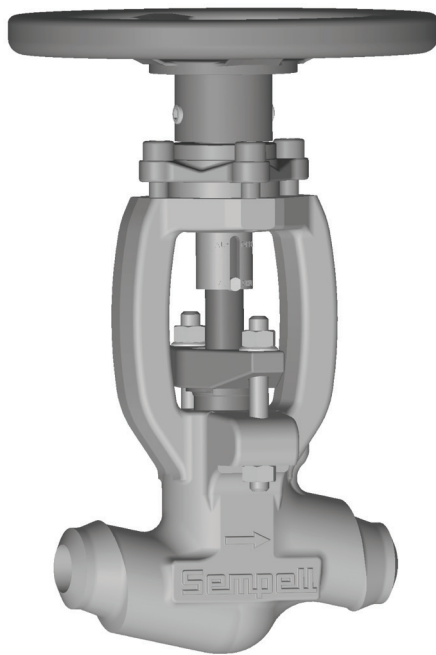


SEMPPELL HIGH PRESSURE ISOLATION VALVES

MODEL VA400 (DIN/EN)

An economical optimized globe valve to isolate high temperature and pressure systems



FEATURES

- T-pattern globe type
- One-piece die-forged body design
- Replaceable seat ring
- Seat surface of wear-resistant stellite
- Robust and optimized design with limited number of components
- Visual position indicator
- Non-rotating stem
- Handwheel or automated option
- Double bearings for low actuation forces
- Code compliance with EN12516-2 and valve size DN40/50 according to PED

GENERAL APPLICATIONS

Designed for high temperature and pressure applications in the steam and water cycle for all power applications.

The VA400 is based on the extensive experience of Sempell isolation valves and leverages a simplified design to provide an optimized and economical solution.

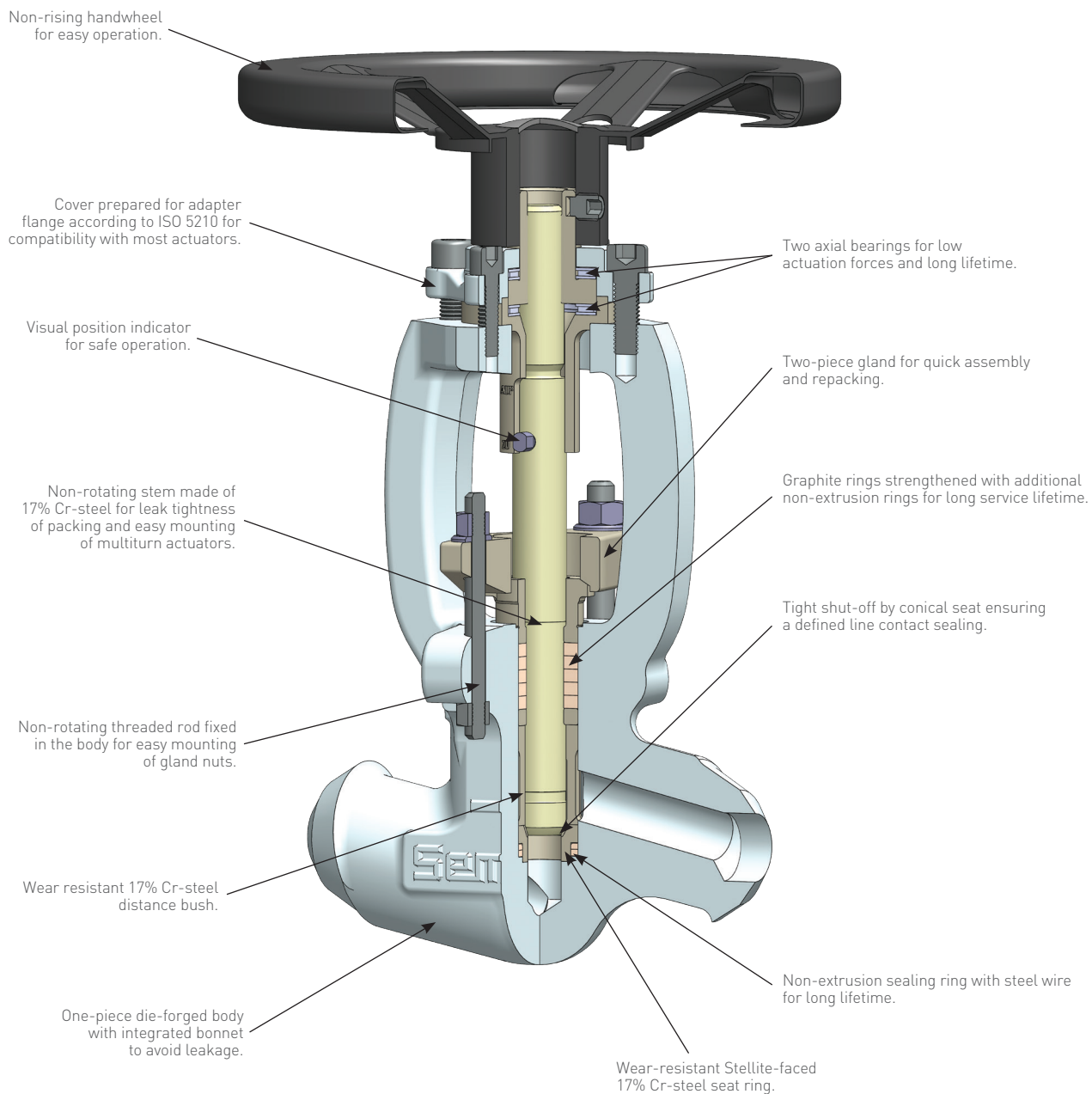
Applications include vents, drains, bypass systems, warm-up lines, etc. - wherever reliable leak-tight performance is required.

TECHNICAL DATA

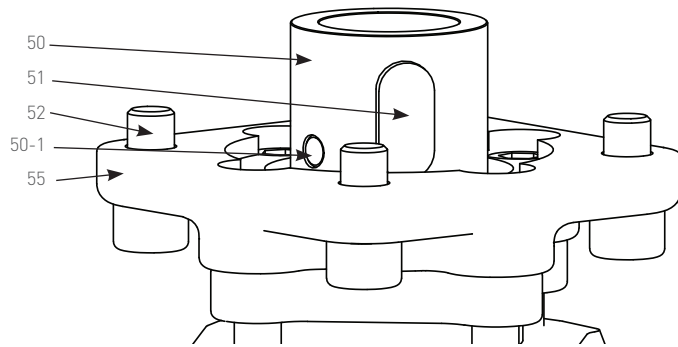
Size:	DN 10 to DN 50
Pressure:	PN63 to PN500 (maximum 522 bar)
Temperature:	-29 °C to 620 °C
Material:	1.0460 (P250GH) 1.5415 (16Mo3) 1.7335 (13CrMo4-5) 1.7383 (11CrMo9-10) 1.4903 (X10CrMoVNb9-1) 1.4550 (X6CrNiNb18-10)
Connection:	Norm welding ends according to DIN 3239 Socket weld ends according to EN12760 Welding ends according to customer requirements

SEPELL HIGH PRESSURE ISOLATION VALVES

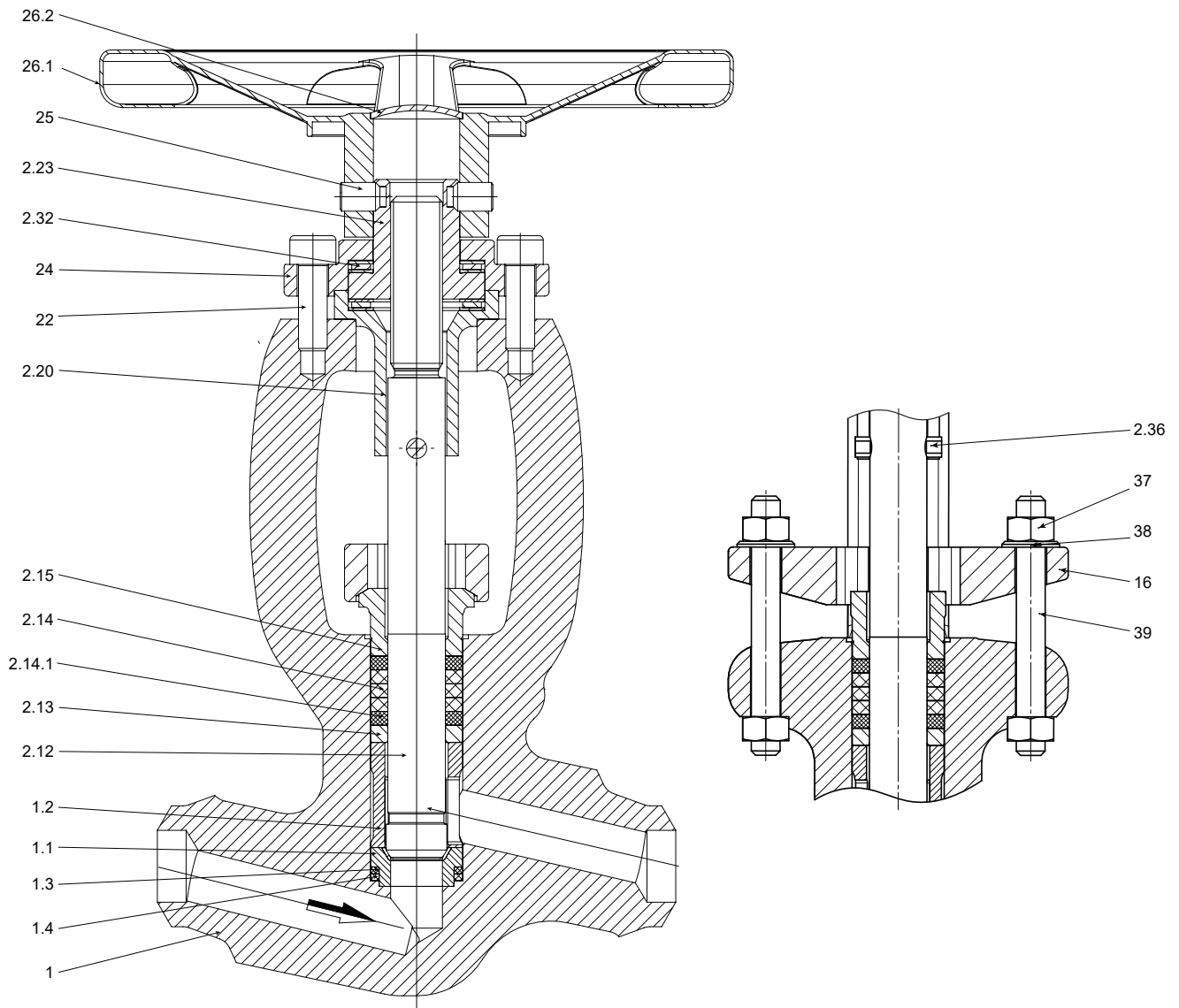
MODEL VA400 (DIN/EN)



SEMPELL HIGH PRESSURE ISOLATION VALVES
 MODEL VA400 (DIN/EN)



Prepared for Actuator According to DIN EN ISO 5210
 (Special Feature SN33)



SEPELL HIGH PRESSURE ISOLATION VALVES

MODEL VA400 (DIN/EN)

PART LIST

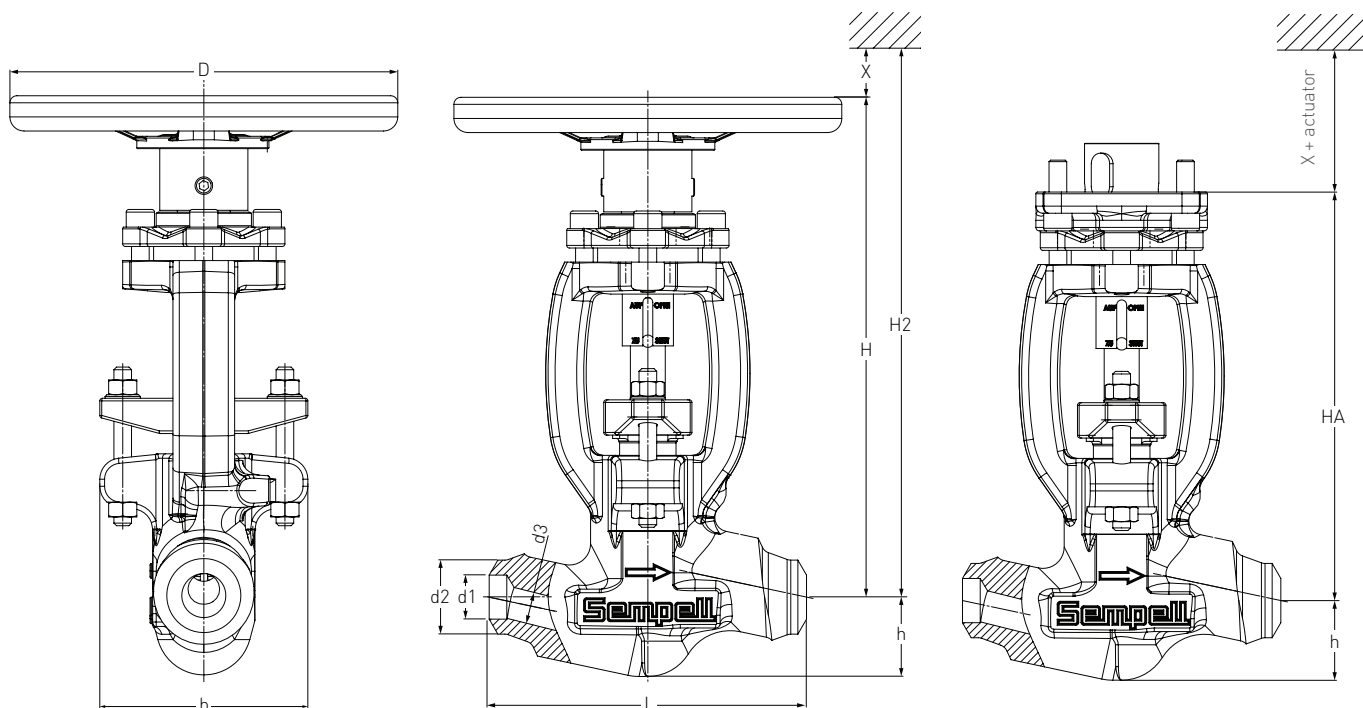
Material specification		01	11	10	13	30	31
Part	Designation	Material					
1	Body	1.0460	1.5415	1.7335	1.7383	1.4903	1.4550
1.1	Body seat	17%Cr+stellite					
1.2	Distance piece	17%Cr					
1.3	Seat gasket	Graphite					
1.4	Seat gasket	Graphite-Austenite					
2.12	Stem	17% Cr					
2.13	Base ring	13% Cr					
2.14*	Packing	Graphite					
2.14.1*	Packing	Graphite-Austenite					
2.15	Gland shaft	13% Cr					
2.20	Guide bush	13% Cr					
2.23	Threaded bush	Brass					
2.32	Axial needle bearing	Steel					
2.36	Guide bolt	17% Cr					
16	Gland flange	13% Cr					
18	Nameplate	Austenite					
19	Grooved pin	Austenite					
22	Allen bolt	Steel					
24	Cover	Stainless steel					
25 ^[1]	Threaded pin	Steel					
26.1 ^[1]	Handwheel	Steel					
26.2 ^[1]	Lock washer	Steel					
27***	Circlip	Steel					
37	Hexagonal nut	Steel					
38	Washer	Steel					
39	Stuffing box screw	Steel					
50 ^[2]	Bush	Steel					
50-1 ^{[2]**}	Pin / Parallel key	Steel					
51 ^[2]	Parallel key	Steel					
52 ^[2]	Allan bolt	Steel					
55 ^[2]	Flange	Steel					

NOTES:

- * Commissioning parts
- ** Parallel key for NVS 2 only
- *** For NPS 2 with SN33.B
- 1. Handwheel version
- 2. Actuator version

SEPELL HIGH PRESSURE ISOLATION VALVES

MODEL VA400 (DIN/EN)



DIMENSIONS, MM

DN	10/15		25.00		40/50	
Pipe Connection	S1 / U1	S2/ U2	S1 / U1	S2/ U2	S1 / U1	S2/ U2
d2 maximum	38.00	38.00	54.00	54.00	94.00	94.00
d1 minimum	9.50	17.00	20.50	26.00	36.00	45.00
d3	6.00	12.00	14.00	18.00	28.00	36.00
L ⁽¹⁾	160.00	160.00	180.00	180.00	300.00	300.00
b	120.00	120.00	130.00	130.00	170.00	170.00
H	ca. 232	ca. 232	ca. 284	ca. 284	ca. 447	ca. 447
H2 ⁽²⁾	ca. 532	ca. 532	ca. 684	ca. 684	ca. 997	ca. 997
HA	ca. 186	ca. 186	ca. 231	ca. 231	ca. 358**	ca. 368***
h	35.00	35.00	45.00	45.00	75.00	75.00
D	200.00	200.00	220.00	220.00	350.00	350.00
X	ca. 300	ca. 300	ca. 400	ca. 400	ca. 550	ca. 550
Seat- Ø	12.00	12.00	18.00	18.00	36.00	36.00
Turns (U)/Stroke	5.00	5.00	10.00	10.00	10.00	10.00
Weight (kg)	ca. 6	ca. 6	ca. 10	ca. 10	ca. 36	ca. 36
K _v value (m ³ /h)	0.72	1.75	3.04	5.12	11.33	18.42
C _v value (USG/min)	0.84	2.04	3.54	5.96	13.20	21.46
Zeta nominal size	156.80	26.51	67.39	23.79	77.70	29.41

NOTES:

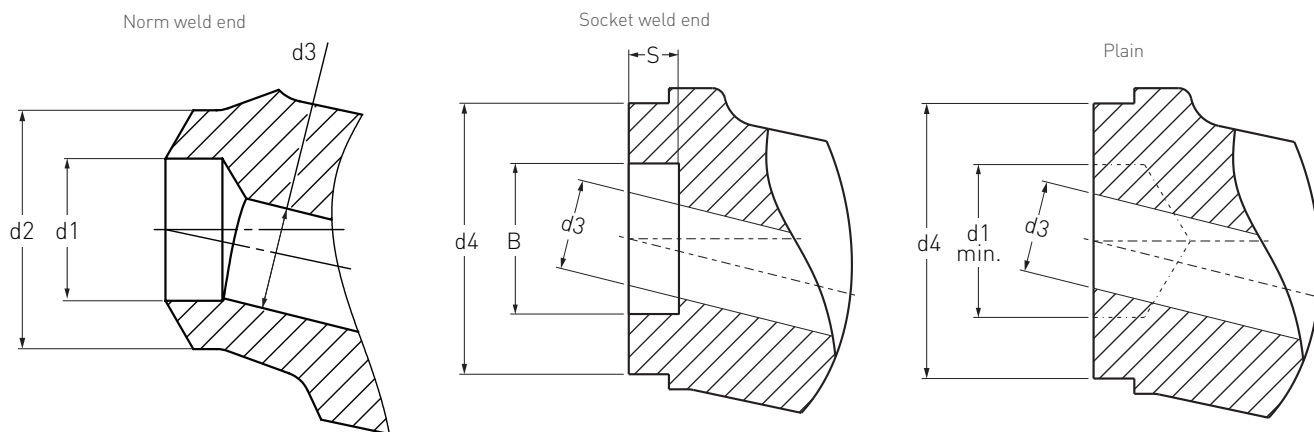
** Special feature SN33.A

*** Special feature SN33.B

1. Other end-to-end dimension on request.
2. Required dimension for disassembly with handwheel for rework.

SEPELL HIGH PRESSURE ISOLATION VALVES

MODEL VA400 (DIN/EN)



NORM WELDING ENDS ACCORDING TO DIN 3239, MM

DN (seat-Ø)	DN	Welding ends [S] according to DIN 3239		
		d3	d1	d2
10 (Ø12)	100	6	13.0	18
	160	6	13.0	18
	250	6	12.0	18
	320	6	12.0	18
	400	6	10.0	18
15 (Ø12)	100	12	17.0	22
	160	12	17.0	22
	250	12	16.0	22
	320	6	15.0	22
	400	12	17.0	28
25 (Ø18)	100	18	28.5	35
	160	18	27.0	35
	250	18	26.5	35
	320	14	24.0	35
	400	18	29.0	44
40 (Ø36)	100	36	43.0	49
	160	28	41.0	49
	250	28	38.5	49
	320	28	36.0	49
	400	28	40.0	61
50 (Ø36)	100	36	54.0	61
	160	36	52.5	61
	250	36	45.0	61
	320	36	59.5	77
	400	36	49.5	77

DIMENSIONS PLAIN, MM

DN	Pipe connection	d3	d1 min.	d4
15	U2	12	17.0	40.5
25	U1	14	20.5	56.5
25	U2	18	26.0	56.5
40	U1	28	36.0	97.0
50	U2	36	45.0	97.0

DIMENSIONS SOCKET WELD ENDS ACCORDING TO EN12760, MM

DN	B	S	d4	d3
10	17.6	10	40.5	12
15	21.8	13	40.5	12
20	27.1	13	56.5	18
25	33.9	13	56.5	18
32	42.7	13	97.0	28
40	48.8	13	97.0	36
50	61.2	16	97.0	36

SEPELL HIGH PRESSURE ISOLATION VALVES

MODEL VA400 (DIN/EN)

APPLICATION RANGES - FOR WELDING ENDS

Body material	DIN	Temperature, °C																				
		20	250	300	350	400	450	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620
		Allowable pressure, bar																				
P250GH	1.0460	522	482	471	397	311	236	137	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16Mo3	1.5415	522	482	471	444	429	419	416	413	311	236	186	149	---	---	---	---	---	---	---	---	---
13CrMo4-5	1.7335	522	482	471	457	444	429	419	416	413	398	315	257	207	161	132	107	---	---	---	---	---
11CrMo9-10	1.7383	522	482	471	457	444	429	419	416	413	409	377	328	282	240	207	178	153	132	116	---	---
X10CrMoVNb9-1	1.4903	---	---	---	---	---	429	419	416	413	409	406	403	399	396	398	336	282	240	199	166	137
X6CrNiNb18-10	1.4550	522	482	471	457	444	429	419	416	413	409	406	403	399	396	393	389	387	380	370	338	307

SEPELL HIGH PRESSURE ISOLATION VALVES

MODEL VA400 (DIN/EN)

SELECTION GUIDE

Example:	VA400	01	100	25	G	S2	33 A
Valve type							
VA400							
Material specification							
01	1.0460 P250GH						
10	1.7335 13CrMo4-5						
11	1.5415 16Mo3						
13	1.7383 11CrMo9-10						
30	1.4903 X10CrMoVNb9-1						
31	1.4550 X6CrNiNb18-10						
Pressure rating							
(at operating data/ design data)							
63	PN63						
100	PN100						
160	PN160						
250	PN250						
320	PN320						
400	PN400						
Nominal size							
10	DN 10						
15	DN 15						
25	DN 25						
40	DN 40						
50	DN 50						
Body design							
G	Globe type (T-pattern)						
Pipe connection							
S1	Welding ends, channel type 1						
S2	Welding ends, channel type 2						
M	Socket weld ends according to EN12760						
U1	Plain, channel type 1						
U2	Plain, channel type 2						
Special features							
33 A	Connection for actuator DIN EN ISO 5210 F10 B1						
33 B	Connection for actuator DIN EN ISO 5210 F14 B1						
41	Stellited disc seat						

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