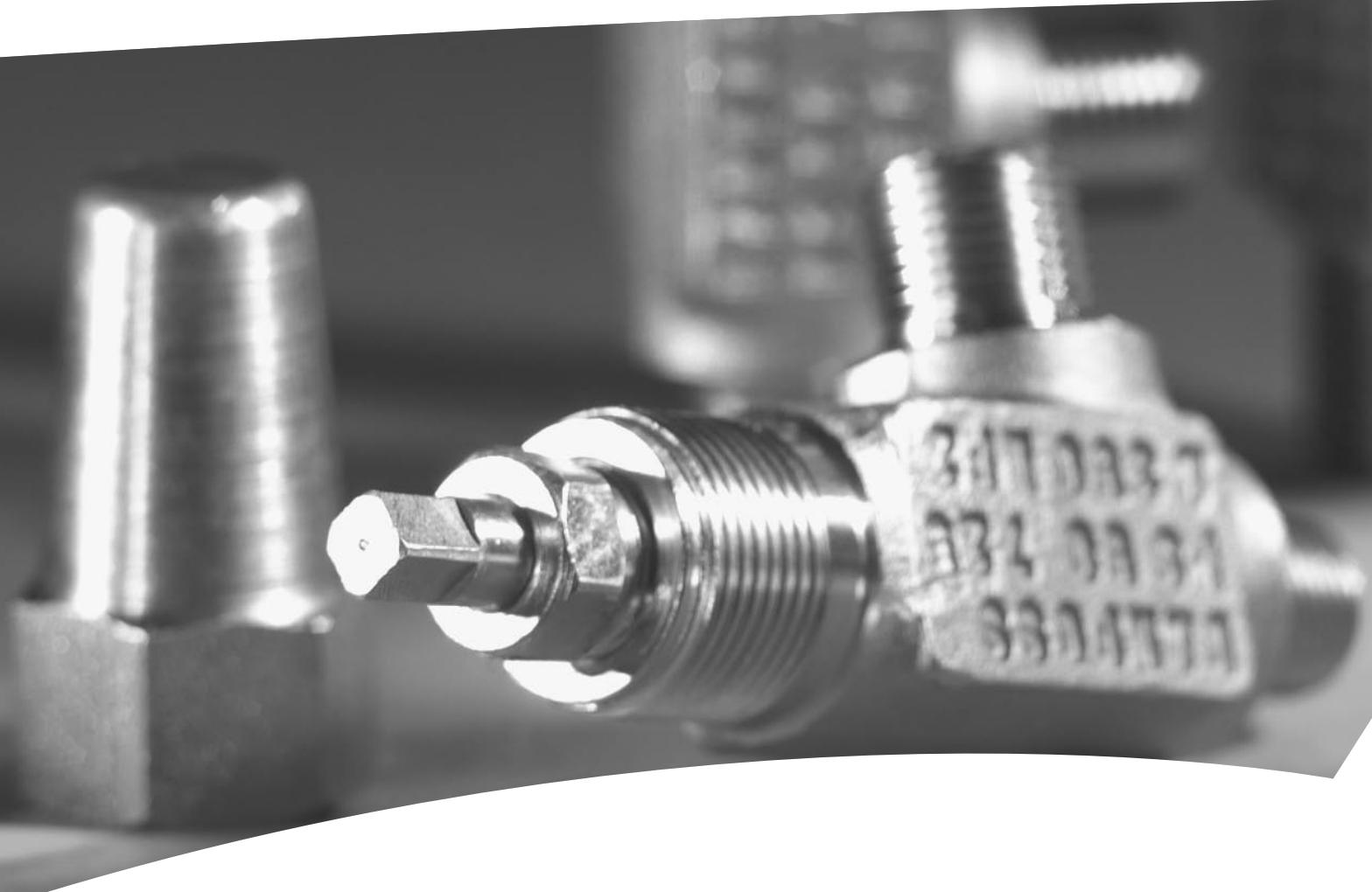


Danfoss



Stop Needle Valves, type SNV-ST

Contents

	Page
Introduction	3
Features	3
Technical data	4
Design	4
Connections	4
Material specification	5
Dimensions and weights	6
Ordering	7
Accessories	8

Introduction

SNV-ST valves are designed to meet all industrial refrigeration application requirements. Designed as service valves they provide favourable flow characteristics.

Features

- Applicable to all common refrigerants including R717 and R744 (CO₂) and non corrosive gases/liquids.
- Suitable for "heavy duty" industrial applications having a very sturdy and safe design including high pressures and wide temperature range.
- The SNV-ST valves have backseating (metal to metal).
- Compact and light valve for easy handling and installation
- No special flow direction required.
- Provide high flow characteristics.
- Each valve type is clearly marked with type and size.
- Housing and bonnet are made from low temperature steel according to requirements of the Pressure Equipment Directive and other international classification authorities.
- Valve safety is enhanced with the spindle being secured such that it cannot be unscrewed.
- Max. operating pressure: 52 bar g (754 psig)
Valves for higher operating pressure available on request
- Full temperature range: -60/+150°C (-76/+302°F)

Technical data

 ■ *Refrigerants*

Applicable to all common refrigerants including R 717 and R744 (CO₂) and non corrosive gases/liquids. For further information please see installation instruction for SNV-ST.

For further information please contact your local Danfoss Sales Company.

 ■ *Temperature range*

-60/+150°C (-76/+302°F).

 ■ *Maximum working pressure*

The valve is designed for: Maximum operating pressure of 52 bar g (754 psig). Valves for higher operating pressure available on request.

Design

Connections

Available with the following connections:

- CD Cutting ring
- MPT Male NPT ANSI
- FPT Female NPT ANSI
- G
- W Welding connection

Housing

Made of special steel, approved for low temperature operations.

Spindle

Equipped with stainless steel spindle, which is ideal for O-ring sealing.

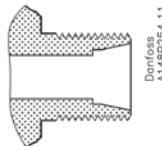
Installation

No special flow direction is required.

The valve is designed to withstand high internal pressures. 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 instruction for SNV-ST.

Connections

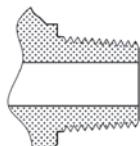
CD 6
CD10



Cutting ring, DIN 3861 & DIN 3901 class L,
 $d_u = 6$ mm

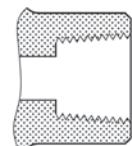
Cutting ring, DIN 3861 & DIN 3901 class L,
 $d_u = 10$ mm

1/4 MPT
3/8 MPT



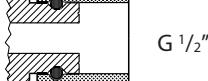
1/4" male NPT ANSI
3/8" male NPT ANSI

1/4 FPT
3/8 FPT



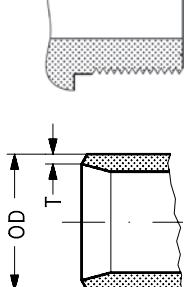
1/4" female NPT ANSI
3/8" female NPT ANSI

G 1/2

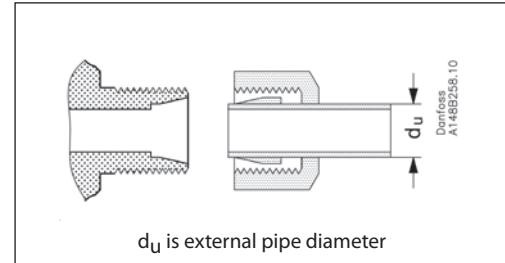


G 1/2"

W



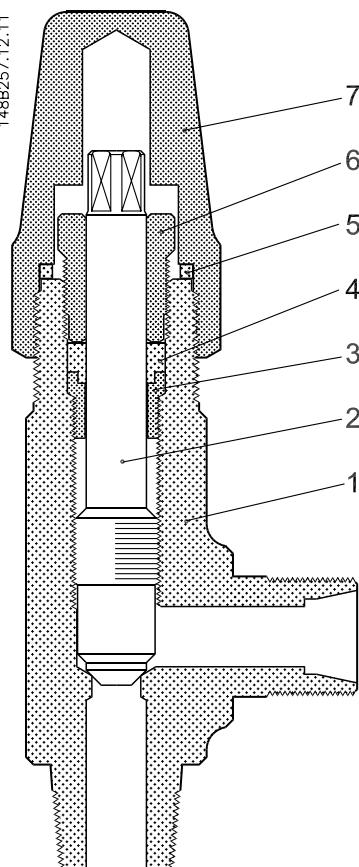
1/2" welding connection
OD = 21.3 mm (0.839 in.)
T = 2.3 mm (0.091 in.)



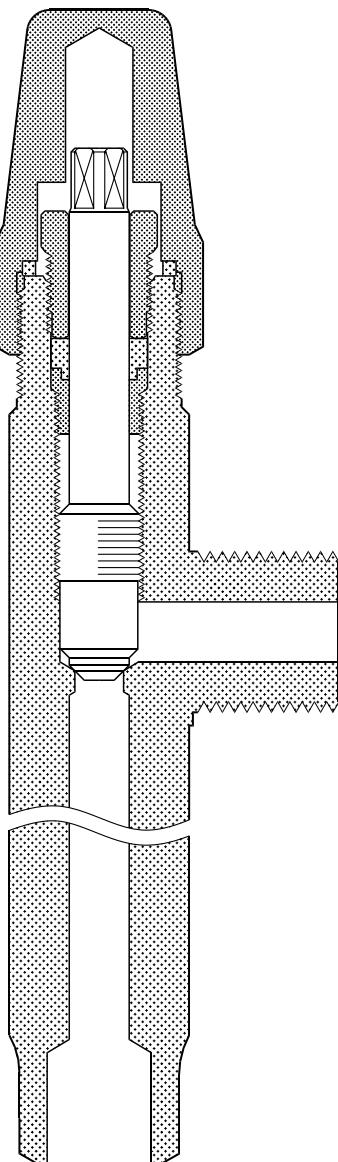
d_u is external pipe diameter

Note: Fittings not included

Material specification

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148B257.12.111


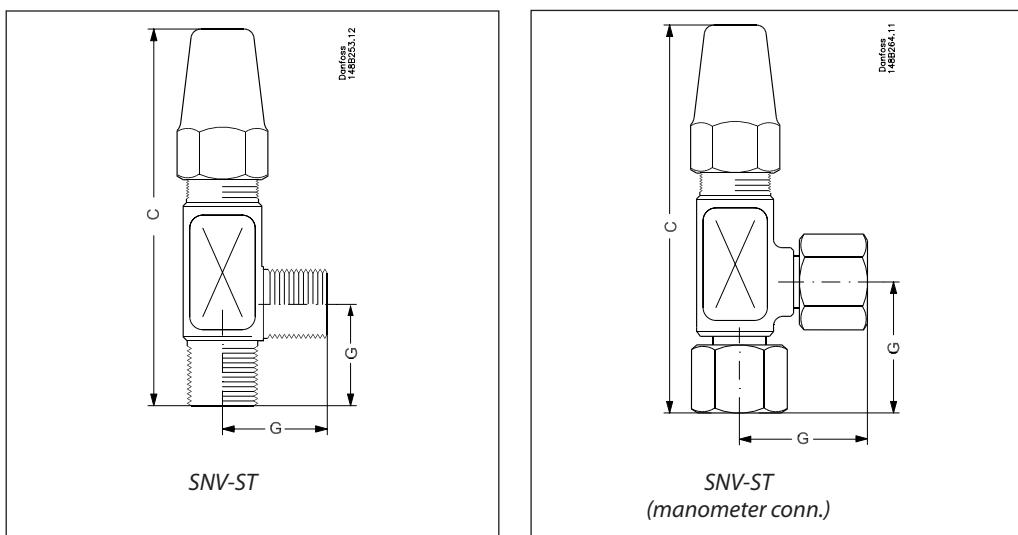
SNV-ST

 Danfoss
148B262.10


SNV-ST (extended branch)

No.	Part	Material	EN	JIS	ASTM
1	Housing	Steel	P285QH EN 10222-4	SFL 2 G 3205	LF2 A350
2	Spindle	Stainless steel	X8CrNiS 18-9 EN 10088	SUS 303	AISI 303
3	Locking ring	Steel			
4	Sealing ring	Teflon			
5	Seal cap gasket	Nylon			
6	Gland nut	Steel			
7	Seal cap	Steel			

Dimensions and weights

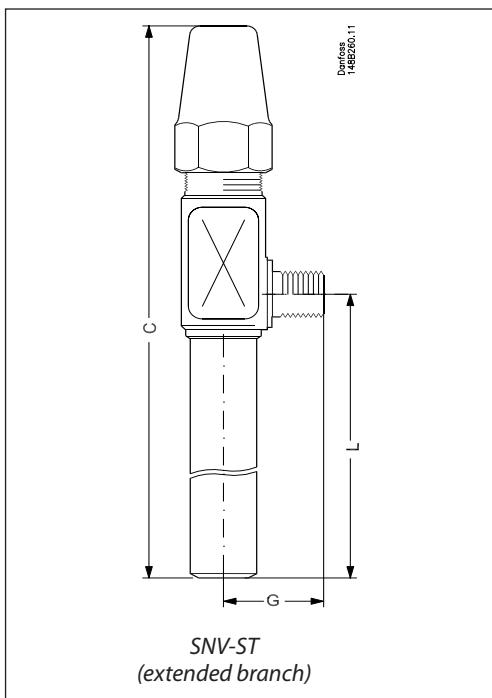


Type	C	G	Weight
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SNV-ST	mm in.	115 4.53	32 1.26	0.36 kg 0.79 lb
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Type	C	G	Weight
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SNV-ST (Man.)	mm in.	127 5.00	45 1.77	0.56 kg 1.22 lb
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Type	C	G	L	Weight
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SNV-ST Ext.branch	mm in.	131 5.16	32 1.26	50 1.97	0.60 kg 1.32 lb
SNV-ST Ext.branch	mm in.	181 7.13	32 1.26	100 3.94	0.60 kg 1.32 lb
SNV-ST Ext.branch	mm in.	206 8.11	32 1.26	125 4.92	0.60 kg 1.32 lb

Specified weights are approximate values only.

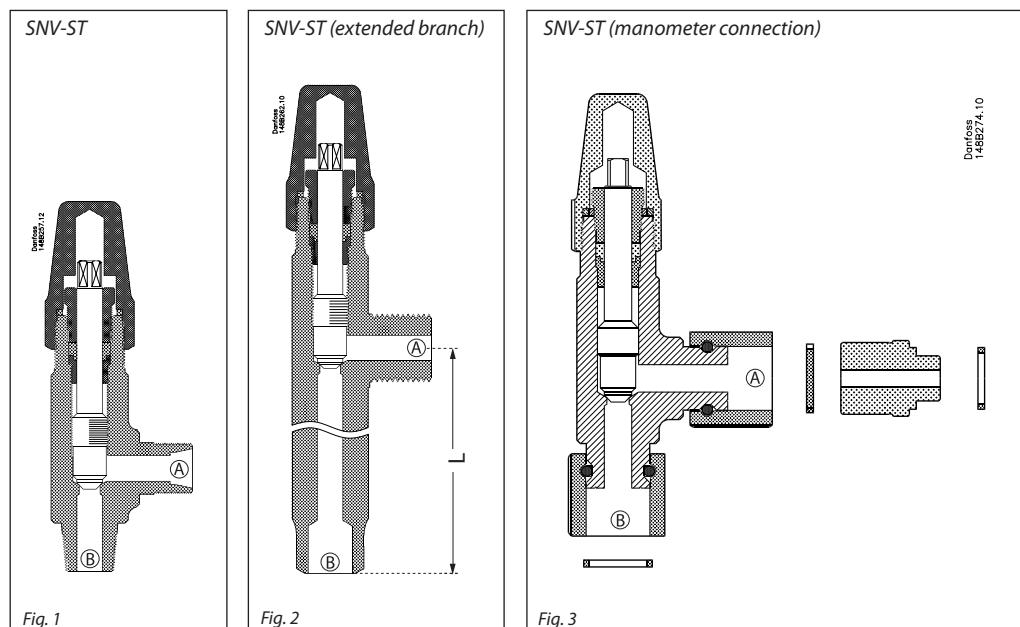
Ordering
How to order

The table below is used to identify the valve required.

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.

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.



See figure 1

Side branch connection (A)	Bottom branch connection (B)	Type	Quantity	Code No.
CD 10	CD 10	SNV-ST CD10-CD10	1 pc.	14883740
CD 10	CD 10	SNV-ST CD10-CD10	30 pcs.	14884177
CD 10	1/4 MPT	SNV-ST CD10-1/4MPT	1 pc.	14883741
CD 6	1/4 MPT	SNV-ST CD6-1/4MPT	1 pc.	14883742
CD 10	3/8 MPT	SNV-ST CD10-3/8MPT	1 pc.	14883743
CD 6	3/8 MPT	SNV-ST CD6-3/8MPT	1 pc.	14883744
G 1/2 (external)	G 1/2 (external)	SNV-ST G1/2-G1/2	1 pc.	14883745
G 1/2 (external)	G 1/2 (external)	SNV-ST G1/2-G1/2	30 pcs.	14884179
1/4 FPT	1/4 MPT	SNV-ST 1/4FPT-1/4MPT	1 pc.	14883746
1/4 FPT	1/4 MPT	SNV-ST 1/4FPT-1/4MPT	30 pcs.	14884180
3/8 FPT	3/8 MPT	SNV-ST 3/8FPT-3/8MPT	1 pc.	14883747
3/8 FPT	3/8 MPT	SNV-ST 3/8FPT-3/8MPT	30 pcs.	14884181
3/8 FPT	1/2 MPT	SNV-ST 3/8FPT-1/2MPT	30 pcs.	14884233
CD 1/4	1/4 MPT	SNV-ST CD 1/4-1/4MPT	30 pcs.	14884220
CD 1/8	3/8 MPT	SNV-ST CD3/8-3/8MPT	30 pcs.	14884221
CD 3/8	1/4 MPT	SNV-ST CD3/8-1/4MPT	30 pcs.	14884222
1/4 FPT	1/4 FPT	SNV-ST 1/4FPT-1/4FPT	30 pcs.	14884223
1/2 MPT	1/2 MPT	SNV-ST 1/2MPT-1/2MPT	30 pcs.	14884224
3/8 FPT	3/8 FPT	SNV-ST 3/8FPT-3/8FPT	30 pcs.	14884225
1/2 MPT	3/8 FPT	SNV-ST 1/2MPT-3/8FPT	30 pcs.	14884226
CD 6	1/4 MPT	SNV-ST CD6-1/4MPT*	30 pcs.	14884216
7/16 UNF	1/4 MPT	SNV-ST 7/16UNF-1/4MPT	30 pcs.	14884230

* With handwheel

Extended Branch

See figure 2

L50 = 50 mm (2 in.)
 L100 = 100 mm (4 in.)
 L125 = 125 mm (5 in.)

Side branch connection (A)	Bottom branch connection (B)	Type	Quantity	Code No.
CD10	W1/2 L100	SNV-ST CD10-W1/2 L100	1 pc.	14883768
CD10	W1/2 L100	SNV-ST CD10-W1/2 L100	30 pcs.	14884210
G 1/2	W1/2 L100	SNV-ST G1/2-W1/2 L100	1 pc.	14883769
G 1/2 (external)	W1/2 L100	SNV-ST G1/2-W1/2 L100	30 pcs.	14884211
G 1/2 (external)	W1/2 L125	SNV-ST G1/2-W1/2 L125	30 pcs.	14884219
G 1/2 (external)	W1/2 L50	SNV-ST G1/2-W1/2 L50	30 pcs.	14884218
G 1/4 (internal)	R1/4 L50 (external)	SNV-ST G1/4-R1/4 L50	30 pcs.	14884231
1/4 FPT	1/4 MPT L100	SNV-ST 1/4FPT-1/4MPT L100	30 pcs.	14884232

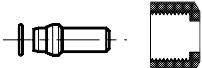
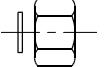
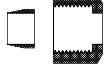
See figure 3

Manometer connection

Side branch connection	Bottom branch connection	Type	Quantity	Code No.
G 1/2	G 1/2	SNV-ST G1/2 Man	1 pc.	148B3778**

** Including adaptor for connection to ICS/PM valve.

Accessories

Type	Connection type	Quantity	Code no.
	Weld nipple incl. union nut and O-ring	CD 10	1 pc. 2469+008
	Blind nut incl. gasket	G 1/2	1 pc. 2469+056
	CD 6 Cutting ring + union nut	CD 6	1 pc. 148B4182
	CD 10 Cutting ring + union nut	CD 10	1 pc. 148B4183
			60 pcs. 148B4186
	Welding nipple incl. aluminium gasket	G½-ND6	2 pcs. 148B4184