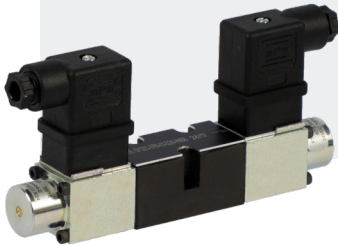
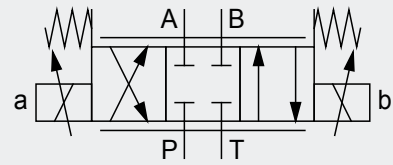


Proportional Directional Valve W42E-5PS03 and W43E-5PS03



Directly operated,
Electrically actuated
Max. operating pressure 315 bar
Rated flow rate up to 5 l/min
Connection NG 3



010111_W42E-5PS03
12.2025

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Characteristics

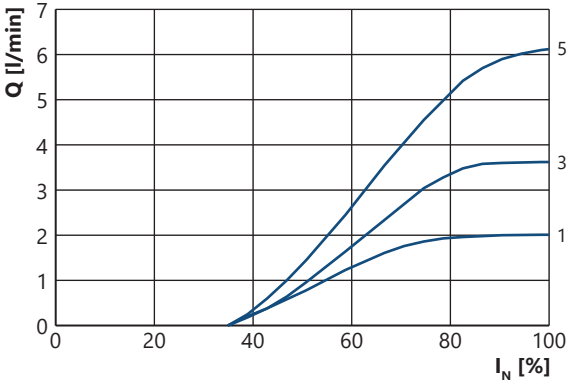
- Proportional directional valve in spool design
- Compact design
- Available as a 2- or 3-way version
- Control the direction and quantity of a volume flow
- Low leakage
- Spring centered spool
- Maintenance-free
- Various rated flow rate ranges

Technical data

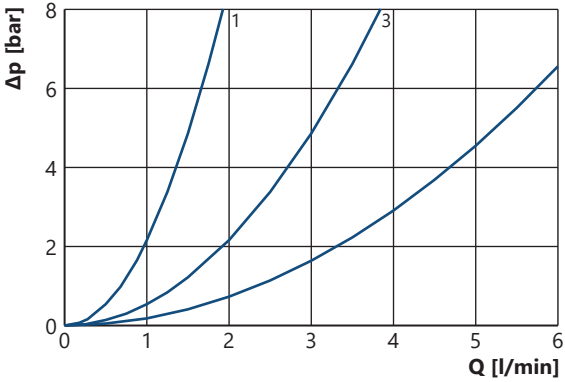
Hydraulic characteristics	Max operating pressure:	315 bar
	Connection T:	75 bar
	Total pressure A, B:	350 bar
	Rated flow rate:	1, 3, 5 l/min at $\Delta p = 7$ bar
	Flow direction:	See the symbols in the type code
	Operating fluids:	Mineral oils according to DIN 51524, others on request
	Viscosity range:	10 - 350 cSt
	Filtration:	Oil purity according to ISO 4406 (1999) 18/16/13, filter with $\beta_{5(c)} > 200$
	Repeatability:	< 3 % with optimized PMW-signal*
	Hysteresis:	< 5 % with optimized PMW-signal*
	* at 20 % to 100 % of the rated solenoid current	
Mechanical characteristics	Design:	Spool type, directly operated
	Size:	NG 3 (company standard)
	Fluid temperature:	-20 °C to +80 °C
	Ambient temperature:	-20 °C to +50 °C
	Storage temperature:	-30 °C to +60 °C (non-condensing)
	Installation position:	Any, preferably horizontal
	Permissible acceleration:	5 g
	Weight:	4/2-way-design: 0.42 kg 4/3-way-design: 0.58 kg
	Materials:	Valve parts: Steel Seals: NBR, optional Viton
	Surface protection:	Solenoid: galvanized Casing: nitrocarburized
Electrical characteristics	Rated voltage:	12 V DC, 24 V DC
	Rated solenoid current:	1.3 A (12 V), 0.63 A (24 V)
	Rated resistance (R20):	5.9 Ω (12 V), 24.0 Ω (24 V)
	Max. power consumption:	9,6 W (at rated solenoid current)
	Power-on time:	100 % PO
	Control command:	PWM signal
	PWM frequency:	Typically 140 Hz (depending on the application)
	Protection class:	IP65 with a correctly installed wiring box
	Electrical connection:	Device plug in accordance with DIN EN 175301-803 (formerly DIN 43650) shape B, unterminated wire
	Control units:	See <i>"Electronics and Sensors"</i> on our website at www.weber-hydraulik.com

Characteristic curves

Flow rate diagram (Q/I) W4_E-5PS03 at $\Delta p = 7$ bar



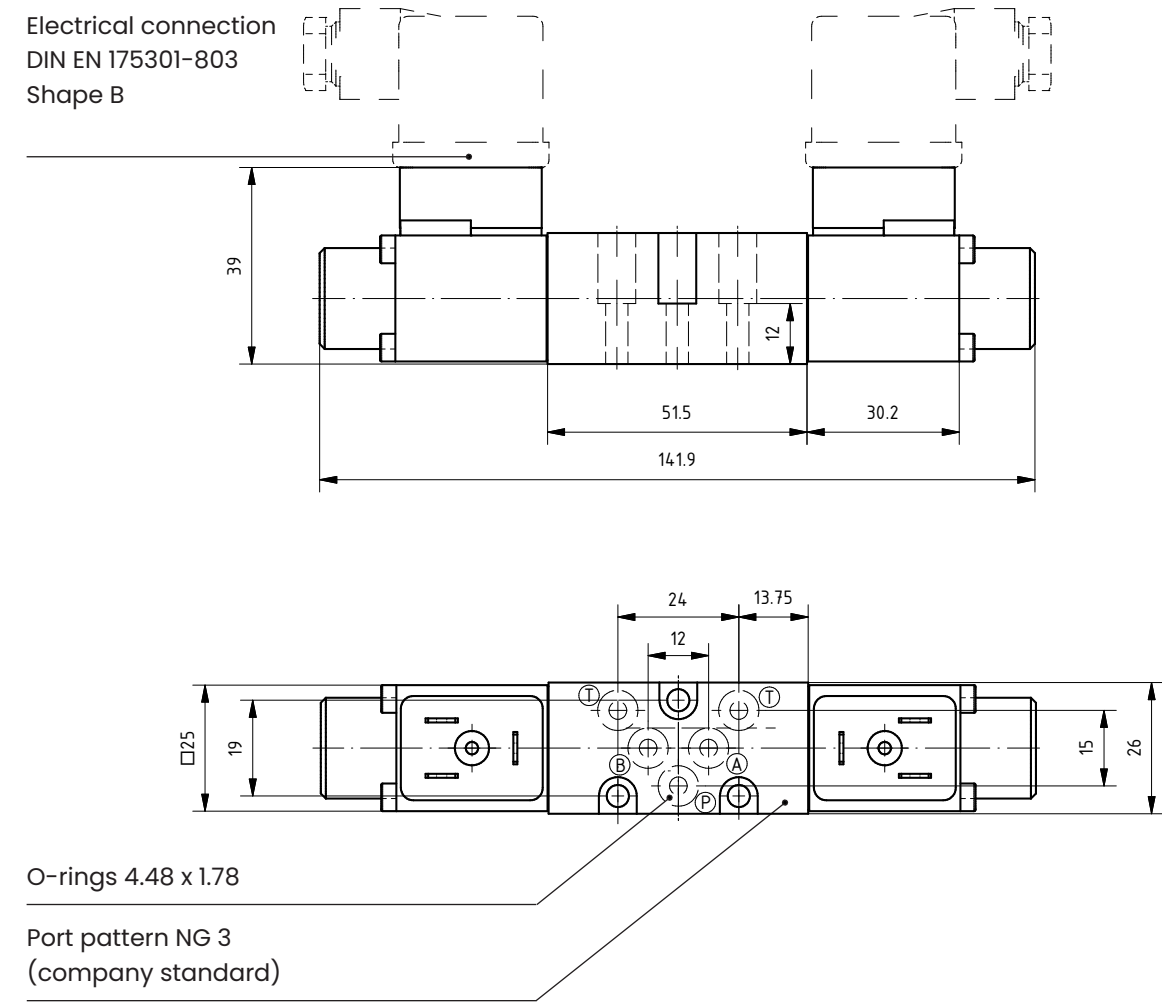
Pressure drop diagram ($\Delta p/Q$) W4_E-5PS03 at I_N



NOTE Maximum tolerance of flow rate $\pm 10\%$ at symmetric flow.
Maximum control Δp : 20 bar.

Measurement conditions Oil: HLP 32, temperature: 40 °C (~32 cSt).

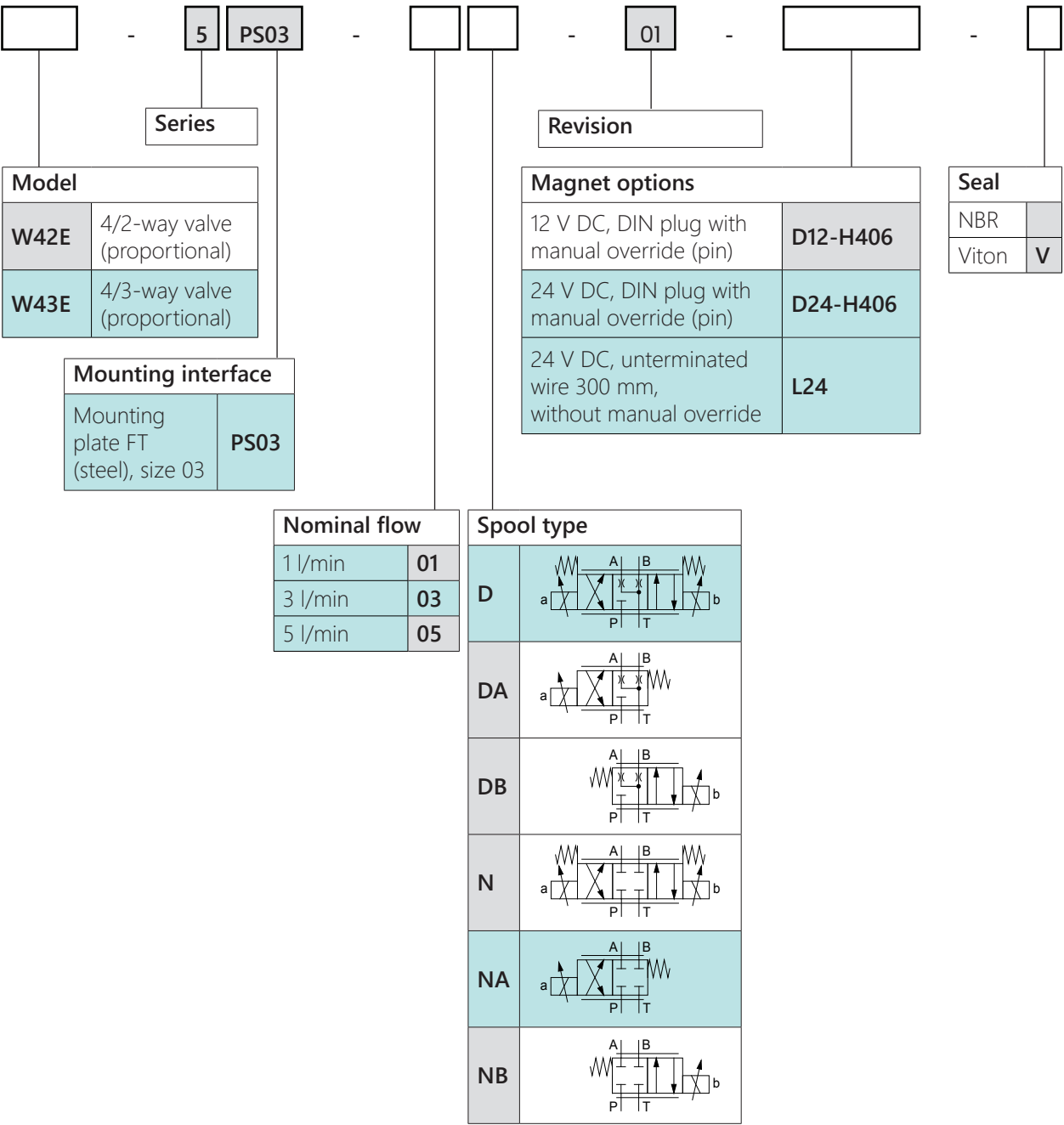
Dimensions



HM3/01 51 10

- NOTE The valve must be mounted with suitable M4 x 30 - 12.9 cylinder head screws according to DIN EN ISO 4762. Tightening torque: 2.2 ± 0.2 Nm, screw-in depth min. 7 mm. The mounting surface of the valve must have a flatness better than 0.01 mm.
- NOTE For the appropriate mounting plates, see "Accessories/ spare parts" and they are available on request.
- NOTE Dimensions for the port patterns are available in the "General information" section under the "Port Patterns" heading on our website at www.weber-hydraulik.com.

Type code



Standard program

Accessories and further information

Accessories/ spare parts	Article:	Material number:
	Socket connector DIN EN 175301-803, shape B, black	149.0005
	Adapter plug DIN EN 175301-803, shape B to shape A	109.0006
	Seal kit W43_-5PS03 (NBR)	405.0066
	Seal kit W43_-5PS03 (Viton)	405.0067
	Adapter plate NG 6 to NG 3, including seals and screws	203.0153
	Mounting plate NG 3, ports on the side	151.0171

NOTE For appropriate electronic controllers, see the "Electronics and Sensors" section and our online catalog at www.weber-hydraulik.com.

Operating manual Information regarding assembly, commissioning and maintenance is available on our website in "General information" in the "General Operating Manual" category or on request.