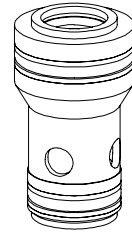
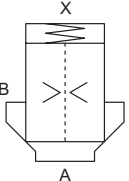
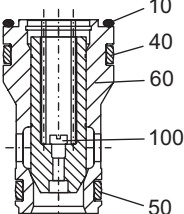
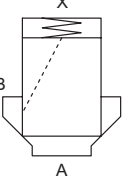
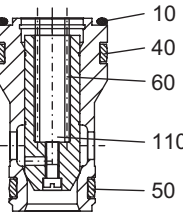
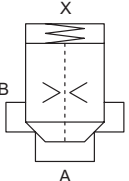
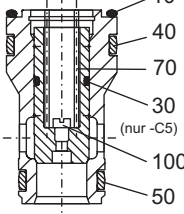
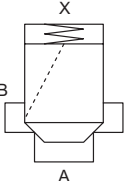
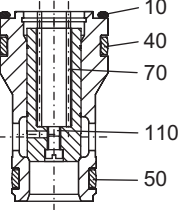
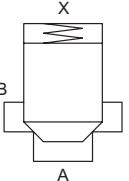
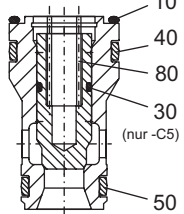
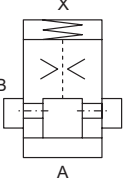
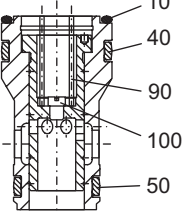
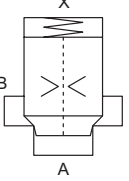
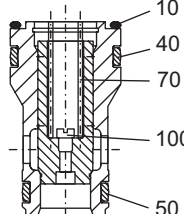
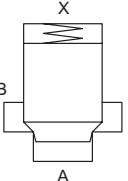
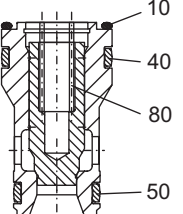
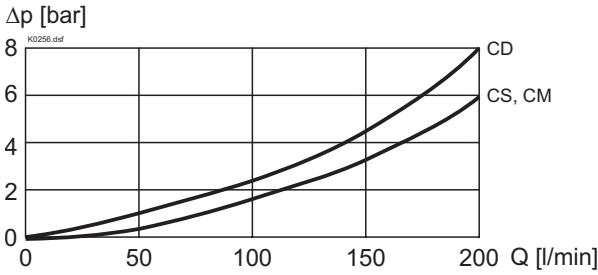


2 position, 2 way cartridge valve

- $Q_{max} = 200 \text{ l/min}$
- $p_{max} = 350 \text{ bar}$

NG 16
 ISO 7368
 DIN 24342


<p>Type: CS16-10/..</p> <p>General application: Pressure relief valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:1</p>	 <p>Opening pressures A → B 0.5; 2.0; 5.0 bar</p>	<p>Type: CS16-10/..-C7</p> <p>General application: Non return valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:1</p>	 <p>Opening pressure: A → B 0.5; 2.0; 5.0 bar</p>
<p>Type: CS16-12/..</p> <p>General application: Spool valve</p> <p>Type: CS16-12/..-C5</p> <p>General application: Poppet valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:1,2</p>	 <p>Opening pressure: A → B 0.5; 2.0; 5.0 bar</p>	<p>Type: CS16-12/..-C7</p> <p>General application: Non return valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:1,2</p>	 <p>Opening pressure: A → B 0.5; 2.0; 5.0 bar</p>
<p>Type: CS16-20/..</p> <p>General application: Spool valve</p> <p>Type: CS16-20/..-C5</p> <p>General application: Poppet valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:2</p>	 <p>Opening pressure: A → B 0.5; 2.0; 5.0 bar</p>	<p>Type: CM16-10/..</p> <p>General application: Pressure reducing valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:1</p>	 <p>Closing pressure: B → A 3.0 bar</p>
<p>Type: CD16-12/..</p> <p>General application: Flow valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:1,2</p>	 <p>Opening pressure: A → B 0.5; 2.0; 5.0 bar</p>	<p>Type: CD16-20/..</p> <p>General application: Flow valve</p>	<p>Symbol:</p>  <p>Opening ratio: 1:2</p>	 <p>Opening pressure: A → B 0.5; 2.0; 5.0 bar</p>

CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$

 Opening pressures $B \rightarrow A = f(\text{Area ratio opening pressure } A \rightarrow B)$

Area ratio	Opening pressure [bar]	
	A → B	B → A
1:1,2	0.5	2.5
1:1,2	2.0	10.0
1:1,2	5.0	25.0
1:2	0.5	0.5
1:2	2.0	2.0
1:2	5.0	5.0

GENERAL SPECIFICATIONS

Design	2 way cartridge valve
Installation	any
Installation dimension	to ISO 7368 / DIN 24342 refer to data sheet 2.13-1021
Ambient temp.	-20...+50°C
Weight spool	m = 0,050 kg
Weight total	m = 0,180 kg

HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination	ISO 4406:1999, class 18/16/13
Efficiency	Required filtration grade (B6...10 \geq 75) (refer to data sheet Nr. 1.0-50/2)
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70°C
Working pressure	$p_{\text{max}} = 350 \text{ bar}$ (connections A, B, X)
Max. volume flow	$Q_{\text{max}} = 200 \text{ l/min}$
Pilot oil volume	$Q_{\text{st}} = 1.0 \text{ cm}^3$

TYPE CODE

	C <input type="checkbox"/> 16 - <input type="checkbox"/> / <input type="checkbox"/> / <input type="checkbox"/> - <input type="checkbox"/> # <input type="checkbox"/>
Slip-in cartridge	
Poppet spool	<input type="checkbox"/> S
Poppet spool with damping	<input type="checkbox"/> D
Spool	<input type="checkbox"/> M
Size 16	
Area ratio:	<input type="checkbox"/> 10 <input type="checkbox"/> 12 <input type="checkbox"/> 20 *
Opening pressure A → B:	<input type="checkbox"/> 0 bar (no spring) <input type="checkbox"/> 0.5 bar <input type="checkbox"/> 2.0 bar <input type="checkbox"/> 3.0 bar <input type="checkbox"/> 5.0 bar
Orifice in poppet spool:	<input type="checkbox"/> 0 <input type="checkbox"/> 0.4 <input type="checkbox"/> 0.6 usw.
Omit if ordered without orifice or plug	
* Omitted as no provision for orifice made	
Special features for poppet spools only:	
Check function X connected to B port	<input type="checkbox"/> C7
additional seal on poppet spool	<input type="checkbox"/> C5

Design-Index (subject to change)

PARTS LIST

Position	Article	Description
10	160.2266	O-Ring ID 26,64x2,62
30	160.2120	O-Ring ID 12,42x1,78
40	049.0320	Cover-Seal PU 83 rd 32/27,5x5,1
50	049.0251	Cover-Seal PU 83 rd 25/20,5x5,2
60	53.2604	Spring 1,25x9,8x38,6
	53.4100	Spring 1,6x9,8x40,8
	53.5101	Spring 2x10x39,8
70	53.2603	Spring 1,1x9,7x37,5
	53.3602	Spring 1,5x9,8x39,2
	53.4601	Spring 1,8x9,8x39,3

Position	Article	Description
80	53.2104	Spring 1x10x28,6
	53.2602	Spring 1,1x9,7x33,7
	53.3601	Spring 1,5x9,8x32
90	53.5201	Spring 1,9x10,8x29
100	246.1003	Cyl. screw M4x4 VSM 213302
	117.1001	Orifice bing M4 / 0,4
	117.1003	Orifice bing M4 / 0,6
	117.1005	Orifice bing M4 / 0,8
	117.1007	Orifice bing M4 / 1,0
110	246.1003	Cyl. screw M4x4 VSM 213302