SPITZNAS
CUSTOMIZED POWER SOLUTIONS



ANGLE GRINDERS AND VERTICAL GRINDERS



CSI srl - Genova
www.csiadvice.it

PNEUMATIC

HYDRAULIC

SYSTEM CONCEPT



Various tool holders available



Handle is mountable on the left or on the right side



Type for underwater oparation with exhaust backwards







For grinding discs or rough grinding wheels

Exhaust sidewise

Air connection







PNEUMATIC

Pneumatic angle grinders are available in different power classes and with different tool holders.
Type 1 4311 0050 is also usable for underwater operation.



Type 1 4311... / 1 4312 ...



Type 1 5031-44 ...



Type 1 1488 ...



Type 1 2140 ... / 1 2150

PNEUMATIC | **OPERATING PRESSURE** 6 Bar | **UNDERWATER OPERATION**[1)]

ORDER NO.	Max. disc diameter	Valve type	Speed (free)	Power	Air consumption	Noise level LpA	Vibration level	Weight
	mm		rpm	kW	m³/min	dB(A)	m/s²	kg
1 5043 0020	80.00 (for cup brushes)	Twist throttle	8,000	0.70	0.85	85.6	<2.5	2.0
1 5044 0010		Lever valve						1.9
1 5039 0020	120.00 (for rubber discs)	Twist throttle	8,000	0.70	0.85	85.6	<2.5	2.0
1 5040 0010		Lever valve						1.9
1 4312 0010	125.00 (for grinding discs/rough grinding wheels)	Twist throttle	11,600	0.30	0.64	88.5	<2.5	1.6
1 4311 0010		Lever valve						1.7
1 4311 0050[1)]		Lever valve			1.00			2.5
1 5031 0020		Twist throttle	8,000	0.70	0.85	85.6		2.0
1 5032 0010		Lever valve						1.9
1 5035 0020		Twist throttle	12,000					2.0
1 5036 0010		Lever valve						1.9
1 1488 0050	178.00 (for grinding discs/rough grinding wheels)	Twist throttle	7,200	1.00	1.40	86.5	<2.5	4.3
1 1488 0150		Lever valve						
1 2150 0010	180.00 (for grinding discs/rough grinding wheels)	Lever valve	7,200	3.60	3.90	98.5	<2.5	5.9
1 2140 0010	230.00 (for grinding discs/rough grinding wheels)	Lever valve	6,500	3.60	3.60	98.5	<2.5	6.0

Subject to technical change. [1)] to use for underwater operation Performance data at an operating pressure of 6 bar.

CSI srl - Genova

SYSTEM CONCEPT



Disc diameter up to 180 mm



Lever valve with self lock



Hydraulic hoses with quick coupling





For grinding discs or rough grinding wheels



Lever valve with self lock



Hydraulic connection



HYDRAULIC

Powerful angle grinder based on a hydraulic drive,
maximum cutting and abrasion work,
as well usable under water.



HYDRAULIC | **OPERATING PRESSURE** 90-140 Bar | **UNDERWATER OPERATION**

ORDER NO.	Max. disc diameter (for underwater operation)	Valve type	Speed (free)	Power	Volume flow	Noise level L_{pA}	Vibration level	Weight
	mm		rpm	kW	l/min	dB(A)	m/s²	kg
1 1585 0010	180.00 (125.00) (for grinding discs/rough grinding wheels)	Lever valve	5,500	1.80	20	94.8	<2.5	7.6

Subject to technical change. Performance data at an operating pressure of 90 bar.

HYDRAULIC

The powerful vertical grinder, ideal for all hard grinding work,
also usable for underwater work.



HYDRAULIC | **OPERATING PRESSURE** 90-140 Bar | **UNDERWATER OPERATION**

ORDER NO.	Max. disc diameter	Valve type	Speed (free)	Power	Volume flow	Noise level L_{pA}	Vibration level	Weight
	mm		rpm	kW	l/min	dB(A)	m/s²	kg
1 2060 0010	230.00 (for grinding discs/rough grinding wheels)	Lever valve	3,600	3.50	20-45	98.0	3.0	5.8

Subject to technical change. Performance data at an operating pressure of 90 bar.

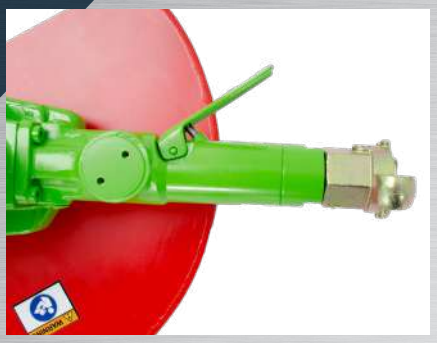
SYSTEM CONCEPT



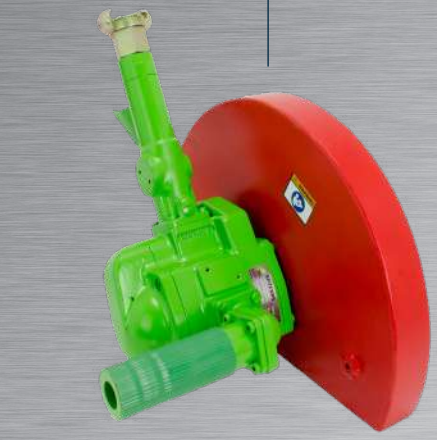
Tool holder with protective hood



Second handle



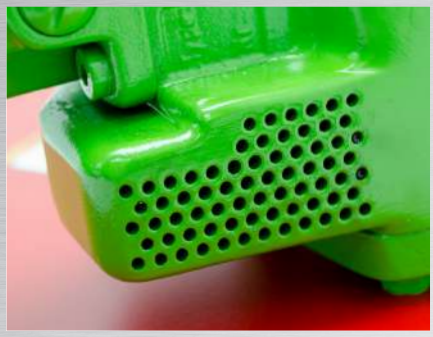
Lever valve with self retraction or twist throttle and sensor block







Exhaust sidewise



Safety sensor block



Air connection



PNEUMATIC

Pneumatic vertical grinders are available in different power classes and disc diameters.





PNEUMATIC **OPERATING PRESSURE** 6 Bar

ORDER NO.	Max. disc diameter	Valve type	Speed (free)	Power	Air consumption	Noise level LpA	Vibration level	Weight
	mm		rpm	kW	m³/min	dB(A)	m/s²	kg
1 1834 0010	125.00 (for grinding discs/rough grinding wheels)	Lever valve	12,200	1.20	1.25	94.8	<2.5	2.6
1 1840 0010	180.00 (for grinding discs/rough grinding wheels)		8,500	1.00	1.25	95.3		2.9
1 2034 0010				2.70	2.60	89.6		4.4
1 2040 0010	230.00 (for grinding discs/rough grinding wheels)		6,500	2.30	2.30	98.3		4.7
1 2122 0010	350.00 (for grinding discs/rough grinding wheels)		5,100	3.75	3.20	98.5		10.5

Subject to technical change.

Performance data at an operating pressure of 6 bar.

SYSTEM ACCESSORIES

HOSES WITH LUBRICATOR

We recommend to use hoses with lubricator when the service unit is not installed upstream to the machine.

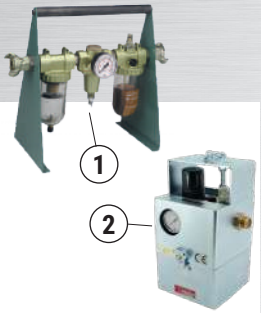
ORDER NO.	Description
9 3610 0180	Hose 2.5 m, ID 10 mm, with automatic lubricator R 1/4"
9 3610 0350	Hose 2.5 m, ID 13 mm, with automatic lubricator R 1/2"



SERVICE UNITS

Portable service units for safe operation and protection of your grinder.

ORDER NO.	Pos.	Description
9 2406 0260	1	Portable service unit with pressure regulator 3/4"
9 2406 0630	2	Portable service unit with protection housing and pressure regulator 1/2"
9 2406 0650	2	Portable service unit with protection housing and pressure regulator 3/4"



ACCESSORIES AND CONSUMABLES

The easy and safe storage with our carrying case and the use of our multi oil guarantees the optimum condition of your machine.

ORDER NO.	Pos.	Description	For type
9 1301 0100	1	Spanner AF24 according to DIN894	
9 1417 0080	2	Pin type face spanner 11-60 (dia. 4) mm	
1 4310 6900		Handle assembly	1 4311 ..., 1 4312 ...
9 9910 0090	3	Carrying case	1 1470, 1 1472, 1 1474, 1 4312, 1 50...
9 9902 0020	4	Pneumatic oil 50 ml	
9 9902 0470	5	Pneumatic oil 1000 ml	
9 9902 0120	6	Multi oil for cleaning and protection	

More accessories on request.

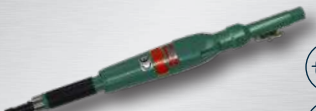


GRINDERS RANGE

DIE GRINDERS



AXIAL GRINDERS



ANGLE-/ AND VERTICAL GRINDERS



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