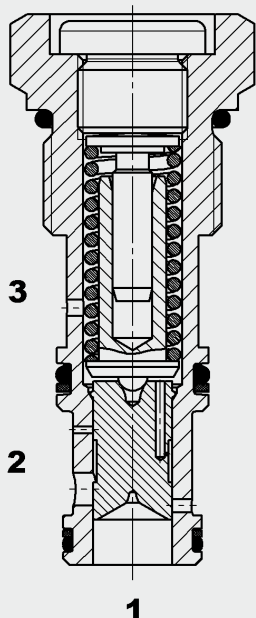


FUNCTION



The pressure compensator DWM12130Z is a normally closed, direct-acting, spring-loaded flow control valve.

By maintaining a constant differential between inlet and outlet pressure 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 opens an orifice cross-section and diverts the surplus flow which is not required at the consumer, through a third port.

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 3-way proportional flow regulator. In load sensing circuits with a fixed displacement pump, if there is no demand from the consumer, the valve allows the oil to flow back to tank and therefore vents the whole system.

Pressure Compensator Bypass Spool Type, Direct-Acting, Normally Closed Metric Cartridge – 250 bar DWM12130Z

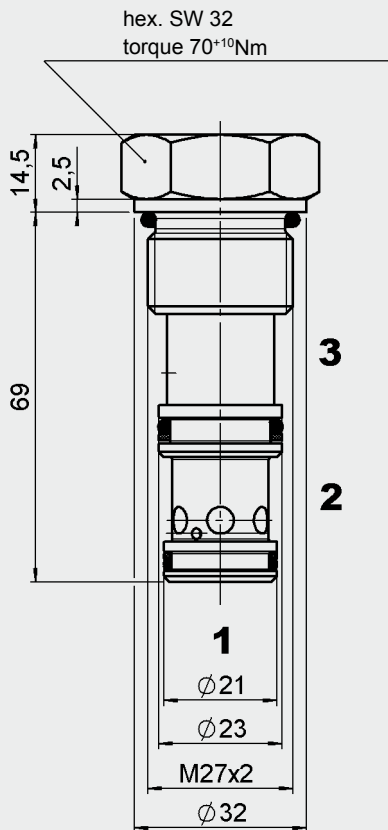
FEATURES

- Used as a load sensing valve to control the flow rate of consumers independently of the pressure
- Versions available for two different control pressure differentials
- Hydrodynamic damping
- Excellent stability throughout pressure and flow range
- Excellent dynamic performance
- All 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
- Internal venting of the load sensing line

SPECIFICATIONS

Operating pressure:	max. 250 bar
Nominal flow:	max. 90 l/min
Control accuracy:	+/- 10%
Media operating temperature range:	min. -20 °C to max. +120 °C
Ambient temperature range:	min. -20 °C to max. +120 °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 Piston: hardened and ground steel Seals: FKM (standard) NBR (optional, media temperature range -30 °C to +100 °C) Back-up rings: PTFE
Cavity:	12130
Weight:	0.25 kg

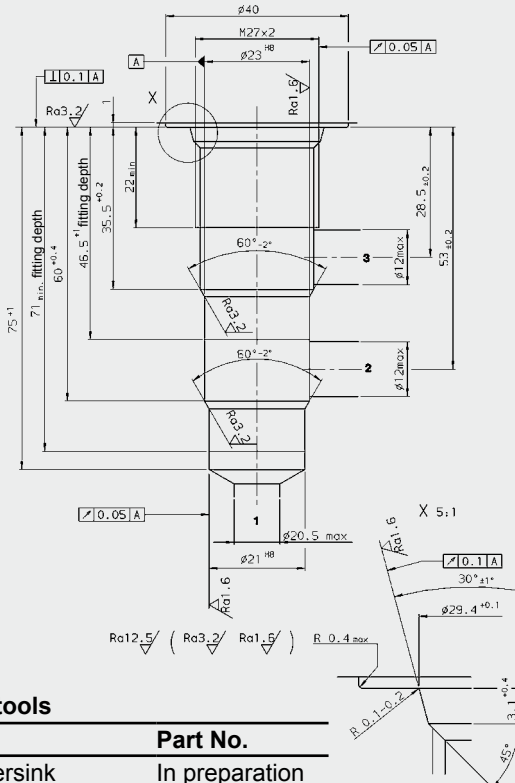
DIMENSIONS



Millimeter
Subject to technical modifications

CAVITY

Metric 12130



Millimeter
Subject to technical modifications

Form tools

Tool	Part No.
Countersink	In preparation
Reamer	In preparation

MODEL CODE

DWM 12130 Z - 0 - C - V - 06

Basic model

Pressure compensator

Cavity to ISO

Function symbol
Z = normally closed pressure compensator

Type

21 = without damping, without venting
22 = with damping, without venting
31 = without damping, with venting from 3 to 2
32 = with damping, with venting from 3 to 2

Body and ports

C = cartridge only
Versions with bodies on request

Seals

V = FKM (standard)
N = NBR

Control pressure differential

06 = 6 bar differential pressure
15 = 15 bar differential pressure

Standard models

Model code	Mat.-Nr.
DWM12130Z-32-C-V-15	562816
DWM12130Z-22-C-V-15	3308547
DWM12130Z-31-C-V-06	3396757

Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
R12130	3305489	Steel, zinc-plated	G 3/4	420 bar

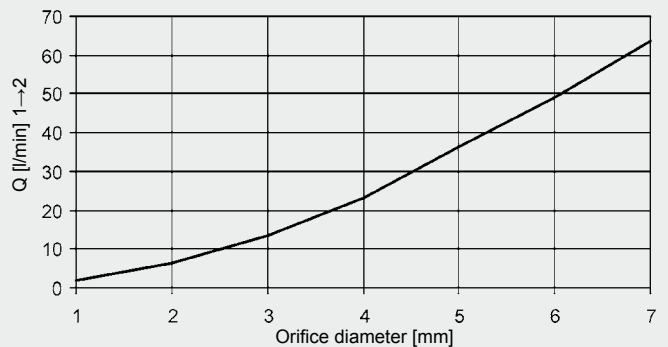
Seal kits

Code	Material	Part No.
Seal kit 12130	NBR	3506022
Seal kit 12130	FKM	3506021

PERFORMANCE

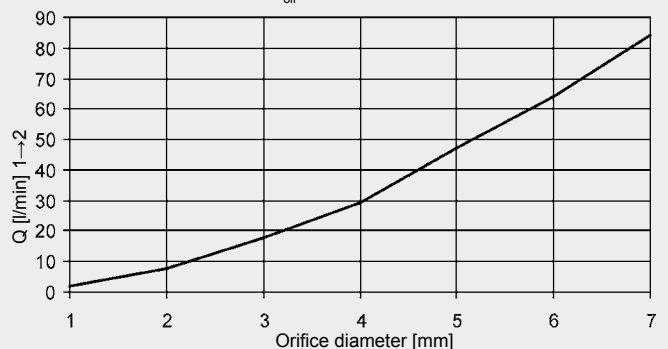
DWM12130Z-...-C-V-06

Measured at $v = 33 \text{ mm}^2/\text{s}$, $T_{\text{oil}} = 46 \text{ }^\circ\text{C}$



DWM12130Z-...-C-V-15

Measured at $v = 33 \text{ mm}^2/\text{s}$, $T_{\text{oil}} = 46 \text{ }^\circ\text{C}$



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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