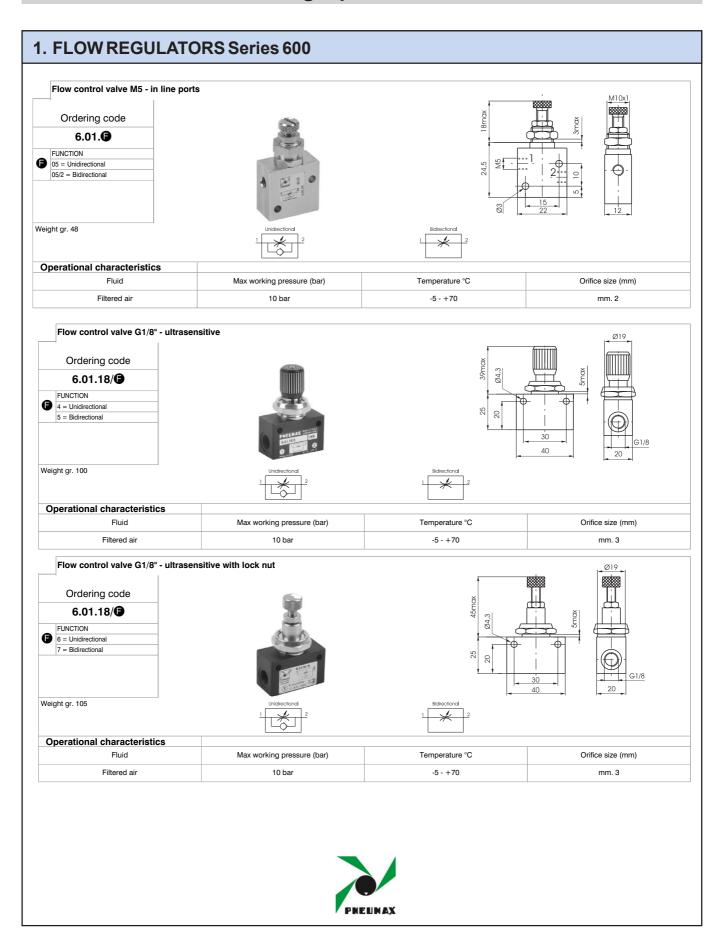
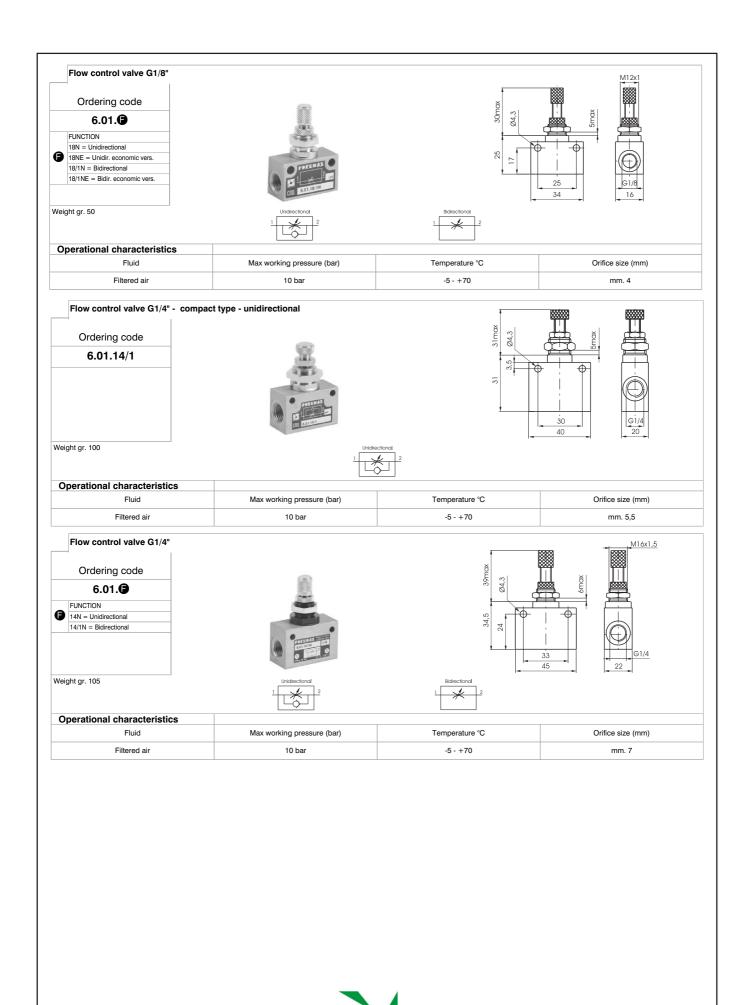
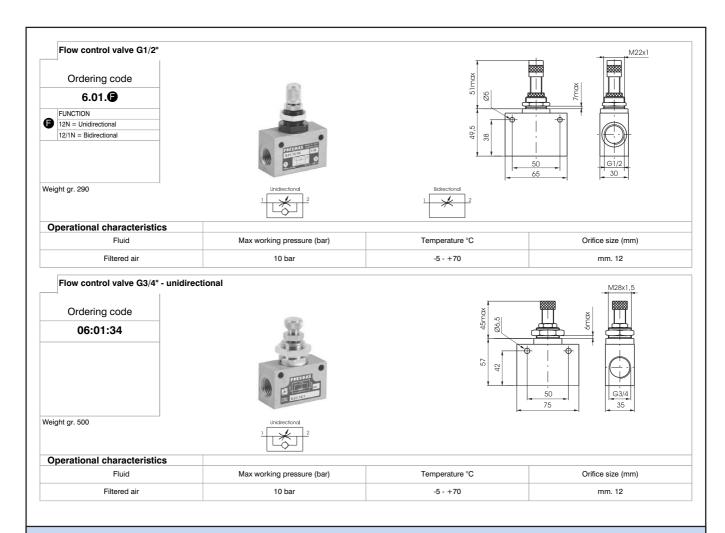


## COMPLEMENTARY VALVES Pneumax/Aignep/Sistem/Knocks/AZ

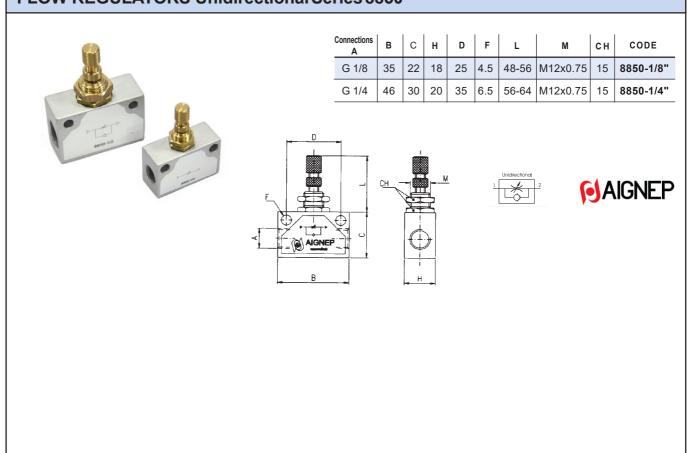


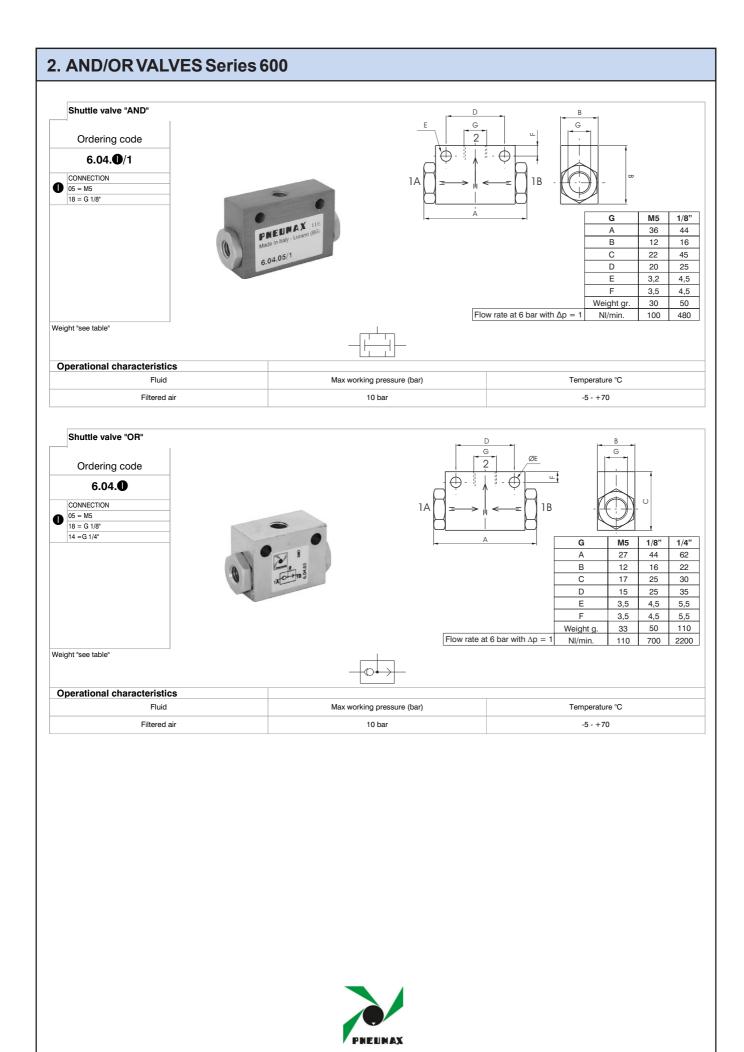


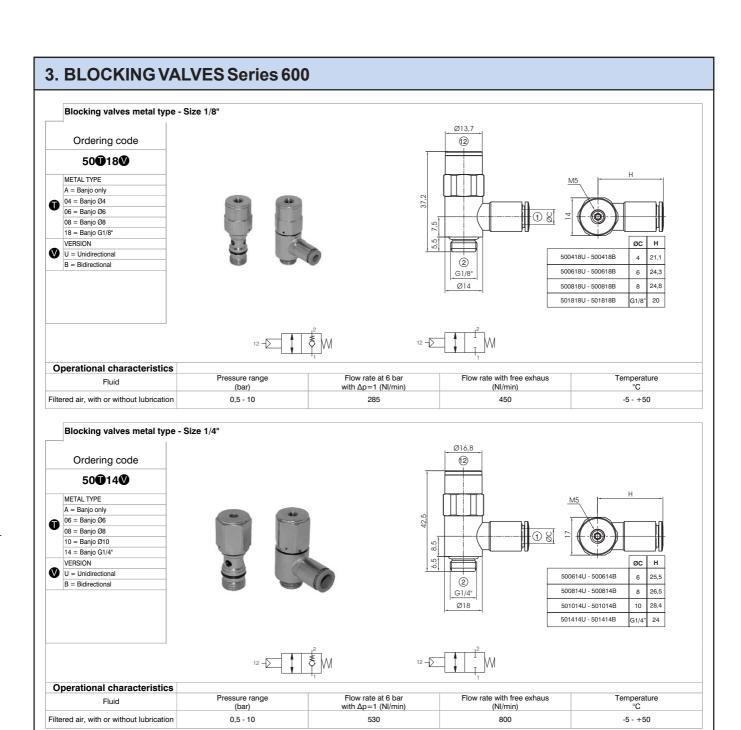
PNEU

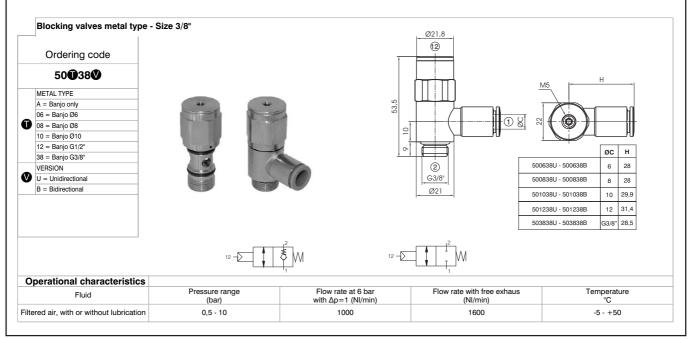


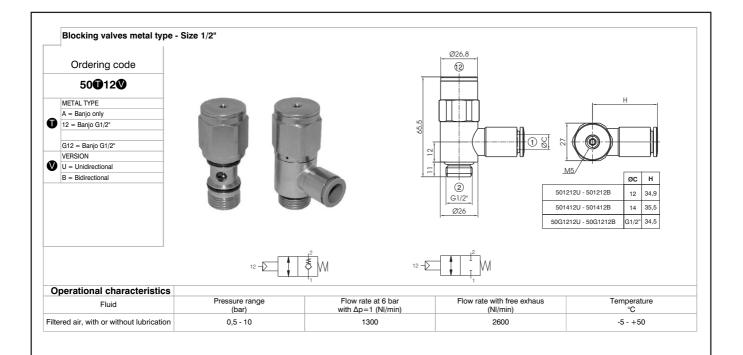
#### FLOW REGULATORS Unidirectional Series 8850



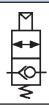








#### **BLOCKING VALVES Series 63/73**





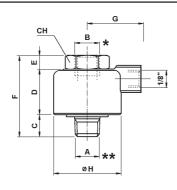
UNIDIRECTIONAL blocking valves blocks the flow only in one direction when the pilot pressure is cut off.



BIDIRECTIONAL blocking valves blocks the flow in both directions when the pilot pressure is cut off.







Operating pressure: 1 to 10 bar

Minimum pilot pressure:

- for series 63: approx. 4.5 bar, depending on work pressure

- for series 73: approx. 2 bar, depending on

work pressure

Construction: brass, nylon & stainless steel Seals: oil-resistant rubber, polyurethane

TY	PΕ	A **	В*	С	D	E	F	G	Н	СН	Ø	NI/min
738800	638800	1/8"	1/8"	10	20.5	6	36.5	25	30	17	5	650
734400	634400	1/4"	1/4"	11.5	25.5	5.5	42.5	28.5	37	22	7.5	1000
733300	633300	3/8"	3/8"	14	32.5	6	52.5	32	46	30	9	1900
UNIDIR	BIDIR	* CONIC BSP ** CYLINDERIC BSP										

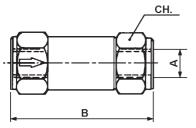


1.20.06 **+32 3 355 32 20** 

#### 4. NON RETURN VALVES Series 6062

Non return valves are devices allowing the passage of compressed air in one direction only.





Pressure: 2 - 8 bar

Room temperature: -18 to +70°C Body: Nickel-plated Brass Spring: Stainless Steel AISI 302 Piston: Nickel-plated Brass



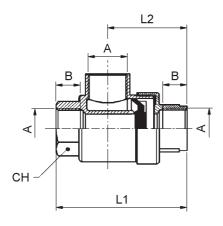
TYPE	Α	В	СН
6062-M5	M5	26.5	8
6062-1/8"	1/8"	35.5	13
6062-1/4"	1/4"	42.5	17
6062-3/8"	3/8"	58	24
6062-1/2"	1/2"	64	24



#### 5. QUICK EXHAUST VALVES Series 6050

Quick exhaust immediately opens its outlet to exhaust, whenever the pressure of the air decreases at the inlet. This allows a speedy and a better exhaust and also it speeds up the work cycles.

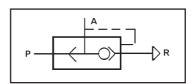




Maximum operating pressure: 0.3 to 10 bar

Ambient temperature : -18 to 70°C Body : nickel-plated OT 58 UNI 5705

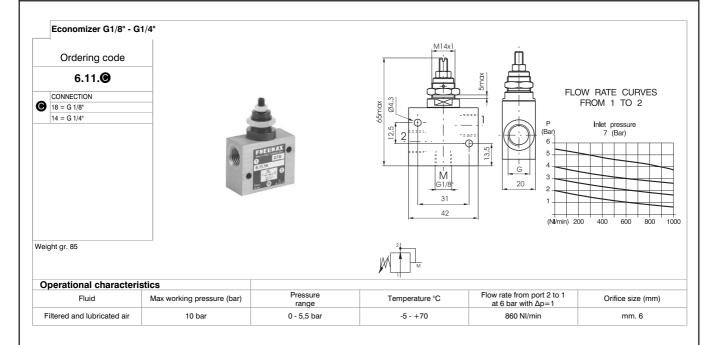
Seals: nylon PA6



TYPE	Α	В	L1	L2	СН
6050-1/8"	1/8"	7.5	42	27	15
6050-1/4"	1/4"	11	54	35	19
6050-3/8"	3/8"	11.5	60.5	38	22
6050-1/2"	1/2"	14	71	43	26
6050-3/4"	3/4"	16.3	87	53	32



#### 6. ECONOMIZERS Series 600



#### 7. SOFTSTARTERS Series Knocks



Multifix Series A11/33/55 1/4" 1/2" 1" (See page 3.02)



Futura Series KSSV 1/4" 1/2" 1" (See page 3.01)





#### 8. FLIP-FLOP VALVES

It frequently happens that with only one pilot signal available it is necessary to determine any reciprocating movement having two stationary positions. A typical example of this need is the opening and closing of the doors of a bus using a single push-button. This problem is resolved by adopting a flip-flop valve, which acts like a bistable 5/2 valve but is controlled by one single pilot pressure.



In the event of pilot pressure failure or system maintenance a manual override facility is provided.

#### **Material:**

Body : Aluminium Spring : Stainless steel

Seals : NBR

Spools : Nickel plated aluminium

Internal

parts : Brass OT58

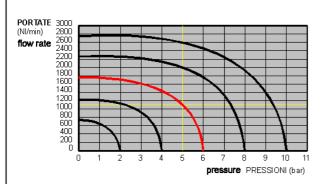
#### **General characteristics:**

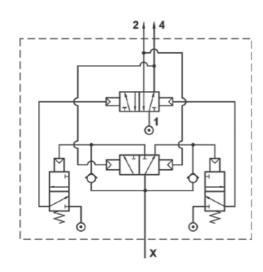
Connections: 1/4" (Pilot pressure 1/8")

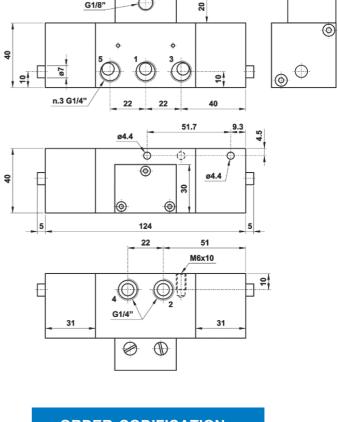
Temperature : max. +60° C Pressure : 3 till 10 bar

Medium : 50µ filtered, lubricated or non

lubricated air







ORDER CODIFICATION: AZ100354

#### 9. BIMANUAL VALVES

These control valves are mainly used to control machines like press- and punching-machines. They oblige the user to start a dangerous cycle with both hands.

The main valve is only activated if both signals are pressurized. In all other situations, the main valve shuts off. The interval between the 2 signals is limited in time. So, the bimanual valve will not work when blocking permanently one of the two buttons).



#### **Material:**

Corps : Aluminium Spring : Stainless steel

Gaskets: NBR

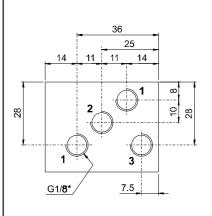


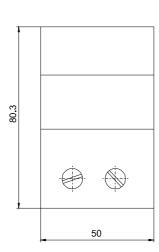
#### **General characteristics:**

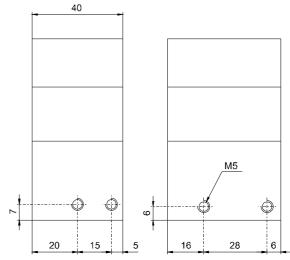
Connections: 1/8"

Temperature : -10° till + 80° C Flow : 100 NI/min. Pressure : 2 till 8 bar

Medium : Filtered air (50μ), lube or not lube

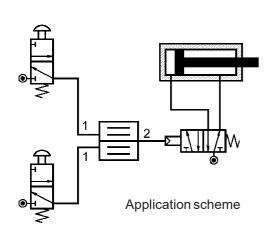


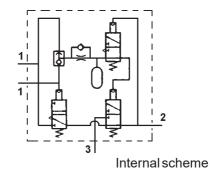




#### CONNECTIONS

- 1. Inlet
- 2. Utilisation
- 3. Exhaust





ORDER CODIFICATION:
AZ081564
(CE-certificated)

#### 10. OSCILLATING VALVES

This control valve generates an alternating signal with a regulating frequency. With this valve it is possible to activate automatically a double-acting cylinder in and out, without any use of end-contacts. The on/off times can be regulated separately by means of 2 incorporated flow-regulators. The valves starts oscillating when "X" is pressurized.



#### **Material:**

Body : Aluminium Springs : Stainless steel

Seals : NBR

Internal parts: Brass OT58

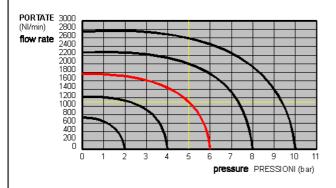
#### **Technical data:**

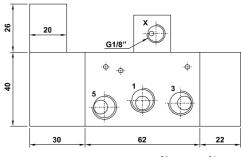
Connections: 1/4" (Pilot pressure 1/8")

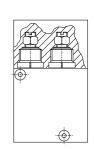
Temperature : max + 60° C Working pressure : 2 till 10 bar Actuating pressure (X): 3 till 10 bar

Medium : 50µ filtered, lubricated or non

lubricated air

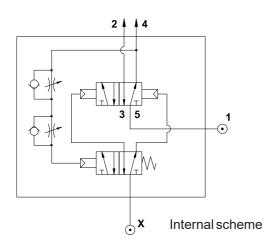


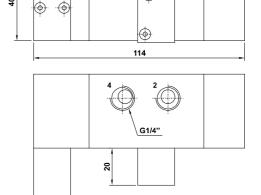




#### **CONNECTIONS**

- Inlet
- 2-4. Utilisation
- **3-5.** Exhaust
- Pilot Pressure





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**ORDER CODIFICATION** AZ010464

**+32 3 355 32 20** 1.20.11

#### 11. 5/2 OSCILLATING NOT VALVES

It is a high-flow device which allows a double acting cylinder or analogue pneumatic equipment to automatically extend and retract without the need for limit switches.

The frequency of the phases is set by regulation of the exhausts 3 and 5 using separate silencer/regulators which are not included.

When actuating signal is applied or removed the valve automatically moves to the start position ensuring no device is left in a semi-actuated position.

A manual override is integrated to re-activate the oscillator if it gets accidentaly blocked.



#### Material:

Body : Aluminium Springs : Stainless steel

: NBR Seals

: Nickel plated aluminium Spools Internal parts: Brass OT58

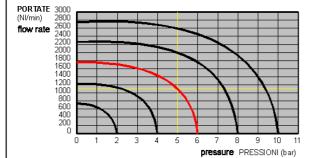
#### **Technical data:**

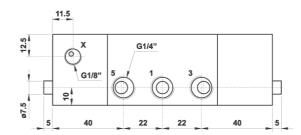
Connections: 1/4" (Pilot pressure 1/8")

Temperature : max + 60° C Working pressure: 2 till 7 bar Actuating pressure (X): 3 till 7 bar

Medium : 50µ filtered, lubricated or non

lubricated air

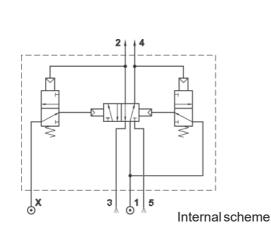


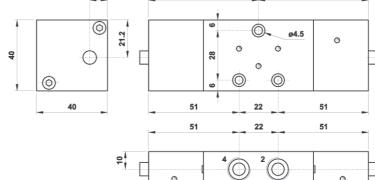


62

#### CONNECTIONS

- Inlet
- 2-4. Utilisation
- 3-5. Exhaust
- Pilot Pressure





62

**ORDER CODIFICATION** 

G1/4"

124

AZ100274

1.20.12

#### 12. 5/2 TIMER VALVES

This is a high-flow 5 way valve with a pneumatic timer which delays the effect of the pneumatic pilot after a preset time. The time is adjusted by screw (R).

When a signal is applied to X the valve will stay in the rest position until the time which was set at R has elapsed, and then the valve will automatically switch to the actuated position. Then the valve will remain in the actuated position. When the pilot signal stops, the valve returns to the rest position.

The valve will only operate when pressure signal is applied to X.



#### Material:

Body : Aluminium Springs : Stainless steel

Seals : NBR

Spools : Nickel plated aluminium Internal parts : Brass OT58

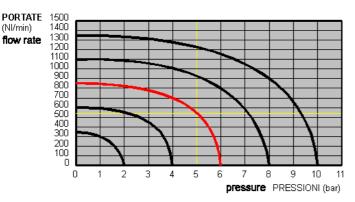
#### **Technical data:**

Connections: 1/8"

Temperature: max + 60° C Working pressure: 2 till 10 bar Actuating pressure (X): 3 till 10 bar

Time regulation: 0 till 15 sec

Medium: 50µ filtered, lubricated or non lub air



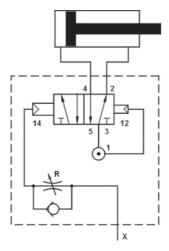
#### **CONNECTIONS**

1. Inlet

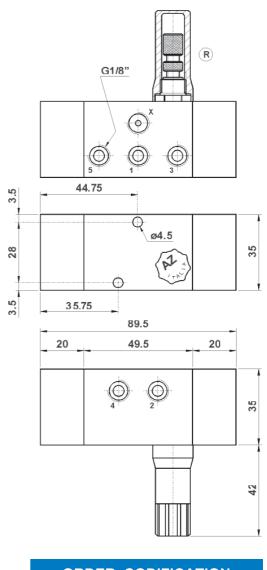
2-4. Utilisation

3-5. Exhaust

X. Pilot Pressure



Application scheme



ORDER CODIFICATION AZ001774

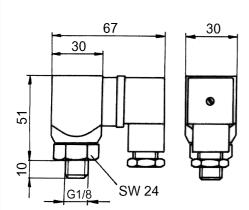
**2** +32 3 355 32 20

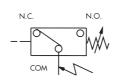
#### 13. PRESSURE SWITCHES Series PE210



connector included

Media	Air, non corrosive gases and fluids	
Description	Diaphragm	
Mounting	Arbitrary	
Pressure range	1 - 10 bar (max 20 bar)	
Switch difference	15% - 25%	
Temperature	-30° to +120° C	
Port size	G 1/8"	
Electr.connection	Plug connection DIN 43650, form A	
Circuit element	Micro-switch, one-pole change	
Type of isolation	IP 65, connect IP 00 DIN 40050	
Weight	0,230 kg.	
CODE	PE210	





direct-	direct-current switch-power				
	resistor loading	bulb loading	inductive loading		
[V]	[A]	[A]	[A]		
30	5	0,5	5		
50	2	0,4	2		
75	1	0,3	1		
125	0,5	0,2	0,06		
250	0,25	0,1	0,03		
alternating-current switch-power					
	resistor loading	bulb loading	inductive loading		
[V]	[A]	[A]	[A]		
125	5	0,5	5		
250	5	0,5	5		

#### 14. PRESSURE SWITCHES FOR COMPRESSOR Series PES1V12



## ORDER CODE: PES1V12

Met ontluchtingsventiel geschikt voor 1/4" of 6 mm aansluiting, regelbare min. en max. druk - Voor mono- en driefasige compressoren (tot 380 V.) -IP 40 - Gebruik: Automatisch aan- & uitschakelen van compressoren

Avec soupape de décharge pour raccordement 1/4" ou 6 mm, pression min. et max. - Pour compresseurs mono- et triphasés (jusqu'à 380 V) IP 40 - Utilisation: (Dé)branchement automatique de compresseurs



No. d'article C00004002 Art nr. Diamètre 1/4" | Diameter Voltage 0 Stroomsterkte Verpakking Emballage Bulk Puissance Vermogen 4 HP Pression de travail Werkdruk 7,5-10 bar

#### 15. PRESSURE SWITCHES Series PN5611

Pressure switches are used to convert a pneumatic signal into an ON-OFF electric signal.









**Pressure:** Adjustable 0.2 - 6 bar (max. supply pressure 12 bar)

Factory preset at 6 bar

**Contact:** NO or NC (according to the terminals connected)

Operating voltage: Max. 250 V

Parts in contact with Diaphragm in stainless steel AISI 301,

the fluid: brass connection.

Fluids: Water, oil, air & steam

Max. temp: Fluid 155°C, Ambient 120°C

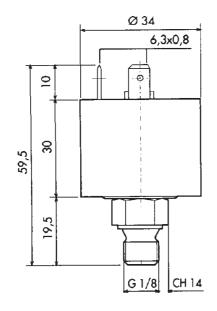
Electrical data: Faston 6.3 x 0.8

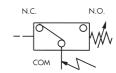
Microswitch:

NC  $\leq$  15 A resistance load  $\leq$  1.5 inductive NO  $\leq$  9 A resistance load  $\leq$  0.9 inductive Life of the electrical contacts: 100.000 cycles

**Mounting position :** Any. Prefered the position with the fastons upwards

**Weight:** 0.060 kg.





## ORDER CODE: PN5611

(rubber cap included)



#### 16. PRESSURE SWITCHES Series DRS

This miniature membrane pressure switches are used to convert a pneumatic signal into an ON-OFF electric signal.

**Materials**: Body: brass, diaphragms: NBR **Temperature range**: -25°C to max. +85°C

Switchback difference: < 10 %Protection class: IP 65 (clamps IP 00)

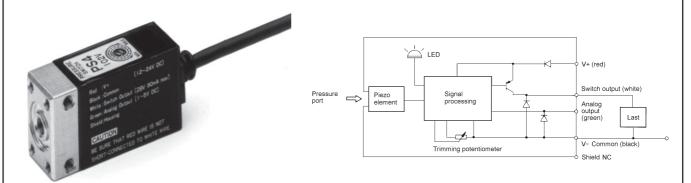
**Cable connection**: Flat connecter 2 x 6.3 x 0.8 **Media**: Hydraulic oil, oil emulsion, water, air



#### FOR HIGHER LOADS RELAIS ARE RECOMMENDED

ORDER CODE	CONTACT	ADJUSTING PRESSURE RANGE	CONNECTION	MAX. PRESSURE	SWITCH CAPACITY
DRSS2MINI	NO	0,3-2 bar	M1/8"	5 bar	42 V / 100 VA
DRSO2MINI	NC	0,3-2 bar	M1/8"	5 bar	42 V / 100 VA
DRSS10MINI	NO	1-10 bar	M1/8"	20 bar	42 V / 100 VA
DRSO10MINI	NC	1-10 bar	M1/8"	20 bar	42 V / 100 VA
DRSM2	Protection cap	It is advisable to protect the electric connections and the internal devices against moisture and dust infiltration by means of this protection cap.			

#### 17. VACUUM/PRESSURE SWITCHES Series PS4



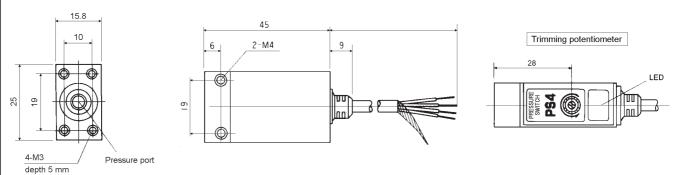
The semi-conductor type pressure sensor and the electronic hybrid circuit are contained in a plastic housing.

The operation principle is based on the piezo resistance effect of 4 semi-conductor strain gages in the silicon element. Because of the elasticity and small dimensions of the element, the sensor has **fast response** and guarantees **optimal repeatability**, **hysteresis and vibration resistance**.

The sensed pressure is converted to an electric signal which is amplified in the electronic circuit with on the one side the analog output and on the other side the switch without any mechanical and or moving parts which results in long life. **Over 10 million cycles** were run in both inhouse and field tests.

A built in LED indicates the switching position and simplifies presetting by means of the trimming potentiometer on top of the switch-housing. At the front side an aluminium connection block is attached to the plastic housing with port connection M5 and O-ring groove for subplate or manifold mouting.

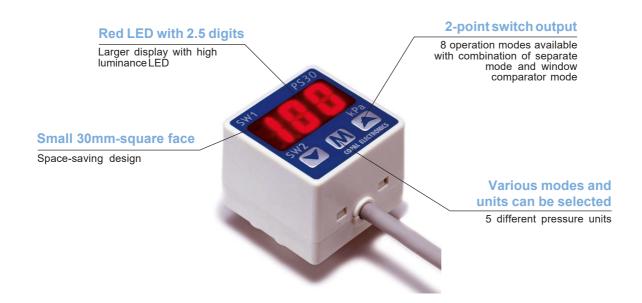
(also ON SPECIAL REQUEST with connector & cable available).



ORDER CODE	PS4-102V-Z	PS4-103G-Z
Pressure range	-1 ~ 0 bar	-1 ~ 10 bar
Overpressure	3 bar	16 bar
Max. Pressure	5 bar	20 bar
Pressure media	dry, non aggressive gases	dry, non aggressive gases
Norking voltage	12 - 24 VDC	12 - 24 VDC
Current consumption	30 mA at 24 VDC	30 mA at 24 VDC
nsulation resistance	min. 100 Mohm at 500 V	min. 100 Mohm at 500 V
Analog output	1 <u>+</u> 0,4 - 4 <u>+</u> 0,4 VDC	1 <u>+</u> 0,4 - 4 <u>+</u> 0,4 VDC
Switch output	PNP open collector output	PNP open collector output
•	Switching characteristic: Current max. 80 mA	Switching characteristic: Current max. 80 mA
	Excitation Voltage: max. 2 V	Excitation Voltage: max. 2 V
Switch position indication	LED	LED
Switching pressure setting	Potentiometer	Potentiometer
Switching hysteresis	max. 15 mbar at -1bar	max. 150 mbar at 10 bar
Switching accuracy at	5 mbar	50 mbar
constant temperature		
Switching frequency	1000 Hz	1000 Hz
lousing material	Aluminium and Polycarbonat	Aluminium and Polycarbonat
Shock resistance	100 G. Time 1 ms	100 G. time 1 ms
/ibration resistance	10 G (10 - 2000 Hz)	10 G (10 - 2000 Hz)
Dielectric strength	500 VAC 1 min.	500 VAC 1 min.
Temperature range	-20°C + 70°C operating temperature	-20°C + 70°C operating temperature
	-20°C + 80°C storage temperature	-20°C + 80°C storage temperature
Electrical connection	4 x 0.13 mm², 3 m shielded cable AWG 26	4 x 0.13 mm², 3 m shielded cable AWG 26
Pressure connection	M5 or O-ring sealed subplate- or manifold mounting	M5 or O-ring sealed subplate- or manifold mounting
Weight	approx. 80 g	approx. 80 g

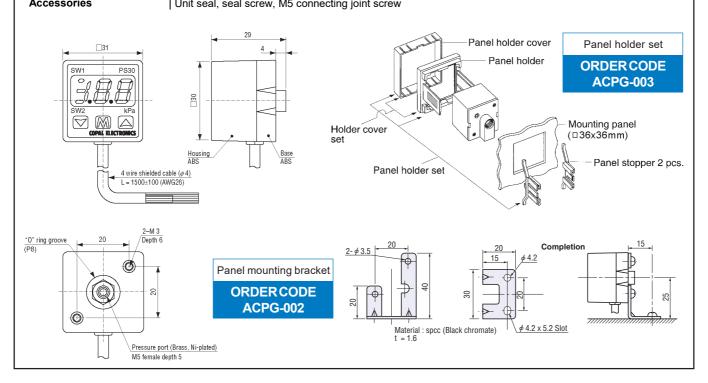
#### 18. VACUUM/PRESSURE GAUGES Series PS30

Compact multipurpose compound pressure gauge specifically designed to cover negative to normal pressure.



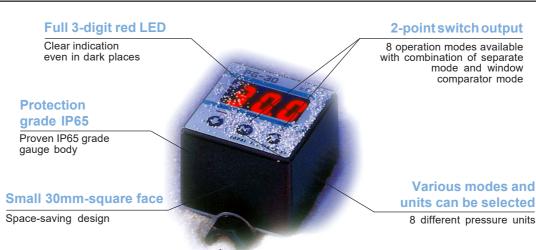
ORDER CODE	PS30-103R	PS30-102R	
Rated pressure range	-1 ~ 10 bar	-1 ~ 1 bar	
Maximum pressure	15 bar	2 bar	
Media	Non-corrosive gases		
Input voltage	12 ~ 24 VDC (including r	ipple)	
Current consumption	40 mA maximum		
Display	2.5-digit LED		
Temperature / Humidity	-10 ~ 50 °C / 35 ~ 85 %RH		
Insulation resistance	> 100 M $\Omega$ at 500 VDC between bundle		
	of lead wire and pressure	e port	
Dielectric strength	1 minute at 500 VAC between bundle of lead wire		
	and pressure port (leak o	current : < 1 mA)	
Vibration	10 ~ 500 Hz Amplitude 1.5 mm, 3 directions, 2 h		
	each		
Shock	490 m/s <sup>2</sup> 3 directions for 3 times each		
Thermal error	±3 %F.S. (0 ~ +50 °C)		
Pressure port	M5, Silicon		
Weight	approx. 60g (including 1.5 m cable)		
Protection	IP40		
Accessories	Unit seal seal screw M5 connecting joint screw		

SWITCH OUTPUT (PNP)					
Switch capacity : 30 VDC 100 mA max. Residual voltage : 2,2 V max. (at load current or 100 mA)					
<b>Hysteresis</b> 0 ~ 30 digits (adj.)					
Repeatability	±0,3%F.S. max.				
<b>Response</b> 5 ~ 250 ms (adj.)					
Short-circ. prot.	Provided				



#### 19. VACUUM/PRESSURE GAUGES Series PG30

Compact multipurpose compound pressure gauge specifically designed to cover negative to normal pressure.



Analog output 1~5 V

In addition to 2-point switch output, analog voltage output is provided

ORDER CODE	PG30-103R	PG30-102R	
Rated pressure range	-1 ~ 10 bar	-1 ~ 1 bar	
Maximum pressure	15 bar	2 bar	
Media	Non-corrosive gases		
Input voltage	10.8 ~ 30 VDC (including	ripple)	
Current consumption	70 mA maximum		
Analog output	Output voltage : 1 ~ 5 V		
	Output impedance : 10 kg	Ω	
Display	Full 3-digit LED		
Switch state indication	Output 1 (green) and output 2 (red)		
	light up when output is on.		
Temperature / Humidity	-10 ~ 50 °C / 35 ~ 85 %RH		
Insulation resistance	> 100 M $\Omega$ at 500 VDC between bundle		
	of lead wire and pressure port		
Dielectric strength	1 minute at 500 VAC between bundle of lead wire		
	and pressure port (leak current : < 1 mA)		
Vibration	10 ~ 500 Hz Amplitude 1.5 mm, 3 directions, 2 h		
	each		
Shock	490 m/s <sup>2</sup> 3 directions for 3 times each		
Thermal error	±3 %F.S. (0 ~ +50 °C)		
Pressure port	1/8", Aluminium die-casting, silicone		
Weight	approx. 80g (including 2 m cable)		
Accessories	Unit seal, seal screw, M5 connecting joint screw		

# SWITCH OUTPUT (PNP) Switch capacity: 30 VDC 100 mA max. Residual voltage: 2,2 V max. (at load current or 100 mA) Hysteresis 0 ~ 300 digits (adj.) Repeatability ±0,2%F.S. ±1digit Response 5 ms ~ 2,5 s (adj.) Short-circ. prot. Provided

<b>OUTPUT MODE SETTING</b>					
Detected pressure (Pin)					
Output mode Pin (L) Pin (H)					
R mode	-Pr	+Pr			
G mode	0	+Pr			
V mode	0	-Pr			
Output Vo (L) Vo (H)					
Pressure range (103R) : only for G mode					

