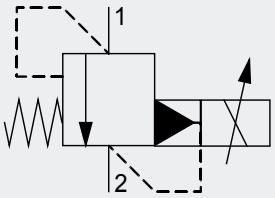
Proportional Pressure Relief Valve EPDB 08

Pilot operated, electrically actuated
Max. operating pressure 315 bar
Rated flow rate up to 80 l/min
Cavity T-10A or C-10-2



020210_EPDB_08
02.2026

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Characteristics

- Proportional pressure relief valve in spool design
- Screw-in valve for cavity T-10A or
- Slip-in valve for cavity C-10-2
- Low vibration
- Maintenance-free
- Degressive versions available

Technical data

Hydraulic characteristics	Max operating pressure:	315 bar (with free return flow in port 2) For aluminum casings: 210 bar max. Max. tank pressure: 35 bar
	Rated flow rate:	80 l/min
	Pressure setting range:	See type code
	Flow direction:	1 (P) to 2 (T) (2 to 1 or T to P not permitted)
	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 ß 5(c) > 200
	Repeatability:	< 3 % with optimized PMW-signal*
	Hysteresis:	< 5 % with optimized PMW-signal*

* At 20 % to 100 % of the rated solenoid current

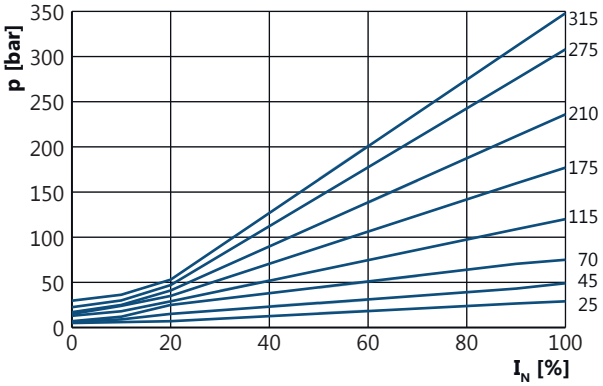
NOTE The pressure at connection 2 (T) is added directly to the set value. The total pressure of connection A and T must not exceed the permissible maximum operating pressure.

Mechanical characteristics	Design:	EEPDBS screw-in version T-10A or EEPDBM slip-in version C-10-2, EPDBSA screw-in valve in mounting plate NG 6, pilot-operated
	Size:	08
	Fluid temperature:	-25 °C to +70 °C
	Ambient temperature:	-25 °C to +50 °C
	Storage temperature:	-30 °C to +60 °C (non-condensing)
	Installation position:	Any
	Weight:	EEPDBS 08 and EEPDBM 08: 0.7 kg, EPDBSA 08: 1.1 kg
	Materials:	Valve parts: Steel Seals: NBR, optional Viton
	Surface protection:	Exterior parts: Galvanized steel, partially burnished

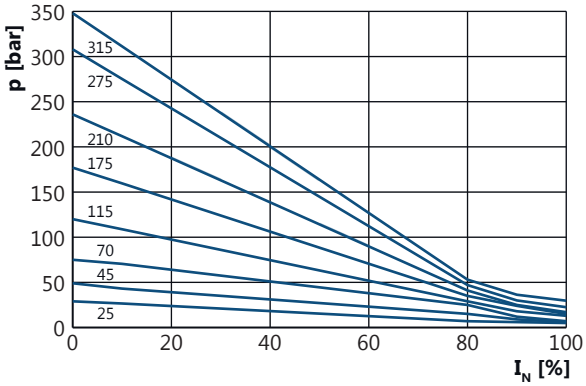
Electrical characteristics	Rated voltage:	12 V DC, 24 V DC
	Rated solenoid current:	1.7 A (12 V), 0.7 A (24 V)
	Rated resistance (R20):	4 Ω (12 V), 25 Ω (24 V)
	Power consumption:	16 W at rated solenoid current
	Power-on time:	100 % PO
	Control command:	PWM signal
	PWM frequency:	Typically 140 Hz (depending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

Characteristic curves

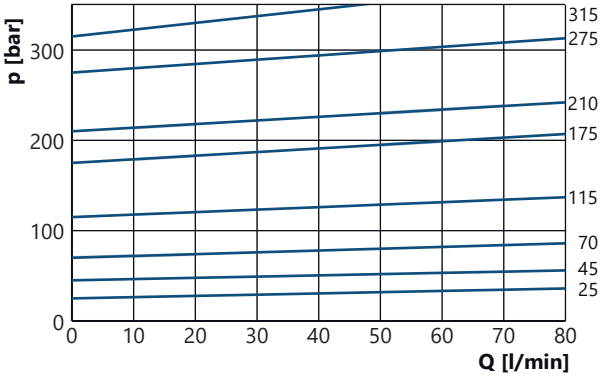
Pressure characteristic curve (p/I) EEPDB 08 at Q = 20 l/min



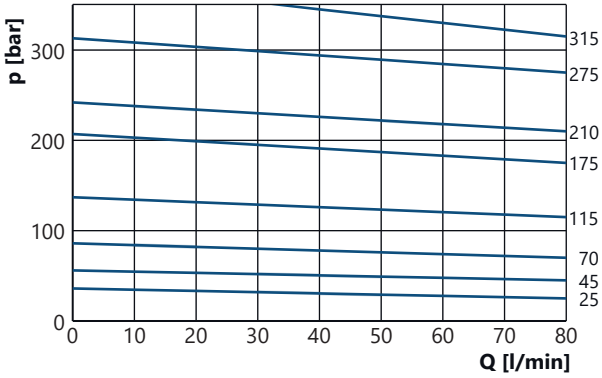
Pressure characteristic curve (p/I) EEPDB 08 degressive version at Q = 20 l/min



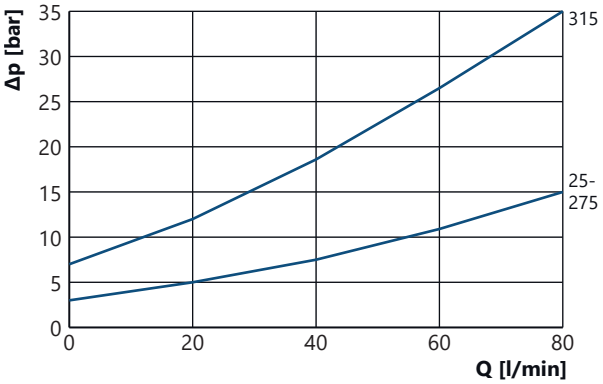
Pressure characteristic curve (p/Q) EEPDB 08 at I_N



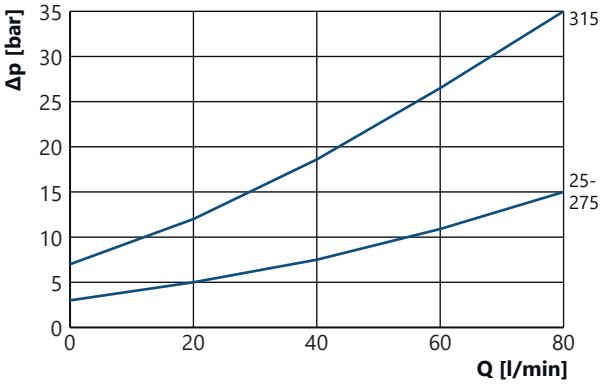
Pressure characteristic curve (p/Q) EEPDB 08 degressive version at I_N



Pressure loss characteristic curve (Δp/Q) EEPDB 08 at I = 0 mA (deenergized)



Pressure loss characteristic curve (Δp/Q) EEPDB 08 degressive version at I = 100 % (full current)

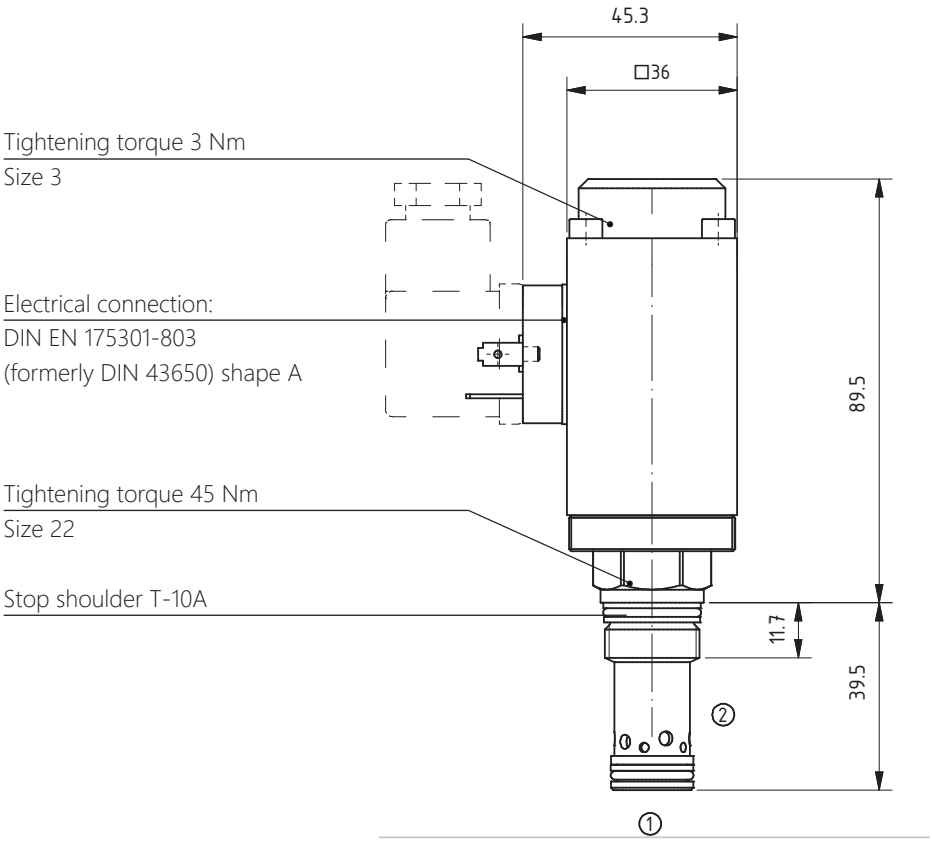


Measurement conditions

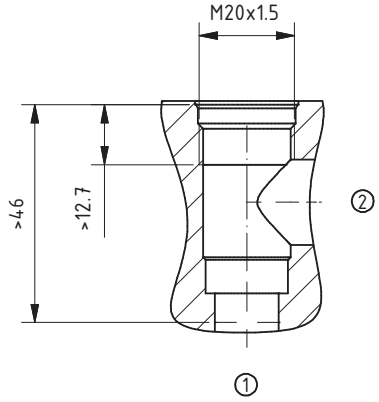
Oil: HLP 32, temperature: 40 °C (~32 cSt).
Greater flow rates and higher viscosities result in higher pressures at connection 1.
The higher the pressure setting range, the greater this effect.

Dimensions

Screw-in valve
EEPDBS 08



Cavity
T-10A



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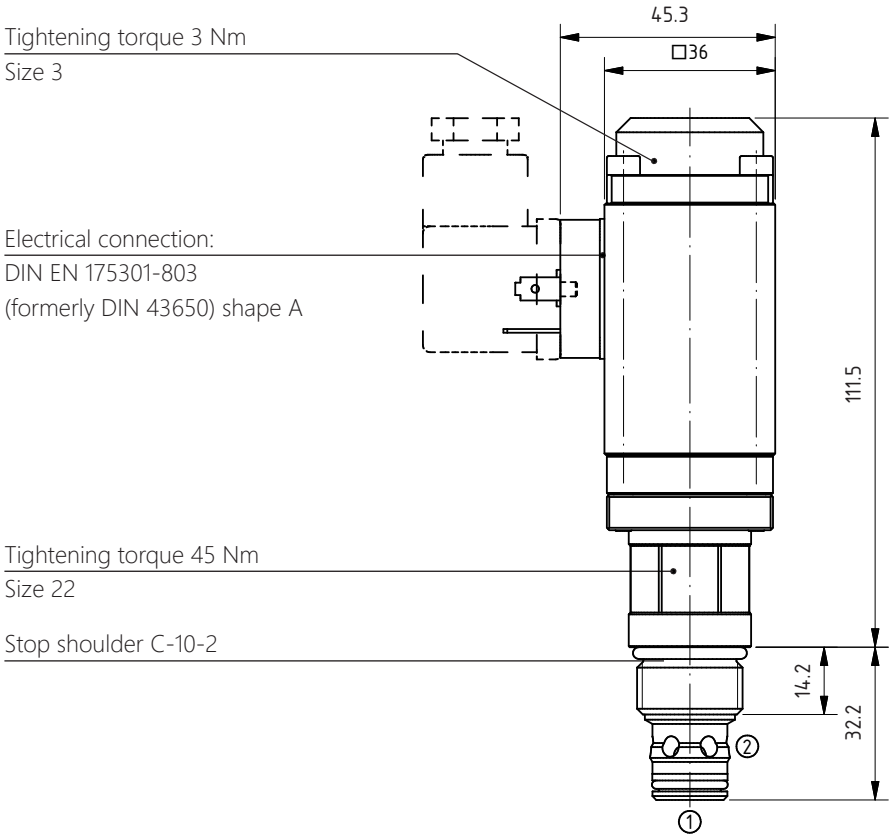
NOTE A detailed drawing of the cavity is provided at *"General information"* on our website at *www.weber-hydraulik.com.*

NOTE Suitable casings and connection plates are available at *"Connecting Plates and Manifolds"* on our website *www.weber-hydraulik.com.*

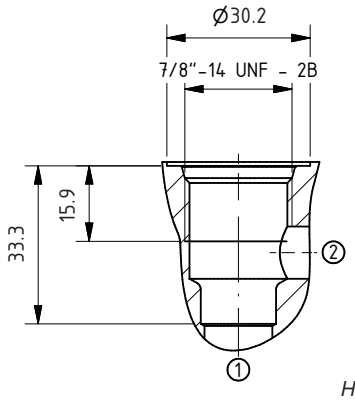
NOTE The valve is also available as EPDBSA (08/06) in an NG 6 mounting plate. Dimension sheets are available upon request.

Dimensions

Slip-in valve EEPDBM 08



Cavity C-10-2



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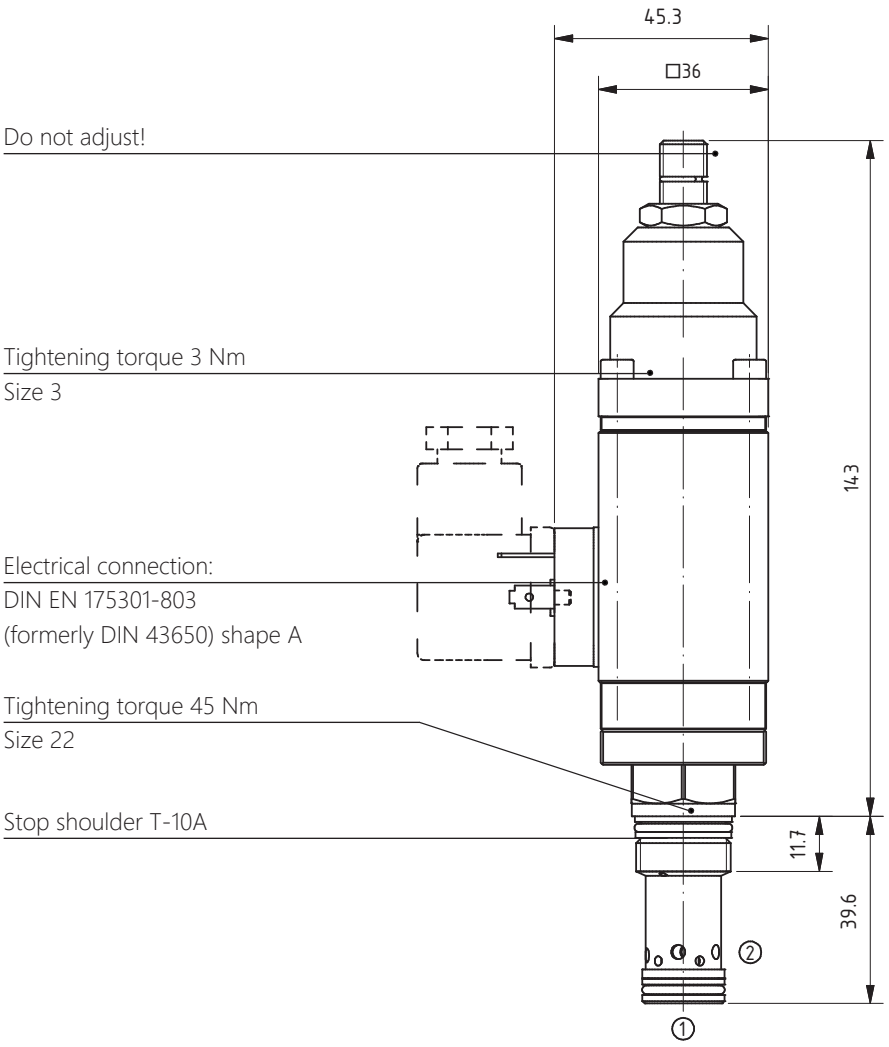
NOTE A detailed drawing of the cavity is provided at *"General information"* on our website at *www.weber-hydraulik.com*.

NOTE Suitable casings for C-10-2 are available on request.

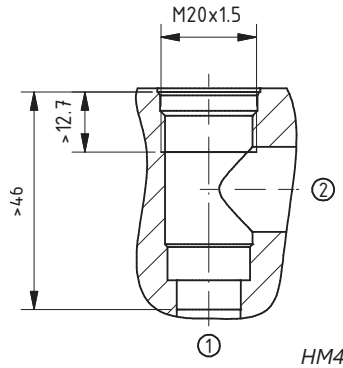
NOTE The valve is also available as a degressive version.

Dimensions

Screw-in valve EEPDBS 08, degressive



Cavity T-10A



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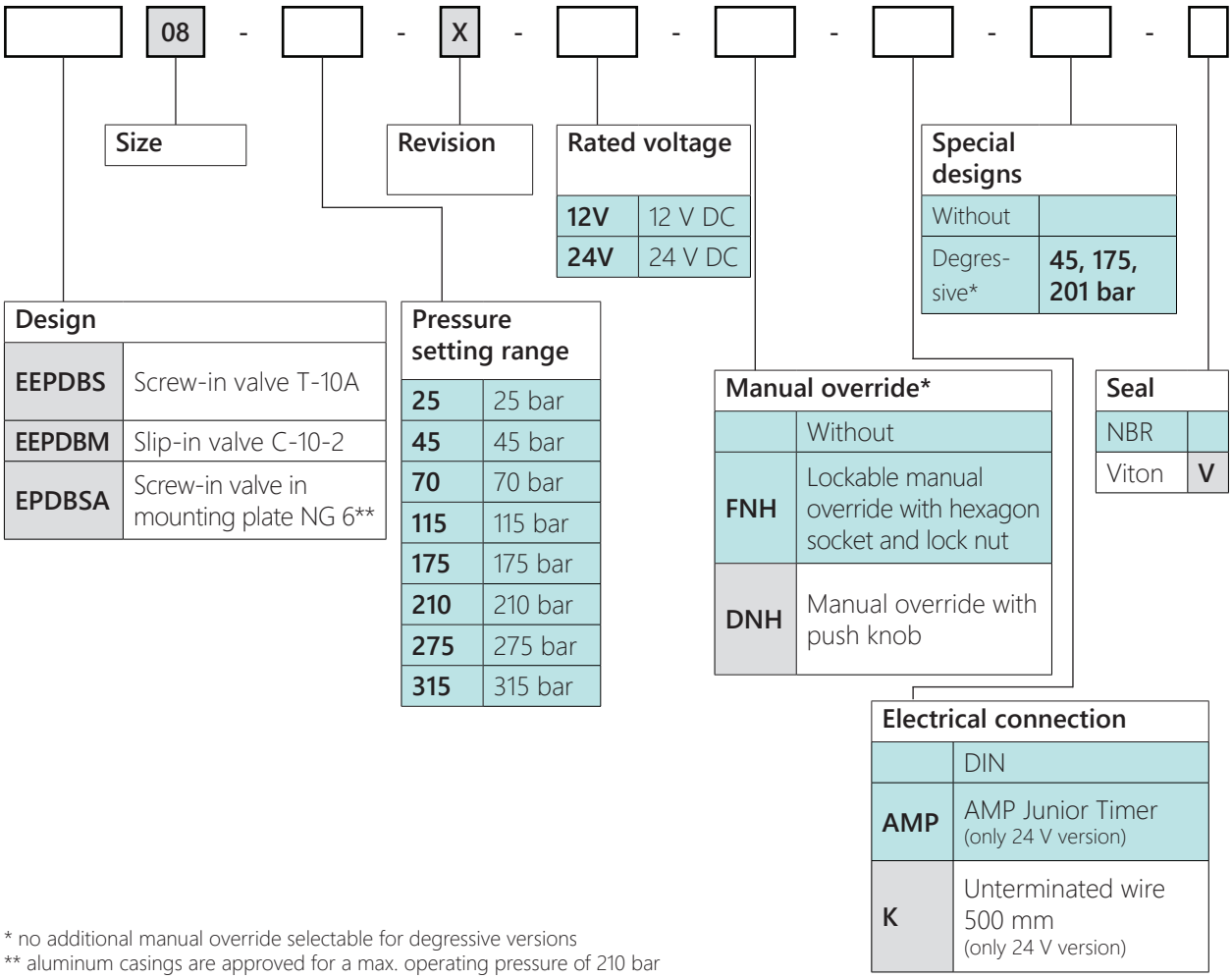
NOTE A detailed drawing of the cavity is provided at *"General information"* on our website at *www.weber-hydraulik.com.*

NOTE Suitable casings and connection plates are available at *"Connecting Plates and Manifolds"* on our website *www.weber-hydraulik.com.*

NOTE The valve is also available as EEPDBM 08 in a degressive version.

Type code



* no additional manual override selectable for degressive versions
** aluminum casings are approved for a max. operating pressure of 210 bar

NOTE FOR FNH

The FNH lockable manual override can be used to override the pressure relief function of the valve. Be aware that the valve can not fulfill its pressure relief function if the FNH is screwed in and locked. This can lead to excessive pressure and cause breakage or failure of the components if no parallel pressure relief protection is present.
The FNH should never be screwed in when used in conjunction with a running system! The application as a pressure relief valve with extended throttle function is solely at the operator's discretion and responsibility!
If the FNH lockable manual override is screwed in to achieve a throttle function, the reduction in the valve's rated flow rate must be noted.

Standard program

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 T-10A (NBR)	405.0013
Seal kit T-10A (Viton)	405.0037
Seal kit C-10-2 (NBR)	405.0079
Seal kit C-10-2 (Viton)	405.0080

NOTE

For appropriate electronic controllers, see " ***Electronics and Sensors***" on 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.

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