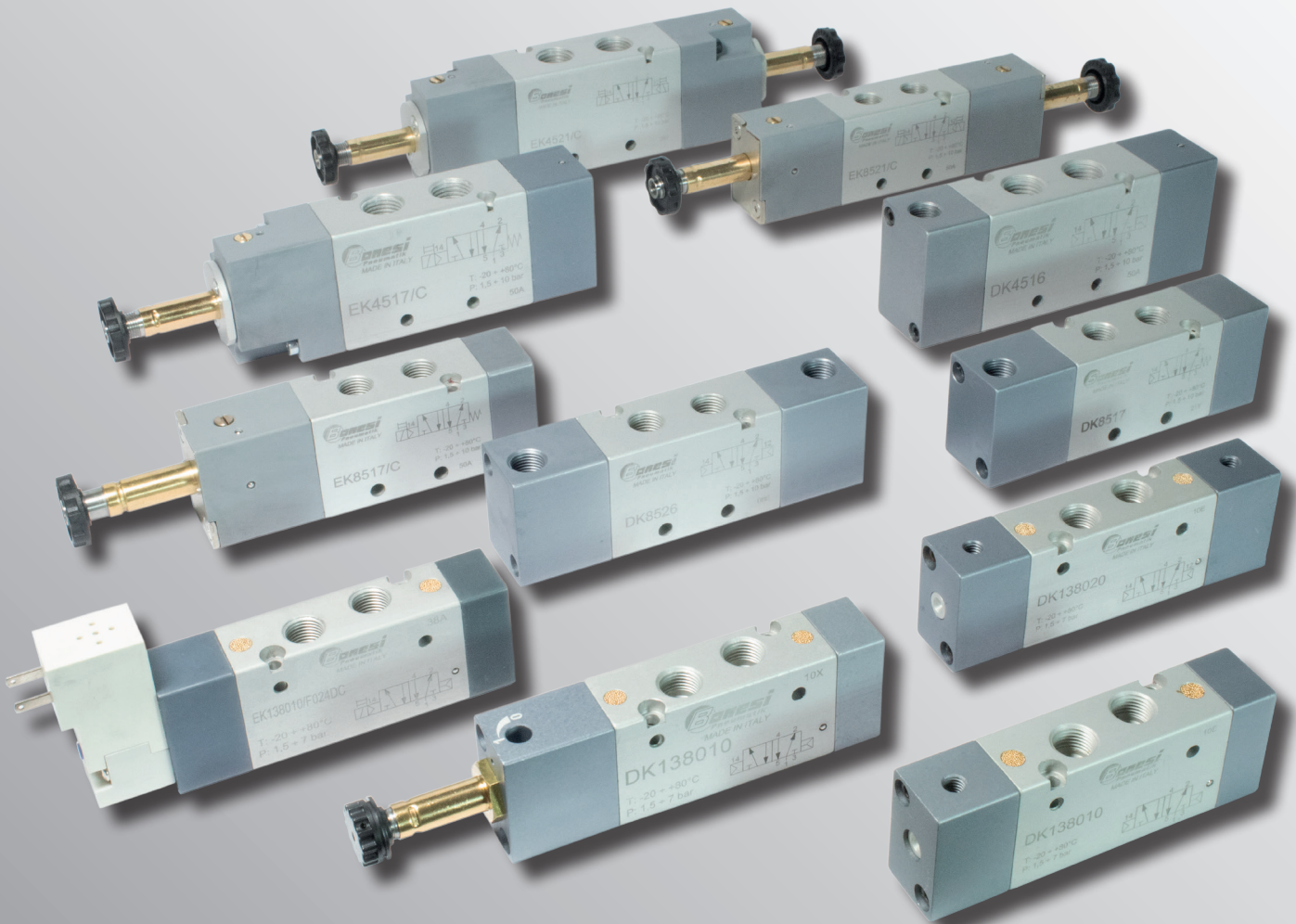


K Series

Spool valves



ISO 9001
BUREAU VERITAS
Certification



Bonesi
Pneumatik



Balanced spool pneumatic microvalves - K Series

Connections: 1/8"

K SERIES



Balanced spool valves with dynamic sealing

Fast switching times

Small footprint

Anodised aluminium body and bases

Pneumatically operated with external piloting

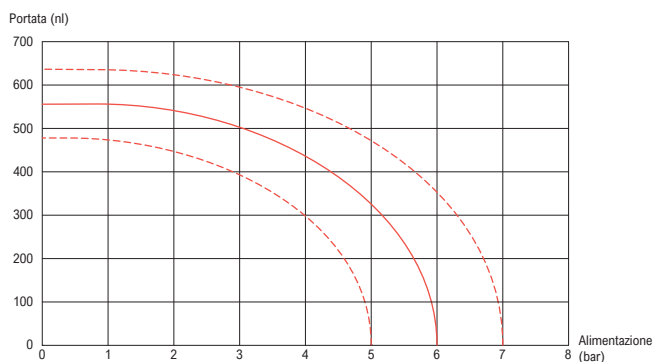
Possibility of series assembly

TECHNICAL FEATURES

| | |
|---------------------------------|--|
| Function | 5/2 |
| Operation | Pneumatic: External piloting - Monostable pneumatic spring return, bistable |
| Materials | Body, base and cover in anodised aluminium alloy - Internal components in steel - aluminium - brass NBR gaskets |
| Note on materials | Compliant with REACH (1907/2006/EC and subsequent amendments) |
| Connections | 1/8" Gas |
| Threads | Cylindrical gases (BSPP) |
| Operating temperature | 0°C ÷ 80°C (-20°C with dry air, to avoid ice formation) |
| Operating pressure | 0 ÷ 7 bar |
| Pilot actuation pressure | 1.5 bar |
| Air flow rate | 1/8" |
| Nominal diameter | 4mm |
| Supply pressure | 5 bar 320 NI/min |
| (with ΔP 1 bar) | 6 bar 350 NI/min |
| | 7 bar 400 NI/min |
| | See flow diagram page 3.1.05.1 |
| Fluid | Filtered air, lubrication-free, compliant with ISO 8573-1:2010 [7:4:4] |
| Lubrication | Not required (if required in the pneumatic circuit, it must be continuous) |

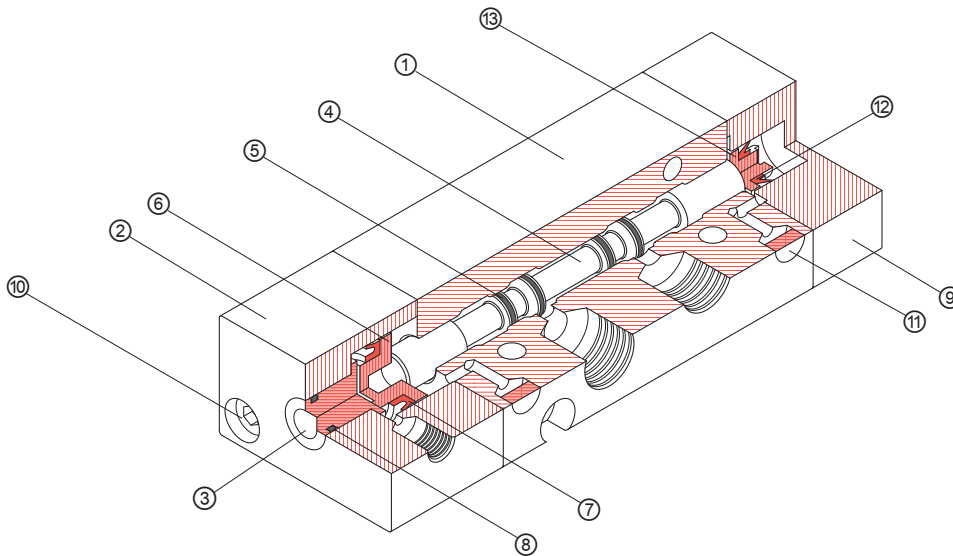
FLOW DIAGRAMS - PNEUMATICALLY OPERATED VALVES

FLOW RATE DIAGRAM - 1/8" MICROVALVE



MATERIALS - PNEUMATICALLY OPERATED VALVES

| POS | DESCRIPTION | MATERIALS | POS | DESCRIPTION | MATERIALS |
|-----|----------------|--------------------------|-----|----------------|----------------------|
| ① | Body | Anodised drawn aluminium | ⑧ | O-ring | Nitrile rubber (NBR) |
| ② | Cover | Anodised drawn aluminium | ⑨ | Base | Anodised aluminium |
| ③ | Manual control | Anodised aluminium | ⑩ | Screw | Galvanised steel |
| ④ | Spool | Anodised aluminium | ⑪ | Silencer | Sintered bronze |
| ⑤ | Sealing gasket | Nitrile rubber (BUNA-N) | ⑫ | Sealing gasket | Nitrile rubber (NBR) |
| ⑥ | Piston | Nylon | ⑬ | Piston | Galvanised aluminium |
| ⑦ | Piston gasket | PUR 90 ShA | | | |


CODING KEY - PNEUMATICALLY OPERATED VALVES

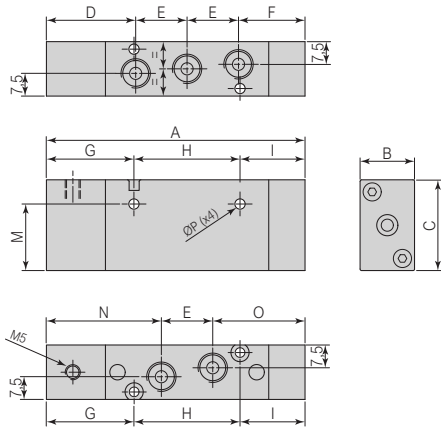
| Operation | Function | Size | Version |
|----------------------------------|-------------------------------------|---------------|--|
| DK | 13 | 80 | 10 |
| DK = Pneumatic External piloting | 13 = 5/2 Monostable 5/2 Bistable | 80 = 1/8" Gas | 10 = Monostable Pneumatic spring return |
| | | | 20 = Pneumatic bistable |

POSSIBLE CONFIGURATIONS

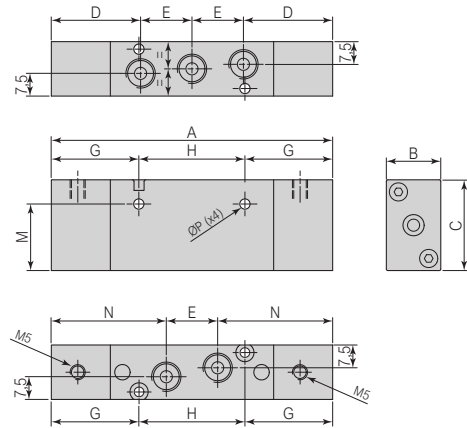
| Operation | Function | Size | Version |
|--|------------------|-----------------------|--|
| DK Pneumatic external piloting | 13 5/2 | 80 1/8" Gas | <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;"> 10 Monostable Pneumatic return </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> 20 Pneumatic bistable </div> |

DIMENSIONS - PNEUMATICALLY OPERATED 5/2 VALVES

MONOSTABLE WITH PNEUMATIC BISTABLE

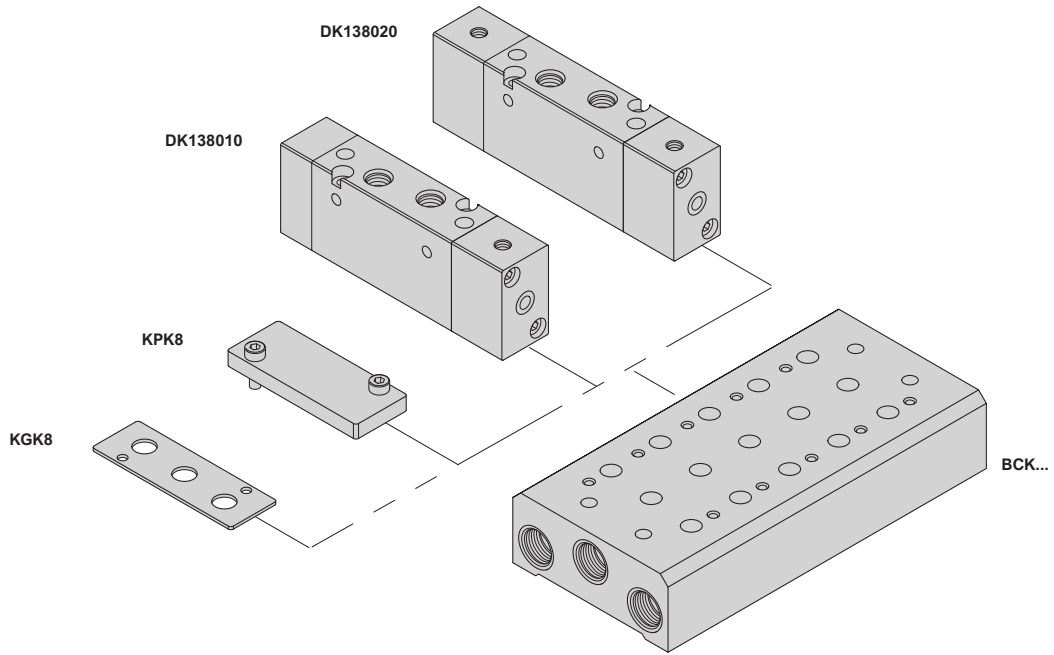





SPRING RETURN



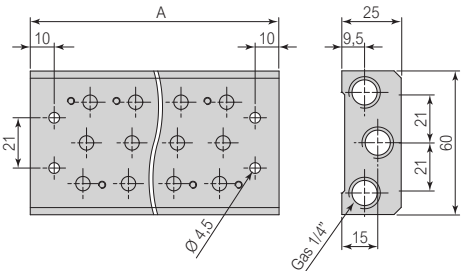
| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | M | N | O | Ø P |
|--------|-------------|----------|------|----|----|------|----|----|----|----|------|----|----|------|-----|
| | Gas 1/8" | DK138010 | 88.5 | 18 | 30 | 29.5 | 17 | 22 | 29 | 35 | 21.5 | 22 | 38 | 30.5 | 3.2 |
| | Gas 1/8" | DK138020 | 93 | 18 | 30 | 29.5 | 17 | - | 29 | 35 | - | 22 | 38 | - | 3.2 |

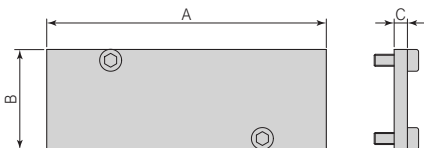
K SERIES ACCESSORIES



| SUB-BASES BCK... | | | | | | | | | GASKET For BCK sub-base... | EXCLUSION PLATE For BCK sub-base... |
|---|---------|---------|---------|---------|---------|---------|---------|----------|--|---|
|  Page 3.3.05.8 | | | | | | | | |  Page 3.3.05.19 |  Page 3.3.05.8 |
| 2 seats | 3 seats | 4 seats | 5 seats | 6 seats | 7 seats | 8 seats | 9 seats | 10 seats | | |
| BCK82 | BCK83 | BCK84 | BCK85 | BCK86 | BCK87 | BCK88 | BCK89 | BCK810 | KGK8 | KPK8 |
| Anodised aluminium sub-base Zinc-plated steel fixing screws - NBR gaskets | | | | | | | | | NBR gasket | Anodised aluminium plate Zinc-plated steel screws |

ACCESSORIES

| BCK .. Sub-base | A | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|----------|--|
| | BCK82 | BCK83 | BCK84 | BCK85 | BCK86 | BCK87 | BCK88 | BCK89 | BCK810 | |
|  | 2 seats | 3 seats | 4 seats | 5 seats | 6 seats | 7 seats | 8 seats | 9 seats | 10 seats | |
| | 66 | 85 | 104 | 123 | 142 | 161 | 180 | 199 | 218 | |
| Anodised aluminium sub-base - Zinc-plated steel fixing screws - NBR gaskets / 1 piece per pack | | | | | | | | | | |

| EXCLUSION PLATE For BCK sub-bases... | Code | A | B | C |
|---|------|----|----|---|
|  | KPK8 | 54 | 20 | 3 |
| Anodised aluminium plate - Zinc-plated steel fixing screws / 1 piece per pack | | | | |

Balanced spool electro-pneumatic microvalves - K Series

Connections: 1/8"

K SERIES



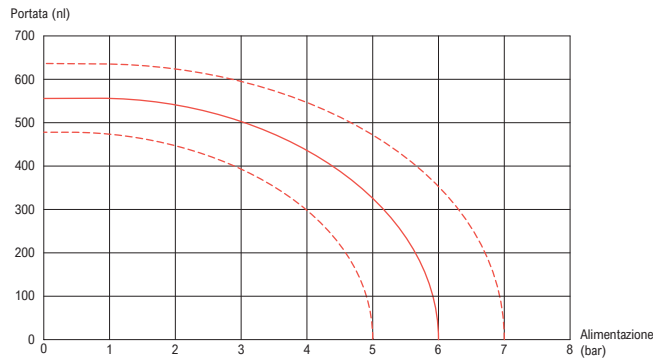
- Balanced spool valves with dynamic sealing
- Fast switching times
- Small footprint
- Anodised aluminium body and bases
- Electro-pneumatically operated with internal piloting
- Possibility of series assembly

TECHNICAL FEATURES

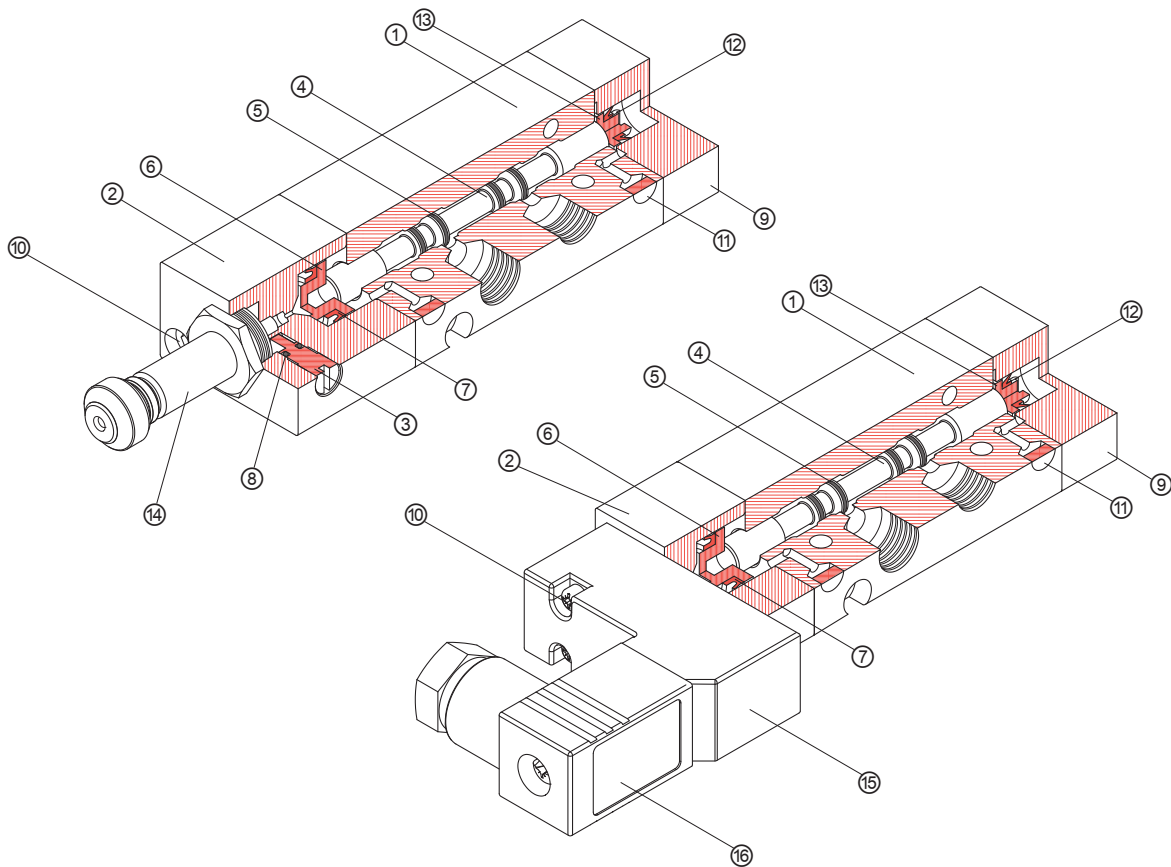
| | | | |
|---------------------------------|--|------------|--|
| Function | 5/2 | | |
| Operation | Electropneumatic: Internal servopiloting - Monostable pneumatic, bistable spring return | | |
| Materials | Body, base and cover in anodised aluminium alloy - Internal components in steel - aluminium - brass NBR gaskets | | |
| Note on materials | Compliant with REACH (1907/2006/EC and subsequent amendments) | | |
| Connections | 1/8" Gas | | |
| Threads | Cylindrical gases (BSPP) | | |
| Operating temperature | 0°C ÷ 80°C (-20°C with dry air, to avoid ice formation) | | |
| Operating pressure | 1.5 ÷ 7 bar | | |
| Pilot actuation pressure | 1.5 bar | | |
| Air flow rate | 1/8" | | |
| Nominal diameter | 4mm | | |
| Supply pressure | 5 bar | 320 NI/min | |
| (with ΔP 1 bar) | 6 bar | 350 NI/min | |
| | 7 bar | 400 NI/min | |
| | See flow diagram page 3.1.05.6 | | |
| Fluid | Filtered air, lubrication-free, compliant with ISO 8573-1:2010 [7:4:4] | | |
| Lubrication | Not required (if required in the pneumatic circuit, it must be continuous) | | |

COILS ELECTRICAL CHARACTERISTICS

| Coil type | "ES" Type | | "F" Type | |
|--------------------------|--------------------------|------------|-----------------------|--------|
| | Operating voltage | 12, 24 Vdc | 24, 48, 110, 220 Vac | 24 Vdc |
| Power (max.) | 2.5 W | 3.6 VA | 2.5 W | 3.0 VA |
| Voltage tolerance | ± 10% | | ± 10% | |
| Protection class | IP65 | | IP65 | |
| Other features | See from p. 3.1.05.10 | | See from p. 3.1.05.10 | |

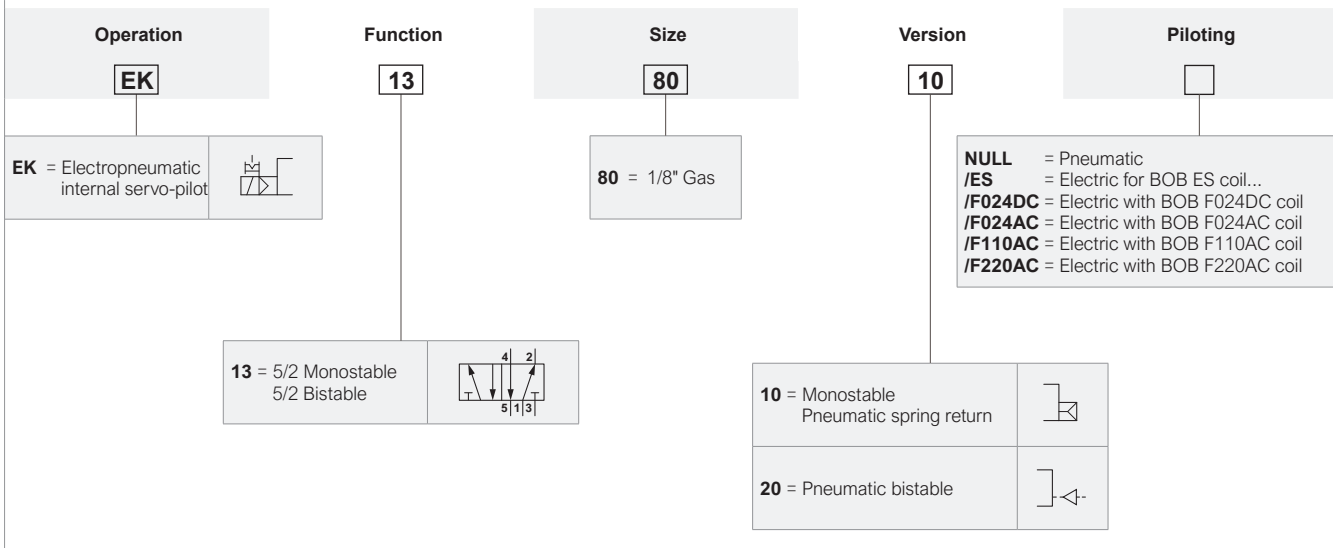
FLOW DIAGRAMS - ELECTRO-PNEUMATICALLY OPERATED VALVES
FLOW RATE DIAGRAM - 1/8" MICROVALVE

MATERIALS - ELECTRO-PNEUMATICALLY OPERATED VALVES

| POS | DESCRIPTION | MATERIALS | POS | DESCRIPTION | MATERIALS |
|-----|----------------|--------------------------|-----|----------------|----------------------------------|
| ① | Body | Anodised drawn aluminium | ⑨ | Base | Anodised aluminium |
| ② | Cover | Anodised drawn aluminium | ⑩ | Screw | Galvanised steel |
| ③ | Manual control | OT58 brass | ⑪ | Silencer | Sintered bronze |
| ④ | Spool | Anodised aluminium | ⑫ | Sealing gasket | Nitrile rubber (NBR) |
| ⑤ | Sealing gasket | Nitrile rubber (BUNA-N) | ⑬ | Piston | Galvanised aluminium |
| ⑥ | Piston | Nylon | ⑭ | Electropilot | Brass - Magnetic stainless steel |
| ⑦ | Piston gasket | PUR 90 ShA | ⑮ | Coil | NYLON + Fibreglass coating |
| ⑧ | O-ring | Nitrile rubber (NBR) | ⑯ | Connector | Nylon PA6 GF |

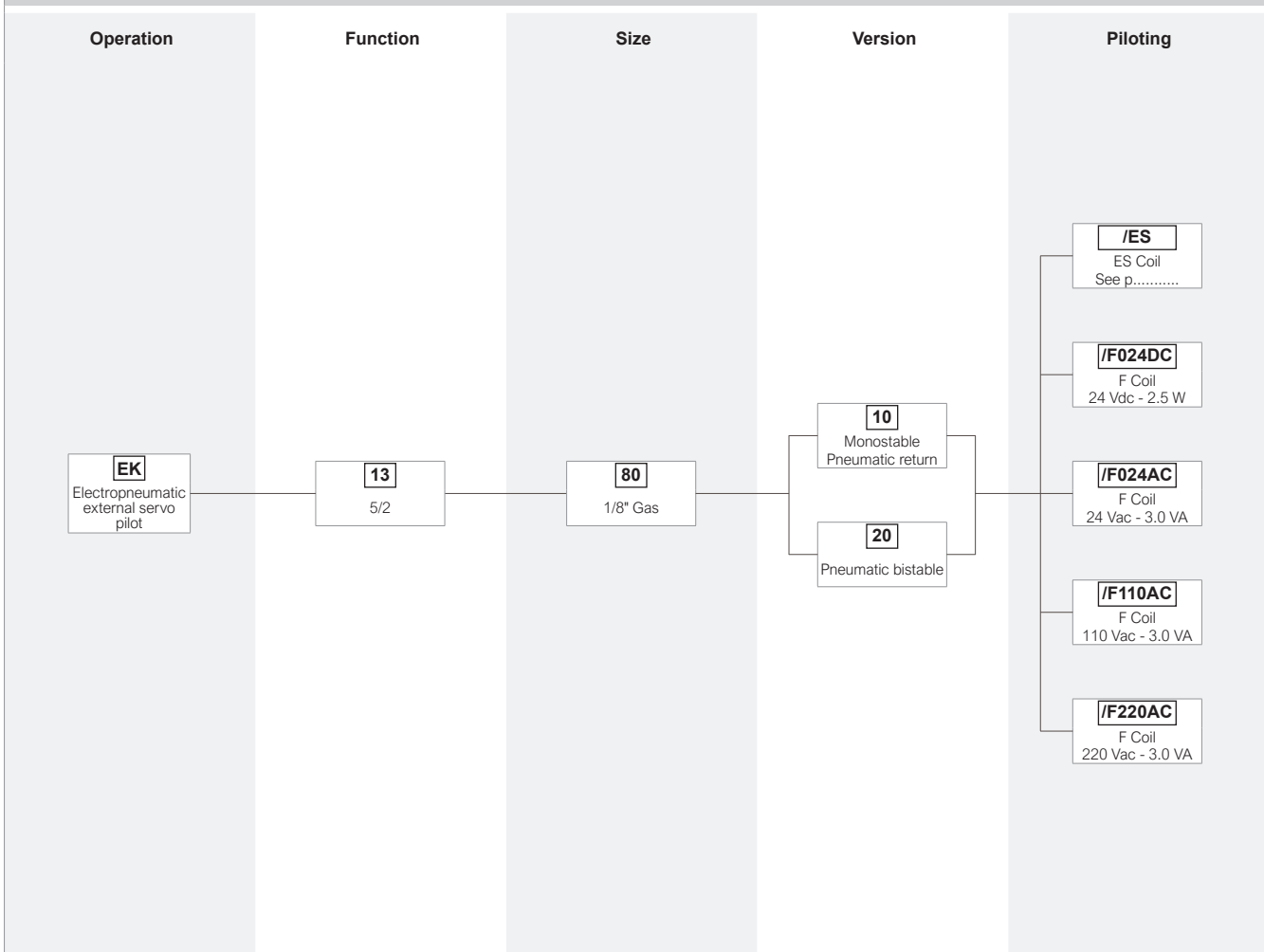


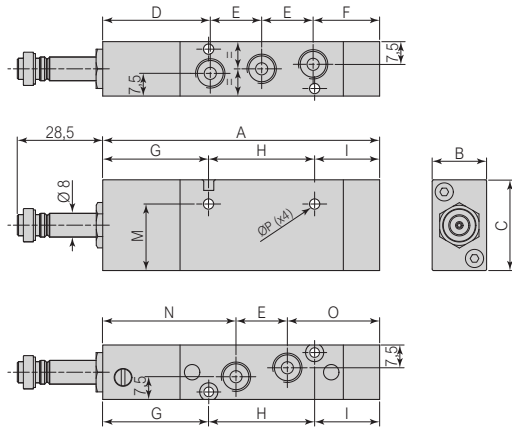
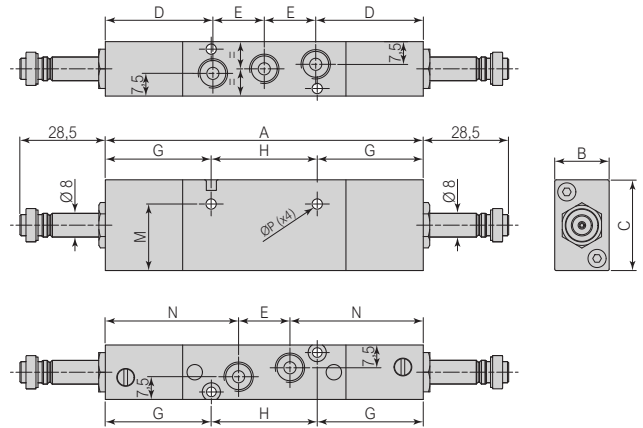


CODING KEY - ELECTRO-PNEUMATICALLY OPERATED VALVES

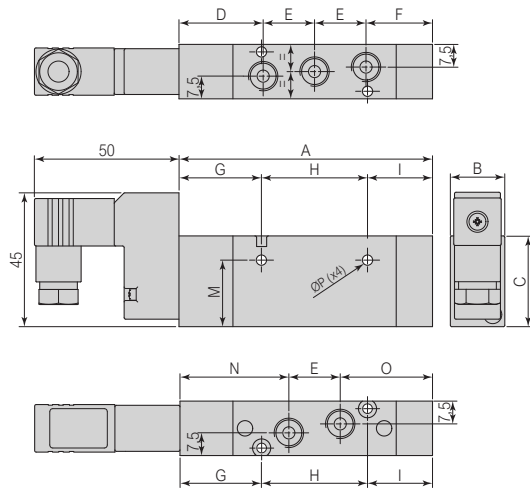
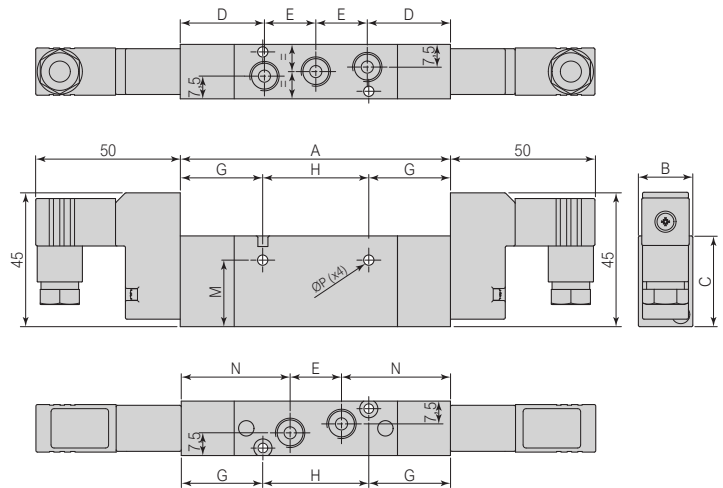


POSSIBLE CONFIGURATIONS



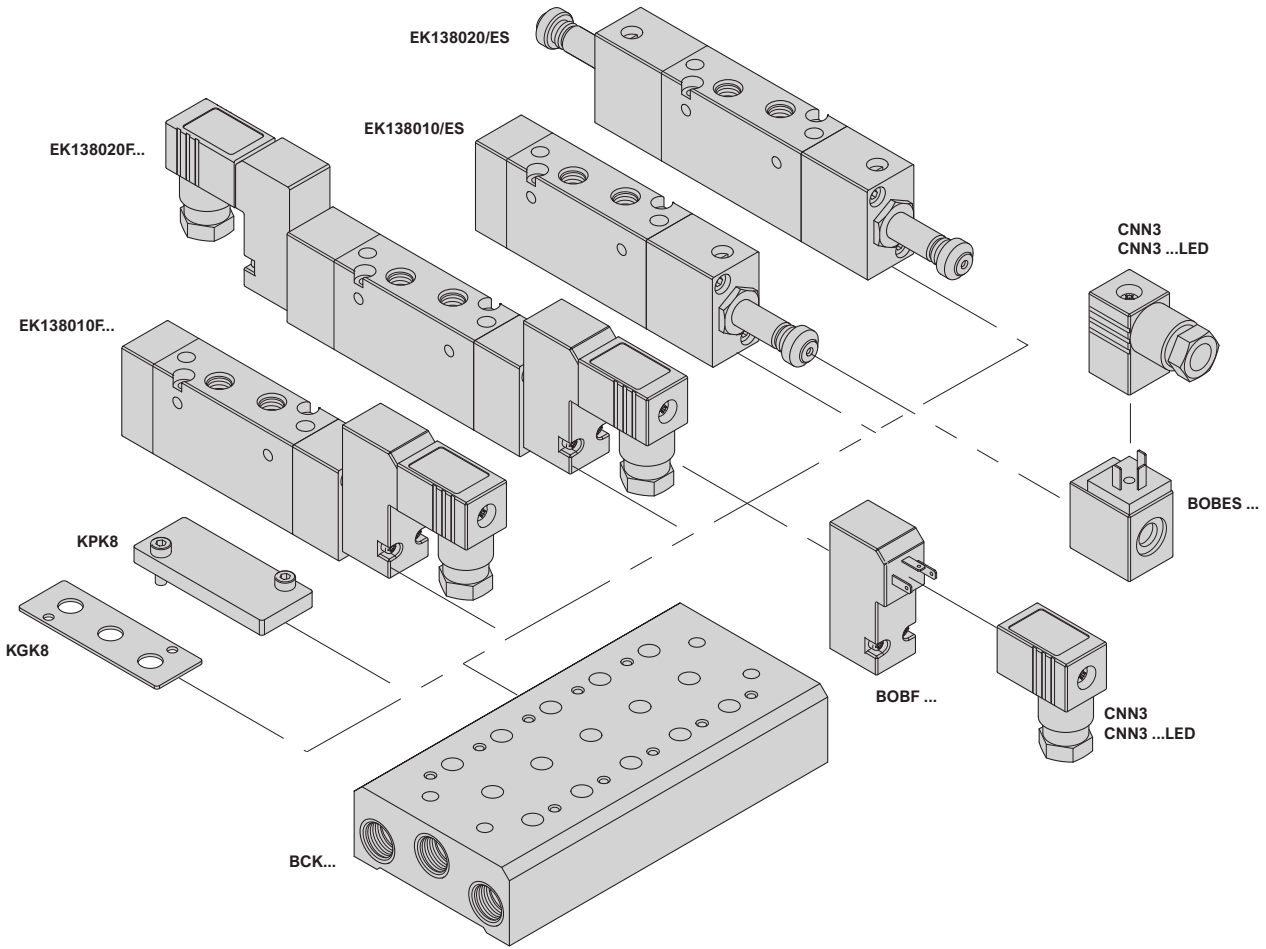
DIMENSIONS - 5/2 VALVES ELECTRO-PNEUMATICALLY OPERATED TYPE /ES
MONOSTABLE WITH PNEUMATIC BISTABLE

SPRING RETURN


| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | M | N | O | ØP |
|--------|-------------|-------------|------|----|----|------|----|----|----|----|------|----|----|------|-----|
| | Gas 1/8" | EK138010/ES | 91.5 | 18 | 30 | 35.5 | 17 | 22 | 35 | 35 | 21.5 | 22 | 44 | 30.5 | 3.2 |
| | Gas 1/8" | EK138020/ES | 105 | 18 | 30 | 29.5 | 17 | - | 35 | 35 | - | 22 | 44 | - | 3.2 |

DIMENSIONS - 5/2 VALVES ELECTRO-PNEUMATICALLY OPERATED TYPE /F...
MONOSTABLE WITH PNEUMATIC BISTABLE

SPRING RETURN


| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | M | N | O | ØP |
|--------|-------------|---------------|------|----|----|------|----|----|----|----|------|------|----|------|-----|
| | Gas 1/8" | EK138010/F... | 83.5 | 18 | 30 | 27.5 | 17 | 22 | 27 | 35 | 21.5 | 21.5 | 36 | 30.5 | 3.2 |
| | Gas 1/8" | EK138020/F... | 89 | 18 | 30 | 27.5 | 17 | - | 27 | 35 | - | 21.5 | 36 | - | 3.2 |

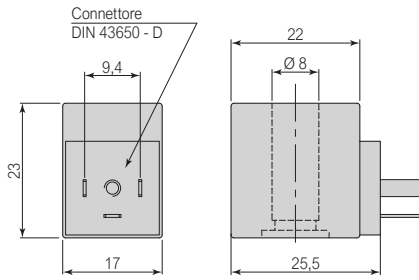
K SERIES ACCESSORIES



| BOBES ... "ES" type coils AC / DC | | BOBF ... "F" type coils AC / DC | | CNN3 Connectors for "F" type coils | | CNN3 ... LED LED connectors for "F" type coils | | | | | | |
|--|------------|--|-----------|---|---------|---|------------|----------|--------------------------------------|--|--|--|
| | | | | | | | | | | | | |
| Page 3.1.05.10 | | Page 3.1.05.10 | | Page 3.1.05.11 | | Page 3.1.05.11 | | | | | | |
| 12 Vdc | BOBES012DC | 24 Vdc | BOBF024DC | 0=250 V ac/dc | CNN3 | 12 V ac/dc | CNN3 2 LED | | | | | |
| 24 Vdc | BOBES024DC | 24 Vac | BOBF024AC | | | 24 V ac/dc | CNN3 2 LED | | | | | |
| 24 Vac | BOBES024AC | 110 Vac | BOBF110AC | | | 115 V ac/dc | CNN3 4 LED | | | | | |
| 110 Vac | BOBES110AC | 220 Vac | BOBF220AC | | | 230 V ac/dc | CNN3 5 LED | | | | | |
| 220 Vac | BOBES220AC | | | | | | | | | | | |
| Coating in NYLON + FIBREGLASS | | RESIN body NBR gasket | | PA6 GF | | PA6 GF - PA12 | | | | | | |
| SUB-BASES BCK... | | | | | | | | | GASKET For BCK sub-base... | | EXCLUSION PLATE For BCK sub-base... | |
| | | | | | | | | | | | | |
| Page 3.1.05.11 | | | | | | | | | Page 3.1.05.11 | | | |
| 2 seats | 3 seats | 4 seats | 5 seats | 6 seats | 7 seats | 8 seats | 9 seats | 10 seats | | | | |
| BCK82 | BCK83 | BCK84 | BCK85 | BCK86 | BCK87 | BCK88 | BCK89 | BCK810 | KGK8 | | KPK8 | |
| Anodised aluminium sub-base Zinc-plated steel fixing screws - NBR gaskets | | | | | | | | | NBR gasket | | Anodised aluminium plate Zinc-plated steel screws | |

"ES" type COILS
BOBES ...

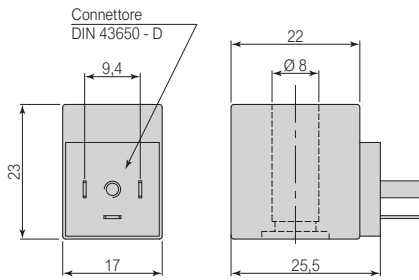
Direct current coils


Technical features

| | | |
|------------------------------|---|------------|
| Code | BOBES012DC | BOBES024DC |
| Operating voltage | 12 VDC | 24 VDC |
| Power (max.) | 2.5 W | |
| Voltage tolerance | ±10% (of nominal voltage) | |
| Insulation class | 155°C (F) | |
| Wire insulation class | 200°C (H) | |
| Insertion duration | 100% (at 20°C) | |
| Electrical connection | INDUSTRIAL (AMP 6.3 x 0.8) form B | |
| Protection class | IP54 (with connector) IP65 (with connector and suitable gaskets) | |
| Material | NYLON + Fibreglass coating | |
| BOBES... / 1 piece per pack | | |

BOBES ...

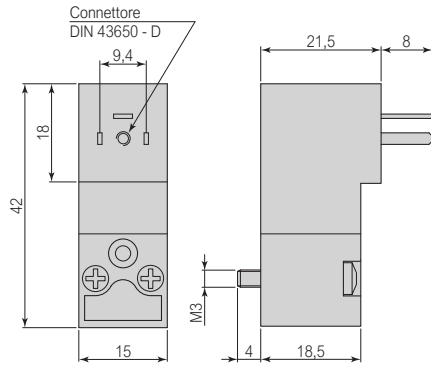
AC coils


Technical features

| | | | |
|------------------------------|---|-----------|-----------|
| Code | BOBE024AC | BOBE110AC | BOBE220AC |
| Operating voltage | 24 VAC | 110 VAC | 220 VAC |
| Power (max.) | 3.6 VA | | |
| Voltage tolerance | ±10% (of nominal voltage) | | |
| Insulation class | 155°C (F) | | |
| Wire insulation class | 200°C (H) | | |
| Insertion duration | 100% (at 20°C) | | |
| Electrical connection | INDUSTRIAL (AMP 6.3 x 0.8) form B | | |
| Protection class | IP54 (with connector) IP65 (with connector and suitable gaskets) | | |
| Material | NYLON + Fibreglass coating | | |
| BOBES... / 1 piece per pack | | | |

"F" type COILS (15 mm)
BOBF ...

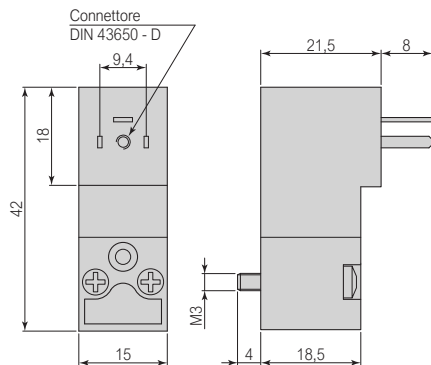
Direct current coils


Technical features

| | | |
|------------------------------|--|--|
| Code | BOBF024DC | |
| Operating voltage | 24 VDC | |
| Power (max.) | 2.5 W | |
| Voltage tolerance | ±10% (of nominal voltage) | |
| Insulation class | 200°C (H) | |
| Insertion duration | 100% (at 20°C) | |
| Electrical connection | DIN 43650 form D | |
| Version | 3/2 N.A. | |
| Work pressure | 0 ÷ 7 bar | |
| Protection class | IP65 (with connector and suitable gaskets) | |
| Material | RESIN body, NBR gasket, steel screws | |
| BOBF... / 1 piece per pack | | |

BOBF ...

AC coils


Technical features

| | | | |
|------------------------------|--|-----------|-----------|
| Code | BOBF024AC | BOBF110AC | BOBF220AC |
| Operating voltage | 24 VAC | 110 VAC | 220 VAC |
| Power (max.) | 3.0 VA | | |
| Voltage tolerance | ±10% (of nominal voltage) | | |
| Insulation class | 200°C (H) | | |
| Insertion duration | 100% (at 20°C) | | |
| Electrical connection | DIN 43650 form D | | |
| Version | 3/2 N.A. | | |
| Work pressure | 0 ÷ 7 bar | | |
| Protection class | IP65 (with connector and suitable gaskets) | | |
| Material | RESIN body, NBR gasket, steel screws | | |
| BOBF... / 1 piece per pack | | | |

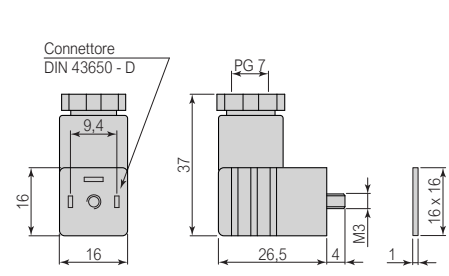
CONNECTORS for "ES" and "F" type coils

CNN3...

Connector for "ES" type coils

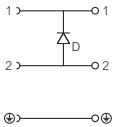


Technical features

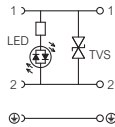


| | | | | |
|---------------------------------------|---|------------------|------------------|------------------|
| Code | CNN3 | CNN3 2 LED | CNN3 4 LED | CNN3 5 LED |
| Voltage | 0÷250 V AC/DC | 24 V AC/DC | 115 V AC/DC | 230 V AC/DC |
| Current (max.) | 4 A | 4 A | 5 A | 5 A |
| Contact resistance (max.) | 15 mΩ | | | |
| Overvoltage category | III | | | |
| Conductor cross-section (max.) | 1.5 mm ² (without terminals) | | | |
| Cable clamp thread | PG7 | | | |
| Operating temperature | -40°C ÷ +100°C | -20°C ÷ +80°C | -20°C ÷ +80°C | -20°C ÷ +80°C |
| Electrical connection | DIN 43650 form D | | | |
| Protection class | IP65 (properly assembled) | | | |
| Insert and case materials | PA6 GF - PA6 GF | PA6 GF - PA12 | PA6 GF - PA12 | PA6 GF - PA12 |
| Visual indicator | None | Yellow LED diode | Yellow LED diode | Yellow LED diode |
| Colour | Black | Clear | Clear | Clear |
| Electrical circuit protection | Diode | TVS Circuit | TVS Circuit | TVS Circuit |
| Fixing type | Central screw M3x27,5 | | | |

CNN3



CNN3...LED

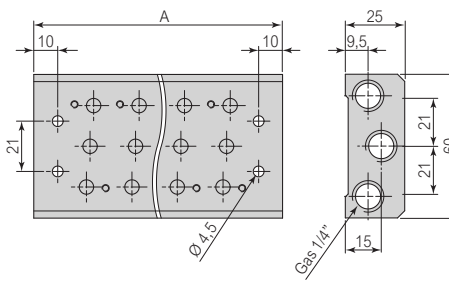


CNN3... / Insert, case, gasket and fixing screw - 1 piece per pack

ACCESSORIES

BCK ..

Sub-base

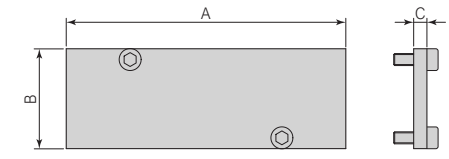


| | A | | | | | | | | | |
|---------|----------|---------|---------|---------|---------|---------|---------|----------|--------|--|
| | BCK82 | BCK83 | BCK84 | BCK85 | BCK86 | BCK87 | BCK88 | BCK89 | BCK810 | |
| 2 seats | 3 seats | 4 seats | 5 seats | 6 seats | 7 seats | 8 seats | 9 seats | 10 seats | | |
| 66 | 85 | 104 | 123 | 142 | 161 | 180 | 199 | 218 | | |

Anodised aluminium sub-base - Zinc-plated steel fixing screws - NBR gaskets / 1 piece per pack

EXCLUSION PLATE

For BCK sub-bases...



| Code | A | B | C |
|-------------|----------|----------|----------|
| KPK8 | 54 | 20 | 3 |

Anodised aluminium plate - Zinc-plated steel fixing screws / 1 piece per pack

Balanced spool pneumatic valves - K83 Series

Connections: 1/8" - 1/4"

K SERIES



- Balanced spool valves with static sealing
- Fast switching times
- Small footprint
- Anodised aluminium body and bases
- Pneumatically operated with external piloting
- Possibility of series assembly
- ATEX 2014/34/EU certificates available

TECHNICAL FEATURES

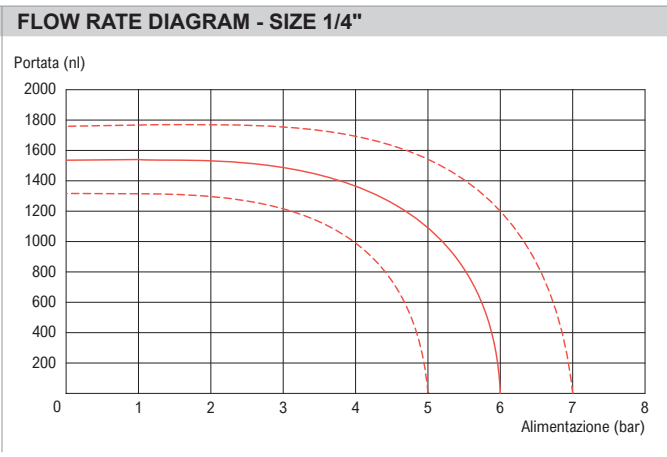
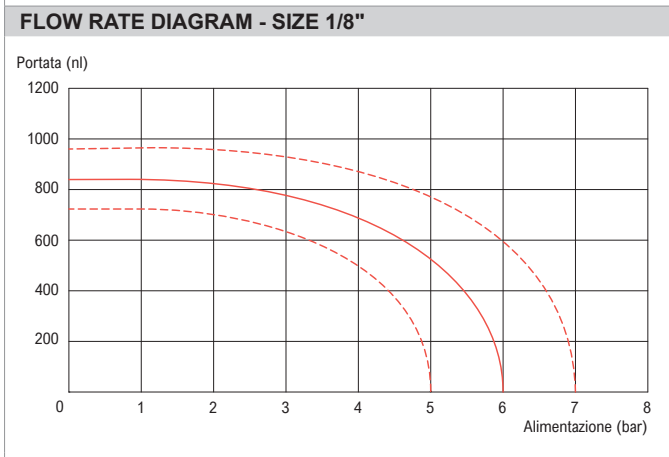
| | | |
|---------------------------------|--|-------------|
| Function | 5/2 - 5/3 | |
| Operation | Pneumatic: External piloting - Monostable mechanical and pneumatic, bistable spring return, three positions | |
| Materials | Body, base and cover in anodised aluminium alloy - Internal components in steel - aluminium - brass NBR gaskets | |
| Note on materials | Compliant with REACH (1907/2006/EC and subsequent amendments) | |
| Connections | 1/8" - 1/4" Gas | |
| Threads | Cylindrical gases (BSPP) | |
| Operating temperature | 0°C + 80°C (-20°C with dry air, to avoid ice formation) | |
| Operating pressure | 0 + 10 bar | |
| Pilot actuation pressure | 2 bar | |
| Air flow rate | 1/8" | 1/4" |
| Nominal diameter | 5mm | 7.5mm |
| Supply pressure | 5 bar | 500 NI/min |
| (with ΔP 1 bar) | 6 bar | 550 NI/min |
| | 7 bar | 600 NI/min |
| | | 1000 NI/min |
| | | 1100 NI/min |
| | | 1200 NI/min |
| | See flow diagram page 3.1.05.13 | |
| Fluid | Filtered air, lubrication-free, compliant with ISO 8573-1:2010 [7:4:4] | |
| Lubrication | Not required (if required in the pneumatic circuit, it must be continuous) | |

ATEX CERTIFICATION

| | |
|---|---|
| Valve marking | CE II 2G Ex h IIC T6 Gb (Zone 1 and Zone 2) CE II 2D Ex h IIIC 85°C Db (Zone 21 and Zone 22) |
| Operating pressure in ATEX environment | 0.5 + 10 bar |
| ATEX ambient temperature | -20°C ≤ Ta ≤ +60°C |
| CE marking | In compliance with Directive 2014/34/EU (see declaration of conformity) |

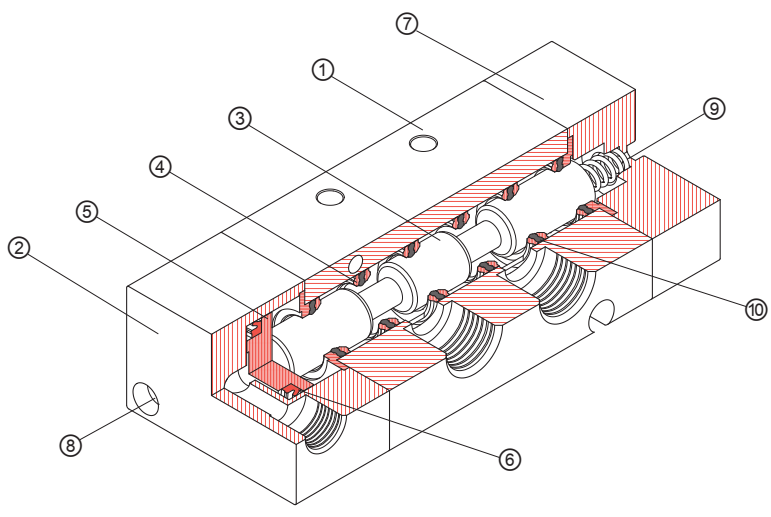


FLOW DIAGRAMS - PNEUMATICALLY OPERATED VALVES



MATERIALS - PNEUMATICALLY OPERATED VALVES

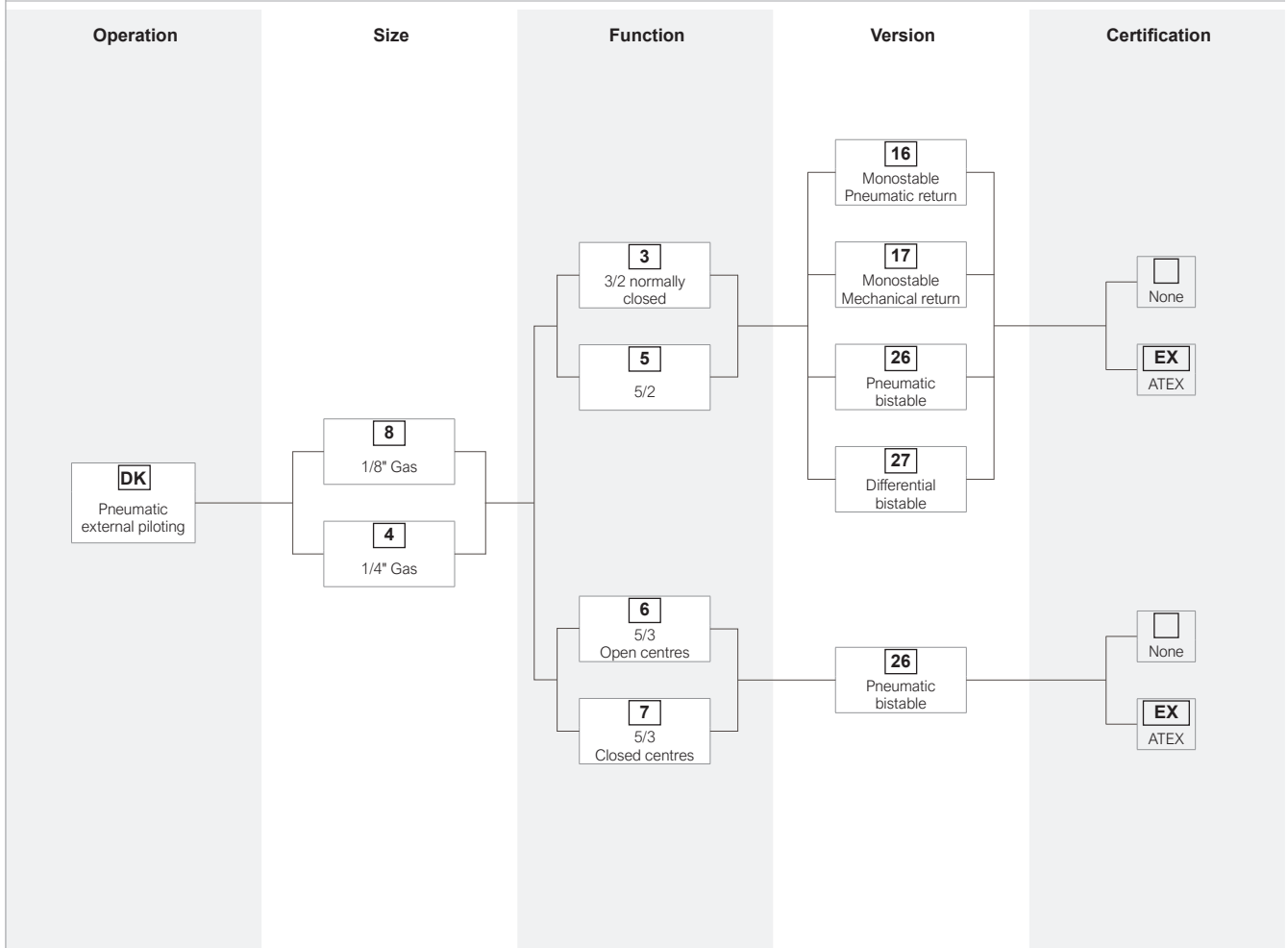
| POS | DESCRIPTION | MATERIALS | POS | DESCRIPTION | MATERIALS |
|-----|-------------|--------------------------|-----|----------------|--------------------------|
| ① | Body | Anodised drawn aluminium | ⑥ | Piston gasket | PUR 85 ShA |
| ② | Cover | Anodised drawn aluminium | ⑦ | Base | Anodised drawn aluminium |
| ③ | Spool | Anodised aluminium | ⑧ | Screw | Galvanised steel |
| ④ | Spacers | OT58 brass | ⑨ | Spring | Harmonic steel |
| ⑤ | Piston | Anodised aluminium | ⑩ | Sealing gasket | Nitrile rubber (NBR) |



CODING KEY - PNEUMATICALLY OPERATED VALVES

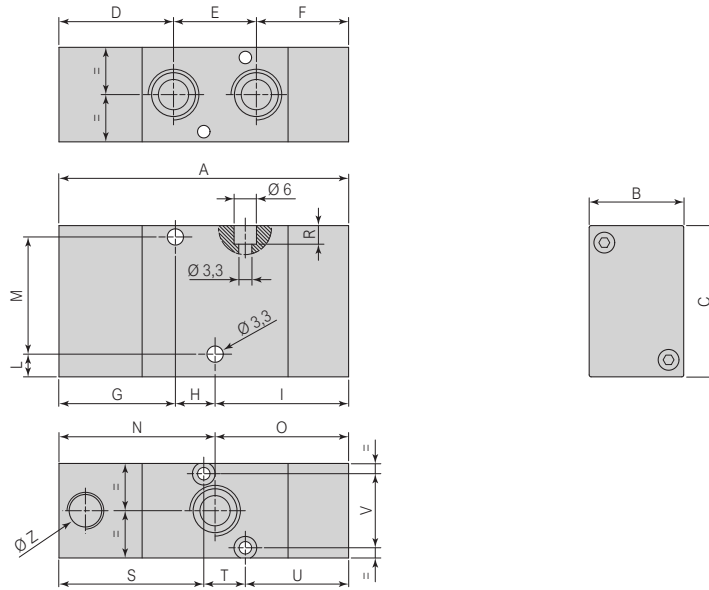
| Operation | Size | Function | Version | Certification |
|---|--|--|---|---|
| DK | 4 | 5 | 17 | <input type="checkbox"/> |
| DK = Pneumatic External piloting | 8 = 1/8" Gas 4 = 1/4" Gas | 3 = 3/2 Normally closed 5 = 5/2 6 = 5/3 Open centres 7 = 5/3 Closed centres | 16 = Monostable Pneumatic spring return 17 = Monostable Mechanical spring return 26 = Pneumatic bistable 27 = Differential bistable Pneumatics | NULL = None EX = For compressed air in potentially explosive atmosphere (ATEX) |

POSSIBLE CONFIGURATIONS



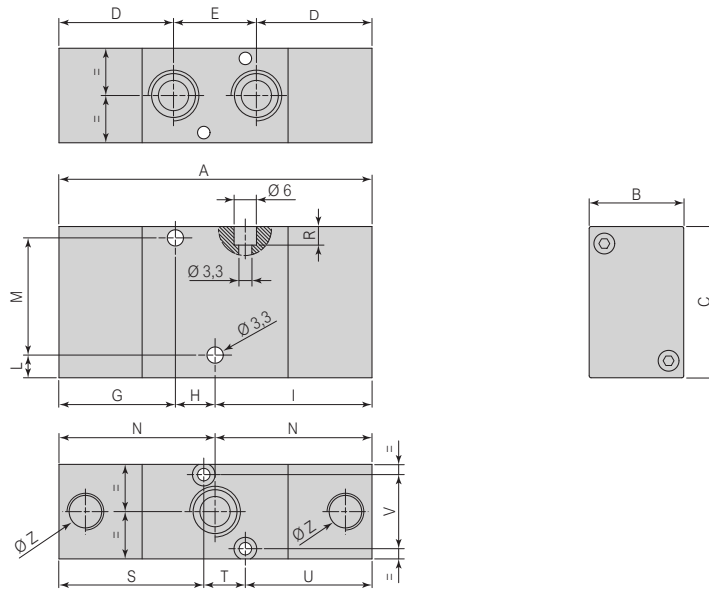
DIMENSIONS - PNEUMATICALLY OPERATED 3/2 VALVES

PNEUMATIC OPERATION - NORMALLY CLOSED - MONOSTABLE WITH PNEUMATIC / MECHANICAL SPRING RETURN

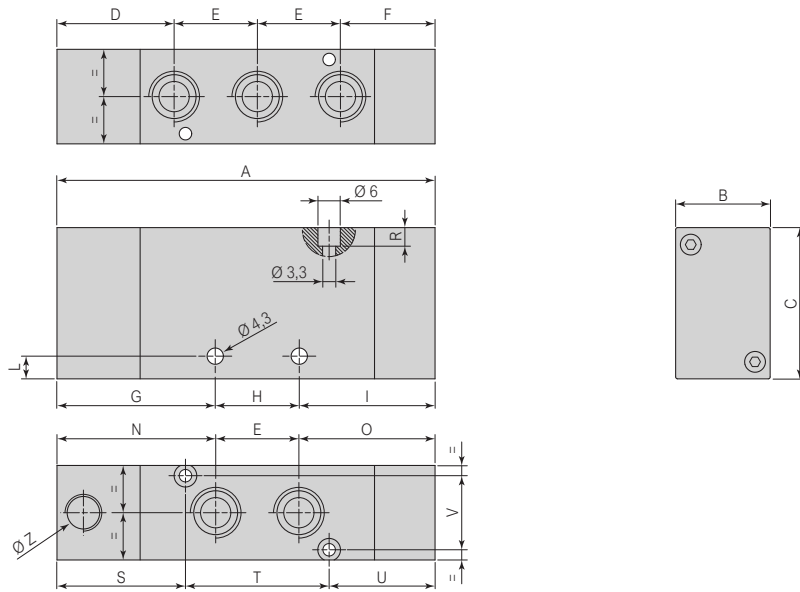


| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | L | M | N | O | R | S | T | U | V | ØZ |
|--------|-------------|--------|------|----|----|-------|----|-------|------|------|-------|-----|------|-------|-------|---|------|------|-------|------|----------|
| | Gas 1/8" | DK8316 | 78.5 | 22 | 32 | 32.75 | 18 | 27.75 | 33.5 | 8.25 | 36.75 | 4.5 | 20.1 | 41.75 | 36.75 | 3 | 39.5 | 7.75 | 31.25 | 17.4 | M5 |
| | Gas 1/4" | DK4316 | 82.6 | 25 | 40 | 30.3 | 22 | 30.3 | 30.8 | 10.5 | 41.3 | 6 | 31 | 41.3 | 41.3 | 4 | 38.3 | 11 | 33.3 | 11 | Gas 1/8" |
| | Gas 1/8" | DK8317 | 73.5 | 22 | 32 | 32.75 | 18 | 22.75 | 33.5 | 8.25 | 31.75 | 4.5 | 20.1 | 41.75 | 31.75 | 3 | 39.5 | 7.75 | 26.25 | 17.4 | M5 |
| | Gas 1/4" | DK4317 | 76.6 | 25 | 40 | 30.3 | 22 | 24.3 | 30.8 | 10.5 | 35.5 | 6 | 31 | 41.3 | 35.3 | 4 | 38.3 | 11 | 27.3 | 11 | Gas 1/8" |

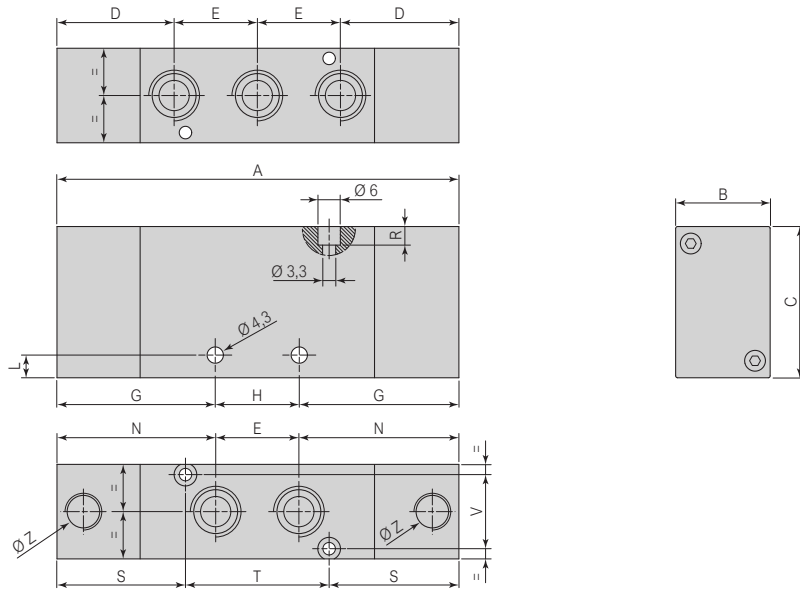
PNEUMATIC OPERATION - BISTABLE - DIFFERENTIAL BISTABLE



| Symbol | Connections | Code | A | B | C | D | E | G | H | I | L | M | N | R | S | T | U | V | ØZ |
|--------|-------------|--------|------|----|----|-------|----|------|------|-------|-----|------|-------|---|------|------|-------|------|----------|
| | Gas 1/8" | DK8326 | 83.5 | 22 | 32 | 32.75 | 18 | 33.5 | 8.25 | 41.75 | 4.5 | 20.1 | 41.75 | 3 | 39.5 | 7.75 | 36.25 | 17.4 | M5 |
| | Gas 1/4" | DK4326 | 82.6 | 25 | 40 | 30.3 | 22 | 30.8 | 10.5 | 41.3 | 6 | 31 | 41.3 | 4 | 38.3 | 11 | 33.3 | 11 | Gas 1/8" |
| | Gas 1/8" | DK8327 | 83.5 | 22 | 32 | 32.75 | 18 | 33.5 | 8.25 | 41.75 | 4.5 | 20.1 | 41.75 | 3 | 39.5 | 7.75 | 36.25 | 17.4 | M5 |
| | Gas 1/4" | DK4327 | 82.6 | 25 | 40 | 30.3 | 22 | 30.8 | 10.5 | 41.3 | 6 | 31 | 41.3 | 4 | 38.3 | 11 | 33.3 | 11 | Gas 1/8" |

DIMENSIONS - PNEUMATICALLY OPERATED 5/2 VALVES
PNEUMATIC OPERATION - MONOSTABLE WITH PNEUMATIC / MECHANICAL SPRING RETURN


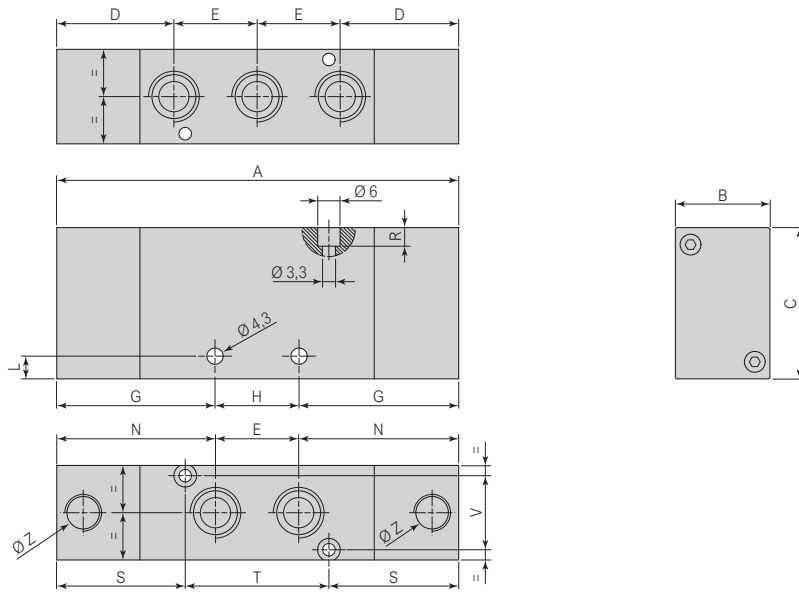
| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | L | N | O | R | S | T | U | V | ØZ |
|--------|-------------|--------|------|----|----|-------|----|-------|-------|----|-------|-----|-------|-------|-----|-------|----|-------|------|----------|
| | Gas 1/8" | DK8516 | 96.5 | 22 | 32 | 32.75 | 18 | 27.75 | 41.75 | 18 | 36.75 | 4.5 | 41.75 | 36.75 | 3 | 35.75 | 30 | 30.75 | 17.4 | M5 |
| | Gas 1/4" | DK4516 | 106 | 25 | 40 | 31 | 22 | 31 | 42 | 22 | 42 | 6 | 42 | 42 | 4.5 | 34 | 38 | 34 | 19.6 | Gas 1/8" |
| | Gas 1/8" | DK8517 | 91.5 | 22 | 32 | 32.75 | 18 | 22.75 | 41.75 | 18 | 31.75 | 4.5 | 41.75 | 31.75 | 3 | 35.75 | 30 | 25.75 | 17.4 | M5 |
| | Gas 1/4" | DK4517 | 100 | 25 | 40 | 31 | 22 | 25 | 42 | 22 | 36 | 6 | 42 | 36 | 4.5 | 34 | 38 | 28 | 19.6 | Gas 1/8" |

PNEUMATIC OPERATION - BISTABLE - DIFFERENTIAL BISTABLE


| Symbol | Connections | Code | A | B | C | D | E | G | H | L | N | R | S | T | V | ØZ |
|--------|-------------|--------|-------|----|----|-------|----|-------|----|-----|-------|-----|-------|----|------|----------|
| | Gas 1/8" | DK8526 | 101.5 | 22 | 32 | 32.75 | 18 | 41.75 | 18 | 4.5 | 41.75 | 3 | 35.75 | 30 | 17.4 | M5 |
| | Gas 1/4" | DK4526 | 106 | 25 | 40 | 31 | 22 | 42 | 22 | 6 | 42 | 4.5 | 34 | 38 | 19.6 | Gas 1/8" |
| | Gas 1/8" | DK8527 | 101.5 | 22 | 32 | 32.75 | 18 | 41.75 | 18 | 4.5 | 41.75 | 3 | 35.75 | 30 | 17.4 | M5 |
| | Gas 1/4" | DK4527 | 106 | 25 | 40 | 31 | 22 | 42 | 22 | 6 | 42 | 4.5 | 34 | 38 | 19.6 | Gas 1/8" |

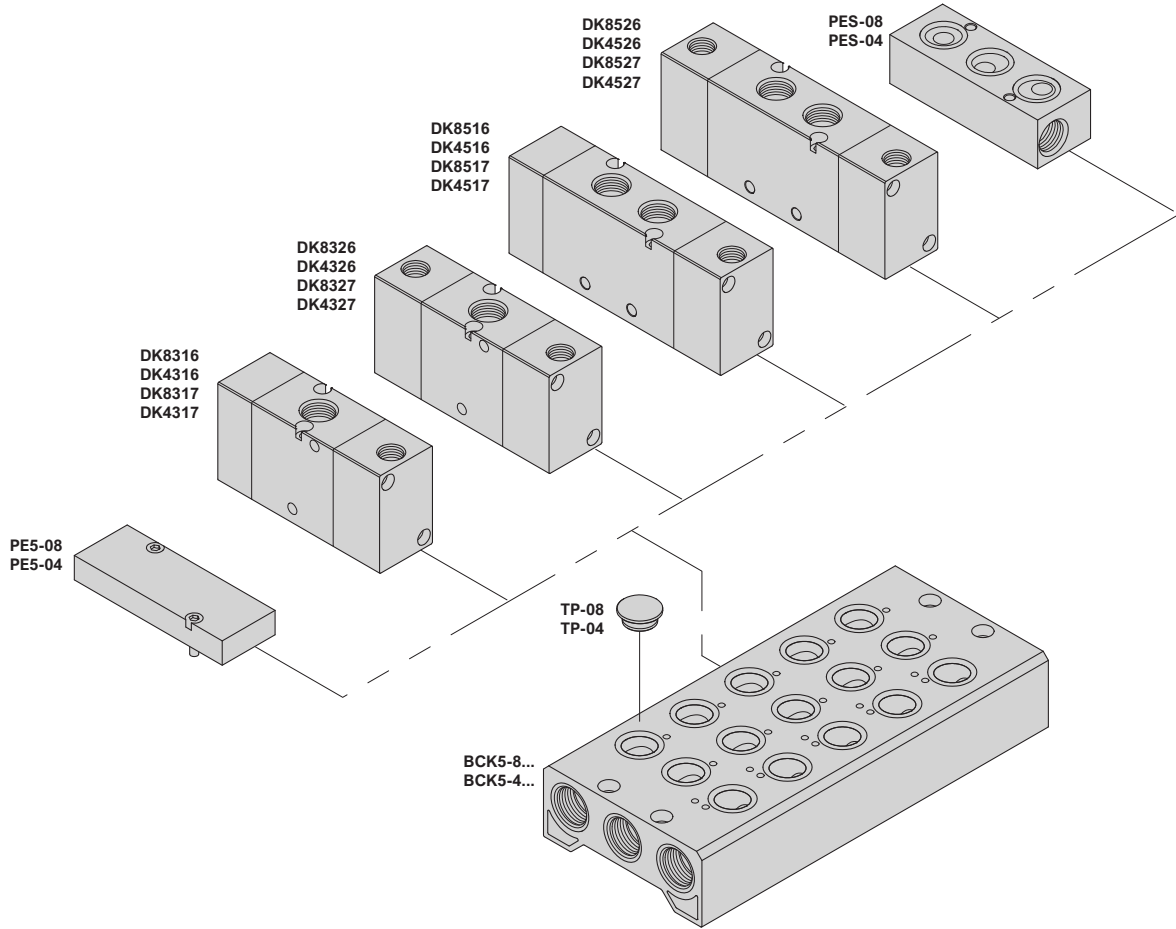
DIMENSIONS - PNEUMATICALLY OPERATED 5/3 VALVES

PNEUMATIC OPERATION - THREE POSITIONS - CLOSED / OPEN CENTRES



| Symbol | Connections | Code | A | B | C | D | E | G | H | L | N | R | S | T | V | Ø Z |
|--------|-------------|----------|-------|----|----|-------|----|-------|----|-----|-------|-----|-------|----|------|----------|
| | Gas 1/8" | DK8621/C | 101.5 | 22 | 32 | 32.75 | 18 | 41.75 | 18 | 4.5 | 41.75 | 3 | 35.75 | 30 | 17.4 | M5 |
| | Gas 1/4" | DK4621/C | 106 | 25 | 40 | 31 | 22 | 42 | 22 | 6 | 42 | 4.5 | 34 | 38 | 19.6 | Gas 1/8" |
| | Gas 1/8" | DK8721/C | 101.5 | 22 | 32 | 32.75 | 18 | 41.75 | 18 | 4.5 | 41.75 | 3 | 35.75 | 30 | 17.4 | M5 |
| | Gas 1/4" | DK4721/C | 106 | 25 | 40 | 31 | 22 | 42 | 22 | 6 | 42 | 4.5 | 34 | 38 | 19.6 | Gas 1/8" |

K83 SERIES ACCESSORIES



3

PNEUMATIC DISTRIBUTORS

| SUB-BASES BCK5... | | | | | | | | | | CAP For BCK5 sub-base... | EXCLUSION PLATE For BCK5 sub-base... | SEPARATE SUPPLY For BCK5 sub-base... |
|--|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------------------------------------|---|---|
| <p>Page 3.1.05.19</p> | | | | | | | | | | <p>Page 3.1.05.19</p> | <p>Page 3.1.05.19</p> | <p>Page 3.1.05.19</p> |
| Size | 2 seats | 3 seats | 4 seats | 5 seats | 6 seats | 7 seats | 8 seats | 9 seats | 10 seats | | | |
| 1/8" | BCK5-82 | BCK5-83 | BCK5-84 | BCK5-85 | BCK5-86 | BCK5-87 | BCK5-88 | BCK5-89 | BCK5-810 | TP-08 | PE5-08 | PES-08 |
| 1/4" | BCK5-42 | BCK5-43 | BCK5-44 | BCK5-45 | BCK5-46 | BCK5-47 | BCK5-48 | BCK5-49 | BCK5-410 | TP-04 | PE5-04 | PES-04 |
| Anodised aluminium sub-base Zinc-plated steel fixing screws - NBR gaskets | | | | | | | | | | Cap: Anodised aluminium NBR gasket | Plate: Anodised aluminium Screws: Galvanised steel | Plate: Anodised aluminium NBR gasket |

ACCESSORIES

| BCK5... Sub-base | | Size | Code | Seats | L | A | B | C | Ø D |
|--|----------|-------------|-------------|--------------|------------|----------|------------|----------|------------|
| | Gas 1/8" | | BCK5-82 | 2 | 71 | 60 | 20 | 20.5 | Gas 1/4" |
| | | | BCK5-83 | 3 | 94 | | | | |
| | | | BCK5-84 | 4 | 117 | | | | |
| | | | BCK5-85 | 5 | 140 | | | | |
| | | | BCK5-86 | 6 | 163 | | | | |
| | | | BCK5-87 | 7 | 186 | | | | |
| | | | BCK5-88 | 8 | 209 | | | | |
| | | | BCK5-89 | 9 | 232 | | | | |
| | | | BCK5-810 | 10 | 255 | | | | |
| | | Gas 1/4" | | BCK5-42 | 2 | | | | |
| | | | BCK5-43 | 3 | 112 | | | | |
| | | | BCK5-44 | 4 | 138 | | | | |
| | | | BCK5-45 | 5 | 164 | | | | |
| | | | BCK5-46 | 6 | 190 | | | | |
| | | | BCK5-47 | 7 | 216 | | | | |
| | | | BCK5-48 | 8 | 242 | | | | |
| | | | BCK5-49 | 9 | 268 | | | | |
| | | | BCK5-410 | 10 | 294 | | | | |
| Anodised aluminium sub-base - Zinc-plated steel fixing screws - NBR gaskets / 1 piece per pack | | | | | | | | | |
| TP .. Cap for BCK5 sub-base... | | Size | Code | Ø A | Ø B | C | | | |
| | Gas 1/8" | TP-08 | 12.6 | 7.9 | 6 | | | | |
| | Gas 1/4" | TP-04 | 15.5 | 11.9 | 5.5 | | | | |
| Anodised aluminium cap - NBR gasket / 1 piece per pack | | | | | | | | | |
| EXCLUSION PLATE For BCK5 sub-bases... | | Size | Code | A | B | C | | | |
| | Gas 1/8" | PE5-08 | 60 | 22 | 10 | | | | |
| | Gas 1/4" | PE5-04 | 70 | 25 | 15 | | | | |
| Anodised aluminium plate - Zinc-plated steel fixing screws / 1 piece per pack | | | | | | | | | |
| SEPARATE POWER PLATE For BCK5 sub-bases... | | Size | Code | A | B | C | Ø G | | |
| | Gas 1/8" | PES-08 | 60 | 22 | 10 | Gas 1/8" | | | |
| | Gas 1/4" | PES-04 | 70 | 25 | 15 | Gas 1/4" | | | |
| Anodised aluminium plate - NBR gaskets / 1 piece per pack | | | | | | | | | |

3
 PNEUMATIC DISTRIBUTORS

Balanced spool electropneumatic valves - K83 Series

Connections: 1/8" - 1/4"

K SERIES



Balanced spool valves with static sealing

Fast switching times

Small footprint

Anodised aluminium body and bases

 Electro-pneumatically operated
Internal servo-pilot

Possibility of series assembly

ATEX 2014/34/EU certificates available

TECHNICAL FEATURES

| | | |
|---------------------------------|---|------------|
| Function | 5/2 - 5/3 | |
| Operation | Electropneumatic: Internal servo-pilot - Monostable mechanical and pneumatic, bistable spring return, three positions | |
| Materials | Body, base and cover in anodised aluminium alloy - Internal components in steel - aluminium - brass NBR gaskets | |
| Note on materials | Compliant with REACH (1907/2006/EC and subsequent amendments) | |
| Connections | 1/8" - 1/4" Gas | |
| Threads | Cylindrical gases (BSPP) | |
| Operating temperature | 0°C ÷ 80°C (-20°C with dry air, to avoid ice formation) | |
| Operating pressure | 2 ÷ 10 bar | |
| Pilot actuation pressure | 2 bar | |
| Air flow rate | 1/8" | 1/4" |
| Nominal diameter | 5mm | 7.5mm |
| Supply pressure | 5 bar | 500 NI/min |
| (with ΔP 1 bar) | 6 bar | 550 NI/min |
| | 7 bar | 600 NI/min |
| | See flow diagram page 3.1.05.21 | |
| Fluid | Filtered air, lubrication-free, compliant with ISO 8573-1:2010 [7:4:4] | |
| Lubrication | Not required (if required in the pneumatic circuit, it must be continuous) | |

COILS ELECTRICAL CHARACTERISTICS

| | | |
|--------------------------|-----------------------|------------------|
| Coil type | Type "C" (22mm) | |
| Operating voltage | 24 VDC | 24, 110, 220 VAC |
| Power (max.) | 4.8 W | 5.5 VA |
| Tolerance | ± 10% | |
| Protection class | IP54 / IP65 | |
| Other features | See from p. 3.3.05.10 | |

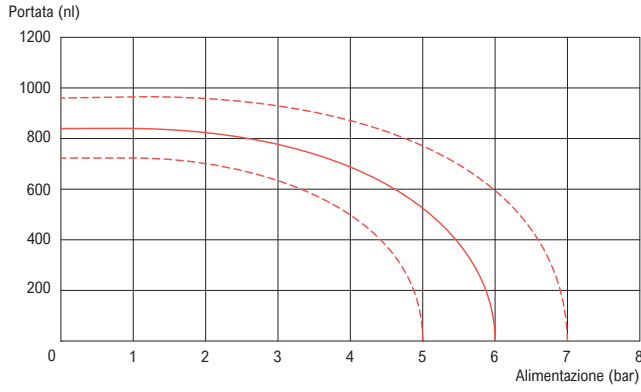
ATEX CERTIFICATION

| | |
|---|---|
| Valve marking | CE II 2G Ex h IIC T6 Gb (Zone 1 and Zone 2) CE II 2D Ex h IIIC 85°C Db (Zone 21 and Zone 22) |
| Operating pressure in ATEX environment | 0.5 ÷ 10 bar |
| ATEX ambient temperature | -20°C ≤ Ta ≤ +60°C |
| CE marking | In compliance with Directive 2014/34/EU (see declaration of conformity) |

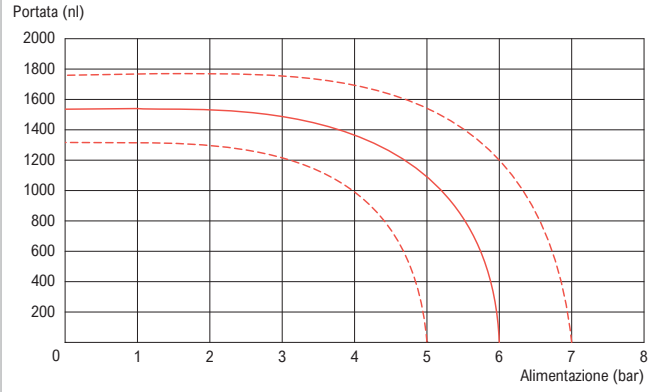


FLOW DIAGRAMS - ELECTROPNEUMATICALLY OPERATED VALVES

FLOW RATE DIAGRAM - SIZE 1/8"

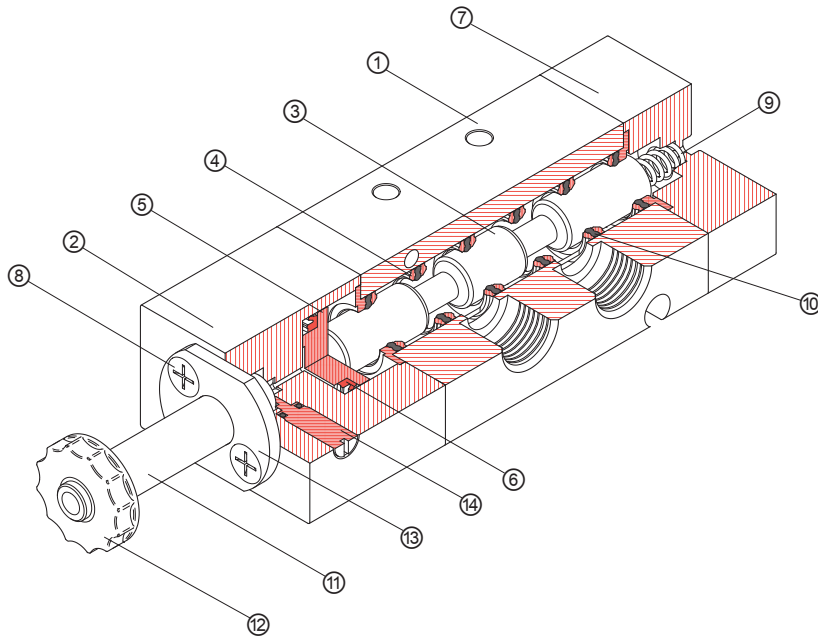


FLOW RATE DIAGRAM - SIZE 1/4"













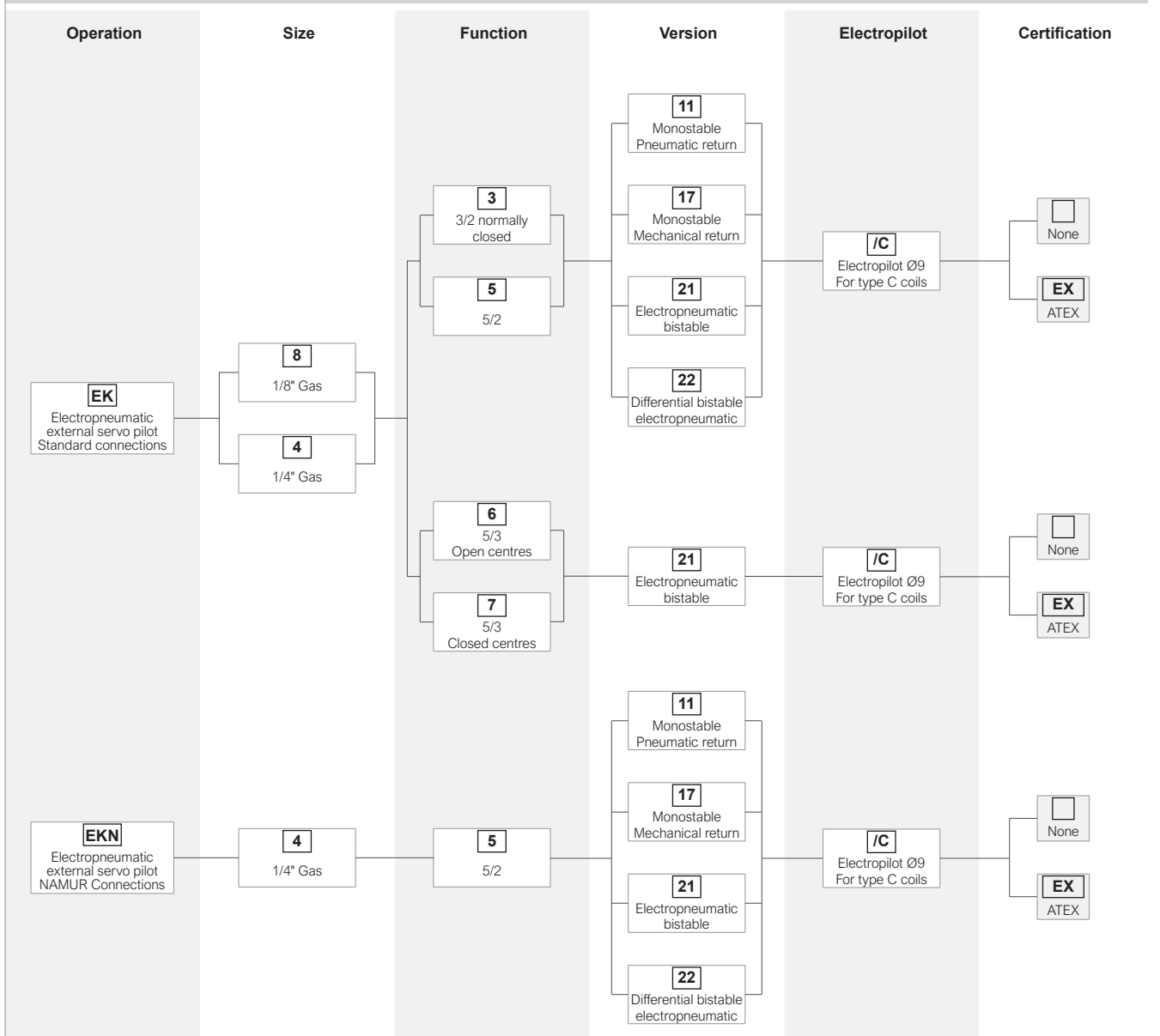
MATERIALS - ELECTROPNEUMATICALLY OPERATED VALVES

| POS | DESCRIPTION | MATERIALS | POS | DESCRIPTION | MATERIALS |
|-----|---------------|--------------------------|-----|---------------------|-------------------------------------|
| ① | Body | Anodised drawn aluminium | ⑧ | Screw | Galvanised steel |
| ② | Cover | Reinforced polyarylamide | ⑨ | Spring | Harmonic steel |
| ③ | Spool | Anodised aluminium | ⑩ | Sealing gasket | Nitrile rubber (NBR) |
| ④ | Spacers | OT58 brass | ⑪ | Electropilot | Brass - Magnetic stainless steel |
| ⑤ | Piston | Anodised aluminium | ⑫ | Ring nut | Acrylonitrile butadiene styrene ABS |
| ⑥ | Piston gasket | PUR 85 ShA | ⑬ | Mounting plate | Anodised aluminium |
| ⑦ | Base | Anodised drawn aluminium | ⑭ | Manual intervention | Brass OT58 - NBR |



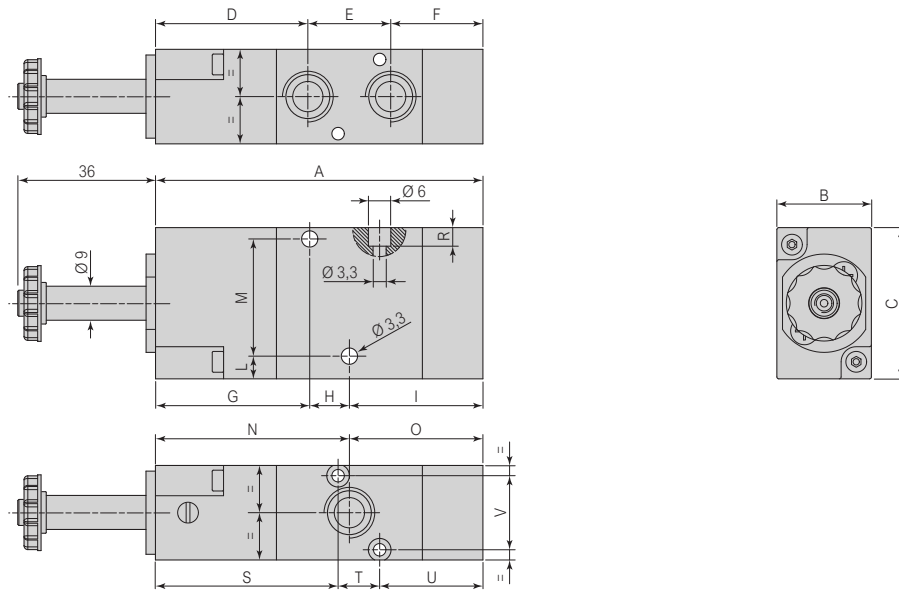
CODING KEY - VALVES ELECTRO-PNEUMATICALLY OPERATED VALVES

| Operation | Size | Function | Version | Electropilot | Certification |
|---|--|---|---|--|---|
| EK | 4 | 5 | 12 | /C | |
| EK = Electropneumatic internal servo-pilot Standard connections  | 8 = 1/8" Gas 4 = 1/4" Gas | 3 = 3/2 Normally closed  | 11 = Monostable Pneumatic spring return  | /C = Electropilot Ø9 For type C coils | |
| EKN = Electropneumatic internal servo-pilot NAMUR Connections  | | 5 = 5/2  | 17 = Monostable Mechanical spring return  | | |
| | | 6 = 5/3 Open centres  | 21 = Electropneumatic bistable  | | |
| | | 7 = 5/3 Closed centres  | 22 = Differential bistable electropneumatic  | | |
| | | | | | NULL = None EX = For compressed air in atmosphere potentially explosive (ATEX) |

POSSIBLE CONFIGURATIONS


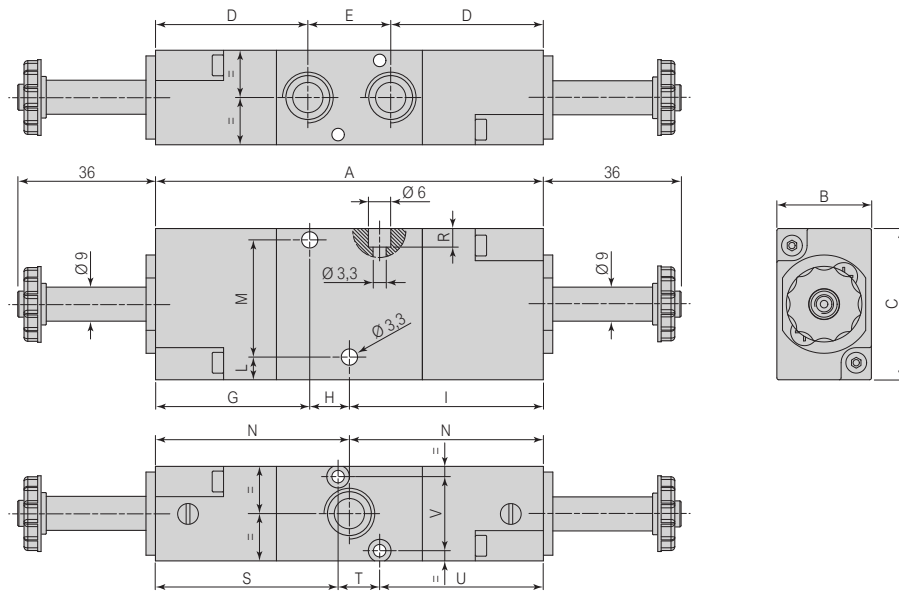
DIMENSIONS - 3/2 VALVES ELECTRO-PNEUMATICALLY OPERATED

ELECTROPNEUMATIC OPERATION - NORMALLY CLOSED - MONOSTABLE WITH PNEUMATIC / MECHANICAL SPRING RETURN



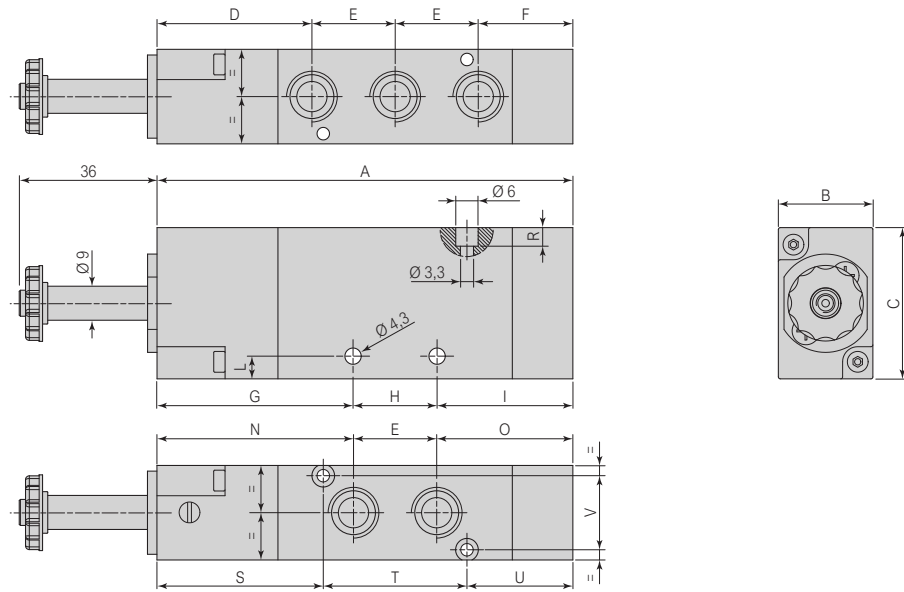
| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | L | M | N | O | R | S | T | U | V |
|--------|-------------|----------|------|----|----|-------|----|-------|------|------|-------|-----|------|-------|-------|---|------|------|-------|------|
| | Gas 1/8" | EK8311/C | 83.5 | 22 | 32 | 37.75 | 18 | 27.75 | 38.5 | 8.25 | 36.75 | 4.5 | 20.1 | 46.75 | 36.75 | 3 | 44.5 | 7.75 | 31.25 | 17.4 |
| | Gas 1/4" | EK4311/C | 92.6 | 25 | 40 | 40.3 | 22 | 30.3 | 40.8 | 10.5 | 41.3 | 6 | 31 | 51.3 | 41.3 | 4 | 48.3 | 11 | 33.3 | 11 |
| | Gas 1/8" | EK8317/C | 78.5 | 22 | 32 | 37.75 | 18 | 22.75 | 38.5 | 8.25 | 31.75 | 4.5 | 20.1 | 46.75 | 31.75 | 3 | 44.5 | 7.75 | 26.25 | 17.4 |
| | Gas 1/4" | EK4317/C | 86.6 | 25 | 40 | 40.3 | 22 | 24.3 | 40.8 | 10.5 | 35.3 | 6 | 31 | 51.3 | 35.3 | 4 | 48.3 | 11 | 28.3 | 11 |

ELECTROPNEUMATIC OPERATION - BISTABLE - DIFFERENTIAL BISTABLE

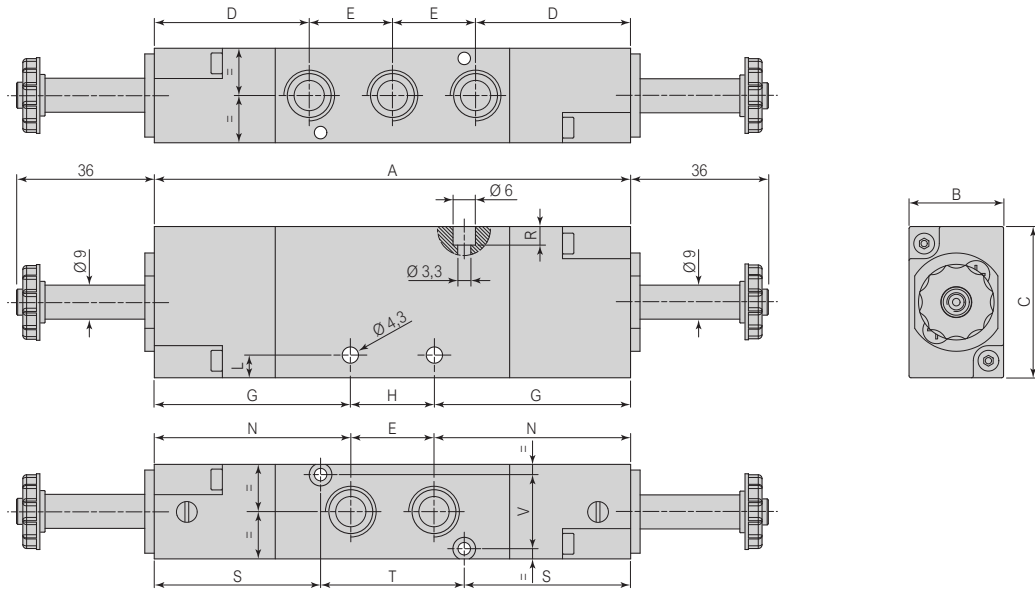


| Symbol | Connections | Code | A | B | C | D | E | G | H | I | L | M | N | R | S | T | U | V |
|--------|-------------|----------|-------|----|----|-------|----|------|------|-------|-----|------|-------|---|------|------|-------|------|
| | Gas 1/8" | EK8321/C | 93.5 | 22 | 32 | 37.75 | 18 | 38.5 | 8.25 | 46.75 | 4.5 | 20.1 | 46.75 | 3 | 44.5 | 7.75 | 41.25 | 17.4 |
| | Gas 1/4" | EK4321/C | 102.6 | 25 | 40 | 30.3 | 22 | 40.8 | 10.5 | 51.3 | 6 | 31 | 51.3 | 4 | 48.3 | 11 | 43.3 | 11 |
| | Gas 1/8" | EK8322/C | 93.5 | 22 | 32 | 37.75 | 18 | 38.5 | 8.25 | 46.75 | 4.5 | 20.1 | 46.75 | 3 | 44.5 | 7.75 | 41.25 | 17.4 |
| | Gas 1/4" | EK4322/C | 102.6 | 25 | 40 | 30.3 | 22 | 40.8 | 10.5 | 51.3 | 6 | 31 | 51.3 | 4 | 48.3 | 11 | 43.3 | 11 |

3
 PNEUMATIC DISTRIBUTORS

DIMENSIONS - 5/2 VALVES ELECTRO-PNEUMATICALLY OPERATED
ELECTROPNEUMATIC OPERATION - MONOSTABLE WITH PNEUMATIC / MECHANICAL SPRING RETURN


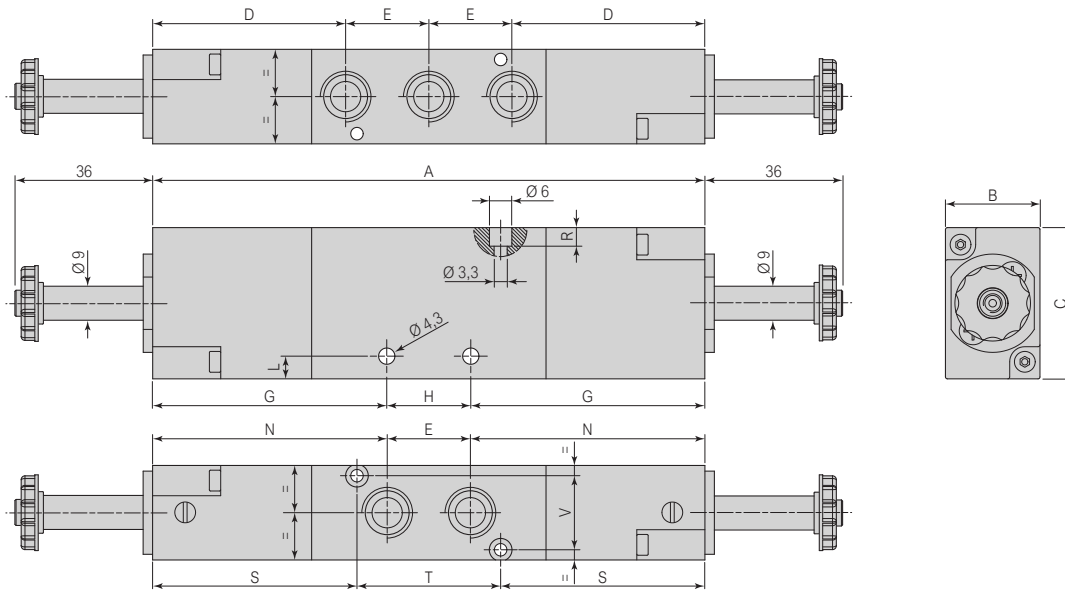
| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | L | N | O | R | S | T | U | V |
|--------|-------------|----------|-------|----|----|-------|----|-------|-------|----|-------|-----|-------|-------|-----|-------|----|-------|------|
| | Gas 1/8" | EK8511/C | 101.5 | 22 | 32 | 37.75 | 18 | 27.75 | 46.75 | 18 | 36.75 | 4.5 | 46.75 | 36.75 | 3 | 40.75 | 30 | 30.75 | 17.4 |
| | Gas 1/4" | EK4511/C | 116 | 25 | 40 | 41 | 22 | 31 | 52 | 22 | 42 | 6 | 52 | 42 | 4.5 | 44 | 38 | 34 | 19.6 |
| | Gas 1/8" | EK8517/C | 96.5 | 22 | 32 | 37.75 | 18 | 22.75 | 46.75 | 18 | 31.75 | 4.5 | 46.75 | 31.75 | 3 | 40.75 | 30 | 25.75 | 17.4 |
| | Gas 1/4" | EK4517/C | 110 | 25 | 40 | 41 | 22 | 25 | 52 | 22 | 36 | 6 | 52 | 36 | 4.5 | 44 | 38 | 28 | 19.6 |

ELECTROPNEUMATIC OPERATION - BISTABLE - DIFFERENTIAL BISTABLE


| Symbol | Connections | Code | A | B | C | D | E | G | H | L | N | R | S | T | V |
|--------|-------------|----------|-------|----|----|-------|----|-------|----|-----|-------|-----|-------|----|------|
| | Gas 1/8" | EK8521/C | 111.5 | 22 | 32 | 37.75 | 18 | 46.75 | 18 | 4.5 | 46.75 | 3 | 40.75 | 30 | 17.4 |
| | Gas 1/4" | EK4521/C | 126 | 25 | 40 | 41 | 22 | 52 | 22 | 6 | 52 | 4.5 | 44 | 38 | 19.6 |
| | Gas 1/8" | EK8522/C | 111.5 | 22 | 32 | 37.75 | 18 | 46.75 | 18 | 4.5 | 46.75 | 3 | 40.75 | 30 | 17.4 |
| | Gas 1/4" | EK4522/C | 126 | 25 | 40 | 41 | 22 | 52 | 22 | 6 | 52 | 4.5 | 44 | 38 | 19.6 |

DIMENSIONS - 5/3 VALVES ELECTRO-PNEUMATICALLY OPERATED

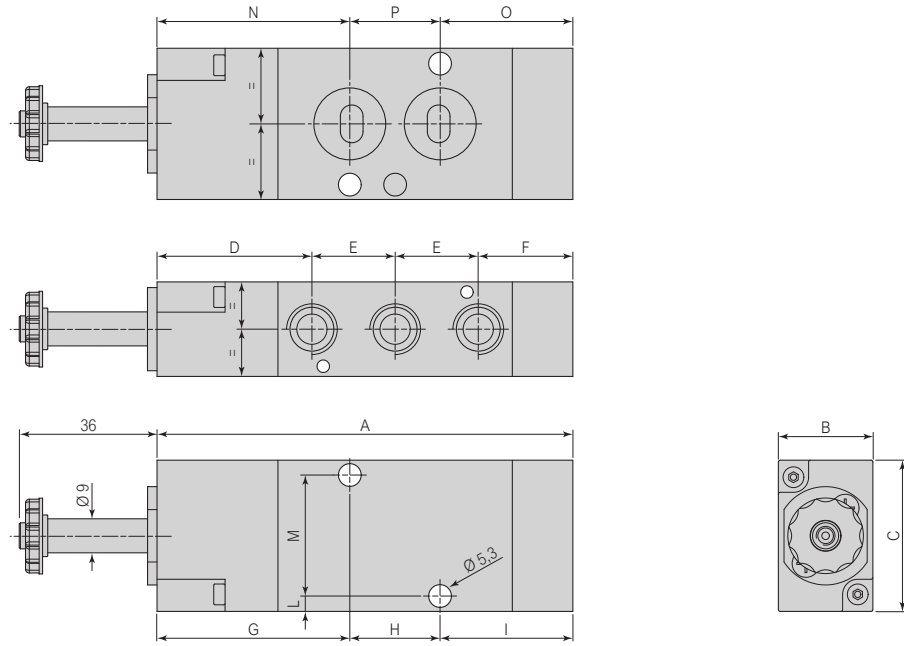
ELECTROPNEUMATIC OPERATION - THREE POSITIONS - CLOSED / OPEN CENTRES



| Symbol | Connections | Code | A | B | C | D | E | G | H | L | N | R | S | T | V |
|--------|-------------|----------|-------|----|----|-------|----|-------|----|-----|-------|-----|-------|----|------|
| | Gas 1/8" | EK8621/C | 111.5 | 22 | 32 | 37.75 | 18 | 46.75 | 18 | 4.5 | 46.75 | 3 | 40.75 | 30 | 17.4 |
| | Gas 1/4" | EK4621/C | 146 | 25 | 40 | 51 | 22 | 62 | 22 | 6 | 62 | 4.5 | 54 | 38 | 19.6 |
| | Gas 1/8" | EK8721/C | 111.5 | 22 | 32 | 37.75 | 18 | 46.75 | 18 | 4.5 | 46.75 | 3 | 40.75 | 30 | 17.4 |
| | Gas 1/4" | EK4721/C | 146 | 25 | 40 | 51 | 22 | 62 | 22 | 6 | 62 | 4.5 | 54 | 38 | 19.6 |

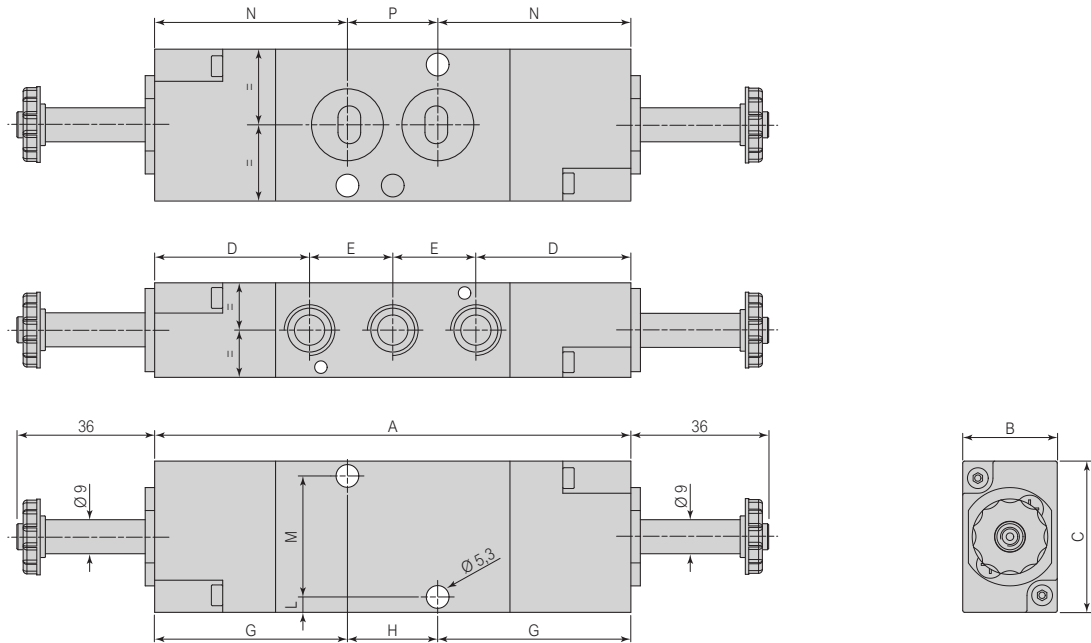
DIMENSIONS - 5/2 VALVES ELECTRO-PNEUMATICALLY OPERATED - NAMUR CONNECTIONS

ELECTROPNEUMATIC OPERATION - MONOSTABLE WITH PNEUMATIC / MECHANICAL SPRING RETURN



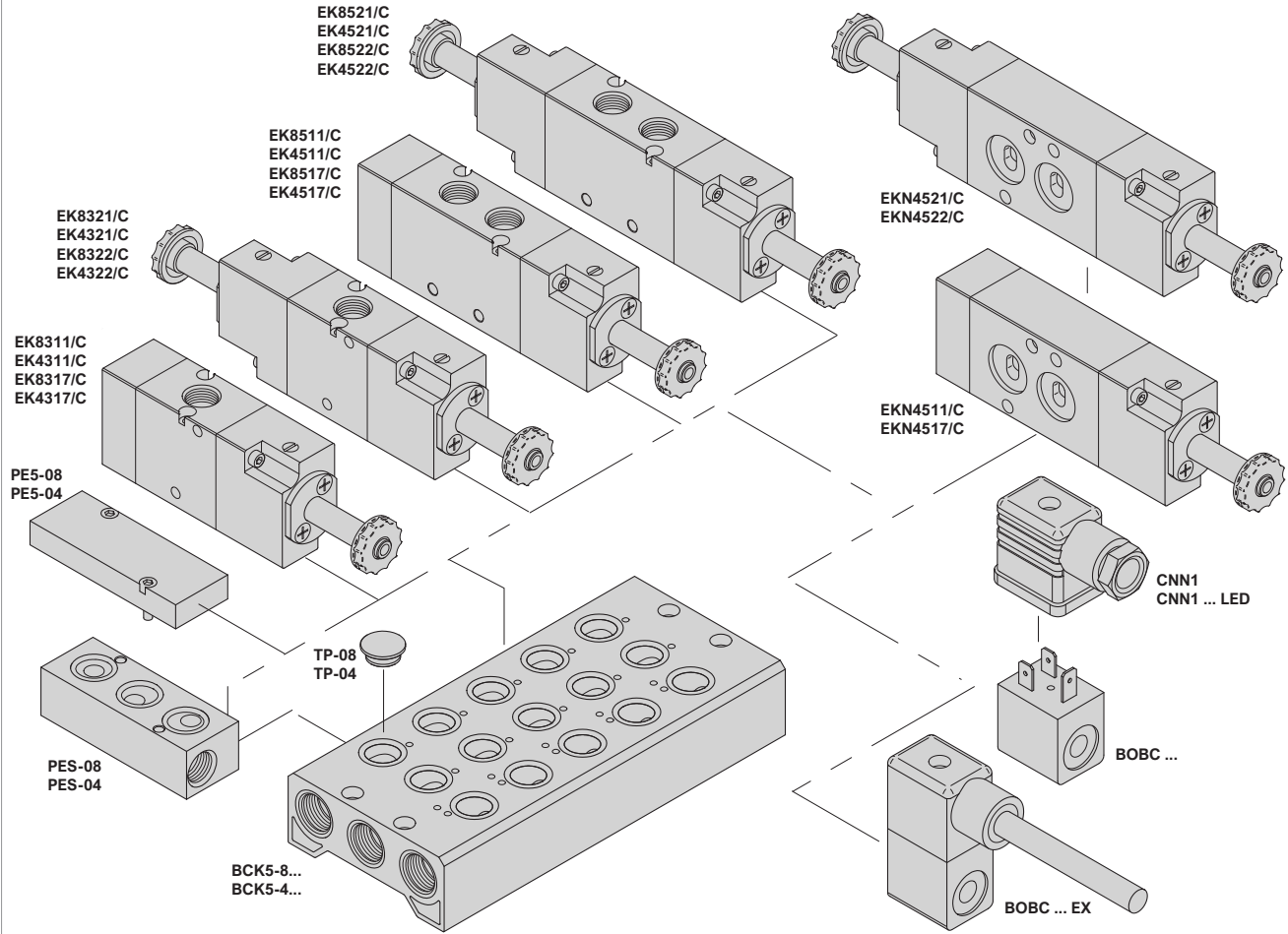
| Symbol | Connections | Code | A | B | C | D | E | F | G | H | I | L | M | N | O | P |
|--------|-------------|----------|-----|----|----|----|----|----|----|----|----|---|----|----|----|----|
| | Gas 1/4" | EK4511/C | 116 | 25 | 40 | 41 | 22 | 31 | 51 | 24 | 41 | 4 | 32 | 51 | 41 | 24 |
| | Gas 1/4" | EK4517/C | 110 | 25 | 40 | 41 | 22 | 25 | 51 | 24 | 35 | 4 | 32 | 51 | 35 | 24 |

ELECTROPNEUMATIC OPERATION - BISTABLE - DIFFERENTIAL BISTABLE



| Symbol | Connections | Code | A | B | C | D | E | G | H | L | M | N | P |
|--------|-------------|----------|-----|----|----|----|----|----|----|---|----|----|----|
| | Gas 1/4" | EK4521/C | 126 | 25 | 40 | 41 | 22 | 51 | 24 | 4 | 32 | 51 | 24 |
| | Gas 1/4" | EK4522/C | 126 | 25 | 40 | 41 | 22 | 52 | 22 | 6 | 32 | 52 | 24 |

K83 SERIES ACCESSORIES



| SUB-BASES BCK5... | | | | | | | | | | CAP For BCK5 sub-base... | EXCLUSION PLATE For BCK5 sub-base... | SEPARATE SUPPLY For BCK5 sub-base... |
|--|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------------------------------------|---|--|
| | | | | | | | | | | | | |
| Page 3.1.05.28 | | | | | | | | | | Page 3.1.05.28 | Page 3.1.05.28 | Page 3.1.05.28 |
| Size | 2 seats | 3 seats | 4 seats | 5 seats | 6 seats | 7 seats | 8 seats | 9 seats | 10 seats | | | |
| 1/8" | BCK5-82 | BCK5-83 | BCK5-84 | BCK5-85 | BCK5-86 | BCK5-87 | BCK5-88 | BCK5-89 | BCK5-810 | TP-08 | PE5-08 | PES-08 |
| 1/4" | BCK5-42 | BCK5-43 | BCK5-44 | BCK5-45 | BCK5-46 | BCK5-47 | BCK5-48 | BCK5-49 | BCK5-410 | TP-04 | PE5-04 | PES-04 |
| Anodised aluminium sub-base Zinc-plated steel fixing screws - NBR gaskets | | | | | | | | | | Cap: Anodised aluminium NBR gasket | Plate: Anodised aluminium Screws: Galvanised steel | Plate: Anodised aluminium NBR gasket |

| BOBC ... Type "C" coils AC / DC | BOBC ... EX ATEX coils AC / DC | CNN1 ... Connectors for "C" type coils | CNN1 ... LED Connectors for "C" type coils |
|---------------------------------------|---|--|--|
| | | | |
| Page 3.1.05.29 | Page 3.1.05.30 | Page 3.1.05.29 | Page 3.1.05.29 |
| Coating in NYLON + GLASS FIBRES | Coating in Self-extinguishing PA + GLASS FIBRES | PA6 GF | PA6 GF - PA12 |

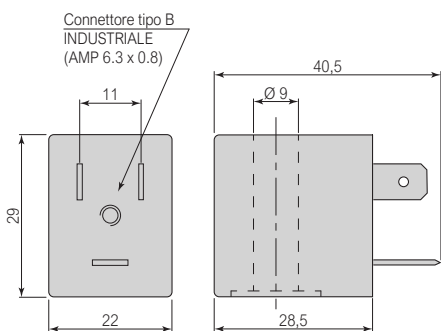
ACCESSORIES

| BCK5... Sub-base | Size | Code | Seats | L | A | B | C | Ø D |
|--|-------------|-------------|------------|------------|----------|------------|------|----------|
| | Gas 1/8" | BCK5-82 | 2 | 71 | 60 | 20 | 20.5 | Gas 1/4" |
| | | BCK5-83 | 3 | 94 | | | | |
| | | BCK5-84 | 4 | 117 | | | | |
| | | BCK5-85 | 5 | 140 | | | | |
| | | BCK5-86 | 6 | 163 | | | | |
| | | BCK5-87 | 7 | 186 | | | | |
| | | BCK5-88 | 8 | 209 | | | | |
| | | BCK5-89 | 9 | 232 | | | | |
| | | BCK5-810 | 10 | 255 | | | | |
| | | Gas 1/4" | BCK5-42 | 2 | | | | |
| | BCK5-43 | | 3 | 112 | | | | |
| | BCK5-44 | | 4 | 138 | | | | |
| | BCK5-45 | | 5 | 164 | | | | |
| | BCK5-46 | | 6 | 190 | | | | |
| | BCK5-47 | | 7 | 216 | | | | |
| | BCK5-48 | | 8 | 242 | | | | |
| | BCK5-49 | | 9 | 268 | | | | |
| | BCK5-410 | 10 | 294 | | | | | |
| Anodised aluminium sub-base - Zinc-plated steel fixing screws - NBR gaskets / 1 piece per pack | | | | | | | | |
| TP .. Cap for BCK5 sub-base... | Size | Code | Ø A | Ø B | C | | | |
| | Gas 1/8" | TP-08 | 12.6 | 7.9 | 6 | | | |
| | Gas 1/4" | TP-04 | 15.5 | 11.9 | 5.5 | | | |
| Anodised aluminium cap - NBR gasket / 1 piece per pack | | | | | | | | |
| EXCLUSION PLATE For BCK5 sub-bases... | Size | Code | A | B | C | | | |
| | Gas 1/8" | PE5-08 | 60 | 22 | 10 | | | |
| | Gas 1/4" | PE5-04 | 70 | 25 | 15 | | | |
| Anodised aluminium plate - Zinc-plated steel fixing screws / 1 piece per pack | | | | | | | | |
| SEPARATE POWER PLATE For BCK5 sub-bases... | Size | Code | A | B | C | Ø G | | |
| | Gas 1/8" | PES-08 | 60 | 22 | 10 | Gas 1/8" | | |
| | Gas 1/4" | PES-04 | 70 | 25 | 15 | Gas 1/4" | | |
| Anodised aluminium plate - NBR gaskets / 1 piece per pack | | | | | | | | |

"C" type COILS (22 mm)

BOBC ...

Direct current coils



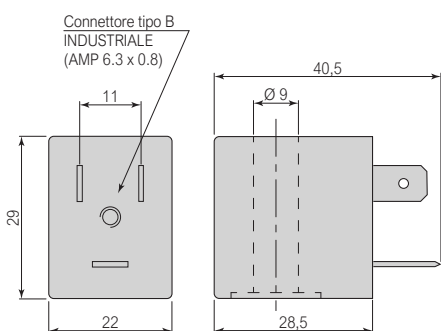
Technical features

| | |
|------------------------------|---|
| Code | BOBC024DC |
| Operating voltage | 24 VDC |
| Power (max.) | 4.8 W |
| Voltage tolerance | ±10% (of nominal voltage) |
| Insulation class | 155°C (F) |
| Wire insulation class | 200°C (H) |
| Insertion duration | 100% (at 20°C) |
| Electrical connection | INDUSTRIAL (AMP 6.3 x 0.8) form B |
| Protection class | IP54 (with connector) IP65 (with connector and suitable gaskets) |
| Material | NYLON + Fibreglass coating |

BOBC... / 1 piece per pack

BOBC ...

AC coils



Technical features

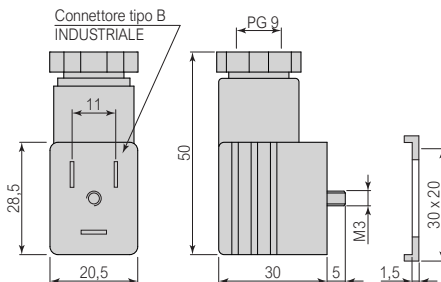
| | | | |
|------------------------------|---|-----------|-----------|
| Code | BOBC024AC | BOBC110AC | BOBC220AC |
| Operating voltage | 24 VAC | 110 VAC | 220 VAC |
| Power (max.) | 5.5 VA | | |
| Voltage tolerance | ±10% (of nominal voltage) | | |
| Insulation class | 155°C (F) | | |
| Wire insulation class | 200°C (H) | | |
| Insertion duration | 100% (at 20°C) | | |
| Electrical connection | INDUSTRIAL (AMP 6.3 x 0.8) form B | | |
| Protection class | IP54 (with connector) IP65 (with connector and suitable gaskets) | | |
| Material | NYLON + Fibreglass coating | | |

BOBC... / 1 piece per pack

CONNECTORS for "C" type coils (22 mm)

CNN1...

Connector for "C" type coils

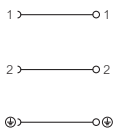


Technical features

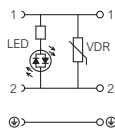
| | | | | |
|---------------------------------------|---|------------------|------------------|------------------|
| Code | CNN1 | CNN1 2 LED | CNN1 4 LED | CNN1 5 LED |
| Voltage | 0÷250 V AC/DC | 12/24 V AC/DC | 115 V AC/DC | 230 V AC/DC |
| Current (max.) | 10 A | 5 A | 5 A | 5 A |
| Contact resistance (max.) | 15 mΩ | | | |
| Overvoltage category | III | | | |
| Conductor cross-section (max.) | 1.5 mm ² (without terminals) | | | |
| Cable clamp thread | PG9 | | | |
| Operating temperature | -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) form B | | | |
| Protection class | IP65 (properly assembled) | | | |
| Insert and case materials | PA6 GF - PA6 GF | PA6 GF - PA12 | PA6 GF - PA12 | PA6 GF - PA12 |
| Visual indicator | None | Yellow LED diode | Yellow LED diode | Yellow LED diode |
| Colour | Black | Clear | Clear | Clear |
| Electrical circuit protection | None | VDR Circuit | VDR Circuit | VDR Circuit |
| Fixing type | Central screw M3x32,5 | | | |

CNN1... / Insert, case, gasket and fixing screw - 1 piece per pack

CNN1

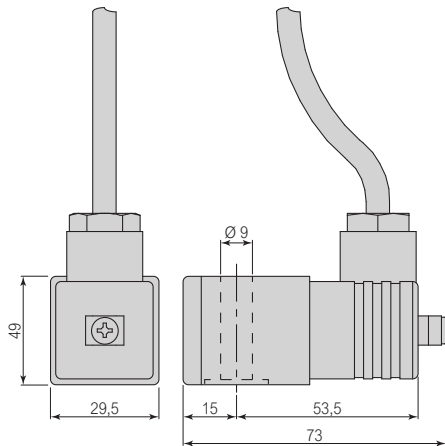


CNN1...LED



"ATEX" COILS
BOBC ... EX

ATEX direct current coils

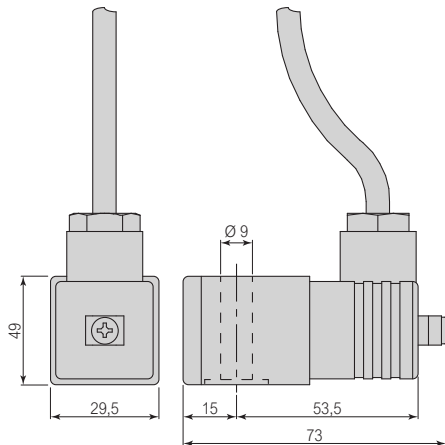

Technical features


| | |
|--------------------------------------|--|
| Code | BOBC024DCEX |
| Operating voltage | 24 VDC |
| Power (max.) | 5.3 W |
| Voltage tolerance | ±10% (of nominal voltage) |
| Wire insulation class | 200°C (H) |
| Insertion duration | 100% (at the indicated power and temperatures) |
| ATEX marking | II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T135°C Db For the assembly of ATEX coils the valve will be equipped with a Ø 9mm solenoid pilot |
| Electrical connection | Three-core cable 3x0.75 mm ² Length 3000 mm Length 5000 mm (on request) |
| Protection class | IP65 (with suitable gaskets) |
| Material | Self-extinguishing PA coating + Glass fibres |
| Visual indicator | None |
| Colour | Black |
| Electrical circuit protection | Internal fuse |

BOBC ... EX / 1 piece per pack

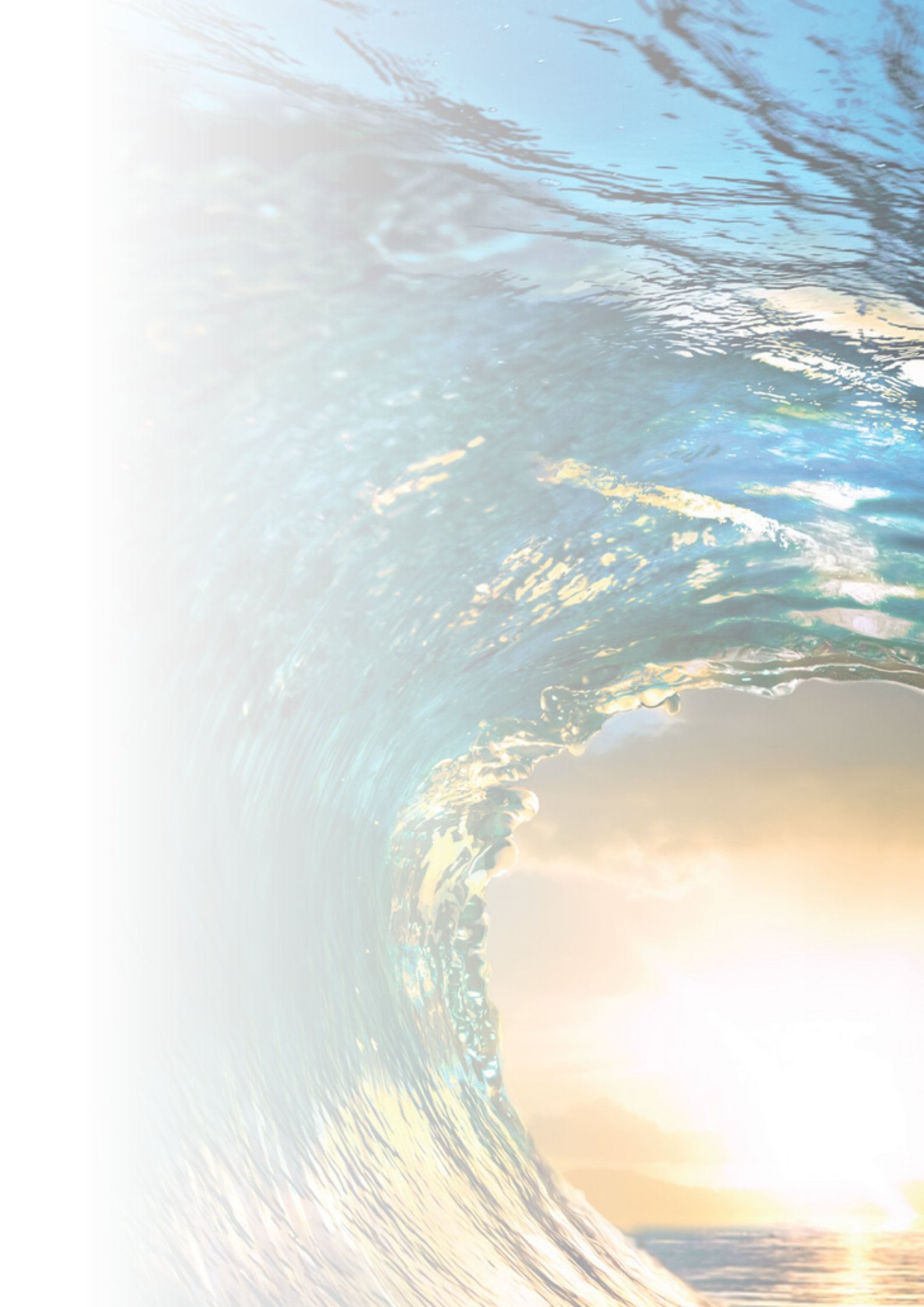
BOBC ... EX

ATEX AC coils


Technical features


| | | | | |
|--------------------------------------|--|-------------|-------------|-------------|
| Code | BOBC024ACEX | BOBC048ACEX | BOBC110ACEX | BOBC220ACEX |
| Operating voltage | 24 VAC | 48 VAC | 110 VAC | 220 VAC |
| Power (max.) | 5.3W (voltage rectifier inside the coil) | | | |
| Voltage tolerance | ±10% (of nominal voltage) | | | |
| Wire insulation class | 200°C (H) | | | |
| Insertion duration | 100% (at the indicated power and temperatures) | | | |
| ATEX marking | II 2G Ex mb IIC T4 Gb II 2D Ex mb IIIC T135°C Db For the assembly of ATEX coils the valve will be equipped with a Ø 9mm solenoid pilot | | | |
| Electrical connection | Three-core cable 3x0.75 mm ² Length 3000 mm Length 5000 mm (on request) | | | |
| Protection class | IP65 (with suitable gaskets) | | | |
| Material | Self-extinguishing PA coating + Glass fibres | | | |
| Visual indicator | None | | | |
| Colour | Black | | | |
| Electrical circuit protection | Internal fuse | | | |

BOBC ... EX / 1 piece per pack



BONESI PNEUMATIK makes all its products in Italy



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