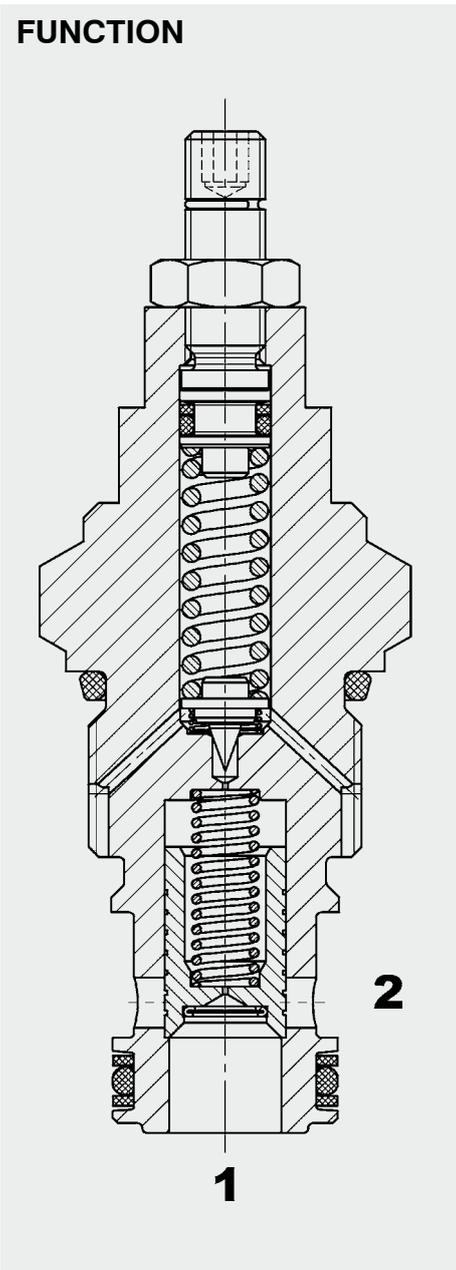


Pressure Relief Valve SAE 12-Cartridge - 350 bar DB12P-01 Spool Type - Pilot Operated

FUNCTION



The DB12P is a pilot-operated pressure relief valve. If pressure at port 1 exceeds the pressure setting the pilot poppet opens, creating a small flow across the orifice in the main spool. The pressure drop over the orifice lifts the main spool against a light spring, opening a connection from port 1 to port 2.

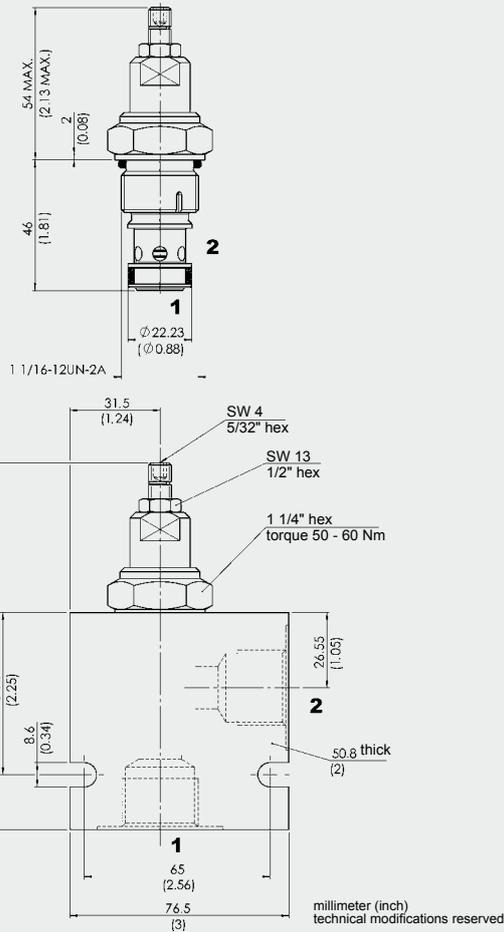
FEATURES

- All surfaces zinc-plated and corrosion proof
- All valve parts made of high-strength steel with hardened and ground components to ensure minimal wear and to extend service life
- Rigid design using one-piece body minimizes the effect of eccentricity and maximizes reliability
- Excellent stability throughout flow range
- Low pressure drop by CFD optimized flow-path
- Screen protected measuring orifice enhances safety
- Optional spring ranges up to 345 bar
- Adjustable across entire pressure range
- Quick response
- Compact design

SPECIFICATIONS

Operating pressure:	350 bar
Nominal flow:	200 l/min
Operating pressure ranges:	up to 35 bar up to 60 bar up to 125 bar up to 230 bar up to 345 bar
Internal leakage:	less than 0.5 l/min at 350 bar
Media operating temperature range:	-20 °C to +120 °C
Ambient temperature range:	-20 °C to +80 °C
Fluids:	Mineral-based or synthetics with lubricating properties
Viscosity:	7.4 to 420 cSt
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
Installation:	No orientation restrictions
Material:	Valve body: carbon steel Spool: carbon steel Seals: NBR (standard) FKM (optional)
Cavity:	FC12-2
Weight:	265 g

DIMENSIONS



MODEL CODE

DB12P-01 - C - N - 180 V 100

Basic Model

Body and Ports*

C = Cartridge only
 SB6 = 3/4 BSP ports, steel body
 SS12 = SAE-12 ports, steel body
 AB6 = 3/4 BSP ports, aluminium body
 AS12 = SAE-12 ports, aluminium body

Seals

N = NBR
 V = FKM

Spring range

050 = up to 35 bar
 090 = up to 60 bar
 180 = up to 125 bar
 330 = up to 230 bar
 500 = up to 345 bar

Adjustment option

V = Allen head (HEX 5/32")
 H = Knob adjustment
 F = Factory preset, non adjustable
 K = Allen head (HEX 5/32") with cover cap

Setting

Model code = desired psi ÷ 10

Standard models

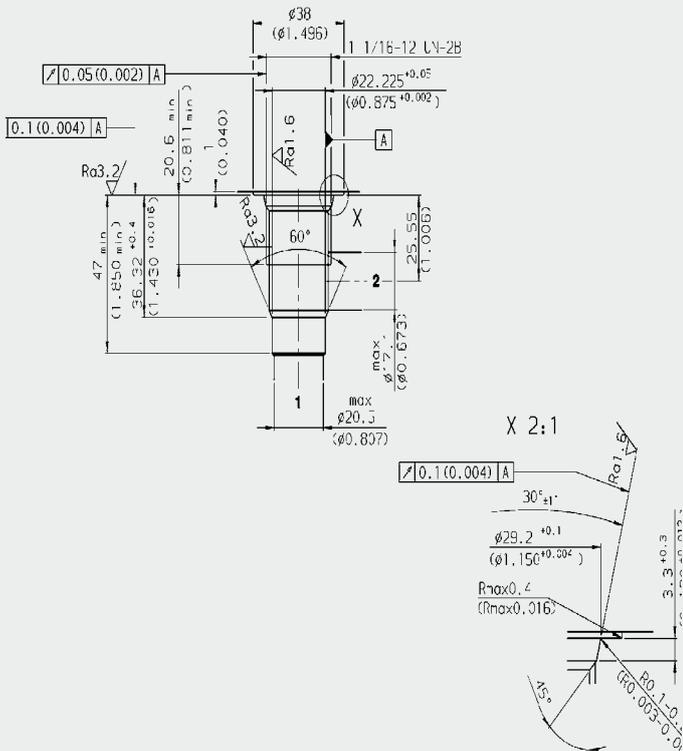
Model code	Material no.
DB12P-01-C-N-090V	3047311
DB12P-01-C-N-330V	3047313
DB12P-01-C-N-500V	3047314

* Standard Line Bodies

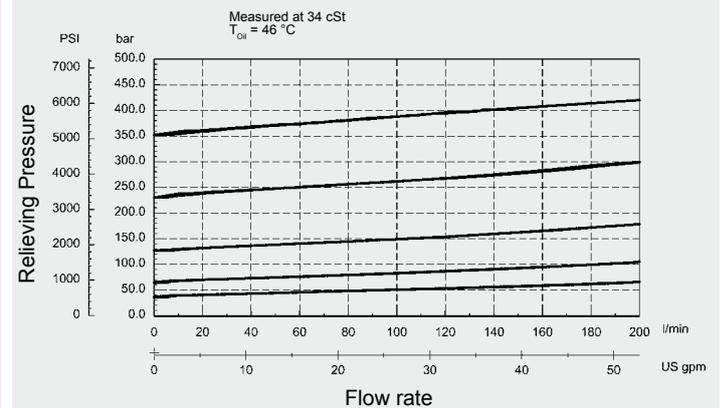
Code	Part No	Material	Ports	Pressure
FH122-SB6	3053782	Steel, zinc-plated	3/4 BSP	420 bar
FH122-SS12	3053772	Steel, zinc-plated	SAE-12	420 bar
FH122-AB6	3053843	Aluminium, clear anodized	3/4 BSP	245 bar
FH122-AS12	3053845	Aluminium, clear anodized	SAE-12	245 bar

CAVITY

FC12-2



PERFORMANCE



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.

Form tools

Tool	Part No
Rougher FC12-2	in preparation
Finisher FC12-2	in preparation

millimeter (inch)
 technical modifications reserved

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