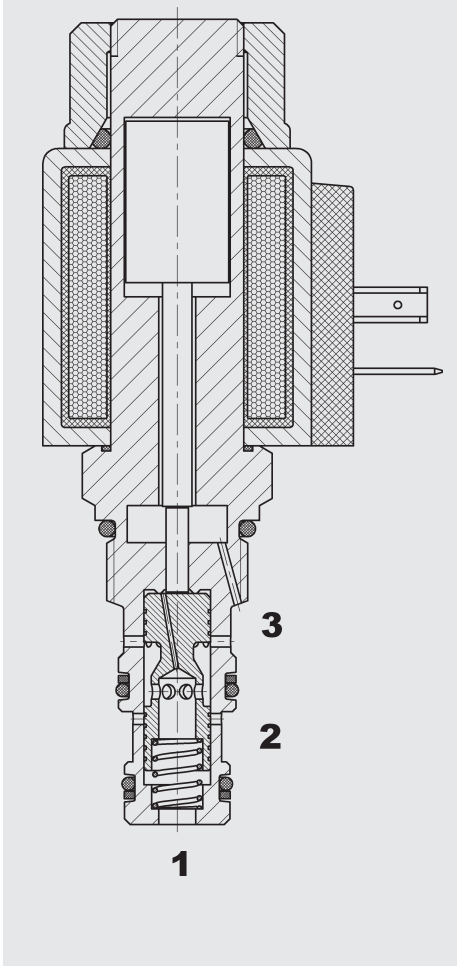


## FUNCTION



The PDR08-01 is a direct acting 3 port pressure reducing valve with outlet pressure relief. In the de-energized mode the inlet port 2 is closed and the outlet port 1 is connected to the tank (port 3). When a current signal is applied, the solenoid armature presses onto the control spool with a force corresponding to the amount of current and sets the reduced pressure at port 2. This setting is proportional to the amount of current applied. Port 3 is vented to tank - any pressure at port 3 is additive to the setting.

## Proportional Pressure Reducing Valve SAE 08-Cartridge – 350 bar

PDR08-01  
Spool Type – direct operated

### FEATURES

- All surfaces zinc-plated and corrosion proof
- All valve parts made of high-strength steel with hardened and ground components to ensure minimal wear and to extend service life
- Rigid design using one-piece body minimizes the effect of eccentricity and maximizes reliability
- Waterproof design standard
- Wide variety of connectors available
- Excellent stability throughout flow range
- Excellent dynamic performance
- Low pressure drop by CFD optimized flow-path

### SPECIFICATIONS

Operating pressure:	max. 350 bar at port 2
Nominal flow:	max. 12 l/min
Operating pressure ranges:	up to 14 bar, up to 20 bar, up to 35 bar, up to 48 bar, up to 75 bar, up to 138 bar
Control current range:	1050 mA, 8.8 Ω / 2100 mA, 2.2 Ω
Internal leakage:	less than 50 cm <sup>3</sup> /min at 350 bar
Media operating temp. range:	-20 °C to +120 °C
Ambient temp. range:	-20 °C to +60 °C
Dither frequency:	140 Hz - 250 Hz
Response time:	On: approx. 40 ms, Off: approx. 30 ms
Hysteresis with dither:	2 - 4 % of maximum control current
Repeatability:	≤ 2 % of maximum pressure range
Reversal error:	≤ 2 % of maximum control current
Response sensitivity:	≤ 1 % of maximum control current
Fluids:	Mineral-based or synthetics with lubricating properties
Viscosity:	7.4 to 420 cSt
Filtration:	Class 18/16/13 up to 19/17/14 according to ISO 4406 or cleaner
Installation:	no orientation restrictions
Material:	Valve body: carbon steel Spool: carbon steel Seals: NBR (standard) FKM (optional) Coil: Steel / Polyamide

#### Notes:

The PDR08 can also be supplied with an emergency pressure adjustment (version -01M). This allows a mechanical pressure adjustment of the valve if the electrical signal is interrupted. This adjustment should be used only in the case of electrical failure since the manual setting would be additive to the electrical setting and the danger of equipment damage could develop.

In order to achieve optimal function, any trapped air should be vented with the bleed screw on the face of the tube (not fitted to version -01M).

Cavity:	FC08-3
Weights:	Valve complete: 364 g Coil only: 190 g

