3-way pressure reducing valves Size 10



Indirectly controlled HERION port dimensions

 $PN [p_{max.}] = 315 bar$

750**1409**.06.02.06

Description (standard units)

The pressure reducing valves of Type D Y K are indirectly controlled spool-type valves.

Actuation

The pressure is set manually by means of a rotary knob. The setting can, if desired, be safeguarded by lock (E-10type) or lead seal.

Mounting

The units are bolted on subplates and sealed by O-rings.

Line connection

Subplate, HERION port dimensions. (Similar to 2-way pressure reducing valves DIN 24 340)



Features

Subplate

- · High flow rating
- Sensitive adjustment
- Stable control characteristics

Type code

Pressure	reducir	ng valve

D	Y	K	10		A		001		0	
				1		2		3		4

1 Actuation: H – Manual setting

> **HV** – Manual setting (lockable) **HK** – Set-screw with cover (can be lead sealed)

2 Pressure **70** – up to 100 bar 90 - up to 315 bar setting range:

3 Engineering version:

Perbunan 4 Sealing Viton material:

P	DY	10	A	4	005	•••	0	0
						1		

1 Engineering version: 1

Parameters according to VDI 3276

Toma danimation	D V V 40
Type designation	D Y K 10

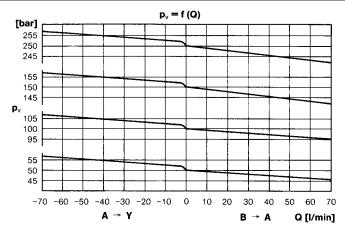
General parameters

Designation			Pressure reducing valve		
Symbol				A X TY	Port X blocked in subplate if Y is used for return of control oil
Design			Spool-type valve, pilot cor	ntrolled	
Type of mounting			Flange		
Line connection			Subplate		
Mounting position			Optional		_
Flow direction			from B to A, from A to Y		
Actuation			Manual setting		
Weight		[kg]	4.9		
Weight of subplate		[kg]	1.6		
Ambient temperature	ϑ_{u}	[°C]	-20 to +50		
Size		NG	10		

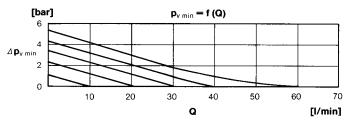
Hydraulic parameters

Operating pressure range	p _e	[bar]	up to 315
Adjustable pressure range	p _v	[bar]	Pressure stage 70: 5 to 100 Pressure stage 90: 5 to 315
Pressure fluid temperature	ϑ_{m} max.	[°C]	+70
Visosity range	ν	[mm²/s]	12 to 500
Flow	Q	[l/min]	See characteristic curves
Control oil flow	Q _{St}	[l/min]	0.5

Characteristic curves



 p_v values valid if $p_Y = 0$ bar



[bar] $\Delta p = f(Q)$ 6

4

4

2

10

20

30

40

50

60

70

Q

[l/min]

Increase of outlet pressure

Flow resistance B→A with piston in open position

Ordering

The units are designated by their type number. The composition of this number can be drawn from the type code. The standard versions are listed in the type survey. When ordering any of the standard versions, please state type number as well as catalog number to preclude possible misinterpretations.

When inquiring about or ordering units not listed in our type survey of this publication, the type number made up by you by means of the type code, however, will do. The corresponding catalog number will then be stated in our confirmation of order. Units with flanged connection are delivered complete with mounting bolts and O-rings. The subplate must be ordered separately.

Example of order

2-way pressure reducing valve size 10 for flanged mounting with manual setting. Setting pressure max. 315 bar, with mating subplate.

3-way pressure reducing valve:

Type No.: D Y K 10 H A 90 001 2 O O

Cat. No.: **6014254**

Subplate:

Type No.: P DY 10 A 4 005 1 O O

Cat. No.: **2840085**

Type survey (standard versions)

Size	Q [l/min]	p _v max. [bar]	Actuation	Line connection	Туре	Cat No.
10	70	100 315		Subplate G 1/2 P DY 10 A 4 005 1 O O (Port X closed) 2840085	1) D Y K 10 H A 70 001 2 OO 1) D Y K 10 H A 90 001 2 OO	6014253 6014254

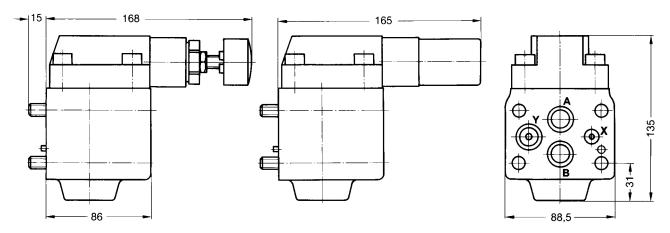
¹⁾ Note: Unit is furnished with internal control oil return via port Y (standard version). For units with external control oil return via port X, not instructions on spare parts drawings.

Dimensional drawings (in mm)

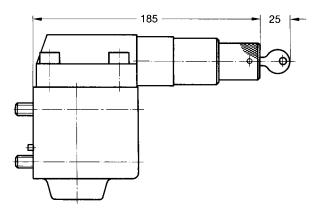
Pressure reducing valves

D Y K..H...

DYK...HK...

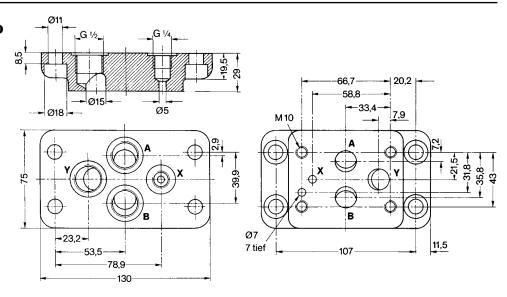


D Y K..HV...



Dimensional drawings (in mm)

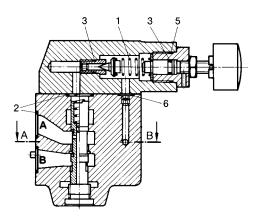
Subplate P DY 10 A 4 005 1 O O

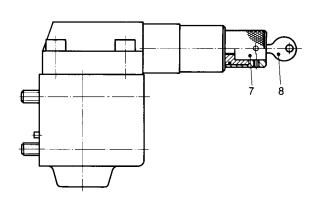


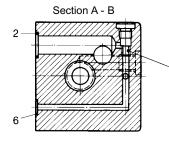
Spare parts drawings











Closed by means of screw 0700514 if control oil is returned externally via X.

Spare parts

Part	Qty.	Designation	Cat. No.
1	1	Spring pressure stage 70 pressure stage 90	0701810 0701853
2	5	O-ring (17.1 x 2.6)	0701290
3	2	O-ring (7.7 x 1.8)	0701621
5	1	O-ring (20.3 x 1.8)	0701259
6	2	O-ring (9.2 x 1.8)	0701252
7	1	Lock cylinder with key	0568519
8	1	Key	0660051

Mounting bolts, tightening torque = 69 Nm

-	4	Cylinder bolt	0700462
		(M10 x 90 DIN 912-10.9)	

Spar parts kits

Cat. No. **0727312**

1 Set of spare parts consists of parts 2 to 6.