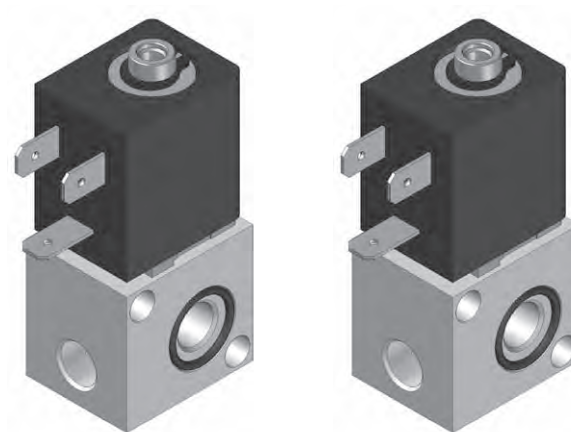


MODULAR VALVES

General Information



Our 78 series 3/2 valves can be assembled into blocks of up to 10 pieces. These are designed for arduous duties, typically in industrial

automotive applications. Features include high shock resistance, extended operating temperatures, and wide voltage tolerances.

Technical Data

Version	Type	Pressure range	Pressure connection	Flowrate Q	Nominal orifice	Air exhaust port
Directional Valves	3/2-way NC	6 - 10 bar	G 1/8	70 Nl/min	1.2 mm	M5

Body material: Aluminum alloy - anodised

Sealing element: NBR, Viton®

Shock / vibration: 25 G all 3 axis/125 Hz random, test in accordance with EN 60068-2

Protection classification: IP 65 (with plug-in socket and occupied pneumatic connections)

Mounting: 2 x M4 thread on bottom side

Operating medium: 5 micron filtered, lubricated or dry compressed air; also suitable for other media conforming to ISO-VG 10

Ambient temperature range: From -40 °C up to +50 °C

Voltage options: 24 VDC ± 30%

Order Code

Order specifications		78.	A	1.	M02
Series No.		78			
Version					
Actuation	3/2 NC G1/8 24VDC 4.5W, NW 1.2, NBR		A		
	3/2 NC G1/8 24VDC 4.5W, NW 1.2, Viton®		B		
Modularity	without manual override			1	
	with manual override			2	
Modularity	Single valve				-
	2 valves				M02
	3 valves				M03
	4 valves				M04
	5 valves				M05
	6 valves				M06
	7 valves				M07
	8 valves				M08
	9 valves				M09
	10 valves				M10

Special versions		KB.	A	1.	zzzz*
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* zzzz = project number (assigned by factory)

Examples

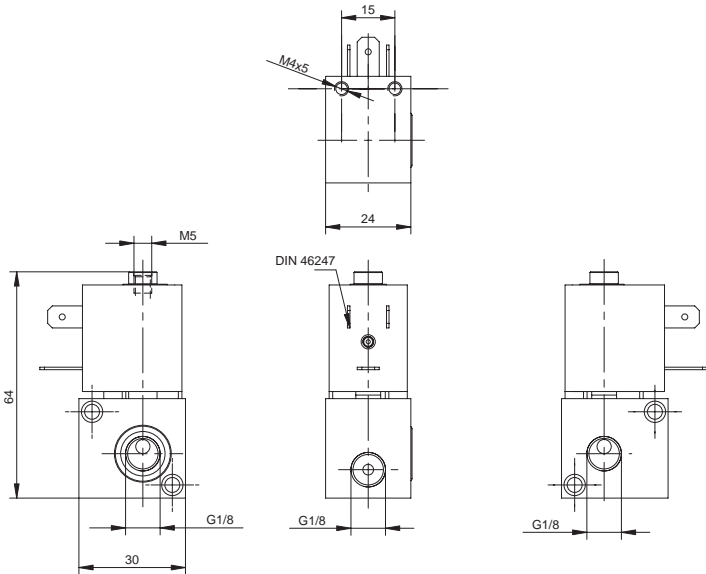
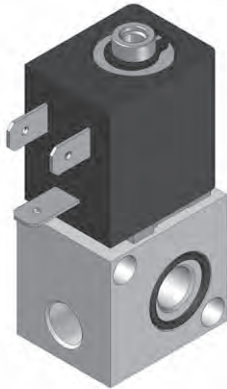
Standard single valve, without manual override	78.A1
Block of 6 valves pre-assembled, without manual override	78.A1.M06
Viton® sealed single valve with manual override	78.B2
Block of 9 valves, Viton® sealed, with manual override	78.B2.M09
Special block of 7 standard valves without manual override	SP.778.xxxx

5/2-way Poppet Valves - G 1/8 (D_{nom} 6 mm)

Actuation: Solenoid, manual override

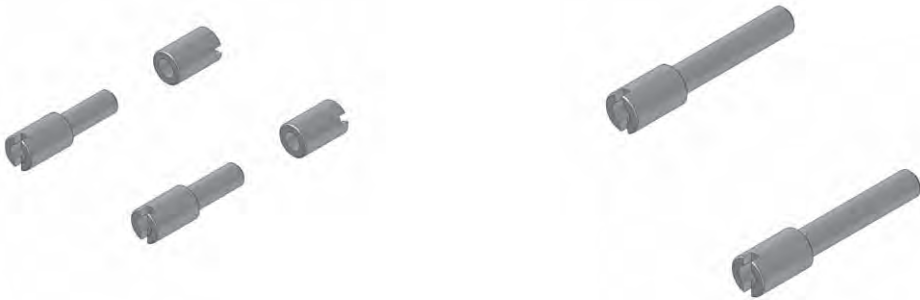
Return: Spring

Coil Type: JL4100002



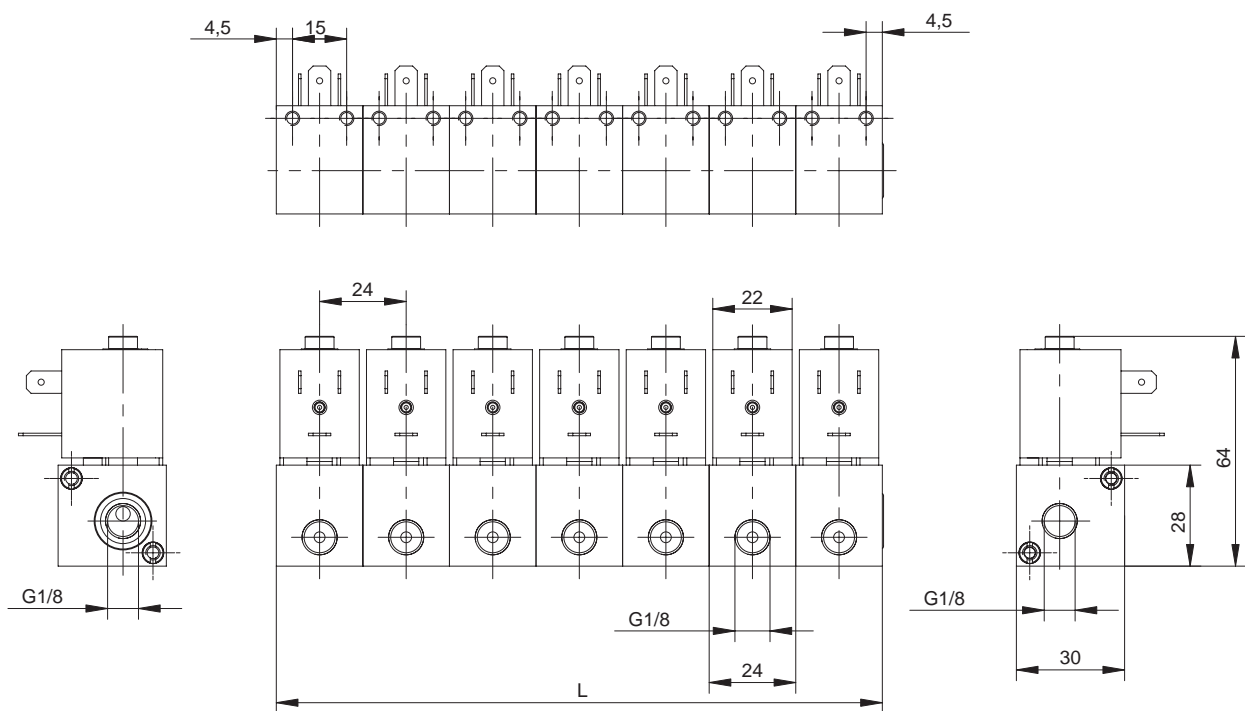
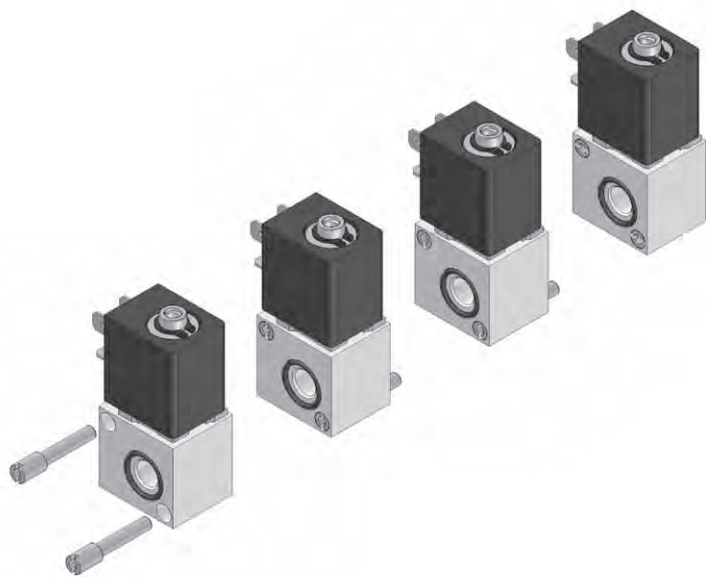
Code	A	Symbol
78.A1	3/2 NC	
78.A2	3/2 NC	

KIT for Block Assembly



Product	Content	Code
Screw kit for assembly of first valve place	2 short screws + 2 inserts	78.KIT.01
Screw kit for adding a valve place	2 long screws	78.KIT.02

Valve Block - Dimensional Drawing



Number of Places

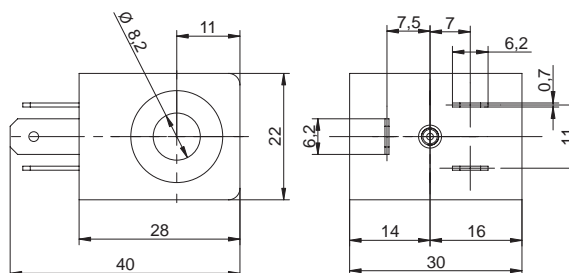
Nr	2	3	4	5	6	7	8	9	10
L	48	72	96	120	144	168	192	216	240

COILS & PLUG-IN SOCKETS

Coil - Type DIN B

This coil is only used with 78 series valves and is supplied pre-mounted.

Electrical standards:	EN 60335-1, EN 60730-1
Insulation class:	F (155 °C)
Duty cycle:	Continuous 100%
Copper enamelled wire:	Temperature class H (200 °C)
Bobbin materials:	PA 6.6
Cover:	Die-cast material PA 6.6
Electrical connections:	3 spade connectors (6.3 x 0.8 DIN 46247) for plug in socket (order separately)



Code	Power	Voltage	Voltage tolerance	Switching frequency	Return power	Pull-in time	Drop-out time
JL4100002	(DC Version) approx. 4.6 W	24	-30% +30%	1 Hz	0.1 W	approx. 9 - 12 ms	approx. 9 - 12 ms

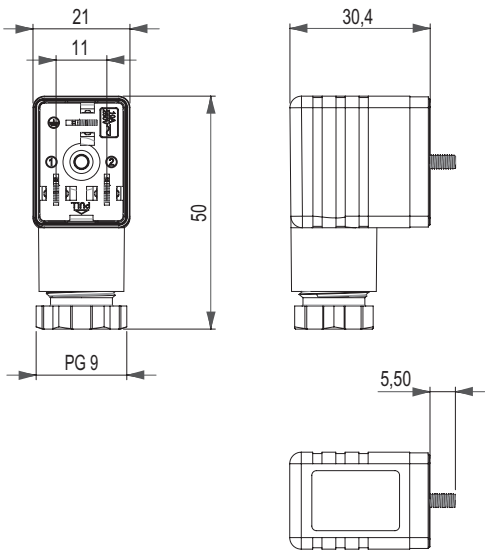
Note: Coils are pre-mounted on each valve.

Plug-in Socket - DIN 43650 Type B

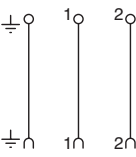
Nominal Voltage AC/DC: 250V AC/DC
Nominal current: 10 A
Contact resistance: $\leq 5 \text{ m}\Omega$
Wire cross section: max 1.5 mm² (AWG 16)

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

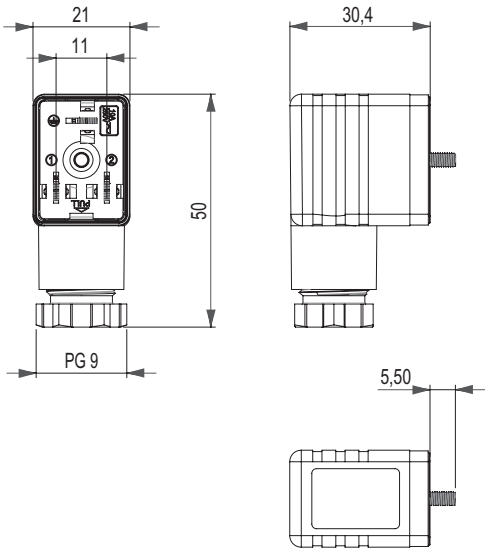


Plug-in Socket - DIN 43650 Type B (LED)

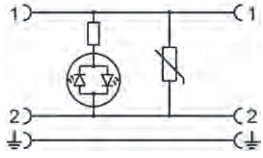
Nominal Voltage AC/DC: see order code
Nominal current: 4 A
Contact resistance: $\leq 5 \text{ m}\Omega$
Wire cross section: max 1.5 mm²

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





BSG Kuhnke Solutions S.r.l.

Via R. Colpi, 38
35010 Limena (PD) - Italy

Tel. +39 049 86 57 711
Fax +39 049 88 41 571

sales@bsgkuhnkesolutions.com
www.bsgkuhnkesolutions.com