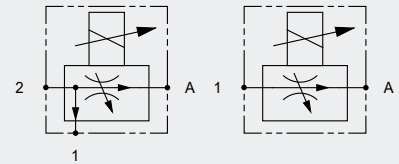


Proportional flow control valve EPSR2-11 and EPSR3-11



Directly operated, electrically actuated
 Max. operating pressure 350 bar
 Rated flow rate up to 20 l/min
 In piping casing,
 intermediate or mounting plate NG 6



050110_EPSR3_11
 12.2025

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Characteristics

- 2- or 3-way proportional flow control valve in piping casing, in intermediate plate NG 6 or in mounting plate NG 6
- Normally open or normally closed models
- Available with or without check valve
- Maintenance-free

Technical data

Hydraulic characteristics

Max operating pressure:	350 bar
Rated flow rate:	See type code at differential pressure control $\Delta p = 7$ bar
Flow direction:	See symbols
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

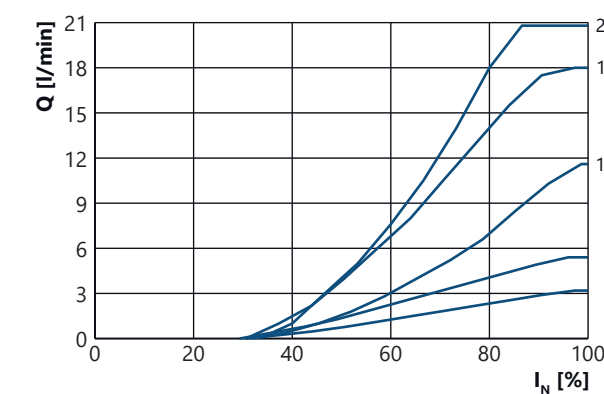
Design:	Slip-in valve in piping casing or in intermediate or end mounting plate NG 6
Size:	11
Fluid temperature:	-20 °C to +65 °C
Ambient temperature:	-20 °C to +50 °C
Storage temperature:	-30 °C to +60 °C (non-condensing)
Installation position:	Any
Permissible acceleration:	3 g crossways
Weight:	EPSR: 2.39 kg, EPSRV: 1.63 kg, ZEPSR: 2.41 kg, EPSRA: 1.84 kg
Materials:	Valve parts: Steel, casing: Steel Seals: NBR, optional Viton
Surface protection:	Exterior parts: Galvanized steel

Electrical characteristics

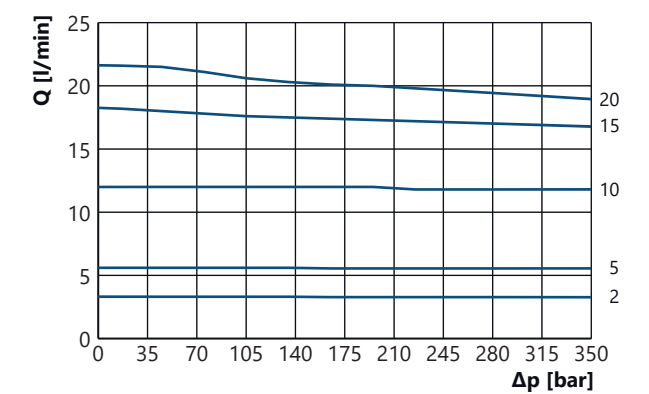
Rated voltage:	12 V DC, 24 V DC
Rated solenoid current:	1.7 A (12 V), 0.7 A (24 V)
Rated resistance (R20):	4 Ω (12 V), 25 Ω (24 V)
Power consumption:	16 W at rated solenoid current
Power-on time:	100% PO
Control command:	PWM signal
PWM frequency:	Typically 140 Hz (depending on the application)
Protection class:	IP65 with a correctly installed wiring box
Electrical connection:	Device plug in accordance with DIN EN 175301-803 shape A (formerly DIN 43650), AMP Junior Timer, unterminated wire
Control units:	See section 6, <i>"Electronics and Sensors"</i> at www.weber-hydraulik.com .

Characteristic curves

Flow rate diagram (Q/I) EPSR2-11



Flow rate diagram (Q/p) EPSR2-11

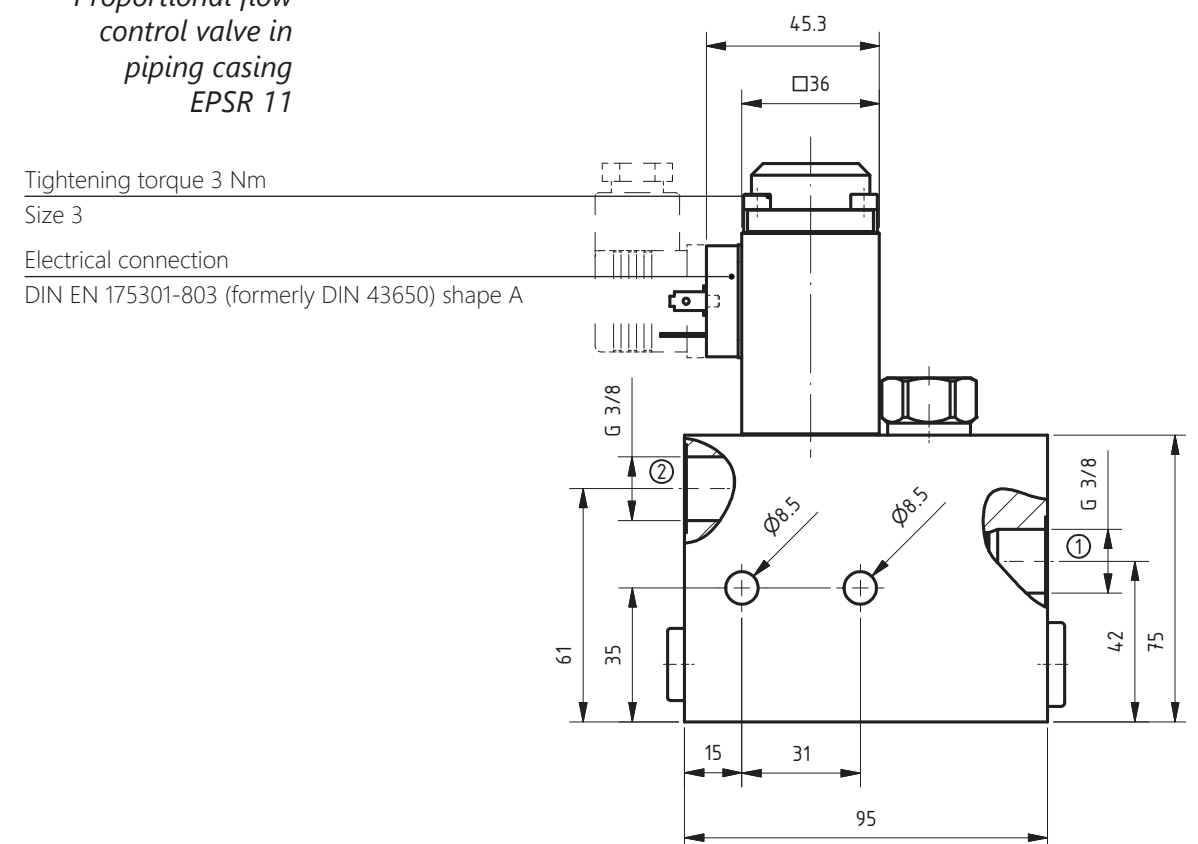


Measurement conditions

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

Dimensions

*Proportional flow
control valve in
piping casing
EPSR 11*



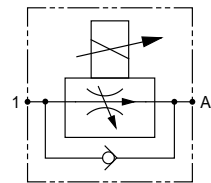
HM3/90 08 02

NOTE

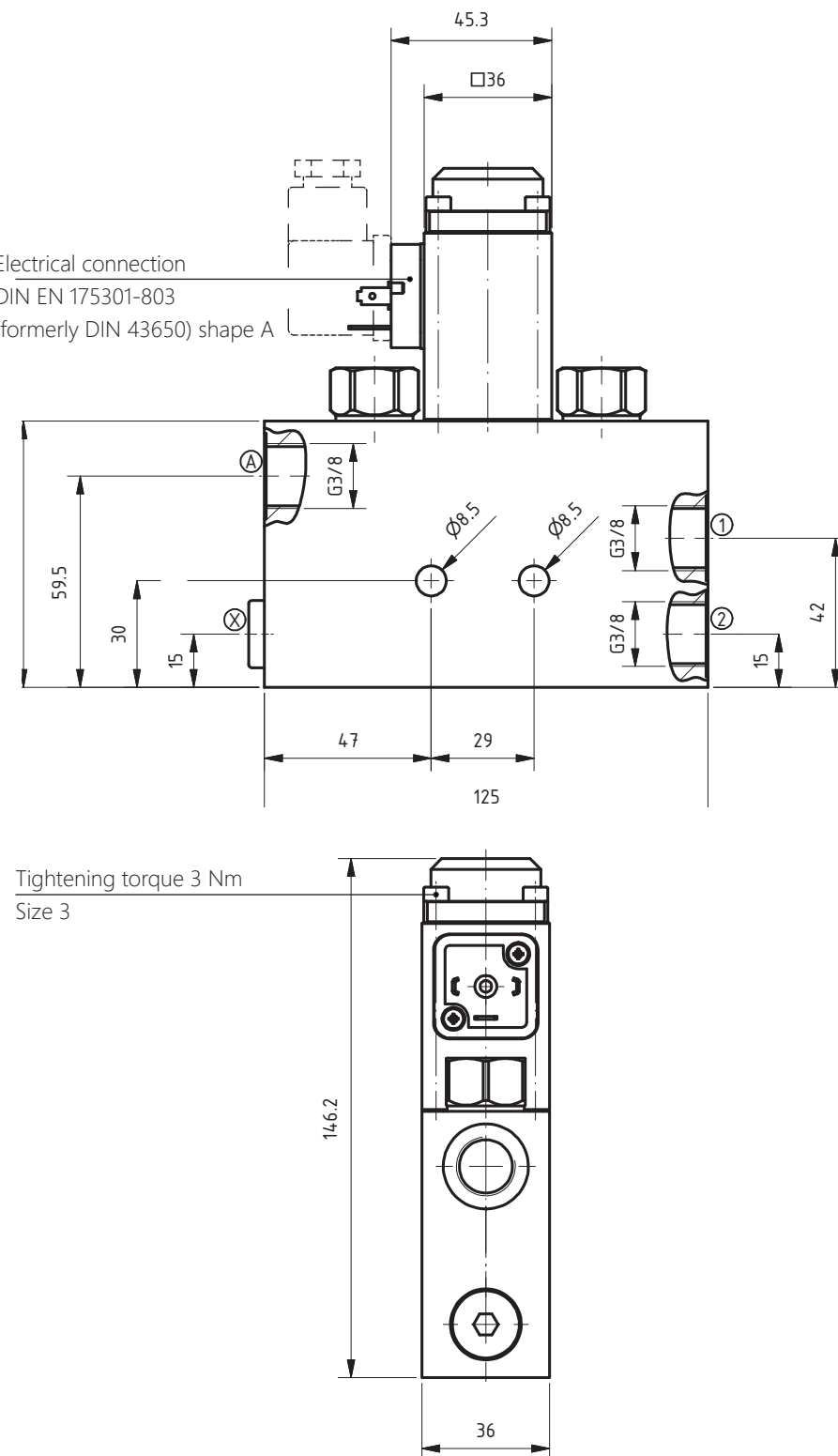
The valve is also available as EPSRA-06-11 in an NG 6 mounting plate. Dimension sheets are available upon request.

Dimensions

*Proportional flow
control valve in
piping casing with
check valve
EPSRV 11*



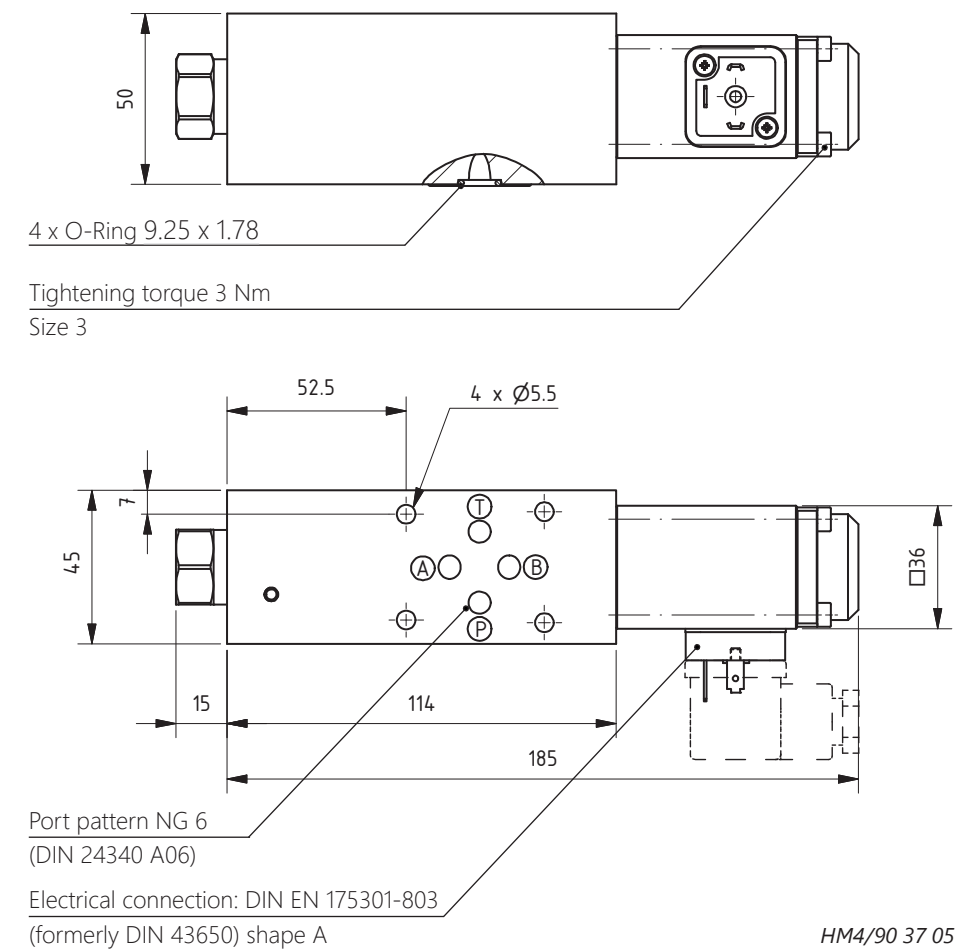
Electrical connection
DIN EN 175301-803
(formerly DIN 43650) shape A



HM3/90 46 03

Dimensions

Proportional flow
control valve in
intermediate plate
NG 6
ZEPSR 06-11



HM4/90 37 05

NOTE Dimensions for the port patterns are available in section 11 “General information” under the “Port Patterns” heading at www.weber-hydraulik.com.

NOTE The valve must be mounted to the pressure sequence body with suitable M5 x 60 - 12.9 cylinder head screws according to DIN EN ISO 4762. Tightening torque: 6 Nm, screw-in depth min. 8 mm.

Type code

11

X

S

Size*

Model

2	2-way valve
3	3-way valve

Revision

Steel casing

Spool type

SG	Normally closed
SO	Normally open

Rated voltage

12V	12 V DC
24V	24 V DC

Manual override

Without	
Manual override with push knob	DNH
Lockable manual override with hexagon socket and lock nut	FNH
Lockable manual override with hand wheel and lock nut	HNH

Seal

NBR	
Viton	V

Design

EPSR	Flow control valve in piping casing
EPSRV	Flow control valve in piping casing with check valve
ZEPSR	Flow control valve in intermediate plate NG 6
EPSRA	Flow control valve in mounting plate NG 6

Nominal flow

(at differential pressure control Δp = 7 bar)	
2	2 l/min
5	5 l/min
10	10 l/min
15	15 l/min
20	20 l/min (Δp = 10 bar)

Electrical connection**

DIN	
AMP Junior Timer (only 24 V version)	AMP
Unterminated wire 500 mm (only 24 V version)	K

* if mounted on an intermediate/mounting plate (ZEPSR or EPSRA): Size "06-11"

** DEUTSCH connector on request

Accessories and further information

Accessories/spare parts	Article:	Article number:
	Socket DIN EN 175301-803 (formerly DIN 43650), shape A, black	149.0007
	Seal kit PVDE2-11 (NBR)	405.0020
	Seal kit PVDE2-11 (Viton)	405.0068
	Seal kit T-13A (NBR)	405.0013
	Seal kit T-13A (Viton)	405.0037
	4 x O-Ring 9.25 x 1.78 (NBR)	401.0128
	4 x O-Ring 9.25 x 1.78 (Viton)	401.0147
	Other manual override variants or electrical connections are available on request	

NOTE For appropriate electronic controllers, see section 6, "Electronics and Sensors" at www.weber-hydraulik.com.

Operating manual Information regarding assembly, commissioning and maintenance is available in section 11, "General information" in the "General Operating Manual" category or on request.



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Subject to changes