

Material Removal, Pneumatic Assembly and Specialty Tools

## **Model Number Index**

Model	Page	Model	Page	Model	Page	Model	Page	Model	Page	Model	Page
10B1200-32	47	10R9000-08	8	12L2081-01RT	90	12L4018-03	91	135DPV-7B-50	60	14CSL98-38	58
10B2500-01	17	10T4309-62	92	12L2082-01	14	12L4202-80	52	136VGL-135-D3T4	27	14CSL98-40	58
10L1000-36	14	10T4316-62	92	12L2218-36	23	12L4203-80	52	136VGL-180-D3T3	27	14G-810	11
10L1001-36	14	10T4318-62	92	12L2218-36	48	12L4206-80	52	136VGL-180-D3T4	27	15DP-14B-49	60
10L1003-36	14	11T4309-62	92	12L2218-36RT	90	12L4207-80	52	14CFS60-95	102	15DP-1.6B-53	60
10L1080-36	14	11T4316-62	92	12L2240-90	95	12LF200-32	46	14CFS60-98	102	15DP-4B-53	60
10L1081-36	14	11T4318-62	92	12L2251-01	24	12LF200-36	22	14CFS90-38	58	15DP-8B-53	60
10L1082-36	14	12B2080-01	14	12L2251-80	48	12LF200-36	46	14CFS90-40	58	15L1401-37	62
10L1097-36	14	12L1000-36	13	12L2252-01	24	12LF201-32	40	14CFS90-51	58	15L1470-37	62
10L1100-36	19	12L1000-36RT	90	12L2277-36	23	12LF201-36	22	140FS91-38	58	15L1471-37	62
10L1101-36	19	12L1000-30N1	90 13	12L2277-36	23 48	12LF201-36	46	14CFS91-40	58	15L1487-32	62
10L1111-36	19	12L1001-36 12L1001-36RT	90	12L2277-30	40 23	12LF201-30	40 22	14CFS91-40	58	15L1487-36	62
10L1112-36	19	12L1003-36	13	12L2278-36 12L2384-01	48	12LF280-36 12LF281-36	46	14CFS92-38 14CFS92-40	58	15L1487-38	62
10L1180-36	19	12L1010-36	103		23		22		58	15L1488-36	62
10L1181-36	19	12L1028-36	13	12L2384-B1	50	12LF281-36	46	14CFS92-51	58	15L1488-38	62
10L1200-32	47	12L1031-36	103	12L2384-K1	50	12R0380-13	9	14CFS93-38	58	15L1489-32	62
10L2000-01	15	12L1045-36	13	12L2500-01	16	12R0380-18	9	14CFS93-40	58	15L1489-36	62
10L2000-01RT	91	12L1046-36	13	12L2500-01RT	91	12R0380-43	9	14CFS93-51	58	15L1489-38	62
10L2000-36	15	12L1080-36	13	12L2500-36	16	12R0400-13	10	14CFS93-98	102	15L1489-51	62
10L2002-36	15	12L1081-36	13	12L2502-01	16	12R0400-18	10	14CFS93-99	102	15LF051-38	62
10L2005-01	15	12L1082-36	13	12L2502-01RT	91	12R0400-43	10	14CFS94-38	58	15LF052-38	62
10L2080-01	15	12L1088-01	51	12L2542-01	16	12R0410-13	10	14CFS94-40	58	15LF053-38	62
10L2080-36	15	12L1092-01	51	12L2545-01	16	12R0410-16	10	14CFS94-51	58	15LF054-38	62
10L2081-01	15	12L1093-01	51	12L2548-01	16	12R0410-18	10	14CFS95-38	58	15LF055-38	62
10L2082-01	15	12L1100-36	19	12L2562-01	16	12R0410-43	10	14CFS95-40	58	15LF080-38	62
10L2500-01	17	12L1101-36	19	12L2565-01	16	12R0500-36	13	14CFS95-51	58	15LF081-38	62
10L2500-01RT	91	12L1111-36	19	12L2568-01	16	12R9180-03	8	14CFS96-38	58	15LF081-40	62
10L2500-36	17	12L1112-36	19	12L2580-01	16	12R9180-08	8	14CFS96-40	58	15LF082-38	62
10L2502-01	17	12L1180-36	19	12L2580-0124RT	91	12R9180-43	8	14CFS96-51	58	15LF082-40	62
10L2562-01	17	12L1181-36	19	12L2580-01RT	91	12R9180-48	8	14CFS97-38	58	15LF083-38	62
10L2565-01	17	12L1200-32	47	12L2580-36	16	12S1008-36	13	14CFS97-40	58	15LF083-40	62
10L2568-01	17	12L1201-32	47	12L2582-01	16	12S1206-02	95	14CFS97-51	58	15LF084-38	62
10L2580-01	17	12L1201-36RT	90	12L2582-0124RT	91	12S1207-02	95	14CHL92-38	59	15LF085-38	62
10L2580-01RT	91	12L1280-32	47	12L2582-01RT	92	12S1273-03	95	14CHL92-40	59	15LF085-40	62
10L2580-36	17	12L1280-36B2	50	12L2592-01	51	12S1274-03	95	14CHL92-51	59	15LF086-38	62
10L2582-01	17	12L1281-32	47	12L2593-01	51	12S1282-02	95	14CHL92-53	59	15LF087-38	62
10L2592-01	51	12L1281-36B2	50	12L2594-01	51	12S1283-02	95	14CHL98-38	59	15LF087-40	62
10L2750-80	49	12L1281-36RT	90	12L2600-01	20	12S1288-02	95	14CHL98-40	59	15LF281-52	63
10L2750-80	52	12L1300-32	47	12L2602-01	20	12S1289-02	95	14CHL98-51	59	15LF281-62	63
10L2751-80	49	12L1300-36	23	12L2662-01	20	12S2674-1A	20	14CHL98-53	59	15LF281Q	63
10L2752-80	49	12L1300-36	47	12L2668-01	20	12S2674-2A	20	14CNL60-95	102	15LF282-52	63
10L2760-80	49	12L1300-36RT	47 90	12L2680-01	20	12S2674-2A	20	14CNL90-38	59	15LF282-62	63
10L2760-80	43 52	12L1301-32	30 47	12L2682-01	20	12S2674-26	20	14CNL90-40	59	15LF282Q	65
				12L2002-01				14CNL91-40			
10L4018-01	91	12L1301-36 12L1301-36	23	12L2714-28	28	12S2674-3C 12S2674-4A	20	14CNL91-51	59 50	15LF283-52 15LF283-62	63 62
10L9500-36	8		47		28		20		59		63 65
10LF200-32	46	12L1302-36	23	12L2718-36	26	12S2674-4C	20	14CNL92-38	59	15LF283Q	65
10LF200-36	22	12L1302-36	47	12L2718-36RT	90	12S2674-5A	20	14CNL92-40	59	15LF284-52	63
10LF200-36	46	12L1380-36	23	12L2750-01	25	12S2674-5C	20	14CNL92-51	59	15LF284-62	63
10LF201-32	46	12L1380-36	47	12L2750-80	49	12S2748-01	96	14CNL92-53	59	15LF284Q	65
10LF201-36	22	12L1380-36RT	90	12L2750-80	52	12S2749-01	96	14CNL95-40	59	15LF285-52	63
10LF201-36	46	12L1381-36	23	12L2751-01	25	12S2774-02	96	14CNL95-51	59	15LF285-62	63
10LF280-36	22	12L1381-36	47	12L2751-80	49	12S2775-01	96	14CNL97-40	59	15LF285Q	65
10LF280-36	46	12L1381-36RT	90	12L2752-01	25	12S2775-03	96	14CNL97-51	59	15LF286-52	63
10LF281-36	22	12L1382-36	23	12L2752-80	49	12S2790-02	96	14CNL97-53	59	15LF286-62	63
10LF281-36	46	12L1382-36	47	12L2760-80	49	12S2792-02	96	14CNL98-38	59	15LF286Q	65
10N1080-01	14	12L1382-36B2	50	12L2760-80	52	12S2793-02	96	14CNL98-40	59	15LF287-52	63
10N1081-36	14	12L1382-36B4	50	12L2761-80	49	12S2794-01	96	14CNL98-51	59	15LF287-62	63
10N2080-01	15	12L2000-01	14	12L2762-80	49	12S2794-02	96	14CNL98-53	59	15LF287Q	65
10N9500-36	8	12L2000-01RT	90	12L2762-80	52	12S4216-01	96	14CSL90-38	58	15LN281-52	64
10R0400-13	9	12L2001-01	14	12L2776-36	26	12S4217-01	96	14CSL90-40	58	15LN281-62	64
10R0400-18	9	12L2001-01RT	90	12L2776-36	48	12S4218-01	96	14CSL91-38	58	15LN281Q	65
10R0401-13	9	12L2002-01	14	12L2777-36	26	12S4225-01	96	14CSL91-40	58	15LN282-62	64
10R0401-16	9	12L2003-01	14	12L2777-36	48	12\$4225-02	96	14CSL92-38	58	15LN282Q	65
10R0401-18	9	12L2062-96	103	12L2778-36	26	12\$4225-03	96	14CSL92-40	58	15LN283-52	64
10R0401-43	9	12L2065-90	95	12L2778-36	48	135DPV-14B-50	60	14CSL95-40	58	15LN283-62	64
10R0412-18	9	12L2000-00	14	12L2780-01	40 25	135DPV-14B-51	60	14CSL95-51	58	15LN283Q	65
10R0414-43	9	12L2080-01	90	12L2782-01	25	135DPV-28B-51	60	14CSL97-40	58	15LN284-52	64
10R9000-03	9	12L2080-0111 12L2081-01	90 14	12L4018-01	23 91	135DPV-7B-43	60	14CSL97-51	58	15LN284-62	64
	0		14		51		00		50	I JEINEO T UL	т

## **Model Number Index**

Internation         End         SEQUAD         SEQUAD         SEQUAD         SEQUAD         MP 2008-3           Internation         SEQUAD         SEQUAD         SEQUAD         SEQUAD         MP 2008-3           Internation         SEQUAD         SEQUAD         SEQUAD         MP 2008-3         MP 2008-4           Internation         SEQUAD         SEQUAD         SEQUAD         MP 2008-4         MP 2008-4           Internation         SEQUAD         SEQUAD         SEQUAD	el	Page	Model	Page	Model	Page	Model	Page	Model	Page
InLAGS-2         64         ISCAUGO         85         2808.0.1154.0375         29         04.30.80-0         101         WT-2119-2           INLAGS-2         64         ISCAUGO         65         2808.0.1154.04764         31         0.4378         71         WT-5210-12           INLAGS-2         64         ISCAUGO         65         2808.0.1160.047         16         0.4507         WT-5210-12           ISLAZS-2         64         ISFAUGO         65         2808.0.160.047         16         0.45037         WT-5210-12           ISLAZS-2         64         ISFAUGO         82         2808.0.163.007         16         0.45037         77         WT-5210-11           ISLAZS-2         64         ISFAUGO         82         2808.0.163.007         16         0.45037         78           ISLAZS-2         61         ISFAUGO         82         2808.0.154.007         16         0.007.378         78           ISLAZS-2         61         ISFAUGO         82         2808.0.154.014         31         0.007.378         78           ISLAZS-2         61         ISTAUGO         64         2808.0.146.04         16         0.000.000         78           ISLAZS-2         61         IS	284Q	65		83	236GLR-115A-D3T4	29	CH-30-HX	101	WP-2109B-8	80
InLAGS-2         64         ISCAUGO         85         2808.0.1154.0375         29         04.30.80-0         101         WT-2119-2           INLAGS-2         64         ISCAUGO         65         2808.0.1154.04764         31         0.4378         71         WT-5210-12           INLAGS-2         64         ISCAUGO         65         2808.0.1160.047         16         0.4507         WT-5210-12           ISLAZS-2         64         ISFAUGO         65         2808.0.160.047         16         0.45037         WT-5210-12           ISLAZS-2         64         ISFAUGO         82         2808.0.163.007         16         0.45037         77         WT-5210-11           ISLAZS-2         64         ISFAUGO         82         2808.0.163.007         16         0.45037         78           ISLAZS-2         61         ISFAUGO         82         2808.0.154.007         16         0.007.378         78           ISLAZS-2         61         ISFAUGO         82         2808.0.154.014         31         0.007.378         78           ISLAZS-2         61         ISTAUGO         64         2808.0.146.04         16         0.000.000         78           ISLAZS-2         61         IS	285-52	64	19SCA05B	83	236GLR-115A-D3T45	29	CH-30-HX-QC	101	WT-2109-8	81
19.4089-82         64         195C/040         83         28.68.4.146.4.416.4         16         0.4379         77         WF2120-12           19.4089         65         195P402         83         28.68.4.160.4.474         85         0.43784         77         WF3210           19.4087-62         64         195P402         83         28.68.4.20-C4         16         0.43784         77         WT5210           19.4087-62         64         195P404         83         28.68.4.20-C4         16         0.43784         77         WT5210           19.4088-82         64         195P408         83         28.68.4.154.4.074         20         0.45307         78           19.32824-52         64         195P408         83         28.68.5.114.6.0714         31         0.453787         78           19.32824-52         64         1970401         83         28.68.5.114.4.071         31         0.453787         78           19.32824-52         64         1970401         84         28.68.5.114.4.071         31         0.453787         78           19.32824-52         64         1970401         84         28.69.5.114.4.071         30         0.453787         78           19.32824-52	285-62	64		83	236GLR-115A-D3T5	29	CH-30-RD	101	WT-2110-8	81
1112.08800         64         195.98020         25         266.41.400.471         16         0.47378.4         77         WTS-2110           12.02807         64         195.98020         65         286.04.400.47         16         0.4500P         77         WTS-2110           12.0287.42         64         195.98030         65         286.04.290.4         16         0.4500P         78           13.0283.42         64         195.98040         65         286.04.790.4         20         0.47250P         78           13.5283.42         64         195.98060         65         286.51.154.0714         20         0.47250P         78           13.5283.42         64         197.0000         85         286.51.154.0714         16         0.47567P         78           13.5285.42         64         197.0000         85         286.51.154.0714         16         0.47567P         78           13.5285.42         64         197.0000         85         286.51.154.0714         16         0.47567P         78           13.5285.42         64         197.0000         85         286.51.154.0714         18         0.47567P         78           13.52856.42         64         197.0000	285Q	65	19SCA06B	83	236GLR-115A-D5T45	29	CH-30-RD-QC	101	WT-2119-12	81
151/2680/0         65         155/8703         83         2648/1400/471         85         07478/44         70         VITS-2119           151/267         65         155/8703         83         2668/1420/44         16         075/8704         70         VITS-210           151/268         64         155/8703         83         2668/1420/44         16         075/8704         70         VITS-210           151/268         64         155/8703         83         2668/143/1404         20         077/2704         70           151/258         64         155/8703         83         2007/2574         70         70           151/258         64         157/0704         82         268/85190/44         16         077/3774         70           151/258         64         197/0400         82         268/8549/74         16         077/3774         70           151/258         64         197/0400         82         268/8549/74         16         077/3774         70           151/258         64         197/0400         82         268/8549/74         10         077/3774         70           151/258         64         197/0400         82         268/854/154/747     <	286-52	64	19SCA06Q	83	236GLR-115A-W3T4	31	CV-375P	77	WT-2120-12	81
BLNB270         64         BSPA030         82         2868.420-CA         16         CA00P         7         VIRS-219           BLNB280         64         BSPA030         82         2869.420-CA         16         CA00P         7           BLNB280-22         64         BSPA040         82         2869.48-336-M074         28         CA750P         7           BLS281-42         64         BSPA050         82         2869.45-156-M074         20         CM-2300C         76           BLS281-42         63         BSPA050         82         2869.5-156-M74         80         CM-230P         78           BLS282-42         64         BSPA050         82         2869.5-156-M74         16         CM-230P         78           BLS282-42         64         BTCA000         84         2869.5-156-M074         16         CM-230P         78           BLS285-42         64         BTCA000         84         2869.5-156-M74         80         CM-230P         78           BLS285-42         64         BTCA000         84         2869.5-158-M74         80         CM-230P         78           BLS285-42         64         BTCA000         84         2869.5-158-M174         80	286-62	64	19SPA02B	83	236GLR-180-C4	16	CV-375R	77	WTS-2109	81
B1M2070         65         19SPA026         82         28/06/1-20-04         10         0-4/000         7           15U2688-52         64         19SPA046         82         28/06/1-34-0474         20         0/7-2006         7           15U2688-52         64         19SPA050         82         28/06/1-154-0574         20         0/7-2006         76           15US281-52         64         19SPA050         82         28/05/1-154-0574         20         0/7-2076         76           15US282-52         64         19TOA20         82         28/05/1-140-0741         10         0/7-3776         76           15US285-62         63         19TOA20         82         28/05/2-140-0741         10         0/7-3776         76           15US285-62         63         19TOA20         82         28/05/2-140-0741         20         0/7-5076         76           15US285-62         63         19TOA20         82         28/05/2-140-0747         20         0/7-5076         76           15US285-62         64         19TOA20         82         28/05/2-140-0737         30         0/7-5076         77           15US285-62         64         19TOA20         82         28/05/2-140-1737	286Q	65	19SPA02Q	83	236GLR-180-W3T4	35	CV-375R-4	77	WTS-2110	81
1512888-52         64         1557A00         82         2562LB-135-AVGT4         28         0.757P         77           161281-122         64         1557A00         82         2562LB-135-AVGT4         29         00C-2500         78           1612828-122         64         1557A050         82         2562LS-115A-D0714         29         00C-375P         78           1612828-22         64         1557A050         82         2562LS-115A-D0714         31         00C-375P         78           1612828-24         64         1670A00         82         2560LS-115A-M0714         31         00C-375P         78           1613828-12         64         1670A00         82         2560LS-115A-M0714         31         00C-375P         78           1613828-12         64         1670A00         82         2560LS-115A-M0714         20         00C-375P         78           1613828-12         64         1670A00         82         2560LS-115A-M0714         20         00C-379P         78           1613828-12         64         1670A00         82         2560L-102-M713         25         00M-37P         79           1613828-12         64         1670A00         82         2560L-102-M713 <td>287-62</td> <td>64</td> <td>19SPA03B</td> <td>83</td> <td>236GLR-200-C4</td> <td>16</td> <td>CV-500P</td> <td>77</td> <td>WTS-2119</td> <td>81</td>	287-62	64	19SPA03B	83	236GLR-200-C4	16	CV-500P	77	WTS-2119	81
111.0288-62         64         1959M08         85         2264,D-135,M-WT4         92         0.0C-290C         78           113.031-62         61         1959M08         82         2263,S-115A-D074         29         00C-290C         78           113.0321-62         61         1959M08         82         2363,S-116A-D074         29         00C-297B         78           113.0328-62         61         1970A00         82         2363,S-14A-MT4         16         00C-377B         78           113.0328-62         61         1970A00         82         2363,S-24A-44         16         00C-300F         78           113.0326-62         61         1970A00         82         2363,S-135A-M074         32         00C-300F         78           113.0326-62         61         1970A00         82         2364,S-135A-M074         32         00C-300F         78           113.0326-62         61         1970A00         82         2364,S-135A-M074         32         00C-300F         78           113.0326-72         61         1970A00         82         2364,L-134-W173         35         0WM-379F         79           113.0326-72         61         1970A00         82         2364,L-134-W173 <td>287Q</td> <td>65</td> <td>19SPA03Q</td> <td>83</td> <td>236GLR-250-C4</td> <td>16</td> <td>CV-500R</td> <td>77</td> <td>WTS-2120</td> <td>81</td>	287Q	65	19SPA03Q	83	236GLR-250-C4	16	CV-500R	77	WTS-2120	81
15.2367+62       64       1597M050       85       2264,D-15+D0714       29       OVC-2500       78         15.2528-52       64       1597M050       85       2264,S-15+D0714       10       OVC-379F       78         15.2528-52       64       1970A00       82       2264,S-16+D074       16       OVC-379F       78         15.2528-52       64       1970A00       82       2264,S-81-D0A4       16       OVC-300F       78         15.2528-52       64       1970A00       82       2264,S-81-D5A4       20       OVC-300F       78         15.2526       64       1970A00       82       2264,S-81-D5A4074       25       OVC-300F       78         15.2526       64       1970A00       82       2264,S-81-D5A4074       25       OVC-300F       79         15.2526       64       1970A00       82       2266,L-10A40737       35       OVC-300F       79         15.2526       64       1970A00       82       2266,L-10A40737       35       DVC-300F       79         15.2527       12       1970A00       82       2266,L-10A40737       35       DVC-3067       79         15.2527       12       1970A00       82	288-52	64	19SPA04B	83	236GLRB-135A-D3T4	28	CV-750P	77		
13.2381-62       63       159N068       63       2563,5-154,00714       29       00C-2008       78         13.2382-52       64       1970400       82       2263,5-154,00714       16       00C-3794       78         13.2382-52       64       1970400       82       2263,5-104,04       16       00C-5079       78         13.2382-52       64       1970400       82       2263,5-104,04       16       00C-5079       78         13.5382-52       64       1970400       84       2263,5-104,04       2       00C-500P       78         13.5382-52       64       1970400       84       2262,5-124,04       2       00C-500P       78         13.5387-52       64       1970400       84       2562,1-124,0473       30       00M-37P       79         13.5387-52       63       1970400       84	288-62	64	19SPA04Q	83	236GLRB-135A-W3T4	32	CV-750P-8	77		
13.2326-22       64       195PA060       82       2963_514A-D5145       29       CMC-375P       78         13.5325-52       64       1970A90       82       2563_5140-C4       16       CMC-375P       78         13.5325-52       63       1970A90       84       2563_5240-C4       16       CMC-375P       78         13.5325-62       64       1970A90       84       2563_5241-54       31       CMC-507P       78         13.5325-62       64       1970A90       84       2563_521-154-C4       25       CMC-375P       79         13.5326-62       64       1970A90       84       2563_521-154-C4       25       CMC-375P       79         13.5326-62       64       1970A90       84       2562_12-124-473       35       OMM-375P       79         13.5326-62       64       1970A90       84       2562_12-124-4737       35       D56-11-6678A       45         13.5326-62       64       1970A90       84       2562_1140-4737       35       D56-11-6678A       45         13.5326-62       63       1970A90       82       2562_1140-4737       35       D56-11-6678A       45         15.7270       12       1970A90 <t< td=""><td>281-52</td><td>64</td><td>19SPA05B</td><td>83</td><td>236GLRE-115A-D5T45</td><td>29</td><td>CWC-250QC</td><td>78</td><td></td><td></td></t<>	281-52	64	19SPA05B	83	236GLRE-115A-D5T45	29	CWC-250QC	78		
13.2328-22       63       1957A0C0       84       2962.5167.44       16       CMC-375R       78         13.5328-52       64       19TCA020       84       2562.540.74       16       CMC-507F       78         13.5328-52       64       19TCA050       84       2562.540.74       16       CMC-507F       78         13.5328-52       64       19TCA050       84       2562.5135.41374       20       CMC-507F       78         13.5328-52       64       19TCA050       84       2562.5135.41374       20       CMC-507F       78         13.5328-52       64       19TCA050       84       2561.512.41374       20       CMC-507F       78         13.5328-52       64       19TCA050       84       2561.512.41473       35       CMM-507F       79         13.5328-52       64       19TCA050       84       2561.512.41473       35       CMM-507F       79         13.5328-52       64       19TCA050       84       2561.512.41473       35       S60-01.6614       45         152.710       12       19TCA050       84       2561.512.41473       35       S60-01.6614       45         156040.415       33       19TTA610	281-62	63	19SPA05Q	83	236GLS-115A-D3T4	29	CWC-250R	78		
13.2328-22       64       19T0A020       84       2960.5-20-0.4       16       00X-507P       78         13.5328-42       63       19T0A040       84       2960.5-20-1.4       16       00X-500P       78         13.5328-52       64       19T0A070       84       2960.5-31.54.04       20       00X-500P       78         13.5328-52       64       19T0A070       84       2960.5-11.54.04       20       00X-500P       78         13.5328-62       64       19T0A070       84       2960.5-11.54.04       20       00X-500P       79         13.5328-62       64       19T0A070       84       2560.1-12.04.07       20       00X-500P       79         13.5327-62       64       19T0A020       84       2560.1-12.04.07       30       00X-500P       79         13.5327-62       63       19T0A020       84       2560.1-10.44.07       35       00X-500P       79         13.5327-62       10       19T0A020       84       2560.1-10.44.07       35       056-01.695A       45         15.2720       12       19T0A020       84       2560.1-10.44.77       30       056-01.695A       45         15.2720       19T0A020       85	282-52	64	19SPA06B	83	236GLS-115A-D5T45	29	CWC-375P	78		
15.3282-92       63       19TCADQ       94       2863.2-340.4       16       0WC-500P       78         15.3282-62       64       19TCADGO       94       2963.95-1354.V314       20       0WC-500P       78         15.3282-62       63       19TCADGO       84       2963.95-1354.V314       25       0WC-750P       79         15.3286-62       63       19TCADGO       84       2963.15-1154.C4       21       0WM-578P       79         15.3287-62       63       19TTADGO       84       2561.C1.120.W3725       35       0WM-500P       79         15.3287-62       63       19TTADGO       84       2561.C1.120.W3713       35       0MM-500P       79         15.2700       12       19TTADGO       84       2561.C1.120.W3714       35       0MM-500P       79         15.2701       12       19TTADGO       84       2561.C1.120.W3714       35       0MM-500P       79         15.2702       13       19TTADGO       84       2561.C1.120.W373       35       0MM-500P       79         15.2703       13       19TTADGO       84       2561.C1.120.W373       35       0MM-500P       78         15.6604.1614       33       19TTADGO <td>282-62</td> <td>63</td> <td>19SPA06Q</td> <td>83</td> <td>236GLS-115A-W3T4</td> <td>31</td> <td>CWC-375R</td> <td>78</td> <td></td> <td></td>	282-62	63	19SPA06Q	83	236GLS-115A-W3T4	31	CWC-375R	78		
115.228-62       61       1970A050       64       2963L59-15A-W374       31       0WC-500Fe       78         15.5285-62       63       1970A050       84       2963L59-15A-V64       25       0WC-500Fe       78         15.5285-62       64       1970A050       84       2963L59-15A-V64       25       0WC-500Fe       78         15.5287-62       64       1970A050       84       256LC-120-V4725       55       0WM-500F       79         15.5287-62       64       1970A050       84       256LC-120-W3725       55       0WM-500F       79         15.2770       12       1970A060       84       256LC-120-W373       35       0MM-50P       79         152-720       12       1970A060       84       256LC-120-W373       35       056-07-08FA       45         1660A2-04       30       1970A050       84       256LC-130-W373       35       056-07-08FA       45         1660A2-05       31       197TA50       8       256LC-130-W373       35       056-07-08FA       45         1660A2-05       31       197TA50       8       256LC-130-W373       35       056-07-08FA       45         1660A2-05       31       197TA500	283-52	64	19TCA02Q	84	236GLS-180-C4	16	CWC-375R-4	78		
15.2528-52       64       19TAQ60       64       298GL9-135A-VR14       28       0WC-500PE       78         15.5228-52       64       19TAQ60       84       286L9-135A-VR14       25       0WC-750P       78         15.5228-52       63       19TAQ60       84       2466L710-4       21       0WM-378P       79         15.5287-52       63       19TAQ60       84       256LC120-W3725       55       0WM-500P       79         15.2327-52       63       19TAQ60       84       256LC120-W3725       55       0WM-500P       79         15.270       12       19TA050       84       256LC120-W373       35       0WM-500P       79         15.270       12       19TA050       84       256LC140-W373       35       0S640-108FA       45         1660A2-05       30       19TA050       84       256LC140-W373       35       0S640-138FA       45         1660A2-05-M14       30       19TA050       82       256LC140-W373       35       0S640-138FA       45         1660A2-05-M14       30       19TA950       82       256LC140-W373       35       0S640-138FA       45         1660A2-05-M14       30       19TA950       5	283-62	63	19TCA03Q	84	236GLS-240-C4	16	CWC-500P	78		
15.2528-52       61       1970A070       64       2980.53-136-W0714       32       0W-700P       78         15.3286-52       63       1970A070       64       2960.52-136-44       21       0WH-375P       79         13.5287-52       64       1970A070       64       256ELC-120-40727       51       0WH-375P       79         13.5287-62       63       1970A070       64       256ELC-120-W073       55       0WH-300P       79         152.720       12       1970A070       64       256ELC-120-W073       35       0WH-300P       79         152.720       12       1970A050       64       256ELC-130-W073       35       0S6-01-00FA       45         1660AL-04       30       1970A050       64       256ELC-130-W373       35       0S6-01-00FA       45         1660AL-05       31       1970A070       65       256ELC-130-W373       35       0S6-01-00FA       45         1660AL-05       31       1970A070       65       256EL-130-W371       35       0S6-01-00FA       45         1660AL-05       31       1970A070       65       256EL-130-W371       35       0S6-01-00FA       44         1660AL-16       31       1971S050	284-62	63	19TCA04Q	84	236GLSB-115A-W3T4	31	CWC-500PE	78		
15.228-52       64       19TCA000       84       266LS-C115A-C4       25       CVC/SPP       78         15.5287-52       64       19TCA000       84       266LC-120-VAIT25       35       VM-307E       79         15.5287-52       64       19TTA00       84       256LC-120-VAIT25       35       VM-300P       79         15.2710       12       19TTA00       84       256LC-120-VAIT4       35       CVM-300P       79         15.7270       12       19TTA060       84       256LC-140-VAIT3       35       CS6-01-06H       45         16600AL-05       33       19TTA00       84       256LC-140-VAIT3       35       DS6-01-06FA       45         16600AL-05       33       19TTA00       82       256LC-140-VAIT3       35       DS6-01-38FA       45         16600AL-05       33       19TTS00       85       256LC-140-VAIT3       35       DS6-01-38FA       45         16600AL-05       33       19TTS00       85       256LC-140-VAIT3       35       DS6-01-38FA       45         16600AL-05       33       19TTS00       85       256LC-140-VAIT3       35       DS6-01-36FA       44         16600AL-15       32       216LF-115A	285-52	64	19TCA05Q	84	236GLSB-135A-D3T4	28	CWC-500R	78		
15.228-52       64       19TCA000       84       266LS-C115A-C4       25       CVC/SPP       78         15.5287-52       64       19TCA000       84       266LC-120-VAIT25       35       VM-307E       79         15.5287-52       64       19TTA00       84       256LC-120-VAIT25       35       VM-300P       79         15.2710       12       19TTA00       84       256LC-120-VAIT4       35       CVM-300P       79         15.7270       12       19TTA060       84       256LC-140-VAIT3       35       CS6-01-06H       45         16600AL-05       33       19TTA00       84       256LC-140-VAIT3       35       DS6-01-06FA       45         16600AL-05       33       19TTA00       82       256LC-140-VAIT3       35       DS6-01-38FA       45         16600AL-05       33       19TTS00       85       256LC-140-VAIT3       35       DS6-01-38FA       45         16600AL-05       33       19TTS00       85       256LC-140-VAIT3       35       DS6-01-38FA       45         16600AL-05       33       19TTS00       85       256LC-140-VAIT3       35       DS6-01-36FA       44         16600AL-15       32       216LF-115A	285-62	63	19TCA06Q	84	236GLSB-135A-W3T4	32	CWC-500RE	78		
15.2526-62       64       19TK020       84       26GEL C120-C4       21       04M 375P       79         15.2527-62       64       19TK020       84       25GEL C120-C4       21       0MM-375P       79         15.2710       12       19TK040       84       25GEL C120-V0712       35       0MM-500P       79         1562720       12       19TK040       84       25GEL C140-V0713       35       0SM-70P       79         166040.4-04       30       19TK060       84       25GEL C140-V171       34       D5G-01-0BFL       45         166040.4-05       30       19TK090       84       25GEL C140-V171       34       D5G-01-3BFL       45         166040.4-05       30       19TK300       85       25GEL C140-V171       34       D5G-01-3BFL       45         166040.4-05       31       19TK300       85       25GEL C140-V171       35       D5G-01-40FL       45         166040.4-05       31       19TK300       85       25GEL C140-V171       35       D5G-01-40FL       45         166040.4-05       33       19TK300       85       25GEL C140-V171       29       D5G-01-40FL       45         166040.4-05       33       19TK3	286-52	64	19TCA07Q	84	236GLSC-115A-C4	25	CWC-750P			
15.25742       63       19TTA030       84       25GLC 120-W3T3       35       CMM-500P       79         152-720       12       19TTA040       84       25GLC 120-W3T3       35       CMM-500P       79         1660AGL-04       30       19TTA060       84       25GLC 120-W3T4       34       DSG-01-06PA       45         1660AGL-05       30       19TTA090       84       25GLC 160-V41       21       DSG-01-08PA       45         1660AGL-05       30       19TTA090       84       25GLC 160-PST       34       DSG-01-38PA       45         1660AGL-05-M14       30       19TTS010       85       25GLC 160-PST       34       DSG-01-38PA       45         1660AGL-05-M14       31       19TTS040       85       25GL-0120-W3T3       35       DSG-01-08PA       45         1660AGL-45       31       19TTS040       85       25GL-0120-W3T4       35       DSG-01-08PA       45         1660AGL-45       31       19TTS040       85       25GL-0120-W3T4       35       DSG-01-08PA       45         1660AGL-45       31       19TS040       85       25GL-0120-W3T4       20       DSR-01-06PA       44         1660AGL-45       31 <t< td=""><td>286-62</td><td>63</td><td></td><td>84</td><td>240461PT</td><td>104</td><td></td><td></td><td></td><td></td></t<>	286-62	63		84	240461PT	104				
15.227-02       63       19TTA030       84       25GELC-120-WGT3       35       CWM-500P       79         152-720       12       19TTA060       84       25GELC-120-WGT3       35       CWM-500P       79         1660AGL-04       30       19TTA060       84       25GELC-140-WGT       35       DSG-01-0BH       45         1660AGL-05       30       19TTA090       84       25GELC-160-C4       21       DSG-01-3BH       45         1660AGL-05       30       19TTA090       84       25GELC-160-P3T       34       DSG-01-3BH       45         1660AGL-05       31       19TTS020       85       25GELC-160-P3T       34       DSG-01-3BH       45         1660AGL-05       31       19TTS040       85       25GEL-160-WGT3       35       DSG-01-3BH       45         1660AGL-45       31       19TTS040       85       25GL-160-WGT3       35       DSG-01-0PSA       45         1660AGL-45       31       19TTS040       85       25GL-70A-D5T7       29       DSR-01-0PSA       44         1660AGL-45       31       19TS040       82       25GL-70A-D5T7       29       DSR-01-0PSA       44         1660AGL-45       32       21GGLF-15	287-52	64		84	25GELC-120-C4	21				
152-710       12       19TTADAQ       84       25GELC-120-W3T4       35       CWM-500R       79         152-720       12       19TTADGQ       84       25GELC-140-W3T3       35       DSG-01-OBHL       45         1660AGL-04       33       19TTADQ0       84       25GELC-160-V3T3       35       DSG-01-OBFA       45         1660AGL-05       31       19TTADQ0       84       25GELC-160-V3T       34       DSG-01-38FA       45         1660AGL-05       31       19TTSDQ0       85       25GELC-180-V3T       35       DSG-01-38FA       45         1660AGL-05-M14       31       19TTSDQ0       85       25GELC-180-W3T       35       DSG-01-38FA       45         1660AGL-45       30       19TTSDQ0       85       25GEL-160-W3T       35       DSG-01-40FA       45         1660AGL-45       30       19TTSDQ0       85       25GEL-780-W3T       29       DSG-01-40FA       45         1660AGL-45       30       19TTSDQ0       85       25GEL-780-W3T       29       DSR-01-02FA       44         1660AGL-45       30       19TSD40       72       25GL-780-D5T       29       DSR-01-02FA       44         1660AGL-15A-M3TA       31	287-62	63	19TTA03Q	84	25GELC-120-W3T25	35				
152.720       12       19TRASC       84       2SGELC-120-WGTA       35       DSG-01-06HL       45         1660AGL-04       30       19TRA00       84       2SGELC-140-WGTA       35       DSG-01-06FA       45         1660AGL-05       30       19TRA000       84       2SGELC-180-VGTA       21       DSG-01-36FLA       45         1660AGL-05       30       19TRA000       84       2SGELC-180-VGTA       34       DSG-01-38FLA       45         1660AGL-05-M14       30       19TR300       65       2SGELC-180-VGTA       30       DSG-01-38FLA       45         1660AGL-05-M14       30       19TR300       65       2SGELC-180-VGTA       30       DSG-01-49FSA       45         1660AGL-45       31       19TR300       85       2SGL-02-NGTA       20       DSG-01-40FSA       45         1660AGL-45       31       19TR300       85       2SGL-04-NSTA       20       DSG-01-40FSA       44         1660AGL-45       31       19TR304       27       2SGL-60A-NSTA       20       DSG-01-40FSA       44         1660AGL-45       31       19TR404       35       2GGL-16A-13A       30       DSG-01-40FSA       44         1660AGL-45       32 <td></td> <td></td> <td></td> <td></td> <td>25GELC-120-W3T3</td> <td></td> <td></td> <td></td> <td></td> <td></td>					25GELC-120-W3T3					
1660AGL-04       30       1917A000       84       25GLC-140-P3T       34       DSC-01-60FL       45         1660AGL-05       30       1917A070       84       25GLC-140-V3T3       35       DSC-01-36FL       45         1660AGL-05       30       1917A070       84       25GLC-160-C4       21       DSC-01-36FL       45         1660AGL-05-M14       30       1917S020       85       25GLC-160-P3T       34       DSC-01-38FL       45         1660AGL-05-M14       30       1917S020       85       25GLC-160-V3T3       35       DSC-01-40FL       45         1660AGL-45       31       1917S020       85       25GL-160-V3T3       35       DSC-01-40FL       45         1660AGL-45       31       1917S040       85       25GL-160-V3T7       29       DSC-01-40FL       44         1660AGL-45       31       1917S040       31       25GL-86A-V5T7       29       DSR-01-40FSA       44         1660AGL-16       35       216GLF-115A-V3T4       31       25GL-86A-V5T7       29       DSR-01-40FSA       44         186-110-08       216GLF-115A-V3T4       31       25GL-86A-V5T7       29       DSR-01-68FL       44         1960H-16       35	20	12		84		35				
1660AGL-04       33       19TRA70       84       25GLC-140-WGT3       35       DSG-01-6PSA       45         1660AGL-05       33       19TRA90       84       25GLC-180-C4       21       DSG-01-39FA       45         1660AGL-05-M14       30       19TR5020       85       25GLC-180-P5T       34       DSG-01-39FA       45         1660AGL-05-M14       30       19TTS020       85       25GLC-100-WGT3       35       DSG-01-40FL       45         1660AGL-45       30       19TTS020       85       25GL-100-WGT3       35       DSG-01-40FL       45         1660AGL-45       30       19TTS020       85       25GL-100-WGT3       35       DSG-01-40FL       45         1660AGL-45       30       19TTS050       85       25GL-120-WGT3       35       DSG-01-40FL       45         1660AGL-45       31       19TS040       85       25GL-50A/ST7       29       DSR-01-02FA       44         186-100       11       216GLF-115A-W3T4       27       25GL-85A-W5T7       29       DSR-01-02FA       44         1960HC-16       35       216GLF-15A-W3T4       27       25GL-85A-W5T7       29       DSR-01-02FA       44         1960HC-16       35 </td <td>AGL-04</td> <td>30</td> <td>19TTA06Q</td> <td>84</td> <td></td> <td>34</td> <td>DSG-01-06HL</td> <td></td> <td></td> <td></td>	AGL-04	30	19TTA06Q	84		34	DSG-01-06HL			
1660AC-05       30       19TA090       84       2SGELC-180-P3T       21       DSG-01-38HL       45         1660ACL-05-M14       30       19TTS020       85       2SGELC-180-P3T       34       DSG-01-38HL       45         1660ACL-05-M14       30       19TTS020       85       2SGELC-180-W3T3       35       DSG-01-38HS       45         1660ACL-05-M14       30       19TTS040       85       2SGL-120-W3T4       35       DSG-01-40HL       45         1660ACL-45       30       19TTS040       85       2SGL-01A-W3T7       29       DSG-01-40HL       45         1660ACL-45       30       19TTS040       85       2SGL-01A-W3T7       29       DSG-01-40HL       44         1660ACL-45       30       19TTS040       27       2SGL-77A-D5T7       29       DSG-01-02HL       44         1660ACL-66       36       216GLF-115A-W3T4       31       2SGL-85A-U5T7       29       DSG-01-05HL       44         1960HL-16       36       216GLF-115A-W3T4       31       2SGL-85A-U5T       30       DSG-01-05HL       44         1960HL-16       36       216GLF-15A-W3T4       31       22SGPT-042       65       DSG-01-05HL       44         1960HL-16						35				
1660AGL-05       33       19TTA150       84       25GELC-100-W3T       34       DSG-01-36PSA       45         1660AGL-05-M14       30       19TTS020       85       25GELC-180-W3T3       35       DSG-01-38PSA       45         1660AGL-45       30       19TTS040       85       25GL-120-W3T4       35       DSG-01-40PSA       45         1660AGL-45       30       19TTS040       85       25GL-60A-W5T7       29       DSG-01-40PSA       45         1660AGL-45       30       121GELF-115A-C4       24       25GL-60A-W5T7       29       DSG-01-02PSA       44         186-8100-08       11       216GLF-115A-W3T4       27       25GL-77A-D5T7       29       DSG-01-02PLA       44         1960HG-16       36       216GLF-15A-W3T4       27       25GL-85A-W5T7       32       DSG-01-05PLA       44         198PA020       83       216GLF-15A-W3T4       31       25GL-85A-W5T7       32       DSG-01-05PLA       44         198PA020       83       216GLF-15A-W3T4       31       25GL-85A-W5T7       32       DSG-01-05PLA       44         198PA020       83       216GLF-15A-W3T4       31       232206PT-042       65       DSG-01-05PSA       44	\GL-05	30		84		21	DSG-01-36HL			
1660AGL-05-M14       30       19TTS020       85       25GELC:100-W3T3       30       DSC-01-38HL       45         1660AGL-05-M14       30       19TTS030       85       25GEL:120-W3T3       35       DSC-01-40HL       45         1660AGL-45       30       19TTS050       85       25GL:120-W3T3       35       DSC-01-40PKA       45         1660AGL-45       31       19TTS050       85       25GL:60A-U5T7       29       DSC-01-40PKA       44         166:8100       11       216GLF-115A-D3T4       27       25GL:77A-D5T7       29       DSR-0-11-02FKA       44         186:8100-08       11       216GLF-115A-D3T4       27       25GL:8A-D5T7       29       DSR-0-11-02FKA       44         1960HC-16       36       216GLFB-135A-W3T4       27       25SA+10B       83       DSR-0-11-06FL       44         1996PA020       83       216GLFD-135A-W3T4       27       302206FT-042       65       DSR-0-11-06FL       44         1998PA050       83       216GLFD-156A-C4       24       302206FT-052       65       DSR-0-11-36FL       44         1998PA050       83       216GLSB-135A-W3T4       27       302206FT-053       65       DSR-0-11-36FL       44	\GL-05	33	19TTA15Q	84		34	DSG-01-36PSA			
1660AGL-05-M14       33       19TTS030       85       25GELC-180-W3T3       35       DSG-01-38PSA       45         1660AGL-45       30       19TTS040       85       25GL-120-W3T4       35       DSG-01-40PSA       45         1760HL-16       36       216GLF-115A-C4       24       25GL-60A-D5T7       29       DSR-01-102PL       44         186-810D       11       216GLF-115A-D3T4       27       25GL-87A-D5T7       29       DSR-01-102PL       44         196-810D-08       11       216GLF-115A-D3T4       27       25GL-87A-D5T7       29       DSR-01-102PL       44         1960HG-16       36       216GLF-115A-D3T4       27       27SA-10B       83       DSR-01-102PL       44         1999PA020       83       216GLF-15SA-W3T4       31       27SA-10B       83       DSR-01-05PSA       44         199PA020       83       216GLF-15SA-W3T4       31       302206PT-042       65       DSR-01-06PSA       44         199PA020       83       216GLF-15SA-W3T4       31       302206PT-023       65       DSR-01-35HL       44         199PA020       83       216GLF-15SA-W3T4       31       302206PT-023       65       DSR-01-36HL       44	AGL-05-M14	30		85	25GELC-180-P5T	34	DSG-01-38HL	45		
1660AGL-45       30       19TTS040       85       25GL-102-WGT4       35       DSG-01-40PLA       45         1660AGL-45       33       19TTS050       85       25GL-60A-V5T7       29       DSG-01-40PSA       44         186-810D       11       216GLF-115A-C4       25GL-70A-DST7       29       DSR-00-102PLA       44         186-810D-08       11       216GLF-115A-WGT4       27       25GL-85A-DST7       29       DSR-00-102PSA       44         1960HG-16       36       216GLF-115A-WGT4       31       25GL-85A-V5T7       29       DSR-00-105PSA       44         1960HG-16       36       216GLF-115A-WGT4       31       25GL-85A-V5T7       29       DSR-00-105PSA       44         1960HG-16       36       216GLFB-135A-WGT4       31       25GL-85A-V5T7       29       DSR-00-105PSA       44         196PA020       83       216GLFB-135A-WGT4       31       302206PT-042       65       DSR-00-1-25HL       44         198PA040       83       216GLSB-135A-WGT4       31       302206PT-053       65       DSR-00-1-35HL       44         198PA050       84       216GLSB-135A-WGT4       31       302206PT-053       65       DSR-00-1-35FSA       44	AGL-05-M14	33		85		35	DSG-01-38PSA			
1660AGL-45       33       19TTS050       85       25GL-60A-DST7       29       DSG-01-40PSA       45         1760HL-16       36       216GLF-115A-O3T4       24       25GL-60A-WST7       29       DSR0-01-02PSA       44         186-810D-08       11       216GLF-115A-D3T45       27       25GL-85A-DST7       29       DSR0-01-02PSA       44         1960HL-16       36       216GLF-115A-D3T45       27       25GL-85A-DST7       29       DSR0-01-02PSA       44         1960HL-16       36       216GLFB-135A-D3T4       27       S2GL-85A-DST7       29       DSR0-01-05PSA       44         1960HL-16       36       216GLFB-135A-D3T4       27       S2GL0FD       30       DSR0-01-06PSA       44         198PA020       83       216GLSB-135A-W3T4       302206PT-042       65       DSR0-01-26HL       44         198PA020       82       216GLSB-135A-W3T4       302206PT-052       65       DSR0-01-35HL       44         198PA020       82       216GLSB-135A-W3T4       302206PT-052       65       DSR0-01-36FA       44         198PA020       82       216GLSB-135A-W3T4       302206PT-052       65       DSR0-01-36FA       44         198PA020       82       2	\GL-45	30		85		35	DSG-01-40HL			
1760HL-16       36       216GLF-115A-C4       24       25GL-60A-WST7       32       DS0-70-09PSA       44         186-8100       11       216GLF-115A-D3T4       27       25GL-67A-D5T7       29       DSR0-01-02HL       44         1960HG-16       36       216GLF-115A-W3T4       31       25GL-85A-W5T7       29       DSR0-01-05HL       44         1960HG-16       36       216GLFB-135A-03T4       27       2FSA-10B       30       DSR0-01-05FSA       44         198PA02Q       83       216GLFB-135A-W3T4       31       22S0FT-042       65       DSR0-01-06FSA       44         198PA02Q       83       216GLFB-135A-W3T4       31       202206FT-042       65       DSR0-01-06FSA       44         198PA05Q       83       216GLFB-135A-W3T4       31       202206FT-042       65       DSR0-01-36HL       44         198PA05Q       83       216GLFB-135A-W3T4       31       202206FT-053       65       DSR0-01-35HL       44         198PA05Q       83       216GLSB-135A-W3T4       31       302206FT-053       65       DSR0-01-36FL       44         198PA05Q       84       216GLSB-250-C4       15       302206FT-052       65       DSR0-01-36FL       44										
186-810D       11       216GLF-115A-D3T4       27       25GL-77A-D5T7       29       DSR0-01-02HL       44         186-810D-08       11       216GLF-115A-D3T4       27       25GL-85A-D5T7       29       DSR0-01-02FA       44         1960HG-16       36       216GLF-115A-D3T4       27       2RSA-10B       33       DSR0-01-05FSA       44         1960HL-16       36       216GLFB-135A-W3T4       27       2RSA-10B       33       DSR0-01-06FLA       44         198PA020       33       216GLFB-250-C4       15       302206PT-042       65       DSR0-01-06FLA       44         198PA050       33       216GLSB-135A-W3T4       31       302206PT-043       65       DSR0-01-26HL       44         198PA050       33       216GLSB-135A-W3T4       31       302206PT-053       65       DSR0-01-36HL       44         199PCA030       8       216GLSB-135A-W3T4       31       302206PT-053       65       DSR0-01-36FL       44         199PCA030       8       216GLSB-135A-W3T4       31       302206PT-053       65       DSR0-01-36FL       44         199PCA030       8       216GLSB-135A-W3T4       31       302206PT-023       65       DSR0-01-36FL       44 <td>IL-16</td> <td>36</td> <td>216GLF-115A-C4</td> <td>24</td> <td></td> <td>32</td> <td>DS0-70-09PSA</td> <td></td> <td></td> <td></td>	IL-16	36	216GLF-115A-C4	24		32	DS0-70-09PSA			
186-810D-08       11       216GLF-115A-D3T45       27       25GL-85A-D5T7       29       DSR0-01-02PSA       44         1960HL-16       36       216GLF-115A-W3T4       21       22GL-85A-WST7       32       DSR0-01-05PLA       44         196PA020       32       216GLFB-135A-W3T4       27       2RSA-10B       83       DSR0-01-05PLA       44         198PA020       32       216GLFB-135A-W3T4       21       2RSA-10S       85       DSR0-01-06PSA       44         198PA020       33       216GLFB-156A-C4       24       302206PT-042       65       DSR0-01-26HL       44         198PA020       33       216GLSB-135A-W3T4       21       302206PT-052       65       DSR0-01-35HL       44         198PA060       32       216GLSB-135A-W3T4       31       302206PT-052       65       DSR0-01-35HL       44         198PA060       32       216GLSB-156A-C4       24       302206PT-052       65       DSR0-01-36FSA       44         19PCA020       84       216GLSD-165A-C4       24       302206PT-052       65       DSR0-01-36FSA       44         19PCA030       84       216GLSD-165A-C4       24       302206PT-022       65       DSR0-03-36FSA       44 <td></td>										
1960HL-16       36       216GLFB-135A-D3T4       27       2RSA-10B       83       DSR0-01-05FSA       44         198PA02Q       83       216GLFB-135A-W3T4       31       2RSA-10SB       83       DSR0-01-06FL       44         198PA03Q       83       216GLFB-125A-C4       15       302206PT-043       65       DSR0-01-06FSA       44         198PA04Q       83       216GLSB-135A-D3T4       27       302206PT-052       65       DSR0-01-25HL       44         198PA06Q       83       216GLSB-135A-W3T4       31       302206PT-052       65       DSR0-01-35HL       44         19PCA02Q       84       216GLSC-165A-C4       24       302206PT-053       65       DSR0-01-36HL       44         19PCA02Q       84       216GLSC-165A-C4       24       302206PT-053       65       DSR0-01-36HL       44         19PCA04Q       84       2206-600-C2       11       302206PT-053       65       DSR0-01-36FSA       44         19PCA05Q       84       2206-600-C2       11       302206PT-073       65       DSR0-03-36FSA       44         19PCA05Q       84       2206-600-C2       11       302206PT-032       65       DSR0-03-35HL       44         1	10D-08	11	216GLF-115A-D3T45	27	25GL-85A-D5T7	29	DSRO-01-02PSA	44		
1960HL-16       36       216GLFB-135A-D3T4       27       2RSA-10B       83       DSR0-01-05FSA       44         198PA02Q       83       216GLFB-135A-W3T4       31       2RSA-10SB       83       DSR0-01-06FL       44         198PA03Q       83       216GLFB-125A-C4       15       302206PT-043       65       DSR0-01-06FSA       44         198PA04Q       83       216GLSB-135A-D3T4       27       302206PT-052       65       DSR0-01-25HL       44         198PA06Q       83       216GLSB-135A-W3T4       31       302206PT-052       65       DSR0-01-35HL       44         19PCA02Q       84       216GLSC-165A-C4       24       302206PT-053       65       DSR0-01-36HL       44         19PCA02Q       84       216GLSC-165A-C4       24       302206PT-053       65       DSR0-01-36HL       44         19PCA04Q       84       2206-600-C2       11       302206PT-053       65       DSR0-01-36FSA       44         19PCA05Q       84       2206-600-C2       11       302206PT-073       65       DSR0-03-36FSA       44         19PCA05Q       84       2206-600-C2       11       302206PT-032       65       DSR0-03-35HL       44         1	IG-16	36	216GLF-115A-W3T4	31	25GL-85A-W5T7	32	DSR0-01-05HL	44		
19BPA03083216GLFB-250-C415302206PT-04265DSR0-01-06PSA4419BPA04083216GLFC-165A-C424302206PT-04365DSR0-01-25HL4419BPA06083216GLSB-135A-03T427302206PT-05265DSR0-01-35HL4419PCA02084216GLSB-250-C415302206PT-05965DSR0-01-35PSA4419PCA03084216GLSC-165A-C424302206PT-06265DSR0-01-36PSA4419PCA040842206-600-C211302206PT-07265DSR0-01-36PSA4419PCA050842206-600-C2-K11302206PT-07265DSR0-03-05PSA4419PCA060842206-600-C2-K11302206PT-02265DSR0-03-05PSA4419PCA070842206-600-C211302206PT-03265DSR0-03-05PSA4419PCA070842260AGL-0633302206PT-03265DSR0-03-05PSA4419PCA090842260AGL-07333060AVL-0637MP1457-516119PTA020842260AGL-07333060AVL-0737MP1453-556119PTA040842366EL-240-C4213060AVL-0937MP1453-556119PTA040842366EL-180-C4214060AVL-0737MP2265B7619PTA040842366EL-180-C4244060AVL-0937MP2265B7619PTA07084236GEL-115A-D3T4	IL-16	36		27		83		44		
19BPA04Q83216GLFC-165A-C424302206PT-04365DSR0-01-25HL4419BPA06Q83216GLSB-135A-D3T427302206PT-05265DSR0-01-26HL4419PCA02Q84216GLSB-135A-W3T431302206PT-05365DSR0-01-35PSA4419PCA03Q84216GLSC-165A-C424302206PT-06265DSR0-01-36HL4419PCA04Q84220G-600-C211302206PT-07265DSR0-01-36PSA4419PCA05Q84220G-600-C211302206PT-07265DSR0-03-05PSA4419PCA06Q84220G-600-C211302206PT-07365DSR0-03-05PSA4419PCA06Q84220GAGL-0633302206PT-07365DSR0-03-05PSA4419PCA07Q842260AGL-0633302206PT-03365DSR0-03-35HL4419PCA09Q842260AGL-07333060AVL-0637MP1457-516119PTA04Q84236GEL-240-74213060AVL-0937MP1458-556119PTA04Q84236GEL-240-74214060AVL-0937MP2265B7619PTA04Q84236GEL-240-74214060AVL-0937MP2265B7619PTA04Q84236GEL-115A-03T244060AVL-0937MP2265B7619PTA04Q84236GEL-115A-03T255120BHL-P34MP42001019PTA04Q84236GEL-115A-03T25	102Q	83	216GLFB-135A-W3T4	31	2RSA-10SB	83	DSR0-01-06HL	44		
19BPA05Q83216GLSB-135A-D37427302206PT-05265DSR0-01-26HL4419BPA06Q83216GLSB-135A-W3T431302206PT-05365DSR0-01-35FJA4419PCA02Q84216GLSB-250-C415302206PT-06265DSR0-01-36FSA4419PCA03Q84216GLSC-165A-C424302206PT-06265DSR0-01-36FSA4419PCA04Q84220G-600-C211302206PT-06265DSR0-01-36FSA4419PCA05Q84220G-600-C2-K11302206PT-07265DSR0-03-06FSA4419PCA06Q84220G-00-C211302206PT-03265DSR0-03-30FSA4419PCA07Q842260AGL-0630302206PT-03265DSR0-03-35FL4419PCA09Q842260AGL-07303060AVL-0637MP1457-516119PTA02Q842260AGL-07333060AVL-0637MP1458-556119PTA04Q84236GEL-240-C4213060AVL-0637MP1458-556119PTA05Q84236GEL-240-C4213060AVL-0637MP2264B7619PTA04Q84236GEL-740-C4213060AVL-0937MP2264B7619PTA05Q84236GEL-740-C425120BHL-P34MP42001019PTA04Q84236GEL-715A-D3T429560BHL-1666MP42011019PTA04Q84236GEL-115A-D3T429 <t< td=""><td>403Q</td><td>83</td><td>216GLFB-250-C4</td><td>15</td><td>302206PT-Q42</td><td>65</td><td>DSRO-01-06PSA</td><td>44</td><td></td><td></td></t<>	403Q	83	216GLFB-250-C4	15	302206PT-Q42	65	DSRO-01-06PSA	44		
19BPA06Q83216GLSB-135A-W3T431302206PT-05365DSR0-01-35HL4419PCA02Q84216GLSC-165A-C415302206PT-05265DSR0-01-35PSA4419PCA03Q84216GLSC-165A-C424302206PT-06265DSR0-01-36HL4419PCA04Q842206-600-C211302206PT-07265DSR0-01-36PSA4419PCA05Q842206-600-C211302206PT-07365DSR0-03-05PSA4419PCA07Q842260AGL-0630302206PT-07365DSR0-03-05PSA4419PCA09Q842260AGL-0630302206PT-09365F4-PT-RT-B10119PTA02Q842260AGL-07303060AU-0637MP1457-516119PTA02Q842366EL-240-C4213060AU-0737MP1453-516119PTA04Q842366EL-240-P3T344060AU-0637MP2264B7619PTA05Q842366EL-180-P3T344060AU-0737MP2265B7619PTA04Q842366EL-180-P3T344060AU-0937MP22717619PTA04Q842366EL-180-P3T344060AU-0937MP2261B7619PTA04Q842366EL-115A-D3T429560BHL-1636MP42011019PTA04Q842366EL-115A-D3T429560BHL-1636MP42011019PTA04Q85236GLF-115A-D3T429560BHL-16 </td <td>104Q</td> <td>83</td> <td>216GLFC-165A-C4</td> <td>24</td> <td>302206PT-Q43</td> <td>65</td> <td>DSR0-01-25HL</td> <td>44</td> <td></td> <td></td>	104Q	83	216GLFC-165A-C4	24	302206PT-Q43	65	DSR0-01-25HL	44		
19PCA02Q84216GLSB-250-C415302206PT-05965DSR0-01-35PSA4419PCA03Q84216GLSC-165A-C424302206PT-06265DSR0-01-36HL4419PCA04Q84220G-600-C211302206PT-06365DSR0-01-36PSA4419PCA05Q84220G-600-C2-K11302206PT-07265DSR0-03-05PSA4419PCA06Q84220GL-600-C211302206PT-07365DSR0-03-05PSA4419PCA07Q842260AGL-0630302206PT-09265DSR0-03-35HL4419PCA09Q842260AGL-07303060AVL-0637MP1457-516119PTA02Q842260AGL-07333060AVL-0637MP1458-556119PTA04Q842366EL-240-C4213060AVL-0737MP1458-556119PTA05Q842366EL-740-P3T344060AVL-0737MP2264B7619PTA04Q842366EL-7180-P3T344060AVL-0737MP2264B7619PTA05Q842366ELF-1180-P3T344060AVL-0737MP2265B7619PTA04Q842366EL-7180-P3T344060AVL-0737MP2264B7619PTA05Q842366EL-115A-D3T429560BHL-P34MP42001019PTA02Q85236GLF-115A-D3T429560BHL-P34MP42011019PTS03Q85236GLF-115A-D3T4529560BHL-P<	405Q	83	216GLSB-135A-D3T4	27	302206PT-Q52	65	DSR0-01-26HL	44		
19PCA03Q84216GLSC-165A-C424302206PT-Q6265DSR0-01-36HL4419PCA04Q84220G-600-C211302206PT-Q6365DSR0-01-36PSA4419PCA05Q84220G-600-C2-K11302206PT-Q7265DSR0-03-05PSA4419PCA06Q84220GL-600-C211302206PT-Q9265DSR0-03-35HL4419PCA07Q842260AGL-0633302206PT-Q9265DSR0-03-35HL4419PCA09Q842260AGL-07303060AVL-0637MP1457-516119PTA02Q842260AGL-07333060AVL-0737MP1458-556119PTA03Q842260AGL-07333060AVL-0737MP1453-516119PTA04Q84236GEL-240-C4213060AVL-0937MP264B7619PTA05Q84236GEL-180-C3T344060AVL-0937MP22057619PTA04Q84236GEL-180-C3T344060AVL-0937MP22011019PTA05Q84236GEL-115A-C3T255120BHL-P34MP42001019PTA15Q84236GEL-115A-D3T429560BHL-1636MP42011019PTS02Q85236GEL-115A-D3T429560BHL-1636MP42011019PTS02Q85236GEL-15A-W3T431590BHL-P34MP4301819PTS02Q85236GEL-15A-W3T431590BHL-P34MP430	106Q	83	216GLSB-135A-W3T4	31	302206PT-Q53	65	DSR0-01-35HL	44		
19PCA04Q84220G-600-C211302206PT-Q6365DSR0-01-36PSA4419PCA05Q84220G-600-C2-K11302206PT-Q7265DSR0-03-05PSA4419PCA06Q84220GL-600-C211302206PT-Q9265DSR0-03-35HL4419PCA07Q842260AGL-0630302206PT-Q9265DSR0-03-35HL4419PCA09Q842260AGL-0730302040FT-Q9365F4-PT-RT-B10119PTA02Q842260AGL-07303060AVL-0637MP1457-516119PTA03Q842260AGL-07333060AVL-0637MP1458-556119PTA04Q84236GEL-240-C4213060AVL-0937MP1458-516119PTA05Q84236GEL-240-P3T344060AVL-0937MP2264B7619PTA06Q84236GEL-180-C4214060AVL-0737MP2265B7619PTA04Q84236GEL-180-C4255120BHL-P34MP42001019PTA05Q84236GEL-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHL-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-115A-W3T431590BHL-P36MP445818	402Q	84	216GLSB-250-C4	15	302206PT-Q59	65	DSRO-01-35PSA	44		
19PCA05Q84220G-600-C2-K11302206PT-Q7265DSR0-03-05PSA4419PCA06Q84220GL-600-C211302206PT-Q7365DSR0-03-06PSA4419PCA07Q842260AGL-0630302206PT-Q9265DSR0-03-35HL4419PCA09Q842260AGL-073030206PT-Q9365F4-PT-RT-B10119PTA02Q842260AGL-07303060AVL-0637MP1457-516119PTA03Q842260AGL-07333060AVL-0937MP1453-556119PTA04Q84236GEL-240-C4213060AVL-0637MP2264B7619PTA05Q84236GEL-240-P3T344060AVL-0937MP2265B7619PTA05Q84236GEL-115A-C4255120BHL-P34MP42001019PTA05Q84236GLF-115A-C4255120BHL-P34MP42001019PTA05Q84236GLF-115A-D3T429560BHL-1666MP42011019PTS02Q85236GLF-115A-M3T43550BHL-P34MP4301819PTS04Q85236GLF-115A-W3T431590BHL-P34MP4301819PTS04Q85236GLF-115A-W3T436SNP-10BQ85MP445818	403Q	84	216GLSC-165A-C4	24	302206PT-Q62	65	DSR0-01-36HL	44		
19PCA06Q84220GL-600-C211302206PT-Q7365DSR0-03-06PSA4419PCA07Q842260AGL-0630302206PT-Q9265DSR0-03-35HL4419PCA09Q842260AGL-0733302206PT-Q9365F4-PT-RT-B10119PTA02Q842260AGL-07303060AVL-0637MP1457-516119PTA03Q842260AGL-07333060AVL-0737MP1458-556119PTA04Q84236GEL-240-C4213060AVL-0937MP1463-5116119PTA05Q84236GEL-240-P3T344060AVL-0637MP2264B7619PTA06Q84236GEL-8180-C4214060AVL-0737MP2265B7619PTA07Q84236GELF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T429560BHL-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP43001819PTS04Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	404Q	84	220G-600-C2	11	302206PT-Q63	65	DSRO-01-36PSA	44		
19PCA07Q84260AGL-0630302206PT-Q9265DSR0-03-35HL4419PCA09Q84260AGL-0633302206PT-Q9365F4-PT-RT-B10119PTA02Q84260AGL-07303060AVL-0637MP1457-516119PTA03Q84260AGL-07333060AVL-0737MP1458-556119PTA04Q84236GEL-240-C4213060AVL-0937MP1463-5116119PTA05Q84236GEL-240-P3T344060AVL-0637MP264B7619PTA06Q84236GELR-180-C4214060AVL-0737MP2265B7619PTA07Q84236GELF-180-C4255120BHL-P34MP42001019PTA05Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T429560BHL-P34MP43001819PTS03Q85236GLF-15A-W3T431590BHL-P34MP4301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	405Q	84	220G-600-C2-K	11	302206PT-Q72	65	DSRO-03-05PSA	44		
19PCA09Q842260AGL-0633302206PT-Q9365F4-PT-RT-B10119PTA02Q842260AGL-07303060AVL-0637MP1457-516119PTA03Q842260AGL-07333060AVL-0737MP1458-556119PTA04Q84236GEL-240-C4213060AVL-0937MP1463-516119PTA05Q84236GEL-240-P3T344060AVL-0637MP2264B7619PTA06Q84236GELR-180-C4214060AVL-0737MP2265B7619PTA07Q84236GELF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-C4255120BHL-P34MP42011019PTS02Q85236GLF-115A-D3T429560BHX-1636MP42412219PTS03Q85236GLF-115A-W3T431590BHL-P34MP43001819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	406Q	84	220GL-600-C2	11	302206PT-Q73	65	DSRO-03-06PSA	44		
19PTA02Q842260AGL-07303060AVL-0637MP1457-516119PTA03Q842260AGL-07333060AVL-0737MP1458-556119PTA04Q84236GEL-240-C4213060AVL-0937MP1463-516119PTA05Q84236GEL-240-P3T344060AVL-0637MP2264B7619PTA06Q84236GELR-180-C4214060AVL-0737MP2265B7619PTA07Q84236GELR-180-P3T344060AVL-0937MP22717619PTA09Q84236GELF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHL-P34MP44301819PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	407Q	84	2260AGL-06	30	302206PT-Q92	65	DSR0-03-35HL	44		
19PTA03Q842260AGL-07333060AVL-0737MP1458-556119PTA04Q84236GEL-240-C4213060AVL-0937MP1463-516119PTA05Q84236GEL-240-P3T344060AVL-0637MP2264B7619PTA06Q84236GELR-180-C4214060AVL-0737MP2265B7619PTA07Q84236GELR-180-P3T344060AVL-0937MP22717619PTA09Q84236GELF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHL-P34MP44301819PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	409Q	84	2260AGL-06	33	302206PT-Q93	65	F4-PT-RT-B	101		
19PTA04Q84236GEL-240-C4213060AVL-0937MP1463-516119PTA05Q84236GEL-240-P3T344060AVL-0637MP2264B7619PTA06Q84236GELR-180-C4214060AVL-0737MP2265B7619PTA07Q84236GELR-180-P3T344060AVL-0937MP22717619PTA09Q84236GLF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHX-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	102Q	84	2260AGL-07	30	3060AVL-06	37	MP1457-51	61		
19PTA05Q84236GEL-240-P3T344060AVL-0637MP2264B7619PTA06Q84236GELR-180-C4214060AVL-0737MP2265B7619PTA07Q84236GELR-180-P3T344060AVL-0937MP22717619PTA09Q84236GLF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHX-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	103Q	84	2260AGL-07	33	3060AVL-07	37	MP1458-55	61		
19PTA06Q84236GELR-180-C4214060AVL-0737MP2265B7619PTA07Q84236GELR-180-P3T344060AVL-0937MP22717619PTA09Q84236GLF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHX-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	v04Q	84	236GEL-240-C4	21	3060AVL-09	37	MP1463-51	61		
19PTA07Q84236GELR-180-P3T344060AVL-0937MP22717619PTA09Q84236GLF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHX-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	05Q	84	236GEL-240-P3T	34	4060AVL-06	37	MP2264B	76		
19PTA09Q84236GLF-115A-C4255120BHL-P34MP42001019PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHX-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	106Q	84	236GELR-180-C4	21	4060AVL-07	37	MP2265B	76		
19PTA15Q84236GLF-115A-D3T429560BHL-1636MP42011019PTS02Q85236GLF-115A-D3T4529560BHX-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	07Q	84	236GELR-180-P3T	34	4060AVL-09	37	MP2271	76		
19PTS02Q85236GLF-115A-D3T4529560BHX-1636MP44242219PTS03Q85236GLF-115A-W3T431590BHL-P34MP44301819PTS04Q85236GLF-180-C4168RNP-10BQ85MP445818	109Q	84	236GLF-115A-C4	25	5120BHL-P	34	MP4200	10		
19PTS03Q       85       236GLF-115A-W3T4       31       590BHL-P       34       MP4430       18         19PTS04Q       85       236GLF-180-C4       16       8RNP-10BQ       85       MP4458       18	v15Q	84	236GLF-115A-D3T4	29	560BHL-16	36	MP4201	10		
19PTS04Q 85 236GLF-180-C4 16 8RNP-10BQ 85 MP4458 18	502Q	85	236GLF-115A-D3T45	29	560BHX-16	36	MP4424	22		
	503Q	85	236GLF-115A-W3T4	31	590BHL-P	34	MP4430	18		
19PTS050 85 236GLF-250-C4 16 8RNP-20B0 85 MP5187 99	304Q	85	236GLF-180-C4	16	8RNP-10BQ	85	MP4458	18		
	305Q	85	236GLF-250-C4	16	8RNP-20BQ	85	MP5187	99		
19SCA02B 83 236GLF-250-C6 16 B1-C-LT 100 MP5195 100	402B	83	236GLF-250-C6	16	B1-C-LT	100	MP5195	100		
19SCA02Q 83 236GLFB-135A-D3T4 28 B1-CNB-LT-RD 99 SC3A 99	402Q	83	236GLFB-135A-D3T4	28		99				
19SCA03B 83 236GLFB-135A-W3T4 32 B1-CNB-LT-RD-K 100 WP-2059-8 80		83	236GLFB-135A-W3T4	32	B1-CNB-LT-RD-K		WP-2059-8			
19SCA03Q 83 236GLFC-165A-C4 25 B1-C-PT 100 WP-2059-8-6E 80	403Q	83	236GLFC-165A-C4	25	B1-C-PT	100				
19SCA04B 83 236GLR-115A-C4 25 BR-C-LT 100 WP-2060B-6 80	404B	83	236GLR-115A-C4	25	BR-C-LT	100	WP-2060B-6	80		





Model Number Index	
Tool Operation	
Introduction 4	
Grinders 6 –	
Precision	
Inline	
Right Angle 22	
Horizontal	
Vertical	
Grinder Accessories 38	
Sanders 42 –	
Random Orbital 44	
Geared	
Right Angle	
Belt	
Buffers & Polishers 51	
Sander Accessories 53	
Drills	
Pistol Grip	
Inline	
Right Angle 62	
Drill Accessories	
Microstop Cages & Cutters 70	
Hand Drill Cutters 72	
Impact Wrenches 74 –	
Composite	
All-Metal	
Pistol Grip	
Spade Handle 81	
Screwdrivers 82 -	
19 Series Inline 83	
19 Series Pistol	
Accessories	
Specialty Tools	
Routers	
Router Accessories	
Saws	
Saw Accessories 97	
Percussion Tools	
Percussion Accessories 101	
Specialty Tools 102	
TULMan <sup>™</sup> Electronic Counter	
General Accessories106 –	

#### Warranty

Cleco<sup>®</sup> and Cleco Dotco<sup>™</sup> are registered trademarks of Apex Brands Inc. Apex Brands, Inc. warrants products and parts sold by it, insofar as they are of its own manufacture, against defects of material and workmanship, under normal use and service in accordance with its written instructions, recommendations, and ratings for installation, operation, maintenance, and service of products, for a period of **ONE YEAR FROM THE DATE OF INITIAL USE, BUT IN NO EVENT SHALL THE WARRANTY EXCEED 24 MONTHS FROM DATE OF DELIVERY TO DISTRIBUTOR.** 

Proof of Purchase with shipment date must be furnished by the user to validate the warranty. This warranty applies only to products manufactured by Apex Brands, LLC and specifically excludes products manufactured by others.

Products not manufactured by Apex Brands, LLC are warranted only to the extent and in the manner warranted to Apex Brands, LLC by the manufacturer and then only to the extent Apex Brands, LLC is

Lubrication -

Proper lubrication is essential to the economical operation of pneumatic and electric tools. Apex Brands, LLC products perform better and their life is extended by using the recommended lubricants. All lubricants that are listed in the accessory section of this catalog have undergone extensive testing and are recommended for use with Apex Brands, LLC products.

#### Safe Work Practices

#### 🛕 W A R N I N G

The signal word "WARNING" indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury; and, identifies safe work practices in this operating instruction. Observe these notes and proceed with special care in these cases. Pass all safety instructions on to other users. In addition to these instructions, the general local safety and accident prevention rules must be observed.

able to enforce such warranty. Apex Brands, LLC's warranty with respect to products manufactured by it is limited to the repair or replacement, as Apex Brands, LLC may elect, of any defective part regarding which the Distributor has given 5 days written notice from the discovery of such defect. Installation and transportation costs are not included.

Apex Brands, LLC shall have the option of requiring the return to it of the defective material, transportation prepaid, for inspection. No allowance will be made for repairs without Apex Brands, LLC's approval.

APEX BRANDS, LLC MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND HEREBY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

#### 🛕 W A R N I N G

the Product Manual for the specific tool.

These Safety Instructions are not intended to be all

inclusive. The operator should also read and understand

### **WARNING**



Before mounting any abrasive wheel, buffing wheel, wire brush, saw blade, flap wheel or other product, after all tool repairs and whenever a tool is issued for use, the rpm should be checked with a tachometer to insure that its actual speed does not exceed rated speed. Governed tools in use on the job should be checked at least once every twenty hours of use, or once weekly, whichever is more frequent. Tachometers must be checked and calibrated on a regular basis according to the manufacturer's recommendations.

## **A**WARNING

Select proper guards for the application and mount securely and properly. Always mount guards so that abrasive debris, sparks, etc., are deflected away from the operator.

Safety guards should be in good condition. Any guard which has been subjected to a wheel failure should be discarded and replaced.



#### **WARNING**

Speed rating of abrasive wheel, buffing wheel, wire brush, saw blade, flap wheel, or other products used, must equal or exceed speed rating of tool.

Exceeding the speed of accessories may cause failure of these products and serious operator injury.

Wheels must clearly show the rated speed for its use, or must be discarded and not used.

## **WARNING**

Test and operate tools at 90 PSIG (620 kPa/6.2 bar) maximum pressure (measured at the tool while the tool is running) unless tool is marked otherwise. Use air line filters – regulators – lubricators.

Always remove the air supply hose before working on the tool or changing accessories.

### <u> WARNING</u>

Immediately shut off the tool if unusual sound or vibration is detected. Remove and inspect the wheel and check the tool speed (RPM).

Use of over-speeding grinder or unbalanced wheels may result in serious injury.

# Each type of wheel, wire brush, saw blade, and other product, has specific mounting pr

Each type of wheel, wire brush, saw blade, flap wheel, and other product, has specific mounting procedures and regulations concerning spindles, flanges, blotters, collets, etc., which should be used. Wheels must mount on tool's spindle freely but not loosely. Spindle nuts must be tightened so as not to crack the wheel with too much force. Nuts must have all thread engagement.

### **A**WARNING

Regularly inspect all wheels, etc., and discard cracked, chipped, or otherwise damaged units.

# 🛦 WARNING

Wear impact resistant goggles or face shield at all times the tool is in operation. Other protective clothing should be worn, if necessary, for spark protection deflection.

# **A** WARNING

High sound levels can cause permanent hearing loss. Use hearing protection as required by the work environment and grinding application.

### 🛦 WARNING

Employ a safety program to provide inspection and maintenance of all phases of tool operation and air supply equipment in accordance with "Safety Code for Portable Air Tools," CAGI B186.1 and CAGI B7.1.

Make sure that all repairs are by trained personnel only and that these safety instructions are understood by the user.

### WARNING

When mounting any grinding wheel, the tool should be run at operating speed with the safety guard in place, in a protected area such as under a work bench, for at least one minute. A damaged wheel should fail within that time.

Any suspect wheel of unknown origin should not be used and must be properly disposed.

## Cleco<sup>®</sup> Dotco<sup>™</sup> Tools that work with operators, not against them.

#### Performance

Known for their durability, dependability, and versatility, the Cleco Dotco brand is viewed as the premier line of material removal tools in the industrial marketplace. This is made possible by sound design and manufacturing techniques, producing tools that are small, comfortable and lightweight, yet can withstand the most rugged environments.

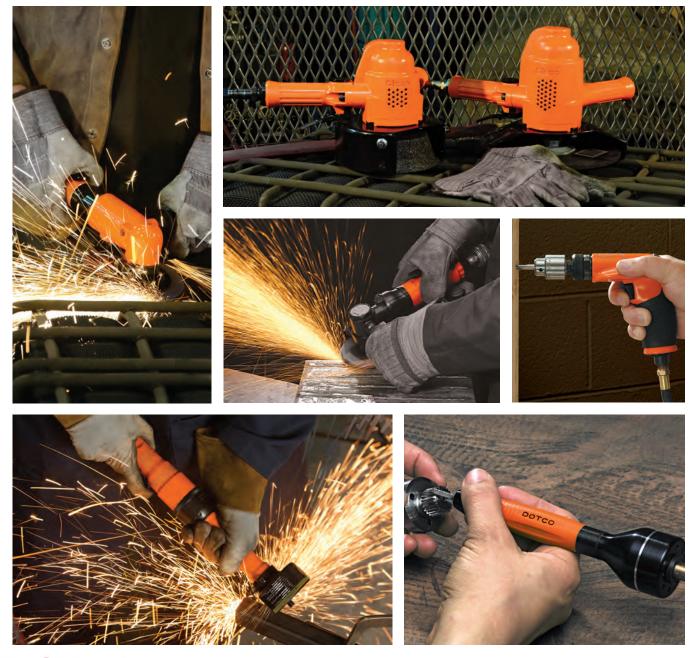
#### Ergonomics

Cleco Dotco tools are designed so their form follows their function. Simply, tools that are more comfortable for the operator to use...tools that work with operators and not against them...including composite housings, low vibration, and low noise.

#### Versatility

By using only a few motor types, a diverse line of Cleco Dotco products have been developed to handle a wide range of applications. These tools also have a high interchangeability of parts making maintenance easier and more affordable.





#### Cleco<sup>®</sup> Dotco<sup>™</sup> Quality

Quality Cleco Dotco power tools have been manufactured for over 75 years. Understandably, we are proud of our tools. Proud that they have become the industry standard.

#### **ISO 9001 Certified**

Our manufacturing processes are ISO 9001 certified... that means our products are manufactured to the highest standards.

#### Low Noise, Low Vibration

Noise and vibration of power tools in manufacturing is an important issue. Cleco Dotco tools have been designed to operate as quietly as possible, while providing substantial power. Vibration has been kept to a minimum by using precision parts and high quality bearings.

#### **Precision Parts**

It's simple, precision parts let operators manufacture precision products. Whether it is a spindle, a chuck, a motor or an angle head, our parts are manufactured from the finest materials available and are machined to the highest tolerances.

#### Parts Interchangeability

Maintenance of tools can be time consuming...and expensive. That is why our products have been designed with high parts interchangeability. With fewer parts required to repair our tools, less inventory of parts is required and tools are easier to repair.

DOLCO

#### **PERFORMANCE, VERSATILITY & QUALITY**

When it comes to fine finishing applications such as die grinding or de-burring, no tools are better suited for the job than Cleco<sup>®</sup> Dotco<sup>™</sup> grinders. Dotco's reputation for durability, dependability and versatility is among the highest for fine finishing applications. This is the result of years of continuous improvements in engineering design and manufacturing processes.

Dotco grinders are designed with the operator in mind. They are 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 doing the best job possible, in the least amount of time.

#### **TOUGH TOOLS FOR TOUGH JOBS**

Cleco grinders meet the demanding requirements of industries including shipbuilding, pipe fabricating, transportation equipment manufacturing, and welding applications. Since these types of applications typically require a high material removal rate, Cleco grinders incorporate high horsepower/high RPM motors.

To achieve maximum durability, Cleco grinders use top quality precision components and motor assemblies protected by all metal housings.



IX IA IN 🥂 I

# **GRINDER ABRASIVES GUIDE** 7



#### Precision Grinders, Carbide Bur and Mounted Wheel Grinders

Used in finishing applications that require a high degree of durability.



#### **Cone and Plug Wheels**

Used for general purpose grinding work on mild steel, stainless steel, metal alloys, and cast steel. Applications include:

- Grinding and smoothing fillets, corners
- Mild bending contours
- Beveling workpiece edges prior to welding
- Internal grinding
- General grinding in confined areas



#### Type 1 Wheels

Used on portable horizontal shaft tools. Applications Include:

- Notch free grinding
- Pre-weld cleaning
- Type 1 Cut-Off Wheels
- Smoothing out weld seams
- Grinding concrete or masonry products
- Removing seam lines from castings



### Type 6 & 11 Cup Wheels

Used on right angle or vertical shaft tools.

Type 6 – Straight Cup Wheels

■ Type 11 – Flared Cup Wheels

#### Type 27/28 Depressed Center Wheels



Type 27 wheels are used at an angle to the workpiece between 30° and 45°. These wheels do not "flat grind." Type 28 wheels are saucer shaped wheels, which are contoured to provide a correct "built-in"

Applications include cutting carbon and stainless steel, ferrous metals, and cast iron

grinding angle. Consequently, Type 28 wheels may be used for flat contact on the workpiece.





### **10-90 Series - Turbine**

#### 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

|--|--|

Cat. No.	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
10R9000-03	3 mm	100,000	3/16" Carbide Burr, 3/16" Diamond Pin	Aluminum	0.5 lb   0.23 kg	5.4 in   137 mm	1/8 in
10R9000-08	1/8 in	100,000	3/16" Diamond Pin	Aluminum	0.5 lb   0.23 kg	5.4 in   137 mm	1/8 in

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 - Turbine**

#### 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



Cat. No.	Collet Size	Throttle Type	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
10L9500-36	1/8 in	Lever	80,000	1/4" Carbide Burr, 3/16" Diamond Pin	Aluminum	1.9 lb   0.86 kg	5.8 in   147 mm	1/4 in
10N9500-36*	1/8 in	None	80,000	1/4" Carbide Burr, 3/16" Diamond Pin	Aluminum	1.9 lb   0.86 kg	5.8 in   147 mm	1/4 in

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

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

# **12R91 Series - Governed - Turbine**

#### 65,000 RPM 0.1 hp (0.074 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 composite housing
- Low vibration and quiet operation minimizes operator fatigue



Cat. No.	Collet Size	Free Speed (rpm)	Overhose	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12R9180-03	3 mm	65,000	None	1/8" Carbide Burr, 1/8" Diamond Pin	Composite	0.4 lb   0.18 kg	5.8 in   147 mm	1/8 in
12R9180-08	1/8 in	65,000	None	1/8" Carbide Burr, 1/8" Diamond Pin	Composite	0.4 lb   0.18 kg	5.8 in   147 mm	1/8 in
12R9180-43	3 mm	65,000	4 ft   1.2 m	1/8" Carbide Burr, 1/8" Diamond Pin	Composite	0.4 lb   0.18 kg	5.8 in   147 mm	1/8 in
12R9180-48	1/8 in	65,000	4 ft   1.2 m	1/8" Carbide Burr, 1/8" Diamond Pin	Composite	0.4 lb   0.18 kg	5.8 in   147 mm	1/8 in

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 - Gearless Right Angle**

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



Cat. No.	Collet Size	Free Speed (rpm)	Overhose	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12R0380-13	3 mm	80,000	1 ft   0.3 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.5 in   140 mm	1/8 in
12R0380-18	1/8 in	80,000	1 ft   0.3 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.5 in   140 mm	1/8 in
12R0380-43	3 mm	80,000	4 ft   1.2 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.5 in   140 mm	1/8 in

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/1.5 m air supply hose, 1 ft./0.3 m overhose

## **10-04 Series - Inline**

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



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/1.5 m air supply hose, 1 ft./0.3 m overhose

9



### **12-04 Series - Inline**

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

Collet	Guard								
Without	With	Collet	Free Speed						Air Inlet
Cat. No.	Cat. No.	Size	(rpm)	Overhose	Abrasive Capacity	Type Housing	Weight	Length	Size
12R0400-13	12R0410-13	3 mm	60,000	1 ft   0.3 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.8 in   147 mm	1/8 in
12R0400-18	-	1/8 in	60,000	1 ft   0.3 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.8 in   147 mm	1/8 in
12R0400-43	-	3 mm	60,000	4 ft   1.2 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.8 in   147 mm	1/8 in
—	12R0410-16	3/32 in	60,000	1 ft   0.3 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.8 in   147 mm	1/8 in
12R0410-18	-	1/8 in	60,000	1 ft   0.3 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.8 in   147 mm	1/8 in
12R0410-43	—	3 mm	60,000	4 ft   1.2 m	1/4" Carbide Burr, 1/4" Diamond Pin	Composite	0.3 lb   0.14 kg	5.8 in   147 mm	1/8 in

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/1.5 m air supply hose, 1 ft./0.3 m overhose

### **MP Series - MP4200 & MP4201**

70,000 RPM 0.06 hp (0.044 kW)

- Ideal for precision deburring, blending, and smoothing applications
- Lightweight, ergonomically designed and 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



DOTCO

MP4201

Model	Нр	Free Speed	Abrasive Capacity		Length		Wei	ight	Hose	e (I.D.) CFM		Inlet	Collet
Number		RPM	Carbide Bur	Diamond Pin	in	mm	lbs.	kg	in	mm		(NPT)	Size
Inline													
MP4200	0.1	70,000	1/4 in	1/4 in	5.35	136	0.43	0.2	3/16	4.76	8	1/8 in	1/8 in, 30 mm
Angle													
MP4201	0.1	70,000	1/4 in	1/4 in	5.9	150	0.43	0.2	3/16	4.76	8	1/8 in	1/8 in, 30 mm
	General: Air Inlet 1/4" NPT. Use 1/4" (6.4 mm) I.D. hose.				Optional:								

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

#### 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.)

10

# 220G Series - 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



Colle	et Guard								
With	Without	Collet	Throttle Type	Free Speed					Air Inlet
Cat. No.	Cat. No.	Size		(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Size
220GL-600-C2	—	1/8 in	Lever	60,000	1/4" Carbide Burr	Aluminum	0.4 lb   0.18 kg	4.6 in   117 mm	1/8 in
—	220G-600-C2-K*	-	None	60,000	1/4" Carbide Burr	Aluminum	0.5 lb   0.23 kg	4.6 in   117 mm	1/8 in
220G-600-C2*	—	1/8 in	None	60,000	1/4" Carbide Burr	Aluminum	0.3 lb   0.14 kg	4.6 in   117 mm	1/8 in

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

\* 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.

### 14/18 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

Cat. No.	Collet Size	Throttle Type	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
14G-810	1/8 in	Roll	50,000	1/4" Carbide Burr, 1/2" Mounted Wheel	Steel	0.3 lb   0.14 kg	3.9 in   99 mm	1/8 in
18G-810D	1/4 in	Dial	40,000	1/4" Carbide Burr, 1/2" Mounted Wheel	Steel	0.9 lb   0.41 kg	5.9 in   150 mm	1/8 in
18G-810D-08	1/8 in	Dial	40,000	1/4" Carbide Burr, 1/2" Mounted Wheel	Steel	0.9 lb   0.41 kg	5.9 in   150 mm	1/8 in

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



PREC

\_

S

### **15Z Series - Air Marking Pen**

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!

Cat. No.	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size	Diameter			
15Z-710	20,000	1/8" Stylus	Aluminum	0.3 lb   0.14 kg	5.5 in   140 mm	1/4 in	0.6 in			

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: Carbide tipped stylus

<b>15Z Series - Air Marking Pen Kit</b> 20,000 RPM 0.06 hp (0.044 kW)	
<ul> <li>Includes 15Z-710 air marking pen</li> <li>5' (1.5 m) air hose assembly</li> <li>3/16" ID with 1/8" NPT fittings</li> <li>Includes two 1/2" wrenches</li> <li>Durable and convenient carrying case</li> </ul>	

Cat. No.	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
15 <b>Z-72</b> 0	20,000	1/8" Stylus	Aluminum	0.4 lb   0.18 kg	5.50 in   140 mm	1/4 in

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: Carbide tipped stylus

٩

DOTCO

## **12-05 Series - with Collet Guard**

#### 40,000 RPM 0.2 hp (0.15 kW)

- 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

Cat. No.	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12R0500-36	1/4 in	40,000	1/4" Carbide Burr, 7/8" Mounted Wheel	Composite	0.7 lb   0.32 kg	5.9 in   150 mm	1/8 in

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

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

### 12-10 Series - 300 Series Collet

20,000 - 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

Ext	naust							
Front	Rear	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.							
12L1045-36	_	1/4 in	12,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	0.8 lb   0.36 kg	6.0 in   152 mm	1/4 in
12L1046-36	—	1/4 in	18,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	0.8 lb   0.36 kg	6.0 in   152 mm	1/4 in
12\$1008-36	12L1028-36	1/4 in	20,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	0.8 lb   0.36 kg	6.0 in   152 mm	1/4 in
12L1003-36	12L1082-36	1/4 in	25,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	0.8 lb   0.36 kg	6.0 in   152 mm	1/4 in
12L1000-36	12L1080-36	1/4 in	30,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	0.8 lb   0.36 kg	6.0 in   152 mm	1/4 in
12L1001-36	12L1081-36	1/4 in	34,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	0.8 lb   0.36 kg	6.0 in   152 mm	1/4 in

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





z

Ш

GRIN

Π 刀

S

### 10-10 Series - 200 & 300 Series Collet

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



Exh	aust								
Front	Rear	Collet Size	Throttle Type	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.								
10L1003-36	10L1082-36	1/4 in	Lock Off Lever	25,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	0.7 lb   0.32 kg	4.6 in   117 mm	1/4 in
-	10N1080-01*	1/4 in	None	30,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	0.7 lb   0.32 kg	4.6 in   117 mm	1/4 in
10L1000-36	10L1080-36	1/4 in	Lock Off Lever	30,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	0.7 lb   0.32 kg	4.6 in   117 mm	1/4 in
-	10L1097-36	1/4 in	Lock Off Lever	30,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum With Bail	0.7 lb   0.32 kg	4.6 in   117 mm	1/4 in
10L1001-36	10L1081-36	1/4 in	Lock Off Lever	34,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	0.7 lb   0.32 kg	4.6 in   117 mm	1/4 in
-	10N1081-36*	1/4 in	None	34,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	0.7 lb   0.32 kg	4.6 in   117 mm	1/4 in

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

# 12-20 Series - 200 Series Collet

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



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



Exh	aust								
Front	Rear	Throttle Type	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size	
Cat. No.	Cat. No.								
12L2003-01	_	Lock Off Lever	12,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	1.4 lb   0.64 kg	6.9 in   175 mm	1/4 in	
12L2002-01	12L2082-01	Lock Off Lever	18,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	1.4 lb   0.64 kg	6.9 in   175 mm	1/4 in	
12L2001-01	12L2081-01	Lock Off Lever	20,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	1.4 lb   0.64 kg	6.9 in   175 mm	1/4 in	
-	12B2080-01	Button	25,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	1.4 lb   0.64 kg	6.9 in   175 mm	1/4 in	
12L2000-01	12L2080-01	Lock Off Lever	25,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	1.4 lb   0.64 kg	6.9 in   175 mm	1/4 in	

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

## 10-20 Series - 200 & 300 Series Collet

#### 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



Ext	naust				Free					
Front	Rear	Collet Guard	Collet Size	Throttle Type	Speed	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.				(rpm)					
10L2002-36	-	300 Series	1/4 in	Lock Off Lever	18,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.4 lb   0.64 kg	6.6 in   168 mm	1/4 in
—	10L2082-01	200 Series	1/4 in	Lock Off Lever	18,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.4 lb   0.64 kg	6.6 in   168 mm	1/4 in
10L2005-01	-	200 Series	1/4 in	Lock Off Lever	20,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.3 lb   0.59 kg	5.7 in   145 mm	1/4 in
_	10L2081-01	200 Series	1/4 in	Lock Off Lever	20,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.3 lb   0.59 kg	5.8 in   147 mm	1/4 in
10L2000-01	10L2080-01	200 Series	1/4 in	Lock Off Lever	25,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.3 lb   0.59 kg	5.8 in   147 mm	1/4 in
10L2000-36	_	300 Series	1/4 in	Lock Off Lever	25,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.2 lb   0.54 kg	6.4 in   163 mm	1/4 in
—	10L2080-36	300 Series	1/4 in	Lock Off Lever	25,000	3/4" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.3 lb   0.59 kg	6.4 in   163 mm	1/4 in
-	10N2080-01**	200 Series	1/4 in	None	25,000	3/4" Carbide Bur, 1.5" Mounted Wheel	Aluminum	1.3 lb   0.59 kg	5.8 in   147 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Standard Equipment: Applicable collet, collet wrenches

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

\*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

Ext	aust							
Front	Side	Collet Size	Free Speed Abrasive (rpm) Capacity		Type Housing	Weight	Length 6.3 in   160 mm	Air Inlet Size
Cat. No.	Cat. No.							
216GLFB-250-C4	216GLSB-250-C4	1/4 in	25,000	3/4" Carbide Burr	Aluminum	1.3 lb   0.59 kg	6.3 in   160 mm	1/4 in

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 GRIND



🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

### 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

	Exhaust			Free					
Rear	Front	Side	Collet Size	Speed	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.	Cat. No.		(rpm)					
236GLR-180-C4	_	_	1/4 in	18,000	1" Carbide Burr	Aluminum	1.3 lb   0.59 kg	7.4 in   188 mm	1/4 in
_	236GLF-180-C4	236GLS-180-C4	1/4 in	18,000	1" (25 mm) Carbide Burr, 2" (50 mm) Mounted Wheel	Aluminum	1.4 lb   0.64 kg	6.8 in   173 mm	1/4 in
236GLR-200-C4	_	_	1/4 in	20,000	1" (25 mm) Carbide Burr, 2" (50 mm) Mounted Wheel	Aluminum	1.3 lb   0.59 kg	7.4 in   188 mm	1/4 in
-	_	236GLS-240-C4	1/4 in	24,000	1" Carbide Burr	Aluminum	1.4 lb   0.64 kg	6.8 in   173 mm	1/4 in
236GLR-250-C4	_	_	1/4 in	25,000	1" Carbide Burr	Aluminum	1.3 lb   0.59 kg	7.4 in   188 mm	1/4 in
_	236GLF-250-C4	_	1/4 in	25,000	1" Carbide Burr	Aluminum	1.4 lb   0.64 kg	6.8 in   173 mm	1/4 in
-	236GLF-250-C6	_	3/8 in	25,000	1" (25 mm) Carbide Burr, 2" (50 mm) Mounted Wheel	Aluminum	1.4 lb   0.64 kg	6.8 in   173 mm	1/4 in

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

# 12-25 Series - 200 & 300 Series Collet

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



Exh	aust			Free					
Front	Rear	Collet Guard	Collet Size	Speed	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.			(rpm)					
12L2562-01*	12L2542-01*	200 Series	1/4 in	12,000	1" Carbide Bur, 1.5" Mounted Wheel	Composite	1.8 lb   0.82 kg	7.4 in   188 mm	1/4 in
12L2565-01*	12L2545-01*	200 Series	1/4 in	15,000	1" Carbide Burr, 1.5" Mounted Wheel	Composite	1.8 lb   0.82 kg	7.4 in   188 mm	1/4 in
12L2502-01	12L2582-01	200 Series	1/4 in	18,000	1" Carbide Burr, 1.5" Mounted Wheel	Composite	1.8 lb   0.82 kg	7.3 in   185 mm	1/4 in
12L2568-01*	12L2548-01*	200 Series	1/4 in	18,000	1" Carbide Burr, 1.5" Mounted Wheel	Composite	1.8 lb   0.82 kg	7.4 in   188 mm	1/4 in
12L2500-01	12L2580-01	200 Series	1/4 in	23,000	1" Carbide Burr, 1.5" Mounted Wheel	Composite	1.8 lb   0.82 kg	7.3 in   185 mm	1/4 in
12L2500-36	12L2580-36	300 Series	1/4 in	23,000	1" Carbide Burr, 1.5" Mounted Wheel	Composite	1.8 lb   0.82 kg	8.0 in   203 mm	1/4 in

\* 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



### 10-25 Series - 200 & 300 Series Collet

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

- Aluminum housing
- Compact, yet powerful motor



Exha	aust				Free					
Front	Rear	Collet Option	Collet Size	Throttle Type	Speed	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.				(rpm)		<b>y</b>			
10L2562-01	_	200 Series	1/4 in	Lock Off Lever	12,000	1" Carbide Bur, 1.5" Mounted Wheel	Aluminum	1.9 lb   0.86 kg	7.0 in   178 mm	1/4 in
10L2565-01	—	200 Series	1/4 in	Lock Off Lever	15,000	1" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.9 lb   0.86 kg	7.0 in   178 mm	1/4 in
10L2502-01	_	200 Series	1/4 in	Lock Off Lever	18,000	1" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.4 lb   0.64 kg	6.3 in   160 mm	1/4 in
10L2568-01	—	200 Series	1/4 in	Lock Off Lever	18,000	1" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.5 lb   0.68 kg	7.3 in   185 mm	1/4 in
—	10L2582-01	200 Series	1/4 in	Lock Off Lever	18,000	1" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.5 lb   0.68 kg	7.3 in   185 mm	1/4 in
10L2500-01	10L2580-01	200 Series	1/4 in	Lock Off Lever	23,000	1" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.4 lb   0.64 kg	6.3 in   160 mm	1/4 in
10L2500-36	_	300 Series	1/4 in	Lock Off Lever	23,000	1" Carbide Bur, 1.5" Mounted Wheel	Aluminum	1.4 lb   0.64 kg	7.1 in   180 mm	1/4 in
_	10L2580-36	300 Series	1/4 in	Lock Off Lever	23,000	1" Carbide Bur, 1.5" Mounted Wheel	Aluminum	1.5 lb   0.68 kg	7.9 in   201 mm	1/4 in
10B2500-01*	_	200 Series	1/4 in	Button	23,000	1" Carbide Burr, 1.5" Mounted Wheel	Aluminum	1.4 lb   0.64 kg	6.3 in   160 mm	1/4 in

17



### **MP Series - MP4430**

#### 23,000 RPM 0.3 hp (0.223 kW)

- Ideal for general purpose applications such as porting, light weld grinding, polishing, and breaking up sharp edges
- Ergonomic grip for operator comfort
- Built-in power regulator
- 360° air inlet swivel
- Rear exhaust directs air away from work
- 1/4 in capacity collet



### **MP Series - MP4458**

#### 25,000 RPM 0.5 hp (0.372 kW)

- Rugged, all-steel housing is ideal for rapid metal removal
- Trim, ergonomic design enables excellent control
- Front exhaust
- 1/4 in capacity collet 200 Series



MP4458

Model	Нр	Free Speed	Mounted	Carbide	Lenç	yth	Weig	ght	Hose	(I.D.)	CFM	Inlet	Collet
Number	RPN	RPM	Wheels	Bur	in	mm	lbs	kg	in	mm	Griwi	NPT	Size
MP4430	0.3	23,000	1 in	1/2 in	6	153	0.875	0.41	3/8	10	17	1/4 in	1/4 in
MP4458	0.5	25,000	1 1/2 in	1 in	6 1/16	154	1.3	0.60	3/8	10	23	1/4 in	1/4 in

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.

NDERS

## 12-11 Series - 300 Series Collet

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

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

Exh	aust								
Front	Rear	Collet Size	Free Speed (rpm)	Extension	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.								
12L1111-36	_	1/4 in	25,000	3 in	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.1 lb   0.50 kg	8.9 in   226 mm	1/4 in
12L1100-36	12L1180-36	1/4 in	28,000	3 in	1/2" Carbide Bur, 1" Mounted Wheel	Composite	1.1 lb   0.50 kg	8.9 in   226 mm	1/4 in
12L1101-36	12L1181-36	1/4 in	28,000	5 in	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.3 lb   0.59 kg	10.9 in   277 mm	1/4 in
12L1112-36	_	1/4 in	25,000	5 in	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.3 lb   0.59 kg	10.9 in   277 mm	1/4 in

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

## **10-11 Series - 300 Series Collet**

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

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

Exh	aust								
Front	Rear	Collet Size	Free Speed (rpm)	Extension	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
Cat. No.	Cat. No.								
10L1100-36	_	1/4 in	28,000	3 in	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.0 lb   0.45 kg	7.6 in   193 mm	1/4 in
10L1101-36	—	1/4 in	28,000	5 in	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.2 lb   0.54 kg	9.8 in   249 mm	1/4 in
10L1111-36	_	1/4 in	25,000	3 in	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.0 lb   0.45 kg	7.6 in   193 mm	1/4 in
10L1112-36	_	1/4 in	25,000	5 in	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.2 lb   0.54 kg	9.8 in   249 mm	1/4 in
-	10L1180-36	1/4 in	28,000	3 in	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.1 lb   0.50 kg	8.4 in   213 mm	1/8 in
-	10L1181-36	1/4 in	28,000	5 in	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.2 lb   0.54 kg	9.8 in   249 mm	1/4 in

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



· DOICO ·



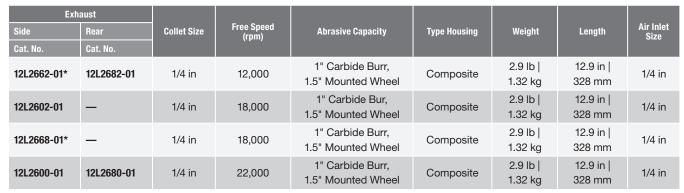
19

🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

#### 12-26 Series - 5" (127 mm) Extension - 200 Series Collet

#### 18,000 - 22,000 RPM 0.9 hp (0.67 kW)

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



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

## **12-26 Series - Multiple Extension**

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

Cat. No.	Exhaust	Termination	Free Speed (rpm)	Extension	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12S2674-1A	Rear	1/4" Collet	18,000	7.25 in	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	3.0 lb   1.36 kg	16.3 in   414 mm	1/4 in
12S2674-2A	Rear	1/4" Collet	18,000	14.50 in	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	4.2 lb   1.91 kg	23.5 in   597 mm	1/4 in
12S2674-2C	Rear	3/8" - 24 e	18,000	14.50 in	1.25" Cone or Plug Wheel	Composite	4.2 lb   1.91 kg	23.5 in   597 mm	1/4 in
12S2674-3A	Rear	1/4" Collet	18,000	21.75 in	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	5.4 lb   2.45 kg	30.8 in   782 mm	1/4 in
12S2674-3C	Rear	3/8" - 24 e	18,000	21.75 in	1.25" Cone or Plug Wheel	Composite	5.4 lb   2.45 kg	30.8 in   782 mm	1/4 in
12S2674-4A	Rear	1/4" Collet	18,000	29.00 in	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	6.6 lb   2.99 kg	38.0 in   965 mm	1/4 in
12S2674-4C	Rear	3/8" - 24 e	18,000	29.00 in	1.25" Cone or Plug Wheel	Composite	6.6 lb   2.99 kg	38.0 in   965 mm	1/4 in
12S2674-5A	Rear	1/4" Collet	18,000	36.25 in	3/4" Carbide Burr, 1.5" Mounted Wheel	Composite	7.8 lb   3.54 kg	45.3 in   1151 mm	1/4 in
12S2674-5C	Rear	3/8" - 24 e	18,000	36.25 in	1.25" Cone or Plug Wheel	Composite	7.8 lb   3.54 kg	45.3 in   1151 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Standard Equipment: Applicable collet, collet wrenches



20

# **236 Series - Extended - 200 Series Collet**

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



Cat. No.	Exhaust	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
236GEL-240-C4	Side	1/4 in	24,000	1" Carbide Burr, 2" Mounted Wheel	Aluminum	2.3 lb   1.04 kg	12.4 in   315 mm	1/4 in
236GELR-180-C4	Rear	1/4 in	18,000	1" (25 mm) Carbide Burr, 2" (50 mm) Mounted Wheel	Aluminum	2.2 lb   1.00 kg	12.3 in   312 mm	1/4 in

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

#### 25 Series - Extended - Governed - 200 Series Collet

#### 18,000 RPM 1.4 hp (1.0 kW)

- 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

Cat. No.	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
25GELC-120-	• <b>C4</b> 1/4 in	12,000	1.25" Carbide Burr, 2" Mounted Wheel	Aluminum	3.0 lb   1.36 kg	14.5 in   368 mm	3/8 in
25GELC-180-	• <b>C4</b> 1/4 in	18,000	1.25" Carbide Burr, 2" Mounted Wheel	Aluminum	3.0 lb   1.36 kg	14.5 in   368 mm	3/8 in

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





**S** 21

Series Collet

🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

### **12LF Series - 300 Series Collet**

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

- Composite housing
- Front and rear exhaust models available
- Ergonomic and balanced design minimizes operator fatigue



Exi	haust							
Front	Rear		Free Speed					
Cat. No.	Cat. No.	Collet Size	(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height
12LF200-36	12LF280-36	1/4 in	12,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in
12LF201-36	12LF281-36	1/4 in	20,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in

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

# **10LF Series - 300 Series Collet**

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

- Aluminum housing for high durability
- Front and rear exhaust models available
- Well suited for any industrial grinding application



Exh	aust							
Front	Rear		Free Speed					
Cat. No.	Cat. No.	Collet Size	(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height
10LF200-36	10LF280-36	1/4 in	12,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in
10LF201-36	10LF281-36	1/4 in	20,000	1/2" Carbide Burr, 1" Mounted Wheel	Aluminum	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Standard Equipment: Applicable collet, collet wrenches

Standard Equipment: Applicable collet, c Minimum Hose I.D.: 1/4 in / 4.8 mm

### **MP Series - MP4424**

#### 20,000 RPM 0.3 hp (0.223 kW)

- Ideal for general purpose applications such as porting, light weld grinding, polishing, and breaking up sharp edges
- Ergonomic grip for operator comfort
- Built-in power regulator
- 360° air inlet swivel
- Rear exhaust directs air away from work
- 1/4 in capacity collet



Model	Number Hp	Free Speed	. wounted		Leng	gth	Weig	ght	Hose	(I.D.)	CFM	Inlet	Collet
Number	пр	RPM	Wheels	Bur	in	mm	lbs	kg	in	mm		NPT	Size
MP4424	0.3	20,000	1 in	1/2 in	6 3/8	160	1.25	0.55	3/8	10	18	1/4 in	1/4 in

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

S

🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

### 12-13 Series - Gearless - 300 Series Collet

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

- Composite housing
- Front and rear exhaust models available
- Suitable for a wide range of finishing and deburring applications



Exi	haust							
Front	Rear		Free Speed					
Cat. No.	Cat. No.	Collet Size	(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height
12L1302-36	12L1382-36	1/4 in	20,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in
12L1301-36	12L1381-36	1/4 in	25,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in
12L1300-36	12L1380-36	1/4 in	30,000	1/2" Carbide Burr, 1" Mounted Wheel	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in

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

## 12-23 Series - Gearless - 200 Series Collet

#### 20,000 RPM 0.5 hp (0.38 kW)

- Composite housing
- Front, side and rear exhaust models available
- Suitable for a wide range of finishing and deburring applications



Cat. No.	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
12L2384-01	1/4 in	20,000	3/4" Carbide Burr, 1.25" Mounted Wheel	Composite	2.0 lb   0.91 kg	7.5 in   191 mm	5.5 in	1/4 in

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

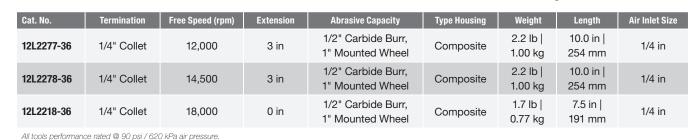
# 12-22 Series - 300 Series Collet

#### 12,000 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" Extended head available

Standard Equipment: Applicable collet, collet wrenches

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



GHT ANGLE GRINDERS

Л

23



AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676

#### 12-22 Series - Heavy Duty Head - 200 Series Collet

#### 9,000 RPM 0.6 hp (0.45 kW)

- Composite housing
- Front, side, and rear exhaust models available
- Ergonomic and balanced design minimized operator fatigue



Cat. No.	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
12L2251-01	1/4 in	9,000	3/4" Carbide Bur, 2" Mounted Wheel	Composite	3.2 lb   1.45 kg	9.3 in   236 mm	3.9 in	1/4 in
12L2252-01	1/4 in	11,000	3/4" Carbide Burr, 2" Mounted Wheel	Composite	3.2 lb   1.45 kg	9.3 in   236 mm	3.9 in	1/4 in

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 - 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



Cat. No.	Exhaust	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
216GLF-115A-C4	Front	1/4 in	11,500	1" Carbide Burr	Aluminum	2.4 lb   1.09 kg	7.1 in   180 mm	2.2 in	1/4 in
216GLFC-165A-C4	Rear	1/4 in	16,500	3/4" Carbide Burr	Aluminum	1.7 lb   0.77 kg	9.1 in   231 mm	2.2 in	1/4 in
216GLSC-165A-C4	Side	1/4 in	16,500	3/4" Carbide Burr	Aluminum	1.7 lb   0.77 kg	9.1 in   231 mm	2.2 in	1/4 in

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

#### 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



Cat. No.	Exhaust	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
236GLF-115A-C4	Front	1/4 in	11,500	1" (25 mm) Carbide Burr, 2" (50 mm) Mounted Wheel	Aluminum	2.6 lb   1.18 kg	7.6 in   193 mm	2.2 in	1/4 in
236GLR-115A-C4	Rear	1/4 in	11,500	1" (25 mm) Carbide Burr, 2" (50 mm) Mounted Wheel	Aluminum	2.1 lb   0.95 kg	8.3 in   211 mm	2.2 in	1/4 in
236GLSC-115A-C4	Side	1/4 in	11,500	1" (25 mm) Carbide Burr, 2" (50 mm) Mounted Wheel	Aluminum	2.0 lb   0.91 kg	9.6 in   244 mm	2.2 in	1/4 in
236GLFC-165A-C4	Front	1/4 in	16,500	3/4" Carbide Burr	Aluminum	2.0 lb   0.91 kg	9.6 in   244 mm	2.2 in	1/4 in

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 - Heavy Duty Head - 200 Series Collet

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



Cat. No.	Exhaust	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
12L2750-01	Side	1/4 in	6,000	1" Carbide Bur, 1" Mounted Wheel	Composite	3.4 lb   1.54 kg	9.8 in   249 mm	3.9 in	1/4 in
12L2780-01	Rear	1/4 in	6,000	3/4" Carbide Burr, 2" Mounted Wheel	Composite	3.4 lb   1.54 kg	9.8 in   249 mm	3.9 in	1/4 in
12L2751-01	Front	1/4 in	9,000	3/4" Carbide Burr, 2" Mounted Wheel	Composite	3.4 lb   1.54 kg	9.8 in   249 mm	3.9 in	1/4 in
12L2752-01	Side	1/4 in	11,000	3/4" Carbide Burr, 2" Mounted Wheel	Composite	3.4 lb   1.54 kg	9.8 in   249 mm	3.9 in	1/4 in
12L2782-01	Rear	1/4 in	11,000	3/4" Carbide Burr, 2" Mounted Wheel	Composite	3.4 lb   1.54 kg	9.8 in   249 mm	3.9 in	1/4 in

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



Л

G H T

ANGL

G R

Z

ш

R S

🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

### 12-27 Series - 300 Series Collet

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" extension



Cat. No.	Collet Size	Free Speed (rpm)	Extension	Abrasive Capacity	Type Housing	Weight	Length
12L2777-36	1/4 in	12,000	3 in	3/4" Carbide Burr, 1.25" Mounted Wheel	Composite	2.3 lb   1.04 kg	10.5 in   267 mm
12L2776-36	1/4 in	13,500	3 in	3/4" Carbide Burr, 1.25" Mounted Wheel	Composite	2.3 lb   1.04 kg	10.5 in   267 mm
12L2778-36	1/4 in	14,500	3 in	3/4" Carbide Burr, 1.25" Mounted Wheel	Composite	2.3 lb   1.04 kg	10.5 in   267 mm
12L2718-36	1/4 in	18,000	0 in	3/4" Carbide Burr, 1.25" Mounted Wheel	Composite	1.9 lb   0.86 kg	8.0 in   203 mm

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

# **136 Series - Gearless**

11,500 - 18,000 RPM 0.6 hp (0.4 kW)

- Compact and powerful
- 1 Piece housing
- Maximum durability with gearless drive
- Equipped with lock-off lever



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
136VGL-135-D3T4	3/8" - 24 e	13,500	4" (100 mm) Type 27	Steel	2.4 lb   1.09 kg	7.3 in   185 mm	4.0 in	1/2 in
136VGL-180-D3T3	3/8" - 24 e	18,000	3" (75 mm) Type 27	Steel	2.4 lb   1.09 kg	7.3 in   185 mm	4.0 in	1/2 in
136VGL-180-D3T4	3/8"- 24 e	18,000	4" (100 mm) Type 27	Steel	2.4 lb   1.09 kg	7.3 in   185 mm	4.0 in	1/2 in

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

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

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

# **216 Series - Heavy Duty Head**

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



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
216GLF-115A-D3T4	Front	3/8"-24 e	11,500	4" (100 mm) Type 27	Aluminum	2.7 lb   1.22 kg	7.1 in   180 mm	3.2 in	1/4 in
216GLF-115A-D3T45	Front	3/8"-24 e	11,500	4.5" (115 mm) Type 27	Aluminum	2.7 lb   1.22 kg	7.1 in   180 mm	3.2 in	1/4 in

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

# **216 Series - Extended Head**

#### 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



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
216GLFB-135A-D3T4	Front	3/8" - 24 e	13,500	4" (100 mm) Type 27	Aluminum	2.7 lb   1.22 kg	9.1 in   231 mm	2.2 in	1/4 in
216GLSB-135A-D3T4	Side	3/8" - 24 e	13,500	4" (100 mm) Type 27	Aluminum	2.4 lb   1.09 kg	9.1 in   231 mm	2.2 in	1/4 in

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



Л

G H T

 $\triangleright$ 

Ζ

GLE

G

Л

Z

DERS

AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 💻

### **236 Series - Extended Head**

13,500 RPM 0.8 hp (0.6 kW)

- Extended head for better excess ability reach
- Powerful and durable material removal
- Robust and long lasting angle head for the most demanding applications



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
236GLSB-135A-D3T4	Side	3/8" - 24 e	13,500	4" (100 mm) Type 27	Aluminum	2.0 lb   0.91 kg	9.6 in   244 mm	2.2 in	1/4 in
236GLRB-135A-D3T4	Rear	3/8" - 24 e	13,500	4" (100 mm) Type 27	Aluminum	2.0 lb   0.91 kg	7.6 in   193 mm	2.2 in	1/4 in
236GLFB-135A-D3T4	Front	3/8" - 24 e	13,500	4" (100 mm) Type 27	Aluminum	2.0 lb   0.91 kg	9.6 in   244 mm	2.2 in	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 1/4 in / 6.4 mm

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

## **12-27 Series - Heavy Duty Head**

#### 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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12L2714-28	3/8"	14,500	4" (100 mm) Type 1	Composite	3.2 lb   1.45 kg	8.0 in   203 mm	1/4 in
12L2718-28	3/8"	18,000	4" (100 mm) Type 1	Composite	3.2 lb   1.45 kg	8.0 in   203 mm	1/4 in

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

# **236 Series - Heavy Duty Head**

11,500 RPM 0.9 hp (0.6 kW)

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



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
236GLR-115A-D3T45	Rear	3/8" - 24 e	11,500	4.5" (115 mm) Type 27	Aluminum	2.5 lb   1.13 kg	8.3 in   211 mm	3.2 in	1/4 in
236GLF-115A-D3T4	Front	3/8" - 24 e	11,500	4" (100 mm) Type 27	Aluminum	3.0 lb   1.36 kg	7.6 in   193 mm	3.2 in	1/4 in
236GLS-115A-D3T4	Side	3/8" - 24 e	11,500	4" (100 mm) Type 27	Aluminum	2.5 lb   1.13 kg	7.6 in   193 mm	3.2 in	1/4 in
236GLR-115A-D3T4	Rear	3/8" - 24 e	11,500	4" (100 mm) Type 27	Aluminum	2.5 lb   1.13 kg	8.3 in   211 mm	3.2 in	1/4 in
236GLF-115A-D3T45	Front	3/8" - 24 e	11,500	4.5" (115 mm) Type 27	Aluminum	3.0 lb   1.36 kg	7.6 in   193 mm	3.2 in	1/4 in
236GLR-115A-D3T5	Rear	3/8" - 24 e	11,500	5" (150 mm) Type 27	Aluminum	2.5 lb   1.13 kg	8.3 in   211 mm	3.2 in	1/4 in
236GLR-115A-D5T45	Rear	5/8" - 11 e	11,500	4.5" (115 mm) Type 27	Aluminum	2.5 lb   1.13 kg	8.3 in   211 mm	3.2 in	1/4 in
236GLRE-115A-D5T45	Rear	5/8" - 11 e	11,500	4.5" (115 mm) Type 27	Aluminum	3.5 lb   1.59 kg	7.6 in   193 mm	3.2 in	1/4 in
236GLS-115A-D5T45	Side	5/8" - 11 e	11,500	4.5" (115 mm) Type 27	Aluminum	2.5 lb   1.13 kg	7.6 in   193 mm	3.2 in	1/4 in

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

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

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

## **25 Series - 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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
25GL-60A-D5T7	5/8" - 11 e	6,000	7" (180 mm) Type 27	Aluminum	5.6 lb   2.54 kg	10.0 in   254 mm	4.0 in	3/8 in
25GL-77A-D5T7	5/8" - 11 e	7,700	7" (180 mm) Type 27	Aluminum	5.6 lb   2.54 kg	10.0 in   254 mm	4.0 in	3/8 in
25GL-85A-D5T7	5/8" - 11 e	8,500	7" (180 mm) Type 27	Aluminum	5.6 lb   2.54 kg	10.0 in   254 mm	4.0 in	3/8 in

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



#### AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676

### **1660 Series - Right Angle Grinder**

- Compact, yet powerful 1.6 hp motor, governed at 12,000 rpm
- Available with 4", 4.5", 5" guard options
- Reversible safety lever throttle
- Dual auxiliary handle positions



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
1660AGL-04	3/8"- 24 e	12,000	4" (100 mm), Type 27/42	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in
1660AGL-05*	5/8"- 11 e	12,000	5" (125 mm), Type 27/42	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in
1660AGL-05-M14*	M14 e	12,000	5" (125 mm), Type 27/42	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in
1660AGL-45*	5/8"- 11 e	12,000	4.5" (115 mm), Type 27/42	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in

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

\* Also compatible with Type 27/29 Abrasive

### **2260 Series - Right Angle Grinder**

- High performance 2.2 hp motor, Governed at 8,400 rpm
- Available with 6", 7" guard options
- Reversible safety lever throttle
- Dual auxiliary handle positions
- Maximum material removal for a right angle grinder



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
2260AGL-06	5/8"- 11 e	8,400	6" (150 mm), Type 27/42	Aluminum	7.3 lb   3.31 kg	12.1 in   307 mm	2.9 in	1/2 in
2260AGL-07	5/8"- 11 e	8,400	7" (180 mm), Type 27/42	Aluminum	7.3 lb   3.31 kg	12.1 in   307 mm	2.9 in	1/2 in

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

## **Cleco - Right Angle Grinder**

- High-performance 1.7Hp motor
- Available in 4", 4.5" and 5" disc size
- Quick change spindle lock
- Versatile 270° adjustable guard
- Quieter operation with rear exhaust overhose standard



NDERS

с С

ш

\_

ປ Z

∢

H

Т

6

£

# **216 Series - Heavy Duty Head**

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



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
216GLF-115A-W3T4	Front	3/8" - 24 e	11,500	4" (100 mm) Type 1	Aluminum	2.7 lb   1.22 kg	7.1 in   180 mm	3.2 in	1/4 in

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

# **216 Series - Extended Head**

#### 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



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
216GLFB-135A-W3T4	Front	3/8" - 24 e	13,500	4" (100 mm) Type 1	Aluminum	2.1 lb   0.95 kg	9.6 in   244 mm	2.2 in	1/4 in
216GLSB-135A-W3T4	Side	3/8" - 24 e	13,500	4" (100 mm) Type 1	Aluminum	2.4 lb   1.09 kg	9.1 in   231 mm	2.2 in	1/4 in

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

## 236 Series - Heavy Duty Head

#### 11,500 RPM 0.8 hp (0.6 kW)

Rugged and durable aluminum housing

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

- Heavy duty and extended head models available
- Designed for heavy duty material removal applications



Cat. No.	Exhaust	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
236GLF-115A-W3T4	Front	11,500	4" (100 mm) Type 1	Aluminum	3.0 lb   1.36 kg	7.6 in   193 mm	1/4 in
236GLR-115A-W3T4	Rear	11,500	4" (100 mm) Type 1	Aluminum	2.5 lb   1.13 kg	8.3 in   211 mm	1/4 in
236GLS-115A-W3T4	Side	11,500	4" (100 mm) Type 1	Aluminum	2.5 lb   1.13 kg	8.3 in   211 mm	1/4 in
236GLSB-115A-W3T4	Side	11,500	4" (100 mm) Type 1	Aluminum	2.0 lb   0.91 kg	9.6 in   244 mm	1/4 in

1/4 in

Л

ດ H

-1

 $\triangleright$ 

Ζ

G

G R

NDERS

### AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676

### **236 Series - Extended Head**

11,500 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



Cat. No.	Exhaust	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
236GLFB-135A-W3T4	Front	13,500	4" (100 mm) Type 1	Aluminum	2.0 lb   0.91 kg	9.6 in   244 mm	1/4 in
236GLRB-135A-W3T4	Rear	13,500	4" (100 mm) Type 1	Aluminum	2.0 lb   0.91 kg	7.6 in   193 mm	1/4 in
236GLSB-135A-W3T4	Side	13,500	4" (100 mm) Type 1	Aluminum	2.0 lb   0.91 kg	9.6 in   244 mm	1/4 in

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

Standard Equipment. veneer gaard and nange v

### **25 Series - Governed - Right Angle**

- Rugged and durable all aluminum housing
- Vibration dampened handle for operator comfort
- Balanced design works with the operator for maximum material removal



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
25GL-60A-W5T7	Side	5/8" - 11 e	6,000	7" (180 mm) Type 1	Aluminum	5.6 lb   2.54 kg	10.0 in   254 mm	4.0 in	3/8 in
25GL-85A-W5T7	Side	5/8" - 11 e	8,500	7" (180 mm) Type 1	Aluminum	5.6 lb   2.54 kg	10.0 in   254 mm	4.0 in	3/8 in

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

## **1660 Series - Right Angle Grinder**

- Compact, yet powerful 1.6 hp motor, governed at 12,000 rpm
- Available with 4", 4.5", 5" guard options
- Reversible safety lever throttle
- Dual auxiliary handle positions



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
1660AGL-04	3/8"- 24 e	12,000	4" (100 mm), Type 1	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in
1660AGL-05-M14*	M14 e	12,000	5" (125 mm), Type 1	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in
1660AGL-05*	5/8"- 11 e	12,000	5" (125 mm), Type 1	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in
1660AGL-45*	5/8"- 11 e	12,000	4.5" (115 mm), Type 1	Aluminum	4.3 lb   1.95 kg	11.5 in   292 mm	2.7 in	1/2 in

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

\* Also compatible with Type 27/29 Abrasive

### **2260 Series - Right Angle Grinder**

- High performance 2.2 hp motor, Governed at 8,400 rpm
- Available with 6", 7" guard options
- Reversible safety lever throttle
- Dual auxiliary handle positions
- Maximum material removal for a right angle grinder



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
2260AGL-06	5/8"- 11 e	8,400	6" (150 mm) Type 1	Aluminum	7.3 lb   3.31 kg	12.1 in   307 mm	2.9 in	1/2 in
2260AGL-07	5/8"- 11 e	8,400	7" (180 mm) Type 1	Aluminum	7.3 lb   3.31 kg	12.1 in   307 mm	2.9 in	1/2 in

**Coming Soon!** 

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

## **Cleco - Right Angle Grinder**

- High-performance 1.7Hp motor
- Available in 4", 4.5" and 5" disc size
- Quick change spindle lock
- Versatile 270° adjustable guard
- Quieter operation with rear exhaust overhose standard



eco



Л

AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676

# 236 Series - Inline

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

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



Cat. No.	Exhaust	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
236GELR-180-P3T	Rear	3/8" - 24 e	18,000	1.25" (31 mm) Cone or Plug Wheel	Aluminum	2.3 lb   1.04 kg	12.3 in   312 mm	1/4 in
236GEL-240-P3T	Side	3/8" - 24 e	24,000	1.25" (31 mm) Cone or Plug Wheel	Aluminum	2.3 lb   1.04 kg	12.3 in   312 mm	1/4 in

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

### **25 Series - 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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
25GELC-140-P3T	3/8" - 24 e	14,000	2" (50 mm) Cone or Plug Wheel	Aluminum	3.0 lb   1.36 kg	14.5 in   368 mm	3/8 in
25GELC-180-P3T	3/8" - 24 e	18,000	2" (50 mm) Cone or Plug Wheel	Aluminum	3.0 lb   1.36 kg	14.5 in   368 mm	3/8 in
25GELC-180-P5T	5/8" - 11 e	18,000	2" (50 mm) Cone or Plug Wheel	Aluminum	3.2 lb   1.45 kg	14.9 in   378 mm	3/8 in

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 Series**

#### 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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
5120BHL-P	5/8" - 11 e	12,000	3" Cone or Plug Wheel	Steel	7.6 lb   3.45 kg	17.9 in   455 mm	1/2 in
590BHL-P	5/8" - 11 e	9,000	3" Cone or Plug Wheel	Steel	7.6 lb   3.45 kg	17.9 in   455 mm	1/2 in

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

Standard Equipment: Applicable wrenches, operating instructions & service manual Minimum Hose I.D.: 5/16 in / 7.9 mm

### **236 Series - Inline** 18,000 RPM 0.9 hp (0.7 kW)

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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
236GLR-180-W3T4	3/8" - 24 e	18,000	4" (100 mm) Type 1	Aluminum	1.8 lb   0.82 kg	7.3 in   185 mm	1/4 in

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

### **25 Series - 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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Weight	Length	Air Inlet Size
25GELC-120-W3T25	3/8" - 24 e	12,000	2.5" (63 mm) Type 1	3.4 lb   1.54 kg	14.4 in   366 mm	3/8 in
25GELC-120-W3T3	3/8" - 24 e	12,000	3" (75 mm) Type 1	3.7 lb   1.68 kg	14.4 in   366 mm	3/8 in
25GELC-120-W3T4	3/8" - 24 e	12,000	4" (100 mm) Type 1	3.7 lb   1.68 kg	14.4 in   366 mm	3/8 in
25GELC-140-W3T3	3/8" - 24 e	14,000	3" (75 mm) Type 1	3.7 lb   1.68 kg	14.5 in   368 mm	3/8 in
25GELC-180-W3T3	3/8" - 24 e	18,000	3" (75 mm) Type 1	3.7 lb   1.68 kg	14.9 in   378 mm	3/8 in
25GL-120-W3T4*	3/8" - 24 e	12,000	4" (100 mm) Type 1	3.0 lb   1.36 kg	10.0 in   254 mm	3/8 in

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

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

\* Non-extended version

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



Т

0

RIZONTAL

G

R

Z

E R S

#### 500B Series 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



Cat. No.	Spindle Size	Throttle Type	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
560BHX-16	5/8" - 11 e	Spade	6,000	6" x 1" (150 mm x 25 mm) Type 1	Steel	11.6 lb   5.26 kg	18.8 in   478 mm	1/2 in
560BHL-16	5/8" - 11 e	Lever	6,000	6" x 1" (150 mm x 25 mm) Type 1	Steel	10.8 lb   4.90 kg	18.4 in   467 mm	1/2 in

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

1700 Series - Lock-Off Lever Throttle

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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
1760HL-16	5/8" - 11 e	6,000	6" x 1" (150 mm x25 mm) Type 1	Steel	14.5 lb   6.58 kg	19.6 in   498 mm	1/2 in

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 - Inline**

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



Cat. No.	Spindle Size	Throttle Type	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
1960HG-16	5/8" - 11 e	Spade	6,000	6" x 1" (150 mm x 25 mm) Type 1	Aluminum	16.8 lb   7.62 kg	21.4 in   544 mm	1/2 in
1960HL-16	5/8" - 11 e	Lever	6,000	6" x 1" (150 mm x 25 mm) Type 1	Aluminum	16.8 lb   7.62 kg	21.4 in   544 mm	1/2 in

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

### **3060 Series** 6,000 RPM 3.0 hp (2.3 kW)

0,000 HE WE 0.0 HP (2.0 KW

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



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Weight	Height	Air Inlet Size
3060AVL-06	5/8" - 11 e	6,000	6" (150 mm) Type 11	10.2 lb   4.63 kg	6.9 in   175 mm	1/2 in
3060AVL-07	5/8" - 11 e	6,000	7" (180 mm) Type 27	9.7 lb   4.40 kg	6.9 in   175 mm	1/2 in
3060AVL-09	5/8" - 11 e	6,000	9" (230 mm) Type 27	10.4 lb   4.72 kg	6.9 in   175 mm	1/2 in

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

6,000 RPM 4.0 hp (3.1 kW)

- Maximum material removal in any application
- Powerful motor delivering ultimate torque
- Ideally suited for any heavy metal fabrication process



Cat. No.	Spindle Size	Free Speed (rpm)	Abrasive Capacity	Weight	Height	Air Inlet Size
4060AVL-06	5/8" - 11 e	6,000	6" (150 mm) Type 11	11.6 lb   5.26 kg	8.2 in   208 mm	1/2 in
4060AVL-07	5/8" - 11 e	6,000	7" (180 mm) Type 27	11.1 lb   5.03 kg	8.2 in   208 mm	1/2 in
4060AVL-09	5/8" - 11 e	6,000	9" (230 mm) Type 27	11.8 lb   5.35 kg	8.2 in   208 mm	1/2 in

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

vSize	Part No.	Speed (rpm)
3"/75 mm	202226	13,500 & 16,500
4"/100 mm	889208	11,500
4"/100 mm	202227	13,500 & 16,500
3"/75 mm	202278	
4"/100 mm	202245	
7"/180 mm	204131	
3"/75 mm	865786	
4"/100 mm	865988	
4"/100 mm	881608	9,000 & 12,000
6"/150 mm	865993	6,000
6"/150 mm	202022	
8"/205 mm	202025	
	3"/75 mm 4"/100 mm 3"/75 mm 4"/100 mm 7"/180 mm 3"/75 mm 4"/100 mm 4"/100 mm 6"/150 mm 6"/150 mm	3"/75 mm         202226           4"/100 mm         889208           4"/100 mm         202227           3"/75 mm         202278           4"/100 mm         202245           7"/180 mm         204131           3"/75 mm         865786           4"/100 mm         865988           4"/100 mm         865988           4"/100 mm         881608           6"/150 mm         202022

#### Type 27 Wheel

21			
25GL RA	7"/180 mm	865986	
136V	3"/75 mm	849905	
136V	4"/100 mm	203382	
216RA, 236RA	4"/100 mm	889208	11,500
216RA, 236RA	4 1/2"/100 mm	202063	11,500
216RA, 236RA	3"/75 mm	202226	13,500 & 16,500
216RA, 236RA	4"/115 mm	202227	13,500 & 16,500
216RA, 236RA	5"/125 mm	203142	11,500
15V	7"/180 mm	849760	
1200V	7"/180 mm	202374	
1200V	9"/230 mm	202608	
3060V, 4060V	9"/230 mm	207752PT	
3060V, 4060V	7"/180 mm	207751PT	

#### Type 28 Wheel

15V	7"/180 mm	849760
1200V	7"/180 mm	202374
25GL RA	7"/180 mm	865986

#### Type 6 & 11 (Cup) Wheel

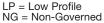
1200V	4"/100 mm	202465	
3060V, 4060V	6"/150 mm	207750PT	

### Cleco Wheel Guards

	Doico		
	Model Number Tool Series*	- Wheel Size	Guard No.
00	Stationary Cup Wh	neel Guards	
00	10-53 & 10-58	6" (152 mm)	14-5002
00			
.00	Type 1 (Cut-Off) W	heel Guards	
	12-10	3" x 3/16" (76 mm x 4.8 mm)	14-1018
	12-12	3" x 3/16" (76 mm x 4.8 mm)	14-1258
	12-20 & 12-25	3" x 3/16" (76 mm x 4.8 mm)	14-2624
	12-22 & 12-27 (LP)	3" x 3/16" (76 mm x 4.8 mm)	14-1258
00	12-25	4" x 3/16" (102 mm x 4.8 mm)	14-2623
	12-22 & 12-27 (LP)	4" x 3/16" (102 mm x 4.8 mm)	14-1259
	Type 1 Wheel Gua	rds	
	12-25	3" x 1/2" (76 mm x 13 mm)	14-2551
	12-26	3" x 1/2" (76 mm x 13 mm)	14-2097
	12-31	3" x 1/2" (76 mm x 13 mm)	14-3011
	12-41	3" x 1" (76 mm x 25 mm)	14-3011
	12-41	4" x 1" (102 mm x 25 mm)	14-4074
	12-51	6" x 1" (152 mm x 25 mm)	14-5012
	10-56	8" x 1" (203 mm x 25 mm)	14-5022
00			
00	Type 27 Depresse	d Center Wheel Guards	
	12-22 & 12-27 (LP)	3" (76 mm)	14-2593
	12-28 (NG)	3" (76 mm)	14-2564
	12-22 & 12-27	4" (102 mm)	14-2562
	12-22 & 12-27 (LP)	4" (102 mm)	14-2594
	12-27	4.5" (115 mm)	14-2672
	12-27	5" (127 mm)	14-2252
	12-22 & 12-27	5" (127 mm)	14-2152
	12-42	7" (178 mm)	14-2123
	10-53 & 10-58	7" (178 mm)	14-5018
	10-53 & 10-58	9" (229 mm)	14-5017

#### Type 28 Depressed Center Wheel Guards

.,		
10-53 & 10-58	7" (178 mm)	14-5018
10-53 & 10-58	9" (229 mm)	14-5019
D Law Drafile		





38

# Grinders <sup>39</sup>

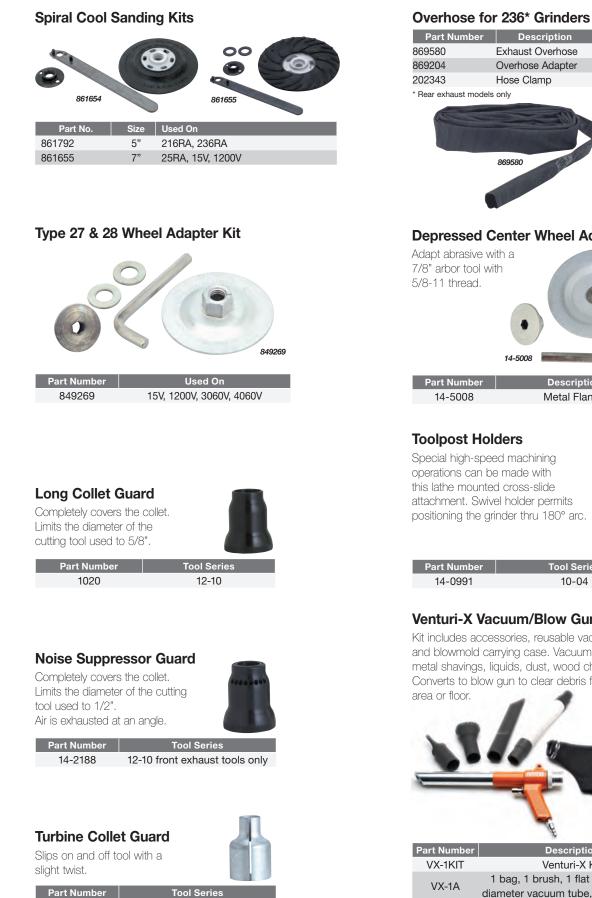
Part Number	Collet	Tool	Ca	pacity	Tool Series*					
Fait Nulliber	Size	Termination	Min.	Max.	10-04	10-90	12-03	12-04		
Series HG Collets										
103	1/16"	-04 or -14	-	1/16"	OPT	OPT				
102	3/32"	-06 or -16	-	3/32"	STD	OPT		STD		
01-0102	3/32"	-16	-	3/32"			STD			
100	1/8"	-08 or -18	-	1/8"	STD	STD		STD		
01-0100	1/8"	-18	-	1/8"			STD			
146	1 mm	-00 or -10	-	1 mm	OPT	OPT				
131	2.35 mm	-02 or -12	-	2.35 mm	OPT	OPT				
148	3 mm	-03 or -13	-	3 mm	STD	STD		STD		
01-0148	3 mm	-13	-	3 mm			STD			

				Capacity				Tool S	Series*		
	Part Number	Collet Size	Tool Termination	Min.	Max.	10-95	12-10 12-11 12-12	12-20 12-25	12-21 12-22 12-26 12-27 12-31	10-43 11-43	12-05 12-22 12-27
Universal C	ollets										
	7809	1/8"	-4508	-	1/8"						OPT
	7812	3/16"	-4512	-	3/16"						OPT
	7808	1/4"	-45	-	1/4"						STD
	7810	3 mm	-45M3	-	3 mm						OPT
	7811	6 mm	-45M6	-	6 mm						OPT
"K" Series	Collets										
	120	1/8"	-6208	3/32"	1/8"					OPT	
	121	3/16"	-6212	5/32"	3/16"					OPT	
	122	1/4"	-6216	7/32"	1/4"					OPT	
	123	5/16"	-6220	9/32"	5/16"					OPT	
	124	3/8"	-62	11/32"	3/8"					STD	
	125	7/16"	-6228	13/32"	7/16"					OPT	
	126	1/2"	-6232	15/32"	1/2"					OPT	
	134	8 mm	-62M8	-	8 mm					OPT	
	135	10 mm	-6270	-	10 mm					OPT	
Series 200	Collets										
	204	1/8"	-0108	3/32"	1/8"			OPT	OPT		
	205	5/32"	-0110	1/8"	5/32"			OPT	OPT		
	206	3/16"	-0112	5/32"	3/16"			OPT	OPT		
	207	7/32"	-0114	3/16"	7/32"			OPT	OPT		
	208	1/4"	-01	7/32"	1/4"			STD	STD		
-	209	9/32"	-0118	1/4"	9/32"			OPT	OPT		
2	210	5/16"	-0120	9/32"	5/16"			OPT	OPT		
	211	11/32"	-0122	5/16"	11/32"			OPT	OPT		
	212	3/8"	-0124	11/32"	3/8"			OPT	OPT		
	213	6 mm	-01M6	5.2 mm	6 mm			OPT	OPT		
	216	8 mm	-01M8	7.2 mm	8 mm			OPT	OPT		
Series 300	Collets										
	301	3/64"	-3603	1/64"	3/64"		OPT	OPT			OPT
	302	5/64"	-3605	3/64"	5/64"		OPT	OPT			OPT
	303	3/32"	-3606	1/16"	3/32"		OPT	OPT			OPT
11	304	1/8"	-3608	3/32"	1/8"	STD	OPT	OPT			OPT
(1)	305	5/32"	-3610	1/8"	5/32"		OPT	OPT			OPT
	306	3/16"	-3612	5/32"	3/16"		OPT	OPT			OPT
	308	1/4"	-36	7/32"	1/4"	OPT	STD	STD			STD
	311	3 mm	-36M3	2.2 mm	3 mm		OPT	OPT			OPT
	310	6 mm	-36M6	5.2 mm	6 mm		OPT	OPT			OPT
* 970 _ 94	andard Collet										

\* STD = Standard Collet OPT = Optional Collet



Grinders 40



869580 **Depressed Center Wheel Adapters** Adapt abrasive with a 14-5008 Description Metal Flange **Toolpost Holders** Special high-speed machining operations can be made with this lathe mounted cross-slide attachment. Swivel holder permits positioning the grinder thru 180° arc. Tool Series 10-04

Description

869204

202243

#### Venturi-X Vacuum/Blow Gun Kit

Kit includes accessories, reusable vacuum bag, and blowmold carrying case. Vacuum can extract metal shavings, liquids, dust, wood chips, etc. Converts to blow gun to clear debris from work



🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

14-1280

10-9000



### **POWER & PERFORMANCE**

42

Cleco<sup>®</sup> Dotco<sup>™</sup> 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, Cleco Dotco has a quality tool solution.

Cleco Dotco belt sanders can grind corners, enter grooves, debur, strap polish or enter channels. The unique belt cover makes belt changes quick and easy. You can use non-woven nylon or coated abrasive belts on a variety of surfaces.

### FLEXIBILITY WHEN YOU NEED IT MOST

The unique sanding attachment pivots 360 degrees to allow user flexibility in reaching confined areas. The belt cover snaps on/off easily with no special tools needed allowing for quick belt changes. The arm itself is interchangeable to best suit a variety of applications.









### 3 in | 5 in | 6 in Random Orbital Sanders

#### 12,000 RPM 0.3 hp (0.22 kW)

- Hardened alloy steel cylinder with coated aluminum end plates
- Fan blade cooling system for high durability and longer life
- 3 in, 5 in, and 6 in PSA and Hook & Loop pads available



Model	Details	Free Speed	Pad	Size	Pad Face	Vacuum Type	Air Flow	@ 90psi	Ort	oit	We	ight	He	ight
Model	Details	ОРМ	in	mm	Fau Face	vacuum Type	SCFM	LPM	in	mm	lbs	kg	in	mm
DSR0-01-02PSA	Random Orbital Sander	12000	3	76.2	PSA	Non-Vacuum	12	340	3/16	5.0	1.47	0.66	3.3	85
DSR0-01-05PSA	Random Orbital Sander	12000	5	127	PSA	Non-Vacuum	12	340	3/16	5.0	1.88	0.85	3.3	85
DSR0-01-06PSA	Random Orbital Sander	12000	6	152	PSA	Non-Vacuum	12	340	3/16	5.0	1.97	0.89	3.3	85
DSR0-01-35PSA	Random Orbital Sander	12000	5	127	PSA	Central Vacuum	12	340	3/16	5.0	2.00	0.90	3.3	85
DSR0-01-36PSA	Random Orbital Sander	12000	6	152	PSA	Central Vacuum	12	340	3/16	5.0	2.12	0.96	3.3	85
DSR0-03-05PSA	Random Orbital Sander	12000	5	127	PSA	Non-Vacuum	12	340	3/32	2.5	1.84	0.83	3.3	85
DSR0-03-06PSA	Random Orbital Sander	12000	6	152	PSA	Non-Vacuum	12	340	3/32	2.5	1.91	0.86	3.3	85
DSR0-03-35HL	Random Orbital Sander	12000	5	127	Hook & Loop	Central Vacuum	12	340	3/32	5.0	2.00	0.90	3.3	85
								_	_				_	
DSR0-01-02HL	Random Orbital Sander	12000	3	76.2	Hook & Loop	Non-Vacuum	12	340	3/16	5.0	1.47	0.66	3.3	85
DSR0-01-05HL	Random Orbital Sander	12000	5	127	Hook & Loop	Non-Vacuum	12	340	3/16	5.0	1.88	0.85	3.3	85
DSR0-01-06HL	Random Orbital Sander	12000	6	152	Hook & Loop	Non-Vacuum	12	340	3/16	5.0	1.97	0.89	3.3	85
DSR0-01-25HL	Random Orbital Sander	12000	5	127	Hook & Loop	Self-Gen Vacuum	12	340	3/16	5.0	2.14	0.97	3.3	85
DSR0-01-26HL	Random Orbital Sander	12000	6	152	Hook & Loop	Self-Gen Vacuum	12	340	3/16	5.0	2.14	0.97	3.3	85
DSRO-01-35HL	Random Orbital Sander	12000	5	127	Hook & Loop	Central Vacuum	12	340	3/16	5.0	2.00	0.90	3.3	85
DSR0-01-36HL	Random Orbital Sander	12000	6	152	Hook & Loop	Central Vacuum	12	340	3/16	5.0	2.12	0.96	3.3	85

### 3 x 8 in Orbital Sander

#### 10,000 RPM 0.3 hp (0.22 kW)

- 3" x 8" (70mm x 198mm) pad size
- Standard with vinyl face pad for PSA mounted abrasives
- 1/8" orbit pattern for fine finishing
- Hook & Loop pad available as option



	Model	Details	Free Speed Pad Size		Pad Face Vacuum Type —	Air Flow @ 90psi		Orbit		Weight		Height			
			OPM	in	mm	Pau Face	vacuum type	SCFM	LPM	in	mm	lbs	kg	in	mm
	DS0-70-09PSA	Orbital Sander	10000	3 x 8	70 x 198	PSA	Non-Vacuum	12	340	1/8	3.2	2.04	0.93	3.8	96

🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

ш.

44

### 6 in 8 in Geared Orbital Sanders

#### 900 RPM 0.45 hp (0.34 kW)

- Epicyclodial sanding pattern allows for aggressive removal of materials
- Available with both PSA and Hook & Loop pads
- Long handle allows for two-handed support of tool



Model	Details	Free Speed	Pad	Size	Pad Face	Vacuum Type	Air Flow	@ 90psi	Ort	oit	Weight		He	ight
MODEL	Details	ОРМ	in	mm	rau raue	vacuum type	SCFM	LPM	in	mm	lbs	kg	in	mm
DSG-01-06PSA	Geared Orbital Sander	900	6	152	PSA	Non-Vacuum	15	424	3/16	5.0	3.5	1.6	4.7	119
DSG-01-36PSA	Geared Orbital Sander	900	6	152	PSA	Central-Vacuum	15	424	3/16	5.0	3.5	1.6	4.7	119
DSG-01-38PSA	Geared Orbital Sander	900	8	203	PSA	Non-Vacuum	15	424	3/16	5.0	3.9	1.8	4.7	119
DSG-01-40PSA	Geared Orbital Sander	900	8	203	PSA	Central Vacuum	15	424	3/16	5.0	3.9	1.8	4.7	119
DSG-01-06HL	Geared Orbital Sander	900	6	152	Hook & Loop	Non-Vacuum	15	424	3/16	5.0	3.5	1.6	4.7	119
DSG-01-36HL	Geared Orbital Sander	900	6	152	Hook & Loop	Central-Vacuum	15	424	3/16	5.0	3.5	1.6	4.7	119
DSG-01-38HL	Geared Orbital Sander	900	8	203	Hook & Loop	Non-Vacuum	15	424	3/16	5.0	3.9	1.8	4.7	119
DSG-01-40HL	Geared Orbital Sander	900	8	203	Hook & Loop	Central-Vacuum	15	424	3/16	5.0	3.9	1.8	4.7	119

-

45



### **12LF Series - 300 Series Collet**

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



Ex	haust							
Rear	Front	]	Free Speed					
Cat. No.	Cat. No.	Termination	(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height
12LF280-36	12LF200-36	1/4" Collet	12,000	3" (75 mm) Sanding/ Polishing disc	Composite	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in
—	12LF200-32	1/4"- 28 i	12,000	3" (75 mm) Sanding/ Polishing disc	Composite	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in
12LF281-36	12LF201-36	1/4" Collet	20,000	2" (50 mm) Sanding/ Polishing disc	Composite	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in
-	12LF201-32	1/4"- 28 i	20,000	2" (50 mm) Sanding/ Polishing disc	Composite	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in

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

### **10LF Series - 300 Series Collet**

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

Aluminum housing

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



Exh	aust							
Front	Rear		Free Speed					
Cat. No.	Cat. No.	Termination	(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height
10LF200-36	10LF280-36	1/4" Collet	12,000	3" (75 mm) Sanding/ Polishing Disc	Aluminum	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in
10LF200-32	-	1/4"- 28 i	12,000	3" (75 mm) Sanding/ Polishing Disc	Aluminum	1.1 lb   0.50 kg	6.6 in   168 mm	2.9 in
10LF201-36	10LF281-36	1/4" Collet	20,000	2" (50 mm) Sanding/ Polishing Disc	Aluminum	1.1 lb   0.50 kg	6.6 in   168 mm	2.7 in
10LF201-32	-	1/4"- 28 i	20,000	2" (50 mm) Sanding/ Polishing Disc	Aluminum	1.1 lb   0.50 kg	6.6 in   168 mm	2.9 in

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

Ľ

### 10-12 & 12-12 Series

- Composite housing
- Front and rear exhaust available
- Wide range of speeds to suit every application



Exh	aust								
Front	Rear		Free Speed					Head	Air Inlet
Cat. No.	Cat. No.	Termination	(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Height	Size
12L1200-32	12L1280-32	1/4"- 28 i	12,000	3" (75 mm) Sanding/ Polishing Disc	Composite	1.1 lb   0.50 kg	6.3 in   160 mm	1.9 in	1/4 in
10B1200-32*	-	1/4"- 28 i	12,000	3" (75 mm) Sanding/ Polishing Disc	Composite	1.0 lb   0.45 kg	5.0 in   127 mm	1.9 in	1/4 in
10L1200-32	_	1/4"- 28 i	12,000	3" (75 mm) Sanding/ Polishing Disc	Composite	1.0 lb   0.45 kg	5.0 in   127 mm	1.9 in	1/4 in
12L1201-32	12L1281-32	1/4"- 28 i	20,000	2" (50 mm) Sanding/ Polishing Disc	Composite	1.1 lb   0.50 kg	6.3 in   160 mm	1.9 in	1/4 in

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

Standard Equipment: Applicable collet, collet wrenches

\* Button Activation

# 12-13 Series - Gearless - 300 Series Collet

#### 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 applications



Ext	aust								
Front	Rear			Free Speed					Head
Cat. No.	Cat. No.	Collet Size	Termination	(rpm)	Abrasive Capacity	Type Housing	Weight	Length	Height
12L1302-36	12L1382-36	1/4 in	1/4" Collet	20,000	2" (50 mm) Sanding/ Polishing Disc	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in
12L1301-36	12L1381-36	1/4 in	1/4" Collet	25,000	2" (50 mm) Sanding/ Polishing Disc	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in
12L1301-32	_	-	1/4"- 28 i	25,000	2" (50 mm) Sanding/ Polishing Disc	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in
12L1300-36	12L1380-36	1/4 in	1/4" Collet	30,000	1" (25 mm) Sanding/ Polishing Disc	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in
12L1300-32	_	-	1/4"- 28 i	30,000	1" (25 mm) Sanding/ Polishing Disc	Composite	1.1 lb   0.50 kg	7.1 in   180 mm	3.7 in

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



Л

-

G H

-1

⊳ Z

G

SANDERS

### 12-22 Series - 300 Series Collet

#### 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" Extended head available



Cat. No.	Termination	Free Speed (rpm)	Extension	Abrasive Capacity	Type Housing	Weight	Length
12L2277-36	1/4" Collet	12,000	3 in	4" (100 mm) Sanding/ Polishing Disc	Composite	2.2 lb   1.00 kg	10.0 in   254 mm
12L2278-36	1/4" Collet	14,500	3 in	4" (100 mm) Sanding/ Polishing Disc	Composite	2.2 lb   1.00 kg	10.0 in   254 mm
12L2218-36	1/4" Collet	18,000	0 in	3" (50 mm) Sanding/ Polishing Disc	Composite	1.7 lb   0.77 kg	7.5 in   191 mm

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 - 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



Cat. No.	Termination	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
12L2251-80	5/8" - 11 e	9,000	5" (125 mm) Sanding/ Polishing Disc	Composite	3.2 lb   1.45 kg	9.3 in   236 mm	3.9 in	1/4 in

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

# 12-27 Series - 300 Series Collet

#### 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" extension



Cat. No.	Termination	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length
12L2777-36	1/4" Collet	12,000	4" (100 mm) Sanding/ Polishing Disc	Composite	2.3 lb   1.04 kg	10.5 in   267 mm
12L2776-36	1/4" Collet	13,500	4" (100 mm) Sanding/ Polishing Disc	Composite	2.3 lb   1.04 kg	10.5 in   267 mm
12L2778-36	1/4" Collet	14,500	4" (100 mm) Sanding/ Polishing Disc	Composite	2.3 lb   1.04 kg	10.5 in   267 mm

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 & 10-27 Series - Heavy Duty Head

#### 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



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

R S

Л

G



### 12-12 Series - Belt Sander

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

#### Grind, deburr, strap polish, blend

- Choice of geared or gearless
- Ergonomic housing reduces cold air transmission to operator



Cat. No.	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12L1280-36B2	12,000	1/2" W x 12" L Sanding Belt	Composite	1.4 lb   0.64 kg	11.3 in   287 mm	1/4 in
12L1281-36B2	20,000	1/2" W x 12" L Sanding Belt	Composite	1.4 lb   0.64 kg	11.3 in   287 mm	1/4 in

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 Optional Terminations, All models may not be available: -32Bx 1/4"-28 Internal Thread; -36Bx 1/4" collet

# 12-13 Series - Gearless - Belt Sander

#### 20,000 RPM 0.3 hp (0.22 kW)

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



Cat. No.	Free Speed (rpm) Abrasive Capacity		Type Housing	Weight	Length	Air Inlet Size
12L1382-36B2	20,000	1/2" W x 12" L Sanding Belt	Composite	1.4 lb   0.64 kg	11.3 in   287 mm	1/4 in
12L1382-36B4	20,000	1" W x 12" L Sanding Belt	Composite	1.7 lb   0.77 kg	11.3 in   287 mm	1/4 in

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

Optional Terminations, All models may not be available: -32Bx 1/4"-28 Internal Thread; -36Bx 1/4" collet

### 12-23 Series - Gearless

#### 20,000 RPM 0.5 hp (0.38 kW)

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



Cat. No.	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12L2384-B1	20,000	5/8" or 3/4" W x 18" L Sanding Belt	Composite	2.5 lb   1.13 kg	15.0 in   381 mm	1/4 in

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

### 12L2384-K1 Kit

- Kit comes with tool and all three interchangeable arms, belts, and wrenches
- Kit includes 12L2384-B1 tool along with: 2 additional abrasives, multiple belt sizes, all required wrenches, collet cap and chuck body



at. No.	
12L2384-K1	

### Description

m

### 12-10 Series - 200 Series Collet

#### 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



Cat. No.	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12L1088-01	1/4 in	380	4" (100 mm) Wire Brush, 5" (125 mm) Wire Brush	Composite	2.2 lb   1.00 kg	8.6 in   218 mm	1/4 in
12L1092-01	1/4 in	3,200	3" (75 mm) Wire Brush, 3" (75 mm) Buffing Wheel	Composite	1.6 lb   0.73 kg	7.2 in   183 mm	1/4 in
12L1093-01	1/4 in	5,000	3" (75 mm) Wire Brush, 3" (75 mm) Buffing Wheel	Composite	1.6 lb   0.73 kg	7.2 in   183 mm	1/4 in

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

### 12-25 & 10-25 Series - Buffer - 200 Series Collet

#### 3,200 - 6,200 RPM 0.9 hp (0.67 kW)

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



Cat. No.	Collet Size	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
12L2592-01	1/4 in	3,200	4"(100 mm) Wire Brush, 6" (150 mm) Buffing Wheel	Composite	2.1 lb   0.95 kg	9.3 in   236 mm	1/4 in
10L2592-01	1/4 in	3,200	4"(100 mm) Wire Brush, 6" (150 mm) Buffing Wheel	Aluminum	2.2 lb   1.00 kg	8.9 in   226 mm	1/4 in
12L2593-01	1/4 in	4,700	4"(100 mm) Wire Brush, 6" (150 mm) Buffing Wheel	Composite	2.1 lb   0.95 kg	9.3 in   236 mm	1/4 in
12L2594-01	1/4 in	6,200	4"(100 mm) Wire Brush, 6" (150 mm) Buffing Wheel	Composite	2.1 lb   0.95 kg	9.3 in   236 mm	1/4 in

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



Π

### 12-27 & 10-27 Series - Heavy Duty Head

#### 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



Cat. No.	Termination	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
10L2760-80	5/8" - 11 e	3,300	4" (102 mm) Wire Brush, 6" (152 mm) Buffing Wheel	Aluminum	3.9 lb   1.77 kg	9.3 in   236 mm	3.9 in	1/4 in
12L2760-80	5/8" - 11 e	3,300	7" (178 mm) Sanding/ Polishing Disc	Composite	3.9 lb   1.77 kg	10.5 in   267 mm	3.9 in	1/4 in
12L2762-80	5/8" - 11 e	4,500	7" (178 mm) Sanding/ Polishing Disc	Composite	3.9 lb   1.77 kg	10.5 in   267 mm	3.9 in	1/4 in
10L2750-80	5/8" - 11 e	6,000	7" (178 mm) Sanding/ Polishing Disc	Aluminum	3.1 lb   1.41 kg	8.5 in   216 mm	3.9 in	1/4 in
12L2750-80	5/8" - 11 e	6,000	7" (178 mm) Sanding/ Polishing Disc	Composite	3.4 lb   1.54 kg	9.8 in   249 mm	3.9 in	1/4 in

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

### 12-42 Series

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



Cat. No.	Termination	Free Speed (rpm)	Abrasive Capacity	Type Housing	Weight	Length	Head Height	Air Inlet Size
12L4202-80	5/8" - 11 e	2,500	4" (100 mm) Wire Brush, 8" (200 mm) Buffing Wheel	Composite	6.4 lb   2.90 kg	13.6 in   345 mm	3.9 in	1/2 in
12L4203-80	5/8" - 11 e	3,400	4" (100 mm) Wire Brush, 8" (200 mm) Buffing Wheel	Composite	6.4 lb   2.90 kg	13.6 in   345 mm	3.9 in	1/2 in
12L4206-80	5/8" - 11 e	6,000	9"(225 mm) Sanding Disc	Composite	6.4 lb   2.90 kg	13.6 in   345 mm	3.9 in	1/2 in
12L4207-80	5/8" - 11 e	7,200	7" (175 mm) Sanding Disc	Composite	6.4 lb   2.90 kg	13.6 in   345 mm	3.9 in	1/2 in

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

m

#### **Belt Sander Attachments**

Dotco 12-12 and 12-13 series.

300 Series Collet	1/4"-28 Internal Thread	Sanding Belt Size		Sandin	g Area
-36 Termination	-32 Termination	in.	mm	in.	mm
Non-Woven Attack	nments (used with 12,00	0 rpm 12-12 serie	es)		
14-1715	-	1/2" x 18"	13 x 457	1/2" x 6"	13 x 152
Coated Abrasive A	ttachments (used with	n 12,000 rpm 12-1	2 series; 20,000 ı	rpm 12-12 & 12-13	3 series)
14-1639	14-1638	1/4" x 12"	6.4 x 305	1/4" x 4"	6.4 x 102
14-1316	14-1301	1/2" x 12"	13 x 305	1/2" x 4"	13 x 102
14-1473	14-1463	1" x 12"	25 x 305	1" x 4"	25 x 102
14-1319	14-1318	1/2" x 24"	13 x 610	1/2" x 10"	13 x 254
14-1613	14-1603	1" x 24"	25 x 610	1" x 10"	25 x 254



#### Sanding Belts – Aluminum Oxide, Resin Bond

For use with Dotco belt sanders. Minimum order: 10 of any one belt.

Grit Size	Belt Number							
Grit Size	1/4" x 12	1/2" x 12	1" x 12	1/2" x 24	1" x 24	1/4" x 18	1/2" x 18	3/4" x 18
40		14-1344						
50		14-1345						
60	14-1590	14-1346	14-1582	14-1366	14-1642	14-2320	14-2316	14-2326
80	14-1591	14-1348	14-1583	14-1368		14-2321	14-2317	14-2323
100		14-1350						
120	14-1593	14-1352	14-1585	14-1372		14-2322	14-2318	
150		14-1355						
180	14-1596	14-1358	14-1588	14-1378	14-1648			
240		14-1360						
320		14-1362						

#### Sanding Belts – Non-woven

Minimum order: 10 of any one belt.

,	
Part Ni	umber
1/4" x 18	3/4" x 18
14-1728	
14-1729	
14-1730	14-2327
14-1731	
	1/4" x 18 14-1728 14-1729 14-1730



SANDER

⋗

0

CESSORIES

#### Spiralcool<sup>™</sup> Backing Pads

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

	Part Number – Pad Diameter (Max. rated RPM)						
Flexibility	4"	4 1/2"	5"	7"	9"		
	12,000 rpm	11,000 rpm	10,000 rpm	7,000 rpm	6,000 rpm		
Flexible	14-2197	14-2255	14-2115	14-2529	14-2202		
Medium	14-2198	14-2256	14-2116	14-2200	14-2203		
Rigid	14-2199	14-2257	14-2117	14-2201			

#### Save-A-Disc Pads

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



Diameter		Part Number					
Diameter	Max. rpm	Assembly	Pad Only	Plate Only	Nut Only		
5"	7,500	14-2515	14-2521	14-2522	14-2525		
7"	7,500	14-2517	14-2521	14-2523	14-2525		
9"	7,500	14-2519	14-2521		14-2525		

#### **PSA Disc Holders Collet Chuck:**



Chuck the PSA disc holder shank directly into the appropriate collet (1/8" or 1/4").

#### **Threaded Spindle:**

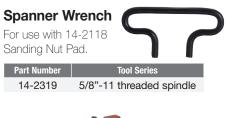
Remove the threaded shank from the PSA disc holder. Referring to the spindle adapter chart, select the correct spindle and thread it into the PSA holder.

Part Number	Disc Holder Diameter	Shank Assembly	PSA Disc Holder Thread
14-1146	1/2"	1/8"	5-40 Female
14-1105	1/2"	1/4"	5-40 Female
14-1147	3/4"	1/8"	5-40 Female
14-1107	3/4"	1/4"	5-40 Female
14-1170	1"	1/8"	5-40 Female
14-1110	1"	1/4"	5-40 Female
14-1111	1-1/2"	1/4"	1/4"-20 Female
14-1112	2"	1/4"	1/4"-20 Female
14-1113	3"	1/4"	1/4"-20 Female
14-1114	4"	1/4"	1/4"-20 Female

#### Sanding Pad Nut

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

Part Number Tool Series 14-2118 5/8"-11 threaded spindle





#### Sanding Disc Cutter

An adjustment scale allows a 9" maximum diameter sanding disc to be cut down to 3" or 4" diameter. The double bevel cutting edge assures a round cut without a loose edge or raveling.

Part Number	Description
14-2535	Disc Cutter
Replacement Blade	es
14-2590	Upper
14-2591	Lower

#### Mini Chucks



For use with Dotco 12-12 series. To adapt right angle threaded spindle sanders for drilling, disc sanding with PSA holders, and light grinding.

Shank Size	Part Number			
Slidlik Size	Assembly	Collet		
1/8"	14-1102*	14-0158**		
1/4"	14-1104*	14-0168***		
6 mm	14-1094	14-0170***		

\* NOTE: For 1/4"-28 internal thread

\*\* NOTE: For 5/16"-24 internal thread – 1/8" collet \*\*\* NOTE: For 3/8"-24 internal thread – 1/4" collet

### Spindle Adapters

For use with PSA Disc holders.



	Adapter Description					
Part Number	Thread (for Tool Spindle)	Thread (for PSA Disc Holder)	Max. Disc Dia.			
14-1142	1/4"-28 Male	5 -40 Male	1"			
14-1144	1/4"-28 Male	1/4"-20 Male	4"			
14-2903	5/8"-11 Male	5/16"-24 Male	4"			
14-1212	5/8"-11 Male	1/4"-20 Male	4"			
14-1211	5/8"-11 Female	3/8"-24 Male	4"			

S

### Sanders & Polishers 55

# Low Profile Backup Pads for Random Orbital Sanders



Part Number	Diameter	Thickness	Туре	Style
543025	3.5	3/8	PSA	Non-Vac
543026	3.5	3/8	Hook & Loop	Non-Vac
543017	5	3/8	PSA	Non-Vac
543018	5	3/8	PSA	Vac
543019	5	3/8	Hook & Loop	Non-Vac
543020	5	3/8	Hook & Loop	Vac
543021	6	3/8	PSA	Non-Vac
543022	6	3/8	PSA	Vac
543023	6	3/8	Hook & Loop	Non-Vac
543024	6	3/8	Hook & Loop	Vac
01-4522	3	3/8	PSA	Non-Vac
01-4649	3	3/8	Hook & Loop	Non-Vac

# Tampered Edge Backup Pad for Random Orbital Sanders



Part Number	Diameter	Thickness	Туре	Style
543041	5	3/4	PSA	Non-Vac
543042	6	3/4	PSA	Non-Vac

#### **Backup Pads for Orbital Sanders**



Part Number	Diameter	Thickness	Туре	Style
543011	3-2/3 x7	3/8	PSA	Non-Vac
543012	3-2/3 x 7	3/8	Hook & Loop	Non-Vac
543013	3-2/3 x7	3/8	PSA	Non-Vac
543014	3-2/3 x7	3/8	Hook & Loop	Non-Vac
01-4523	70 x 198 (3 x 8)	3/8	PSA	Non-Vac
01-4648	70 x 198 (3 x 8)	3/8	Hook & Loop	Non-Vac

#### **Backup Pads for Geared Sanders**

Part Number	Diameter	Туре	Style
208885	6	Hook & Loop	Non-Vac
208886	6	Hook & Loop	Vac
208887	8	Hook & Loop	Non-Vac
208888	8	Hook & Loop	Vac
01-4505	6	PSA	Non-Vac
01-4506	6	PSA	Vac
01-4507	8	PSA	Non-Vac
01-4508	8	PSA	Vac



# DRILLS

### **CONFIGURED FOR YOUR ENVIRONMENT & APPLICATION**

Cleco MP Series Drills are Industrial grade medium duty drills suitable for a wide range of production and MRO applications. Cleco<sup>®</sup> Dotco<sup>™</sup> pneumatic drills are Industrial high duty grade and are used daily in applications ranging from appliances to aerospace manufacturing. Offered in a variety of configurations, including pistol grip, inline, and right angle, Dotco air drills are designed for the high-volume, high-repetition, high-precision demands of today's assembly lines. Whether a spindle, chuck, motor or angle head, our interchangeable parts allow operators the versatility they need for a range of industrial and manufacturing applications.

### PARTS INTERCHANGEABILITY

Maintenance of tools can be time consuming and expensive. That is why our products have been designed with high parts interchangeability. With fewer parts required to repair our tools, less inventory of parts is required and tools are easier to repair.

### PRECISION PARTS

It's simple, precision parts let operators manufacture precision products. Whether it is a spindle, a chuck, a motor or an angle head, our parts are manufactured from the finest materials available and are machined to the highest tolerances.

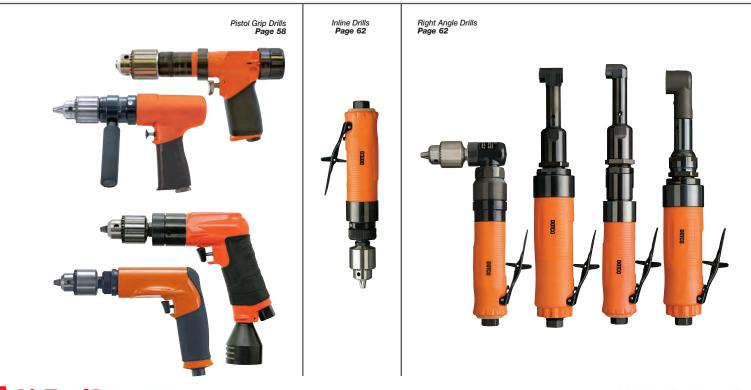
### **ULTIMATE ERGONOMICS**

Dotco drills have long been the industry workhorse for the high-volume, high-repetition, high-precision demands of today's assembly line. Dotco drills are the ergonomic solution to deliver comfort and productivity, while assuring decreased operator fatigue, potential for injury and downtime on the line.



# SELECTION GUIDE 57





### **14CF Series - Non-Reversible**

600 - 29,000 RPM 0.4 hp (0.30 kW)

- 600 29000 rpm
- 0.4 hp / 0.30 kW
- Supplied with Jacobs<sup>®</sup> Keyed Chuck or Threaded Termination for Keyless Chuck/Collet - see options on page 67.
- Non-reversible
- Composite grip with ergonomic finger and thumb guides to aid control
- Excellent for aerospace, metal fabrication, and woodworking applications



	Termination					
1/4" Chuck	3/8" Chuck	3/8"-24 e				
Cat. No.	Cat. No.	Cat. No.	Free Speed (rpm)	Weight	Length	Air Inlet Size
14CFS97-38	14CFS97-51	14CFS97-40	600	1.8 lb   0.82 kg	6.9 in   175 mm	1/4 in
14CFS96-38	14CFS96-51	14CFS96-40	700	1.8 lb   0.82 kg	6.9 in   175 mm	1/4 in
14CFS95-38	14CFS95-51	14CFS95-40	1,000	1.8 lb   0.82 kg	6.9 in   175 mm	1/4 in
14CFS94-38	14CFS94-51	14CFS94-40	2,400	1.6 lb   0.73 kg	5.7 in   145 mm	1/4 in
14CFS93-38	14CFS93-51	14CFS93-40	3,200	1.5 lb   0.68 kg	5.7 in   145 mm	1/4 in
14CFS92-38	14CFS92-51	14CFS92-40	3,800	1.5 lb   0.68 kg	5.7 in   145 mm	1/4 in
14CFS91-38	14CFS91-51	14CFS91-40	5,200	1.5 lb   0.68 kg	5.7 in   145 mm	1/4 in
14CFS90-38	14CFS90-51	14CFS90-40	29,000	1.5 lb   0.68 kg	5.7 in   145 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 5/16 in / 7.9 mm Drill Diameter Capacity Matches Chuck Size

### **14CS Series - Non reversible**

500 - 20,000 RPM 0.6 hp (0.45 kW)

- 500 20000 rpm
- 06 hp / 0.45 kW
- Supplied with Jacobs<sup>®</sup> Keyed Chuck or Threaded Termination for Keyless Chuck/Collet see options on page 67.
- Composite grip with ergonomic finger and thumb guides to aid control
- Excellent for aerospace, metal fabrication, and woodworking applications

	Termination						
3/8" Chuck	3/8" - 24 e	1/4" Chuck					
Cat. No.	Cat. No.	Cat. No.	Free Speed (rpm)	Weight	Length	Air Inlet Size	
14CSL97-51	14CSL97-40	—	500	2.9 lb   1.32 kg	8.1 in   206 mm	1/4 in	
14CSL95-51	14CSL95-40	—	1,300	2.9 lb   1.32 kg	8.1 in   206 mm	1/4 in	
-	14CSL92-40	14CSL92-38	3,200	2.1 lb   0.95 kg	6.3 in   160 mm	1/4 in	
—	14CSL91-40	14CSL91-38	5,200	2.1 lb   0.95 kg	6.3 in   160 mm	1/4 in	
—	14CSL98-40	14CSL98-38	6,000	2.1 lb   0.95 kg	6.3 in   160 mm	1/4 in	
—	14CSL90-40	14CSL90-38	20,000	2.1 lb   0.95 kg	6.3 in   160 mm	1/4 in	

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

Minimum Hose I.D.: 5/16 in / 7.9 mm Standard equipment: Jacobs geared chuck, chuck key Drill diameter capacity matches chuck size.

Ω

### **14CNL Series - Non-Reversible**

500 - 20,000 RPM 0.9 hp (0.67 kW)

- 500 20000 rpm
- 0.9 hp / 0.67 kW
- Supplied with Jacobs<sup>®</sup> Keyed Chuck or Threaded Termination for Keyless Chuck/Collet - see options on page 67.
- Composite grip with ergonomic finger and thumb guides to aid control
- Excellent for aerospace, metal fabrication, and woodworking applications
- 1/2" models equipped with dead handle



	Term	ination					
3/8" Chuck	3/8" - 24 e	1/2" Chuck	1/4" Chuck				
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Free Speed (rpm)	Weight	Length	Air Inlet Size
14CNL97-51	14CNL97-40	14CNL97-53	_	500	3.5 lb   1.59 kg	9.1 in   231 mm	1/4 in
14CNL95-51	14CNL95-40	—	—	1,300	2.8 lb   1.27 kg	8.6 in   218 mm	1/4 in
14CNL92-51	14CNL92-40	14CNL92-53	14CNL92-38	3,200	2.4 lb   1.09 kg	7.2 in   183 mm	1/4 in
14CNL91-51	14CNL91-40	—	—	5,200	2.4 lb   1.09 kg	7.2 in   183 mm	1/4 in
14CNL98-51	14CNL98-40	14CNL98-53	14CNL98-38	6,000	2.2 lb   1.00 kg	6.8 in   173 mm	1/4 in
—	14CNL90-40	—	14CNL90-38	20,000	2.2 lb   1.00 kg	6.8 in   173 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 5/16 in / 7.9 mm

Standard equipment: Jacobs geared chuck, chuck key

Drill diameter capacity matches chuck size.

# **14CHL Series - Non-Reversible**

3,200 - 6,000 RPM 1.4 hp (1.0 kW)

- **3200 6000 rpm**
- 1.4 hp / 1.0 kW
- Supplied with Jacobs<sup>®</sup> Keyed Chuck or Threaded Termination for Keyless Chuck/Collet see options on page 67.
- Powerful motor
- Rear exhaust



Cat. No.	Termination	Free Speed (rpm)	Weight	Length	Air Inlet Size
14CHL92-38	1/4" Chuck	3,200	2.6 lb   1.18 kg	6.5 in   165 mm	1/4 in
14CHL92-40	3/8" - 11 e	3,200	2.4 lb   1.09 kg	5.5 in   140 mm	1/4 in
14CHL92-51	3/8" Chuck	3,200	2.8 lb   1.27 kg	7.1 in   180 mm	1/4 in
14CHL92-53	1/2" Chuck	3,200	3.8 lb   1.72 kg	7.4 in   188 mm	1/4 in
14CHL98-38	1/4" Chuck	6,000	2.6 lb   1.18 kg	6.5 in   165 mm	1/4 in
14CHL98-40	3/8"- 11 e	6,000	2.4 lb   1.09 kg	5.5 in   140 mm	1/4 in
14CHL98-51	3/8" Chuck	6,000	2.8 lb   1.27 kg	7.1 in   180 mm	1/4 in
14CHL98-53	1/2" Chuck	6,000	3.8 lb   1.72 kg	7.4 in   188 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Drill Diameter Capacity Matches Chuck Size Minimum hose ID: 5/16 in / 7.9 mm



### **15DP Series - Non-Reversible**

160 - 1,400 RPM 1.0 hp (0.75 kW)

- li 160 1400 rpm
- 📕 1.0 hp / 0.75 kW
- Excellent for slow speed application
- Powerful motor



Cat. No.	Termination	Free Speed (rpm)	Weight	Length	Air Inlet Size
15DP-1.6B-53	1/2" Chuck	160	6.0 lb   2.72 kg	9.8 in   249 mm	3/8 in
15DP-4B-53	1/2" Chuck	400	5.5 lb   2.49 kg	8.5 in   216 mm	3/8 in
15DP-8B-53	1/2" Chuck	800	5.5 lb   2.49 kg	8.5 in   216 mm	3/8 in
15DP-14B-49	3/8" Chuck	1,400	4.5 lb   2.04 kg	8.3 in   211 mm	3/8 in

All tools performance rated @ 90 psi / 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

Minimum hose ID: 5/16 in / 7.9 mm

### **135DPV Series - Variable Speed**

1,350 RPM 0.7 hp (0.5 kW)

- 150 2600 rpm
- 0.7 hp / 0.5 kW
- Variable speed
- Calibrated governed speed control



Cat. No.	Termination	Free Speed (rpm)	Weight	Length	Air Inlet Size	Governed RPM Range
135DPV-7B-43	1/2" Chuck	600	3.6 lb   1.63 kg	9.6 in   244 mm	1/4 in	150 - 550
135DPV-7B-50	1/2" Chuck	600	3.6 lb   1.63 kg	9.6 in   244 mm	1/4 in	150 - 550
135DPV-14B-50	1/2" Chuck	1,250	3.4 lb   1.54 kg	9.3 in   236 mm	1/4 in	400 - 1,200
135DPV-14B-51	3/8" Chuck	1,250	3.4 lb   1.54 kg	9.3 in   236 mm	1/4 in	400 - 1,200
135DPV-28B-51	3/8" Chuck	2,600	3.2 lb   1.45 kg	8.5 in   216 mm	1/4 in	700 - 2,400

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

Standard Equipment: Operating instructions, service manual, 3-Jaw Chuck and Key-Jaw Chuck and Key General: Air Inlet: 1/4 in NPT, Minimum Hose Size: 1/4 in / 6 mm, Spindle Offset: 25/32 in / 20 mm

General: Air Inlet: 1/4 in NP1, Minimum Hose Size: 1/4 in / 6 mm, Spindle Offset: 25/32 in / Drill Diameter Capacity Matches Chuck Size

Cleco

# **MP Series - MP1457-51**

2,600 RPM 1.0 hp (0.75 kW)

- Non-reversible
- Double row ball bearings on output spindle for excellent alignment and true running bits
- Steel front end for industrial applications
- 2-step throttle for easy starts
- Built-in, no-clog mufflers for quiet operation
- Hardened and ground precision parts for extended service life
- Industrial grade medium duty drills are suitable for a wide range of production and MRO applications

### **MP Series - MP1463-51**

1,800 RPM 1.0 hp (0.75 kW)

#### Reversible

- Ball bearings on output spindle for excellent alignment and true running bits
- Steel front end for industrial applications
- 2-step throttle for easy starts
- Built-in, no-clog mufflers for quiet operation
- Hardened and ground precision parts for extended service life
- Industrial grade medium duty drills are suitable for a wide range of production and MRO applications



#### 1,200 RPM 1.2 hp (0.90 kW)

- Non-reversible
- Ball bearings on output spindle for excellent alignment and true running bits
- Steel front end for industrial applications
- 2-step throttle for easy starts
- Built-in, no-clog mufflers for quiet operation
- Hardened and ground precision parts for extended service life
- Industrial grade medium duty drills are suitable for a wide range of production and MRO applications

Model Number Free Spec	Free Speed	hp Chuck		Length		Weight		Spindle Offset		Air Inlet
	RPM		Capacity	in	mm	lbs	kg	in	mm	
MP1457-51	2600	1.0	3/8 in	7.5	191.0	1.9	0.85	0.84	20.6	1/4 in
MP1463-51	1800	1.0	3/8 in	6.8	172.7	2.5	1.1	0.84	20.6	1/4 in
MP1458-55	1200	1.2	1/2 in	9.0	228.6	2.1	0.95	0.84	20.6	1/4 in

General:

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









S

-

0

P

G

Л

\_

υ

DRIL

с S

# **15LF Series - Inline**

600 - 28,500 RPM 0.4 hp (0.30 kW)

- Optional Jacobs<sup>®</sup> geared chuck
- Safety lever



Exhaust							
Rear	Front						
Cat. No.	Cat. No.	Termination	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
15LF087-38	—	1/4" Chuck	600	Composite	1.9 lb   0.86 kg	8.6 in   218 mm	1/4 in
15LF087-40	—	3/8" - 24 e	600	Composite	1.9 lb   0.86 kg	8.6 in   218 mm	1/4 in
15LF086-38	—	1/4" Chuck	750	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
_	15LF055-38	1/4" Chuck	1,000	Composite	1.9 lb   0.86 kg	8.6 in   218 mm	1/4 in
15LF085-38	—	1/4" Chuck	1,000	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
15LF085-40	—	3/8" - 24 e	1,000	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
_	15LF054-38	1/4" Chuck	2,400	Composite	1.3 lb   0.59 kg	7.3 in   185 mm	1/4 in
15LF084-38	—	1/4" Chuck	2,400	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
_	15LF053-38	1/4" Chuck	3,300	Composite	1.3 lb   0.59 kg	7.3 in   185 mm	1/4 in
15LF083-38	—	1/4" Chuck	3,300	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
15LF083-40	—	3/8" - 24 e	3,300	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
_	15LF052-38	1/4" Chuck	4,000	Composite	1.3 lb   0.59 kg	7.3 in   185 mm	1/4 in
15LF082-38	—	1/4" Chuck	4,000	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
15LF082-40	—	3/8" - 24 e	4,000	Composite	1.4 lb   0.64 kg	7.3 in   185 mm	1/4 in
—	15LF051-38	1/4" Chuck	5,300	Composite	1.3 lb   0.59 kg	7.3 in   185 mm	1/4 in
15LF081-38	—	1/4" Chuck	5,300	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
15LF081-40	-	3/8" - 24 e	5,300	Composite	1.4 lb   0.64 kg	8.0 in   203 mm	1/4 in
15LF080-38	—	1/4" Chuck	28,500	Composite	0.9 lb   0.41 kg	6.3 in   160 mm	1/4 in
A.U. 1 (	an instant @ 00 pail / 00						

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 1/4 in / 6.4 mm Standard Equipment: Jacobs geared chuck, chuck key Drill diameter capacity matches chuck size.

### **15-14 Series - Right Angle**

- 2400 3600 rpm
- 0.3 hp / 0.22 kW
- Optional Jacobs<sup>®</sup> geared chuck

Safety Lever



Cat. No.	Termination	Free Speed (rpm)V	Type Housing	Weight	Length	Head Height	Air Inlet Size	Drill Diameter Capacity
15L1487-32	1/4" - 28 i	1,500	Composite	1.2 lb   0.54 kg	8.0 in   203 mm	3.0 in	1/4 in	1/4 in
15L1487-36	1/4" Collet	1,500	Composite	1.2 lb   0.54 kg	8.0 in   203 mm	3.0 in	1/4 in	1/4 in
15L1487-38	1/4" Chuck	1,500	Composite	1.5 lb   0.68 kg	8.0 in   203 mm	3.0 in	1/4 in	1/4 in
15L1488-36	1/4" Collet	2,400	Composite	1.6 lb   0.73 kg	8.7 in   221 mm	3.0 in	1/4 in	1/4 in
15L1488-38	1/4" Chuck	2,400	Composite	1.5 lb   0.68 kg	8.0 in   203 mm	3.0 in	1/4 in	1/4 in
15L1489-32	1/4" - 28 i	3,600	Composite	1.6 lb   0.73 kg	8.7 in   221 mm	3.0 in	1/4 in	1/4 in
15L1489-36	1/4" Collet	3,600	Composite	1.6 lb   0.73 kg	8.7 in   221 mm	3.0 in	1/4 in	1/4 in
15L1489-38	1/4" Chuck	3,600	Composite	1.5 lb   0.68 kg	8.0 in   203 mm	3.0 in	1/4 in	1/4 in
15L1489-51	3/8" Chuck	3,600	Composite	1.5 lb   0.68 kg	8.0 in   203 mm	3.0 in	1/4 in	1/4 in
15L1470-37	5/32" Chuck	12,000	Composite	1.2 lb   0.54 kg	6.9 in   175 mm	2.5 in	1/4 in	1/4 in
15L1401-37*	5/32" Chuck	20,000	Composite	1.0 lb   0.45 kg	6.2 in   157 mm	2.5 in	1/4 in	1/4 in
15L1471-37	5/32" Chuck	20,000	Composite	1.2 lb   0.54 kg	6.9 in   175 mm	2.5 in	1/4 in	1/4 in



### **15LF Series - Light Duty Head**

#### 600 - 5,300 RPM 0.4 hp (0.30 kW)

- 600 5300 rpm
- 📕 0.4 hp / 0.30 kW
- Wide array of speeds, head designs, and spindle threads for all applications
- High efficiency motor and gear train
- Comfortable and ergonomic handle
- Other terminations available (see page 66) -61 10-32 interal thread, -63 threaded collet, -64 5/16 in 24 thread

Cat. No.	Termination	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
15LF287-62	1/4"- 28 i	600	Composite	1.9 lb   0.86 kg	11.8 in   300 mm	1/4 in
15LF286-62	1/4" - 28 i	750	Composite	1.9 lb   0.86 kg	11.8 in   300 mm	1/4 in
15LF285-62	1/4" - 28 i	1,000	Composite	1.9 lb   0.86 kg	11.8 in   300 mm	1/4 in
15LF284-62	1/4" - 28 i	2,400	Composite	1.8 lb   0.82 kg	11.1 in   282 mm	1/4 in
15LF283-62	1/4" - 28 i	3,300	Composite	1.6 lb   0.73 kg	10.7 in   272 mm	1/4 in
15LF282-62	1/4" - 28 i	4,000	Composite	1.6 lb   0.73 kg	10.7 in   272 mm	1/4 in
15LF281-62	1/4" - 28 i	5,300	Composite	1.6 lb   0.73 kg	10.7 in   272 mm	1/4 in

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

#### Standard Equipment: 600 Series Mini Angle Head with 1/4"-28 internal thread

# **15LF Series - Heavy Duty Head**

#### 420 - 3,700 RPM 0.4 hp (0.30 kW)

- Wide array of speeds, head designs, and spindle threads for all applications
- High-efficiency motor and gear train
- Comfortable and ergonomic handle
- Other terminations available (see page 66) -51 10-32 interal thread, -53 threaded collet, -54 5/16 in 24 thread

Cat. No.	Termination	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
15LF287-52	1/4" - 28 i	420	Composite	2.0 lb   0.91 kg	12.0 in   305 mm	1/4 in
15LF286-52	1/4" - 28 i	525	Composite	2.0 lb   0.91 kg	12.0 in   305 mm	1/4 in
15LF285-52	1/4" - 28 i	700	Composite	2.0 lb   0.91 kg	12.0 in   305 mm	1/4 in
15LF284-52	1/4" - 28 i	1,700	Composite	1.8 lb   0.82 kg	10.6 in   269 mm	1/4 in
15LF283-52	1/4" - 28 i	2,300	Composite	1.7 lb   0.77 kg	11.0 in   279 mm	1/4 in
15LF282-52	1/4" - 28 i	2,800	Composite	1.7 lb   0.77 kg	11.0 in   279 mm	1/4 in
15LF281-52	1/4" - 28 i	3,700	Composite	1.7 lb   0.77 kg	11.0 in   279 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Standard Equipment: 500 Series Heavy Duty Angle Head with 1/4"-28

# **15LS Series - Light Duty Head**

#### 500 - 5,430 RPM 0.6 hp (0.45 kW)

- Wide array of speeds, head designs, and spindle threads for all applications
- High efficiency motor and gear train
- Comfortable and ergonomic handle
- Other terminations available (see page 66) -61 10-32 interal thread, -63 threaded collet, -64 5/16 in 24 thread

	-	,				
Cat. No.	Termination	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
15LS287-62	1/4" - 28 i	500	Composite	1.9 lb   0.86 kg	12.7 in   323 mm	1/4 in
15LS286-62	1/4" - 28 i	840	Composite	1.9 lb   0.86 kg	12.7 in   323 mm	1/4 in
15LS285-62	1/4" - 28 i	1,360	Composite	1.9 lb   0.86 kg	12.7 in   323 mm	1/4 in
15LS284-62	1/4" - 28 i	1,660	Composite	1.9 lb   0.86 kg	12.4 in   315 mm	1/4 in
15LS283-62	1/4" - 28 i	2,010	Composite	2.3 lb   1.04 kg	11.5 in   292 mm	1/4 in
15LS282-62	1/4" - 28 i	3,370	Composite	2.3 lb   1.04 kg	11.5 in   292 mm	1/4 in
15LS281-62	1/4" - 28 i	5,430	Composite	2.3 lb   1.04 kg	11.5 in   292 mm	1/4 in

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

Standard Equipment: 600 Series Mini Angle Head with 1/4"-28 internal thread



RIG



### **15LN Series - Light Duty Head**

#### 540 - 5,600 RPM 0.9 hp (0.67 kW)

- Wide array of speeds, head designs, and spindle threads for all applications
- High efficiency motor and gear train
- Comfortable and ergonomic handle
- Other terminations available (see page 66) -61 10-32 interal thread, -63 threaded collet, -64 5/16 in 24 thread

Cat. No.	Termination	Free Speed (rpm)	Type Housing	Weight	Length	Head Height	Air Inlet Size
15LN287-62	1/4"- 28 i	320	Composite	2.5 lb   1.13 kg	12.0 in   305 mm	1.0 in	1/4 in
15LN286-62	1/4"- 28 i	540	Composite	2.5 lb   1.13 kg	13.5 in   343 mm	1.0 in	1/4 in
15LN285-62	1/4" - 28 i	1,000	Composite	2.5 lb   1.13 kg	12.0 in   305 mm	1.0 in	1/4 in
15LN284-62	1/4" - 28 i	1,530	Composite	2.5 lb   1.13 kg	12.0 in   305 mm	1.0 in	1/4 in
15LN283-62	1/4"- 28 i	1,850	Composite	2.5 lb   1.13 kg	12.0 in   305 mm	1.0 in	1/4 in
15LN282-62	1/4"- 28 i	3,100	Composite	2.5 lb   1.13 kg	12.0 in   305 mm	1.0 in	1/4 in
15LN281-62	1/4"- 28 i	5,000	Composite	2.5 lb   1.13 kg	12.0 in   305 mm	1.0 in	1/4 in
15LN288-62	1/4" - 28 i	5,600	Composite	2.5 lb   1.13 kg	12.0 in   305 mm	1.0 in	1/4 in

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

Standard Equipment: 600 Series Mini Angle Head with 1/4"-28 internal thread

# **15LS Series - Heavy Duty Head**

#### 350 - 3,800 RPM 0.6 hp (0.45 kW)

- Wide array of speeds, head designs, and spindle threads for all applications
- High-efficiency motor and gear train
- Comfortable and ergonomic handle
- Other terminations available (see page 67) -51 10-32 interal thread, -53 threaded collet, -54 5/16 in 24 thread

Cat. No.	Termination	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
15LS287-52	1/4" - 28 i	350	Composite	2.8 lb   1.27 kg	12.3 in   312 mm	1/4 in
15LS286-52	1/4" - 28 i	590	Composite	2.8 lb   1.27 kg	12.3 in   312 mm	1/4 in
15LS285-52	1/4" - 28 i	950	Composite	2.8 lb   1.27 kg	12.3 in   312 mm	1/4 in
15LS283-52	1/4" - 28 i	1,410	Composite	2.4 lb   1.09 kg	11.0 in   279 mm	1/4 in
15LS282-52	1/4" - 28 i	2,360	Composite	2.4 lb   1.09 kg	11.0 in   279 mm	1/4 in
15LS281-52	1/4" - 28 i	3,800	Composite	2.4 lb   1.09 kg	11.0 in   279 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Standard Equipment: 500 Series Heavy Duty Angle Head with 1/4"-28

### **15LN Series - Heavy Duty Head**

#### 320 - 3,900 RPM 0.9 hp (0.67 kW)

- Wide array of speeds, head designs, and spindle threads for all applications
- High-efficiency motor and gear train
- Comfortable and ergonomic handle
- Other terminations available (see page 66) -51 10-32 interal thread, -53 threaded collet, -54 5/16 in 24 thread

Cat. No.	Termination	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
15LN286-52	1/4" - 28 i	540	Composite	3.0 lb   1.36 kg	12.8 in   325 mm	1/4 in
15LN285-52	1/4" - 28 i	870	Composite	3.0 lb   1.36 kg	12.8 in   325 mm	1/4 in
15LN284-52	1/4" - 28 i	1,070	Composite	3.0 lb   1.36 kg	12.8 in   325 mm	1/4 in
15LN283-52	1/4" - 28 i	1,300	Composite	2.6 lb   1.18 kg	11.5 in   292 mm	1/4 in
15LN281-52	1/4" - 28 i	3,500	Composite	2.6 lb   1.18 kg	11.5 in   292 mm	1/4 in
15LN288-52	1/4" - 28 i	3,900	Composite	2.6 lb   1.18 kg	11.5 in   292 mm	1/4 in

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

```
Standard Equipment: 500 Series Heavy Duty Angle Head with 1/4"-28
```



S

£

ш

\_

6

Ζ

∢



### **Base Modular Quick-Change Tools**

320 - 5,300 RPM

15LF: 0.4 hp (0.3 kW); 15LN: 0.9 hp (0.7 kW)

- Quick-release for range of angle head attachments
- Can be used for quick-change of: cutter size, drilling speed, head style
- Pull-back sleeve to change angle head
- Common drive system



Cot No.	Termination	n Speed Weight Length		Aix Inlat Cina		
Cat. No.	Termination	w/ Q5X Head	w/ Q4X, Q6X, Q7X, Q9x Head	weight	Length	Air Inlet Size
15LF281Q	Quick Change Adapter	3700	5300	0.4 hp / 0.3 kW	0.65 kg / 1.43 lbs	1/4 in
15LF282Q	Quick Change Adapter	2800	4000	0.4 hp / 0.3 kW	0.65 kg / 1.43 lbs	1/4 in
15LF283Q	Quick Change Adapter	2300	3300	0.4 hp / 0.3 kW	0.65 kg / 1.43 lbs	1/4 in
15LF284Q	Quick Change Adapter	1700	2400	0.4 hp / 0.3 kW	0.65 kg / 1.43 lbs	1/4 in
15LF285Q	Quick Change Adapter	700	1000	0.4 hp / 0.3 kW	0.65 kg / 1.43 lbs	1/4 in
15LF286Q	Quick Change Adapter	525	750	0.4 hp / 0.3 kW	0.65 kg / 1.43 lbs	1/4 in
15LF287Q	Quick Change Adapter	420	600	0.4 hp / 0.3 kW	0.65 kg / 1.43 lbs	1/4 in
15LN281Q	Quick Change Adapter	3500	5000	0.9 hp / 0.7 kW	1.05 kg / 2.31 lbs	1/4 in
15LN282Q	Quick Change Adapter	2170	3100	0.9 hp / 0.7 kW	1.05 kg / 2.31 lbs	1/4 in
15LN283Q	Quick Change Adapter	1300	1850	0.9 hp / 0.7 kW	1.05 kg / 2.31 lbs	1/4 in
15LN284Q	Quick Change Adapter	1070	1530	0.9 hp / 0.7 kW	1.05 kg / 2.31 lbs	1/4 in
15LN285Q	Quick Change Adapter	870	1240	0.9 hp / 0.7 kW	1.05 kg / 2.31 lbs	1/4 in
15LN286Q	Quick Change Adapter	540	770	0.9 hp / 0.7 kW	1.05 kg / 2.31 lbs	1/4 in
15LN287Q	Quick Change Adapter	320	460	0.9 hp / 0.7 kW	1.05 kg / 2.31 lbs	1/4 in

### **Quick-Change Angle Heads**

#### 350 - 3,800 RPM 0.6 hp (0.45 kW)

- Use with 15LFQ & 15LNQ Base modular quick change tools
- 45°, 90° and 360° light duty angle head: 600 Series
- Heavy duty angle head: 500 Series, drill chuck
- Compact angle head: 700 Series



Ordering Code	Termination	Туре	Notes
302206PT-Q42	1/4 in - 28	45° Light Duty Angle Head	
302206PT-Q43	Collet (9/32 in - 40)	45° Light Duty Angle Head	*Order Collets Separately: See pg. 67
302206PT-Q52	1/4 in - 28	Heavy Duty Angle Head - 500 Series	
302206PT-Q53	Collet (9/32 in - 40)	Heavy Duty Angle Head - 500 Series	*Order Collets Separately: See pg. 67
302206PT-Q59	3/8 in - 24	Heavy Duty Angle Head - 500 Series	
302206PT-Q62	1/4 in - 28	Light Duty Head - 600 Series	
302206PT-Q63	Collet (9/32 in - 40)	Light Duty Head - 600 Series	*Order Collets Separately: See pg. 67
302206PT-Q72	1/4 in - 28	Compact Angle Head - 700 Series	
302206PT-Q73	Collet (9/32 in - 40)	Compact Angle Head - 700 Series	*Order Collets Separately: See pg. 67
302206PT-Q92	1/4 in - 28	360° Light Duty Angle Head	
302206PT-Q93	Collet (9/32 in - 40)	360° Light Duty Angle Head	*Order Collets Separately: See pg. 67



#### **Optional Drill Attachments**

For use on Dotco 15LF, 15LS, and 15LN series. Capacity: 1/4" Diameter Drill

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.

Part Number	Termination	Spindle Thread
Compact Angle Head – 700 Series		
1025477	-72	1/4"-28 Internal Thread
1025476	-73	9/32"-40 Internal Thread*
1025668	-74	5/16"-24 Internal Thread
Light Duty Head – 600 Series		
1025314	-61	#10-32 Internal Thread
1025409	-62	1/4"-28 Internal Thread
1025313	-63	9/32"-40 Internal Thread*
1025328	-64	5/16"-24 Internal Thread
Heavy Duty Angle Head – 500 Series	S	
1021289	-52	1/4"-28 Internal Thread
1021292	-53	9/32"-40 Internal Thread*
1021291	-54	5/16"-24 Internal Thread
1025780	-55	3/8"-24 Internal Thread
45° Light Duty Angle Head		
1025730	-42	1/4"-28 Internal Thread
1025731	-43	9/32"-40 Internal Thread*
1025733	-44	5/16"-24 Internal Thread
360° Light Duty Angle Head		
1025696	-91	#10-32 Internal Thread
1025694	-92	1/4"-28 Internal Thread



1025694

\* 9/32-40 thread for collets, see page 67

Part No.	Termination	Drill Chuck
Heavy Duty Angle Head		
1021620	-59	500 Series Angle Head with drill chuck, 1/4" capacity
1021620	-59 NC	500 Series Angle Head, no chuck 3/8"-24 ext. thread

#### Straight Shank Drill Adaptors

Hex

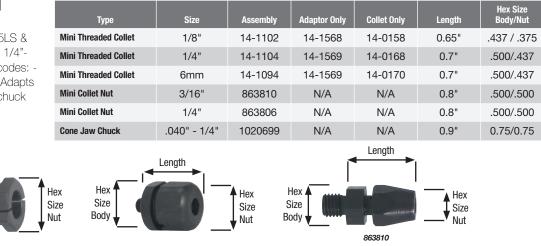
Size

Body

For use on Dotco 15LF, 15LS & 15LN right angle drills with 1/4"-28 spindles. (Termination codes: -42, -52, -62, -72, & -92). Adapts 1/4" - 28 output to collet/chuck for straight shank drills.

Length

14-1104



S Ш

£

1001252

#### Collets

For use on Dotco 15LF, 15LS & 15LN right angle drills with 9/32"-40 spindles.



(Termination codes: - 43, -53, -63, -73, & -93)

Cat.		Drill Size	
Number	No.	Inch Decimal	mm
1006408	53	0.0600	
316PT	00	0.0630	1.6
1005180	1/16	0.0630	1.0
1006412	51	0.0670	1.7
320PT	01	0.0787	2
1005875	46	0.0810	_
1005182	3/32	0.0940	
324PT	0,01	0.0945	2.4
1005684	40	0.0980	
325PT		0.0984	2.5
1006395	39	0.1000	
326PT		0.1024	2.6
1005183	7/64	0.1090	
330PT	.,	0.1181	3
1005873	31	0.1200	-
331		0.1220	3.1
1005184	1/8	0.1250	
332PT		0.1260	3.2
1013904	30	0.1290	
333PT		0.1299	3.3
1005185	9/64	0.1410	
1005872	27	0.1440	
1005186	5/32	0.1560	
1005926	22	0.1570	
340PT		0.1575	4
1005682	21	0.1590	
1005876	20	0.1610	
341PT		0.1614	4.1
342PT		0.1654	4.2
1006035	19	0.1660	
1005187	11/64	0.1720	
1005977	17	0.1730	
344PT		0.1732	4.4
345PT		0.1772	4.5
1005927	13	0.1850	4.7
1005188	3/16	0.1880	
348PT	12	0.1890	4.8
1006001	11	0.1910	
349		0.1929	4.9
1005681	10	0.1940	
350PT		0.1969	5

Other sizes available, please contact Cleco Production Tools

#### **Chuck Assemblies (300 Series Collet)**

Size	Chuck Assembly	Thread	L
3/16"	14-3050-12	3/8"-24	2.62"/66.5mm
7/32"	14-3050-14	3/8"-24	2.62"/66.5mm
1/4"	14-3050	3/8"-24	2.62"/66.5mm
1/4"	14-1148	5/16"-24	1.62"/41.2mm
3/32"-1/4" *	14-3080	3/8"-24	2.12"/54mm

Jacobs <sup>®</sup> Chucks
----------------------------

Part No.	Туре	Capacity	mm	Term.	
1005078	With Key	1/4 in	6.3	3/8 in - 24	
1001505	With Key	1/4 in HD	6.3	3/8 in - 24	
1001252	With Key	3/8 in	9.5	3/8 in - 24	
1009726	With Key	1/2 in	12.7	3/8 in - 24	
33633	Keyless	5/16 in	8.0	3/8 in - 24	
33663D	Keyless	25/64 in	10.0	3/8 in - 24	



Use with Standard Collet: 1/4" (#308).	
Termination Number: -36	

Termination Num	iber: -36
Part Number	Description
14-1148	1/64"-1/4" capacity with a 5/16"-24 female thread

#### **Quick-Change Chuck**

Thread Size	Capacity	Part Number	
3/8"-24	1/4" Hex	QRA-08	



#### **300 Series Collets**

Size	Cat No
3/32"	303PT
1/8"	304PT
3/32"	305PT
3/16"	306PT
7/32"	307PT
1/4"	308PT
3mm	311PT
6mm	310PT







RILL

ACC

ESSORIES

#### **Drilling Guides - Manual**

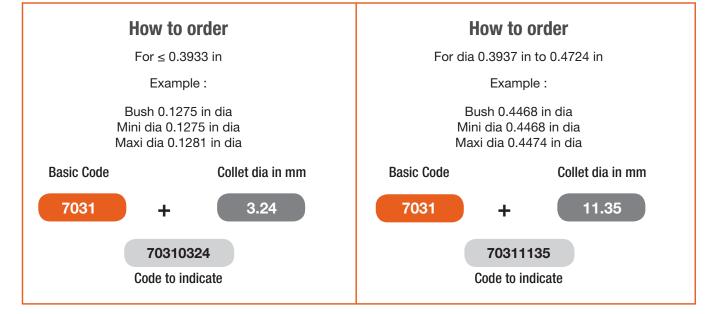
These drill guides, simple and sturdy, can be fitted with a removable drill bush of tempered high-speed steel. The drill bush is slide fit to H7g6 with a m6 fit on the last 3 mm.

#### **Drilling Bushes**

For Use with Drilling Guides - Manual

We can supply all drilling bushes from 0.039 in up to 0.47 in dia. All our bushes are manufactured with a tolerance of +0.0006 in / +0 on the nominal diameter.

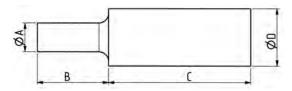




#### **Cutter Adapters**

For M6, M8, and M10 Cutters

Adaptors to use threaded cutters in drill chucks.



For Cutter Thread	Ø A		В	C	ØD	Code
	mm	in	mm	mm	mm	UUUE
M6 x 1	4	0.157	15	15	10	10090000
M6 x 1	6	0.236	20	30	10	10090050
M8 x 1	6	0.236	20	30	12	10090055
M8 x 1	8	0.315	20	30	14	10090100
M10 x 1	10	0.394	20	30	14	10090150

S

#### Flat Offset Angle Drill

For restricted access drilling. Fits into a standard drill chuck, shaft size is  $6 \mathrm{mm}$ 

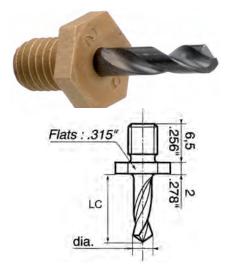
Cutter Attachment	A	В	Code
	84	28	10080005
UNF 10-32 F	84	112.5	10080010
UNF 10-32 F	63	28	10080015
	63	112.5	10080020



STEEL

TITANIUM

Drill Cutters for Flat Offset Angle Drill



LC **DRILL DIAMETER** PART NUMBER mm in mm in 12 2.5 0.0984 0.472 33000020 2.5 0.0984 20 0.787 33000625 3 0.1181 12 0.472 33000025 3.2 0.126 8 0.315 33000132 3.2 0.126 12 0.472 33000030 3.2 20 0.126 0.787 33000632 4 0.1575 12 0.472 33000040 4 0.1575 15 0.591 33000240 4.8 0.189 15 0.591 33000248

ALUMINIUM

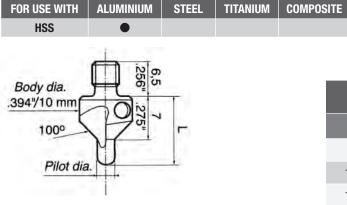
FOR USE WITH

HSS

Alternative drills may be manufactured on request: *E.g. special diameters and lengths.* 

#### **Countersink Cutters for Flat Offset Angle Drill**

HSS UNF 10-32F





L		PILOT DI	AMETER	PART NUMBER
mm	mm in		in	
9.40	0.370	1.60	0.0630	33001005
10.60	0.417	2.40	0.0945	33001010
10.75	0.423	2.50	0.0984	33001015
11.60	0.456	3.20	0.1260	33001020





72

COMPOSITE

D R I

-

P

 $\triangleright$ 

0

0

т С

S

0

Л

Ш

S

### **Microstop Cages**

A wide range of Microstop Cages are available for use with Cleco<sup>®</sup> Dotco<sup>™</sup> Pistol Grip Drills. Use for Drilling, Reaming and Countersinking.

Cutters are also available for a complete system solution.



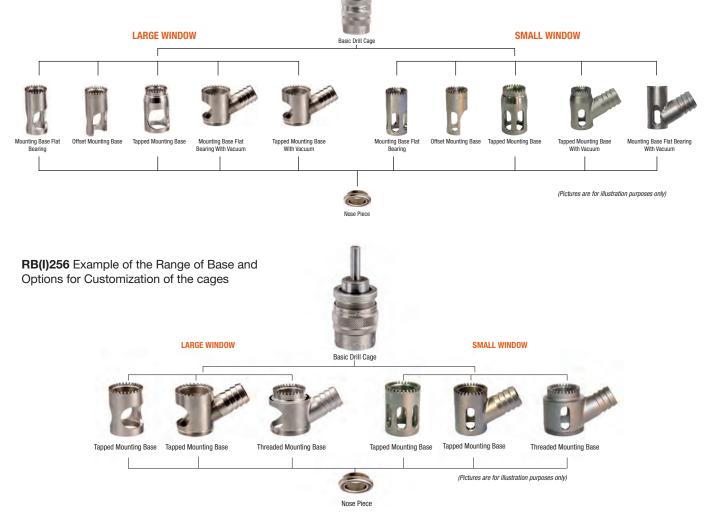
#### These cages have:

- High precision, body in heat-treated chrome steel, fully ground throughout
- Microstop depth adjustment options for .0005 or 0.001 in adjustment
- 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.

#### Wide range of Basic Drill cages with varying strokes and metric/inch cutter interface

- For each there are different mounting bases available to suit the needs of the application
- Reduced dimensions for tight access areas.
- Vacuum options to reduce clean up/prevent operator exposure to dust and chips.

**RB(I)206** Example of the Range of Base and Options for Customization of the cages



For full product information refer to the SP401 Aerospace Products Catalog.

S

🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

#### **Microstop Cages**



Microstop	Shank Dia.	Cutter Thread	Stroke	Ø EXT. MAXI	Total I	Length
Cage	Silalik Dia.	Guller Inicau	3006	Ø EAT. MAAI	Mini	Maxi
RB 156	Ø 4.8 mm - 0.19 in dia	M6 x 1	3.5 mm - 0.14 in	Ø 25 mm - 1 in dia	51 mm - 2 in	55 mm - 2.16 in
RB 206	Ø 6 mm - 0.24 in dia	M6 x 1	6 mm - 0.24 in	Ø 21 mm - 0.826 in dia	95 mm - 3.74 in	101 mm - 3.97 in
RBI 206	Ø 6 mm - 0.24 in dia	1/4 in - 28 F	6 mm - 0.24 in	Ø 21 mm - 0.826 in dia	95 mm - 3.74 in	101 mm - 3.97 in
RB 256	Ø 6 mm - 0.24 in dia	M6 x 1	7.5 mm - 0.3 in	Ø 28 mm - 1.1 in dia	91 mm - 3.58 in	98 mm - 3.85 in
RBI 256	Ø 6 mm - 0.24 in dia	1/4 in - 28 F	7.5 mm - 0.3 in	Ø 28 mm - 1.1 in dia	91 mm - 3.58 in	98 mm - 3.85 in
RB 257	Ø 6 mm - 0.24 in dia	M6 x 1	6 mm - 0.24 in	Ø 29 mm - 1.14 in dia	88 mm - 3.46 in	92 mm - 3.62 in
RB 258	Ø 6.35 mm - 1/4 in dia	M6 x 1	27 mm - 1.06 in	Ø 29 mm - 1.14 in dia	141 mm - 5.55 in	156 mm - 6.14 in
RBI 258	Ø 6.35 mm - 1/4 in dia	1/4 in - 28 F	27 mm - 1.06 in	Ø 29 mm - 1.14 in dia	141 mm - 5.55 in	156 mm - 6.14 in
RB 306	Ø 6 mm - 0.24 in dia	M8 x 1	7.5 mm - 0.3 in	Ø 28 mm - 1.1 in dia	91 mm - 3.58 in	98 mm - 3.85 in
RB 307	Ø 6 mm - 0.24 in dia	M8 x 1	7 mm - 0.28 in	Ø 29 mm - 1.14 in dia	88 mm - 3.46 in	98 mm - 3.62 in
RBI 307	Ø 6 mm - 0.24 in dia	1/4 in - 28 F	7 mm - 0.28 in	Ø 29 mm - 1.14 in dia	88 mm - 3.46 in	98 mm - 3.62 in
RB 406	Ø 6 mm - 0.24 in dia / JTI	M10 x 1	14 mm - 0.55 in	Ø 36 mm - 1.42 in dia	136 mm - 5.35 in	163 mm - 6.42 in
RB 356 HP 21	Ø 6 mm - 0.24 in dia / JTI	M6 x 1	21 mm - 0.83 in	Ø 27 mm - 1.06 in dia	116 mm - 4.57 in	136 mm - 5.35 in
RB 356 HPI 21	Ø 6 mm - 0.24 in dia / JTI	1/4 in - 28 F	21 mm - 0.83 in	Ø 27 mm - 1.06 in dia	116 mm - 4.57 in	136 mm - 5.35 in
RB 356 HP 38	Ø 6 mm - 0.24 in dia / JTI	M6 x 1	38 mm - 1.5 in	Ø 27 mm - 1.06 in dia	183 mm - 7.2 in	168 mm - 6.61 in
RB 356 HPI 38	Ø 6 mm - 0.24 in dia / JTI	1/4 in - 28 F	38 mm - 1.5 in	Ø 27 mm - 1.06 in dia	183 mm - 7.2 in	168 mm - 6.61 in
RB 356 HP 58	Ø 6 mm - 0.24 in dia / JTI	M10 x 1	58 mm - 2.28 in	Ø 38 mm - 1.5 in dia	264 mm - 10.4 in	292 mm - 11.5 in
RB 356 HPI 58	Ø 6 mm - 0.24 in dia / JTI	7/16 in - 20 F	58 mm - 2.28 in	Ø 38 mm - 1.5 in dia	264 mm - 10.4 in	292 mm - 11.5 in



🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

#### A wide range of cutters are available for use with Dotco Pistol Grip Drills.

For product information refer to SP401 Aerospace Products Catalogue.

Cutters with Inserted Pilot for Countersinking for Rivets and Screws in HSS, Carbide and PCD M6 and M8 threads	
10-25mm Diameter with 3-12mm pilots	
Cutters with Inserted Pilot for Countersinking for Rivets and Screws in HSS, Carbide and PCD M6 and M8 threads	
12-25mm Diameter with 5-14mm pilots	
Spotfacing Cutters with Pilot Insert in HSS, Carbide and PCD	
M6 and M8 threads	uterandi
6-38mm Spotface	
Drill and Countersink Cutters in HSS, Carbide and PCD	
	(IIII ) South and the second
Drill, Ream and Countersink Cutters in HSS, Carbide and PCD	
Tapered Drill Reamers	
Fluted Drill Reamers	
Router Cutters	
	€ 32600005-0 6
Wire Brush for Rivet Holes	

S



🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

### TOUGH TOOLS EASY CHOICE.

From light assembly to maximum torque requirements Cleco® has the impact wrench you demand.



SERIES

### FAST, COMPACT, POWERFUL

HIGH TORQUE, LOW WEIGHT,

performance at an unbeatable value.

The CV Series is a practical and rugged workhorse

comfortable, the CV Series impacts deliver Cleco

for general industrial production, repair, and maintenance. Lightweight, balanced and

**UNBEATABLE VALUE** 

Cleco MP Series Impacts are Industrial grade medium duty tools suitable for a wide range of production and MRO applications.







### THE ULTIMATE BALANCE OF PERFORMANCE, DURABILITY, AND ERGONOMICS

The CWC Series combines powerful performance, durability, and a user-preferred ergonomic design in one lightweight comfortable package. A reliable triple cycle heat treated twin hammer mechanism and industrial grade bearings ensure that the CWC Series impacts deliver long-lasting productivity.



# **IMPACT WRENCHES** 75

# **CWM** s e r i e s

#### ENGINEERED FOR HEAVY-DUTY APPLICATIONS IN DEMANDING ENVIRONMENTS

The CWM Series is built to thrive in the toughest environments. With hundreds of hours spent on advanced engineering and testing, this tool has been dropped from two stories, bashed on concrete and tested outside in extreme environments to make sure it performs whenever and wherever you need it.





#### DESIGNED FOR PUNISHING INDUSTRIAL APPLICATIONS, EASY SERVICE, AND REDUCED DOWNTIME

The W Series is the most powerful, longest lasting, low maintenance impact series we offer. It has a proven history for durability, holding up to the critical demands of heavy industry. Engineered to reduce downtime this series is a staple in the oil and gas, rail, and shipping industries.





🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

# MP Series

- High power to weight ratio
- 4-speed regulator for variable torque control
- All metal housing increase tool life and reduces vibration\*
- Overmold grip for user comfort and removable belt clip\*
- 100% ball bearing construction
- Excellent choice for soft joint applications



Model Number	Output Drive	Working Torque Range	Free Speed	Blows Per Minute	Weight	Length	Sound Pressure / Power	Air Inlet	Hose ID	Air Consumption
	in	ft-lbs (Nm)	RPM	BPM	lb (kg)	in (mm)	dBA	Inches	Inches	CFM
MP2264B	1/4 Quick Change	10 - 90 (13.5-122)	10,000	2,000	2.15 (.98)	6 (152)	84 / 91	1/4	3/8	33
MP2265B	3/8 Pin	10 - 90 (13.5-122)	10,000	2,000	2.15 (.98)	6 (152)	84 / 91	1/4	3/8	33
MP2271	3/8 Pin	10 - 65 (13.5-88)	10,500	900	2.2 (1.0)	6.5 (165)	87	1/4	3/8	22

### **MP Series**

#### 10,500 RPM

- High power to weight ratio
- 4-speed regulator for variable torque control
- Top mounted reversible butterfly throttle improves control and reduces user fatigue
- Chemical resistant housing
- Excellent choice for soft joint applications



Model Number	Output Drive	Maximum Reverse Torque	Maximum Applied Torque	Working Torque Range	Free Speed	Blows Per Minute	Weight	Length	Sound Pressure / Power	Air Inlet	Hose ID	Air Consumption
Number	in	ft-lbs (Nm)	ft-lbs (Nm)	ft-lbs (Nm)	RPM	BPM	lb (kg)	in (mm)	dBA	Inches	Inches	CFM
MP2271	3/8 Pin			10 - 65 (13.5-88)	10,500	900	2.2 (1.0)	6.5 (165)	87	1/4	3/8	22

S Ш

н

0

Z

ш

Ľ

≥

### **CV Composite Series**

#### 5,500 - 8,500 RPM

- 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 Number	Output Drive	Maximum Reverse Torque	Maximum Applied Torque	Working Torque Range	Free Speed	Blows Per Minute	Weight	Length	Sound Pressure / Power	Air Inlet	Hose ID	Air Consumption
Nulliper	in	ft-Ibs (Nm)	ft-lbs (Nm)	ft-lbs (Nm)	RPM	BPM	lb (kg)	in (mm)	dBA	Inches	Inches	CFM
CV-375P	3/8 Pin	510 (692)	420 (569)	25-275 (34-373)	8,000	1,600	2.9 (1.32)	6.2 (157)	87.9 / 98.9	1/4	3/8	4.5
CV-375R	3/8 Ring	510 (692)	420 (569)	25-275 (34-373)	8,000	1,600	2.9 (1.32)	6.2 (157)	87.9 / 98.9	1/4	3/8	4.5
CV-375R-4	1/2 Ring	510 (692)	420 (569)	25-275 (34-373)	8,000	1,600	2.9 (1.32)	6.2 (157)	87.9 / 98.9	1/4	3/8	4.5
CV-500P	1/2 Pin	1,100 (1,491)	780 (1,058)	50-600 (68-814)	8,500	1,200	4.8 (2.2)	7.6 (193)	89.1 /100.1	1/4	3/8	5.7
CV-500R	1/2 Ring	1,100 (1,491)	780 (1,058)	50-600 (68-814)	8,500	1,200	4.8 (2.2)	7.6 (193)	89.1 /100.1	1/4	3/8	5.7
CV-750P	3/4 Pin and Ring	1,500 (2,034)	1,300 (1,763)	200-1,000 (271- 1,356)	5,500	1,000	8.2 (3.72)	8.7 (221)	91.1 / 102.1	3/8	1/2	9
CV-750P-8	1 Pin and Ring	1,500 (2,034)	1,300 (1,763)	200-1,000 (271- 1,356)	5,500	1,000	8.3 (3.76)	9.1 (231)	91.1 / 102.1	3/8	1/2	9

#### General:

Tool Performance rated at 90 psi (620 kPa) air pressure

#### \*\* BreakawayTorque Capacity in Reverse:

375: 510 ft-lbs (692 Nm) 500: 1,100 ft-lbs (1491 Nm) 750: 1,500 ft-lbs (2034 Nm) Output Option:

R - Retaining Ring P - Pin Anvil or Pin Hole

S



### **CWC Composite Series**

6,000 - 13,000 RPM

- 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 Number	Output Drive	Maximum Reverse Torque	Maximum Applied Torque	Working Torque Range	Free Speed	Blows Per Minute	Weight	Length	Sound Pressure / Power	Air Inlet	Hose ID	Air Consumption
Nulliber	in	ft-lbs (Nm)	ft-lbs (Nm)	ft-lbs (Nm)	RPM	BPM	lb (kg)	in (mm)	dBA	Inches	Inches	CFM
CWC-250QC	1/4 Quick Change	75 (102)	50 (68)	10-40 (14-54)	13,000	1,200	1.9 (.86)	6 (152)	89.8 / 100.8	1/4	3/8	2.7
CWC-250R	1/4 Ring	75 (102)	50 (68)	10-40 (14-54)	13,000	1,200	1.9 (.86)	6 (152)	89.8 / 100.8	1/4	3/8	2.7
CWC-375P	3/8 Pin	550 (746)	450 (610)	25-330 (34-447)	10,000	1,600	6 (152)	6 (152)	87.7 /98.7	1/4	3/8	5.3
CWC-375R	3/8 Ring	550 (746)	450 (610)	25-330 (34-447)	10,000	1,600	6 (152)	6 (152)	87.7 /98.7	1/4	3/8	5.3
CWC- 375R-4	1/2 Ring	550 (746)	450 (610)	25-330 (34-447)	10,000	1,600	6 (152)	6 (152)	87.7 /98.7	1/4	3/8	5.3
CWC-500P	1/2 Pin	1,180 (1,600)	800 (1,085)	50-625 (68-847)	8,000	1,250	4.4 (2)	7.6 (186)	88.2 / 99.2	1/4	3/8	5.7
CWC-500R	1/2 Ring	1,180 (1,600)	800 (1,085)	50-625 (68-847)	8,000	1,250	4.4 (2)	7.6 (186)	88.2 / 99.2	1/4	3/8	5.7
CWC-500PE	1/2 Pin 6" ext	1,180 (1,600)	800 (1,085)	50-625 (68-847)	8,000	1,250	4.7 (2.13)	9.6 (244)	88.2 / 99.2	1/4	3/8	5.7
CWC-500RE	1/2 Ring 6" ext	1,180 (1,600)	800 (1,085)	50-625 (68-847)	8,000	1,250	4.7 (2.13)	9.6 (244)	88.2 / 99.2	1/4	3/8	5.7
CWC-750P	3/4 Pin and Ring	1,800 (2,440)	1,400 (1,898)	200-1,200 (271- 1,627)	6,500	1,200	7.6 (3.45)	8.4 (215)	91.4 / 102.4	3/8	1/2	9.7

General:

Tool Performance rated at 90 psi (620 kPa) air pressure

#### \*\* BreakawayTorque Capacity in Reverse:

250: 75 ft-lbs (102 Nm) 375: 550 ft-lbs (746 Nm)

- 500: 1,180 ft-lbs (1600 Nm)
- 750: 1,800 ft-lbs (2440 Nm)

#### Output Option:

R - Retaining Ring P - Pin Arwil or Pin Hole RE - 2" Extended Anvil w/Ring Retainer PE - 2" Extended Anvil w/Pin Retainer QC - 1/4" Quick Change

### **CWM All-Metal Series**

6,000 - 12,000 RPM

- Triple heat treated twin hammer mechanism
- Variable speed trigger
- Industrial grade ball bearing design
- Durable all-metal housing
- Ideal for heavy industries and demanding environments



Model Number	Output Drive	Maximum Reverse Torque	Maximum Applied Torque	Working Torque Range	Free Speed	Blows Per Minute	Weight	Length	Sound Pressure / Power	Air Inlet	Hose ID	Air Consumption
Number	in	ft-lbs (Nm)	ft-Ibs (Nm)	ft-lbs (Nm)	RPM	BPM	lb (kg)	in (mm)	dBA	Inches	Inches	СҒМ
CWM-375P	3/8 Pin	450 (610)	340 (461)	25-175 (34-237)	12,000	1,400	3.3 (1.5)	5.5 (140)	89.5 (100.5)	1/4	3/8	3.8
CWM-375R	3/8 Ring	450 (610)	340 (461)	25-175 (34-237)	12,000	1,400	3.3 (1.5)	5.5 (140)	89.5 (100.5)	1/4	3/8	3.8
CWM-500P	1/2 Pin	1,200 (1627)	850 (1,152)	50-750 (68-1,1017)	9,000	1,200	5.8 (2.6)	7.1 (180)	90.4 (101.4)	1/4	3/8	5.6
CWM-500R	1/2 Ring	1,200 (1627)	850 (1,152)	50-750 (68-1,1017)	9,000	1,200	5.8 (2.6)	7.1 (180)	90.4 (101.4)	1/4	3/8	5.6
CWM-750P	3/4 Pin and Ring	1,725 (2,339)	1,350 (1,830)	200-1,200 (271- 1,627)	6,000	1,200	10.4 (4.7)	8.3 (210)	91.7 (102.7)	3/8	1/2	7.6

#### General:

Tool Performance rated at 90 psi (620 kPa) air pressure

#### Optional Equipment:

Suspension Bail

3/8 - 208538P 1/2 - 208539PT

3/4 - 208540PT

#### \*\* BreakawayTorque Capacity in Reverse:

375: 450 ft-lbs (610 Nm) 500: 1,200 ft-lbs (1627 Nm) 750: 1,725 ft-lbs (2339 Nm)

#### Output Option:

R - Retaining Ring P - Pin Anvil or Pin Hole

S

79



### **WP Series - Pistol Grip**

4,000 - 4,300 RPM

- 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
- Durable casted housing and steel impact housing withstands abusive environments
- Ideal for heavy industries and harsh conditions



Model Numbe	r Output Drive	Working Torque Range	Free Speed	Blows Per Minute	Weight	Length	Sound Pressure / Power	Air Inlet	Hose ID	Air Consumption
	in	ft-lbs (Nm)	RPM	BPM	lb (kg)	in (mm)	dBA	Inches	Inches	CFM
WP-2060B-6	3/4	250-700 (350-950)	4,000	1,000	12 (5.4)	7.8 (197)		3/8	3/8	60
WP-2059-8	1	250-800 (350- 1,100)	4,000	1,000	12.1 (5.5)	7.8 (197)		3/8	3/8	60
WP-2059-8-6	E 1" w/ 6" Extended	250-750 (350- 1,000)	4,000	1,000	14.3 (6.5)	13.8 (350)		3/8	3/8	60
WP-2109B-8	1	750-1,650 (1,000- 2,250)	4,300	880	20.8 (9.4)	9.5 (241)		1/2	3/8	100

#### General:

Standard Equipment:

Operating instructions & service manual

Tool performance rated at 90 psi (620kPa) air pressure.

#### \*\*\* Breakaway torque capacity in reverse:

2059 Series: 1200 ft-lbs. (1600 Nm) 2109 Series: 2500 ft-lbs. (3400 Nm) \*Quick change chuck \*\* 6" Extended spindle

### WT Series - Spade Handle

3,300 - 4,600 RPM

- 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
- Easily serviced and maintained reduces productivity disruption
- External and internal metal construction for maximum dependability
- Designed for continuous abuse in heavy industry applications



Model Number	Output Drive	Working Torque Range	Free Speed	Blows Per Minute	Weight	Length	Sound Pressure / Power	Air Inlet	Hose ID	Air Consumption
	in	ft-Ibs (Nm)	RPM	BPM	lb (kg)	in (mm)	dBA	Inch- es	Inches	CFM
WT-2110-8	1	750-1,650 (1,000- 2,250)	4,600	880	21 (9.5)	12.9 (327)		1/2	1/2	100
WT-2120-12	1 1/2	1,200 -3,000 (1,600-4,000)	3,300	850	27.6 (12.5)	29 (13.1)		1/2	5/8	105
WTS-2110	# 5 Spline	750-1,650 (1,000- 2,250)	4,600	880	21 (9.5)	12.9 (327)		1/2	1/2	100
WTS-2120	# 5 Spline	1,200-2,800 (1,600-3,800)	3,300	850	27.6 (12.5)	14.3 -362		1/2	5/8	105
WT-2109-8	1	750-1,650 (1,000- 2,250)	4,300	880	21 (9.5)	12.9 (327)		1/2	1/2	100
WTS-2109	# 5 Spline	800-1,800 (1,100- 2450)	4,300	880	21.5 (9.8)	13.1 (333)		1/2	1/2	100
WT-2119-12	1 1/2	1,200-2,600 (1,600 - 3,500)	3,300	820	29 (13.1)	14.3 (362)		1/2	5/8	105
WTS-2119	# 5 Spline	1,200-2,500 (1,600 - 3,400)	3,300	820	29 (13.1)	29 (13.1)		1/2	5/8	105

General:

Tool performance rated at 90 psi (620kPa) air pressure.

#### \* Breakaway torque capacity in reverse: 2109 Series: 2500 ft-lbs. (3400 Nm) 2119 Series: 3500 ft-lbs. (4700 Nm)

#### Standard Equipment:

Operating instructions & service manual Dead handle bracket Dead Handle

S

81



### **SCREWDRIVERS**

### **BEST-IN-CLASS PERFORMANCE**

The Clecomatic<sup>®</sup> clutch delivers **Best-in-Class Accuracy** exceeding a Cm of 2.0 with a tolerance of +/-10%.

Built-in the USA and factory tested to guarantee a high level of torque accuracy and repeatability.

The Clecomatic® clutch has an Industry Leading 5-Year Guaranteed!

The latest design provides up to a **19% Weight Reduction**, improving balance and reducing user fatigue, with no loss of durability.





ZAMPINI

# SCREWDRIVERS

83

### **19 Series**

#### Torque Range: 0.6 - 14.7 Nm 5 - 130 In. Lbs.

- Push-to-start and Push & Lever start
- External torque adjustment
- Bit & Finder & 1/4" quick change chuck



nber Quick Change	Tool F				Free	0.00	ath*	Wa	ight			tion
Quick Change		range	With Sto	I. Spring	Speed	Len	gui	vve	igni	Air Inlet	Min. Hose	SCFM
a anon on ango	inIbs.	Nm	inlbs.	Nm	RPM	in.	mm	lbs.	kg	NPT	I.D.	SCFIN
Push Button	Reverse	е										
2RSA-10B			0.5 - 8	.06 - 0.9	1000	7.6	194	0.5	0.20	1/8"	3/16"	6
RSA-10SB**			0.5 - 8	.06 - 0.9	1000	6.4	162	0.5	0.20	1/8"	3/16"	6
19BPA02Q	5 - 19	0.6 - 2.1	5 - 19	0.6 - 2.1	2300	9.1	230	1.4	0.63	1/8"	3/16"	11
19BPA03Q	5 - 26	0.6 - 2.9	5 - 19	0.6 - 2.1	1600	9.3	235	1.4	0.64	1/8"	3/16"	11
19BPA04Q	10 - 40	1.1 - 4.5	10 - 38	1.1 - 4.3	920	9.1	230	1.3	0.61	1/8"	3/16"	11
19BPA05Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	560	9.5	240	1.5	0.67	1/8"	3/16"	11
19BPA06Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	220	9.5	240	1.5	0.68	1/8"	3/16"	11
Collar Rever	se											
19SPA02Q	5 - 19	0.6 - 2.1	5 - 19	0.6 - 2.1	2800	9.1	230	1.4	0.63	1/8"	3/16"	11
19SPA03Q	5 - 26	0.6 - 2.9	5 - 19	0.6 - 2.1	1900	9.3	235	1.4	0.64	1/8"	3/16"	11
19SPA04Q	10 - 40	1.1 - 4.5	10 - 38	1.1 - 4.3	1100	9.1	230	1.3	0.61	1/8"	3/16"	11
19SPA05Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	660	9.5	240	1.5	0.67	1/8"	3/16"	11
19SPA06Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	260	9.5	240	1.5	0.68	1/8"	3/16"	11
tart - Collar	Reverse	e										
19SCA02Q	5 - 19	0.6 - 2.1	5 - 19	0.6 - 2.1	2800	9.8	249	1.5	0.69	1/8"	3/16"	11
19SCA03Q	5 - 26	0.6 - 2.9	5 - 19	0.6 - 2.1	1900	10.0	254	1.5	0.70	1/8"	3/16"	11
19SCA04Q	10 - 40	1.1 - 4.5	10 - 38	1.1 - 4.3	1100	9.8	249	1.5	0.66	1/8"	3/16"	11
19SCA05Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	660	10.2	259	1.6	0.73	1/8"	3/16"	11
19SCA06Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	260	10.2	259	1.6	0.74	1/8"	3/16"	11
	2RSA-10B RSA-10SB** 19BPA02Q 19BPA03Q 19BPA04Q 19BPA05Q 19BPA06Q <b>Collar Rever</b> 19SPA02Q 19SPA02Q 19SPA03Q 19SPA05Q 19SPA06Q <b>tart - Collar</b> 19SCA02Q 19SCA03Q 19SCA03Q 19SCA05Q 19SCA06Q	2RSA-10B         RSA-10SB**         19BPA02Q       5 - 19         19BPA03Q       5 - 26         19BPA04Q       10 - 40         19BPA05Q       10 - 45         19BPA06Q       10 - 45         19BPA06Q       10 - 45         19BPA06Q       10 - 45         19SPA02Q       5 - 19         19SPA03Q       5 - 26         19SPA04Q       10 - 40         19SPA05Q       10 - 45         19SPA06Q       10 - 45         19SPA06Q       5 - 19         19SPA06Q       5 - 19         19SCA02Q       5 - 19         19SCA03Q       5 - 26         19SCA04Q       10 - 40         19SCA05Q       10 - 40         19SCA05Q       10 - 40	RSA-10SB**         19BPA02Q       5 - 19       0.6 - 2.1         19BPA03Q       5 - 26       0.6 - 2.9         19BPA04Q       10 - 40       1.1 - 4.5         19BPA05Q       10 - 45       1.1 - 5.1         19BPA06Q       10 - 45       1.1 - 5.1         19BPA06Q       10 - 45       1.1 - 5.1         19BPA06Q       5 - 19       0.6 - 2.1         19BPA06Q       5 - 26       0.6 - 2.9         19SPA02Q       5 - 19       0.6 - 2.1         19SPA03Q       5 - 26       0.6 - 2.9         19SPA04Q       10 - 40       1.1 - 5.1         19SPA05Q       10 - 45       1.1 - 5.1         19SPA06Q       10 - 45       1.1 - 5.1         19SPA06Q       10 - 45       1.1 - 5.1         19SCA02Q       5 - 19       0.6 - 2.1         19SCA03Q       5 - 26       0.6 - 2.9         19SCA04Q       10 - 40       1.1 - 4.5         19SCA05Q       10 - 40       1.1 - 5.1         19SCA05Q       10 - 45       1.1 - 5.1         19SCA05Q       10 - 45       1.1 - 5.1         19SCA06Q       10 - 45       1.1 - 5.1	2RSA-10B $0.5 - 8$ RSA-10SB** $0.5 - 8$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ 19BPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ 19BPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ 19BPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ 19SPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ 19SPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ 19SPA04Q $10 - 40$ $1.1 - 5.1$ $10 - 38$ 19SPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ 19SCA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ 19SCA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ 19SCA04Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ 19SCA04Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ 19SCA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ 19SCA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ 19SCA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$	2RSA-10B $0.5 - 8$ $.06 - 0.9$ RSA-10SB** $0.5 - 8$ $.06 - 0.9$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ 19BPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ 19BPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ 19BPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ 19SPA02Q $5 - 19$ $0.6 - 2.5$ $5 - 19$ $0.6 - 2.1$ 19SPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ 19SPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ 19SPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ 19SPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ 19SCA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ 19SCA04Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ 19SCA05Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ 19SCA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ 19SCA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ 19SCA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$	$2RSA-10B$ $0.5 - 8$ $.06 - 0.9$ $1000$ $RSA-10SB^{**}$ $0.5 - 8$ $.06 - 0.9$ $1000$ $19BPA02Q$ $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2300$ $19BPA03Q$ $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1600$ $19BPA04Q$ $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $920$ $19BPA05Q$ $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $560$ $19BPA06Q$ $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $220$ Collar Reverse $19SPA02Q$ $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2800$ $19SPA03Q$ $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1900$ $19SPA03Q$ $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1900$ $19SPA04Q$ $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $1100$ $19SPA05Q$ $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $260$ $19SCA02Q$ $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2800$ $19SCA04Q$ $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $1100$ $19SCA05Q$ $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $1100$ $19SCA05Q$ $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $660$ $19SCA06Q$ $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $660$ $19SCA06Q$ $10 - 45$ $1.1 - 5.1$ <td><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td> <td><math display="block">\begin{array}{c ccccccccccccccccccccccccccccccccccc</math></td> <td>2RSA-10B<math>0.5 - 8</math><math>.06 - 0.9</math><math>1000</math><math>7.6</math><math>194</math><math>0.5</math>RSA-10SB**<math>0.5 - 8</math><math>.06 - 0.9</math><math>1000</math><math>6.4</math><math>162</math><math>0.5</math>19BPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2300</math><math>9.1</math><math>230</math><math>1.4</math>19BPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1600</math><math>9.3</math><math>235</math><math>1.4</math>19BPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>920</math><math>9.1</math><math>230</math><math>1.3</math>19BPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>560</math><math>9.5</math><math>240</math><math>1.5</math>19BPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>220</math><math>9.5</math><math>240</math><math>1.5</math><b>Collar Reverse1</b>9SPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.1</math><math>230</math><math>1.4</math>19SPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.1</math><math>230</math><math>1.4</math>19SPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.3</math>19SPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>260</math><math>9.5</math><math>240</math><math>1.5</math>19SPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>260</math><math>9.8</math><math>249</math><math>1.5</math>19SCA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.8</math><math>249</math><math>1.5</math>19SCA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math>&lt;</td> <td>2RSA-10B<math>0.5 - 8</math><math>.06 - 0.9</math><math>1000</math><math>7.6</math><math>194</math><math>0.5</math><math>0.20</math>RSA-10SB**<math>0.5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2300</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math>19BPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2300</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math>19BPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1600</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math>19BPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>920</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math>19BPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>560</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math>19BPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>220</math><math>9.5</math><math>240</math><math>1.5</math><math>0.68</math>Collar ReverseTISPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math>19SPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1900</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math>19SPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math>19SPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>260</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math>19SPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>260</math><math>9.8</math><math>249</math><math>1.5</math><td>2RSA-10B<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>7.6</math><math>194</math><math>0.5</math><math>0.20</math><math>1/8"</math>RSA-10SB**<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>6.4</math><math>162</math><math>0.5</math><math>0.20</math><math>1/8"</math>19BPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2300</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math>19BPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1600</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math><math>1/8"</math>19BPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>920</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math>19BPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>560</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math><math>1/8"</math>19BPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>220</math><math>9.5</math><math>240</math><math>1.5</math><math>0.68</math><math>1/8"</math>Collar ReverseIPSPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math>19SPA03Q<math>5 - 26</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.1</math><math>230</math><math>1.4</math><math>0.64</math><math>1/8"</math>19SPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math>19SPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>100</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math><math>1/8"</math>19SPA05Q</td><td>2RSA-10B<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>7.6</math><math>194</math><math>0.5</math><math>0.20</math><math>1/8"</math><math>3/16"</math>RSA-10SB**<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>6.4</math><math>162</math><math>0.5</math><math>0.20</math><math>1/8"</math><math>3/16"</math>19BPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2300</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math><math>3/16"</math>19BPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1600</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math><math>1/8"</math><math>3/16"</math>19BPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>920</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math><math>3/16"</math>19BPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>560</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math><math>1/8"</math><math>3/16"</math>19BPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>220</math><math>9.5</math><math>240</math><math>1.5</math><math>0.68</math><math>1/8"</math><math>3/16"</math>19SPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1900</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math><math>1/8"</math><math>3/16"</math>19SPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math><math>3/16"</math>19SPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math><math>3/16"</math>19SPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 3</math></td></td>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2RSA-10B $0.5 - 8$ $.06 - 0.9$ $1000$ $7.6$ $194$ $0.5$ RSA-10SB** $0.5 - 8$ $.06 - 0.9$ $1000$ $6.4$ $162$ $0.5$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2300$ $9.1$ $230$ $1.4$ 19BPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1600$ $9.3$ $235$ $1.4$ 19BPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $920$ $9.1$ $230$ $1.3$ 19BPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $560$ $9.5$ $240$ $1.5$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $220$ $9.5$ $240$ $1.5$ <b>Collar Reverse1</b> 9SPA02Q $5 - 19$ $0.6 - 2.1$ $2800$ $9.1$ $230$ $1.4$ 19SPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $2800$ $9.1$ $230$ $1.4$ 19SPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $1100$ $9.1$ $230$ $1.3$ 19SPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $260$ $9.5$ $240$ $1.5$ 19SPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $260$ $9.8$ $249$ $1.5$ 19SCA02Q $5 - 19$ $0.6 - 2.1$ $2800$ $9.8$ $249$ $1.5$ 19SCA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ <	2RSA-10B $0.5 - 8$ $.06 - 0.9$ $1000$ $7.6$ $194$ $0.5$ $0.20$ RSA-10SB** $0.5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2300$ $9.1$ $230$ $1.4$ $0.63$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2300$ $9.1$ $230$ $1.4$ $0.63$ 19BPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1600$ $9.3$ $235$ $1.4$ $0.64$ 19BPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $920$ $9.1$ $230$ $1.3$ $0.61$ 19BPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $560$ $9.5$ $240$ $1.5$ $0.67$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $220$ $9.5$ $240$ $1.5$ $0.68$ Collar ReverseTISPA02Q $5 - 19$ $0.6 - 2.1$ $2800$ $9.1$ $230$ $1.4$ $0.63$ 19SPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1900$ $9.3$ $235$ $1.4$ $0.64$ 19SPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $1100$ $9.1$ $230$ $1.3$ $0.61$ 19SPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $260$ $9.5$ $240$ $1.5$ $0.67$ 19SPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $260$ $9.8$ $249$ $1.5$ <td>2RSA-10B<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>7.6</math><math>194</math><math>0.5</math><math>0.20</math><math>1/8"</math>RSA-10SB**<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>6.4</math><math>162</math><math>0.5</math><math>0.20</math><math>1/8"</math>19BPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2300</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math>19BPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1600</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math><math>1/8"</math>19BPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>920</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math>19BPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>560</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math><math>1/8"</math>19BPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>220</math><math>9.5</math><math>240</math><math>1.5</math><math>0.68</math><math>1/8"</math>Collar ReverseIPSPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math>19SPA03Q<math>5 - 26</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2800</math><math>9.1</math><math>230</math><math>1.4</math><math>0.64</math><math>1/8"</math>19SPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math>19SPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>100</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math><math>1/8"</math>19SPA05Q</td> <td>2RSA-10B<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>7.6</math><math>194</math><math>0.5</math><math>0.20</math><math>1/8"</math><math>3/16"</math>RSA-10SB**<math>0.5 - 8</math><math>0.6 - 0.9</math><math>1000</math><math>6.4</math><math>162</math><math>0.5</math><math>0.20</math><math>1/8"</math><math>3/16"</math>19BPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>2300</math><math>9.1</math><math>230</math><math>1.4</math><math>0.63</math><math>1/8"</math><math>3/16"</math>19BPA03Q<math>5 - 26</math><math>0.6 - 2.9</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1600</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math><math>1/8"</math><math>3/16"</math>19BPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>920</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math><math>3/16"</math>19BPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>560</math><math>9.5</math><math>240</math><math>1.5</math><math>0.67</math><math>1/8"</math><math>3/16"</math>19BPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>220</math><math>9.5</math><math>240</math><math>1.5</math><math>0.68</math><math>1/8"</math><math>3/16"</math>19SPA02Q<math>5 - 19</math><math>0.6 - 2.1</math><math>5 - 19</math><math>0.6 - 2.1</math><math>1900</math><math>9.3</math><math>235</math><math>1.4</math><math>0.64</math><math>1/8"</math><math>3/16"</math>19SPA04Q<math>10 - 40</math><math>1.1 - 4.5</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math><math>3/16"</math>19SPA05Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 38</math><math>1.1 - 4.3</math><math>1100</math><math>9.1</math><math>230</math><math>1.3</math><math>0.61</math><math>1/8"</math><math>3/16"</math>19SPA06Q<math>10 - 45</math><math>1.1 - 5.1</math><math>10 - 3</math></td>	2RSA-10B $0.5 - 8$ $0.6 - 0.9$ $1000$ $7.6$ $194$ $0.5$ $0.20$ $1/8"$ RSA-10SB** $0.5 - 8$ $0.6 - 0.9$ $1000$ $6.4$ $162$ $0.5$ $0.20$ $1/8"$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2300$ $9.1$ $230$ $1.4$ $0.63$ $1/8"$ 19BPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1600$ $9.3$ $235$ $1.4$ $0.64$ $1/8"$ 19BPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $920$ $9.1$ $230$ $1.3$ $0.61$ $1/8"$ 19BPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $560$ $9.5$ $240$ $1.5$ $0.67$ $1/8"$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $220$ $9.5$ $240$ $1.5$ $0.68$ $1/8"$ Collar ReverseIPSPA02Q $5 - 19$ $0.6 - 2.1$ $2800$ $9.1$ $230$ $1.4$ $0.63$ $1/8"$ 19SPA03Q $5 - 26$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2800$ $9.1$ $230$ $1.4$ $0.64$ $1/8"$ 19SPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $1100$ $9.1$ $230$ $1.4$ $0.63$ $1/8"$ 19SPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $100$ $9.5$ $240$ $1.5$ $0.67$ $1/8"$ 19SPA05Q	2RSA-10B $0.5 - 8$ $0.6 - 0.9$ $1000$ $7.6$ $194$ $0.5$ $0.20$ $1/8"$ $3/16"$ RSA-10SB** $0.5 - 8$ $0.6 - 0.9$ $1000$ $6.4$ $162$ $0.5$ $0.20$ $1/8"$ $3/16"$ 19BPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $2300$ $9.1$ $230$ $1.4$ $0.63$ $1/8"$ $3/16"$ 19BPA03Q $5 - 26$ $0.6 - 2.9$ $5 - 19$ $0.6 - 2.1$ $1600$ $9.3$ $235$ $1.4$ $0.64$ $1/8"$ $3/16"$ 19BPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $920$ $9.1$ $230$ $1.3$ $0.61$ $1/8"$ $3/16"$ 19BPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $560$ $9.5$ $240$ $1.5$ $0.67$ $1/8"$ $3/16"$ 19BPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $220$ $9.5$ $240$ $1.5$ $0.68$ $1/8"$ $3/16"$ 19SPA02Q $5 - 19$ $0.6 - 2.1$ $5 - 19$ $0.6 - 2.1$ $1900$ $9.3$ $235$ $1.4$ $0.64$ $1/8"$ $3/16"$ 19SPA04Q $10 - 40$ $1.1 - 4.5$ $10 - 38$ $1.1 - 4.3$ $1100$ $9.1$ $230$ $1.3$ $0.61$ $1/8"$ $3/16"$ 19SPA05Q $10 - 45$ $1.1 - 5.1$ $10 - 38$ $1.1 - 4.3$ $1100$ $9.1$ $230$ $1.3$ $0.61$ $1/8"$ $3/16"$ 19SPA06Q $10 - 45$ $1.1 - 5.1$ $10 - 3$

\*Add .63" (16mm) for bit & finder models \*\* Short housing

#### 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)

**Optional Equipment:** 

Additional accessories: Pages 12-13 Bits & finders: Page 12 Non-Reverse Kit: 207030 Torque Signal Kit: 301106 (lever only) Overhose: 207019



### **19 Series**

#### Torque Range: 0.6-14.7 Nm 5.0-130 In. Lbs.

- Class-leading accuracy and repeatability
- Adjustable reverse lever for true one-hand: left-handed or right-handed - operation
- External torque adjustment
- 1/4" hex quick change drive
- "P" and "T" style handles
- 2 interchangeable soft-touch grip sizes
- Streamlined torque signal ports
- Trigger and Push & Trigger start



Model Number		Torque	Range		Free	Lor	ngth	Wo	ight	Ai	Consumption	on
	Tool I	Range	With Sto	d. Spring	Speed	Lei	igui		iyin	Air Inlet	Min. Hose	00514
1/4" Quick Change	inIbs.	Nm	inIbs.	Nm	RPM	in.	mm	lbs.	kg	NPT	I.D.	SCFM
Push and Trigg	ger Start	- T Handl	e - Cleco	matic Clu	utch							
19TCA02Q	5 - 19	0.6 - 2.1	5 - 19	0.6 - 2.1	2800	8.0	202	1.44	0.7	1/4"	3/8"	11
19TCA03Q	5 - 26	0.6 - 2.9	5 - 19	0.6 - 2.1	1900	8.2	207	1.54	0.7	1/4"	3/8"	11
19TCA04Q	10 - 40	1.1 - 4.5	10 - 38	1.1 - 4.3	1100	8.0	202	1.54	0.7	1/4"	3/8"	11
19TCA05Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	660	8.4	212	1.54	0.7	1/4"	3/8"	11
19TCA06Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	260	8.4	212	1.54	0.7	1/4"	3/8"	11
19TCA07Q	15 - 60	1.7 - 6.8	24 - 60	2.7 - 6.8	660	8.4	212	1.54	0.7	1/4"	3/8"	11
19TCA09Q	15 - 79	1.7 - 8.9	24 - 60	2.7 - 8.9	470	9.3	235	1.73	0.8	1/4"	3/8"	11
Trigger Start -	T Handle	- Clecon	natic Clu	tch								
19TTA02Q	5 - 19	0.6 - 2.1	5 - 19	0.6 - 2.1	2800	7.9	199	1.44	0.7	1/4"	3/8"	11
19TTA03Q	5 - 26	0.6 - 2.9	5 - 19	0.6 - 2.1	1900	8.1	204	1.54	0.7	1/4"	3/8"	11
19TTA04Q	10 - 40	1.1 - 4.5	10 - 38	1.1 - 4.3	1100	7.9	199	1.54	0.7	1/4"	3/8"	11
19TTA05Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	660	8.3	210	1.54	0.7	1/4"	3/8"	11
19TTA06Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	260	8.3	210	1.54	0.7	1/4"	3/8"	11
19TTA07Q	15 - 60	1.7 - 6.8	24 - 60	2.7 - 6.8	660	8.3	210	1.54	0.7	1/4"	3/8"	11
19TTA09Q	15 - 79	1.7 - 8.9	24 - 79	2.7 - 8.9	470	9.3	235	1.73	0.8	1/4"	3/8"	11
19TTA15Q	45 - 130	5.1 - 14.7	45 - 130	5.1 - 14.7	260	9.6	243	1.94	0.9	1/4"	3/8"	11
General:			Star	ndard Equipr	nent:			Option	al Equipm	ent:		

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

(Trigger w/Clecomatic clutch only) Overhose: 207107 Push-only Conversion Kit: 301121

Additional accessories: Pages 12-13

Torque Springs: Page 13

Torque Signal Kit: 302021PT

Model Number		Torque	Range		Free	ler	ngth	Wei	ight	Ai	Consumption	on
Model Number	Tool I	Range	With Sto	d. Spring	Speed			WC.	igin	Air Inlet	Min. Hose	SCFM
1/4" Quick Change	inIbs.	Nm	inIbs.	Nm	RPM	in.	mm	lbs.	kg	NPT	I.D.	SCEINI
Push and Trigg	ger Start	- P Handl	e - Cleco	matic Clu	ıtch							
19PCA02Q	5 - 19	0.6 - 2.1	5 - 19	0.6 - 2.1	2800	8.1	206	1.41	0.6	1/4"	3/8"	11
19PCA03Q	5 - 26	0.6 - 2.9	5 - 19	0.6 - 2.1	1900	8.3	211	1.51	0.7	1/4"	3/8"	11
19PCA04Q	10 - 40	1.1 - 4.5	10 - 38	1.1 - 4.3	1100	8.1	206	1.41	0.6	1/4"	3/8"	11
19PCA05Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	660	8.5	216	1.51	0.7	1/4"	3/8"	11
19PCA06Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	260	8.5	216	1.51	0.7	1/4"	3/8"	11
19PCA07Q	15 - 60	1.7 - 6.8	24 - 60	2.7 - 6.8	660	8.5	216	1.51	0.7	1/4"	3/8"	11
19PCA09Q	15 - 79	1.7 - 8.9	24 - 60	2.7 - 8.9	470	9.8	248	1.65	0.7	1/4"	3/8"	11
Trigger Start -	P Handle	- Clecon	natic Clu	tch								
19PTA02Q	5 - 19	0.6 - 2.1	5 - 19	0.6 - 2.1	2800	8.0	204	1.41	0.6	1/4"	3/8"	11
19PTA03Q	5 - 26	0.6 - 2.9	5 - 19	0.6 - 2.1	1900	8.2	209	1.51	0.7	1/4"	3/8"	11
19PTA04Q	10 - 40	1.1 - 4.5	10 - 38	1.1 - 4.3	1100	8.0	204	1.41	0.6	1/4"	3/8"	11
19PTA05Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	660	8.4	214	1.51	0.7	1/4"	3/8"	11
19PTA06Q	10 - 45	1.1 - 5.1	10 - 38	1.1 - 4.3	260	8.4	214	1.51	0.7	1/4"	3/8"	11
19PTA07Q	15 - 60	1.7 - 6.8	24 - 60	2.7 - 6.8	660	8.4	214	1.51	0.7	1/4"	3/8"	11
19PTA09Q	15 - 79	1.7 - 8.9	24 - 79	2.7 - 8.9	470	9.8	248	1.65	0.7	1/4"	3/8"	11
19PTA15Q	45 - 130	5.1 - 14.7	45 - 130	5.1 - 14.7	260	9.7	247	1.91	0.9	1/4"	3/8"	11
General:			Star	ndard Equipm	nent:			Option	al Equipm	ent:		

#### General:

Tool performance rated at 90 psi (620kPa) air pressure.

Operating instructions & service manual Suspension bail

Dead handle on models above 100 in.-lbs. torque cap.

Additional accessories: Pages 12-13 Torque Springs: Page 13 Torque Signal Kit: 302021PT

(Trigger w/Clecomatic clutch only)

All torque springs required to meet

indicated torque specification

🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

### **19 Series Stall**

Torque Range: 2.1 – 7.9 Nm 19 – 70 In. Lbs.

- 1/4" hex quick change drive
- Trigger start
- "P" and "T" style handles (19 series)
- 2 interchangeable soft-touch grip sizes (19 Series)
- Adjustable reverse lever for true one-hand left or right - operation (19 series)
- Sliding knob or push button reverse (8 series)



Model Number	Torque	Rande	Free	Ler	Length Weight -		Air	Air Consumption		
		lange	Speed				gin	Air Inlet	Min. Hose	SCFM
1/4" Quick Change	inIbs.	Nm	RPM	in.	mm	lbs.	kg	NPT	I.D.	SCFM
Trigger Start - T Handle - Sliding Knob Reverse										
19TTS02Q	19	2.1	2800	5.8	146	1.19	0.5	1/4"	3/8"	11
19TTS03Q	26	2.9	1900	6.1	154	1.19	0.5	1/4"	3/8"	11
19TTS04Q	40	4.5	1100	5.8	146	1.19	0.5	1/4"	3/8"	11
19TTS05Q	45	5.1	660	6.1	154	1.19	0.5	1/4"	3/8"	11
8RNP-20BQ	44	5.0	1800	5.4	137	2.1	1.0	1/4"	1/4"	19
8RNP-10BQ	70	7.9	800	6.1	156	2.4	1.1	1/4"	1/4"	19
Trigger Start - P Handle - Sliding	<b>Knob Reverse</b>	9								
19PTS02Q	19	2.1	2800	5.9	150	1.16	0.5	1/4"	3/8"	11
19PTS03Q	26	2.9	1900	6.1	155	1.16	0.5	1/4"	3/8"	11
19PTS04Q	40	4.5	1100	5.9	150	1.16	0.5	1/4"	3/8"	11
19PTS05Q	45	5.1	660	6.1	155	1.16	0.5	1/4"	3/8"	11
General:	Standard Equipment: Standard Equipment if Specified:				ied:					

General:

Tool performance rated at 90 psi (620kPa).

#### tandard Equipment:

Operating instructions & service manual Suspension bail

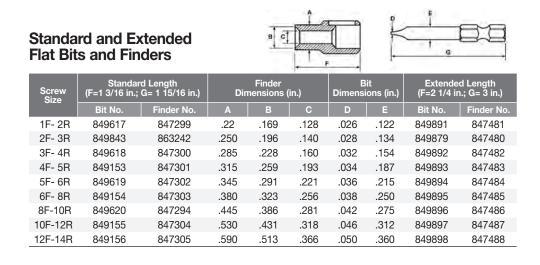
All torque springs required to meet indicated torque Dead handle on all models above 100 in.lbs. torque

#### Standard Equipment if Specified: Dead handle (861006; 8 series models)

#### **Optional Equipment:**

Additional accessories: Pages 12-13 Bits: Page 12





### Finder Springs

Light Force 844000 Medium Force 865728

#### Phillips Bits and Support Bushings



303 847485

809473

Phillips Bit Point Size	Bit Body Diameter (in.)	Phillips Bit Part No.	Support Bushing* Part No.						
Standard: 1/4 in. Hex Shank Bit – 2 3/4 in. O.A. Length; Bushing – 1 3/16 in. O.A. Length									
1	3/16	809451	847301						
2	1/4	809470	847303						
3	5/16	809471	847304						
	Extended: 1/4 in. Hex Shank Bit – 3 1/2 in. O.A. Length; Bushing – 2 1/4 in. O.A. Length								
1	3/16	809453	847483						
2	1/4	809473	847485						
3	5/16	809474	847487						

\*Bushing not required on Quick Change models.

### Bit Holders and Support Bushings



1/4" Hex Drive Magnetic Bit Holder Part No. 849325 (2 3/8" O.A. Length)

Magnetic Support Bushing\* Part No. 849621

Nonmagnetic Support Bushing\* Part No. 847245

Quick-Change Bushing Part No. 201203 Fits all finder type tools except No. 2 Screwdriver \*Bushing not required on Quick Change models.

#### **Torque Signal Kits**

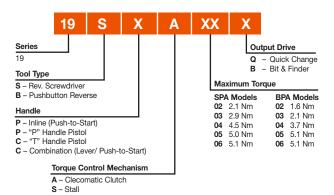
Part No.	Tool Used On
301106	19SCA & 19RAA series (inline & right angle)
302021PT	19TTA & 19PTA series (pistol "P" handle or "T" handle)

#### **Portable Tool Balancers**

Part	Capa	Capacity		Min. Distance	Length of
Number	Max.	Min.	Weight	Hook to Hook	Working Cable
200427	2 lbs.	0 lbs.	1.25 lbs.	10.8 in.	5.0 ft.
200428	4 lbs.	2 lbs.	1.25 lbs.	10.8 in.	5.0 ft.
200429	5 lbs.	3 lbs.	1.25 lbs.	10.8 in.	5.0 ft.
PL-12A	12 lbs.	1 lbs.	-	6.8 in.	4.6 ft.
BL-2A	2 lbs.	1 lbs.	1.1 lbs.	10.4 in.	5.2 ft.
BL-4A	4 lbs.	2 lbs.	1.1 lbs.	10.4 in.	5.2 ft.



#### **Cleco 19 Series Inline**



#### **Cleco 19 Series Pistol**

	19	Χ	X	Α	XX	Q	
Series							tput Drive – Quick Change
Handle P – Pistol Gr T – Pistol Gr						2.1 Nm	rque 06 5.1 Nm 07 6.8 Nm
Tool Type C – Combination (Trigger/ Push-to-Start) T – Trigger					04	4.5 Nm	09 8.9 Nm 15 5.1 Nm
Ā	<u> </u>	ntrol Med natic Cluto					



87

DRIVERS

🛲 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

# **SPECIALTY TOOLS**

# ROUTERS, SAWS, PERCUSSION, & SPECIALTY TOOLS

### **EXPERIENCE THAT MATTERS**

For over 60 years, Cleco<sup>®</sup> Dotco<sup>™</sup> has been producing tools that are precise, durable, and easy-to-service, satisfying all the demands of the world's toughest industries. We offer a full range of routers, saws, percussion, and specialty tools for all your production and maintenance needs.

### **PACKS A PUNCH**

Attack those hard-to-reach spots with our full line of percussion tools. Our tools are designed to pack a harder punch, outlast the competition, and reduce vibration for the operator. Whether your application is maintenance or production, look no further than our family of trusted percussion tools.



# SELECTION GUIDE 89



90

### **12 Series - Right Angle Routers**

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



Cat. No.	Exhaust	Shank Diameter Capacity	Free Speed (rpm)	Drive	Weight	Length	Air Inlet Size
12L2218-36RT	Front	1/4 in	18,000	Geared 0.6 hp (0.45 kW)	1.8 lb   0.82 kg	7.5 in   191 mm	1/4 in
12L2718-36RT	Front	1/4 in	18,000	Geared 0.9 hp (0.67 kwW)	1.9 lb   0.86 kg	8.0 in   203 mm	1/4 in
12L1281-36RT	Rear	1/4 in	20,000	Geared 0.3 hp (0.22 kW)	1.7 lb   0.77 kg	6.5 in   165 mm	1/4 in
12L1201-36RT	Front	1/4 in	20,000	Geared 0.3 hp (0.22 kW)	1.7 lb   0.77 kg	6.5 in   165 mm	1/4 in
12L1381-36RT	Rear	1/4 in	25,000	Gearless 0.3 hp (0.22 kW)	1.5 lb   0.68 kg	7.4 in   188 mm	1/4 in
12L1300-36RT	Front	1/4 in	30,000	Gearless 0.3 hp (0.22 kW)	1.5 lb   0.68 kg	7.4 in   188 mm	1/4 in
12L1380-36RT	Rear	1/4 in	30,000	Gearless 0.3 hp (0.22 kW)	1.5 lb   0.68 kg	7.4 in   188 mm	1/4 in

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



Cat. No.	Shank Diameter Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
12L1000-36RT	1/4 in	30,000	Composite	1.4 lb   0.64 kg	6.7 in   170 mm	1/4 in
12L1001-36RT	1/4 in	34,000	Composite	1.4 lb   0.64 kg	6.7 in   170 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure Minimum Hose I.D.: 1/4 in / 6.4 mm

Standard Equipment: Collet, applicable wrenches

### **12-20 Series - Inline Router**

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

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



Cat. No.	Exhaust	Shank Diameter Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
12L2001-01RT	Front	1/4 in	20,000	Composite	1.9 lb   0.86 kg	7.5 in   191 mm	1/4 in
12L2081-01RT	Rear	1/4 in	20,000	Composite	1.9 lb   0.86 kg	7.5 in   191 mm	1/4 in
12L2000-01RT	Front	1/4 in	25,000	Composite	1.9 lb   0.86 kg	7.5 in   191 mm	1/4 in
12L2080-01RT	Rear	1/4 in	25,000	Composite	1.9 lb   0.86 kg	7.5 in   191 mm	1/4 in

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

S

#### **Specialty Tools** 91

### **10-20 Series - Inline Router**

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

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



DOTTO

7.1 in | 180 mm

1/4 in

Cat. No.	Exhaust	Shank Diameter Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
10L2000-01RT	Front	1/4 in	25,000	Aluminum	1.8 lb   0.82 kg	6.3 in   160 mm	1/4 in

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

**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
- Ro

12L2502-01RT

Roll value for e	easy operation					
Cat. No.	Shank Diameter Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
12L2582-01RT	1/4 in	18,000	Composite	2.6 lb   1.18 kg	7.1 in   180 mm	1/4 in
12L2582-0124RT	3/8 in	18,000	Composite	2.6 lb   1.18 kg	7.1 in   180 mm	1/4 in
12L2580-0124RT	3/8 in	23,000	Composite	2.6 lb   1.18 kg	7.1 in   180 mm	1/4 in
12L2500-01RT	1/4 in	23,000	Composite	2.6 lb   1.18 kg	7.1 in   180 mm	1/4 in
12L2580-01RT	1/4 in	23,000	Composite	2.6 lb   1.18 kg	7.1 in   180 mm	1/4 in
10L2500-01RT	1/4 in	23,000	Aluminum	2.5 lb   1.13 kg	6.9 in   175 mm	1/4 in
10L2580-01RT	1/4 in	23,000	Aluminum	2.5 lb   1.13 kg	6.9 in   175 mm	1/4 in

Composite

2.6 lb | 1.18 kg

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

1/4 in

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

Standard Equipment: Collet, applicable wrenches

### **12-40 Series - Inline Router**

18,000

#### 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



Cat. No.	Shank Diameter Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
10L4018-01	1/4 in	18,000	Aluminum	4.2 lb   1.91 kg	11.3 in   287 mm	1/2 in
12L4018-01	1/4 in	18,000	Composite	4.2 lb   1.91 kg	11.3 in   287 mm	1/2 in
12L4018-03	3/8 in	18,000	Composite	4.2 lb   1.91 kg	11.3 in   287 mm	1/2 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 1/2 in / 12.7 mm

Standard Equipment: Collet. applicable wrenches



Л

0

С

-1

П Л S

AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676

### **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 handle
- Smooth accurate cuts assured by precision spindle



Cat. No.	Shank Diameter Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
10T4309-62	1/2 in	9,000	Aluminum	7.4 lb   3.36 kg	7.1 in   180 mm	1/2 in
10T4316-62	1/2 in	16,000	Aluminum	7.4 lb   3.36 kg	7.1 in   180 mm	1/2 in
10T4318-62	1/2 in	18,000	Aluminum	7.4 lb   3.36 kg	7.1 in   180 mm	1/2 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 1/2 in / 12.7 mm

Standard Equipment: Collet, applicable wrenches

### **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



Cat. No.	Shank Diameter Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
11T4309-62	1/2 in	9,000	Aluminum	5.5 lb   2.49 kg	7.1 in   180 mm	1/2 in
11T4316-62	1/2 in	16,000	Aluminum	5.5 lb   2.49 kg	7.1 in   180 mm	1/2 in
11T4318-62	1/2 in	18,000	Aluminum	5.5 lb   2.49 kg	7.1 in   180 mm	1/2 in

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

S

🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

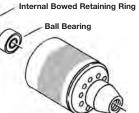
#### **Router Assemblies**

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

	Cutter			Part N	umber		
Tool Series	Shank Capacity	Complete Attachment	Nose Housing	Bearing	Ring	Lock Nut	Router Housing
12-10	1/4"	14-2187	14-2176	14-0508	1098	14-2082	14-1180
2-20/12-25	1/4"	14-2180	14-2176	14-0508	1098	14-2082	14-2080
12-20/12-25	3/8"	14-2429	14-2426	14-0533	1068	14-2082	14-2080
12-12/12-22/12-27	1/4"	7197		14-0508	1098	N/A	N/A

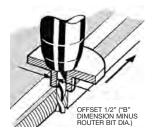
#### For use with Dotco 12-40 series.

	Cutter Shank	Part Number			
Tool Series	Capacity	Nose Housing	Bearing	Retaining Ring	
12-40	1/4"	4272	14-0508	1098	
12-40	3/8"	4263	14-0533	1068	



#### **Router Guides**

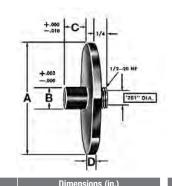
For use on Dotco 12-10, 12-20, 12-20, 12-20, 12-25 and 12-40 series.



The minimum router bit length (Overall Length) 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.



Number	A	В	C	D
For Router	Bits w	ith 1/4	" Sha	nks
14-2703	3/4	3/8	1/2	1/8
14-2400	1	3/8	1/8	1/8
14-2401	1	3/8	1/4	1/8
14-2402	1	3/8	3/8	1/8
14-2406	1	7/16	1/8	1/8
14-2407	1	7/16	1/4	1/8
14-2408	1	7/16	3/8	1/8
14-2411	1	1/2	1/4	1/8
14-2412	1	1/2	1/2	1/8
14-2413	1	1/2	5/8	1/8
14-2414	1	1/2	3/4	1/8
14-2417	1	9/16	1/8	1/8
14-2420	1	5/8	1/8	1/8
14-2421	1	5/8	5/8	1/8
14-2500	1 1/2	3/8	1/8	1/8
14-2501	1 1/2	3/8	1/4	1/8
14-2502	1 1/2	3/8	3/8	1/8
14-2505	1 1/2	7/16	1/8	1/8
14-2506	1 1/2	7/16	1/4	1/8
14-2507	1 1/2	7/16	3/8	1/8
14-2510	1 1/2	1/2	1/4	1/8
14-2511	1 1/2	1/2	3/8	1/8
14-2512	1 1/2	1/2	1/2	1/8
14-2600	2 1/2	1/2	1/2	3/16

5/8-18NF	)" DIA
1 m	
	KL

Dimensions (in.)

Part

Number	A	B	C	D
For Router	Bits w	ith 3/8	" Sha	nks
14-2531	1 1/2	1/2	3/8	1/8
14-2538	1 1/2	1/2	1/2	1/8
14-2539	1 1/2	1/2	5/8	1/8
14-2540	1 1/2	9/16	3/8	1/8
14-2541	1 1/2	9/16	1/2	1/8
14-2542	1 1/2	9/16	5/8	1/8
14-2893	1 1/2	5/8	3/8	1/8
14-2925	1 1/2	5/8	1/2	1/8
14-2544	1 1/2	5/8	5/8	1/8
14-2240	2 1/2	1/2	3/8	1/8
14-2632	2 1/2	1/2	1/2	1/8
14-2633	2 1/2	1/2	5/8	1/8
14-2634	2 1/2	9/16	3/8	1/8
14-2630	2 1/2	9/16	1/2	1/8
14-2635	2 1/2	9/16	5/8	1/8
14-2243	2 1/2	5/8	3/8	1/8
14-2636	2 1/2	5/8	1/2	1/8
14-2631	2 1/2	5/8	5/8	1/8

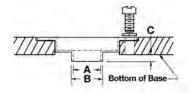
Л



#### **10-43 Series Router Template Guides**

Part Number	Dime	ensions in In	For Use w/Router	
Fait Nulling	A	В	C	Bits Up To:
14-4019	5/16	3/8	3/16	1/4"
14-4020	3/8	7/16	5/16	5/16"
14-4021	9/16	5/8	3/16	1/2"





#### **Rivet Trimmer Attachment**

For use on 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.

Part No.	Diameter	Shank	Length	Description	Recommended Use
Trimmer					
14-1723					
Cutters					
14-1732	3/4"	1/4"	1 7/8"	Inverted Cone, carbide	Steel Rivets
14-1332	1/2"	1/4"	1 7/8"	Cylindrical, carbide	Shaving welds



### Two Handed Router Base

**(Use with front or rear exhaust collet models.)** 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°)

Part Number	Series
14-1577	Dotco 12-10 Series
14-2577	Dotco 12-20 & 12-25 Series



#### Laminate Trimmer Attachment

Part Number	Series
14-1178	Dotco 12-10 Series
14-2178	Dotco 12-20 & 12-25 Series



ſ

### 12-22 Series

#### 14,000 RPM 0.6 hp (0.45 kW)

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



Cat. No.	Free Speed (rpm)	Configuration	Saw Blade Capacity	Maximum Depth of Cut	Type Housing	Weight	Length	Air Inlet Size
12L2240-90	14,000	Right Angle	2.5"	9/16 in	Composite	2.3 lb   1.04 kg	10.9 in   277 mm	1/4 in
12L2065-90	14,000	Inline	2.5"	9/16 in	Composite	2.1 lb   0.95 kg	8.9 in   226 mm	1/4 in

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

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

### 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



Cat. No.	Exhaust	Free Speed (rpm)	Saw Blade Capacity	Maximum Depth of Cut	Type Housing	Weight	Length	Air Inlet Size
12\$1288-02	Rear	2,400	2.0"	7/16 in	Composite	1.6 lb   0.73 kg	8.9 in   226 mm	1/4 in
12\$1289-02	Rear	3,600	2.0"	7/16 in	Composite	1.6 lb   0.73 kg	8.9 in   226 mm	1/4 in
12S1206-02	Front	12,000	2.0"	7/16 in	Composite	1.3 lb   0.59 kg	7.1 in   180 mm	1/4 in
12\$1273-03	Vacuum Ready	12,000	2.0"	7/16 in	Composite	2.3 lb   1.04 kg	7.1 in   180 mm	1/4 in
12\$1282-02	Rear	12,000	2.0"	7/16 in	Composite	1.3 lb   0.59 kg	7.1 in   180 mm	1/4 in
12S1207-02	Front	20,000	2.0"	7/16 in	Composite	1.3 lb   0.59 kg	7.1 in   180 mm	1/4 in
12\$1274-03	Vacuum Ready	20,000	2.0"	7/16 in	Composite	2.3 lb   1.04 kg	7.1 in   180 mm	1/4 in
12\$1283-02	Rear	20,000	2.0"	7/16 in	Composite	1.3 lb   0.59 kg	7.1 in   180 mm	1/4 in

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

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

Standard Equipment: Applicable wrenches, oilless blades

S



### 12-27 Series - Saw

940 - 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



Cat. No.	Exhaust	Free Speed (rpm)	Saw Blade Capacity	Maximum Depth of Cut	Type Housing	Weight	Length	Air Inlet Size
12S2790-02	Rear	430	4 in	1 in	Composite	6.2 lb   2.81 kg	16.2 in   411 mm	1/4 in
12S2792-02	Rear	940	3.375 in	1 in	Composite	6.2 lb   2.81 kg	16.2 in   411 mm	1/4 in
12S2793-02	Rear	3,200	4 in	1 in	Composite	5.2 lb   2.36 kg	14.5 in   368 mm	1/4 in
12S2794-01	Rear	4,700	2.5 in	9/16 in	Composite	4.6 lb   2.09 kg	13.2 in   335 mm	1/4 in
12S2794-02	Rear	4,700	3.375 in	1 in	Composite	5.2 lb   2.36 kg	14.5 in   368 mm	1/4 in
12S2774-02	Vacuum Ready	7,000	3.375 in	1 in	Composite	6.5 lb   2.95 kg	14.1 in   358 mm	1/4 in
12S2775-01	Vacuum Ready	8,500	4 in	1 in	Composite	7.2 lb   3.27 kg	14.1 in   358 mm	1/4 in
12S2775-03	Vacuum Ready	8,500	4 in	1 in	Composite	6.5 lb   2.95 kg	14.1 in   358 mm	1/4 in
12S2748-01	Front	9,000	4 in	1 in	Composite	4.8 lb   2.18 kg	11.4 in   290 mm	1/4 in
12\$2749-01	Front	11,000	3.375 in	1 in	Composite	4.8 lb   2.18 kg	11.4 in   290 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 5/16 in / 7.9 mm

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



Cat. No.	Exhaust	Free Speed (rpm)	Saw Blade Capacity	Maximum Depth of Cut	Type Housing	Weight	Length	Air Inlet Size
12\$4216-01	Front	5,800	4.0"	1 in	Composite	7.9 lb   3.58 kg	15.5 in   394 mm	1/4 in
12\$4217-01	Front	7,200	4.0"	1 in	Composite	7.9 lb   3.58 kg	15.5 in   394 mm	1/4 in
12\$4225-01	Vacuum with PortaBag	8,500	4.0"	1 in	Composite	9.9 lb   4.49 kg	17.0 in   432 mm	1/4 in
12\$4225-02	Vacuum with Floor Bag	8,500	4.0"	1 in	Composite	9.2 lb   4.17 kg	17.0 in   432 mm	1/4 in
12\$4218-01	Front	8,600	4.0"	1 in	Composite	7.9 lb   3.58 kg	15.5 in   394 mm	1/4 in
12\$4225-03	Vacuum Ready	8,500	4.0"	1 in	Composite	9.2 lb   4.17 kg	17.0 in   432 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 1/2 in / 12.7 mm

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

#### **Specialty Tools** 97



Part Number	Diameter	Туре	Maximum Depth & Width of Cut	Maximum rpm	Recommended Use (Guidelines only)					
Saw Blades – 1/4"	Saw Blades – 1/4" arbor hole									
14-1875	1 1/4"	High Speed Steel 22 Teeth	3/32" x 1/16"	12,000	Aluminum, Laminated Plastics, Pressed Board, Wood					
14-0930	1 1/4"	High Speed Steel 44 Teeth	3/32" x 1/16"	12,000	Aluminum, Laminated Plastics, Pressed Board, Wood					
14-1895	1 1/2"	High Speed Steel 22 Teeth	7/32" x 1/16"	12,000	Aluminum, Laminated Plastics, Pressed Board, Wood					
14-1890	2"	High Speed Steel 22 Teeth	7/16" x 1/16"	12,000	Aluminum, Laminated Plastics, Pressed Board, Wood					
14-1891	2"	High Speed Steel 44 Teeth	7/16" x 1/16"	12,000	Aluminum, Laminated Plastics, Pressed Board, Wood					
14-1892	2"	High Speed Steel 60 Teeth	7/16" x 1/16"	12,000	Aluminum, Laminated Plastics, Pressed Board, Wood					
14-1396*	1 1/2"	Carbide Chip 36/80 Grit	7/32" x 3/32"	20,000	Fiberglass, Rubber					
14-1395*	2"	Carbide Chip 36/80 Grit	7/16" x 3/32"	20,000	Fiberglass, Rubber					
14-1398*	1 1/2"	Diamond Chip 40/60 Grit	7/32" x 5/64"	20,000	Fiberglass, Rubber					
14-1400*	2"	Diamond Chip 40/60 Grit	7/16" x 5/64"	20,000	Fiberglass, Rubber, Carbon Fiber					

\*CAUTION: Use only for sawing non-metallic materials.

Part Number	Diameter	Туре	Maximum Depth of Cut	Use With Model	Recommended Use Up To (Guidelines only)			
Saw Blades – 7/16" arbor hole								
14-2147	2 1/2"	High Speed Steel 44 Teeth	9/16"	12S2794-01	1/4" Aluminum, 1/2" Plywood, 1/2" Phenolic			
14-2146	2 1/2"	High Speed Steel 80 Teeth	9/16"	12S2793-01	16 Gauge Steel			
14-2928	3 3/8"	High Speed Steel 60 Teeth	15/16"	12S2794-02	1/4" Aluminum, 1/2" Plywood, 1/2" Phenolic			
14-2929	3 3/8"	High Speed Steel 80 Teeth	15/16"	12S2792-02	20 Gauge Steel, Paneling, Plywood			
14-1887	2"	High Speed Steel 22 Teeth	7/16" x 1/16"	12S1288-04	Aluminum, Laminated Plastics, Pressed Board, Wood			
14-1888	2"	High Speed Steel 44 Teeth	7/16" x 1/16"	12S1288-04	Aluminum, Laminated Plastics, Pressed Board, Wood			
14-1889	2"	High Speed Steel 60 Teeth	7/16" x 1/16"	12S1288-04	Aluminum, Laminated Plastics, Pressed Board, Wood			

Part Number	Diameter	Туре	Maximum Depth & Width of Cut	Recommended Use (Guidelines only)
Saw Blades – 3/4" a	rbor hole			
14-2701*	4"	Carbide Chip 36/80 Grit**	1" x 1/8"	Fiberglass, Hard Rubber
14-2694*	4"	Carbide Chip 36 Grit	1" x 11/64"	Hard Rubber
14-2697*	4"	Carbide Chip 80 Grit	1" x 1/8"	Fiberglass
14-2699*	4"	Carbide Tip 20 Teeth	1" x 7/64"	Thin Fiberglass, Plastic Laminates to 1/8" thick
14-2700*	4"	Carbide Tip 20 Teeth	1" x 7/64"	Thicker Fiberglass, Plastic Laminates to 1/2" thick
14-2710	4"	Carbide Tip 20 Teeth	1" x 7/64"	Thin non-ferrous material (to approx. 1/8" thick)
14-2711	4"	Carbide Tip 12 Teeth	1" x 7/64"	Thicker non-ferrous material (to approx. 1/2" thick)
14-2690*	4"	Diamond Chip 60/80 Grit	1" x 5/64"	Fiberglass, Composite, Carbon Fiber

\*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.



🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

S

### <sup>98</sup> Specialty Tools



Part Number	Diameter	Туре	Maximum Depth & Width of Cut	Recommended Use (Guidelines only)
Saw Blades – Osc	illating saw	vs with 3/8" arbor hole		
14-1740*	2"	Carbide Chip 36/80 Grit	7/16" x 3/32"	Fiberglass
14-1741*	2"	Diamond Chip 40/60 Grit	7/16" x 5/64"	Fiberglass, Carbon Composites
14-1742	2 1/2"	Stainless Steel 124 Teeth	9/16" x 3/64"	Wood, Uncured or Cured Composites, Aluminum, Plastic
14-1746	2 1/2"	Flush Stainless 124 Teeth	9/16" x 3/64"	Wood, Uncured or Cured Composites, Aluminum, Plastic
14-1743	2 1/2"	Carbide 120 Teeth	9/16" x 1/16"	Cured Graphic Composites
14-1744	2 1/2"	Razor	9/16" x 3/64"	Cardboard, Light Plastic
14-1745	2 1/2"	Stainless Steel 120 Teeth	9/16" x 3/64"	Confined Space
14-1747	3"	Razor	9/16" x 3/64"	Cardboard, Light Plastic

\*Use only for sawing non-metallic materials.



#### Vacuum Conversion Kits 12-27 series

To convert an existing 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%.

Converts front exhaust to this configuration
Option 1 – Porta Bag
Option 2 – Floor Bag
Option 3 – Vacuum System Adapter

#### 12-42 series

To convert an existing 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%.

Part Number	Converts front exhaust to this configuration
4131	Option 1 – Porta Bag
4132	Option 2 – Floor Bag
4133	Option 3 – Vacuum System Adapter

S

S

### **SC3A Series - Triple Scaler**

#### Piston Type



Heavy duty, rugged application



Cat. No.	Bore	Stroke	Type Housing	Blows Per Minute	Weight	Length	Air Inlet Size
SC3A	0.88 in	0.81 in	Aluminum	5,200	7.9 lb   3.58 kg	13.3 in   338 mm	3/8 in
	nce rated @ 90 psi / 620 D.: 3/8 in / 9.6 mm	) kPa air pressure.					

Standard Equipment: Operating instructions & service manual

### **B1 Series - Lever Start - Needle Scaler**

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

-	
Concernment of the	

Cat. No.	Bore	Abrasive Capacity	Stroke	Type Housing	Blows Per Minute	Weight	Length	Air Inlet Size
B1-CNB-LT-RD	1.0 in	5" needles standard, 7" needles optional	1.1 in	Steel	4,600	6.3 lb   2.86 kg	15.0 in   381 mm	1/4 in

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

Minimum Hose I.D.: 5/16 in / 7.9 mm Standard Equipment: Operating instructions & service manual

**MP5187 - Lightweight Needle Scaler** 

- 4,200 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



Cat. No. MP5187	Throttle Handle	Blows Per Minute 4,200	Bore .79 in   20 mm	Stroke .59 in   15 mm	Weight 2.5 lb   1.1 kg	Length 8.9 in   225 mm
General: Air Inlet 1/4" NPT Use 1/4" (9.6 mm) I.D. hose All tools performance rated @ 90psi (620	kPa) air pressure.		Standard Equipment: MP5187: 12 needles, 1/8" Owners Manual Parts List	(3mm) dia., 5" (125mm) lon	g	

Р П



### **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.



Cat. No.	Bore	Abrasive Capacity	Stroke	Type Housing	Blows Per Minute	Weight	Length
B1-CNB-LT-RD-K	1.0 in	5" needles standard, 7" needles optional	1.1 in	Steel	4,600	6.3 lb   2.86 kg	15.0 in   381 mm

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 5/16 in / 7.9 mm

Standard Equipment: Operating instructions & service manual

### **B1 Series - Push-Pull Start - Chisel Scaler**

Built-in Chisel Retainer

Chisel Type

1404-00	
	دعه بروي أهي أهي أ

Cat. No.	Bore	Abrasive Capacity	Stroke	Type Housing	Blows Per Minute	Weight	Length	Air Inlet Size
B1-C-PT	1.0 in	1/2" square stock	1.1 in	Steel	4,600	4.3 lb   1.95 kg	12.0 in   305 mm	1/4 in
All tools perform	nance rated @ !	90 psi / 620 kPa air pressure.						

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

Standard Equipment: Operating instructions & service manual

### **B Series - Lever Start - Chisel Scaler**

- Built-in Chisel Retainer
- Chisel Type



Cat. No.	Bore	Abrasive Capacity	Stroke	Type Housing	Blows Per Minute	Weight	Length	Air Inlet Size
B1-C-LT	1.0 in	1/2" Square Stock	1.1 in	Steel	4,600	4.3 lb   1.95 kg	10.3 in   262 mm	1/4 in
BR-C-LT	1.0 in	5/8 round stock	1.1 in	Steel	4,200	4.3 lb   1.95 kg	10.4 in   264 mm	1/4 in

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

Minimum Hose I.D.: 5/16 in / 7.9 mm Standard Equipment: Operating instructions & service manual

### MP5195 - Long Reach Scaler

- 2,200 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

Cat. No.	Blows Per Minute	Piston Diameter	Piston Stroke	Weight	Length		
MP5195	2,200	1.1 in   29 mm	1.5 in   39 mm	11.5 lb   5.2 kg	60.0 in   1524 mm		
General: Air Inlet 1/4" NPT for I Use 1/4" (9.6 mm) I.E All tools performance		<u>9</u> .	<b>Standard Equipment:</b> 51741 4" 5/8 hex chisel Owners Manual Parts List				

Δ.

S

### **CH30 Series Chipping Hammer**

- Heavy duty for rugged use
- Ring valve hard hitting hammer
- Forged steel hammer
- Heat treated cylinder & piston for reduced wear
- Replaceable bushing

Cat. No.	Bore	Abrasive Capacity	Stroke	Type Housing	Blows Per Minute	Weight	Length	Air Inlet Size
CH-30-HX	1.125 in	.580 Hex	2.5 in	Aluminum	2,200	15.0 lb   6.80 kg	17.7 in   450 mm	3/8 in
CH-30-HX-QC	1.125 in	.580 Hex	2.5 in	Aluminum	2,200	15.0 lb   6.80 kg	17.7 in   450 mm	3/8 in
CH-30-RD	1.125 in	.680 Round Shank	2.5 in	Aluminum	2,200	15.0 lb   6.80 kg	17.7 in   450 mm	3/8 in
CH-30-RD-QC	1.125 in	.680 Round Shank	2.5 in	Aluminum	2,200	15.0 lb   6.80 kg	17.7 in   450 mm	3/8 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 1/2 in / 12.7 mm

Standard Equipment: Operating instructions & service manual

### **Rivet Hammers**

- For driving 1/8"-1/4" (3-6 mm) rivets
- 0.401 Rivet Set Shank Diameter
- Built-in air regulator controls power output
- Spool valve for precise speed control

Cat. No.	Bore	Retainer Style	Rivet Capacity	Stroke	Blows Per Minute	Weight	Length	Air Inlet Size
E4-2335	0.50 in	Open	3/16" / 4.8mm	4.0 in	1,600	2.6 lb   1.20 kg	8.4 in   213 mm	1/4 in
E5-2336	0.50 in	Open	1/4" / 6.4mm	5.0 in	1,400	2.9 lb   1.30 kg	9.4 in   239 mm	1/4 in
F4-PT-RT-B	0.56 in	Beehive	1/4" 6.4mm	4.0 in	1,700	3.3 lb   1.50 kg	8.7 in   221 mm	1/4 in

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

#### B1 Series Chisels (Safety Retainer Type)

Turne	Cutting	edge	Square S	tock Size	Overall L	Code	
Туре	in.	mm	in.	mm	in.	mm	Number
Hardened Blank	_	_	1/2	12.7	7 1/2	190	839052
Hardened Blank	-	-	1/2	12.7	12	305	839053
Cold Chisel	3/4	19	1/2	12.7	7 1/2	190	839051
Cold Chisel	3/4	19	1/2	12.7	12	305	839341
Cold Chisel	3/4	19	1/2	12.7	18	457	839335
Cold Chisel	1 1/2	38	1/2	12.7	8	203	839467
Spoon Chisel	1 3/8	35	1/2	12.7	7 1/4	184	839050
Spoon Chisel	1 3/8	35	1/2	12.7	12	305	839299
Spoon Chisel	1 3/8	35	1/2	12.7	18	457	839334
Spoon Chisel	1	25	1/2	12.7	7 1/4	184	839740

# 839341 839053

#### **BR Series Chisels (Safety Retainer Type)**

Туре	Cutting Edge		Round Stock Size		Overall I	Length	Code
Турс	in.	mm	in.	mm	in.	mm	Number
Blank	—	-	5/8	16	7 1/2	190	829173
Long Wide Blade	1 3/4 x 3/32	44.5 x 2.4	5/8	16	7	203	829165
Cold	3/4 x 3/32	19.1 x 2.4	5/8	16	8 1/2	216	829150
Scaling	1 1/4 x 3/32	31.8 x 2.4	5/8	16	9	229	829301
Spoon	1 3/8 x 3/32	34.9 x 2.4	5/8	16	7 1/2	190	829310

829173



J ш

Л



### AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987

### **14CF Series - Rivet Shaver with Stabilizer**

Non-Reversible

Optional stabilizer attachment



Cat. No.	Free Speed (rpm)	Abrasive Capacity	Weight	Length
14CFS60-95	29,000	0.0005 Cutter Adjustment	2.3 lb   1.04 kg	8.2 in   208 mm
14CFS60-98	29,000	0.00025 Cutter Adjustment	2.3 lb   1.04 kg	8.2 in   208 mm
14CNL60-95	20,000	0.0005 Cutter Adjustment	4.5 lb   2.04 kg	8.9 in   226 mm

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 5/16 in / 7.9 mm

Standard Equipment: Stabilizer and choice of skirt

Cutter	0						Part Number					
Diameter	Carbide Cutter	Skirts		1" Extended Skirt		4" Extended Skirt			6" Extended Skirt			
Inches	outto	Std.	Wide	Adapter	Skirt	Assembly	Adapter	Skirt	Assembly	Adapter	Skirt	Assembly
5/16	-	14-4391	14-4401	-	-	-	-	-	-	-	-	-
3/8	14-4382	14-4392	14-4402	-	-	14-4532	14-4302	14-4312	14-4512	-	14-4372	14-4572
7/16	14-4383	14-4393	14-4403	14-4323	-	14-4533	14-4303	-	14-4513	14-4363	14-4373	14-4573
1/2	14-4384	14-4394	14-4404	14-4324	14-4334	14-4534	-	-	14-4514	14-4364	14-4374	14-4574
9/16	14-4385	14-4395	14-4405	-	-	-	-	-	-	-	-	-
5/8	14-4386	14-4396	14-4406	-	-	-	14-4306	14-4316	14-4516	-	-	-
3/4	14-4387	14-4397	-	-	-	-	-	-	-	-	-	-
1	14-4422	14-4410	-	-	-	-	-	-	-	-	-	-
1-1/4	-	14-4412	-	-	-	-	-	-	-	-	-	-

### **14CF Series - Shears & Scissors**

Industrial shears suitable for a variety of general industry applications



Cat. No.	Spindle Size	Abrasive Capacity	Type Housing	Weight	Length	Air Inlet Size
14CFS93-98	Scissor Shear	18 Gauge Steel-1/16" other material	Aluminum	2.4 lb   1.09 kg	9.8 in   249 mm	1/4 in
14CFS93-99	Standard Shear	18 Gauge Steel-1/16" other material	Aluminum	2.2 lb   1.00 kg	8.0 in   203 mm	1/4 in

All tools performance rated @ 90 psi / 620 kPa air pressure. Minimum Hose I.D.: 5/16 in / 7.9 mm

Standard Equipment: Shear attachment and cutter blades

#### **12-20 Series - Nibbler** Great for tight access application Suitable for general industry Cat. No. Weight Capacity Speed SPM Type Housing Length Air Inlet Size Composite 8.3 in | 211 mm 12L2062-96 18 ga. Mild Steel 6 1.1 lb | 0.50 kg 1/4 in

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

12-10 Series - Lint Picker - 300 Series Collet

- Front or Rear Exhaust
- 6" or 9" pick rod
- Ideal for textile operation

-
 DOTCO

Cat. No.	Exhaust	Capacity	Free Speed (rpm)	Type Housing	Weight	Length	Air Inlet Size
12L1010-36	Front	6" or 9" Picker Rod	20,000	Composite	0.75 lb   0.34 kg	4.8 in   122 mm	1/4 in
12L1031-36	Rear	6" or 9" Picker Rod	20,000	Composite	0.8 lb   0.36 kg	5.5 in   140 mm	1/4 in

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, 6" / 152 mm Picker Rod 14-2181

S



### **TULMan Electronic Counter**

- Simple and easy to install on any small pneumatic tool, the Cleco TULMan allows you to know when and how often your tools are used for calibration, service and overall life. This device can also be used to monitor consumables and productivity.
- Rugged polymer construction drop tested and crush-resistant
- Electronics isolated from air to prevent contamination
- 1/4 in NPT outlet and inlet
- LEDs indicate a yellow warning when cycle or run time limits are being reached
- LEDs turn red when cycle or run time limits are reached
- Tamper-proof cover for micro USB access requires T10 torx driver
- Micro USB connection for program set up and data

Model Number	Max Presure	Min Flow	Max Flow	Weight	Connection
240461PT	100 psi / 6.9 bar	5 cfm / 145 lpm	20 cfm / 570 lpm	2.8 oz / 80 g	1/4 in NPT



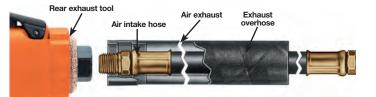
ш



🔤 AirToolPro.com by Zampini Industrial Group - Premier Tool Suppliers Since 1987 1-800-353-4676 📰

#### **Overhose Assemblies**

For use with Cleco/Dotco series rear exhaust tools:



	Overhose	Non-Overhose	0	erhose Only		Aiı	hose Only	
Tool Series	and	to Overhose	Number	Ler	ıgth	Number	Ler	ıgth
	Airhose	Conversion Kit	Number	ft.	m	Number	ft.	m
10-04	45-0946		45-0945	1.0	0.3	45-0948	5.0	1.5
	45-0953		45-0955	2.0	0.6	45-0948	5.0	1.5
	45-0954		45-0956	4.0	1.2	45-0948	5.0	1.5
12-03, 12-04	45-6013		45-6003	1.0	0.3	45-0948	5.0	1.5
	45-6012		45-6002	2.0	0.6	45-0948	5.0	1.5
	45-6000		45-6001	4.0	1.2	45-0948	5.0	1.5
10-10, 10-11, 10-12	45-1930		45-1904	2.0	0.6	45-1409	8.0	2.4
	45-1931		45-1901	4.0	1.2	45-1409	8.0	2.4
	45-1932		45-1902	8.0	2.4	45-1409	8.0	2.4
12-10, 12-11, 12-12		45-2783	45-2629	2.0	0.6	45-1408	8.0	2.4
12-13, 15LF, 15-14		45-2784	45-2687	4.0	1.2	45-1408	8.0	2.4
		45-2785	45-2688	8.0	2.4	45-1408	8.0	2.4
10-20, 10-21, 10-22		45-2786	45-2629	2.0	0.6	45-1508	8.0	2.4
10-25, 10-26, 10-27		45-2787	45-2687	4.0	1.2	45-1508	8.0	2.4
12-20, 12-21, 12-22		45-2788	45-2688	8.0	2.4	45-1508	8.0	2.4
12-25, 12-26, 12-27,								
12-28, 15LS, 15IN								
12-91			45-0974	4.0	1.2	01-9167	5.0	1.5
14CF			45-2687	4.0	1.2	45-1508	8.0	2.4
14CS			45-2687	2.0	0.6	45-1408	8.0	2.4
			45-2687	4.0	1.2	45-1408	8.0	2.4
			45-2688	8.0	2.4	45-1408	8.0	2.4
			45-2688	8.0	2.4	45-1408	8.0	2.4
14CN			45-2687	2.0	0.6	45-1508	8.0	2.4
			45-2687	4.0	1.2	45-1508	8.0	2.4
		1025687	45-2688	8.0	2.4	45-1508	8.0	2.4
		1020001	45-2688	8.0	2.4	45-1508	8.0	2.4
			10 2000	0.0	<u> </u>	10 1000	0.0	<u> </u>

5

#### **General Accessories** 107

#### **Airline Filter and Lubricator**



	Part	Description	NPT	Air F	low	Max. P	ressure
Nu	ımber	Description	in.	SCFM	m <sup>3</sup> /min	psig	bar
45-	0211	Filter w/cartridge*	1/4	17	8.0	100	6.9
45-	0212	Filter cartridge	-	-	-	-	-
45-	0201	Lubricator**	1/4	22	10	100	6.9
45-	0301	Lubricator**	3/8	22	10	100	6.9

GENERAL: Use where inconvenient for standard filter or lubricator.

\* NOTE: Filter will not remove water. \*\* NOTE: One ounce reservoir good for an average eight hour shift.



#### Air Hoses

				and the second se		
Part	Hose	I.D.	Fitting	s (NPT)	Len	igth
Number	in.	mm	in.	mm	ft.	m
A110026	3/16	4.7	1/8	3/8-24*	6.0	1.8
A139856	3/16	4.7	1/8	1/8	6.0	1.8
45-1307	3/16	4.7	1/8	1/4	7.0	2.1
45-1408	1/4	6.4	1/4	1/4	8.0	2.4
45-1409	1/4	6.4	1/8	1/4	8.0	2.4
45-1508	5/16	7.9	1/4	1/4	8.0	2.4
45-1610	3/8	9,5	3/8	3/8	10	3.0
45-1810	1/2	12.7	3/8	1/2	10	3.0
45-1812	1/2	12.7	1/2	1/2	12	3.7
45-1825	1/2	12.7	1/2	1/2	25	7.6

GENERAL: 3/16" & 1/4" hoses have braided covers, all others have neoprene covers. \* NOTE: 3/8"-24 is a straight thread

#### **Swivel Hose Couplings**

NPT in.
1/4
3/8
1/2



#### **Quick Disconnect Fittings**

Fitting Type*	NPT		Nominal Size		
	in.	1/4"	3/8"	1/2"	
Coupler (male NPT)					
	1/8	45-0710	-	-	
	1/4	45-0711	45-0713	-	
	3/8	45-0712	-	-	
	1/2	-	-	45-0717	
Coupler (female NP	T)				
	1/4	-	-	-	
	3/8	45-0732	45-0734	45-0736	
Nipple (male NPT)					
	1/8	45-0720	-	-	
	1/4	-	45-0724	-	
and and a state	3/8	45-0722	45-0725	45-0726	
	1/2	-	-	45-0727	
Nipple (female NPT)					
	1/4	-	45-0744	-	
	3/8	45-0742	45-0745	45-0746	
	1/2	-	-	45-0747	
Nipple (with hose barbs)					
	1/4**	45-0748	-	-	
	1/2**	-	-	45-0753	
* NOTE: Nipples of one size will not fit couplers of another size.					

\*\* NOTE: Indicates inside diameter of hose.

NOTE: 1/4" nominal will pass 49 cfm free air @ 90 psi, but pressure drop exceeds 10 psi with air flow over 30 cfm.

3/8" nominal will pass 90 cfm free air @ 90 psi, but pressure drop exceeds 10 psi with air flow over 53 cfm. 1/2" nominal will pass 168 cfm free air @ 90 psi, but pressure drop exceeds 10 psi with

air flow over 109 cfm.

#### Activeswivel

Part No.	NPT	Air I	Air Flow Max. Pressure		Weight		
Part No.	in.	SCFM	m <sup>3</sup> /min	psig	bar	lbs.	kg
SW-102	1/4	25	7.1	150	10.4	0.20	0.09
SW-103	3/8	45	12.7	150	10.4	0.40	0.18
SW-104	1/2	65	18.4	150	10.4	0.80	0.36
SWR-102*	1/4	25	7.1	150	10.4	0.25	0.11

\* NOTE: Equipped with built-in flow regulator.



#### **Steel Handle Bushings**

Part Number	Size
881276*	1/4 in. MPT x 1/4 in. FPT
841554†	1/4 in. MPT x 1/4 in. FPT
841553	3/8 in. MPT x 1/4 in. FPT
841552	3/8 in. MPT x 3/8 in. FPT

\* Light duty for rotary tools

*†* Heavy duty for percussion tools.

G



### <sup>108</sup> General Accessories

#### Lubricants

Part Number	Size	Description	M.S.D.S. No.
Oils			
540397	1 qt. plastic	Air line oil	CPT-153
533485	1 gal. metal	Air line oil	CPT-153
536333	1 gal. metal	High film strength	CPT-154
45-0918	1 qt. plastic	Air line oil (Dotco)	CPT-155
45-0919	1 gal metal	Air line oil (Dotco)	CPT-155
539317	1 qt. plastic	Hydraulic oil (Pulse)	CPT-157
Greases			
513156	18 oz. can	Teflon grease	CPT-145
45-0983	2 oz. tube	Dotco gear grease	CPT-147
45-0980	2 oz. tube	Dotco gear lube	CPT-148

NOTE: 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.



#### Service Tools

#### **"T" Wrenches**

Part Number	Description
1021202	3/16" Hex socket screws
To remove and replace I	nex socket screws in tool housings.

#### **Hex Key Wrenches**

Part Number	Description
1008860	1/8"
1006443	3/16"

#### **Open End Wrenches**

Part Number	Description
1006626	3/6" & 5/16"
1011691	7/16"
1014471	1/2"
1004958	9/16" & 1-33/64" Hex Box
1014472	11/16"
1010911	7/8"
1016694	1-1/8"

Snap Ring F	A	
Part Number	Description	
1007488	External sizes 25 thru 87	()
Part Number	Description	
1008702	External sizes 37 thru 93	

5

S

### Cleco® Production Tools provide solutions to challenges, leveraging technology for accuracy, connectivity, productivity and safety.

### Solutions are in our DNA.

Cleco Production Tools covers a wide range of industrial markets, including aerospace, automotive, foundries, furniture, general industry, metal fabrication, petroleum, power generation, shipbuilding, and transportation. We offer our customers solutions and products that meets their demanding productivity requirements.

### NeoTek

Corded Electric Assembly Tools

The Cleco<sup>®</sup> NeoTek<sup>™</sup> fastening system is the next generation of smart tool solutions. NeoTek exceeds the industry's most demanding assembly requirements by combining over 50 years of experience with smart technology. The NeoTek 30 and 50 series tools have angle heads that were engineered to provide 1 million cycles maintenance-free, while delivering class-leading repeatability of 2.0 Cm/ Cmk at +/- 7%.

**1 MILLION CYCLES MAINTENANCE-FREE** 

#### LiveWire Cordless Tools

Experience the freedom and flexibility of cordless tools with real-time wireless error-proofing. NeoTek LiveWire is Cleco's exclusive cordless tool system, an industryleading innovation that combines traditional fastening technology with advanced Wi-Fi connectivity. LiveWire tools:

• Include advanced features such as digital process controls, onboard electronic intelligence and an integrated barcode scanner

• Provide up to 1700 rundowns on a single battery charge transmit safety critical data securely, thanks to a 2.4/5Ghz encrypted wireless network

**BRAINS. POWER. WIRELESS** 



# Apex Fasteners Because There's A Lot On The Line.

APEX® is a market leader in fastening tools such as bits, sockets, wrenches, and torque products that are engineered for the toughest industrial application. APEX's expertise comprises more than 80 years of experience and the commitment to serve its customers in the automotive, aerospace, energy, electronics, and general industries with a wide range of quality and long-life fastening solutions built to enhance productivity and with end-user safety in mind. APEX's fastening solutions can be customized to meet specific application needs and are available to customers worldwide.



### Aerospace Industrv

Strong, Powerful Tools That Are Up to the challenge.

The Aerospace Industry requires and durability at high speeds. From fastening and material removal tools to

sophisticated drilling equipment, Cleco's products are used in quality- and safety-critical applications around the world



STRENGTH UNDER PRESSURE

G

Ш Z



WWW.APEX-TOOLS.COM



#### **Power Tools Sales & Service Centers**

Please note that all locations may not service all products. Please contact the nearest Cleco Sales & Service Center for the appropriate facility to handle your service requirements.



#### NORTH AMERICA | SOUTH AMERICA

#### DETROIT, MICHIGAN

Apex Tool Group Sales & Service Center 2630 Superior Court Auburn Hills, MI 48326 Tel: +1 (248) 393-5640 Fax: +1 (248) 391-6295

LEXINGTON, SOUTH CAROLINA Apex Tool Group 670 Industrial Drive Lexington, SC 29072 Tel: +1 (800) 845 5629 Tel: +1 (803) 951 7544 Fax: +1 (803) 358 7681

#### CANADA

Apex Tool Group Sales & Service Center 7631 Bath Road Mississauga, Ontario L4T 3T1 Canada Tel: (866) 691 6212 Fax: (905) 673 4400

#### ME

MEXICO Apex Tool Group Manufacturing México S. de R.L. de C.V. Vialidad El Pueblito #103 Parque Industrial Querétaro Querétaro, QRO 76220 Mexico Tel: +52 (442) 211 3800 Fax: +52 (800) 685 5560

BRAZIL Apex Tool Group Ind. Com. Ferram, Ltda. Av. Liberdade, 4055 Zona Industrial Iporanga Sorocaba, São Paulo CEP# 18087-170 Brazil Tel: +55 15 2383929

Fax: +55 15 2383260

#### EUROPE | MIDDLE EAST | AFRICA

ENGLAND Apex Tool Group GmbH & Co. OHG C/O Spline Gauges Piccadilly, Tamworth Staffordshire B78 2ER United Kingdom Tel: +44 1827 8741 28 Fax: +44 1827 8741 28

#### FRANCE

Apex Tool Group S.N.C. 25 rue Maurice Chevalier B.P. 28 77831 Ozoir-La-Ferrière Cedex, France Tel: +33 1 64 43 22 00 Fax: +33 1 64 43 17 17

#### GERMANY

Apex Tool Group GmbH & Co. OHG Industriestraße 1 73463 Westhausen Germany Tel: +49 (0) 73 63 81 0 Fax: +49 (0) 73 63 81 222

#### HUNGARY

Apex Tool Group Hungaria Kft. Platànfa u.2 9027 Györ Hungary Tel: +36 96 66 1383 Fax: +36 96 66 1135

#### ASIA PACIFIC

#### CHINA

Apex Power Tool Trading (Shanghai) Co., Ltd Building A8, No. 38 Dongsheng Road Pudong, Shanghai China 201201 Tel: +86 21 60880320 Fax: +86 21 60880298

#### INDIA

Apex Power Tools India Private Limited Gala No. 1, Plot No. 5 S. No. 234, 235 & 245 Indialand Global Industrial Park Taluka-Mulsi, Phase I Hinjawadi, Pune 411057 Maharashtra, India Tel: +91 20 66761111

www.ClecoTools.com | www.ClecoTools.eu