

## Throttle/shut-off valve and throttle check valve

**RE 32502/10.07** Replaces: 08.92 1/6

### Types DV and DRV

Sizes 6 to 40 Component series 1X Maximum operating pressure 350 bar Maximum flow 600 l/min



## **Table of contents**

# Content Features Ordering code Function, section, symbols Technical data

Characteristic curves
Unit dimensions

\_\_\_ Features

Page – For direct in-pipe mounting1 – For control panel mounting

2 - Threaded connection

2 - Good repeatability of set values due to color scale

3 - Variant, optional:

3, 4 • Steel

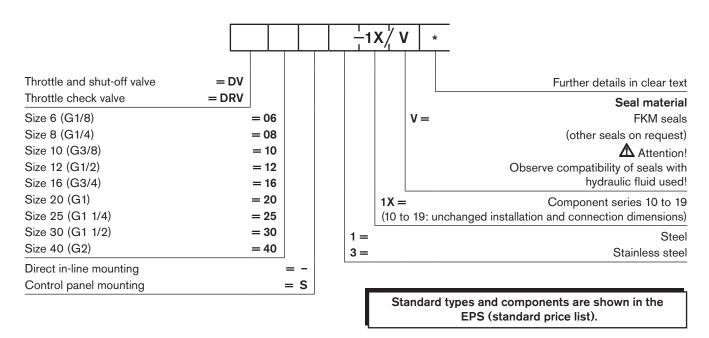
5

• Stainless steel

- Available with fine throttle spindle (please indicate on order)

Information on available spare parts: www.boschrexroth.com/spc

## Ordering code



## Function, section, symbols

Throttle/shut-off valves of type DV serve to exactly adjust and shut off a flow in both directions.

Throttle check valves of type DRV are used to throttle the flow in only one direction (A to B). In the opposite direction, a check valve (4) allows a free return flow.

The valves basically consist of housing (1), adjustment knob (2) with locking mechanism (3) and check valve (4) on type DRV.

Turning adjustment knob (2) to the left causes spindle (5) with throttle pin (6) to increase flow cross-section (7) until it is completely open.

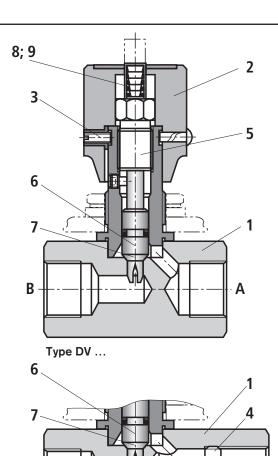
Turning adjustment knob (2) to the right causes spindle (5) with throttle pin (6) to reduce flow cross-section (7) until it is leak-free closed.

To allow repeat settings, a color scale (8) is provided at the upper end of spindle (5).

The area of the color triangle (9) indicates the size of the flow cross-section (the larger the color triangle, the greater the flow cross-section).

The setting is protected by means of clamping screw (3).





B

Type DRV ...

## Technical data (for applications outside these parameters, please consult us!)

General												
Size		Size	6	8	10	12	16	20	25	30	40	
Weight	- Type DV	kg	0.12	0.25	0.4	0.7	1.2	2.1	2.8	3.5	5.5	
	- Type DRV	kg	0.13	0.3	0.45	0.8	1.3	2.4	3.5	4.6	7.7	
Installation position			Optional									
Ambient temperature range °C		-20 to +80										

## Hydraulic

Maximum operating pressure	bar	350					
Check valve cracking pressure (type DRV)	bar	0.5 (other cracking pressures on request)					
Maximum flow	l/min	See Characteristic curves below and on page 4					
Hydraulic fluid		Mineral oil (HL, HLP) to DIN 51524; fast bio-degradable hydraulic fluids to VDMA 24568 (see also RE 90221); HETG (rape seed oil); HEPG (polyglycols); HEES (synthetic esters); other hydraulic fluids on request					
Hydraulic fluid temperature range	°C	-20 to +100					
Viscosity range	mm²/s	2.8 to 500					
Permissible max. degree of contamination of the hydraulic fluid - cleanliness class to ISO 4406 (c)		Class 20/18/15 <sup>1)</sup>					

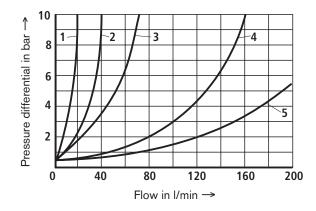
The cleanliness classes specified for components must be adhered to in hydraulic systems. Effective filtration prevents malfunction and, at the same time, prolongs the service life of components.

For the selection of filters, see data sheets RE 50070, RE 50076, RE 50081, RE 50086, RE 50087 and RE 50088.

## Characteristic curves (measured with HLP46, $\vartheta_{oil} = 40$ °C $\pm$ 5 °C)

## Type DRV $\Delta p$ - $q_{V}$ characteristic curves

Free flow across open check valve (B to A)



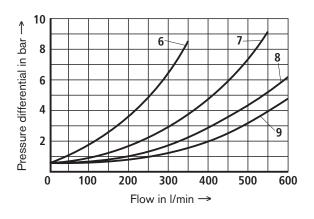


4 Size 12 ...

**2** Size 08 ...

... **5** Size 16 ...





6 Size 20 ...

8 Size 30 ...

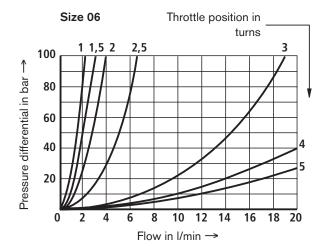
**7** Size 25 ...

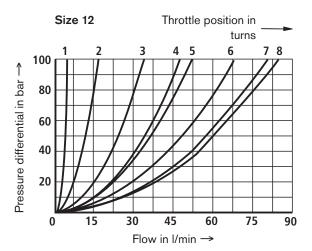
**9** Size 40 ...

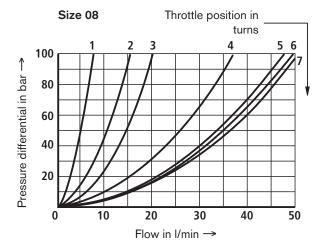
## Characteristic curves (measured with HLP46, $\vartheta_{oil}$ = 40 °C ± 5 °C)

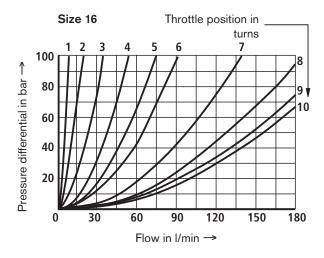
### Type DV/DRV

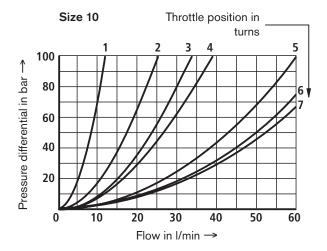
 $\Delta p$ - $q_V$  characteristic curves with constant throttle position (A to B)

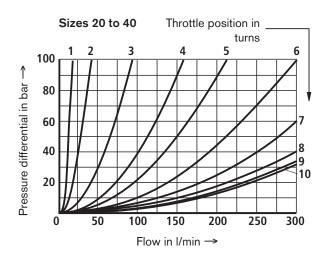




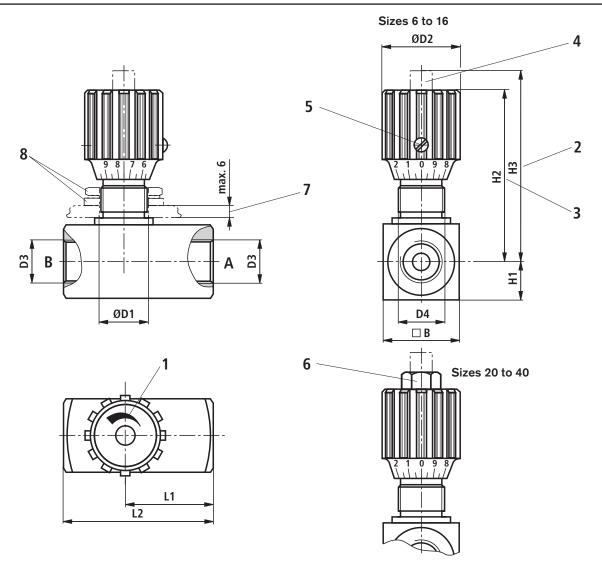








## Unit dimensions (dimensions in mm)



- 1 Counter-clockwise turning → increase in flow
   Clockwise turning → reduction in flow
- 2 Throttle fully open
- 3 Throttle closed
- 4 Color scale for repeat setting

- 5 Clamping screw as locking mechanism
- 6 Width across flats 19 A/F
- 7 Control panel thickness
- 8 Nut and toothed lock washer

Size	□В	ØD1	ØD2	D3	D4	H1	H2		НЗ		L1		L2	
							DV	DRV	DV	DRV	DV	DRV	DV	DRV
6	16	13	24	G1/8	Pg 7	8	50	50	55	55	19	26	38	45
8	25	19	29	G1/4	Pg 11	12.5	65	65	72	72	24	33.5	48	55
10	30	19	29	G3/8	Pg 11	15	67	67	74	74	29	41	58	65
12	35	23	38	G1/2	Pg 16	17.5	82	82	92	92	34	44	68	73
16	45	23	38	G3/4	Pg 16	22.5	96	96	106	106	39	57	78	88
20	50	38	49	G1	Pg 29	25	128	128	145	145	54	77	108	107
25	60	38	49	G1 1/4	Pg 29	30	133	133	150	150	54	93	108	143
30	70	38	49	G1 1/2	Pg 29	35	138	142	155	159	54	108	108	143
40	90	38	49	G2	Pg 29	45	148	148	165	165	65	130	180	165

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