

**TECHNICAL DESCRIPTION**

Change over valves are designed and manufactured to ensure maximum durability and reliability. Valves meet requirements of EN 12516-1, EN 12516-2 standards.

Basic standards for design

- Building lengths.....see table
- Flanges dimension.....EN 1092-1, ANSI B16.5,  
ANSI B16.47 A, GOST 12815-80
- Testing.....EN 12266-1
- Pressure-temperature rating..... EN 12516-1, ASME B16.34
- Connection of control.....EN ISO 5210

Control

Hand wheel, gear-box with hand-wheel, electric actuator, pneumatic actuator, hydraulic actuator

Connection into piping

Flanged, welding-on

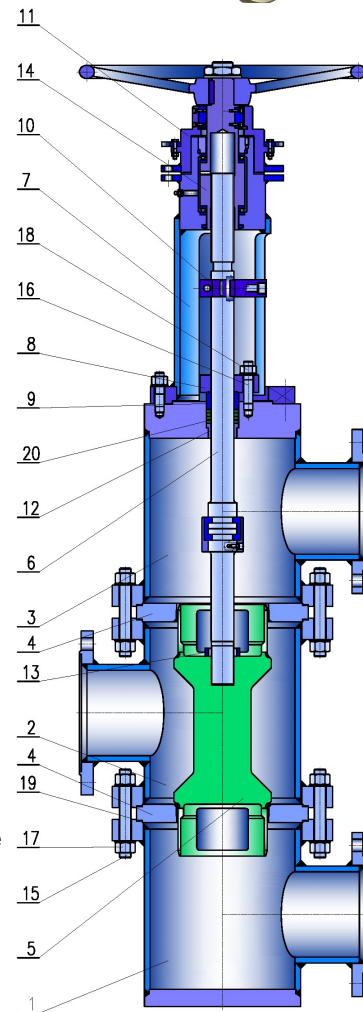
**Material specification**

pos.	Designation	Material			
1	Bottom body	P355 NH	P355 QH	1.4541	1.4401
2	Middle body	P355 NH	P355 QH	1.4541	1.4401
3	Top body	P355 NH	P355 QH	1.4541	1.4401
4	Seat	P355 NH + overlay	P355 QH + overlay	1.4541	1.4401
5	Disc	P355 NH + overlay	P355 QH + overlay	1.4541	1.4401
6	Stem	X20 Cr13, M300 Bohler			
7	Yoke	P355 NH	P355 QH	1.4541	1.4541
8	Gland flange	P355 NH	P355 QH	1.4541	1.4541
9	Thrust ring	P355 NH	P355 QH	1.4541	1.4541
10	Guide plate	P355 NH	P355 QH	1.4541	1.4541
11	Chain wheel hub	P355 NH	P355 QH	1.4541	1.4541
12	Guidie sleeve	Bronze			
13	Disc nut	P355 NH	P355 QH	1.4541	1.4541
14	Stem nut	Bronze			
15	Bolt	25CrMo4	Strength class 8.8	A2 - 70	A2 - 70
16	Bolt	25CrMo4		A2 - 70	A2 - 70
17	Nut	A2 - 70	Strength class 8	A2 - 70	A2 - 70
18	Nut	A2 - 70		A2 - 70	A2 - 70
19	Gasket	Graphite	Graphite	Graphite	Graphite
20	Gland packing	Graphite	Graphite	Graphite	Graphite

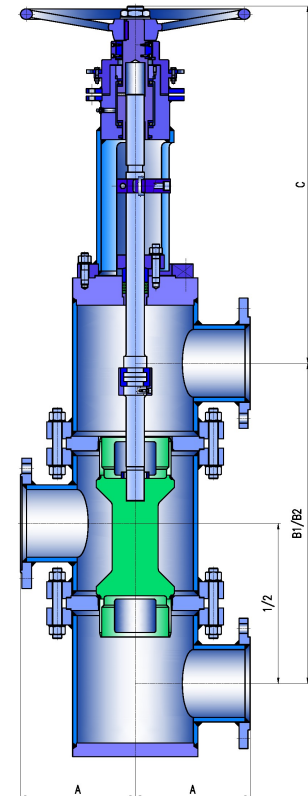
Material execution of change over valves can be selected according to the customer's request so that it suits as much as possible valves service conditions.

**APPLICATION**

Change over valves are used to separate the flow into two branches of the pipeline and to ensure continuous operation of the pipeline in case of the safety valve overhaul. For this purpose, the set, consisting of two change over valves and two safety valves, is supplied. The valves can be used for water, steam, air, alkalis and acids, oils, crude oil and crude oil products, hydrocarbons and their mixtures, etc.



DN	PN 16, 25, 40				PN 63, 100				PN 160, 250				PN 325, 400			
	A	B1	B2	C	A	B1	B2	C	A	B1	B2	C	A	B1	B2	C
15	70	200	-	250	90	260	-	320	120	340	-	420	160	440	-	545
20	80	200	220	250	100	260	290	320	130	340	340	420	170	440	500	545
25	85	220	280	365	110	290	360	480	140	380	470	620	180	500	600	800
32	100	280	320	400	130	360	400	500	170	470	520	650	220	600	680	850
40	120	320	370	430	160	400	500	560	200	520	650	730	260	680	850	950
50	150	370	-	490	190	500	-	640	250	650	-	830	330	850	-	1000
65	150	370	470	490	200	500	600	640	260	650	800	830	340	850	1000	1000
80	180	470	540	640	230	600	700	830	300	800	900	1080	400	1000	1200	1400
100	200	540	700	690	260	700	900	900	340	900	1200	1170	440	1200	1550	1500
125	220	700	-	740	290	900	-	960	380	1200	-	1250	-	-	-	-
150	250	700	800	740	320	900	1000	960	420	1200	1300	1250	-	-	-	-
200	300	800	980	1060	390	1000	1300	1350	500	1300	1700	1800	-	-	-	-
250	350	980	1050	1285	460	1300	1400	1700	600	1700	1800	2200	-	-	-	-
300	400	1050	1200	1300	500	1400	1500	1700	-	-	-	-	-	-	-	-
350	450	1200	1250	1500	600	1500	1600	2000	-	-	-	-	-	-	-	-
400	500	1250	1600	1600	650	1600	-	2100	-	-	-	-	-	-	-	-
500	550	1600	1800	1600	-	-	-	-	-	-	-	-	-	-	-	-
600	600	1800	2100	1700	-	-	-	-	-	-	-	-	-	-	-	-
700	650	2100	2500	1700	-	-	-	-	-	-	-	-	-	-	-	-
800	750	2500	2800	1900	-	-	-	-	-	-	-	-	-	-	-	-
900	850	2800	3200	2100	-	-	-	-	-	-	-	-	-	-	-	-
1000	900	3200	-	2600	-	-	-	-	-	-	-	-	-	-	-	-



DN	CLASS 150, 300				CLASS 400, 600				CLASS 900, 1500				CLASS 2500			
	A	B1	B2	C	A	B1	B2	C	A	B1	B2	C	A	B1	B2	C
1/2	70	200	-	250	90	260	-	320	120	340	-	420	160	440	-	545
3/4	80	200	220	250	100	260	290	320	130	340	340	420	170	440	500	545
1	85	220	280	365	110	290	360	480	140	380	470	620	180	500	600	800
1 1/4	100	280	320	400	130	360	400	500	170	470	520	650	220	600	680	850
1 1/2	120	320	370	430	160	400	500	560	200	520	650	730	260	680	850	950
2	150	370	-	490	190	500	-	640	250	650	-	830	330	850	-	1000
2 1/2	150	370	470	490	200	500	600	640	260	650	800	830	340	850	1000	1000
3	180	470	540	640	230	600	700	830	300	800	900	1080	400	1000	1200	1400
4	200	540	700	690	260	700	900	900	340	900	1200	1170	440	1200	1550	1500
5	220	700	-	740	290	900	-	960	380	1200	-	1250	-	-	-	-
6	250	700	800	740	320	900	1000	960	420	1200	1300	1250	-	-	-	-
8	300	800	980	1060	390	1000	1300	1350	500	1300	1700	1800	-	-	-	-
10	350	980	1050	1285	460	1300	1400	1700	600	1700	1800	2200	-	-	-	-
12	400	1050	1200	1300	500	1400	1500	1700	-	-	-	-	-	-	-	-
14	450	1200	1250	1500	600	1500	1600	2000	-	-	-	-	-	-	-	-
16	500	1250	1500	1600	650	1600	-	2100	-	-	-	-	-	-	-	-
18	500	1500	1600	1600	-	-	-	-	-	-	-	-	-	-	-	-
20	550	1600	1800	1600	-	-	-	-	-	-	-	-	-	-	-	-
24	600	1800	2100	1700	-	-	-	-	-	-	-	-	-	-	-	-
28	650	2100	2500	1700	-	-	-	-	-	-	-	-	-	-	-	-
32	750	2500	2800	1900	-	-	-	-	-	-	-	-	-	-	-	-
36	850	2800	3200	2100	-	-	-	-	-	-	-	-	-	-	-	-
40	900	3200	-	2600	-	-	-	-	-	-	-	-	-	-	-	-

**Type description**

**CHOV X/Y - Z - T**

**CHOV** – VALVE TYPE – CHANGE OVER VALVE

**X** – NOMINAL PRESSURE

**Y** – BODY MATERIAL

**Z** – PIPELINE CONNECTION

**T** – STEM PACKING

**CS**...Carbon steel

**F**...Flanged

**P**...Gland

**AS**...Alloy steel

**W**...Welding-on

**B**...Bellows

**SS**...Stainless steel