



INDUSTRIAL TOOLS AND SOLUTIONS

2016

Atlas Copco

GRINDERS

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Maximum material removal with minimum effort

Atlas Copco Grinders are designed to be powerful, yet small in size and weight. With Atlas Copco Grinders, you can rely on maximum material removal with minimum effort. Our range of grinders covers virtually all applications.

DIE GRINDING

Small precision deburring – die grinding is performed with either tungsten carbide, high speed steel burrs or mounted points.

The choice of burr depends on the size of your job. A larger volume of removed material will require a bigger size of the burr's head.

Select the tool rpm depending on the diameter of the burr head, the material to be ground and the material in the rotary burr. Use tungsten carbide burrs for hard and tough materials. High speed steel burr's are recommended for natural steel and medium hardened materials. Example, see table below:

Burr head Ø	Hardened steel		Natural steel	Soft material
	Though materials	Cast iron	Wood, brass Plastics, Al.	
Up to 1/4"	– TC	38000	38000	38000
	– HSS	–	20000	20000
Up to 1/2"	– TC	30000	30000	30000
	– HSS	–	–	20000

TC – Tungsten carbide tipped rotary burr. **HSS** – High speed steel burrs.

For mounted points, follow the recommendations that relate to the particular mounted point.

ROUGH GRINDING

Pure material removal is determined by the power generated at the grinding process. The applied feed force and the rotation of the wheel generates a cutting force which, multiplied by the peripheral speed of the wheel, represents the power of removed material. (Power=Peripheral speed x Cutting force).

A powerful grinder will provide enough power with maintained rotational speed, when applying feed-force. A suitable combination of operative rotational speed, feed-force applied by the operator and power of the grinder, will give you the best combination for the material removal required.

As rough grinding is performed with bonded abrasives, a limitation of rotational speed is necessary in order to prevent wheel fractures due to centrifugal force.

The peripheral speed is limited to 14200 S.F.P.M (surface feet per minute) for fiber reinforced depressed center, straight and cutting off wheels. Resin bonded cup and straight wheels are limited to a peripheral speed of 9000 S.F.P.M.

SANDING AND POLISHING

Unlike die and rough grinding, sanding and polishing applies to the requirements of a surface. A fine surface will require a fine grit paper, fine Scotch-Brite, Bear Tex or a soft polishing bonnet. Rougher surface grinding will require a higher material removal rate thus requiring a coarser grit paper.

Similar to rough grinding, a rough surface, ground with coarse grit, will benefit from a high rotational speed. The limitations, however, are the maximum allowed speed of the backing pad and the fiber disc.

Normal sanding speeds for fiber discs of diameter 5", 7" and 9" are 4000 to 6000 rpm.

Polishing with different pastes and compounds require low speed in combination with high torque. Suitable speeds are 1800 to 2200 rpm.

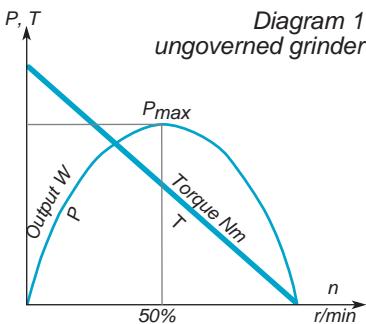
Sanding with wet coated abrasives is best performed at low speeds, because water is thrown out into the periphery and partly because of the fine grit.

Scotch-Brite, Bear Tex and flap wheels perform best at 50% of their maximum allowed rotational speeds.

THE SPEED GOVERNOR

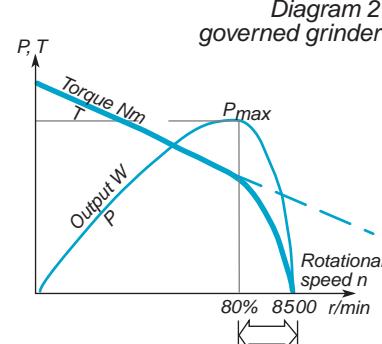
The amount of material removed in the grinding process depends on the power of the tool and the operative rotational speed. The diagram below shows the correlation between torque, power and rotational speed of a non governed pneumatic grinder.

In order to remove material, the operator has to apply a feed-force on the work-piece. Consequently the rotational speed decreases and having passed approximately 50% of the free speed, the operative power output starts to decrease. Theoretically, the most material would be removed at approximately 50% of the free speed on a non governed grinder, (diagram 1).



The Atlas Copco grinders are built small and smooth, partly due to their speed governor. The air is governed to the air flow necessary to maintain the rotational speed regardless of load, (to the extent of the power of the grinder).

The correlation between power, torque and rotational speed of a governed grinder is shown in diagram 2.



Air is used economically, as the flow through the motor is adjusted after applied load. Air consumption at free speed is minimized. The governor opens and lets in more air during load thus keeping the optimal rpm.

Guides

DIE GRINDING AND DEBURRING

SEE PAGE 229

① Carbide burrs



② Mounted points



ROUGH GRINDING AND CUTTING OFF

SEE PAGE 227 AND 233

③ Depressed center wheels



④ Cut off wheels



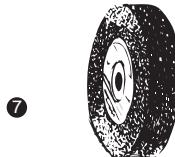
⑤ Cup wheels



⑥ Flap wheels



⑦ Straight wheels



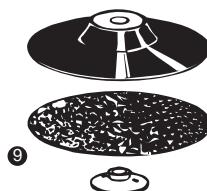
⑧ Cone wheels



SANDING AND POLISHING

SEE PAGE 235 AND 237

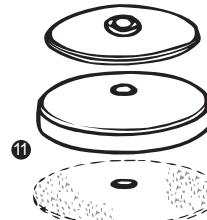
⑨ Fibre discs



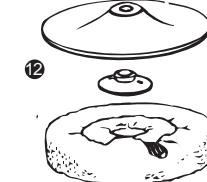
⑩ Wire brushes



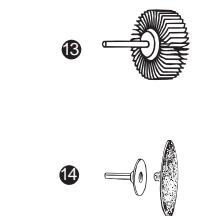
⑪ Coated abrasives



⑫ Polishing bonnets



⑬ Radial flap wheels



⑭ Scotch-Brite



DIAMETER – PERIPHERAL SPEED – R/MIN

The table below will help you to translate the peripheral speed of the grinding wheel to the correct rotational speed of the grinder when using a grinding wheel with a specific diameter.

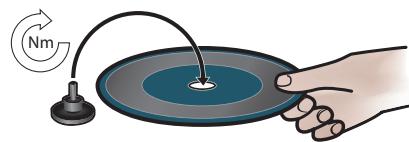
Wheel diameter inches	Surface feet per minute															
	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500	10,000	12,000	12,000	14,200
Revolutions per minute																
1	15,279	17,189	19,099	21,008	22,918	24,828	26,737	28,647	30,558	32,467	34,377	36,287	38,197	45,837	47,746	54,240
1 1/2	10,186	11,459	12,732	14,006	15,279	16,552	17,825	19,099	20,372	21,645	22,918	24,192	25,465	30,558	31,831	36,160
2	7,639	8,594	9,549	10,504	11,459	12,414	13,369	14,324	15,279	16,234	17,189	18,144	19,099	22,918	23,873	27,120
2 1/2	6,112	6,875	7,639	8,403	9,167	9,931	10,695	11,459	12,223	12,987	13,751	14,515	15,279	18,335	19,099	21,696
3	5,093	5,730	6,366	7,003	7,639	8,276	8,913	9,549	10,186	10,823	11,459	12,096	12,732	15,279	15,915	18,080
3 1/2	4,365	4,911	5,457	6,002	6,548	7,094	7,639	8,185	8,731	9,276	9,822	10,368	10,913	13,096	13,642	15,497
4	3,820	4,297	4,775	5,252	5,730	6,207	6,685	7,162	7,640	8,117	8,594	9,072	9,549	11,459	11,937	13,560
5	3,056	3,438	3,820	4,202	4,584	4,966	5,348	5,730	6,112	6,494	6,875	7,257	7,639	9,167	9,549	10,848
6	2,546	2,865	3,183	3,501	3,820	4,138	4,465	4,775	5,093	5,411	5,730	6,048	6,366	7,639	7,958	9,040
7	2,183	2,456	2,728	3,001	3,274	3,547	3,820	4,093	4,365	4,638	4,911	5,148	5,457	6,548	6,821	7,749
8	1,910	2,149	2,387	2,626	2,865	3,104	3,342	3,581	3,820	4,058	4,297	4,536	4,775	5,730	5,968	6,780
9	1,699	1,910	2,122	2,334	2,546	2,759	2,971	3,183	3,395	3,608	3,820	4,032	4,244	5,093	5,305	6,027

THIS IS YOUR RESPONSIBILITY

Always read and understand the safety information supplied with the tool and on www.atlascopco.com. All locally legislated safety rules regarding installation, operation and maintenance shall be respected at all times.

1. Check the free speed

- The measured speed at a pressure of 6.3 bars must not exceed the rated speed, which is marked on the grinder.
- Remove the grinding wheel and outer flange before checking the free speed.
- Carry out checks daily.
- Make sure the speed marking on the tool is legible.
- Return the machine for repair in the event of overspeeding.



5. Check the flange and wheel

Make sure that flange and wheel combinations correspond to national regulations.

- Check that the flanges are undamaged and clean.
- Attach the wheel with the recommended torque.
- Always disconnect the air-supply when changing the wheel or adjusting the tool.
- Test-run your grinder in a protected area after assembling the wheel.
- Check that the grinder is working correctly.

2. Check the wheel guard

The wheel guard protects your health and safety.

- Always use the recommended wheel guard.
 - Check that it is not damaged.
 - Never use a grinder without the wheel guard.
 - Position the wheel guard between yourself and the grinding wheel.
- Check that the trigger is working correctly.
- The trigger must never be removed or fixed by tape for example.
 - If the trigger is not working properly, make sure that it is replaced.



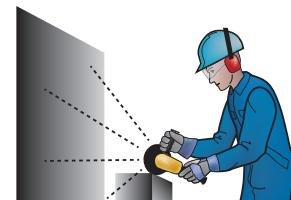
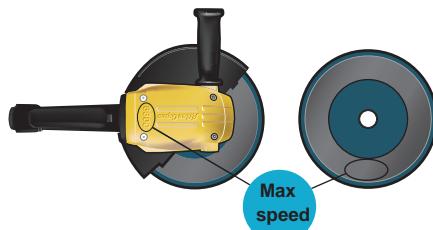
6. Personal protection equipment

Make sure that operators wear:

- Eye protection, goggles or a visor.
- Ear protection.
- Gloves.
- Steel toe-capped shoes.
- Protective clothing, such as a leather apron.
- A helmet (for heavier applications).
- Avoid loosely hanging clothing, hair, jewellery (risk of getting caught).

3. Maximum speed

Make sure that the stated maximum speed of the grinding wheel is greater than or equal to the speed specified on the grinder.



4. Check the grinding wheel

Make sure that the grinding wheel is not cracked or damaged in any way.

- The grinding wheel should have the correct hole dimensions and be fitted correctly on the spindle to avoid unbalanced vibrations.
- Damaged grinding wheels must be removed and replaced immediately.
- Do not use dropped or damaged wheels, as these can cause serious injuries.



7. Working area

Ensure that the area in which you are working is kept free from other people so that no one can get injured.

- People nearby must also wear hearing and eye protection.
- Check that there is good ventilation and dust extraction from the premises.
- There should be a stand or a place available, on which the machine can be safely placed.
- Work within a sealed-off area, if possible with protecting walls, since there is a risk that broken discs could fly off.

During work

Stop using the grinder if abnormally loud noises and vibrations occur during use. The grinder and its accessories must not be modified in any way.

After the work is finished

Make sure the machine is switched off and has come to a complete stop before it is put down. Put down the tool carefully, so that there is no risk of the tool starting by itself.



Maintenance

Make sure you follow the service instructions provided and the recommended service intervals. Do not dismantle safety-related parts such as the speed governor and overspeed shut off. These parts should be completely replaced when damaged.

Turbine Grinder

GTG25

TURBINE TECHNOLOGY BOOSTS PRODUCTIVITY

More efficient than a conventional vane grinder motor, the 2 stage turbine motor in the GTG25 provides an extremely high efficiency leading to great rate of material removal on the roughest surfaces. A speed governor ensures optimum process speed and process time is cut to a minimum. Since the job is done faster, the total energy consumption is significantly lower for each job.

REDUCES OPERATOR STRAIN

The GTG25 is ergonomically designed in every aspect. Its high power-to-weight ratio, 3.4 hp of power in a 5.07 lb tool, makes grinding much easier for the user. Combined with other GTG25 features, for example, an ergonomic angled throttle handle and an autobalancer to minimize vibrations, the overall result is less strain on the operator.



GTG25 F120-527

GTG25 F085-727

HIGHLY SERVICE FRIENDLY

With its all-metal design, the GTG25 turbine grinder is a robust, durable tool. Service intervals are long and servicing is easy thanks to modular internal components and Service Kits from Atlas Copco.

Model	Max free speed r/min	For wheel dia in	Spindle thread	Max output hp	Weight lb	Height over spindle in	Air consumption at max output free speed		Rec. hose size		Air inlet thread NPT		Ordering No.
							cfm	cfm	mm	in	3/8	5/8	
For grinding and cutting off													
GTG25 F120-527	12000	5	5/8-11	3.4	5.07	2.3	67.8	19	16	5/8	3/8	8423 2525 06	
GTG25 F085-727	8500	7	5/8-11	3.4	5.29	2.3	67.8	19	16	5/8	3/8	8423 2525 07	
For sanding													
GTG25 S085-700	8500	7	5/8-11	3.4	4.2	2.3	67.8	19	16	5/8	3/8	8423 2525 08	
GTG25 S060-700	6000	7	5/8-11	3.4	4.2	2.3	67.8	19	16	5/8	3/8	8423 2525 22	

TOOL ACCESSORIES

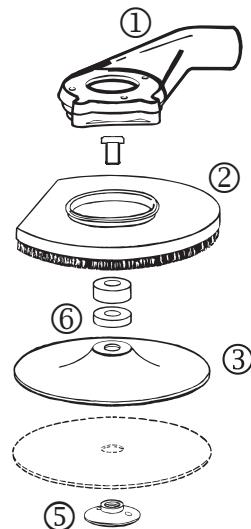
Model	Ordering No.
Whip-hose (incl.)	4175 0738 91
Exhaust hose	4150 1532 95
Spot suction kit for sander	3780 4090 27

AIR LINE ACCESSORIES

Model	Ordering No.
MultiFlex	8202 1350 28
Claw coupling	9000 0262 00
HM Open XL hose reel	8202 1183 50

SPOT SUCTION KIT FOR SANDING WITH FIBRE DISC

Model	Ordering No.
KIT 7"	3780 4007 90
1 Chamber	3780 3100 40
2 Suction cap 180 mm with brush	3780 2675 00
3 Backing pad 180 mm	3780 2710 60
6 Distance washer 9 mm	3780 2721 50
5 Nut 5/8"	3780 2726 70



Productivity Kits

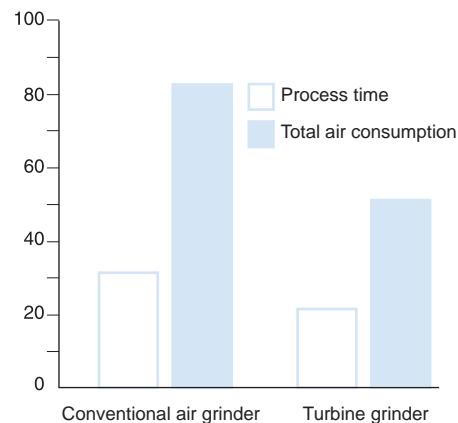
Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ15US-T16	85 cfm	Turbo 16	ErgoQIC 15US	Yes	8202 0850 31

The GTG/GTR40 are the most powerful grinders in the turbine grinder range, with incredible power for their size and weight. The range includes angle and straight type grinders for virtually every common rough grinding application.

- For rough grinding and cutting off with depressed center wheels.
- For surface finishing with coated abrasives and wire brushes.
- For rough grinding with cup wheels.
- GTR40 – for rough grinding and applications such as internal and external cleaning of castings with straight grinding wheels.
- Dust extraction – Efficient accessory and standard model for extraction of air-borne dust in sanding applications with fiber discs.



MORE EFFECTIVE



The turbine motor is more efficient than a conventional grinder motor. Therefore it takes less time to do the same job. Also the total air consumption will be a lot less for a specific job.

Model	Max free speed r/min	Max wheel dia in	Max output hp	Weight lb	Height over spindle in	Air consumption at		Hose size in	Air inlet thread NPT	Spindle thread in	Ordering No.
						max output cfm	free speed cfm				
For depressed center wheels, type 27											
GTG40 S060-927	6000	9	6.1	9.5	5.2	126	42	5/8	1/2	UNC 5/8	8423 0715 05
GTG40 S060-727	6000	7	6.1	9.5	5.2	126	42	5/8	1/2	UNC 5/8	8423 0715 07
GTG40 S077-727	7700	7	6.1	9.5	5.2	126	42	5/8	1/2	UNC 5/8	8423 0715 09
GTG40 S085-727	8500	7	6.1	9.5	4.8	126	42	5/8	1/2	UNC 5/8	8423 0715 10
For cup wheel, type 11											
GTG40 S060-611	6000	6	6.1	10.1	5.2	126	42	5/8	1/2	UNC 5/8	8423 0715 00
GTG40 F072-611	7200	5	6.1	10.1	5.2	126	42	5/8	1/2	UNC 5/8	8423 0715 20
For sanding											
GTG40 S060-900	6000	9	6.1	7.9	5.2	126	42	5/8	1/2	UNC 5/8	8423 0715 02
GTG40 S060-700	6000	7	6.1	7.9	5.2	126	42	5/8	1/2	UNC 5/8	8423 0715 03

Model	Max. free speed r/min	Rec. wheel diam. DxTxH in	Spindle		Max output hp	Weight incl. guard flanges lb	Air consumption at		Air inlet thread NPT	Rec. air hose in	Ordering No.
			thread in	length in			max output cfm	free speed cfm			
GTR40 S085-601	8500	6x1x1	UNC 5/8	2.2	6.1	12.3	22.1	126	42	1/2	5/8
GTR40 S072-501	7200	5x1x1	UNC 5/8	2.2	6.1	12.3	22.1	126	42	1/2	5/8
GTR40 S060-601	6000	6x1x1	UNC 5/8	2.2	6.1	12.8	22.1	126	42	1/2	5/8
GTR40 S060-801	6000	8x1x1	UNC 5/8	2.2	6.1	12.8	22.1	126	42	1/2	5/8

Accessories Included

GTG40

Adjustable wheel guard
Support handle
Attachment flanges
Whip hose 2 ft long, 5/8" dia complete with nipple
Gear box oil, one tube
Hex key for wheel change

GTR40

Wheel guard
Attachment flanges
Whip hose 2 ft long, 5/8" dia complete with nipple
Gear box oil, one tube
Key and spanner for wheel change

Optional Accessories

GTG40

	Ordering No.
Heavy duty backing pad for sanding Ø 180 mm (7") Ø 230 mm (9")	4170 1192 90 4170 1193 90
Hand shield	4175 0165 90
Adapter for positioning support handle 120/135° between handles	4175 0164 90 ^b
Adapter kit fibre disc	4175 0238 90
Dust extraction kit for 180 mm fiber disc GTG40 S060-700 3780 4090 11 ^a	
Hose kit including 1.8 m vacuum hose, Ø 38 mm and air hose Ø 13 mm	3780 2724 41
Attachment nut for cup wheel with plane hole	4175 0178 90

^a Incl. flow chamber, suction cap and support pad.

^b Included as standard in GTG40 S060-611.

GTG40

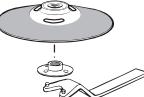
Adapter



Hand shield



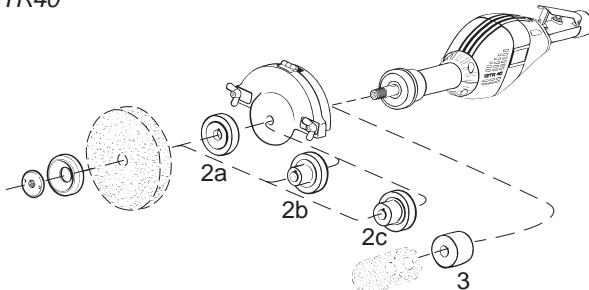
Back-up pad



GTR40

	Thickness x Hole dia in	See illustration	Ordering No.
Rear flange	3/4-1 x 5/8	2a	4150 0619 00
	x 1	2a	4150 0713 00
	x 3/4	2b	4150 1650 00
	x 1 1/4	2c	4150 0620 00
Spacer for cone wheel		3	4150 0787 00

GTR40



Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MAXI F/R EQ15US-T20	140 cfm	Turbo 16	ErgoQIC 15US	No	8202 0850 32
MAXI F/RD EQ15US-T20	140 cfm	Turbo 16	ErgoQIC 15US	Yes	8202 0850 33

NOTE: Tool nipple is not included in the Productivity kit and needs to be ordered separately together with the tool.



Service Kits

GTG40 4081 0153 90
GTR40 4081 0153 91

- LSF07 is a high speed model for precision grinding and polishing. LSF07 is delivered with a 1/8" collet and can be equipped with a 3 mm collet as optional.
- LSF12/LSV12 – Small and comfortable die grinder with up to 0.5 hp for maximum control in cramped spaces. All models are delivered with speed governor and a well balanced 1/4" Erickson collet.
- LSF19/LSV19 – All models in the 19 series are equipped with a powerful 0.67 hp air motor and a speed governor. LSF versions have scatter damping, for less vibrations. The angled models (LSV) have a patented solution that overcomes temperature and leakage problems commonly associated with angle head tools. The result is a leak free and self-cooled angle head. All models are lubrication free except for the high speed model LSF19 S460.
- LSF28 – Powerful 1.2 hp air motor, with speed governor and scatter damping. Impressive power-to-weight ratio.
- LSF38 – One of the most powerful one-hand die grinders on the market with up to 1.7 hp. If you are looking for



a tool that can boost your productivity and save you money, the LSF38 is the right tool! The die grinders in the 38

series are lubrication free with scatter damping for maximum operator comfort and safety.

Model	Max free speed r/min	Rec max dia of		Max output hp	Weight lb	Length in	Air consumption		Rec. hose size mm	Air inlet thread NPT	Ordering No.
		Tungsten carbide burrs in	Mounted point mm				at max output cfm	at free speed cfm			
Straight models											
LSF12 S180-2 ^a	18000	1/2	20	0.28	0.8	6.7	15	5	8	5/16	1/4
LSF12 S200-2 ^a	20000	1/2	20	0.32	0.8	6.7	17	5	8	5/16	1/4
LSF12 S250-2 ^a	25000	1/2	20	0.39	0.8	6.7	18	7	8	5/16	1/4
LSF12 S310-2 ^a	31000	1/2	20	0.43	0.8	6.7	19	9	8	5/16	1/4
LSF12 S400-2 ^a	40000	3/8	16	0.48	0.8	6.7	21	15	8	5/16	1/4
LSF19 S460-2 ^a	46000	3/8	16	0.68	1.2	7.6	24	31	10	3/8	1/4
LSF19 S300-2	30000	1/2	20	0.67	1.2	7.6	23	14	10	3/8	1/4
LSF19 S200-2	20000	1/2	20	0.67	1.2	7.6	20	7	10	3/8	1/4
LSF19 S200-E-2	30000	1/2	20	0.67	1.5	11.5	20	7	10	3/8	1/4
LSF19 S300-E-2	30000	1/2	20	0.67	1.5	11.5	23	14	10	3/8	1/4
LSF28 S250-2 ^a	25000	1/2	32	1.2	1.7	8.3	39	23	13	1/2	3/8
LSF28 S250-E-2 ^a	25000	1/2	32	1.2	2.8	13.2	39	23	13	1/2	3/8
LSF28 S180-2	18000	5/8	40	1.1	1.7	8.3	37	15	13	1/2	3/8
LSF28 S180-E-2	18000	5/8	40	1.1	2.7	13.2	37	15	13	1/2	3/8
LSF28 S150-2	15000	5/8	40	0.9	1.7	8.3	32	12	13	1/2	3/8
LSF28 S120-2	12000	5/8	40	0.9	1.7	8.3	29	8	13	1/2	3/8
LSF38 S250-E ^a	25000	5/8	40	1.8	3.3	13.8	58	53	13	1/2	3/8
LSF38 S180-E	18000	5/8	40	1.8	3.3	13.8	58	31	13	1/2	3/8
LSF38 S150-E	15000	5/8	40	1.8	3.3	13.8	50	27	13	1/2	3/8
Angle models											
LSV12 S120-2 ^a	12000	1/2	20	0.33	1.2	6.5	18	6	8	5/16	1/4
LSV12 S200-2 ^a	20000	1/2	20	0.39	1.2	6.5	20	14	8	5/16	1/4
LSV19 S200-2	20000	1/2	-	0.6	1.3	7.3	23	15	10	3/8	1/4
LSV19 S120-2	12000	1/2	-	0.6	1.3	7.3	23	15	10	3/8	1/4
LSV19 S080-2	8000	1/2	-	0.5	1.3	7.3	23	13	10	3/8	1/4
Die grinders for polishing											
LSF28 ST030-2	3000	-	-	0.9	2.6	10.8	38	18	10	3/8	3/8
LSF28 ST070-2 ^a	7000	-	-	1.0	2.6	10.8	40	26	10	3/8	3/8
LSF28 ST070E-2 ^a	7000	-	-	1.0	3.9	15.7	40	26	10	3/8	3/8
High speed model											
LSF07 S850 ^a	88000	1/6	6	0.10	0.9	6.7	4.9	4.6	4.5	3/16	-
											8423 1222 03

^a Not lubrication free.

E = Extended version, flexible spindle

Accessories Included

LSF07

Air hose
ErgoNIP 08
Collet 1/8" (See ill. 1)

LSF/LSV12, LSF/LSV19, LSF28

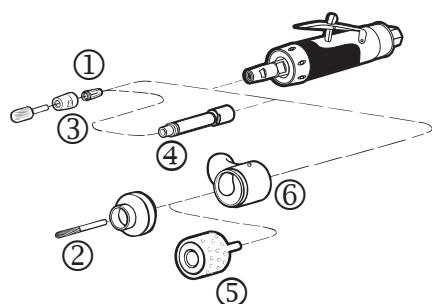
Spanner
Collet 1/4" (See ill. 1)
Air hose, air hose nipple and clamp
Exhaust hose

LSF38

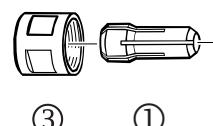
Air hose nipple
Collet 1/4" (See ill. 1)

Optional Accessories

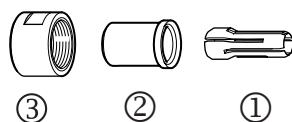
LSF07



LSF28/38



LSF/LSV12, LSF/LSV19



	LSF07	LSF/LSV12	LSF/LSV19	LSF28	LSF38	See ill.
Optional collets						
3 mm	4150 1800 00	-	-	-	-	1
1/8"	4150 1822 00	4150 2226 46	4150 1710 00	-	-	1
1/4"	-	4150 2226 03	4112 1077 00	4150 1709 00	4150 1709 00	1
3/8"	-	-	-	-	4150 1708 00	1
Collar	-	4150 2226 02	4112 1078 00	-	-	2
Collet nut	-	4150 2226 04	4112 1076 00	4150 1706 00	4150 1706 00	3
For machining of plastic and glass fibre						
Spot suction kit burr (burr not included)	-	3780 3015 23	3780 3015 22	3780 4007 42	-	6
Diamond burr Ø 6 mm (1/4")	-	3780 5013 70	3780 5013 70	3780 5013 70	-	2
Spot suction kit drum (drum not included), for use with 8 mm (5/16") collet	-	-	3780 4011 61	3780 4011 73	-	6
Diamond drum Ø 52 mm (2 1/16")	-	-	3780 5033 00	3780 5035 00	-	5

Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	Yes	8202 0850 29
MIDI Optimizer F/R EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	No	8202 0850 30

NOTE: Tool nipple is not included in the Productivity kit and needs to be ordered separately together with the tool.



Service Kits

07 series	4081 0243 90
12 series	4081 0472 90
19 series	4081 0488 90
28 series	4081 0315 90
38 series	4081 0308 90

For Cone Wheels and Collet

Straight Grinders

Atlas Copco straight grinders for cone wheel or collet, are suitable for grinding in holes and cavities in castings, etc. They require rough abrasives, which must be attached to the tool with a rigid shank or be mounted directly to the spindle.

The power ranges from 0.9 hp to 2.4 hp. All Atlas Copco tools are designed with focus on operator ergonomics and maximum power, the best combination for maximum productivity.

- The LSR38 is suitable for lighter applications where accessibility is first priority.
- If you need maximum power, then LSR48 is the natural choice. You will have access to 2.4 hp in combination with auto balancer for even less vibrations. All packed in a strong and light package.



Model	Max free speed r/min	Rec. wheel diameter in	Max output hp	Weight lb	Length in	Air consumption			Spindle thread and length in	Air inlet thread NPT	Ordering No.
						at max output cfm	at free speed cfm	Rec. hose size in			
LSR38 S150-CW	15000	2 3/8	1.8	3.5	12.6	50	27	1/2	UNF 3/8x14	3/8	8423 0700 29
LSR38 S180-CW	18000	2	1.8	3.5	12.6	58	31	1/2	UNF 3/8x14	3/8	8423 0700 30
LSR38 S150-CW/2	15000	2 3/8	1.8	3.5	12.6	50	27	1/2	UNC 5/8x21	3/8	8423 0700 33
LSR38 S120-CW/2	12000	2	1.8	3.5	12.6	58	31	1/2	UNC 5/8x21	3/8	8423 0700 35
LSR48 S120-CW	12000	2	2.4	5.0	17.6	64	28	1/2	UNC 5/8x21	1/2	8423 0708 02

Accessories

For Cone Wheels and Collet

Accessories Included

LSR38 CW

Exhaust air hose (1.1 ft)
Hose clamp
Open end spanner
For -CW: UNF 3/8" (See ill. 1)
For -CW/2: UNC/W 5/8" (See ill. 1)

LSR48 CW

Whip hose
Wrench
Cone wheel adapter UNC 5/8"-11,
(See ill. 2)

Optional Accessories

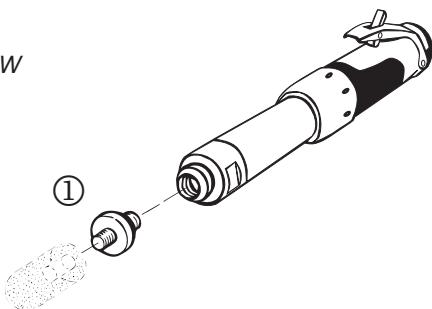
LSR38

	See illustration	Ordering No.
Adapter for cone wheel with thread		
UNC/W 3/8"	1	4150 0318 00
UNF 3/8"	1	4150 0318 01
UNC 1/2"	1	4150 1357 00
UNC/W 5/8"	1	4150 0767 00

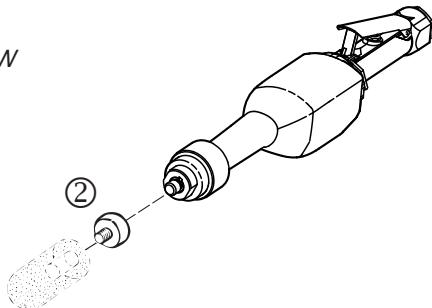
LSR48

	See illustration	Ordering No.
Adapter for cone wheel with thread		
UNC/W 5/8"	2	4150 0945 01

LSR38-CW



LSR48-CW



Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	Yes	8202 0850 29
MIDI Optimizer F/R EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	No	8202 0850 30

NOTE: Tool nipple is not included in the Productivity kit and needs to be ordered separately together with the tool.



Service Kits

28 series	4081 0315 90
38 series	4081 0311 90
48 series	4081 2023 90

For Depressed Center and Cut-off Wheels

Angle Grinders

No matter which of our vane grinders you choose you will get durable tools with high power and low weight. In addition, vibrations and noise are on a low level.

- LSV19 – For work in cramped spaces, the LSV19 series is small yet powerful, and lubrication free.

Features: Speed governor, sealed anglehead, thermally insulated handle and lubrication-free air motor.

- LSV28 – Small, yet powerful giving 1 hp. Available in an extended version for optimal accessibility.

Features: Speed governor and thermally insulated handle.

- LSV38 – If you are looking for the most powerful one-hand grinder on the market, then you have found it – up to 1.7 hp.

Features: Speed governor, sealed angle head, lubrication-free air motor, thermally insulated handle, spindle lock and adjustable wheel guard.

- LSV48 – Our most powerful angle vane grinder with 2.5 hp for ultimate productivity.

Features: Speed governor, sealed angle head, lubrication-free air motor, thermally insulated handle and spindle lock. The autobalancer reduces the vibrations by up to 50%.

LSV48 SA085-727



LSV19



LSV28-E



LSV38 ST12-427



Model	Max free speed r/min	Max wheel dia in	Max output hp	Weight lb	Height over spindle in	Air consumption		Spindle thread and length in	Hose size in	Air inlet thread NPT	Ordering No.
						at max output cfm	at free speed cfm				
LSV19 S170-327	17000	3	0.6	1.6	2.8	23	14	UNF 3/8x17	3/8	1/4	8423 0705 80
LSV28 ST13-427E	13000	4	1.0	3.7	3.1	37	16	UNF 3/8x17	3/8	3/8	8423 0706 00
LSV28 ST12-427	12000	4	1.0	3.7	3.2	37	16	UNF 3/8x18	3/8	3/8	8423 0706 01
LSV38 ST12-427	12000	4	1.7	3.5	3.3	58	31	UNF 3/8x17	1/2	3/8	8423 0700 20
LSV38 ST12-527	12000	4 1/2-5	1.7	4.0	3.3	58	31	UNC 5/8x20	1/2	3/8	8423 0700 22
LSV48 SA120-527	12000	5	2.5	5.5	3.9	76	36	UNC 5/8x21	5/8	1/2	8423 0707 53
LSV48 SA085-727	8500	7	2.5	6.2	3.9	76	36	UNC 5/8x21	5/8	1/2	8423 0707 52
LSV48 SA066-727	6600	7	2.5	5.1	3.9	76	36	UNC 5/8x21	5/8	1/2	8423 0707 54

With wheel guard for disc
 -327 = Ø 3"
 -427 = Ø 4"
 -527 = Ø 5" and 4.5"
 -727 = Ø 7"

Selection Guide

HOW TO CHOOSE YOUR LSV38

	LSV38 ST12-427	LSV38 ST12-527
1.7 hp air motor	x	x
Adjustable guard positions	x	x
Lockable spindle	x	x
Side handle	x	x
Size wheel, inch	4	4.5 and 5
Spindle thread, inch	UNF 3/8	UNC 5/8

Accessories

For Depressed Center and Cut-off Wheels

Accessories Included

LSV19

Wheel guard
Flanges
Air hose nipple, clamp
Wrenches
Exhaust hose set

LSV28

Wheel guard
Flanges
Air hose, air hose nipple, clamp
Wrenches
Exhaust hose set

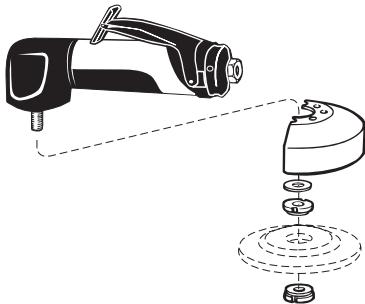
LSV38

Wheel guard
Flanges
Support handle (LSV38 ST-models)
Wrenches
Grease refill

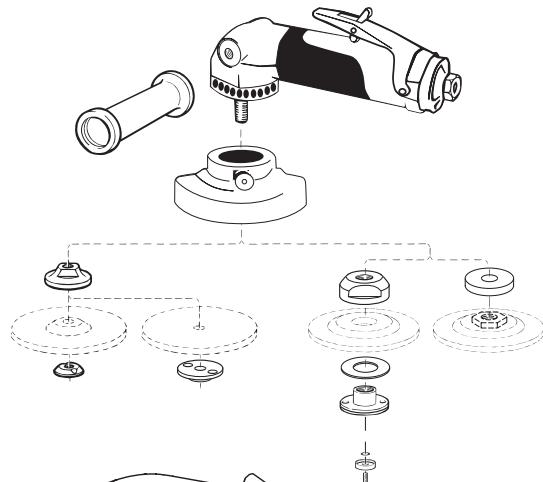
LSV48

Wheel guard
Flanges
Support handle
Wrenches
Grease refill

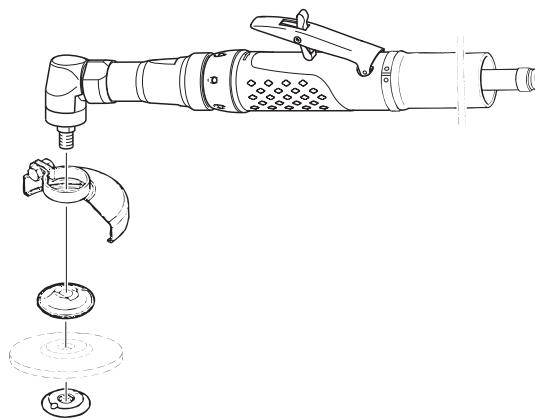
LSV19



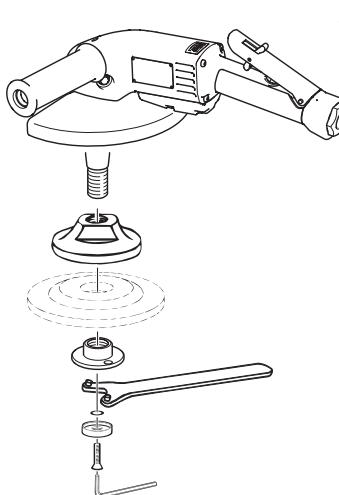
LSV38



LSV28



LSV48



Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	Yes	8202 0850 29
MIDI Optimizer F/R EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	No	8202 0850 30
MIDI Optimizer F/RD EQ15US-T16	85 cfm	Turbo 16	ErgoQIC 15US	Yes	8202 0850 31
MAXI F/R EQ15US-T20	140 cfm	Turbo 16	ErgoQIC 15US	No	8202 0850 32
MAXI F/RD EQ15US-T20	140 cfm	Turbo 16	ErgoQIC 15US	Yes	8202 0850 33

NOTE: Tool nipple is not included in the Productivity kit and needs to be order separately together with the tool.



Service Kits

LSV19	4081 0488 90
LSV28	4081 0317 90
LSV38	4081 0309 90
LSV48	4081 0312 90

For Sanding and Polishing

Angle Sanders

- LSV12 series** – For finer work where less power and more control are needed. Available with collet or threaded spindle.

Features: Speed governor, high quality gears and lever with feathering characteristics.

- LSV19 series** – For work in cramped spaces. Available with collet or threaded spindle versions.

Features: Speed governor, sealed angle head and lubrication-free air motor.

- LSV28 series** – The 28 series comes in various speeds.

Features: Speed governor, sealed angle head, LF models have lubrication-free air motor.

- LSV38 series** – Powerful one hand sander for medium rough to rough sanding.

Features: Speed governor, sealed angle head, lubrication-free air motor and spindle lock.

- LSV48 series** – Our most powerful angle vane sander with 2.5 hp for ultimate productivity.

Features: Speed governor, sealed angle head, lubrication-free air motor, autobalancer and spindle lock.



Model	Max free speed r/min	Rec. pad size dia in	Max output hp	Weight lb	Length in	Height in	Air consumption		Spindle thread and length in	Rec. hose size in	Air inlet thread NPT	Ordering No.
							at max output cfm	at free speed cfm				
With collet												
LSV12 S200-2	20000	2	0.39	1.2	6.5	3.0	17.6	6.4	– ^a	5/16	1/4	8423 0701 06
LSV12 S120-2	12000	3	0.33	1.2	6.5	3.0	17.6	6.4	– ^a	5/16	1/4	8423 0701 05
LSV19 S200-2	20000	2	0.6	1.3	7.3	3.0	23	15	– ^a	3/8	1/4	8423 0703 75
LSV19 S120-2	12000	3	0.6	1.3	7.3	3.0	23	15	– ^a	3/8	1/4	8423 0703 76
LSV19 S080-2	8000	3	0.5	1.3	7.3	3.0	23	13	– ^a	3/8	1/4	8423 0703 77
With threaded spindle												
LSV12 S200	20000	2	0.39	1.2	6.5	2.3	17.6	6.4	UNC 1/4x5/16	5/16	1/4	8423 0701 08
LSV12 S120	12000	3	0.33	1.2	6.5	2.3	17.6	6.4	UNC 1/4x5/16	5/16	1/4	8423 0701 07
LSV19 S120	12000	3	0.6	1.3	7.3	2.3	23	15	UNC 1/4x8	3/8	1/4	8423 0703 78
Dry sanding												
LSV28 S085	8500	7	1.0	3.2	10.4	3.4	46	29	UNC 5/8x32	3/8	3/8	8423 0706 12
LSV28 S060 LF	6000	7	1.0	3.2	10.4	3.4	34	16	UNC 5/8x32	3/8	3/8	8423 0706 11
LSV28 S040 LF	4000	7	0.8	3.2	10.4	3.4	32	9	UNC 5/8x32	3/8	3/8	8423 0706 13
LSV28 ST034	3400	7	1.0	3.7	12.0	3.4	38	16	UNC 5/8x32	3/8	3/8	8423 0706 15
LSV28 S021 LF	2100	7	0.9	4.1	11.2	3.4	34	12	UNC 5/8x32	3/8	3/8	8423 0706 14
LSV38 S085	8500	7	1.7	3.5	8.5	3.8	58	31	UNC 5/8x23	1/2	3/8	8423 0700 24
LSV38 S066	6600	7	1.6	3.5	8.5	3.8	50	27	UNC 5/8x23	1/2	3/8	8423 0700 25
LSV38 S066 D	6600	7	1.6	3.5	8.5	3.8	50	27	UNC 5/8x28	1/2	3/8	8423 0700 26
LSV48 SA066	6600	7	2.5	5.1	11.8	3.5	76	36	UNC 5/8x21	5/8	1/2	8423 0707 50
LSV48 SA085	8500	7	2.5	5.1	11.8	3.5	76	36	UNC 5/8x21	5/8	1/2	8423 0707 51

Backing pads sold separately.

^a Ø 1/4" collet.

- D = Spot suction kit included.

Accessories

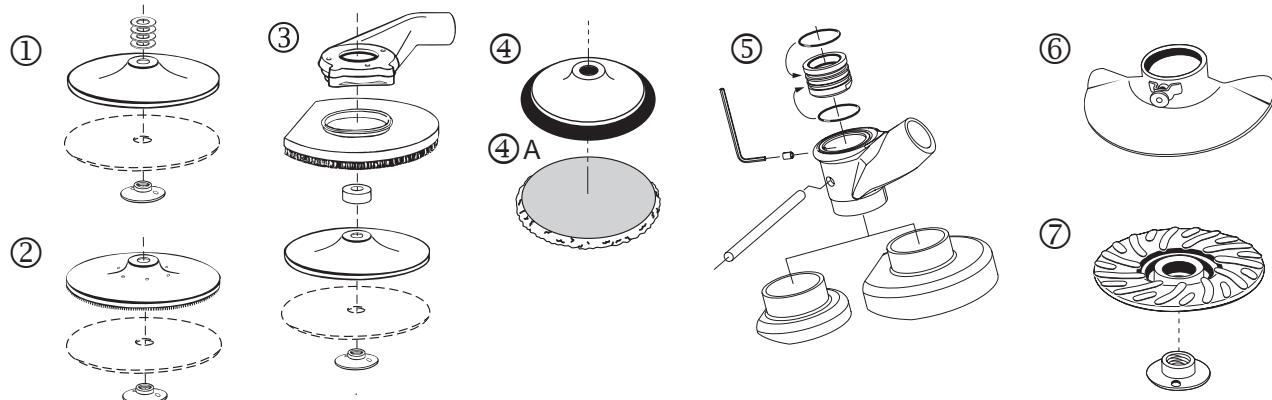
For Sanding and Polishing

Accessories Included

Air hose nipple
Clamp
Exhaust hose (LSV19/28/38)

Support handle (LSV28/38/48)
Wrenches (LSV19/28)
Spot suction equipment (D-version)

Optional Accessories



	LSV12	LSV19	LSV28	LSV38	LSV48	See illustration
Backing pad set, standard type						
Ø 5 in - 5/8" - soft	-	-	4170 0768 80	4170 0768 80	4170 0768 80	1
Ø 7 in - 5/8" - soft	-	-	4170 0756 80	4170 0756 80	4170 0756 80	1
Ø 7 in - 5/8" - stiff	-	-	4170 0757 80	4170 0757 80	4170 0757 80	1
Backing pad set with cooling ribs						
Ø 5 in - 5/8" and M14	-	-	4150 1962 80	4150 1962 80	4150 1962 80	2
Ø 7 in - 5/8" and M14	-	-	4150 1962 81	4150 1962 81	4150 1962 81	2
Backing pad set, heavy duty type						
Ø 120 mm - 5/8"	-	-	-	4170 1204 90	4170 1204 90	7
Ø 162 mm - 5/8"	-	-	-	4170 1192 90	4170 1192 90	7
Backing pad set for polishing - velcro						
Ø 150 mm - 5/8" (max 2500 rpm)	-	-	4112 6092 15	-	-	4
Ø 150 mm - Lambs wool bonnet	-	-	4112 6093 15	-	-	4A
Spot suction kit for fiber disc						
Ø 5 in	-	-	3780 4007 80 ^a	-	-	
Ø 7 in	-	-	3780 4007 90 ^b	-	3780 4093 40	
Ø 2 - 3 in	3780 4092 64 ^d	3780 4092 62 ^d	-	-	-	5
		3780 4092 65 ^e				
Hand shield for 5-7 in	-	-	-	4150 1936 80	-	6
Hand shield for 5-7 in, large shield	-	-	-	4150 1941 80	-	6

^a = Suits LSV28 S060

^b = Suits LSV28 S040/060

^c = Suits LSV28 S021

^d = For model with collet

^e = For model with threaded spindle

Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	Yes	8202 0850 29
MIDI Optimizer F/R EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	No	8202 0850 30
MIDI Optimizer F/RD EQ15US-T16	85 cfm	Turbo 16	ErgoQIC 15US	Yes	8202 0850 31
MAXI F/R EQ15US-T20	140 cfm	Turbo 16	ErgoQIC 15US	No	8202 0850 32
MAXI F/RD EQ15US-T20	140 cfm	Turbo 16	ErgoQIC 15US	Yes	8202 0850 33

NOTE: Tool nipple is not included in the Productivity kit and needs to be ordered separately together with the tool.



Service Kits

LSV19	4081 0488 90
LSV28	4081 0317 90
LSV38	4081 0309 90
LSV48	4081 0312 90

Orbital and Random Orbital Sanders

Atlas Copco series of random orbital sanders combines all the important customer and application requirements in a very competitive range of products. Applications like sanding before painting and surface coating, polishing with wax and surface conditioner are all quickly done with the small and easily operated LST20-range of sanders.

All models are lubrication free and have silicone free components. They have two grip options in the same handle. In addition, one smaller grip model is included. The full range includes standard models and extraction models. There are also two orbit diameters to choose from in the model range.

- **Lubrication-free** – Avoids contamination of workpiece. No oil in the exhaust air.



Model	Max free speed r/min	Pad size mm	Orbit dia mm	Max output hp	Weight lb	Height mm	Length mm	Air consumption at free speed cfm	Rec. hose size mm	Air inlet thread NPT	Ordering No.
Random orbital – Standard											
LST30 H090-11	9000	110	8	0.4	2.6	120	255	16	8	1/4	8423 0361 64
LST30 H090-15	9000	150	8	0.4	2.6	120	275	16	8	1/4	8423 0361 72
LST30 S090-15	9000	150	8	0.4	2.4	120	175	16	8	1/4	8423 0361 98
Self suction ^a											
LST31 H090-15	9000	150	8	0.4	3.0	120	300	16	8	1/4	8423 0363 19
Central suction ^b											
LST32 H090-15	9000	150	8	0.4	3.0	120	300	16	8	1/4	8423 0362 55
LST32 S090-15	9000	150	8	0.4	2.9	120	200	16	8	1/4	8423 0362 71
Orbital – Standard											
LSO30 S070-3	7000	93x170	5	0.4	3.5	125	185	16	8	1/4	8423 0360 16
LSO30 H070-3	7000	93x170	5	0.4	3.7	125	285	16	8	1/4	8423 0360 24
Self suction ^a											
LSO31 S070-3	7000	93x170	5	0.4	3.5	125	210	16	8	1/4	8423 0362 79
LSO31 H070-3	7000	93x170	5	0.4	3.7	125	310	16	8	1/4	8423 0363 03
Central suction ^c											
LSO32 H070-3	7000	93x170	5	0.4	4.0	125	310	16	8	1/4	8423 0361 07
Standard model											
LST20 R350	12000	90	5	0.27	1.85	95	127	17	8	1/4	8423 0361 65
LST20 R550	12000	125	5	0.27	1.85	83	127	17	8	1/4	8423 0361 69
LST20 R650	12000	150	5	0.27	1.85	83	127	17	8	1/4	8423 0361 73
LST20 R525	12000	125	2.4	0.27	1.85	83	127	17	8	1/4	8423 0361 81
LST20 R625	12000	150	2.4	0.27	1.85	83	127	17	8	1/4	8423 0361 84
Extraction model – self suction											
LST21 R350	12000	90	5	0.27	1.85	95	133 ^d	17	8	1/4	8423 0361 66
LST21 R550	12000	125	5	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 70
LST21 R650	12000	150	5	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 74
LST21 R525	12000	125	2.4	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 82
LST21 R625	12000	150	2.4	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 85
Extraction model – central suction ^c											
LST22 R350	12000	90	5	0.27	1.85	95	133 ^d	17	8	1/4	8423 0361 67
LST22 R550	12000	125	5	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 71
LST22 R650	12000	150	5	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 75
LST22 R650-9	12000	150	5	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 40
LST22 R325	12000	90	2.4	0.27	1.85	95	133 ^d	17	8	1/4	8423 0361 78
LST22 R525	12000	125	2.4	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 83
LST22 R625	12000	150	2.4	0.27	1.85	83	133 ^d	17	8	1/4	8423 0361 86

^a Includes dust collecting bag.

H = With handle.

^b Required air flow 150 m³/h or 88 cfm.

S = Without handle.

^c Required air flow 60 m³/h or 35 cfm.

All data at 6.3 bar.

^d 186 mm (7.3") suction hose connector included.

-9 Velcro pad, 9 holes.

Accessories

Orbital and Random Orbital Sanders

Accessories Included

LSO

Base pad
Perforating plate
Hose nipple for 8 mm hose
LSO31 including dust collection kit

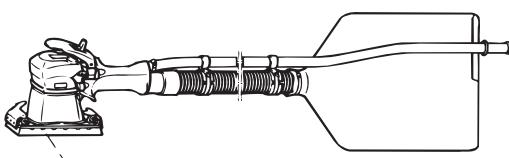
LST20/21/22

Velcro pad
U-wrench for pad change
Air hose nipple
Dust hose and bag (LST21)
Large and small grip cover

LST30/31/32

Velcro pad
Bar for changing pad
Hose nipple for 8 mm hose
LST31 incl dust collection kit

LSO



Standard

Self suction

Central suction

Optional Accessories

LSO

For LSO	Ordering No.
Base pad, vinyl for -3F-type	4112 0787 01
Suspension yoke	4112 0975 00
Hose set	
Dust hose, for LSO32, Ø 32 mm, L=1.8 m including air hose	3780 2724 34

LST20/21/22, PAD FOR SELF STICK PAPER

	Ordering No.		
	Dia 89 mm	Dia 125 mm	Dia 150 mm
For LST20	4112 1231 00	4112 1233 00	4112 1235 00
For LST21/22		4112 1232 00	4112 1234 00

LST20/21/22, PAD FOR VELCRO BACK PAPER

	Ordering No.		
	Dia 89 mm	Dia 125 mm	Dia 150 mm
For LST 20	4112 1218 00	4112 1216 00	4112 1214 00
For LST 21/22	-	4112 1217 00	4112 1215 00

LST30/31/32

	Ordering No.		
Pad velcro, Ø 150 mm	4112 0795 01 ^a		
Pad velcro, Ø 110 mm	4112 0792 02 ^b		
Pad velcro, Ø 150 mm, 6 holes	4112 0796 00 ^c		
Suspension yoke	4112 0975 00		
Hose set			
Dust hose Ø 32 mm, L=1.8 m including air hose	3780 2724 34 ^d		

^aLST30-15 ^bLST30/32-11 ^cLST31/32-15 ^dLST32

LST30/31/32, PAD FOR SELF STICK PAPER

	Ordering No.		
	Dia 110 mm	Dia 125 mm	Dia 150 mm
For LST 30	41120 7992 00	4112 0872 00	4112 0793 00
For LST 31/32	41120 7992 00	4112 0873 00	4112 0874 00

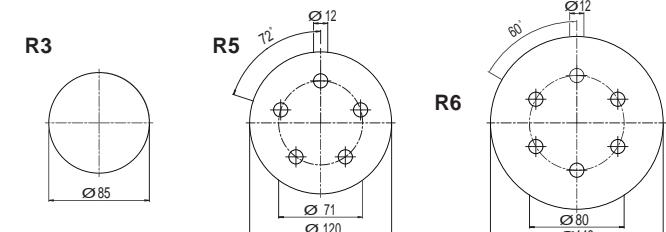


Service Kits

LST20/21/22

4112 1300 90

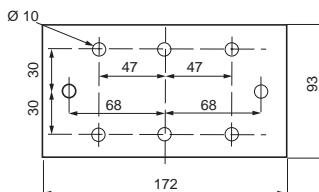
Dimension in mm



HOLE PATTERN DIMENSIONS FOR SANDING PAPER, DUST EXTRACTION MODELS

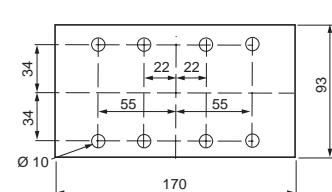
LS031/32/33 S/H070-3

R-type pad



LSO31/32-3

F-type pad



LST20/21/22, 30/31/32

The fact that dust can represent a hazard in the working environment is well documented.

Dust particles from certain materials are dangerous to health. Even inert dust particles that cause no permanent damage can still be retained in the body and make breathing more difficult. The size of dust particles of most concern are those below 0.005 mm.

Efficient dust control can make a significant contribution to efficiency and productivity in industrial operations. It is already a requirement in countries with strict health and safety regulations.

Efficient dust control will:

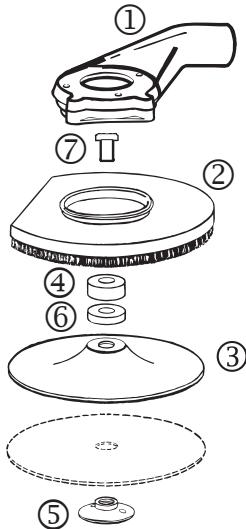
- Reduce the health risk for operators exposed to potentially dangerous particles.
- Give a more favourable working environment which will encourage greater efficiency and effort from those who operate industrial tools.

The most efficient method of dust collection is dust extraction at the point of dust creation, i.e. on the tool itself. This not only ensures very efficient extraction but also allows a relatively low power vacuum source to be used.

Atlas Copco spot suction kits provide an extraction hood fixed to the tool. It is fitted with a plastic or brush edge to trap heavier particles as well as the small ones. The following pages show a number of applications and the necessary dust extraction kits with their contents.



LSV28/38/48/GTG40

SPOT SUCTION KIT FOR SANDING WITH FIBER DISC. SANDERS WITH UNC 5/8" SPINDLE.

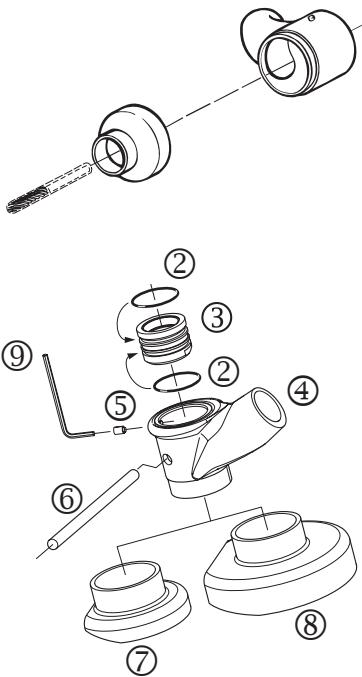
Suction requirement: 250 m ³ /h		Ordering No.
LSV28 S040/S060/S085 5 in	Includes	KIT 1 Chamber 2 Suction cap 125 mm with brush 3 Backing pad 125 mm 4 Distance washer 12 mm 5 Nut 5/8"
LSV28 ST12-13 5 in	Includes	KIT 1 Chamber 2 Suction cap 125 mm with brush 3 Backing pad 125 mm 6 Distance washer 9 mm 7 Adapter UNF 3/8" UNC 5/8" 5 Nut 5/8"
LSV28 S040/S060 7 in	Includes	KIT 1 Chamber 2 Suction cap 180 mm with brush 3 Backing pad 180 mm 6 Distance washer 9 mm 5 Nut 5/8"
LSV28 S021 7 in	Includes	KIT 1 Chamber 2 Suction cap 180 mm with brush 3 Backing pad 6 Distance washer 12 mm 5 Nut 5/8"
LSV38 S066 7 in	Includes	KIT^a 1 Chamber 2 Suction cap 180 mm with brush 3 Backing pad 180 mm 5 Nut 5/8" 6 Distance washer 9 mm
LSV38 S085 5 in	Includes	KIT^a 1 Chamber 2 Suction cap 125 mm with brush 3 Backing pad 125 mm 5 Nut 5/8" 6 Distance washer 9 mm
LSV48 SA066 7 in	Includes	KIT 1 Chamber 2 Suction cap 180 mm with brush 3 Backing pad 180 mm 4 Distance washer 9 mm 5 Flange nut 5/8"
G TG40 S060 7 in	Includes	KIT 1 Chamber 2 Suction cap 180 mm with brush 3 Backing pad 180 mm 4 Distance washer 6 mm 5 Flange nut 5/8"

^a Use with adapter, Ordering No. 4150 1928 90, to be ordered separately.**VACUUM HOSE, 5.9 FT**

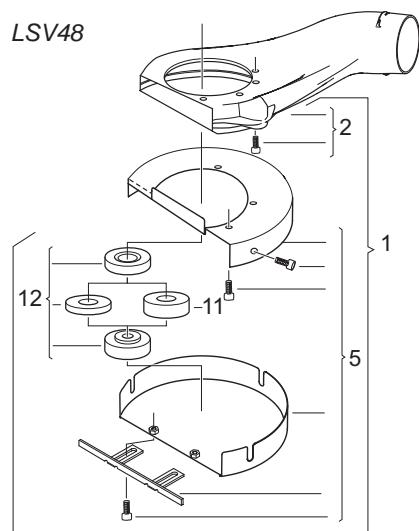
Hose	Ordering No.
Ø 1" (25 mm) for 74 cfm (125 m ³ /h) suction requirement	3780 2724 20
Ø 1 9/32" (32 mm) for 118 cfm (200 m ³ /h) suction requirement	3780 2724 31
Ø 1 1/2" (38 mm) for 147 cfm (250 m ³ /h) suction requirement	3780 2724 40

BRUSH FOR SUCTION CAP

	Ordering No.
Separate brush 3/4" high, for cap Ø 5"	3780 2678 00
Separate brush 3/4" high, for cap Ø 7"	3780 2677 50
Separate brush 1 3/16" high, for cap Ø 7"	3780 2677 30

SPOT SUCTION KIT FOR DIE GRINDERSSuction requirement: 125 m³/h (LSF19), 200 m³/h (LSF28)

		Ordering No.
LSV12 S-1	KIT for sanding pad dia 2-3"	3780 4092 64
LSF19 S	KIT for burr	3780 3015 22
	Optional Diamond burr 6 mm	3780 5013 70
LSF19 S	KIT for drum	3780 4011 61
	Includes 3 Shaft dia 6 mm	3780 5090 30
	4 Locking screw	3780 5090 60
LSV19 S-1	Optional 5 Diamond drum 27 mm	3780 5033 00
	KIT for sanding pad dia 50 and 75 mm	3780 4092 62
LSF28	Includes 6 O-ring 23x1.6	0663 2103 85
	7 Clamp ring	4112 1065 04
	9 Lock screw M4x6 A1	0192 1168 00
	10 Lock pin	4112 0779 00
LSF28	KIT for burr	3780 4007 42
	Optional Diamond burr 6 mm	3780 5013 70

**DUST EXTRACTION FOR DIAMOND CUTTING BLADE (GRP-CUTTING)**

		Ordering No.
LSV48 SA085/SA066 7 in	KIT	3780 4093 42
	Includes 12 Flange set	3780 2799 50
	Optional 7 in diamond cutting disc	3780 5074 62

ROUTER

Pattern fixture cutting of composite in the aerospace industry as well as trimming of composite materials is preferably done with a router. The LSK37 is the only router with dust extraction and support bearing integrated into one unit. This gives the LSK37 excellent performance and ergonomics in most composite applications.

- **Productive** – The speed governor maintains the rotational speed at applied feed-force which enables fast and effective cutting and prevents the bit from clogging.
- **Ergonomic** – An integrated dust extraction hood for deportation of hazardous dust, thermally insulated throttle handle, sound dampening exhaust valve and piped-away exhaust air provides the operator with the best working environment.



LSK38



LSK37

Model	Free speed r/min	Collet size	Weight lb	Power hp	Air consumption cfm	Recommended hose size		Hose fitting thread NPT	Ordering No.
						mm	in		
LSK37 S250-DS1	25000	6 mm	6.1	0.95	32	13	1/2	3/8	8423 1234 41
LSK37 S250-DS2	25000	1/4	6.1	0.95	32	13	1/2	3/8	8423 1234 42
LSK38 S250 Do	25000	1/4	2.2	1.8	58	13	1/2	3/8	8423 0700 00
LSK38 S180 Do	18000	1/4	2.2	1.8	58	13	1/2	3/8	8423 0700 01

Suction requirement: 200 m³/h. NOTE: LSK38 delivered without rotor housing

Cutting operations in glass and carbon fiber as well as metal sheet, wood and steel can successfully be performed with a circular cutter.

- **Effective** – LCS10 and LCS38 cut to a depth of 10 and 26 mm respectively.
- LCS38 is suitable for diamond coated blades only.
- **Dust extraction** – Cutting of composite materials generates dust containing particles hazardous to health. The dust must be deported in order to prevent the operator from inhaling it.

LCS38 is equipped with a cutter blade guard with integrated dust extraction hood for external vacuum source.



Model	Free speed r/min	Max output hp	Max cutting depth in	Max cutter blade dia in	Weight lb	Air consumption at free speed cfm	Rec. hose size		Air inlet thread	Ordering No.
							mm	in		
LCS10	3000	0.4	3/8	2	3.1	16	6.3	1/4	BSP 1/4	8424 1161 38
LCS38 S150D ^a	15000	1.7	1	4	3.7	58	13.0	1/2	BSP 3/8	8424 1125 06

^a Suction requirement: 200 m³/h.

Accessories Included

Flanges for diamond blade
Hose nipple for 13 mm air hose

Optional Accessories

CUTTER BLADES

Model	Application	Max thickness of material in	Ordering No.			
			No. of teeth	Dia in	Hole in	
LCS10	Steel sheet	3/64	92	2	3/8	4190 0394 00
	Steel sheet (std)	3/64	62	2	3/8	4190 0395 00
	Aluminum	3/32	34	2	3/8	4190 0396 00
	Wood	3/8	34	2	3/8	4190 0396 00
LCS38	Diamond disc for fibre glass	3/4	44/60 (Grain)	3	1/2	3780 5073 00
	Diamond disc for fibre glass	1	44/60 (Grain)	4	1/2	3780 5074 00

SUCTION HOSE SET

Model	Ordering No.
Suction hose set, (L= 5.9 in, Dia 1 1/4") for LCS38	3780 2724 31

Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	Yes	8202 0850 29
MIDI Optimizer F/R EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	No	8202 0850 30

NOTE: Tool nipple is not included in the Productivity kit and needs to be order separately together with the tool.

PERCUSSIVE TOOLS



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These tools make light of the toughest jobs

Atlas Copco percussive tools are ideal for all material removal tasks in foundries, engineering workshops and shipyards. Built-in-ergonomic features such as vibration damping reduce the human load, delay fatigue and help protect the operator against the ill effects of long-term exposure to vibration and noise.

Our tools are made out of lightweight alloys to keep weight down while maintaining performance. This makes our tools extremely effective in the hands of your skilled operators.

WELD FLUX REMOVAL

Our tools are used when fettling welds from flux and spatter and in general scaling operations.

The conventional scaler RRC 13 and RRC 13B with a blowing function are the preferred models for these types of application. These tools have the right power and a sturdy reliable design. They also have a low vibration level for conventional models.

RUST AND PAINT REMOVAL

Rust and paint removal is a common application found in various types of industries such as shipbuilding, large transport sector and on offshore rigs.

Our RVM07B has low noise and is vibration damped. The standard chisel delivered with the tool is carbide tipped for a long service life. The tool is also equipped with a clean blowing device.

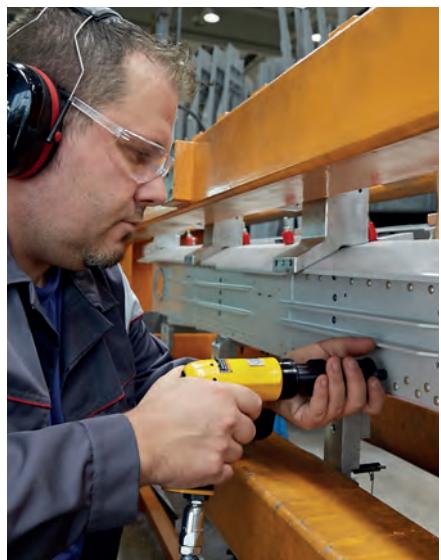
For lighter jobs the needle scaler RRC 13N is the ideal tool. Needle sets of different shapes and material are available to suit most operations.

CHIPPING AND SCALING

Percussive tools for chipping and scaling are widely used in all kinds of metalworking, construction and other industrial areas. Applications could be slag chipping, concrete trimming and sheet-metal cutting.

We offer high power-to-weight tools for these kind of applications. RRF 21/31 and RRD 37/57 models are vibration damped for operator comfort.

Our RRC22-RRC75 models are robust and highly dependable conventional chipping hammers suitable for heavy roughening.



Product Safety

IMPORTANT: All local safety regulations with respect to installation, operation and overhaul must always be followed.

AVOID ACCIDENTS

- ① The chisel, die or punch may fall out or may be shot out of the tool accidentally causing serious injury.



- To prevent injury from a flying chisel:
- Always use a retainer.
 - Inspect the retainer for wear or damage regularly.



- Be aware that the chisel may break during operation.
- Never trigger a hammer unless held against a work piece.
- Remove chisel, die or punch from tool when work is over.
- When finishing a job, disconnect the tool from its air supply.
- Before changing accessories, chisel or die – disconnect the tool from the air supply.

- ② Chips and sparks should be prevented from striking an eye or another worker.



To prevent vision loss:

- Always wear eye protection.
- Isolate work of this kind by using barriers between work stations.
- Do not use the tool for other purposes than it is intended for.

- ③ Gloves protect fingers from pinching, scuffing and scraping.

- Protective shoes may prevent your feet from being injured.

- ④ Explosive atmosphere must not be ignited.



To prevent injury and property loss from fires:

- Use other technique.
- Use accessories of non sparking material (e.g. needle attachment of Beryllium copper for a needle scaler).

- ⑤ Electric shock may be fatal.

- Avoid chiseling into electric wiring hidden inside walls etc.

LONG TERM RISKS

- ⑥ Always use ear protection.



To prevent gradual loss of hearing due to exposure to high noise level – wear ear protection.

- ⑦ Vibration may be harmful to hands and arms.



- Use vibration damped tools if available.
- Reduce the total time of exposure to vibrations, particularly if the operator has to guide the chisel by hand.

- ⑧ Dust generated during operation may be harmful.

- Use spot suction or a breathing apparatus.

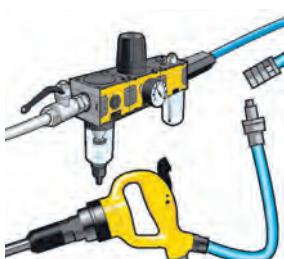
PROPER USE AND MAINTENANCE

- ⑨ Do not perform idle blows with a hammer.



- They will cause high internal stresses and shorten the life of the tool.
- Note the risk of shooting out the chisel, die or punch if the retainer is not in order or damaged.

- ⑩ Quick coupling.



- If a coupling is used on a percussive tool, it should be separated from the tool by a whip hose (length 0.5 m).

- ⑪ Follow the tool manual and the lubrication instructions.

- ⑫ Perform overhauls at regular intervals.

Vibration-damped and Silenced

Chipping Hammers

- RRF21/31** have a sturdy D-handle in light metal alloy for a high power-to-weight ratio and steady grip. The compact, vibration-controlled design offers good accessibility and ease of use.
- RRD37/57** are light, quiet and have a long service life. They have light alloy tool casings, very low vibration and noise levels, vibration damping in both hand grips, and piped away exhaust.



Model	Blows Hz	Piston dia		Stroke		Energy per blow		Weight kg	Bushing mm	Air consumption		Hose size mm	Air inlet in	Ordering No.
		mm	in	mm	in	J	ft lb			in	l/s	cfm		
RRF21-01	57	18	0.7	33	1.3	2.0	1.5	1.75	3.3	12.7 ^c	0.50	6.5	13.8	10.0 3/8 3/8 8425 1104 05
RRF31-01	38	22	0.9	43	1.7	4.4	3.2	2.5	5.3	12.7 ^c	0.50	7.5	15.9	10.0 3/8 3/8 8425 1104 15
RRF31-02	38	22	0.9	43	1.7	4.4	3.2	2.5	5.3	12.7 ^c	0.50	7.5	15.9	10.0 3/8 3/8 8425 1104 16
RRD37-11	35	27/19 ^a	1.1/0.8	70	2.8	6.8	5.0	3.0	6.6	17.3 ^d	0.68	7.2	15.3	12.5 1/2 special ^e 8425 1101 22
RRD57-11	31	28/18 ^b	1.1/0.8	92	3.6	9.3	6.9	3.4	7.5	17.3 ^d	0.68	9.5	20.1	12.5 1/2 special ^e 8425 1103 20
RRD57-12	31	28/18 ^b	1.1/0.8	92	3.6	9.3	6.9	3.4	7.5	17.3 ^d	0.68	9.5	20.1	12.5 1/2 special ^e 8425 1103 38

^a Effective piston dia 19 mm, 0.75 in.

^d Spline.

-01 and -11: Guided models,

^b Effective piston dia 21.5 mm, 0.85 in.

^e Integrated hose barb.

-02 and -12: Non guided models.

^c ISO.

Chipping Hammers

- Dependable** – Their robust construction makes them highly dependable.
- Efficient** – RRC65 and RRC75 have a blow rate which makes them particularly suitable for roughening.
- Chisel retainer** – for safer jobs – RRC22-RRC75 are delivered with a chisel retainer as standard. For the same reason choose a tool that can be guided via the machine itself and not by holding the chisel.

Atlas Copco chipping hammers of series RRC are delivered with a standard, guided ISO hexagon nozzle (-01) or a round, non guided shank nozzle (-02).



Model	Blows Hz	Piston dia		Stroke		Energy per blow		Weight kg	Bushing mm	Air consumption		Hose size mm	Air inlet in	Ordering No.
		mm	in	mm	in	J	ft lb			in	l/s	cfm		
RRC22F-01	62	15	0.6	52	2.0	2.7	2.0	2.2	4.9	12.7 ^a	0.50	6.2	13.1	10 3/8 3/8 8425 0202 22
RRC22F-02	62	15	0.6	52	2.0	2.7	2.0	2.2	4.9	12.7 ^a	0.50	6.2	13.1	10 3/8 3/8 8425 0202 30
RRC34B-01	45	24	0.9	67	2.6	5.5	4.1	4.5	9.9	17.3 ^a	0.68	8.0	14.0	12.5 1/2 special ^b 8425 0212 53
RRC65B-01	40	29	1.1	50	2.0	10.0	7.3	5.9	13.0	17.3 ^a	0.68	10.8	22.9	12.5 1/2 special ^b 8425 0225 33
RRC75B-01	30	29	1.1	75	3.0	16.0	11.8	6.5	14.3	17.3 ^a	0.68	14.0	29.6	12.5 1/2 special ^b 8425 0225 58

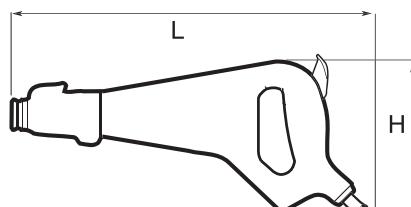
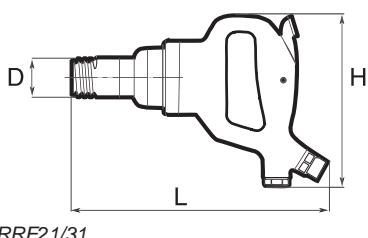
^a ISO. ^b Integrated hose barb.

Accessories

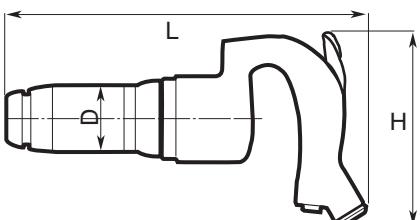
Chipping Hammers

Dimensions (in)

Model	L	H	D
RRF21	9.7	6.3	1.3
RRF31	10.4	6.7	1.4
RRD37	16.5	6.9	—
RRD57	18.0	7.5	—



Model	L	H	D
RRC22	10.2	6.1	1.3
RRC34	13.0	6.3	1.7
RRC65	13.2	6.7	2.1
RRC75	15.4	6.7	2.1



RRC

Accessories Included

RRF MODELS

Chisel retainer and a hose fitting

RRD MODELS

Flat chisel
Silencer complete
Hand grip
Key

RRC MODELS

Chisel retainer and hose fitting

Optional Accessories

Model	Ordering No.
Power regulator	
RRF21 and -31	3512 0273 80
Retainer, open type	
RRF21	3512 0290 90
RRF31	3512 0305 90
Protective handle kit	
RRF21	3512 0349 81
RRF31	3512 0349 82

CHISELS

For a wide choice of chisels, see pages with "Chisels" at the end of this chapter.

Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	Yes	8202 0850 29
MIDI Optimizer F/R EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	No	8202 0850 30

NOTE: Tool nipple is not included in the Productivity kit and needs to be ordered separately together with the tool.

RVM07B is the obvious choice for task such as weld dressing light concrete trimming and for removal of paint and rust.

- **Vibration-damped with low-noise level.**
- **Two-job capacity** – RVM07B features a clean-blowing device which is very useful in order to keep the work piece clean from slagg and other particles from the process.

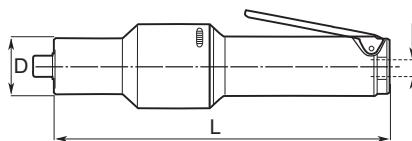


RVM07B

Model	Blows Hz	Weight incl. standard chisel		Air consumption		Hose size		Air inlet NPT	Ordering No.
		kg	lb	l/s	cfm	mm	in		
RVM07B	100	1.7	3.8	3.8	8.1	6.3	1/4	1/4	8425 0105 25

Dimensions

Model	L in	D in
RVM07B	10.7	1.5



Choose between two different models for heavy slag chipping and for instant trimming of concrete.

- **High removal rate** – RRC13 is very effective and has a high removal rate in relation to its low weight.
- **Well proven** percussive mechanism and retainer.
- **Two-job capacity** – RRC13B with extra clean-blowing device.
- **Improved back head** – Throttle valve and lever with really Heavy Duty performance for long service life. Clean blowing system with twice the previous blow



RRC13B

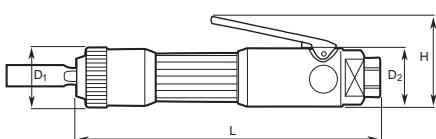
capacity. Big blow button for easy operation and sturdy valve stem to resist rough handling.

Model	Blows Hz	Piston dia		Stroke		Energy per blow		Weight		Air consumption		Hose size		Air inlet BSP	Ordering No.
		mm	in	mm	in	J	ft lb	kg	lb	l/s	cfm	mm	in		
RRC13	73	15	0.6	35	1.4	1.4	1.0	1.4	3.1	4.0	8.0	10	3/8	3/8	8425 0101 30
RRC13B	73	15	0.6	35	1.4	1.4	1.0	1.6	3.5	4.0	8.0	10	3/8	3/8	8425 0101 33

B = Blow Gun

Dimensions

Model	L in	H in	D ₁ in	D ₂ in
RRC13	8.7	2.6	1.8	1.6
RRC13B	9.1	2.6	1.8	1.6



Needle Scaler

The effective needle scaler, type RRC13N, is based on the same fundamental design as the straight chipping hammers of type RRC13 described above.

- **Sturdy design** – Easy to maintain.
- **Versatile** – The needle scaler is used to remove welding slag, rust and paint from steel structures.

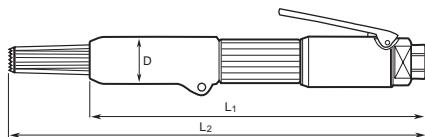


RRC13N

Model	Blows Hz	Piston dia		Stroke		Energy per blow		Weight		Air consumption		Hose size		Air inlet NPT		Ordering No.
		mm	in	mm	in	J	ft lb	kg	lb	l/s	cfm	mm	in	10	3/8	3/8
RRC13N	73	15	0.6	35	1.4	1.4	1.0	1.9	4.2	4.0	8.0	10	3/8	3/8	3/8	8425 0101 36

Dimensions

Model	L ₁ in	L ₂ in	D in
RRC13N	11.1	13.9	1.5



Accessories Included

FOR ALL RRC13

Hose fitting
Scaling chisel

FOR RMV07B

Hose fitting
Flat carbide tipped chisel 10x120 mm

Optional Accessories

FOR RRC13, 13B

RRC13 / RRC13B	Ordering No.
Hand guard	3510 0246 90
Silencer	3510 0366 80
Chisels for RRC13 and -13B: Square shank 13.0 mm	

FOR RRC13N

NEEDLE-SET OF 19 NEEDLES, LENGTH 100 MM

Material	Ordering No.
Steel, standard	3510 0221 90
Steel flat ends	3510 0227 90
Stainless steel flat ends	3510 0228 90
Beryllium copper flat ends (spark resistant)	3510 0229 90

FOR RMV07B

Carbide tipped chisels and through hardened chisels with other length and width, see separate page for chisels.

Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/RD EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	Yes	8202 0850 29
MIDI Optimizer F/R EQ10US-T13	65 cfm	Turbo 13	ErgoQIC 10US	No	8202 0850 30

NOTE: Tool nipple is not included in the Productivity kit and needs to be ordered separately together with the tool.



Chisels for Chipping hammers. All chisels are normally through hardened. Otherwise, see tables.

Figure	Shank type	Tools	Table
	Square shank 13.0 mm	RRC13, RRC13B	1
	Extended square shank ISO, 12.7 mm		1
	Hexagon and round shank ISO, round collar 12.7 mm	RRC22F-01, RRC22F-02 RRF21, RRF31	2
	Hexagon shank ISO round collar 17.3 mm	RRC34B-01, RRC65B-01, RRC75B-01	3
	Round shank ISO, with splines 17.3 mm	RRD37, RRD57	3
	Hexagon shank ISO without round collar 17.3 mm	RRC34-01, RRC65-01, RRC75-01	4
	Round shank ISO, without collar 17.3 mm	RRC34-02, RRC65-02, RRC75-02	4
	Special shank	RVM07B	5

Chisels

1 A. Chisels with square shank 1/2"

B. Chisels with square shank ISO 1/2"

C. Square shank 1/2" in round end. For RRC13B



A

B

C

Chisel type	Designation	Width		Length		Square 1/2" Ordering No.	ISO Extended square 1/2" Ordering No.	Ordering No.
		mm	in	mm	in			
	Chisel blank	15	0.59	155	6.1	3085 0020 00		
		15	0.59	200	7.9	3085 0020 01		
		15	0.59	300	11.8	3085 0020 02		
	Flat chisel	15	0.59	165	6.1	3085 0227 00	3085 0230 01	
		15	0.59	200	7.9	3085 0227 01		
		15	0.59	110	4.3		3512 0114 00	
		15	0.59	185	7.3		3512 0070 00	
	Wide flat chisel	35	1.38	165	6.5	3085 0032 00	3085 0232 01	
		35	1.38	200	7.9	3085 0032 01		
		35	1.38	300	11.8	3085 0032 02		
		55	2.17	165	6.5	3085 0332 00		
		35	1.4	178	7		3512 0115 00	
	Angle scraper chisel	35	1.38	165	6.5	3085 0176 00	3085 0362 00	
		35	1.38	200	7.9	3085 0176 01		
		55	2.17	165	6.5	3085 0333 00		
	Scaling chisel	15	0.59	155	6.1	3085 0018 00	3085 0229 01	
		15	0.59	200	7.9	3085 0018 02		
		15	0.59	300	11.8	3085 0018 01		

2 A. Chisels with hexagon shank ISO, round collar 1/2 in.

For RRC22F-01.



A

B

Chisel type	Designation	Width		Length		Hex ISO 12.7 mm (1/2") Ordering No.	Round ISO 12.7 mm (1/2") Ordering No.
		mm	in	mm	in		
	Chisel blank	13	0.51	200	7.9	3085 0182 00	
		13	0.51	350	13.8	3085 0182 01	
		13	0.51	400	15.7	3085 0182 04	
		13	0.51	500	19.7	3085 0182 05	
	Flat chisel	13	0.51	200	7.9	3085 0183 00	3085 0184 00
		35	1.38	300	11.8	3085 0376 00	
	Sharp chisel	15	0.59	200	7.9	3085 0170 00	
		15	0.59	300	11.8	3085 0170 01	
	Spot weld chisel	17	0.69	200	7.9	3085 0301 00	
	Angle scraper chisel	30	1.18	200	7.9	3085 0262 00	
	Pipe cutting chisel	20	0.78	200	7.9	3085 0302 00	
		35	1.38	200	7.9	3085 0303 00	
	Plate cutting chisel	14.5	0.57	200	7.9	3085 0263 00	
	Plate cutting chisel	16	0.62	200	7.9	3085 0173 00	
	Moil point chisel	13	0.51	200	7.9	3085 0297 00	
		13	0.51	305	12.0	3085 0297 01	

**3 Chisels with round ISO shank with splines 0.68 in.
For RRD 37-11, RRD 37-12, RRD 57-11, RRD 57-12.**



Chisel type	Designation	Width		Length		Round ISO with splines 17.3 mm (0.68") Ordering No.
		mm	in	mm	in	
	Chisel blank	22	0.86	250	9.8	3085 0242 00
		22	0.86	340	13.4	3085 0242 01
		22	0.86	550	21.7	3085 0242 02
		22	0.86	800	31.5	3085 0242 03
	Flat chisel	22	0.86	215	8.5	3085 0236 00
		22	0.86	250	9.8	3085 0236 01
		22	0.86	340	13.4	3085 0236 02
		22	0.86	550	21.7	3085 0236 03
	Flat chisel	32	1.26	340	13.4	3085 0252 00
	Wide flat chisel	50	1.97	340	13.4	3085 0250 00
	Extra wide flat chisel	130	5.12	400	15.7	3085 0998 00
	Angle scraper chisel	50	1.97	335	13.2	3085 0350 00
	Moil point chisel	22	0.86	340	13.4	3085 0249 00

**4 Chisels with special shank.
For RVM07.**



Chisel type	Designation	Material	Width		Length		Ordering No.
			mm	in	mm	in	
	Flat chisel	Tungsten carbide	10	0.39	120	4.7	3085 0321 00
		Through hardened steel	10	0.39	120	4.7	3085 0325 00
		Tungsten carbide	10	0.39	200	7.9	3085 0321 01
		Tungsten carbide	10	0.39	300	11.8	3085 0321 02
		Tungsten carbide	20	0.79	120	4.7	3085 0345 00
		Through hardened steel	20	0.79	120	4.9	3085 0346 00
	Wide chisel	Tungsten carbide	35	1.38	120	4.7	3085 0322 00
		Through hardened steel	35	1.38	120	4.7	3085 0327 00

Introduction – Riveting Systems

Minimum vibration, maximum productivity

Atlas Copco's top-of-the-line riveting systems are designed to minimize the riveter's exposure to vibration, while maintaining high tool performance. The RRH recoilless riveting hammer has an air cushion behind the hammer piston which efficiently kills vibrations. The same air dampening technique is used in RBB bucking bars. It raises individual productivity and boosts output in your plant.

The Atlas Copco riveting system includes vibration-damped hammers RRH and bucking bars RBB – as well as conventional riveting hammers RRN.

The vibration-damped riveting hammers – RRH – are available in different sizes.

Each size is available in "Trigger start" and "Push to start" models.

The conventional riveting hammer – RRN – is available in one size: RRN11P.

CRITICAL FACTORS

The number of blows and the power are critical factors which determine the strength of a riveted joint. A few powerful blows are needed to fill out the hole and form a head when upsetting the rivet. The impact force is critical to some extent when working with aluminum alloys, as too many blows can embrittle the metal.

In terms of capacity, the tools overlap. The selection guide below helps you to find the right tool for your particular application of riveting.

The vibration-damped bucking bars RBB are available in two versions – the simple spring damped – SP type and the air servo assisted SA type.



Selection Guide

Hammer model ^a	Nominal Max. Rivet Diameter Capacity							
	Dural		Steel		Titanium		Bucking bar model required ^b	
	mm	in	mm	in	mm	in		
RRN11	2-5	3/32 - 3/16	1-4	3/32 - 5/32				
RRH04	2-5	3/32 - 3/16	1-4	3/21 - 5/32			RBB04	
RRH06	4-7	5/32 - 1/4	3-6	1/8 - 1/4	2-4	3/32 - 5/32		
RRH08	5-8	3/16 - 5/16	4-7	5/32 - 1/4	3-6	1/8 - 1/4		
RRH10	5-9	3/16 - 3/8	6-8	1/4 - 5/16	4-7	5/32 - 1/4		
RRH12	8-11	5/16 - 7/16	7-10	1/4 - 3/8	6-9	1/4 - 1/8		
RRH14	11-13	7/16 - 1/2	9-12	3/8 - 15/32	8-11	5/16 - 7/16		

^aHammer capacity depends on direct/indirect riveting as well as Panel density and stiffness.

^bBucking bar capacity is dependent on dolly weight.

Vibration-damped

Riveting Hammers

RRH is a unique series of riveting hammers incorporating completely revolutionary ergonomic advantages.

- **Versatile** – RRH can easily cope with rivets in diameters up to 13 mm.
- **Vibration-damped system** – The RRH vibration-damped riveting hammer, combined with the RBB vibration-damped bucking bar, offer an unbeatable system for riveting.
- **Adjustable power.**
- **Adjustable hand guard** – Support hand grip is vibration-damped.
- Models with trigger start for excellent handling. Pistol grip with rubber coating.



Model	Blows Hz	Nozzle mm in	Piston dia mm in	Stroke mm in	Energy per blow J ft lb	Weight kg lb	Air consumption l/s cfm	Hose size mm in	Air inlet NPT	Ordering No.
With push start										
RRH04P-01	66	10.0 0.4	15 0.6	40 1.6	2.0 1.5	1.0 2.2	3.7 6	6.3 1/4	1/4	8426 1111 07
RRH04P-02	66	10.2 0.4	15 0.6	40 1.6	2.0 1.5	1.0 2.2	3.7 6	6.3 1/4	1/4	8426 1111 15
RRH04P-12	66	10.2 0.4	15 0.6	40 1.6	2.0 1.5	1.0 2.2	3.7 6	6.3 1/4	1/4	8426 1111 25
RRH06P	36	10.2 0.4	15 0.6	102 4.0	6.0 4.4	1.3 2.9	9.0 19	10.0 3/8	1/4	8426 1111 04
RRH08P	24	10.2 0.4	15 0.6	137 5.4	8.0 5.9	1.4 3.0	10.0 21	10.0 3/8	1/4	8426 1111 09
RRH10P	25	12.7 0.5	19 0.7	118 4.6	13.0 9.6	2.0 4.4	12.0 24	10.0 3/8	1/4	8426 1110 20
RRH12P	20	12.7 0.5	19 0.7	153 6.0	16.0 11.8	2.1 4.6	13.0 28	10.0 3/8	1/4	8426 1110 47
RRH14P	18	12.7 0.5	19 0.7	188 7.4	19.5 14.4	2.2 4.8	13.0 28	10.0 3/8	1/4	8426 1110 80
With trigger start										
RRH04P TS-12	66	10.2 0.4	15 0.6	40 1.6	2.0 1.5	1.0 2.2	3.7 6	6.3 1/4	1/4	8426 1111 27
RRH06P TS	36	10.2 0.4	15 0.6	102 4.0	6.0 4.4	1.3 2.9	9.0 19	10.0 3/8	1/4	8426 1111 66
RRH08P TS	24	10.2 0.4	15 0.6	137 5.4	8.0 5.9	1.4 3.0	10.0 21	10.0 3/8	1/4	8426 1111 68
RRH10P TS	25	12.7 0.5	19 0.7	118 4.6	13.0 9.6	2.0 4.4	12.0 24	10.0 3/8	1/4	8426 1110 70
RRH12P TS	20	12.7 0.5	19 0.7	153 6.0	16.0 11.8	2.1 4.6	13.0 28	10.0 3/8	1/4	8426 1110 72
RRH14P TS	18	12.7 0.5	19 0.7	188 7.4	19.5 14.4	2.2 4.8	13.0 28	10.0 3/8	1/4	8426 1110 81
RRH12P-ENG	20	12.7 0.5	19 0.7	153 6.0	16.0 11.8	2.1 4.6	13.0 28	10.0 3/8	1/4	8426 1110 49
RRH14P-ENG	18	12.7 0.5	19 0.7	188 7.4	19.5 14.4	2.2 4.8	13.0 28	10.0 3/8	1/4	8426 1110 82

-01 means 10 mm short shank rivet set.

-02 means 10.2 mm short shank rivet set.

-12 means 10.2 mm stand shank rivet set.

Conventional Type

Riveting Hammers

For riveting in confined spaces we recommend our RRN11 riveting hammer.

- **RRN11** – is the smallest riveting hammer available on the market, with unique accessibility.
- **Adjustable** – The RRN11 has a built-in adjustment knob with which you can set the power for different rivet materials and sizes.
- **Controllable** – The trigger is easily operated and provides excellent control.



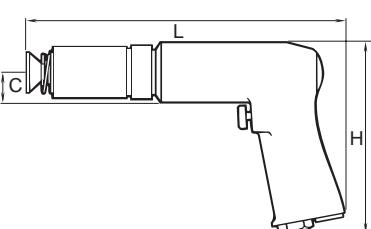
Model	Blows Hz	Nozzle mm in	Piston dia mm in	Stroke mm in	Energy per blow J ft lb	Weight kg lb	Air consumption l/s cfm	Hose size mm in	Air inlet NPT	Ordering No.
RRN11P-01	66	10.0 0.4	15 0.6	40 1.6	2.0 1.5	1.2 2.6	3.4 7.2	6.3 1/4	1/8	8426 1101 05
RRN11P-02	66	10.2 0.4	15 0.6	40 1.6	2.0 1.5	1.2 2.6	3.4 7.2	6.3 1/4	1/8	8426 1101 13

-01 means 10 mm short shank rivet set.

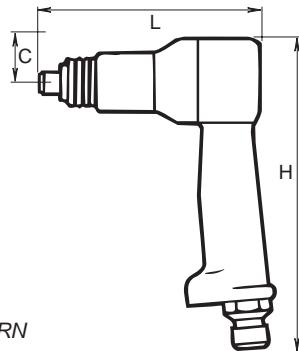
-02 means 10.2 mm short shank rivet set.

Dimensions (in)

Model	L in	H in	C in
RRH			
RRH04-01	6.3	5.8	0.9
RRH04-02	6.3	5.8	0.9
RRH04-12	6.9	5.8	0.9
RRH06	8.9	5.8	0.94
RRH08P	9.6	5.8	0.94
RRH10P	10.4	5.9	1.06
RRH12P	11.8	5.9	1.06
RRH14P	13.1	5.9	1.06
RRN			
RRN11P	3.9	6.7	0.9



RRH



RRN

Accessories Included

For RRH models

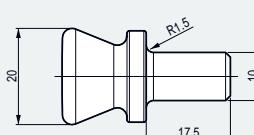
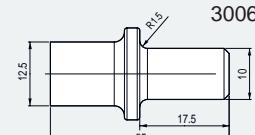
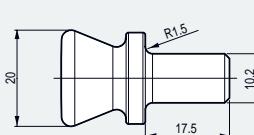
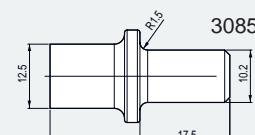
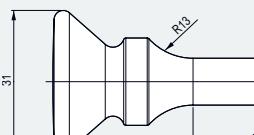
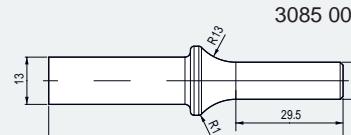
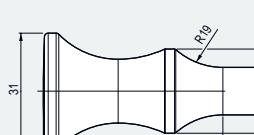
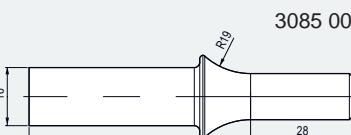
Hose fitting
Flush set
Open spring retainer

For RRN11P

Hose fitting and retainer
Blank rivet set
Retainers for blank and flush rivet set

Optional Accessories

RIVET SETS. RRH AND RRN

Hammer type	Model	Shank mm	Flush set	Ordering No.	Blank rivet set	Ordering No.
RRH04P-01	(-01)	10.0 spec		3085 0347 00		3006 0983 00
RRN11P-01						
RRH04P-02	(-02)	10.2 spec		3085 0352 00		3085 0353 00
RRN11P-02						
RRH04P-12	(-12)	10.2 std		3085 0324 00		3085 0022 00
RRH06P		10.2 std				
RRH08P		10.2 std				
RRH10P		12.7 std		3085 0323 00		3085 0021 00
RRH12P		12.7 std				
RRH14P		12.7 std				
RRH04P-12		10.2 std				
RRH06P		10.2 std				
RRH08P		10.2 std				
RRH04P-12		10.2 std				
RRH06P		10.2 std				
RRH08P		10.2 std				
Mandrel blank						3085 0212 00
3085 0212 02						3085 0212 02

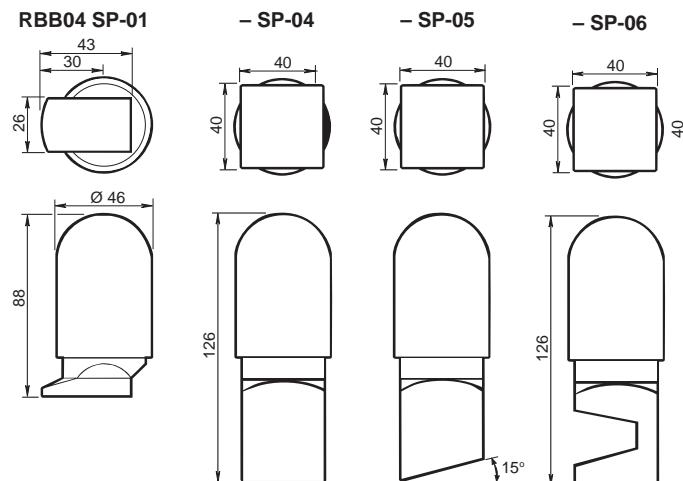
An efficient riveting system consists of vibration-damped bucking bars together with vibration-damped riveting hammers.

- **Cramped spaces** – Mini bucking bars RBB04SP are ideal for work in confined spaces. The large mass types -04, -05 will in most applications set the rivet faster than the smaller models.

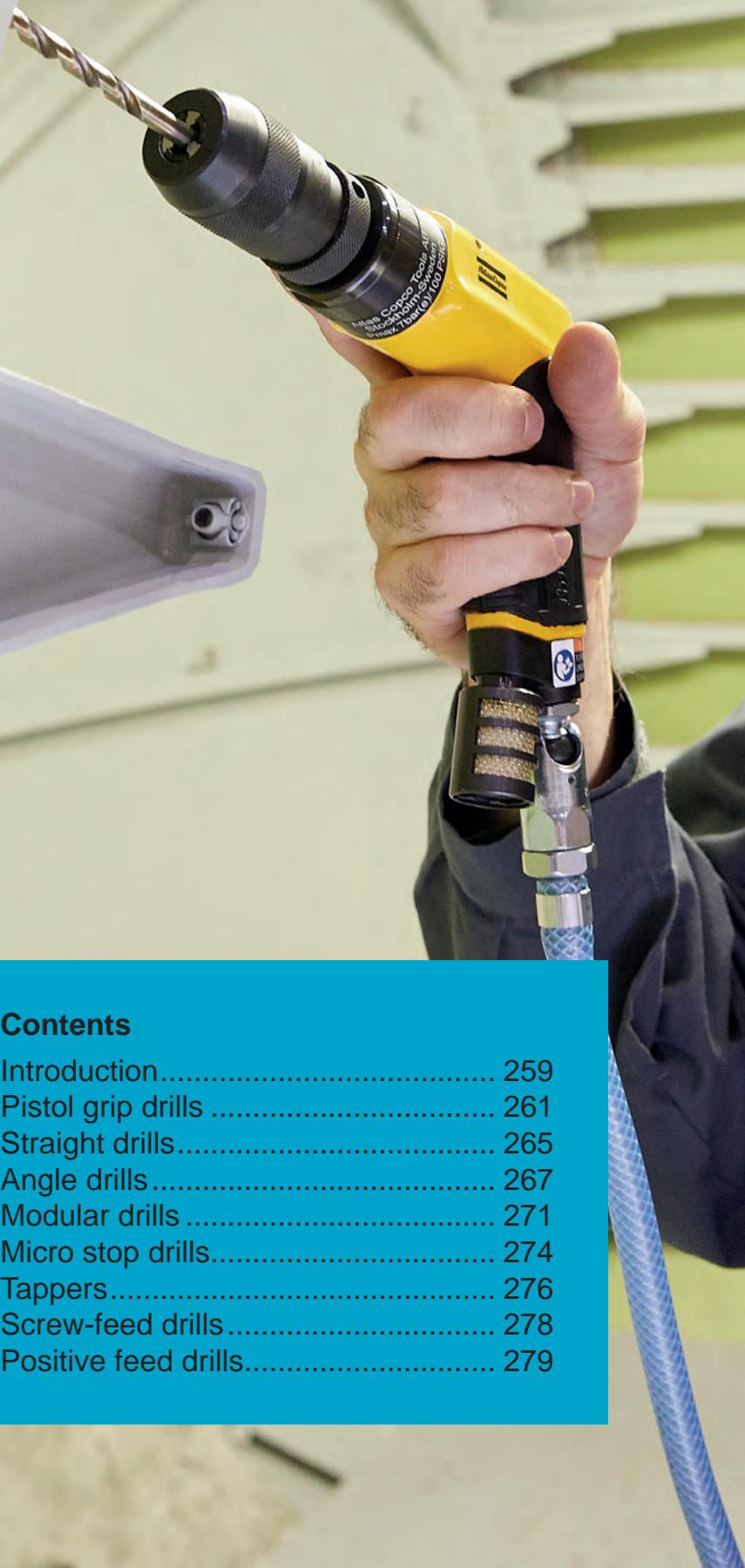


Model	Weight		Diameter		Ordering No.
	kg	lb	mm	in	
Mini bucking bars					
RBB04SP-01	0.8	1.8	46	1.8	8426 9101 10
RBB04SP-04	1.3	2.9	46	1.8	8426 9101 13
RBB04SP-05	1.4	3.1	46	1.8	8426 9101 14
RBB04SP-06	1.1	2.5	46	1.8	8426 9101 15

Dimensions (mm)



DRILLS



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Reliable, productive and comfortable to work with



The handheld drills in Atlas Copco's wide range are of the highest quality and built to provide consistent reliability and performance in a wide range of applications. Their advanced ergonomic designs make your job easier, safer and more efficient.

From the time our first drill was produced in 1901, Atlas Copco has demonstrated a genuine understanding of customer needs. Our drills have evolved to meet changing customer demands over the years. Whatever the job, Atlas Copco has a drill to match your exact requirements.

RELIABLE

When you pick up an Atlas Copco drill, you can be confident that it will do the job over and over again.

POWERFULLY PRODUCTIVE

Despite their compact designs, our drills consistently deliver all the power you need. Their high power-to-weight ratio ensures maximum material removal in the shortest possible time.

ERGONOMIC

Thanks to 50 years of focusing on ergonomics, Atlas Copco drills fit comfortably in your hand. Grips are anatomically shaped to keep your arm and wrist straight, reducing the risk of injury during

long-term use. The light weight and perfect balance of each drill enables you to guide it smoothly and easily. Low noise and vibration levels make the tools comfortable to work with all day long.

DURABLE, LOW MAINTENANCE

The rugged, lubrication-free designs of our drills can withstand the toughest industrial situations and go on working day in, day out. Maintenance requirements are low.

QUALITY THROUGHOUT THE TOOLS' LIFE-CYCLE

Atlas Copco stands for quality, from the manufacture of critical drill components, through production and sales, to service and support throughout the tools' long life-cycle.

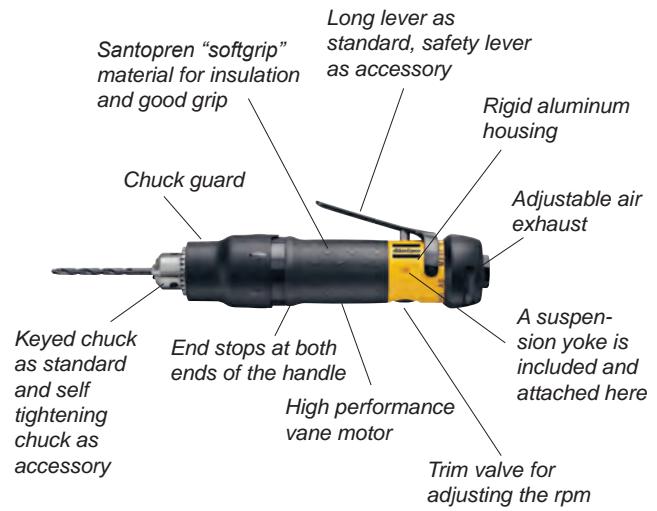


Drills

LBB 16 FEATURES



LBB 16S FEATURES



Selection Guide

Cutting speed ^a sfpm	Material	rpm																											
		300	400	500	600	700	800	1000	1200	1300	1500	1700	1900	2200	2400	2600	2900	3000	3300	3700	3800	4500	5500	6000	6400	6500	20000	23000	26000
15		3/16	5/32	1/8	1/8	1/16	1/16	1/16	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32										
30		7/16	5/16	1/4	3/16	3/16	5/32	1/8	1/8	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16									
50		1/2	3/8	5/16	1/4	1/4	3/16	5/32	5/32	1/8	1/8	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16									
65	Cast iron	5/8	1/2	7/16	3/8	5/16	1/4	3/16	3/16	5/32	5/32	1/8	1/8	1/16	1/16	1/16	1/16	1/16	1/16	1/16									
80																													
100																													
115	Hard plastics																												
130																													
150																													
165																													
180																													
200																													
215																													
230																													
245	Composite																												
260																													
280																													
295																													
310																													
330																													
345																													
360																													
375																													
395																													
410																													
425																													
440																													
460																													
475																													
500																													

^a Remember that, if the speed is too low the cycle time increases.

Regardless of which model you choose, you'll get a product with superior ergonomics and productivity.

- Quiet – Very low noise level.
- Comfortable grip – For high precision.
- Two-hand grip available – Gives even greater flexibility.
- Lubrication-free – For clean working environment and operator comfort.

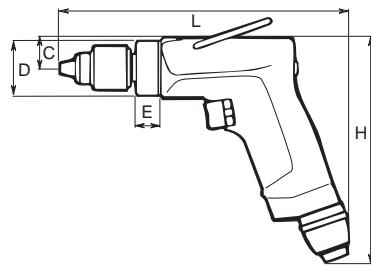


Model	Free speed r/min	Chuck capacity in	Weight with chuck lb	Air consumption at free speed cfm	Hose size		Air inlet thread NPT	Stall torque Nm	With chuck Ordering No.	Without chuck	
					mm	in				Model	Ordering No.
Non-reversible drills with air supply through handle											
LBB16 EP-003 ^b	300	3/8	1.5	17.0	6.3	1/4	1/4	0.4	-	8421 0108 01	003-U 8421 0108 02
LBB16 EP-005 ^b	500	3/8	1.5	17.0	6.3	1/4	1/4	0.4	21.6	8421 0108 06	005-U 8421 0108 07
LBB16 EP-010	1000	3/8	1.5	17.0	6.3	1/4	1/4	0.4	7.8	8421 0108 10	010-U 8421 0108 11
LBB16 EP-024 ^a	2400	1/4	1.2	17.0	6.3	1/4	1/4	0.4	4.2	8421 0108 20	024-U 8421 0108 21
LBB16 EP-033 ^a	3300	1/4	1.2	17.0	6.3	1/4	1/4	0.4	3.4	8421 0108 30	033-U 8421 0108 31
LBB16 EP-045 ^a	4500	1/4	1.2	17.0	6.3	1/4	1/4	0.4	2.0	8421 0108 40	045-U 8421 0108 41
LBB16 EP-060 ^a	6000	1/4	1.2	17.0	6.3	1/4	1/4	0.4	1.7	8421 0108 50	060-U 8421 0108 51
LBB16 EP-200 ^a	20000	1/4	1.2	17.0	6.3	1/4	1/4	0.4	0.5	8421 0108 60	200-U –
LBB16 EPX-005 ^b	500	1/2	1.5	20.0	6.3	1/4	1/4	0.45	25.2	8421 0108 08	005-U 8421 0108 09
LBB16 EPX-010 ^b	1000	3/8	1.5	20.0	6.3	1/4	1/4	0.45	12.3	8421 0108 12	010-U 8421 0108 03
LBB16 EPX-024 ^a	2400	1/4	1.2	20.0	6.3	1/4	1/4	0.45	4.9	8421 0108 22	024-U 8421 0108 23
LBB16 EPX-033 ^a	3300	1/4	1.2	20.0	6.3	1/4	1/4	0.45	3.7	8421 0108 32	033-U 8421 0108 33
LBB16 EPX-045 ^a	4500	1/4	1.2	20.0	6.3	1/4	1/4	0.45	3.0	8421 0108 42	045-U 8421 0108 43
LBB16 EPX-060 ^a	6000	1/4	1.2	20.0	6.3	1/4	1/4	0.45	2.3	8421 0108 52	060-U 8421 0108 53
LBB16 EPX-200 ^a	20000	1/4	1.2	20.0	6.3	1/4	1/4	0.45	0.6	8421 0108 82	200-U 8421 0108 63
LBB26 EPX-003 ^b	300	1/2	1.8	31.8	10.0	3/8	1/4	0.7	53.5	8421 0500 00	003-U 8421 0500 01
LBB26 EPX-005 ^b	500	1/2	1.8	31.8	10.0	3/8	1/4	0.7	31.6	8421 0500 02	005-U 8421 0500 03
LBB26 EPX-007 ^b	700	1/2	1.8	31.8	10.0	3/8	1/4	0.7	24.6	8421 0500 04	007-U 8421 0500 05
LBB26 EPX-013 ^{ab}	1300	3/8	1.7	31.8	10.0	3/8	1/4	0.7	14.7	8421 0500 06	013-U 8421 0500 07
LBB26 EPX-019 ^a	1900	3/8	1.7	31.8	10.0	3/8	1/4	0.7	9.9	8421 0500 24	019-U 8421 0500 25
LBB26 EPX-026 ^a	2600	5/16	1.7	31.8	10.0	3/8	1/4	0.7	7.7	8421 0500 08	026-U 8421 0500 09
LBB26 EPX-033 ^a	3300	5/16	1.5	31.8	10.0	3/8	1/4	0.7	5.7	8421 0500 10	033-U 8421 0500 11
LBB26 EPX-045 ^a	4500	5/16	1.5	31.8	10.0	3/8	1/4	0.7	4.1	8421 0500 12	045-U 8421 0500 13
LBB26 EPX-060 ^a	6000	5/16	1.5	31.8	10.0	3/8	1/4	0.7	3.3	8421 0500 14	060-U 8421 0500 15
LBB26 EPX-200 ^a	22000	1/4	1.5	31.8	10.0	3/8	1/4	0.7	0.8	8421 0500 28	200-U 8421 0500 29
LBB36 H005 ^b	500	-	3.3	34.9	10.0	3/8	3/8	0.9	43.8	-	-H005U 8421 0408 03
LBB36 H007 ^b	700	1/2	3.5	34.9	10.0	3/8	3/8	0.9	37.2	8421 0408 07	-H007U 8421 0408 05
LBB36 H013 ^a	1300	3/8	3.3	34.9	10.0	3/8	3/8	0.9	19.5	8421 0408 15	-H013U 8421 0408 13
LBB36 H026 ^a	2600	3/8	2.5	34.9	10.0	3/8	3/8	0.9	10.3	8421 0408 33	-H026U 8421 0408 31
LBB36 H033 ^a	3300	3/8	2.5	34.9	10.0	3/8	3/8	0.9	8.6	8421 0408 41	-H033U 8421 0408 39
LBB36 H060 ^a	6000	1/4	2.5	34.9	10.0	3/8	3/8	0.9	5.0	8421 0408 49	-H060U 8421 0408 47
LBB36 H200 ^a	22000	1/4	2.2	34.9	10.0	3/8	3/8	0.9	1.3	8421 0408 55	-H200U 8421 0408 53
LBB37 H006	600	1/2	2.5	44.0	10.0	3/8	3/8	1.1	48.0	8421 0608 06	-H006U 8421 0608 14
LBB37 H015	1500	3/8	3.3	44.0	10.0	3/8	3/8	1.1	22.5	8421 0608 05	-H015U 8421 0608 15
LBB37 H037	3700	3/8	2.5	44.0	10.0	3/8	3/8	1.1	9.2	8421 0608 13	-H037U 8421 0608 16
LBB37 H065	6500	1/4	2.5	44.0	10.0	3/8	3/8	1.1	5.0	8421 0608 11	-H065U 8421 0608 17
LBB37 H230	23000	1/4	2.2	44.0	10.0	3/8	3/8	1.1	1.3	8421 0608 03	-H230U 8421 0608 18
LBB45 H004 ^b	400	5/8	9.3	21.0	10.0	3/8	1/4	0.9	-	8421 0501 16	– –
LBB45 H006 ^b	600	5/8	9.3	21.0	10.0	3/8	1/4	0.9	-	8421 0501 24	-H006U 8421 0501 40
LBB45 H017 ^b	1700	5/8	9.3	21.0	10.0	3/8	1/4	0.9	-	8421 0501 32	– –
ATEX certified models											
LBB26 EPX005-ATEX	500	1/2	1.8	31.8	10.0	3/8	1/4	0.7	-	8421 0500 22	– –
LBB26 EPX007-ATEX	700	1/2	1.8	31.8	10.0	3/8	1/4	0.7	-	8421 0500 21	– –
LBB26 EPX013-ATEX	1300	3/8	1.7	31.8	10.0	3/8	1/4	0.7	-	8421 0500 20	– –
LBB26 EPX026-ATEX	2600	5/16	1.7	31.8	10.0	3/8	1/4	0.7	-	8421 0500 19	– –

^a Including chuck guard. ^b Including support handle.

Dimensions**LBB EP/EPX/H**

Model	L mm	H mm	C mm	D mm	E mm
LBB16 EP/EPX-200	177	131	16.5	31.4	13.8
LBB16 EP/EPX-060	177	131	16.5	31.4	13.8
LBB16 EP/EPX-045	177	131	16.5	31.4	13.8
LBB16 EP/EPX-033	177	131	16.5	31.4	13.8
LBB16 EP/EPX-024	177	131	16.5	31.4	13.8
LBB16 EP/EPX-010	190	131	16.5	31.4	27.0
LBB16 EP/EPX-005	190	131	16.5	31.4	27.0
LBB16 EP-003	190	131	16.5	31.4	27.0
LBB26 EPX-060	180	147	21	39	-
LBB26 EPX-045	180	147	21	39	-
LBB26 EPX-033	180	147	21	39	-
LBB26 EPX-026	180	147	21	39	-
LBB26 EPX-019	196	147	21	39	-
LBB26 EPX-013	196	147	21	39	-
LBB26 EPX-007	196	147	21	39	-
LBB26 EPX-005	196	147	21	39	-
LBB26 EPX-003	196	147	21	39	-
LBB36 H200	217	157	23	41.5	16.5
LBB36 H060	217	157	23	41.5	16.5
LBB36 H033	217	157	23	41.5	16.5
LBB36 H026	217	157	23	41.5	16.5
LBB36 H013	256	157	23	41.5	64.0
LBB36 H007	256	157	23	41.5	64.0
LBB36 H005	256	157	23	41.5	64.0
LBB37 H230	217	157	23	41.5	16.5
LBB37 H065	217	157	23	41.5	16.5
LBB37 H037	217	157	23	41.5	16.5
LBB37 H015	256	157	23	41.5	64.0
LBB37 H006	256	157	23	41.5	64.0
LBB45 H006	360	185	33	60	113
LBB45 H017	360	185	33	60	113
LBB45 H004	360	185	33	60	113

**Accessories Included**

Chuck, chuck key, hose nipple.

LBB16 and -36/37 with suspension yoke and with chuck guard where possible.

LBB16 and -36/37 have a 3/8" -24 UNF spindle thread.

LBB36 H005 and LBB37 H006 have a 1/2" -20 UNF thread.

LBB45 has a JT3 taper mount.

Optional Accessories**KEY CHUCKS**

Mount	Body diameter mm	Chuck capacity in	Ordering No.		
			Chuck (key incl)	Key only	Key designation
1/2-20UNF	43	5/8	4021 0289 01	4021 0465 00	S2
3/8-24UNF	30	1/4	4021 0283 00	4021 0293 00	S1
3/8-24UNF	30	5/16	4021 0495 00	4021 0293 00	S1
3/8-24UNF	36	3/8	4021 0416 00	4021 0449 00	S8
3/8-24UNF	46	1/2	4021 0289 00	4021 0465 00	S2
JT3	59	5/8	4021 0423 00	4021 0301 00	S3



Key chuck

QUICK CHUCKS

Mount	Chuck dia mm	Chuck capacity in	Ordering No.
3/8-24UNF	34	1/4	4021 0400 00
3/8-24UNF	34	5/16	4021 0401 00
3/8-24UNF	36	3/8	4021 0402 00
3/8-24UNF	36	1/2	4021 0403 00



Quick chuck

Optional Accessories

COLLET CHUCK AND COLLETS

Designation	Capacity		Ordering No.
	mm	in	
Collet	3		4150 0081 00
	6		4150 0075 00
	8	5/16	4150 0074 00
		1/8	4150 0082 00
		5/32	4150 0648 00
		3/16	4150 0649 00
		1/4	4150 0076 00
			4110 0844 90
Collet holder			4150 0760 00
Collet nut			



Collet chuck and collets

CHUCK GUARDS

For model	Max chuck dia mm	Ordering No.
LBB16 ^a	30	4110 1619 04
LBB26	36	4110 1728 02
LBB26	30	4110 1728 03
LBB36 ^b	36	4110 1415 00
LBB37 ^b	36	4110 1415 00



Chuck guard

^aThe guards do not fit 1000 r/min models, 500 r/min and 300 r/min models.

^bThe chuck guards do not fit the 500 r/min, 600 r/min or 700 r/min models.

FLEX CONNECT

For model	Ordering No.
LBB16	4110 1601 80



Flex connect

SPOT SUCTION ATTACHMENT

For model	Hose size in	Spot suction kit ^a Ordering No.	Hose kit Ordering No.
LBB16	1 1/4	4110 1715 80	4112 1227 00
LBB26	1 1/4	4110 1715 84	4112 1227 00
LBB36/37	1 1/4	4110 1716 80	4112 1227 00

^aSpare part, nose piece kit, Ordering No. 4110 1700 90.

Other standard sizes of front nozzle available.



Spot suction attachment

POWER FEED ARM FOR EXTRA FEED FORCE – LBB36 H005 AND LBB37 H006

	Ordering No.
Adapter piece (SR295), lever arm (SR201), chain (SR202) and No. 2 Morse socket (SR206)	4110 1416 80
Two extension pieces (SR204-1 and SR204-2), 370 and 750 mm long	4110 1417 80
No. 2 Morse socket	4110 1416 01



Power feed arm

Optional Accessories

SUPPORT HANDLES

For model	Ordering No.
LBB16	4110 1355 92
LBB26	4110 1355 95
LBB36/37	4110 1355 82
LBB45	4110 1355 84



Support handle

OPTIONAL ACCESSORIES – LBB45

Designation	Ordering No.
No. 2 Morse socket	4130 1080 00

Productivity Kits

Model	Max air flow	Hose 16.4 ft	Coupling	Lubrication	Ordering No.
MIDI Optimizer F/R EQ08US-C06	12 cfm	Cabair 06	ErgoQIC 08US	No	8202 0850 21
MIDI Optimizer F/RD EQ08US-C06	19 cfm	Cabair 06	ErgoQIC 08US	Yes	8202 0850 22
MIDI Optimizer F/RD EQ08US-C08	19 cfm	Cabair 08	ErgoQIC 08US	Yes	8202 0850 23
MIDI Optimizer F/R EQ08US-C08	19 cfm	Cabair 08	ErgoQIC 08US	No	8202 0850 24
MIDI Optimizer F/RD EQ10US-C10	34 cfm	Cabair 10	ErgoQIC 10US	Yes	8202 0850 25
MIDI Optimizer F/RD EQ10US-R10	34 cfm	Rubair 10	ErgoQIC 10US	Yes	8202 0850 26
MIDI Optimizer F/RD EQ10US-C13	50 cfm	Cabair 13	ErgoQIC 10US	Yes	8202 0850 27
MIDI Optimizer F/RD EQ10US-R13	50 cfm	Rubair 13	ErgoQIC 10US	Yes	8202 0850 28

NOTE: Tool nipple is not included in the Productivity kit and needs to be order separately together with the tool.



Service Kits

LBB16	4081 0271 90
LBB26	4081 2028 90
LGB/LBV34	4081 0035 90
LBB36/37	4081 0194 90
LBB45	4081 0139 90

Atlas Copco straight drills are primarily intended for vertical drilling operations and for drilling in cramped spaces.

- Quiet – Very low noise level.
- Very high power to weight ratio.
- Adjustable exhaust –The exhaust air is directed away from the operator.
- Lubrication-free – LBB16 drills are lubrication-free for clean working environment and operator comfort.



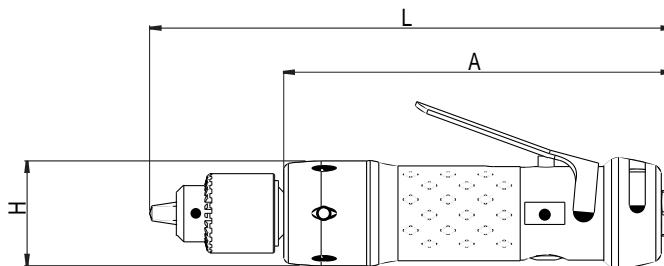
LBB16

Model	Free speed r/min	Chuck capacity in	Weight lb	Air consumption at free speed cfm	Hose size		Air inlet thread NPT	Power hp	With chuck Ordering No.	Without chuck	
					mm	in				Model	Ordering No.
Drills with rear exhaust											
LBB16 S260	26000	1/4	1.1	17	6.3	1/4	1/4	0.47	8421 0210 00	S260-U	8421 0210 10
LBB16 S064	6400	1/4	1.1	17	6.3	1/4	1/4	0.47	8421 0210 01	S064-U	8421 0210 11
LBB16 S045	4500	1/4	1.1	17	6.3	1/4	1/4	0.47	8421 0210 02	S045-U	8421 0210 12
LBB16 S038	3800	1/4	1.1	17	6.3	1/4	1/4	0.47	8421 0210 03	S038-U	8421 0210 13
LBB16 S029	2900	5/16	1.2	17	6.3	1/4	1/4	0.47	8421 0210 04	S029-U	8421 0210 14
LBB16 S022	2200	3/8	1.5	17	6.3	1/4	1/4	0.47	8421 0210 05	S022-U	8421 0210 15
LBB16 S012	1200	3/8	1.5	17	6.3	1/4	1/4	0.47	8421 0210 06	S012-U	8421 0210 16

^a The free speed can be reduced to 50% of the maximum speed using the trim valve.

Dimensions

Model	L	H	A
LBB16 S260	196	39	146
LBB16 S064	196	39	146
LBB16 S045	196	39	146
LBB16 S038	196	39	146
LBB16 S029	196	39	146
LBB16 S022	219	39	159
LBB16 S012	219	39	159



Accessories Included

Chuck, chuck key
Suspension yoke and chuck guard

Optional Accessories

KEY CHUCKS

Mount	Body diameter mm	Chuck capacity in	Ordering No.		
			Chuck (key incl)	Key only	Key designation
1/2-20UNF	43	5/8	4021 0289 01	4021 0465 00	S2
3/8-24UNF	30	1/4	4021 0283 00	4021 0293 00	S1
3/8-24UNF	30	5/16	4021 0495 00	4021 0293 00	S1
3/8-24UNF	36	3/8	4021 0416 00	4021 0449 00	S8
3/8-24UNF	46	1/2	4021 0289 00	4021 0465 00	S2
JT3	59	5/8	4021 0423 00	4021 0301 00	S3



Key chuck

QUICK CHUCHS

Mount	Chuck dia mm	Chuck capacity in	Ordering No.
3/8-24UNF	34	1/4	4021 0400 00
3/8-24UNF	34	5/16	4021 0401 00
3/8-24UNF	36	3/8	4021 0402 00
3/8-24UNF	36	1/2	4021 0403 00



Quick chuck

COLLET CHUCK AND COLLETS

Designation	Capacity		Ordering No.
	mm	in	
Collet	3		4150 0081 00
	6		4150 0075 00
	8	5/16	4150 0074 00
		1/8	4150 0082 00
		5/32	4150 0648 00
		3/16	4150 0649 00
		1/4	4150 0076 00
Collet holder			4110 0844 90
Collet nut			4150 0760 00



Collet chuck and collets

SAFETY LEVER

For model	Ordering No.
LBB16S	4110 1787 90



Safety lever



Service Kits

LBB16 4081 0438 90

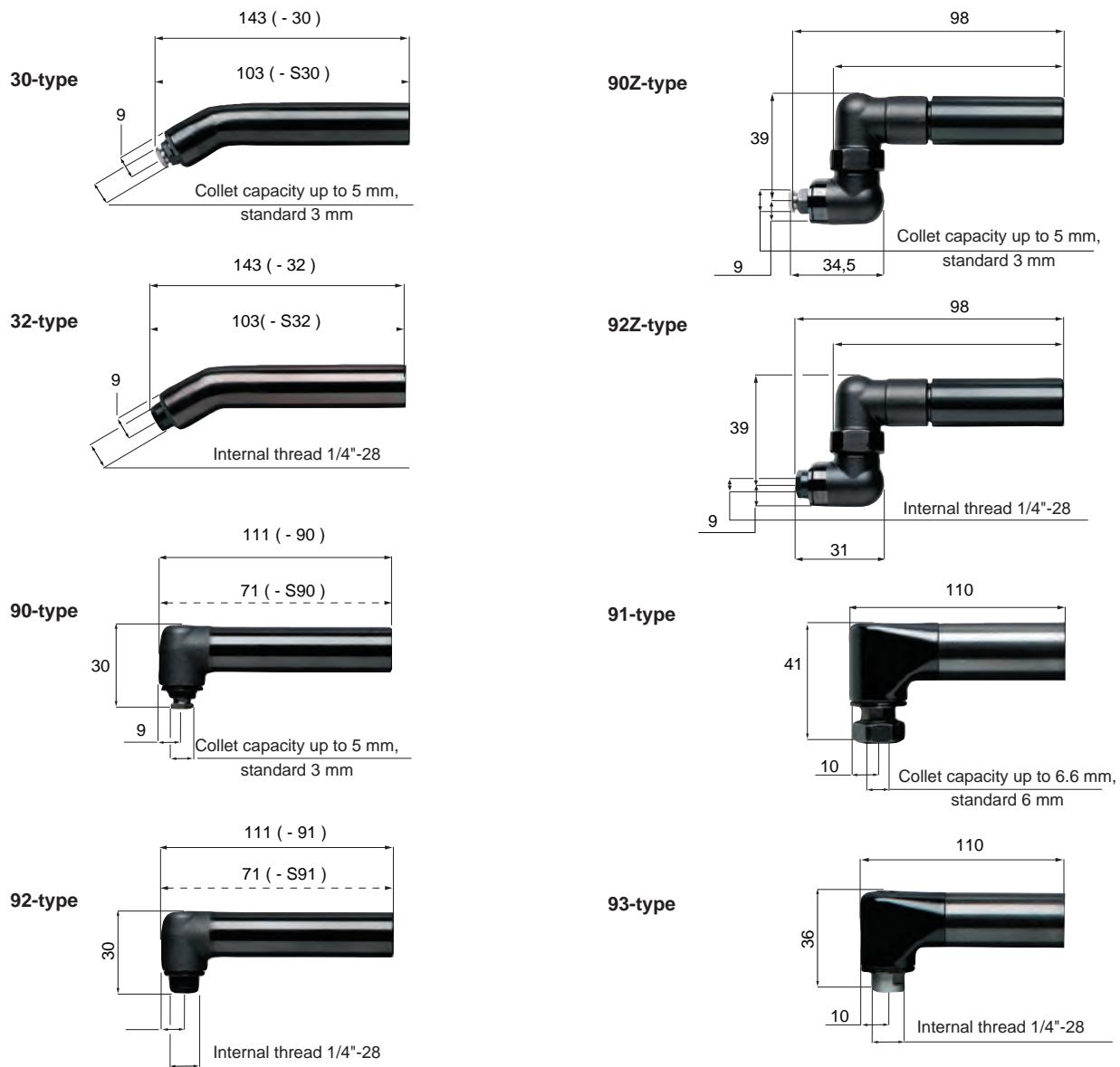
- Quiet – Very low noise level.
- Low air consumption – Good operating economy.
- Side exhaust – The air can be directed to suit the operator.
- Rear exhaust – The air is piped away through a pliant hose.
- Lubrication-free – For clean working environment and operator comfort.
- Collet chuck or threaded spindle.
- Multiple lever options.



Model	Free speed r/min	Setting range rpm	Collet or chuck capacity in	Weight lb	Air consumption at free speed cfm	Hose dimension mm in	Air inlet thread NPT	Power hp	Ordering No.
30° angle head									
LBV11 S029-S30	2900	–	13/64	1.1	8.5	5.0 1/8	1/8	0.16	8421 0108 70
LBV16 032-30	3200	1500-3200	13/64	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 05
LBV16 032-S30	3200	1500-3200	13/64	1.0	18.4	6.3 1/4	1/4	0.4	8421 0110 04
LBV16 032-32	3200	1500-3200	c	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 07
LBV16 032-S32	3200	1500-3200	c	1.0	18.4	6.3 1/4	1/4	0.4	8421 0110 06
LBV16 045-30	4500	3200-4500	13/64	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 71
LBV36 S030-30 ^e	3000	–	13/64	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 70
45° angle head									
LBV16 032-45	3200	1500-3200	13/64	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 59
LBV16 032-46	3200	1500-3200	c	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 60
90° angle head									
LBV11 S029-S90	2900	–	13/64	1.1	8.5	5.0 1/8	1/8	0.16	8421 0109 79
LBV16 032-90	3200	1500-3200	13/64	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 00
LBV16 032-S90	3200	1500-3200	13/64	1.0	18.4	6.3 1/4	1/4	0.4	8421 0110 01
LBV16 032-92	3200	1500-3200	c	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 03
LBV16 032-S92	3200	1500-3200	c	1.0	18.4	6.3 1/4	1/4	0.4	8421 0110 02
LBV16 045-90	4500	3200-4500	13/64	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 20
LBV16 045-92	4500	3200-4500	c	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 21
LBV16 055-90	5500	4500-5500	13/64	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 23
LBV16 055-S92	5500	4500-5500	c	1.0	18.4	6.3 1/4	1/4	0.4	8421 0110 58
LBV36 S030-90 ^e	3000	–	13/64	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 60
LBV36 S030-92 ^e	3000	–	c	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 64
LBV36 S045-90 ^e	4500	–	13/64	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 62
360° angle head									
LBV16 032-90Z	3200	1500-3200	13/64	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 64
LBV16 032-92Z	3200	1500-3200	c	1.1	18.4	6.3 1/4	1/4	0.4	8421 0110 68
90° angle head – large angle head									
LBV16 005-91	500	200-500	1/4	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 11
LBV16 005-93	500	200-500	c	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 12
LBV16 010-91	1000	500-1000	1/4	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 16
LBV16 010-93	1000	500-1000	c	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 17
LBV16 018-91	1800	800-1800	1/4	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 18
LBV16 018-93	1800	800-1800	c	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 19
LBV16 032-91	3200	1500-3200	1/4	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 09
LBV16 032-93	3200	1500-3200	c	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 10
LBV16 032-S93	3200	1500-3200	c	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 39
LBV16 045-91	4500	3200-4500	1/4	1.2	18.4	6.3 1/4	1/4	0.4	8421 0110 38
LBV36 S030-91 ^e	3000	–	1/4	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 50
LBV36 S060-91 ^e	6000	–	1/4	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 51
LBV36 S030-93 ^e	3000	–	c	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 52
LBV36 S060-93 ^e	6000	–	c	2.2	36.0	10.0 3/8	1/4	0.73	8421 0414 53
90° angle head – Key chuck models									
LBV16 018-11	1800	800-1800	5/16	1.7	18.4	6.3 1/4	1/4	0.4	8421 0110 22
LBV34 S005 ^b	500	–	1/2 ^a	4.6	15.9	10.0 3/8	1/4	0.6	8421 0309 04
LBV34 S010 ^b	1000	–	3/8 ^a	4.4	15.9	10.0 3/8	1/4	0.6	8421 0309 12
LBV34 S040 ^b	4000	–	1/4 ^a	3.3	15.9	10.0 3/8	1/4	0.6	8421 0309 46
90° angle head – heavy-duty									
LBV37 030	3000	–	c	2.4	46	10.0 3/8	3/8	1.1	8421 0414 54
LBV37 HD030	3000	–	d	2.4	46	10.0 3/8	3/8	1.1	8421 0414 56

^a Spindle thread, male 3/8"-24 UNF. ^b Side exhaust. ^c Internal thread 1/4"-28. ^d Internal thread 5/16". ^e Short lever as standard.

Dimensions

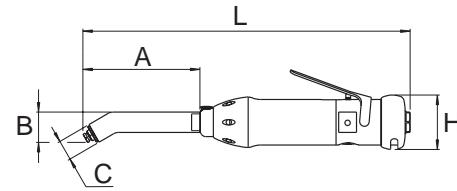


Dimensions

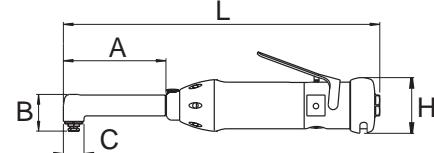
DRILLING CAPACITY

Model	Angle head mm				
	A	B	C	L	H
LBV11 S027-S30	59	25	18	224	30
LBV11 S025-S90	44	30	18	204	30
LBV16 032-S30	103	25	17	241	42
LBV16 032-30	143	25	17	281	42
LBV16 032-S32	103	25	17	241	42
LBV16 032-32	143	25	17	281	42
LBV16 032-90	111	30	17	248	42
LBV16 032-S90	71	30	17	209	42
LBV16 032-S92	71	30	17	209	42
LBV16 032-92	111	30	17	249	42
LBV16 032-90Z	145	48	17	283	42
LBV16 032-91	110	39	20	248	42
LBV16 032-93	110	36	20	248	42
LBV16 005-91	110	39	20	248	42
LBV16 005-93	110	36	20	248	42
LBV16 010-91	110	39	20	248	42
LBV16 010-93	110	36	20	248	42
LBV16 018-91	110	39	20	248	42
LBV16 018-93	110	36	20	248	42
LBV34 S040	92	97	20	255	43
LBV34 S010	92	114	20	290	43
LBV34 S005	92	120	20	290	43
LBV36 S030-91	92	41	20	252	43
LBV36 S060-91	92	41	20	252	43
LBV36 S030-93	92	36	20	252	43
LBV36 S060-93	92	36	20	252	43
LBV36 S030-30	122	26	18	281	43
LBV36 S045-30	122	26	18	281	43
LBV36 S030-90	112	30	18	272	43
LBV36 S045-90	112	30	18	272	43
LBV36 S030-92	112	30	18	272	43
LBV37 030	55	39	23	262	43
LBV37 HD030	55	39	23	262	43

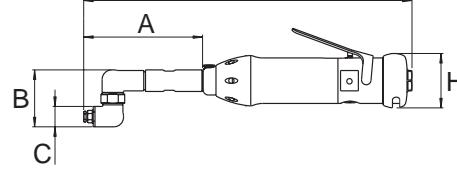
LBV11, -16, -36
30°



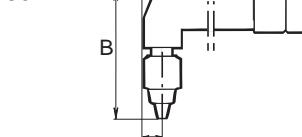
LBV11, -16, -36
90°



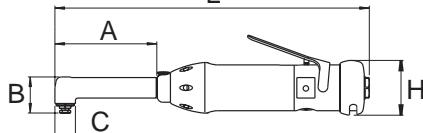
LBV16, -25
360°



LBV34
90°



LBV37
90°



Accessories Included

KEY WRENCHES

Collet or chuck with key
3 mm collet (5.0 collet capacity head)
6 mm collet (6.6 collet capacity head)

Optional Accessories

SAFETY LEVERS

For model	Ordering No.
LBV16	4110 1787 90
LBV36/37	4150 1594 97



Safety lever

SHORT LEVERS

For model	Ordering No.
LBV16	4210 2306 04

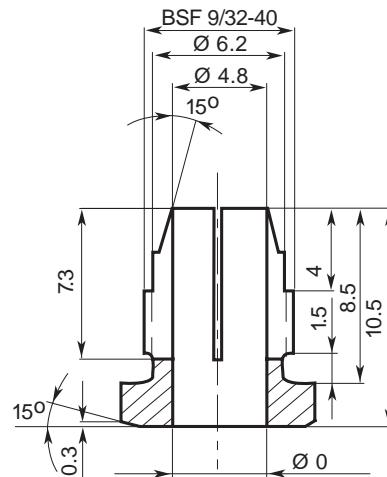


Short lever

COLLETS FOR 5.0 MM CAPACITY HEAD LBV11, LBV16 - (-30, -90, -90Z) AND LBV36 (-30, -90)

Capacity mm	Ordering No.	Capacity mm	Ordering No.	Capacity in	Ordering No.
1.0	4110 0438 01	3.4	4110 0438 33	1/16	4110 0438 19
1.5	4110 0438 02	3.5	4110 0438 13	3/32	4110 0438 20
1.8	4110 0438 28	3.6	4110 0438 24	1/8	4110 0438 21
2.0	4110 0438 03	3.7	4110 0438 34	5/32	4110 0438 22
2.1	4110 0438 29	3.8	4110 0438 14	3/16	4110 0438 23
2.2	4110 0438 04	3.9	4110 0438 35		
2.3	4110 0438 30	4.0	4110 0438 15		
2.4	4110 0438 05	4.1	4110 0438 25		
2.5	4110 0438 06	4.2	4110 0438 26		
2.6	4110 0438 07	4.3	4110 0438 36		
2.7	4110 0438 31	4.4	4110 0438 37		
2.8	4110 0438 32	4.5	4110 0438 16		
2.9	4110 0438 08	4.6	4110 0438 38		
3.0	4110 0438 09	4.7	4110 0438 39		
3.1	4110 0438 10	4.8	4110 0438 18		
3.2	4110 0438 11	4.9	4110 0438 40		
3.3	4110 0438 12	5.0	4110 0438 27		

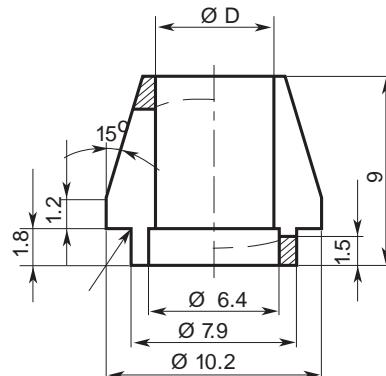
Collets for 5.0 mm (Thread BSF 9/32 -40)

**COLLETS FOR 6.6 MM CAPACITY HEAD LBV16 (-91) AND LBV36 (-91)**

Capacity mm	Ordering No.	Capacity mm	Ordering No.
1.6	4110 1411 01	4.2	4110 1411 14
1.8	4110 1411 02	4.4	4110 1411 15
2.0	4110 1411 03	4.6	4110 1411 16
2.2	4110 1411 04	4.8	4110 1411 17
2.4	4110 1411 05	5.0	4110 1411 18
2.6	4110 1411 06	5.2	4110 1411 19
2.8	4110 1411 07	5.4	4110 1411 20
3.0	4110 1411 08	5.6	4110 1411 21
3.2	4110 1411 09	5.8	4110 1411 22
3.4	4110 1411 10	6.0	4110 1411 23
3.6	4110 1411 11	6.2	4110 1411 24
3.8	4110 1411 12	6.4	4110 1411 25
4.0	4110 1411 13	6.6	4110 1411 26

Collet nut 4110 1410 00, to be ordered separately.

Collets for 6.6 mm

**Service Kits**

LBV16	4081 0322 90
LBV24	4081 0005 90
LBV25	4081 0272 90
LGB/LBV34	4081 0035 90
LBV36 (30, 90/92)	4081 0263 90
LBV36 (91/93)	4081 0251 90
LBV37	4081 0431 90

The LBD16M and LBP16M are designed with the operator in focus. A lightweight tool with a powerful air motor combined with interchangeable angle heads equals excellent flexibility in any handheld drilling operation. Swap to a new head in a matter of seconds with the easy-to-use quick change mechanism. With the LBD16M and LBP16M, you are always ready to take on any job in ever changing drilling applications.

- Quick change system – Easy-to-use and robust quick change design for high durability.
- Indexable head – The head can be positioned in any direction for maximum accessibility.
- High power lubrication free motor – No more oil aerosols, for a safer and cleaner working environment.



LBP16M



LBD16M

Model	Free speed ^a rpm	Motor speed ^b	Weight lb	Air consumption cfm	Hose size mm	Hose size in	Air inlet thread NPT	Power hp	Ordering No.
Straight motor units									
LBD16M-005	500	600	1.25	18.4	6.3	1/4	1/4	0.4	8421 0122 05
LBD16M-010	1000	1200	1.25	18.4	6.3	1/4	1/4	0.4	8421 0122 10
LBD16M-018	1800	2100	1.25	18.4	6.3	1/4	1/4	0.4	8421 0122 18
LBD16M-032	3200	3600	1	18.4	6.3	1/4	1/4	0.4	8421 0122 32
LBD16M-045	4500	5100	1	18.4	6.3	1/4	1/4	0.4	8421 0122 45
LBD16M-055	5500	6200	1	18.4	6.3	1/4	1/4	0.4	8421 0122 55
Pistol motor units									
LBP16M-005	500	600	1.2	20.0	6.3	1/4	1/4	0.45	8421 0124 05
LBP16M-010	1000	1100	1.2	20.0	6.3	1/4	1/4	0.45	8421 0124 10
LBP16M-018	1800	2100	1.2	20.0	6.3	1/4	1/4	0.45	8421 0124 18
LBP16M-033	3300	3700	1.1	20.0	6.3	1/4	1/4	0.45	8421 0124 33
LBP16M-045	4500	5100	1.1	20.0	6.3	1/4	1/4	0.45	8421 0124 45
LBP16M-060	6000	6800	1.1	20.0	6.3	1/4	1/4	0.45	8421 0124 60

^a The free speed is given when used with a 90° angle head. ^b Multiply this value with the Speed ratio to get the free speed of each angle head.

ANGLE HEADS

Model	Angle head	Weight lb	Collet capacity	Thread in	Speed ratio	Length mm	Length in	Ordering No.
Angle heads with collet – Short								
BHM90SC-5-0	90°	0.5	5.0	–	14:16	65.5	2.58	8421 0123 02
Angle heads with collet – Standard								
BHM90C-5-0	90°	0.36	5.0	–	14:16	88.5	3.48	8421 0123 00
BHM90C-6-6	90°	0.55	6.6	–	14:16	89.6	3.53	8421 0123 05
BHM90C-8-0	90°	0.55	8.0	–	14:17	89.7	3.54	8421 0123 80
BHM45C-5-0	45°	0.44	5.0	–	14:15	117.3	4.62	8421 0123 10
BHM30C-5-0	30°	0.44	5.0	–	14:15	120.4	4.74	8421 0123 20
BHM30C-6-6	30°	0.44	6.6	–	14:15	127	5	8421 0123 15
BHM90ZC-5-0	360°	0.47	5.0	–	7:9	100.8	3.97	8421 0123 30
BHM90ZC-6-6	360°	0.47	6.6	–	7:9	108	4.25	8421 0123 40
Angle heads with collet – Extended								
BHM90EC-5-0	90°	0.58	5.0	–	14:16	128.5	5.06	8421 0123 08
BHM45EC-5-0	45°	0.64	5.0	–	14:15	157.3	6.19	8421 0123 18
BHM30EC-5-0	30°	0.64	5.0	–	14:15	160.4	6.31	8421 0123 28
BHM90EZC-5-0	360°	0.67	5.0	–	7:9	140.8	5.54	8421 0123 38
Angle head with internal thread – Standard								
BHM90T-1-4	90°	0.36	–	1/4"-28	14:16	88.5	3.48	8421 0123 01
BHM90LT-1-4	90°	0.52	–	1/4"-28	14:16	89.6	3.53	8421 0123 06
BHM45T-1-4	45°	0.44	–	1/4"-28	14:15	118.2	4.65	8421 0123 11
BHM30T-1-4	30°	0.44	–	1/4"-28	14:15	121.1	4.77	8421 0123 21
BHM90ZT-1-4	360°	0.47	–	1/4"-28	7:9	101	3.98	8421 0123 31
Angle head with internal thread – Extended								
BHM90ET-1-4	90°	0.58	–	1/4"-28	14:16	128.5	5.06	8421 0123 09
BHM45ET-1-4	45°	0.64	–	1/4"-28	14:15	157.9	6.22	8421 0123 19
BHM30ET-1-4	30°	0.64	–	1/4"-28	14:15	161.1	6.34	8421 0123 29
BHM90EZT-1-4	360°	0.67	–	1/4"-28	7:9	141	5.55	8421 0123 39
Straight short angle head								
BHM0C-5-0	0°	0.31	5.0	–	1:1	78	3.07	8421 0123 43
BHM0T-1-4	0°	0.31	–	1/4"-28	1:1	78	3.07	8421 0123 44

Angle heads Standard/Extended
(pictures shows extended versions)



90C/EC/T/ET



45C/EC/T/ET



30C/EC/T/ET

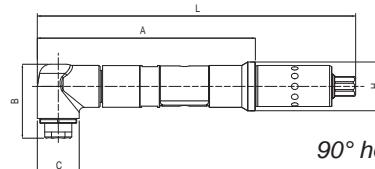


90ZC/EZC/ZT/EZT

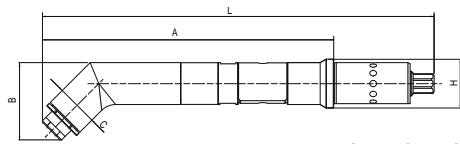
Dimensions

ANGLE HEAD DIMENSIONS

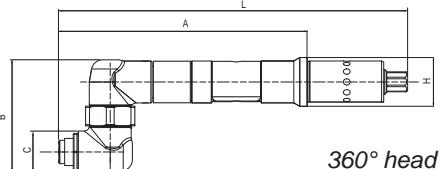
Model	A mm	B mm	C mm	L mm	H mm	Ordering No.
90° heads						
BHM90SC-5-0	65.5	29.8	17	106.2	19.8	8421 0123 02
BHM90C-5-0	88.5	29.8	17	129.2	19.8	8421 0123 00
BHM90C-6-6	90	39.3	20	130.3	20	8421 0123 05
BHM90C-8-0	90	41.1	20	130.3	20	8421 0123 80
BHM90EC-5-0	128.5	29.8	17	169.2	19.8	8421 0123 08
BHM90T-1-4	88.5	30	17	129.2	19.8	8421 0123 01
BHM90LT-1-4	90	36	20	130.3	20	8421 0123 06
BHM90ET-1-4	128.5	30	14	169.2	19.8	8421 0123 09
30° heads						
BHM30C-5-0	120.4	25	17	161	19.8	8421 0123 20
BHM30C-6-6	127.3	32.3	17	168	19.8	8421 0123 15
BHM30EC-5-0	160.4	25.2	17	201	19.8	8421 0123 28
BHM30T-1-4	121.1	26.4	17	161.6	19.8	8421 0123 21
BHM30ET-1-4	161.1	26.4	17	201.8	19.8	8421 0123 29
45° heads						
BHM45C-5-0	117.3	30.5	17	158	19.8	8421 0123 10
BHM45EC-5-0	157.3	30.5	17	198	19.8	8421 0123 18
BHM45T-1-4	118.2	31.4	17	159	19.8	8421 0123 11
BHM45ET-1-4	158.2	31.4	17	199	19.8	8421 0123 19
360° heads						
BHM90ZC-5-0	100.8	45.9	17	141.5	19.8	8421 0123 30
BHM90ZC-6-6	107.3	45.9	17	148	19.8	8421 0123 40
BHM90EZC-5-0	140.8	45.9	17	181.5	19.8	8421 0123 38
BHM90ZT-1-4	101	45.9	17	141.5	19.8	8421 0123 31
BHM90EZT-1-4	141	45.9	17	181.5	19.8	8421 0123 39
Straight heads						
BHM0C-5-0	78	-	17	119	19.8	8421 0123 43
BHM0T-1-4	78	-	17	119	19.8	8421 0123 44
Extension - for chuck						
EXTENSION	35	-	17.5	76	28.5	4110 1692 90



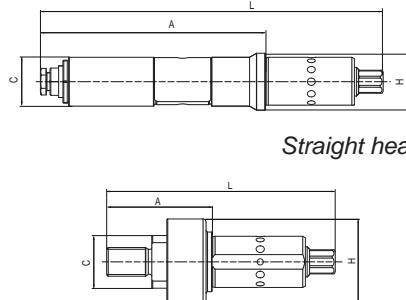
90° head



30° and 45° head



360° head



Straight head

Extension for chuck

Optional Accessories



STRAIGHT DRILL HEAD FOR CHUCK

For model	Ordering No.
LBD16M, LBP16M	4110 1692 90



SAFETY LEVERS

For model	Ordering No.
LBD16M	4110 1787 80

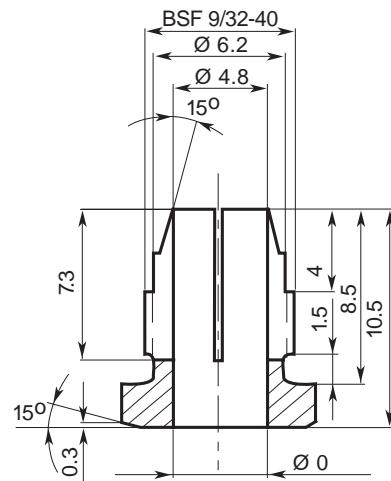


SHORT LEVERS

For model	Ordering No.
LBD16M	4210 2306 04

COLLETS FOR 5.0 MM CAPACITY ANGLE HEAD BHMC-5-0 (-30, -45, -90, -90Z)

Capacity mm	Ordering No.	Capacity mm	Ordering No.	Capacity in	Ordering No.
1.0	4110 0438 01	3.4	4110 0438 33	1/16	4110 0438 19
1.5	4110 0438 02	3.5	4110 0438 13	3/32	4110 0438 20
1.8	4110 0438 28	3.6	4110 0438 24	1/8	4110 0438 21
2.0	4110 0438 03	3.7	4110 0438 34	5/32	4110 0438 22
2.1	4110 0438 29	3.8	4110 0438 14	3/16	4110 0438 23
2.2	4110 0438 04	3.9	4110 0438 35		
2.3	4110 0438 30	4.0	4110 0438 15		
2.4	4110 0438 05	4.1	4110 0438 25		
2.5	4110 0438 06	4.2	4110 0438 26		
2.6	4110 0438 07	4.3	4110 0438 36		
2.7	4110 0438 31	4.4	4110 0438 37		
2.8	4110 0438 32	4.5	4110 0438 16		
2.9	4110 0438 08	4.6	4110 0438 38		
3.0	4110 0438 09	4.7	4110 0438 39		
3.1	4110 0438 10	4.8	4110 0438 18		
3.2	4110 0438 11	4.9	4110 0438 40		
3.3	4110 0438 12	5.0	4110 0438 27		

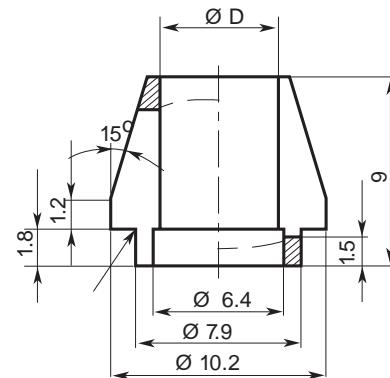


Collets for 5.0 mm (Thread BSF 9/32 -40)

COLLETS FOR 6.6 MM CAPACITY ANGLE HEAD BHMC-6-6 (-30, -90, -90Z)

Capacity mm	Ordering No.	Capacity mm	Ordering No.
1.6	4110 1411 01	4.2	4110 1411 14
1.8	4110 1411 02	4.4	4110 1411 15
2.0	4110 1411 03	4.6	4110 1411 16
2.2	4110 1411 04	4.8	4110 1411 17
2.4	4110 1411 05	5.0	4110 1411 18
2.6	4110 1411 06	5.2	4110 1411 19
2.8	4110 1411 07	5.4	4110 1411 20
3.0	4110 1411 08	5.6	4110 1411 21
3.2	4110 1411 09	5.8	4110 1411 22
3.4	4110 1411 10	6.0	4110 1411 23
3.6	4110 1411 11	6.2	4110 1411 24
3.8	4110 1411 12	6.4	4110 1411 25
4.0	4110 1411 13	6.6	4110 1411 26

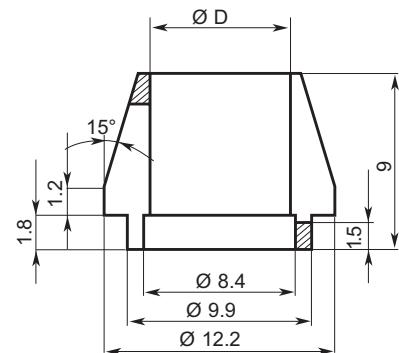
Collet nut 4110 1410 00, to be ordered separately.



Collets for 6.6 mm

COLLETS FOR 8.0 MM CAPACITY ANGLE HEAD BHMC-8-0 (-90)

Capacity mm	Ordering No.	Capacity mm	Ordering No.
6.8	4110 1812 01	7.6	4110 1812 05
7.0	4110 1812 02	7.8	4110 1812 06
7.2	4110 1812 03	8.0	4110 1812 07
7.4	4110 1812 04		



Collets for 8.0 mm



Service Kits

The Atlas Copco LBS36 drill is equipped with an integrated micro stop. It is designed for the aerospace industry where the focus is on high-precision drilling, reaming and countersinking.

- Accurate – The integrated micro stop function makes the LBS36 unique for high-precision drilling of rivet holes and other fasteners. Minimized spindle run-out is achieved by eliminating standard drill chuck.
- Ergonomic handle design – The integrated micro stop function makes the tool shorter and lighter in weight.
- Flexible – Can be used for drilling, reaming, countersinking and, in certain applications, a combined operation using a form bit.
- Dust extraction – Equipped with a specially designed spot suction system for working in composite materials.
- Lubrication-free – For clean working environment and operator comfort.



LBS26

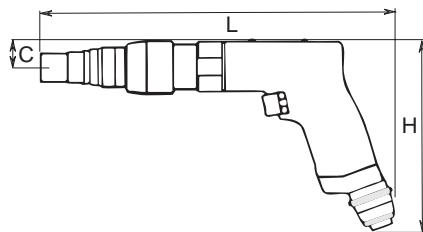


LBS36

Model	Free speed r/min	Spindle thread in/mm	Stroke		Setting range +		Weight lb	Hose size		Air consumption cfm	Air inlet thread NPT	Ordering No.
			mm	in	mm	in		mm	in			
LBS26 H033-40	3300	1/4"-28	40	1.6	6	1/4	2.0	10	3/8	31.8	3/8	8421 0220 40
LBS26 H013-40	1300	1/4"-28	40	1.6	6	1/4	2.6	10	3/8	31.8	3/8	8421 0220 45
LBS36 H033-40	3300	1/4"-28	40	1.6	6	1/4	2.6	10	3/8	34.9	3/8	8421 0220 80
LBS36 H013-40	1300	1/4"-28	40	1.6	6	1/4	3.3	10	3/8	34.9	3/8	8421 0220 90

Dimensions

Model	L mm	H mm	C mm
LBS26 H033-40	253	146	21
LBS26 H013-40	285	146	21
LBS36 H033-40	281	157	21
LBS36 H013-40	314	157	21



Accessories Included

Hose nipple
2x2 mm Allen wrenches

Optional Accessories

Designation		Attachment	Ordering No.
Plain base, dia 24 mm	Fig 1	M 20x1	4110 1521 00
Plain base for nylon ring (attached with thread M35x1)	Fig 2	M 20x1	4110 1522 00
Separate nylon ring for above base, outer dia 40 mm, thread M35x1	Fig 3	M 20x1	4110 1523 00
Plain base, dia 14.5 mm	Fig 4	M 20x1	4110 1520 00
Tripod, nylon supported	Fig 5	Dia 22 mm	4110 1524 00

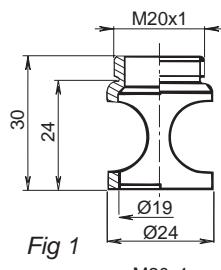


Fig 1

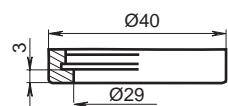


Fig 3

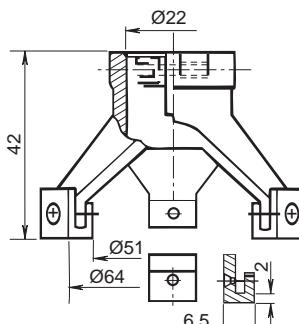


Fig 5

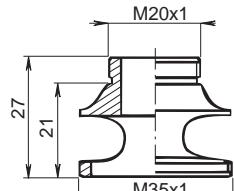


Fig 2

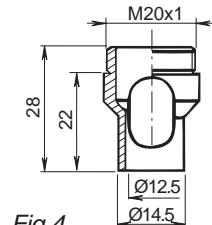


Fig 4

Service Kits

LBS26 4081 0507 90
LBS36 4081 0005 90

Atlas Copco tappers are designed for tapping and thread-cleaning operations with thread taps. The tools are fitted with a tap chuck as standard.

- Comfortable and effective – The ergonomically designed handle gives a comfortable grip and maximum performance.
- Higher productivity – Double speed when you withdraw the machine.
- Low noise level – Rear-directed exhaust gives a lower noise level.
- Lubrication-free – For a clean working environment and operator comfort.
- Quick change system – Upgrade your old tool, or order a new one with this system. Various tap holders can be used to change a broken tap or to change to a different tap size.
- Lower cost – The efficient air motor, together with interchangeable components from our standard drills, cut your costs.



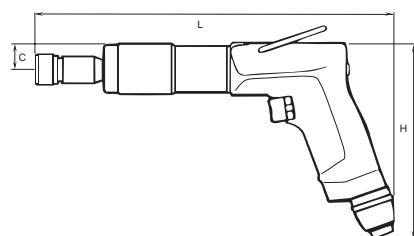
Model	Free speed		Tapping capacity mm	Weight kg lb	Hose dimension mm in		Air inlet thread BSP	Air consumption l/s cfm		With chuck Ordering No.
	Forward r/min	Reverse r/min			mm	in		l/s	cfm	
Pistol-grip tappers with air supply through handle										
LGB34 H007	700	1400	10	1.8 4.0	10.0	3/8	1/4	7.5	15.9	8421 0311 66
LGB34 H007Q ^a	700	1400	10	1.8 4.0	10.0	3/8	1/4	7.5	15.9	8421 0311 76
LGB36 H007Q ^a	700	1400	12	2.0 4.4	10.0	3/8	3/8	16.5	34.9	8421 0411 00
Straight tappers										
LGB34 S007	700	1400	10	1.8 4.0	10.0	3/8	1/4	7.5	15.9	8421 0311 72

^a Quick change system.

Taper: Jacob 1

Dimensions

Model	L mm	H mm	C mm
LGB34 H007	300	156	20
LGB34 S007	293	43	21
LGB36 H007	335	157	20



Accessories Included

Non Quick change system

LGB34 Chuck complete with collet 6.4-10 mm 4021 0469 00

Quick change system

Chuck plus one tap holder with collet for M6 shank Ø 6.3 mm.

Optional Accessories

COLLETS FOR NON QUICK CHANGE SYSTEM

Model	Capacity		Ordering No.
	mm	inch	
LGB34	3.5 - 6.5	0.139 - 0.257	4021 0337 00
	4.5 - 8.1	0.176 - 0.320	4021 0336 00
	6.4 - 9.7	0.253 - 0.383	4021 0456 00

COLLETS FOR QUICK CHANGE SYSTEM

Collets for tap size mm	Shank dia		Ordering No.
	mm	in	
M2.2/M2.5	2.8		4021 0414 01
M3	3.15	1/8	4021 0414 02
M3.5	3.5		4021 0414 03
M4	4.0		4021 0414 04
M4.5	4.5		4021 0414 05
M5	5.0	3/16	4021 0414 06
M5.5	5.6	7/32	4021 0414 07
M6	6.4	1/4	4021 0414 08
M6 (DIN)	6.0		4021 0414 13
M7	7.1	9/32	4021 0414 09
M8/M11	8.0	5/16 & 7/16	4021 0414 10
M9/M12	9.0	1/2	4021 0414 11
M10	10.0	3/8	4021 0414 12

COMPLETING EXISTING EQUIPMENT WITH QUICK CHANGE SYSTEM

Accessories	Length mm	Ordering No.
Quick change chuck	47	4021 0406 90
Tap holder	58	4021 0408 00



Service Kits

LGB34 4081 0035 90
LGB36 4081 0194 90

Atlas Copco screw-feed drills are ideal for heavy-duty drilling operations requiring high feed forces. They can also be used for reaming and tube-rolling.

- Reliable – Simple, reliable design.
- Constant speed – The speed governor keeps the drilling speed constant and reduces air consumption as power is reduced.
- Safer – The safety catch prevents accidental starting. The throttle is also self-closing.



Model	Forward	Reverse
RAB9	1.14 hp	0.74 hp
RAB12	2.0 hp	1.5 hp

Model	Free speed r/min	Capacity			Morse taper No.	Length feed mm	Height in	Weight lb	Hose dimension		Air consumption max output cfm	Distance centre to side mm	Air inlet thread NPT	Ordering No.
		Drilling mm	Reaming mm	Tapping mm					mm	in				
RAB9 VR003	300	23	23	16	2	75	10.4	20.9	13	1/2	47	40	1/2	8421 5109 37
RAB9 VR006	600	23	23	12	2	75	10.4	20.9	13	1/2	49	40	1/2	8421 5109 45
RAB12 L150	140	51	40	32	4	90	15.2	32.8	16	5/8	64	50	1/2	8421 5112 08
RAB12 L250	240	51	40	30	4	90	13.2	32.8	16	5/8	70	50	1/2	8421 5112 16
RAB12 L450	475	32	32	24	3	90	13.4	28.4	16	5/8	68	50	1/2	8421 5112 24

Accessories Included

Hose nipple

Optional Accessories

SQUARE DRIVE ADAPTER

Morse taper No.	Square drive in	Ordering No.
3	1	4021 0394 00
4	1	4021 0395 00



Square drive adapter

Robust and versatile, the PFD-drills are your best choice for holemaking

PRODUCTIVITY

With this platform you have all you need for hole preparation. Reduce cycle time and increase output with a powerful turbine motor. This robust tool is well suited for factory environment and the long service intervals maximizes uptime of your investments.

HOLE QUALITY

Keep your workplace clean with Atlas Copco's ChipLet® feature which makes chips easy to evacuate. With ChipLet® during countersinking, you have a one-step process. Giving process improvements in terms of both productivity and quality.

ERGONOMICS

My operators will really appreciate how all the controls on the tool are grouped in one and the same place. This reduces the risk of operator errors. The tool is also very well balanced which makes it easy to move around.

SAFE OPERATION

The modular design means fewer back-up tools. You can also save on service as the platform is based on standard, reusable components.

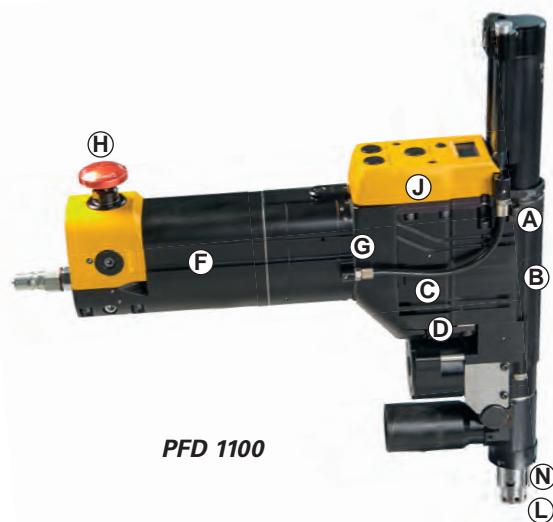
SUPPORT

The modular approach means quick deliveries when needed, and makes it easy to re-work your existing products when urgent applications come up. With our technical documentation and support you will quickly put new tools to work on your assembly line.





PFD 1500



PFD 1100

PFD 1500

Item	Ordering No.
PFD1500RA-200-R	8440 1500 39
Indexer-1-9-16	4141 0306 90
PFD1500-IPR2	4141 0034 92
Spindle-1500-12-9-6	4141 0004 91
Guard-1500-12	4141 0323 91
Nose-8IN-1-1-2	4141 0245 90

Example: Twistlock model with rapid advance and indexer. Spindle with 9/16"-18" interface, speed of 200 rpm and feed of 0.05 mm/r (0.002 IPR). Suitable for drilling of 19 mm holes (3/4") in Ti or Ti/CFRP stacks.

PFD 1100

Item	Ordering No.
PFD1100RA-IFB110B	8440 1110 66
Spindle-CC-1100-2	4141 0742 90
Guard-1100-2in-p	4141 0826 92
Guide-CC-R-1100-M6	4141 0743 91
Bush-CC-1100-53	4141 0707 92
Foot-CC-1100-MINI	4141 0764 90
Mandrel-CC-25.4-A	4141 0806 28
Collet-CC-1	4141 0813 28

Example: Concentric collet model with inboard lubricator, counter and ChipLet®. Spindle with M6 interface, speed of 2600 rpm and feed of 0.07 mm/r (0.003 IPR). Suitable for drill and countersink of Ø 6.35 (1/4") holes in Al or Al/CFRP stacks.

- (A) Optional ChipLet® module which effectively breaks chips while drilling for improved chip evacuation and hole quality.
- (B) Angle head with superior durability with double needle bearings for both feed and drive gear.
- (C) Overload clutch protects the angle head and drive train from overthrust.
- (D) The replaceable feed cassette system enables quick and easy change of feed rate.
- (E) Optional indexer which allows the tool to be locked in the jig also when free space is compromised.
- (F) High torque, high power governed air motor maintains cutting speed while drilling.
- (G) Easy-to-change split gearbox for quick adjustment of rpm.

- (H) Emergency stop fully compliant with the European machinery directive for a high level of safety.
- (J) Rapid advance of spindle reduces cycle time and makes setup a quick and safe task.
- (K) Reliable and user-friendly tool controls with optional cycle counter.
- (L) Best in class spindle power and thrust capabilities. A wide range of speeds and feeds.
- (M) A large selection of tool noses with or without vacuum port makes the tool fit existing drill jigs.
- (N) Concentric collet foot which allows clamp force for countersinking up to diameter 22 mm (7/8"). Debris protection and efficient vacuum exhaust of chips. Foot is modular and easily removed for drill bit change.

Specifications

Feature	PFD1100		PFD1500	
	Metric	Imperial	Metric	Imperial
Motor	Turbine	Turbine	Vane	Vane
Drill and ream	yes	yes	yes	yes
Countersinking	yes	yes	no	no
Sound level	78 dB(A)	78 dB(A)	83 dB(A)	83 dB(A)
Spindle power	1.7 kW	2.3 hp	1.5 kW	2.0 hp
Max hole	15.9 mm	5/8"	32 mm	1 1/4"
Max countersink	22 mm	7/8"	N/A	N/A
Max speed	7300 rpm	7300 rpm	2360 rpm	2360 rpm
Min speed	350 rpm	350 rpm	38 rpm	38 rpm
Max thrust	2000 N	450 lbf	4000 N	900 lbf
Max clamp force (cc)	1800 N	400 lbf	N/A	N/A
Max feed	0.17 mm/rev	0.007 IPR	0.25 mm/rev	0.010 IPR
Tool weight (base)	3.0 kg	6.6 lb	5.5 kg	12.0 lb
Max air consumption	30 l/s	60 cfm	35 l/s	70 cfm
Air inlet	1/2" BSP	1/2" NPT	1/2" BSP	1/2" NPT
Operating pressure	5.5–7.5 bar	80–110 psi	5.5–7.5 bar	80–110 psi
Angle head radius	16.0 mm	5/8"	17.8 mm	0.7"
Air hose	13 mm	1/2"	16 mm	5/8"

Collet



Mandrel



Counter sink stop nut



Tool nose with vacuum port



Tool nose



Optional Equipment

Item	PFD1100	PFD1500
Chiplet®	yes	yes
Rapid advance	no	yes (with J-Clutch)
Lubrication pump	inboard, 30 ml	onboard, 55 ml
Counter	yes	yes
Indexer	yes	yes
Tool handle	no	yes
Nose sizes	21k–23k	23k–25k
Concentric collet	yes	no
Max collet outer diameter	1 3/8"	N/A

Concentric collet unit



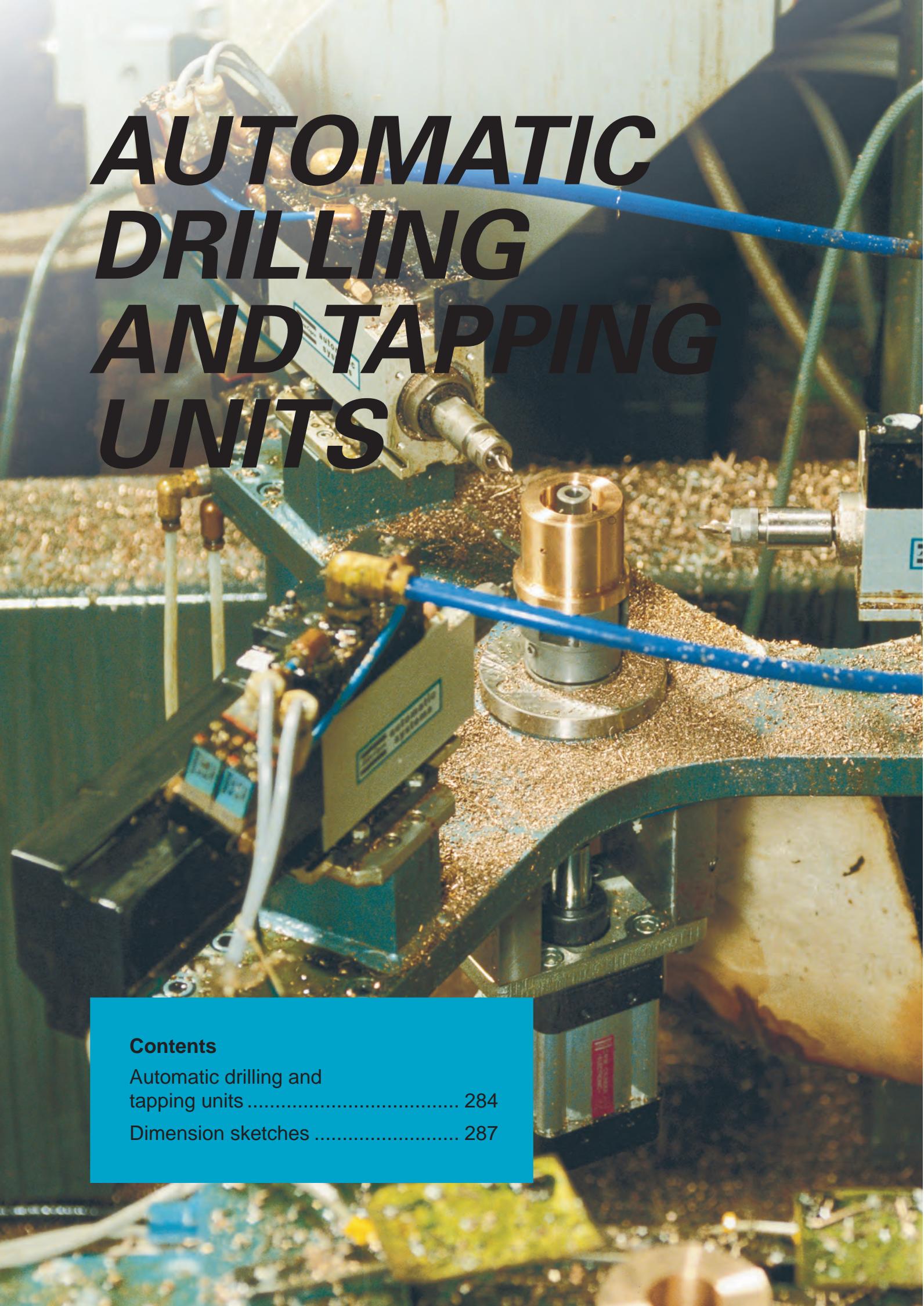
Tool nose indexer



Air Installation

Item	PFD1100	PFD1500 / PFD1100
	Light to Medium Duty Cycle	Heavy Duty Cycle
Swivel	MultiFlex with 1/2	MultiFlex with 1/2
Coupling	ErgoQIC 08 with H13	ErgoQIC 10 with H16
Air fitting	ErgoNIP 08 with 1/2	ErgoNIP 10 with 1/2
Hose	PVC 13, 30 m coil	PVC 16, 30 m coil
Clamp	clamp for PVC 13	clamp for PVC 13
Air preparation unit	MIDI Optimizer F/R A with 1/2	Optimizer F/R A with 1/2
Ball valve	BAL-1A with 1/2	BAL-1A with 1/2
Connection	Double with two 1/2	Double with two 1/2

AUTOMATIC DRILLING AND TAPPING UNITS



Contents

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More mechanization in your drilling operations

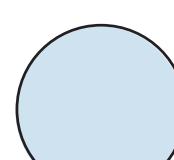
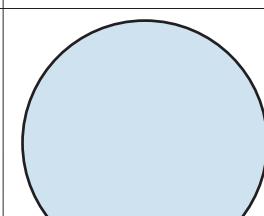
Simple and cost effective, Atlas Copco automatic drilling and tapping units cut costs by reducing machining time in ancillary equipment, or in highly automated special machines. Modular designs allow the units to be easily replaced, transferred to other machines, or combined to form new special-purpose machines.



Selection Guide

Dimensions in mm

LBL45

025	015	010	007	003
—	7.0	10.0	14.0 (M8)	20.0 (M12)
				
				
10.0	14.0	16.0	22.0 (M12)	32.0 (M16)



LBL35			
054	030	014	007
3.0	5.0	8.0 (M4)	11.0 (M8)
○	○	○	○
●	●	●	●
5.0	7.0	10.0 (M5)	13.0 (M10)

LBL25			
220	049	022	011
1.2	3.2	5.0	8.0
	○	○	○
○	○	○	○
2.0	5.0	6.5	10.0

