

PNEUMATIC VALVES

SERIES 79-81-84-85-87 Steelspool Valves

• SOLENOID VALVES •

• MECHANICAL VALVES •

• PNEUMATIC VALVES •

• COILS & PLUG-IN SOCKETS •

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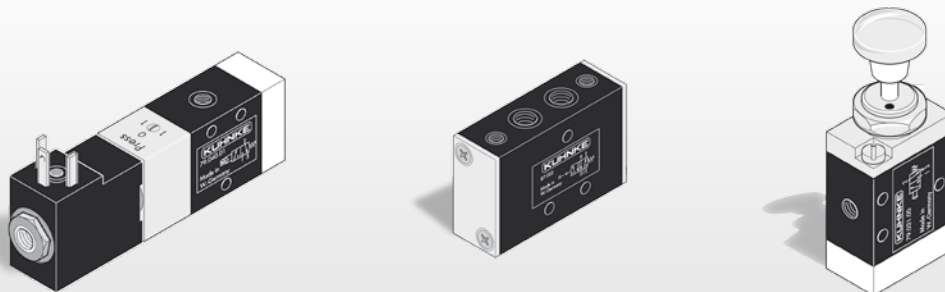
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STEELSPPOOL VALVES

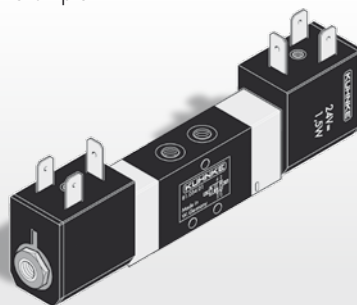
General Information

The steelspool range of valves includes electrical, mechanical and pneumatic version for single or modular use.



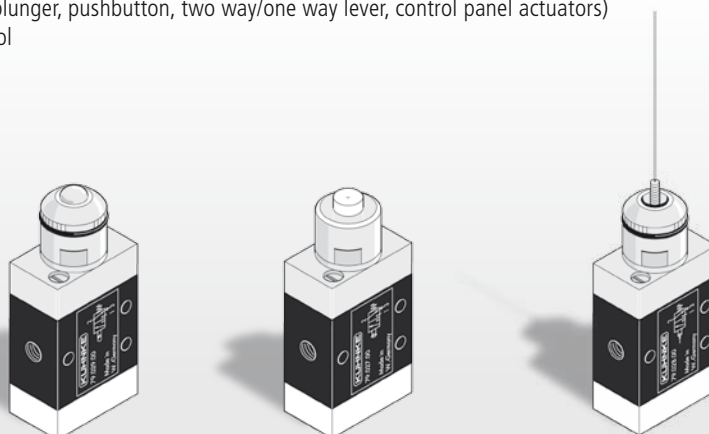
These valves can be supplied in a wide range of versions, for example:

- different plug options
- inline or sub-base mounting
- with/without manual override
- also available as a low watt version
- nominal orifice 2 mm or 4 mm

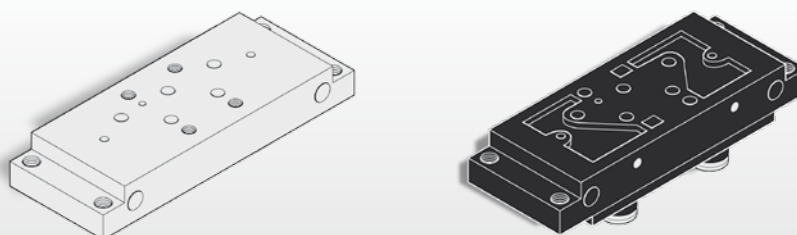


Other features:

- different actuating modes (plunger, pushbutton, two way/one way lever, control panel actuators)
- with/without pressure control



Mounting flange available.



SOLENOID VALVES

General Information

Series	Section	Function	Pressure range	Pressure connection (nominal orifice)	Ambient temperature range	Protection classification
Series 79	A	3/2-way	2 - 8 bar	M5 (2 mm)	-10 °C +50 °C	IP 65 DIN 40050 (with plug-in socket and occupied pneumatic connections)
Series 85	B	3/2-way	2 - 8 bar	G 1/8 (4 mm)	-10 °C +50 °C	
Series 81	C	5/2-way	2 - 8 bar	M5 (2 mm)	-10 °C +50 °C	
Series 84	D	5/2-way	2 - 8 bar	subplates only (2 mm)	-10 °C +50 °C	
Series 87	E	5/2-way	2 - 8 bar	G 1/8 (4 mm)	-10 °C +50 °C	

Housing material: Aluminium alloy

Valve end cap material: Zinc alloy or Makrolon®

Spool and liner material: Steel, hardened, corrosion resistant

Duty cycle: Continuous 100%

Earthing contact: Part of the standard device

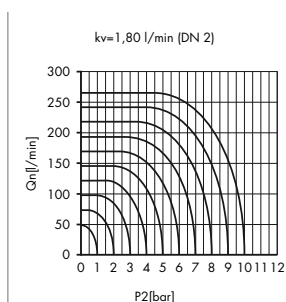
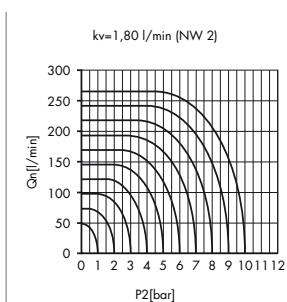
Electrical version: According to VDE 0580/VDE 0110 insulation group C

Electrical connections: Plug-in socket/flying lead, flat plug receptacles 2 x 0.8 DIN 43650 or 6.3 x 0.8 DIN 46247

Mounting: Any position

Lubricant: Shell Tellus C10 or equivalent

Operating medium: 5 micron filtered, lubricated (or not) compressed air; also suitable for other media conforming to ISO-VG 10



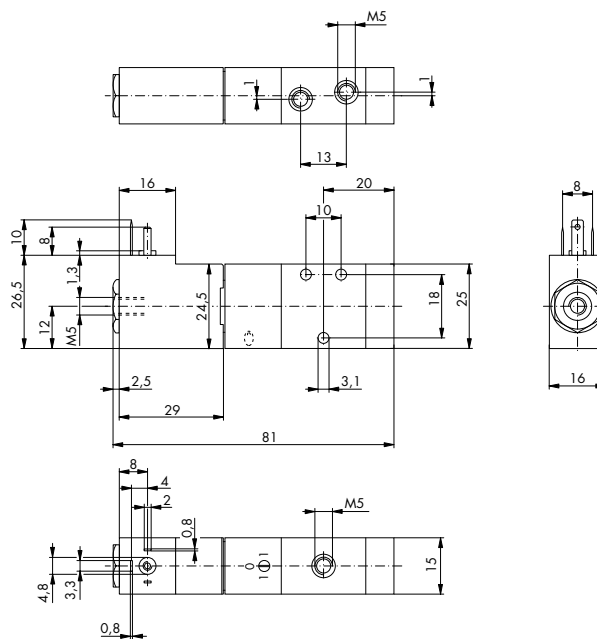
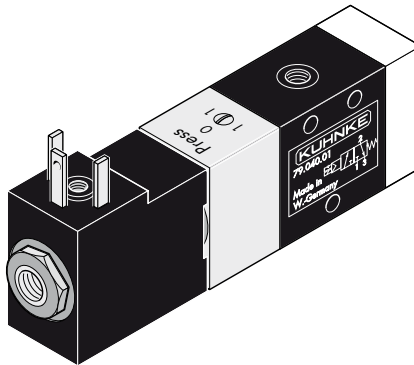
3/2-way Solenoid Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION A

Actuation: Solenoid, manual override

Return: Spring

Coil Type: Type 64



Code	Voltage	Power	Symbol
79.040.01.01	12V DC	1.8 W	
79.040.01.02	24V DC		
79.040.02.12	24V AC	5.5 VA	
79.040.02.14	110V AC		
79.040.02.15	230V AC		

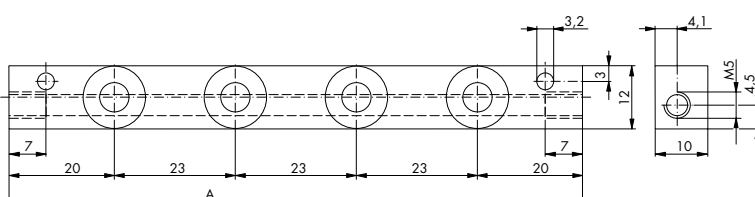
Accessories for Solenoid Valves - Common Input Manifolds

SECTION A

The kit includes:

banjo screws (71.750.026.01.00)

washers (50.001)



Code	No. of valves	A
44.404.02	2	63
44.404.03	3	86
44.404.04	4	109
44.404.06	6	155
44.404.08	8	201

Note: Available until end of stock.

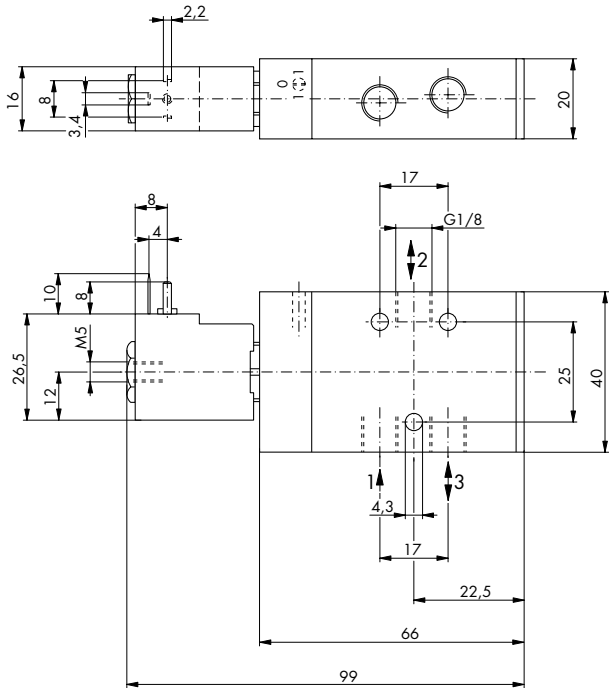
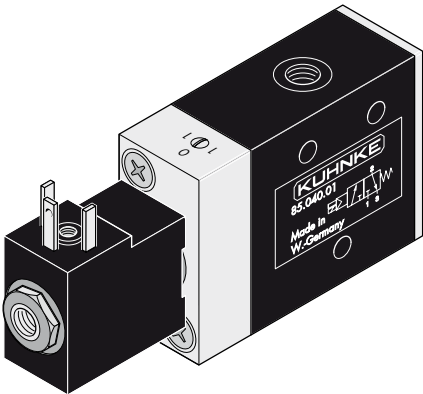
3/2-way Solenoid Steelspool Valves - G 1/8 (D_{nom} 4 mm)

SECTION B

Actuation: Solenoid, manual override

Return: Spring

Coil Type: Type 64



Code	Voltage	Power	Symbol
85.040.01.01	12V DC	1.8 W	
85.040.01.02	24V DC		
85.040.02.12	24V AC	5.5 VA	
85.040.02.14	110V AC		
85.040.02.15	230V AC		

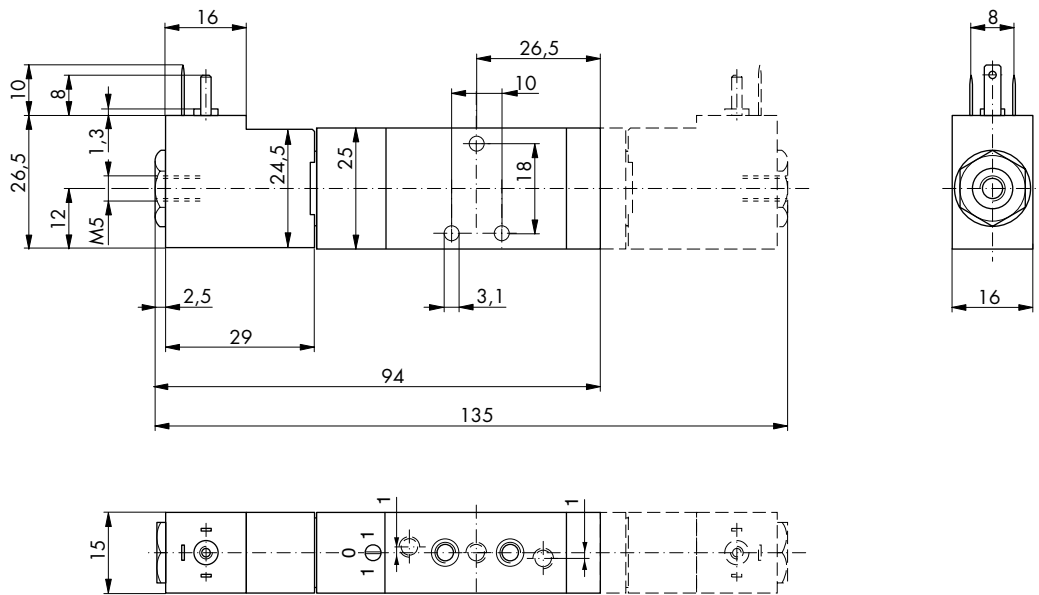
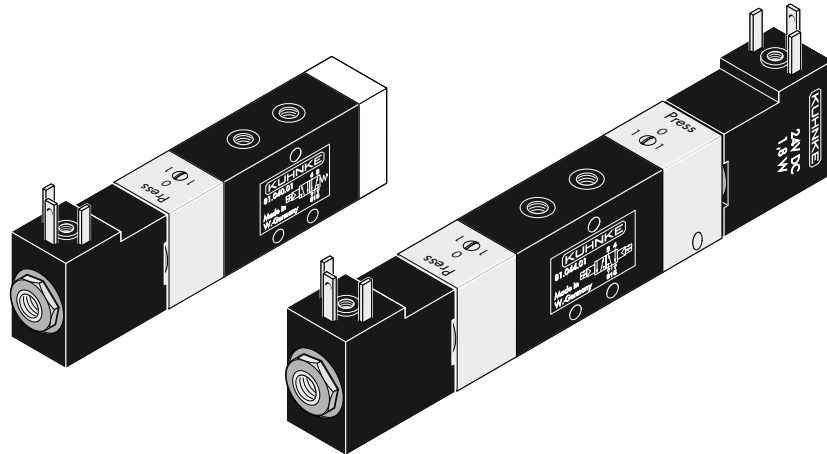
5/2-way Solenoid Steelpool Valves - M5 (D_{nom} 2 mm)

SECTION C

Actuation: Solenoid, manual override

Return: Spring

Coil Type: Type 64



Code	Voltage	Power	Symbol
81.040.01.01	12V DC	1.8 W	
81.040.01.02	24V DC		
81.040.02.12	24V AC	5.5 VA	
81.040.02.14	110V AC		
81.040.02.15	230V AC		

Code	Voltage	Power	Symbol
81.044.01.01	12V DC	1.8 W	
81.044.01.02	24V DC		
81.044.02.12	24V AC	5.5 VA	
81.044.02.14	110V AC		
81.044.02.15	230V AC		

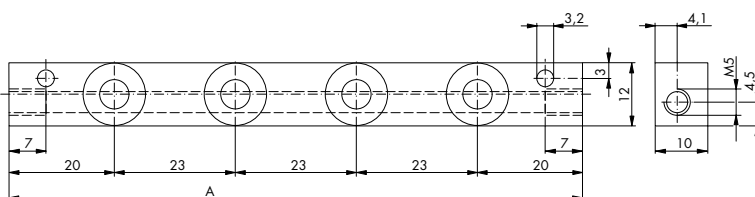
Accessories for Solenoid Valves - Common Input Manifolds

SECTION C

The kit includes:

banjo screws (71.750.026.01.00)

washers (50.001)



Code	No. of valves	A
44.404.02	2	63
44.404.03	3	86
44.404.04	4	109
44.404.06	6	155
44.404.08	8	201

Note: Available until end of stock.

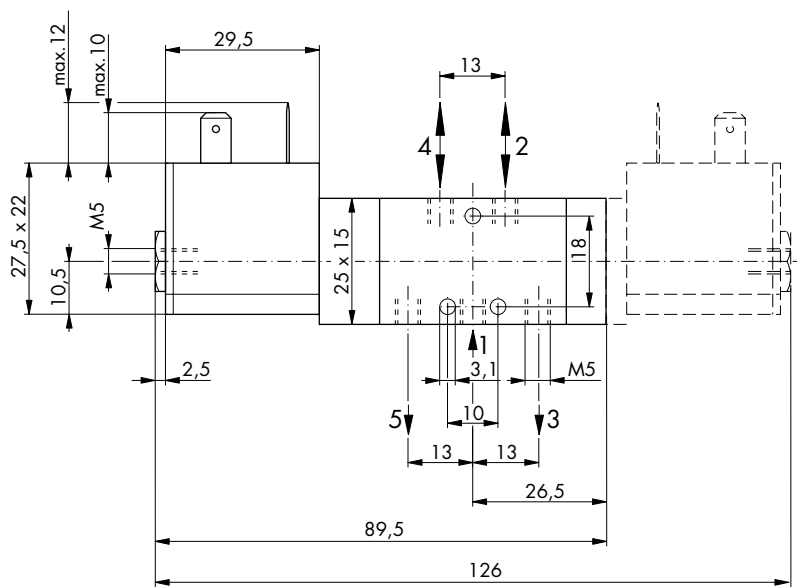
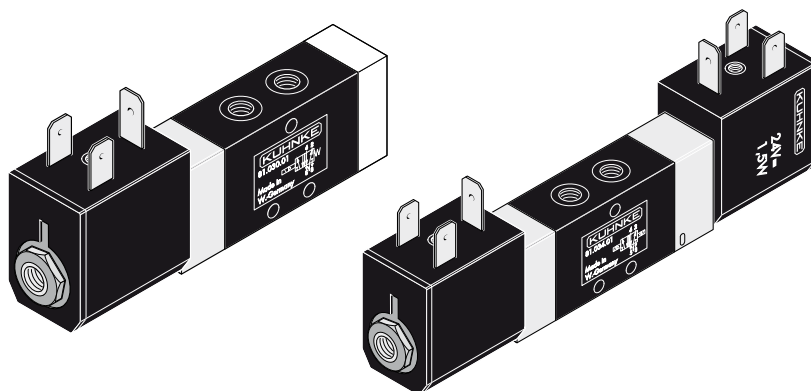
5/2-way Solenoid Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION C

Actuation: Solenoid

Return: Spring

Coil Type: Type 65



Code	Voltage	Power	Symbol
81.030.01.01	12V DC	1.5 W	
81.030.01.02	24V DC		
81.030.02.12	24V AC	5 VA	
81.030.02.14	110V AC		
81.030.02.15	230V AC		

Code	Voltage	Power	Symbol
81.034.01.01	12V DC	1.5 W	
81.034.01.02	24V DC		
81.034.02.12	24V AC	5 VA	
81.034.02.14	110V AC		
81.034.02.15	230V AC		

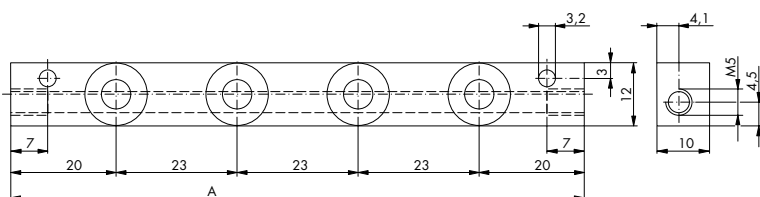
Accessories for Solenoid Valves - Common Input Manifolds

SECTION C

The kit includes:

banjo screws (71.750.026.01.00)

washers (50.001)



Code	No. of valves	A
44.404.02	2	63
44.404.03	3	86
44.404.04	4	109
44.404.06	6	155
44.404.08	8	201

Note: Available until end of stock.

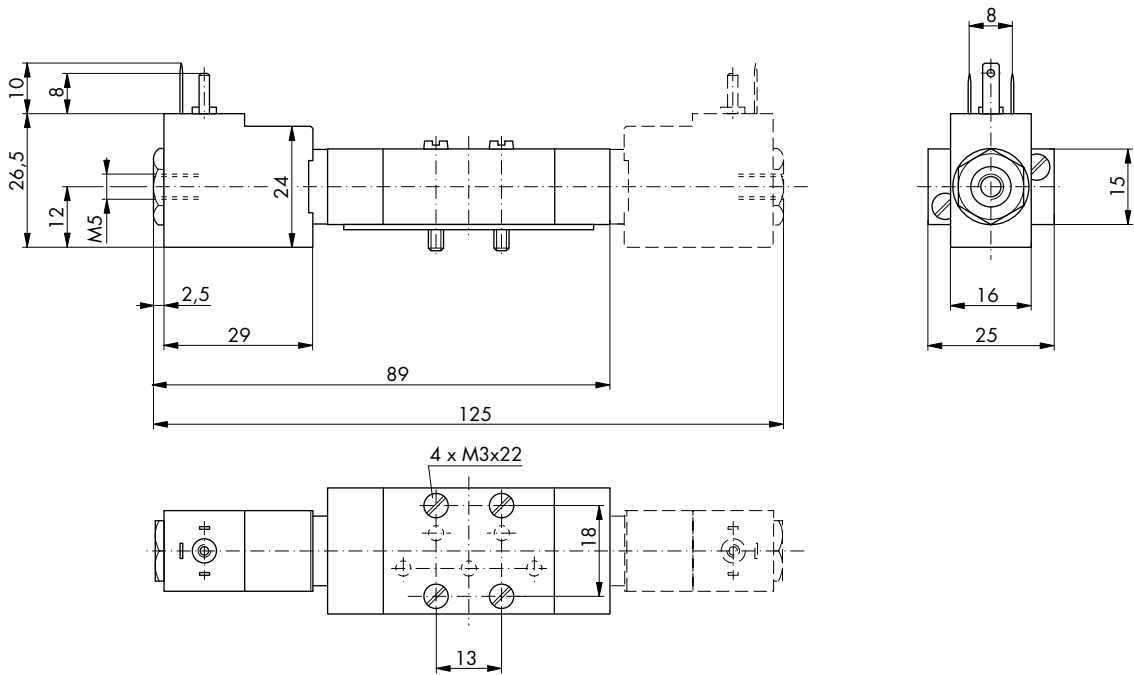
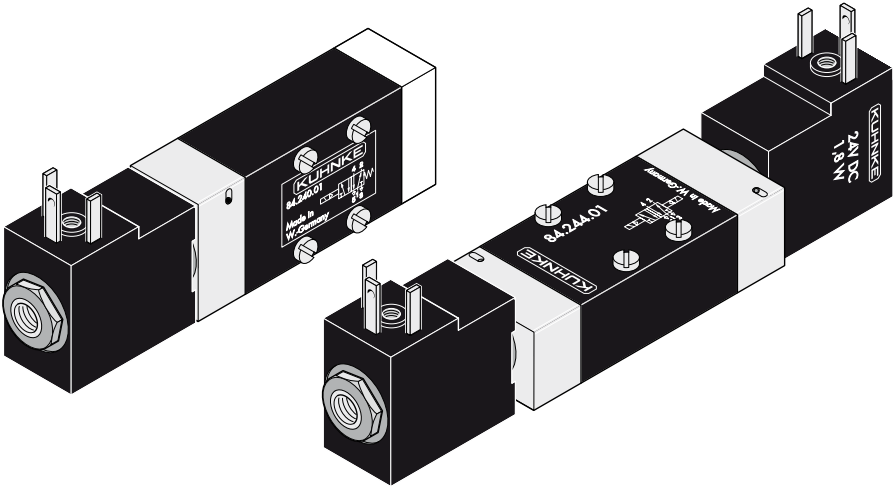
5/2-way Solenoid Steelpool Valves - Subplates (D_{nom} 2 mm)

SECTION D

Actuation: Solenoid

Return: Spring

Coil Type: Type 64



Code	Voltage	Power	Symbol
84.240.01.01	12V DC	1.8 W	
84.240.01.02	24V DC		
84.240.02.12	24V AC	5.5 VA	
84.240.02.14	110V AC		
84.240.02.15	230V AC		

Code	Voltage	Power	Symbol
84.244.01.01	12V DC	1.8 W	
84.244.01.02	24V DC		
84.244.02.12	24V AC	5.5 VA	
84.244.02.14	110V AC		
84.244.02.15	230V AC		

Note: Supplied with screws and gasket.

5/2-way Solenoid Steelspool Valves - Subplates (D_{nom} 2 mm)

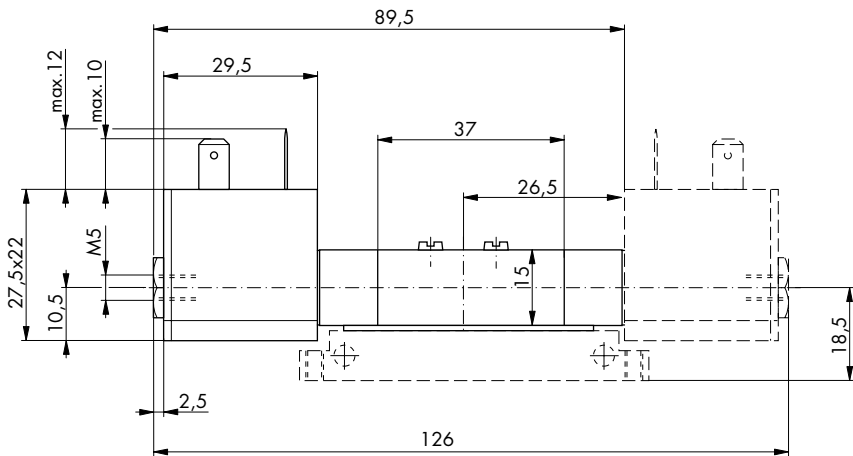
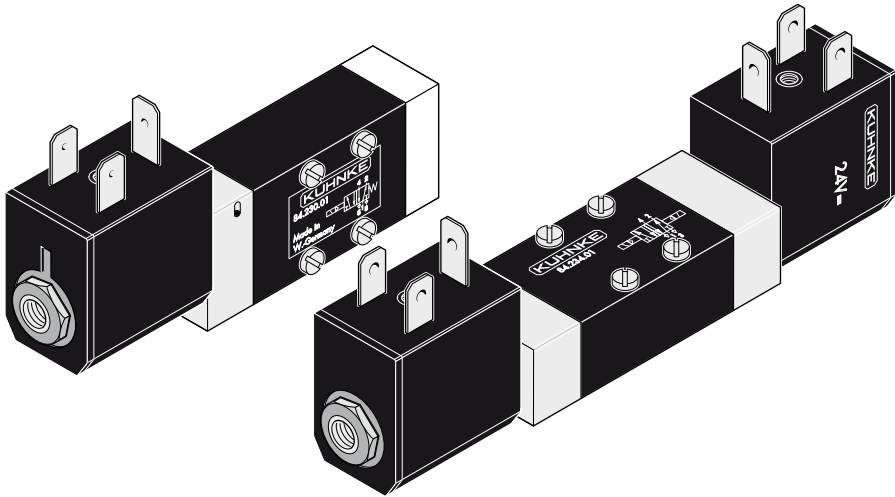
SECTION D

Actuation: Solenoid

Return: Spring

Coil Type: Type 65

SERIES 79 - 85 - 81 - 84 - 87
SOLENOID STEELSPool VALVES



Code	Voltage	Power	Symbol
84.230.01.01	12V DC	1.5 W	
84.230.01.02	24V DC		
84.230.02.12	24V AC	5 VA	
84.230.02.14	110V AC		
84.230.02.15	230V AC		

Code	Voltage	Power	Symbol
84.234.01.01	12V DC	1.5 W	
84.234.01.02	24V DC		
84.234.02.12	24V AC	5 VA	
84.234.02.14	110V AC		
84.234.02.15	230V AC		

Note: Supplied with screws and gasket.

Technical drawing of a mechanical part with dimensions in mm. The drawing shows a side view and a top view.

Side View Dimensions:

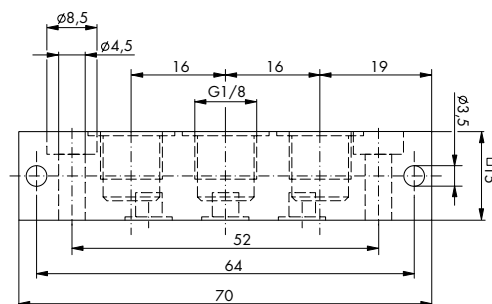
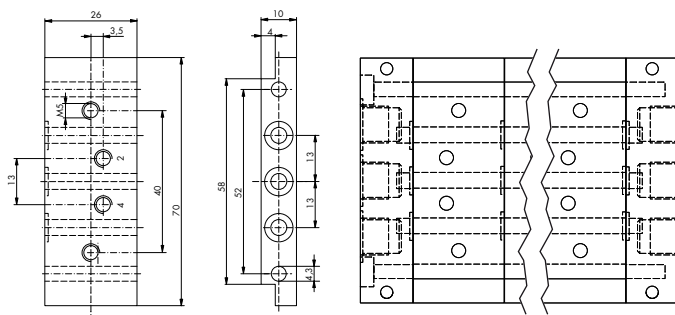
- Total width: 26
- Total height: 48
- Vertical dimensions from top: 23, 22, 17, 16.5, 13, 6.5, 4, 3
- Horizontal dimensions from left: 3, 14, 22, 28.5, 35, 41.5, 48

Top View Dimensions:

- Total width: 67
- Total height: 56
- Vertical dimensions from top: 10, 4
- Horizontal dimensions from left: 4.2, 52, 58

SECTION D

SECTION D

Universal end Plate for Subplates 84.463

**Note: The kit includes one end-plate, threaded rod and nuts for a maximum of 6 subplates.*

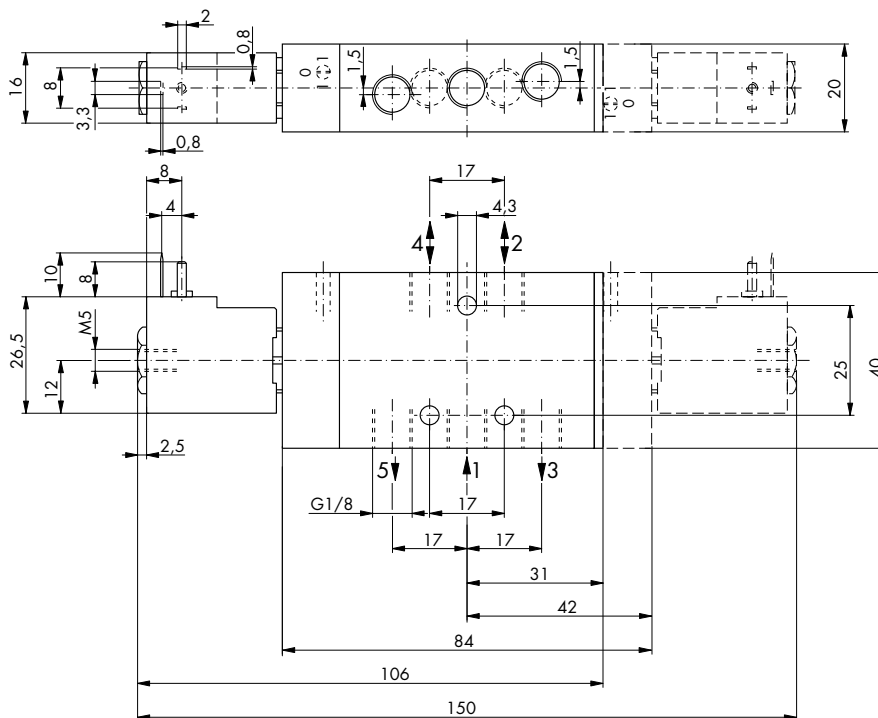
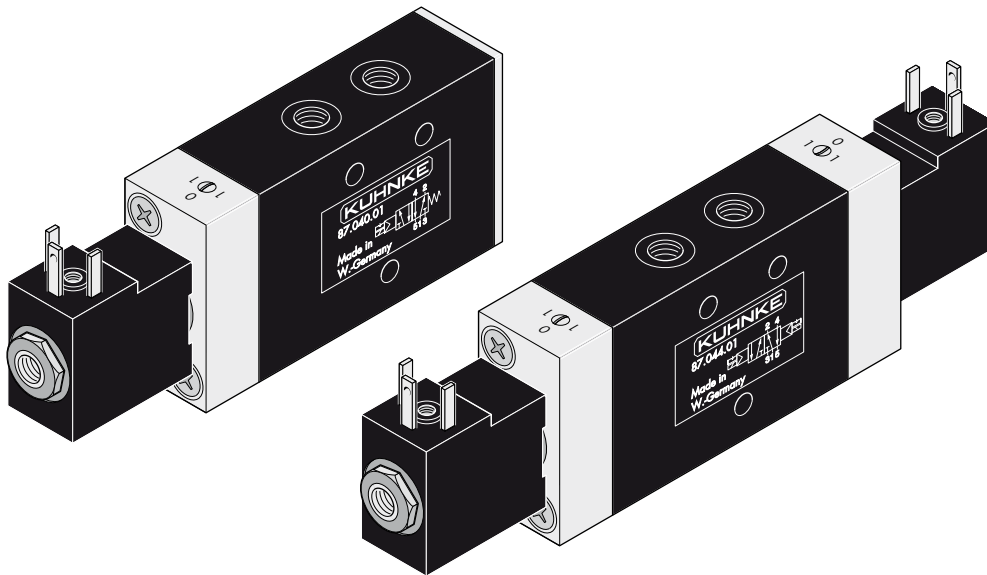
5/2-way Solenoid Steelspool Valves - G 1/8 (D_{nom} 4 mm)

SECTION E

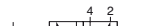
Actuation: Solenoid, manual override

Return: Spring

Coil Type: Type 64



Code	Voltage	Power	Symbol
87.040.01.01	12V DC	1.8 W	
87.040.01.02	24V DC		
87.040.02.12	24V AC	5.5 VA	
87.040.02.14	110V AC		
87.040.02.15	230V AC		

Code	Voltage	Power	Symbol
87.044.01.01	12V DC	1.8 W	
87.044.01.02	24V DC		
87.044.02.12	24V AC	5.5 VA	
87.044.02.14	110V AC		
87.044.02.15	230V AC		

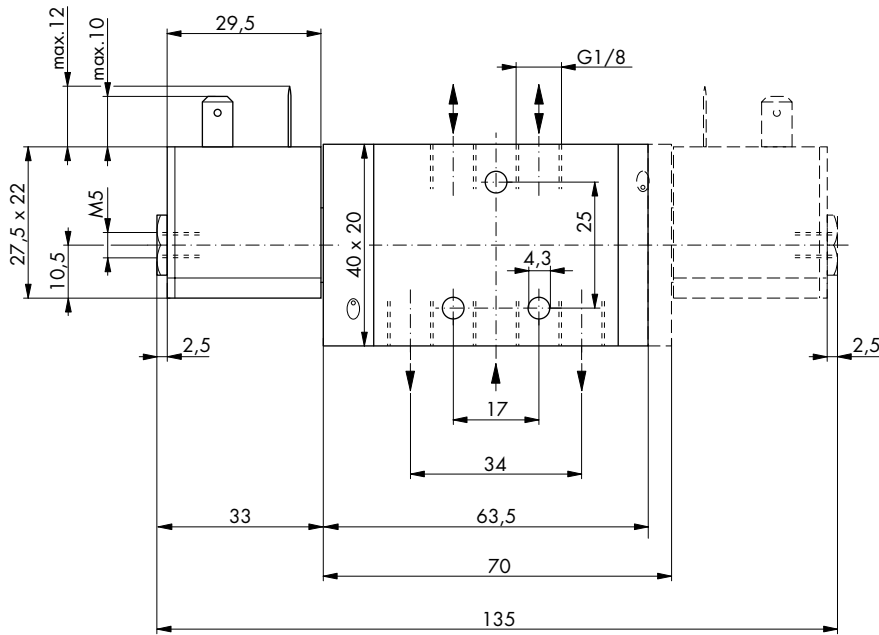
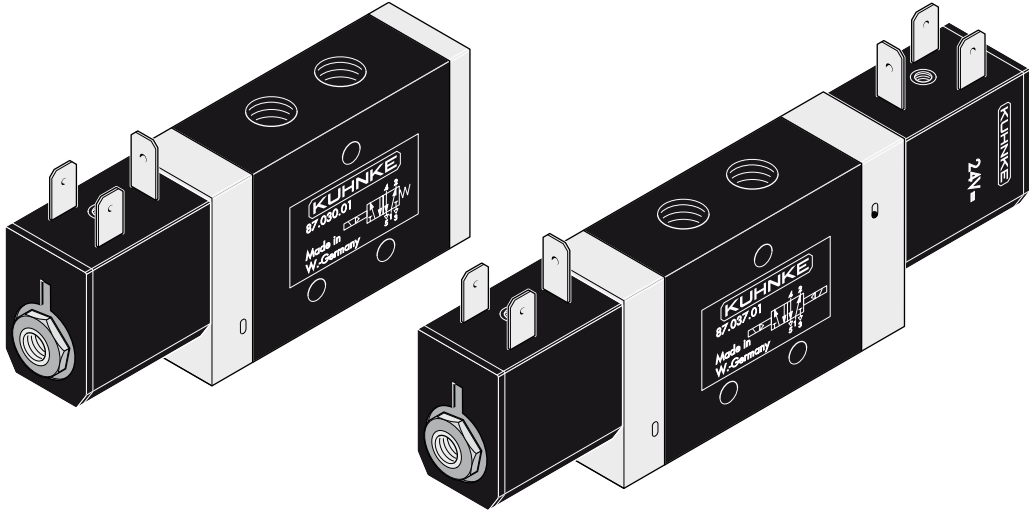
5/2-way Solenoid Steelspool Valves - G 1/8 (D_{nom} 4 mm)

SECTION E

Actuation: Solenoid

Return: Spring

Coil Type: Type 65



Code	Voltage	Power	Symbol
87.030.01.01	12V DC	4.5 W	
87.030.01.02	24V DC		
87.030.02.12	24V AC	5 VA	
87.030.02.14	110V AC		
87.030.02.15	230V AC		

Code	Voltage	Power	Symbol
87.037.01.01	12V DC	4.5 W	
87.037.01.02	24V DC		
87.037.02.12	24V AC	5 VA	
87.037.02.14	110V AC		
87.037.02.15	230V AC		

MECHANICAL VALVES

General Information

Series	Section	Function	Pressure range	Pressure connection (nominal orifice)
Series 79	A	3/2-way	0 - 10 bar	M5 (2 mm)
Series 81	B	5/2-way	0 - 10 bar	M5 (2 mm)

Housing material: Aluminium alloy

Valve end cap material: Zinc alloy or Makrolon®

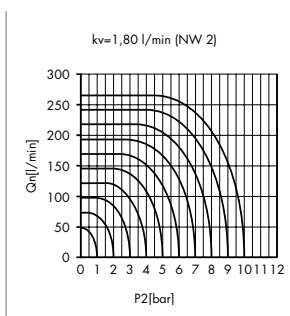
Spool and liner material: Steel, hardened, corrosion resistant

Ambient temperature range: -10 °C +70 °C (for NO valves min. 0 °C)

Mounting: Any position

Lubricant: Shell Tellus C10 or equivalent

Operating medium: 5 micron filtered, lubricated (or not) compressed air; also suitable for other media conforming to ISO-VG 10



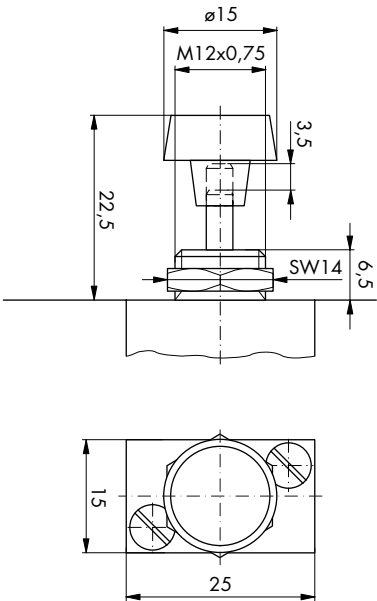
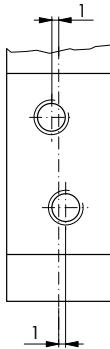
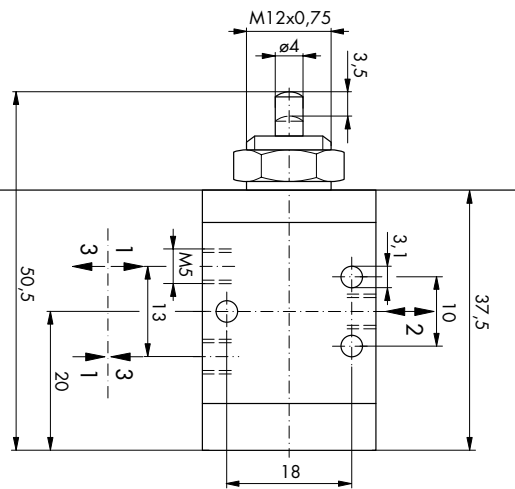
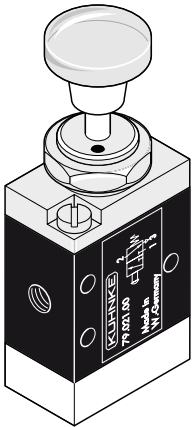
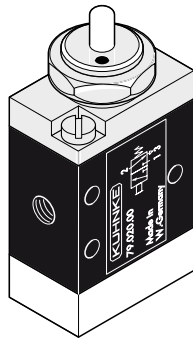
3/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION A

Actuation: Plunger, pushbutton

Actuation Force: 8 N (6 bar approx.)

Return: Spring



Code	Type	Symbol
79.020	Plunger	
79.021	Pushbutton	

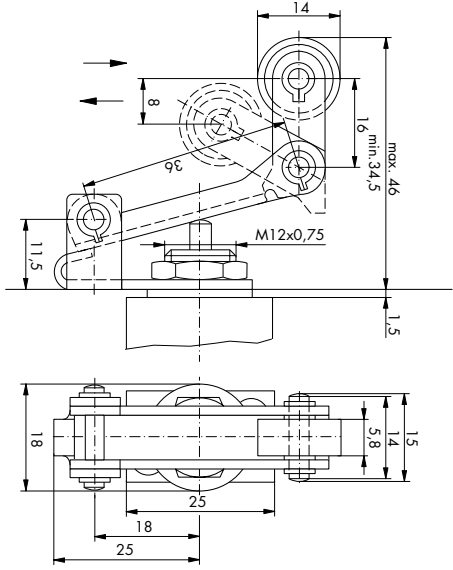
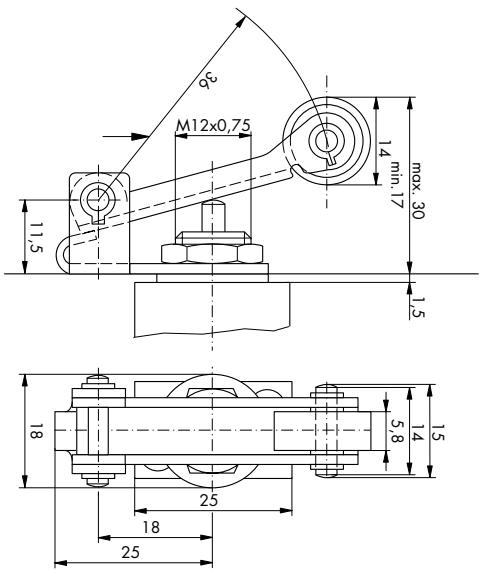
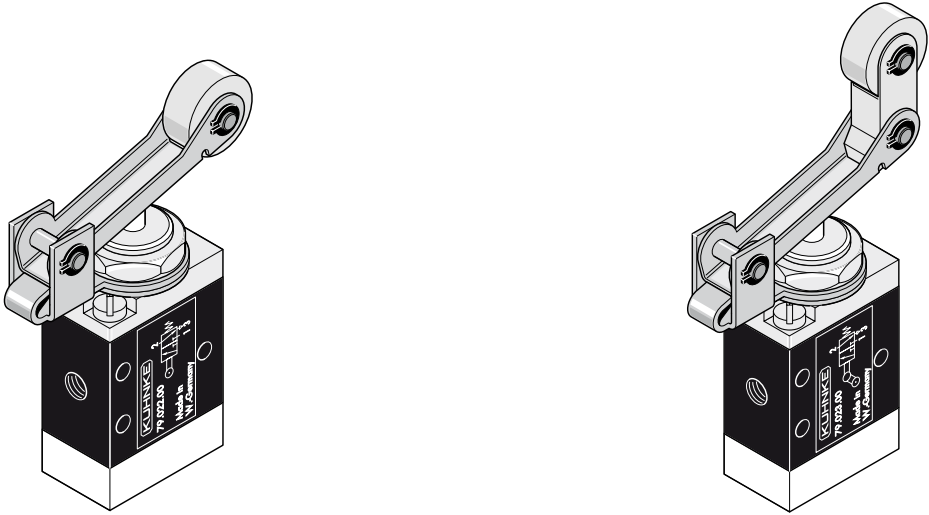
3/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION A

Actuation: Roller lever (one or two way)

Actuation Force: 4 N (6 bar approx.)

Return: Spring



Code	Type	Spare part lever	Symbol
79.022	Two way roller lever	MM4930017	
79.023	One way roller lever	MM4930016	

3/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

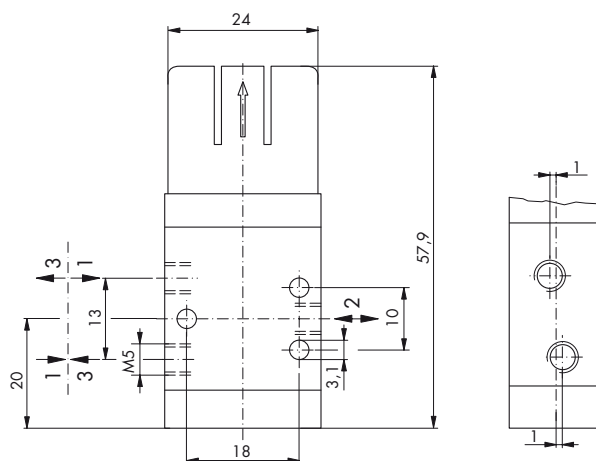
SECTION A

"Valves for control panel actuators" are fitted with a connector suitable for Moeller pushbuttons. The valve should be ordered from BSG Kuhnke Solutions and the actuator directly from Heaton-Moeller GmbH using their order number (see below). For further information visit: www.moeller.net

Actuation: Pushbutton (order separately)

Return: Spring

SERIES 79 - 81
MECHANICAL STEELSPPOOL VALVES



Code	Symbol
79.017.03	

Note: Mounting depth 90 mm + 10 mm for mounting.

Moeller Description	Moeller Series	Moeller Order No.	Symbol
Black pushbutton, flush	M 22 - D - S	216590	
Selector switch 2 positions with detent	M 22 S - WR	216856	
Black mushroom without detent	M 22 - DP - S	216712	
Emergency stop button non illuminated with detent	M 22 - PV	216876	
Key operated button, 2 positions	M 22 - WRS	216887	

Pushbutton Assembly Instruction

Client must unscrew the brass part from the thread M12 hole of the valve, then disassemble the black interface of Moeller pushbutton, assemble the valve on the back of the panel, then assemble the black interface, screw the brass part to the M12 thread of the valve in way to fix the panel and mount the choosen pushbutton on this black part.

3/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION A

Technical Data: Pressure range: 2-10 bar

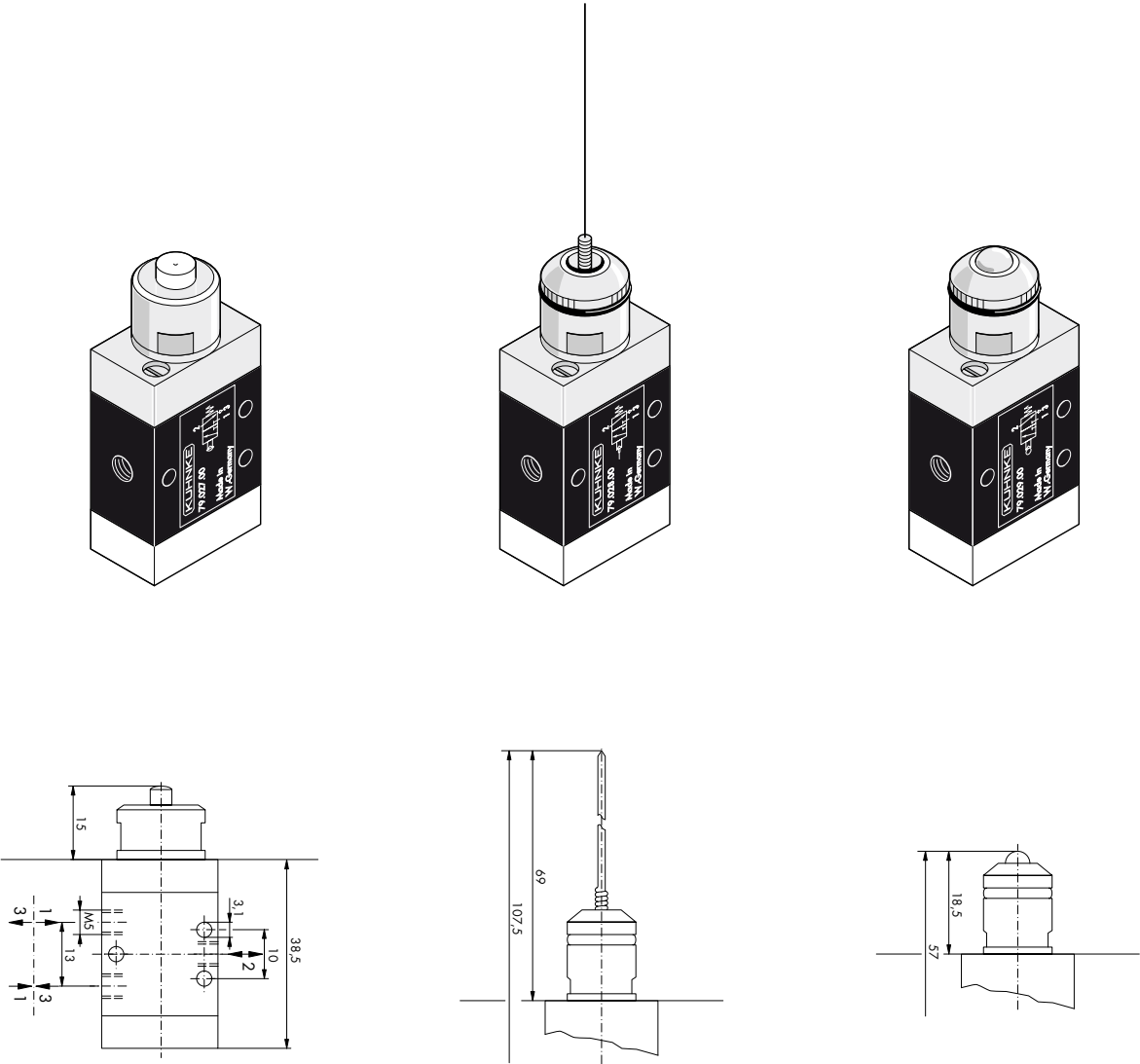
Actuation: Pushbutton

Switching time: approx. 65 ms (at 6 bar)

Air consumption: approx. 2 Nl/min (at 6 bar)

Function:

An internal connection from port 1 via a calibrated aperture bleeds to atmosphere via a nozzle. Upon actuation the nozzle is closed creating pressure within the valve changing the status of the spool.



Code	Actuation	Return	Actuation force (6 bar)	Symbol	Note
79.027	Pushbutton	Spring	approx. 0.25 N		
79.028	Deflection of a cat whisker	Spring	approx. 0.05 N		The length of whisker can be adjusted maximum 10 mm. Spare whisker: MM4920003
79.029	Ball	Spring	approx. 0.25 N		Actuation stroke approx. 1 mm

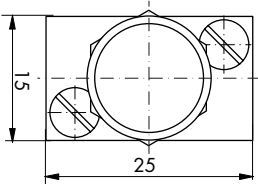
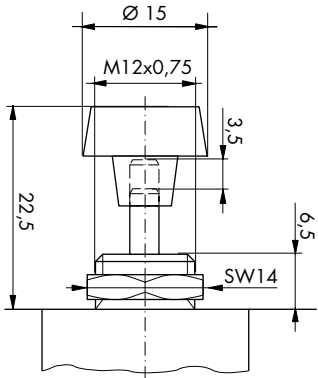
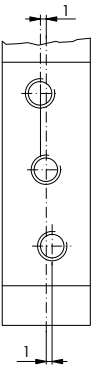
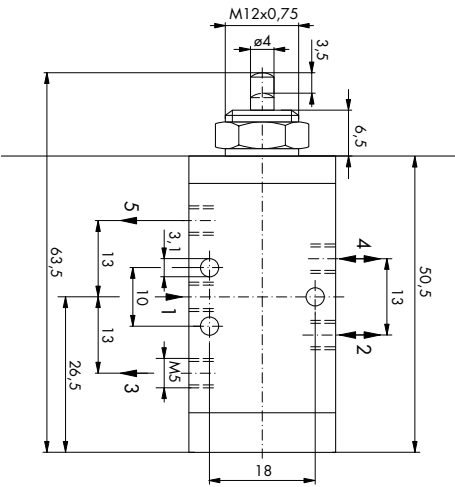
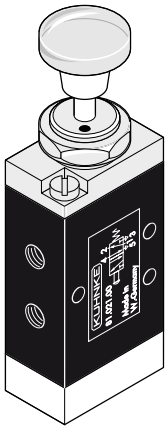
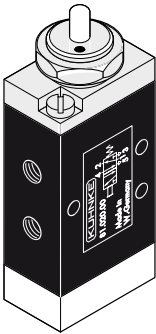
5/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION B

Actuation: Plunger, pushbutton

Actuation Force: Plunger, pushbutton 10 N (6 bar approx.)

Return: Spring



Code	Type	Symbol
81.020	Plunger	
81.021	Pushbutton	

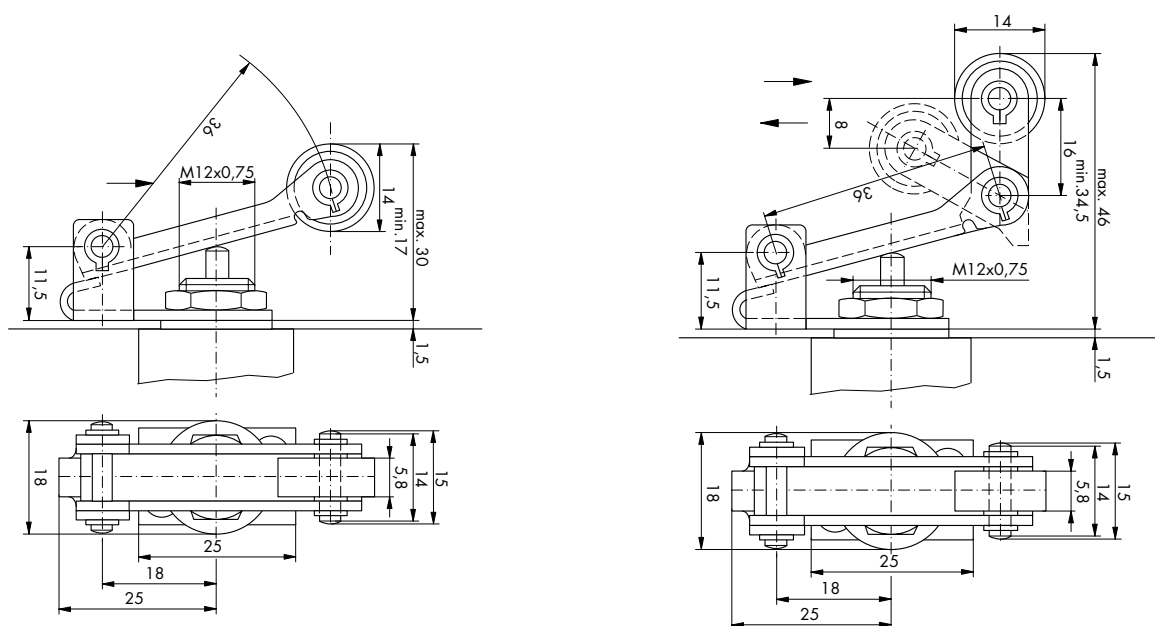
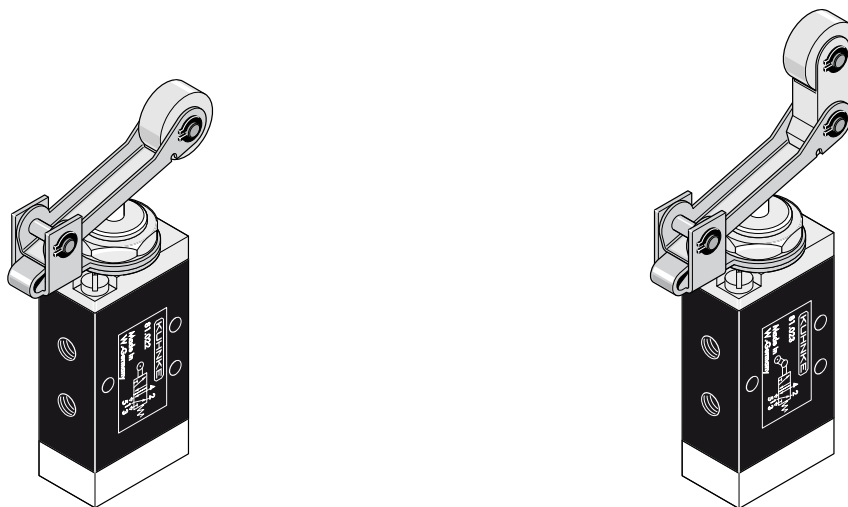
5/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

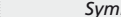
SECTION B

Actuation: Roller lever (one or two way)

Actuation Force: 5 N (6 bar approx.)

Return: Spring



Code	Type	Spare part lever	Symbol
81.022	Two way roller lever	MM4930017	
81.023	One way roller lever	MM4930016	

5/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

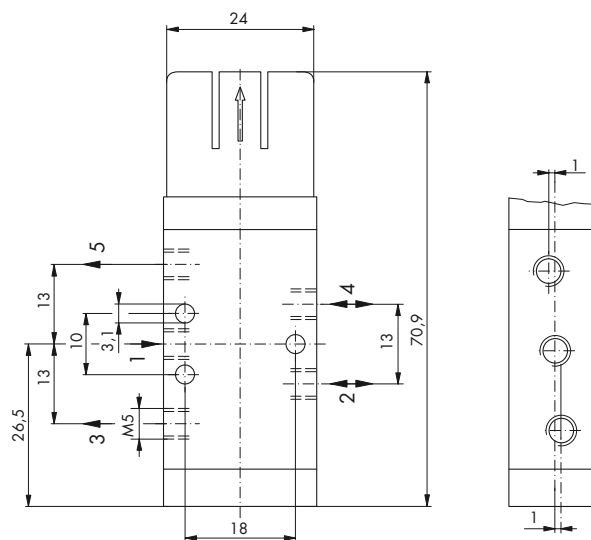
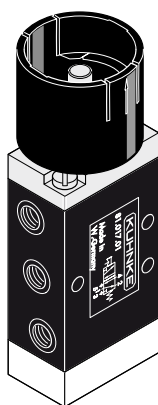
SECTION B

"Valves for control panel actuators" are fitted with a connector suitable for Moeller pushbuttons. The valve should be ordered from BSG Kuhnke Solutions and the actuator directly from Heaton-Moeller GmbH using their order number (see below). For further information visit: www.moeller.net

Actuation: Pushbutton (order separately)

Return: Spring

SERIES 79 - 81
MECHANICAL STEELSPPOOL VALVES



Code	Symbol
81.017.03	

Note: Mounting depth 90 mm + 10 mm for mounting.

Moeller Description	Moeller Series	Moeller Order No.	Symbol
Black pushbutton, flush	M 22 - D - S	216590	
Selector switch 2 positions with detent	M 22 S - WR	216856	
Black mushroom without detent	M 22 - DP - S	216712	
Emergency stop button non illuminated with detent	M 22 - PV	216876	
Key operated button, 2 positions	M 22 - WRS	216887	

Pushbutton Assembly Instruction

Client must unscrew the brass part from the thread M12 hole of the valve, then disassemble the black interface of Moeller pushbutton, assemble the valve on the back of the panel, then assemble the black interface, screw the brass part to the M12 thread of the valve in way to fix the panel and mount the chosen pushbutton on this black part.

5/2-way Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION B

Technical Data: Pressure range: 2-10 bar

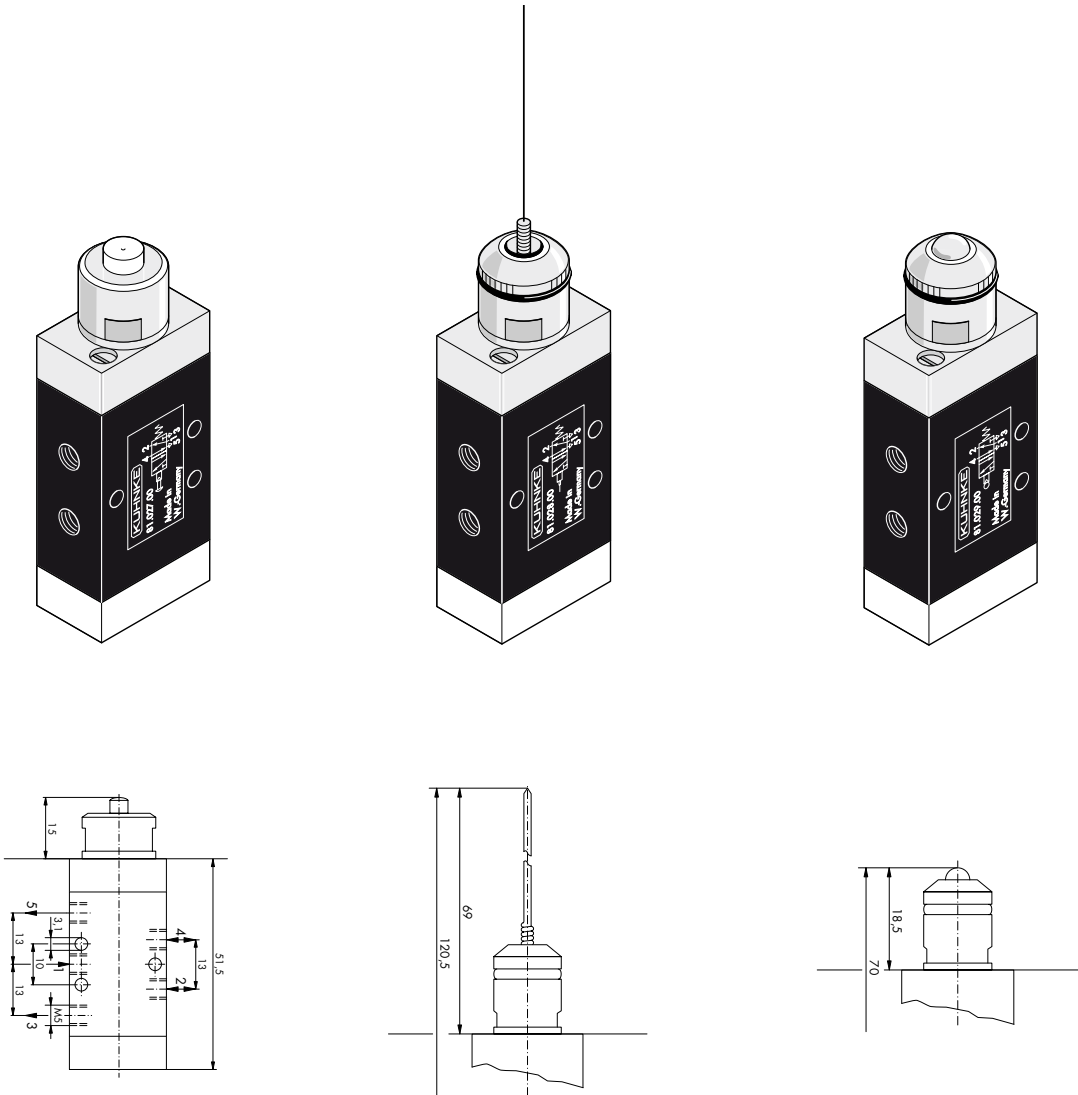
Actuation: Pushbutton

Switching time: approx. 65 ms (at 6 bar)

Air consumption: approx. 2 NI/min (at 6 bar)

Function:

An internal connection from port 1 via a calibrated aperture bleeds to atmosphere via a nozzle. Upon actuation the nozzle is closed creating pressure within the valve changing the status of the spool.



Code	Actuation	Return	Actuation force (6 bar)	Symbol	Note
81.027	Pushbutton	Spring	approx. 0.25 N		
81.028	Deflection of a cat whisker	Spring	approx. 0.05 N		The length of whisker can be adjusted maximum 10 mm. Spare whisker: MM4920003
81.029	Ball	Spring	approx. 0.25 N		Actuation stroke approx. 1 mm

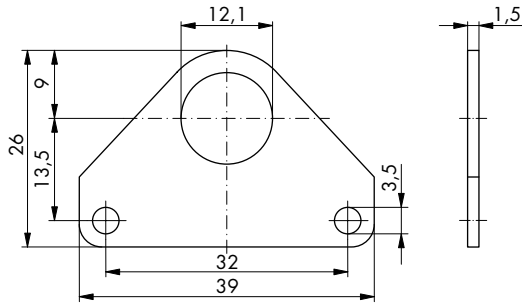
SERIES 79 - 81
MECHANICAL STEELSPPOOL VALVES

Accessories for Mechanical Valves - Mounting Accessories

SECTION A & B

A mounting flange or bracket can be used as an alternative method for mounting mechanical valves utilising the M12 x 0.75 valve thread.

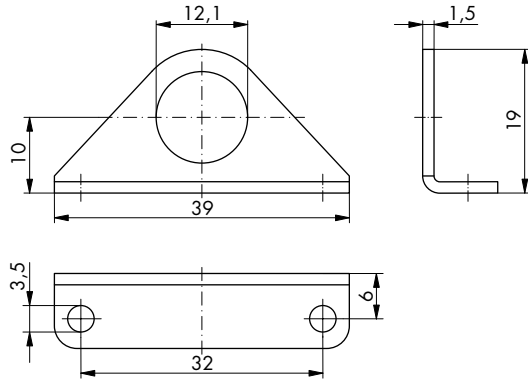
Mounting Flange



Code

43.010.1

Mounting Bracket



Code

43.010.2

PNEUMATIC VALVES

General Information

Series	Section	Function	Pressure range	Pressure connection (nominal orifice)
Series 79	A	3/2-way	0 - 10 bar	M5 (2 mm)
Series 85	B	3/2-way	0 - 10 bar	G 1/8 (4 mm)
Series 81	C	5/2-way	0 - 10 bar	M5 (2 mm)
Series 84	D	5/2-way	0 - 10 bar	subplates only (2 mm)
Series 87	E	5/2-way	0 - 10 bar	G 1/8 (4 mm)

Housing material: Aluminium alloy

Valve end cap material: Zinc alloy or Makrolon®

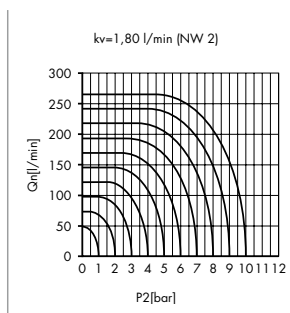
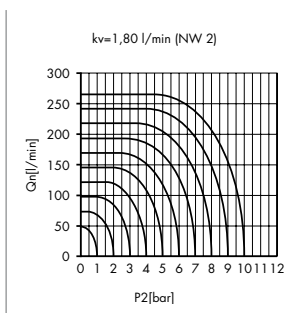
Spool and liner material: Steel, hardened, corrosion resistant

Ambient temperature range: -10 °C +70 °C (for NO valves min. 0 °C)

Mounting: Any position

Lubricant: Shell Tellus C10 or equivalent

Operating medium: 5 micron filtered, lubricated (or not) compressed air; also suitable for other media conforming to ISO-VG 10

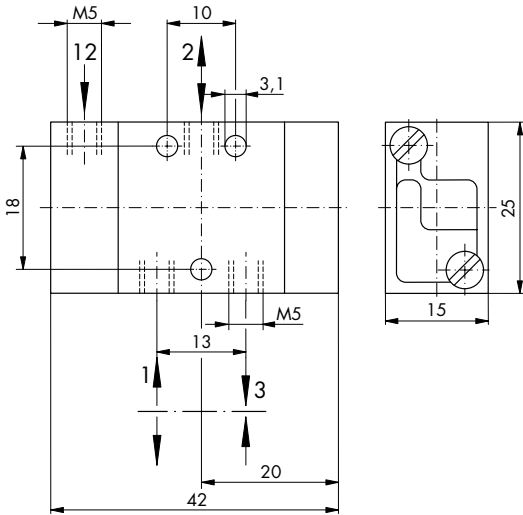
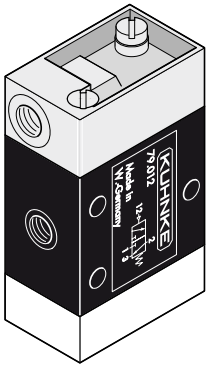


3/2-way Pneumatic Steelpool Valves - M5 (D_{nom} 2 mm)

SECTION A

Actuation: Pressure at 12

Return: Spring



Code	Symbol
79.012	

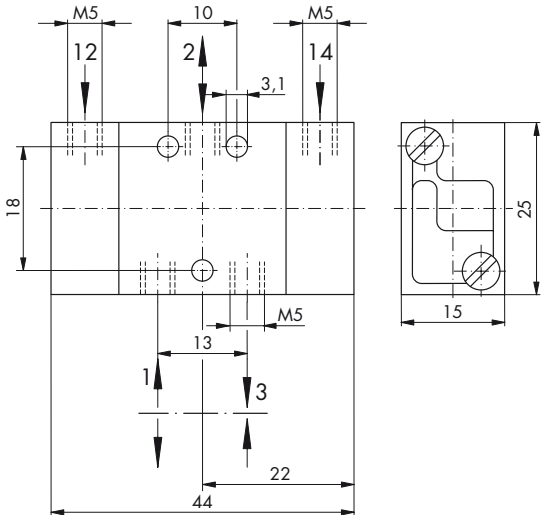
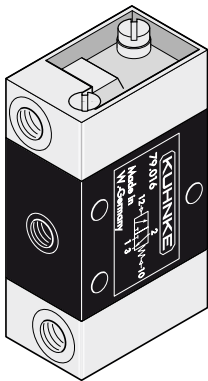
3/2-way Pneumatic Steelpool Valves - M5 (D_{nom} 2 mm)

SECTION A

Actuation: Pressure at 10 and 12

Return: Action by spring when pressure at 10 and 12 are the same

Min. control pressure: 2 bar



Code	Symbol
79.016	

3/2-way Air Bleed Operated Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION A

Switching time at 6 bar: Actuation time depends on volume of tubing

Pressure range: 2 - 10 bar

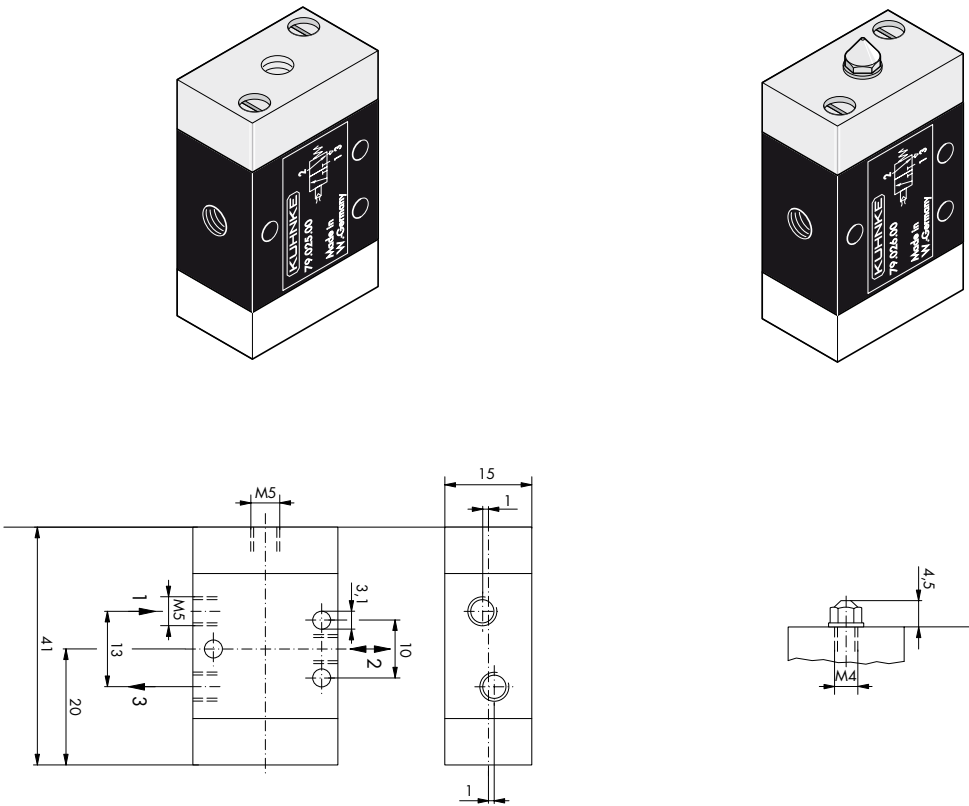
Actuation: Via nozzle with hose, via fixed nozzle

Return: Spring

Air consumption at 6 bar: Approx. 2 NI/min (0 °C 1013 mbar)

Function:

An internal connection from port 1 via a calibrated aperture bleeds to atmosphere via a nozzle. Upon actuation the nozzle is closed creating pressure within the valve changing the status of the spool.



Code	Actuation	Symbol
79.025 *	Nozzle with hose	
79.026	Fixed nozzle	

* The necessary accessories are 1 tube nipple, 1 nozzle, 1 hose 4x1x500 length, code 43.138.

3/2-way Pneumatic Steelpool Valves - M5 (D_{nom} 2 mm)

SECTION A

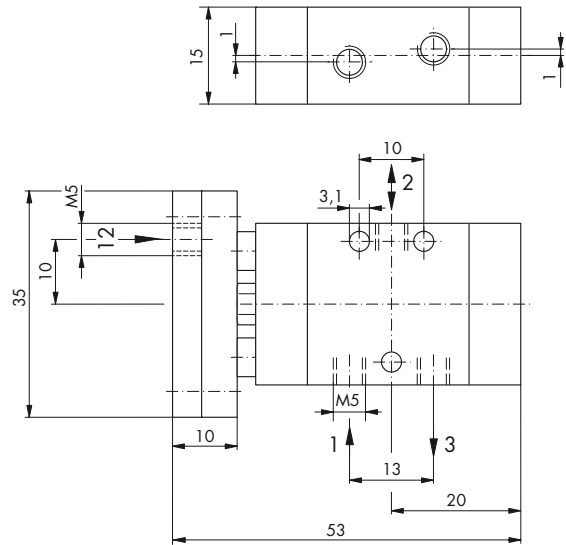
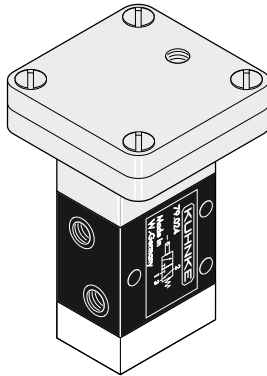
Valve type: Step-up relay (amplifier)

Pressure range: 2 - 10 bar

Return: Spring

Control pressure: 5 - 100 mbar

Air consumption: Approx. 2 Nl/min (0° C, 1013 mbar)



Code	Symbol
79.024	

3/2-way Pulse Shaper Steelpool Valves - M5 (D_{nom} 2 mm)

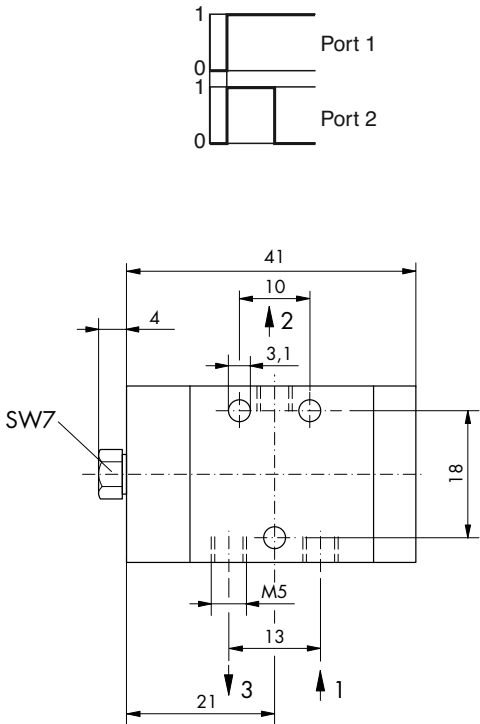
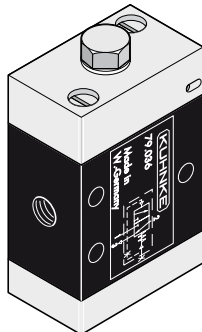
SECTION A

The pulse shaper converts one continuous input pulse into a short one. Used for example with constant pulses. The pulse can be lengthened by connecting an additional volume to 12.

Pressure range: 3 - 10 bar

Function: Input signal at 1
Output signal at 2

Pulse length: Approx. 80 - 140 ms at 8 bar (without added volume)



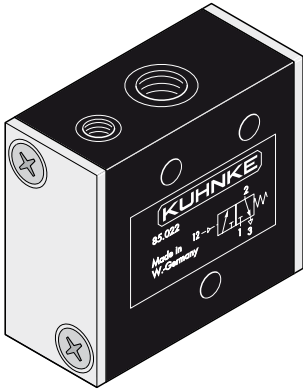
Code	Symbol
79.036	

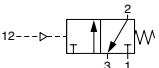
3/2-way Pneumatic Steelspool Valves - G 1/8 (D_{nom} 4 mm)

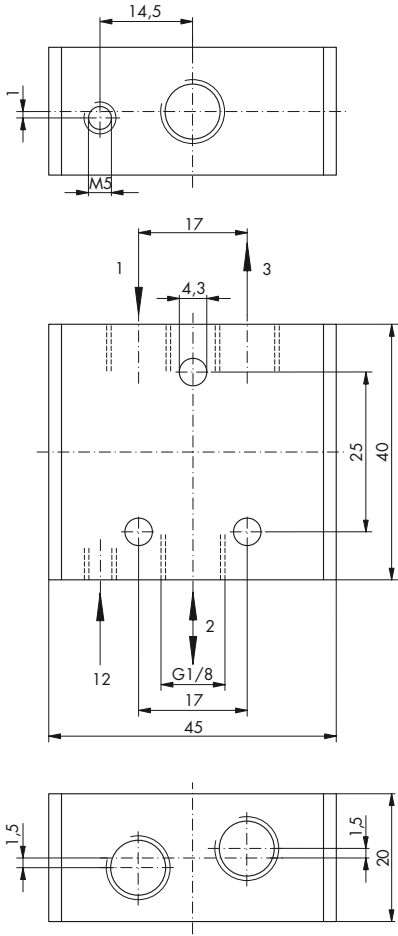
SECTION B

Actuation: Pressure at 12

Return: Spring



Code	Symbol
85.022	



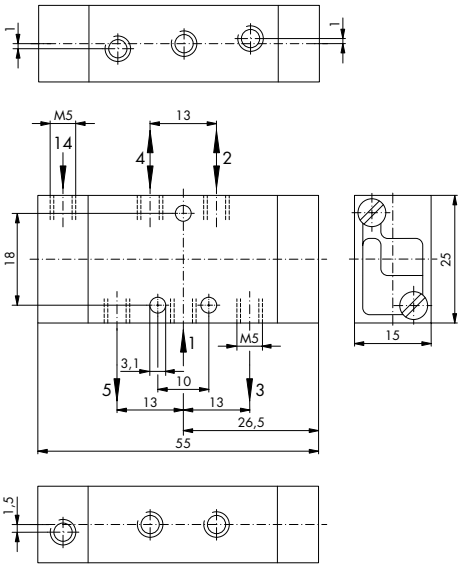
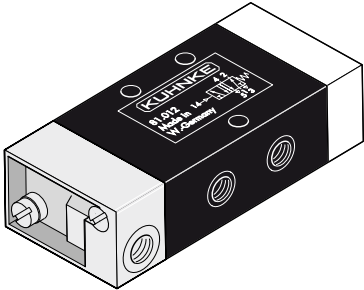
5/2-way Pneumatic Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION C

Actuation: Pressure at 14

Return: Spring

Min. control pressure: 2 bar



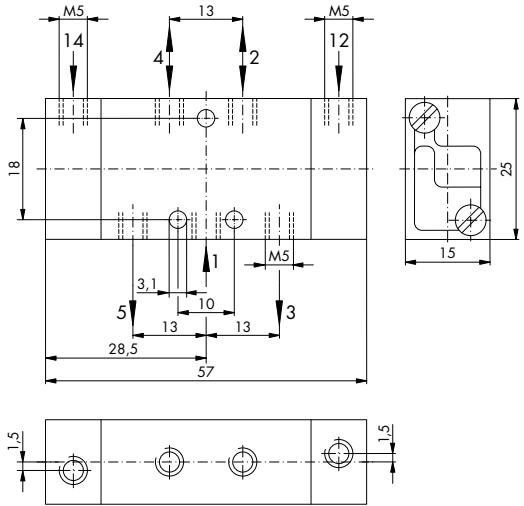
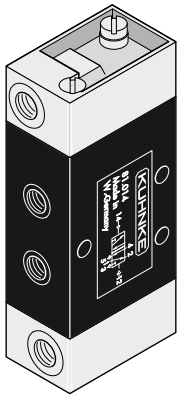
Code	Symbol
81.012	

5/2-way Pneumatic Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION C

Actuation: Pressure at 14

Min. control pressure: 2 bar



Code	Return	Symbol
81.014 *	Pressure at 12	
81.016	Actuation by spring when pressure at 14 and 12 are the same	

*With mechanical detent.
It is strictly prohibited to remove the detent
as uncontrollable switching will occur.

5/2-way Pneumatic Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION C

Switching time at 6 bar: Actuation time depends on volume of tubing

Pressure range: 2 - 10 bar

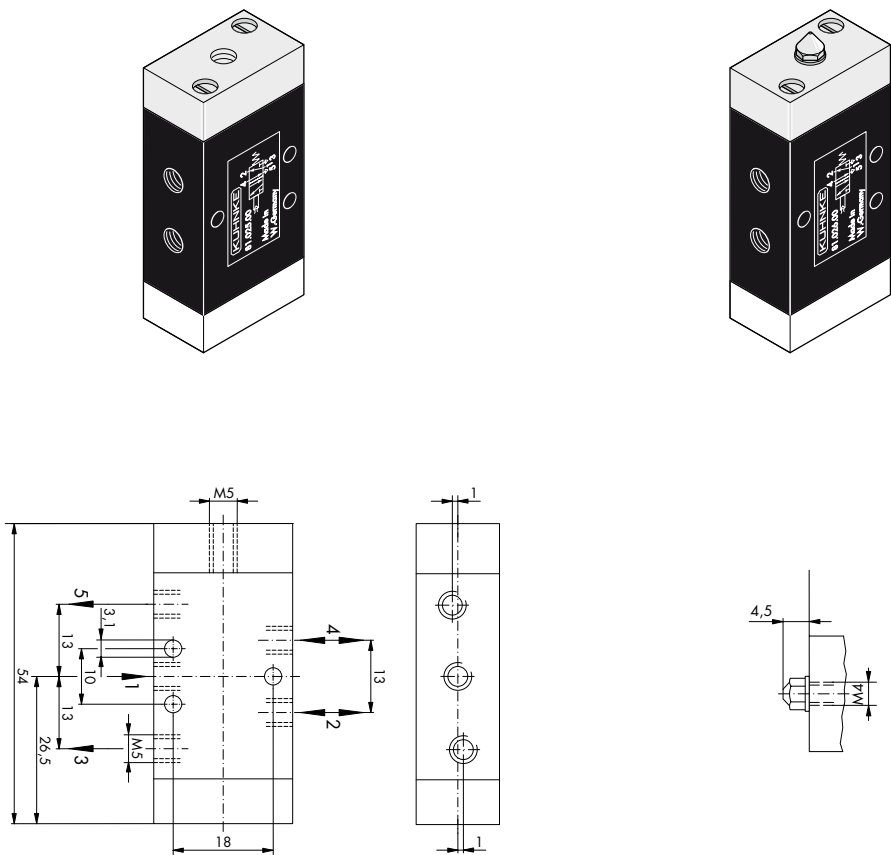
Return: Spring

Actuation: Via nozzle with hose, via fixed nozzle

Air consumption at 6 bar: Approx. 2 NI/min (0 °C 1013 mbar)

Function:

An internal connection from port 1 via a calibrated aperture bleeds to atmosphere via a nozzle. Upon actuation the nozzle is closed creating pressure within the valve changing the status of the spool.



Code	Actuation	Symbol
81.025 *	Nozzle with hose	
81.026	Fixed nozzle	

* The necessary accessories are 1 tube nipple, 1 nozzle, 1 hose 4x1x500 length, code 43.138.

5/2-way Pneumatic Steelspool Valves - M5 (D_{nom} 2 mm)

SECTION C

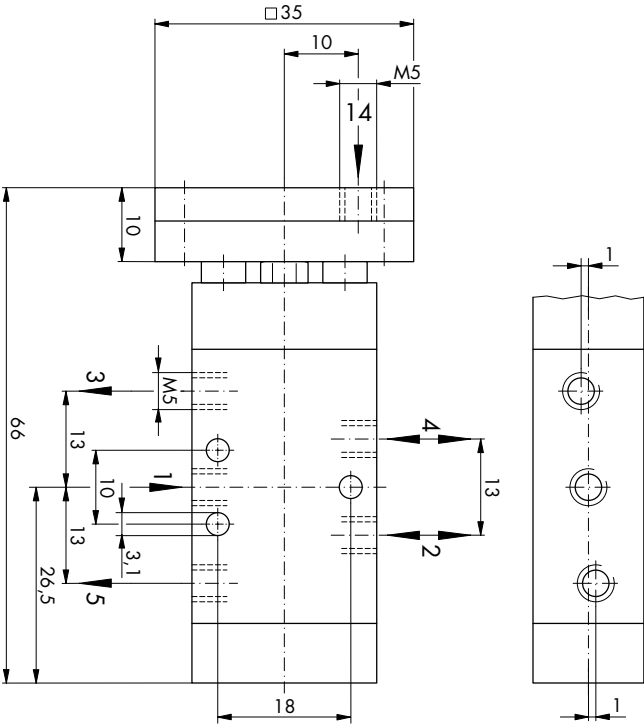
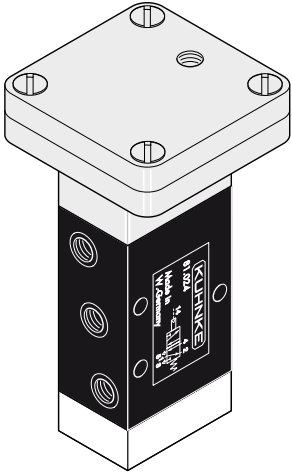
Valve type: Step-up relay (amplifier)

Pressure range: 2 - 10 bar

Return: Spring

Control pressure: 5 - 100 mbar

Air consumption: Approx. 2 Nl/min (0° C, 1013 mbar)



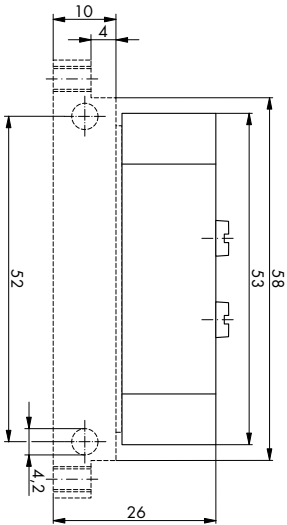
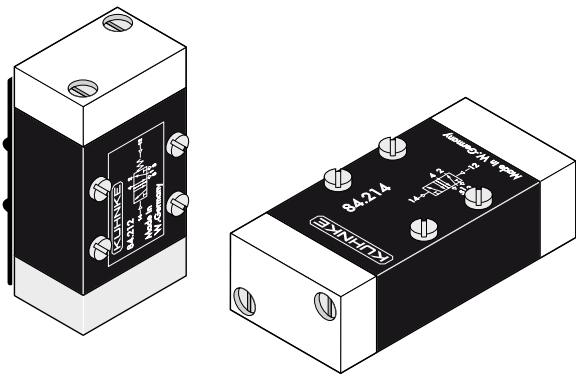
Code	Symbol
81.024	

5/2-way Pneumatic Steelspool Valves - Subplates (D_{nom} 2 mm)

SECTION D

Actuation: Pressure at 14

Min. control pressure: 2 bar



Code	Return	Symbol
84.212	Spring	
84.212	Actuation by spring when pressure at 14 and 12 are the same	
84.214 *	Pressure at 12	

*With mechanical detent.
It is strictly prohibited to remove the detent as uncontrollable switching will occur.

5/2-way Pulse Shaper Steelspool Valves - Subplates (D_{nom} 2 mm)

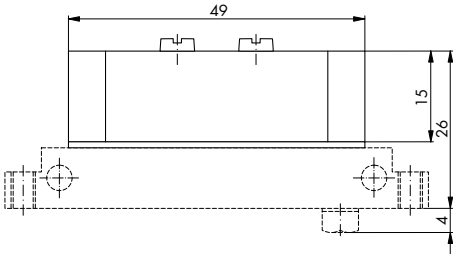
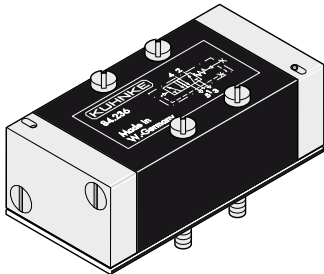
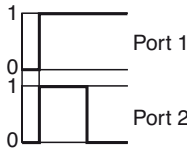
SECTION D

The pulse shaper converts one continuous input pulse into a short one.Used for example with constant pulses. The pulse can be lengthened by connecting an additional volume to 12.

Pressure range: 3 - 10 bar

Function: Input signal at 1
Output signal at 2

Pulse length: Approx. 80 - 140 ms at 8 bar (without added volume)



Code	Symbol
84.236	

Note: Approx. 80 - 140 ms at 8 bar (without added volume).

SECTION D

A 3D perspective drawing of a rectangular metal plate. The plate has a raised section on the left side. The top surface features several circular holes of different diameters, including two large ones near the center and several smaller ones. The front face has two large circular holes, one near each corner. The left face has two threaded holes. The right face has a single threaded hole. The plate is shown in a light gray color with black outlines.

SECTION D

Technical drawing of a mechanical part, showing dimensions in mm.

Top View Dimensions:

- Overall width: 64
- Overall height: 26
- Distance from left edge to first hole center: 4.4
- Distance from first hole center to second hole center: 13
- Distance from second hole center to third hole center: 28
- Distance from third hole center to fourth hole center: 13
- Distance from fourth hole center to fifth hole center: 13
- Distance from fifth hole center to right edge: 4.4
- Distance from left edge to first hole center (offset): 4.4
- Distance from first hole center to second hole center (offset): 13
- Distance from second hole center to third hole center (offset): 28
- Distance from third hole center to fourth hole center (offset): 13
- Distance from fourth hole center to fifth hole center (offset): 13
- Distance from fifth hole center to right edge (offset): 4.4
- Distance from left edge to first hole center (offset): 4.4
- Distance from first hole center to second hole center (offset): 13
- Distance from second hole center to third hole center (offset): 28
- Distance from third hole center to fourth hole center (offset): 13
- Distance from fourth hole center to fifth hole center (offset): 13
- Distance from fifth hole center to right edge (offset): 4.4

Side View Dimensions:

- Overall width: 70
- Overall height: 19
- Distance from left edge to first hole center: 6
- Distance from first hole center to second hole center: 58
- Distance from second hole center to third hole center: 52
- Distance from third hole center to fourth hole center: 52
- Distance from fourth hole center to fifth hole center: 58
- Distance from fifth hole center to right edge: 6
- Distance from left edge to first hole center (offset): 6
- Distance from first hole center to second hole center (offset): 58
- Distance from second hole center to third hole center (offset): 52
- Distance from third hole center to fourth hole center (offset): 52
- Distance from fourth hole center to fifth hole center (offset): 58
- Distance from fifth hole center to right edge (offset): 6

SECTION D

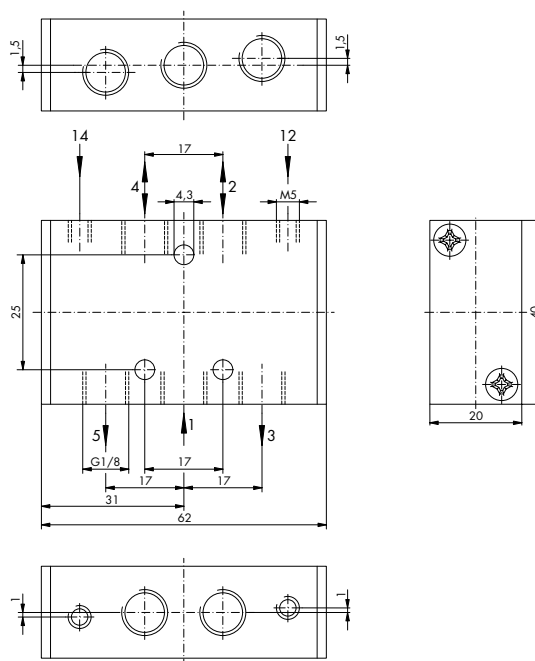
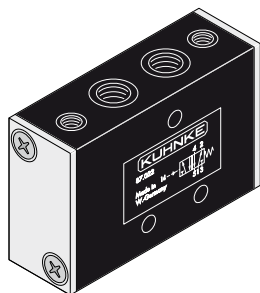
Single Subplate for Assemblies

C | 32

5/2-way Pneumatic Steelspool Valves - G 1/8 (D_{nom} 4 mm)

SECTION E

Actuation: Pressure at 14

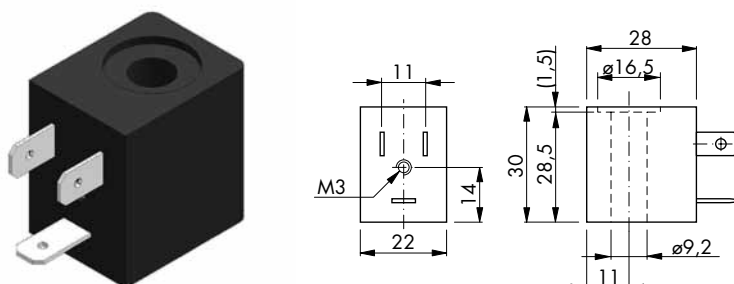


Code	Return	Symbol
87.022	Spring	
87.024	Pressure at 12	

COILS & PLUG-IN SOCKETS

Coils Type 64 - DIN C

Electrical versions:	VDE 0580, VDE 0110
Pull-in power:	Approx. 1.5 x nominal (AC)
Insulation class:	F (155 °C)
Duty cycle:	Continuous 100 %
Materials bobbin:	PA 6.6
Cover:	EP
Electrical connections:	Plug-in socket, flying lead, flat plug receptacles 2 x 0.8 DIN 43650 type C



Low Power Version

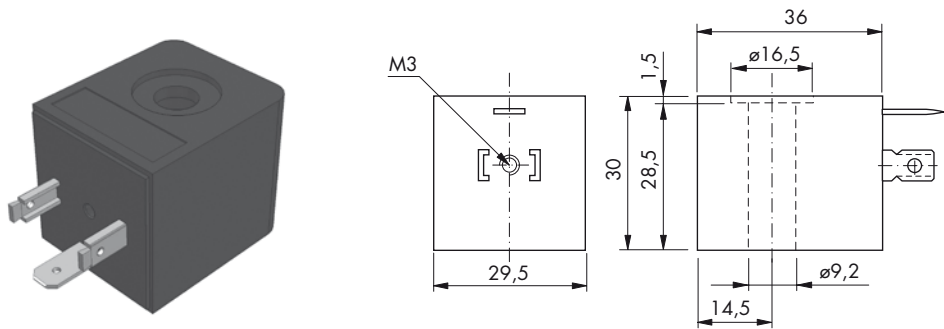
Code	Power	Voltage	Nominal resistance	Nominal current	Return power	Pull-in time	Drop-out time
JL5910008	(DC Version) approx. 1.8 W	12	93	129	0.027 W	4-10 ms	3-9 ms
JL5910001		24	403	59			
JL5910004	(AC Version) approx. 5.5 VA (50/60Hz)	24	57	200	1.4 VA	5-10 ms	3-5 ms
JL5910005		110	1440	32			
JL5910009		230	4350	22			

High Power Version

Code	Power	Voltage	Nominal resistance	Nominal current	Return power	Pull-in time	Drop-out time
JL5910024	(DC Version) approx. 4.6 W	12	31	386	0.15 W	5-10 ms	3-5 ms
JL5910022		24	124	193			

Coils Type 65 - DIN B

Electrical versions:	VDE 0580, VDE 0110
Pull-in power:	Approx. 1.5 x nominal (AC)
Insulation class:	F (120 °C)
Duty cycle:	Continuous 100 %
Materials bobbin:	PA 6.6
Cover:	EP
Electrical connections:	Plug-in socket, flat plug receptacles 6.3 x 0.8 DIN 46247 type B



Low Power Version

Code	Power	Voltage	Nominal resistance	Nominal current	Return power	Pull-in time	Drop-out time
JL5910013	(DC Version) approx. 1.5 W	12	93	129	0.027 W	10-14 ms	8-12 ms
JL5910002		24	403	59			
JL5910006	(AC Version) approx. 5 VA (50/60Hz)	24	57	200	1.4 VA	4-11 ms	5-10 ms
JL5910015		110	1036	50			
JL5910007		230	4950	22			

High Power Version

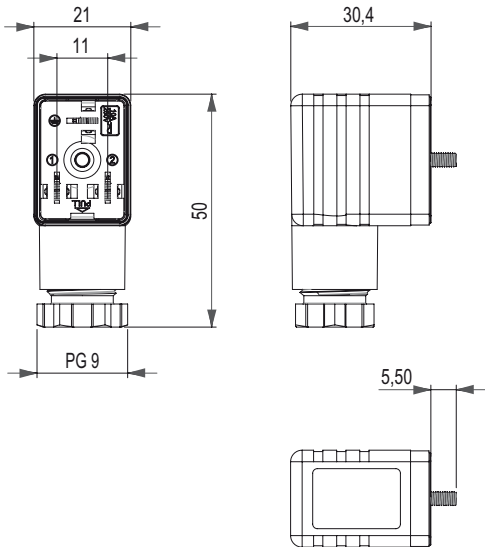
Code	Power	Voltage	Nominal resistance	Nominal current	Return power	Pull-in time	Drop-out time
JL5910018	(DC Version) approx. 4.5 W	12	37	350	0.15 W	10-15 ms	3-5 ms
JL5910003		24	117	205			

Plug-in Socket - DIN 43650 Type B

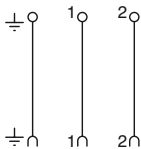
Nominal Voltage AC/DC: 250V AC/DC
Nominal current: 10 A
Contact resistance: <= 5 mΩ
Wire cross section: max 1.5 mm² (AWG 16)

Casing: PA6 GF
LED: none
No. of poles: 2+ground (earth position H12)
Cable screw connection: Pg 9

Protection: IP 65 (if correctly assembled)
Gasket: flat
Colour: black
Ambient temperature: from -40 °C to +100 °C



Code	Voltage
PBP.00.N000	Up to 250V

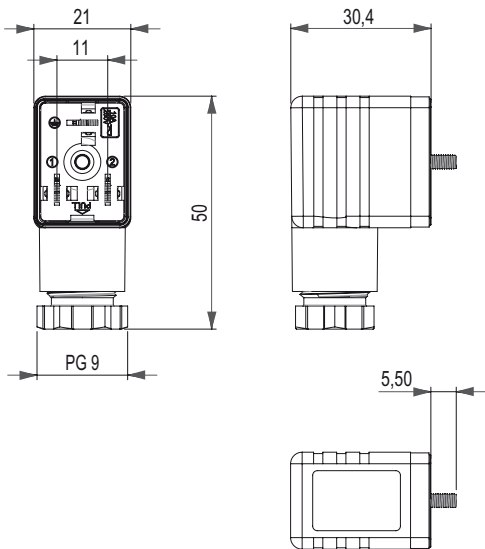


Plug-in Socket - DIN 43650 Type B (LED)

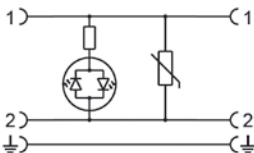
Nominal Voltage AC/DC: see order code
Nominal current: 4 A
Contact resistance: <= 5 mΩ
Wire cross section: max 1.5 mm²

Casing: PA12
LED: yellow
No. of poles: 2+ground (earth position H12)
Cable screw connection: Pg 9

Protection: IP 65 (if correctly assembled)
Gasket: flat
Colour: transparent
Ambient temperature: from -20 °C to +80 °C



Code	Voltage
PBP.00.Y024	24V
PBP.00.Y115	115V
PBP.00.Y230	230V



Plug-in Socket - DIN 43650 Type C

Nominal Voltage AC/DC: 250V AC/DC

Nominal current: 6 A

Contact resistance: <= 5 mΩ

Wire cross section: max 1.0 mm²

Casing: PA6 GF

LED: none

No. of poles: 2+ground (earth position H6)

Cable screw connection: Pg 7

Protection: IP 65 (if correctly assembled)

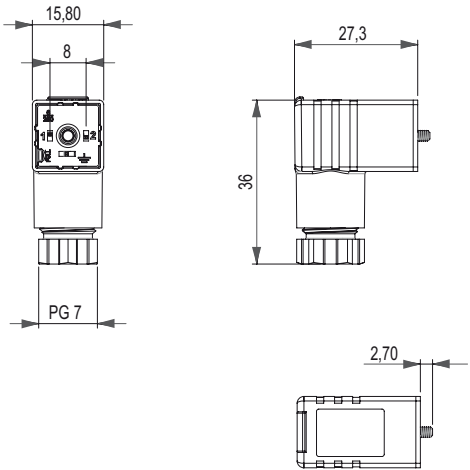
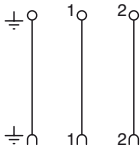
Gasket: flat

Colour: black

Ambient temperature: from -40 °C to +100 °C



Code	Voltage
PCP.00.N000	Up to 250V



Plug-in Socket - DIN 43650 Type C (LED)

Nominal Voltage AC/DC: see order code

Nominal current: 4 A

Contact resistance: <= 5 mΩ

Wire cross section: max 1.0 mm²

Casing: PA12

LED: yellow

No. of poles: 2+ground (earth position H6)

Cable screw connection: Pg 7

Protection: IP 65 (if correctly assembled)

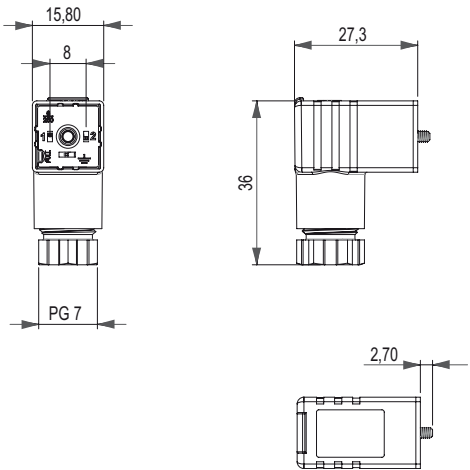
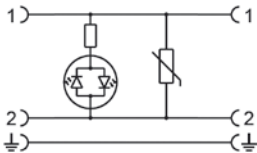
Gasket: flat

Colour: transparent

Ambient temperature: from -20 °C to +80 °C



Code	Voltage
PCP.00.Y024	24V
PCP.00.Y115	115V
PCP.00.Y230	230V



PART No. INDEX

Part No. Index

VALVE	TYPE	ID	PAGE
43.010.1	MECH	12085	C - 22
43.010.2	MECH	12086	C - 22
44.404.02	SOLE	56033	C - 4
44.404.02	SOLE	56033	C - 6
44.404.02	SOLE	56033	C - 7
44.404.03	SOLE	54534	C - 4
44.404.03	SOLE	54534	C - 6
44.404.03	SOLE	54534	C - 7
44.404.04	SOLE	56034	C - 4
44.404.04	SOLE	56034	C - 6
44.404.04	SOLE	56034	C - 7
44.404.06	SOLE	56035	C - 4
44.404.06	SOLE	56035	C - 6
44.404.06	SOLE	56035	C - 7
44.404.08	SOLE	55973	C - 4
44.404.08	SOLE	55973	C - 6
44.404.08	SOLE	55973	C - 7
79.012	PNEUM	18673	C - 24
79.016	PNEUM	25838	C - 24
79.017.03	MECH	97259	C - 16
79.020	MECH	58724	C - 14
79.021	MECH	58725	C - 14
79.022	MECH	58726	C - 15
79.023	MECH	58727	C - 15
79.024	PNEUM	18501	C - 26
79.025	PNEUM	18507	C - 25
79.026	PNEUM	18485	C - 25
79.027	MECH	18505	C - 17
79.028	MECH	18502	C - 17
79.029	MECH	18503	C - 17
79.036	PNEUM	59135	C - 26
79.040.01.01	SOLE	30889	C - 4
79.040.01.02	SOLE	18605	C - 4
79.040.02.12	SOLE	32830	C - 4
79.040.02.14	SOLE	58789	C - 4
79.040.02.15	SOLE	30012	C - 4
81.012	PNEUM	58708	C - 28
81.014	PNEUM	58709	C - 28
81.016	PNEUM	17494	C - 28
81.017.03	MECH	97257	C - 20
81.020	MECH	58711	C - 18
81.021	MECH	58712	C - 18
81.022	MECH	58713	C - 19
81.023	MECH	58714	C - 19
81.024	PNEUM	58715	C - 30
81.025	PNEUM	52716	C - 29
81.026	PNEUM	58717	C - 29
81.027	MECH	58718	C - 21
81.028	MECH	58719	C - 21
81.029	MECH	58720	C - 21
81.030.01.01	SOLE	15865	C - 7
81.030.01.02	SOLE	48765	C - 7
81.030.02.12	SOLE	59134	C - 7
81.030.02.14	SOLE	60321	C - 7
81.030.02.15	SOLE	59137	C - 7
81.034.01.01	SOLE	27337	C - 7
81.034.01.02	SOLE	58722	C - 7

VALVE	TYPE	ID	PAGE
81.034.02.12	SOLE	59133	C - 7
81.034.02.14	SOLE	-	C - 7
81.034.02.15	SOLE	59508	C - 7
81.040.01.01	SOLE	27151	C - 6
81.040.01.02	SOLE	12777	C - 6
81.040.02.12	SOLE	13352	C - 6
81.040.02.14	SOLE	95589	C - 6
81.040.02.15	SOLE	12778	C - 6
81.044.01.01	SOLE	37769	C - 6
81.044.01.02	SOLE	12799	C - 6
81.044.02.12	SOLE	13353	C - 6
81.044.02.14	SOLE	41447	C - 6
81.044.02.15	SOLE	132071	C - 6
83.450	SOLE	56873	C - 10
83.450	PNEUM	56873	C - 32
84.212	PNEUM	11372	C - 31
84.214	PNEUM	16098	C - 31
84.230.01.01	SOLE	49595	C - 9
84.230.01.02	SOLE	13501	C - 9
84.230.02.12	SOLE	16249	C - 9
84.230.02.14	SOLE	60317	C - 9
84.230.02.15	SOLE	13542	C - 9
84.234.01.01	SOLE	161894	C - 9
84.234.01.02	SOLE	15268	C - 9
84.234.02.12	SOLE	59048	C - 9
84.234.02.14	SOLE	60316	C - 9
84.234.02.15	SOLE	12474	C - 9
84.236	PNEUM	59376	C - 31
84.240.01.01	SOLE	-	C - 8
84.240.01.02	SOLE	12851	C - 8
84.240.02.12	SOLE	13354	C - 8
84.240.02.14	SOLE	52588	C - 8
84.240.02.15	SOLE	12859	C - 8
84.244.01.01	SOLE	40855	C - 8
84.244.01.02	SOLE	12860	C - 8
84.244.02.12	SOLE	13355	C - 8
84.244.02.14	SOLE	77118	C - 8
84.244.02.15	SOLE	12861	C - 8
84.402.01	SOLE	14698	C - 10
84.402.01	PNEUM	14698	C - 32
84.463	SOLE	56030	C - 10
84.463	PNEUM	56030	C - 32
84.465	SOLE	56032	C - 10
84.465	PNEUM	56032	C - 32
85.022	PNEUM	17503	C - 27
85.040.01.01	SOLE	99344	C - 5
85.040.01.02	SOLE	17517	C - 5
85.040.02.12	SOLE	31793	C - 5
85.040.02.14	SOLE	54558	C - 5
85.040.02.15	SOLE	18521	C - 5
87.022	PNEUM	11173	C - 33
87.024	PNEUM	11207	C - 33
87.030.01.01	SOLE	31653	C - 12
87.030.01.02	SOLE	12112	C - 12
87.030.02.12	SOLE	12113	C - 12
87.030.02.14	SOLE	164595	C - 12
87.030.02.15	SOLE	12825	C - 12

Part No. Index

VALVE	TYPE	ID	PAGE
87.037.01.01	SOLE	57473	C - 12
87.037.01.02	SOLE	52029	C - 12
87.037.02.12	SOLE	52017	C - 12
87.037.02.14	SOLE	-	C - 12
87.037.02.15	SOLE	52030	C - 12
87.040.01.01	SOLE	11233	C - 11
87.040.01.02	SOLE	11227	C - 11
87.040.02.12	SOLE	11244	C - 11
87.040.02.14	SOLE	11245	C - 11
87.040.02.15	SOLE	11247	C - 11
87.044.01.01	SOLE	-	C - 11
87.044.01.02	SOLE	11262	C - 11
87.044.02.12	SOLE	11268	C - 11
87.044.02.14	SOLE	11271	C - 11
87.044.02.15	SOLE	11279	C - 11
JL5910001	COILS	106117	C - 35
JL5910002	COILS	116880	C - 36
JL5910003	COILS	102718	C - 36
JL5910004	COILS	106130	C - 35

VALVE	TYPE	ID	PAGE
JL5910005	COILS	106121	C - 35
JL5910006	COILS	116882	C - 36
JL5910007	COILS	116883	C - 36
JL5910008	COILS	106120	C - 35
JL5910009	COILS	106119	C - 35
JL5910013	COILS	116885	C - 36
JL5910015	COILS	116887	C - 36
JL5910018	COILS	116889	C - 36
JL5910022	COILS	106115	C - 35
JL5910024	COILS	106118	C - 35
PBP.00.N000	PLUG	175173	C - 37
PBP.00.Y024	PLUG	175172	C - 37
PBP.00.Y115	PLUG	175171	C - 37
PBP.00.Y230	PLUG	175170	C - 37
PCP.00.N000	PLUG	175165	C - 38
PCP.00.Y024	PLUG	175164	C - 38
PCP.00.Y115	PLUG	175163	C - 38
PCP.00.Y230	PLUG	175162	C - 38



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