

# Speciality Tools

## Offset Angle Head

### Introduction

Offset Angle Heads are used to provide solutions to drill holes in areas where access is very limited.

Two types of offset angle head module (standard and extended reach) suitable for mounting to the D23 (straight and pistol versions) drill are available.

To order please ensure that you list both the D23 Drill plus the Offset Angle Head to suit your requirements.

e.g.: D23-P-700 + Standard reach Part No. 108302

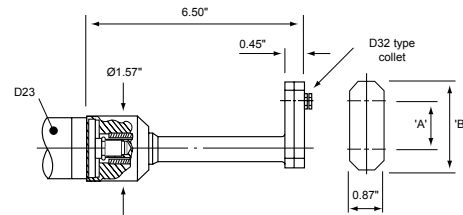


Vibration level: <math><2.5 \text{ m/s}^2</math>

PICTURE REF	MODEL	PART NUMBER	FREE SPEED	CHUCK SIZE		MOTOR POWER	STALL TORQUE	WEIGHT		LENGTH	AIR FLOW	AIR INLET	MIN HOSE BORE		SOUND LEVEL
			r/min	in.	mm	kW	Nm	lb	kg	mm	cfm	BSP/NPT	in.	mm	dB(A)
<b>PISTOL GRIP DRILLS – TRIGGER START – D SERIES</b>															
•	D23-P-6000	1364374	6000	0.315	8.0	0.28	2.0	1.98	0.90	175	18	1/4	3/8	10	78
•	D23-P-4600	1364454	4600	0.315	8.0	0.28	2.0	1.98	0.90	175	18	1/4	3/8	10	78
•	D23-P-2900	1364534	2900	0.315	8.0	0.28	3.0	1.98	0.90	175	18	1/4	3/8	10	78
•	D23-P-1800	1364794	1800	0.315	8.0	0.28	5.0	2.42	1.10	197	18	1/4	3/8	10	78
•	D23-P-1100	1364874	1100	0.315	8.0	0.28	9.0	2.42	1.10	197	18	1/4	3/8	10	78
•	D23-P-700	1364954	700	0.315	8.0	0.28	15.0	2.42	1.10	197	18	1/4	3/8	10	78
•	D23-P-400	1365004	400	0.315	8.0	0.28	24.0	2.42	1.10	197	18	1/4	3/8	10	78
<b>STRAIGHT GRIP DRILLS – LEVER START – D SERIES</b>															
•	D23-L-5700	1362914	5700	0.315	8.0	0.28	2.0	1.54	0.70	218	20	1/4	3/8	10	77
•	D23-L-4400	1363144	4400	0.315	8.0	0.28	2.0	1.54	0.70	218	20	1/4	3/8	10	77
•	D23-L-2800	1363304	2800	0.315	8.0	0.28	3.0	1.85	0.84	218	20	1/4	3/8	10	77
•	D23-L-1750	1363564	1750	0.315	8.0	0.28	6.0	1.85	0.84	240	20	1/4	3/8	10	77
•	D23-L-1050	1363724	1050	0.315	8.0	0.28	10.0	1.85	0.84	240	20	1/4	3/8	10	77
•	D23-L-400	1363984	400	0.315	8.0	0.28	25.0	1.85	0.84	240	20	1/4	3/8	10	77
<b>STRAIGHT GRIP DRILLS – BUTTON START – D SERIES</b>															
•	D23-S-4400	1363064	4400	0.315	8.0	0.28	2.0	1.54	0.70	218	20	1/4	3/8	10	77
•	D23-S-2800	1363224	2800	0.315	8.0	0.28	3.0	1.54	0.70	218	20	1/4	3/8	10	77
•	D23-S-1750	1363484	1750	0.315	8.0	0.28	6.0	1.85	0.84	240	20	1/4	3/8	10	77
•	D23-S-1050	1363644	1050	0.315	8.0	0.28	10.0	1.85	0.84	240	20	1/4	3/8	10	77
•	D23-S-400	1363804	400	0.315	8.0	0.28	25.0	1.85	0.84	240	20	1/4	3/8	10	77

# Accessories

Angle Head	A		B		Part No.
	in.	mm	in.	mm	
Standard reach	1.10	28	2.32	59	108302
Extended reach	1.97	50	3.07	78	108312



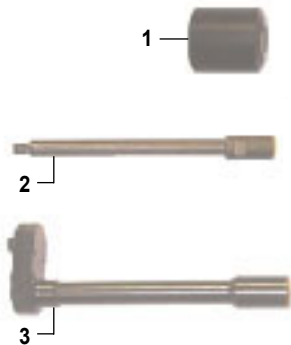
## OFFSET ANGLE HEAD

### ACCESSORIES

ITEM	PART NO.
A Offset Angle Head – Standard reach	108302
B Offset Angle Head – Extended reach	108312
• Service kits (standard reach) – gears and bearings set	461273
• Service kits (extended reach) – gears and bearings set	461283

### Offset Angle Head components

ITEM	
1	Mounting block
2	Drive spindle
3	Offset Angle Head body



To fit the offset angle head to a D23 drill the chuck guard and chuck should be removed; the drive spindle is then fitted followed by the mounting block. The offset angle head body is then engaged with the drive shaft and secured to the mounting block by means of set screws.

The head may be rotated through 360° to the desired orientation prior to securing to the mounting block.

The drill bit is held by means of a standard collet (D32 type).

# Safety Information

## General Safety Instructions for the Operation of Power Tools

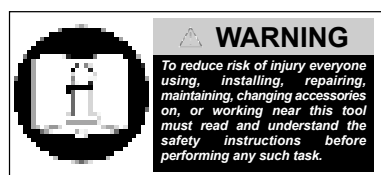
The goal of Chicago Pneumatic and Desoutter is to produce tools that help the operator work safely and efficiently.

The most important safety device for this or any other tool is the operator. Care and good judgement are the best protection against injury.

All possible hazards cannot be covered here, but we have tried to highlight some of the important ones.

Individuals should look for and obey Caution, Warning and Danger signs placed on tools, and displayed in the workplace. Operators should read and follow safety instructions packed with each tool. For a copy of these instructions, contact your local Desoutter representative.

Learn how each tool works. Even if you have previously used similar tools, carefully check out each tool before you use it. Get the 'feel' of it and know its capabilities, limitations, potential hazards, how it operates and how it stops.



All tools are designed to operate at a line pressure of 6.3 bar +/- 0.15bar in accordance with ISO2787. Sound levels +/- 3dB(A)\* measured in accordance with CAGI-PNEUROP test code or PNEUROP PN8NTC1.2. Vibration values\* measured in accordance with ISO 8662.

\*These declared values were obtained by laboratory testing in compliance with stated standards and are not adequate for risk assessments. Values measured in individual work places may be higher than the declared values. The actual exposure values and risk of harm experienced by an individual are unique and depend upon the way the user works, the workplace and the work station design, as well as upon the exposure time and the physical condition of the user. We Desoutter cannot be held liable for the consequences of using declared values, instead of values reflecting the actual exposure, in an individual risk assessment in a work place situation over which we have no control.

Tools are CE marked to comply with European Machinery Directive.

Specifications subject to change without prior notice.

Further occupational health and safety information can be obtained from the following web sites  
<http://www.osha.gov> (USA)  
<http://europe.osha.eu.int> (Europe).



### Compressed Air Hazards

- Air under pressure can cause injury. Never point an air hose at yourself or anyone else. Never blow your clothes free of dust with compressed air. Always direct exhaust air away from yourself and others in the work area.
- Always check for damaged or loose hoses and fittings before using an air tool, and replace if necessary. Whipping hoses can cause serious injury.
- Disconnect the tool from the air supply when not in use, before changing accessories, setting the torque, or when making repairs.
- Do not exceed rated air pressure to increase the output of the tool. This could cause injury and shorten tool life.
- Do not assemble quick coupler on the tool. Vibration can cause breakage resulting in a whipping air hose. Instead, use quick couplers on the end of a short leader hose.
- When universal twist couplings are used, lock pins must be installed to prevent accidental hose disconnection.
- Air tools are not intended for use in explosive atmospheres and are not insulated for contact with electric power sources.



### Projectile Hazards

- Always wear impact resistant eye and face protection when involved with or near the operation or repair of tools.



### Breathing Hazards

- Proper breathing protection must be worn when working with materials, which produce airborne particles.



### Noise Hazards

- Hearing loss can result from prolonged exposure to excessive sound levels.
- Use hearing protection as recommended by your employer or Occupational Health and Safety Regulations.



### Vibration Hazards

- Repetitive work motions, awkward positions, and exposure to vibration may be harmful to your hands and arms.
- If numbness, tingling, pain or whitening of the skin occurs, stop using tool and consult a physician.



### Entanglement Hazards

- To reduce the risk of injury from entanglement, do not wear loose clothing when using rotating accessories.



### Additional Hazards

- Slip/Trip/Fall is a major cause of serious injury or death. Beware of excessive hose/cord left on the walking or work surface.
- Operators and maintenance personnel must be physically fit to perform job tasks, and handle the bulk, weight and power of the tool.
- Deburring tools should be used to reduce the risk of cuts and abrasions due to burrs.
- Wear gloves to protect hands from sharp edges.

## Specific Safety Instructions for Power Tool Groups

In addition to the General Safety Instructions, the following are safety instructions and warnings that apply to the safe operation of specific power tool groups.



### Compression Tools

- To reduce the risk of injury always keep hands and fingers away from yoke and moving jaws, sets or dies. If possible, hold the tool body with both hands.
- Inspect the yoke daily for cracks. Injury may result if a cracked yoke fails during use.
- All yokes have a life limitation based on cycles and riveting force. This tool and its accessories must not be modified.
- The operator must always read and understand the safety instructions supplied with the tool.



### Drills & Tappers

- Keep away from rotating bit and chuck. You can become cut or burned if you come into contact with the drill bit or tap, chips/swarf, or work surface.
- Use intermittent drill feed pressure to avoid long shaved chips/swarf.

- The drill bit or tap can suddenly bind and cause the workpiece or tool to rotate, causing arm and shoulder injuries.
- ANSI recommends use of a support handle on drills with a chuck larger than 3/8" (10mm).



### Percussive Tools (Riveting Hammers, Air Scribe)

- All chisels, rivet sets and other associated accessories should be checked for cracks, excessive wear, or other physical damage before each use. Accessories that show signs of damage should be replaced immediately.
- Never use a tool without the proper accessory retainer.



### Other Tools (Saws, Deburring, Rivet Milling/ Shaving, Vacuum Cleaner)

- Specific instructions/warnings affecting this group of tools are contained in product specific documents accompanying each product.



### Accessories

- Always use accessories of correct size and design for the tool. Tool and accessories must not be modified in any way.
- Never use a tool without the proper accessory retainer.
- Do not use a tool or attachment for a purpose not intended by the manufacturer.



For further information on Ergonomics and Workplace Design ask for Desoutter publication LT198