

Pressure Reducing Cartridge Valve, 10 mm Poppet Pilot Stage, Spool-type Main Stage Series DRPA-5 ...



- Pmax 350 bar / Qmax 120 l/min
- Pilot oil drained externally to port Z
- Interchangeable with DRP-5-10 ...
- Good corrosion protection, stainless steel adjusting screw
- Very stable in operation
- Improved pressure-setting resolution
- Very tolerant of over-tightening in cavity
- BUCHER cavity type DD
- available in ISO / CETOP3 and 5 stack mounting body

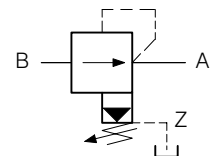
1. Description

Series DRPA-5-10... cartridges are 2-stage pressure reducing valves with a positive seat pilot stage and spool-type main stage. When the pilot stage is active (main stage reducing), pilot oil is externally drained to port Z. In this condition the secondary pressure in A will be maintained at the set level, as long as the primary pressure in B does

not fall below that value. Thoroughly oil or grease external seals before inserting the cartridge in a DD cavity. The cartridge can be tightened with a 27 A/F OE spanner (note the recommended tightening torque). Form tools are available for sale or hire, should customers wish to machine cavities in their own control blocks. The BUCHER line- and manifold-mounting body type DD-12 can be used where the application requires a line mounting valve.

2. Symbols

DRPA-5-10 ...

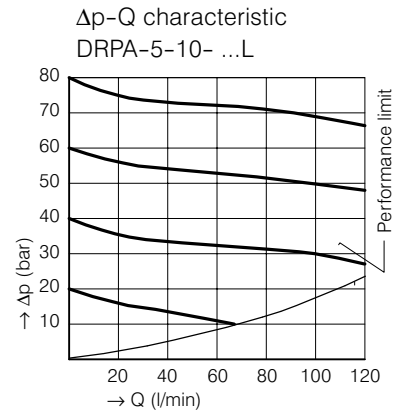
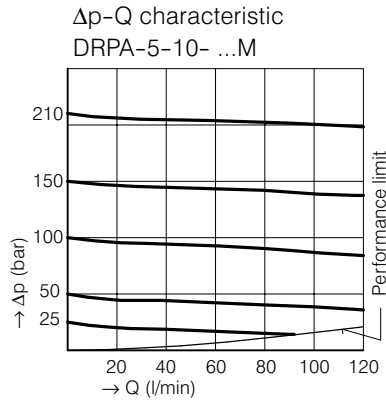
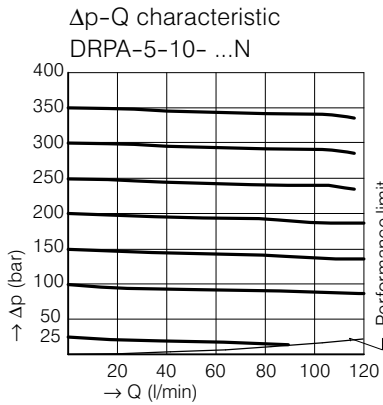


3. Characteristics

Type		pressure reducing cartridge valve
Design		poppet pilot stage, spool main stage with external pilot drain to port Z
Mounting method		screw-in cartridge (M24 x 1,5)
Size		10 mm nominal size, BUCHER cavity type DD
Mass	kg	0,23
Mounting attitude		unrestricted
Flow direction		B ⇒ A, see symbol
Operating pressure	bar	... 350 max. in A, B and Z
Adjustment ranges, see performance curves	bar	pressure range N = 10 ... 350 pressure range M = 10 ... 210 pressure range L = 10 ... 65
Flow rate Q max.	l/min	1 ... 120 max. see performance characteristics
Fluids		Hydraulic oils HL and HLP to DIN 51 524 other fluids - contact BUCHER
Fluid temperature range	°C	-20 ... +60
Viscosity range	cSt	10 ... 300
Minimum fluid cleanliness		18/14 to ISO 4406 /CETOP RP70H 8 ... 9 to NAS 1638

4. Performance characteristics

Oil viscosity 33 cSt

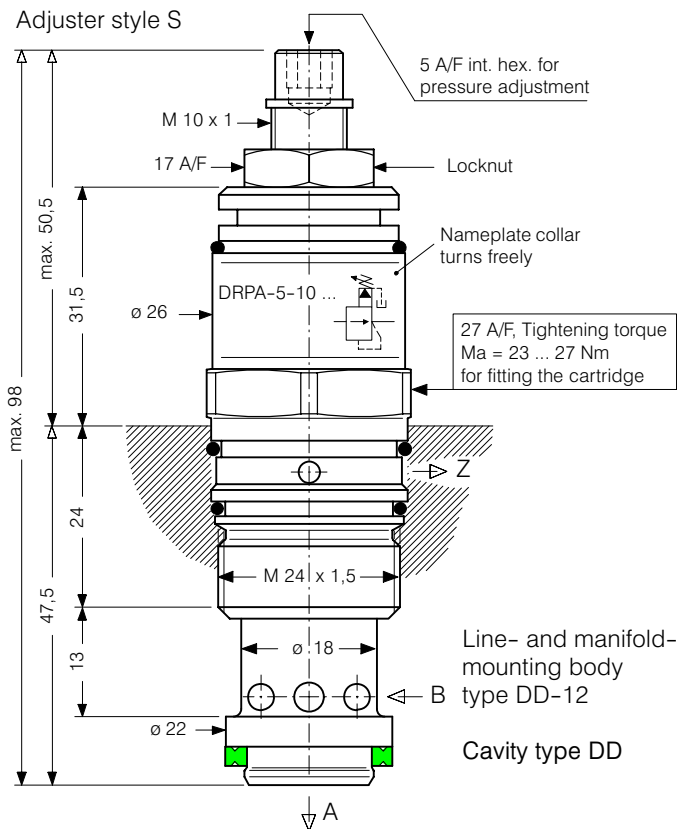


Rate of pressure change when turning the adjusting screw

DRPA-5-10-...N: 1 tum	≈	approx. 65 bar
DRPA-5-10-...M: 1 tum	≈	approx. 38 bar
DRPA-5-10-...L: 1 tum	≈	approx. 13 bar

Pilot flow A ⇒ Z:
approx. 300 cm³ / min

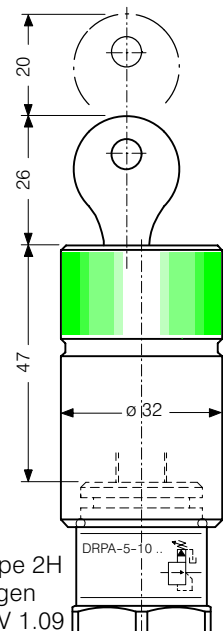
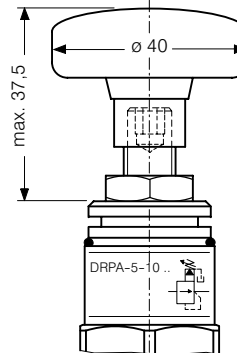
5. Dimensions



Adjuster styles / OPTIONAL

Cartridges can also be supplied with adjuster styles H and Z4 (see model code key)

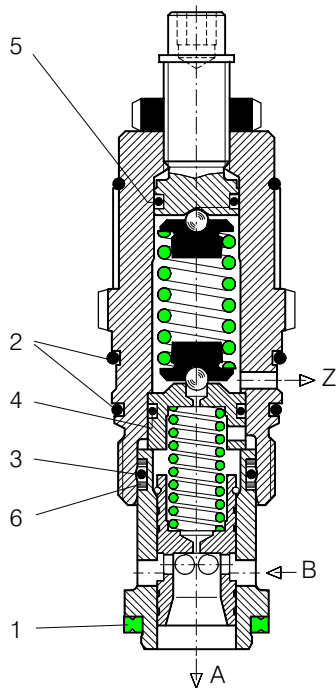
Adjuster style H Hand knob



Adjuster style Z4

Lockable hand knob type 2H
Complies with Volkswagen
Factory specification BV 1.09

6. Schematic section



Seal kit no. DS-216, comprising:

Itm.	Qty.	Description	Size
1	1	Sealing ring	Ø 22,1 / 16,5 x 2,5
2	2	O-ring no. 020	Ø 21,95 x 1,78 N90
3	1	O-ring	Ø 14,00 x 2,00 N90
4	1	O-ring no. 013	Ø 10,82 x 1,78 N90
5	1	O-ring no. 012	Ø 9,25 x 1,78 N90
6	2	Backup ring	Ø 13,7 X 1,4 X 1,15 FI0751

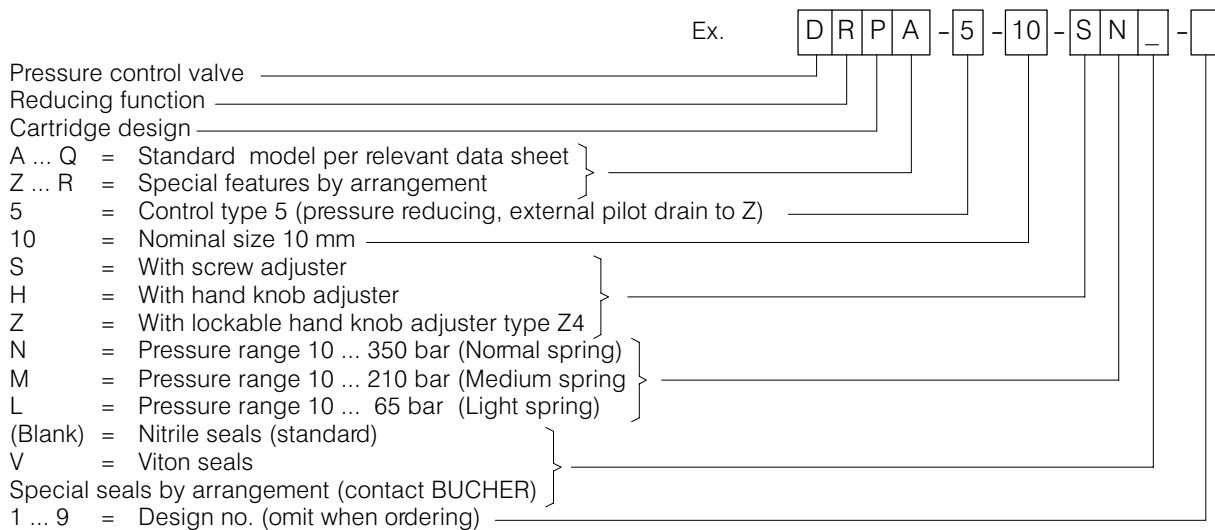
7. Installation and servicing

All installation and servicing must be carried out with care, and by qualified personnel only. Use the correct tighten-

ing torque when fitting the cartridge. When changing seals, the new seals

must be thoroughly oiled or greased before they are fitted.

8. Model code key



9. Related data sheets

Old no.	New no.	
G-24.21	400-P-740111-E	BUCHER Line- and manifold-mounting body type DD-12 (G 1/2")
i-32	400-P-040011-E	The Form tool hire programme
i-45.2	400-P-060121-E	BUCHER cavity type DD

BUCHER HYDRAULICS

Germany

Phone +49 7742 85 20
Fax +49 7742 71 16
info.de@bucherhydraulics.com

France

Phone +33 389 64 22 44
Fax +33 389 65 28 78
info.fr@bucherhydraulics.com

Netherlands

Phone +31 79 34 26 24 4
Fax +31 79 34 26 28 8
info.nl@bucherhydraulics.com

UK

Phone +44 24 76 35 35 61
Fax +44 24 76 35 35 72
info.uk@bucherhydraulics.com

USA

Phone +1 262 605 82 80
Fax +1 262 605 82 78
info.wi@bucherhydraulics.com

www.bucherhydraulics.com

Switzerland

Phone +41 33 67 26 11 1
Fax +41 33 67 26 10 3
info.ch@bucherhydraulics.com

Italy

Phone +39 0522 92 84 11
Fax +39 0522 51 32 11
info.it@bucherhydraulics.com

Austria

Phone +43 6216 44 97
Fax +43 6216 44 97 4

China

Phone +86 10 64 44 32 88
Fax +86 10 64 44 32 35
info.bj@bucherhydraulics.com

Product Center (Elevator)

Phone +41 41 757 03 33
Fax +41 41 757 16 49
info.nh@bucherhydraulics.com

We reserve the right of modification without notice.