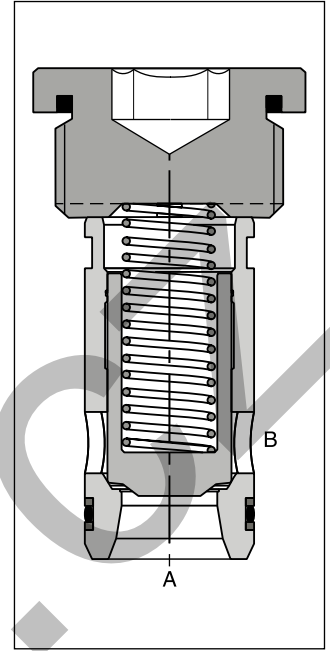
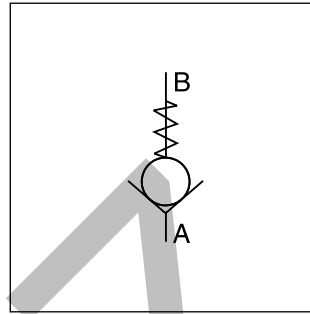


The check valves series SPZBE are slip-in cartridge valves. The function unit is fixed inside the manifold by a hexagonal plug with slot.

The design is based on CE series with same poppet and sleeve. The different mounting cavity has to be considered.

**Features**

- Little space required
- Leak-free from port B to A
- 4 different opening pressures

**Ordering code**

<input type="checkbox"/>	—	<b>SP</b>	<b>Z</b>	<b>BE</b>	<b>1010</b>	<b>E</b>	<input type="checkbox"/>	<input type="checkbox"/>
Seal		Check valve	Flow direction A to B	Design series, screwed cover	Factory norm, poppet, direct operated	Slip-in valve	Valve size	Opening pressure

Code	Seal
omit	<b>NBR</b>
V	FPM

Code	Size
<b>16</b>	<b>NG16</b>
<b>25</b>	<b>NG25</b>
<b>32</b>	<b>NG32</b>
<b>40</b>	<b>NG40</b>
<b>50</b>	<b>NG50</b>

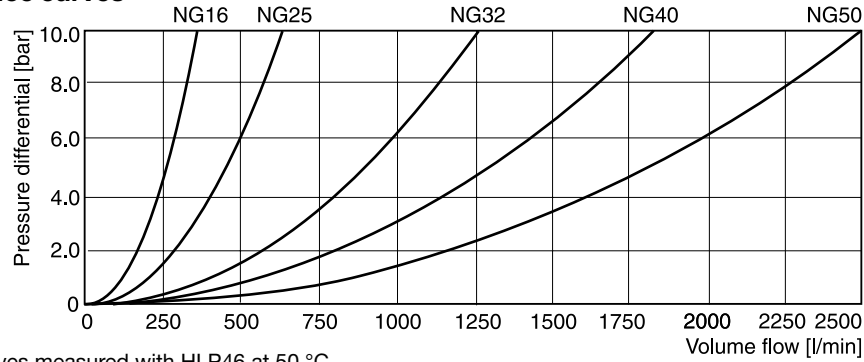
Code	Pressure [bar]
L	0.1
<b>N</b>	<b>0.5</b>
S	1.6
U	4.0

**Bold letters =  
Short-term availability**

**Technical data**

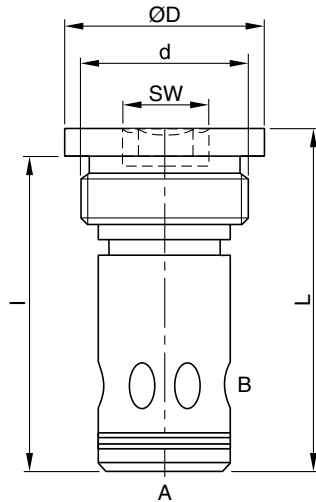
General						
Design		Threaded cartridge valve				
Mounting position		Unrestricted				
Ambient temperature [°C]		-20 ... +60				
MTTF <sub>D</sub> value [years]		150				
Nominal size		NG16	NG25	NG32	NG40	NG50
Weight [kg]		0.25	0.5	1.2	3.1	5.2
Hydraulic						
Flow direction		Port A to B				
Fluid		Hydraulic oil according to DIN 51524				
Fluid temperature [°C]		-20...+70 (NBR: -25...+70)				
Viscosity, permitted [cSt]/[mm²/s]		20 ... 400				
Viscosity, recommended [cSt]/[mm²/s]		30 ... 80				
Filtration		ISO 4406 (1999); 18/16/13				
Nominal pressure [bar]		350				
Opening pressure [bar]		0.1; 0.5; 1.6 and 4.0				
Flow at Δp= 5 bar [l/min]		250	450	900	1350	1800

$\Delta p/Q$  performance curves

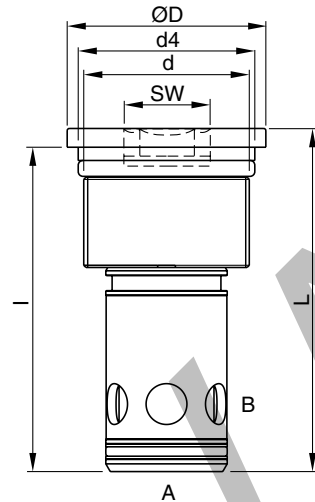
All characteristic curves measured with HLP46 at 50 °C.

## Dimensions

## NG16-NG32

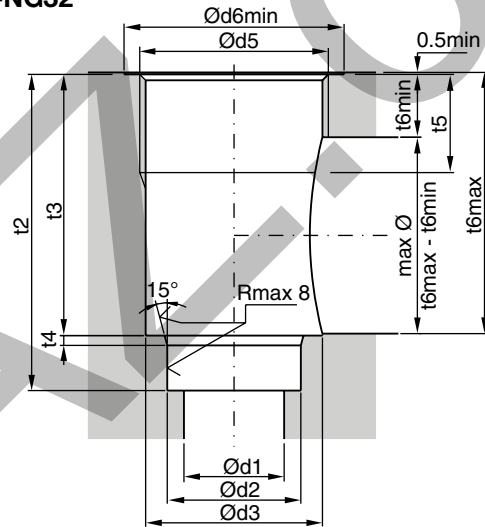


## NG40-NG50

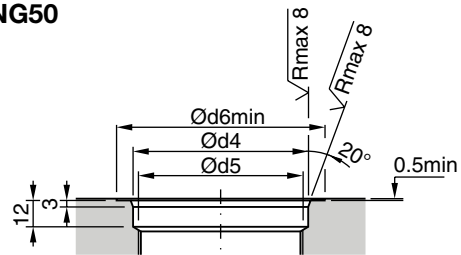


## Mounting cavity

## NG16-NG32



## NG40-NG50



Dimensions	NG16	NG25	NG32	NG40	NG50
D	40	55	72	90	105
L	72.5	89	109.5	155.5	182
d	M33x2	G1½"	G2"	M75x2	M90x2
d4	-	-	-	80	95
l	66	80.5	99.5	147	173.5
SW	17	24	32	32	32
Tightening torque <sup>1)</sup> [Nm] ± 15 %	225	300	550	750	950

## Seal kits

NG	NBR seals	FPM seals
16	SK-SPZBE10E16	SK-SPZBE10E16V
25	SK-SPZBE10E25	SK-SPZBE10E25V
32	SK-SPZBE10E32	SK-SPZBE10E32V
40	SK-SPZBE10E40	SK-SPZBE10E40V
50	SK-SPZBE10E50	SK-SPZBE10E50V

## Springs

Spring Type	Ordering Number				
	NG16	NG25	NG32	NG40	NG50
L 0.1 bar	45051368	45051375	45051376	45051382	45051384
N 0.5 bar	45051369	45051374	45051377	45051381	45051385
S 1.6 bar	45051370	45051372	45051378	45051380	45051386
U 4.0 bar	45051371	45051373	45051379	45051383	45051387

Size	NG16	NG25	NG32	NG40	NG50
d1	18	25.5	36	43	56
d2 <sup>H7</sup>	25	34	45	55	68
d3	31	45	57	73	88
d4	-	-	-	80 H7	95 H7
d5	M33x2	G1½"	G2"	M75x2	M90x2
d6 <sub>min</sub>	41	56	73	95	110
t2 <sup>+0.1</sup>	66	80.5	99.5	147	173.5
t3	53	66.5	84.5	129	151.5
t4	2	2.5	2.5	3	3
t5	21	25	30	60	70
t6 <sub>min</sub>	16	16	24	55	65
t6 <sub>max</sub>	52.5	66	84	128.5	151

<sup>1)</sup> Please note the material specification for tightening torque in chapter 12, "accessories".