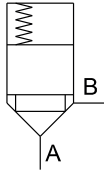
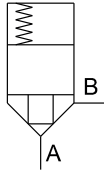
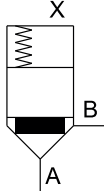
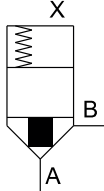


2/2-way slip-in cartridge valves

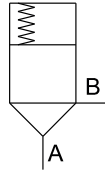
- $Q_{max} = 3530$ l/min
- $p_{max} = 630$ bar

NG 50
 DIN ISO 7368

2/2-WAY FUNCTION

Area ratio A:X	1:1,06 X	1:1,5 X
		
Type Execution	CSEN50-11 Standard	CSEN50-15 Standard
		
Type Execution	CDEN50-11 with damping	CDEN50-15 with damping

PRESSURE RELIEF

Area ratio A:X	1:1,0 X
	
Type Execution	CPEN50-10 Standard

TYPE CODE

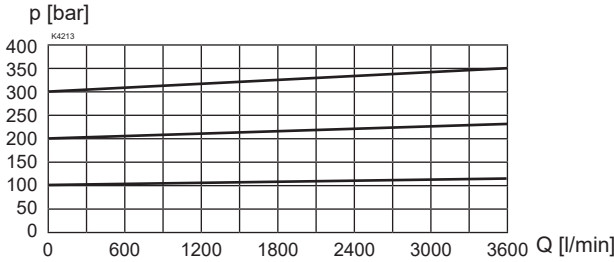
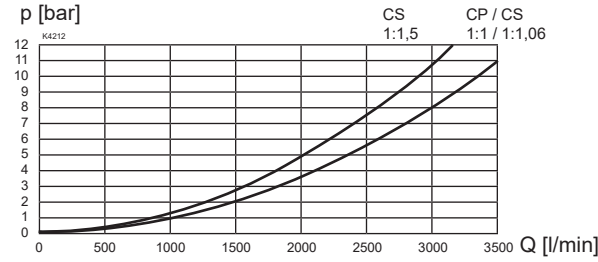
2/2-way slip-in cartridge valve	C	<input type="checkbox"/>	EN50 -	<input type="checkbox"/>	/	<input type="checkbox"/>	/	<input type="checkbox"/>	-	<input type="checkbox"/>	#	<input type="checkbox"/>
Seat construction	S											
Seat construction with damping	D											
Pressure function	P											
Nominal size 50, Enhanced												
Area ratio	1:1	10	For pressure function only									
	1:1,06	11										
	1:1,5	15										
Opening pressure A to B	0 bar (without spring)	0										
Nominal	0.5 bar	05										
	1.0 bar	10										
	2.0 bar	20										
	4.0 bar	40										
Orifice in poppet spool	closed											
Sealing material	NBR											
	FKM	D1	(Viton)									
Design-Index (subject to change)												

GENERAL SPECIFICATIONS

Construction	2/2-way slip-in cartridge valves
Mounting position	any
Mounting dimensions	according to DIN ISO 7368
Ambient temperature	-30...+80 °C
Weight spool	m = 0,88 kg (1:1,5)
Weight total	m = 2,88 kg (1:1,5; without spring)
MTTFd	150 years

HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 18/16/13 (Required filtration grade $\beta_{6...10} \geq 75$) refer to data sheet no. 1.0-50/2
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+80 °C (FKM) -30...+80 °C (NBR)
Operating pressure	$p_{max} = 630$ bar (connections A, B, X) CLEN $p_{max} = 420$ bar CPEN connection X, X-A = < 420 bar max. cover pressure to be observed
Max. volume flow	$Q_{max} = 3530$ l/min at v = 30 m/s
Pilot oil volume	$Q_{st} = 45,0$ cm ³ $Q_{st} = 35,3$ cm ³ (Pressure function)

CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$
 $\Delta p = f(Q)$ Pressure drop / volume flow characteristics

CHARACTERISTICS

Nominal	Opening pressure [bar]			
	0,5	1,0	2,0	4,0

Area ratio	Flow direction A → B			
	1:1	0,4	0,8	1,6
1:1,06	0,4	0,9	1,7	3,4
1:1,5	0,6	1,2	2,5	4,9

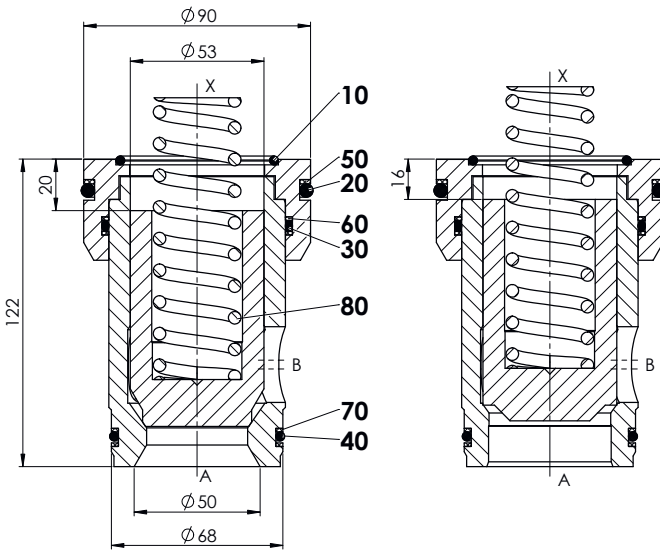
Area ratio	Flow direction B → A			
	1:1	-	-	-
1:1,06	6,5	13,1	26,1	52,3
1:1,5	1,1	2,2	4,4	8,8

Pressure spring	Article no.			
		053.7414	053.7908	053.8405

DIMENSIONS

CSEN50-15

CPEN50-10


PARTS LIST

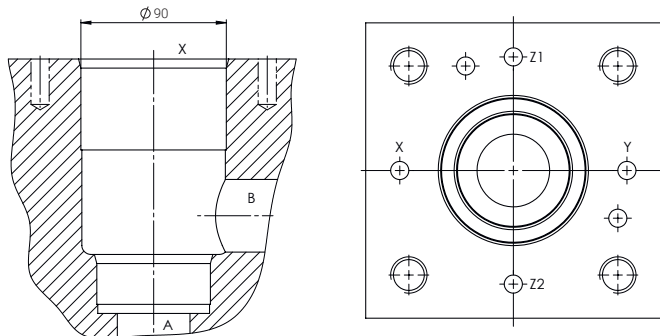
Position	Description	Seal kit
10	O-ring ID 58,74 x 3,53	•
20	O-ring ID 78,74 x 5,33	•
30	O-ring ID 69,44 x 3,53	•
40	O-ring ID 59,92 x 3,53	•
50	Backup ring rd 78,4 x 87,1 x 1,7	
60	Backup ring rd 70,0 x 75,6 x 1,4	
70	Backup ring rd 59,3 x 64,9 x 1,4	
80	Pressure spring 34,8	

SEAL KIT

251.8710	Seal kit C.E.50	NBR
251.8711	Seal kit C.E.50	VITON

HYDRAULIC CONNECTION

Cavity drawing according to ISO 7368


INSTALLATION NOTES

Mounting type	Slip-in cartridge
Mounting position	Any, preferably horizontal
Dismounting	Dismounting tool DW-C.E.50 Article no. 983.3011

Important! For detailed cavity drawing and cavity tools see data sheet 2.13-1025

Note! The length of the cover fixing screws to be used depends on the base material of the valve body and on the maximum system pressure.