HYDAC INTERNATIONAL

Pressure control valve, pilot operated
Subplate-mounted

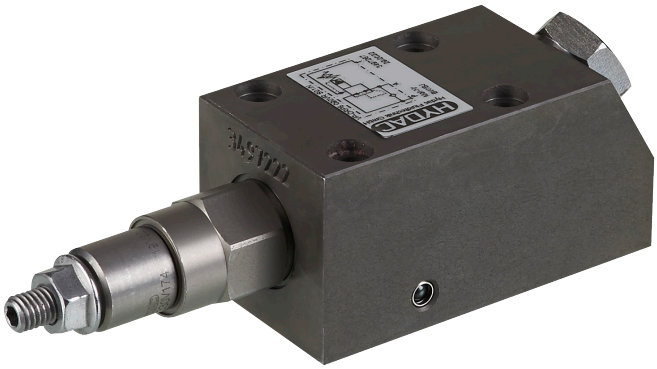
VP-DRP6

DESCRIPTION

The HYDAC VP-DRP6 is a spring-loaded, pilot operated pressure control valve. It is responsible for keeping the pressure at the consumer constant.
An optional bypass check valve enables unrestricted reverse flow from the consumer to an unloaded supply port.

CHARACTERISTICS

- Interface to DIN 24340 form A6 | ISO 4401-03-02-0-05 (CETOP3), nominal size 6
- Pilot operated pressure control valve
- Unrestricted flow in opposite direction thanks to installed check valve (cracking pressure 0.5 bar)



Size 6
up to 60 l/min
up to 350 bar

CONTENTS

Description	1
Characteristics	1
Model code	2
Symbol	2
Function	3
Section view	3
Technical data	3
Performance curves	4
Unit dimensions	5
Accessories	5

EN 5.249.15.1/09.24

MODEL CODE

VP-DRP 6 090 V R S01 /V

Designation
Pressure control valve, pilot operated

Nominal size (NG)
6

Pressure setting ranges
50 = 6 to 35 bar
90 = 6 to 62 bar
180 = 6 to 125 bar
330 = 6 to 228 bar
500 = 6 to 345 bar
Other versions on request.

Adjustment type
V = adjustable with tool

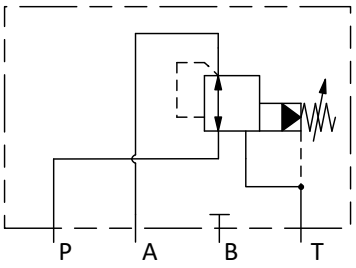
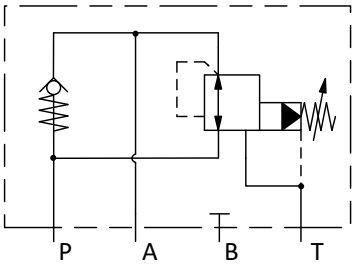
Check valve
R = 0.5 bar cracking pressure

Type
S01 = standard

Sealing material
V = FKM (standard)
N = NBR

SYMBOLS

Pressure control valve, pilot operated

Type	Symbol
VP-DRP6 without bypass check valve	
VP-DRP6 R with bypass check valve	

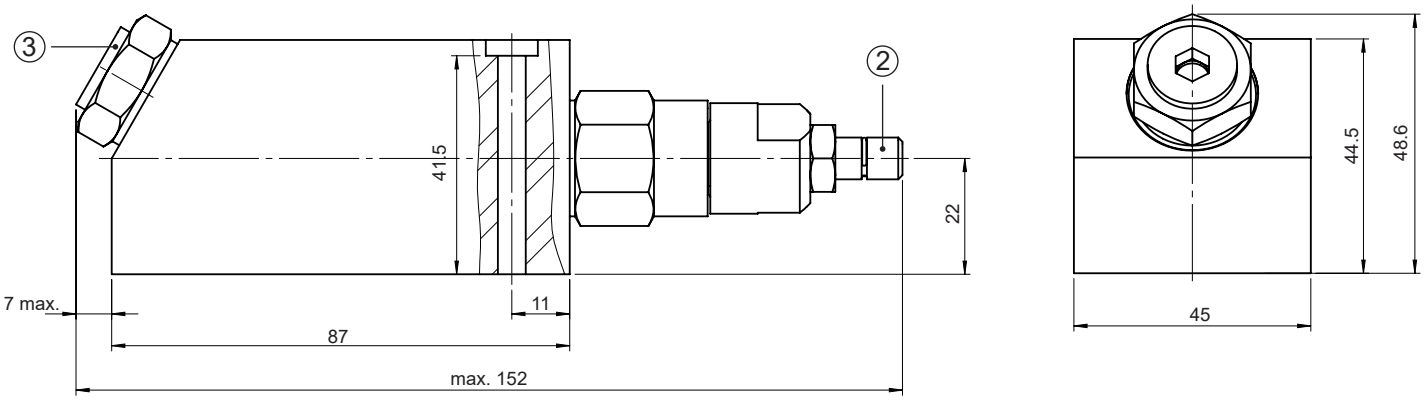
FUNCTION

The VP-DRP6 combines a functional element in the form of cartridge valve DR08P-01 and optionally a cartridge valve RV08A-01 as bypass check valve in the subplate-mounted housing.

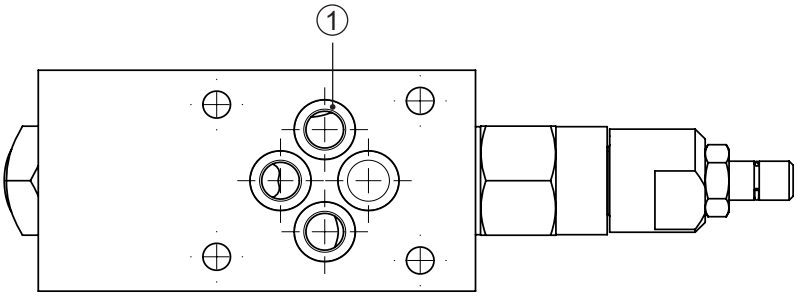
Details on the function of the two valves are provided in brochures DR08P-01 (DE 5.920.1) and RV08A-01 (5.912.5).

Please note: A tank pressure at port T is additive to the valve's setting pressure.

SECTION VIEW



1. Sealing rings 4x O-ring 9.25 x 1.78
2. Pressure control valve adjustable with tool
3. Check valve



Fastening screws: (not included in scope of supply)
DIN EN ISO 4762 – M5x50 – 10.9 | Tightening torque: 5 Nm
Tightening torque tool in acc. with DIN EN ISO 6789, tool type II class A or B

Millimetres
Subject to technical modifications.

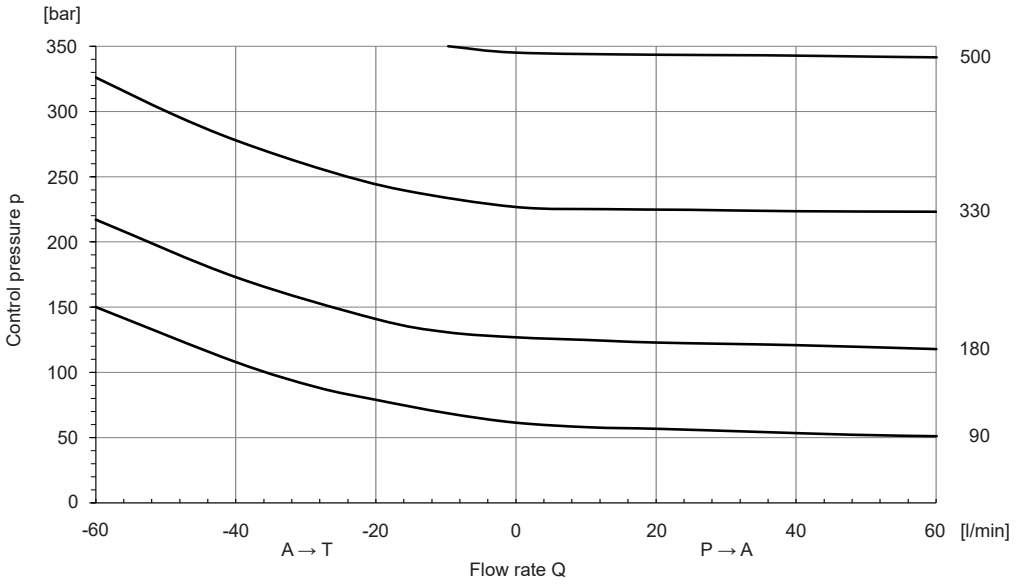
TECHNICAL DATA[1)]

General specifications	
$MTTF_D$	150 - 1200 years, assessment according to DIN EN ISO 13849-1:2016; Table C.1, Confirmation of ISO 13849-2:2013; Tables C.1 and C.2
Ambient temperature	-20 °C to +50 °C
Installation pos.	User-definable
Weight	1.2 kg
Material	Valve housing: Steel
Surface coating	Valve housing: Phosphate-plated
Hydraulic specifications	
Operating pressure	350 bar max.
Flow rate	60 l/min max.
Drain flow, internal	< 0.5 l/min
Operating fluid	Hydraulic oil to DIN 51524 Part 1 and 2
Temperature range of operating fluid	-20 °C to +80 °C
Viscosity range	min. 15 to max. 400 mm²/s
Filtration, max. permitted contamination level	ISO 4406 class 21/19/16 or better

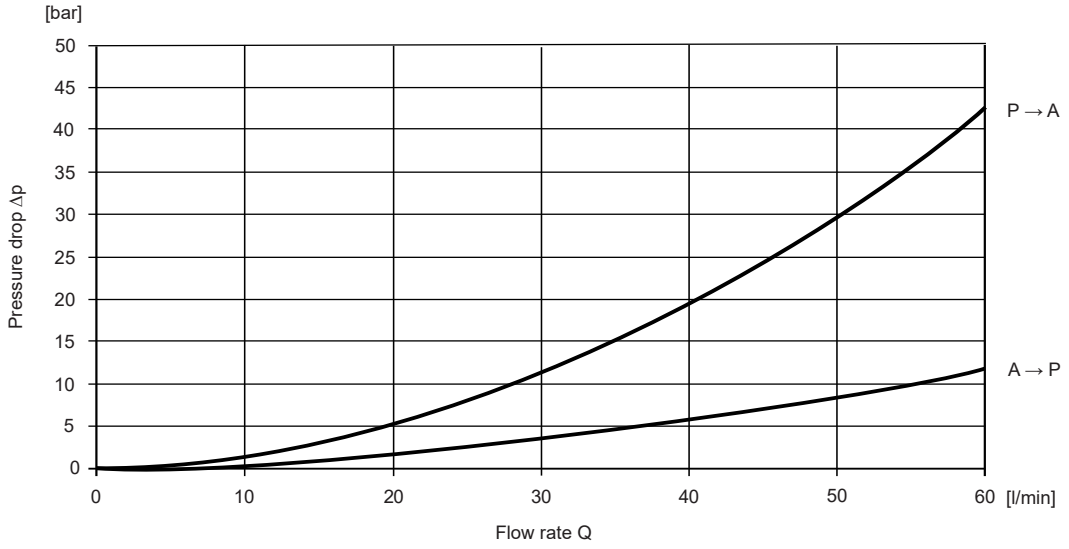
[1] See "Conditions and Instructions for Valves" in brochure 53.000

SAMPLE CHARACTERISTICS

p/Q characteristics measured at ν = 33 mm²/s, T_{Oil} = 46 °C

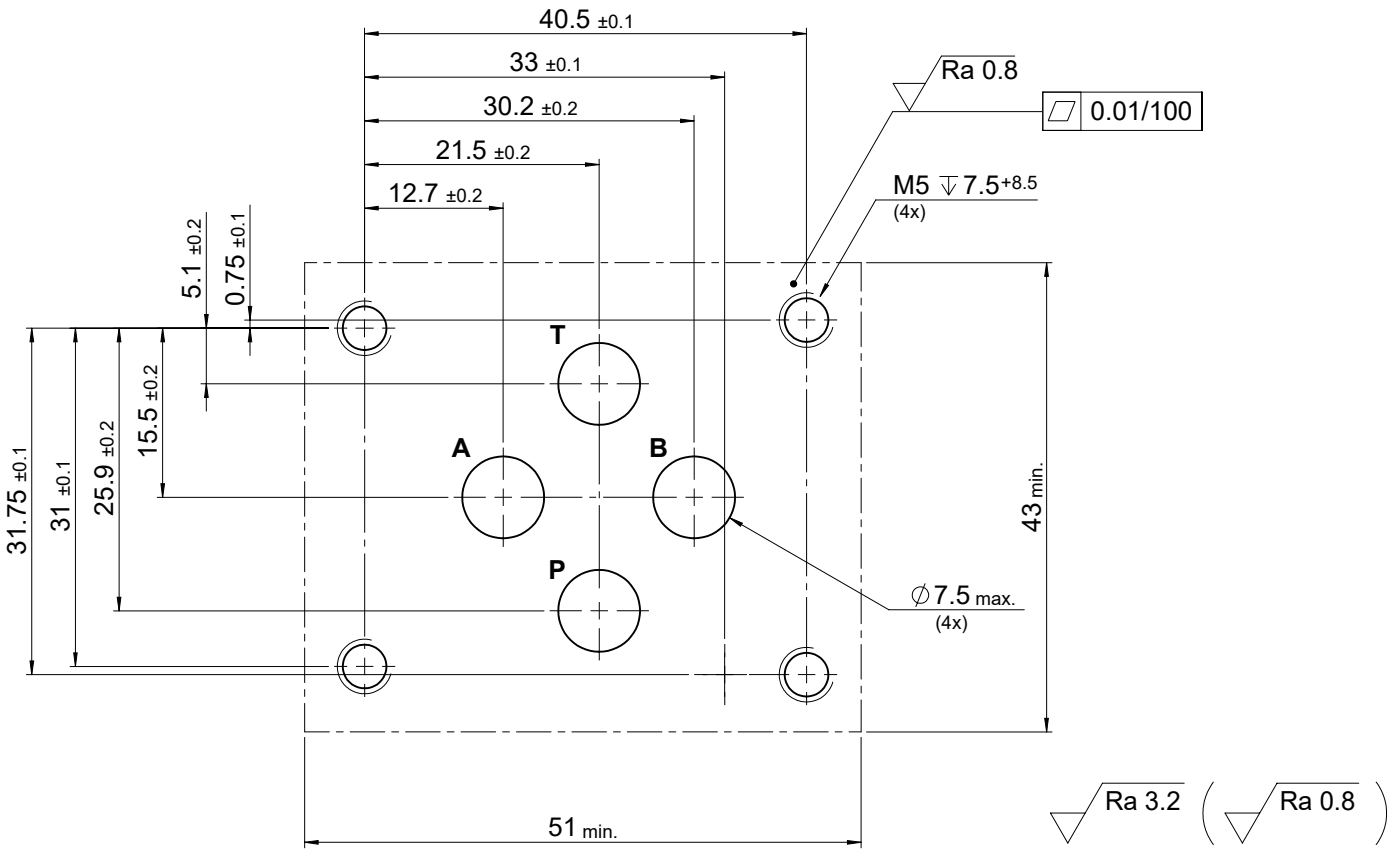


Δp/Q characteristics measured at ν = 33 mm²/s, T_{Oil} = 46 °C



DIMENSIONS

Interface to DIN 24340 form A6 | ISO 4401-03-02-0-05 (CETOP3)



ACCESSORIES

Spare parts, seal kits

Designation	Material	Code	Part no.
Seal kits (4-part set)	NBR	9.25 x 1.78 80 Sh	3492432
Seal kits (4-part set)	FKM	9.25 x 1.78 80 Sh	3120269

Accessories

Designation	Code	Part no.
Fastening screws	Hexagon socket head cap screws ISO4762 - M5x50-10.9	4312231

NOTE

The information in this brochure relates to the operating conditions and fields of application described. For applications and operating conditions not described, please contact the relevant technical departments.

Subject to technical modifications.

Documents are only valid if they have been obtained via the website and are up-to-date.

HYDAC FLUIDTECHNIK GMBH
Justus-von-Liebig-Str.
66280 Sulzbach/Saar
Germany
Phone: +49 6897 509-01
E-mail: valves@hydac.com
Internet: www.hydac.com