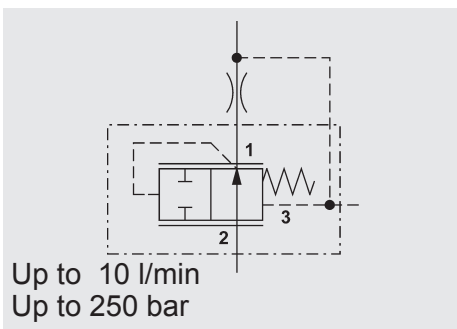
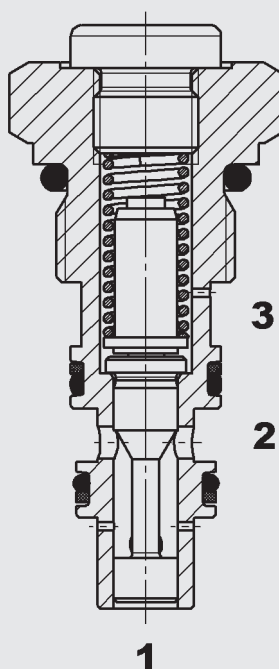




FUNCTION



The pressure compensator DW05830V is a normally open, direct-acting, spring-loaded flow control valve which operates smoothly. By maintaining a constant differential pressure between inlet and outlet of an orifice (ports 1 and 3 of the pressure compensator), a constant flow rate is maintained (independently of the load pressure). As soon as the pressure differential exceeds the value pre-set by the spring force, the control piston reduces an orifice cross-section. The pressure compensator can, for example, be used when raising variable loads at the same velocity. Together with a proportional flow control valve it can be used as a 2-way proportional flow regulator.

In a load sensing system in which several consumers are operated, the speed of each individual circuit can be controlled.

Pressure Compensator, Upstream, Spool Type, Direct-Acting Normally Open Metric Cartridge – 250 bar DW05830V

FEATURES

- Used to control the flow rate of consumers independently of the load pressure
- Excellent stability throughout pressure and flow range
- Excellent dynamic performance
- External surfaces zinc-plated and corrosion-proof
- Hardened and ground valve components to ensure minimal wear and extended service life
- Reliable operation due to integral stroke limitation

SPECIFICATIONS

Operating pressure:	max. 250 bar
Nominal flow:	max. 10 l/min
Media operating temperature range:	min. -30 °C to max. +100 °C
Ambient temperature range:	min. -30 °C to max. +100 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 10 mm ² /s to max. 420 mm ² /s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF _d :	150 years (see "Conditions and instructions for valves" in brochure 5.300)
Installation:	No orientation restrictions
Materials:	Valve body: high tensile steel Closing element: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C) Back-up rings: PTFE
Cavity:	05830
Weight:	0.065 kg

torque 25±5 Nm

millimeter
subject to technical modifications

DW 05830 V – 21 – C – N – 10

Basic model _____
Pressure compensator

Cavity _____

Function symbol _____
V = upstream pressure compensator

Type _____
21 = without damping, without venting
22 = with damping, without venting

Body and ports _____
C = cartridge only

Seals _____
N = NBR (standard)
V = FKM (optional)

Control pressure differential _____
10 = 10 bar differential pressure

Model code	Part No.
DW05830V-21-C-N-05	3152308
DW05830V-21-C-N-10	3031531

Line bodies and seal kits on request

Technical drawing of a shaft with a countersink and a reamer. The drawing shows a shaft with a diameter of 25 mm at the top, a countersink with a 60-degree angle, and a reamer with a 45-degree angle. The shaft has a total length of 44 mm. The countersink has a depth of 27.5 mm and a diameter of 14 mm. The reamer has a depth of 23 mm and a diameter of 13 mm. The shaft has a diameter of 12 mm at the bottom. The drawing includes various surface finish symbols and dimensions.

Form tools

Tool	Part No.
Countersink	In preparation
Reamer	In preparation

millimeter
subject to technical modifications

A line graph showing the relationship between orifice diameter and flow rate. The x-axis is labeled 'Orifice diameter [mm]' and ranges from 0.5 to 2.5 with major grid lines every 0.5 units. The y-axis is labeled 'Flow [l/min] from 2 → 1' and ranges from 0 to 10 with major grid lines every 2 units. A single black line represents the data, showing a linear increase in flow as the orifice diameter increases.

Orifice diameter [mm]	Flow [l/min] from 2 → 1
0.5	0.4
1.0	1.6
1.5	3.8
2.0	6.6
2.5	10.0

NOTE
The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.

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