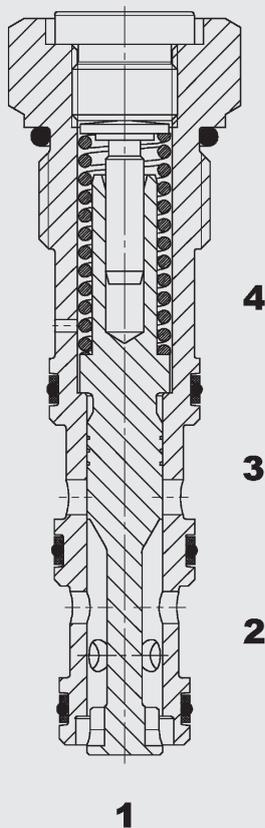


FUNCTION



The pressure compensator is a direct-acting, spring-loaded, smooth-operating spool valve.

Its task is to supply port 1 as the first priority regardless of the load pressure (port 4). It is normally open at service port 1 and is supplied by pump port 2.

If the pressure differential increases to overcome the spring force, the spool will shift to a throttle function at port 1 and will then begin to supply port 3 as the secondary priority.

It is irrelevant to the function of the priority pressure compensator whether the pressure is higher at the first priority port 1 or at the secondary priority port 3.

The priority pressure compensator can be used in steering control units, for example, to support the steering when a vehicle is moving.

Priority Valve Pressure Compensator spool type, direct-acting Cartridge Valve UNF – 350 bar DW12P

FEATURES

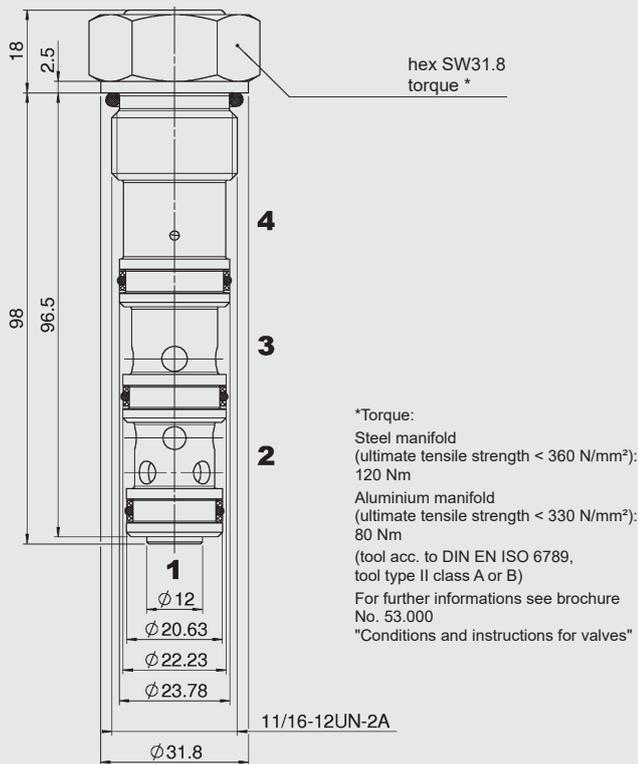
- Hydrodynamic damping
- Excellent stability throughout pressure and flow range
- Used as a load sensing valve to control the flow rate of consumers independently of the pressure
- Exposed surfaces zinc-nickel plated for increased corrosion protection (1000 h Salt spray test)
- Optional: Type -4X with internal venting from port 4 to 1

SPECIFICATIONS*

Operating pressure:	max. 350 bar
Nominal flow:	max. 100 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. 10 mm ² /s to max. 420 mm ² /s
Filtration: (according to ISO 4406)	< 210 bar: min. class 20/18/15 > 210 bar: min. class 19/17/14
MTTF _d :	150 - 1200 years, according to DIN EN ISO 13849-1
Installation:	No orientation restrictions
Materials:	Valve body: steel Closing element: Hardened and ground steel Seals: NBR (standard) FKM (optional, temperature range -20 °C to +120 °C) Back-up rings: PTFE
Cavity:	FC12-4
Weight:	0.33 kg

* see "Conditions and instructions for valves" in brochure 53.000

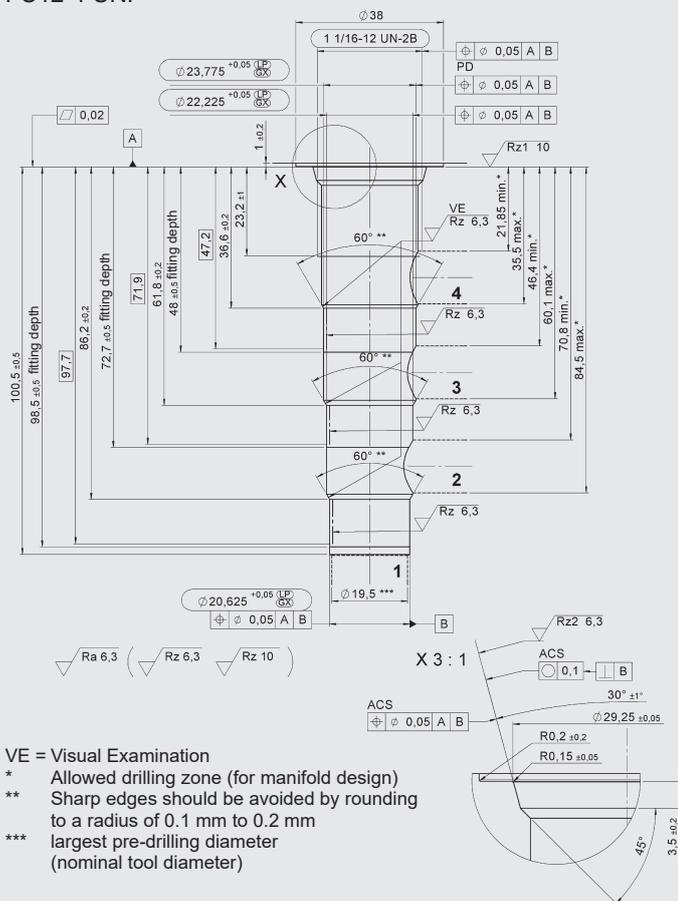
DIMENSIONS



millimeter
subject to technical modifications

CAVITY

FC12-4 UNF



Form tools

Tool	Part No.
Spiral countersink	178068
Reamer	178069

Millimeters (inch)
Subject to technical modifications

MODEL CODE

DW12P-22-C-N-55

Basic model

Priority style pressure compensator

Type

- 21 = without damping, without venting
- 22 = with damping, without venting (standard)
- 23 = heavy damping, without venting
- 41 = with internal venting (4 to 1), without damping
- 42 = with internal venting (4 to 1), with damping
- 43 = with internal venting (4 to 1), with heavy damping

Body and ports*

C = cartridge only

Seals

- N = NBR (standard)
- V = FKM

Pressure ranges

- 55 = 55 PSI
 - 80 = 80 PSI
 - 140 = 140 PSI
- (other pressure ranges on request)

Standard models

Model code	Part No.
DW12P-21-C-N-180	3915570
DW12P-22-C-N-55	3304335
DW12P-23-C-N-80	3956824
DW12P-42-C-N-140	4170460

*Standard Line Bodies

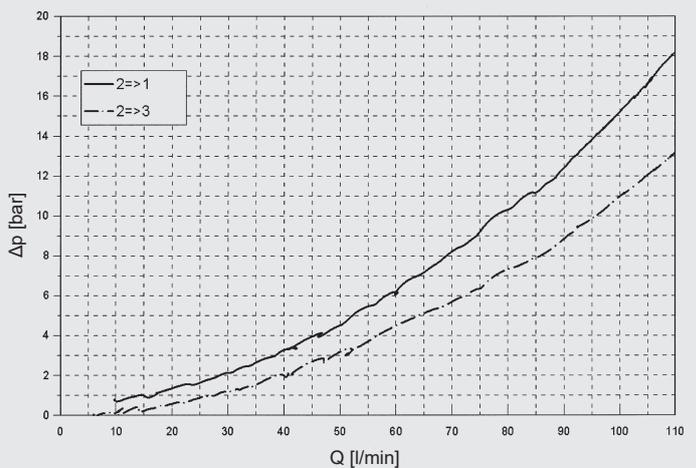
Code	Part No.	Material	Ports	Pressure
FH124-AB6	3054099	Aluminium, anodized	3/4"	210 bar
FH124-SB6	3054097	Steel, zinc plated	3/4"	350 bar

Seal kits

On request

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

HYDAC Fluidtechnik GmbH

Justus-von-Liebig-Str.
D-66280 Sulzbach/Saar
Tel: 0 68 97 /509-01
Fax: 0 68 97 /509-598
E-Mail: valves@hydac.com