

Firesafe and Offshore Applications



Offshore and LNG: The MS Stavangerfjord of the shipping company Fjord Line ferry runs between Norway and Denmark fuelled 100% with the environmentally friendly LNG. Equipped with HEROSE valves specifically for LNG use.

Fire Safe Valves

Type 01651 - Globe Valve

HEROSE



Cryogenic-Globe and Globe/Check Valves, PN50 (DN100=PN40)

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork, "live loaded" gland packing

"cleaned and degreased for oxygen service"

Part No. 01651.X.000*

Part No. 01651.X.500* Globe/Check Valve

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01651.X.0004

Part No. 01651.X.5004 Globe/Check Valve

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Valve with control disc (tapered design)



Applications:

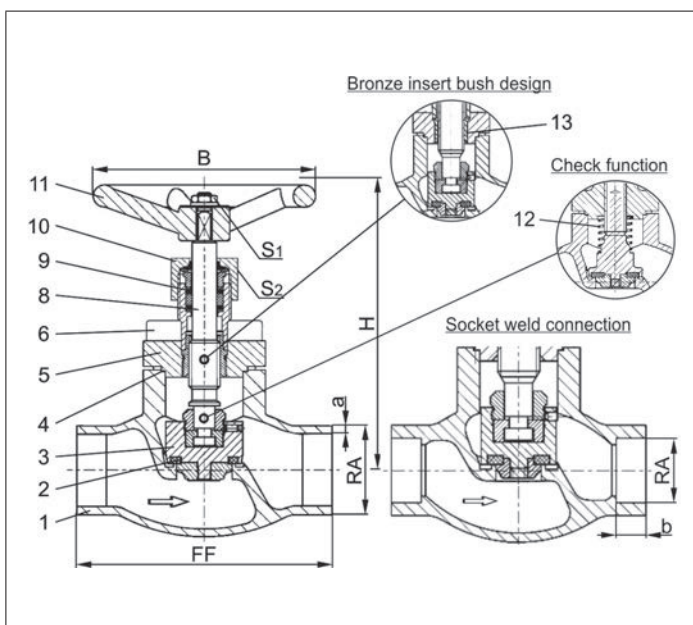
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01651 - Standard design	Technical data												
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280
Height	H	140	140	140	140	140	170	175	175	200	260	310	350
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40											
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20
Handwheel-Ø	B	100	100	100	100	100	125	125	125	125	200	250	315
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41
Weight	ca. kg	1.0	1.25	1.3	1.7	2.0	2.8	4.2	4.2	6.7	10.7	16.0	23.0
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Fire Safe Valves

Type 01655 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN50

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01655.X.0001

Part No. 01655.X.5001 Globe/Check Valve

Female thread connection (G) acc. to ISO 228/1

Part No. 01655.X.0006

Part No. 01655.X.5006 Globe/Check Valve

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

- Female thread connection (R) acc. to ISO 7-Rc
- Valve with control disc (tapered design)



Applications:

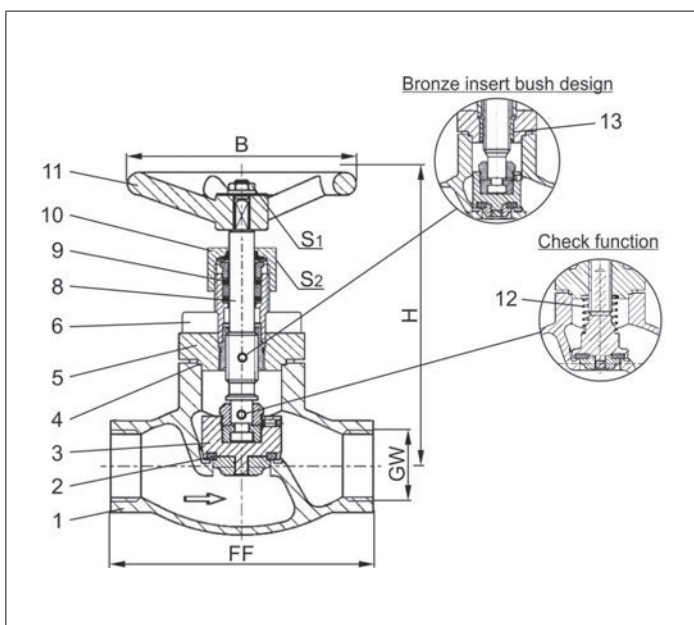
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Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01655 - Standard design	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	140	140	140	140	140	175	175	200
Handwheel-Ø	B	100	100	100	100	100	125	125	125
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36
Weight	ca. kg	1.0	1.0	1.3	1.7	2.0	4.2	4.2	6.7
Kvs-Value	m ³ /h	1.6	2.2	4.3	6.7	11.5	20.6	22.6	37.1
Cv-Value	gal/min	1.9	2.6	5.0	7.8	13.4	23.9	26.3	43.2

Dimensions in mm.

Fire Safe Valves

Type 03651 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN40

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03651.X.0002

Part No. 03651.X.5002 Globe/Check Valve

Flanged connection acc. to DIN EN 1092-1 PN40

Available options - on request only:

- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



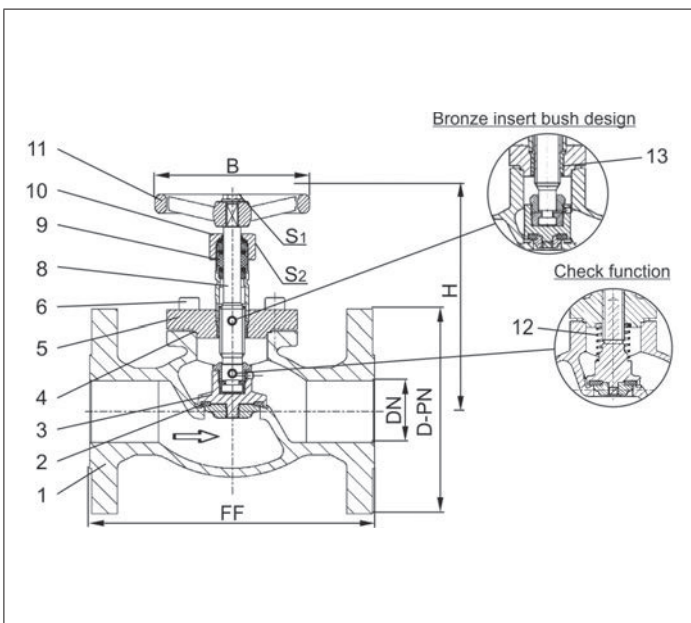
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 03651 - Standard design		Technical data					
Nominal size	DN	25	40	50	65	80	100
Dimension code - Flange EN 1092-1 PN40	.X.	0250	0400	0500	0650	0800	1000
Flange-Ø	D-PN	115	150	165	185	200	235
Face-to-face dimension	FF	160	200	230	290	310	350
Height	H	140	170	200	260	310	350
Handwheel-Ø	B	100	125	125	200	250	315
Wrench size across flats	S ₁	10	13	13	13	13	13
Wrench size across flats	S ₂	30	36	36	36	36	41
Weight	ca. kg	4.5	9.1	12.9	20.6	27.6	42.0
Kvs-Value	m ³ /h	11.5	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	13.4	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Fire Safe Valves

Type 03651 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, class 300
"Fire safem" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
 "live loaded" gland packing
 "cleaned and degreased for oxygen service"

Part No. 03651.X.0003

Part No. 03651.X.5003 Globe/Check Valve

Flanged connection acc. to ANSI B16.5 class 300

Available options - on request only:

- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



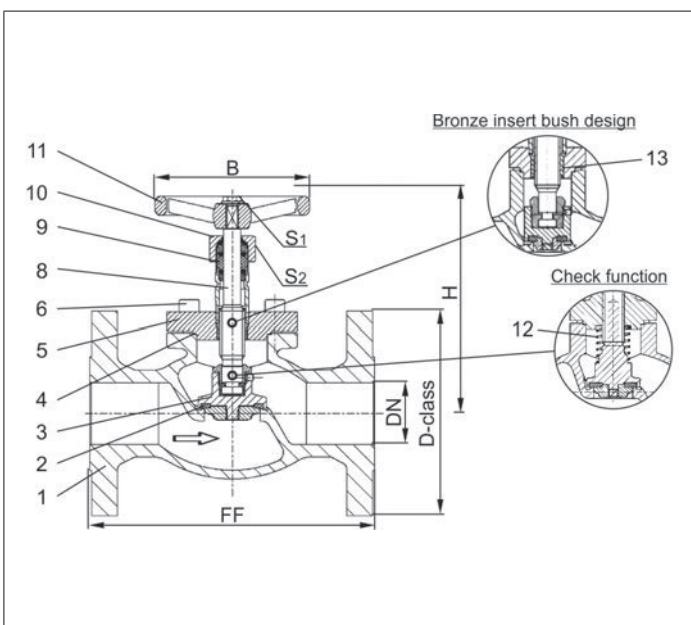
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 03651 - Standard design	Technical data						
Nominal size	DN	25	40	50	65	80	100
Dimension code - Flange ANSI B16.5 class 300	.X.	1000	1400	2000	2400	3000	4000
Flange-Ø	D-class	123.9	155.4	165	190.5	209.5	254
Face-to-face dimension	FF	160	200	230	290	310	350
Height	H	140	170	200	260	310	350
Handwheel-Ø	B	100	125	125	200	250	315
Wrench size across flats	S ₁	10	13	13	13	13	13
Wrench size across flats	S ₂	30	36	36	36	36	41
Weight	ca. kg	4.5	9.1	12.9	20.6	27.6	42.0
Kvs-Value	m ³ /h	11.5	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	13.4	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Fire Safe Valves

Type 01641 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN50 (DN100/150=PN40)

“Fire safe” type test approval acc. to EN ISO 10497

Stainless steel body and topwork, “live loaded” gland packing
“cleaned and degreased for oxygen service”

Part No. 01641.X.001* (H = 270mm)

Part No. 01641.X.002* (H = 370mm)

Part No. 01641.X.501* (H = 270mm) Globe/Check Valve

Part No. 01641.X.502* (H = 370mm) Globe/Check Valve

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01641.X.0014 (H = 270mm)

Part No. 01641.X.0024 (H = 370mm)

Part No. 01641.X.5014 (H = 270mm) Globe/Check Valve

Part No. 01641.X.5024 (H = 370mm) Globe/Check Valve

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Extension H up to 900mm
- Valve with control disc (tapered design)

Applications:

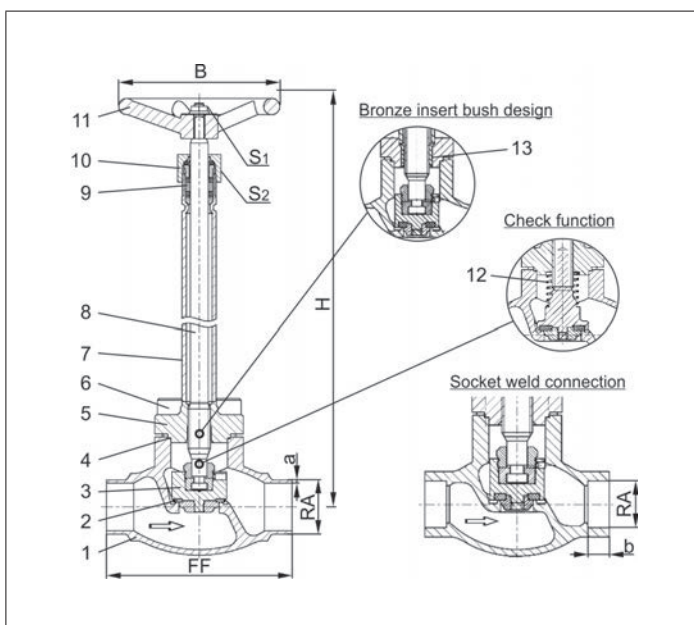
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
7 Elongation tube	1.4541	A 213 TP 321
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01641	Technical data													
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100	150
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114	0168
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280	400
Height	H	270 mm or 370 mm												
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	-	42.4	48.3	60.3	76.1	88.9	114.3	168.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	-	2.0	2.0	2.0	2.6	3.2	6.0	7.11
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3	168.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40												
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20	20
Handwheel-Ø	B	100	100	100	100	100	-	125	125	125	200	250	315	360
Wrench size across flats	S ₁	10	10	10	10	10	-	13	13	13	13	13	13	19
Wrench size across flats	S ₂	30	30	30	30	30	-	36	36	36	36	36	41	41
Weight	ca. kg	1.4	1.65	1.7	2.1	2.4	-	4.7	4.7	7.2	12.7	17.0	24.5	54.0
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0	350.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2	401.8

Dimensions in mm. Compliance of tightness requirements acc. to EN 1626 for DN150 up to 20 bar differential pressure.

Fire Safe Valves

Type 01645 - Globe Valve

HEROSE



Cryogenic-Globe and Globe/Check Valves, PN50

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork, "live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01645.X.0011 (H = 270mm)

Part No. 01645.X.0021 (H = 370mm)

Part No. 01645.X.5011 (H = 270mm) Globe/Check Valve

Part No. 01645.X.5021 (H = 370mm) Globe/Check Valve

Female thread connection (G) acc. to ISO 228/1

Part No. 01645.X.0016 (H = 270mm)

Part No. 01645.X.0026 (H = 370mm)

Part No. 01645.X.5016 (H = 270mm) Globe/Check Valve

Part No. 01645.X.5026 (H = 370mm) Globe/Check Valve

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

· Female thread connection (R) acc. to ISO 7-Rc

· Extension H up to 900mm

· Valve with control disc (tapered design)

Applications:

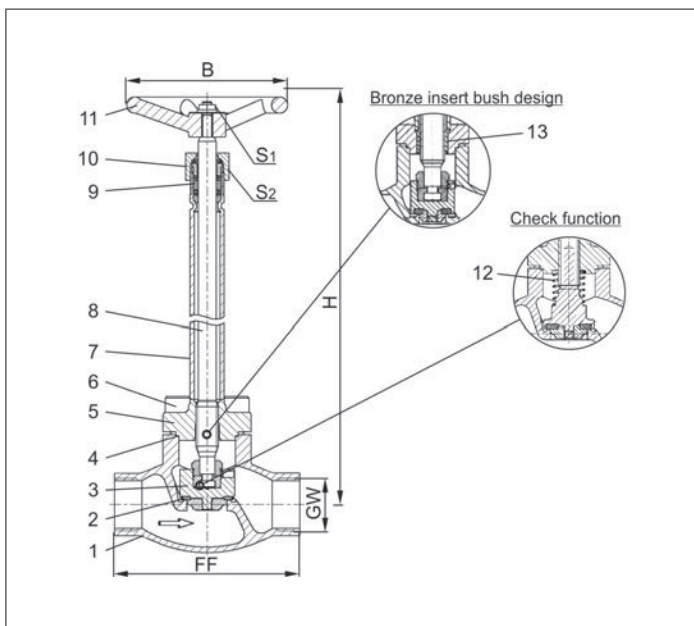
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
7 Elongation tube	1.4541	A 213 TP 321
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment
Directive 97/23/EC (PED).



Type 01645	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	270 mm or 370 mm							
Handwheel-Ø	B	100	100	100	100	100	125	125	125
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36
Weight	ca. kg	1.4	1.4	1.7	2.1	2.4	4.7	4.7	7.2
Kvs-Value	m ³ /h	1.6	2.2	4.3	6.7	11.5	20.6	22.6	37.1
Cv-Value	gal/min	1.9	2.6	5.0	7.8	13.4	23.9	26.3	43.2

Dimensions in mm.

Fire Safe Valves

Type 03641 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN40

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03641.X.0012 (H = 270mm)

Part No. 03641.X.0022 (H = 370mm)

Part No. 03641.X.5012 (H = 270mm) Globe/Check Valve

Part No. 03641.X.5022 (H = 370mm) Globe/Check Valve

Flanged connection acc. to DIN EN 1092-1 PN40

Available options - on request only:

- Extension H up to 900mm
- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



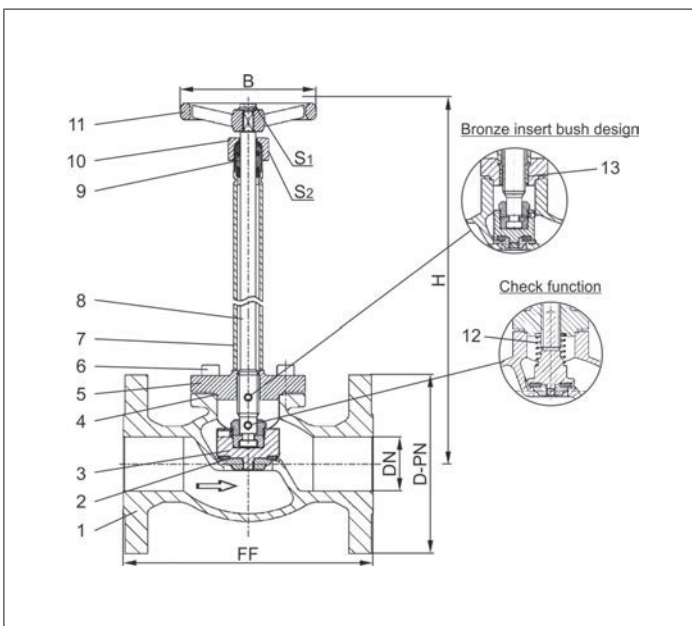
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
7 Elongation tube	1.4541	A 213 TP 321
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 03641	Technical data						
Nominal size	DN	25	40	50	65	80	100
Dimension code - Flange EN 1092-1 PN40	.X.	0250	0400	0500	0650	0800	1000
Flange-Ø	D-PN	115	150	165	185	200	235
Face-to-face dimension	FF	160	200	230	290	310	350
Height	H	270 mm or 370 mm			400	400	400
Handwheel-Ø	B	100	125	125	200	250	315
Wrench size across flats	S ₁	10	13	13	13	13	13
Wrench size across flats	S ₂	30	36	36	36	36	41
Weight	ca. kg	4.9	9.7	13.3	21.1	28.0	43.2
Kvs-Value	m ³ /h	11.5	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	13.4	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Fire Safe Valves

Type 03641 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, class 300
"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
 "live loaded" gland packing
 "cleaned and degreased for oxygen service"

Part No. 03641.X.0013 (H = 270mm)

Part No. 03641.X.0023 (H = 370mm)

Part No. 03641.X.5013 (H = 270mm) Globe/Check Valve

Part No. 03641.X.5023 (H = 370mm) Globe/Check Valve

Flanged connection acc. to ANSI B16.5 class 300

Available options - on request only:

- Extension H up to 900mm
- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



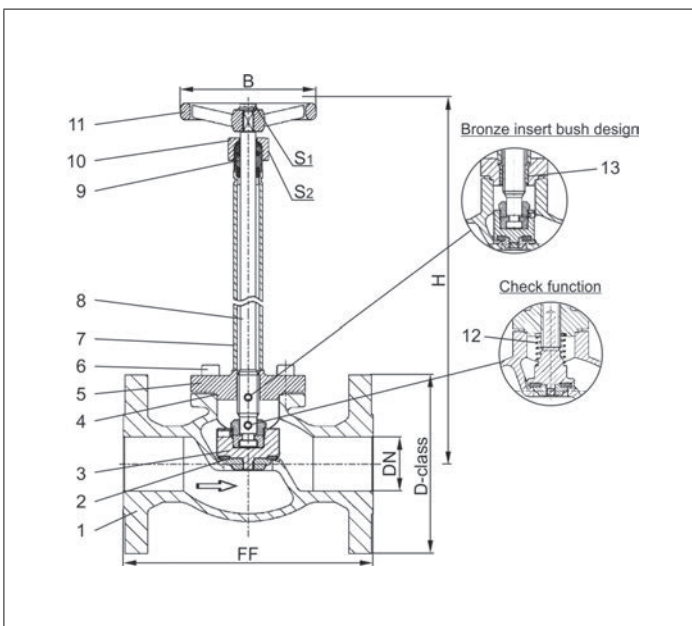
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
7 Elongation tube	1.4541	A 213 TP 321
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4310	A 313 Grade 301
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 03641	Technical data						
Nominal size	DN	25	40	50	65	80	100
Dimension code - Flange ANSI B16.5 class 300	.X.	1000	1400	2000	2400	3000	4000
Flange-Ø	D-class	123.9	155.4	165	190.5	209.5	254
Face-to-face dimension	FF	160	200	230	290	310	350
Height	H	270 mm or 370 mm			400	400	400
Handwheel-Ø	B	100	125	125	200	250	315
Wrench size across flats	S ₁	10	13	13	13	13	13
Wrench size across flats	S ₂	30	36	36	36	36	41
Weight	ca. kg	4.9	9.7	13.3	21.1	28.0	43.2
Kvs-Value	m ³ /h	11.5	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	13.4	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Fire Safe Valves

Type 01262 - Bellow Sealed Globe Valve



"Fire-safe"-design without fire type-testing according to EN ISO 10497

Cryogenic-Bellow Sealed Globe Valve, PN50

Stainless steel body and topwork,

"live loaded" gland packing

"cleaned and degreased for oxygen service"

Part No. 01262.X.002*

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01262.X.0024

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Extension H up to 900mm

Applications:

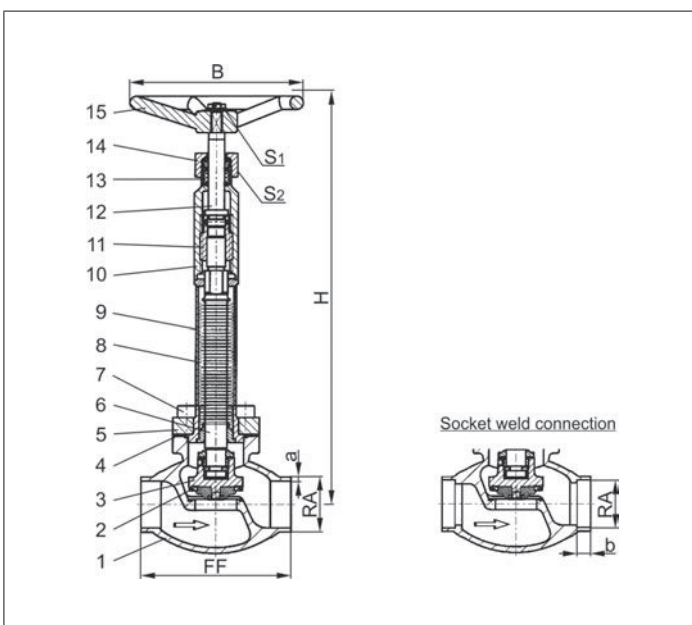
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Leak rate: 10^{-6} mbar ltr / sec outside, 10^{-4} mbar ltr / sec seat

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bellow stem	1.4571	A 313 Grade 316Ti
7 Bolts	1.4301/A2	A 194 B8
8 Bellow	1.4571	A 313 Grade 316Ti
9 Elongation tube	1.4541	A 213 TP 321
10 Headpiece	1.4301	A 276 Grade 304
11 Bush	CW452K	B 159 UNS C51900
12 Stem	1.4301	A 276 Grade 304
13 Gland packing	Graphite / PTFE	
14 Gland nut	1.4305	A 276 Grade 303
15 Handwheel	Aluminium alloy	

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01262 - Standard design		Technical data								
Nominal size	DN	10	15	15	20	25	32	40	40	50
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155
Height	H	380	380	380	380	380	380	380	380	380
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40								
Socket depth	b	6	10	10	13	13	-	13	13	16
Handwheel-Ø	B	150	150	150	150	150	150	150	150	150
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36
Weight	ca. kg	1.6	1.85	1.9	2.3	2.7	3.6	5.1	5.1	7.7
Kvs-Value	m ³ /h	1.6	2.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1
Cv-Value	gal/min	1.9	3.3	5.0	7.8	13.4	16.2	26.3	26.3	43.2

Dimensions in mm.

Fire Safe Valves

Type 01642 - Globe Valve Angle Type



Cryogenic-Globe and Globe/Check Valves, PN50

“Fire safe” type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
“live loaded” gland packing
“cleaned and degreased for oxygen service“

Part No. 01642.X.001* (H = 270mm)

Part No. 01642.X.002* (H = 370mm)

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01642.X.0014 (H = 270mm)

Part No. 01642.X.0024 (H = 370mm)

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

· Extension H up to 900mm



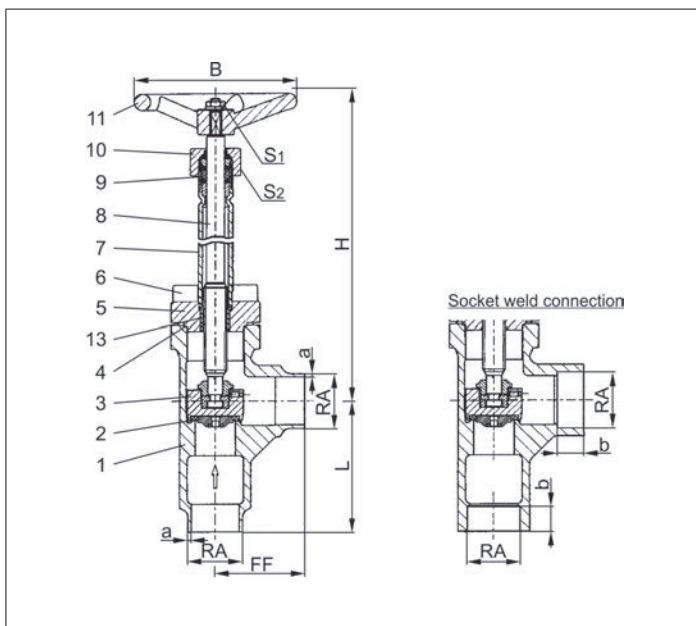
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
7 Elongation tube	1.4541	A 213 TP 321
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
13 Spring	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01642 - Standard design		Technical data					
Nominal size	DN	15	20	25	32	40	50
Dimension code	.X.	1521	2026	2533	3242	4048	5060
Face-to-face dimension	FF	40	50	55	60	58	85
Height	H	270 mm or 370 mm					
Outside pipe-Ø ISO 1127	RA	21.3	26.9	33.7	42.0	48.3	60.3
Wall thickness pipe ISO 1127	a	2.0	2.0	2.0	2.0	2.0	2.0
Outside pipe-Ø ASTM A312	RA	21.34	26.67	33.40	-	48.26	60.33
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40					
Socket depth	b	10	13	13	13	13	16
Handwheel-Ø	B	100	100	100	125	125	125
Length	L	50	65	80	80	90	90
Wrench size across flats	S ₁	10	10	10	13	13	13
Wrench size across flats	S ₂	30	30	30	36	36	36
Weight	ca. kg	1.4	1.6	2.2	4.0	4.3	6.5
Kvs-Value	m ³ /h	6.0	10.5	17.2	32.0	35.0	57.0
Cv-Value	gal/min	7.0	12.2	20.0	37.2	40.7	66.3

Dimensions in mm.

Fire Safe Valves

Type 15090, Type 15091 - Ball Valve full bore



Cryogenic-3-Piece-Ball Valve

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,

"live loaded" gland packing

"cleaned and degreased for oxygen service"

with upstream pressure relief hole

Marking acc. to EN 1626, EN 12567, ISO 10497 and ATEX Ex II 2GD

Part No. 15090.X.002*

Socket weld connection for stainless steel pipes acc. to ISO 1127

Part No. 15091.X.002*

Butt weld connection for stainless steel pipes acc. to ISO 1127

Available options - on request only:

- End connection for pipes acc. to ASTM A312 S10/S40
- Stainless steel lockable handle
- With pneumatic actuator



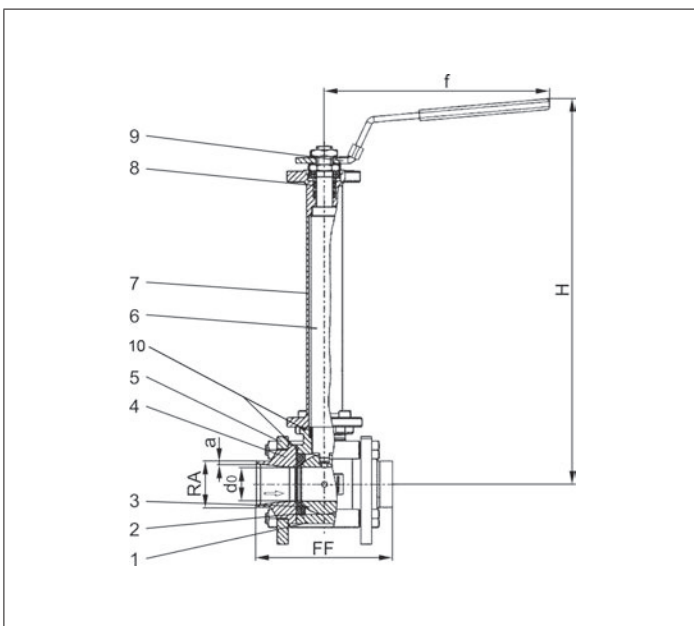
Applications:

Approved for air gases, vapours and cryogenic liquefied gases.

Working temperature: -200°C / -328°F (73K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Ball seat	PTFE / Carbon filled (25%)	
3 Ball	1.4409	A 351 CF3M
4 Fitting	1.4404	A 276 Grade 316L
5 Flange	1.4306	A 276 Grade 304L
6 Stem	1.4404	A 276 Grade 316L
7 Elongation tube up to DN50	1.4307	304L
7a Elongation tube from DN65	1.4404	A 276 Grade 316L
8 Gland packing	Graphite	
9 Lever	1.1181	1035
10 Seal	Graphite	

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 15090, 15091	Technical data											
Nominal size	DN	8	12	15	20	25	32	40	50	65	80	100
Dimension code	.X.	0813	1217	1521	2026	2533	3242	4048	5060	6576	8088	0114
Nominal pressure	PN	100	100	100	100	70	70	50	50	40	40	25
Face-to-face dimension	FF	65	65	70	85	100	110	125	150	180	210	230
Height	H	225	225	230	276	280	321	326	346	426	438	471
Outside pipe-Ø ISO 1127	RA	13.5	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness pipe ISO 1127	a	2.0	2.0	2.0	2.0	2.0	2.6	2.6	2.9	2.9	2.9	3.2
Orifice	d ₀	11.1	11.1	14.0	19.0	25.0	32.0	38.0	50.0	64.0	76.0	100.0
Length	f	118	118	118	158	158	188	188	225	370	440	505
Weight	ca. kg	1.05	1.05	1.45	2.35	3.05	4.55	6.30	11.10	20.15	32.22	45.00
Kvs-Value	m ³ /h	6.0	8.0	13.0	26.0	46.0	82.0	120.0	223.0	423.0	617.0	1154.0
Cv-Value	gal/min	6.9	9.2	15.0	30.0	53.2	94.8	138.7	257.8	489.0	713.3	1334.0

Dimensions in mm.

Fire Safe Valves

Type 15092, Type 15093 - Ball Valve full bore



Cryogenic-3-Piece-Ball Valve

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,

"live loaded" gland packing

"cleaned and degreased for oxygen service"

with upstream pressure relief hole

Marking acc. to EN 1626, EN 12567, ISO 10497 and ATEX Ex II 2GD

Part No. 15092.X.0020

Female thread NPT acc. to ANSI B 1.20.1

Part No. 15093.X.0020

Female thread G (BSPP) acc. to ISO 228/1

Available options - on request only:

- Stainless steel lockable handle
- With pneumatic actuator



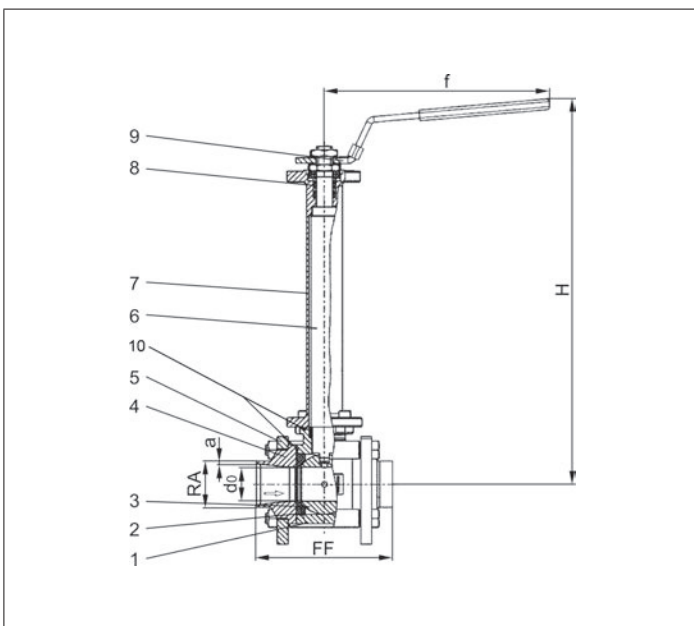
Applications:

Approved for air gases, vapours and cryogenic liquefied gases.

Working temperature: -200°C / -328°F (73K) up to +200°C / +392°F (473K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Ball seat	PTFE / Carbon filled (25%)	
3 Ball	1.4409	A 351 CF3M
4 Fitting	1.4404	A 276 Grade 316L
5 Flange	1.4306	A 276 Grade 304L
6 Stem	1.4404	A 276 Grade 316L
7 Elongation tube up to DN50	1.4307	304L
7a Elongation tube from DN65	1.4404	A 276 Grade 316L
8 Gland packing	Graphite	
9 Lever	1.1181	1035
10 Seal	Graphite	

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 15092, 15093	Technical data											
Nominal size	DN	8	12	15	20	25	32	40	50	65	80	100
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000	2400	3000	4000
BSPP / NPT	thread	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
Nominal pressure	PN	100	100	100	100	70	70	50	50	40	40	25
Face-to-face dimension	FF	65	65	70	85	100	110	125	150	180	210	230
Height	H	225	225	230	276	280	321	326	346	426	438	471
Orifice	d ₀	11.1	11.1	14.0	19.0	25.0	32.0	38.0	50.0	64.0	76.0	100.0
Length	f	118	118	118	158	158	188	188	225	370	440	505
Weight	ca. kg	1.05	1.05	1.45	2.35	3.05	4.55	6.30	11.10	20.15	32.22	45.00
Kvs-Value	m ³ /h	6.0	8.0	13.0	26.0	46.0	82.0	120.0	223.0	423.0	617.0	1154.0
Cv-Value	gal/min	6.9	9.2	15.0	30.0	53.2	94.8	138.7	257.8	489.0	713.3	1334.0

Dimensions in mm.

Fire Safe Valves

Type 01643 - Actuated Globe Valve



Cryogenic-Globe Valves with Pneumatic Actuator, PN50 (DN100/150=PN40)

"Fire safe" type test approval acc. to EN ISO 10497 (only actuator spring closes)

Stainless steel body and topwork

Actuator - air opens, spring closes

"live loaded" gland packing

"cleaned and degreased for oxygen service" - the actuator is not cleaned and degreased for oxygen

Part No. 01643.X.101*

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01643.X.1014

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Verfügbare Zusatzausrüstungen:

- Solenoid valve · Limit switch
- Electropneumatic positioner etc.

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Actuator "cleaned and degreased for oxygen service"

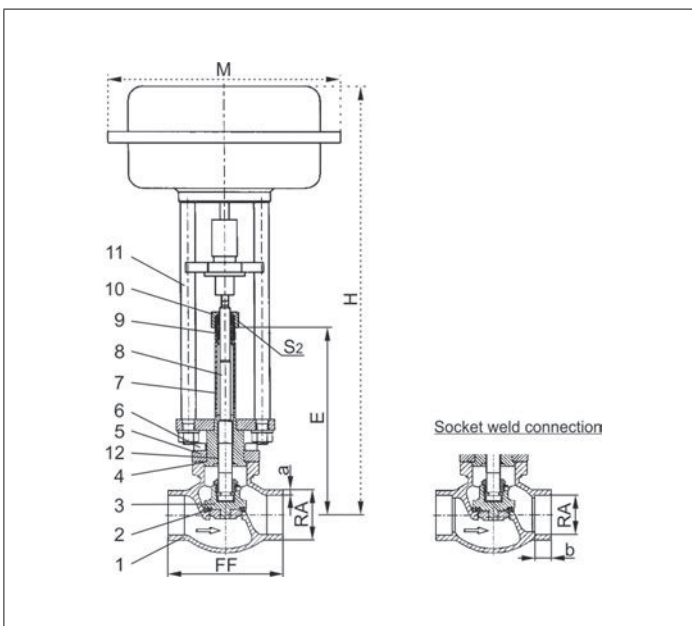
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
7 Elongation tube	1.4541	A 213 TP 321
8 Stem	1.4301	A 276 Grade 304
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Pillars	1.4404	A 276 Grade 316L
12 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01643 - Standard	Technical data													
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100	150
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114	0168
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280	400
Height	H	dependent on actuator												
Length	E	195	195	195	200	200	230	230	230	235	300	300	300	300
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3	168.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0	7.1
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3	168.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40												
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20	20
Actuator-Ø	M	dependent on actuator												
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41	41
Weight w/o actuator	ca. kg	1.9	2.15	2.2	2.4	3.1	3.8	6.5	6.5	9.0	15.2	20.0	28.0	60.9
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0	350.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2	401.8
Stroke	mm	10	10	10	7	9	9	11	11	15	23	23	30	40

Dimensions in mm. Compliance of tightness requirements acc. to EN 1626 for DN150 up to 20 bar differential pressure.

Fire Safe Valves

Type 01653 - Actuated Trailervalue



Cryogenic-Globe Valves with Pneumatic Actuator, PN50

"Fire safe" type test approval acc. to EN ISO 10497

air pressure for operation 6,0 bar g (maximum 10.0 bar g)

Stainless steel body and topwork,

Actuator - air opens, spring closes

"live loaded" gland packing

"cleaned and degreased for oxygen service" - the actuator is not cleaned and degreased for oxygen

maximum working pressure of the valve depending on nominal size

Part No. 01653.X.T0**

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01653.X.T0*4

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

· Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm

Applications:

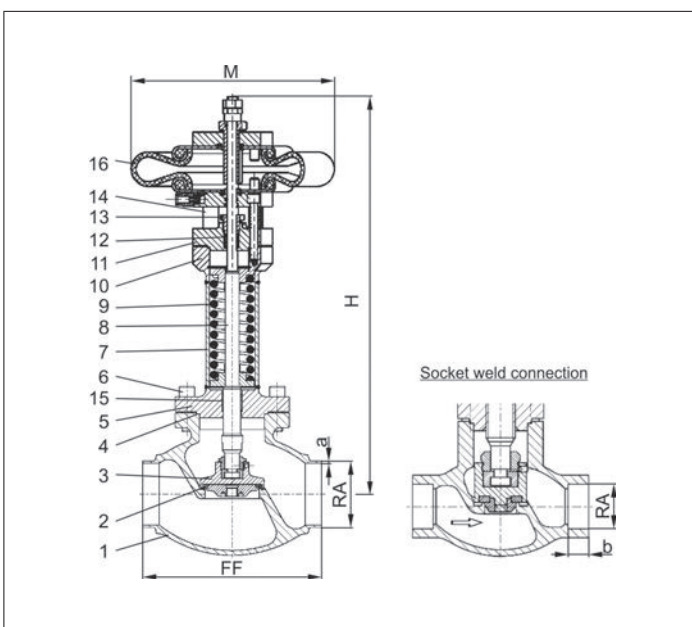
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4301	A 276 Grade 304
4 Bonnet gasket	Graphite	
5 Headpiece	1.4301	A 276 Grade 304
6 Bolts	1.4301/A2	A 194 B8
7 Elongation tube	1.4306	A 213 TP 304L
8 Stem	1.4301	A 276 Grade 304
9 Spring	1.4571	A 313 Grade 316Ti
10 Flansch	1.4301	A 276 Grade 304
11 Headpiece	1.4301	A 276 Grade 304
12 Gland packing	Graphite / PTFE / MICA	
13 Gland nut	1.4571	A 313 Grade 316Ti
14 Pillars	1.4301	A 276 Grade 304
15 Bush	CW452K	B 159 UNS C51900
16 Actuator	Rubber	

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01653	Technical data							
Nominal size	DN	15	25	40	40	50	65	80
Dimension code	.X.	1521	2533	4042	4048	5060	657x	8088
Face-to-face dimension	FF	85	115	130	130	155	205	245
Height	H	395	444	400	400	440	470	500
Outside pipe-Ø ISO 1127	RA	21.3	33.7	42.4	48.3	60.3	76.1	88.9
Wall thickness pipe ISO 1127	a	2.0	2.0	2.0	2.0	2.0	2.6	3.2
Outside pipe-Ø ASTM A312	RA	21.34	33.40	42.16	48.26	60.33	73.03	88.90
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40						
Socket depth	b	10	13	13	13	16	16	16
Actuator-Ø	M	229	229	229	229	229	229	229
Weight	ca. kg	7.2	9.1	10.5	10.5	14.5	17.4	22.5
Kvs-Value	m³/h	4.3	11.5	22.6	22.6	37.1	71.1	104.0
Cv-Value	gal/min	5.0	13.4	23.9	26.3	43.2	82.7	120.9
Stroke	mm	10	9	11	11	15	23	23

Dimensions in mm.

Cryogenic-Globe and Globe/Check Valves, PN50 (DN100=PN40)

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01751.X.000*

Part No. 01751.X.500* Globe/Check Valve

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01751.X.0004

Part No. 01751.X.5004 Globe/Check Valve

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Valve with control disc (tapered design)



Applications:

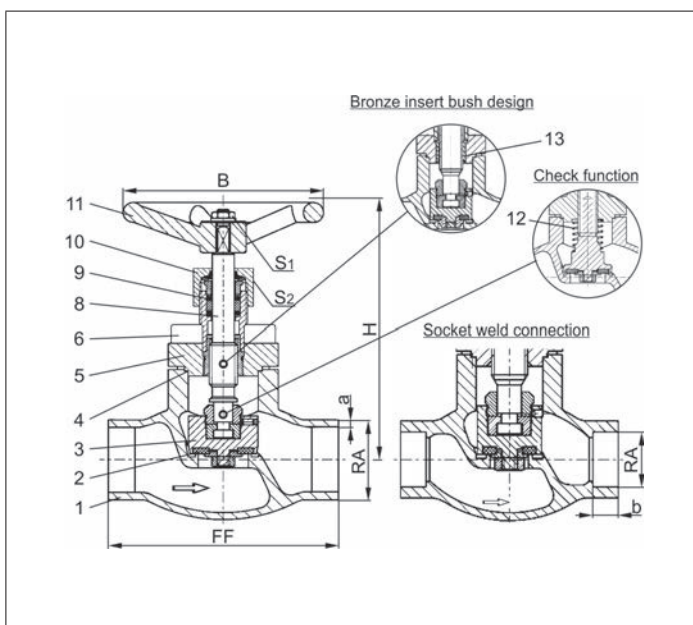
Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PCTFE (Kel-F)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01751 - Standard design	Technical data												
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280
Height	H	140	140	140	140	140	170	175	175	200	260	310	350
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40											
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20
Handwheel-Ø	B	100	100	100	100	100	125	125	125	125	200	250	315
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41
Weight	ca. kg	1.0	1.25	1.3	1.7	2.0	2.8	4.2	4.2	6.7	10.7	16.0	23.0
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Cryogenic-Globe and Globe/Check Valves, PN50

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01755.X.0001

Part No. 01755.X.5001 Globe/Check Valve

Female thread connection (G) acc. to ISO 228/1

Part No. 01755.X.0006

Part No. 01755.X.5006 Globe/Check Valve

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

- Female thread connection (R) acc. to ISO 7-Rc
- Valve with control disc (tapered design)



Applications:

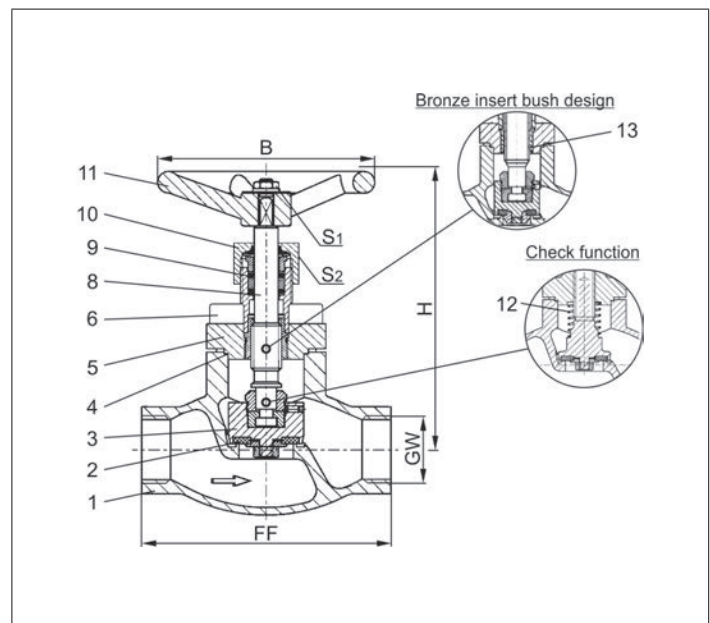
Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PCTFE (Kel-F)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01755 - Standard design	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	140	140	140	140	140	175	175	200
Handwheel-Ø	B	100	100	100	100	100	125	125	125
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36
Weight	ca. kg	1.0	1.0	1.3	1.7	2.0	4.2	4.2	6.7
Kvs-Value	m ³ /h	1.6	2.2	4.3	6.7	11.5	20.6	22.6	37.1
Cv-Value	gal/min	1.9	2.6	5.0	7.8	13.4	23.9	26.3	43.2

Dimensions in mm.



Cryogenic-Globe and Globe/Check Valves, PN50 (DN100=PN40)

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01741.X.001* (H = 270mm)

Part No. 01741.X.002* (H = 370mm)

Part No. 01741.X.501* (H = 270mm) Globe/Check Valve

Part No. 01741.X.502* (H = 370mm) Globe/Check Valve

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01741.X.0014 (H = 270mm)

Part No. 01741.X.0024 (H = 370mm)

Part No. 01741.X.5014 (H = 270mm) Globe/Check Valve

Part No. 01741.X.5024 (H = 370mm) Globe/Check Valve

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Extension H up to 900mm
- Valve with control disc (tapered design)

Applications:

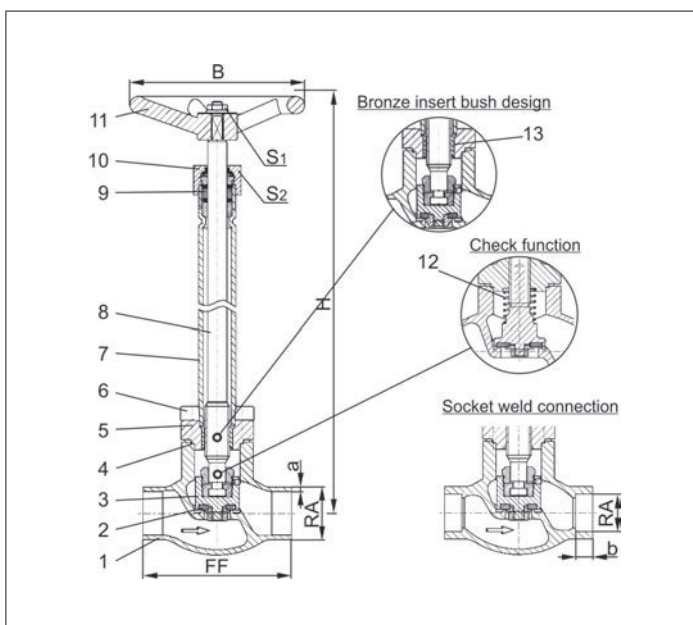
Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PCTFE (Kel-F)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01741 - Standard design	Technical data												
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280
Height	H	270 mm or 370 mm											
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40											
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20
Handwheel-Ø	B	100	100	100	100	100	125	125	125	125	200	250	315
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41
Weight	ca. kg	1.4	1.65	1.7	2.1	2.4	3.3	4.7	4.7	7.2	12.7	17.0	24.5
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Cryogenic-Globe and Globe/Check Valves, PN50

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01745.X.0011 (H = 270mm)

Part No. 01745.X.0021 (H = 370mm)

Part No. 01745.X.5011 (H = 270mm) Globe/Check Valve

Part No. 01745.X.5021 (H = 370mm) Globe/Check Valve

Female thread connection (G) acc. to ISO 228/1

Part No. 01745.X.0016 (H = 270mm)

Part No. 01745.X.0026 (H = 370mm)

Part No. 01745.X.5016 (H = 270mm) Globe/Check Valve

Part No. 01745.X.5026 (H = 370mm) Globe/Check Valve

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

- Female thread connection (R) acc. to ISO 7-Rc
- Extension H up to 900mm
- Valve with control disc (tapered design)

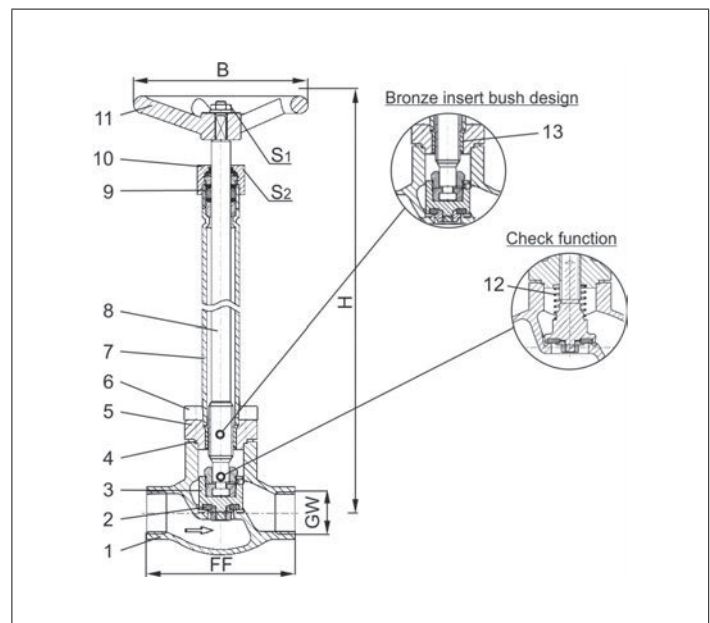
Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PCTFE (Kel-F)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade
6 Bolts	1.4571/A4	similar A 194
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01745	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	270 mm or 370 mm							
Handwheel-Ø	B	100	100	100	100	100	125	125	125
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36
Weight	ca. kg	1.4	1.4	1.7	2.1	2.4	4.7	4.7	7.2
Kvs-Value	m ³ /h	1.6	2.2	4.3	6.7	11.5	20.6	22.6	37.1
Cv-Value	gal/min	1.9	2.6	5.0	7.8	13.4	23.9	26.3	43.2

Dimensions in mm.

Type 01272 - Bellow Sealed Globe Valve



Cryogenic-Bellow Sealed Globe Valve, PN50

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01272.X.002*

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01272.X.0024

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Extension H up to 900mm
- Valve with control disc (tapered design)



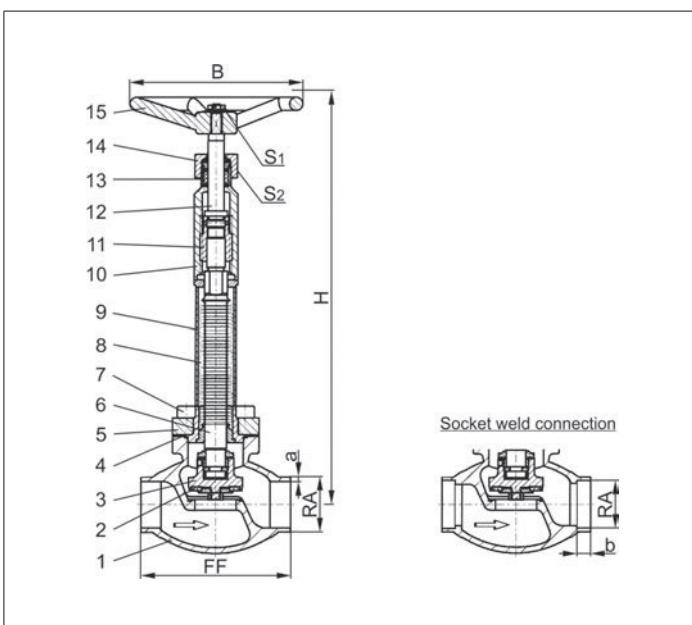
Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Leak rate: 10^{-6} mbar ltr / sec outside, 10^{-4} mbar ltr / sec seat

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PCTFE (Kel-F)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bellow stem	1.4571	A 313 Grade 316Ti
7 Bolts	1.4571/A4	similar A 194 B8T
8 Bellow	1.4571	A 313 Grade 316Ti
9 Elongation tube	1.4571	A 313 Grade 316Ti
10 Headpiece	1.4404	A 276 Grade 316L
11 Bush	CW452K	B 159 UNS C51900
12 Stem	1.4404	A 276 Grade 316L
13 Gland packing	Graphite / PTFE / MICA	
14 Gland nut	1.4404	A 276 Grade 316L
15 Handwheel	Aluminium alloy	



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01272 - Standard design	Technical data									
Nominal size	DN	10	15	15	20	25	32	40	40	50
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155
Height	H	380	380	380	380	380	380	380	380	380
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40								
Socket depth	b	6	10	10	13	13	-	13	13	16
Handwheel-Ø	B	150	150	150	150	150	150	150	150	150
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36
Weight	ca. kg	1.6	1.85	1.9	2.3	2.7	3.6	5.1	5.1	7.7
Kvs-Value	m ³ /h	1.6	2.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1
Cv-Value	gal/min	1.9	3.3	5.0	7.8	13.4	16.2	26.3	26.3	43.2

Dimensions in mm.

Type 01743 - Actuated Globe Valve

Cryogenic-Globe Valves with Pneumatic Actuator, PN50 (DN100/150=PN40)

Stainless steel body and topwork

Actuator - air opens, spring closes or contrary

"live loaded" gland packing

"cleaned and degreased for oxygen service" - the actuator is not cleaned and degreased for oxygen

Part No. 01743.X.301*

Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01743.X.3014

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available accessories:

- Solenoid valve · Limit switch
- Electropneumatic positioner etc.

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Actuator "cleaned and degreased for oxygen service"
- Electric actuator · Valve with check disc, valve with control disc (tapered design)

Applications:

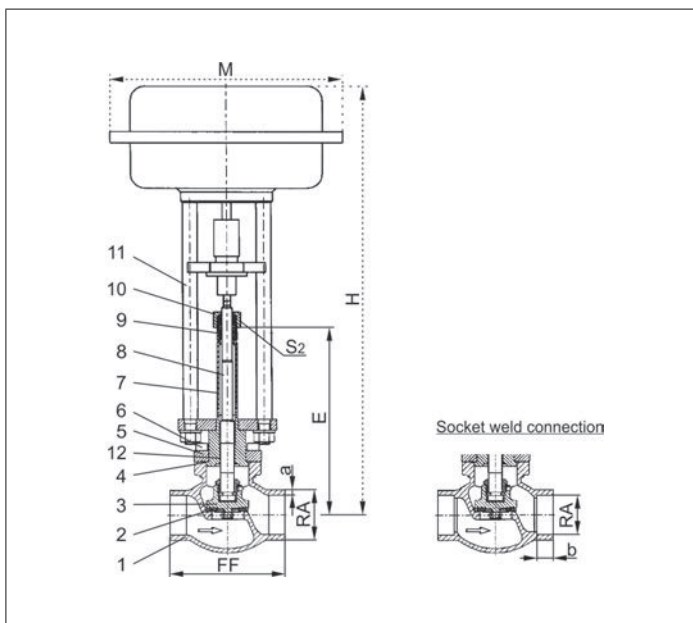
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PCTFE (Kel-F)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4404	A 276 Grade 316L
11 Pillars	1.4404	A 276 Grade 316L
12 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01743 - Standard	Technical data													
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100	150
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114	0168
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280	400
Height	H	dependent on actuator												
Length	E	195	195	195	200	200	230	230	230	235	300	300	300	300
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3	168.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0	7.1
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3	168.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40												
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20	20
Actuator-Ø	M	dependent on actuator												
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41	41
Weight w/o actuator	ca. kg	1.9	2.15	2.2	2.4	3.1	3.8	6.5	6.5	9.0	15.2	20.0	28.0	60.9
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0	350.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2	401.8
Stroke	mm	10	10	10	7	9	9	11	11	15	23	23	30	40

Dimensions in mm. Compliance of tightness requirements acc. to EN 1626 for DN150 up to 20 bar differential pressure.

Type 01753 - Actuated Trailerv Valve



Cryogenic-Globe Valves with Pneumatic Actuator, PN50

air pressure for operation 6,0 bar g (maximum 10.0 bar g)

Stainless steel body and topwork,

Actuator - air opens, spring closes

"live loaded" gland packing

"cleaned and degreased for oxygen service" - the actuator is not cleaned and degreased for oxygen

maximum working pressure of the valve depending on nominal size

Part No. 01753.X.T0**

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01753.X.T0*4

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

· Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm



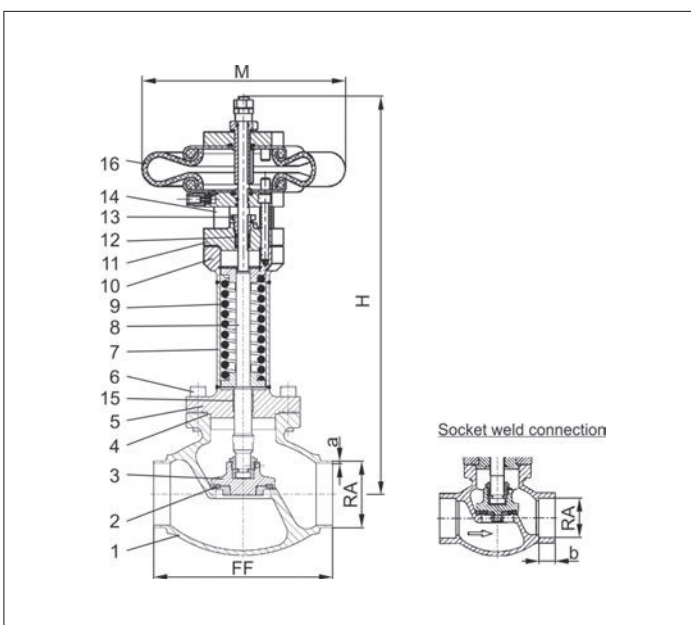
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PCTFE (Kel-F)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Spring	1.4571	A 313 Grade 316Ti
10 Flange	1.4404	A 276 Grade 316L
11 Headpiece	1.4404	A 276 Grade 316L
12 Gland packing	Graphite / PTFE / MICA	
13 Gland nut	1.4571	A 313 Grade 316Ti
14 Pillars	1.4404	A 276 Grade 316L
15 Bush	CW452K	B 159 UNS C51900
16 Actuator	Rubber	

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01753	Technical data							
Nominal size	DN	15	25	40	40	50	65	80
Dimension code	.X.	1521	2533	4042	4048	5060	657x	8088
Face-to-face dimension	FF	85	115	130	130	155	205	245
Height	H	395	444	400	400	440	470	500
Outside pipe-Ø ISO 1127	RA	21.3	33.7	42.4	48.3	60.3	76.1	88.9
Wall thickness pipe ISO 1127	a	2.0	2.0	2.0	2.0	2.0	2.6	3.2
Outside pipe-Ø ASTM A312	RA	21.34	33.40	42.16	48.26	60.33	73.03	88.90
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40						
Socket depth	b	10	13	13	13	16	16	16
Actuator-Ø	M	229	229	229	229	229	229	229
Weight	ca. kg	7.2	9.1	10.5	10.5	14.5	17.4	22.5
Kvs-Value	m ³ /h	4.3	11.5	22.6	22.6	37.1	71.1	104.0
Cv-Value	gal/min	5.0	13.4	23.9	26.3	43.2	82.7	120.9
Stroke	mm	10	9	11	11	15	23	23

Dimensions in mm.

Pneumatic Actuators for Globe Valves (on/off)

Actuator - air to open, **spring to close**

maximum air pressure for operation 6.0 bar g

"cleaned and degreased for oxygen service"

Available options - on request only:

· Pneumatic actuator with override handwheel

Ambient temperature limit: -40°C / -40°F (233K) up to +80°C / 176°F (353K)

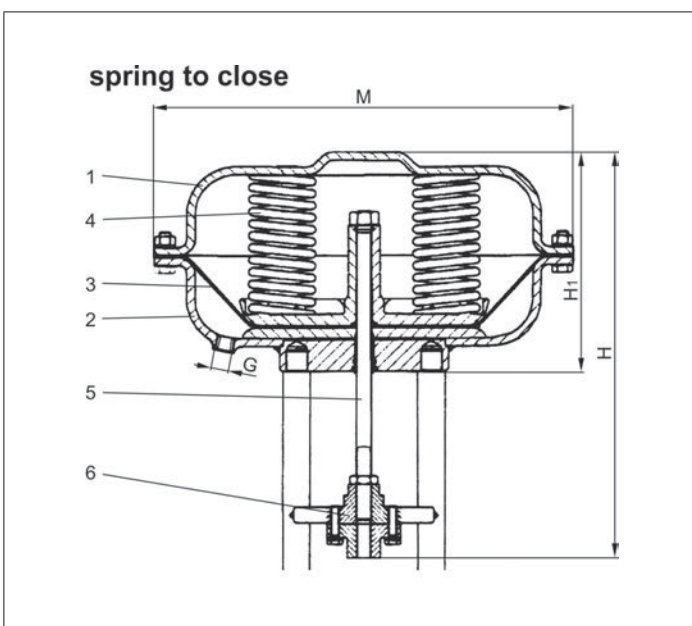


Overview - required actuator sizes for differential pressures

Valve size	3	4	7	10	11	15	18	20	22	30	33	35	50
DN 10	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 15	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 20	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 25	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 32	B	B	B	B	B	B	B	B	B	B	B	B	C
DN 40	B	B	B	B	B	B	B	B	B	C	C	C	C
DN 50	B	B	B	B	B	B	C	C	C	C	C	C	-
DN 65	B	B	B	C	C	C	C	-	-	-	-	-	-
DN 80	B	B	C	C	-	-	-	-	-	-	-	-	-
DN 100	B	-	-	-	-	-	-	-	-	-	-	-	-
DN 150	-	-	-	-	-	-	-	-	-	-	-	-	-

Code in Table	Part No. Actuator
B	27521.35B6.6GPO
C	27521.60A6.6GPO

Materials	DIN EN	ASTM
1 Body	1.4571	A 240 Grade 316Ti
2 Body	1.4571	A 240 Grade 316Ti
3 Diaphragm	EPDM	
4 Springs	1.7102	AISI 9254
5 Actuator stem	1.4404	A 276 Grade 316L
6 Coupling	1.4571	A 240 Grade 316Ti



Type 27521	Technical data		
Part No. Actuator	27521		
	.35B6.6GPO	.60A6.6GPO	
Diameter Actuator	M	210	310
Height	H	276	309
Height	H1	136	166
Thread	G	1/4" NPT	1/4" NPT
Diaphragm area	cm ²	280	530
Spring rage	bar	0.8 - 3.0	0.8 - 2.8
Regulating lift	mm	35	40
Weight	ca. kg	5.0	12.5

Dimensions in mm.

Offshore Valves

Type 27521 - Pneumatic Actuator - Control Valve



Pneumatic Actuators for Control Valves

Actuator - air to open, **spring to close**

maximum air pressure for operation 6.0 bar g

"cleaned and degreased for oxygen service"

Available options - on request only:

· Pneumatic actuator with override handwheel

Ambient temperature limit: -40°C / -40°F (233K) up to +80°C / 176°F (353K)



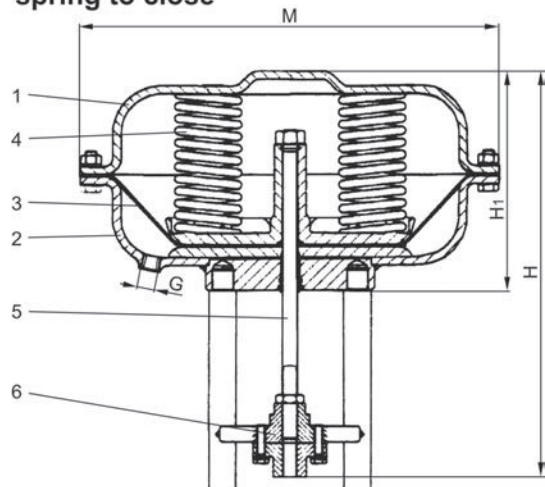
Overview - required actuator sizes for differential pressures

Valve size	Differential pressure in bar															
	2	4	6	8	10	12	15	17	19	22	25	29	35	39	42	50
DN 10	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 15	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 20	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 25	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
DN 32	B	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C
DN 40	B	B	B	B	B	B	B	C	C	C	C	C	C	C	D	-
DN 50	B	B	B	B	B	C	C	C	C	C	C	D	D	-	-	-
DN 65	C	C	C	C	C	C	-	-	-	-	-	-	-	-	-	-
DN 80	C	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-
DN 100	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DN 150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Code in Table	Part No. Actuator
B	27521.35B6.6GPO
C	27521.60A6.6GPO

Materials	DIN EN	ASTM
1 Body	1.4571	A 240 Grade 316Ti
2 Body	1.4571	A 240 Grade 316Ti
3 Diaphragm	EPDM	
4 Springs	1.7102	AISI 9254
5 Actuator stem	1.4404	A 276 Grade 316L
6 Coupling	1.4571	A 240 Grade 316Ti

spring to close



Type 27521	Technical data	
Part No. Actuator	27521	
	.35B6.6GPO	.60A6.6GPO
Diameter Actuator	M 210	310
Height	H 276	309
Height	H1 136	166
Thread	G 1/4" NPT	1/4" NPT
Diaphragm area	cm ² 280	530
Spring rage	bar 0.8 - 3.0	0.8 - 2.8
Regulating lift	mm 35	40
Weight	ca. kg 5.0	12.5

Dimensions in mm.

Pneumatic Actuators for Globe Valves (on/off)

Actuator - **spring to open**, air to close

maximum air pressure for operation 6.0 bar g

"cleaned and degreased for oxygen service"

Available options - on request only:

· Pneumatic actuator with override handwheel

Ambient temperature limit: -40°C / -40°F (233K) up to +80°C / 176°F (353K)



Overview - required actuator sizes for differential pressures

Valve size	Differential pressure in bar											
	5	7	14	17	19	22	26	29	35	37	45	50
DN 10	B	B	B	B	B	B	B	B	B	B	B	B
DN 15	B	B	B	B	B	B	B	B	B	B	B	B
DN 20	B	B	B	B	B	B	B	B	B	B	B	B
DN 25	B	B	B	B	B	B	B	B	B	B	B	B
DN 32	B	B	B	B	B	B	B	B	B	B	C	C
DN 40	B	B	B	B	B	B	B	B	C	C	C	C
DN 50	B	B	B	B	B	C	C	C	C	C	C	C
DN 65	B	B	B	C	C	C	C	C	C	C	-	-
DN 80	B	B	C	C	C	C	-	-	-	-	-	-
DN 100	B	C	C	-	-	-	-	-	-	-	-	-
DN 150	-	-	-	-	-	-	-	-	-	-	-	-

Code in Table	Part No. Actuator
B	27522.35B6.6GPS
C	27522.60A6.6GPS

Materials	DIN EN	ASTM
1 Body	1.4571	A 240 Grade 316Ti
2 Body	1.4571	A 240 Grade 316Ti
3 Diaphragm	EPDM	
4 Springs	1.7102	AISI 9254
5 Actuator stem	1.4404	A 276 Grade 316L
6 Coupling	1.4571	A 240 Grade 316Ti

Type 27522	Technical data		
Part No. Actuator	27522		
	.35B6.6GPS	.60A6.6GPS	
Diameter Actuator	M	210	310
Height	H	276	309
Height	H1	136	166
Thread	G	1/4" NPT	1/4" NPT
Diaphragm area	cm ²	280	530
Spring rage	bar	0.8 - 3.0	0.8 - 2.8
Regulating lift	mm	35	40
Weight	ca. kg	5.0	12.5

Dimensions in mm.

Offshore Valves

Type 27522 - Pneumatic Actuator - Control Valve



Pneumatic Actuators for Control Valves

Actuator - **spring to open**, air to close

maximum air pressure for operation 6.0 bar g

"cleaned and degreased for oxygen service"

Available options - on request only:

· Pneumatic actuator with override handwheel

Ambient temperature limit: -40°C / -40°F (233K) up to +80°C / 176°F (353K)

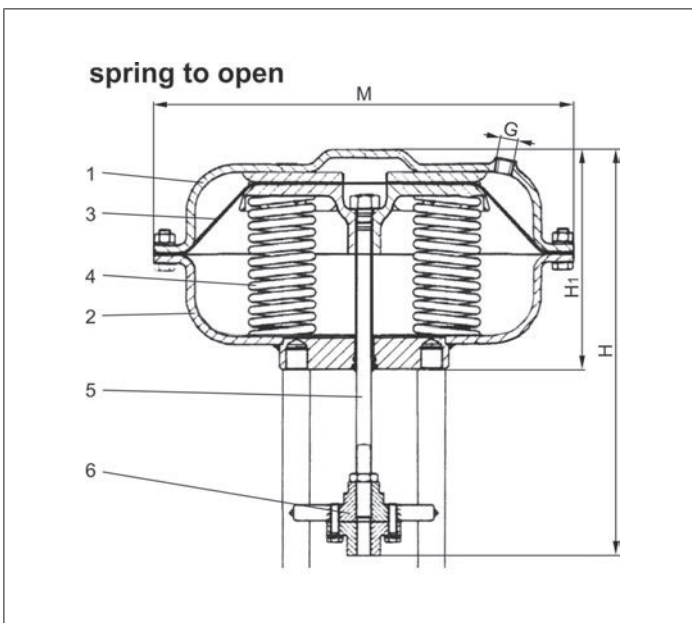


Overview - required actuator sizes for differential pressures

Valve size	Differential pressure in bar								
	5	13	15	21	23	29	34	37	50
DN 10	B	B	B	B	B	B	B	B	B
DN 15	B	B	B	B	B	B	B	B	B
DN 20	B	B	B	B	B	B	B	B	B
DN 25	B	B	B	B	B	B	B	B	B
DN 32	B	B	B	B	B	B	B	B	C
DN 40	B	B	B	B	B	B	B	C	C
DN 50	C	C	C	C	C	C	C	C	C
DN 65	C	C	C	C	C	C	-	-	-
DN 80	C	C	C	C	-	-	-	-	-
DN 100	C	C	-	-	-	-	-	-	-
DN 150	-	-	-	-	-	-	-	-	-

Code in Table	Part No. Actuator
B	27522.35B6.6GPS
C	27522.60A6.6GPS

Materials	DIN EN	ASTM
1 Body	1.4571	A 240 Grade 316Ti
2 Body	1.4571	A 240 Grade 316Ti
3 Diaphragm	EPDM	
4 Springs	1.7102	AISI 9254
5 Actuator stem	1.4404	A 276 Grade 316L
6 Coupling	1.4571	A 240 Grade 316Ti



Type 27522	Technical data		
Part No. Actuator	27522		
	.35B6.6GPS	.60A6.6GPS	
Diameter Actuator	M	210	310
Height	H	276	309
Height	H1	136	166
Thread	G	1/4" NPT	1/4" NPT
Diaphragm area	cm ²	280	530
Spring rage	bar	0.8 - 3.0	0.8 - 2.8
Regulating lift	mm	35	40
Weight	ca. kg	5.0	12.5

Dimensions in mm.

Cryogenic-Check Valves, PN50 (DN100=PN40)

Stainless steel body and cap
with spring, opening pressure ca. 0.1 bar
"cleaned and degreased for oxygen service"

Part No. 05714.X.004*

Butt or Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312
Disc seal: PTFE / Carbon filled (25%)

Part No. 05714.X.005*

Butt or Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312
Disc seal: PTFE

Available options - on request only:

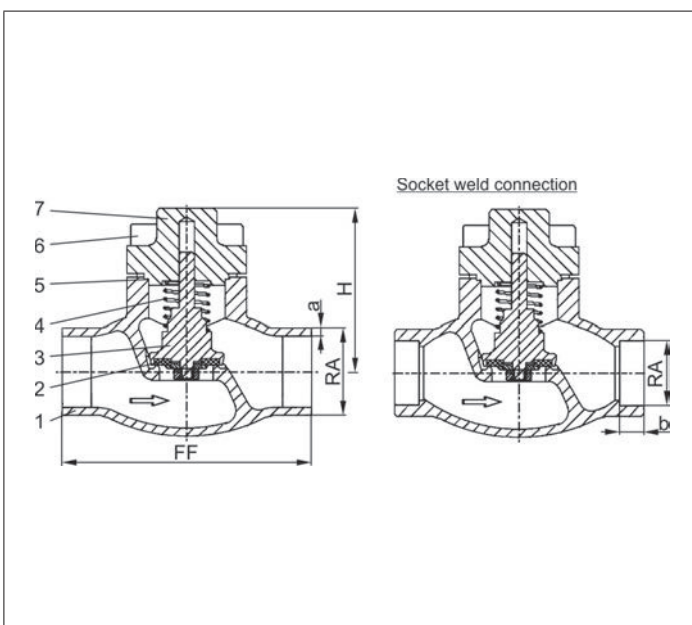
- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm



Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.
Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal up to DN50	PTFE / Carbon filled (25%)	
2 Valve seal from DN65	PTFE	
3 Disc	1.4404	A 276 Grade 316L
4 Spring	1.4571	A 313 Grade 316Ti
5 Bonnet gasket	Graphite	
6 Bolts	1.4571/A4 similar A 194 B8T	
7 Cap	1.4404	A 276 Grade 316L



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 05714 - Standard	Technical data													
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100	150
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114	0168
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280	400
Height	H	71	71	71	72	75	87	95	95	95	125	150	185	214
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3	168.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0	7.1
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.30	168.30
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40												
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20	20
Weight	ca. kg	0.7	0.95	1.0	1.3	1.6	2.4	3.9	3.9	5.7	9.6	14.6	20.0	50.0
Kvs-Value	m³/h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0	350.0
Cv-Value	gal/mir	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2	401.8

Dimensions in mm. Compliance of tightness requirements acc. to EN 1626 for DN150 up to 20 bar differential pressure.

Offshore Valves

Type 05717 - Check Valve



Cryogenic-Check Valves, PN50

Stainless steel body and cap
with spring, opening pressure ca. 0.1 bar
"cleaned and degreased for oxygen service"

Part No. 05717.X.0001

Female thread connection (G) acc. to ISO 228/1

Part No. 05717.X.0006

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

· Female thread connection (R) acc. to ISO 7-Rc

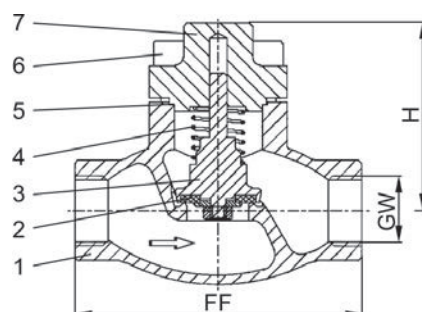


Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal up to DN50	PTFE / Carbon filled (25%)	
2 Valve seal from DN65	PTFE	
3 Disc	1.4404	A 276 Grade 316L
4 Spring	1.4571	A 313 Grade 316Ti
5 Bonnet gasket	Graphite	
6 Bolts	1.4571/A4 similar A 194 B8T	
7 Cap	1.4404	A 276 Grade 316L



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 05717 - Standard design	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	71	71	71	72	75	95	95	95
Weight	ca. kg	0.7	0.7	1.0	1.3	1.6	3.9	3.9	5.7
Kvs-Value	m ³ /h	1.6	2.2	4.3	6.7	11.5	20.6	22.6	37.1
Cv-Value	gal/min	1.9	2.6	5.0	7.8	13.4	23.9	26.3	43.2

Dimensions in mm.

Cryogenic-Strainer, PN50 (DN100=PN40)

Stainless steel body and cap
with strainer screen mesh size 0.25 mm
"cleaned and degreased for oxygen service"

Part No. 08717.X.000*

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 08717.X.0004

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- other mesh sizes for strainer screen (changed flow coefficient)
- strainer screen in bronze or monel
- sintered filter in bronze or stainless steel in various porosities



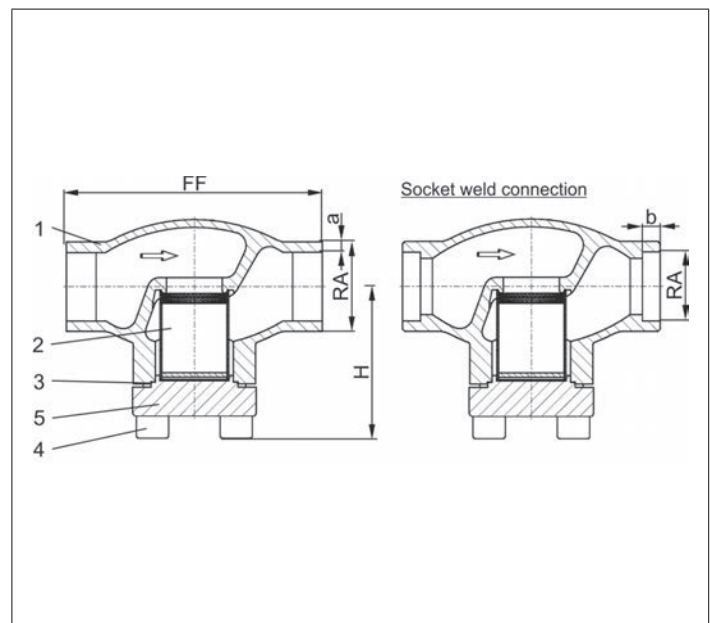
Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Strainer screen	1.4404	A 276 Grade 316L
3 Bonnet gasket	Graphite	
4 Bolts	1.4571/A4	similar A 194 B8T
5 Cap	1.4404	A 276 Grade 316L

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 08717 - Standard	Technical data												
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280
Height	H	62	62	62	65	69	76	89	89	89	125	150	166
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40											
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20
Weight	ca. kg	0.6	0.75	0.8	0.9	1.2	1.8	3.1	3.1	4.7	8.9	13.6	18.0
Kvs-Value	m ³ /h	1.5	3.4	3.4	6.5	9.5	14.0	19.0	21.0	28.0	62.0	90.0	118.0
Cv-Value	gal/mir	1.7	3.9	3.9	7.5	11.0	16.2	22.0	24.3	32.4	71.7	104.0	136.4

Dimensions in mm.

Cryogenic-Strainer, PN50

Stainless steel body and cap
with strainer screen mesh size 0.25 mm
"cleaned and degreased for oxygen service"

Part No. 08716.X.0001

Female thread connection (G) acc. to ISO 228/1

Part No. 08716.X.0006

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

- Female thread connection (R) acc. to ISO 7-Rc
- other mesh sizes for strainer screen (changed flow coefficient)
- strainer screen in bronze or monel
- sintered filter in bronze or stainless steel in various porosities



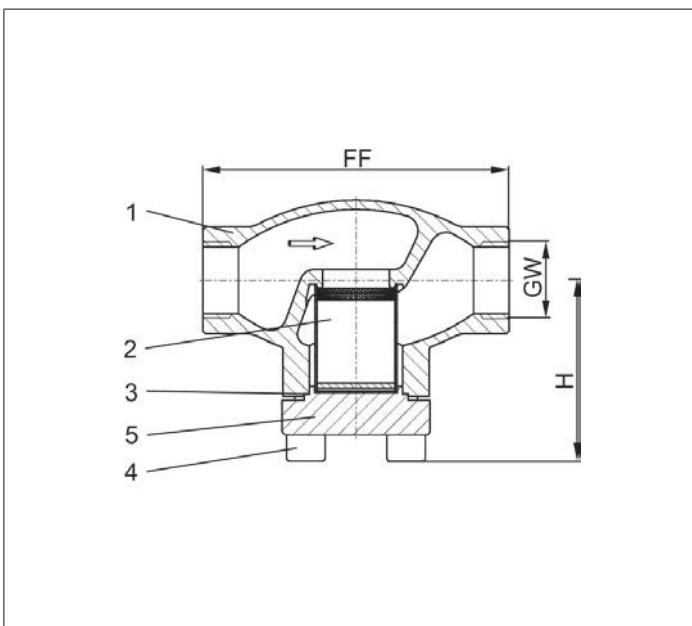
Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Strainer screen	1.4404	A 276 Grade 316L
3 Bonnet gasket	Graphite	
4 Bolts	1.4571/A4 similar A 194 B8T	
5 Cap	1.4404	A 276 Grade 316L

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 08716 - Standard design	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	62	62	62	65	69	89	89	89
Weight	ca. kg	0.6	0.6	0.8	0.9	1.2	3.1	3.1	4.7
Kvs-Value	m ³ /h	1.5	1.5	3.4	6.5	9.5	19.0	21.0	28.0
Cv-Value	gal/min	1.7	1.7	3.9	7.5	11.0	22.0	24.3	32.4

Dimensions in mm.

Fire Safe and Offshore Valves

Type 01851 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN50 (DN100=PN40)

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01851.X.000*

Part No. 01851.X.500* Globe/Check Valve

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01851.X.0004

Part No. 01851.X.5004 Globe/Check Valve

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Valve with control disc (tapered design)



Applications:

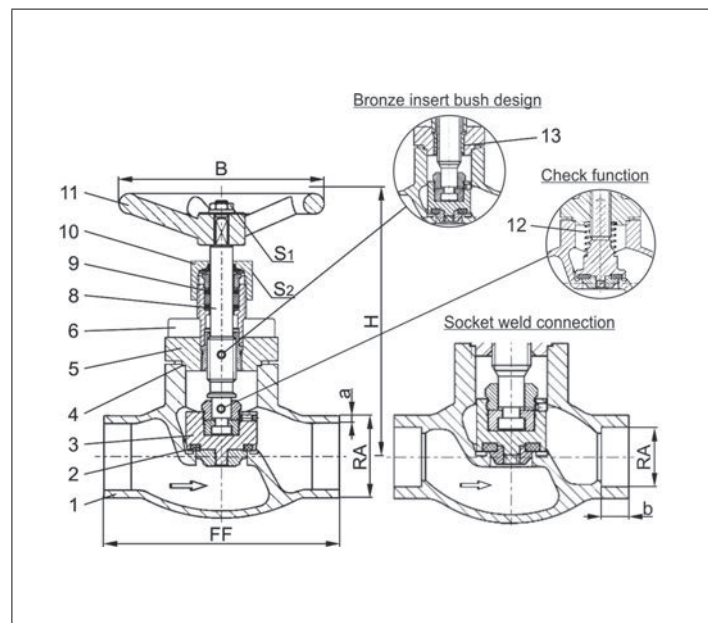
Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01851 - Standard design	Technical data												
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280
Height	H	140	140	140	140	140	170	175	175	200	260	310	350
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40											
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20
Handwheel-Ø	B	100	100	100	100	100	125	125	125	125	200	250	315
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41
Weight	ca. kg	1.0	1.25	1.3	1.7	2.0	2.8	4.2	4.2	6.7	10.7	16.0	23.0
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.



Fire Safe and Offshore Valves

Type 01855 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN50
"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
 "live loaded" gland packing
 "cleaned and degreased for oxygen service"

Part No. 01855.X.0001

Part No. 01855.X.5001 Globe/Check Valve

Female thread connection (G) acc. to ISO 228/1

Part No. 01855.X.0006

Part No. 01855.X.5006 Globe/Check Valve

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

- Female thread connection (R) acc. to ISO 7-Rc
- Valve with control disc (tapered design)



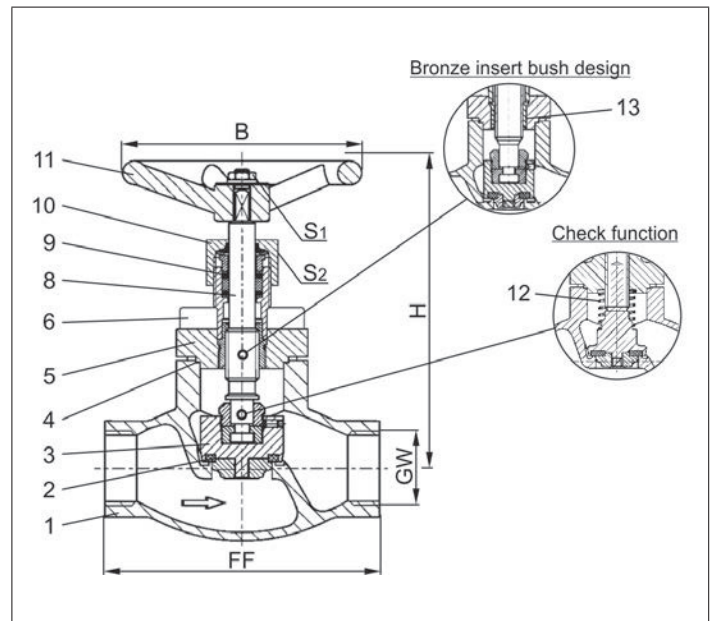
Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01855 - Standard design	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	140	140	140	140	140	175	175	200
Handwheel-Ø	B	100	100	100	100	100	125	125	125
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36
Weight	ca. kg	1.0	1.0	1.3	1.7	2.0	4.2	4.2	6.7
Kvs-Value	m ³ /h	1.6	2.2	4.3	6.7	11.5	20.6	22.6	37.1
Cv-Value	gal/min	1.9	2.6	5.0	7.8	13.4	23.9	26.3	43.2

Dimensions in mm.

Fire Safe and Offshore Valves

Type 01841 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN50 (DN100=PN40)

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01841.X.001* (H = 270mm)

Part No. 01841.X.002* (H = 370mm)

Part No. 01841.X.501* (H = 270mm) Globe/Check Valve

Part No. 01841.X.502* (H = 370mm) Globe/Check Valve

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01841.X.0014 (H = 270mm)

Part No. 01841.X.0024 (H = 370mm)

Part No. 01841.X.5014 (H = 270mm) Globe/Check Valve

Part No. 01841.X.5024 (H = 370mm) Globe/Check Valve

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Extension H up to 900mm
- Valve with control disc (tapered design)

Applications:

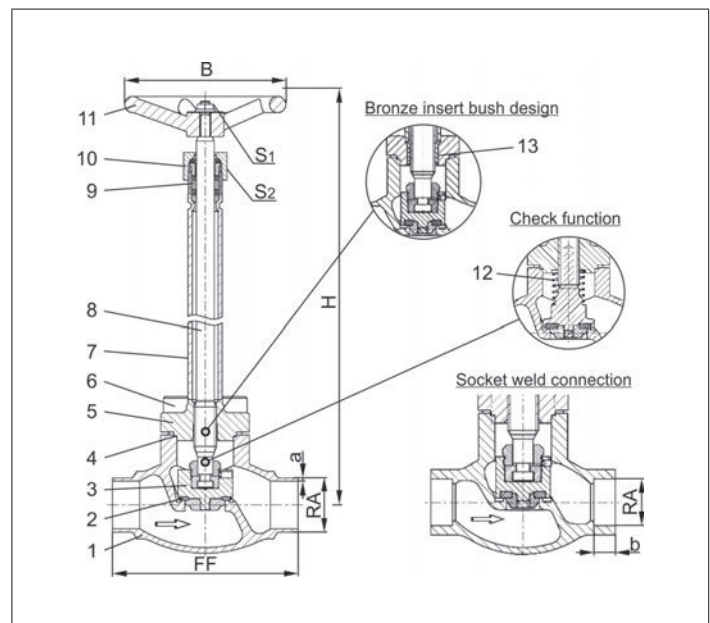
Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01841 - Standard design	Technical data												
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280
Height	H	270 mm or 370 mm											
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40											
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20
Handwheel-Ø	B	100	100	100	100	100	125	125	125	125	200	250	315
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41
Weight	ca. kg	1.4	1.65	1.7	2.1	2.4	3.3	4.7	4.7	7.2	12.7	17.0	24.5
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.



Fire Safe and Offshore Valves

Type 01845 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, PN50
"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
 "live loaded" gland packing
 "cleaned and degreased for oxygen service"

Part No. 01845.X.0011 (H = 270mm)

Part No. 01845.X.0021 (H = 370mm)

Part No. 01845.X.5011 (H = 270mm) Globe/Check Valve

Part No. 01845.X.5021 (H = 370mm) Globe/Check Valve

Female thread connection (G) acc. to ISO 228/1

Part No. 01845.X.0016 (H = 270mm)

Part No. 01845.X.0026 (H = 370mm)

Part No. 01845.X.5016 (H = 270mm) Globe/Check Valve

Part No. 01845.X.5026 (H = 370mm) Globe/Check Valve

Female thread connection NPT acc. to ANSI B 1.20.1

Available options - on request only:

- Female thread connection (R) acc. to ISO 7-Rc
- Extension H up to 900mm · Valve with control disc (tapered design)

Applications:

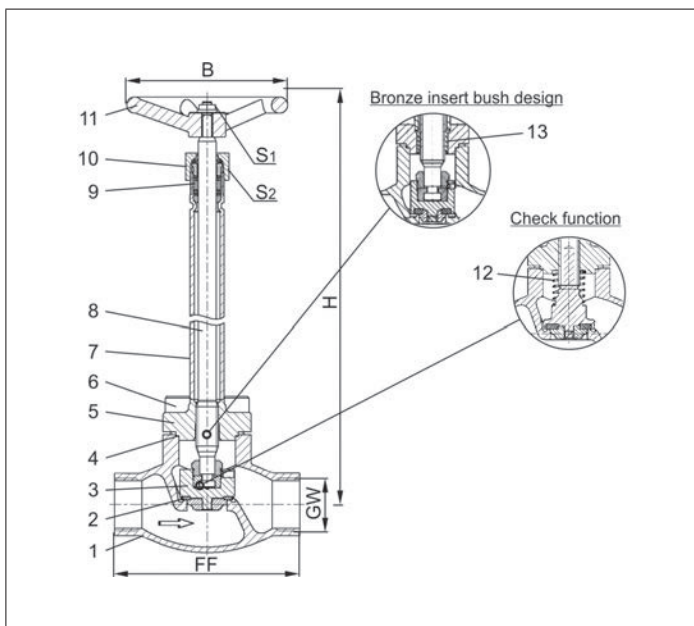
Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194
7 Elongation tube	1.4571	A 213 TP 316 Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4305	A 276 Grade 303
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01845	Technical data								
Nominal size	DN	10	10	15	20	25	40	40	50
Thread size	GW	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	2
Dimension code	.X.	0200	0300	0400	0600	1000	1200	1400	2000
Face-to-face dimension	FF	70	70	85	100	115	130	130	155
Height	H	270 mm or 370 mm							
Handwheel-Ø	B	100	100	100	100	100	125	125	125
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36
Weight	ca. kg	1.4	1.4	1.7	2.1	2.4	4.7	4.7	7.2
Kvs-Value	m ³ /h	1.6	2.2	4.3	6.7	11.5	20.6	22.6	37.1
Cv-Value	gal/min	1.9	2.6	5.0	7.8	13.4	23.9	26.3	43.2

Dimensions in mm.

Fire Safe and Offshore Valves

Type 03841 - Globe Valve

HEROSE



Cryogenic-Globe and Globe/Check Valves, PN40

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03841.X.0012 (H = 270mm)

Part No. 03841.X.0022 (H = 370mm)

Part No. 03841.X.5012 (H = 270mm) Globe/Check Valve

Part No. 03841.X.5022 (H = 370mm) Globe/Check Valve

Flanged connection acc. to DIN EN 1092-1 PN40

Available options - on request only:

· Nominal sizes DN15, DN20 and DN150 with welding-neck flange



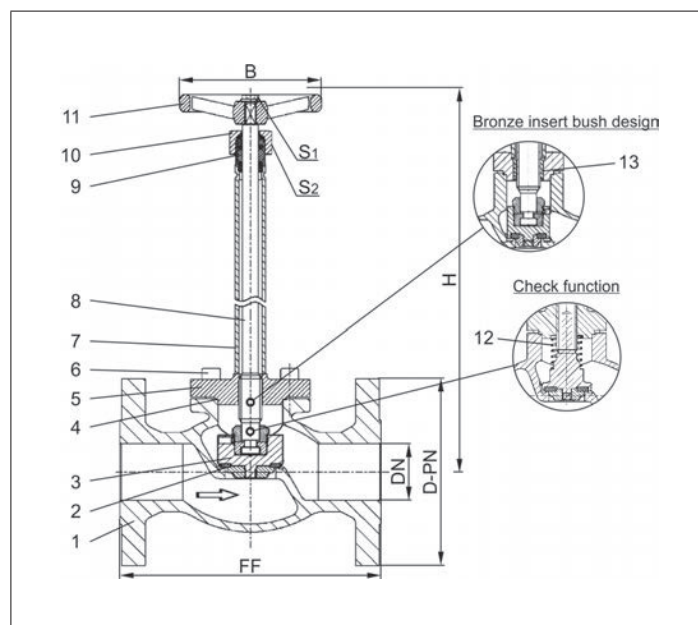
Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4404	A 276 Grade 316L
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 03841	Technical data						
Nominal size	DN	25	40	50	65	80	100
Dimension code - Flange EN 1092-1 PN40	.X.	0250	0400	0500	0650	0800	1000
Flange-Ø	D-PN	115	150	165	185	200	235
Face-to-face dimension	FF	160	200	230	290	310	350
Height	H	270 mm or 370 mm			400	400	400
Handwheel-Ø	B	100	125	125	200	250	315
Wrench size across flats	S ₁	10	13	13	13	13	13
Wrench size across flats	S ₂	30	36	36	36	36	41
Weight	ca. kg	4.9	9.7	13.3	21.1	28.0	43.2
Kvs-Value	m³/h	11.5	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	13.4	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Fire Safe and Offshore Valves

Type 03841 - Globe Valve



Cryogenic-Globe and Globe/Check Valves, class 300
"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel body and topwork,
 "live loaded" gland packing
 "cleaned and degreased for oxygen service"

Part No. 03841.X.0013 (H = 270mm)

Part No. 03841.X.0023 (H = 370mm)

Part No. 03841.X.5013 (H = 270mm) Globe/Check Valve

Part No. 03841.X.5023 (H = 370mm) Globe/Check Valve

Flanged connection acc. to ANSI B16.5 class 300

Available options - on request only:

· Nominal sizes DN15, DN20 and DN150 with welding-neck flange



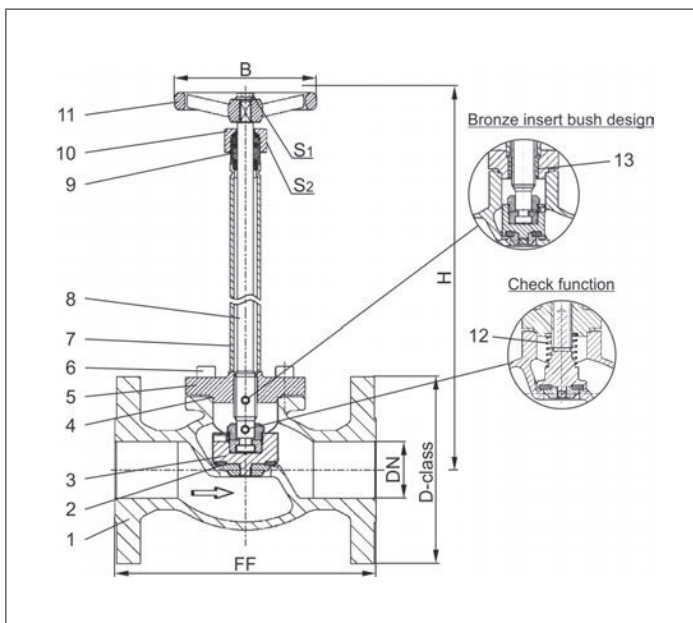
Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4404	A 276 Grade 316L
11 Handwheel	1.4409	SA 351 CF3M
12 Spring	1.4571	A 313 Grade 316Ti
13 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 03841	Technical data						
Nominal size	DN	25	40	50	65	80	100
Dimension code - Flange ANSI B16.5 class 300	.X.	1000	1400	2000	2400	3000	4000
Flange-Ø	D-class	123.9	155.4	165	190.5	209.5	254
Face-to-face dimension	FF	160	200	230	290	310	350
Height	H	270 mm or 370 mm			400	400	400
Handwheel-Ø	B	100	125	125	200	250	315
Wrench size across flats	S ₁	10	13	13	13	13	13
Wrench size across flats	S ₂	30	36	36	36	36	41
Weight	ca. kg	4.9	9.7	13.3	21.1	28.0	43.2
Kvs-Value	m³/h	11.5	22.6	37.1	71.1	104.0	170.0
Cv-Value	gal/min	13.4	26.3	43.2	82.7	120.9	195.2

Dimensions in mm.

Fire Safe and Offshore Valves

Type 01282 - Bellow Sealed Globe Valve



"Fire-safe"-design without fire type-testing according to EN ISO 10497

Cryogenic-Bellow Sealed Globe Valve, PN50

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 01282.X.002*

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01282.X.0024

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Extension H up to 900mm

Applications:

Suitable for hydrogen, approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

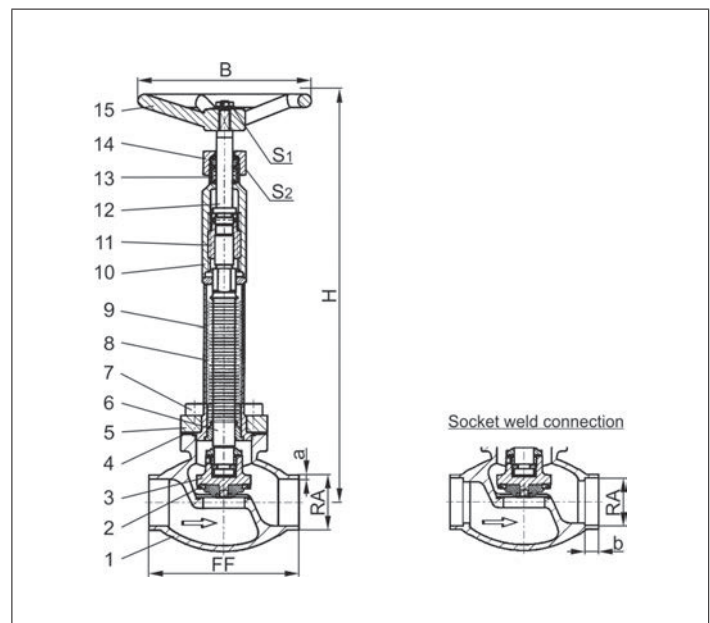
Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)

Leak rate: 10^{-6} mbar ltr / sec outside, 10^{-4} mbar ltr / sec seat



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bellow stem	1.4571	A 313 Grade 316Ti
7 Bolts	1.4571/A4	similar A 194 B8T
8 Bellow	1.4571	A 313 Grade 316Ti
9 Elongation tube	1.4571	A 313 Grade 316Ti
10 Headpiece	1.4404	A 276 Grade 316L
11 Bush	CW452K	B 159 UNS C51900
12 Stem	1.4404	A 276 Grade 316L
13 Gland packing	Graphite / PTFE / MICA	
14 Gland nut	1.4404	A 276 Grade 316L
15 Handwheel	Aluminium alloy	

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01282 - Standard design	Technical data									
Nominal size	DN	10	15	15	20	25	32	40	40	50
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155
Height	H	380	380	380	380	380	380	380	380	380
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40								
Socket depth	b	6	10	10	13	13	-	13	13	16
Handwheel-Ø	B	150	150	150	150	150	150	150	150	150
Wrench size across flats	S ₁	10	10	10	10	10	13	13	13	13
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36
Weight	ca. kg	1.6	1.85	1.9	2.3	2.7	3.6	5.1	5.1	7.7
Kvs-Value	m ³ /h	1.6	2.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1
Cv-Value	gal/min	1.9	3.3	5.0	7.8	13.4	16.2	26.3	26.3	43.2

Dimensions in mm.



Fire Safe and Offshore Valves

Type 01843 - Actuated Globe Valve



Cryogenic-Globe Valves with Pneumatic Actuator, PN50 (DN100/150=PN40)
"Fire safe" type test approval acc. to EN ISO 10497 (only actuator spring closes)

Stainless steel body and topwork
 Actuator - air opens, spring closes
 "live loaded" gland packing
 "cleaned and degreased for oxygen service" - the actuator is not cleaned and degreased for oxygen

Part No. 01843.X.301*

Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01843.X.3014

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available accessories:

- Solenoid valve · Limit switch
- Electropneumatic positioner etc.

Available options - on request only:

- Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm
- Actuator "cleaned and degreased for oxygen service"

Applications:

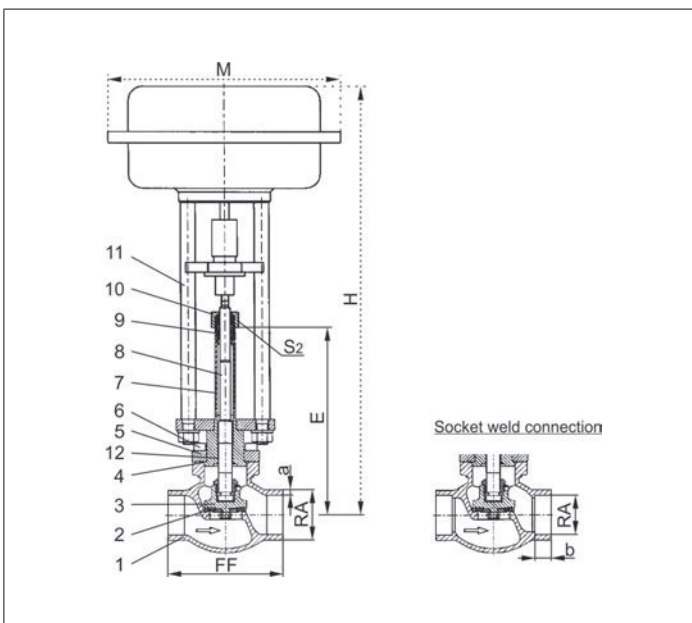
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194 B8T
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Gland packing	Graphite / PTFE / MICA	
10 Gland nut	1.4404	A 276 Grade 316L
11 Pillars	1.4404	A 276 Grade 316L
12 Bush	CW452K	B 159 UNS C51900

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01843 - Standard	Technical data													
Nominal size	DN	10	15	15	20	25	32	40	40	50	65	80	100	150
Dimension code	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114	0168
Face-to-face dimension	FF	70	85	85	100	115	115	130	130	155	205	245	280	400
Height	H	dependent on actuator												
Length	E	195	195	195	200	200	230	230	230	235	300	300	300	300
Outside pipe-Ø ISO 1127	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3	168.3
Wall thickness pipe ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0	7.1
Outside pipe-Ø ASTM A312	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3	168.3
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40												
Socket depth	b	6	10	10	13	13	-	13	13	16	16	16	20	20
Actuator-Ø	M	dependent on actuator												
Wrench size across flats	S ₂	30	30	30	30	30	36	36	36	36	36	36	41	41
Weight w/o actuator	ca. kg	1.9	2.15	2.2	2.4	3.1	3.8	6.5	6.5	9.0	15.2	20.0	28.0	60.9
Kvs-Value	m ³ /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0	350.0
Cv-Value	gal/min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2	401.8
Stroke	mm	10	10	10	7	9	9	11	11	15	23	23	30	40

Dimensions in mm. Compliance of tightness requirements acc. to EN 1626 for DN150 up to 20 bar differential pressure.

Fire Safe and Offshore Valves

Type 01853 - Actuated Trailervalue



Cryogenic-Globe Valves with Pneumatic Actuator, PN50
"Fire safe" type test approval acc. to EN ISO 10497

air pressure for operation 6,0 bar g (maximum 10.0 bar g)
 Stainless steel body and topwork,
 Actuator - air opens, spring closes
 "live loaded" gland packing
 "cleaned and degreased for oxygen service" - the actuator is not cleaned and degreased for oxygen
 maximum working pressure of the valve depending on nominal size

Part No. 01853.X.T0**

* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 01853.X.T0*4

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

· Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm

Applications:

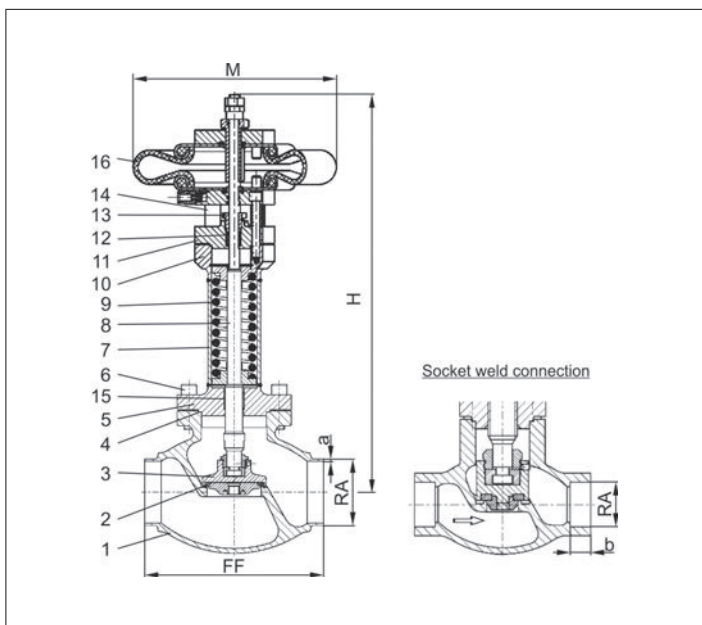
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -255°C / -427°F (18K) up to +120°C / +248°F (393K)



Materials	DIN EN	ASTM
1 Body	1.4409	A 351 CF3M
2 Valve seal	PTFE / Carbon filled (25%)	
3 Disc	1.4404	A 276 Grade 316L
4 Bonnet gasket	Graphite	
5 Headpiece	1.4404	A 276 Grade 316L
6 Bolts	1.4571/A4	similar A 194
7 Elongation tube	1.4571	A 213 TP 316Ti
8 Stem	1.4404	A 276 Grade 316L
9 Spring	1.4571	A 313 Grade 316Ti
10 Flange	1.4404	A 276 Grade 316L
11 Headpiece	1.4404	A 276 Grade 316L
12 Gland packing	Graphite / PTFE / MICA	
13 Gland nut	1.4571	A 313 Grade 316Ti
14 Pillars	1.4404	A 276 Grade 316L
15 Bush	CW452K	B 159 UNS C51900
16 Actuator	Rubber	

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



Type 01853	Technical data							
Nominal size	DN	15	25	40	40	50	65	80
Dimension code	.X.	1521	2533	4042	4048	5060	657x	8088
Face-to-face dimension	FF	85	115	130	130	155	205	245
Height	H	395	444	400	400	440	470	500
Outside pipe-Ø ISO 1127	RA	21.3	33.7	42.4	48.3	60.3	76.1	88.9
Wall thickness pipe ISO 1127	a	2.0	2.0	2.0	2.0	2.0	2.6	3.2
Outside pipe-Ø ASTM A312	RA	21.34	33.40	42.16	48.26	60.33	73.03	88.90
Wall thickness pipe ASTM A312	a	dimensions acc. to S10 or S40						
Socket depth	b	10	13	13	13	16	16	16
Actuator-Ø	M	229	229	229	229	229	229	229
Weight	ca. kg	7.2	9.1	10.5	10.5	14.5	17.4	22.5
Kvs-Value	m ³ /h	4.3	11.5	22.6	22.6	37.1	71.1	104.0
Cv-Value	gal/min	5.0	13.4	23.9	26.3	43.2	82.7	120.9
Stroke	mm	10	9	11	11	15	23	23

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 28651 - Topwork



for Cryogenic-Globe and Globe/Check Valves

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel topwork,

"live loaded" gland packing

"cleaned and degreased for oxygen service"

Part No. 28651.X.0000

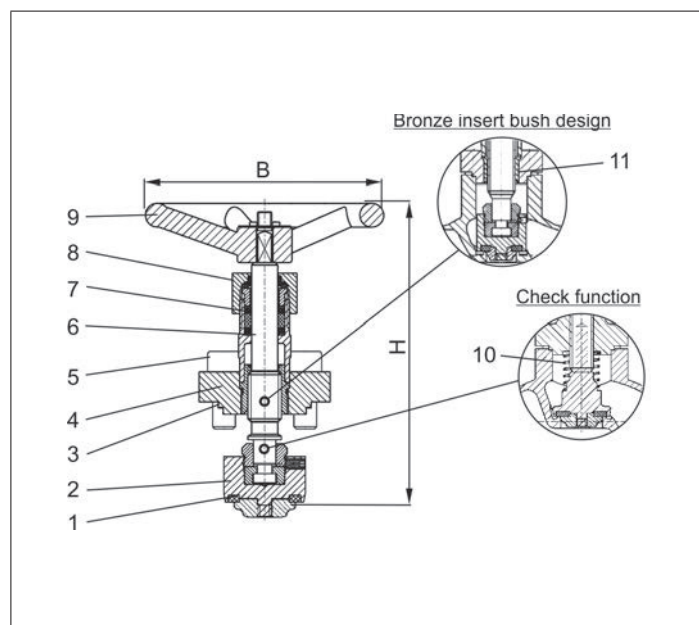
Part No. 28651.X.5000 with check function

suitable for:

Type	Nominal size
01651	DN10 - DN100
01655	DN10 - DN50
03651	DN25 - DN150



Materials	DIN EN	ASTM
1 Valve seal	PTFE / Carbon filled (25%)	
2 Disc	1.4301	A 276 Grade 304
3 Bonnet gasket	Graphite	
4 Headpiece	1.4301	A 276 Grade 304
5 Bolts	1.4301/A2	A 194 B8
6 Stem	1.4301	A 276 Grade 304
7 Gland packing	Graphite / PTFE / MICA	
8 Gland nut	1.4305	A 276 Grade 303
9 Handwheel	1.4409	SA 351 CF3M
10 Spring	1.4310	A 313 Grade 301
11 Bush	CW452K	B 159 UNS C51900



Type 28651	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Height	H	130	130	130	130	155	160	185	240	285	320	380
Nimber of bolts		4	4	4	4	4	4	6	6	6	6	12
Handwheel-Ø	B	100	100	100	100	125	125	125	200	250	315	360
Weight	ca. kg	0.6	0.7	0.95	1.0	1.5	1.9	2.7	4.8	5.9	8.4	18.0

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 28641 - Topwork

for Cryogenic-Globe and Globe/Check Valves

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel topwork,

"live loaded" gland packing

"cleaned and degreased for oxygen service"

Part No. 28641.X.0010 (H=270mm)

Part No. 28641.X.0020 (H=370mm)

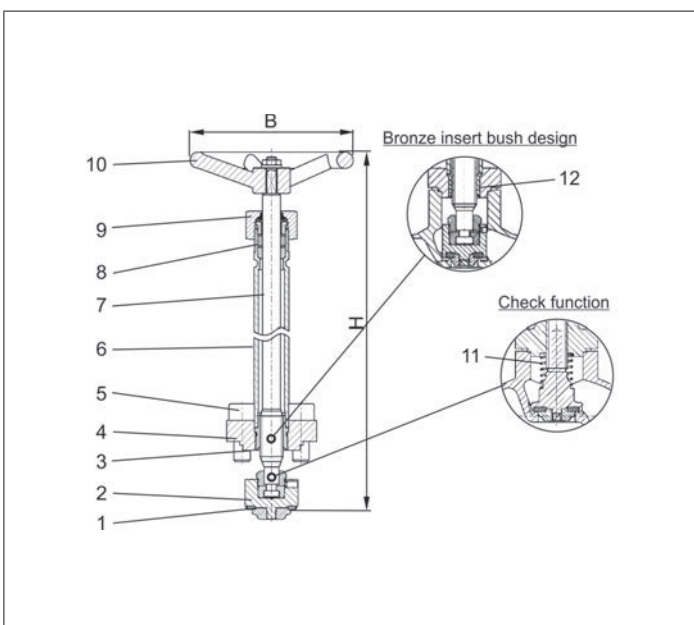
Part No. 28641.X.5010 (H=270mm) with check function

Part No. 28641.X.5020 (H=370mm) with check function

suitable for:

Type	Nominal size
01641	DN10 - DN150
01645	DN10 - DN50
03641	DN25 - DN150

Materials	DIN EN	ASTM
1 Valve seal	PTFE / Carbon filled (25%)	
2 Disc	1.4301	A 276 Grade 304
3 Bonnet gasket	Graphite	
4 Headpiece	1.4301	A 276 Grade 304
5 Bolts	1.4301/A2	A 194 B8
6 Elongation tube	1.4541	A 213 TP 321
7 Stem	1.4301	A 276 Grade 304
8 Gland packing	Graphite / PTFE / MICA	
9 Gland nut	1.4305	A 276 Grade 303
10 Handwheel	1.4409	SA 351 CF3M
11 Spring	1.4310	A 313 Grade 301
12 Bush	CW452K	B 159 UNS C51900



Type 28641	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Height	H	270 mm or 370mm							400	400	400	420
Number of bolts		4	4	4	4	4	4	6	6	6	6	6
Handwheel-Ø	B	100	100	100	100	125	125	125	200	250	315	350
Weight	ca. kg	1.0	1.1	1.4	1.4	2.0	2.4	3.0	5.5	6.8	9.5	18.4

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 28751 - Topwork



for Cryogenic-Globe and Globe/Check Valves

Stainless steel topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 28751.X.0000

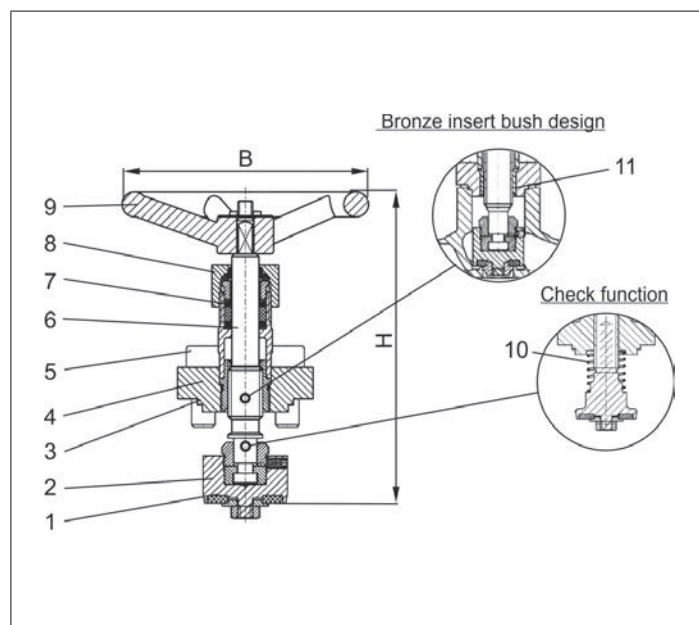
Part No. 28751.X.5000 with check function

suitable for:

Type	Nominal size
01751	DN10 - DN100
01755	DN10 - DN50
03751	DN25 - DN150



Materials	DIN EN	ASTM
1 Valve seal	PCTFE (Kel-F)	
2 Disc	1.4401	A 276 Grade 316
3 Bonnet gasket	Graphite	
4 Headpiece	1.4404	A 276 Grade 316L
5 Bolts	1.4571/A4 similar A 194 B8T	
6 Stem	1.4401	A 276 Grade 316
7 Gland packing	Graphite / PTFE / MICA	
8 Gland nut	1.4305	A 276 Grade 303
9 Handwheel	1.4409	SA 351 CF3M
10 Spring	1.4571	A 313 Grade 316Ti
11 Bush	CW452K	B 159 UNS C51900



Type 28751	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Height	H	130	130	130	130	155	160	185	240	285	320	380
Number of bolts		4	4	4	4	4	4	6	6	6	6	12
Handwheel-Ø	B	100	100	100	100	125	125	125	200	250	315	360
Weight	ca. kg	0.6	0.7	0.95	1.0	1.5	1.9	2.7	4.8	5.9	8.4	18.0

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 28741 - Topwork



for Cryogenic-Globe and Globe/Check Valves

Stainless steel topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 28741.X.0010 (H=270mm)

Part No. 28741.X.0020 (H=370mm)

Part No. 28741.X.5010 (H=270mm) with check function

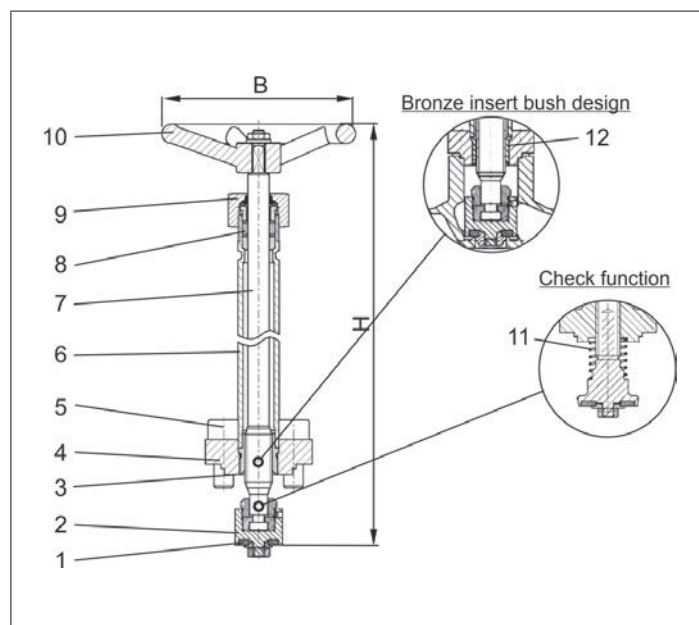
Part No. 28741.X.5020 (H=370mm) with check function

suitable for:

Type	Nominal size
01741	DN10 - DN100
01745	DN10 - DN50
03741	DN25 - DN150



Materials	DIN EN	ASTM
1 Valve seal	PCTFE (Kel-F)	
2 Disc	1.4401	A 276 Grade 316
3 Bonnet gasket	Graphite	
4 Headpiece	1.4404	A 276 Grade 316L
5 Bolts	1.4571/A4	similar A 194 B8T
6 Elongation tube	1.4571	A 213 TP 316Ti
7 Stem	1.4401	A 276 Grade 316
8 Gland packing	Graphite / PTFE / MICA	
9 Gland nut	1.4305	A 276 Grade 303
10 Handwheel	1.4409	SA 351 CF3M
11 Spring	1.4571	A 313 Grade 316Ti
12 Bush	CW452K	B 159 UNS C51900



Type 28741	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Height	H	270mm or 370mm							400	400	400	420
Number of bolts		4	4	4	4	4	4	6	6	6	6	12
Handwheel-Ø	B	100	100	100	100	125	125	125	200	250	315	360
Weight	ca. kg	1.0	1.1	1.4	1.4	2.0	2.4	3.0	5.5	6.8	9.5	19.0

Dimensions in mm.

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Spare Parts Firesafe and Offshore Applications

Type 28851 - Topwork

for Cryogenic-Globe and Globe/Check Valves

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel topwork,

"live loaded" gland packing

"cleaned and degreased for oxygen service"

Part No. 28851.X.0000

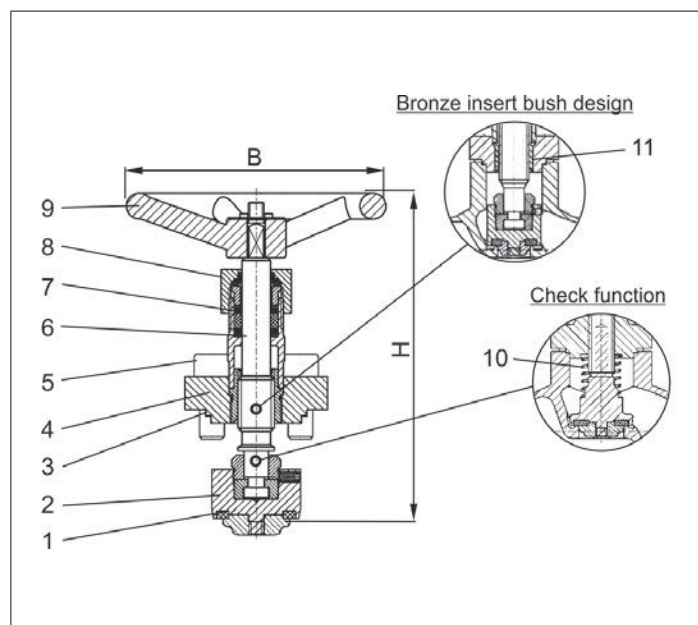
Part No. 28851.X.5000 with check function

suitable for:

Type	Nominal size
01851	DN10 - DN100
01855	DN10 - DN50
03851	DN25 - DN150



Materials	DIN EN	ASTM
1 Valve seal	PTFE / Carbon filled (25%)	
2 Disc	1.4401	A 276 Grade 316
3 Bonnet gasket	Graphite	
4 Headpiece	1.4404	A 276 Grade 316L
5 Bolts	1.4571/A4 similar A 194 B8T	
6 Stem	1.4401	A 276 Grade 316
7 Gland packing	Graphite / PTFE / MICA	
8 Gland nut	1.4305	A 276 Grade 303
9 Handwheel	1.4409	SA 351 CF3M
10 Spring	1.4571	A 313 Grade 316Ti
11 Bush	CW452K	B 159 UNS C51900



Type 28851	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Height	H	130	130	130	130	155	160	185	240	285	320	380
Number of bolts		4	4	4	4	4	4	6	6	6	6	12
Handwheel-Ø	B	100	100	100	100	125	125	125	200	250	315	360
Weight	ca. kg	0.6	0.7	0.95	1.0	1.5	1.9	2.7	4.8	5.9	8.4	18.0

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 28841 - Topwork

for Cryogenic-Globe and Globe/Check Valves

"Fire safe" type test approval acc. to EN ISO 10497

Stainless steel topwork,

"live loaded" gland packing

"cleaned and degreased for oxygen service"

Part No. 28841.X.0010 (H=270mm)

Part No. 28841.X.0020 (H=370mm)

Part No. 28841.X.5010 (H=270mm) with check function

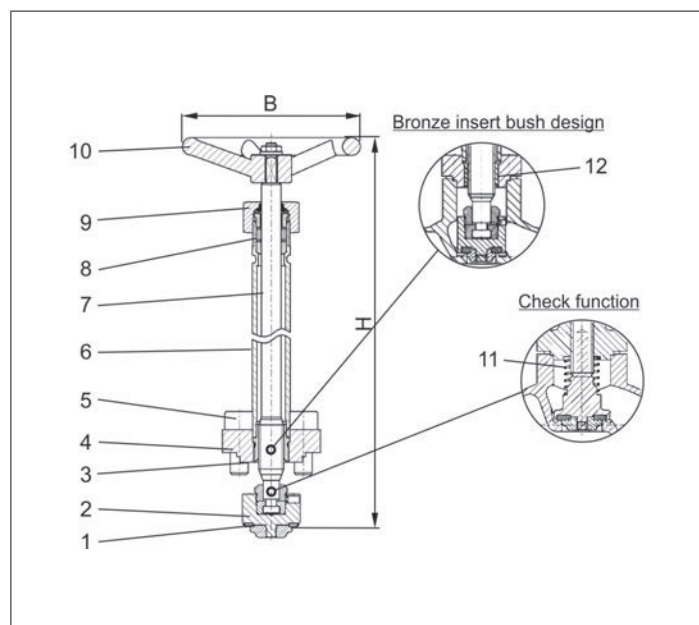
Part No. 28841.X.5020 (H=370mm) with check function

suitable for:

Type	Nominal size
01841	DN10 - DN100
01845	DN10 - DN50
03841	DN25 - DN150



Materials	DIN EN	ASTM
1 Valve seal	PTFE / Carbon filled (25%)	
2 Disc	1.4401	A 276 Grade 316
3 Bonnet gasket	Graphite	
4 Headpiece	1.4404	A 276 Grade 316L
5 Bolts	1.4571/A4	similar A 194 B8T
6 Elongation tube	1.4571	A 213 TP 316Ti
7 Stem	1.4401	A 276 Grade 316
8 Gland packing	Graphite / PTFE / MICA	
9 Gland nut	1.4305	A 276 Grade 303
10 Handwheel	1.4409	SA 351 CF3M
11 Spring	1.4571	A 313 Grade 316Ti
12 Bush	CW452K	B 159 UNS C51900



Type 28841	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Height	H	270mm or 370mm							400	400	400	420
Number of bolts		4	4	4	4	4	4	6	6	6	6	12
Handwheel-Ø	B	100	100	100	100	125	125	125	200	250	315	360
Weight	ca. kg	1.0	1.1	1.4	1.4	2.0	2.4	3.0	5.5	6.8	9.5	19.0

Dimensions in mm.



Spare Parts Firesafe and Offshore Applications

Type 28203, Type 29203 - Disc complete



for Cryogenic-Globe Valves

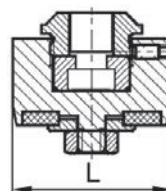
stainless steel disc 1.4404

"cleaned and degreased for oxygen service"

Part No. 28203.X.0783

suitable for:

Type	Nominal size
01751, 01741	DN10 - DN100
01755, 01745	DN10 - DN50



Type 28203.X.0000	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	-
Disc Ø	L	23	25	30	34.5	42	47	55	73	86	104	-
Weight	ca. kg	0.05	0.06	0.09	0.12	0.18	0.22	0.30	0.55	0.75	1.05	-

Dimensions in mm.

for Cryogenic-Globe Valves

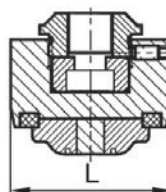
stainless steel disc 1.4301

"cleaned and degreased for oxygen service"

Part No. 29203.X.0765

suitable for:

Type	Nominal size
01651	DN10 - DN100
01641	DN10 - DN150
01655, 01645	DN10 - DN50
03651, 03641	DN25 - DN100



Type 29203.X.0765	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Disc Ø	L	23	25	30	34.5	42	47	55	73	86	104	155
Weight	ca. kg	0.05	0.06	0.09	0.12	0.18	0.22	0.30	0.55	0.75	1.05	3.10

Dimensions in mm.

for Cryogenic-Globe Valves

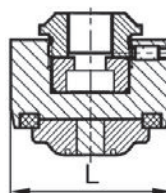
stainless steel disc 1.4404

"cleaned and degreased for oxygen service"

Artikel-Nr. 29203.X.0783

suitable for:

Type	Nominal size
01851, 01841	DN10 - DN100
01855, 01845	DN10 - DN50
03851, 03841	DN25 - DN150



Type 29203.X.0783	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Disc Ø	L	23	25	30	34.5	42	47	55	73	86	104	155
Weight	ca. kg	0.05	0.06	0.09	0.12	0.18	0.22	0.30	0.55	0.75	1.05	3.10

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 28205, Type 29205 - Check Disc complete



for Cryogenic-Globe/Check Valves

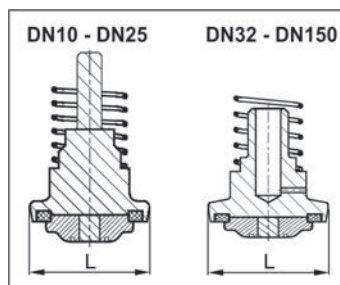
stainless steel check disc 1.4301

"cleaned and degreased for oxygen service"

Part No. 29205.X.5765

suitable for:

Type	Nominal size
01651	DN10 - DN100
01641	DN10 - DN150
01655, 01645	DN10 - DN50
03651, 03641	DN25 - DN150



Type 29205.X.5765	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Disc Ø	L	23	25	30	34.5	42	47	55	73	86	104	155
Weight	ca. kg	0.05	0.07	0.09	0.10	0.15	0.20	0.34	0.48	0.66	1.05	3.28

Dimensions in mm.

for Cryogenic-Globe/Check Valves

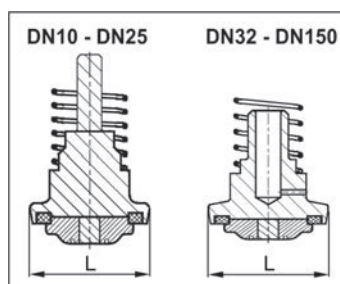
stainless steel check disc 1.4404

"cleaned and degreased for oxygen service"

Part No. 29205.X.5783

suitable for:

Type	Nominal size
01851, 01841	DN10 - DN100
01855, 01845	DN10 - DN50
03851, 03841	DN25 - DN150



Type 28205.X.5783	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Disc Ø	L	23	25	30	34.5	42	47	55	73	86	104	155
Weight	ca. kg	0.05	0.07	0.09	0.10	0.15	0.20	0.34	0.48	0.66	1.05	3.28

Dimensions in mm.

for Cryogenic-Globe/Check Valves

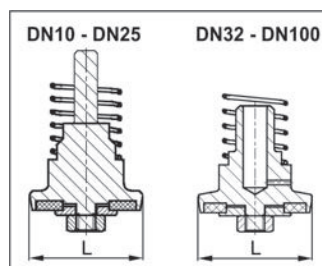
stainless steel check disc 1.4404

"cleaned and degreased for oxygen service"

Part No. 28205.X.5783

suitable for:

Type	Nominal size
01751, 01741	DN10 - DN100
01755, 01745	DN10 - DN50
03751, 03741	DN25 - DN150



Type 28205.X.5783	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Disc Ø	L	23	25	30	34.5	42	47	55	73	86	104	155
Weight	ca. kg	0.05	0.07	0.09	0.10	0.15	0.20	0.34	0.48	0.66	1.05	3.28

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 28206 - Check Disc complete



for Cryogenic-Check Valves

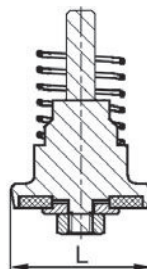
stainless steel check disc 1.4404

"cleaned and degreased for oxygen service"

Part No. 28206.X.0783

suitable for:

Type	Nominal size
05714	DN10 - DN100
05717	DN10 - DN50



Type 28206.X.0783	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	-
Disc Ø	L	23	25	30	34.5	42	47	55	73	86	104	-
Weight	ca. kg	0.05	0.07	0.09	0.10	0.15	0.20	0.34	0.48	0.66	1.05	-

Dimensions in mm.

Spare Parts Firesafe and Offshore Applications

Type 30641 - Sealing spare part kit



for Cryogenic-Globe Valves

"cleaned and degreased for oxygen service"

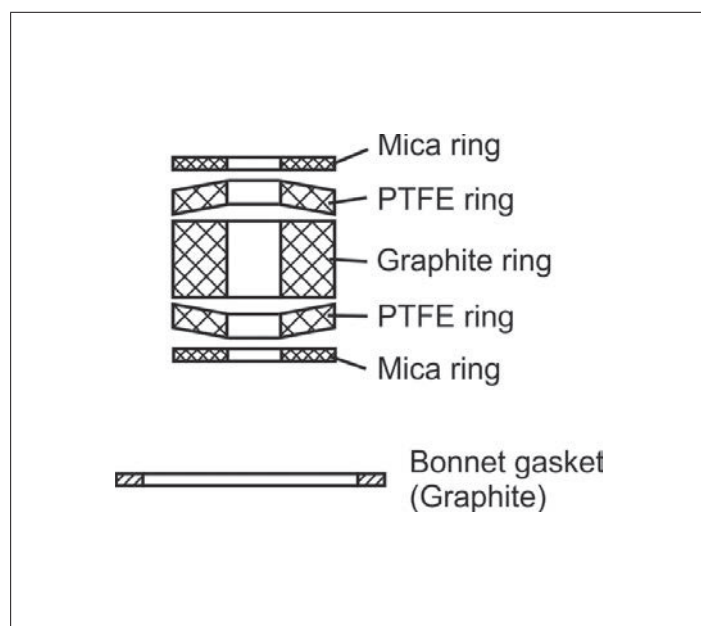
Part No. 30641.X.0000

consisting of:

- 1x Bonnet gasket Graphite
- 1x Gland packing kit complete PTFE/Graphite
- 2x Stem gasket Mica

suitable for:

Type	Nominal size
01651, 01851, 01841	DN10 - DN100
01641	DN10 - DN150
01655, 01645, 01855, 01845	DN10 - DN50
03651, 03641	DN25 - DN150



Type 30641	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Weight	ca. kg	0.04	0.04	0.05	0.06	0.08	0.09	0.14	0.19	0.25	0.34	0.39

Dimensions in mm.

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Spare Parts Firesafe and Offshore Applications

Type 30741 - Sealing spare part kit



for Cryogenic-Globe Valves

"cleaned and degreased for oxygen service"

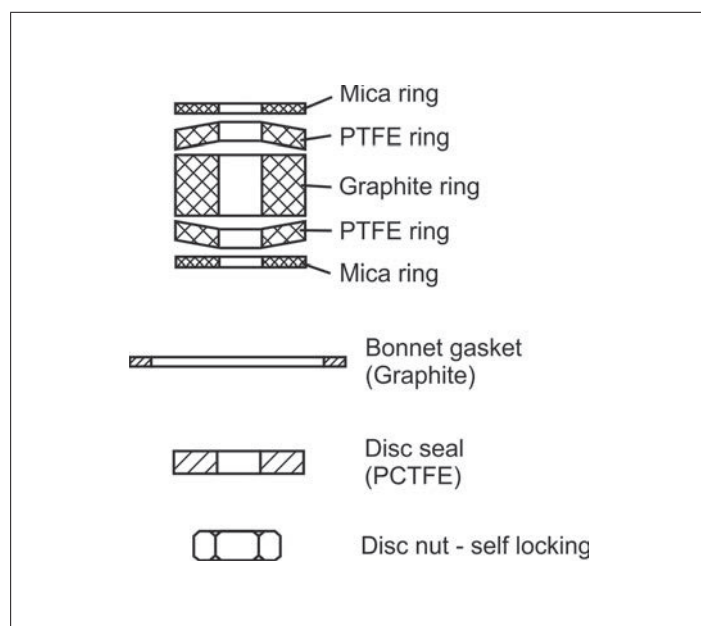
Part No. 30741.X.0000

consisting of:

- 1x Bonnet gasket Graphite
- 1x Disc seal PCTFE
- 1x Disc nut 1.4571
- 1x Gland packing kit complete PTFE/Graphite
- 2x Stem gasket Mica

suitable for:

Type	Nominal size
01751, 01741	DN10 - DN150
01755, 01745	DN10 - DN50
03751, 03741	DN25 - DN150



Type 30741	Technical data											
Nominal size	DN	10	15	20	25	32	40	50	65	80	100	150
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000	1500
Weight	ca. kg	0.03	0.03	0.04	0.05	0.07	0.08	0.13	0.18	0.24	0.32	0.44

Dimensions in mm.

Type 30714 - Sealing spare part kit

for Cryogenic-Check Valves

"cleaned and degreased for oxygen service"

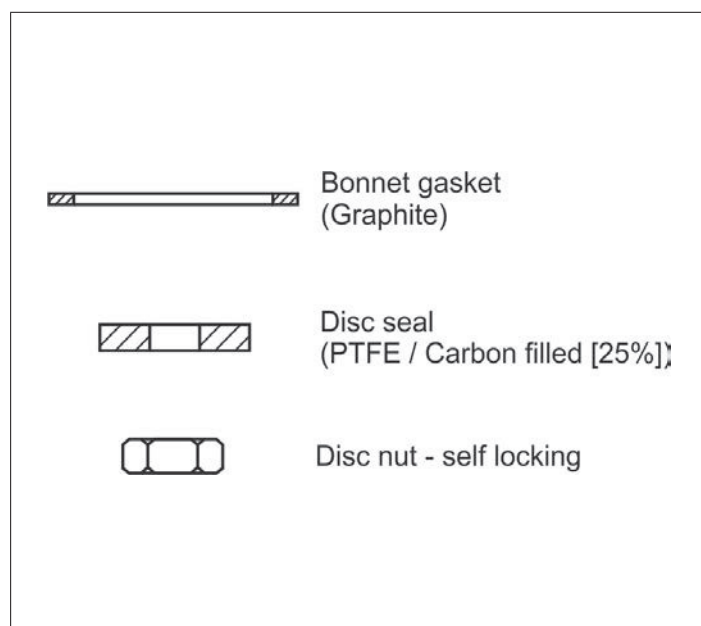
Part No. 30714.X.0000

consisting of:

- 1x Bonnet gasket Graphite
- 1x Disc seal PTFE / Carbon filled (25%)
- 1x Disc nut 1.4571

suitable for:

Type	Nominal size
05714	DN10 - DN100
05717	DN10 - DN50



Type 30714	Technical data										
Nominal size	DN	10	15	20	25	32	40	50	65	80	100
Dimension code	.X.	0100	0150	0200	0250	0320	0400	0500	0650	0800	1000
Weight	ca. kg	0.02	0.02	0.03	0.04	0.06	0.07	0.11	0.16	0.22	0.30

Dimensions in mm.