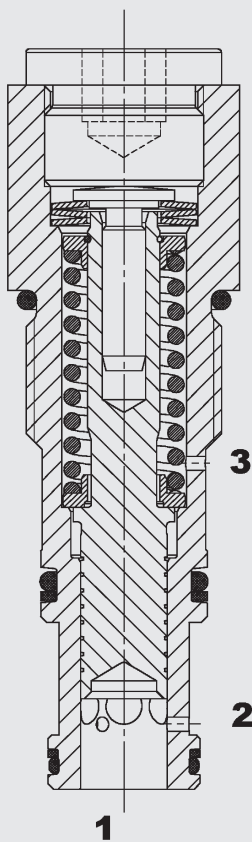


up to 150 l/min
up to 250 bar

FUNCTION



The pressure compensator is a normally open, direct-acting, spring-loaded needle valve in spool valve design. By maintaining a constant differential between inlet and outlet pressures, e.g. of a throttle (ports 3 and 1 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 throttle cross-section. The pressure compensator can, for example, be used when lowering variable loads at the same velocity. Together with a needle valve, it can be used as a flow regulator, for example.

FEATURES

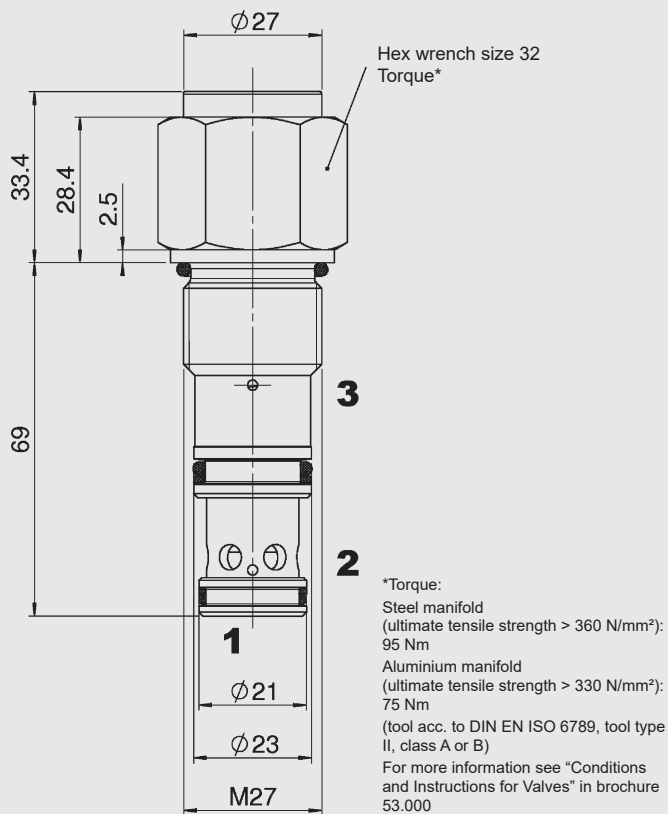
- Used to control the flow rate of consumers independently of the load pressure
- Versions available for different control pressure differentials and flow rates up to max. 150 l/min
- Excellent stability throughout pressure and flow range
- Very good dynamic performance
- Reliable operation due to integrated stroke limitation
- External surfaces with advanced corrosion protection due to Zn-Ni coating (1,000 h salt spray test)

SPECIFICATIONS*

| | |
|------------------------------------|---|
| Operating pressure: | max. 250 bar |
| Nominal flow: | max. 150 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, 2 and 3 |
| Viscosity range: | min. 7.4 mm ² /s to max. 420 mm ² /s |
| Filtration: | Class 21/19/16 according to ISO 4406 or cleaner |
| Installation: | No orientation restrictions |
| MTTF _d : | 150–1200 years, according to DIN EN ISO 13849-1 |
| Materials: | Valve body: steel |
| | Closing element: hardened and ground steel |
| | Seals: NBR (optional FKM, media operating temperature range -20 °C to + 120 °C) |
| | Back-up rings: PTFE |
| Cavity: | Metric 12130 |
| Weight: | 0.35 kg |

*see "Conditions and Instructions for Valves" in brochure 53.000

DIMENSIONS



Millimetre
Subject to technical modifications

MODEL CODE

DWM 12130 - R - 21 - C - N - 05

Basic model

Pressure compensator

Cavity acc. to ISO

Function type

R = downstream pressure compensator

Type

21 = without drain, without damping
22 = without drain, with damping
31 = with drain, without damping
32 = with drain, with damping

Body and ports*

C = cartridge only

Sealing material

N = NBR (standard)
V = FKM

Control pressure differential

05 = 5 bar differential pressure
07 = 7 bar differential pressure
11 = 11 bar differential pressure
15 = 15 bar differential pressure
Other differential pressures on request

Standard models

| Code | Part No. |
|---------------------|----------|
| DWM12130R-21-C-N-05 | 3437185 |
| DWM12130R-22-C-V-07 | 3439473 |
| DWM12130R-21-C-N-11 | 3483304 |
| DWM12130R-21-C-N-15 | 3548608 |

*Standard in-line bodies

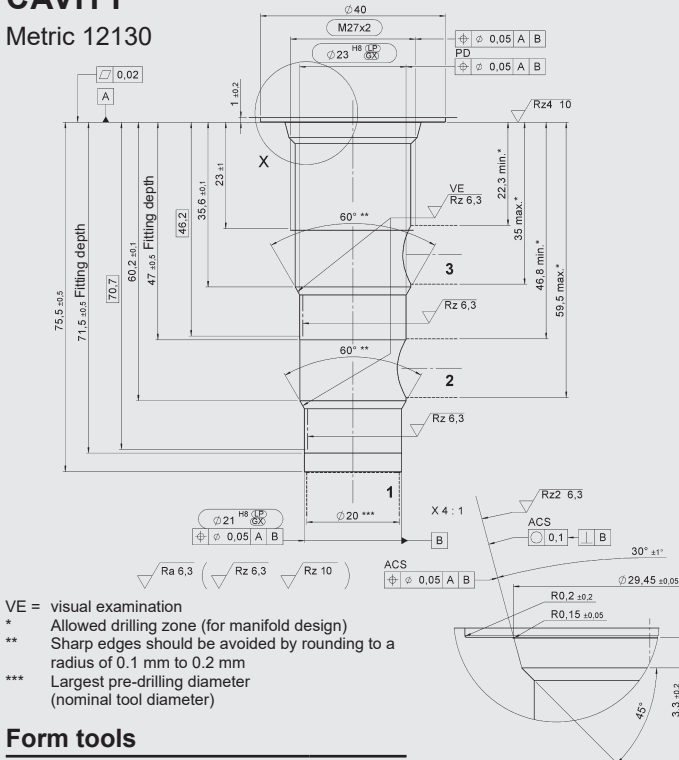
| Code | Part no. | Material | Ports | Pressure |
|---------------|----------|--------------------|----------|----------|
| R12130-01X-01 | 3305489 | Steel, zinc-plated | G3/4 BSP | 250 bar |

Seal kits

| Code | Material | Part no. |
|--------------------|----------|----------|
| SEAL KIT 12130-FKM | FKM | 3506021 |
| FS METRIC 12130/N | NBR | 3825558 |

CAVITY

Metric 12130



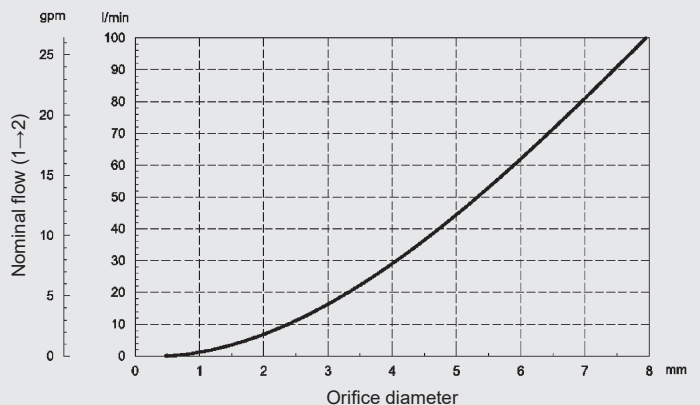
Form tools

| Tool | Part no. |
|------------------|----------|
| Pre-forming tool | 175019 |
| Countersink | 162128 |
| Reamer | 175021 |
| Tap | 1002625 |

Millimetre
Subject to technical modifications

TYPICAL PERFORMANCE

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 not described, please contact the relevant technical department.
Subject to technical modifications.

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