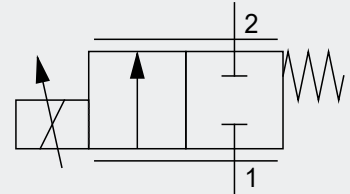


## Proportional throttle valve PVDE\_2-11



direct operated, solenoid operated  
 operating pressure max. 350 bar  
 volume flow max. 21 l/min  
 cavity PVDE2-11 or T-13A



040110\_PVDE\_2-11\_e  
 07.2021

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### Characteristics

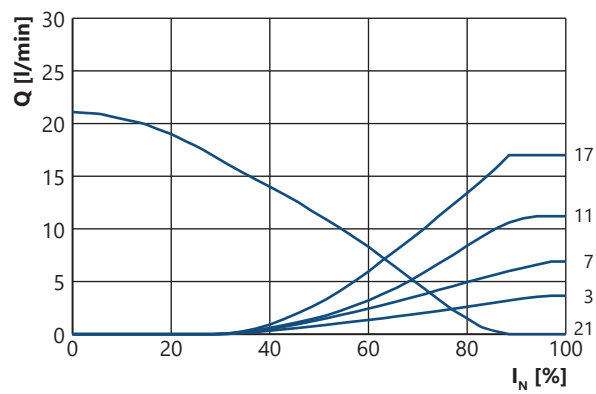
- proportional 2/2-way throttle valve
- normally open or normally closed models
- slip-in valve for cavity PVDE2-11
- or screw-in valve for cavity T-13A
- maintenance-free
- also available with EX-plug according to the ATEX-directive for the use in potentially explosive atmospheres (see datasheet 040111\_PVDE\_2-11\_EX\_e)

**Technical data**

<i>Hydraulic</i>	Operating pressure max.:	350 bar, differential pressure control $\Delta p$ max. 25 bar
	Flow rate:	3, 7, 11, 17, 21 l/min at differential pressure control $\Delta p = 10$ bar
	Performance limit:	max. nominal flow rate also at a higher differential pressure control $\Delta p$
	Flow direction:	1 to 2 (2 to 1 not allowed)
	Hydraulic fluid:	mineral oil according to DIN 51524, other hydraulic fluids upon request
	Viscosity range:	10 - 350 cSt
	Filtration:	oil cleanliness according to ISO 4406 (1999) 18/16/13, filter with $\beta 5(c) > 200$
	Repeatability:	< 3 % with optimized PWM-signal*
	Hysteresis:	< 5 % with optimized PWM-signal*
		* at 20% to 100% of the nominal valve current
	<i>Mechanic</i>	Design :
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
Maximum acceleration:		3 g
Weight:		PVDE2-11: 0,61 kg, PVDR2-11: 1,27 kg, PVDES2-11: 0,72 kg
Material:		valve parts and manifold: steel seals: NBR, Viton optional
Surface protection:		exterior parts: zinc coated steel
<i>Electric</i>	Nominal voltage:	12 V DC, 24 V DC
	Nominal valve current:	1,7 A (12 V), 0,7 A (24 V)
	Nominal resistance (R20):	4,0 $\Omega$ (12 V), 25,0 $\Omega$ (24 V)
	Power consumption:	16 W at nominal valve current
	Shifting time:	100 % ED
	Control command:	PWM-signal
	PWM-frequency:	typically 140 Hz (depending on application)
	Protection class:	IP65 with correctly mounted and locked mating connector
	Electric termination:	Electric plug according to DIN EN 175301-803 shape A, AMP Junior Timer or unterminated wire
	Electronic controllers:	see chapter " <i>electronics and sensors</i> " as well as our online catalogue at <a href="http://www.weber-hydraulik.com">www.weber-hydraulik.com</a> .

## Performance

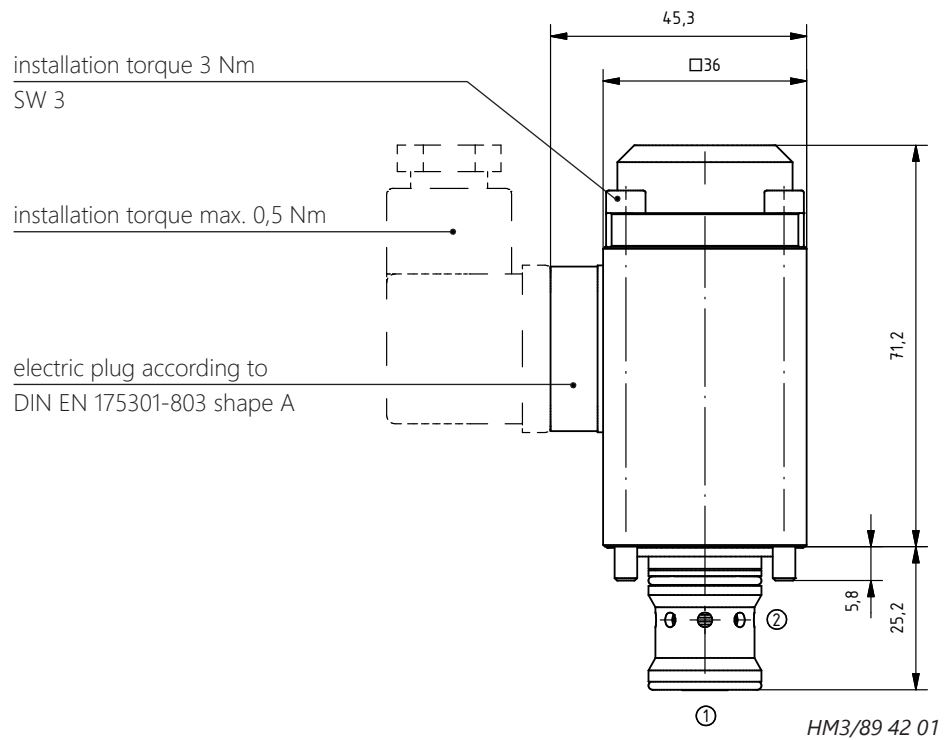
Flow rate diagram (Q/I) PVDE2-11 at  $\Delta p = 10$  bar



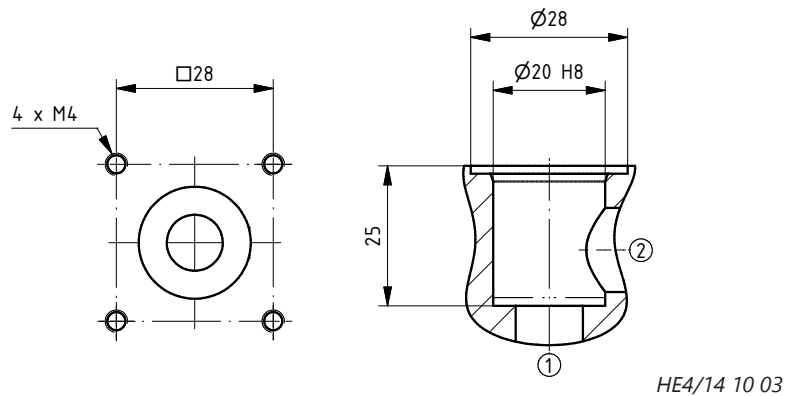
*Test conditions* Oil: HLP 32, temperature: 40 °C (~32 cSt)  
Higher viscosity changes the performance diagrams.

## Dimensions

### Slip-in valve PVDE2-11



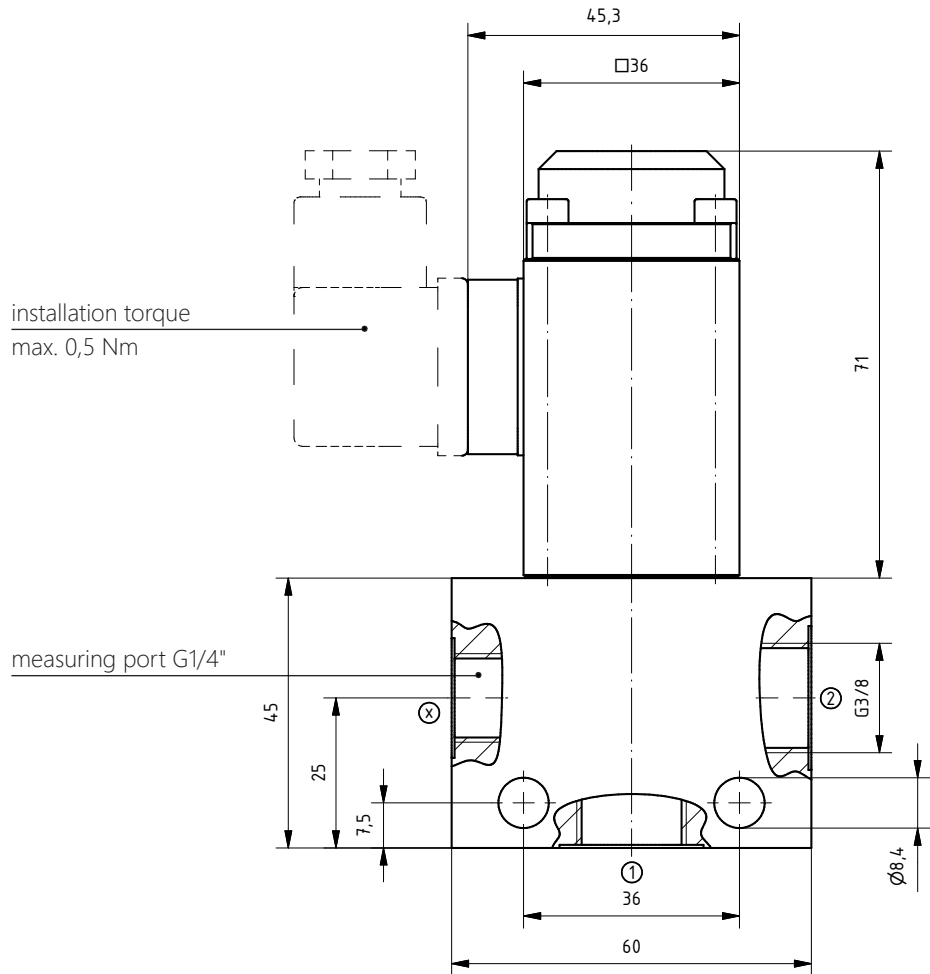
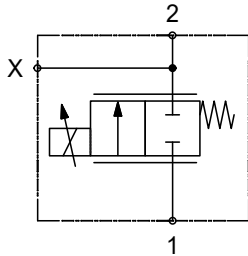
### Cavity PVDE2-11



**NOTE** For a detailed drawing of the cavity please see our „general information“ or our online catalogue at [www.weber-hydraulik.com](http://www.weber-hydraulik.com).

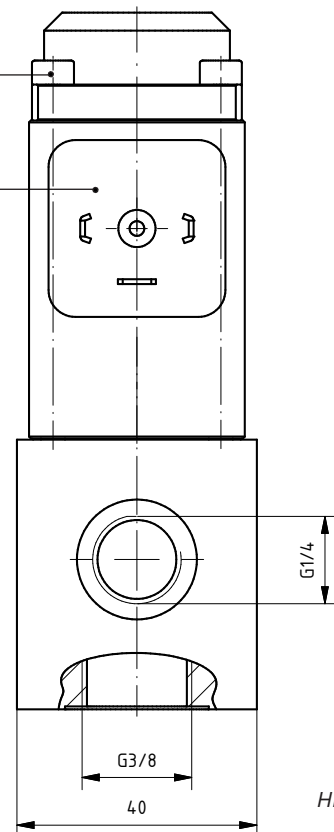
**Dimensions**

*Slip-in valve in  
in-line body G3/8"  
PVDR2-11*



installation torque 3 Nm  
SW 3

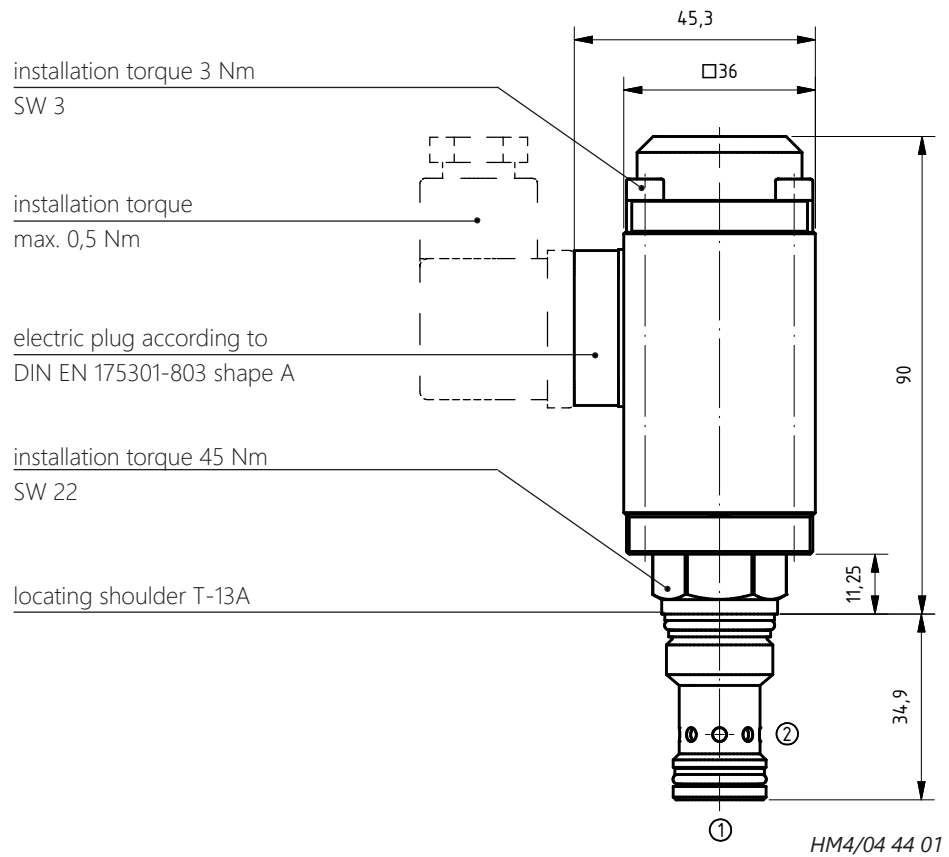
electric plug according to  
DIN EN 175301-803 shape A



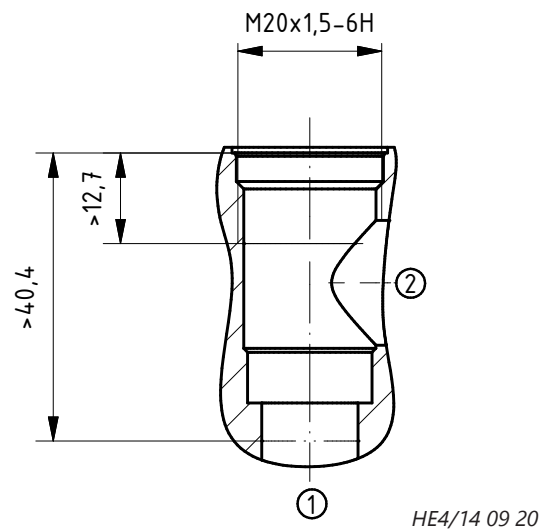
HE4/94 09 01

## Dimensions

### Screw-in valve PVDES2-11



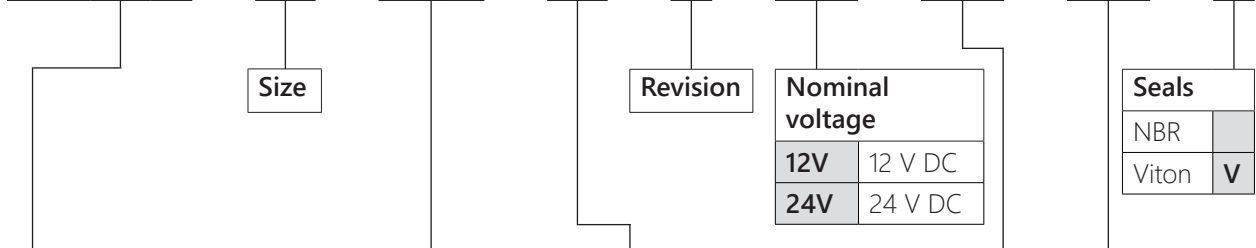
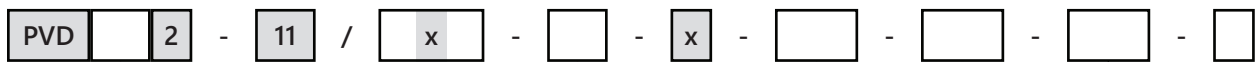
### Cavity T-13A



**NOTE** For a detailed drawing of the cavity please see our „general information“ or our online catalogue at [www.weber-hydraulik.com](http://www.weber-hydraulik.com).

**NOTE** We also provide a variety of suitable manifolds for T-13A. Please contact us for further assistance.

**Type code**



**Model**

E	slip-in valve
R	in in-line body
ES	screw-in valve

**Nominal flow**  
at  $\Delta p = 10 \text{ bar}$

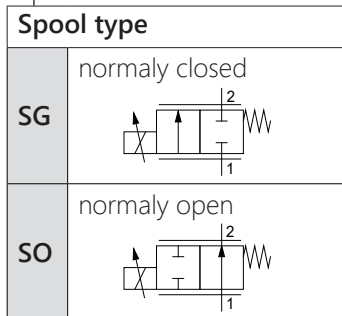
1 x 1	3 l/min
2 x 1	7 l/min
2 x 2	11 l/min
4 x 1,5	17 l/min
4 x 3	21 l/min

**Manual override**

without	
spring loaded manual override (push knob)	DNH
lockable manual override with hexagon socket and lock nut	FNH
lockable manual override with hand wheel and lock nut	HNH

**Electric Termination**

DIN	
AMP Junior Timer (only for 24 V model)	AMP
unterminated wire 500 mm (only for 24 V model)	K



**Accessories and additional information**

<i>Accessories/ spare parts</i>	<b>Article:</b>	<b>Material number:</b>
	Socket connector DIN EN 175301-803, 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
	a variety of alternative solenoids with manual overrides are available on request	

**NOTE** For the appropriate electronic controllers, see our chapter „*electronics and sensors*“ as well as our online catalogue at [www.weber-hydraulik.com](http://www.weber-hydraulik.com).

**Manual** Information regarding installation, set-up and maintenance can be found in our product catalogue in the chapter „*general information*“ under the category „*general operating manual*“ or will be provided upon request.



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