

STAF, STAF-SG, STAF-R, STAG

(STAF-SG with ANSI flanges)

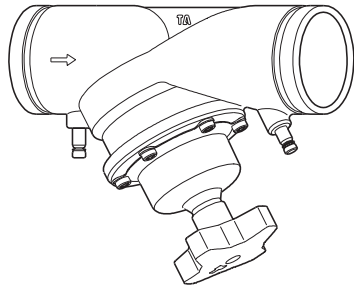
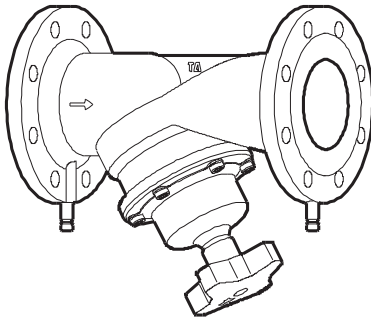


Table 1

	PS (PN)		
	PN 16	PN 25	Class 150
Article 4 § 3		DN 20-40	DN 20-40 (3/4"-1 1/2")
Category I	DN 65-200	DN 50-125	DN 50-125 (2"-5")
Category II	DN 250-300	DN 150-250	DN 150-250 (6"-10")
Category III	DN 350-400	DN 300-400	DN 300 (12")

Table 2

STAF	STAF-SG (PN 25)	STAF-SG (Class 150)	STAF-R	STAG
250 CI	400-15 SG	400-15 SG ~60-40-18	GM	400-15 SG

Table 3

DN (size)	STAF	STAF-SG	STAF-R	STAG
20 (3/4")		X		
25 (1")		X		
32 (1 1/4")		X		
40 (1 1/2")		X		
50 (2")		X		
65 (2 1/2")	X	X	X	X
80 (3")	X	X	X	X
100 (4")	X	X	X	X
125 (5")	X	X	X	X
150 (6")	X	X	X	X
200 (8")		X		X
250 (10")		X		X
300 (12")		X		X
350 (14")		X		
400 (16")		X		


Table 4

	STAF	STAF-SG	STAF-R	STAG
PN 16	DN 65-150	DN 200-400	DN 65-150	
PN 25		DN 20-400		DN 65-300
Class 150		DN 20-400 (3/4"-16")		

Table 5

	STAF	STAF-SG (PN 16)	STAF-SG (PN 25)	STAF-SG (Class 150)	STAF-R	STAG
CE	DN 65-150	DN 65-150	DN 50-125	DN 50-125 (2"-5")	DN 65-150	DN 65-125
CE 0409*		DN 200-400	DN 150-400	DN 150-300 (6"-12")		DN 150-300

Table 6 STAF, STAF-SG (PN 16)

DN	65	80	100	125	150	200	250	300
	M16	M16	M16	M16	M20	M20	M24	M24
N°	4	8	8	8	8	12	12	12
Nm	90	90	90	90	140	140	250	250



DN	350	400
	M24	M27
N°	16	16
Nm	250	380

Table 7a STAF-SG (PN 25)

DN	20	25	32	40	50	65	80	100
	M12	M12	M16	M16	M16	M16	M16	M20
N°	4	4	4	4	4	8	8	8
Nm	50	50	90	90	90	90	90	140



DN	125	150	200	250	300	350	400
	M24	M24	M27	M30	M30	M30	M33
N°	8	8	12	12	16	16	16
Nm	250	250	380	480	480	480	650

Table 7b STAF-SG with ANSI flanges (Class 150)

DN (size)	20 (3/4")	25 (1")	32 (1 1/4")	40 (1 1/2")	50 (2")	65 (2 1/2")	80 (3")	100 (4")
	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"
Nº	4	4	4	4	4	4	4	8
Nm	55	55	55	55	115	115	115	115


DN	125 (5")	150 (6")	200 (8")	250 (10")	300 (12")	350 (14")	400 (16")
	3/4"	3/4"	3/4"	7/8"	7/8"	1"	1"
Nº	8	8	8	12	12	12	16
Nm	200	200	200	320	320	480	480

Table 8 STAF-R


DN	65	80	100	125	150
	M16	M16	M16	M16	M20
Nº	4	8	8	8	8
Nm	90	90	90	90	140

Table 9


	Nº 
DN 20-50	4
DN 65-150	8
DN 200-250	12
DN 300	16
DN 350	20
DN 400	22

Fig 1

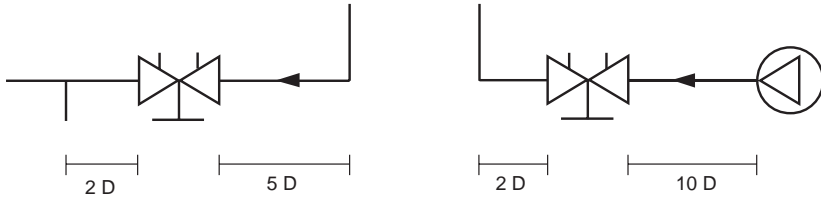


Fig 2

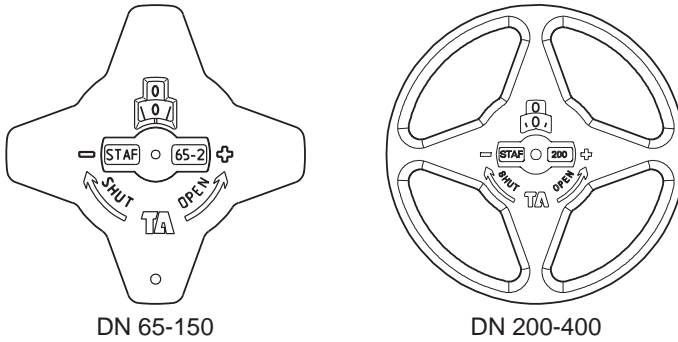


Fig 3

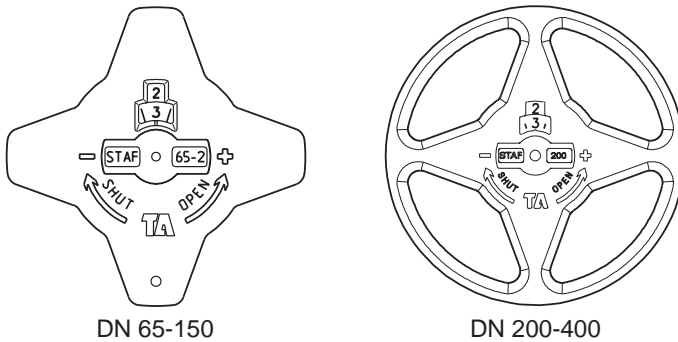
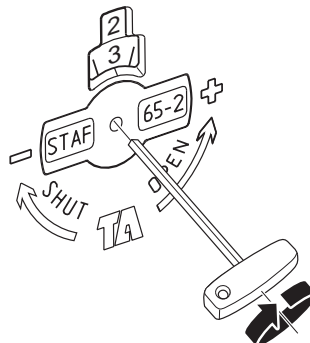


Fig 4



General

The STAF/STAG valves are classified within the Pressure Equipment Directive (European Parliament and Council directive 2014/68/EU) with the consistency level as set out in the table 1.

STAF, STAF-SG, STAF-R and STAG are intended for heating and refrigeration installations, STAF-R is also intended for tap water installations. (Fluids in group 2 according to the directive).

Differential pressure measurement should take place with extreme care especially if this concerns hot media.

Marking

The valve housing is marked with the following data:

TA: Manufacturer

Material according to table 2

DN according to table 3

Max. permitted pressure PS (PN) according to table 4

CE-marking according to table 5 (* Registered body)

Casting date: year of manufacture, month and day

→ Flow arrow for the recommended direction of flow

In addition to that stated on the valve housing, it applies:

- Max. permitted temperature: 120°C (Special version for higher temperature, however, max 150°C)
- Min. permitted temperature: -20°C (STAF -10°C)

Installation

The valve should be kept in a dry, clean location and protected from damage and contamination.

Before you install the valve, check that:

- the valve is clean and undamaged.
- the pipe system has been cleaned.
- surfaces the seals are to seal against are clean and undamaged.
- demands on straight pipe lengths before the valve, after a bend respective pump, as well as after the valve must be observed (fig 1).

STAF

Check that the counter-flanges are parallel before you install the valve. Lubricate the threads on the bolts and fit washers. Tighten the bolts crosswise using a torque wrench to the tightening torque set out in tables 6 to 8.

Check that the flat seals are in accordance with the given standard for flanges and that they are centred correctly.

STAG

Before you install the valve, check that the outside diameter of the valve connection ends and the pipe are the same as well as that grooves for couplings are in accordance with the coupling manufacturer's instructions.

Check that the rubber seals are undamaged and have been fitted correctly.

Pressure switch and thermostat

In order to guarantee the lowest and highest pressure as well as to ensure that the temperature is not exceeded the system should be fitted with a pressure switch and thermostat.

Exception: The pressure may be exceeded when pressure testing, max 24 bar (PN 16) respective 37.5 bar (PN 25).

Commissioning

Test the pressure on the valve using cold water.

Let the valve remain fully open while the system is flushed clean.

Tighten the flange joints and check for leakage in connection with commissioning.

Presetting

The valve's opening position can be read on the digital handwheel. The number of turns between fully open and the closed position are shown in table 9.

Presetting the valve to 2.3 turns is done as follows:

1. Close the valve fully (fig 2).
2. Open the valve to 2.3 (fig 3).
3. Using the allen key turn the inner stern clockwise to the stop (fig 4).

The valve is now set and can be closed, but not opened more than 2.3 turns.

Maintenance

The STAF/STAG valves are maintenance free under the condition that they are used within their normal application area.

We reserve the right to introduce technical alterations without prior notice.



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