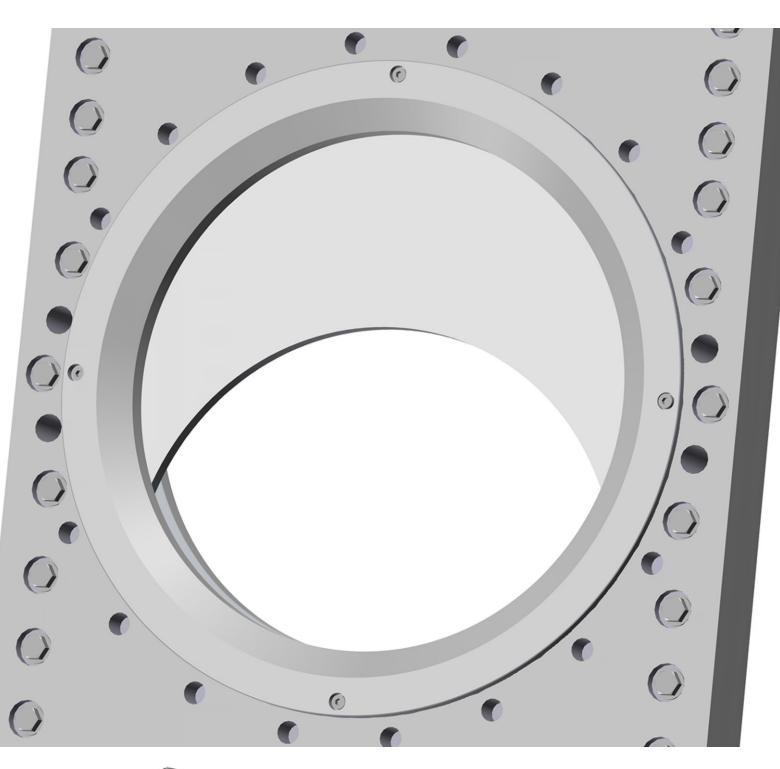
Knife gate valve HPT







Knife gate valve HPT

Stafsjö's knife gate valve HPT is made of Titanium and is the reliable solution for process conditions requiring safe and tight shut-off, in combination with excellent corrosion resistance. The valve is bi-directional tight and has a through-going gate for secure shut-off of static and highly concentrated media.

HPT has a two piece valve body in Titanium with purge ports and integrated guiding pads. Other exposed parts as the gate, retainer rings and glands are also made of Titinium. The top work consists of pillars or beams in stainless steel and as standard it is supplied with an epoxy coated double-acting pneumatic cylinder. The valve is modular designed which makes it easy to uphold flexibility and a first-rate operation year after year.

The HPT valve is designed, manufactured, inspected and tested according to the European Pressure Equipment Directive (PED 97/23/EC) category I and II module A1. The valve is CE marked when it is applicable.

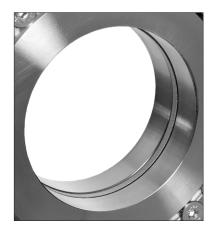
The HPT valve is one of four valves in Stafsjö's product range with through-going gate. The HP is a high pressure version of HG while the HL is a slim line version.





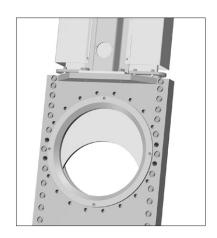
Reliable shut-off and bi-direct-ional sealing

The retainer ring system on both sides of the gate makes it independent of flow direction. The through-going gate assures a reliable shut-off of highly concentrated and static media.



A bore with excellent flow characteristics

In open position, the HPT valve's bore has almost no cavity at all, making the flow characteristics really excellent. In this position the PTFE seats are protected by the retainer rings and the gate.



Solid design to preserve a first class sealing

The gate is supported all the way from open to closed position which, together with a proper dimensioned top works, makes the shut-off reliable and repeat-able.

2

Design data

Sizes	Flange drilling	Face-to-face dimension	ATEX design			
DN 200-DN 700	EN 1092 PN 10 JIS B 2238 10K ANSI B16.5 Class 150	Stafsjö manufacturing standard	ATEX 94/ 9/EC II cat 3 G/D for zone 2 and 22 on request			
Other sizes and flange drilling	gs on request					
Leakage rate		Pressure tests				
EN 12266-1:2012 Rate A: no visually detectable leakage is allowed for duration of the test.		Pressure tests are performed with water at 20° C according to EN 12266-1:2012 Pressure for shell test: 1,5 times maximum allowable working pressure for open valve Pressure for seat tightness test: 1,1 times maximum allowable differential pressure for closed valve.				
Maximum working pressure body at 20°C		Maximum differential pressure at 20°C				
DN	bar	DN bar				
200 - 600	10	200 - 600 10				

Basic equipment

A. Valve Body			
Material	Code	Туре	
Titanium	(T)	ASTM B265 Grade 2	
B. Gate			
Material	Туре		
Titanium	ASTM B265 Grade 2		
C. Retainer rings			
Material	Туре		
Titanium	ASTM B265 Grade 2		
D. Seats			
Material	Code	Maximum temperature °C	
PTFE with o-ring Nitrile	(P)	100	
PTFE with o-ring Viton	(PV)	180	
E. Box packing			
Material	Code	рН	Maximum temperature °C
TwinPack™	(TY)	2-13	260
WhitePack™	(WP)	2-13	260

Actuators

Manual	Code	Automatic	Code
Hand wheel ¹⁾	(HW)	Pneumatic cylinder	(EC)
		Electrical motor	(EM)

¹⁾ For recommended size, see page 5 column E

Epoxycoated double-acting pneumatic cylinder		Electric mo	Electric motor – AUMA multi-turn					
DN valve	EC type	Maximum Force (kN)	DN valve	AUMA type	Attachment			
200-250	EC 160	9.0	200-300	SA 10.2	F10/A			
300	EC 200	14.1	300	SA 10.2	F10/A			
500	EC 250	22.1	500-600	SA 14.2	F14/A			
600	EC 320	36.2						
The table above gives recommended cylinder sizes at normal operation with 5 bar air pressure. For other operating conditions, please contact Stafsjö or your		Electric motors are mounted according to standard ISO 5210. The table above gives recommended motor sizes at normal operation. For other operating conditions, please						

local representative for advice. contact Stafsjö or your local representative for advice.

The actuators are described in separate data sheets. For advice and information on other actuators or on ATEX-classified ones, please contact Stafsjö or your local representative.

Accessories

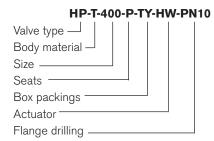
Knife gate valve			
Accessories	Code	Model	Design
Mechanical limit switch	(MLS)	Omron D4V	12-250 V AC/12-125 V DC, IP 65
Inductive limit switch	(ILS)	ifm electronic IG0006	2-wire, 20-250 V AC/DC, IP 67
		ifm electronic IG5401	3-wire, 10-36 V DC PNP, IP 67
Purge ports	(PP)	HPT are equipped with purge ports as standard	Pipe thread G 1/2" acc. to ISO 228/1

Pneumatic cylinder					
Accessories	Code	Model	Design		
Solenoid valve	(SV)	Parker Namur valves for EC 100 - EC 160	G1/4", Mono stable 5/2, Namur series VDI/VDI 3845, 24 V DC/110 V AC/220 V AC, IP 65		
		Parker Namur valves for EC 200 - EC 320	G1/2", Mono stable 5/2, Namur series VDI/VDE 3845, 24 V DC/110 V AC/220 V AC, IP 65		
Magnetic limit switch	(MagLS)	KITA KT-50R for EC 100 - EC 320	2-wire, 5-240 V AC/DC, IP 65		
		KITA KT-50N for EC 100 - EC 320	3-wire, 10-30 V DC, IP 65		

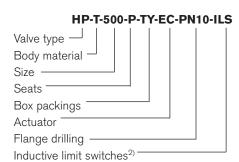
The accessories are described in separate data sheets. For advice and information on other accessories or on ATEX-classified ones, please contact Stafsjö or your local representative.

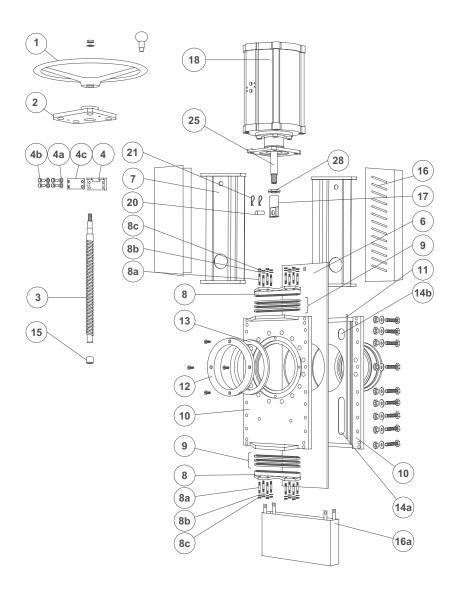
Specify the Stafsjö valve

Stafsjö's valves are modular designed and they can easily be customized with gate, seat and box packings according to media and requirements, as well for actuators and accessories. Below are examples of how you can specify your Stafsjö valve. Further information is available on www.stafsjo.com.



²⁾ All electronics must be specified in detail.



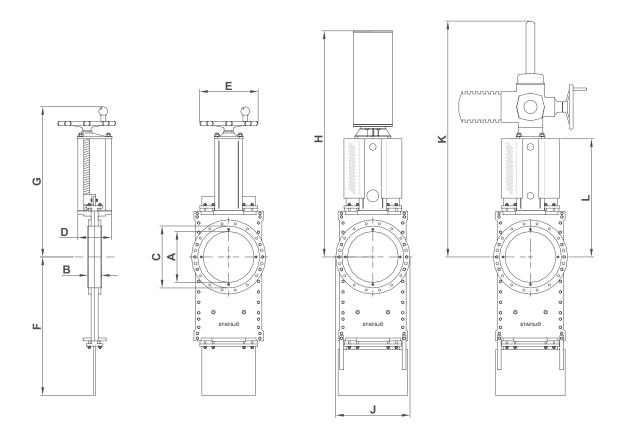


Part list

Pos.	Detail	Material (Type)
1	Hand wheel	Stainless steel (EN 1.4308/SS 2333) ≥Ø 400 Epoxy coated cast iron (EN-JL1030/GG20)
2	Yoke	Stainless steel (EN 1.4436/SS 2343)
3	Stem	Stainless steel (EN 1.4436/SS 2343)
4	Stem nut	Brass (CuZn93Pb3/SS5170)
4a	Stem nut holder	Stainless steel (EN 1.4301/SS 2333)
4b	Screw	A4
4c	Washer	A4
4d	Nut	A4
6	Gate	See equipment B
7	DN 80-DN 450: Pillars ≥ DN 500: Beams	Stainless steel (EN 1.4436/SS 2343) Stainless steel (EN 1.4401/SS 2347)
8	Gland	Titanium (ASTM B265 Grade 2)
8a	Stud bolt	Titanium (ASTM B265 Grade 5)
8b	Washer	Titanium (ASTM B265 Grade 5)
8c	Nut	Titanium (ASTM B265 Grade 5)

Pos.	Detail	Material (Type)
9 ³⁾	Box packings	See equipment E
10	Valve body	See equipment A
11	Body gasket	PTFE
12	Retainer ring	See equipment C
13 ³⁾	Seats	See equipment D
14a	Guide strip	DN ≥ 250 PTFE
14b	Top guide strip	DN ≥ 250 PTFE
15	Plain bearingbushing	PTFE
16	Gate guard, not for HW	Stainless steel (EN 1.4301/SS 2333)
17	Gate clevis	Stainless steel (EN 1.4305/SS 2346)
18	Cylinder	See data sheet, epoxy coated
20	Clevis pin	Stainless steel (EN 1.4305/SS 2346)
21	Split pin	Stainless steel (EN 1.4436/SS 2343)
25	Piston rod	Stainless steel (EN 1.4305/SS 2346)
28	Locking nut	Stainless steel (EN1.4305/SS 2346)
3) Reco	mmended spare parts	

³⁾ Recommended spare parts



Main dimensions

Dimens	ions (mm)											
DN	Α	В	С	D	Е	F	G	Н	J	K	L	Weight ⁴⁾
200	202	60	270	150	315	600	659	886	330	1070	520	75
250	250	69	320	150	315	725	739	1021	402	1200	600	100
300	302	78	375	180	400	865	893	1257	460	1420	720	170
500	470	114	580	320	635	1412	1299	1882	690	2020	1138	670
600	540	122	679	350	635	1553	1336	1981	800	2135	1175	820

⁴⁾ Weight in kg for valve including hand wheel. Main dimensions are only for information. Contact Stafsjö for certified drawings.

Further Information is available on www.stafsjo.com



Globally active. Locally represented.

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