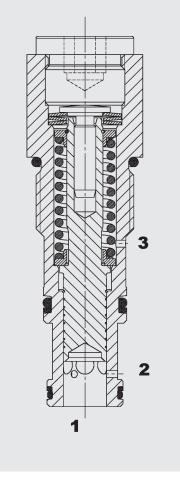


**FUNCTION** 



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.

**Pressure Compensator downstream, spool type direct-acting, normally open Metric Cartridge – 250 bar** DWM12130R

# 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)

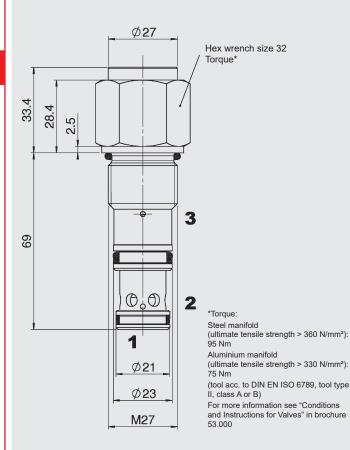
## **SPECIFICATIONS\***

Operating pressure:	max. 250 bar		
Nominal flow:	max. 150 l/min		
Media operating temperature range:	min30 °C to max. +100 °C		
Ambient temperature range:	min30 °C to max. +100 °C		
Operating fluid:	Hydraulic oil to DIN 51524 Part 1, 2 and 3		
Viscosity range:	min. 7.4 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s		
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner		
Installation:	No orientation restrictions		
MTTF <sub>d</sub> :	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

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# DIMENSIONS



## **MODEL CODE**

#### <u>DWM 12130 - R - 21 - C - N - 05</u> 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 Body and ports\* C = cartridge only Sealing material Ν = NBR (standard) ν = 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

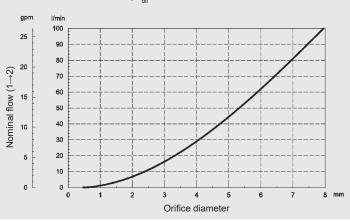
## Seal kits

Millimetre Subject to technical modifications

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

# **TYPICAL PERFORMANCE**

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

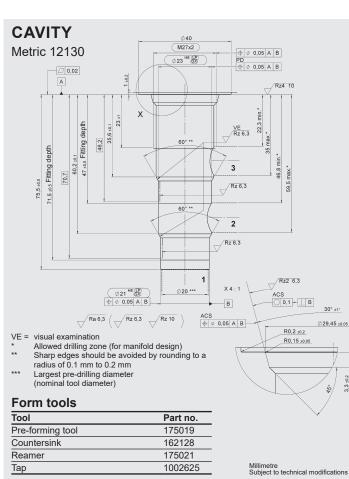


### Note

3,3±0,2

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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2 HYDAC