



Technical brochure

# Flexline™

## Stop valves

### SVA-S and SVA-L



SVA Stop Valves are available in angleway and straightway versions and with Standard neck (SVA-S) and Long neck (SVA-L)

The stop valves are designed to meet all industrial refrigeration application requirements and 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 and withstand a high system pulsation and vibration, which can be present specifically in the discharge line.

#### Features

- Applicable to HCFC, HFC, R717 (Ammonia) and R744 (CO<sub>2</sub>). Can be used in chemical and petro-chemical applications.
- Modular Concept:
  - Each valve housing is available with several different connection types and sizes.
  - Possible to convert SVA-S or SVA-L to any other product in the Flexline™ SVL family (regulating valve, stop check 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 - 2½ 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.
- Equipped with stainless steel bolts.
- Max. working pressure: 52 bar g (754 psi g)
- Temperature range: -60/+150°C (-76/+302°F)
- Classification: DNV, CRN, BV etc. To get an updated list of certification on the products please contact your local Danfoss Sales Company.

## Stop valves, SVA-S and SVA-L

### Design

#### Connections

Available with the following connections:

- Butt-weld DIN (EN 10220)
- Butt-weld ANSI (B 36.10 Schedule 80),  
- DN 6 - 40 (¼ - 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 ½ 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.

#### 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 leak seal sealing.

#### Packing gland

The low temperature packing gland 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.

#### Pressure Equipment Directive (PED)

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

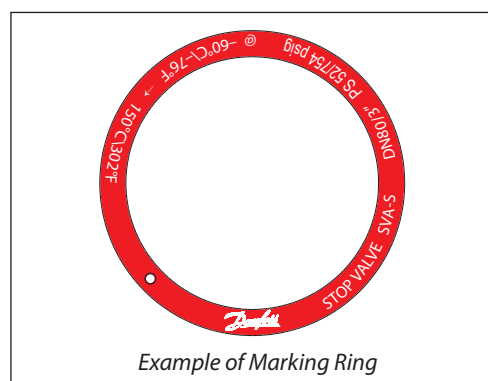
For further details / restrictions - see Installation Instruction.

#### 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.



SVA			
<b>Nominal bore</b>	DN ≤ 25 mm (1 in.)	DN 32-80 mm (1¼ - 3 in.)	DN 100 - 200 mm (4-8 in.)
<b>Classified for</b>	Fluid group I		
<b>Category</b>	Article 3, paragraph 3	II	III

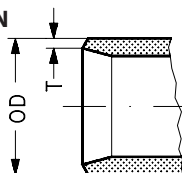
## Stop valves, SVA-S and SVA-L

### Technical data

- Refrigerants  
Applicable to HCFC, HFC, R717 (Ammonia) and R744 (CO<sub>2</sub>). For further information please see installation instruction for SVA.
- Max. working pressure  
52 bar g (754 psi g).
- Temperature range  
-60/+150°C (-76/+302°F).

### Connections

#### DIN



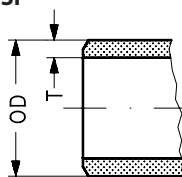
Size mm	Size in.	OD mm	T mm	OD in.	T in.			k <sub>v</sub> -angle m <sup>3</sup> /h	k <sub>v</sub> -straight m <sup>3</sup> /h	C <sub>v</sub> -angle USgal/min	C <sub>v</sub> -straight USgal/min
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#### Butt-weld DIN (EN 10220)

6	¼	13.5	2.3	0.531	0.091			2.9	2.0	3.4	2.4
10	¾	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

Size mm	Size in.	OD mm	T mm	OD in.	T in.			k <sub>v</sub> -angle m <sup>3</sup> /h	k <sub>v</sub> -straight m <sup>3</sup> /h	C <sub>v</sub> -angle USgal/min	C <sub>v</sub> -straight USgal/min
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#### ANSI



#### Butt-weld ANSI (B 36.10 Schedule 80)

6	¼	13.5	3.0	0.531	0.118			2.9	2.03	3.4	2.4
10	¾	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

#### Butt-weld ANSI (B 36.10 Schedule 40)

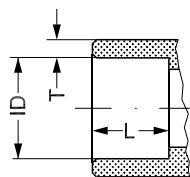
50	2	60.3	3.9	2.37	0.15			80	65	93	76
65	2½	73.0	5.2	2.87	0.20			120	97	140	113
80	3	88.9	5.5	3.50	0.22			182	152	211	176
100	4	114.3	6.0	4.50	0.24			313	278	363	323
125	5	141.3	6.6	5.56	0.26			514	470	596	545
150	6	168.3	7.1	6.63	0.28			785	597	911	693
200	8	219.1	8.2	8.63	0.32			1168	1024	1355	1188

## Stop valves, SVA-S and SVA-L

### Connections

Size mm	Size in.	OD mm	T mm	OD in.	T in.			$k_v$ -angle m <sup>3</sup> /h	$k_v$ -straight m <sup>3</sup> /h	$C_v$ -angle USgal/min	$C_v$ -straight USgal/min
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### SOC

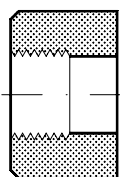


#### Socket welding ANSI (B 16.11)

15	½	21.8	6.0	0.858	0.235	10	0.39	7.0	4.9	8.1	5.7
20	¾	27.2	4.6	1.071	0.181	13	0.51	14.6	10.9	16.9	11.8
25	1	33.9	7.2	1.335	0.284	13	0.51	24.8	17.4	28.8	20.2
32	1¼	42.7	6.1	1.743	0.240	13	0.51	42.6	29.8	49.4	34.6
40	1½	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 m <sup>3</sup> /h	$k_v$ -straight m <sup>3</sup> /h	$C_v$ -angle USgal/min	$C_v$ -straight USgal/min
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### FPT

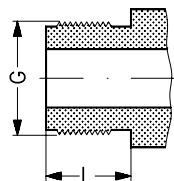


#### FPT inside pipe thread, NPT (ANSI/ASME B 1.20.1)

15	½	(½ × 14 NPT)			8.5	6.0	9.9	7.0
20	¾	(¾ × 14 NPT)			10	7.0	11.6	8.1
25	1	(1 × 11.5 NPT)			32	22.4	37.1	26.0
32	1¼	(1¼ × 11.5 NPT)			36	25.2	41.8	29.3

### Connections - SVA 6

#### T

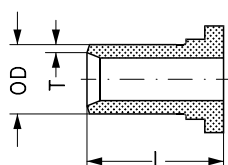


Size mm	Size in.	Outside pipe thread	L mm	L in.	$K_v$ -angle m <sup>3</sup> /h	$K_v$ -str. m <sup>3</sup> /h	$C_v$ -angle USgal/min	$C_v$ -str USgal/min
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#### T outside pipe thread, (ISO 228/1)

6	¼	G ½	16	0.63	2.5	2.0	2.9	2.0
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#### ND



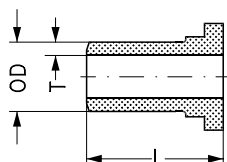
#### Nipples for T outside pipe thread, (ISO 228/1)

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	¼	13.5	2.3	0.531	0.091	60	2.36	G ½			
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#### NA



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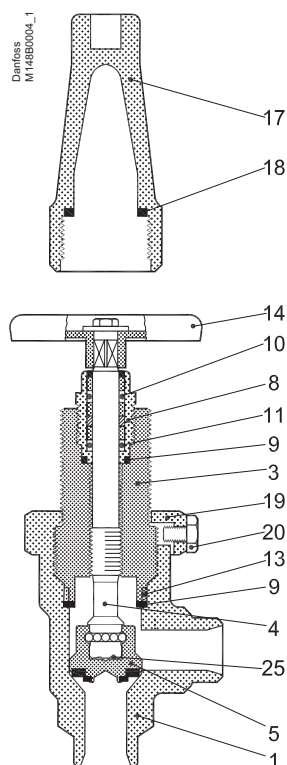
#### NA welding nipples, ANSI (B 36.10 Schedule 80)

6	¼	13.5	3.0	0.531	0.118	60	2.36	G ½			
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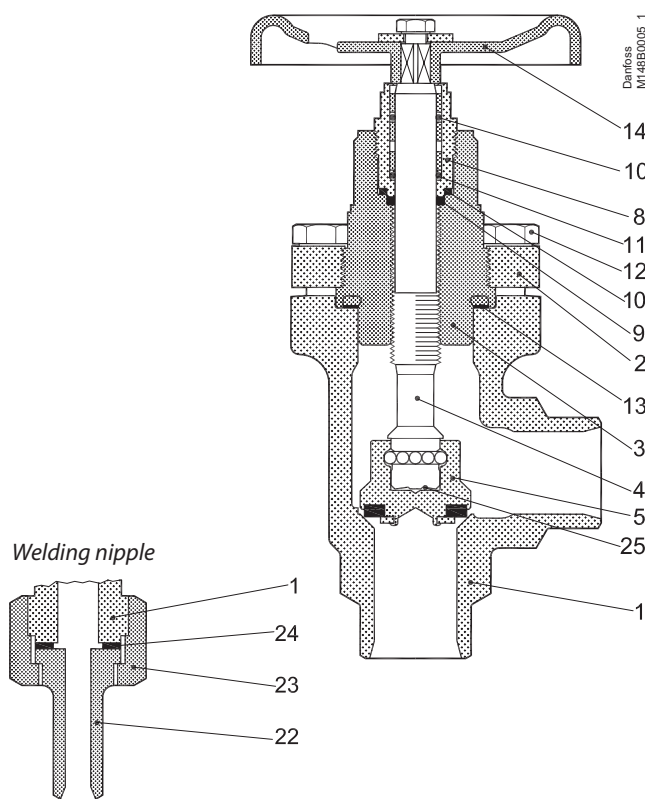
## Stop valves, SVA-S and SVA-L

### Material specification

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



SVA-S 15-20 (1/2 - 3/4 in.)

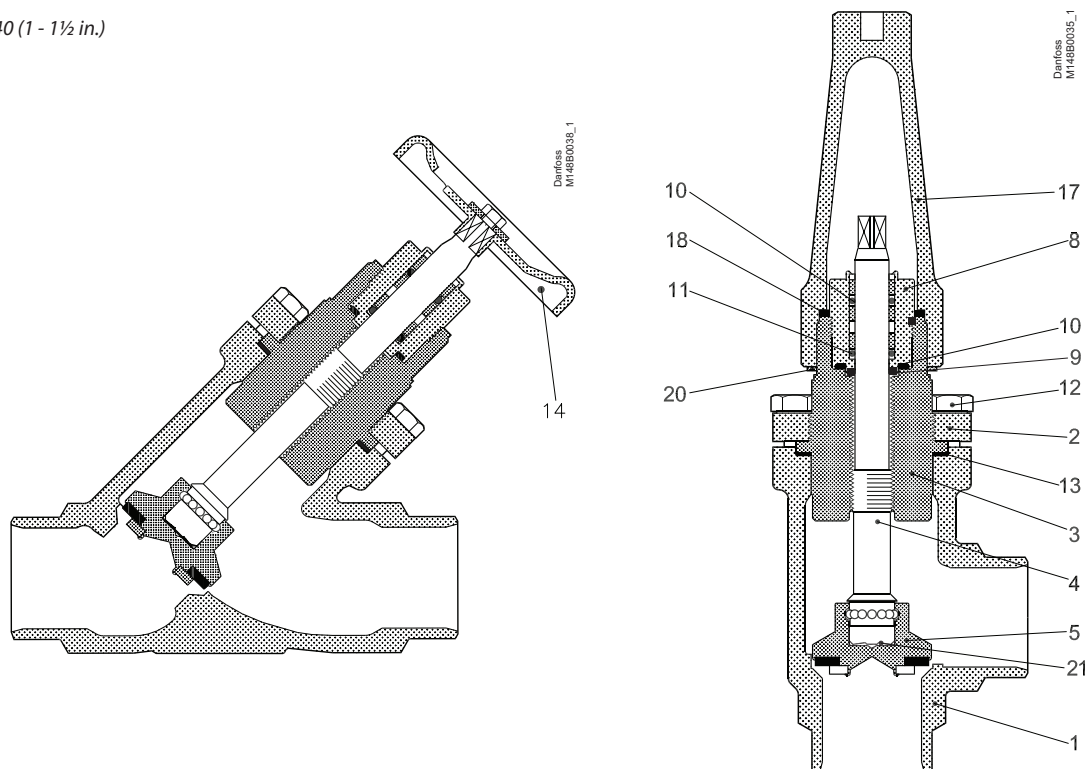


No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
2	Bonnet, Flange	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4 P275NL, 10028-3		LCC, A352 LF2, A350
3	Bonnet, Insert	Steel	11SMn30 10087	Type 2 R 683/9	AISI 1213
4	Spindle	Stainless steel	X8CrNiS18-9 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	Cloroprene (Neoprene)			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
14	Handwheel	Steel			
17	Cap	Aluminium			
18	Gasket for 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			
25	Disk spring	Steel			

## Stop valves, SVA-S and SVA-L

### Material specification

SVA-S 25-40 (1 - 1½ in.)

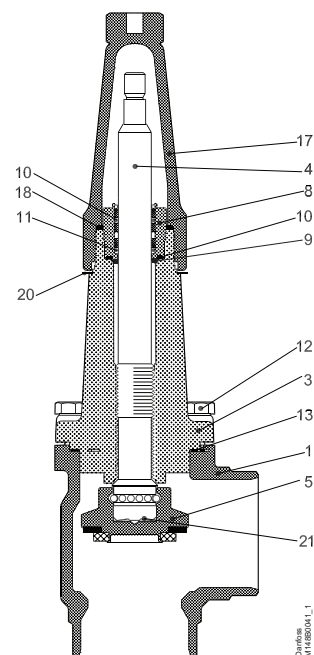
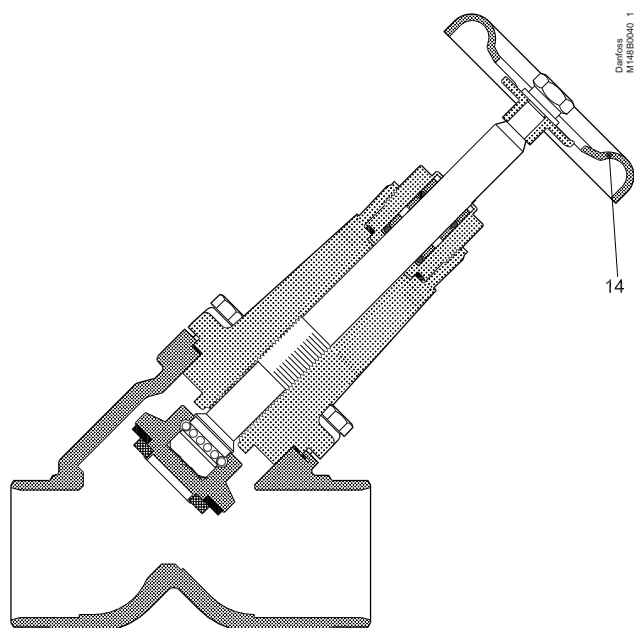


No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
2	Bonnet, Flange	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4 P275NL, 10028-3		LCC, A352 LF2, A350
3	Bonnet, Insert	Steel	11SMn30 10087	Type 2 R 683/9	AISI 1213
4	Spindle	Stainless steel	X8CrNiS18-9 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	Cloroprene (Neoprene)			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
14	Handwheel	Steel			
17	Cap	Aluminium			
18	Gasket for cap	Nylon			
20	Identification ring	Stainless steel			
21	Disk spring	Steel			

## Stop valves, SVA-S and SVA-L

### Material specification

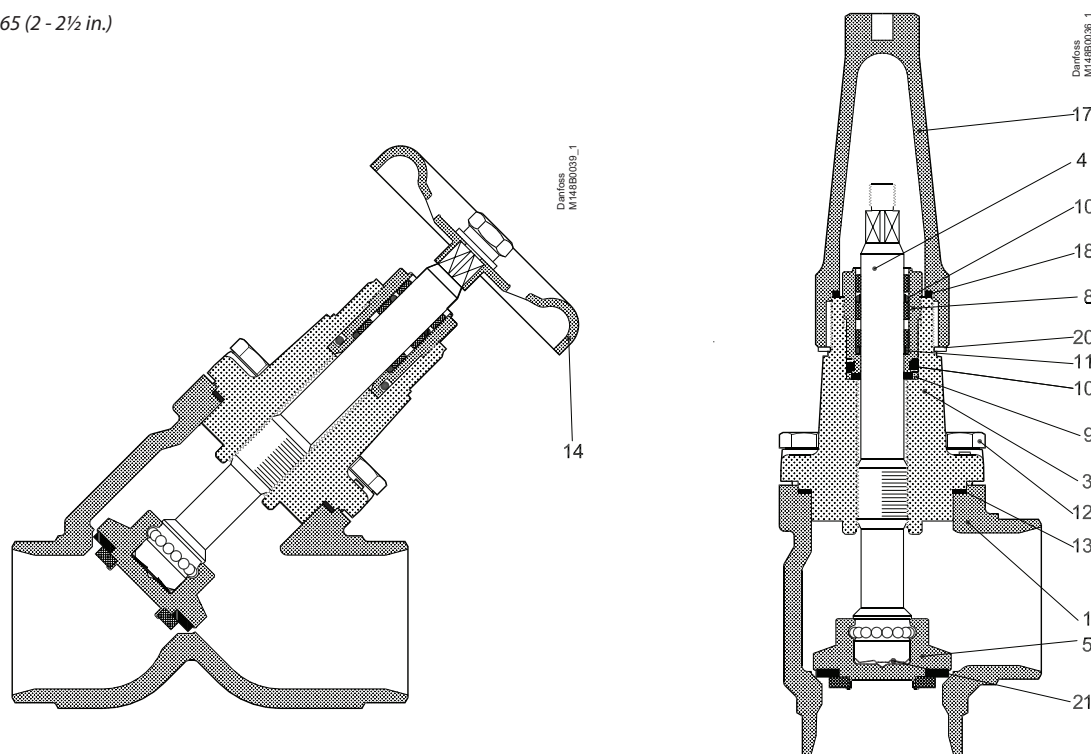
SVA-L 15 - 40 (½ - 1½ in.)



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	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	Cloroprene (Neoprene)			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
14	Hand wheel	Steel			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (PA6)			
20	Identification ring	Stainless steel			
21	Disk spring	Steel			

Material specification

SVA-S 50-65 (2 - 2½ in.)



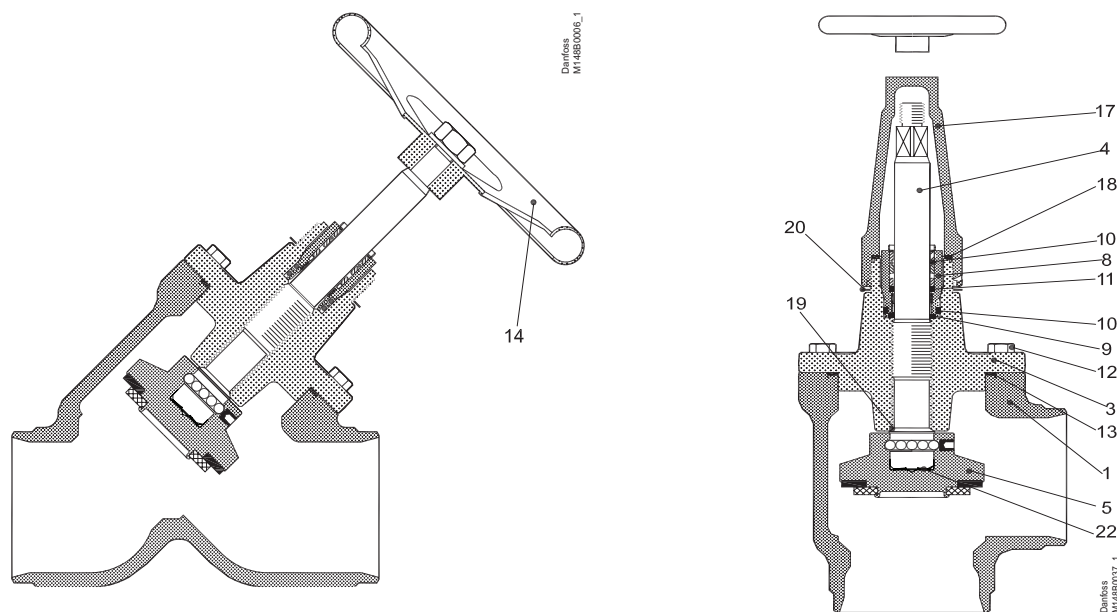
No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
3	Valve bonnet	Steel	G20Mn5QT, 10213-3 P285QH+QT, 10222-4		LCC, A352 LF2, A350
4	Spindle	Stainless steel	X8CrNiS18-9 10088 DIN 17440 (SVA-SS only)	Type 17 683/13	AISI 303
5	Cone	Steel	115Mn30 10087	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	Cloroprene (Neoprene)			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
14	Handwheel	Steel			
17	Cap	Aluminium			
18	Gasket for cap	Nylon			
19	Locking nut	Steel			
20	Identification ring	Stainless steel			
21	Disk spring	Steel			



## Stop valves, SVA-S and SVA-L

### Material specification

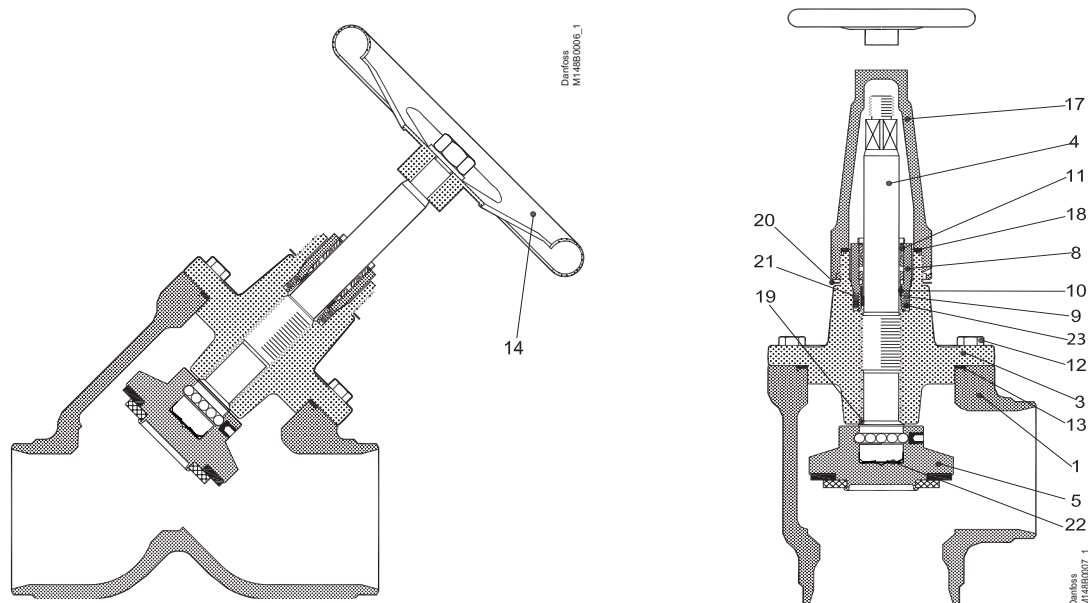
SVA-S 80 - 150 (3 - 6 in.)



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	X8CrNiS18-9 10088	Type 17 R 683/13	AISI 303
9	Packing washer	Aluminium			
10	O-ring	Cloroprene (Neoprene)			
11	Spring loaded Teflon ring	PTFE			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
14	Hand wheel	Steel			
17	Cap	Aluminium			
18	Gasket for cap	Nylon (PA 6)			
19	Soft backseat	Teflon (PTFE)			
20	Identification ring	Stainless steel			
22	Disk spring	Steel			

Material specification

SVA-S 200 (8 in.)

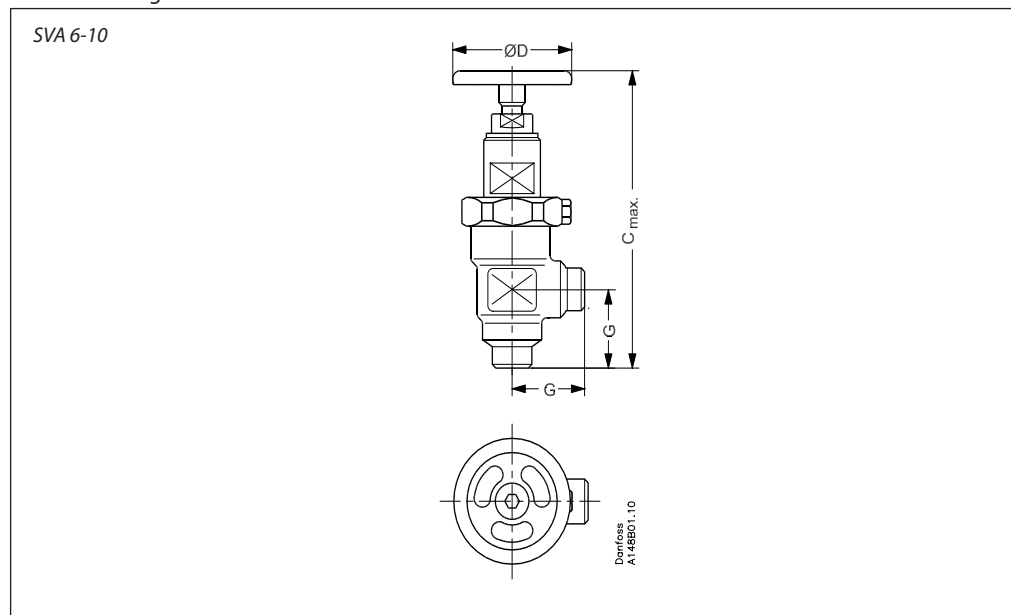


No.	Part	Material	EN	ISO	ASTM
1	Housing	Steel	G20Mn5QT 10213-3		LCC A352
3	Valve bonnet	Steel	G20Mn5QT, 10213-3 ----- P285QH+QT, 10222-4		LCC, A352 ----- LF2, A350
4	Spindle	Stainless steel	X5CrNi18-10 10088	Type 11, R 683/13	AISI 304, A276
5	Cone Cone seal	Steel Teflon (PTFE)	11SMn30 10087	Type 2, R 683/9	AISI 1213
8	Packing gland	Stainless steel	X8CrNiS18-9 10088	Type 17 R 683/13	AISI 303
9	O-ring	Cloroprene (Neoprene)			
10	Spring loaded Teflon ring	PTFE			
11	O-ring	Cloroprene (Neoprene)			
12	Bolts	Stainless steel	A2-70	A2-70	Type 308
13	Gasket	Fiber, Non-asbestos			
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)			
22	Disk spring	Steel			
23	O-ring	PTFE/Cloroprene (Neoprene)			

## Stop valves, SVA-S and SVA-L

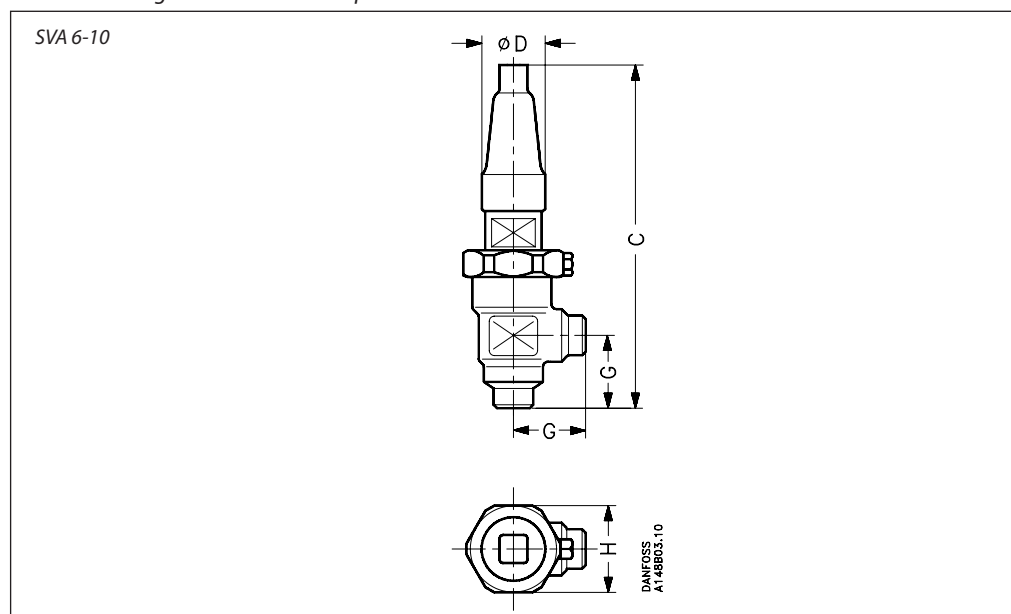
### Dimensions and weights

#### SVA 6-10 in angle execution with handwheel



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

#### SVA 6-10 in angle execution with cap

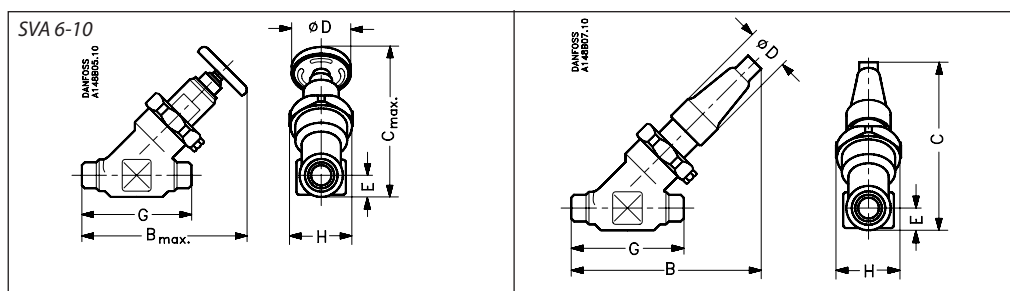


Valve size		C	G	ØD	□H	Weight
SVA 6	mm	139	30	30	48	0.8 kg
	in.	5.47	1.18	1.18	1.89	
SVA 10	mm	182	45	38	60	1.4 kg
	in.	7.17	1.77	1.50	2.36	

Specified weights are approximate values only.

## Stop valves, SVA-S and SVA-L

### Dimensions and weights



SVA 6 - 10 in straight-way execution with handwheel

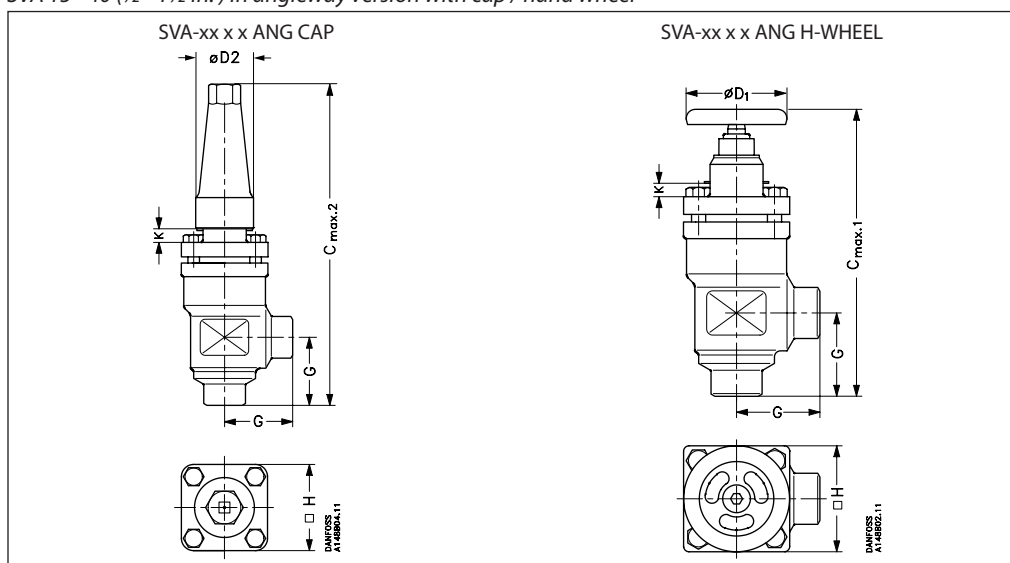
Valve size		C <sub>max.</sub>	B <sub>max.</sub>	E	G	ØD	□H	Weight
SVA 6	mm	110	120	13	70	50	48	0.7 kg
	in.	4.33	4.72	0.49	2.76	1.97	1.89	
SVA 10	mm	145	160	20	120	60	60	2.0 kg
	in.	5.71	6.30	0.79	4.72	2.36	2.36	

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	6.10	0.79	4.72	1.50	2.36	

Specified weights are approximate values only.

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



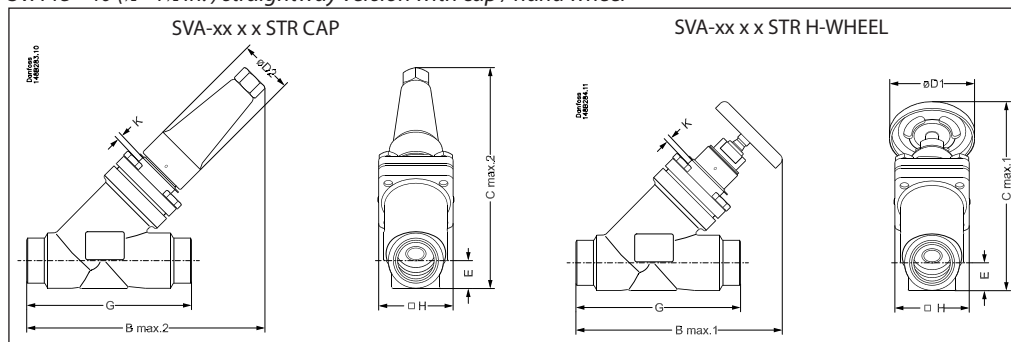
Valve size		K	C <sub>max.1</sub>	C <sub>max.2</sub>	G	ØD <sub>1</sub>	ØD <sub>2</sub>	□H	Weight
<b>SVA-S</b>									
SVA 15 - 20	mm	4	178	189	45	60	38	60	1.4 kg
	in.	0.16	7.00	7.44	1.77	2.36	1.5	2.36	3.1 lb
SVA 25 - 40	mm	12	234	268	55	80	50	70	2.4 kg
	in.	0.47	9.21	10.55	2.17	3.15	1.97	2.76	5.3 lb
<b>SVA-S, Socket weld</b>									
SVA 32 - 40	mm	12	241	275	62	80	50	70	2.9 kg
	in.	0.47	9.49	10.83	2.44	3.15	1.97	2.76	6.4 lb
<b>SVA-L</b>									
SVA 15 - 20	mm	63	237	248	45	60	38	60	1.4 kg
	in.	2.48	9.33	9.76	1.77	2.36	1.5	2.36	3.1 lb
SVA 25 - 40	mm	74	296	330	55	80	50	70	2.4 kg
	in.	2.91	11.65	12.99	2.17	3.15	1.97	2.76	5.3 lb
<b>SVA-L, Socket weld</b>									
SVA 32 - 40	mm	74	303	337	62	80	50	70	2.9 kg
	in.	2.91	11.93	13.27	2.44	3.15	1.97	2.76	6.4 lb

Specified weights are approximate values only.

## Stop valves, SVA-S and SVA-L

### Dimensions and weights

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



Valve size	K	C <sub>max.1</sub>	C <sub>max.2</sub>	B <sub>max.1</sub>	B <sub>max.2</sub>	E	G	ØD <sub>1</sub>	ØD <sub>2</sub>	□H	Weight
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#### SVA-S

SVA 15 - 20	mm	4	146	141	160	156	20	120	60	38	60	2.0 kg
SVA (½ - ¾)	in.	0.16	5.74	5.55	6.30	6.14	0.79	4.72	2.36	1.50	2.36	4.4 lb
SVA 25 - 40	mm	12	199	208	212	222	26	155	80	50	70	3.0 kg
SVA (1 - 1½)	in.	0.47	7.83	8.19	8.35	8.74	1.02	6.10	3.15	1.97	2.76	6.6 lb

#### SVA-S, Socket weld

SVA 32	mm	12	200	209	212	222	27.4	155	80	50	70	3.0 kg
SVA (1¼)	in.	0.47	7.87	8.23	8.35	8.74	1.08	6.10	3.15	1.97	2.76	6.6 lb
SVA 40	mm	12	204	213	212	222	31.0	155	80	50	70	3.0 kg
SVA (1½)	in.	0.47	8.03	8.39	8.35	8.74	1.22	6.10	3.15	1.97	2.76	6.6 lb

#### SVA-L

SVA 15 - 20	mm	63	188	184	202	198	20	120	60	38	60	2.0 kg
SVA (½ - ¾)	in.	2.48	7.40	7.24	7.95	7.80	0.79	4.72	2.36	1.50	2.36	4.4 lb
SVA 25 - 40	mm	74	243	252	256	265	26	155	80	50	70	3.0 kg
SVA (1 - 1½)	in.	2.91	9.57	9.92	10.08	10.43	1.02	6.10	3.15	1.97	2.76	6.6 lb

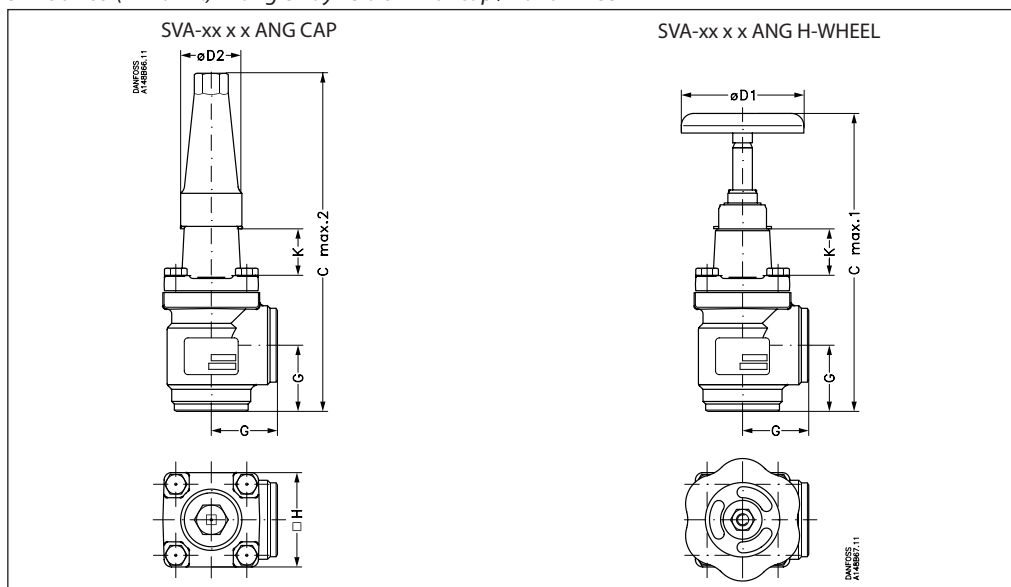
#### SVA-L, Socket weld

SVA 32	mm	74	244	253	256	265	27.4	155	80	50	70	3.0 kg
SVA (1¼)	in.	2.91	9.61	9.96	10.08	10.43	1.08	6.10	3.15	1.97	2.76	6.6 lb
SVA 40	mm	74	248	257	256	265	31.0	155	80	50	70	3.0 kg
SVA (1½)	in.	2.91	9.76	10.12	10.08	10.43	1.22	6.10	3.15	1.97	2.76	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 <sub>max.1</sub>	C <sub>max.2</sub>	G	ØD <sub>1</sub>	ØD <sub>2</sub>	□H	Weight
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#### SVA-S

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-S, Socket weld

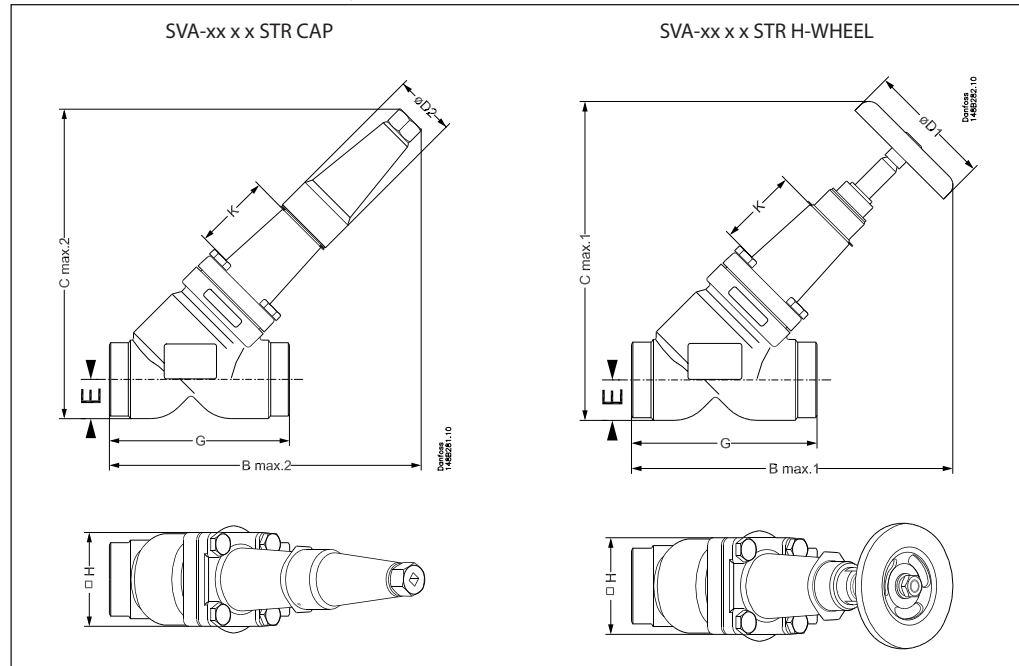
SVA 50	mm	70	289	320	65	100	50	77	4.1 kg
SVA (2)	in.	2.76	11.38	12.60	2.56	3.94	1.97	3.03	9.0 lb

Specified weights are approximate values only.

## Stop valves, SVA-S and SVA-L

### Dimensions and weights

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



Valve size	K	B <sub>max.1</sub>	B <sub>max.2</sub>	C <sub>max.1</sub>	C <sub>max.2</sub>	E	G	ØD <sub>1</sub>	ØD <sub>2</sub>	H	Weight
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#### SVA-S

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 65	mm	70	284	280	284	280	40	176	100	50	90	6.3 kg
SVA (2½)	in.	2.76	11.18	11.02	11.18	11.02	1.57	6.93	3.94	1.97	3.54	13.9 lb

#### SVA-S, Socket weld

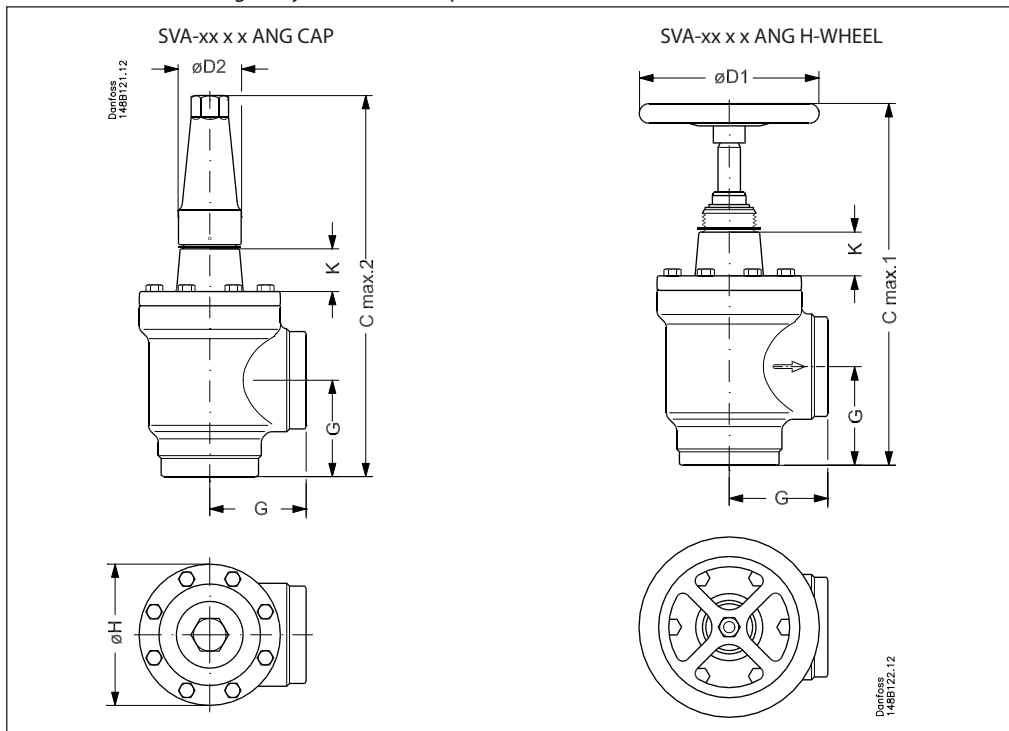
SVA 50	mm	70	266	266	261	261	37	162	100	50	77	5.1 kg
SVA (2)	in.	2.76	10.47	10.47	10.28	10.28	1.26	6.38	3.94	1.97	3.03	11.2 lb

Specified weights are approximate values only.

**Stop valves, SVA-S and SVA-L**

**Dimensions and weights**

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

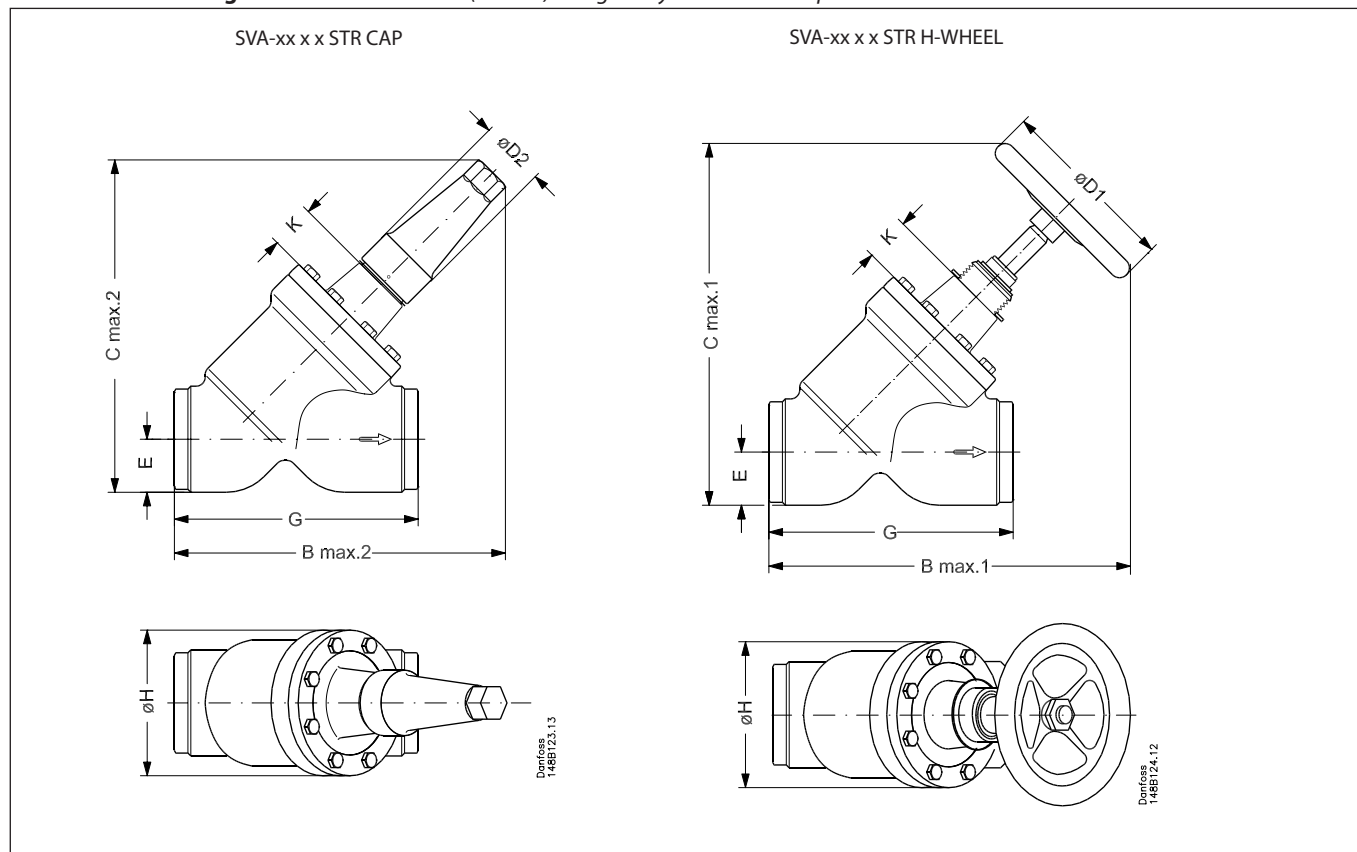


Valve size		K	C <sub>max.1</sub>	C <sub>max.2</sub>	G	ØD <sub>1</sub>	ØD <sub>2</sub>	ØH	Weight
<b>SVA-S</b>									
SVA 80	mm	76	373	388	90	200	58	129	9.7 kg
SVA (3)	in.	3.00	14.69	15.28	3.54	7.87	2.28	5.08	21.4 lb
SVA 100	mm	90	432	437	106	250	58	156	15.3 kg
SVA (4)	in.	3.54	17.00	17.20	4.17	9.84	2.28	6.14	33.7 lb
SVA 125	mm	90	517	533	128	315	74	193	28.1 kg
SVA (5)	in.	3.54	20.35	20.98	5.04	12.40	2.91	7.60	61.9 lb
SVA 150	mm	90	564	568	145	315	74	219	39.7 kg
SVA (6)	in.	3.54	22.20	22.36	5.71	12.40	2.91	8.62	87.5 lb
SVA 200	mm	90	675	678	180	400	86	276	79.5 kg
SVA (8)	in.	3.54	26.57	26.69	7.09	15.75	3.39	10.87	175.3 lb

Specified weights are approximate values only.

## Stop valves, SVA-S and SVA-L

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



Valve size	K	B <sub>max.1</sub>	B <sub>max.2</sub>	C <sub>max.1</sub>	C <sub>max.2</sub>	E	G	ØD <sub>1</sub>	ØD <sub>2</sub>	ØH	Weight	
<b>SVA-S</b>												
SVA 80	mm	76	365	321	367	322	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.



## Stop valves, SVA-S and SVA-L

### Ordering

Available connection sizes

#### SVA-S:

The **S** means **Standard** bonnet length (sizes from DN50 to DN200 are insulation friendly)

#### SVA-L:

The **L** means **Long** bonnet length (insulation friendly)

Size	SVA-S	SVA-L
6	x	-
10	x	-
15	x	x
20	x	x
25	x	x
32	x	x
40	x	x
50	x	
65	x	
80	x	
100	x	
125	x	
150	x	

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																																																																														
Nominal size in mm  (valve size measured on the connection diameter)		<table border="1"> <thead> <tr> <th colspan="4">Available connections</th> </tr> <tr> <th>A/D</th> <th>SOC</th> <th>FPT</th> <th>T</th> </tr> </thead> <tbody> <tr><td>6</td><td>DN 6 (1/4)</td><td>x</td><td></td><td>x</td></tr> <tr><td>10</td><td>DN 10 (3/8)</td><td>x</td><td></td><td></td></tr> <tr><td>15</td><td>DN 15 (1/2)</td><td>x</td><td>x</td><td></td></tr> <tr><td>20</td><td>DN 20 (3/4)</td><td>x</td><td>x</td><td></td></tr> <tr><td>25</td><td>DN 25 (1)</td><td>x</td><td>x</td><td></td></tr> <tr><td>32</td><td>DN 32 (1 1/4)</td><td>x</td><td>x</td><td></td></tr> <tr><td>40</td><td>DN 40 (1 1/2)</td><td>x</td><td>x</td><td></td></tr> <tr><td>50</td><td>DN 50 (2)</td><td>x</td><td>x</td><td></td></tr> <tr><td>65</td><td>DN 65 (2 1/2)</td><td>x</td><td></td><td></td></tr> <tr><td>80</td><td>DN 80 (3)</td><td>x</td><td></td><td></td></tr> <tr><td>100</td><td>DN 100 (4)</td><td>x</td><td></td><td></td></tr> <tr><td>125</td><td>DN 125 (5)</td><td>x</td><td></td><td></td></tr> <tr><td>150</td><td>DN 150 (6)</td><td>x</td><td></td><td></td></tr> <tr><td>200</td><td>DN 200 (8)</td><td>x</td><td></td><td></td></tr> </tbody> </table>	Available connections				A/D	SOC	FPT	T	6	DN 6 (1/4)	x		x	10	DN 10 (3/8)	x			15	DN 15 (1/2)	x	x		20	DN 20 (3/4)	x	x		25	DN 25 (1)	x	x		32	DN 32 (1 1/4)	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		
Available connections																																																																																
A/D	SOC	FPT	T																																																																													
6	DN 6 (1/4)	x		x																																																																												
10	DN 10 (3/8)	x																																																																														
15	DN 15 (1/2)	x	x																																																																													
20	DN 20 (3/4)	x	x																																																																													
25	DN 25 (1)	x	x																																																																													
32	DN 32 (1 1/4)	x	x																																																																													
40	DN 40 (1 1/2)	x	x																																																																													
50	DN 50 (2)	x	x																																																																													
65	DN 65 (2 1/2)	x																																																																														
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Connections	<b>A</b> <b>D</b> <b>SOC</b> <b>FPT</b> <b>T</b>	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 EN 10220 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	<b>ANG</b> <b>STR</b>	Angle flow Straight flow																																																																														
Other equipment	<b>H-WHEEL</b> <b>CAP</b>	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.



## Stop valves, SVA-S and SVA-L

### Ordering SVA-L complete valves

Example:  
SVA-L 20 DIN angleyway with hand wheel = **148B5340**

#### 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.

### SVA-L Angleyway

Size		Type	MWP		Code number
mm	in.		bar	psi	

#### Butt-weld DIN (EN 10220)

15	½	SVA-L 15 D ANG H-WHEEL	52	754	<b>148B5240</b>
15	½	SVA-L 15 D ANG CAP	52	754	<b>148B5241</b>
20	¾	SVA-L 20 D ANG H-WHEEL	52	754	<b>148B5340</b>
20	¾	SVA-L 20 D ANG CAP	52	754	<b>148B5341</b>
25	1	SVA-L 25 D ANG H-WHEEL	52	754	<b>148B5440</b>
25	1	SVA-L 25 D ANG CAP	52	754	<b>148B5441</b>
32	1¼	SVA-L 32 D ANG H-WHEEL	52	754	<b>148B5540</b>
32	1¼	SVA-L 32 D ANG CAP	52	754	<b>148B5541</b>
40	1½	SVA-L 40 D ANG H-WHEEL	52	754	<b>148B5640</b>
40	1½	SVA-L 40 D ANG CAP	52	754	<b>148B5641</b>

#### Butt-weld ANSI (B 36.10 Schedule 80)

15	½	SVA-L 15 A ANG H-WHEEL	52	754	<b>148B5260</b>
15	½	SVA-L 15 A ANG CAP	52	754	<b>148B5261</b>
20	¾	SVA-L 20 A ANG H-WHEEL	52	754	<b>148B5360</b>
20	¾	SVA-L 20 A ANG CAP	52	754	<b>148B5361</b>
25	1	SVA-L 25 A ANG H-WHEEL	52	754	<b>148B5460</b>
25	1	SVA-L 25 A ANG CAP	52	754	<b>148B5461</b>
32	1¼	SVA-L 32 A ANG H-WHEEL	52	754	<b>148B5560</b>
32	1¼	SVA-L 32 A ANG CAP	52	754	<b>148B5561</b>
40	1½	SVA-L 40 A ANG H-WHEEL	52	754	<b>148B5660</b>
40	1½	SVA-L 40 A ANG CAP	52	754	<b>148B5661</b>

#### Socket welding ANSI (B 16.11)

15	½	SVA-L 15 SOC ANG H-WHEEL	52	754	<b>148B5262</b>
15	½	SVA-L 15 SOC ANG CAP	52	754	<b>148B5263</b>
20	¾	SVA-L 20 SOC ANG H-WHEEL	52	754	<b>148B5362</b>
20	¾	SVA-L 20 SOC ANG CAP	52	754	<b>148B5363</b>
25	1	SVA-L 25 SOC ANG H-WHEEL	52	754	<b>148B5462</b>
25	1	SVA-L 25 SOC ANG CAP	52	754	<b>148B5463</b>
32	1¼	SVA-L 32 SOC ANG H-WHEEL	52	754	<b>148B5562</b>
32	1¼	SVA-L 32 SOC ANG CAP	52	754	<b>148B5563</b>
40	1½	SVA-L 40 SOC ANG H-WHEEL	52	754	<b>148B5662</b>
40	1½	SVA-L 40 SOC ANG CAP	52	754	<b>148B5663</b>

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

15	½	SVA-L 15 FTP ANG H-WHEEL	52	754	<b>148B5264</b>
15	½	SVA-L 15 FTP ANG CAP	52	754	<b>148B5265</b>
20	¾	SVA-L 20 FTP ANG H-WHEEL	52	754	<b>148B5364</b>
20	¾	SVA-L 20 FTP ANG CAP	52	754	<b>148B5365</b>
25	1	SVA-L 25 FTP ANG H-WHEEL	52	754	<b>148B5464</b>
25	1	SVA-L 25 FTP ANG CAP	52	754	<b>148B5465</b>
32	1¼	SVA-L 32 FTP ANG H-WHEEL	52	754	<b>148B5564</b>
32	1¼	SVA-L 32 FTP ANG CAP	52	754	<b>148B5565</b>

ANG = Angleyway  
STR = Straightway  
CAP = Cap  
H-WHEEL = Hand wheel

### SVA-L Straightway

Size		Type	MWP		Code number
mm	in.		bar	psi	

#### Butt-weld DIN (EN 10220)

15	½	SVA-L 15 D STR H-WHEEL	52	754	<b>148B5250</b>
15	½	SVA-L 15 D STR CAP	52	754	<b>148B5251</b>
20	¾	SVA-L 20 D STR H-WHEEL	52	754	<b>148B5350</b>
20	¾	SVA-L 20 D STR CAP	52	754	<b>148B5351</b>
25	1	SVA-L 25 D STR H-WHEEL	52	754	<b>148B5450</b>
25	1	SVA-L 25 D STR CAP	52	754	<b>148B5451</b>
32	1¼	SVA-L 32 D STR H-WHEEL	52	754	<b>148B5550</b>
32	1¼	SVA-L 32 D STR CAP	52	754	<b>148B5551</b>
40	1½	SVA-L 40 D STR H-WHEEL	52	754	<b>148B5650</b>
40	1½	SVA-L 40 D STR CAP	52	754	<b>148B5651</b>

#### Butt-weld ANSI (B 36.10 Schedule 80)

15	½	SVA-L 15 A STR H-WHEEL	52	754	<b>148B5270</b>
15	½	SVA-L 15 A STR CAP	52	754	<b>148B5271</b>
20	¾	SVA-L 20 A STR H-WHEEL	52	754	<b>148B5370</b>
20	¾	SVA-L 20 A STR CAP	52	754	<b>148B5371</b>
25	1	SVA-L 25 A STR H-WHEEL	52	754	<b>148B5470</b>
25	1	SVA-L 25 A STR CAP	52	754	<b>148B5471</b>
32	1¼	SVA-L 32 A STR H-WHEEL	52	754	<b>148B5570</b>
32	1¼	SVA-L 32 A STR CAP	52	754	<b>148B5571</b>
40	1½	SVA-L 40 A STR H-WHEEL	52	754	<b>148B5670</b>
40	1½	SVA-L 40 A STR CAP	52	754	<b>148B5671</b>

#### Socket welding ANSI (B 16.11)

15	½	SVA-L 15 SOC STR H-WHEEL	52	754	<b>148B5272</b>
15	½	SVA-L 15 SOC STR CAP	52	754	<b>148B5273</b>
20	¾	SVA-L 20 SOC STR H-WHEEL	52	754	<b>148B5372</b>
20	¾	SVA-L 20 SOC STR CAP	52	754	<b>148B5373</b>
25	1	SVA-L 25 SOC STR H-WHEEL	52	754	<b>148B5472</b>
25	1	SVA-L 25 SOC STR CAP	52	754	<b>148B5473</b>
32	1¼	SVA-L 32 SOC STR H-WHEEL	52	754	<b>148B5572</b>
32	1¼	SVA-L 32 SOC STR CAP	52	754	<b>148B5573</b>
40	1½	SVA-L 40 SOC STR H-WHEEL	52	754	<b>148B5672</b>
40	1½	SVA-L 40 SOC STR CAP	52	754	<b>148B5673</b>

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

15	½	SVA-L 15 FTP STR H-WHEEL	52	754	<b>148B5274</b>
15	½	SVA-L 15 FTP STR CAP	52	754	<b>148B5275</b>
20	¾	SVA-L 20 FTP STR H-WHEEL	52	754	<b>148B5374</b>
20	¾	SVA-L 20 FTP STR CAP	52	754	<b>148B5375</b>
25	1	SVA-L 25 FTP STR H-WHEEL	52	754	<b>148B5474</b>
25	1	SVA-L 25 FTP STR CAP	52	754	<b>148B5475</b>
32	1¼	SVA-L 32 FTP STR H-WHEEL	52	754	<b>148B5574</b>
32	1¼	SVA-L 32 FTP STR CAP	52	754	<b>148B5575</b>

### Accessories

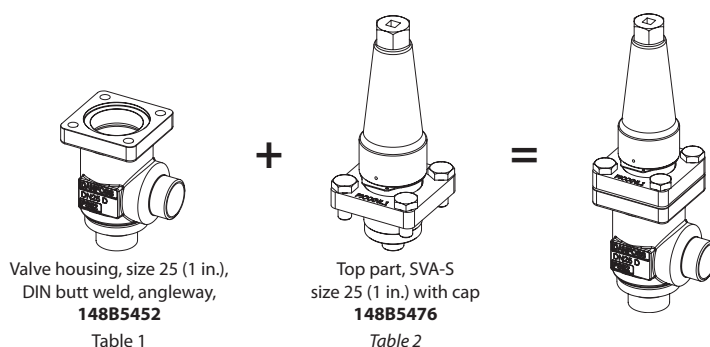
#### 6T Nipple Kit solution

Code no.	
<b>148B4245</b>	ACCESSORY WELD.NIPPLE DN6 A + UNION NUT
<b>148B4184</b>	ACCESSORY WELD.NIPPLE DN6 D + UNION NUT

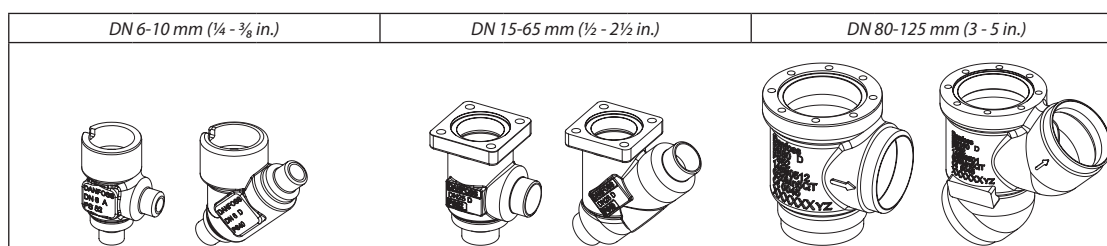
## Stop valves, SVA-S and SVA-L

### Ordering SVA-S from the parts programme

**Example**  
(select from  
table 1 and 2)



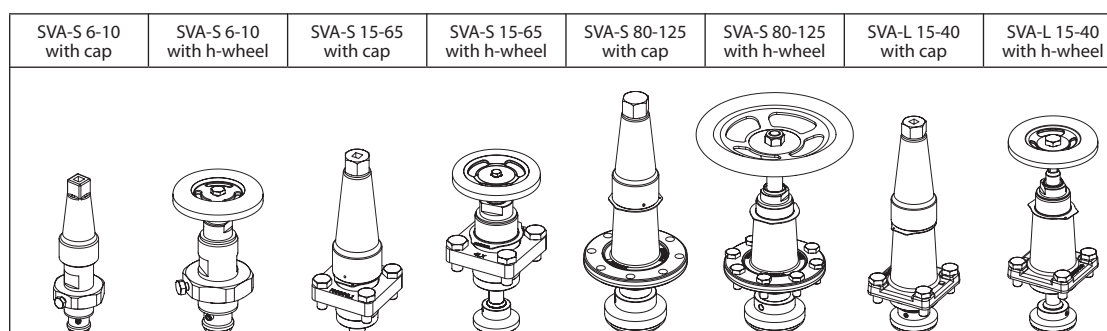
**Table 1**  
SVL valve housings  
w/different connections



**Please note:**  
Not all sizes available for  
SVA-L - see table 2.

Sizes [DN]		Valve Housing SVL									
		DIN-Butt weld		ANSI-Butt weld		SOC		FPT		T	
mm	in.	ANG	STR	ANG	STR	ANG	STR	ANG	STR	ANG	
6	¼	148B5002	148B5003	148B5004	148B5005						148B5012
10	⅜	148B5122	148B5123	148B5124	148B5125						
15	½	148B5252	148B5253	148B5254	148B5255	148B5256	148B5257	148B5258	148B5259		
20	¾	148B5352	148B5353	148B5354	148B5355	148B5356	148B5357	148B5358	148B5359		
25	1	148B5452	148B5453	148B5454	148B5455	148B5456	148B5457	148B5458	148B5459		
32	1¼	148B5576	148B5577	148B5578	148B5579	148B5580	148B5581	148B5582	148B5583		
40	1½	148B5652	148B5653	148B5654	148B5655	148B5656	148B5657				
50	2	148B5741	148B5742	148B5743	148B5744	148B5745	148B5746				
65	2½	148B5816	148B5817	148B5818	148B5819						
80	3	148B5912	148B5913	148B5914	148B5915						
100	4	148B6014	148B6015	148B6016	148B6017						
125	5	148B6112	148B6113	148B6114	148B6115						

**Table 2**  
SVA complete top part  
including gaskets and  
bolts



Sizes [DN]		Complete top part			
mm	in.	SVA-S CAP	SVA-S H-WHEEL	SVA-L CAP	SVA-L H-WHEEL
6	¼	148B5013	148B5014		
10	⅜				
15	½	148B5276	148B5277	148B5278	148B5279
20	¾				
25	1	148B5476	148B5477	148B5478	148B5479
32	1¼				
40	1½				
50	2	148B5728	148B5729		
65	2½	148B5822	148B5823		
80	3	148B5916	148B5917		
100	4	148B6012	148B6018		
125	5	148B6116	148B6117		







