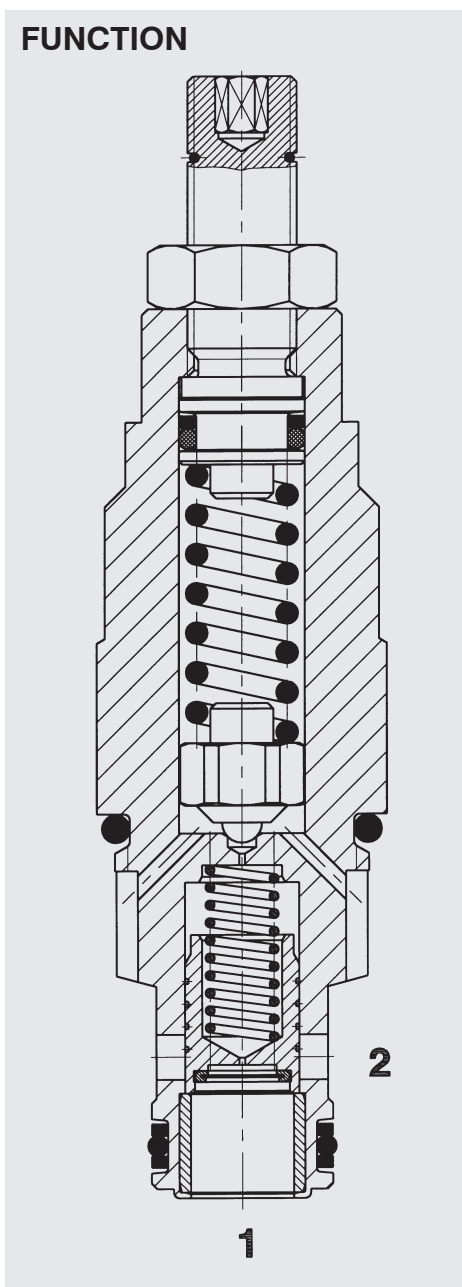


## FUNCTION



The DB10P 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 and opens a connection from port 1 to port 2.

## Pressure Relief Valve SAE 10-Cartridge – 420 bar

DB10P-01

Spool Type – Pilot Operated

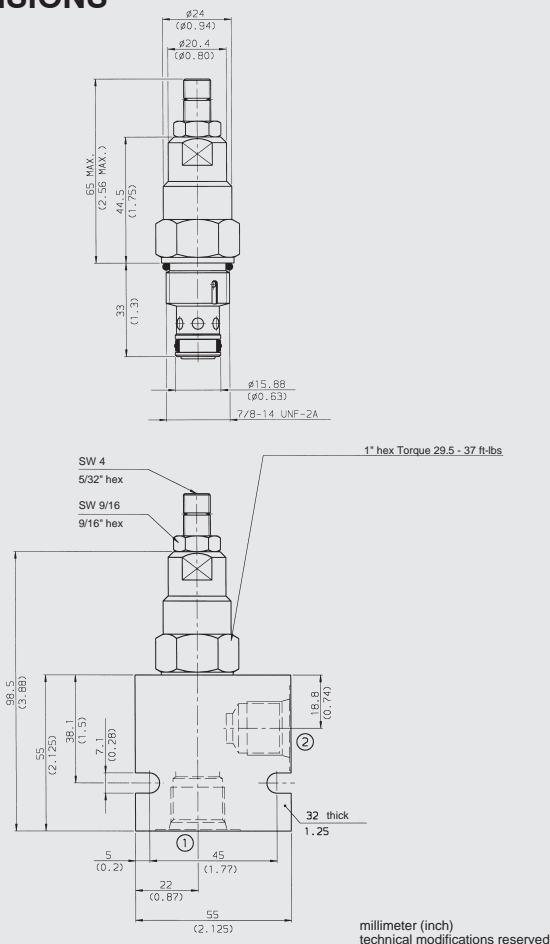
## FEATURES

- 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
- Screen protected measuring orifice for safe valve function
- Adjustable across entire pressure range
- Guided pilot poppet
- Optional spring ranges to 420 bar
- Quick response
- Compact design

## SPECIFICATIONS

Operating pressure:	420 bar
Nominal flow:	120 l/min
Operating pressure ranges:	up to 35 bar up to 62 bar up to 124 bar up to 228 bar up to 345 bar up to 420 bar
Media operating temp. range:	-20 °C to +120 °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:	FC10-2
Weight:	200 g

## DIMENSIONS



## MODEL CODE

**DB10P-01 - C - N - 180 V 100**

## Basic Cartridge

### Body and Ports\*

C = Cartridge only  
SB4 = 1/2 BSP ports, steel body  
SS8 = SAE-8 ports, steel body  
AB4 = 1/2 BSP ports, aluminium body  
AS8 = SAE-8 ports, aluminium body

## Seals

N = NBR  
V = FKM

### Spring range

050 = up to 35 bar  
090 = up to 62 bar  
180 = up to 124 bar  
330 = up to 228 bar  
500 = up to 345 bar  
600 = up to 420 bar

### Adjustment option

**Adjustment Option**

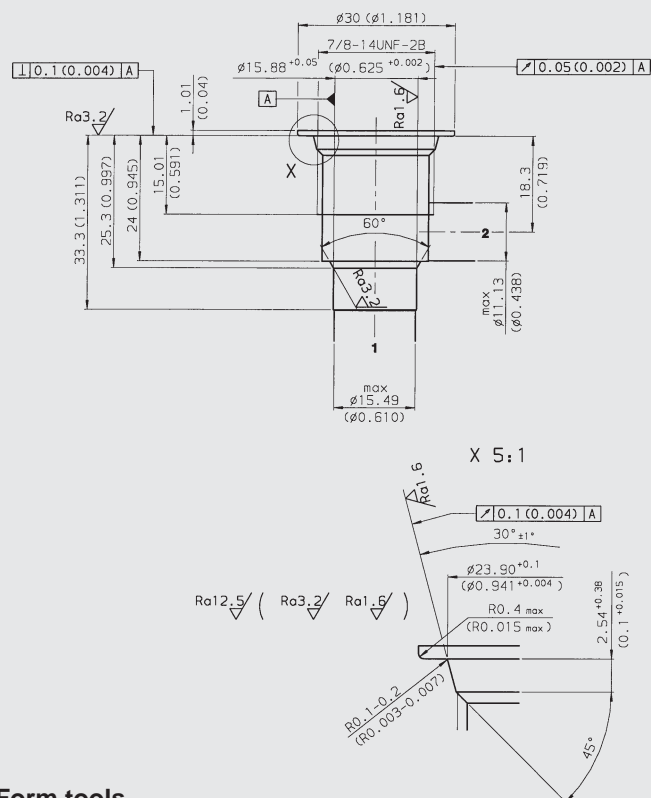
V = Allen head (HEX 5/32")  
H = Knob adjustment  
F = Factory preset, non adjustable  
K = Allen head (HEX 5/32") with cover cap

## Setting

Model code = desired psi  $\div$  10

## CAVITY

FC10-2



## Form tools

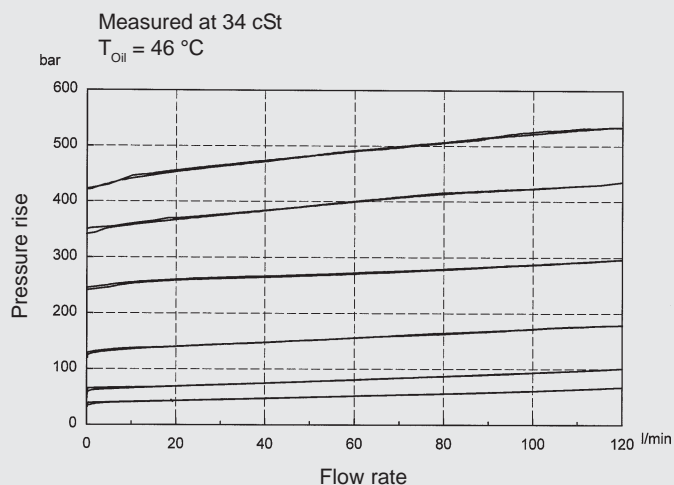
Tool	Part No
Rougher FC10-2	in preparation
Finisher FC10-2	in preparation

millimeter (inch)  
technical modifications reserved

\* **Standard Line Bodies**

Code	Part No	Material	Ports	Pressure
FH102-SB4	3037594	Steel, zinc-plated	1/2 BSP	420 bar
FH102-SS8	3037612	Steel, zinc-plated	SAE-8	420 bar
FH102-AB4	3037777	Aluminium, clear anodized	1/2 BSP	245 bar
FH102-AS8	3037778	Aluminium, clear anodized	SAE-8	245 bar

## PERFORMANCE



## NOTE

**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  
Telefax. 0 68 97 /509-598  
E-Mail: flutec@hydac.com