMINUM RIVETS | MAXIMUM FORCE | REACH | GAP | MAX TRAVEL | WEIGHT | LENGTH |
|----------|-----------------------------------|--------------------------|-----------------|-----------------|-----------|------------|--------|--------|
| | | MM IN | T LB | MM IN | MM IN | MM IN | LB | IN |
| 60103010 | STD DIAMETER 5 MM | 3.6MM 9/64IN | 1.4T 3090 LBS | 50 MM 2.00 IN | 36 1.41 | 35 1.38 | 4.8 | 10.8 |
| 60103110 | STD DIAMETER 3/16" | 3.6MM 9/64IN | 1.4T 3090 LBS | 50 MM 2.00 IN | 36 1.41 | 35 1.38 | 4.8 | 10.8 |
| 60102010 | STD DIAMETER 5 MM | 4.8MM 3/16IN | 2.2T 4850 LBS | 50 MM 2.00 IN | 35 1.38 | 34 1.34 | 6.7 | 13.4 |
| 60102110 | STD DIAMETER 3/16" | 4.8MM 3/16IN | 2.2T 4850 LBS | 50 MM 2.00 IN | 35 1.38 | 34 1.34 | 6.7 | 13.4 |

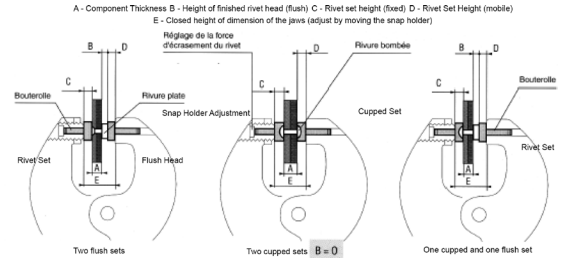
Riveting

RB43/RB40/RB44 Series - Compression Riveter- Alligator Jaw Type

Up to 7/32" | 5.6mm Capacity Al rivets



- Smooth controlled throttle movement for fast and slow approach.
- Equipped with a safety throttle lever.
- Standard Alligator Jaws - Special Versions Available
- The operator can adjust exactly the position of the rivet by adjusting the snap holder (stroke 5 mm/0.12"). This allows the operator to use the same rivet set for different thicknesses.
- Different force/capacity options to suit the specific riveting requirements
- Select Rivet Set from:-
- RB 400 for countersink rivets
- RB 401 for universal head type rivets
- RB 402 for special reduced universal head rivets
- To develop maximum power the riveter must squeeze the rivet near to the end of the riveting stroke. Therefore, the combined length of the two rivets sets must be correct.
- Determine the correct length of rivet sets as shown.



| MODEL | RIVET SQUEEZER SET SHANK DIAMETER | CAPACITY ALUMINUM RIVETS | MAXIMUM FORCE | REACH | GAP | MAX TRAVEL | WEIGHT | LENGTH |
|----------|-----------------------------------|--------------------------|-----------------|-----------------|-----------------|-----------------|---------|---------|
| | | MM IN | T LB | MM IN | MM IN | MM IN | LB | IN |
| 60104010 | STD DIAMETER 5 MM | 3.6MM 9/64IN | 1.4T 3090 LBS | 60 MM 2.36 IN | 55 MM 2.16 IN | 49 MM 1.93 IN | 4.59 LB | 9.7 IN |
| 60104110 | STD DIAMETER 3/16" | 3.6MM 9/64IN | 1.4T 3090 LBS | 60 MM 2.36 IN | 55 MM 2.16 IN | 49 MM 1.93 IN | 4.59 LB | 9.7 IN |
| 60101020 | STD DIAMETER 5 MM | 3.6MM 9/64IN | 1.8T 3970 LBS | 85 MM 3.35 IN | 55 MM 2.16 IN | 49 MM 1.93 IN | 6.8 LB | 15.4 IN |
| 60101120 | STD DIAMETER 3/16" | 3.6MM 9/64IN | 1.8T 3970 LBS | 85MM 3.35 IN | 55 MM 2.16 IN | 49 MM 1.93 IN | 6.8 LB | 15.4 IN |
| 60101010 | STD DIAMETER 5 MM | 4.8MM 3/16IN | 2.6T 5730 LBS | 60 MM 2.36 IN | 55 MM 2.16 IN | 49 MM 1.93 IN | 6.7 LB | 14.4 IN |
| 60101110 | STD DIAMETER 3/16" | 4.8MM 3/16IN | 2.6T 5730 LBS | 60 MM 2.36 IN | 55 MM 2.16 IN | 49 MM 1.93 IN | 6.7 LB | 14.4 IN |
| 60110010 | STD DIAMETER 5 MM | 5.6MM 7/32IN | 3T 6610 LBS | 58 MM 2.28 IN | 35 MM 1.38 IN | 45 MM 1.77 IN | 11.2 LB | 16.8 IN |

Riveting

RB46 Series - Pressure Riveting Unit for C Yoke or Alligator Jaws

Up to 5/16" / 8mm Capacity Al rivets



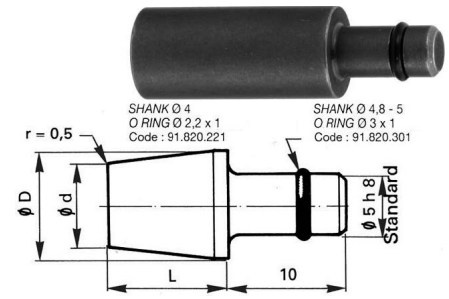
- The RB 46 pressure riveting assembly comprises a hydropneumatic generator, a hydraulic cylinder and a regulator for setting the force (max. 7 tonnes). It uses various standard and special yokes to form solid rivets made from various materials.
- It is easy to use and adjust, making it suitable for all riveting operations on assembly rigs and for maintenance repairs.
- The work cycle is performed automatically after initiation by the operator.
 - quick feed at low pressure until rivet contact
 - high pressure squeezing at preset forces
 - automatic return.
- The principle of this riveting assembly is based on automatic control of the squeezing force ; no additional adjustment is required to squeeze rivets of the same type, diameter and material on assemblies of varying thicknesses.
- An adjusting nut can be used to reduce the return stroke to shorten the riveting time.

| MODEL | LIGHT ALLOY | CAPACITY MONEL | HOSE LENGTH | START CONTROL | MAX CYLINDER STROKE | MAXIMUM FORCE | MINIMUM FORCE | JAWS |
|----------|-------------|----------------|-------------|----------------------------|---------------------|----------------|----------------|---|
| | MM IN | MM IN | M FT | | MM IN | T LB | T LB | |
| 60203006 | 8 5/16 | 6.35 1/4 | 1.80 5.9 | MANUAL CONTROL ON CYLINDER | 50 2 | 7T 15400 LBS | 0.4T 880 LBS | CUSTOM ALLIGATOR OR C YOKE JAWS TO SUIT APPLICATION |
| 60203016 | 8 5/16 | 6.35 1/4 | 1.80 5.9 | REMOTE PEDAL CONTROL | 50 2 | 7T 15400 LBS | 0.4T 880 LBS | CUSTOM ALLIGATOR OR C YOKE JAWS TO SUIT APPLICATION |
| 60203106 | 8 5/16 | 6.35 1/4 | 3 9.8 | MANUAL CONTROL ON CYLINDER | 50 2 | 7T 15400 LBS | 0.4T 880 LBS | CUSTOM ALLIGATOR OR C YOKE JAWS TO SUIT APPLICATION |
| 60203116 | 8 5/16 | 6.35 1/4 | 3 9.8 | REMOTE PEDAL CONTROL | 50 2 | 7T 15400 LBS | 0.4T 880 LBS | CUSTOM ALLIGATOR OR C YOKE JAWS TO SUIT APPLICATION |

Riveting

RB400 - Rivet Set - Countersunk Rivets

- For Countersink Rivets



| MODEL | SHANK | RIVET DIAMETER | LENGTH | | DIAMETER MIN | | DIAMETER MAX | | USED ON |
|----------|-------|-------------------------------------|--------|-------|--------------|-------|--------------|-------|--|
| | | | MM | IN | MM | IN | MM | IN | |
| 60701005 | 4H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 4 | 0.157 | 7 | 0.276 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60701020 | 4H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 7 | 0.276 | 7 | 0.276 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60701205 | 4H8 | 3.2 MM 3.6 MM 1/16 IN 3/32 IN | 4 | 0.157 | 9 | 0.354 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60701220 | 4H8 | 3.2 MM 3.6 MM 1/16 IN 3/32 IN | 7 | 0.276 | 9 | 0.354 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60703005 | 5H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 4 | 0.157 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703020 | 5H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 7 | 0.276 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703040 | 5H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 10 | 0.394 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703055 | 5H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 12.5 | 0.492 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703075 | 5H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 16 | 0.63 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703095 | 5H8 | 1.6 MM 2.4 MM 1/16 IN 3/32 IN | 20 | 0.787 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703220 | 5H8 | 3.2 MM 3.6 MM 1/16 IN 3/32 IN | 7 | 0.276 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703240 | 5H8 | 3.2 MM 3.6 MM 1/16 IN 3/32 IN | 10 | 0.394 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703255 | 5H8 | 3.2 MM 3.6 MM 1/16 IN 3/32 IN | 12.5 | 0.492 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703275 | 5H8 | 3.2 MM 3.6 MM 1/16 IN 3/32 IN | 16 | 0.63 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703295 | 5H8 | 3.2 MM 3.6 MM 1/16 IN 3/32 IN | 20 | 0.787 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703405 | 5H8 | 4 MM 5/32 IN | 4 | 0.157 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703420 | 5H8 | 4 MM 5/32 IN | 7 | 0.276 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703440 | 5H8 | 4 MM 5/32 IN | 10 | 0.394 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703455 | 5H8 | 4 MM 5/32 IN | 12.5 | 0.492 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703475 | 5H8 | 4 MM 5/32 IN | 16 | 0.63 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703495 | 5H8 | 4 MM 5/32 IN | 20 | 0.787 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703505 | 5H8 | 4.8 MM 3/16 IN | 4 | 0.157 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703520 | 5H8 | 4.8 MM 3/16 IN | 7 | 0.276 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703540 | 5H8 | 4.8 MM 3/16 IN | 10 | 0.394 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703555 | 5H8 | 4.8 MM 3/16 IN | 12.5 | 0.492 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703575 | 5H8 | 4.8 MM 3/16 IN | 16 | 0.63 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703595 | 5H8 | 4.8 MM 3/16 IN | 20 | 0.787 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |

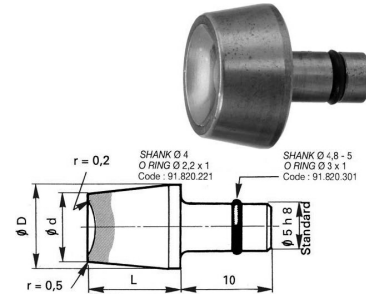
Riveting

| MODEL | SHANK | RIVET DIAMETER | LENGTH | | DIAMETER MIN | | DIAMETER MAX | | USED ON |
|----------|-------|------------------------------------|--------|-------|--------------|------|--------------|------|--|
| | | | MM | IN | MM | IN | MM | IN | |
| 60703605 | 5H8 | 5.6 MM 6.4 MM 7/32 IN 1/4 IN | 4 | 0.157 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703620 | 5H8 | 5.6 MM 6.4 MM 7/32 IN 1/4 IN | 7 | 0.276 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703640 | 5H8 | 5.6 MM 6.4 MM 7/32 IN 1/4 IN | 10 | 0.394 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703655 | 5H8 | 5.6 MM 6.4 MM 7/32 IN 1/4 IN | 12.5 | 0.492 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703675 | 5H8 | 5.6 MM 6.4 MM 7/32 IN 1/4 IN | 16 | 0.63 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60703695 | 5H8 | 5.6 MM 6.4 MM 7/32 IN 1/4 IN | 20 | 0.787 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |

Riveting

RB401 - Rivet Set - Universal Head Type Rivets

- For Universal Head Type Rivets



| MODEL | SHANK | RIVET DIAMETER | LENGTH | | DIAMETER MIN | | DIAMETER MAX | | USED ON |
|----------|-------|------------------|--------|-------|--------------|-------|--------------|-------|--|
| | | | MM | IN | MM | IN | MM | IN | |
| 60711105 | 4H8 | 2.4 MM 3/32 IN | 4 | 0.157 | 7 | 0.276 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60711120 | 4H8 | 2.4 MM 3/32 IN | 7 | 0.276 | 7 | 0.276 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60711205 | 4H8 | 2.4 MM 3/32 IN | 4 | 0.157 | 9 | 0.354 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60711220 | 4H8 | 2.4 MM 3/32 IN | 7 | 0.276 | 9 | 0.354 | 9 | 0.354 | •RB 40-13-30 HAND RIVETER |
| 60713105 | 5H8 | 2.4 MM 3/32 IN | 4 | 0.157 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713120 | 5H8 | 2.4 MM 3/32 IN | 7 | 0.276 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713140 | 5H8 | 2.4 MM 3/32 IN | 10 | 0.394 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713155 | 5H8 | 2.4 MM 3/32 IN | 12.5 | 0.492 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713175 | 5H8 | 2.4 MM 3/32 IN | 16 | 0.63 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713195 | 5H8 | 2.4 MM 3/32 IN | 20 | 0.787 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713205 | 5H8 | 3.2 MM 1/8 IN | 4 | 0.157 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713220 | 5H8 | 3.2 MM 1/8 IN | 7 | 0.276 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713240 | 5H8 | 3.2 MM 1/8 IN | 10 | 0.394 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713255 | 5H8 | 3.2 MM 1/8 IN | 12.5 | 0.492 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713275 | 5H8 | 3.2 MM 1/8 IN | 16 | 0.63 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713295 | 5H8 | 3.2 MM 1/8 IN | 20 | 0.787 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713405 | 5H8 | 4 MM 5/32 IN | 4 | 0.157 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713420 | 5H8 | 4 MM 5/32 IN | 7 | 0.276 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713440 | 5H8 | 4 MM 5/32 IN | 10 | 0.394 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713455 | 5H8 | 4 MM 5/32 IN | 12.5 | 0.492 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713475 | 5H8 | 4 MM 5/32 IN | 16 | 0.63 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713495 | 5H8 | 4 MM 5/32 IN | 20 | 0.787 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713505 | 5H8 | 4.8 MM 3/26 IN | 4 | 0.157 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713520 | 5H8 | 4.8 MM 3/26 IN | 7 | 0.276 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713540 | 5H8 | 4.8 MM 3/26 IN | 10 | 0.394 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713555 | 5H8 | 4.8 MM 3/26 IN | 12.5 | 0.492 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713575 | 5H8 | 4.8 MM 3/26 IN | 16 | 0.63 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |

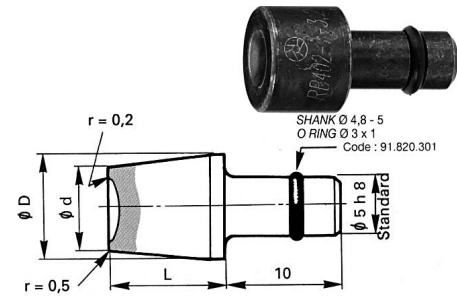
Riveting

Riveting

| MODEL | SHANK | RIVET DIAMETER | LENGTH | | DIAMETER MIN | | DIAMETER MAX | | USED ON |
|----------|-------|------------------|--------|-------|--------------|-------|--------------|-------|--|
| | | | MM | IN | MM | IN | MM | IN | |
| 60713595 | 5H8 | 4.8 MM 3/26 IN | 20 | 0.787 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713605 | 5H8 | 5.6 MM 7/32 IN | 4 | 0.157 | 14 | 0.551 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713620 | 5H8 | 5.6 MM 7/32 IN | 7 | 0.276 | 14 | 0.551 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713640 | 5H8 | 5.6 MM 7/32 IN | 10 | 0.394 | 14 | 0.551 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713655 | 5H8 | 5.6 MM 7/32 IN | 12.5 | 0.492 | 14 | 0.551 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713675 | 5H8 | 5.6 MM 7/32 IN | 16 | 0.63 | 14 | 0.551 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713695 | 5H8 | 5.6 MM 7/32 IN | 20 | 0.787 | 14 | 0.551 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713705 | 5H8 | 6.4 MM 1/4 IN | 4 | 0.157 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713720 | 5H8 | 6.4 MM 1/4 IN | 7 | 0.276 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713740 | 5H8 | 6.4 MM 1/4 IN | 10 | 0.394 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713755 | 5H8 | 6.4 MM 1/4 IN | 12.5 | 0.492 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713775 | 5H8 | 6.4 MM 1/4 IN | 16 | 0.63 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60713795 | 5H8 | 6.4 MM 1/4 IN | 20 | 0.787 | 16 | 0.63 | 16 | 0.63 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |

Riveting

RB402 - Rivet Set - Special Reduced Universal Head Rivets



- For Special Reduced Universal Head Rivets

| MODEL | SHANK | RIVET DIAMETER | LENGTH | | DIAMETER MIN | | DIAMETER MAX | | USED ON |
|----------|-------|------------------|--------|-------|--------------|-------|--------------|-------|--|
| | | | MM | IN | MM | IN | MM | IN | |
| 60723105 | 5H8 | 2.4 MM 3/32 IN | 4 | 0.157 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723120 | 5H8 | 2.4 MM 3/32 IN | 7 | 0.276 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723140 | 5H8 | 2.4 MM 3/32 IN | 10 | 0.394 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723155 | 5H8 | 2.4 MM 3/32 IN | 12.5 | 0.492 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723175 | 5H8 | 2.4 MM 3/32 IN | 16 | 0.63 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723195 | 5H8 | 2.4 MM 3/32 IN | 20 | 0.787 | 7 | 0.276 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723205 | 5H8 | 3.2 MM 1/8 IN | 4 | 0.157 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723220 | 5H8 | 3.2 MM 1/8 IN | 7 | 0.276 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723240 | 5H8 | 3.2 MM 1/8 IN | 10 | 0.394 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723255 | 5H8 | 3.2 MM 1/8 IN | 12.5 | 0.492 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723275 | 5H8 | 3.2 MM 1/8 IN | 16 | 0.63 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723295 | 5H8 | 3.2 MM 1/8 IN | 20 | 0.787 | 9 | 0.354 | 9 | 0.354 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723405 | 5H8 | 4 MM 5/32 IN | 4 | 0.157 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723420 | 5H8 | 4 MM 5/32 IN | 7 | 0.276 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723440 | 5H8 | 4 MM 5/32 IN | 10 | 0.394 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723455 | 5H8 | 4 MM 5/32 IN | 12.5 | 0.492 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723475 | 5H8 | 4 MM 5/32 IN | 16 | 0.63 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723495 | 5H8 | 4 MM 5/32 IN | 20 | 0.787 | 10 | 0.394 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723505 | 5H8 | 4.8 MM 3/32 IN | 4 | 0.157 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723520 | 5H8 | 4.8 MM 3/32 IN | 7 | 0.276 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723540 | 5H8 | 4.8 MM 3/32 IN | 10 | 0.394 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723555 | 5H8 | 4.8 MM 3/32 IN | 12.5 | 0.492 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723575 | 5H8 | 4.8 MM 3/32 IN | 16 | 0.63 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723595 | 5H8 | 4.8 MM 3/32 IN | 20 | 0.787 | 12 | 0.472 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723605 | 5H8 | 5.6 MM 7/32 IN | 4 | 0.157 | 14 | 0.551 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |

Riveting

| MODEL | SHANK | RIVET DIAMETER | LENGTH | | DIAMETER MIN | | DIAMETER MAX | | USED ON |
|----------|-------|------------------|--------|-------|--------------|-------|--------------|-------|--|
| | | | MM | IN | MM | IN | MM | IN | |
| 60723620 | 5H8 | 5.6 MM 7/32 IN | 7 | 0.276 | 14 | 0.551 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723640 | 5H8 | 5.6 MM 7/32 IN | 10 | 0.394 | 14 | 0.551 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723655 | 5H8 | 5.6 MM 7/32 IN | 12.5 | 0.492 | 14 | 0.551 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723675 | 5H8 | 5.6 MM 7/32 IN | 16 | 0.63 | 14 | 0.551 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |
| 60723695 | 5H8 | 5.6 MM 7/32 IN | 20 | 0.787 | 14 | 0.551 | 14 | 0.551 | •RB 41-17-70 HAND RIVETER •ALL COMPRESSION RIVETERS RB41-17-70 HAND RIVETER |

Rivet Cutting Pliers

- This very simple hand cutting tool includes a microstop adjustment for a clean, precise cut of all aluminium rivets.



| MODEL | MINIMUM UNDERHEAD | RIVET | TOLERANCE OVER |
|-------------|-------------------|--|--------------------|
| | CUTTING LENGTH | DIAMETER | LENGTH |
| 60001000 | 5 MM - 0.197" DIA | 2 MM 2.5 MM 3 MM 3.5 MM 4 MM 5 MM 6 MM | 0,5 MM - 0.02" DIA |
| RC-60001005 | 5 MM - 0.197" DIA | 1/16 IN 3/32 IN 1/8 IN 9/64 IN 5/32 IN 3/16 IN 7/32 IN | 0,5 MM - 0.02" DIA |

Riveting

Ring Cutters

Easy removal of Rivet Rings 4.00 - 8.00mm

- Simple, rugged and handy, this tool has been designed to afford the easy removal of rivet rings (Huck, LGP type or others) without risk of damage to the hole or skin.
- Strong mechanical leverage enables clean removal of rings into two half shells.
- Quick change levers enable the ring cutter to be used in either « in line » or « right angle » position.
- Reduced dimension of the working part.
- No adjustment or setting required for use which is a considerable time-saver for rivet ring removal.
- Removable, quick change anvils.
- Each tool is supplied with 1 set of anvils for one rivet ring diameter.



| MODEL | FASTENER SIZE |
|----------|---------------------|
| 60004000 | 4 MM 0.1579 IN |
| 60004017 | 4.16 MM 0.1638 IN |
| 60004001 | 4.8 MM 0.188 IN |
| 60004005 | 5 MM 0.1969 IN |
| 60004008 | 5.6 MM 0.219 IN |
| 60004010 | 6 MM 0.2362 IN |
| 60004016 | 6.35 MM 0.250 IN |
| 60004015 | 7.94 MM 0.313 IN |

E & F Series - Rivet Hammer

Up to 1/4" Rivets

- For driving 1/8"-1/4" (3-6mm) rivets
- Standard beehive retainer
- Built-in air regulator controls power output
- Spool valve for precise speed control



| MODEL | RETAINER TYPE | BORE | BLOWS PER MINUTE | WEIGHT | LENGTH | AIR INLET SIZE |
|------------|----------------|------|------------------|--------|--------|----------------|
| | | IN | | LB | IN | IN |
| E4-2335 | OPEN | 0.50 | 1600 | 2.6 | 8.4 | 1/4 |
| E4-2336 | OPEN | 0.50 | 1400 | 2.9 | 9.4 | 1/4 |
| F4-PT-RT-B | BEEHIVE SPRING | 0.56 | 1700 | 3.31 | 8.7 | 1/4 |

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 1/4 in / 6.4 mm Standard Equipment: Operating instructions & service manual E4-2335 and E5-2336 have minimum order quantities

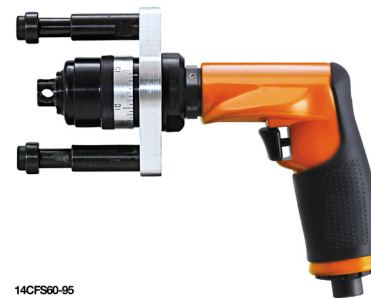
Riveting

14CF / 14CN Series - Rivet Shaver

14CF 0.4hp / 0.3kW 29000rpm

14CN 0.9hp / 0.75kW 20000rpm

- 0.00025 or 0.0005 Cutter Adjustment
- Optional Adjustment Guard 02-8150 or Stabilizer 02-8120 Sold Separately
- These rivet shavers accept skirts for cutters up to 3/4" in diameter - sold separately



| MODEL | DESCRIPTION | SPEED | CUTTER ADJUSTMENT | WEIGHT | | LENGTH | |
|------------|--------------------|-------------|---------------------------|--------|----|--------|-------|
| | | R/MIN | IN | LB | KG | IN | MM |
| 14CFS60-96 | RIVET SHAVER 0.4HP | 29000 R/MIN | 0.0005 CUTTER ADJUSTMENT | 2.20 | 1 | 8.2 | 208.3 |
| 14CFS60-98 | RIVET SHAVER 0.4HP | 29000 R/MIN | 0.00025 CUTTER ADJUSTMENT | 2.20 | 1 | 8.2 | 208.3 |
| 14CNL60-96 | RIVET SHAVER 0.9HP | 20000 R/MIN | 0.0005 CUTTER ADJUSTMENT | 4.41 | 2 | 8.9 | 226.1 |

All tools performance rated @ 90psi / 620 kPa air pressure.
Minimum Hose I.D.: 5/16in / 7.9mmmm

Thickness Gauge

0 to 1/4" (30mm)



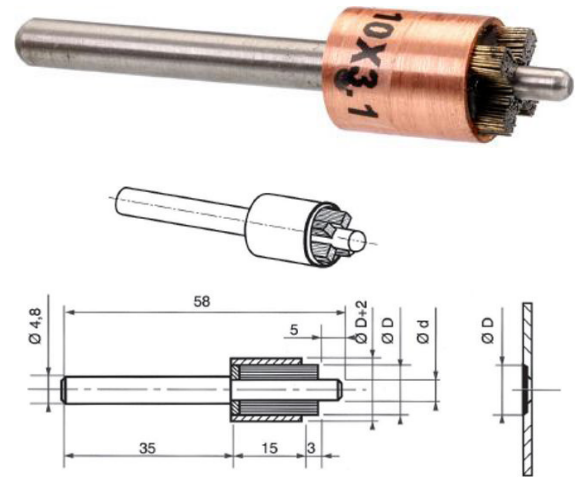
- Simple and handy, equipped with a flexible, highly-efficient safety locking device, this inspection tool is designed for checking all thicknesses from 0 to 1 1/4" (30 mm).
- The accurate scale allows reading to 0.004" (0,1 mm).

| MODEL | DESCRIPTION |
|----------|---------------------------|
| 60901000 | RB 2010 - THICKNESS GAUGE |

Riveting

Wire Brush

- Used for cleaning paint, dirt, rust from around rivet or bolt holes. By placing the pilot in the rivet hole the cleaning process is secure. Assures a positive electrical contact to eliminate static electricity buildup.
- Wire diameter 0.008"
- Solid item, with a steel shank + pilot, nylon body in a copper sleeve, 4 steel brushes set at 90°.
- Backfacing wire brushes, code 32115... and alternative diameters may be manufactured on request



| MODEL | DESCRIPTION | DIAMETER | |
|----------|----------------------------|----------|---------|
| | | SMALL D | LARGE D |
| 32110102 | WIRE BRUSH FOR RIVET HOLES | 2.40 | 10 |
| 32110103 | WIRE BRUSH FOR RIVET HOLES | 2.40 | 12 |
| 32110069 | WIRE BRUSH FOR RIVET HOLES | 2.50 | 10 |
| 32110097 | WIRE BRUSH FOR RIVET HOLES | 3.00 | 12 |
| 32110060 | WIRE BRUSH FOR RIVET HOLES | 3.00 | 13 |
| 32110070 | WIRE BRUSH FOR RIVET HOLES | 3.10 | 10 |
| 32110072 | WIRE BRUSH FOR RIVET HOLES | 3.10 | 12 |
| 32110067 | WIRE BRUSH FOR RIVET HOLES | 3.20 | 8 |
| 32110071 | WIRE BRUSH FOR RIVET HOLES | 3.50 | 10 |
| 32110073 | WIRE BRUSH FOR RIVET HOLES | 3.50 | 12 |
| 32110065 | WIRE BRUSH FOR RIVET HOLES | 4.00 | 10 |
| 32110055 | WIRE BRUSH FOR RIVET HOLES | 4.00 | 12 |
| 32110063 | WIRE BRUSH FOR RIVET HOLES | 4.00 | 14 |
| 32110075 | WIRE BRUSH FOR RIVET HOLES | 4.10 | 16 |
| 32110074 | WIRE BRUSH FOR RIVET HOLES | 4.80 | 12 |
| 32110057 | WIRE BRUSH FOR RIVET HOLES | 4.80 | 13 |
| 32110064 | WIRE BRUSH FOR RIVET HOLES | 4.80 | 14 |
| 32110076 | WIRE BRUSH FOR RIVET HOLES | 4.80 | 16 |
| 32110062 | WIRE BRUSH FOR RIVET HOLES | 4.80 | 18 |
| 32110078 | WIRE BRUSH FOR RIVET HOLES | 5.00 | 10 |
| 32110079 | WIRE BRUSH FOR RIVET HOLES | 5.00 | 12 |
| 32110056 | WIRE BRUSH FOR RIVET HOLES | 5.00 | 13 |
| 32110082 | WIRE BRUSH FOR RIVET HOLES | 5.00 | 14 |
| 32110119 | WIRE BRUSH FOR RIVET HOLES | 5.00 | 16 |
| 32110077 | WIRE BRUSH FOR RIVET HOLES | 5.00 | 20 |
| 32110081 | WIRE BRUSH FOR RIVET HOLES | 5.20 | 14 |
| 32110080 | WIRE BRUSH FOR RIVET HOLES | 6.00 | 14 |
| 32110098 | WIRE BRUSH FOR RIVET HOLES | 6.00 | 16 |
| 32110068 | WIRE BRUSH FOR RIVET HOLES | 6.30 | 14 |
| 32110058 | WIRE BRUSH FOR RIVET HOLES | 6.30 | 16 |
| 32110059 | WIRE BRUSH FOR RIVET HOLES | 7.50 | 14 |
| 32110061 | WIRE BRUSH FOR RIVET HOLES | 7.50 | 23 |
| 32110066 | WIRE BRUSH FOR RIVET HOLES | 7.80 | 20 |
| 32110083 | WIRE BRUSH FOR RIVET HOLES | 9.30 | 21 |