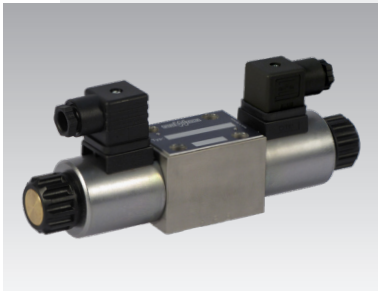
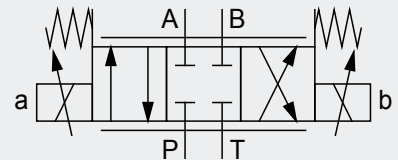


Proportional Directional Valve W42E-1AS06 and W43E-1AS06



Directly operated, electrically actuated
 Max. operating pressure 350 bar
 Rated flow rate up to 25 l/min
 Connection NG 6, DIN 24340 A06



010130_W43_E-1AS06
 12.2025

Table of contents

Contents	Page
Characteristics	1
Technical data	2
Characteristic curves	3
Dimensions	4
Type code	5
Accessories and further information	6

Characteristics

- Proportional directional valve in spool design
- Control the direction and quantity of a volume flow
- Spring centered spool
- Maintenance-free
- Rotatable and replaceable solenoid coil
- Various rated flow rate ranges

Technical data

Hydraulic characteristics

Max operating pressure:	Port P, A, B: 350 bar (at T= 0 bar) Connection T: 210 bar (for P and A or P and B, maximum 315 bar)
Rated flow rate:	8, 16, 24 l/min at $\Delta p = 10$ 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

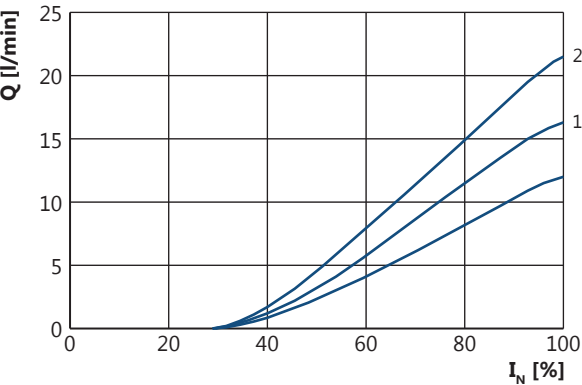
Design:	Plate-mounted valve, directly operated
Size:	NG 6 (DIN 24340 A06, ISO 4401-03, CETOP 3)
Fluid temperature:	-20 °C to +65 °C
Ambient temperature:	-20 °C to +50 °C
Storage temperature:	-30 °C to +60 °C (non-condensing)
Installation position:	Any
Permissible acceleration:	5 g
Weight:	4/2-way-design: 1.6 kg 4/3-way-design: 2.1 kg
Materials:	Valve parts: Steel Seals: NBR, optional Viton
Surface protection:	Magnet: Zinc-nickel Casing: comparable

Electrical characteristics

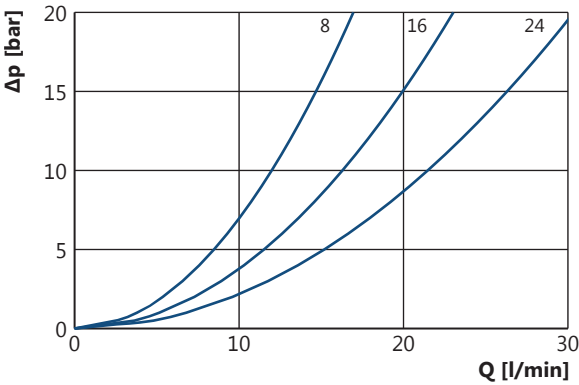
Rated voltage:	12 V DC, 24 V DC
Rated solenoid current:	1.8 A (12 V), 0.9 A (24 V)
Rated resistance (R20):	2.7 Ω (12 V), 12.6 Ω (24 V)
Max. power consumption:	21,6 W (at rated solenoid current)
Power-on time:	100 % PO
Control command:	PWM signal
PWM frequency:	Typically 85 Hz (depending on the application)
Protection class:	IP65 with a correctly installed wiring box
Electrical connection:	Device plug in accordance with DIN EN 175301-803 (formerly DIN 43650) shape A, AMP Junior Timer
Control units:	See section 6, <i>"Electronics and Sensors"</i> and our online catalog at www.weber-hydraulik.com

Characteristic curves

Flow rate diagram (Q/I) W4_E-1AS06 at $\Delta p = 10$ bar



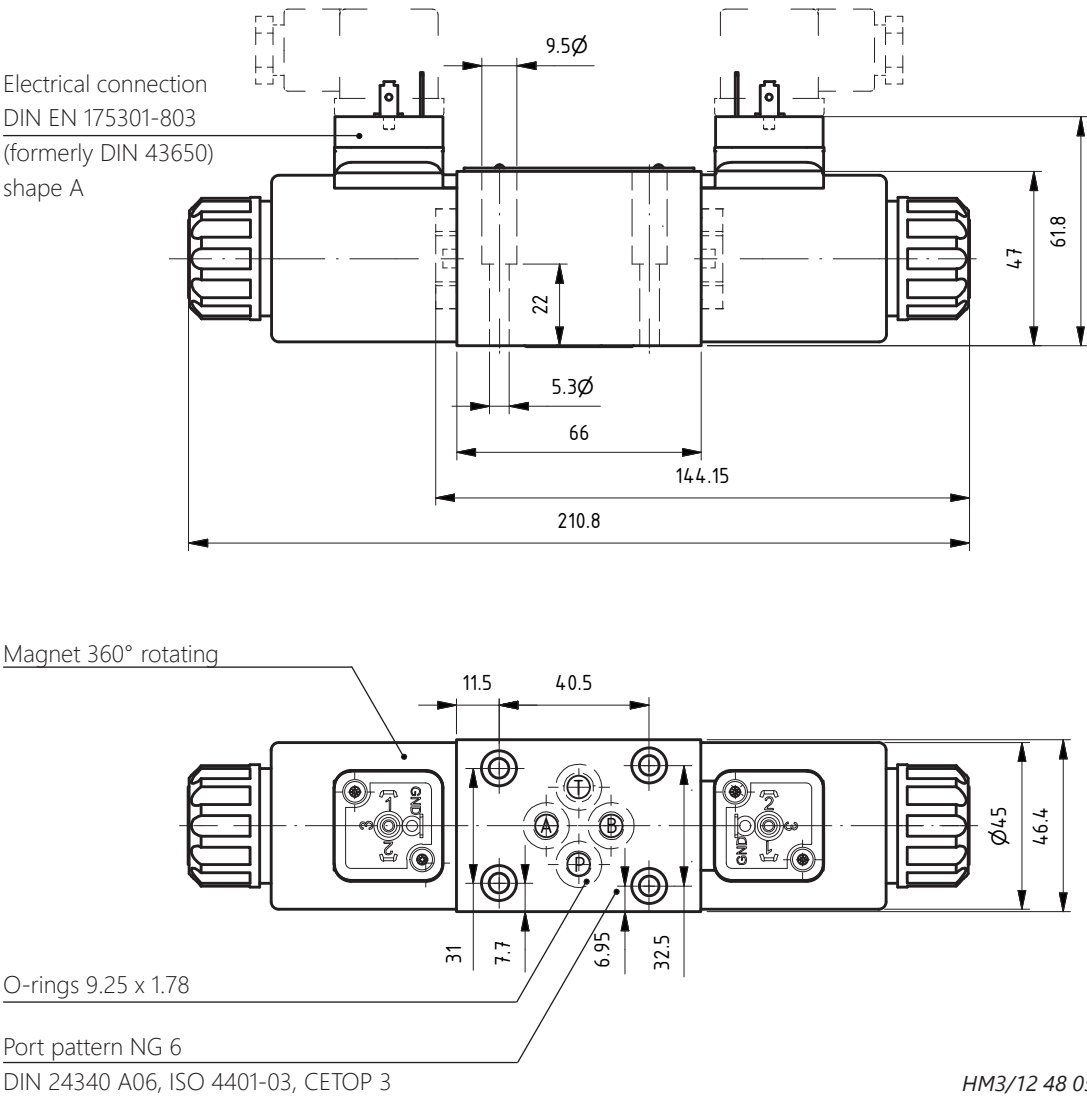
Pressure drop diagram ($\Delta p/Q$) W4_E-1AS06 at I_N



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).
Higher viscosities change the characteristic curves.

Dimensions

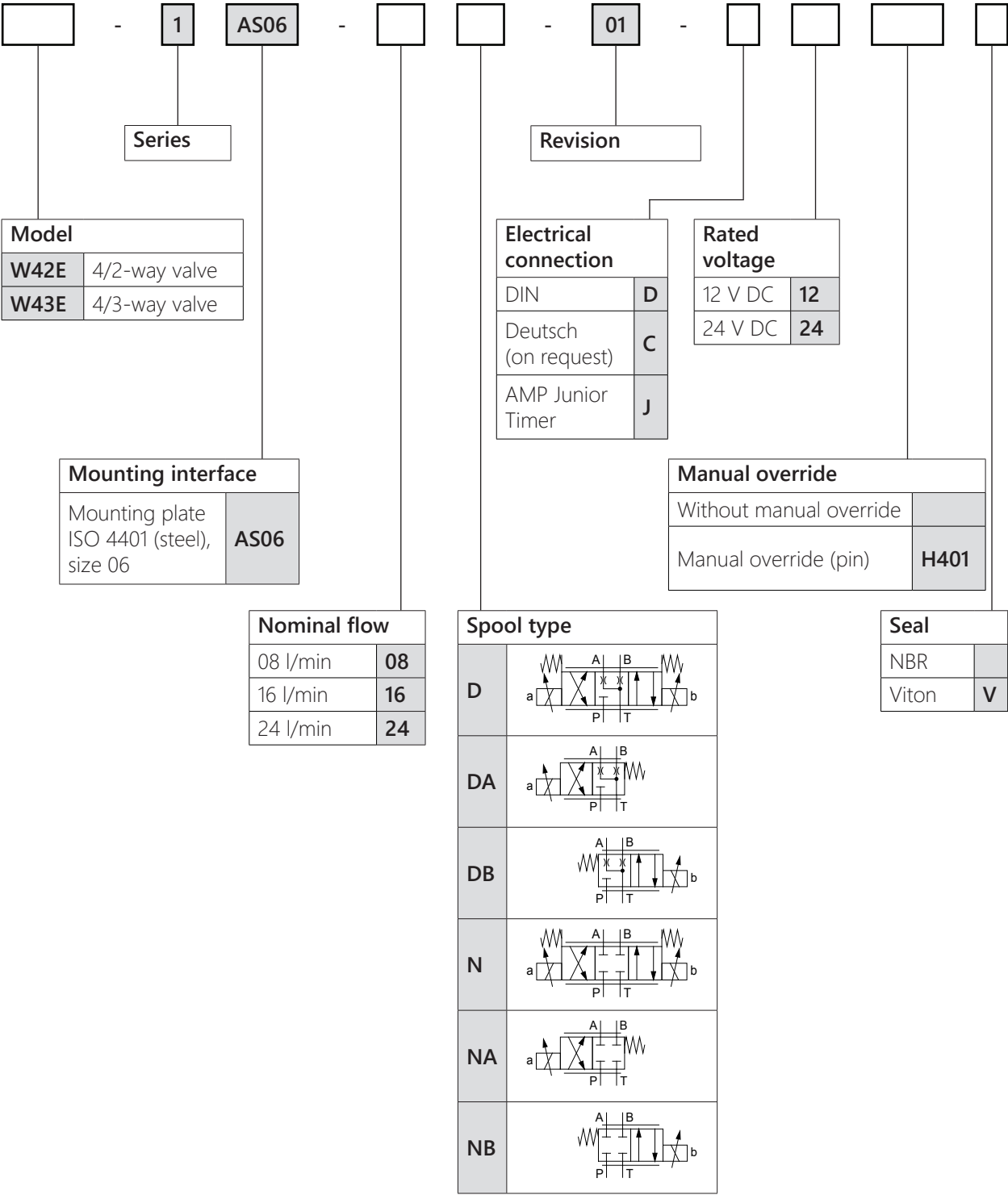


NOTE The valve must be mounted with suitable M5 - 12.9 cylinder head screws according to DIN EN ISO 4762. Tightening torque: 5.7 ± 0.3 Nm.
The minimum screw-in depth depends on the screw material and the material into which it is screwed.
Steel, typical: 1.2 x d 12.9 (10.9)
Aluminum, typical: 1.6 x d 8.8 (10.9)
If in doubt, please use the appropriate table books or carry out tests.
The mounting surface of the valve must have a flatness better than 0.01 mm.

NOTE Dimensions for the port patterns are available in section 11 "General information" under the "Port Patterns" heading and in our online catalog at www.weber-hydraulik.com.

NOTE Suitable casings and connection plates are available in section 10, "Connecting Plates and Manifolds" and in our online catalog at www.weber-hydraulik.com.

Type code



Accessories and further information

<i>Accessories/spare parts</i>	Article:	Material number:
	Socket DIN EN 175301-803 (formerly DIN 43650), shape A, black	149.0007
	Cylinder head screw M5 x 30, DIN EN ISO 4762, 12.9	1093159
	Seal kit W4_E-1AS06 (NBR)	405.0070
	Seal kit W4_E-1AS06 (Viton)	405.0071
	Coil 12 V, DIN EN 175301-803 (formerly DIN 43650), shape A	147.0011
	Coil 24 V, DIN EN 175301-803 (formerly DIN 43650), shape A	147.0009
	Coil 12 V, AMP Junior Timer	147.0007
	Coil 24 V, AMP Junior Timer	147.0010

NOTE For appropriate electronic controllers, see our website at www.weber-hydraulik.com.

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