

Knife gate valve TV

Compact transmitter isolation valve

Size range: DN 80 (3")





About TV

This is a transmitter isolation valve that can be used on both dry media and liquids. The compact design and unique flange pattern enable direct installation on the tank wall. Downstream transmitter or any other equipment can be disengaged and maintained without draining the tank.

The TV valve is modular designed and it can easily be customized in materials to different process conditions. As standard it is available with a valve body in a stainless steel. Stafsjö's retainer ring system offers great flexibility and several seat material options. The gland box system with TwinPack braids ensures that no media reaches the surrounding environment. It can also be reinforced with a box bottom scraper for demanding applications.





Unique flange pattern enable tank wall installations

The TV knife gate valves' unique flange pattern on the inlet side enable assembly directly on the tank wall. Any equipment on the outlet side can be disengaged without draining the tank. The ratchet wrench enables fast and easy operation of the valve.



Pressure class

Max working pressure at 20 °C		Max differential pressure at 20 °C		
DN	bar	DN	bar	
80	16	80	3,5	

TV configurations

Standard

Size: DN 80

Valve body: Stainless steel EN 1.4408 Retainer ring: Stainless steel EN 1.4408 Gate: Stainless steel EN 1.4404, AISI 316L

Box packing: TwinPack

Top works: Stainless steel tie rods encapsulated in aluminum beams.

Actuator: Stainless steel ratchet wrench Options and others from below.

Options

Valve body

Stainless steel EN 1.4408

Retainer rings

Stainless steel EN 1.4408

Gate material and surface treatments

Stainless steel EN 1.4404, AISI 316L Duplex stainless steel EN 1.4462, S32205 Hard chromed surface

Extra polished surface (max Ra 0,8)

Seats

PTFE with o-ring NBR, EPDM or FKM FDA/EC 1935/2004 approved PTFE EPDM, FKM or NBR

Design standards

Face-to-face dimensions

Stafsjö manufacturing standard. Option in MSS-SP81.

Design, manufacturing, inspection and test

According to pressure equipment directive 2014/68/EU category I and II module A2. The valves are CE marked when it is applicable.

Stafsjö's valves are subject for pressure tests before delivery in opened and closed position with water at 20 °C according to EN 12266-1:2003 rate A. No visually detectable leakage is allowed for duration of the test.

On request 2.2 test report and 3.1 inspection certificate according to EN 10204.

Box packings

TwinPack, WhitePack or FDA/EC 1935/2004 approved PTFE Extra scrapers in UHMW-PE, PTFE or brass

Top works

Stainless steel tie rods encapsulated in aluminum beams Stainless steel pillars

Actuators

Stainless steel ratchet wrench

Flange drillings

Stafsjö standard - EN 1092 PN 10 Stafsjö standard - ASME/ANSI B16.5 Class 150 ASME/ANSI B16.5 Class 150 - ASME/ANSI B16.5 Class 150

Accessories

See our accessory data sheet for further information.

Seat service temperatures

EPDM: -25 °C - +120 °C FKM: -15 °C - +180 °C NBR: -25 °C - +100 °C

PTFE with o-ring NBR: -25 °C - +100 °C PTFE with o-ring EPDM: -25 °C - +120 °C PTFE with o-ring FKM: -15 °C - +180 °C

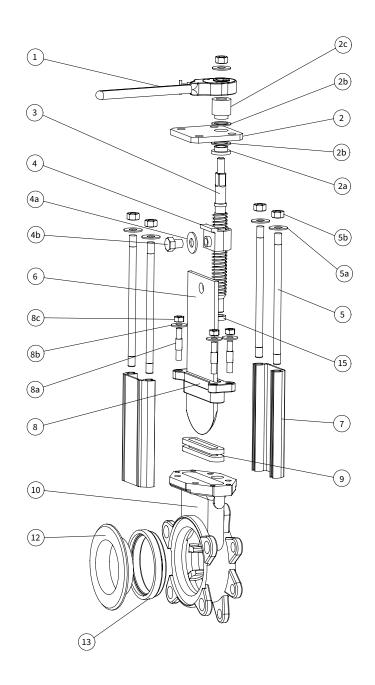
Box packing service temperatures

TwinPack: -60 °C - +260 °C WhitePack: -60 °C-+260 °C PTFE: -200 °C - +280 °C

Additional scrapers in the gland box

UHMW-PE: -200 °C - +85 °C PTFE: -80 °C - +260 °C Brass: -125 °C - +200 °C

Media type, pressure and operating intervals may also affect the seat and box packing material in different ways. Contact Stafsjö for advice.



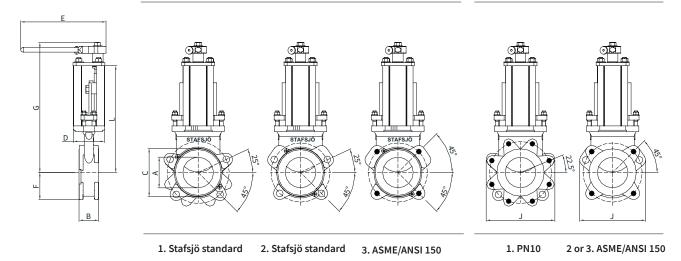
Part list

Pos.	Part	Material	
1	Ratchet wrench	Stainless steel EN 1.4408	
2	Yoke	Stainless steel EN 1.4301	
2a	Bearing	Brass	
2b	Bearing washer	POM	
2c	Bearing	Brass	
3	Stem	Stainless steel EN 1.4016	
4	Stem nut	Brass	
4a	Washer	Stainless steel A2	
4b	Screw	Stainless steel A2	
5	Tie rod	Stainless steel EN 1.4301	
5a	Washer	Stainless steel A2	
5b	Nut	Stainless steel A2	

Pos.	Part	Material		
6	Gate	See options on page 4		
7	Beam	Anodized aluminum		
8	Gland	Stainless steel EN 1.4408		
8a	Stud bolt	Stainless steel A2		
8b	Washer	Stainless steel A2		
8c	Nut	Stainless steel A2		
91)	Box packing	See options on page 4		
10	Valve body	See options on page 4		
12	Retainer ring	See options on page 4		
131)	Seat	See options on page 4		
15	Bushing	Oil-bronze		
1\ Dagg	1) Decommended energy parts			

¹⁾ Recommended spare parts





Main dimensions (mm)

DN	Α	В	С	D	Е	F	G	J	L	kg³)
80	79	51	124	80	220	881)/702)	335	$177^{1)}/170^{2)}$	275	8

¹⁾ Valve body dimension with flange drilling according to EN 1092 PN 10.

Main dimensions are only for information. Contact Stafsjö for certified drawings.

1. Flange drilling: Stafsjö standard - EN 1092 PN 10

DN	80	
Bolt circle diameter (mm)	160	
Number of through-going holes inlet/seat side	4	
Hole size inlet/seat side (mm)	18	
Number of tapped holes outlet side	8	
Bolt size outlet side	M16	

2. Flange drilling: Stafsjö standard - ASME/ANSI B16.5 Class 150

DN	80	
Bolt circle diameter (mm)	152,4	
Number of through-going holes inlet/seat side	4	
Hole size inlet/seat side (mm)	18	
Number of tapped holes outlet side	4	
Bolt size outlet side (UNC)	5/8"-11	

3. Flange drilling: ASME/ANSI B16.5 Class 150 - ASME/ANSI B16.5 Class 150

DN	80	
Bolt circle diameter (mm)	152,4	
Number of tapped holes inlet/outlet side	4	
Bolt size inlet/outlet side (UNC)	5/8"-11	

²⁾ Valve body dimension with flange drilling according to ASME/ANSI B16.5 Class 150.

³⁾ Weight in kg for valve equipped with ratchet wrench.

