

A Series Poppet valves







Poppet valves - A series

Ports: 1/8" - 1/4" - 1/2" - 3/4" - 1"

A SERIES



- High flow rate valves
- Fast switching times
- Not effected by fluid impurities
- High mechanical strength
- Body and top cover in anodized aluminium or stainless steel AISI 316
- Available with ports Gas or NPT
- 2/2 NO/NC - 3/2 NO/NC - 5/2 pilot-spring
- Version for low temperature
- Version for high temperature
- Version for vacuum
- Possibility of manifold mounting
- Available certificated ATEX 2014/34/EU
- Available certificated up to SIL 3

TECHNICAL FEATURES

Function	2/2 NO - 2/2 NC - 3/2 NO - 3/2 NC - 5/2 pilot-spring										
Operation	Electropneumatic: with solenoid size 22 and 30 mm, internal or external servopiloting and return by mechanical spring Pneumatic: with external piloting (single or double) and return by mechanical spring.										
Materials	Standard: Body and covers in aluminium alloy anodized, internal components in carbon steel - aluminium - brass Seals NBR/FKM/PUR Version X: Body and covers in stainless steel AISI 316, internal components in carbon steel - aluminium - brass Seals NBR/FKM/PUR Version XX: Body and covers in stainless steel AISI 316, internal components in stainless steel AISI 316 Seals NBR/FKM/PUR										
Note about the materials	According to Directive REACH (1907/2006/CE and s.a.s.)										
Ports	1/8", 1/4", 1/2", 3/4", 1"										
Threads	BSPP (Gas parallel thread), NPT										
Operating temperature range	Standard: 0°C + +80°C (-20°C cwith dry air to avoid ice formation) High temperature (-VT): -10°C + +150°C Low temperature (-BT): -50°C + +110°C										
Operating pressure range	Electropneumatic, internal servopiloting (/E): 1,5 + 10 bar Electropneumatic, external servopiloting single or double piloting (/PS/E - /PS/D - DP/PS/E - DP/PS/D): 0 + 10 bar Electropneumatic, external servopiloting double pilot for high pressure (DP-HP/PS/E - DP-HP/PS/D): 0 + 16 bar Pneumatic, external piloting, single or double piloting (DP): 0 + 10 bar Pneumatic, external double piloting for high pressure (DP-HP): 0 + 16 bar										
External pilot pressure	1/8"	1/4"		1/2"		3/4"		1"			
Piloting	Single	Double	Single	Double	Single	Double	Single	Double	Single	Double	
Inlet pressure	5 bar	2,2 bar	1,6 bar	2,3 bar	1,7 bar	2,4 bar	1,9 bar	2,5 bar	1,9 bar	2,5 bar	2,1 bar
	6 bar	2,4 bar	1,9 bar	2,6 bar	2,0 bar	2,8 bar	2,3 bar	2,9 bar	2,3 bar	2,9 bar	2,5 bar
	7 bar	2,7 bar	2,2 bar	2,9 bar	2,3 bar	3,1 bar	2,6 bar	3,2 bar	2,6 bar	3,3 bar	2,9 bar
	See piloting diagrams (page 3.4.05.3)										
Flow rate	1/8"	1/4"		1/2"		3/4"		1"			
Nominal orifice	6 mm	9 mm		12 mm		19 mm		23 mm			
Inlet pressure	5 bar	650 NI/min		1500 NI/min		2800 NI/min		6100 NI/min		11000 NI/min	
(with ΔP 1 bar)	6 bar	700 NI/min		1600 NI/min		3000 NI/min		6500 NI/min		12000 NI/min	
	7 bar	800 NI/min		1800 NI/min		3400 NI/min		7300 NI/min		13500 NI/min	
	See flow rate diagrams (page 3.4.05.3)										
Shifting time	1/8"	1/4"		1/2"		3/4"		1"			
According to ISO 12238:2001	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
	3/2 NC	5 ms	16 ms	6 ms	16 ms	7 ms	20 ms	16 ms	44 ms	12 ms	47 ms
	3/2 NA	7 ms	17 ms	6 ms	20 ms	11 ms	56 ms	20 ms	87 ms	17 ms	100 ms
	5/2	10 ms	45 ms	11 ms	53 ms	14 ms	72 ms	28 ms	135 ms	26 ms	215 ms
Fluid	Filtered air, without lubrication, according to ISO 8573-1:2010 [7:4:4]										
Lubrication	Not required (if required on the pneumatic circuit, must be continus)										

ELECTRICAL FEATURES OF THE COILS

Coil type	Type "E" (22mm)		Type "D" (30mm)		Type "C" (30 mm) ATEX	
	12, 24 VDC	24, 48, 110, 220 VAC	12, 24 VDC	24, 48, 110, 220 VAC	24 VDC	24, 48, 110, 220 VAC
Operating voltage	12, 24 VDC	24, 48, 110, 220 VAC	12, 24 VDC	24, 48, 110, 220 VAC	24 VDC	24, 48, 110, 220 VAC
Power consumption (max.)	5,5 W	6,5 VA	10 W	13 VA	5,3 W	5,3 W (raddrizzata)
Voltage tolerance	± 10%		± 10%		± 10%	
Protection class	IP54 / IP65		IP54 / IP65		IP65	
Other features	See page 3.4.05.17		See page 3.4.05.17		See page 3.4.05.18	

ATEX CERTIFICATION

Valve marking (coil excluded)	C [Ⓢ] II 2G Ex h IIC T6 Gb (Zone 1 and Zone 2) C [Ⓢ] II 2D Ex h IIIC 85°C Db (Zone 21 and Zone 22)
Operating pressure in ATEX environment	0,5 ÷ 10 bar
Temperature in ATEX environment	-20°C ≤ Ta ≤ +60°C
CE marking	According to Directive 2014/34/EU (see declaration of conformity)


SIL CERTIFICATION (Pneumatic valve with external piloting)

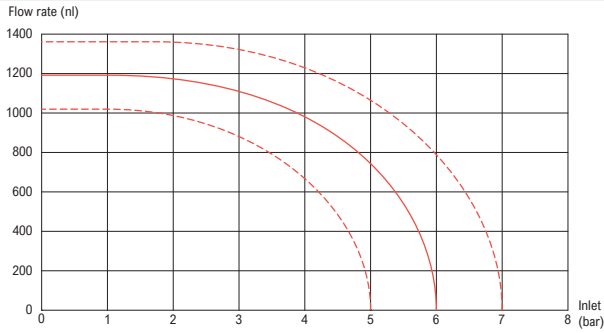
Type	Type A - Low demand mode
Systematic capability	Route 1H - 2H
Architectural constraints	Up to SIL 2 for single channel configuration without external diagnostic tests (HFT 0)
	Up to SIL 3 for single channel configuration with external diagnostic tests (HFT 0)
In accordance with	Up to SIL 3 redundant double channel configuration (HFT 1)
	EN 61508:2010 part 1,2,3,4,5,6,7 - EN 61511 part 1,2,3



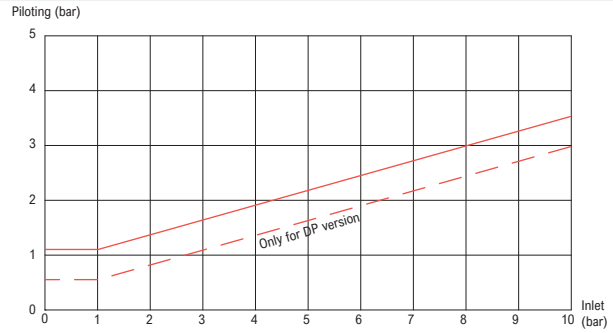


FLOW RATE AND PILOTING DIAGRAMS

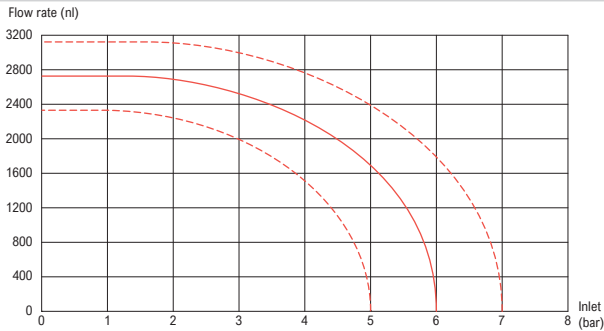
FLOW RATE DIAGRAM – VALVE 1/8"



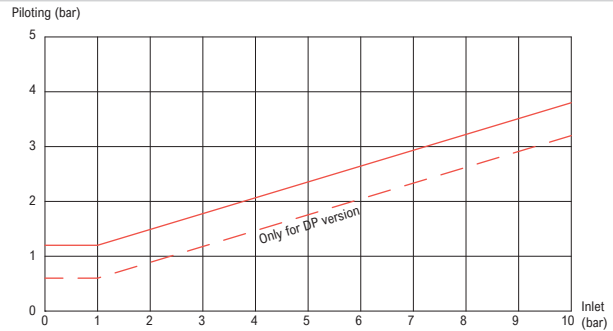
PILOTING DIAGRAM – VALVE 1/8"



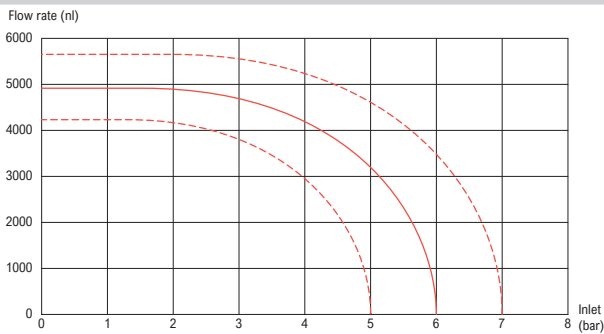
FLOW RATE DIAGRAM – VALVE 1/4"



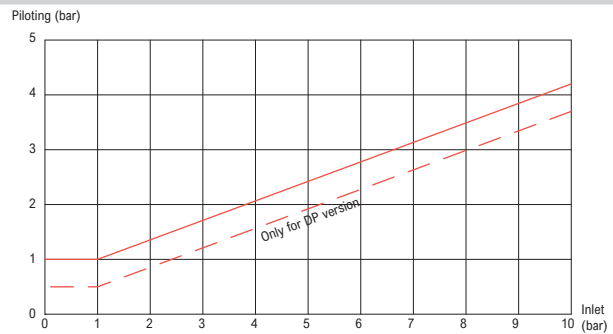
PILOTING DIAGRAM – VALVE 1/4"



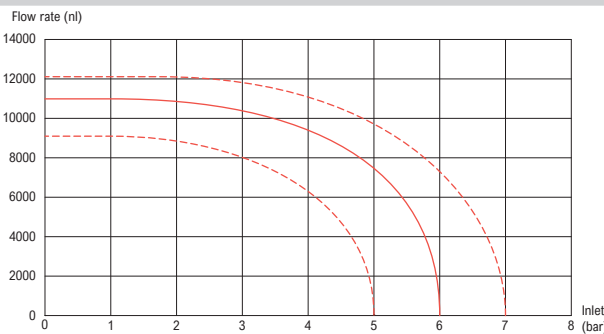
FLOW RATE DIAGRAM – VALVE 1/2"



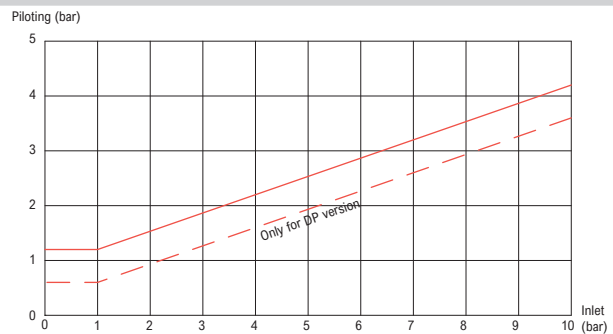
PILOTING DIAGRAM – VALVE 1/2"



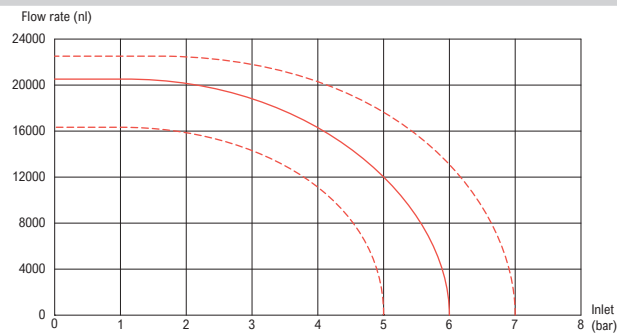
FLOW RATE DIAGRAM – VALVE 3/4"



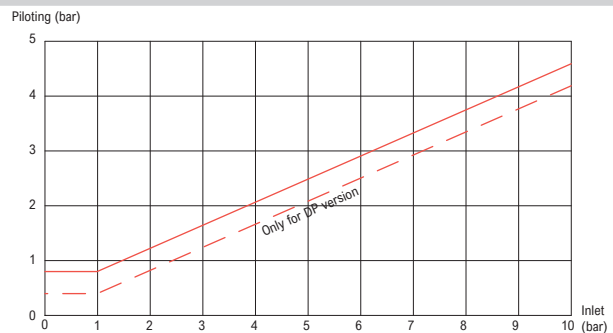
PILOTING DIAGRAM – VALVE 3/4"



FLOW RATE DIAGRAM – VALVE 1"



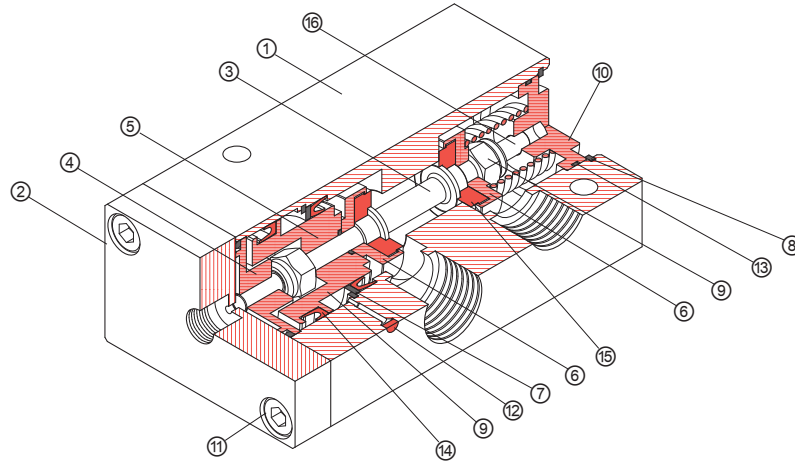
PILOTING DIAGRAM – VALVE 1"



3
PNEUMATIC VALVES

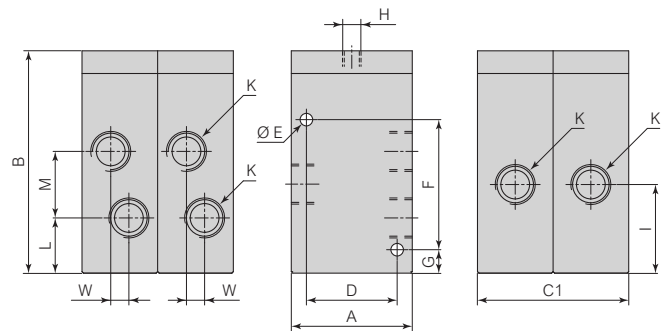
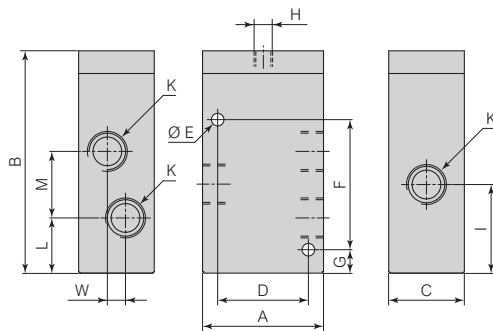
MATERIALS AND DIMENSIONS - PNEUMATIC VALVES - STANDARD VERSION

ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
①	Body	Anodized profiled / extruded aluminium	⑨	Self-locking nut	Zinc plated steel
②	Top cover	Anodized profiled / extruded aluminium	⑩	End cover	Anodized aluminium
③	Poppet rod	Zinc plated steel	⑪	Screw	Zinc plated steel
④	Guide rod	Anodized aluminium	⑫	Silencer	Sintered bronze
⑤	Piston	Anodized aluminium	⑬	O-ring	NBR / FKM / PUR
⑥	Poppet holder	Zinc plated steel	⑭	Tightness seal	NBR / FKM / PUR
⑦	Anti-extrusion washer	Hostaform	⑮	Poppet seal	NBR / FKM / PUR
⑧	Seeger ring	C75 carbon steel	⑯	Spring	Stainless steel AISI 302 (X10CrNi18-09)



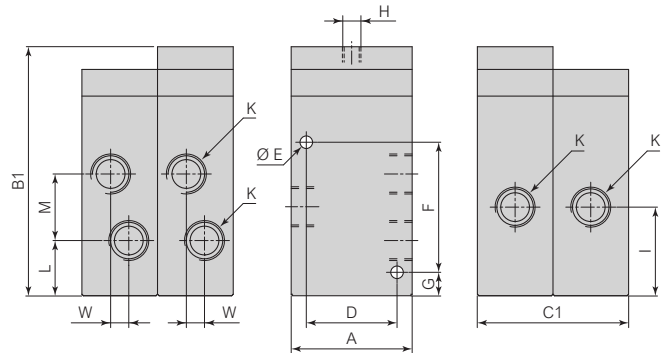
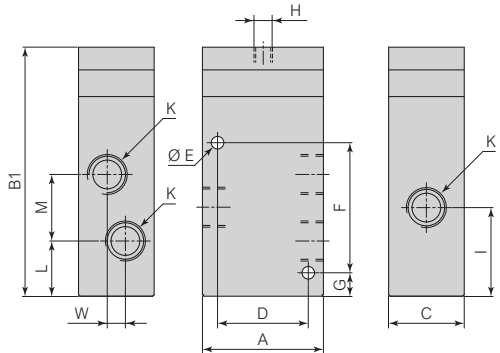
Single pilot - Version 2/2 and 3/2 NC or NA

Single pilot - Version 5/2



Double pilot - Version 2/2 and 3/2 NC or NA

Double pilot - Version 5/2



K	A	B	B1	C	C1	D	Ø E	F	G	H	I	L	M	W
Gas - NPT	$0_{-0,2}$	$\pm 0,3$	$\pm 0,3$	$0_{-0,2}$	$0_{-0,5}$	$\pm 0,3$		$\pm 0,3$	$\pm 0,2$	Gas - NPT	$\pm 0,2$	$\pm 0,2$	$\pm 0,3$	$\pm 0,3$
1/8" Gas - NPT	40	70	91	20	40	29	4,25	33,5	11,5	1/8" Gas - 1/8" NPT	26	16	20	0
1/4" Gas - NPT	50	80,5	100	25	50	34	5,25	39	14,5	1/8" Gas - 1/8" NPT	29,5	17,5	24	0
1/2" Gas - NPT	70	99,5	125	35	70	50	6,25	54,5	15	1/8" Gas - 1/8" NPT	37	21	32	0
3/4" Gas - NPT	79	147	175	50	100	60	8,25	86	15,5	1/4" Gas - 1/4" NPT	58,5	36,5	44	12
1" Gas - NPT	100	166	194,5	60	120	82	10,5	85	33	1/8" Gas - 1/4" NPT	64,5	30	61	0



ORDERING CODE - PNEUMATIC VALVES - STANDARD VERSION

Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
S	1	A	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S = Pneumatic, external piloting		A = Poppet valve	8 = 1/8" 4 = 1/4" 2 = 1/2" 33 = 3/4" 1 = 1"	NULL = In line ⁽¹⁾ /B1 = On manifold				NULL = NBR -VT = FKM -BT = PUR	NULL = BSPP -NPT = NPT ⁽¹⁾	
H1 = 2/2 Pilot-spring Normally closed				NULL = For compressed air /V = For vacuum			NULL = Body and covers in aluminium alloy anodized Internal components in carbon steel - aluminium - brass			
H3 = 2/2 Pilot-spring Normally open										
1 = 3/2 Pilot-spring Normally closed										
3 = 3/2 Pilot-spring Normally open										
13 = 5/2 Pilot-spring Monostable										
										NULL = Standard -EX = For compressed air in potentially explosive environment (ATEX) -SIL = Suitable for use in safety related system up to SIL3 -EXSIL = Both certifications: -EX and -SIL

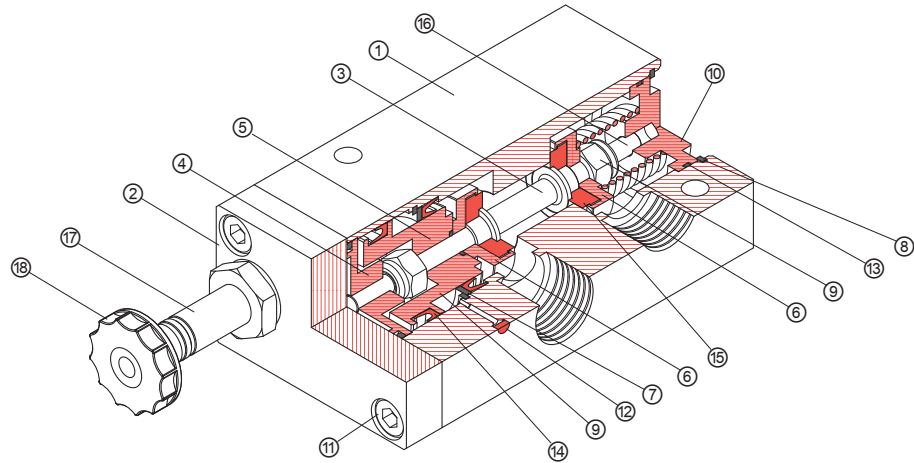
(1) NPT thread available only for in-line mounting

AVAILABLE CONFIGURATION

Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
S Pneumatic, external piloting	H1 2/2 NC H3 2/2 NA 1 3/2 NC 3 3/2 NA 13 5/2 NA	A Poppet valve	8 1/8" 4 1/4" 2 1/2" 33 3/4" 1 1"	<input type="checkbox"/> Compressed air <input type="checkbox"/> /V For vacuum	<input type="checkbox"/> In line <input type="checkbox"/> /B1 On manifold <input type="checkbox"/> In line	<input type="checkbox"/> External pneumatic piloting, single pilot DP External pneumatic piloting, double pilot DP-HP External pneumatic piloting, single pilot, high pressure <input type="checkbox"/> External pneumatic piloting, single pilot DP External pneumatic piloting, double pilot DP-HP External pneumatic piloting, single pilot, high pressure <input type="checkbox"/> External pneumatic piloting, single pilot	<input type="checkbox"/> Standard version <input type="checkbox"/> Standard version <input type="checkbox"/> Standard version	<input type="checkbox"/> NBR -VT FKM -BT PUR <input type="checkbox"/> NBR -VT FKM -BT PUR <input type="checkbox"/> NBR -VT FKM -BT PUR	<input type="checkbox"/> BSPP -NPT NPT <input type="checkbox"/> BSPP -NPT NPT <input type="checkbox"/> BSPP -NPT NPT	<input type="checkbox"/> Standard -EX ATEX -SIL SIL -EXSIL EX + SIL <input type="checkbox"/> Standard -EX ATEX -SIL SIL -EXSIL EX + SIL <input type="checkbox"/> Standard -EX ATEX

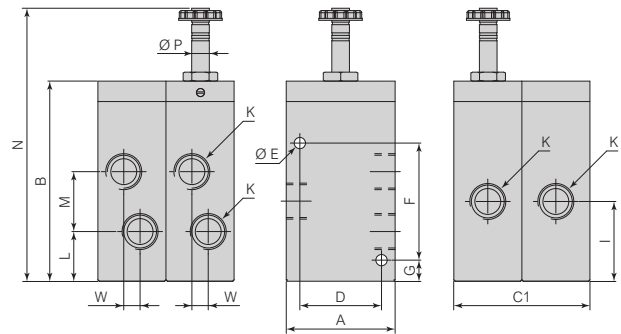
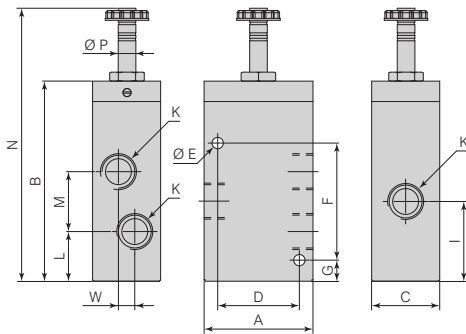
MATERIALS AND DIMENSIONS - ELECTROPNEUMATIC VALVES - STANDARD VERSION

ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
①	Body	Anodized profiled / extruded aluminium	⑩	End cover	Anodized aluminium
②	Top cover	Anodized profiled / extruded aluminium	⑪	Screw	Zinc plated steel
③	Poppet rod	Zinc plated steel	⑫	Silencer	Sintered bronze
④	Guide rod	Anodized aluminium	⑬	O-ring	NBR / FKM / PUR
⑤	Piston	Anodized aluminium	⑭	Tightness seal	NBR / FKM / PUR
⑥	Poppet holder	Zinc plated steel	⑮	Poppet seal	NBR / FKM / PUR
⑦	Anti-extrusion washer	Hostaform	⑯	Spring	Stainless steel AISI 302 (X10CrNi18-09)
⑧	Seeger ring	C75 carbon steel	⑰	Operator	Brass - Magnetic stainless steel
⑨	Self-looking nut	Zinc plated steel	⑱	Knurled nut	Plastic material / Aluminium



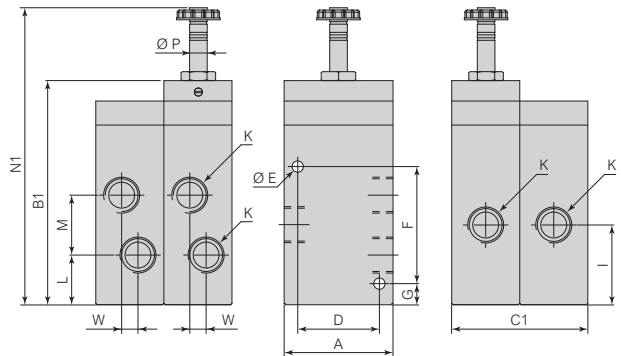
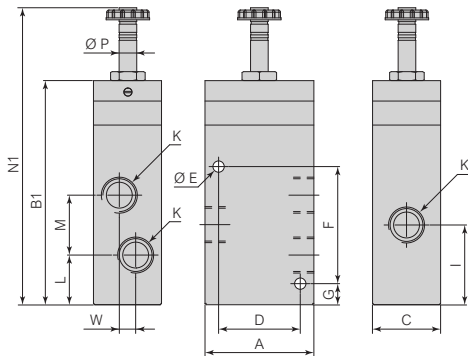
Single pilot - Version 2/2 and 3/2 NC or NA

Single pilot - Version 5/2



Double pilot - Version 2/2 and 3/2 NC or NA

Double pilot - Version 5/2



K	A	B	B1	C	C1	D	Ø E	F	G	I	L	M	N	N1	Ø P	W
Gas - NPT	0 -0,2	± 0,3	± 0,3	0 -0,2	0 -0,5	± 0,3		± 0,3	± 0,2	± 0,2	± 0,2	± 0,3	± 0,3	± 0,3		± 0,3
1/8" Gas - NPT	40	70	91	20	40	29	4,25	33,5	11,5	26	16	20	105	126	8 ⁽³⁾	0
1/4" Gas - NPT	50	80,5	100	25	50	34	5,25	39	14,5	29,5	17,5	24	115,5	135	8 ⁽³⁾	0
1/2" Gas - NPT	70	99,5	125	35	70	50	6,25	54,5	15	37	21	32	134,5 / 153,5 ⁽²⁾	160 / 179 ⁽²⁾	8 ⁽³⁾ / 13 ⁽³⁾	0
3/4" Gas - NPT	79	147	175	50	100	60	8,25	86	15,5	58,5	36,5	44	201	229	13 ⁽³⁾	12
1" Gas - NPT	100	166	194,5	60	120	82	10,5	85	33	64,5	30	61	220	248,5	13 ⁽³⁾	0

(2) Pilot operator type /D and /PS/D, Ø13 with coil type "D", available also for solenoid valve size 1/2"

(3) Ø9 for version -EX (ATEX)



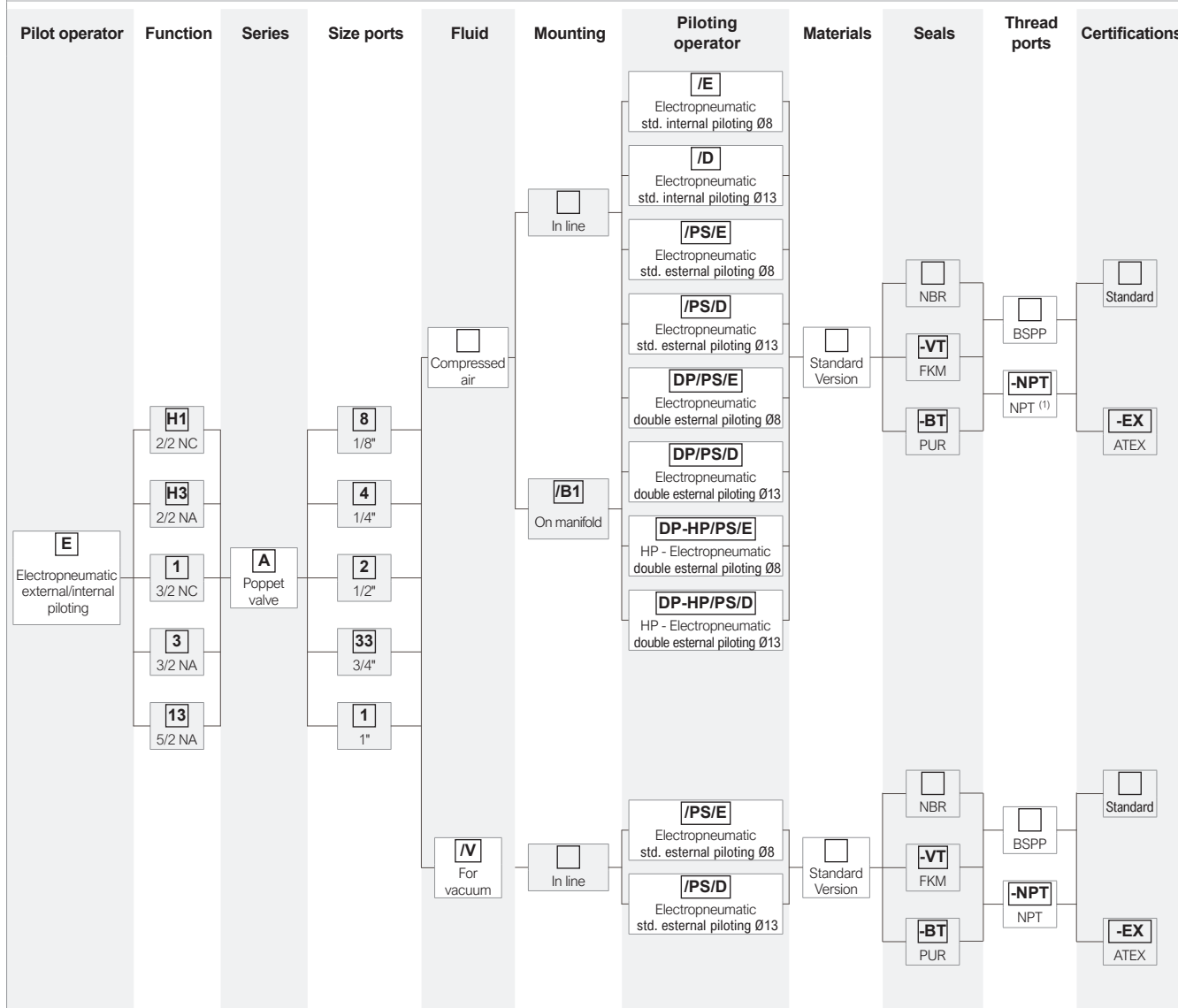
ORDERING CODE - ELECTROPNEUMATIC VALVES - STANDARD VERSION

Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
E	1	A	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E = Electropneumatic, internal / external piloting		A = Poppet valve	8 = 1/8" 4 = 1/4" 2 = 1/2" 33 = 3/4" 1 = 1"	NULL = In line ⁽¹⁾ /B1 = On manifold			NULL = NBR -VT = FKM -BT = PUR	NULL = BSPP -NPT = NPT ⁽¹⁾		
H1 = 2/2 Pilot-spring Normally closed				NULL = For compressed air /V = For vacuum			NULL = Body and covers in aluminium alloy anodized Internal components: carbon steel, aluminium, brass			
H3 = 2/2 Pilot-spring Normally open										NULL = Standard -EX = For compressed air in potentially explosive environment (ATEX)
1 = 3/2 Pilot-spring Normally closed						/E = Electropneumatic internal piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") /D = Electropneumatic internal piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" ⁽²⁾ - 3/4" - 1") /PS/E = Electropneumatic external piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") /PS/D = Electropneumatic external piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" ⁽²⁾ - 3/4" - 1")				
3 = 3/2 Pilot-spring Normally open						DP/PS/E = Electropneumatic external piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") DP/PS/D = Electropneumatic external piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" ⁽²⁾ - 3/4" - 1") DP-HP/PS/E = Electropneumatic external piloting, Ø8 coil type "E", high pressure (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") DP-HP/PS/D = Electropneumatic external piloting, Ø13 coil type "D", high pressure (30 mm for solenoid valves size 1/2" ⁽²⁾ - 3/4" - 1")				
13 = 5/2 Pilot-spring Monostable										

(1) NPT thread available only for in-line mounting

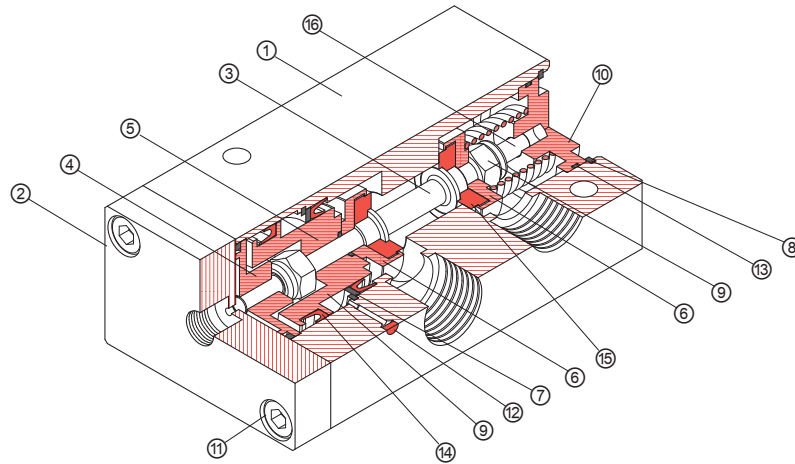
(2) Pilot operator type /D and /PS/D, Ø13 with coil type "D", available also for solenoid valve size 1/2"

AVAILABLE CONFIGURATION



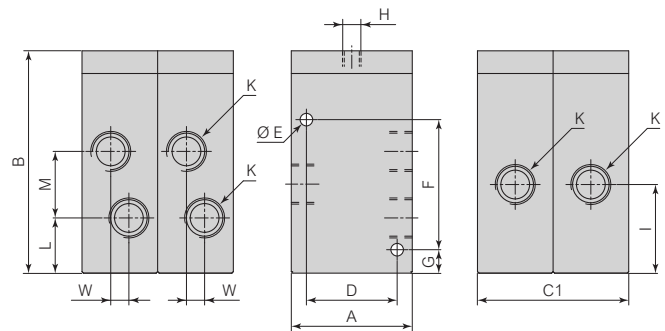
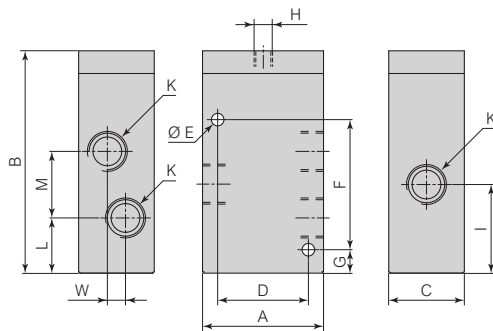
MATERIALS AND DIMENSIONS - PNEUMATIC VALVES - X VERSION

ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
①	Body	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑨	Self-locking nut	Stainless steel AISI A2 70
②	Top cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑩	End cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)
③	Poppet rod	Zinc plated steel	⑪	Screw	Stainless steel AISI A2 80
④	Guide rod	Anodized aluminium	⑫	Silencer	Stainless steel AISI 316 (X5CrNiMo17-12-2)
⑤	Piston	Anodized aluminium	⑬	O-ring	NBR / FKM / PUR
⑥	Poppet holder	Zinc plated steel	⑭	Tightness seal	NBR / FKM / PUR
⑦	Anti-extrusion washer	Hostaform	⑮	Poppet seal	NBR / FKM / PUR
⑧	Seeger ring	Stainless steel AISI 420B (X30Cr13)	⑯	Spring	Stainless steel AISI 302 (X10CrNi18-09)



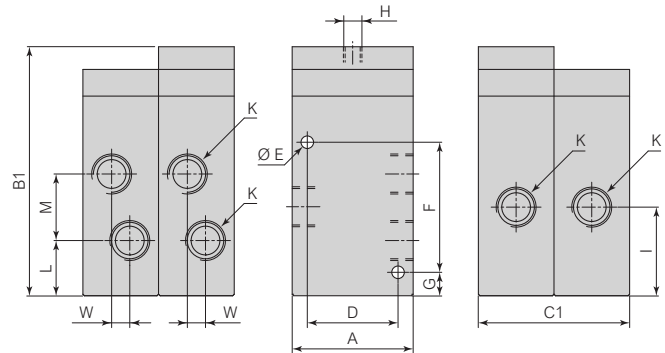
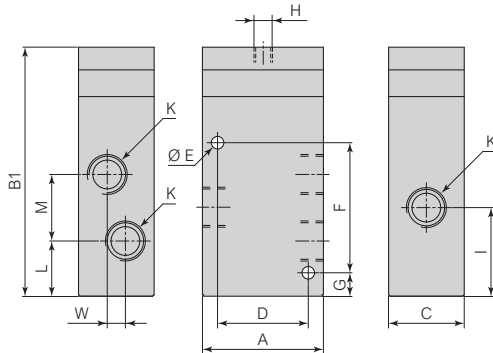
Single pilot - Version 2/2 and 3/2 NC or NA

Single pilot - Version 5/2



Double pilot - Version 2/2 and 3/2 NC or NA

Double pilot - Version 5/2



K	A	B	B1	C	C1	D	Ø E	F	G	H	I	L	M	W
Gas - NPT	$0_{-0,2}$	$\pm 0,3$	$\pm 0,3$	$0_{-0,2}$	$0_{-0,5}$	$\pm 0,3$		$\pm 0,3$	$\pm 0,2$	Gas - NPT	$\pm 0,2$	$\pm 0,2$	$\pm 0,3$	$\pm 0,3$
1/8" Gas - NPT	40	70	91	20	40	29	4,25	33,5	11,5	1/8" Gas - 1/8" NPT	26	16	20	0
1/4" Gas - NPT	50	80,5	100	25	50	34	5,25	39	14,5	1/8" Gas - 1/8" NPT	29,5	17,5	24	0
1/2" Gas - NPT	70	99,5	125	35	70	50	6,25	54,5	15	1/8" Gas - 1/8" NPT	37	21	32	0
3/4" Gas - NPT	79	147	175	50	100	60	8,25	86	15,5	1/4" Gas - 1/4" NPT	58,5	36,5	44	12
1" Gas - NPT	100	166	194,5	60	120	82	10,5	85	33	1/8" Gas - 1/4" NPT	64,5	30	61	0



ORDERING CODE - PNEUMATIC VALVES - X VERSION

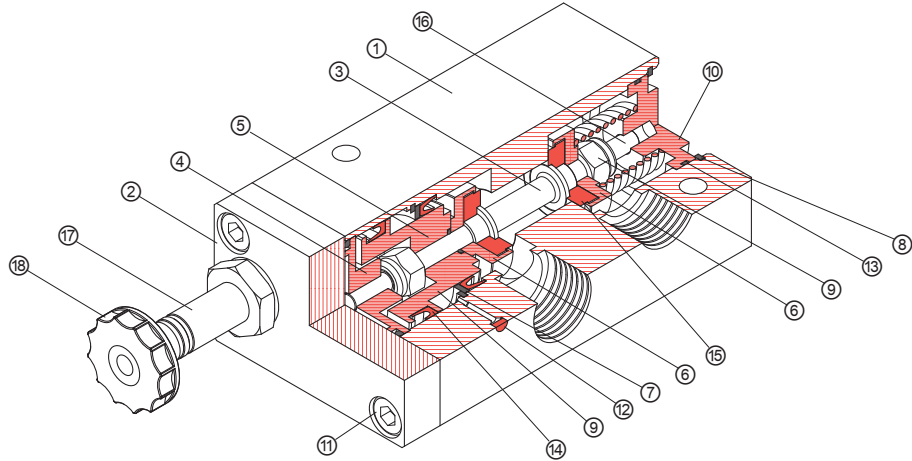
Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
S	1	A	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S = Pneumatic, external piloting		A = Poppet valve	8 = 1/8" 4 = 1/4" 2 = 1/2" 33 = 3/4" 1 = 1"	<input type="checkbox"/>	NULL = In line			NULL = NBR -VT = FKM -BT = PUR	NULL = BSPP -NPT = NPT	
H1 = 2/2 Pilot-spring Normally closed				NULL = For compressed air V = For vacuum			-X = Body and covers in stainless steel AISI 316 Internal components in carbon steel - aluminium - brass			
H3 = 2/2 Pilot-spring Normally open										
1 = 3/2 Pilot-spring Normally closed										
3 = 3/2 Pilot-spring Normally open										
13 = 5/2 Pilot-spring Monostable										
										NULL = Standard -EX = For compressed air in potentially explosive environment (ATEX) -SIL = Suitable for use in safety related system up to SIL3 -EXSIL = Both certifications: -EX and -SIL

AVAILABLE CONFIGURATION

Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications	
S Pneumatic, external piloting	H1 2/2 NC	A Poppet valve	8 1/8"	<input type="checkbox"/> Compressed air	<input type="checkbox"/> In line	<input type="checkbox"/> External pneumatic piloting, single pilot	-X X versione	<input type="checkbox"/> NBR <input type="checkbox"/> -VT FKM <input type="checkbox"/> -BT PUR	<input type="checkbox"/> BSPP <input type="checkbox"/> -NPT NPT	<input type="checkbox"/> Standard <input type="checkbox"/> -EX ATEX <input type="checkbox"/> -SIL SIL <input type="checkbox"/> -EXSIL EX + SIL	
						DP External pneumatic piloting, double pilot					
						DP-HP External pneumatic piloting, single pilot, high pressure					
						<input type="checkbox"/>					
						<input type="checkbox"/>					
	1 3/2 NC		4 1/4"	<input type="checkbox"/> For vacuum	<input type="checkbox"/> In line	<input type="checkbox"/> External pneumatic piloting, single pilot	-X X versione	<input type="checkbox"/> NBR <input type="checkbox"/> -VT FKM <input type="checkbox"/> -BT PUR	<input type="checkbox"/> BSPP <input type="checkbox"/> -NPT NPT	<input type="checkbox"/> Standard <input type="checkbox"/> -EX ATEX	
											<input type="checkbox"/>
											<input type="checkbox"/>
											<input type="checkbox"/>
											<input type="checkbox"/>
1 3/2 NA	2 1/2"	<input type="checkbox"/> For vacuum	<input type="checkbox"/> In line	<input type="checkbox"/> External pneumatic piloting, single pilot	-X X versione	<input type="checkbox"/> NBR <input type="checkbox"/> -VT FKM <input type="checkbox"/> -BT PUR	<input type="checkbox"/> BSPP <input type="checkbox"/> -NPT NPT	<input type="checkbox"/> Standard <input type="checkbox"/> -EX ATEX			
									<input type="checkbox"/>		
									<input type="checkbox"/>		
									<input type="checkbox"/>		
									<input type="checkbox"/>		
3 3/2 NA	33 3/4"	<input type="checkbox"/> For vacuum	<input type="checkbox"/> In line	<input type="checkbox"/> External pneumatic piloting, single pilot	-X X versione	<input type="checkbox"/> NBR <input type="checkbox"/> -VT FKM <input type="checkbox"/> -BT PUR	<input type="checkbox"/> BSPP <input type="checkbox"/> -NPT NPT	<input type="checkbox"/> Standard <input type="checkbox"/> -EX ATEX			
									<input type="checkbox"/>		
									<input type="checkbox"/>		
									<input type="checkbox"/>		
									<input type="checkbox"/>		
13 5/2 NA	1 1"	<input type="checkbox"/> For vacuum	<input type="checkbox"/> In line	<input type="checkbox"/> External pneumatic piloting, single pilot	-X X versione	<input type="checkbox"/> NBR <input type="checkbox"/> -VT FKM <input type="checkbox"/> -BT PUR	<input type="checkbox"/> BSPP <input type="checkbox"/> -NPT NPT	<input type="checkbox"/> Standard <input type="checkbox"/> -EX ATEX			
									<input type="checkbox"/>		
									<input type="checkbox"/>		
									<input type="checkbox"/>		
									<input type="checkbox"/>		

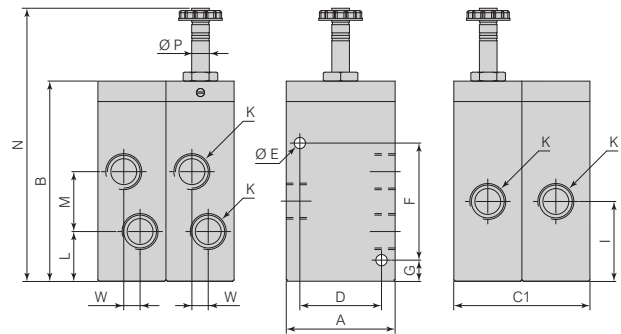
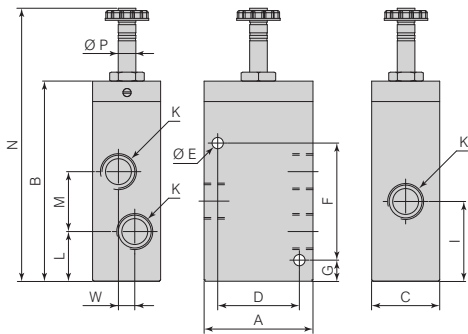
MATERIALS AND DIMENSIONS - ELECTROPNEUMATIC VALVES - X VERSION

ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
①	Body	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑩	End cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)
②	Top cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑪	Screw	Stainless steel AISI A2 80
③	Poppet rod	Zinc plated steel	⑫	Silencer	Stainless steel AISI 316 (X5CrNiMo17-12-2)
④	Guide rod	Anodized aluminium	⑬	O-ring	NBR / FKM / PUR
⑤	Piston	Anodized aluminium	⑭	Tightness seal	NBR / FKM / PUR
⑥	Poppet holder	Zinc plated steel	⑮	Poppet seal	NBR / FKM / PUR
⑦	Anti-extrusion washer	Hostaform	⑯	Spring	Stainless steel AISI 302 (X10CrNi18-09)
⑧	Seeger ring	Stainless steel AISI 420B (X30Cr13)	⑰	Operator	Magnetic stainless steel
⑨	Self-looking nut	Stainless steel AISI A2 70	⑱	Knurled nut	Stainless steel



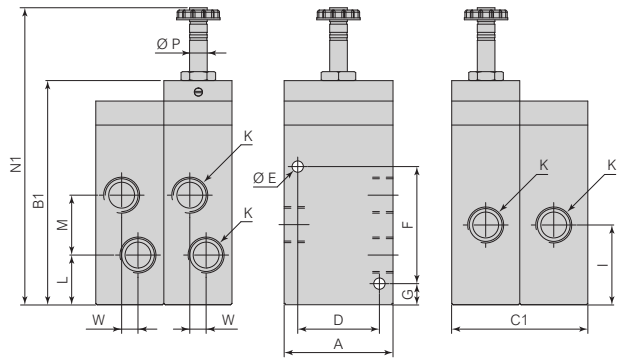
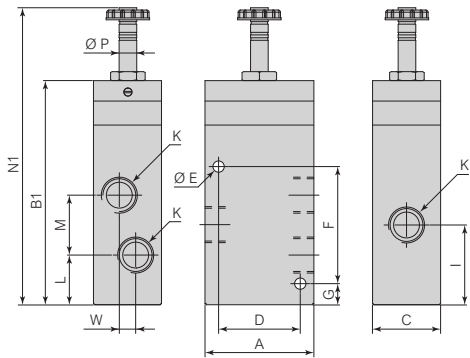
Single pilot - Version 2/2 and 3/2 NC or NA

Single pilot - Version 5/2



Double pilot - Version 2/2 and 3/2 NC or NA

Double pilot - Version 5/2



K	A	B	B1	C	C1	D	Ø E	F	G	I	L	M	N	N1	Ø P	W
Gas - NPT	0 -0,2	± 0,3	± 0,3	0 -0,2	0 -0,5	± 0,3		± 0,3	± 0,2	± 0,2	± 0,2	± 0,3	± 0,3	± 0,3		± 0,3
1/8" Gas - NPT	40	70	91	20	40	29	4,25	33,5	11,5	26	16	20	105	126	8 ⁽³⁾	0
1/4" Gas - NPT	50	80,5	100	25	50	34	5,25	39	14,5	29,5	17,5	24	115,5	135	8 ⁽³⁾	0
1/2" Gas - NPT	70	99,5	125	35	70	50	6,25	54,5	15	37	21	32	134,5 / 153,5 ⁽²⁾	160 / 179 ⁽²⁾	8 ⁽³⁾ / 13 ⁽³⁾	0
3/4" Gas - NPT	79	147	175	50	100	60	8,25	86	15,5	58,5	36,5	44	201	229	13 ⁽³⁾	12
1" Gas - NPT	100	166	194,5	60	120	82	10,5	85	33	64,5	30	61	220	248,5	13 ⁽³⁾	0

(2) Pilot operator type /D and /PS/D, Ø13 with coil type "D", available also for solenoid valve size 1/2"

(3) Ø9 for version -EX (ATEX)



ORDERING CODE - ELECTROPNEUMATIC VALVES - X VERSION

Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
E	1	A	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E = Electropneumatic, internal / external piloting		A = Poppet valve	8 = 1/8" 4 = 1/4" 2 = 1/2" 33 = 3/4" 1 = 1"	NULL = For compressed air V = For vacuum	NULL = In line		-X = Body and covers in stainless steel AISI 316 Internal components: carbon steel, aluminium, brass	NULL = NBR -VT = FKM -BT = PUR	NULL = BSPP -NPT = NPT	
H1 = 2/2 Pilot-spring Normally closed										
H3 = 2/2 Pilot-spring Normally open										
1 = 3/2 Pilot-spring Normally closed										
3 = 3/2 Pilot-spring Normally open										
13 = 5/2 Pilot-spring Monostable										
		Single pilot				/E = Electropneumatic internal piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") /D = Electropneumatic internal piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1") /PS/E = Electropneumatic external piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") /PS/D = Electropneumatic external piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1")				NULL = Standard -EX = For compressed air in potentially explosive environment (ATEX)
		Double pilot				DP/PS/E = Electropneumatic external piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") DP/PS/D = Electropneumatic external piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1") DP-HP/PS/E = Electropneumatic external piloting, Ø8 coil type "E", high pressure (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") DP-HP/PS/D = Electropneumatic external piloting, Ø13 coil type "D", high pressure (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1")				

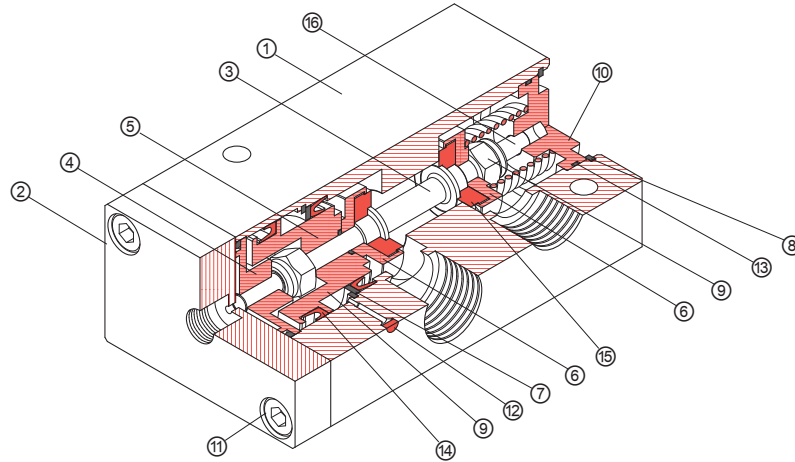
(2) Pilot operator type /D and /PS/D, Ø13 with coil type "D", available also for solenoid valve size 1/2"

AVAILABLE CONFIGURATION

Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
E Electropneumatic external/internal piloting	H1 2/2 NC H3 2/2 NA 1 3/2 NC 3 3/2 NA 13 5/2 NA	A Poppet valve	8 1/8" 4 1/4" 2 1/2" 33 3/4" 1 1"	<input type="checkbox"/> Compressed air	<input type="checkbox"/> In line	/E Electropneumatic std. internal piloting Ø8	-X X Version	<input type="checkbox"/> NBR <input type="checkbox"/> -VT FKM <input type="checkbox"/> -BT PUR	<input type="checkbox"/> BSPP <input type="checkbox"/> -NPT NPT	<input type="checkbox"/> Standard <input type="checkbox"/> -EX ATEX
						/D Electropneumatic std. internal piloting Ø13				
						/PS/E Electropneumatic std. external piloting Ø8				
						/PS/D Electropneumatic std. external piloting Ø13				
						DP/PS/E Electropneumatic double external piloting Ø8				
						DP/PS/D Electropneumatic double external piloting Ø13				
	DP-HP/PS/E HP - Electropneumatic double external piloting Ø8									
	DP-HP/PS/D HP - Electropneumatic double external piloting Ø13									
	/PS/E Electropneumatic std. external piloting Ø8	<input type="checkbox"/> NBR <input type="checkbox"/> -VT FKM <input type="checkbox"/> -BT PUR	<input type="checkbox"/> BSPP <input type="checkbox"/> -NPT NPT	<input type="checkbox"/> Standard <input type="checkbox"/> -EX ATEX						
	/PS/D Electropneumatic std. external piloting Ø13									

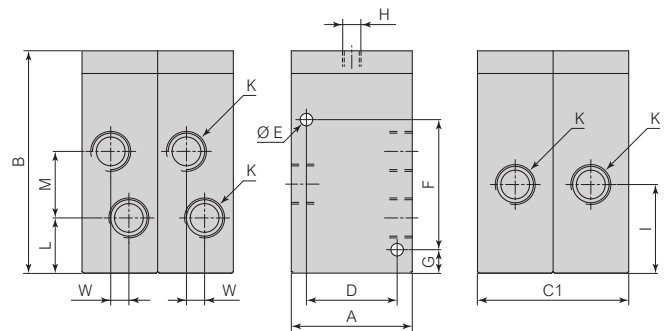
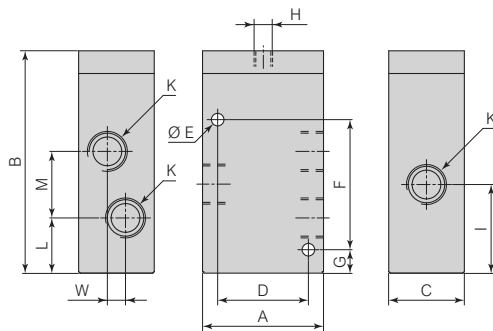
MATERIALS AND DIMENSIONS - PNEUMATIC VALVES - XX VERSION

ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
①	Body	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑨	Self-looking nut	Stainless steel AISI A4 70
②	Top cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑩	End cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)
③	Poppet rod	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑪	Screw	Stainless steel AISI A4 80
④	Guide rod	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑫	Silencer	Stainless steel AISI 316 (X5CrNiMo17-12-2)
⑤	Piston	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑬	O-ring	NBR / FKM / PUR
⑥	Poppet holder	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑭	Tightness seal	NBR / FKM / PUR
⑦	Anti-extrusion washer	Hostaform	⑮	Poppet seal	NBR / FKM / PUR
⑧	Seeger ring	Stainless steel AISI 420B (X30Cr13)	⑯	Spring	Stainless steel AISI 302 (X10CrNi18-09)



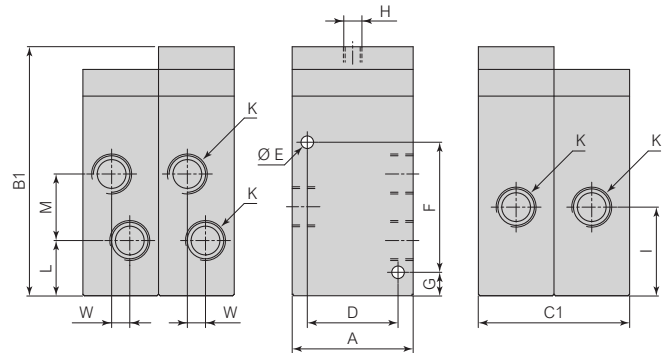
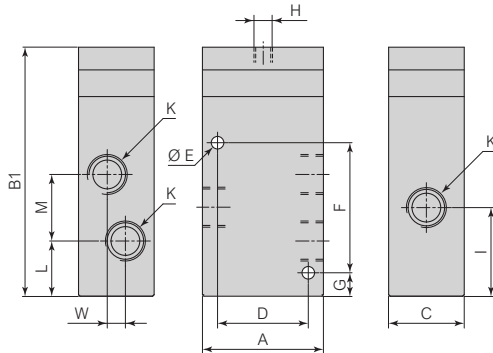
Single pilot - Version 2/2 and 3/2 NC or NA

Single pilot - Version 5/2



Double pilot - Version 2/2 and 3/2 NC or NA

Double pilot - Version 5/2



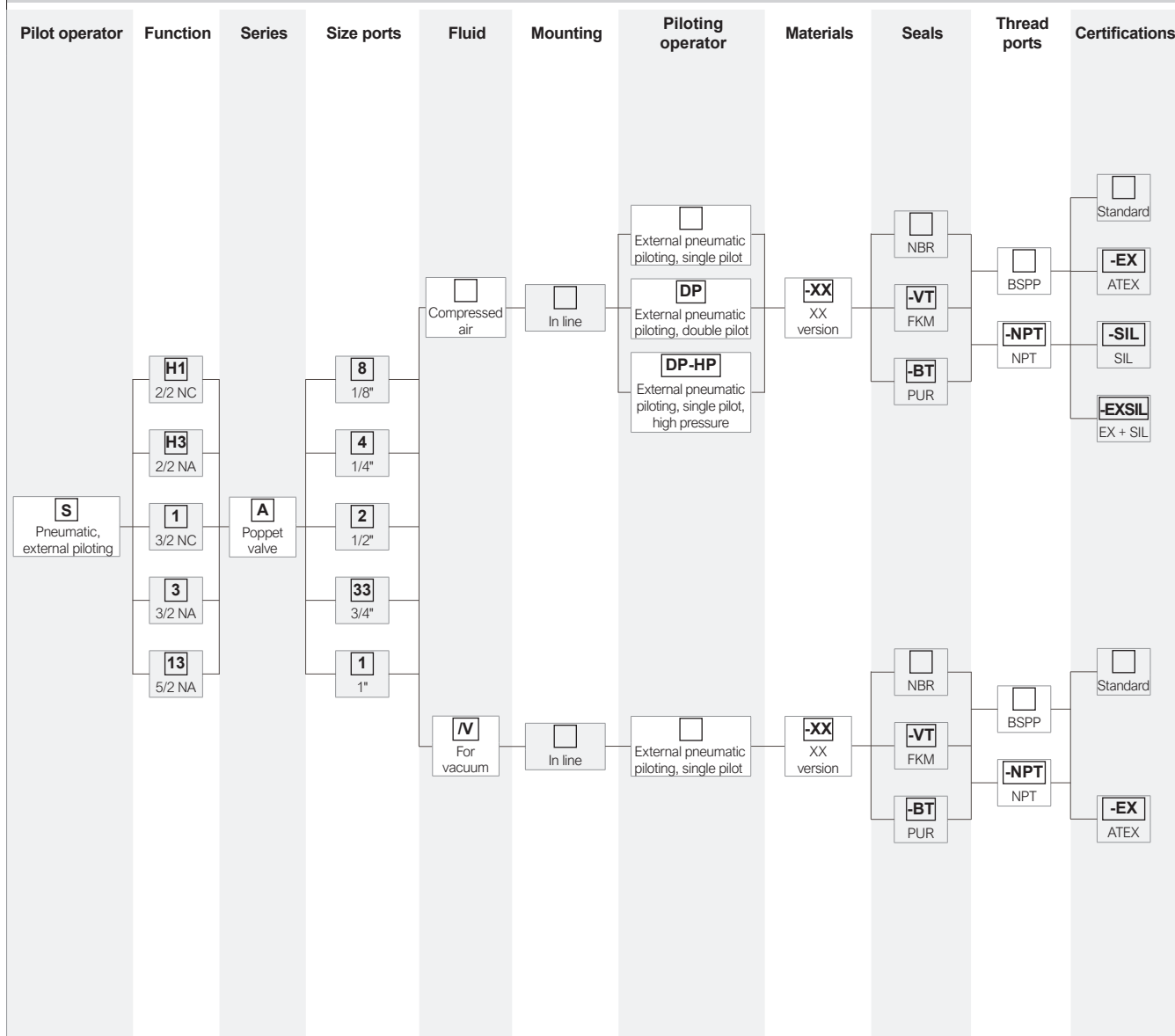
K	A	B	B1	C	C1	D	Ø E	F	G	H	I	L	M	W
Gas - NPT	$0_{-0,2}$	$\pm 0,3$	$\pm 0,3$	$0_{-0,2}$	$0_{-0,5}$	$\pm 0,3$		$\pm 0,3$	$\pm 0,2$	Gas - NPT	$\pm 0,2$	$\pm 0,2$	$\pm 0,3$	$\pm 0,3$
1/8" Gas - NPT	40	70	91	20	40	29	4,25	33,5	11,5	1/8" Gas - 1/8" NPT	26	16	20	0
1/4" Gas - NPT	50	80,5	100	25	50	34	5,25	39	14,5	1/8" Gas - 1/8" NPT	29,5	17,5	24	0
1/2" Gas - NPT	70	99,5	125	35	70	50	6,25	54,5	15	1/8" Gas - 1/8" NPT	37	21	32	0
3/4" Gas - NPT	79	147	175	50	100	60	8,25	86	15,5	1/4" Gas - 1/4" NPT	58,5	36,5	44	12
1" Gas - NPT	100	166	194,5	60	120	82	10,5	85	33	1/8" Gas - 1/4" NPT	64,5	30	61	0



ORDERING CODE - PNEUMATIC VALVES - XX VERSION

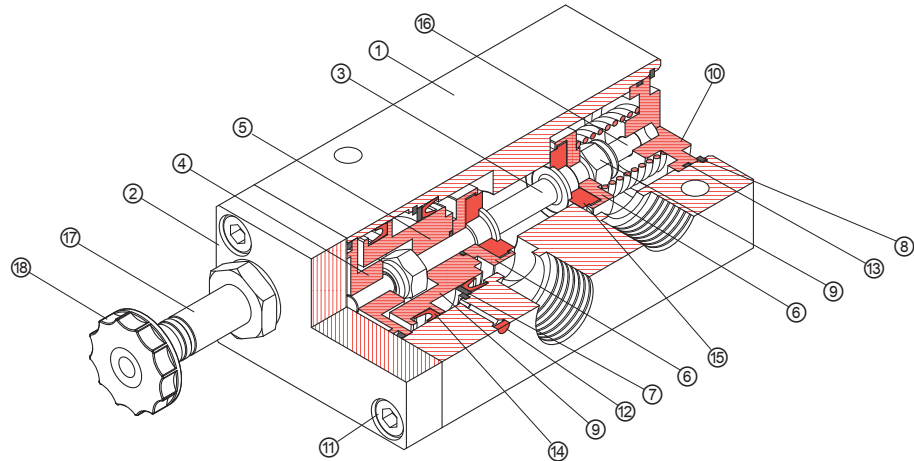
Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
S	1	A	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-XX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S = Pneumatic, external piloting		A = Poppet valve	8 = 1/8" 4 = 1/4" 2 = 1/2" 33 = 3/4" 1 = 1"	NULL = In line				NULL = NBR -VT = FKM -BT = PUR	NULL = BSPP -NPT = NPT	
H1 = 2/2 Pilot-spring Normally closed				NULL = For compressed air V = For vacuum			-XX = Body and covers in stainless steel AISI 316 Internal components in stainless steel AISI 316			
H3 = 2/2 Pilot-spring Normally open										
1 = 3/2 Pilot-spring Normally closed										
3 = 3/2 Pilot-spring Normally open										
13 = 5/2 Pilot-spring Monostable										
										NULL = Standard -EX = For compressed air in potentially explosive environment (ATEX) -SIL = Suitable for use in safety related system up to SIL3 -EXSIL = Both certifications: -EX and -SIL

AVAILABLE CONFIGURATION



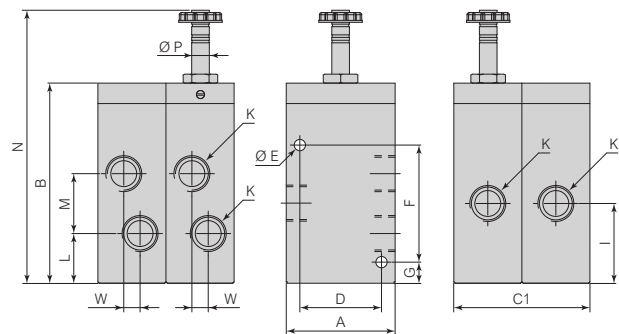
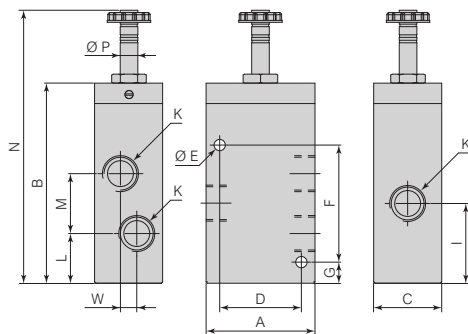
MATERIALS AND DIMENSIONS - ELECTROPNEUMATIC VALVES - XX VERSION

ITEM	DESCRIPTION	MATERIAL	ITEM	DESCRIPTION	MATERIAL
①	Body	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑩	End cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)
②	Top cover	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑪	Screw	Stainless steel AISI A4 80
③	Poppet rod	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑫	Silencer	Stainless steel AISI 316 (X5CrNiMo17-12-2)
④	Guide rod	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑬	O-ring	NBR / FKM / PUR
⑤	Piston	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑭	Tightness seal	NBR / FKM / PUR
⑥	Poppet holder	Stainless steel AISI 316 (X5CrNiMo17-12-2)	⑮	Poppet seal	NBR / FKM / PUR
⑦	Anti-extrusion washer	Hostaform	⑯	Spring	Stainless steel AISI 302 (X10CrNi18-09)
⑧	Seeger ring	Stainless steel AISI 420B (X30Cr13)	⑰	Operator	Magnetic stainless steel
⑨	Self-looking nut	Stainless steel AISI A4 70	⑱	Knurled nut	Stainless steel



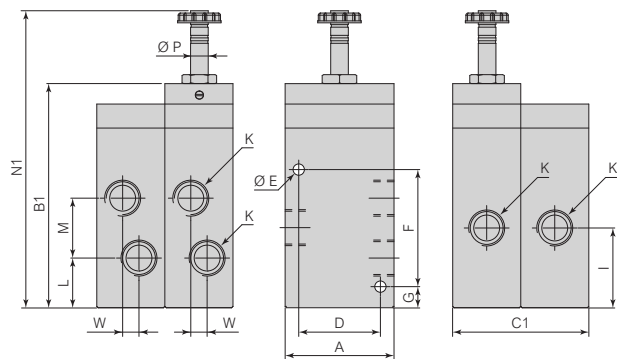
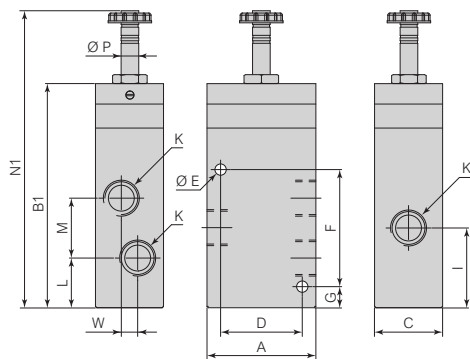
Single pilot - Version 2/2 and 3/2 NC or NA

Single pilot - Version 5/2



Double pilot - Version 2/2 and 3/2 NC or NA

Double pilot - Version 5/2



K	A	B	B1	C	C1	D	Ø E	F	G	I	L	M	N	N1	Ø P	W
Gas - NPT	0 -0,2	± 0,3	± 0,3	0 -0,2	0 -0,5	± 0,3	± 0,3	± 0,2	± 0,2	± 0,2	± 0,2	± 0,3	± 0,3	± 0,3	± 0,3	± 0,3
1/8" Gas - NPT	40	70	91	20	40	29	4,25	33,5	11,5	26	16	20	105	126	8 ⁽³⁾	0
1/4" Gas - NPT	50	80,5	100	25	50	34	5,25	39	14,5	29,5	17,5	24	115,5	135	8 ⁽³⁾	0
1/2" Gas - NPT	70	99,5	125	35	70	50	6,25	54,5	15	37	21	32	134,5 / 153,5 ⁽²⁾	160 / 179 ⁽²⁾	8 ⁽³⁾ / 13 ⁽³⁾	0
3/4" Gas - NPT	79	147	175	50	100	60	8,25	86	15,5	58,5	36,5	44	201	229	13 ⁽³⁾	12
1" Gas - NPT	100	166	194,5	60	120	82	10,5	85	33	64,5	30	61	220	248,5	13 ⁽³⁾	0

(2) Pilot operator type /D and /PS/D, Ø13 with coil type "D", available also for solenoid valve size 1/2"

(3) Ø9 for version -EX (ATEX)



ORDERING CODE - ELECTROPNEUMATIC VALVES - XX VERSION

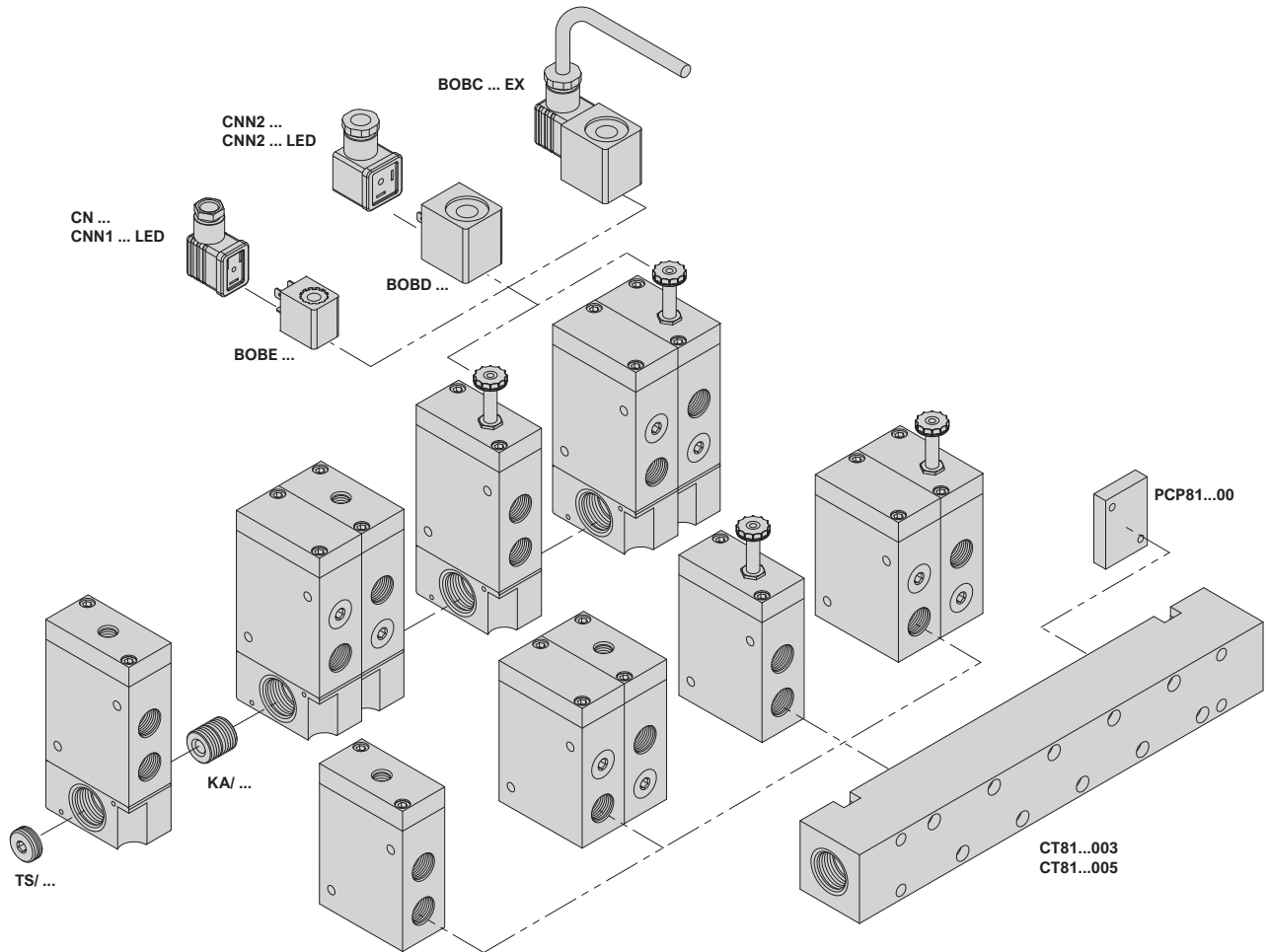
Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
E	1	A	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-XX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E = Electropneumatic, internal / external piloting		A = Poppet valve	8 = 1/8" 4 = 1/4" 2 = 1/2" 33 = 3/4" 1 = 1"	NULL = In line			-XX = Body and covers in stainless steel AISI 316 Internal components in stainless steel AISI 316	NULL = NBR -VT = FKM -BT = PUR	NULL = BSPP -NPT = NPT	
H1 = 2/2 Pilot-spring Normally closed				NULL = For compressed air V = For vacuum						
H3 = 2/2 Pilot-spring Normally open										
1 = 3/2 Pilot-spring Normally closed										
3 = 3/2 Pilot-spring Normally open										
13 = 5/2 Pilot-spring Monostable										
		Single pilot				/E = Electropneumatic internal piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") /D = Electropneumatic internal piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1") /PS/E = Electropneumatic external piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") /PS/D = Electropneumatic external piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1")				NULL = Standard -EX = For compressed air in potentially explosive environment (ATEX)
		Double pilot				DP/PS/E = Electropneumatic external piloting, Ø8 coil type "E" (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") DP/PS/D = Electropneumatic external piloting, Ø13 coil type "D" (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1") DP-HP/PS/E = Electropneumatic external piloting, Ø8 coil type "E", high pressure (22 mm for solenoid valves size 1/8" - 1/4" - 1/2") DP-HP/PS/D = Electropneumatic external piloting, Ø13 coil type "D", high pressure (30 mm for solenoid valves size 1/2" (2) - 3/4" - 1")				

(2) Pilot operator type /D and /PS/D, Ø13 with coil type "D", available also for solenoid valve size 1/2"

AVAILABLE CONFIGURATION

Pilot operator	Function	Series	Size ports	Fluid	Mounting	Piloting operator	Materials	Seals	Thread ports	Certifications
E Electropneumatic external/internal piloting	H1 2/2 NC H3 2/2 NA 1 3/2 NC 3 3/2 NA 13 5/2 NA	A Poppet valve	8 1/8" 4 1/4" 2 1/2" 33 3/4" 1 1"	<input type="checkbox"/> Compressed air <input type="checkbox"/> For vacuum	<input type="checkbox"/> In line <input type="checkbox"/> In line	/E Electropneumatic std. internal piloting Ø8	-XX XX Version	<input type="checkbox"/> NBR -VT FKM -BT PUR	<input type="checkbox"/> BSPP -NPT NPT	<input type="checkbox"/> Standard -EX ATEX
						/D Electropneumatic std. internal piloting Ø13				
						/PS/E Electropneumatic std. external piloting Ø8				
						/PS/D Electropneumatic std. external piloting Ø13				
						DP/PS/E Electropneumatic double external piloting Ø8				
						DP/PS/D Electropneumatic double external piloting Ø13				
	DP-HP/PS/E HP - Electropneumatic double external piloting Ø8									
	DP-HP/PS/D HP - Electropneumatic double external piloting Ø13									
	/PS/E Electropneumatic std. external piloting Ø8	<input type="checkbox"/> NBR -VT FKM -BT PUR	<input type="checkbox"/> BSPP -NPT NPT	<input type="checkbox"/> Standard -EX ATEX						
	/PS/D Electropneumatic std. external piloting Ø13									

ACCESSORIES

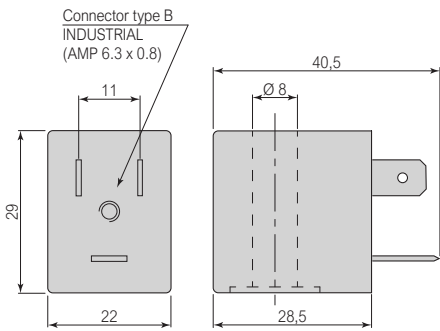


	BOBE ... Coils type "E" AC / DC	BOBD ... Coils type "D" AC / DC	BOBC ... EX Coils ATEX AC / DC	CNN1 ... Connectors for coils type "E"	CNN1 ... LED Connectors for coils type "E"	CNN2 ... Connectors for coils type "D"	CNN2 ... LED Connectors for coils type "D"
	Page 3.4.05.7	Page 3.4.05.7	Page 3.4.05.8	Page 3.4.05.9	Page 3.4.05.9	Page 3.4.05.9	Page 3.4.05.9
1/8"	✓	X	✓	X	X	X	X
1/4"	✓	X	✓	X	X	X	X
1/2"	✓	✓	✓	✓	✓	✓	✓
3/4"	X	✓	✓	✓	✓	✓	✓
1"	X	✓	✓	✓	✓	✓	✓
	Encapsulated NYLON + GLASS FIBER	Encapsulated PA 6.6 + GLASS FIBER	Encapsulated PA self-extinguish + GLASS FIBER	PA6 GF	PA6 GF - PA12	PA6 GF	PA6 GF - PA12
TS/... Closing cap	KA/... Connection nipple	CT81...003 In line connector 3 positions	CT81...005 In line connector 5 positions	PCP81...00 Closing plate			
1/8"	TS/4	KA/8	X	X	X		
1/4"	TS/3	KA/4	X	X	X		
1/2"	TS/34	KA/2	X	X	X		
3/4"	X	X	CT8134003	CT8134005	PCP813400		
1"	X	X	CT8101003	CT8101005	PCP810100		
	Passivated brass	Passivated brass	Aluminium	Aluminium	Aluminium		

COILS type "E" (22 mm)

BOBE ...

Direct current coils



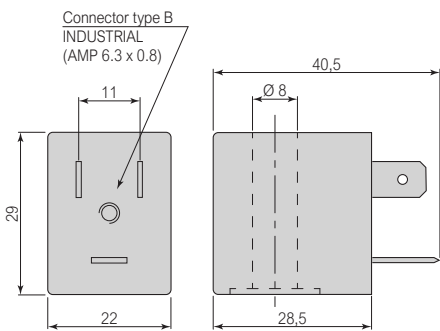
Technical features

Code	BOBE012DC	BOBE024DC
Operating voltage	12 VDC	24 VDC
Power consumption (max.)	5,5 W	
Voltage tolerance	±10% (of the nominal voltage)	
Encapsulation class	155°C (F)	
Wire insulation class	200°C (H)	
Energising duration	100% (a 20°C)	
Electrical connection	INDUSTRIAL (AMP 6.3 x 0.8) type B	
Protection class	IP54 (with connector) IP65 (with connector and suitable seals)	
Material	Encapsulated NYLON + Glass fiber	

BOBE... / 1 piece each package

BOBE ...

Alternate current coils



Technical features

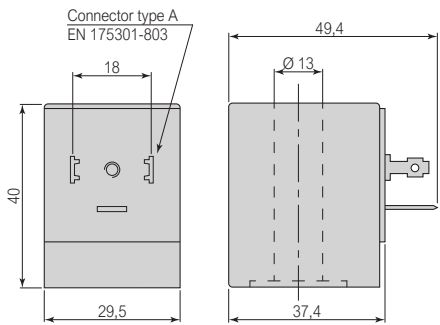
Code	BOBE024AC	BOBE048AC	BOBE110AC	BOBE220AC
Operating voltage	24 VAC	48 VAC	110 VAC	220 VAC
Power consumption (max.)	6,5 VA			
Voltage tolerance	±10% (of the nominal voltage)			
Encapsulation class	155°C (F)			
Wire insulation class	200°C (H)			
Energising duration	100% (a 20°C)			
Electrical connection	INDUSTRIAL (AMP 6.3 x 0.8) type B			
Protection class	IP54 (with connector) IP65 (with connector and suitable seals)			
Material	Encapsulated NYLON + Glass fiber			

BOBE... / 1 piece each package

COILS type "D" (30 mm)

BOBD ...

Direct current coils



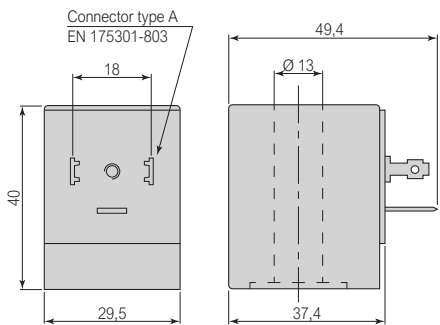
Technical features

Code	BOBD012DC	BOBD024DC
Operating voltage	12 VDC	24 VDC
Power consumption (max.)	10 W	
Voltage tolerance	±10% (of the nominal voltage)	
Encapsulation class	155°C (F)	
Wire insulation class	200°C (H)	
Energising duration	100% (a 20°C)	
Electrical connection	EN175301-803 type A	
Protection class	IP54 (with connector) IP65 (with connector and suitable seals)	
Material	Encapsulated PA 6.6 + Glass fiber	

BOBD... / 1 piece each package

BOBD ...

Alternate current coils



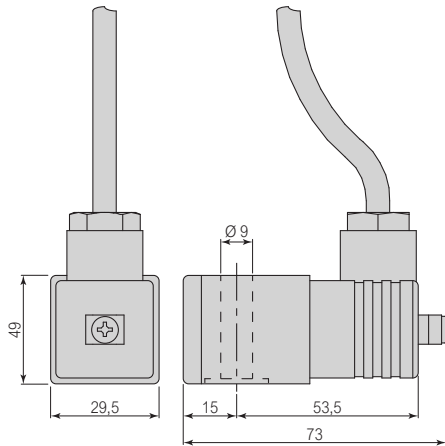
Technical features

Code	BOBD024AC	BOBD048AC	BOBD110AC	BOBD220AC
Operating voltage	24 VAC	48 VAC	110 VAC	220 VAC
Power consumption (max.)	13 VA			
Voltage tolerance	±10% (of the nominal voltage)			
Encapsulation class	155°C (F)			
Wire insulation class	200°C (H)			
Energising duration	100% (a 20°C)			
Electrical connection	EN175301-803 type A			
Protection class	IP54 (with connector) IP65 (with connector and suitable seals)			
Material	Encapsulated PA 6.6 + Glass fiber			

BOBD... / 1 piece each package

COILS "ATEX"
BOBC ... EX

ATEX direct current coils

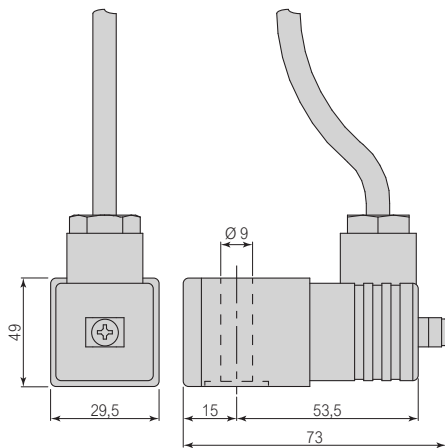

Technical features

Code	BOBC024DCEX
Operating voltage	24 VDC
Power consumption (max.)	5,3 W
Voltage tolerance	±10% (of the nominal voltage)
Wire insulation class	200°C (H)
Energising duration	100% (at the showed power and temperature)
ATEX marking (*)	II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T135°C Db
Electrical connection	Tripolar cable 3x0,75 mm ² Lenght 3000 mm Lenght 5000 mm (available on request)
Protection class	IP65 (with suitable seals)
Material	Encapsulated PA self-extinguish + Glass fiber
Visual indicator	None
Color	Black
Protection circuit	Internal fuse

BOBC ... EX / 1 piece each package

BOBC ... EX

ATEX alternate current coils


Technical features

Code	BOBC024ACEX	BOBC048ACEX	BOBC110ACEX	BOBC220ACEX
Operating voltage	24 VAC	48 VAC	110 VAC	220 VAC
Power consumption (max.)	5,3 W (voltage rectifier inside the coil)			
Voltage tolerance	±10% (of the nominal voltage)			
Wire insulation class	200°C (H)			
Energising duration	100% (at the showed power and temperature)			
ATEX marking (*)	II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T135°C Db			
Electrical connection	Tripolar cable 3x0,75 mm ²		Lenght 3000 mm Lenght 5000 mm (available on request)	
Protection class	IP65 (with suitable seals)			
Material	Encapsulated PA self-extinguish + Glass fiber			
Visual indicator	None			
Color	Black			
Protection circuit	Internal fuse			

BOBC ... EX / 1 piece each package

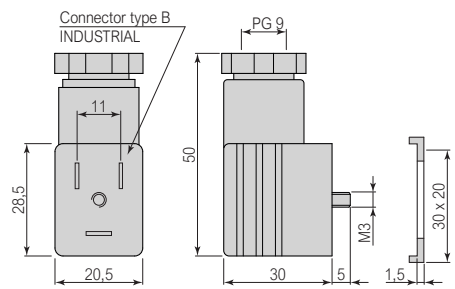
(*) T6 temperature class ATEX coils available on request - For the assembly of ATEX coils the valve will be equipped with an Ø 9 electropilot

CONNECTORS for coils type "E" (22 mm)

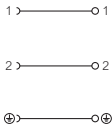
CNN1...
Connectors for coils type "E"



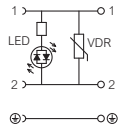
Technical features



CNN1



CNN1...LED



Code	CNN1	CNN1 2 LED	CNN1 4 LED	CNN1 5 LED
Operating voltage (max.)	0÷250 V AC/DC	12/24 V AC/DC	115 V AC/DC	230 V AC/DC
Power consumption (max.)	10 A	5 A	5 A	5 A
Contact resistance (max.)	15 mΩ			
Overvoltage category	III			
Conductor size (max.)	1,5 mm ² (without terminals)			
Cable gland	PG9			
Temperature range	-40°C ÷ +100°C	-20°C ÷ +80°C	-20°C ÷ +80°C	-20°C ÷ +80°C
Electrical connection	INDUSTRIAL (AMP 6.3 x 0.8) type B			
Protection class	IP65 (correctly assembled)			
Material	PA6 GF - PA6 GF	PA6 GF - PA12	PA6 GF - PA12	PA6 GF - PA12
Visual indicator	None	LED yellow diode	LED yellow diode	LED yellow diode
Color	Black	Trasparent	Trasparent	Trasparent
Protection circuit	None	VDR circuit	VDR circuit	VDR circuit
Mounting system	Screw M3x32,5			

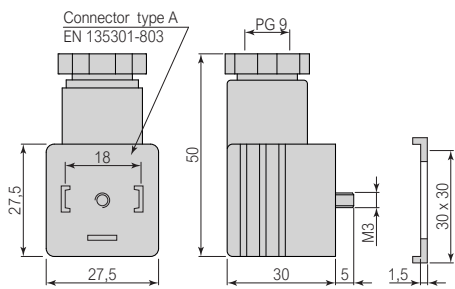
CNN1... / Contact holder, housing, seal and mounting screw - 1 piece each package

CONNECTORS for coils type "D" (30 mm)

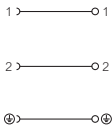
CNN2...
Connectors for coils type "D"



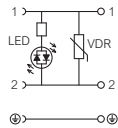
Technical features



CNN2

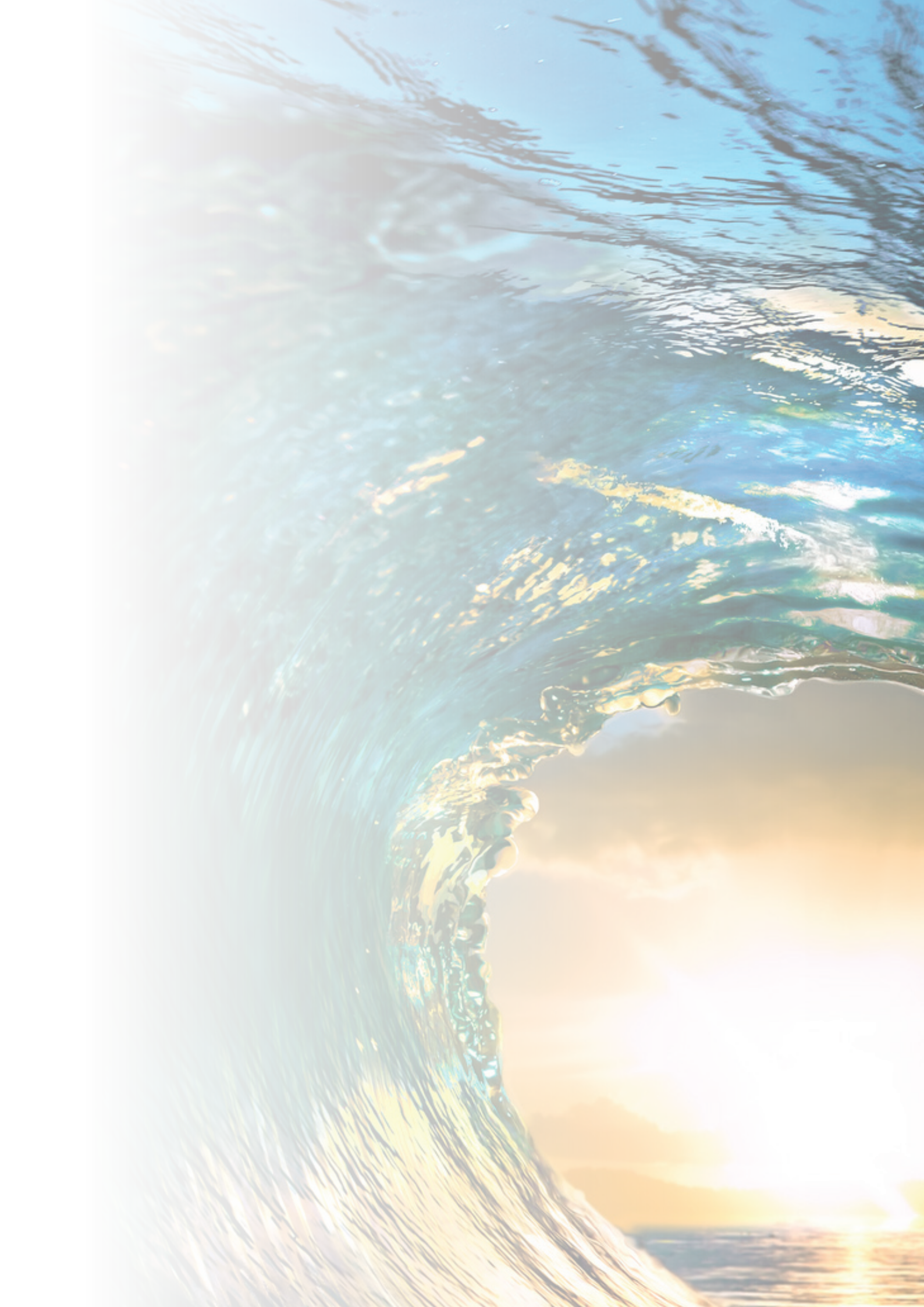


CNN2...LED



Code	CNN2	CNN2 2 LED	CNN2 4 LED	CNN2 5 LED
Operating voltage (max.)	0÷250 V AC/DC	12/24 V AC/DC	115 V AC/DC	230 V AC/DC
Power consumption (max.)	10 A	5 A	5 A	5 A
Contact resistance (max.)	15 mΩ			
Overvoltage category	III			
Conductor size (max.)	1,5 mm ² (without terminals)			
Cable gland	PG9			
Temperature range	-40°C ÷ +100°C	-20°C ÷ +80°C	-20°C ÷ +80°C	-20°C ÷ +80°C
Electrical connection	EN175301-803 type A			
Protection class	IP65 (correctly assembled)			
Material	PA6 GF - PA6 GF	PA6 GF - PA12	PA6 GF - PA12	PA6 GF - PA12
Visual indicator	None	LED yellow diode	LED yellow diode	LED yellow diode
Color	Black	Trasparent	Trasparent	Trasparent
Protection circuit	None	VDR circuit	VDR circuit	VDR circuit
Mounting system	Vite centrale M3x32,5			

CNN2... / Contact holder, housing, seal and mounting screw - 1 piece each package



BONESI PNEUMATIK manufactures all its own products in Italy



BONESI PNEUMATIK s.r.l.

Via A. Robino n. 117
20025 Legnano (MI) Italy
P.I. / C.F. 10396340159
R.E.A. 1373315

www.bonesipneumatik.it
info@bonesipneumatik.it
Phone +39 0331 448000
Telefax +39 0331 448070

