

EASY ADJUSTMENTS AND LITTLE MAINTENANCE

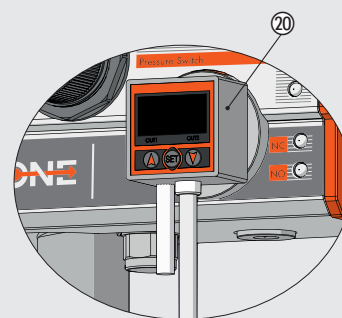
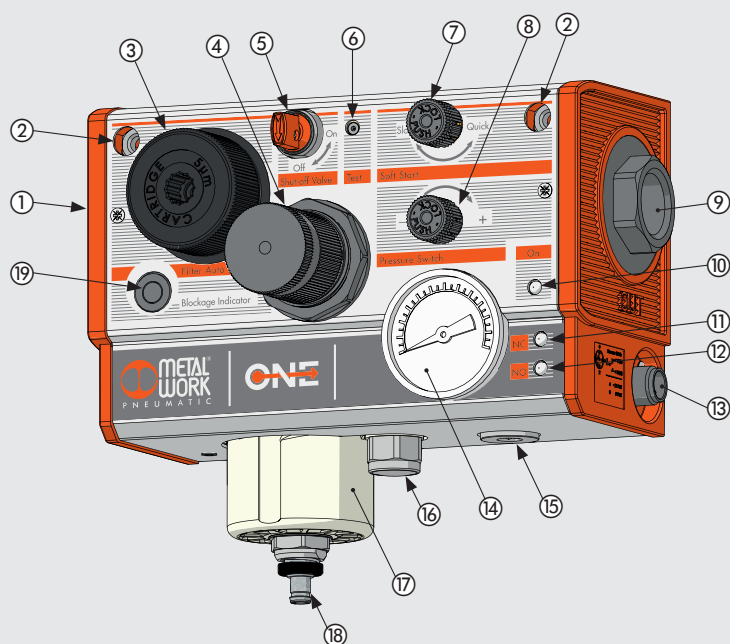
The entire user interface is at the front, which means that everything is visible and easy to reach. All the adjustments are made using the push-lock knobs (no need for wrenches or screwdrivers), thus preventing accidental operations or manoeuvres.



CONFIGURABILITY

Considering that ONE is reduced in size but highly performing, and it can integrate tenths of functions, a single unit can cover the entire range of applications, with cut-clear advantages in terms of standardisation and reduction of the number of codes handled and goods in stock. With a single size there are thousands of different configurations. For example, there is choice between 1/4", 3/8", 1/2", 3/4" or 1" threaded ports, manual and/or electric on-off or progressive valves, etc. The customer decides the configuration he wants and creates the code, using the key-to-coding table shown below in this catalogue. He will receive the unit he wants marked with its code and the correct pneumatic diagram.

WHAT YOU CAN SEE FROM THE OUTSIDE



- | | |
|---|---|
| ① Air intake, with swivel threaded port | ⑫ LED signalling pressure over the value set on analog pressure switch |
| ② Fixing hole | ⑬ 5-pin M12x1 electrical connector |
| ③ Access to filter cartridge | ⑭ Pressure gauge |
| ④ Pressure regulation | ⑮ 1/4" air intake. Another regulated air intake and a filtered non-regulated air intake are situated on the top |
| ⑤ Shut-off valve (manual) | ⑯ Air exhaust with a 1/4" silencer |
| ⑥ Manual override (shut-off valve electrical) | ⑰ Condensate tank |
| ⑦ Soft start valve regulation | ⑱ Condensate drain |
| ⑧ Switching pressure regulation of the analog pressure switch | ⑲ Clogged filter signal |
| ⑨ Air outlet, with swivel threaded port | ⑳ Digital pressure switch |
| ⑩ LED signalling unit ON | |
| ⑪ LED signalling pressure below the value set on analog pressure switch | |

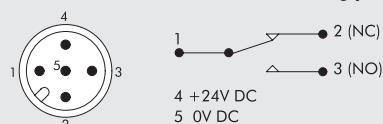
SPECIFICATIONS

TECHNICAL DATA			1/4"	3/8"	1/2"	3/4"	1"
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7 psi)	Nl/min		2200	2900		3600	
	scfm		78	102		127	
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min		2400	3300		4000	
	scfm		85	116		141	
Flow rate on discharge at 6 bar (0.6 MPa; 87 psi)	Nl/min				1600		
	scfm				56		
1/4" port flow rate of non-regulated filtered air at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar	Nl/min				1800		
	scfm				64		
Flow rate of each supplementary 1/4" filtered and regulated air port at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar *	Nl/min				2400		
	scfm				85		
Fluid					Compressed air		
Setting range	bar				0.5 to 2; 0.5 to 4; 0.5 to 8		
Degree of filtration	μm				5 (yellow) or 20 (white)		
Operating pressure range	bar				10		
	MPa				1		
	psi				145		
Operating temperature range	$^{\circ}C$				-10 to 50		
	$^{\circ}F$				-14 to 122		
Class of protection					IP 65 with connector		
Weight	kg				From 1.15 to 1.25 according to configurations		
Wall fixing (max. panel thickness 10 mm)					Front, with M5x75 screws or back, with M6x70 screws		
					The screws are included in the supply		
Mounting position					Vertical		
Direction of flow					From left to right		
Compatibility with oils					See chapter Z1		
Solenoid valve							
Insulation class					F155		
Switching time					100% ED		
Electrical connector					M12x1, 5-PIN 90°, according to CEI IEC 60947-5-2		
Power	W				3/0.3		
Voltage	V				24 VDC \pm 10%		
Analog pressure switch							
Pressure interval settable on the pressure switch	bar				0.5 to 10		
Pressure switch hysteresis (not adjustable)	bar				bar 0.4 to 0.8 (see diagram)		
Maximum pressure switch current	A				0.5		
Maximum pressure switch voltage	V				3 to 30 AC/DC		
Pressure switch contacts					Normally open (NO) and normally closed (NC)		
Number of switching					5x10 ⁶		
Digital pressure switch series 600							
					See page C6.20		

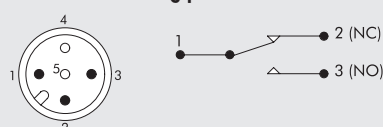
* Total flow rate from two supplementary outlets and the main one cannot exceed 4000 Nl/min at 6.3 bar with $\Delta P=1$

WIRING DIAGRAM M12 CONNECTOR

Version with solenoid valve and analog pressure switch



Version with analog pressure switch

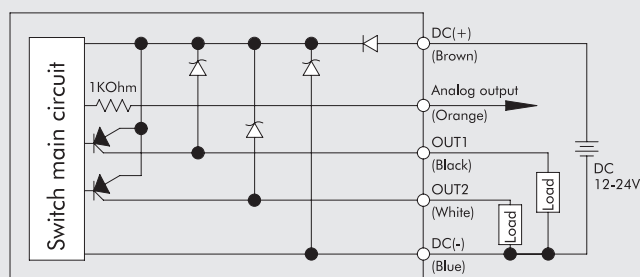


Version with solenoid valve

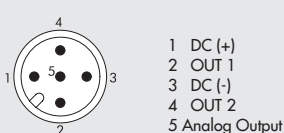


DIGITAL PRESSURE SWITCH WIRING DIAGRAM

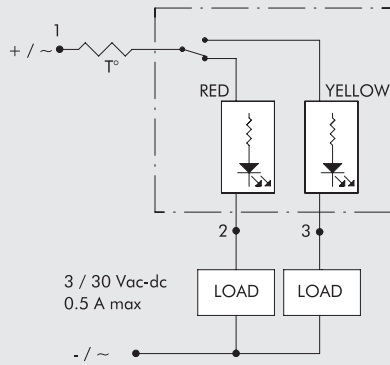
PNP output with cable 2 m



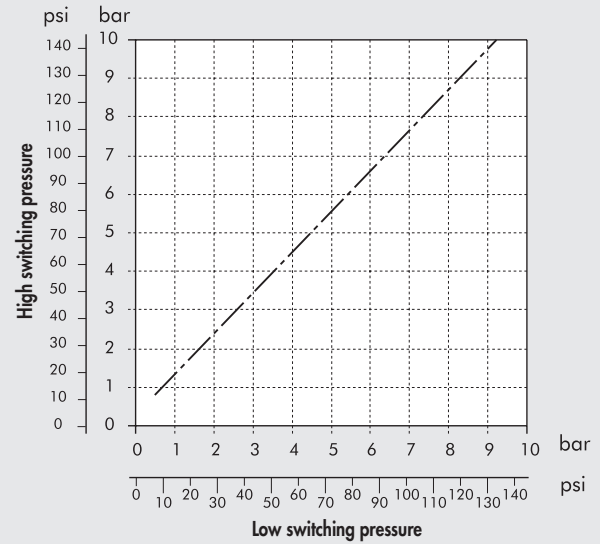
PNP output with M12 connector



ANALOG PRESSURE SWITCH WIRING DIAGRAM



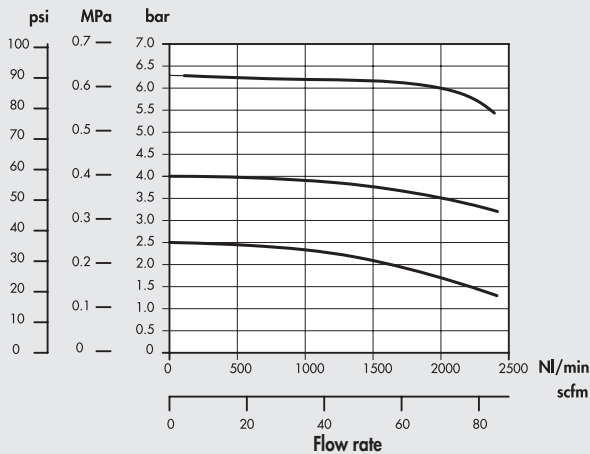
ANALOG PRESSURE SWITCH HYSTERESIS GRAPH



FLOW CHARTS

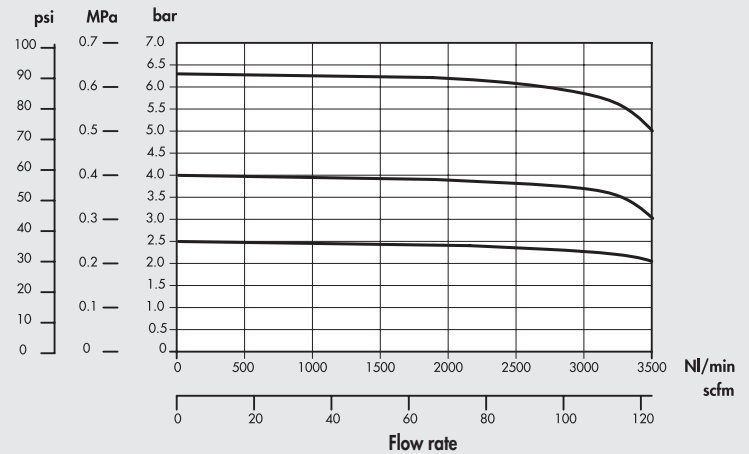
1/4"

Pm = 8 bar - 0.8 MPa - 116 psi
Preset pressure



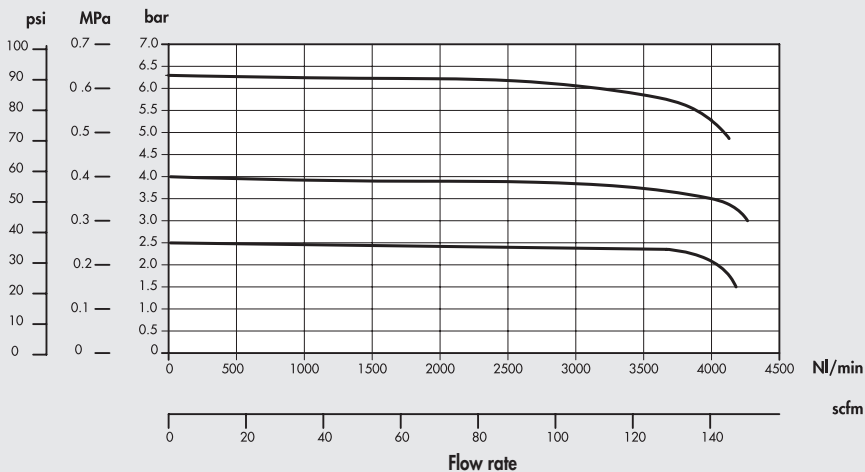
3/8"

Pm = 8 bar - 0.8 MPa - 116 psi
Preset pressure



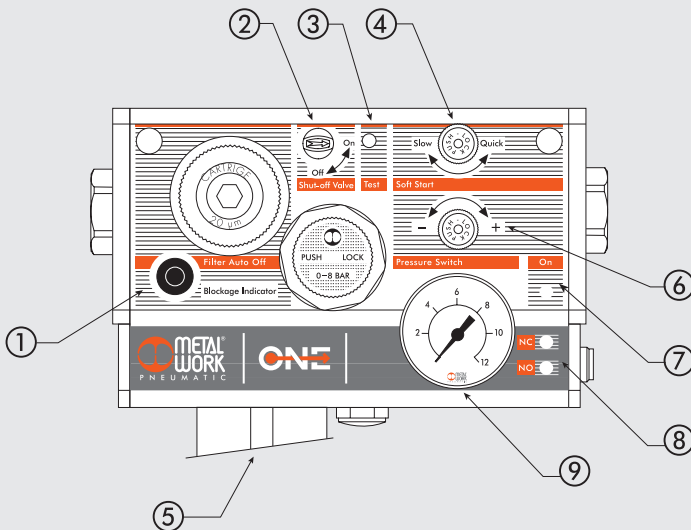
1/2" - 3/4" - 1"

Pm = 8 bar - 0.8 MPa - 116 psi
Preset pressure

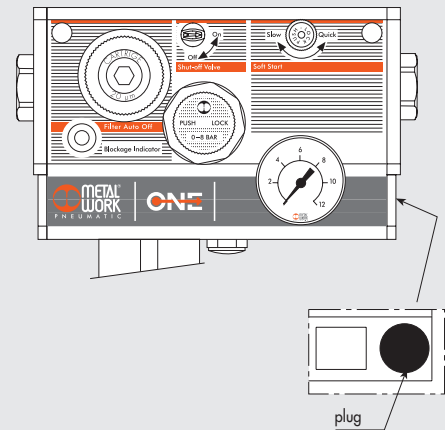


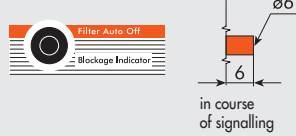
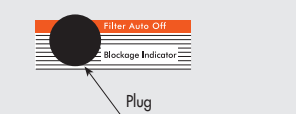
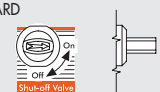
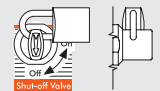
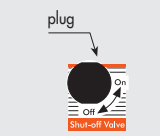
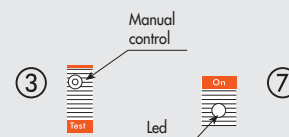
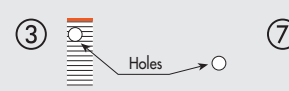
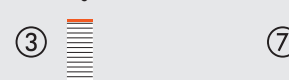


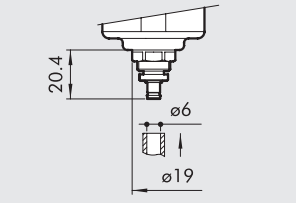
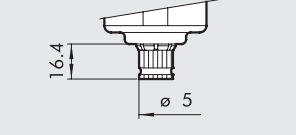
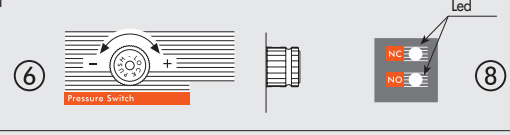



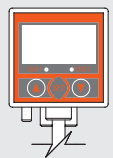
EXTERNAL DESIGN

You can get thousands of different configurations. The external design differs according to the versions chosen.



ONE NON-ELECTRICAL



<div><div>CLOGGED FILTER SIGNAL</div><div>①</div></div> <div><div>PRESENT</div><div></div></div> <div><div>NOT PRESENT</div><div></div></div>	<div><div>V3V MANUAL</div><div>②</div></div> <div><div>STANDARD</div><div></div></div> <div><div>LOCKABLE</div><div></div></div> <div><div>NOT PRESENT</div><div></div></div>	<div><div>V3V ELECTRICAL</div><div></div></div> <div><div>PRESENT</div><div></div></div> <div><div>NOT PRESENT</div><div><p>in some versions holes are present</p></div></div> <div><div></div><div><p>in other configurations the cover has no holes</p></div></div>	<div><div>SOFT START VALVE</div><div>④</div></div> <div><div>PRESENT</div><div></div></div> <div><div>NOT PRESENT</div><div></div></div>
<div><div>CONDENSATE DRAIN</div><div>⑤</div></div> <div><div>AUTOMATIC (RA)</div><div></div></div> <div><div>RMSA</div><div></div></div>	<div><div>ANALOG PRESSURE SWITCH</div><div></div></div> <div><div>PRESENT</div><div></div></div> <div><div>NOT PRESENT</div><div><p>in some versions holes are present</p></div></div> <div><div></div><div><p>in other configurations the cover has no holes</p></div></div>	<div><div>READING OF PRESSURE GAUGE</div><div>⑨</div></div> <div></div>	<div><div>DIGITAL PRESSURE SWITCH</div><div></div></div> <div></div>

HOW TO ORDER

ORDERING CODES

You can choose among numerous variants and options. The product code so personalised is made up by compiling the diagram below. The code so compiled must be specified on the order. A label showing the code and its pneumatic diagram is affixed onto the product.

	A	B	C	D	E	F	G	H	I	L
	ONE electric or ONE non-electric	Air intake	Degree of filtration	Clogged filter signal	Condensate drain	Pressure regulation	Valves	Pressure switch	Air outlet	Miscellaneous, special version
EXAMPLE	54	3	2	1	1	2	7	1	3	0 0
	53 ONE non-electric	1 1/4"	2 20 µm	0 NO	0 RMSA	2 0.5-2 bar	0 None	0 NO	1 1/4"	00 Standard
	54 ONE electric *	2 3/8"	5 5 µm	1 YES	1 Automatic (RA)	4 0.5-4 bar	1 V3V manual	1 YES Analog	2 3/8"	
		3 1/2"				8 0.5-8 bar	2 V3V manual with padlock	2 YES Digital with cable 2 m	3 1/2"	
		4 3/4"					3 V3V manual and soft start valve	3 YES With M12 connector	4 3/4"	
		5 1"					4 V3V manual with padlock and soft start valve		5 1"	
							5 V3V manual and V3V electric			
							6 V3V manual with padlock and V3V electric			
							7 V3V manual and APR electric			
							8 V3V manual with padlock and APR electric			
							9 only V3V electric			
							A only APR electric			

* a pressure switch version and/or electric V3V and/or electric progressive actuator.

● **NB: versions valid only for the electric ONE (code 54...)**

- A ONE electric or non-electric**
ONE non-electric: there is no component actuated electrically: select code 53. In this case, the unit comes without any M12x1 connector, LED, pressure switch, or electric V3V.
ONE electric: there is at least one component actuated electrically, and thus the pressure switch and/or electric V3V (and/or the electrical soft start valve) select code 54. In this case, the unit comes with the M12x1 connector and 3 LEDs. Only the LEDs associated with the functions installed will be active.
- B Air intake**
 There are 5 different gas cylindrical threads: 1/4", 3/8", 1/2", 3/4" and 1".
- C Degree of filtration**
 A cartridge with a degree of filtering of 5 µm (yellow) or 20 µm (white) is available. This value is marked on the plug.
- D Clogged filter signal**
 If the filter gets so clogged up that it causes an excessive drop in pressure as the air passes through, the orange indicator will project from the body by a few millimetres.
- E Condensate drain**
RMSA: the condensate is drained out automatically only by relieving the air pull the knurled knob for having the same result.
Automatic (RA): a floating system that automatically drains the condensate out whenever the level of water in the bowl reaches the set value.
- F Pressure regulation**
 There are three possible regulation fields.
 The value is marked on the regulation knob.
- G Valves**
 There are 11 different combinations. The electric valves are clearly selectable only if the initial code is 54, i.e. ONE electric.
- **0 - No valves present**
 - **1 - V3V manual:** is a 3/2 valve that in a set position allows the air to flow and in the other it closes the passage and discharges the pressure downstream.
 - **2 - V3V manual with padlock:** like the previous one, with the possibility of inserting a padlock (included in the supply with 2 keys) in the valve closed position.
 - **3 - V3V manual and soft start valve:** when the manual V3V valve is operated, the pressure starts to increase slowly, with a fine adjustable ramp, and when it reaches about 30-40% of the set value, the valve opens completely and the pressure rises to the set value.
 - **4 - V3V manual with padlock and soft start valve:** like the previous, with the padlock device on the manual V3V in "OFF" position.
 - **5 - V3V manual and V3V electric:** two V3V in series are present, one is manual the other electrical. By operating both the valve the air flow is allowed. If one or two are switched OFF, the air downstream is relieved. The electrical one can also be operated manually by keeping pushed the "TEST" button
 - **6 - V3V manual with padlock and V3V electric:** like the previous, with the padlock device in "OFF" position.
 - **7 - V3V manual and APR electric:** One manual V3V and one soft start valve are present. When both are operated, the pressure starts to increase slowly, with a fine adjustable ramp, and when it reaches about 30-40% of the set value, the valve opens completely and the pressure rises to the set value.
 - **8 - V3V manual with padlock and APR electric:** like the previous, with the padlock device on the manual V3V in "OFF" position.
 - **9 - V3V electric:** It's present only the electrical V3V. The valve will open if it is powered on. When the power supply is switched off, the valve closes and air downstream is relieved. The valve can also be operated manually by keeping pushed the test button.
 - **A - APR electric:** It's present only the electric soft start valve. When it is powered ON, the pressure starts to increase slowly, with a fine adjustable ramp, and when it reaches about 30-40% of the set value, the valve opens completely and the pressure rises to the set value.
- H Analog pressure switch**
 The pressure switch has a switching contact, which means you can have a normally-open signal or a normally-close signal. It is also connected to the NC and NO LEDs which come on if the actual pressure is less or greater than the set pressure, respectively. The LEDs only come on if an electric charge is connected to them.
Digital pressure switch
 The digital pressure switch allows both the transmission of electrical pressure signals and the instant display of pressure. Two digital outputs, which can be set according to the two pressure values reached, are available. An analogue output of a voltage proportional to the pressure reading is also available. The values are clearly displayed on a LED video and different parameters can be entered from the keypad. Hysteresis can be adjusted and the unit of measurement for pressure can be modified.
- I Air outlet**
 Five different gas cylindrical threads are available: 1/4", 3/8", 1/2", 3/4" and 1". It is possible to choose a thread other than the one on the inlet port.
- L Free positions for special executions.**

SOLENOID VALVE

NEW



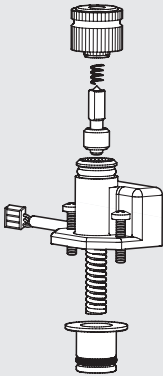
Code	Description
722123840101	PLT-10 722123840101

OLD



Note: Spare part no longer available. If the solenoid valve to be replaced is the same as the one shown here on the left, please contact our sales department.

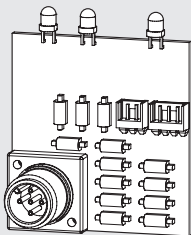
PRESSURE SWITCH



Code	Description
9000500	Spare press. switch for ONE

Note: with this kit we suggest you should order also the gauge, as it could get damaged during the disassembly.

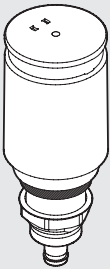
ELECTRIC BOARD



Code	Description
9232010	Spare electric board for ONE

Note: with this kit we suggest you should order also the gauge, as it could get damaged during the disassembly.

AUTOMATIC DRAIN (RA)



Code	Description
9000802	Spare RA automatic drain

NOTES