

Data Sheet

Shut-off valves
Type **SVA-S** and **SVA-L**

65 bar version for all industrial refrigeration and heat pump applications



The new 65 bar SVL range for Industrial Refrigeration and Heat Pumps is based on the successful modular Standard SVL platform. The same flexibility, simplicity and efficiency are features offered in this new series.

The SVA valves are designed to give favorable flow characteristics and are easy to dismantle and repair when necessary. The valve cone is designed to ensure perfect closing and withstand a high system pulsation and vibration, which can be present specifically in the discharge line.

The valves are available from a parts program consisting of:

- Valve housing with DIN or ANSI butt-weld connections and DIN or ASME hard soldering (brazing) connections in angle or straightway and in a variety of sizes
- The function module in Standard neck (SVA-S) and Long neck (SVA-L)

Further, SVA-S is available as complete valves with ANSI butt-weld connection.

Function modules (Top Complete) for the SVA Stop valves DN 50 to DN 100 are available in a special high temperature version called SVA-65BT.

Features

- Modular Concept:
 - Each valve housing is available with DIN and ANSI butt weld connection and in several different sizes
 - Possible to convert SVA-S or SVA-L to any other product in the Flexline™ SVL family (regulating valve, check & stop valve, check valve or strainer) just by replacing the complete top part
- Fast and easy valve overhaul service. It is easy to replace the top part and no welding is needed
- Optional accessories:
 - Heavy duty industrial hand wheel for frequent operation
 - Cap for infrequent operation
- Available in angleway and straightway versions with Standard neck or Long neck (DN 15 to DN 40) for insulated systems
- Each valve type is clearly marked with type, size and performance range
- The valves and caps are prepared for sealing, to prevent operation by unauthorized persons, using a seal wire
- Internal metal backseating:
 - DN 6 - 65 (¼ - 2 ½ in)
- Internal PTFE backseating:
 - DN 80 - 200 (3 - 8 in)
- Can accept flow in both directions
- Housing and bonnet material is low temperature steel according to requirements of the Pressure Equipment Directive and other international classification authorities
- Classification: DNV, CRN, BV, EAC etc. To get an updated list of certification on the products please contact your local Danfoss Sales Company

Media

Refrigerants

Applicable to HCFC, HFC, R717 (Ammonia) and R744 (CO₂). For further information please see installation guide for SVA.

New refrigerants

Danfoss products are continually evaluated for use with new refrigerants depending on market requirements.

When a refrigerant is approved for use by Danfoss, it is added to the relevant portfolio, and the R number of the refrigerant (e.g. R513A) will be added to the technical data of the code number. Therefore, products for specific refrigerants are best checked at store.danfoss.com/en/, or by contacting your local Danfoss representative.

Product specification

Design

Housing

Made of special, cold resistant steel

Valve cone

The valve cone can be turned on the spindle, thus there will be no friction between the cone and the seat when the valve is opened and closed and the special design will avoid cone spin due to pulsation and vibration when the valve is in open position. A teflon tightening ring provides perfect sealing with minimum closing force.

Spindle

Made of polished stainless steel, ideal for leap seal sealing.

Packing gland

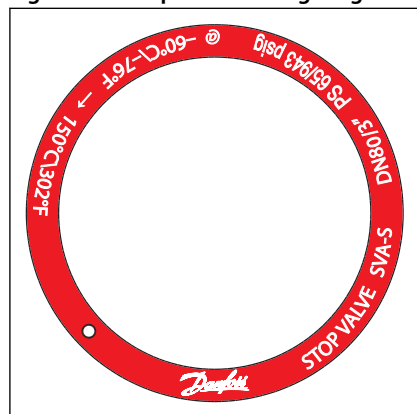
The low temperature packing gland ensures a perfect tightness. The packing glands are equipped with a scraper ring to prevent penetration of dirt and ice into the packing gland.

Table 1: Technical data

Part	Temperature range	Max. working pressure
Housing DN50 -DN100	-60 °C to +190 °C (-76 °F to + 374 °F)	65 bar (943 psi)
Housing other than DN50 -DN100	-60 °C to +150 °C (-76 °F to +302 °F)	65 bar (943 psi)
Function module standard	-60 °C to +150 °C (-76 °F to +302 °F)	65 bar (943 psi)
Function module high temp SVA-65BT	0 °C to +190 °C (32 °F to + 374 °F)	65 bar (943 psi)

Installation

Figure 1: Example of Marking Ring

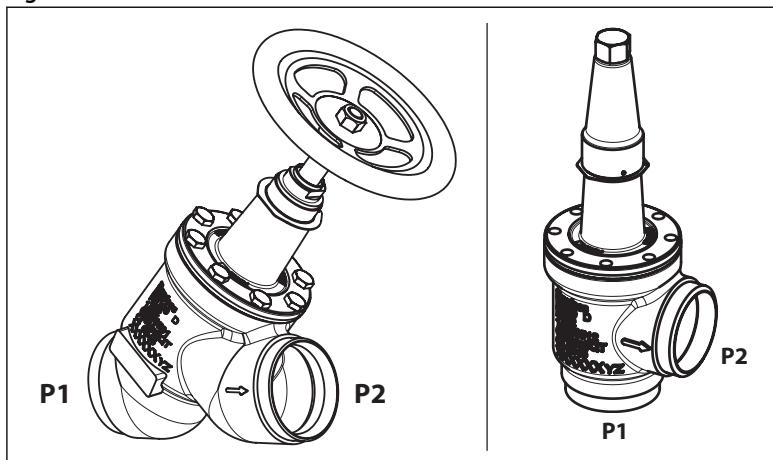


The valve is designed to withstand high internal pressure. However, the piping system in general should be designed to avoid liquid traps and reduce the risk of hydraulic pressure caused by thermal expansion.

It is recommended that the valves be installed in the direction of flow indicated by the arrow on the valve body. The valve can be installed in the opposite direction but this slightly reduces the k_v -value (C_v -value).

Maximum opening and closing pressure differential (for sizes 100 to 200)

Figure 2: Flow direction



The maximum opening pressure differential is equal to the maximum pressure difference between inlet and outlet in the flow direction where the valve can be opened using normal hand force without damaging the valve.

The maximum closing pressure differential is equal to the maximum pressure difference between inlet and outlet in the flow direction where the valve is sealing according to specifications.

The maximum opening and closing pressure differentials are as default equal to the maximum operating pressure (PS or MWP) for valve sizes up to and including DN 50.

For valve sizes of DN 65(80) or larger than DN 65(80) the opening and closing pressure differential depends on the flow direction as shown below. Note that the default flow direction indicated by the flow arrow is P1 -> P2.

Table 2: Flow direction

Valve size [DN]	Flow direction		
	Maximum opening and closing pressure differential	Maximum closing pressure differential	Maximum opening pressure differential
		P1 → P2	P2 → P1
65(80)	60 bar / 870 psi	65 bar / 943 psi	60 bar / 870 psi
100	44 bar / 638 psi	65 bar / 943 psi	44 bar / 638 psi
125	33 bar / 478 psi	65 bar / 943 psi	33 bar / 478 psi
150	21 bar / 304 psi	65 bar / 943 psi	21 bar / 304 psi
200	14 bar / 203 psi	65 bar / 943 psi	14 bar / 203 psi

Material specification

Table 3: SVA-S 6-10 & SVA-S 15-20

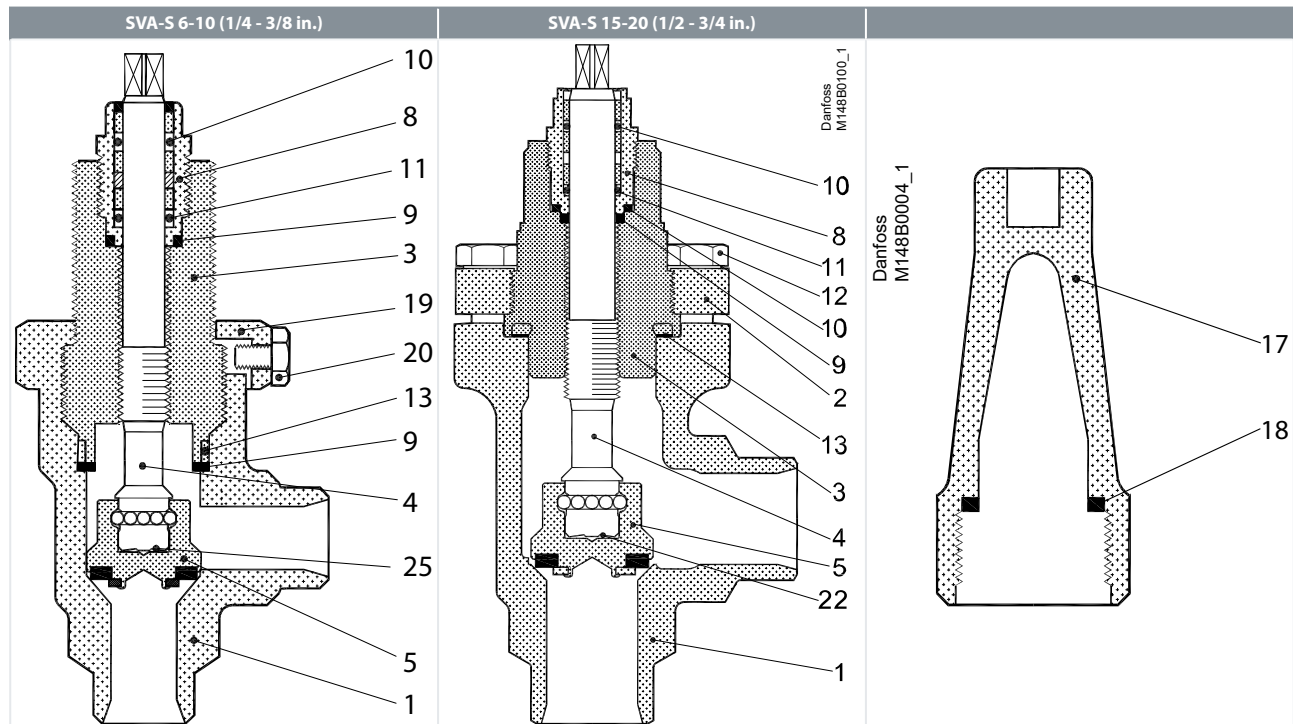


Table 4: SVA-S 6-10 & SVA-S 15-20

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
2	Bonnet, Flange	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
			P275NL, 10028-3		
3	Bonnet, Insert	Steel	115Mn30, 10087	Type 2 R, 683/9	AISI 1213
4	Spindle	Stainless steel	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
5	Cone	Steel	115Mn30, 10087	Type 2 R, 683/9	AISI 1213
8	Packing gland	Stainless steel	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
9	Packing washer	Aluminium			
10	O-ring	Chloroprene			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	High temperature steel	42CrMo5, 10269		A193
13	Gasket	Fiber, Non-asbestos			
17	Cap	Aluminium			
18	Gasket for cap	Nylon			
19	Locking nut	Steel			
20	Screw	Steel			
22	Disk spring	Steel			

Figure 3: SVA-S 25-40 (1 - 1½ in.)

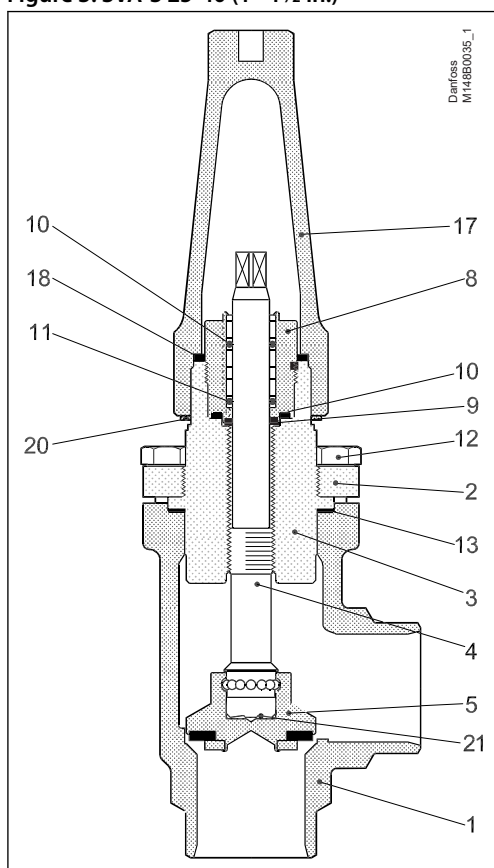


Table 5: SVA-S 25-40 (1 - 1½ in.)

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
2	Bonnet, Flange	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
			P275NL, 10028-3		
3	Bonnet, Insert	Steel	11SMn30, 10087	Type 2 R, 683/9	AISI 1213
4	Spindle	Stainless steel	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
5	Cone	Steel	11SMn30, 10087	Type 2 R, 683/9	AISI 1213
8	Packing gland	Stainless steel	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
9	Packing washer	Aluminium			
10	O-ring	Chloroprene			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	High temperature steel	42CrMo5, 10269		A193
13	Gasket	Fiber, Non-asbestos			
17	Cap	Aluminium			
18	Gasket for cap	Nylon			
20	Identification ring	Stainless steel			
21	Disk spring	Steel			

Shut-off valves, type SVA-S and SVA-L, 65 bar

Figure 4: SVA-L 15 - 40 (½ - 1½ in.)

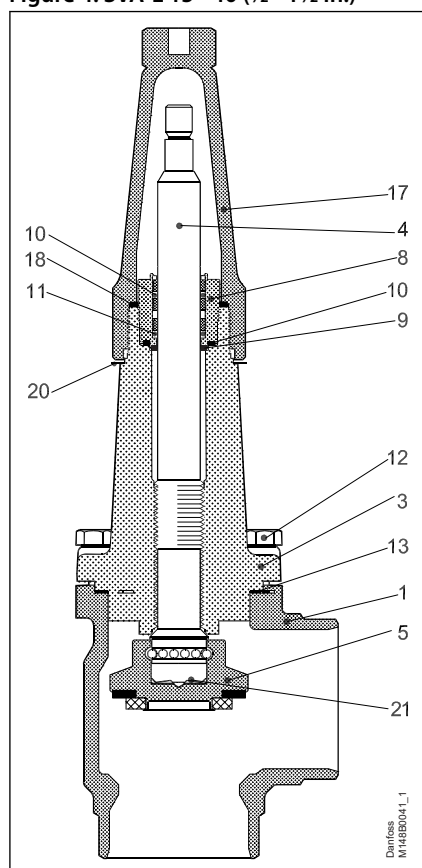


Table 6: SVA-L 15 - 40 (½ - 1½ in.)

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
3	Valve bonnet	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
4	Spindle	Stainless steel	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
5	Cone	Steel	11SMn30, 10087	Type 2 R, 683/9	AISI 1213
8	Packing gland	Stainless steel	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
9	Packing washer	Aluminium			
10	O-ring	Chloroprene			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	High temperature steel	42CrMo5, 10269		A193
13	Gasket	Fiber, Non-asbestos			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (PA6)			
20	Identification ring	Stainless steel			
21	Disk spring	Steel			

Figure 5: SVA-S 50-65 (2 - 2½ in.)

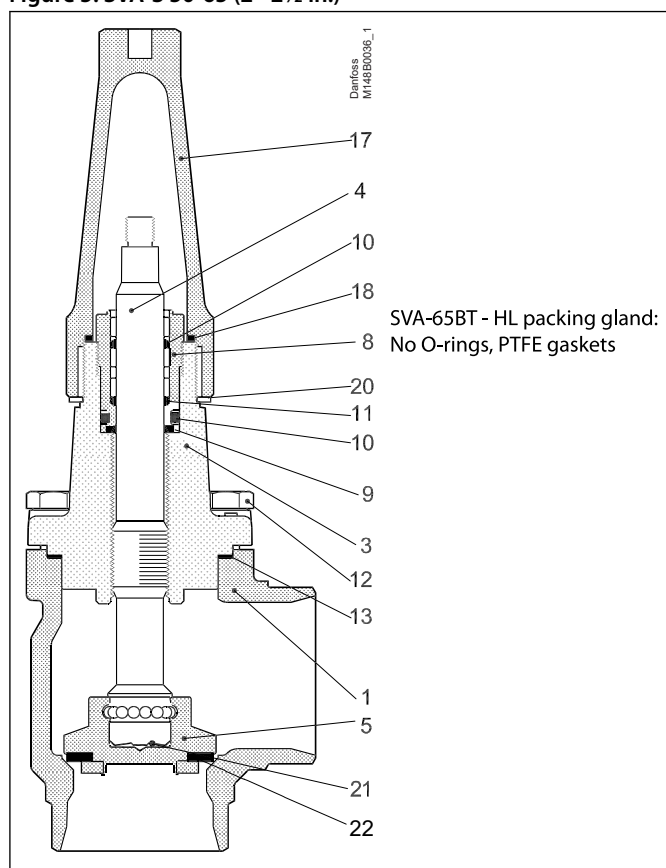


Table 7: SVA-S 50-65 (2 - 2½ in.)

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
3	Valve bonnet	Steel	G20Mn5QT, 10213-3		LCC, A352
			P285QH+QT, 10222-4		LF2, A350
4	Spindle	Stainless steel	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
5	Cone	Steel	11SMn30, 10087	Type 2 R, 683/9	AISI 1213
8	Packing gland	Stainless steel (¹⁾ (HL version) see pos. 8	X8CrNiS18-9, 10088	Type 17, 683/13	AISI 303
9	Packing washer	Aluminium (¹⁾ None			
10	O-ring	Chloroprene (¹⁾ None			
11	Spring loaded Teflon ring	PTFE (¹⁾ None			
12	Bolts	High temperature steel	42CrMo5, 10269		A193
13	Gasket	Fiber, Non-asbestos (¹⁾ Graphite			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (¹⁾ PTFE (fibre)			
19	Locking nut	Steel			
20	Identification ring	Stainless steel			
21	Disk spring	Steel			
22	Cone gasket	PTFE (fibre) (¹⁾ PEEK (fibre)			

(¹⁾ SVA-65BT only

Figure 6: SVA-S 80 - 150 (3 - 6 in.)

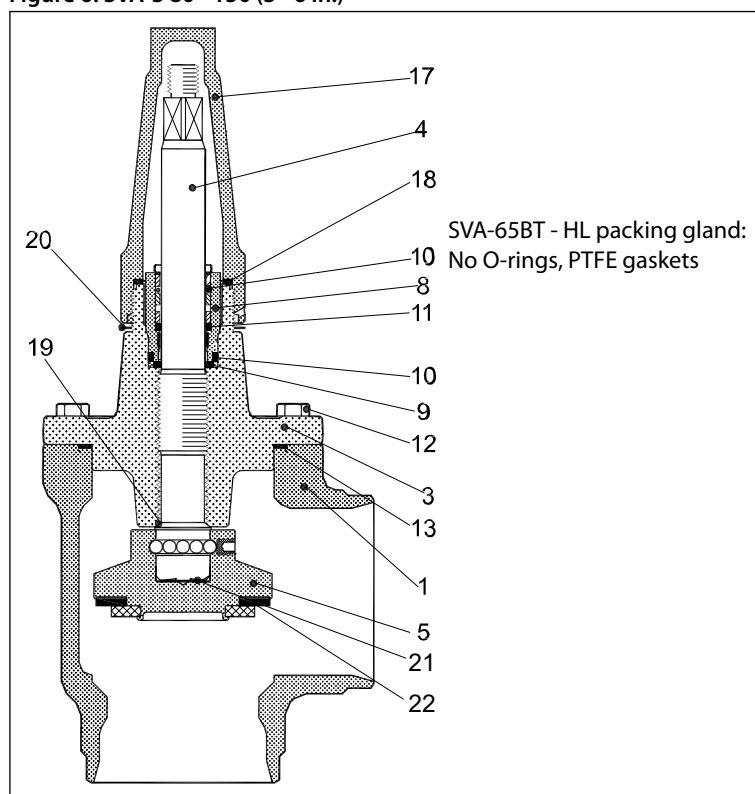


Table 8: SVA-S 80 - 150 (3 - 6 in.)

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3		LCC, A352
3	Valve bonnet	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
4	Spindle	Stainless steel	X5CrNi18-10, 10088	Type 11, R 683/13	AISI 304, A276
5	Cone Cone seal	Steel Teflon (PTFE)	115Mn30, 10087	Type 2, R 683/9	AISI 1213
8	Packing gland	Stainless steel ⁽¹⁾ (HL version) see pos. 8	X8CrNiS18-9, 10088	Type 17, R 683/13	AISI 303
9	Packing washer	Aluminium			
10	O-ring	Chloroprene ⁽¹⁾ None			
11	Spring loaded Teflon ring	PTFE ⁽¹⁾ None			
12	Bolts	High temperature steel	42CrMo5, 10269		A193
13	Gasket	Fiber, Non-asbestos ⁽¹⁾ Graphite			
17	Cap	Aluminium			
18	Gasket for cap	Nylon ⁽¹⁾ PTFE (fibre)			
19	Backseat	Teflon (PTFE) ⁽¹⁾ Steel			
20	Identification ring	Stainless steel			
21	Disk spring	Steel			
22	Cone gasket	PTFE (fibre) ⁽¹⁾ PEEK (fibre)			

⁽¹⁾ SVA-65BT only

Figure 7: SVA-S 200 (8 in.)

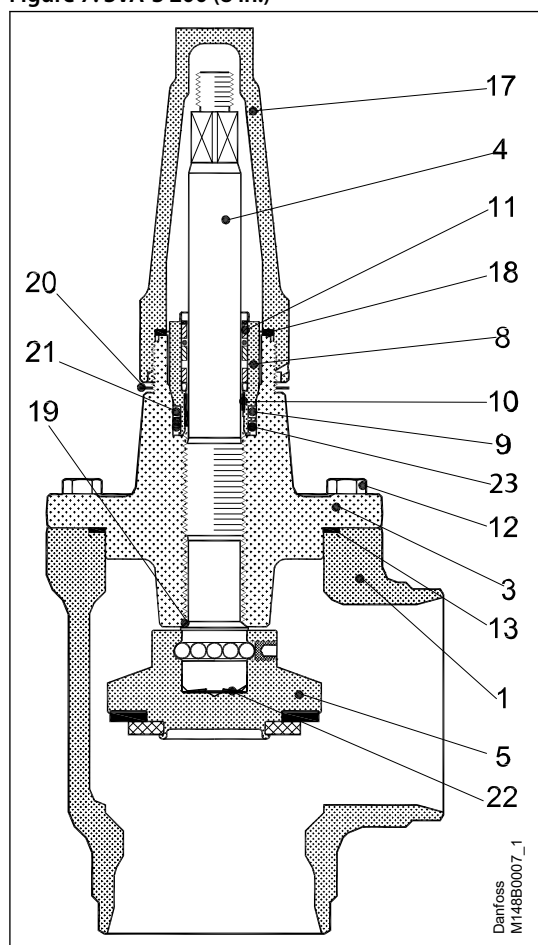


Table 9: SVA-S 200 (8 in.)

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3		LCC, A352
3	Valve bonnet	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
4	Spindle	Stainless steel	X5CrNi18-10, 10088	Type 11, R 683/13	AISI 304, A276
5	Cone Cone seal	Steel Teflon (PTFE)	11SMn30, 10087	Type 2, R 683/9	AISI 1213
8	Packing gland	Stainless steel	X8CrNiS18-9, 10088	Type 17, R 683/13	AISI 303
9	O-ring	Chloroprene			
10	Spring loaded Teflon ring	PTFE			
11	O-ring	Chloroprene			
12	Bolts	High temperature steel	42CrMo5, 10269		A193
13	Gasket	Fiber, Non-asbestos			
15	Washer	Stainless steel			
16	Nut	Stainless steel			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (PA 6)			
19	Soft backseat	Teflon (PTFE)			
20	Identification ring	Stainless steel			
21	Wear ring	Teflon (PTFE)			
22	Disk spring	Steel			
23	O-ring	PTFE/Chloroprene (Neoprene)			

Connections

Figure 8: DIN

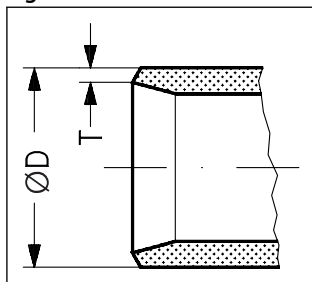


Table 10: Butt-weld DIN (EN 10220)

Size		ØD	T	ØD	T	k_v -angle	k_v -straight	C_v -angle	C_v -straight
mm	in.	mm	mm	in.	in.	m ³ /h	m ³ /h	US _{gal} /min	US _{gal} /min
6	¼	13.5	2.3	0.531	0.091	2.9	2.0	3.4	2.4
10	⅜	17.2	2.3	0.677	0.091	4.5	3.2	5.2	3.6
15	½	21.3	2.3	0.839	0.091	7.0	4.9	8.1	5.7
20	¾	26.9	2.3	1.059	0.091	14.6	10.2	16.9	11.8
25	1	33.7	2.6	1.327	0.103	24.8	17.4	28.8	20.2
32	1¼	42.4	2.6	1.669	0.102	42.6	29.8	49.4	34.6
40	1½	48.3	2.6	1.902	0.103	45.2	31.6	52.4	36.7
50	2	60.3	2.9	2.37	0.11	80	65	93	76
65	2½	76.1	2.9	3	0.11	120	97	140	113
80	3	88.9	3.2	3.50	0.13	182	152	211	176
100	4	114.3	3.6	4.50	0.14	313	278	363	323
125	5	139.7	4.0	5.50	0.16	514	470	596	545
150	6	168.3	4.5	6.63	0.18	785	597	911	693
200	8	219.1	6.3	8.63	0.25	1168	1024	1355	1188

Figure 9: ANSI

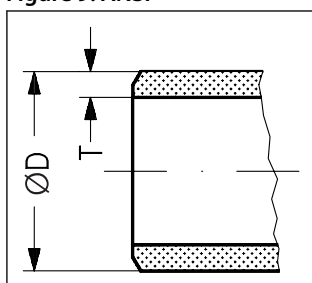


Table 11: Butt-weld ANSI (B 36.10 Schedule 80)

Size		ØD	T	ØD	T	k_v -angle	k_v -straight	C_v -angle	C_v -straight
mm	in.	mm	mm	in.	in.	m ³ /h	m ³ /h	US _{gal} /min	US _{gal} /min
6	¼	13.5	3.0	0.531	0.118	2.9	2.03	3.4	2.4
10	⅜	17.2	3.2	0.677	0.126	4.5	3.15	5.2	3.6
15	½	21.3	3.7	0.839	0.146	7.0	4.9	8.1	5.7
20	¾	26.9	4.0	1.059	0.158	14.6	10.2	16.9	11.8
25	1	33.7	4.6	1.327	0.181	24.8	17.4	28.8	20.2
32	1¼	42.4	4.9	1.669	0.193	42.6	29.8	49.4	34.6
40	1½	48.3	5.1	1.902	0.201	45.2	31.6	52.4	36.7

Table 12: Butt-weld ANSI (B 36.10 Schedule 40)

Size		ØD	T	ØD	T	k_v -angle	k_v -straight	C_v -angle	C_v -straight
mm	in.	mm	mm	in.	in.	m ³ /h	m ³ /h	US _{gal} /min	US _{gal} /min
50	2	60.3	3.9	2.37	0.15	80	65	93	76
65	2½	73.0	5.2	2.87	0.20	120	97	140	113
80	3	88.9	5.5	3.50	0.22	182	152	211	176
100	4	114.3	6.0	4.50	0.24	313	278	363	323

Shut-off valves, type SVA-S and SVA-L, 65 bar

Size		ØD	T	ØD	T	k _v -angle	k _v -straight	C _v -angle	C _v -straight
mm	in.	mm	mm	in.	in.	m ³ /h	m ³ /h	US _{gal} /min	US _{gal} /min
125	5	141.3	6.6	5.56	0.26	514	470	596	545
150	6	168.3	7.1	6.63	0.28	785	597	911	693
200	8	219.1	8.2	8.63	0.32	1168	1024	1355	1188

Figure 10: SD (DIN)

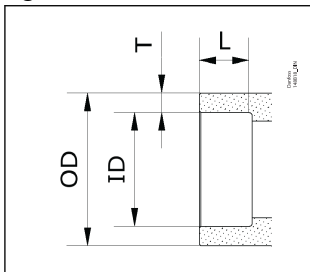


Table 13: Socket-Brazing DIN (EN 1254-5)

Size		ID	L	ØD	T	k _v -angle	k _v -straight	C _v -angle	C _v -straight
mm	in.	mm	mm	mm	mm	m ³ /h	m ³ /h	US _{gal} /min	US _{gal} /min
6	¼	6	7.7	12.7	3.35	2.9	2.0	3.4	2.4
10	¾	10	8	15.88	2.94	4.5	3.2	5.2	3.6
15	½	16	8	21.3	2.65	7.0	4.9	8.1	5.7
20	¾	22	11	26.9	2.45	14.6	10.2	16.9	11.8
25	1	28	11	33.7	2.85	24.8	17.4	28.8	20.2
32	1¼	35	15	42.4	3.7	42.6	29.8	49.4	34.6
40	1½	42	15	48.3	3.15	45.2	31.6	52.4	36.7
50	2	54	13.5	60.3	3.15	80	65	93	76
65	2½	64	13.5	73	4.5	120	97	140	113
80	3	76.1	15	88.9	6.4	182	152	211	176
100	4	108	17.5	118	5	313	278	363	323

Figure 11: SA (ASME)

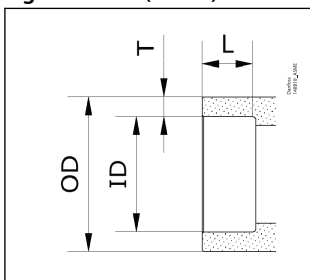


Table 14: Socket-Brazing ASME (ASME B16.50)

Size	ID	L	ØD	T	k _v -angle	k _v -straight	C _v -angle	C _v -straight
in.	mm	mm	mm	mm	m ³ /h	m ³ /h	US _{gal} /min	US _{gal} /min
¼	6.35	7.7	12.7	3.18	2.9	2.0	3.4	2.4
¾	9.53	8	15.88	3.18	4.5	3.2	5.2	3.6
½	15.88	8	21.3	2.71	7.0	4.9	8.1	5.7
¾	22.23	11	26.9	2.34	14.6	10.2	16.9	11.8
1½	28.58	11	33.7	2.56	24.8	17.4	28.8	20.2
1¾	34.93	15	42.4	3.74	42.6	29.8	49.4	34.6
1¾	41.28	15	48.3	3.51	45.2	31.6	52.4	36.7
2½	54	13.5	60.3	3.15	80	65	93	76
2½	66.7	13.5	76.1	4.70	120	97	140	113
3¾	79.38	15	88.9	4.76	182	152	211	176
4¾	104.78	17.5	114.3	4.76	313	278	363	323

Dimensions and weights

Figure 12: SVA 6 - 10 in angle execution with cap

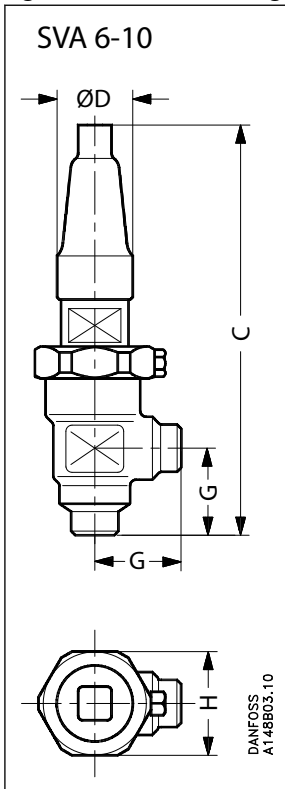


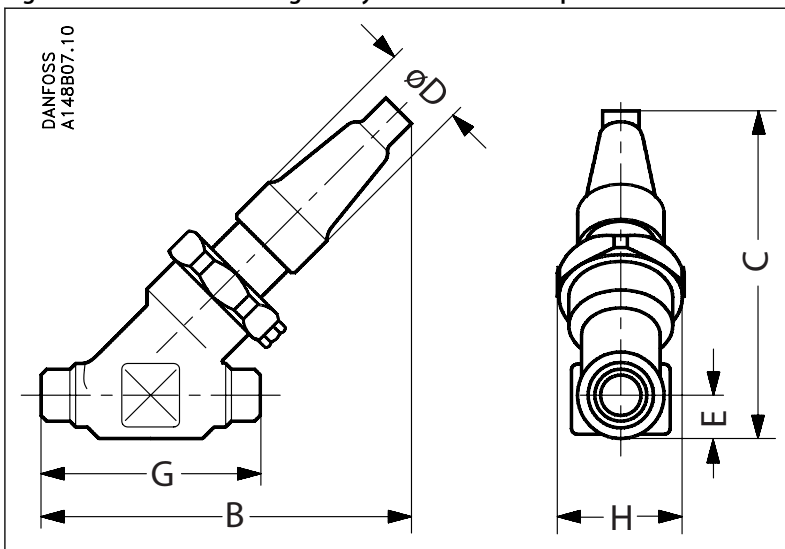
Table 15: SVA 6-10

Valve size		C	G	øD	H	Weight
SVA 6	mm	139	30	30	48	0.8 kg
	in.	5.47	1.18	1.18	1.89	
SVA 10	mm	182	45	38	60	1.4 kg
	in.	7.17	1.77	1.5	2.36	

NOTE:

Specified weights are approximate values only.

Figure 13: SVA 6 - 10 in straight-way execution with cap



Shut-off valves, type SVA-S and SVA-L, 65 bar

Table 16: SVA 6 - 10 in straight-way execution with cap

Valve size		C	B	E	G	øD	H	Weight
SVA 6	mm	110	120	13	70	30	48	0.8 kg
	in.	4.33	4.72	0.49	2.76	1.16	1.89	
SVA 10	mm	145	155	20	120	38	60	2.0 kg
	in.	5.71	6.1	0.79	4.72	1.5	2.36	

NOTE:

Specified weights are approximate values only.

Figure 14: SVA 15 - 40 (½ - 1½ in.) in angleway version with cap

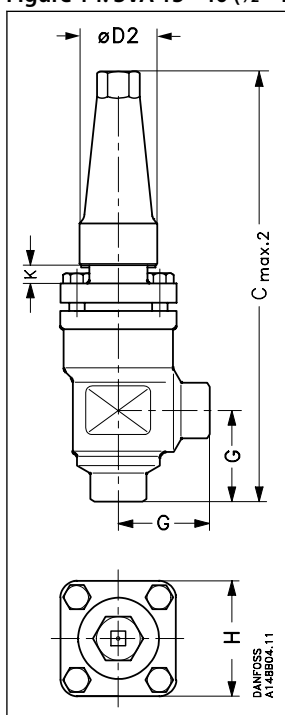


Table 17: SVA-S

Valve size		K	C _{max.2}	G	øD ₂	H	Weight
SVA 15 - 20	mm	63	248	45	38	60	1.4 kg
SVA (½ - ¾)	in.	2.48	9.76	1.77	1.5	2.36	3.1 lb
SVA 25 - 40	mm	74	330	55	50	70	2.4 kg
SVA (1 - 1½)	in.	2.91	12.99	2.17	1.97	2.76	5.3 lb

Table 18: SVA-L

Valve size		1	K	C _{max.2}	G	øD ₂	H	Weight
SVA 15 - 20	mm	63	248	248	45	38	60	1.4 kg
SVA (½ - ¾)	in.	2.48	9.76	9.76	1.77	1.5	2.36	3.1 lb
SVA 25 - 40	mm	74	330	330	55	50	70	2.4 kg
SVA (1 - 1½)	in.	2.91	12.99	12.99	2.17	1.97	2.76	5.3 lb

NOTE:

Specified weights are approximate values only.

Figure 15: SVA 15 - 40 (½ - 1½ in.) straightway version with cap

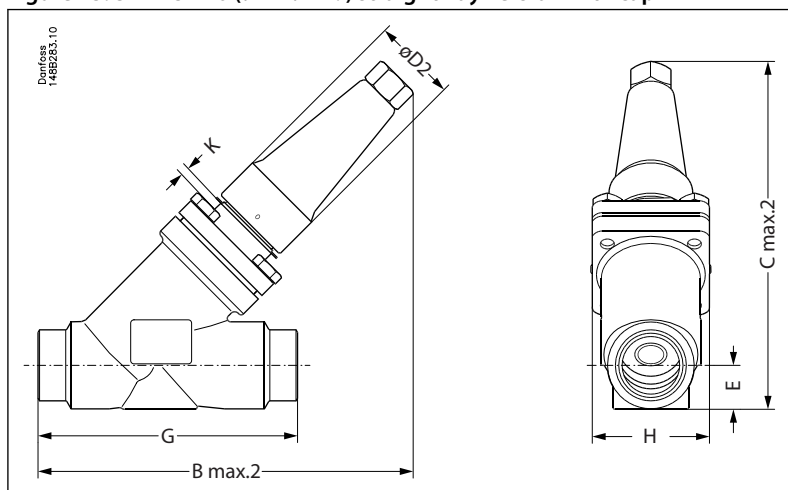


Table 19: SVA-S

Valve size		K	C _{max.2}	B _{max.2}	E	G	øD2	H	Weight
SVA 15 - 20	mm	4	141	156	20	120	38	60	2.0 kg
SVA (½ - ¾)	in.	0.16	5.55	6.14	0.79	4.72	1.5	2.36	4.4 lb
SVA 25 - 40	mm	12	208	222	26	155	50	70	3.0 kg
SVA (1 - 1½)	in.	0.47	8.19	8.74	1.02	6.1	1.97	2.76	6.6 lb

Table 20: SVA-S

Valve size		K	C _{max.2}	B _{max.2}	E	G	øD2	H	Weight
SVA 15 - 20	mm	63	184	198	20	120	38	60	2.0 kg
SVA (½ - ¾)	in.	2.48	7.24	7.8	0.79	4.72	1.5	2.36	4.4 lb
SVA 25 - 40	mm	74	252	265	26	155	50	70	3.0 kg
SVA (1 - 1½)	in.	2.91	9.92	10.43	1.02	6.1	1.97	2.76	6.6 lb

NOTE:

Specified weights are approximate values only.

Figure 16: SVA 50 - 65 (2 - 2½ in.) in angleway version with cap

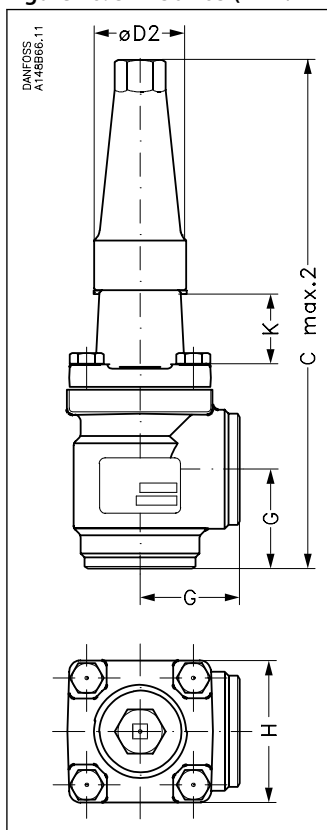


Table 21: SVA 50 - 65 (2 - 2½ in.) ANG CAP

Valve size		K	C _{max.2}	G	øD2	H	Weight
SVA 50	mm	70	315	60	50	77	3.2 kg
SVA (2)	in.	2.76	12.4	2.36	1.97	3.03	7.1 lb
SVA 65	mm	70	335	70	50	90	4.8 kg
SVA (2½)	in.	2.76	13.19	2.76	1.97	3.54	10.6 lb

i NOTE:
Specified weights are approximate values only.

Figure 17: SVA 50 - 65 (2 - 2½ in.) in straightway version with cap

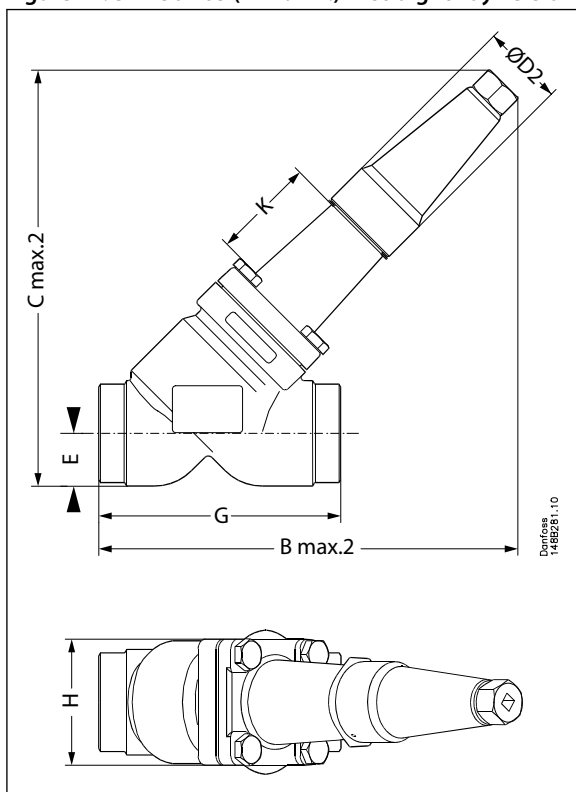


Table 22: SVA-S

Valve size		K	B _{max.2}	C _{max.2}	E	G	øD ₂	H	Weight
SVA 50	mm	70	259	257	32	148	50	77	4.2 kg
SVA (2)	in.	2.76	10.2	10.12	1.26	5.83	1.97	3.03	9.3 lb
SVA 65	mm	70	280	280	40	176	50	90	6.3 kg
SVA (2½)	in.	2.76	11.02	11.02	1.57	6.93	1.97	3.54	13.9 lb

NOTE:

Specified weights are approximate values only.

Figure 18: SVA 80 - 200 (3 - 8 in.) angleway version with cap

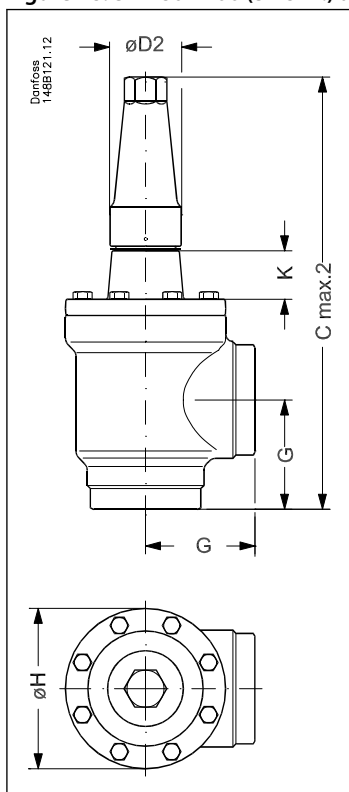


Table 23: SVA-S

Valve size		K	$C_{max.2}$	G	$\varnothing D_2$	$\varnothing H$	Weight
SVA 80	mm	76	388	90	58	129	9.7 kg
SVA (3)	in.	3	15.28	3.54	2.28	5.08	21.4 lb
SVA 100	mm	90	437	106	58	156	15.3 kg
SVA (4)	in.	3.54	17.2	4.17	2.28	6.14	33.7 lb
SVA 125	mm	90	533	128	74	193	28.1 kg
SVA (5)	in.	3.54	20.98	5.04	2.91	7.6	61.9 lb
SVA 150	mm	90	568	145	74	219	39.7 kg
SVA (6)	in.	3.54	22.36	5.71	2.91	8.62	87.5 lb
SVA 200	mm	90	678	180	86	276	79.5 kg
SVA (8)	in.	3.54	26.69	7.09	3.39	10.87	175.3 lb

NOTE:

Specified weights are approximate values only.

Figure 19: SVA 80 - 200 (3 - 8 in.) straightway version with cap

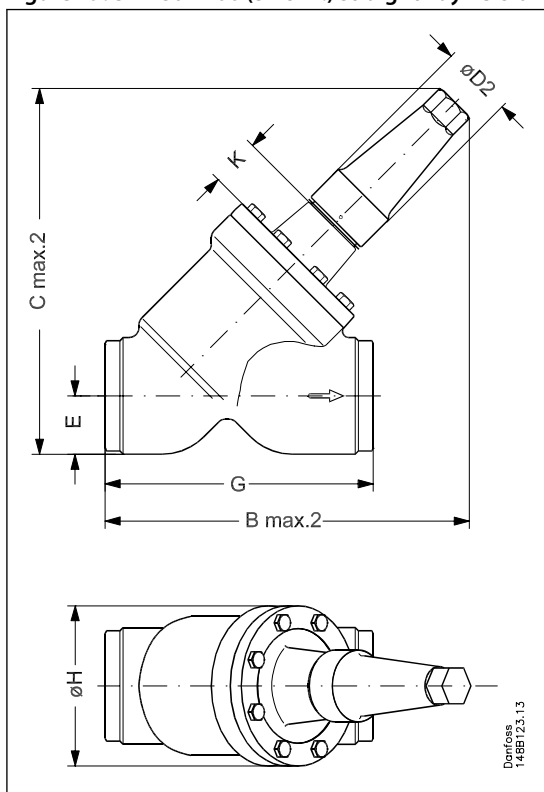


Table 24: SVA-S

Valve size	K	B _{max.2}	C _{max.2}	E	G	øD ₂	øH	Weight
SVA 80	mm	76	321	48	216	58	129	10.9 kg
SVA (3)	in.	3	12.64	1.89	8.5	2.28	5.08	24.0 lb
SVA 100	mm	90	367	60	264	58	156	18.2 kg
SVA (4)	in.	3.54	14.45	2.36	10.39	2.28	6.14	40.1 lb
SVA 125	mm	90	444	74	322	74	193	32.8 kg
SVA (5)	in.	3.54	17.48	2.91	12.68	2.91	7.6	72.3 lb
SVA 150	mm	90	483	91	370	74	219	60.0 kg
SVA (6)	in.	3.54	19.02	3.58	14.57	2.91	8.62	132.3 lb
SVA 200	mm	90	579	117	464	86	276	111.5 kg
SVA (8)	in.	3.54	22.8	4.61	18.27	3.39	10.87	245.8 lb

NOTE:

Specified weights are approximate values only.

Ordering

Ordering from the entire SVL 65 bar (943 psi) series

Table 25: Ordering of SVL 65 bar (943 psi) series

Size [DN]	Parts program											
	Housing								Top complete			
	ANG				STR				SVA-S (cap)	SVA-L (cap)	SVA- 65BT	
	DIN	ANSI	SD	SA	DIN	ANSI	SD	SA				
6	148B6689	148B6687	148B6722	148B6711	148B6693	148B6691	148B6743	148B6732		148B6695		
10	148B6690	148B6688	148B6723	148B6712	148B6694	148B6692	148B6744	148B6733				
15	148B6622	148B6612	148B6724	148B6713	148B6642	148B6632	148B6745	148B6734		148B6652	148B6659	
20	148B6623	148B6613	148B6725	148B6714	148B6643	148B6633	148B6746	148B6735		148B6652	148B6659	
25	148B6624	148B6614	148B6726	148B6715	148B6644	148B6634	148B6747	148B6736		148B6653	148B6660	
32	148B6625	148B6615	148B6727	148B6716	148B6645	148B6635	148B6748	148B6737		148B6653	148B6660	
40	148B6626	148B6616	148B6728	148B6717	148B6646	148B6636	148B6749	148B6738		148B6653	148B6660	
50 ⁽¹⁾	148B6627	148B6617	148B6718		148B6647	148B6637	148B6739			148B6654		148B6804
65 ⁽¹⁾	148B6628	148B6618	148B6729	148B6719	148B6648	148B6638	148B6750	148B6740		148B6655		148B6805
80 ⁽¹⁾	148B6629	148B6619	148B6730	148B6720	148B6649	148B6639	148B6751	148B6741		148B6656		148B6806
100 ⁽¹⁾	148B6630	148B6620	148B6731	148B6721	148B6650	148B6640	148B6752	148B6742		148B6657		148B6807
125	148B6631	148B6621			148B6651	148B6641				148B6658		
150												
200												

⁽¹⁾ Housings and Top complete SVA-65BT in these sizes: Max. temperature 190 °C (374 °F)

Table 26: Gasket and complete valve

Size [DN]	Gasket	Complete valve			
	High temp for SVA-65BT	SVA (cap)			
		ANG		STR	
		DIN	ANSI	DIN	ANSI
6			148B5033		148B5053
10			148B5034		148B5054
15			148B5035		148B5055
20			148B5036		148B5056
25			148B5037		148B5057
32			148B5038		148B5058
40			148B5039		148B5059
50	148B6808		148B5040		148B5060
65	148B6809		148B5041		148B5061
80	148B6810		148B5042		148B5062
100	148B6811		148B5043		148B5063
125			148B5044		148B5064
150		148B6665	148B6667	148B6666	148B6668
200		148B6673	148B6675	148B6674	148B6676

Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

Some approvals may change over time. You can check the most current status at danfoss.com or contact your local Danfoss representative if you have any questions.


Valid approvals

File name	Document type	Document topic	Approval authority
RU Д-ДК.БЛ08.В.03634	EAC Declaration	Machinery & Equipment	EAC
0045 202 1204 Z 00354 19 D 001(00)	Pressure - Safety Certificate		TÜV
RU Д-ДК.РА01.В.72064_20	EAC Declaration	PED	EAC
RU С-ДК.БЛ08.В.01093_20	Pressure - Safety Certificate	PED	EAC
TS271067J-2023	Manufacturing Permission	TSG	AQSIQ
MD 033F0691.AE	Manufacturers Declaration	RoHS	Danfoss
MD 033F0686.AH	Manufacturers Declaration	PED	Danfoss
BV 03709-F0 BV	Marine - Safety Certificate		BV
TAP0000003 Rev. 1	Marine - Safety Certificate		DNV GL
EU 033F0685.AK	EU Declaration	EMCD/PED	Danfoss
033F0453.AD	Manufacturers Declaration	ATEX	Danfoss
19.10048.266	Marine - Safety Certificate		RMRS

Pressure Equipment directive (PED)

SVA valves are approved according to the European standard specified in the Pressure Equipment Directive and are CE marked. For further details / restrictions - see Installation Instruction.

Table 27: Pressure Equipment Directive (PED)

SVL			
	Nominal bore	DN ≤ 25 mm (1 in.)	DN32-80 mm (1¼ - 3 in.)
	Classified for	Fluid group I	
	Category	Article 3, paragraph 3	II

Online support

Danfoss offers a wide range of support along with our products, including digital product information, software, mobile apps, and expert guidance. See the possibilities below.

The Danfoss Product Store



The Danfoss Product Store is your one-stop shop for everything product related—no matter where you are in the world or what area of the cooling industry you work in. Get quick access to essential information like product specs, code numbers, technical documentation, certifications, accessories, and more.

Start browsing at store.danfoss.com.

Find technical documentation



Find the technical documentation you need to get your project up and running. Get direct access to our official collection of data sheets, certificates and declarations, manuals and guides, 3D models and drawings, case stories, brochures, and much more.

Start searching now at www.danfoss.com/en/service-and-support/documentation.

Danfoss Learning



Danfoss Learning is a free online learning platform. It features courses and materials specifically designed to help engineers, installers, service technicians, and wholesalers better understand the products, applications, industry topics, and trends that will help you do your job better.

Create your Danfoss Learning account for free at www.danfoss.com/en/service-and-support/learning.

Get local information and support



Local Danfoss websites are the main sources for help and information about our company and products. Find product availability, get the latest regional news, or connect with a nearby expert—all in your own language.

Find your local Danfoss website here: www.danfoss.com/en/choose-region.

Spare Parts



Get access to the Danfoss spare parts and service kit catalog right from your smartphone. The app contains a wide range of components for air conditioning and refrigeration applications, such as valves, strainers, pressure switches, and sensors.

Download the Spare Parts app for free at www.danfoss.com/en/service-and-support/downloads.

Coolselector®2 - find the best components for you HVAC/R system



Coolselector®2 makes it easy for engineers, consultants, and designers to find and order the best components for refrigeration and air conditioning systems. Run calculations based on your operating conditions and then choose the best setup for your system design.

Download Coolselector®2 for free at coolselector.danfoss.com.

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues descriptions, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the product. All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.