



**Stafsjö**  
SINCE 1666

**D2G**



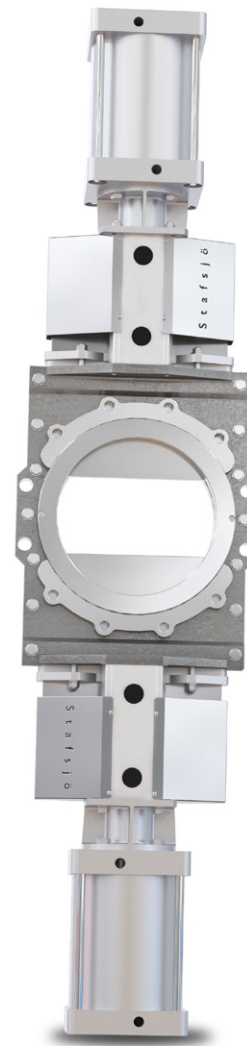
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All specifications are subject to change without notice.*

**First in knife gate solutions**

## Knife gate valve D2G

Stafsjö's D2G is the solution for fast and reliable isolation independent of pressure direction in tough applications with large amount of solids and reject materials, in both virgin and recycled fiber lines.

The D2G valve is modular designed and it can easily be customized with automation accessories to different process conditions. It also makes the valve easy to maintain and to rebuild for long-lasting operations. The valve has a rigid two-piece precision machined stainless steel valve body with friction reducing internal guiding supports. Two hard chromed gates provide wear resistance and high cycle speed. Additional speed can be obtained by optional quick exhaust valves installed on the pneumatic cylinders air ports. For optimal performance the D2G should be installed in vertical pipelines.



## Product features



### 100 % full bore

In opened position the retainer ring concept (1) on both side of the gate provide full bore and a smooth flow path for the media. The gates are fully retracted into the valve body and thus protected by the wear.



### Fast and reliable shut-off

The two hard chromed gates cycles quickly into the centre of the bore and full closed position. The seats (2) and internal guiding supports (3) reduce gate friction and enable a smooth cycling. The gland box sealing system with three layers of Stafsjö's TwinPack (4) in each end of the body ensures that no media reaches surrounding environment.

## Pressure class

Max working pressure at 20 °C		Max differential pressure at 20 °C	
DN	bar	DN	bar
100 - 400	10	100 - 400	6
500 - 600	6	500 - 600	4

## D2G configuration

### Standard

Sizes: DN 100 - DN 600

Valve body: Stainless steel EN 1.4408

Gate: Hard chromed stainless steel EN 1.4404, AISI 316L

Retainer ring: Stainless steel EN 1.4408

Seats: PTFE with o-ring in Nitrile or FPM/FKM

Box packing: TwinPack

**Top works:** Stainless steel tie rods encapsulated in aluminum beams including stainless steel gate guards on automated valves

**Actuators:** Double-acting pneumatic cylinders

**Flange drillings:** EN 1092 PN 10, ASME/ANSI B16.5 Class 150 Class 150, series A or JIS B 2238 10K

See accessory data sheet for automation options.

### Design standards

Face-to-face dimensions

Stafsjö manufacturing standard.

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.

The D2G is subject for pressure tests before delivery in opened position only 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.

ATEX designs

On request directive 2014/34/EU Group II category:

3 G/D (zone 2 or 22)

2 G/D (zone 1 or 21)

1 D (Zone 20)

### Seat service temperatures

PTFE with o-ring Nitrile: -25 °C - +100 °C

PTFE with o-ring FKM: -15 °C - +180 °C

### Guiding supports temperature

POM: +120 °C

### Box packing service temperatures

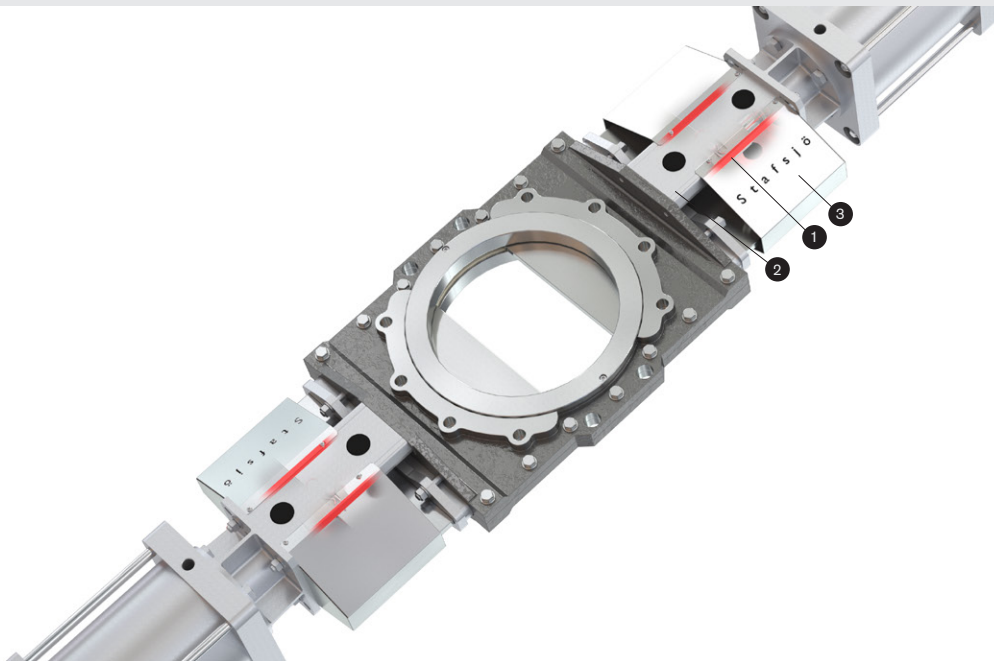
TwinPack: -60 °C - +260 °C

WhitePack: -60 °C - +260 °C

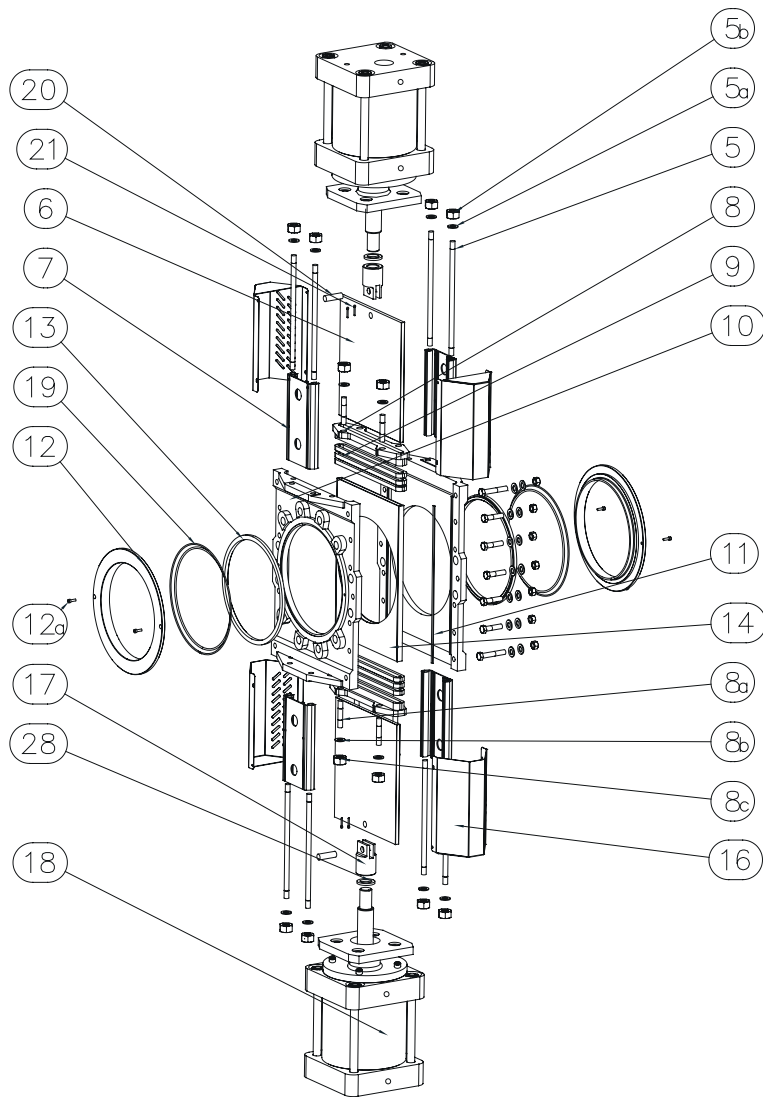
*Stafsjö's TwinPack offers high mechanical strength, excellent chemical resistance and a tight seal to atmosphere. The TwinPack braid is made up by an elastic silicon rubber core (1) surrounded by diagonally interlocked graphite filled PTFE (2) with aramid fiber reinforced corners (3). The TwinPack braids resist pH 2-13 and temperatures -60 °C up to 260 °C.*

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

## A high strength top works



The D2G top works with stainless steel tie rods (1) encapsulated inside structural beams (2) provide an essential support in horizontal high cycling applications. The strong top works ensure gate alignment through its full stroke. Due to safety reasons Stafsjö also assemble stainless steel gate guards (3) on all automated valves.

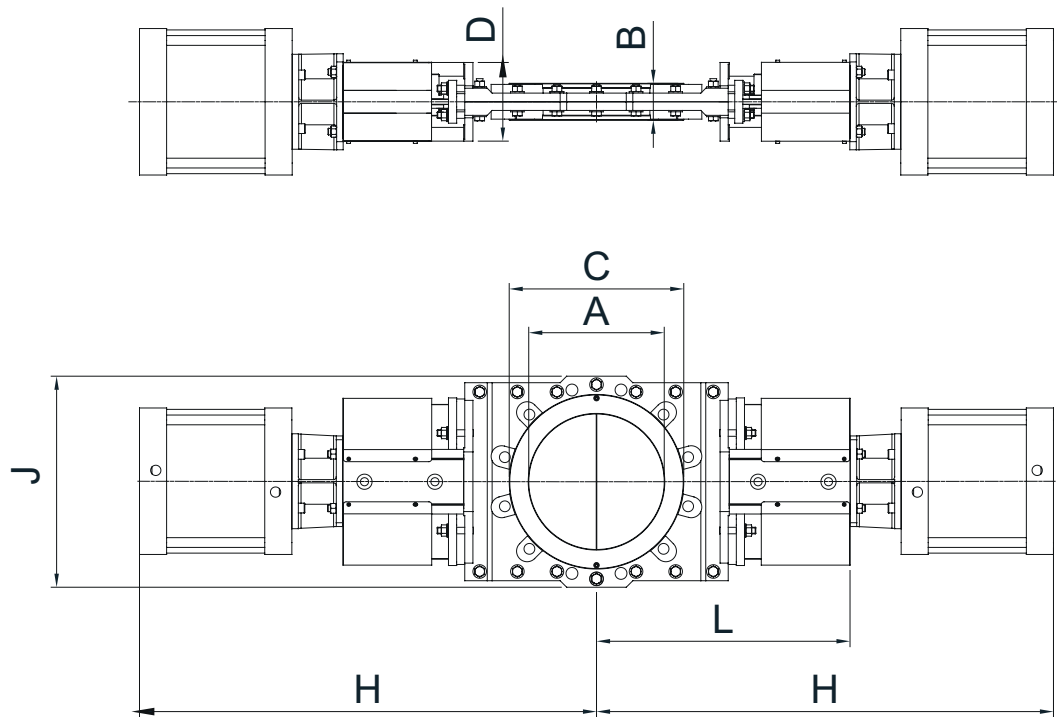


## Part list

Pos	Detail	Material
5	Tie rod	Stainless steel EN 1.4301
5a	Washer	Stainless steel A2
5b	Nut	Stainless steel A2
6	Gate	See equipment B
7	Beam	Anodized aluminium
8	Gland	Stainless steel EN 1.4408
8a	Stud bolt	Stainless steel A2
8b	Washer	Stainless steel A2
8c	Nut	Stainless steel A2
9 <sup>1)</sup>	Box packing	See options on page 3
10	Valve body	See options on page 3
11	Body gasket	PTFE

Pos	Detail	Material
12	Retainer ring	Stainless steel EN 1.4408
12a	Locking screw	Stainless steel A2
13 <sup>1)</sup>	Seat	See options on page 3
14 <sup>1)</sup>	Gliding support set	POM
16	Gate guard	Stainless steel EN 1.4301
17	Gate clevis	Stainless steel EN 1.4305
18	Cylinder	See data sheet
19	O-ring	See options on page 3
20	Clevis pin	Stainless steel EN 1.4305
21	Split pin	Stainless steel EN 1.4436
28	Locking nut	Stainless steel EN 1.4305

<sup>1)</sup> Recommended spare parts

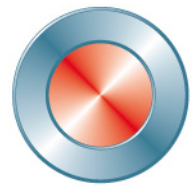


## Main dimensions

DN	A	B	C	D	H	I <sup>1)</sup>	J	L
100	100	52	153	80	504	CFP100	208	266
125	125	56	187	80	541	CFP100	241	291
150	150	56	212	80	647	CFP160	266	319
200	200	60	268	145	765	CFP160	333	411
250	250	68	322	145	870	CFP200	389	468
300	300	78	372	145	959	CFP200	451	532
350	350	78	430	178	1061	CFP200	505	609
400	400	89	481	178	1154	CFP250	571	666
500	500	114	586	260	1351	CFP250	679	801
600	600	114	685	260	1524	CFP250	790	924

1) Recommended sizing of double-acting pneumatic cylinder type CFP at normal operation with 5 bar air pressure. For other operating conditions, contact Stafsjö or your local representative for advice.

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



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