



Stop valves for industrial refrigeration,

Type SVA 6 (1/4 in.) - 10 (3/8 in.)

Type SVA-ST and SVA-HS 15 (1/2 in.) - 200 (8 in.)

Type SVA-SS 15 (1/2 in.) - 125 (5 in.)

Contents

	Page
Introduction.....	3
Features.....	3
Additional features for high spec. version (SVA-HS).....	4
Design	4
Technical data	5
Connections:	
SVA-ST, SS and HS.....	5
SVA 6-10.....	6
Material specification	7
Dimensions and weights.....	13
Ordering	21

Introduction

SVA are angleway and straightway stop valves which are designed to meet all industrial refrigeration application requirements.

The valves are designed to give favourable flow characteristics and are easy to dismantle and repair when necessary. The valve cone is designed to ensure perfect closing.

**Features**

- Applicable to all common refrigerants including R717 and non corrosive gases/liquids dependent on sealing material compatibility
- Optional accessories:
 - Heavy duty industrial hand wheel for frequent operation
 - Cap for infrequent operation
 - Lock washers for the stop valves subjected to high vibrations/pulsations
- Available in angleway and straightway versions with standard bonnet or extended bonnet (15-100) 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 (1/4 - 2½ in.)
 - Internal PTFE backseating
 - DN 80 - 200 (3 - 8 in.)
- Can accept flow in both directions
- Standard bonnet is suitable for installation in normal insulated systems

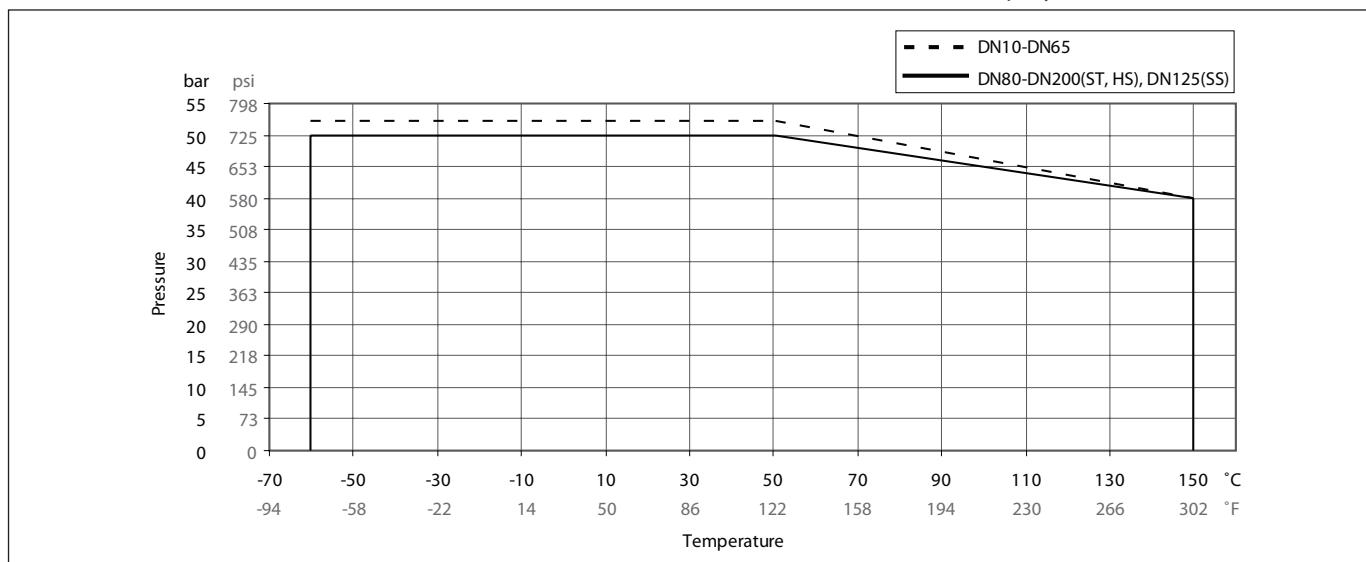
- Housing and bonnet material for SVA-ST and HS are in low temperature steel according to requirements of the Pressure Equipment Directive and other international classification authorities

SVA-SS housing is made of special cold resistant stainless steel approved for low temperature operations.

- Stainless steel bolts.
- Pressure range:
Standard version
SVA-ST, HS: 40 bar g (580 psi g) in the whole temperature range
SVA-ST: for more than 40 bar g (580 psi g), see the curve below.
Please note that the minimum temperature is -58°F (-50°C).

SVA-SS, HS: See the curve below

- Temperature range:
Standard version
SVA-ST: -50/+150°C (-58/+302°F)
SVA-SS, HS: -60/+150°C (-76/+302°F)
- Classification: DNV, LR, SAQ, CRN, BV etc.
To get an updated list of certification on the products please contact your local Danfoss Sales Company



Additional features for high spec. version (SVA-HS)

- Low temperature version with extended bonnet for insulated low temperature applications.
- Can be used in chemical and petro-chemical applications.
- Stainless steel packing gland with special teflon low temperature spindle seal.
- Temperature range:
High spec. version
-60/+150°C (-76/+302°F)

Design*Connections*

Available with the following connections:

- Butt-weld DIN (EN 10220)
- Butt-weld ANSI (B 36.10 Schedule 80),
 - DN 6 - 40 (1/4 - 1½ in.)
- Butt-weld ANSI (B 36.10 Schedule 40),
 - DN 50 - 200 (2 - 8 in.)
- Socket Weld (ANSI B 16.11),
 - DN 15 - DN 50 (½ - 2 in.)
- Outside pipe thread
 - G 1½ in. - G 7/8 in. (ISO 228/1)
- FPT Female Pipe Thread, NPT (ANSI/ASME B 1.20.1),
 - DN 15 - 32 (½ - 1¼ in.)

Housing

Made of special, cold resistant steel (SVA-ST, HS) or stainless steel (SVA-SS) approved for low temperature operations.

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. A teflon tightening ring provides perfect sealing at a minimum closing momentum.

Spindle

Made of polished stainless steel, ideal for O-ring sealing.

Packing gland

Standard version (SVA 6-10 and SVA-ST):

The standard packing gland ensures a perfect tightness in the range: -50/+150°C (-58/+302°F). The packing glands are equipped with a scraper ring to prevent penetration of dirt and ice into the packing gland.

Stainless steel version (SVA-SS):

The stainless steel packing gland comprises a spring loaded seal packing gland which ensures a perfect tightness in the range: -60/+150°C (-76/+302°F).

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

High spec. version (SVA-HS):

This comprises a threaded bush equipped with teflon wear rings to prevent damage of the spindle surface. In addition, a scraper ring is mounted to prevent dirt and ice to penetrate into the packing gland. The sealing consists of conical shaped teflon rings supported by metal bushings and ensures a perfect tightness in the range: -60°C/+150°C (-76°F/+302°F).

Pressure Equipment Directive (PED)

SVA-ST and SVA-HS valves are approved according to the European standard specified in the Pressure Equipment Directive and are CE marked.

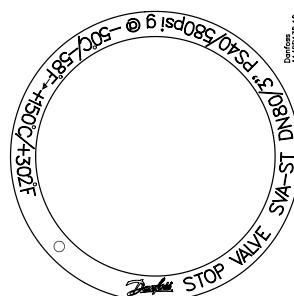
For further details / restrictions – see Installation Instruction.

Installation

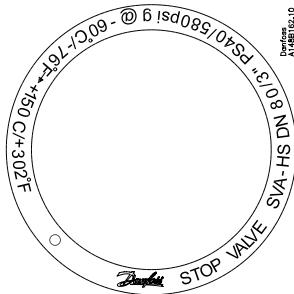
It is recommended that the valves be installed in the direction of flow indicated by the arrow on the valve body. The valve can be installed in the opposite direction but this slightly reduces the k_v -value (C_v -value).

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.

For further information refer to installation instructions for SVA.



Example of Marking Ring, Valve type SVA-ST



Example of marking ring, valve type SVA-HS

SVA			
Nominal bore	DN≤ 25 mm (1 in.)	DN32-80 mm (1½ - 3 in.)	DN100 - 200 mm (4-8 in.)
Classified for	Fluid group I		
Category	Article 3, paragraph 3	II	III



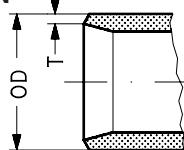
Technical data

- Refrigerants (SVA 6-10 and SVA-ST)
Applicable to all common non flammable refrigerants including R717 and non corrosive gases/liquids dependent on sealing material compatibility. For further information please see installation instruction for SVA.
- Refrigerants (SVA-HS)
Applicable to all common refrigerants including flammable hydrocarbons and all non-corrosive gases/liquids. For further information please see installation instruction for SVA-HS.
- Temperature range
Standard version (ST):
-50/+150°C (-58/+302°F).
- High spec. and stainless steel version (HS and SS):
-60/+150°C (-76/+302°F).
- Pressure range
The valves are designed for max. working pressure 40 bar g (580 psi g). Valves for higher working pressure are available on request.
SVA-SS are designed for max. working pressure 52 bar (754 psi g).

Connections
SVA-ST, SS and HS

Size mm	Size in.	OD mm	T mm	OD in.	T in.			k _v -angle m ³ /h	k _v -straight m ³ /h	C _v -angle USgal/min	C _v -straight USgal/min
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DIN

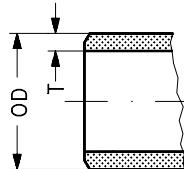


Butt-weld DIN (EN 10220)

6	1/4 3/8	13.5 17.2	2.3 2.3	0.531 0.677	0.091 0.091			2.9 4.5	2.0 3.2	3.4 5.2	2.4 3.6
15	1/2 3/4	21.3 26.9	2.3 2.3	0.839 1.059	0.091 0.091			7.0 14.6	4.9 10.2	8.1 16.9	5.7 11.8
20											
25	1	33.7	2.6	1.327	0.103			24.8	17.4	28.8	20.2
32	1 1/4	42.4	2.6	1.669	0.102			42.6	29.8	49.4	34.6
40	1 1/2	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	2 1/2	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

Size mm	Size in.	OD mm	T mm	OD in.	T in.			k _v -angle m ³ /h	k _v -straight m ³ /h	C _v -angle USgal/min	C _v -straight USgal/min
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ANSI



Butt-weld ANSI (B 36.10 Schedule 80)

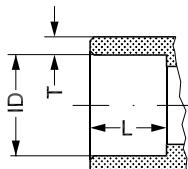
6	1/4 3/8	13.5 17.2	3.0 3.2	0.531 0.677	0.118 0.126			2.9 4.5	2.03 3.15	3.4 5.2	2.4 3.6
15	1/2 3/4	21.3 26.9	3.7 4.0	0.839 1.059	0.146 0.158			7.0 14.6	4.9 10.2	8.1 16.9	5.7 11.8
20											
25	1	33.7	4.6	1.327	0.181			24.8	17.4	28.8	20.2
32	1 1/4	42.4	4.9	1.669	0.193			42.6	29.8	49.4	34.6
40	1 1/2	48.3	5.1	1.902	0.201			45.2	31.6	52.4	36.7

Butt-weld ANSI (B 36.10 Schedule 40)

50	2	60.3	3.9	2.37	0.15			80	65	93	76
65	2 1/2	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
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

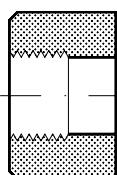
**Connections
SVA-ST, SS and HS**

Size mm	Size in.	ID mm	T mm	ID in.	T in.	L mm	L in.	k_v -angle m³/h	k_v -straight m³/h	C_v -angle USgal/min	C_v -straight USgal/min
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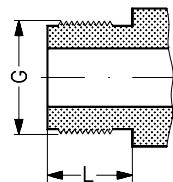
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Socket welding ANSI (B 16.11)

15	1/2	21.8	6.0	0.858	0.235	10	0.39	7.0	4.9	8.1	5.7
20	3/4	27.2	4.6	1.071	0.181	13	0.51	10.0	7.0	11.9	8.1
25	1	33.9	7.2	1.335	0.284	13	0.51	24.8	17.4	28.8	20.2
32	1 1/4	42.7	6.1	1.743	0.240	13	0.51	42.6	29.8	49.4	34.6
40	1 1/2	48.8	6.6	1.921	0.260	13	0.51	45.2	31.6	52.4	36.7
50	2	61.2	6.2	2.41	0.24	16	0.63	80	65	93	76

Size mm	Size in.	Inside pipe tread			k_v -angle m³/h	k_v -straight m³/h	C_v -angle USgal/min	C_v -straight USgal/min
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FPT

FPT inside pipe thread, NPT (ANSI/ASME B 1.20.1)

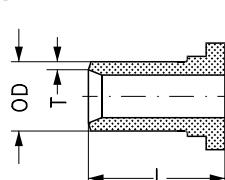
15	1/2	(1/2 × 14 NPT) (3/4 × 14 NPT)			8.5	6.0	9.9	7.0
20	3/4				10	7.0	11.6	8.1
25	1	(1 × 11.5 NPT) (1 1/4 × 11.5 NPT)			32	22.4	37.1	26.0
32	1 1/4				36	25.2	41.8	29.3

Connections - SVA 6 and SVA-ST 15
T


Size mm	Size in.	Outside pipe thread	L mm	L in.	K_v -angle m³/h	K_v -str. m³/h	C_v -angle USgal/min	C_v -str. USgal/min
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T outside pipe thread, (ISO 228/1)

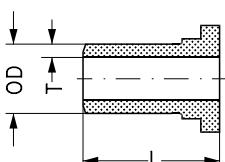
6	1/4	G 1/2	16	0.63	2.5	2.0	2.9	2.0
15	3/8 - 1/2	G 7/8	19	0.76	7.0	4.9	8.1	5.7

Nipples for T outside pipe thread, (ISO 228/1)
ND


Size mm	Size in.	OD mm	T mm	OD in.	T in.	L mm	L in.	Inside pipe thread			
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ND welding nipples, (DIN 2448)

6	1/4	13.5	2.3	0.531	0.091	60	2.36	G 1/2			
10	3/8	17.2	2.3	0.677	0.091	50	1.97	G 7/8			
15	1/2	21.3	2.3	0.852	0.091	50	1.97	G 7/8			

NA


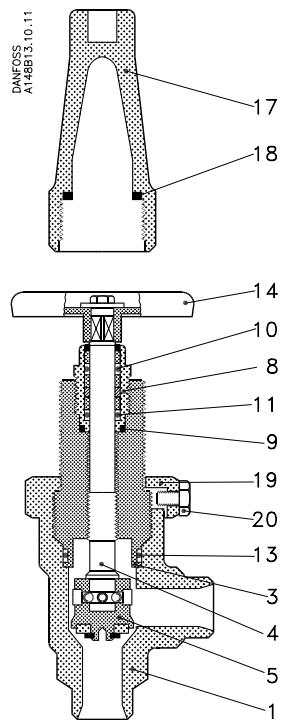
Size mm	Size in.	OD mm	T mm	OD in.	T in.	L mm	L in.	Inside pipe thread			
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NA welding nipples, ANSI (B 36.10 Schedule 80)

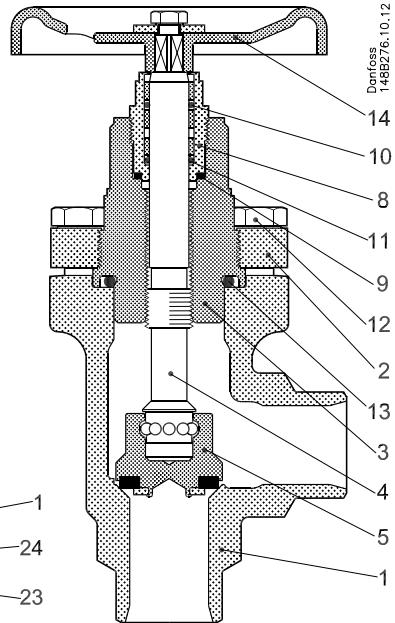
6	1/4	13.5	3.0	0.531	0.118	60	2.36	G 1/2			
10	3/8	17.2	3.2	0.677	0.126	50	1.97	G 7/8			
15	1/2	21.3	3.7	0.852	0.198	50	1.97	G 7/8			

Material specification

SVA-ST 6-10 (1/4 - 3/8 in.)



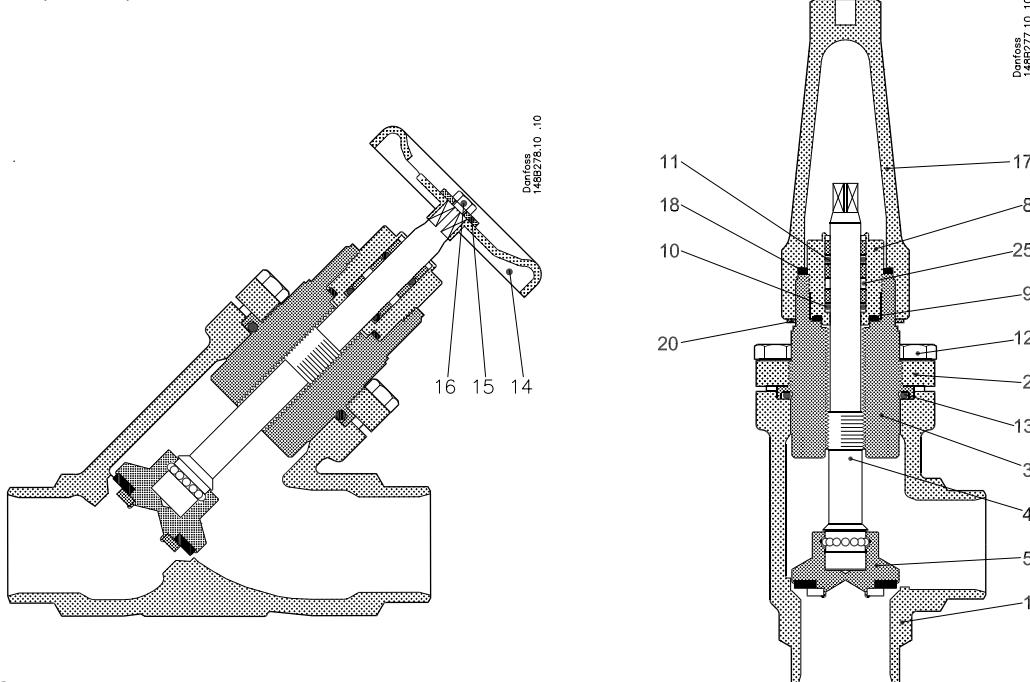
SVA-ST and SVA-SS 15-20 (1/2 - 3/4 in.)



No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3 ----- P285QH+QT, 10222-4		LCC, A352 ----- LF2, A350
		Stainless steel (SVA-SS)	XSCrNi18-10, 10088		AISI 304
2	Bonnet, Flange	Steel	G20Mn5QT, 10213-3 ----- P285QH+QT, 10222-4		LCC, A352 ----- LF2, A350
		Stainless steel (SVA-SS)	XSCrNi18-10, 10088		AISI 304
3	Bonnet, Insert	Steel	11SMn30 10087	Type 2 R 683/9	AISI 1213
		Stainless steel (SVA-SS)			
4	Spindle	Stainless steel	X8CrNiS18-9 10088 DIN 17440 (SVA-SS only)	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	Cloroprene (Neoprene)			
11	O-ring (SVA-ST)	Cloroprene (Neoprene)			
	Spring loaded Teflon ring (SVA-SS)	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	O-ring	Cloroprene (Neoprene)			
14	Handwheel	Steel			
17	Cap	Aluminium			
18	Gasket f. cap	Nylon			
19	Locking nut	Steel			
20	Screw	Steel			
22	Welding nipple	Steel	S235JRG2 10025	Fe260B, 630	Grade C, A 283
23	Nut	Steel	11SMn30 10087	Type 2 R 683/9	AISI 1213
24	Packing washer	Non-asbestos			

Material specification

SVA-ST, SS 25-40 (1 - 1½ in.)

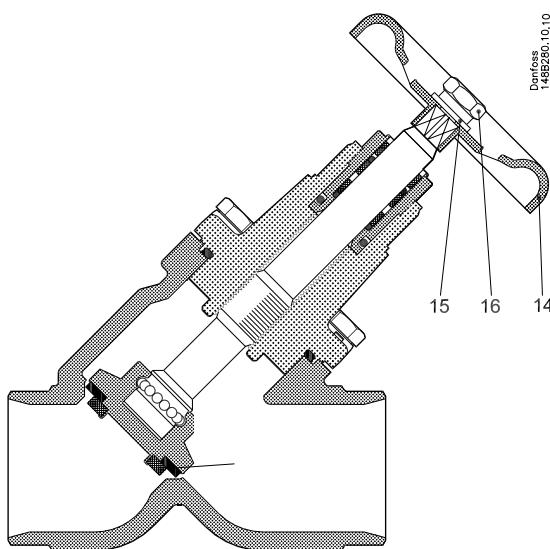


SVA-ST, SS

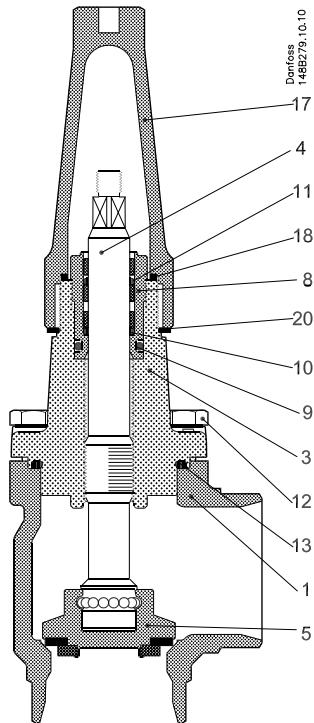
No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3		LCC, A352
			-----		-----
		Stainless steel (SVA-SS)	XSCrNi18-10, 10088		AISI 304
2	Bonnet, flange	Steel	G20Mn5QT, 10213-3		LCC, A352
			-----		-----
		Stainless steel (SVA-SS)	XSCrNi18-10, 10088		AISI 304
3	Bonnet, Insert	Steel	11SMn30 10087	Type 2 R 683/9	AISI 1213
		Stainless steel (SVA-SS)			
4	Spindle	Stainless steel	X8CrNiS18-9 10088 DIN 17440 (SVA-SS only)	Type 17 683/13	AISI 303
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 17 683/13	AISI 303
9	O-ring	Cloroprene (Neoprene)			
10	O-ring (SVA-ST) Spring loaded Teflon ring (SVA-SS)	Cloroprene (Neoprene) PTFE			
11	O-ring	Cloroprene (Neoprene)			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	O-ring	Cloroprene (Neoprene)			
14	Hand wheel	Steel			
15	Washer	Stainless steel (A2)			
16	Screw	Stainless steel (A2)			
17	Cap	Aluminium			
18	Gasket for cap	Nylon			
20	Identification ring	Stainless steel			

Material specification

SVA-ST, SS 50-65 (2 - 2½ in.)



SVA-ST,SS 50-65 (2-2½ in.) and SVA-SS 80-125 (3 - 5 in.)

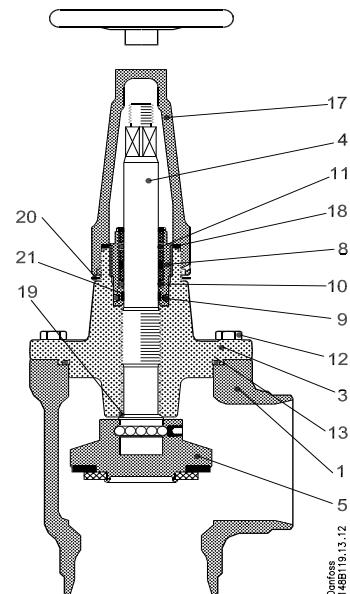
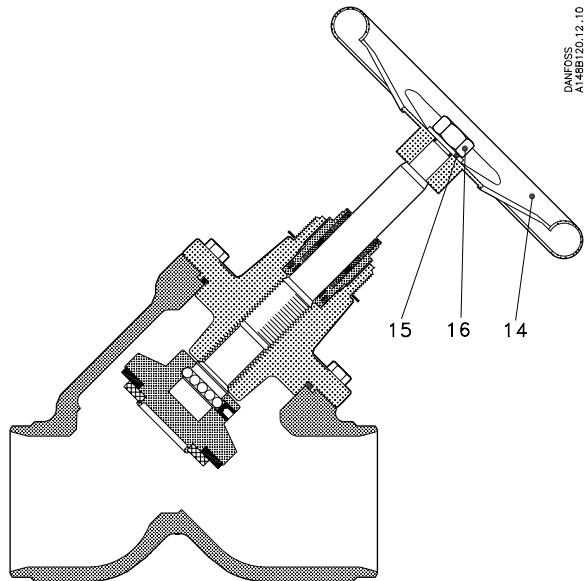


SVA-ST, SS

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3 ----- P285QH+QT, 10222-4		LCC, A352 ----- LF2, A350
		Stainless steel (SVA-SS 50-65) Stainless steel (SVA-SS 80-125)	XSCrNi18-10, 10088 GX5CrNi 18-10, 10213-4		AISI 304
3	Valve bonnet	Steel	G20Mn5QT, 10213-3 ----- P285QH+QT, 10222-4		LCC, A352 ----- LF2, A350
		Stainless steel (SVA-SS 50-65) Stainless steel (SVA SS 80-125)	XSCrNi18-10, 10088 GX5CrNiMo 19-11, 10213-4		AISI 304
4	Spindle	Stainless steel	X8CrNiS18-9 10088 DIN 17440 (SVA-SS only)	Type 17 R 683/13	AISI 303
5	Cone Cone seal	Steel Teflon (PTFE)	11SMn30 10087	Type 2, R 683/13	AISI 1213
8	Packing gland	Stainless steel	X8CrNiS18-9 10088	Type 17 R 683/13	AISI 303
9	O-ring	Cloroprene (Neoprene)			
10	O-ring (SVA-ST)	Cloroprene (Neoprene)			
	Spring loaded Teflon ring (SVA-SS)	PTFE			
11	O-ring	Cloroprene (Neoprene)			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	O-ring	Cloroprene (Neoprene)			
14	Hand wheel	Steel			
15	Washer	Stainless steel (A2)			
16	Nut	Stainless steel (A2)			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (PA 6)			
20	Identification ring	Stainless steel			

Material specification

SVA-ST 80 - 200 (3 - 8 in.)

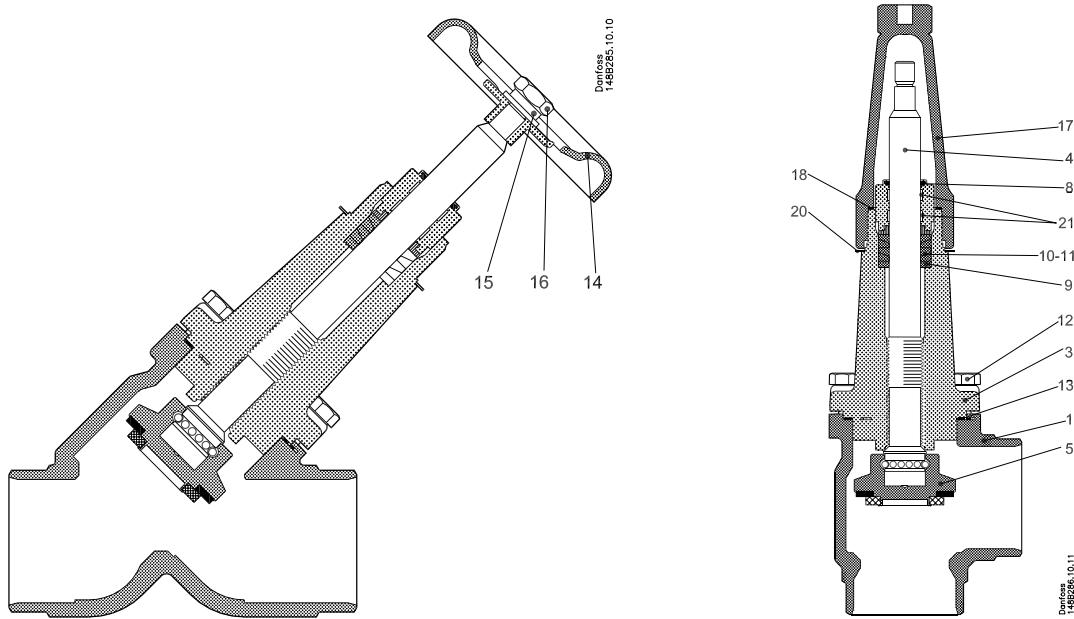


SVA-ST

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	Cloroprene (Neoprene)			
10	O-ring	Cloroprene (Neoprene)			
11	O-ring	Cloroprene (Neoprene)			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	O-ring	Cloroprene (Neoprene)			
14	Hand wheel	Steel			
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)			

Material specification

SVA-HS 15 - 65 (½ - 2½ in.)

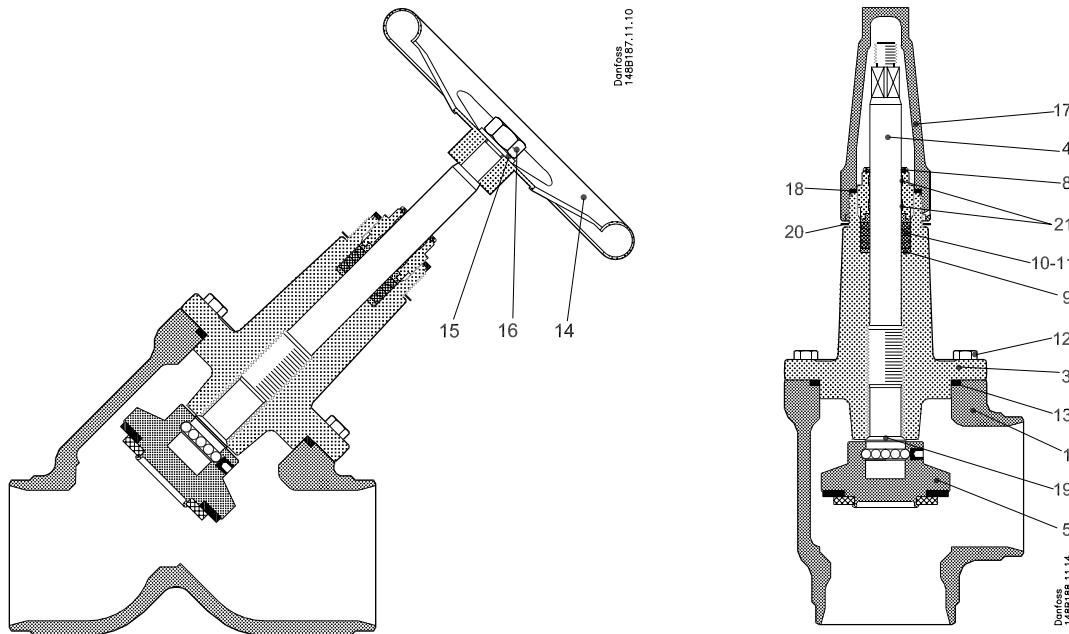


SVA-HS

No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
3	Valve bonnet	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
4	Spindle	Stainless steel	X2CrNiMo17-12-2 10088		AISI 316
5	Cone Cone seal	Steel 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	Washer	Cast iron			
10-11	Seal ring	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
14	Hand wheel	Steel			
15	Washer	Stainless steel			
16	Screw/Nut	Stainless steel			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (PA6)			
20	Identification ring	Stainless steel			
21	Wear ring	PTFE (Teflon)			

Material specification

SVA-HS 80 - 200 (3 - 8 in.)



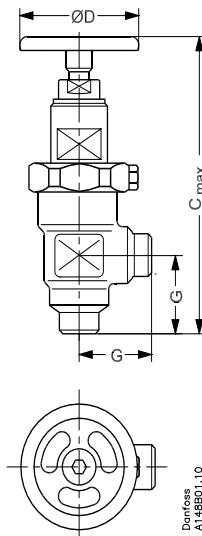
SVA-HS

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	X2CrNiMo17-12-2 10088		AISI 316
5	Cone Cone seal	Steel 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	Washer	Cast iron			
10-11	Seal ring	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
14	Hand wheel	Steel			
15	Washer	Stainless steel			
16	Screw/Nut	Stainless steel			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (PA6)			
19	Internal soft backseating	PTFE			
20	Identification ring	Stainless steel			
21	Wear ring	PTFE			

Dimensions and weights

SVA 6-10 in angle execution with handwheel (SVA 121)

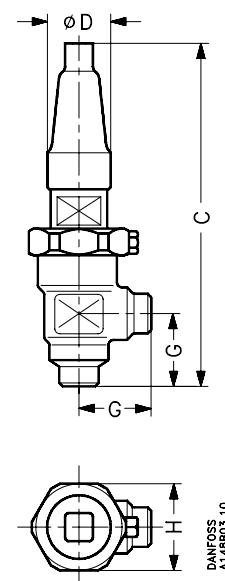
SVA 6-10



Valve size		C _{max.}	G	ØD	□H	Weight
SVA 6	mm in.	128 5.04	30 1.18	50 1.97		0.7 kg
SVA 10	mm in.	173 6.81	45 1.77	60 2.36	60 2.36	1.4 kg

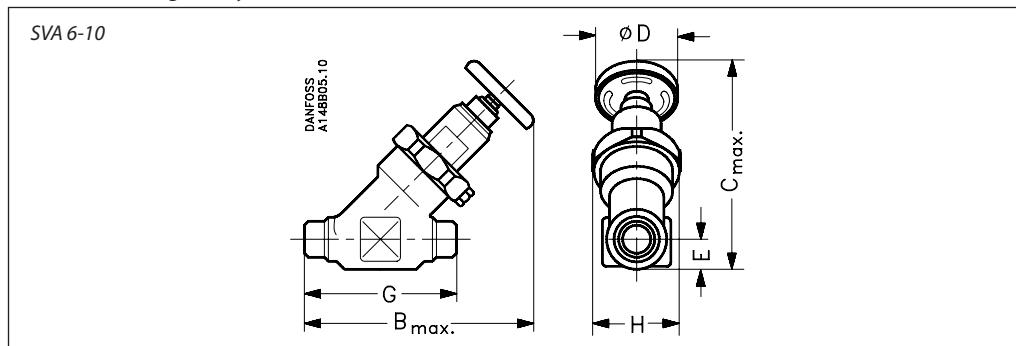
*SVA 6 - 10 in angle execution with cap (SVA 123)
or in angle execution with cap and extended bonnet (SVA 126)*

SVA 6-10

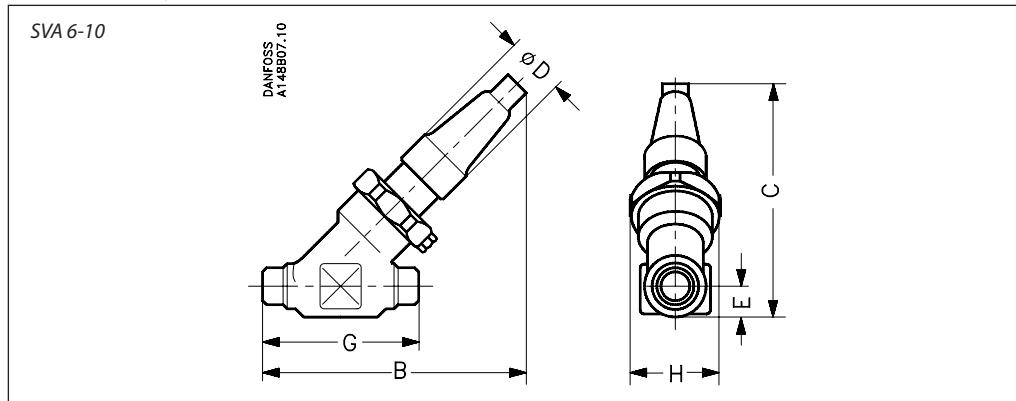


Valve size		C	G	ØD	□H	Weight
SVA 6	mm in.	139 5.47	30 1.18	30 1.18	48 1.89	0.8 kg
SVA 10	mm in.	182 7.17	45 1.77	38 1.50	60 2.36	1.4 kg

Specified weights are approximate values only.

Dimensions and weights
SVA 6 - 10 in straight-way execution with handwheel (SVA 221)


Valve size		C _{max.}	B _{max.}	E	G	ØD	□H	Weight
SVA 6	mm in.	110 4.33	120 4.72	13 0.49	70 2.76	50 1.97	48 1.89	0.7 kg
SVA 10	mm in.	145 5.71	160 6.30	20 0.79	120 4.72	60 2.36	60 2.36	2.0 kg

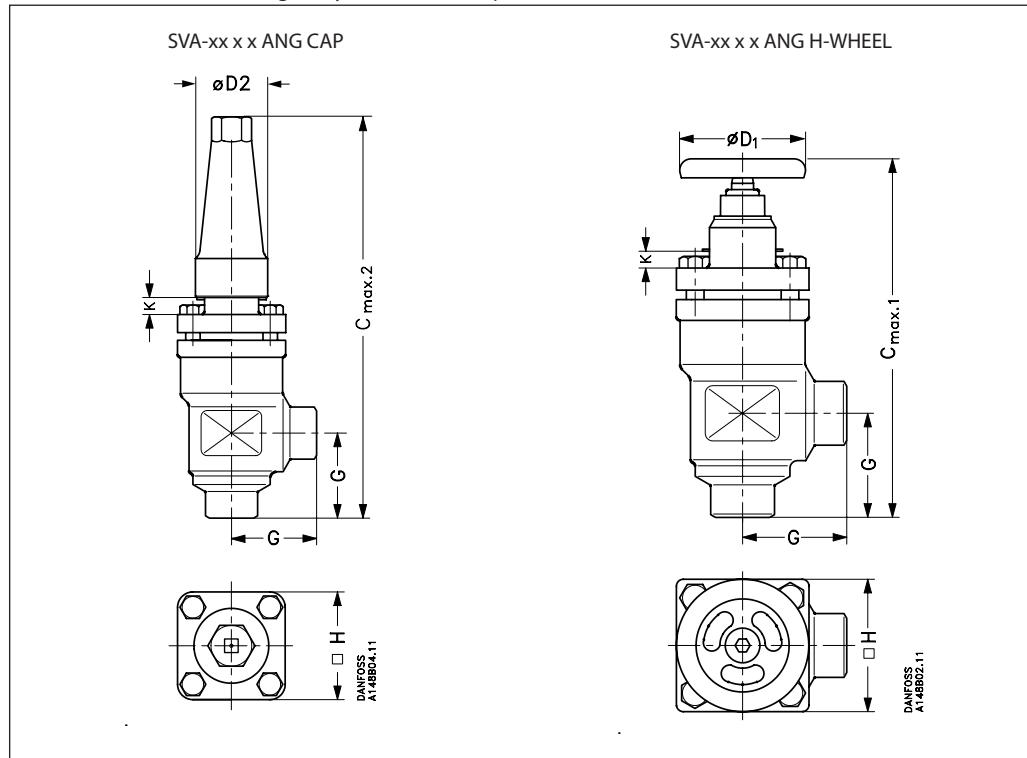
*SVA 6 - 10 in straight-way execution with cap (SVA 223)
or in straight-way execution with cap and extended bonnet (SVA 226)*


Valve size		C	B	E	G	ØD	□H	Weight
SVA 6	mm in.	110 4.33	120 4.72	13 0.49	70 2.76	30 1.16	48 1.89	0.8 kg
SVA 10	mm in.	145 5.71	155 6.10	20 0.79	120 4.72	38 1.50	60 2.36	2.0 kg

Specified weights are approximate values only.

Dimensions and weights

SVA 15 - 40 (½ - 1½ in.) in angleway version with cap / hand wheel



Valve size	K	C _{max.1}	C _{max.2}	G	ØD ₁	ØD ₂	□H	Weight
SVA-ST, SS								
SVA 15 - 20 mm SVA (½ - ¾) in.	4 0.16	178 7.00	189 7.44	45 1.77	60 2.36	38 1.5	60 2.36	1.4 kg 3.1 lb
SVA 25 - 40 mm SVA (1 - 1½) in.	12 0.47	234 9.21	268 10.55	55 2.17	80 3.15	50 1.97	70 2.76	2.4 kg 5.3 lb

SVA-ST, Socket weld

SVA 32 - 40 mm SVA (1¼ - 1½) in.	12 0.47	241 9.49	275 10.83	62 2.44	80 3.15	50 1.97	70 2.76	2.9 kg 6.4 lb
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SVA-HS

SVA 15 - 20 mm SVA (½ - ¾) in.	63 2.48	237 9.33	248 9.76	45 1.77	60 2.36	38 1.5	60 2.36	1.4 kg 3.1 lb
SVA 25 - 40 mm SVA (1 - 1½) in.	74 2.91	296 11.65	330 12.99	55 2.17	80 3.15	50 1.97	70 2.76	2.4 kg 5.3 lb

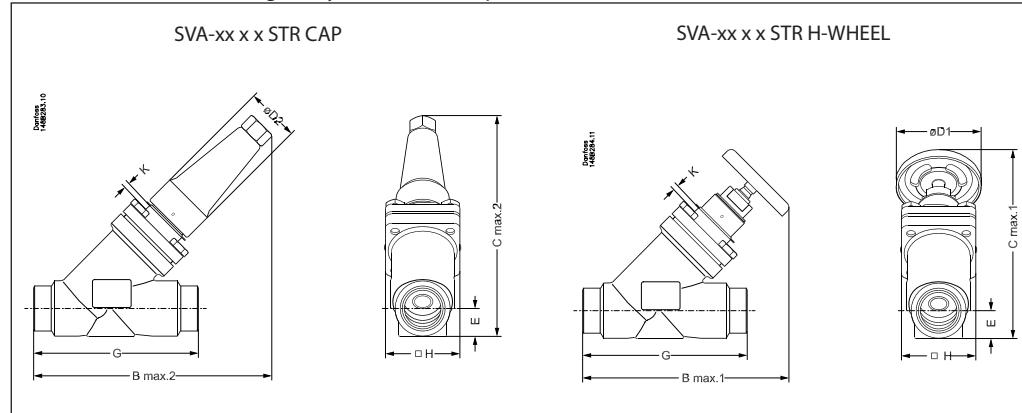
SVA-HS, Socket weld

SVA 32 - 40 mm SVA (1¼ - 1½) in.	74 2.91	303 11.93	337 13.27	62 2.44	80 3.15	50 1.97	70 2.76	2.9 kg 6.4 lb
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Specified weights are approximate values only.

Dimensions and weights

SVA 15 - 40 (½ - 1½ in.) straightway version with cap / hand wheel



Valve size	K	C _{max.1}	C _{max.2}	B _{max.1}	B _{max.2}	E	G	ØD ₁	ØD ₂	H	Weight
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SVA-ST, SS

SVA 15 - 20 mm SVA (½ - ¾) in.	4 0.16	146 5.74	141 5.55	160 6.30	156 6.14	20 0.79	120 4.72	60 2.36	38 1.50	60 2.36	2.0 kg 4.4 lb
SVA 25 - 40 mm SVA (1 - 1½) in.	12 0.47	199 7.83	208 8.19	212 8.35	222 8.74	26 1.02	155 6.10	80 3.15	50 3.15	70 1.97	3.0 kg 6.6 lb

SVA-ST, Socket weld

SVA 32 mm SVA (1¼) in.	12 0.47	200 7.87	209 8.23	212 8.35	222 8.74	27.4 1.08	155 6.10	80 3.15	50 3.15	70 1.97	3.0 kg 6.6 lb
SVA 40 mm SVA (1½) in.	12 0.47	204 8.03	213 8.39	212 8.35	222 8.74	31.0 1.22	155 6.10	80 3.15	50 3.15	70 1.97	3.0 kg 6.6 lb

SVA-HS

SVA 15 - 20 mm SVA (½ - ¾) in.	63 2.48	188 7.40	184 7.24	202 7.95	198 7.80	20 0.79	120 4.72	60 2.36	38 1.50	60 2.36	2.0 kg 4.4 lb
SVA 25 - 40 mm SVA (1 - 1½) in.	74 2.91	243 9.57	252 9.92	256 10.08	265 10.43	26 1.02	155 6.10	80 3.15	50 3.15	70 1.97	3.0 kg 6.6 lb

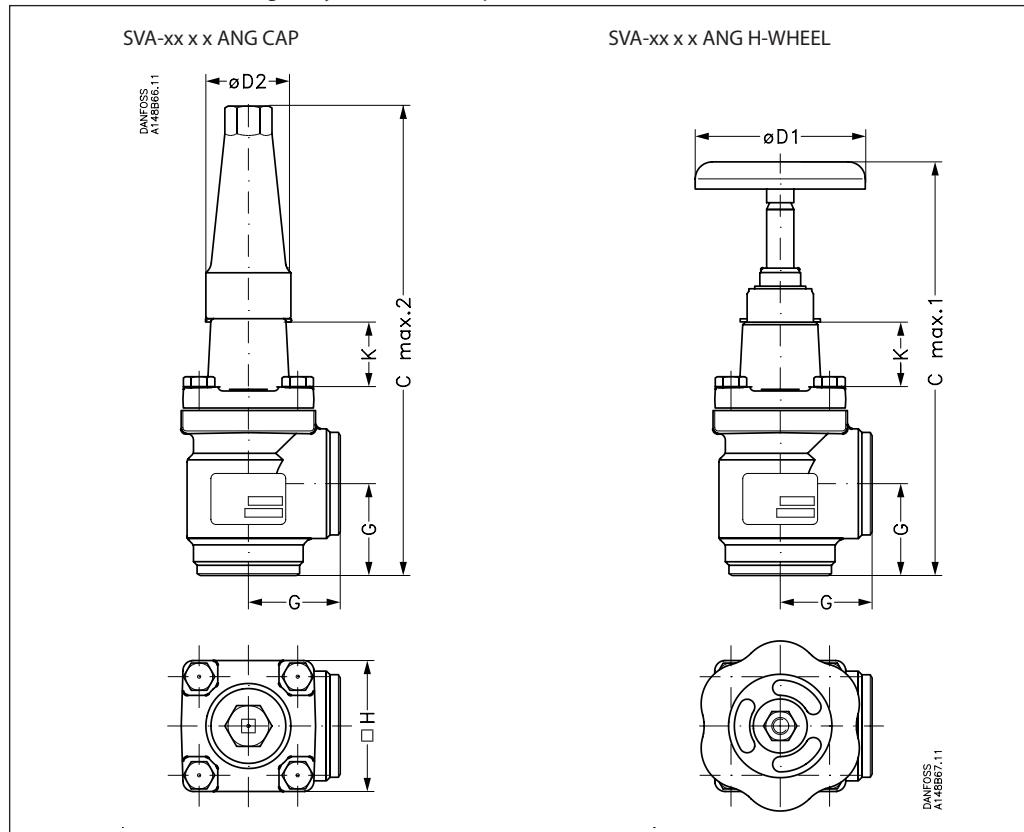
SVA-HS, Socket weld

SVA 32 mm SVA (1¼) in.	74 2.91	244 9.61	253 9.96	256 10.08	265 10.43	27.4 1.08	155 6.10	80 3.15	50 3.15	70 1.97	3.0 kg 6.6 lb
SVA 40 mm SVA (1½) in.	74 2.91	248 9.76	257 10.12	256 10.08	265 10.43	31.0 1.22	155 6.10	80 3.15	50 3.15	70 1.97	3.0 kg 6.6 lb

Specified weights are approximate values only.

Dimensions and weights

SVA 50 - 65 (2 - 2½ in.) in angleway version with cap / hand wheel



Valve size	K	C _{max.1}	C _{max.2}	G	ØD ₁	ØD ₂	□H	Weight
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SVA-ST, SS

SVA 50	mm	35		249	280		60	100	50	77	3.2 kg
SVA (2)	in.	1.38		9.80	11.02		2.36	3.94	1.97	3.03	7.1 lb
SVA 65	mm	40		280	305		70	100	50	90	4.8 kg
SVA (2½)	in.	1.57		11.02	12.01		2.76	3.94	1.97	3.54	10.6 lb

SVA-ST, Socket weld

SVA 50	mm	35		254	285		65	100	50	77	4.1 kg
SVA (2)	in.	1.38		10.00	11.22		2.56	3.94	1.97	3.03	9.0 lb

SVA-HS

SVA 50	mm	70		284	315		60	100	50	77	3.2 kg
SVA (2)	in.	2.76		11.18	12.40		2.36	3.94	1.97	3.03	7.1 lb
SVA 65	mm	70		310	335		70	100	50	90	4.8 kg
SVA (2½)	in.	2.76		12.20	13.19		2.76	3.94	1.97	3.54	10.6 lb

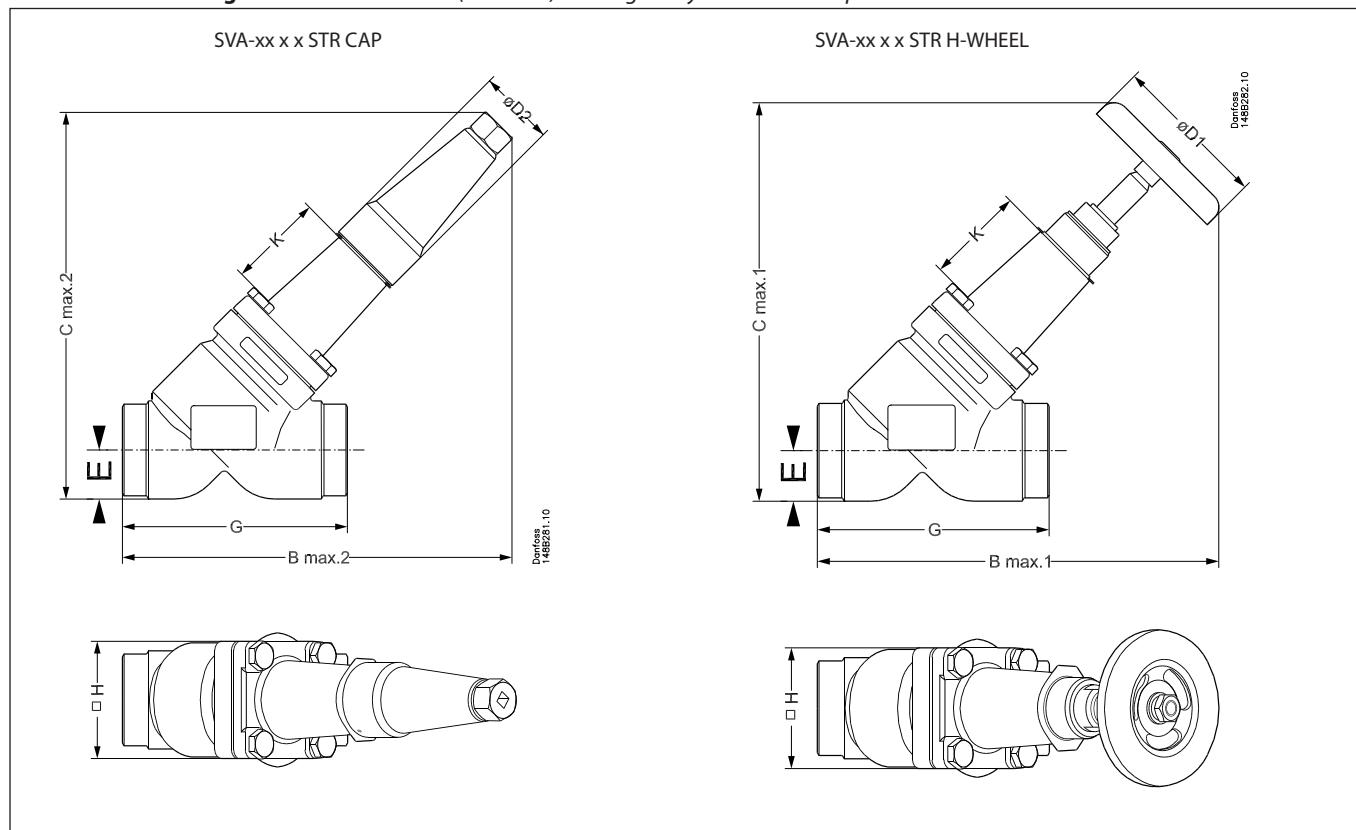
SVA-HS, Socket weld

SVA 50	mm	70		289	320		65	100	50	77	4.1 kg
SVA (2)	in.	2.76		11.38	12.60		2.56	3.94	1.97	3.03	9.0 lb

Specified weights are approximate values only.

Dimensions and weights

SVA 50 - 65 (2 - 2½ in.) in straightway version with cap / hand wheel

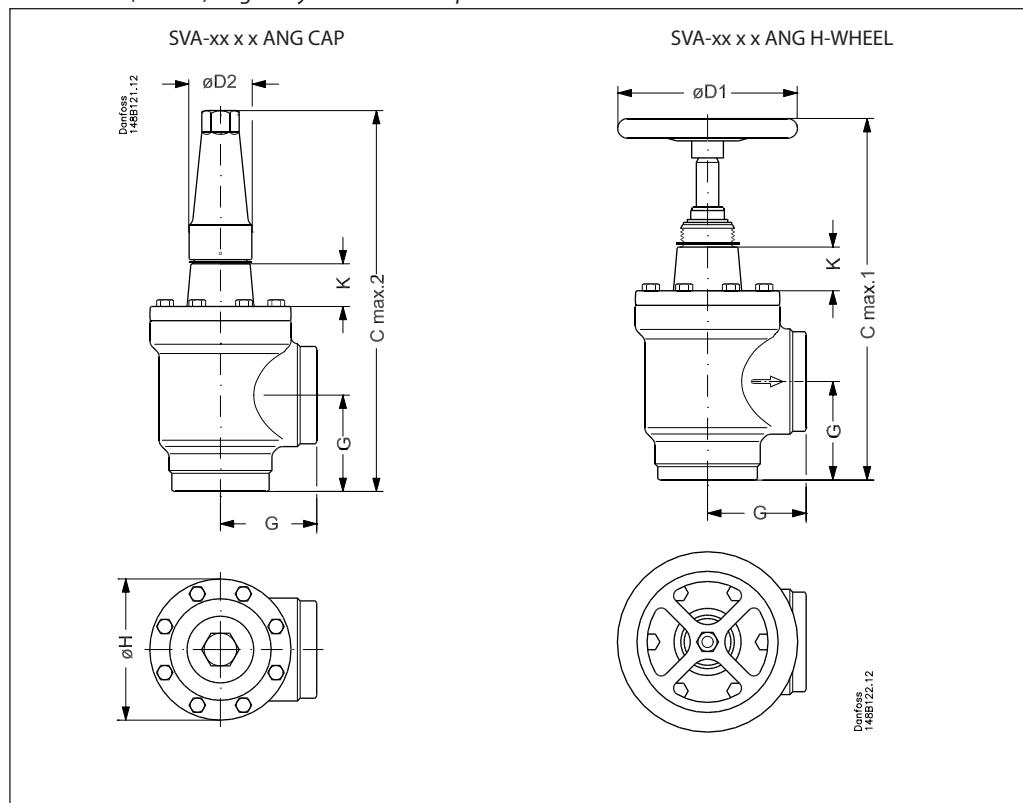


Valve size	K	B _{max.1}	B _{max.2}	C _{max.1}	C _{max.2}	E	G	ØD ₁	ØD ₂	□H	Weight	
SVA-ST, SS												
SVA 50	mm	35	234	234	232	232	32	148	100	50	77	4.2 kg
SVA (2)	in.	1.38	9.21	9.21	9.13	9.13	1.26	5.83	3.94	1.97	3.03	9.3 lb
SVA-ST, Socket weld												
SVA 50	mm	35	241	241	236	236	37	162	100	50	77	5.1 kg
SVA (2)	in.	1.38	9.49	9.49	9.29	9.29	1.46	6.38	3.94	1.97	3.03	11.2 lb
SVA-HS												
SVA 50	mm	70	259	259	257	257	32	148	100	50	77	4.2 kg
SVA (2)	in.	2.76	10.20	10.20	10.12	10.12	1.26	5.83	3.94	1.97	3.03	9.3 lb
SVA-HS, Socket weld												
SVA 50	mm	70	266	266	261	261	37	62	100	50	77	5.1 kg
SVA (2)	in.	2.76	10.47	10.47	10.28	10.28	1.26	6.38	3.94	1.97	3.03	11.2 lb

Specified weights are approximate values only.

Dimensions and weights

SVA 80 - 200 (3 - 8 in.) angleway version with cap / hand wheel



Valve size	K	C _{max.1}	C _{max.2}	G	ØD ₁	ØD ₂	ØH	Weight
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SVA-ST, SS

SVA 80 SVA (3)	mm in.	41 1.61	338 13.31	353 13.90	90 3.54	200 7.87	58 2.28	129 5.08	9.2 kg 20.3 lb
SVA 100 SVA (4)	mm in.	43 1.69	382 15.04	388 15.28	106 4.17	250 9.84	58 2.28	156 6.14	14.8 kg 32.6 lb
SVA 125 SVA (5)	mm in.	90 3.54	517 20.35	533 20.98	128 5.04	315 12.40	74 2.91	193 7.60	28.1 kg 61.9 lb
SVA 150 SVA (6)	mm in.	90 3.54	564 22.20	568 22.36	145 5.71	315 12.40	74 2.91	219 8.62	39.7 kg 87.5 lb
SVA 200 SVA (8)	mm in.	90 3.54	675 26.57	678 26.69	180 7.09	400 15.75	86 3.39	276 10.87	79.5 kg 175.3 lb

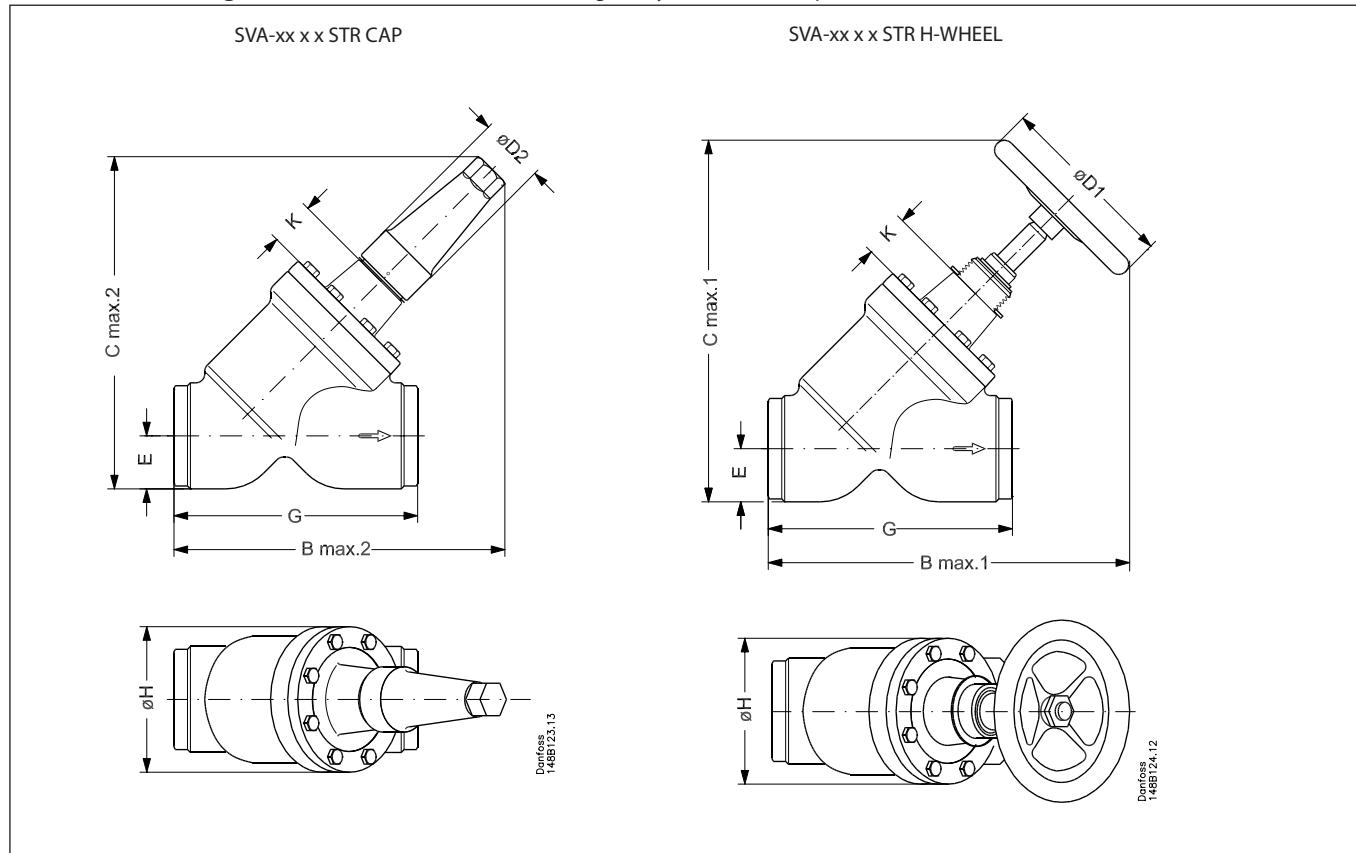
SVA-HS

SVA 80 SVA (3)	mm in.	76 3.00	373 14.69	388 15.28	90 3.54	200 7.87	58 2.28	129 5.08	9.7 kg 21.4 lb
SVA 100 SVA (4)	mm in.	90 3.54	432 17.00	437 17.20	106 4.17	250 9.84	58 2.28	156 6.14	15.3 kg 33.7 lb
SVA 125 SVA (5)	mm in.	90 3.54	517 20.35	533 20.98	128 5.04	315 12.40	74 2.91	193 7.60	28.1 kg 61.9 lb
SVA 150 SVA (6)	mm in.	90 3.54	564 22.20	568 22.36	145 5.71	315 12.40	74 2.91	219 8.62	39.7 kg 87.5 lb
SVA 200 SVA (8)	mm in.	90 3.54	675 26.57	678 26.69	180 7.09	400 15.75	86 3.39	276 10.87	79.5 kg 175.3 lb

Specified weights are approximate values only.

Dimensions and weights

SVA 80 - 200 (3 - 8 in.) straightway version with cap / hand wheel



Valve size	K	B _{max.1}	B _{max.2}	C _{max.1}	C _{max.2}	E	G	ØD ₁	ØD ₂	ØH	Weight	
SVA-ST												
SVA 80	mm	41	340	296	342	298	48	216	200	58	129	10.4 kg
SVA (3)	in.	1.61	13.38	11.65	13.46	11.73	1.89	8.50	7.87	2.28	5.08	22.9 lb
SVA 100	mm	43	400	331	408	339	60	264	250	58	156	17.7 kg
SVA (4)	in.	1.69	15.75	13.03	16.06	13.35	2.36	10.39	9.84	2.28	6.14	39.0 lb
SVA 125	mm	90	526	444	538	456	74	322	315	74	193	32.8 kg
SVA (5)	in.	3.54	20.71	17.48	21.18	17.95	2.91	12.68	12.40	2.91	7.60	72.3 lb
SVA 150	mm	90	572	483	594	505	91	370	315	74	219	60.0 kg
SVA (6)	in.	3.54	22.52	19.02	23.39	19.88	3.58	14.57	12.40	2.91	8.62	132.3 lb
SVA 200	mm	90	692	579	726	613	117	464	400	86	276	111.5 kg
SVA (8)	in.	3.54	27.24	22.80	28.58	24.13	4.61	18.27	15.75	3.39	10.87	245.8 lb
SVA-HS												
SVA 80	mm	76	365	321	367	232	48	216	200	58	129	10.9 kg
SVA (3)	in.	3.00	14.37	12.64	14.45	12.72	1.89	8.50	7.87	2.28	5.08	24.0 lb
SVA 100	mm	90	435	367	443	375	60	264	250	58	156	18.2 kg
SVA (4)	in.	3.54	17.13	14.45	17.44	14.76	2.36	10.39	9.84	2.28	6.14	40.1 lb
SVA 125	mm	90	526	444	538	456	74	322	315	74	193	32.8 kg
SVA (5)	in.	3.54	20.71	17.48	21.18	17.95	2.91	12.68	12.40	2.91	7.60	72.3 lb
SVA 150	mm	90	572	483	594	505	91	370	315	74	219	60.0 kg
SVA (6)	in.	3.54	22.52	19.02	23.39	19.88	3.58	14.57	12.40	2.91	8.62	132.3 lb
SVA 200	mm	90	692	579	726	613	117	464	400	86	276	111.5 kg
SVA (8)	in.	3.54	27.24	22.80	28.58	24.13	4.61	18.27	15.75	3.39	10.87	245.8 lb

Specified weights are approximate values only.

Ordering

Please note that the type codes only serve to identify the valves, some of which may not form part of the standard product range. For further information please contact your local Danfoss Sales Company.

Type codes

Valve type	SVA	Stop valve	Available connections			
Nominal size in mm (valve size measured on the connection diameter)			A/D	SOC	FPT	T
6	DN 6 (1/4)	x				x
10	DN 10 (3/8)	x				x
15	DN 15 (1/2)	x	x	x		
20	DN 20 (3/4)	x	x	x		
25	DN 25 (1)	x	x	x		
32	DN 32 (1 1/4)	x	x	x		
40	DN 40 (1 1/2)	x	x			
50	DN 50 (2)	x	x			
65	DN 65 (2 1/2)	x				
80	DN 80 (3)	x				
100	DN 100 (4)	x				
125	DN 125 (5)	x				
150	DN 150 (6)	x				
200	DN 200 (8)	x				
Connections	A D SOC FPT T	Butt-weld connection: ANSI B 36.10 schedule 80, DN 15 - 40 (1/2 - 1 1/2 in.) Butt-weld connection: ANSI B 36.10 schedule 40, DN 50 - 200 (2 - 8 in.) Butt-weld connection: DIN 2448 Socket weld: ANSI B 16.11 Female Pipe Thread NPT: ANSI/ASME B 1.20.1 Outside threaded connections ISO 228/1 Pipe thread				
Valve housing	ANG STR	Angle flow Straight flow				
Other equipment	H-WHEEL CAP	Hand wheel Cap				

Important!

Where products need to be certified according to specific certification societies or where higher pressures are required, the relevant information should be included at the time of order.

**Ordering
(cont.)**

Example:
SVA 6 ANSI angleway with cap =
2412+336

Important!

Where products need to be certified according to specific certification societies or where higher pressures are required, the relevant information should be included at the time of order.

D = Butt-weld DIN
A = Butt-weld ANSI

The table below is used to identify the valve required.

Angleway		
Size	Type	Code number
mm	in.	

DIN

6	1/4	SVA 6 D ANG H-WHEEL	2412+308
6	1/4	SVA 6 D ANG CAP	2412+315
10	3/8	SVA 10 D ANG H-WHEEL	2412+309
10	3/8	SVA 10 D ANG CAP	2412+316

ANSI

6	1/4	SVA 6 A ANG H-WHEEL	2412+350
6	1/4	SVA 6 A ANG CAP	2412+357
10	3/8	SVA 10 A ANG H-WHEEL	2412+351
10	3/8	SVA 10 A ANG CAP	2412+358

Straightway		
Size	Type	Code number
mm	in.	

DIN

6	1/4	SVA 6 D STR H-WHEEL	2412+329
6	1/4	SVA 6 D STR CAP	2412+336
10	3/8	SVA 10 D STR H-WHEEL	2412+330
10	3/8	SVA 10 D STR CAP	2412+337

ANSI

6	1/4	SVA 6 A STR H-WHEEL	2412+371
6	1/4	SVA 6 A STR CAP	2412+378
10	3/8	SVA 10 A STR H-WHEEL	2412+372
10	3/8	SVA 10 A STR CAP	2412+379

SVA 6T and SVA-ST 10-15 T

Type	Code number
SVA-ST 10-15 T STOPVALVE STR H-WHEEL	148B3969
SVA-ST 10-15 T STOPVALVE STR CAP	148B3970
SVA-ST 10-15 T STOPVALVE ANG H-WHEEL	148B3818
SVA-ST 10-15 T STOPVALVE ANG CAP	148B3819
SVA-ST 6 T STOPVALVE ANG H-WHEEL	2413+123
SVA-ST 6 T STOPVALVE ANG CAP	2413+125

Accessories
6T and 10-15T Nipple Kit solution

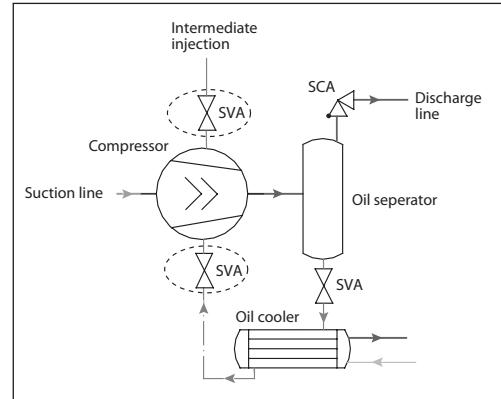
Code no.	
148B4244	ACCESSORY WELD.NIPPLE DN10 D + UNION NUT
148B4245	ACCESSORY WELD.NIPPLE DN6 A + UNION NUT
148B4246	ACCESSORY WELD.NIPPLE DN10 A + UNION NUT
148B4247	ACCESSORY WELD.NIPPLE DN15 A + UNION NUT
148B4184	ACCESSORY WELD.NIPPLE DN6 D + UNION NUT
148B4185	ACCESSORY WELD.NIPPLE DN15 D + UNION NUT

DN6 nipples are used with SVA 6 T.

DN10 and DN15 nipples are used with SVA-ST 10-15 T.

Lock washers for the stop valves, subjected to extreme vibrations/pulsations

Code no.	
148B4238	I-PACK(10) ACC.LOCK WASHER SVA 15-20
148B4239	I-PACK(10) ACC.LOCK WASHER SVA 25-40
148B4240	I-PACK(10) ACC.LOCK WASHER SVA 50-65
148B4241	I-PACK(10) ACC.LOCK WASHER SVA 80-100
148B4242	I-PACK(10) ACC.LOCK WASHER SVA 125-150
148B4243	I-PACK(10) ACC.LOCK WASHER SVA 200



Indication of a pipe line, where stop valves with lock washers are recommended.

Ordering - SVA-SS

Example:
SVA-SS 32 DIN angleway with hand wheel = **148B3850**

Important!

Where products need to be certified according to specific certification societies or where higher pressures are required, the relevant information should be included at the time of order.

D = Butt-weld DIN

ANG = Angle-way
STR = Straight-way

CAP = Cap
H-WHEEL = Hand wheel

The table below is used to identify the valve required.

Standard version			
Angleway			
Size		Type	Code number
mm	in.		
15	½	SVA-SS 15 D ANG CAP 52BAR	148B3843
15	½	SVA-SS 15 D ANG H-WHEEL 52BAR	148B3844
20	¾	SVA-SS 20 D ANG CAP 52BAR	148B3845
20	¾	SVA-SS 20 D ANG H-WHEEL 52BAR	148B3846
25	1	SVA-SS 25 D ANG CAP 52BAR	148B3847
25	1	SVA-SS 25 D ANG H-WHEEL 52BAR	148B3848
32	1¼	SVA-SS 32 D ANG CAP 52BAR	148B3849
32	1¼	SVA-SS 32 D ANG H-WHEEL 52BAR	148B3850
40	1½	SVA-SS 40 D ANG CAP 52BAR	148B3851
40	1½	SVA-SS 40 D ANG H-WHEEL 52BAR	148B3852
50	2	SVA-SS 50 D ANG CAP 52BAR	148B3853
50	2	SVA-SS 50 D ANG H-WHEEL 52BAR	148B3854
65	2½	SVA-SS 65 D ANG CAP 52BAR	148B3855
65	2½	SVA-SS 65 D ANG H-WHEEL 52BAR	148B3856
80	3	SVA-SS 80 D ANG CAP 50BAR	148B4451
100	4	SVA-SS 100 D ANG CAP 50BAR	148B4452
125	5	SVA-SS 125 D ANG CAP 50BAR	148B4453

Standard version			
Straightway			
Size		Type	Code number
mm	in.		
15	½	SVA-SS 15 D STR CAP 52BAR	148B4249
15	½	SVA-SS 15 D STR H-WHEEL 52BAR	148B4250
20	¾	SVA-SS 20 D STR CAP 52BAR	148B4251
20	¾	SVA-SS 20 D STR H-WHEEL 52BAR	148B4252
25	1	SVA-SS 25 D STR CAP 52BAR	148B4253
25	1	SVA-SS 25 D STR H-WHEEL 52BAR	148B4254
32	1¼	SVA-SS 32 D STR CAP 52BAR	148B4255
32	1¼	SVA-SS 32 D STR H-WHEEL 52BAR	148B4256
40	1½	SVA-SS 40 D STR CAP 52BAR	148B4257
40	1½	SVA-SS 40 D STR H-WHEEL 52BAR	148B4258
50	2	SVA-SS 50 D STR CAP 52BAR	148B4259
50	2	SVA-SS 50 D STR H-WHEEL 52BAR	148B4260
65	2½	SVA-SS 65 D STR CAP 52BAR	148B4261
65	2½	SVA-SS 65 D STR H-WHEEL 52BAR	148B4262

DIN

15	½	SVA-SS 15 D STR CAP 52BAR	148B4249
15	½	SVA-SS 15 D STR H-WHEEL 52BAR	148B4250
20	¾	SVA-SS 20 D STR CAP 52BAR	148B4251
20	¾	SVA-SS 20 D STR H-WHEEL 52BAR	148B4252
25	1	SVA-SS 25 D STR CAP 52BAR	148B4253
25	1	SVA-SS 25 D STR H-WHEEL 52BAR	148B4254
32	1¼	SVA-SS 32 D STR CAP 52BAR	148B4255
32	1¼	SVA-SS 32 D STR H-WHEEL 52BAR	148B4256
40	1½	SVA-SS 40 D STR CAP 52BAR	148B4257
40	1½	SVA-SS 40 D STR H-WHEEL 52BAR	148B4258
50	2	SVA-SS 50 D STR CAP 52BAR	148B4259
50	2	SVA-SS 50 D STR H-WHEEL 52BAR	148B4260
65	2½	SVA-SS 65 D STR CAP 52BAR	148B4261
65	2½	SVA-SS 65 D STR H-WHEEL 52BAR	148B4262

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