

- Gate valves
- High pressure gate valve DSK 10
- 700 JT
- PD 10
- DN 50-150



Range of application

BW-Version Material	PD	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																											
		120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	
1.0460	10	100	100	94	82	74	62	50	48	45	43	41	38	34	28	23													
1.5415	10	120	120	112	103	88	85	82	82	81	81	80	79	79	78	78	68	53	40	32	25								
1.7335	10	120	120	120	118	109	103	97	96	95	94	92	91	91	90	89	89	81	68	54	44	35	28	23	18				
1.7383	10	120	120	120	120	118	109	103	102	101	99	98	97	96	95	94	89	79	69	61	53	46	40	34	30	26	22	20	

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 50-150

Standard features

- Split disc gate valve
- Die-forged body and bonnet
- Full bore (Except DN 65/50 and DN 125/100)
- Outside screw and yoke
- Non-turning, rising stem
- Yoke sleeve supported by needle bearings
- Pressure sealing bonnet acc. VGB-guidelines

Pressure and temperature ratings

- Pressure rating up to 120 bar
- Temperature rating up to 600 °C

Materials

- 1.0460
- 1.5415
- 1.7335
- 1.7383

Further materials on request.

Media

Depending on the material the gate valves are suitable for water, gas, oil and other non aggressive media

Fields of application

Chemical industries, power plants, ship building and other

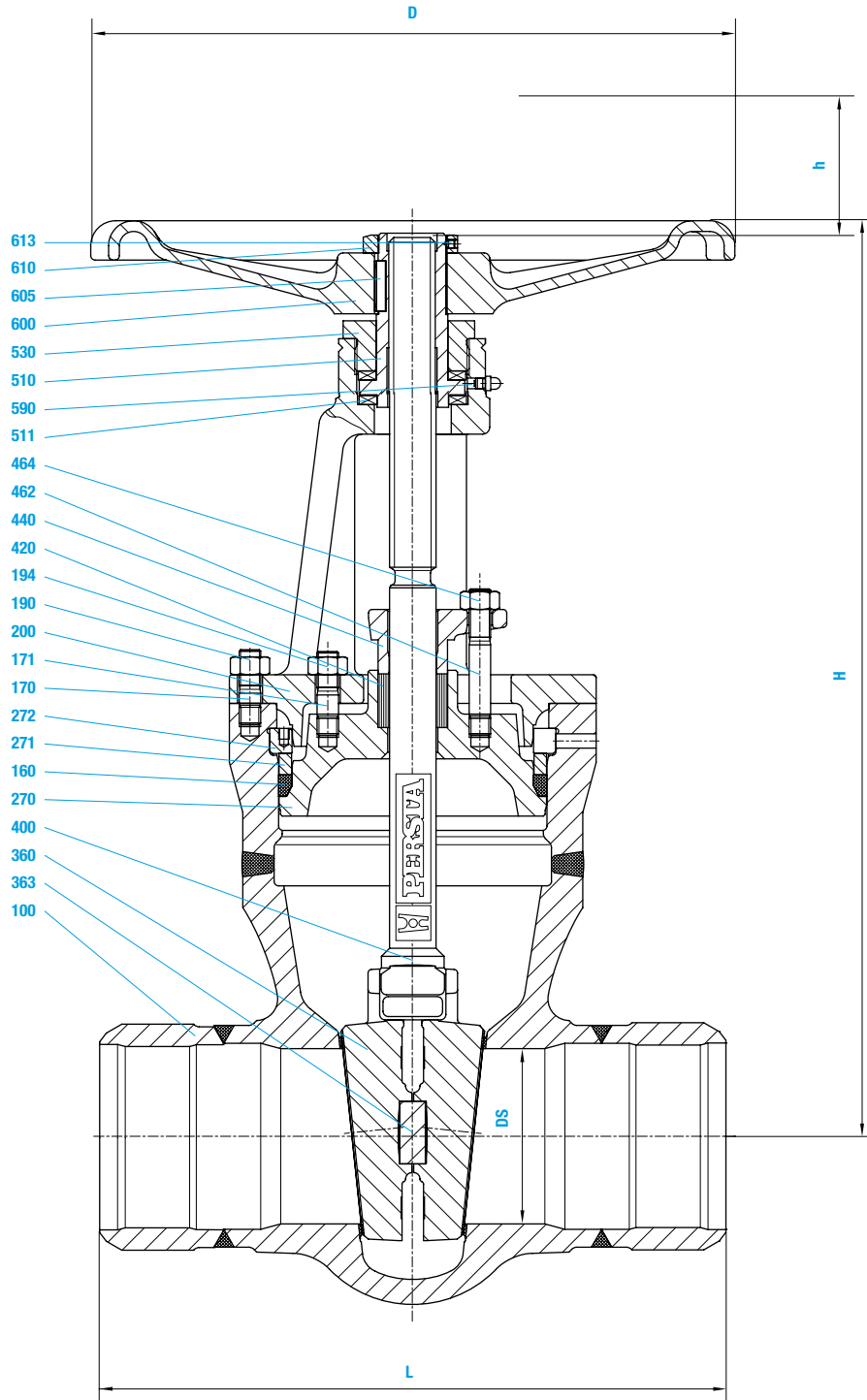
Design Highlights

- Die-forged valve body with integral seats
- Hard faced seats
- Full bore, except DN 65/50 and DN 125/100
- Non-turning rising stem with burnished shaft
- Rolled stem thread
- Pressure sealing bonnet
- Possibility to add an actuator flange

Benefits

- Compared to cast steel, robust and highly stressable
- Best possible sliding performance, minimum wear
- No reduction in seat area
- Minimum wear of the gland packing
- Optimal surface with higher surface hardness and therefore better wear resistance than cut threads
- Best possible sealing function
- Simple retrofitting of an actuator without welding

▪ Gate valves ▪ High pressure gate valve DSK 10 ▪ 700 JT ▪ PD 10 ▪ DN 50-150



■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 50-150

Materials					
Pos.	Component	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45)
100	Body welded on with	1.0460 Cr17	1.5415 Stellite	1.7335 Stellite	1.7383 Stellite
160	▶ Gasket	Graphite	Graphite	Graphite	Graphite
170	▶ Stud	1.7709	1.7719	1.7709	1.7709
171	▶ Stud	1.7709	1.7719	1.7709	1.7709
190	Hexagonal nut	1.7218	1.7218	1.7218	1.7218
194	Hexagonal nut	1.7218	1.7218	1.7218	1.7218
200	Bonnet	1.5419	1.5419	1.5419	1.5419
270	Cover	1.0460	1.5415	1.7335	1.7383
271	Ring	1.0460	1.5415	1.7335	1.7383
272	Segmentring	1.0460	1.5415	1.7335	1.7383
360	▶ Disc welded on with	1.0460 18/8 (40)	1.5415 Stellite	1.7335 Stellite	1.7383 Stellite
363	▶ Pressure piece	1.4021	1.4021	1.4021	1.4021
400	▶ Stem	1.4021	1.4122	1.4122	1.4122
420	▶ Packing	Graphite	Graphite	Graphite	Graphite
440	Gland flange	1.0460	1.0460	1.0460	1.0460
462	▶ Stud	1.7709	1.7709	1.7709	1.7709
464	Hexagonal nut	1.7218	1.7218	1.7218	1.7218
510	▶ Yoke sleeve	1.0718	1.0718	1.0718	1.0718
511	▶ Roller bearing	WLS	WLS	WLS	WLS
530	Screwing	1.0718	1.0718	1.0718	1.0718
590	Grease nipple	5.8	5.8	5.8	5.8
600	Handwheel	0.7040	0.7040	0.7040	0.7040
605	Key	1.0060	1.0060	1.0060	1.0060
610	Hexagonal nut	St	St	St	St
613	Screw pin	45H	45H	45H	45H

▶ Spare parts

Dimensions/mm					
DN	DS	L	H	Stroke h	D
50	50	250	337	63	180
65 / 50	50	290	337	63	180
80	78	310	410	90	280
100	98	350	515	110	360
125 / 100	98	400	515	110	360
150	150	450	685	165	450

Weights/kg and Kvs-values			
DN	FL	BW	Kvs (m ³ /h)
50	26,5	15,5	258,0
65 / 50	30,5	16,0	258,0
80	45,0	31,0	628,0
100	71,0	47,0	991,0
125 / 100	89,0	49,0	991,0
150	155,0	100,0	2323,0

- Gate valves
- High pressure gate valve DSK 10
- 700 JT
- PD 10
- DN 200-350/300



Range of application

BW-Version Material	PD	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																											
		120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	
1.0460	10	100	100	94	82	74	62	50	48	45	43	41	38	34	28	23													
1.5415	10	120	120	112	103	88	85	82	82	81	81	80	79	79	78	78	68	53	40	32	25								
1.7335	10	120	120	120	118	109	103	97	96	95	94	92	91	91	90	89	89	81	68	54	44	35	28	23	18				
1.7383	10	120	120	120	120	118	109	103	102	101	99	98	97	96	95	94	89	79	69	61	53	46	40	34	30	26	22	20	

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

■ **Gate valves** ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 200-350/300

Standard features

- Split disc gate valve
- Die-forged body and bonnet
- Full bore
- Outside screw and yoke
- Non-turning, rising stem
- Yoke sleeve supported by needle bearing
- Pressure sealing bonnet acc. VGB-guidelines

Pressure and temperature ratings

- Pressure rating up to 120 bar
- Temperature rating up to 600 °C

Materials

- 1.0460
- 1.5415
- 1.7335
- 1.7383

Further materials on request.

Media

Depending on the material the gate valves are suitable for water, gas, oil and other non aggressive media

Fields of application

Chemical industries, power plants, ship building and other

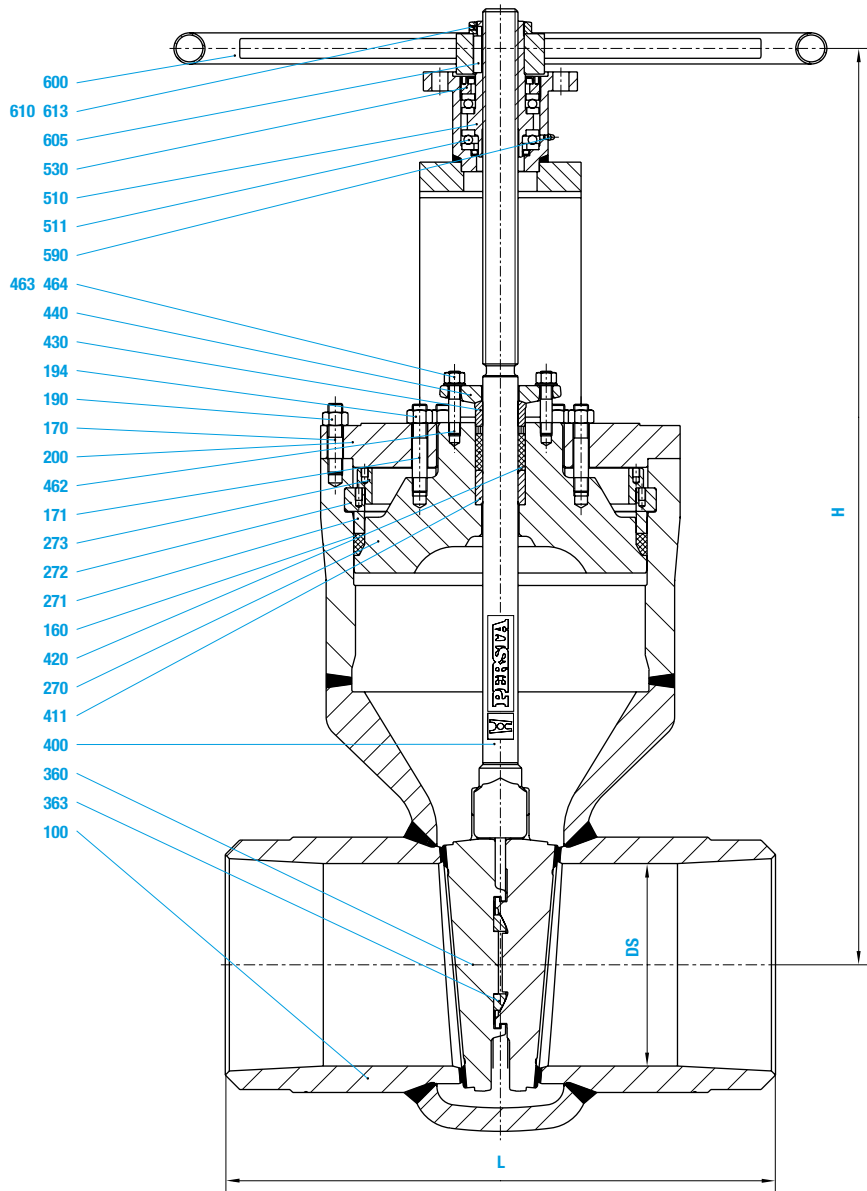
Design Highlights

- Die-forged body and bonnet
- Seats and wedge faced with stellite
- Full bore
- Gland ring and gland flange in two separate pieces
- Yoke sleeve supported by needle bearing
- Pressure sealing bonnet

Benefits

- Free from porosity and shrink holes compared to cast steel, robust and highly stressable
- Extremely resistant to wear
- No reduction in seat area
- Damage to the stem by irregular tightening of gland bolts is avoided
- Minimize the expenditure of effort when operating valve
- Best possible sealing function

▪ Gate valves ▪ High pressure gate valve DSK 10 ▪ 700 JT ▪ PD 10 ▪ DN 200-350/300



■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 200-350/300

Materials					
Pos.	Component	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45)
100	Body welded on with	1.0460	1.7383/1.5415	1.7383/1.7335	1.7383
160	▶ Gasket	18/8	Stellite	Stellite	Stellite
170	▶ Stud	Graphite	Graphite	Graphite	Graphite
171	▶ Stud	1.7709	1.7709	1.7709	1.7709
190	▶ Hexagonal nut	1.7218	1.7218	1.7218	1.7218
194	▶ Hexagonal nut	1.7218	1.7218	1.7218	1.7218
200	▶ Bonnet	1.5415	1.5415	1.5415	1.5415
270	▶ Cover	1.0460	1.5415	1.7335	1.7383
271	▶ Ring	1.0460	1.5415	1.7335	1.7383
272	▶ Segmentring	1.0460	1.5415	1.7335	1.7383
273	▶ Cover	1.7383	1.5415	1.7335	1.7383
360	▶ Disc welded on with	1.7383	1.7383	1.7383	1.7383
363	▶ Pressure piece	Cr17	Stellite	Stellite	Stellite
400	▶ Stem	1.4122	1.4122	1.4122	1.4122
411	▶ Guide bushing	1.4021	1.4122	1.4122	1.4122
420	▶ Packing	1.8507	1.8507	1.8507	1.8507
430	▶ Gland ring	Graphite	Graphite	Graphite	Graphite
440	▶ Gland flange	1.0718	1.0718	1.0718	1.0718
462	▶ Stud	1.0460	1.0460	1.0460	1.0460
463	▶ Washer	1.7709	1.7709	1.7709	1.7709
464	▶ Hexagonal nut	St	St	St	St
510	▶ Yoke sleeve	1.7218	1.7218	1.7218	1.7218
511	▶ Bearing	CW 713 R	CW 713 R	CW 713 R	CW 713 R
530	▶ Screwing	WLS	WLS	WLS	WLS
590	▶ Grease nipple	1.0718	1.0718	1.0718	1.0718
600	▶ Handwheel	5.8	5.8	5.8	5.8
605	▶ Key	0.7040	0.7040	0.7040	0.7040
610	▶ Hexagonal nut	1.0060	1.0060	1.0060	1.0060
613	▶ Screw pin	St	St	St	St
		45H	45H	45H	45H
	▶ Spare parts				

Dimensions/mm					
DN	DS	L	H	Stroke	D
200	198	550	920	210	600
225 / 200	198	600	920	210	600
250 / 200	198	650	920	210	600
225 / 250	235	600	1130	265	720
250	235	650	1130	265	720
300 / 250	235	750	1130	265	720
300	276	750	1300	310	900
350 / 300	276	850	1300	310	900

Weights/kg and Kvs-values		
DN	BW	Kvs (m ³ /h)
200	260	4000
225 / 200	270	
250 / 200	280	
225 / 250	530	
250	550	6247
300 / 250	580	
300	850	8997
350 / 300	870	9257

- Gate valves
- High pressure gate valve DSK 10
- 700 JT
- PD 10
- DN 350-700



		Range of application																																	
		Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																	
BW-Version	Material	PD	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	
1.0425	10	100	100	94	82	74	62	50	48	45	43	41	38	34	28	23																			
1.5415	10	120	120	112	103	88	85	82	82	81	81	80	79	79	78	78	68	53	40	32	25														
1.7335	10	120	120	120	118	109	103	97	96	95	94	92	91	91	90	89	89	81	68	54	44	35	28	23	18										
1.7383	10	120	120	120	120	118	109	103	102	101	99	98	97	96	95	94	89	79	69	61	53	46	40	34	30	26	22	20							
1.4903	10	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	134	122	119	110	101	93	84	76	68	61	54	48	42	37	32	27	24	21	

¹⁾ Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

■ **Gate valves** ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 350-700

Standard features

- Split disc gate valve
- Outside screw and yoke
- Non-turning, rising stem
- Yoke sleeve supported by needle bearings
- Pressure sealing bonnet acc. VGB-guidelines
- Easy assembly of an E-actuator

Pressure and temperature ratings

- Pressure rating up to 136 bar
- Temperature rating up to 650 °C

Materials

- 1.0425
- 1.5415
- 1.7335
- 1.7383
- 1.4903

Further materials on request.

Media

Depending on the material the gate valves are suitable for water, gas, oil and other non aggressive media

Fields of application

Chemical industries, power plants, ship building and other

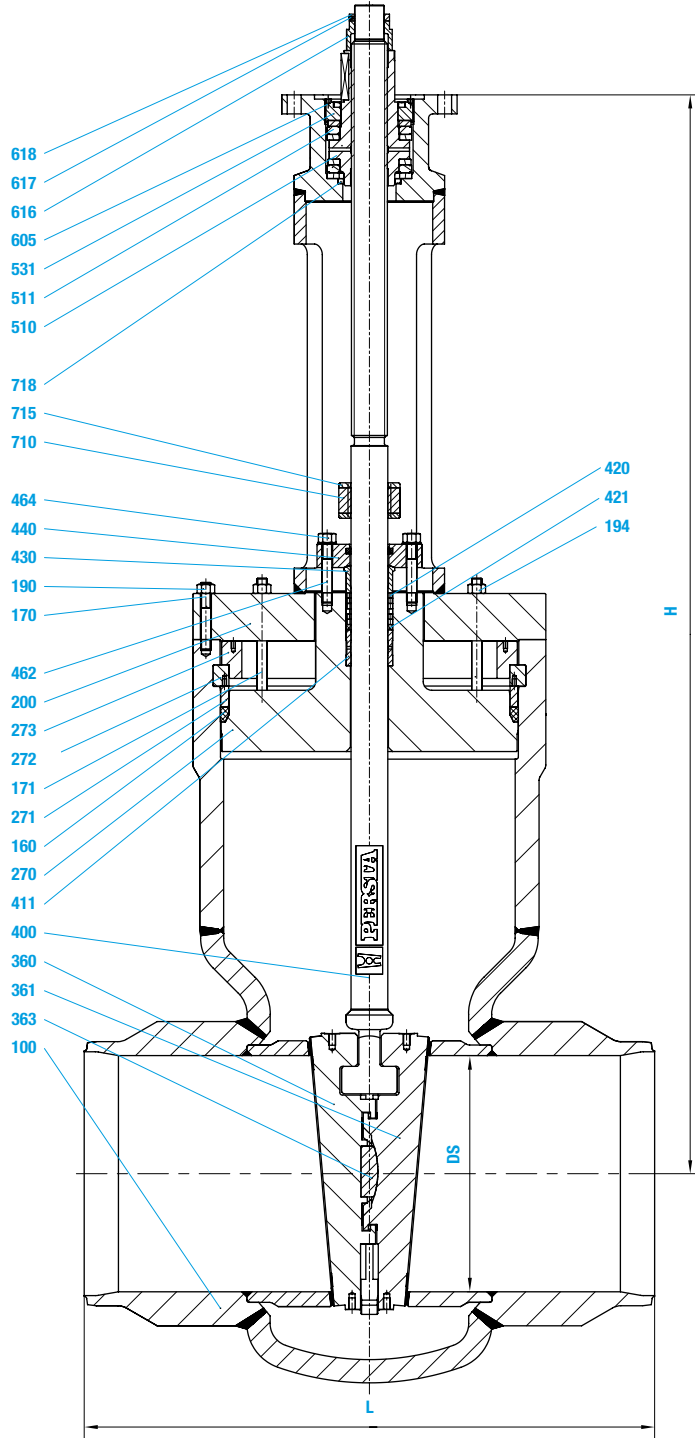
Design Highlights

- Seats and disc faced with stellite
- Non-turning, rising stem
- Gland ring and gland flange in two separate pieces
- Yoke sleeve supported by needle bearing
- Pressure sealed bonnet

Benefits

- Best possible sliding performance, minimum wear
- Minimum wear to the gland packing
- Damage to the stem by irregular tightening of gland bolts is avoided
- Minimize the expenditure of effort when operating valve
- Best possible sealing function

▪ Gate valves ▪ High pressure gate valve DSK 10 ▪ 700 JT ▪ PD 10 ▪ DN 350-700



■ Gate valves ■ High pressure gate valve DSK 10 ■ 700 JT ■ PD 10 ■ DN 350-700

Materials						
Pos.	Component	1.0425 (22)	1.5415 (42)	1.7335 (44)	1.7383 (45)	1.4903 (63)
100	Body welded on with	1.0425 Stellite	1.5415 Stellite	1.7335 Stellite	1.7383 Stellite	1.4903 Stellite
160	▶ Gasket	Graphite	Graphite	Graphite	Graphite	Graphite
170	Stud	1.7709	1.7709	1.7709	1.7709	1.7709
171	Stud	1.7709	1.7709	1.7709	1.7709	1.7709
190	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.7218
194	Hexagonal nut	1.7255	1.7218	1.7218	1.7218	1.7218
200	Bonnet	1.5415	1.5415	1.5415	1.5415	1.5415
270	Cover	1.0460	1.5415	1.7335	1.7383	1.4903
271	Ring	1.0460	1.5415	1.7335	1.7383	1.4903
272	Segmentring	1.0460	1.5415	1.7335	1.7383	1.4903
273	Cover	1.0460	1.0460	1.0460	1.0460	1.0460
360 / 361	▶ Disc welded on with	1.0460 Stellite	1.5415 Stellite	1.7335 Stellite	1.7383 Stellite	1.4903 Stellite
363	▶ Pressure piece	1.4122	1.4122	1.4122	1.4122	1.4122
400	▶ Stem	1.4021	1.4923	1.4923	1.4923	1.4923 / 1.4980
411	▶ Guide bushing	1.8507	1.8507	1.8507	1.8507	1.8507
420	▶ Packing	Graphite	Graphite	Graphite	Graphite	Graphite
430	Gland ring	1.5415	1.5415	1.5415	1.5415	1.5415
440	Gland flange	1.0460	1.5415	1.7335	1.7383	1.7383
462	Stud	1.7709	1.7709	1.7709	1.7709	1.7709
464	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.7218
510	▶ Yoke sleeve	CW 713 R	CW 713 R	CW 713 R	CW 713 R	CW 713 R
511	▶ Bearing	WLSi	WLSi	WLSi	WLSi	WLSi
531	Yoke nut	1.7335	1.7335	1.7335	1.7335	1.7335
605	Key	1.0060	1.0060	1.0060	1.0060	1.0060
616	Screw pin	1.0460	1.0460	1.0460	1.0460	1.0460
617	Screw pin	45H	45H	45H	45H	45H
618	Hexagonal nut	St	St	St	St	St
710	Switch bracket	1.0425	1.0425	1.0425	1.0425	1.0425
715	Key	1.4021	1.4021	1.4021	1.4021	1.4021
718	Washer	1.0038	1.0038	1.0038	1.0038	1.0038

▶ Spare parts

Dimensions/mm				
DN	DS	L	H	Stroke
350	330	850	1730	365
400	375	950	1850	415
450	419	1050	2070	465
500	464	1150	2300	515
600	559	1350	2765	625
700	640	1550	2895	690

Weights/kg and Kvs-values		
DN	BW	Kvs (m ³ /h)
350	995	11243
400	1600	14521
450	2000	18105
500	2490	22353
600	4550	32188
700	5750	41773

▪ Gate valves ▪ High pressure gate valve DSK 26 ▪ 700 JT ▪ PD 25 / PD 40 ▪ DN 65-300



		Range of application																																						
		Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																						
BW-Version	Material	PD	20	50	100	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650			
1.0460		25	250	250	250	250	250	235	206	184	155	125	119	113	107	102	96	85	71	58																				
1.5415		25	300	300	300	300	300	280	258	221	213	206	205	203	202	200	199	197	196	194	170	132	101	79	64															
1.7335		25	300	300	300	300	300	300	294	272	258	243	240	237	234	231	228	227	225	224	222	202	170	134	109	88	69	57	46											
1.7383		25	300	300	300	300	300	300	300	294	272	258	255	252	249	246	243	240	237	234	224	199	174	152	132	115	100	85	75	65	56	49								
1.6368		25	410	410	410	410	410	410	410	410	410	410	410	410	410	402	360	309	257	205	153	102																		
1.4903		25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	418	383	372	344	316	290	263	238	213	191	169	150	132	115	100	85	75	64			
1.4901		25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	423	397	370	345	320	297	275	252	230	208	186	166	147	127	110	95	82			

¹⁾ Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980

		Range of application																																							
		Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																							
BW-Version	Material	PD	20	50	100	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650				
1.0460		40	400	400	400	400	400	377	330	295	248	200	190	181	172	162	153	135	113	93																					
1.5415		40	480	480	480	480	480	447	412	353	341	330	327	325	322	320	318	315	313	311	271	212	161	127	101																
1.7335		40	481	481	481	481	481	471	436	412	388	384	379	374	370	365	363	360	358	355	322	271	215	175	141	110	90	73													
1.7383		40	480	480	480	480	480	480	471	436	412	407	403	398	393	388	384	379	374	358	318	278	242	212	183	160	136	120	103	89	79										
1.6368		40	657	657	657	657	657	657	657	657	657	657	657	657	657	643	577	495	412	328	245	163																			
1.4903		40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	669	612	596	551	506	464	421	381	341	306	271	240	212	183	160	136	120	103				
1.4901		40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	677	635	592	552	512	475	440	404	369	334	298	265	235	204	176	152	131				

¹⁾ Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980

▪ **Gate valves** ▪ High pressure gate valve DSK 26 ▪ 700 JT ▪ PD 25 / PD 40 ▪ DN 65-300

Standard features

- Body made of forged steel
- Disc guided in groove
- Welded seat rings
- Outside screw and yoke
- Position indicator / Switch bracket
- Pressure sealing bonnet acc. to VGB-guidelines
- Yoke sleeve supported by needle bearing
- Possibility to add an actuator

Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C

Materials

- 1.0460
- 1.4901
- 1.4903
- 1.5415
- 1.6368
- 1.7335
- 1.7383

Further materials on request.

Media

Depending on the material the gate valves are suitable for water, gas, oil and other non aggressive media

Fields of application

High temperature steam and water, refining (catalytic reformers and hydrocrackers), petrochemical and chemical industries

Design Highlights

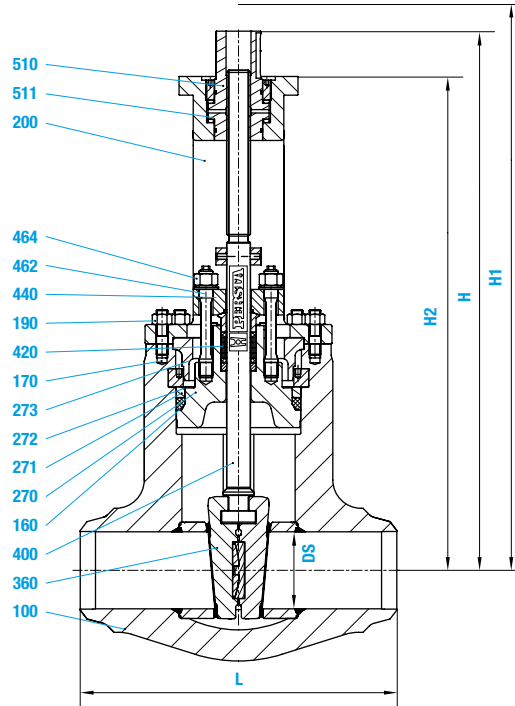
- Long bonnet
- Seats of the shut-off device and of the valve body generally faced with stellite
- Non-rising handwheel
- Non-turning, rising stem and burnished stem
- Outside located switch-bracket
- Hammer head connection between shut-off device and stem
- Gland ring and gland flange in two separate pieces
- Yoke sleeve supported at the top and at the bottom by means of needle bearings (axial type)

Benefits

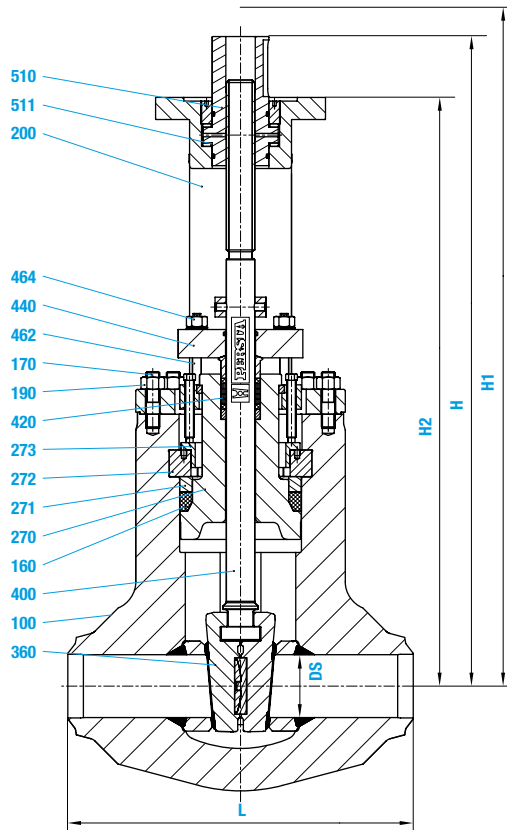
- To reduce temperatures
- Best possible sliding performance and minimum wear
- Small dimensions
- Minimum wear to the gland packing
- Protects against torsion of the stem
- The wedges are able to move parallel to the axis of the pipeline within the guiding groove. This protects the stem against bending moments
- Damage to the stem by irregular tightening of gland bolts is avoided
- Minimize the expenditure of effort when operating valve

▪ Gate valves ▪ High pressure gate valve DSK 26 ▪ 700 JT ▪ PD 25 / PD 40 ▪ DN 65-300

DSK 26 ▪ PD 25 ▪ DN 80-300



DSK 26 ▪ PD 40 ▪ DN 65-250



▪ Gate valves ▪ High pressure gate valve DSK 26 ▪ 700 JT ▪ PD 25 / PD 40 ▪ DN 65-300

Materials								
Pos.	Component	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45)	1.6368 (46)	1.4903 (63)	1.4901 (66)
100	Body welded on with	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
160	▶ Gasket	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
170	▶ Stud	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709
190	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.7218	1.7218	1.7218
200	Bonnet	1.5419	1.5419	1.5419	1.5419	1.5419	1.5419	1.5419
270	Cover	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903	1.4901
271	Ring	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903	1.4901
272	Segmentring	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903	1.4901
273	Cover	1.5419	1.5419	1.5419	1.5419	1.5419	1.5419	1.5419
360	▶ Disc welded on with	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
400	▶ Stem	1.4122	1.4122	1.4122	1.4122	1.4923	1.4923	1.4980
400	▶ Stem from 570 °C					1.4980	1.4980	1.4980
420	▶ Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
440	Gland flange	1.7380	1.7380	1.7380	1.7380	1.7380	1.7380	1.7380
462	Stud	1.7709	1.7709	1.7709	1.7709	1.4923	1.4923	1.4923
464	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.4923	1.4923	1.4923
510	▶ Yoke sleeve	CW713R	CW713R	CW713R	CW713R	CW713R	CW713R	CW713R
511	▶ Bearing	WLSst	WLSst	WLSst	WLSst	WLSst	WLSst	WLSst
	▶ Spare parts							

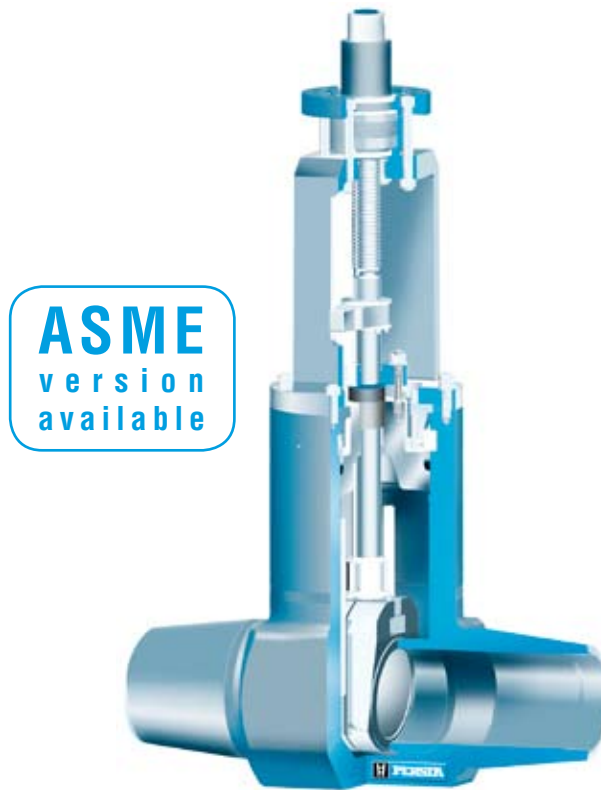
Dimensions/mm DSK 26.25									
DN	DS	L	H	H1	H2	Stroke	R/Stroke	H-Wheel	DIN/ISO 5210
80	70	305	556	605	511	80	16	400	F10 (F14)
100	90	406	658	725	606	105	18	450	F14
125	111	483	781	861	720	130	21	500	F14
150	136	559	952	1045	872	152	22		F16 (F14)
200	178	711	1078	1270	1045	192	24		F25 (F16)
250	222	864	1267	1515	1240	248	28		F30 (F25)
300	263	770 (991)	1528	1815	1497	287	29		F30

Weights/kg and Kvs-values		
DN	BW	Kvs (m ³ /h)
80	72	505
100	128	875
125	208	1270
150	380	1910
200	615	3270
250	1160	5080
300	1835	7140

Dimensions/mm DSK 26.40									
DN	DS	L	H	H1	H2	Stroke	R/Stroke	H-Wheel	DIN/ISO 5210
65	50	330	518	594	466	66	19	400	F10 (F14)
80	57	368	638	675	585	73	21	450	F14
100	72	457	713	836	656	87	15	500	F14
125	90	533	795	870	725	106	15		F16
150	111	610	1090	1230	1040	133	15		F25 (F16)
200	146	762	1195	1370	1165	174	18		F30 (F25)
250	185	1270	1475	1685	1440	212	21		F35 (F30)

Weights/kg and Kvs-values		
DN	BW	Kvs (m ³ /h)
65	83	210
80	136	310
100	219	505
125	411	835
150	676	1485
200	1188	2200
250	2208	3530

▪ Gate valves ▪ High pressure gate valve DSK 16-63 ▪ 700 JT ▪ PD 16-63 ▪ DN 50-600



ASME
version
available

		Range of application																																		
		Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																		
BW-Version	Material	PD	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650		
1.0460	16	160	160	151	132	118	99	80	76	73	69	65	61	54	45	37																				
	25	250	250	235	206	184	155	125	119	113	107	102	96	85	71	58																				
	32	320	320	302	264	236	198	160	153	145	138	130	123	109	91	75																				
	40	400	400	377	330	295	248	200	191	182	172	163	153	136	113	93																				
1.5415	16	192	192	179	165	141	137	132	131	130	129	128	127	126	125	124	109	85	64	51	41															
	25	300	300	280	258	221	213	206	205	203	202	200	199	197	196	194	170	132	101	79	64															
	32	385	385	358	330	283	273	264	262	260	258	256	255	253	251	249	217	170	129	102	81															
	40	480	480	448	413	354	342	330	328	325	323	321	318	316	314	311	272	212	161	127	102															
1.7335	16	192	192	192	189	174	165	156	154	152	150	148	146	145	144	143	142	129	109	86	70	57	44	36	29											
	25	300	300	300	294	272	258	243	240	237	234	231	228	227	225	224	222	202	170	134	109	88	69	57	46											
	32	385	385	385	377	349	330	311	307	304	300	296	292	290	289	287	285	258	217	172	140	113	88	72	59											
	40	481	481	481	471	436	413	389	384	380	375	370	365	363	364	358	356	323	272	215	175	141	110	91	74											
1.7383	16	192	192	192	192	189	174	165	163	161	159	157	156	154	152	150	143	127	111	97	85	74	64	55	48	41	36	32								
	25	300	300	300	300	294	272	258	255	252	249	246	243	240	237	234	224	199	174	152	132	115	100	85	75	65	56	49								
	32	384	384	384	384	377	349	330	326	322	319	315	311	307	304	300	287	255	223	194	170	147	128	109	96	83	72	63								
	40	480	480	480	480	471	436	413	408	403	398	384	389	384	379	375	358	318	278	243	212	184	160	137	120	104	90	79								
1.6368	16	263	263	263	263	263	263	263	263	263	257	231	198	165	131	98	65																			
	25	410	410	410	410	410	410	410	410	410	402	360	309	257	205	153	102																			
	32	525	525	525	525	525	525	525	525	525	515	482	396	330	262	196	130																			
	40	657	657	657	627	657	657	657	657	657	657	643	577	495	412	328	245	163																		
1.4903	16	272	272	272	272	272	272	272	272	272	272	272	272	272	268	245	239	221	203	186	169	153	137	123	108	96	85	74	64	55	48	41				
	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	418	383	372	344	316	290	263	238	213	191	169	150	132	115	100	85	75	65			
	32	544	544	544	544	544	544	544	544	544	544	544	544	544	544	536	490	477	441	405	371	338	305	273	245	217	192	170	147	128	109	96	83			
	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	669	613	596	552	507	464	422	382	342	306	271	240	212	184	160	137	120	104			
1.4901	16	272	272	272	272	272	272	272	272	272	272	272	272	272	272	271	254	237	221	205	190	176	161	147	133	119	106	94	81	70	61	52				
	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	
	32	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544	544
	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. Design according to working data PD 63 on request

■ **Gate valves** ■ High pressure gate valve DSK 16-63 ■ 700 JT ■ PD 16-63 ■ DN 50-600

Standard features

- Valve body made of forged steel
- Split disc type
- Welded seatrings and guide bars
- Outside screw and yoke
- Position indicator / non-rotating device
- Pressure sealing bonnet acc. VGB-guidelines
- Yoke sleeve supported by needle bearing
- Possibility to add an actuator

Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C
- Higher temperature ratings on request

Materials

- 1.0460
- 1.4901
- 1.4903
- 1.5415
- 1.7335
- 1.7383
- 1.6368

Further materials on request.

Media

Depending on the material the gate valves are suitable for water, gas, oil and other non aggressive media

Fields of application

High temperature steam and water, refining (catalytic reformers and hydrocrackers), petrochemical and chemical industries

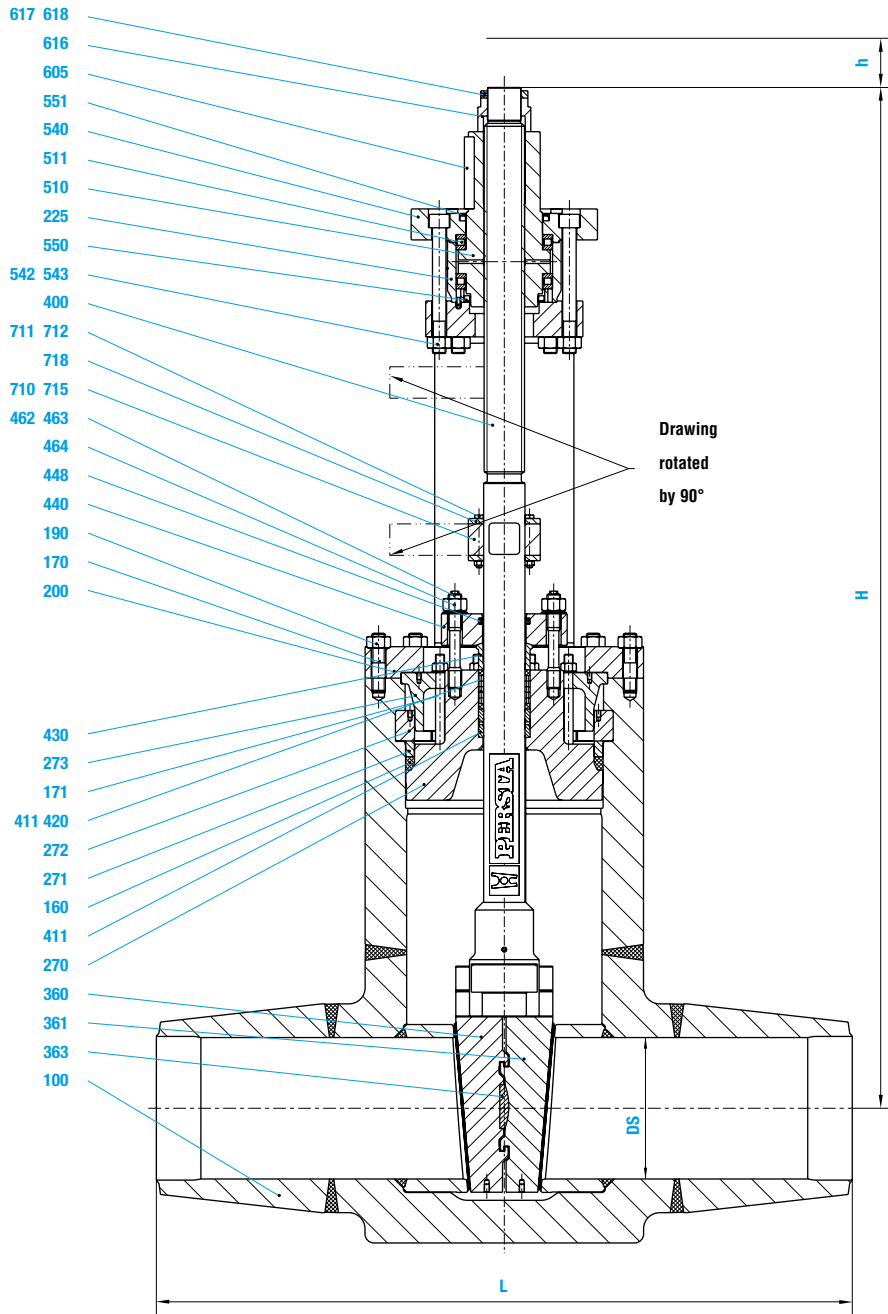
Design Highlights

- Long bonnet
- Seats and discs faced with stellite
- Non-turning, rising stem and burnished stem
- Outside located switch bracket
- Hammer head connection between shut-off device and stem
- Gland flange and gland ring in two separate pieces
- Yoke sleeve supported by needle bearing

Benefits

- To reduce temperatures
- Best possible sliding performance and minimum wear
- Minimum wear to the gland packing
- Protects against torsion
- Wedge are able to align parallel to the axis of the pipe shut-off device and stem within the guiding groove. This protects the stem against bending moments
- Damage to the stem by irregular tightening of gland bolts is avoided
- Minimize the expenditure of effort when operating valve

▪ Gate valves ▪ High pressure gate valve DSK 16-63 ▪ 700 JT ▪ PD 16-63 ▪ DN 50-600



■ Gate valves ■ High pressure gate valve DSK 16-63 ■ 700 JT ■ PD 16-63 ■ DN 50-600

Materials								
Pos.	Component	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45)	1.6368 (46)	1.4903 (63)	1.4901 (66)
100	Body welded on with	1.0460 Stellite	1.5415 Stellite	1.7335 Stellite	1.7383 Stellite	1.6368 Stellite	1.4903 Stellite	1.4901 Stellite
160	▶ Gasket	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
170	Stud	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709
171	Stud	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709
190	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.7218	1.7218	1.7218
200	Bonnet	1.5415	1.5415	1.5415	1.5415	1.5415	1.5415	1.5415
225	Yoke head	1.0460	1.0460	1.0460	1.0460	1.0460	1.0460	1.0460
270	Cover	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
271	Ring	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
272	Segmentring	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
273	Cover	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
360 / 361	▶ Disc welded on with	1.0460 Stellite	1.5415 Stellite	1.7335 Stellite	1.7383 Stellite	1.6368 Stellite	1.4903 Stellite	1.4901 Stellite
363	▶ Pressure piece	1.4122	1.4122	1.4122	1.4122	1.4122	1.4122	1.4122
400	▶ Stem	1.4921	1.4021	1.4923	1.4923	1.4923	1.4923	1.4980
411	▶ Guide bushing	1.8507	1.8507	1.8507	1.8507	1.8507	1.8507	1.8507
420	▶ Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
421	▶ Ring	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
430	Gland ring	1.5415	1.5415	1.5415	1.5415	1.5415	1.5415	1.5415
440	Gland flange	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4903
448	▶ Dirt scraper	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
462	Stud	1.7709	1.7709	1.7709	1.7709	1.7709	1.4923	1.4980
463	Washer	St	St	St	St	St	St	St
464	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.4923	1.4923	1.4980
510	▶ Yoke sleeve	CW 713 R	CW 713 R	CW 713 R	CW 713 R	CW 713 R	CW 713 R	CW 713 R
511	▶ Bearing	WLS	WLS	WLS	WLS	WLS	WLS	WLS
540	Flange	1.0425	1.0425	1.0425	1.0425	1.0425	1.0425	1.0425
542	Headcap screw	8.8	8.8	8.8	8.8	8.8	8.8	8.8
543	Hexagonal nut	8	8	8	8	8	8	8
550 / 551	▶ Gasket	NBR	NBR	NBR	NBR	NBR	NBR	NBR
605	Key	1.0060	1.0060	1.0060	1.0060	1.0060	1.0060	1.0060
616	Screw ring	1.0460	1.0460	1.0460	1.0460	1.0460	1.0460	1.0460
617	Screw pin	45H	45H	45H	45H	45H	45H	45H
618	Hexagonal pipe nut	St	St	St	St	St	St	St
710	Switch bracket	1.0425	1.0425	1.0425	1.0425	1.0425	1.0425	1.0425
711	Hexagonal screw	8.8	8.8	8.8	8.8	8.8	8.8	8.8
712	Hexagonal nut	8	8	8	8	8	8	8
715	Key	1.4021	1.4021	1.4021	1.4021	1.4021	1.4021	1.4021
718	Washer	1.0038	1.0038	1.0038	1.0038	1.0038	1.0038	1.0038

▶ Spare parts

Dimensions/mm, Weights/kg and Kvs-values																							
DN	DS	DSK 16				DSK 25				DSK 32				DSK 40				DSK 63				KV (m3/h)	
		L	H	Stroke/h	kg	L	H	Stroke/h	kg	L	H	Stroke/h	kg	L	H	Stroke/h	kg	L	H	Stroke/h	kg		
65 - 200																							
225	202,5									Version DSK 26.40				Version DSK 26.40									4221
250 / 225	202,5									1050	1720	240	1980										
250	225,0									1150	1720	240											
300 / 250	225,0									1150	1980	270	2300										5211
300	270,0									1350	1980	270											
350 / 300	270,0									1350	2195	305	3600										7504
350	315,0									1550	2195	305											
400 / 350	315,0	1200	2140	350	2230	1550	2280	350	3750	1550	2400	350	5840										10214
400	360,0	1350	2140	350		1750	2280	350		1750	2400	350											
400	360,0	1350	2320	400	3000	1750	2565	410	5500	1750	2700	410	8200										13340
450 / 400	360,0	1500	2320	400		1950	2565	410		1950	2700	410											
450	405,0	1500	2485	445	3935	1950	2850	460	7700														16884
500 / 450	405,0	1650	2485	445		2150	2850	460															
500	450,0	1650	2850	495	5400																		20844
600 / 500	540,0																						
600	540,0																						30015