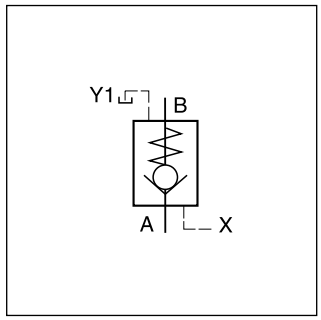
Hydraulically pilot operated check valves C4V allow free flow from A to B. The counter-flow direction is blocked.

When pressure is applied to control port X, the ring chamber flow from B to A is released.

Up to four different pilot control ratios are available (see ordering code).

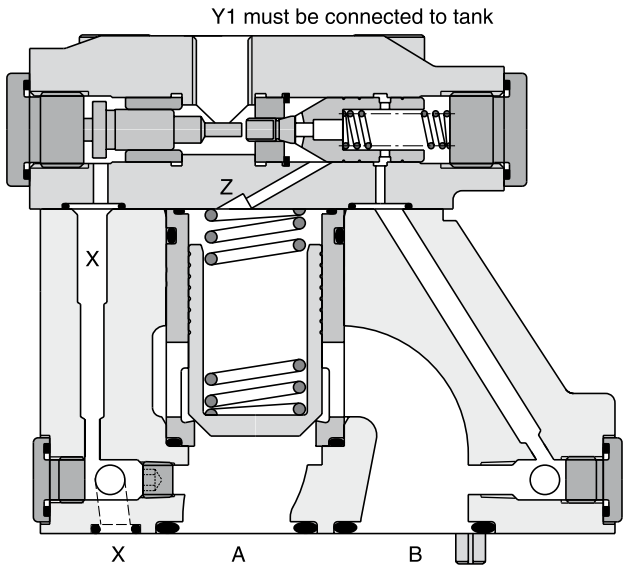


Function

When no pressure is applied to the X-port, the flow from B to A is blocked, because the pressure in B is also in effect on top of the poppet.

Pressurizing the X port relieves the area on top of the poppet to the drain port and allows flow from B to A.

The seat design of the SVL valve series provides leak-free separation of port A and B in the closed position.



Ordering code

C4V	□	–	5	9	□	□	B	□	□
Check valve pilot operated	Nominal size		Max. pressure 350 bar	Y1-port G¼"	Opening ratio	Approx. cracking pressure	Design series	Seal	Options

Code	Nominal size
03	NG10
06	NG25
10	NG32

Code	Opening ratio	Code	Opening ratio
1	1 : 1	E [1)]	1 : 1
3	3 : 1	F [1)]	3 : 1
8	8 : 1	G [1)]	8 : 1
9	10 : 1	H [1)]	10 : 1

Code	Optionen
omit	Standard
013	Position control with protection

Code	Seal
1	NBR
5	FPM

Code	Approx. cracking pressure [bar]			
	Flow A to B		Flow B to A	
	C4V03	C4V06/10	C4V03	C4V06/10
2	1.0	1.0	1.5	1.7
4	4.0	3.5	5.5	6.0
6	2.0	2.2	3.0	3.8

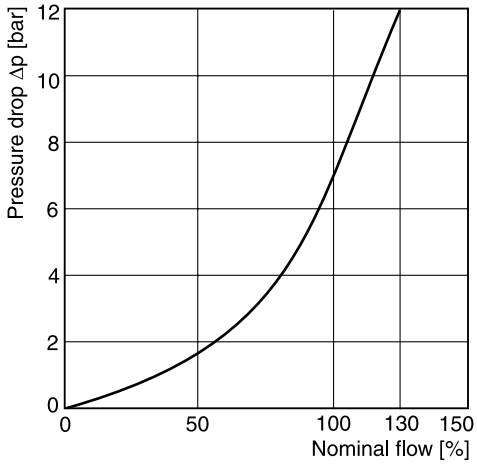
[1)] Position control incl. amplifier for C5P08/10 only.

6

Technical data

General					
Nominal size			NG10	NG25	NG32
Subplate mounting			ISO 5781		
Mounting position			Unrestricted		
Ambient temperature		[°C]	-20...+60		
$MTTF_D$ value		[years]	150		
Weight		[kg]	2.8	4.6	6.1
Hydraulic					
Max. operating pressure		[bar]	350		
Nominal flow		[l/min]	150	270	450
Fluid			Hydraulic oil according to DIN 51524		
Fluid temperature		[°C]	-20...+70 (NBR: -25...+70)		
Viscosity,	permitted	[cSt] / [mm²/s]	20...400		
	recommended	[cSt] / [mm²/s]	30...80		
Filtration			ISO 4406 (1999); 18/16/13		

Δp/Q flow curve



Characteristic curve measured with HLP46 at 50 °C.

6

Position Control

Position control by proximity switch with amplifier. The closed position is monitored.

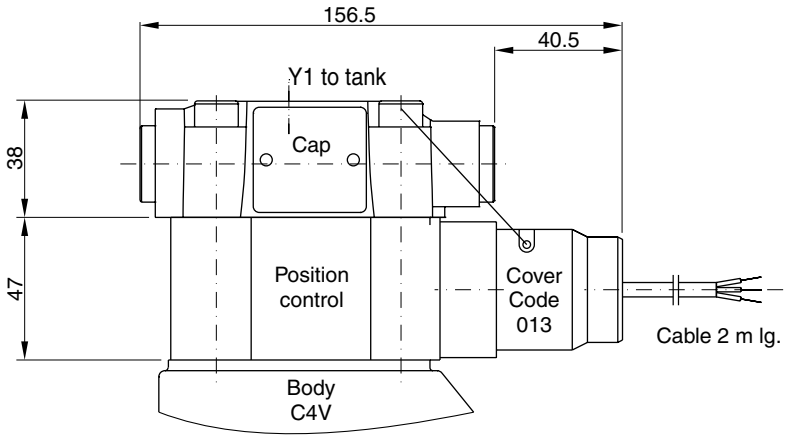
Valve open: proximity switch activated.

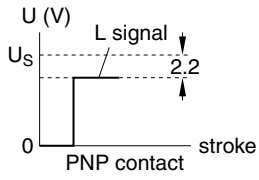
This proximity switch is pressure proof and has no wearing parts.

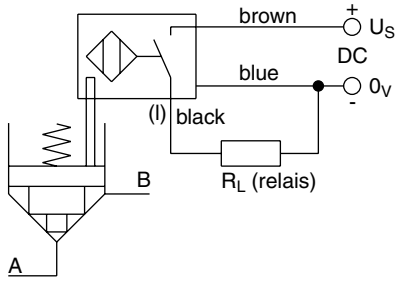
Note: Position control for C4V06 and C4V10 only.

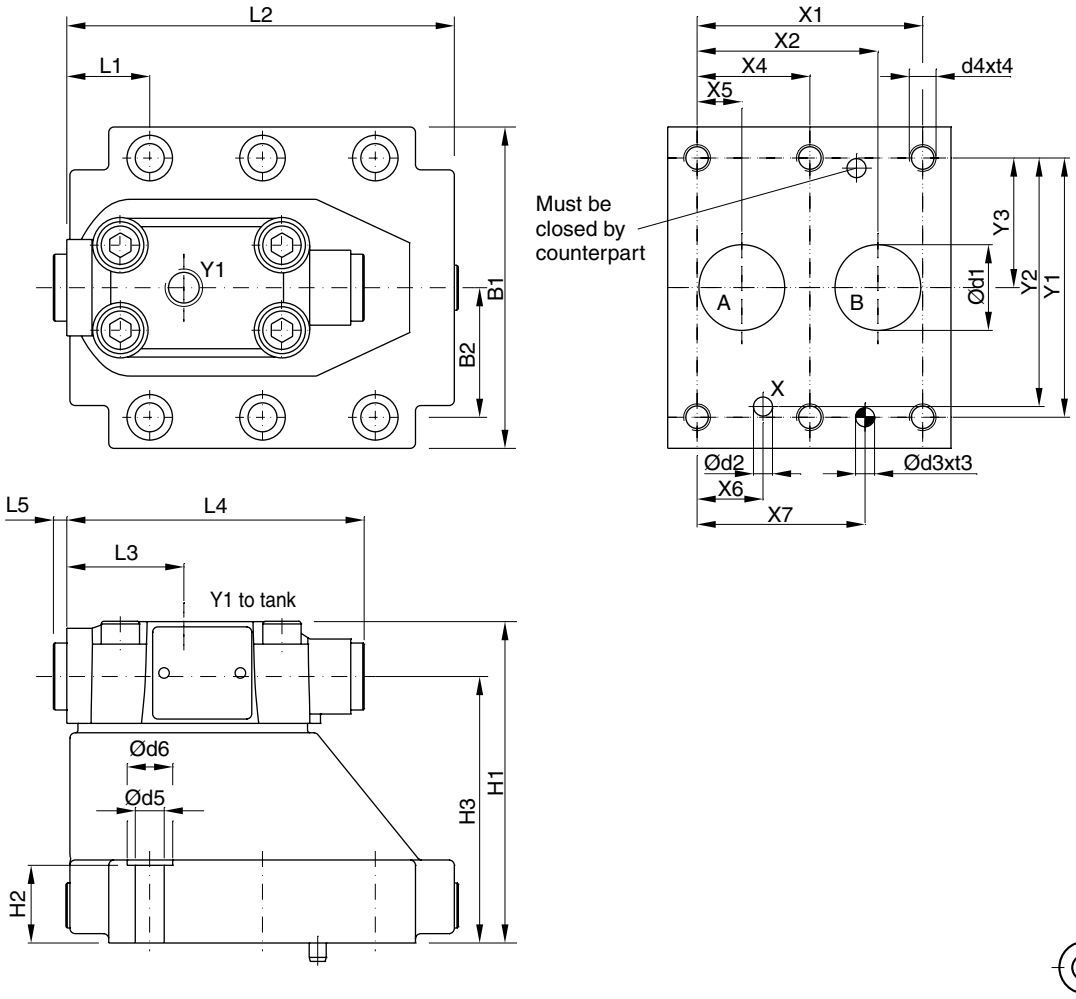
Technical data proximity switch

Function		PNP, contact
Supply voltage (Us)	[VDC]	10...30
Supply voltage ripple	[%]	≤ 10
Current consumption	[mA]	max. 8
Residual voltage L-signal	[V]	Us - 2.2 at Imax
Output current (I)	[mA]	≤ 200
Protection class		IP67
Ambient temperature	[C°]	-25...+70
Wire cross section	[mm²]	3 x 0.5









NG	ISO-code	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6
10	5781-06-07-0-00	42.9	35.8	–	–	7.2	21.5	31.8	66.7	58.8	33.4	–	–	–
25	5781-08-10-0-00	60.3	49.2	–	–	11.1	20.6	44.5	79.4	73	39.7	–	–	–
32	5781-10-13-0-00	84.2	67.5	–	42.1	16.7	24.6	62.7	96.8	92.8	48.4	–	–	–

Tolerance for all dimensions ±0.2

NG	ISO-code	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	L6
10	5781-06-07-0-00	87.3	33.4	83	21	62.5	–	–	–	29.4	95.2	43.7	111	5	–
25	5781-08-0-0-00	105	39.7	109.5	29	89	–	–	–	35.1	127.2	43.7	111	5	–
32	5781-10-13-0-00	120	48.4	120	29	99.5	–	–	–	31	144.7	43.7	111	5	–

NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6
10	5781-06-07-0-00	15	7	7.1	8	M10	16	10.8	17
25	5781-08-10-0-00	23.4	7.1	7.1	8	M10	18	10.8	17
32	5781-10-13-0-00	32	7.1	7.1	8	M10	20	10.8	17

NG	ISO-code	Bolt kit			Kit		Surface finish
					NBR	FPM	
10	5781-06-07-0-00	BK 505	4x M10 x 35 ISO 4762-12.9	63 Nm ±15 %	S26-58507-0	S26-58507-5	R_{max}6.3 ▱ 0.01/100
25	5781-08-10-0-00	BK 485	4x M10 x 45 ISO 4762-12.9	63 Nm ±15 %	S26-58475-0	S26-58475-5	
32	5781-10-13-0-00	BK 506	6x M10 x 45 ISO 4762-12.9	63 Nm ±15 %	S26-58508-0	S26-58508-5	

C4V pilot oper. UK.INDD CM 30.10.14