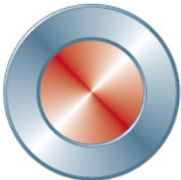
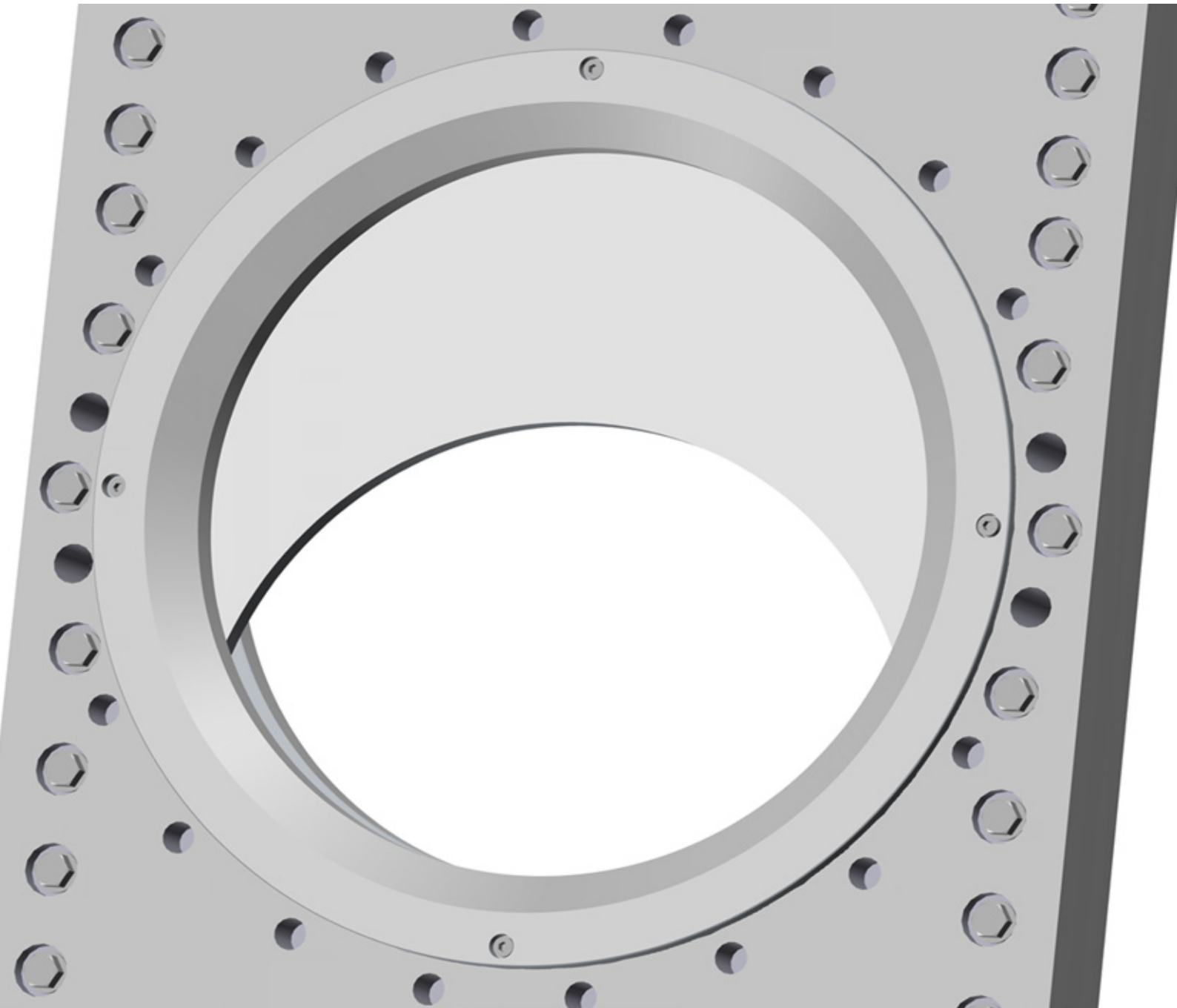


Knife gate valve HPT



Stafsjö
SINCE 1666



Knife gate valve HPT

Stafsjö's knife gate valve HPT is made of Titanium. It offers an excellent flow characteristics and a bi-directional tight shut-off for process conditions requiring excellent corrosion resistance. The valve is equipped with a through-going gate for secure shut-off of static and highly concentrated media.

HPT is supplied as standard with a valve body in Titanium, which has integrated purge ports. To be able to cope with bi-directional pressures, the HPT has the retainer ring system on both body halves. Exposed parts as the gate, retainer rings and glands are also supplied in Titanium. The gland boxes are equipped with Stafsjö's box packing Twin/WhitePack™, to secure that no media reaches surrounding environment.

The top work consist of pillars or beams in stainless steel and as standard it is supplied with a coated double-acting pneumatic cylinder. The valve is modular designed and can easily be customized to specific processes requirements. There are several actuator types and accessories to choose from in our standard collection.

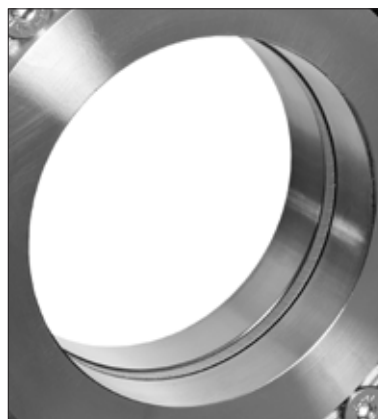
The HPT valve is designed, manufactured, inspected and tested according to the European Pressure Equipment Directive (PED 97/23/EC) category I and II module A1. The valve is CE marked when it is applicable.

The HPT valve is one out of five valves in Stafsjö's product range with through-going gates. The HG valve represent the standard. HL is slim line version of HG while HP a high pressure version. Finally the HX is an extreme high pressure version.



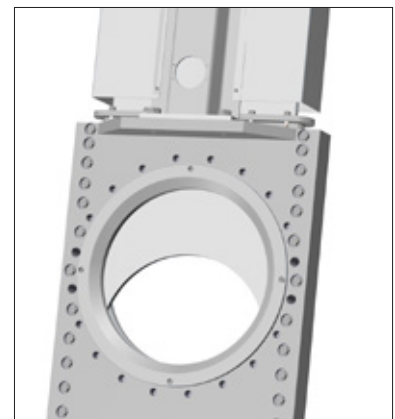
Reliable shut-off and bi-directional sealing

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 opened to closed position which, together with a proper dimensioned top works, makes the shut-off reliable and repeatable.

Design data

Sizes	Flange drilling	Face-to-face dimension	ATEX design
DN 200 - DN 600	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, flange drillings, ATEX zones and corrosion protection 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
200 - 600	10
200 - 600	10

Basic equipment

A. Valve Body		
Material	Code	Type
Titanium	(T)	ASTM B265 Grade 2

The valve body is as standard supplied with purge ports G1/2"

B. Gate		
Material	Type	
Titanium	ASTM B265 Grade 2	

C. Retainer rings		
Material	Type	
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	pH	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 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 local representative for advice.

Electric motors are mounted according to standard ISO 5210. The table above gives recommended motor sizes at normal operation. For other operating conditions, please 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.

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.

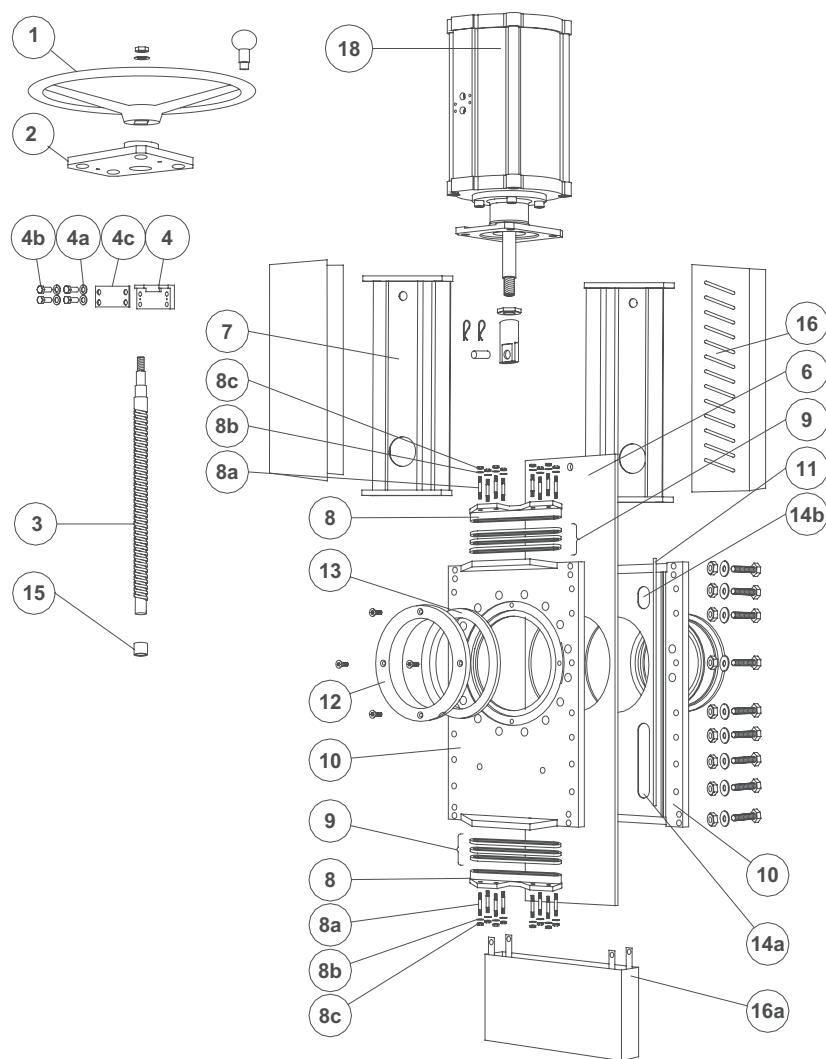
HP-T-400-P-TY-HW-PN10

Valve type —
Body material —
Size —
Seats —
Box packings —
Actuator —
Flange drilling —

²⁾ All electronics must be specified in detail.

HP-T-500-P-TY-EC-PN10-ILS

Valve type —
Body material —
Size —
Seats —
Box packings —
Actuator —
Flange drilling —
Inductive limit switches²⁾ —

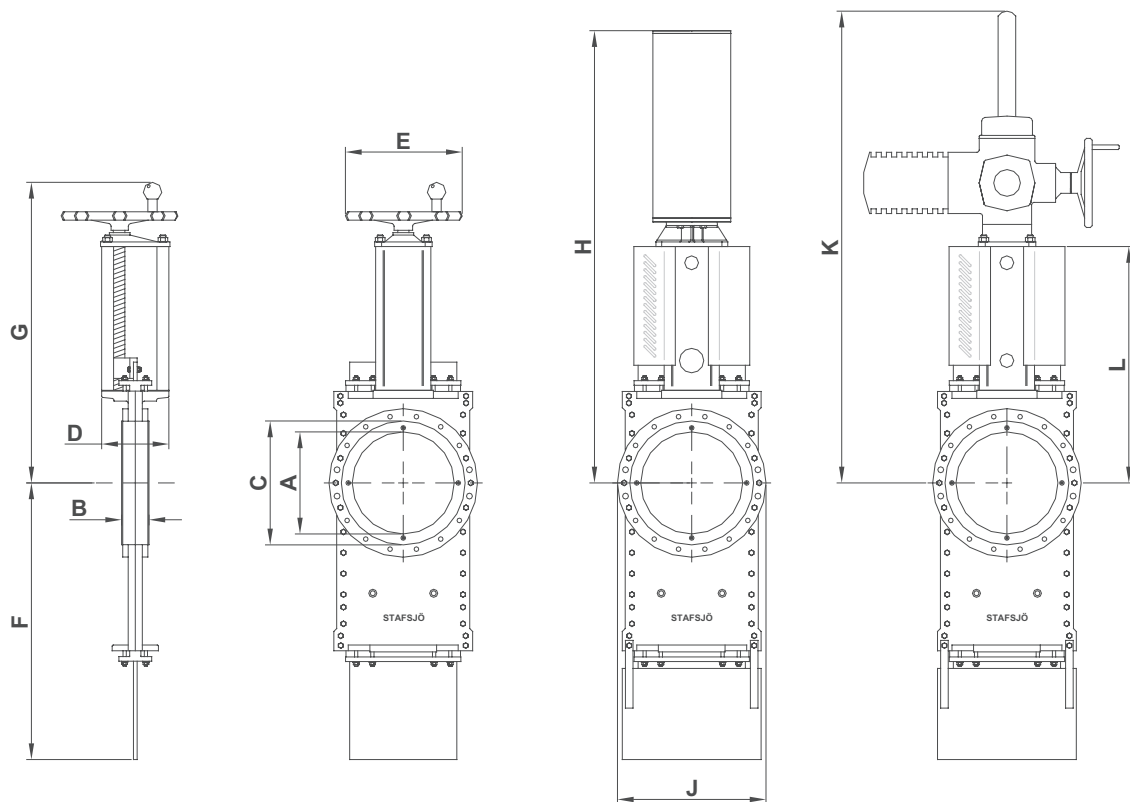


Part list

Pos.	Detail	Material (Type)
1	Hand wheel	Stainless steel (EN 1.4308) ≥ Ø 400 Coated cast iron (EN-JL1030/GG20)
2	Yoke	Stainless steel (EN 1.4436)
3	Stem	Stainless steel (EN 1.4436)
4	Stem nut	Brass (CuZn93Pb3)
4a	Stem nut holder	Stainless steel (EN 1.4301)
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) Stainless steel (EN 1.4401)
8	Gland	Titanium (ASTM B265 Grade 2)
8a	Stud bolt	Titanium (ASTM B265 Grade 5)

Pos.	Detail	Material (Type)
8b	Washer	Titanium (ASTM B265 Grade 5)
8c	Nut	Titanium (ASTM B265 Grade 5)
9 ³⁾	Box packings	See equipment E
10	Valve body	See equipment A
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)
18	Pneumatic cylinder	See data sheet + coating

³⁾ Recommended spare parts



Main dimensions

Dimensions (mm)												
DN	A	B	C	D	E	F	G	H	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



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