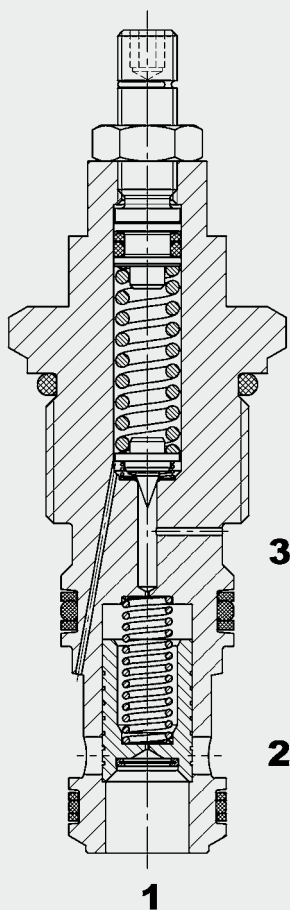


Up to 200 l/min  
Up to 350 bar

## FUNCTION



The pressure relief valve DB12121PF is a pilot operated, spool valve with a remote control option via the additional port 3.

If the pressure across port 1 exceeds the pre-set value, the pilot-stage opens and oil flows from behind the main spool to the tank port 2. The resulting pressure differential allows the main spool to lift against the reset-spring and allows oil to flow from port 1 to port 2. Additionally the valve may switch the system to unpressurized flow by draining a flow over port 3.

## Pressure Relief Valve Spool Type, Pilot-Operated With Remote Control Option Metric Cartridge – 350 bar DB12121PF-01

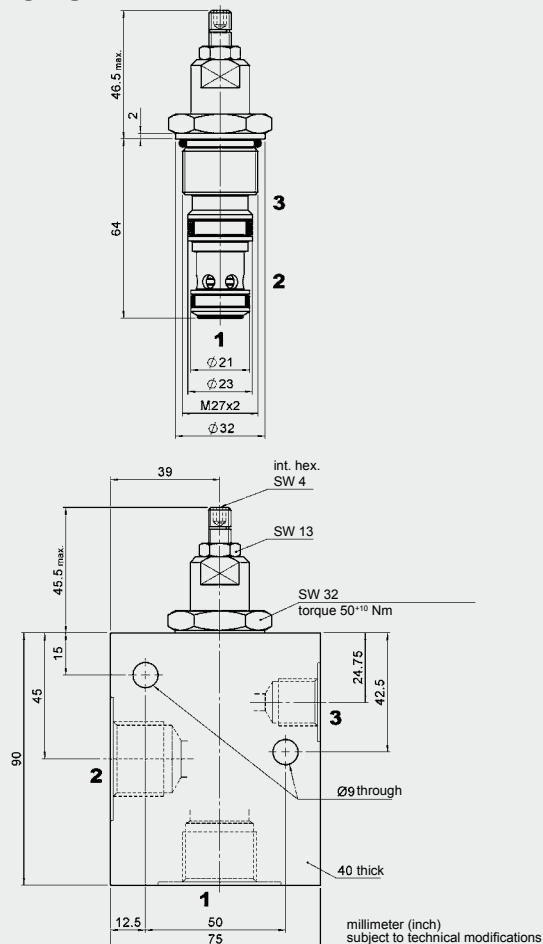
### FEATURES

- External surfaces zinc-plated and corrosion-proof
- Hardened and ground control spool to ensure minimal wear and extended service life
- Various pressure ranges up to 350 bar
- Quick response
- Increased operating reliability due to protective strainer
- Low hysteresis and excellent stability throughout the flow range
- Compact design enables space-saving installation in connection housings and control blocks
- Valve can be operated via its remote control line in combination with a directional valve

### SPECIFICATIONS

Operating pressure:	max. 350 bar
Nominal flow:	max. 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
Required remote control flow rate:	0.2 l/min to 0.6 l/min (depending on pressure and flow rate)
Internal leakage:	320 cm³/min at 350 bar
Media operating temperature range:	min. -30 °C to max. +120 °C
Ambient temperature range:	min. -20 °C to +80 °C
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2
Viscosity range:	min. 10 mm²/s to max. 420 mm²/s
Filtration:	Class 21/19/16 according to ISO 4406 or cleaner
MTTF <sub>d</sub> :	150 years (see "Conditions and instructions for valves" in brochure 5.300)
Installation:	No orientation restrictions
Material	Valve body: high tensile steel Spool: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C) Back-up rings: PTFE Coil: steel / polyamide
Cavity:	12121
Weight:	0.26 kg

## DIMENSIONS



## MODEL CODE

**DB 12121 - PF - 01 - C - N - 350 V 230**

### Basic model

Pressure relief valve  
metric

### Cavity

12121 = 3-way cavity

### Function

PF = pilot operated,  
with remote control option

### Type

01 = standard

### Body and ports\*

C = cartridge only

### Seals

N = NBR (standard)

V = FKM

### Pressure range

035 = up to 35 bar

060 = up to 60 bar

125 = up to 125 bar

230 = up to 230 bar

350 = up to 350 bar

### Type of adjustment

V = Allen head (hex. 5/32")

H = knob adjustment

F = fixed setting

Other adjustment types on request

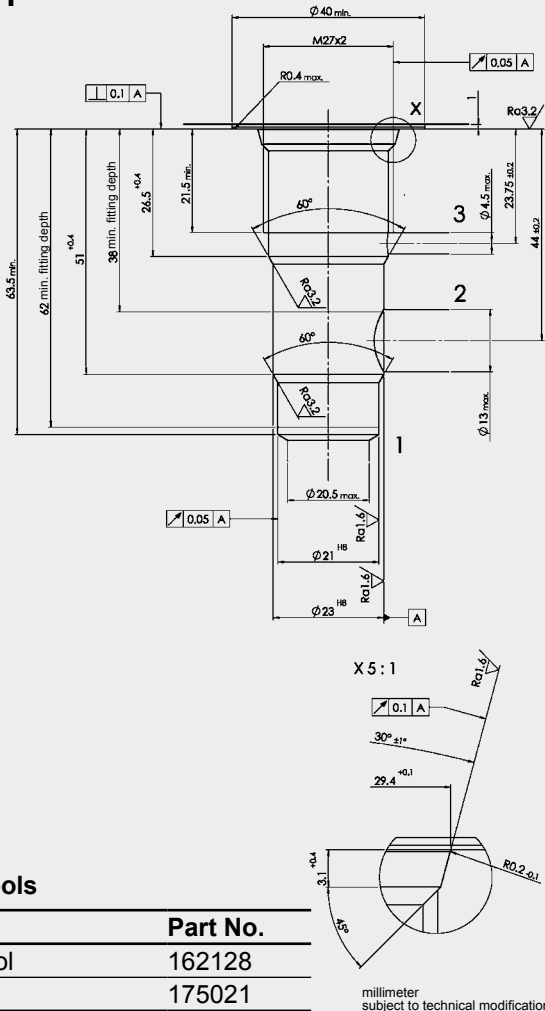
### Opening pressure setting

No details = no setting, spring relaxed

Pressure value = opening pressure specified by customer

## CAVITY

12121



### Form tools

Tool	Part No.
Form tool	162128
Reamer	175021

### Standard models

Model code	Mat.-Nr.
DB12121PF-01-C-N-060V	3126912
DB12121PF-01-C-N-230V	3126914
DB12121PF-01-C-N-350V	3126915

### \*Standard in-line bodies

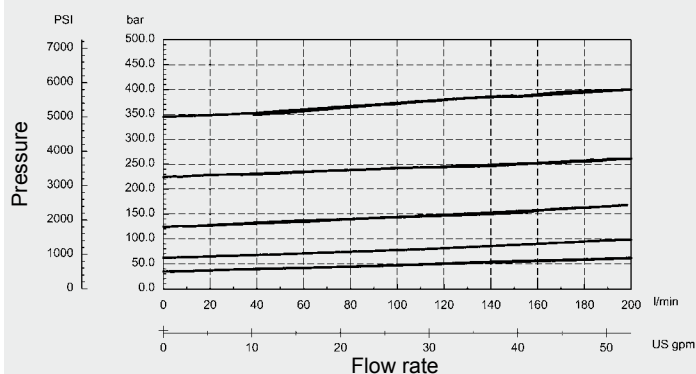
Code	Part No.	Material	Ports	Pressure
R12121-01X-01	3130704	Steel, zinc-plated	G3/4, G3/8	420 bar

### Seal kits

Code	Material	Part No.
SEAL KIT 12121-NBR	NBR	3269389
SEAL KIT 12121-FKM	FKM	3269390

## PERFORMANCE

Measured at  
 $v = 34 \text{ mm}^2/\text{s}$ ,  
Toil =  $46^\circ \text{C}$



### 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.

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