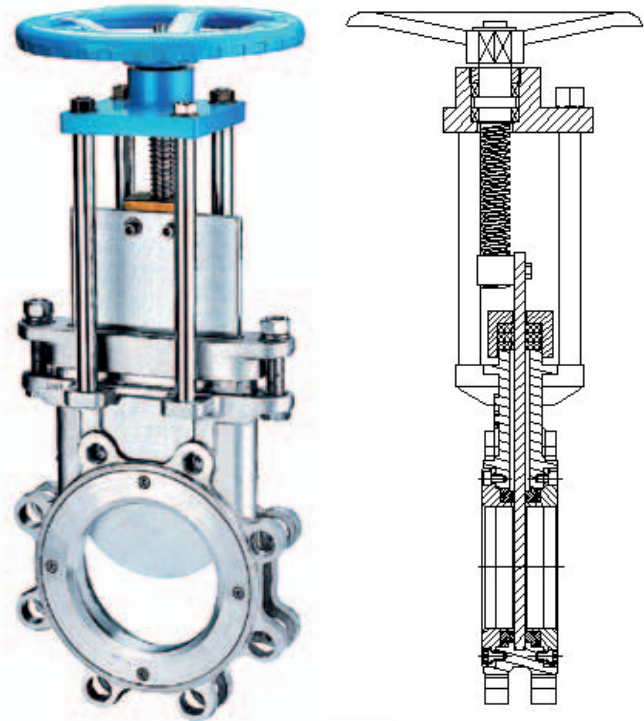


Application

Knife gate valve is linear motion valve mainly intended for shut off service. It is light weight and compact construction. at gate bottom provides strong cutting force, making it particularly suitable for cutting off fluid containing fibre and in industries of water treatment, pulp making, mining, sugar making and chemical fibre.

Product

- **Thicker knife gate** to eliminate gate distortion under maximum differential pressure.
- **Precisely machined knife gate** to provide best possible seat tightness. Hard chrome plating gate is a standard to provide good brasion and corrosion resistance
- **Renewable seat** by simply removing seat retainer saves maintenance work and costs. Spare seats are available upon request.
- **Bubble tightness** for EPDM, NBR and Viton seat retained seat assures tightness without relaying on differential pressure or pressure from from connection flange. Unidirectional or birectional tightness are available options.
- **Inline packing renewal** by removing packing box to allow packing renewing in the line.
- **Low operational torque** with double plan bearing for stem drive.
- **User friendly casting handwheel** with wavy contoured design to offer secured holding and sliding free.



Technical Specification

• Type

BNR	Bidirectional tightness non rising stem knife gate valve	DH	Hopper knife gate valve
BR	Bidirectional tightness rising stem knife gate valve	DD	Double gate knife gate valve
DT	Through conduit knife gate valve		
DS	Square port knife gate valve		

• Size DN50 to DN1200 2 inch to 48 inch

• Temperature range NBR Seat -29~80 Deg.C, EPDM Seat -29~100 Deg.C, Viton Seat -29~200 Deg.C

• Pressure ratings DINPN10, DINPN16, ANSI 150

• Face to face dimension According to MSS SP 81-2001

• Pressure and tightness test

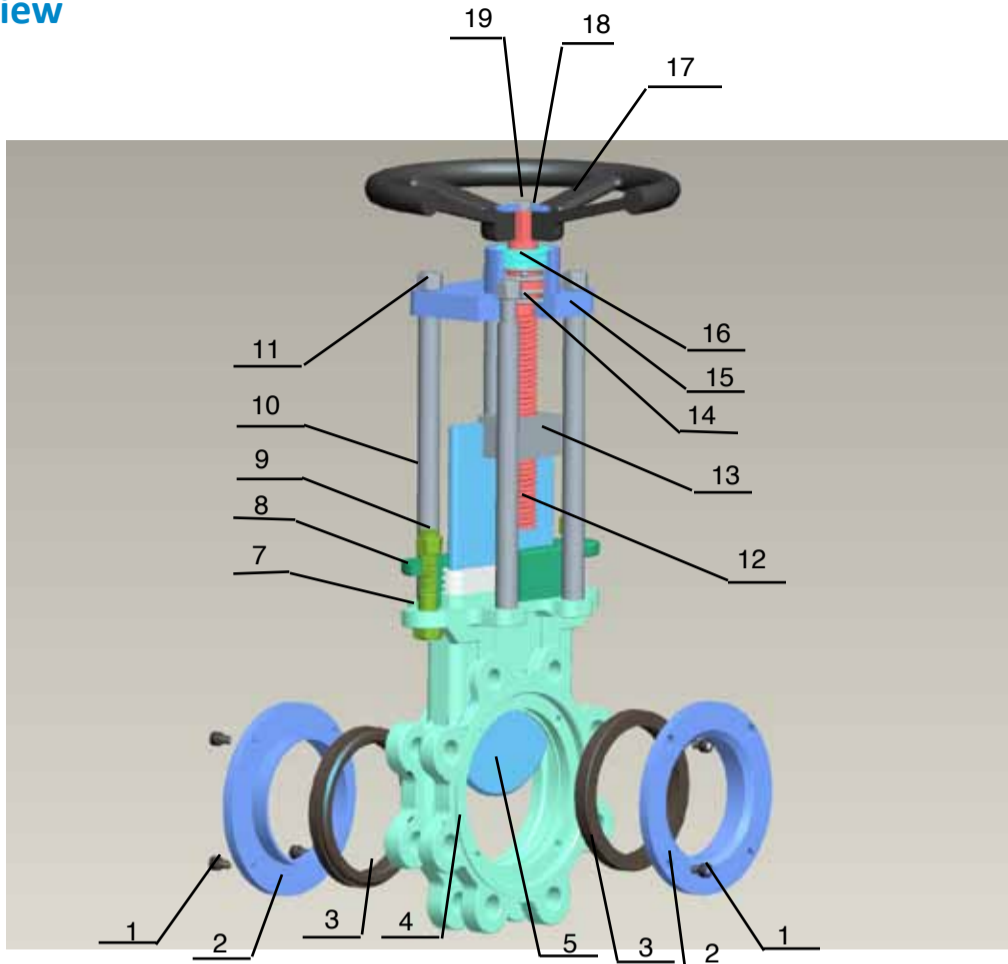
Each valve is subject to a body pressure test as per MSS SP 81. Body test pressure is 1.5 x pressure rating. Seat test pressure is 2.8 bar. Test medium is water.

• Actuation

Handwheel Bevel gear Pneumatic cylinder piston Electric motor

Bidirectional tightness non rising stem knife gate valve

Exploded View

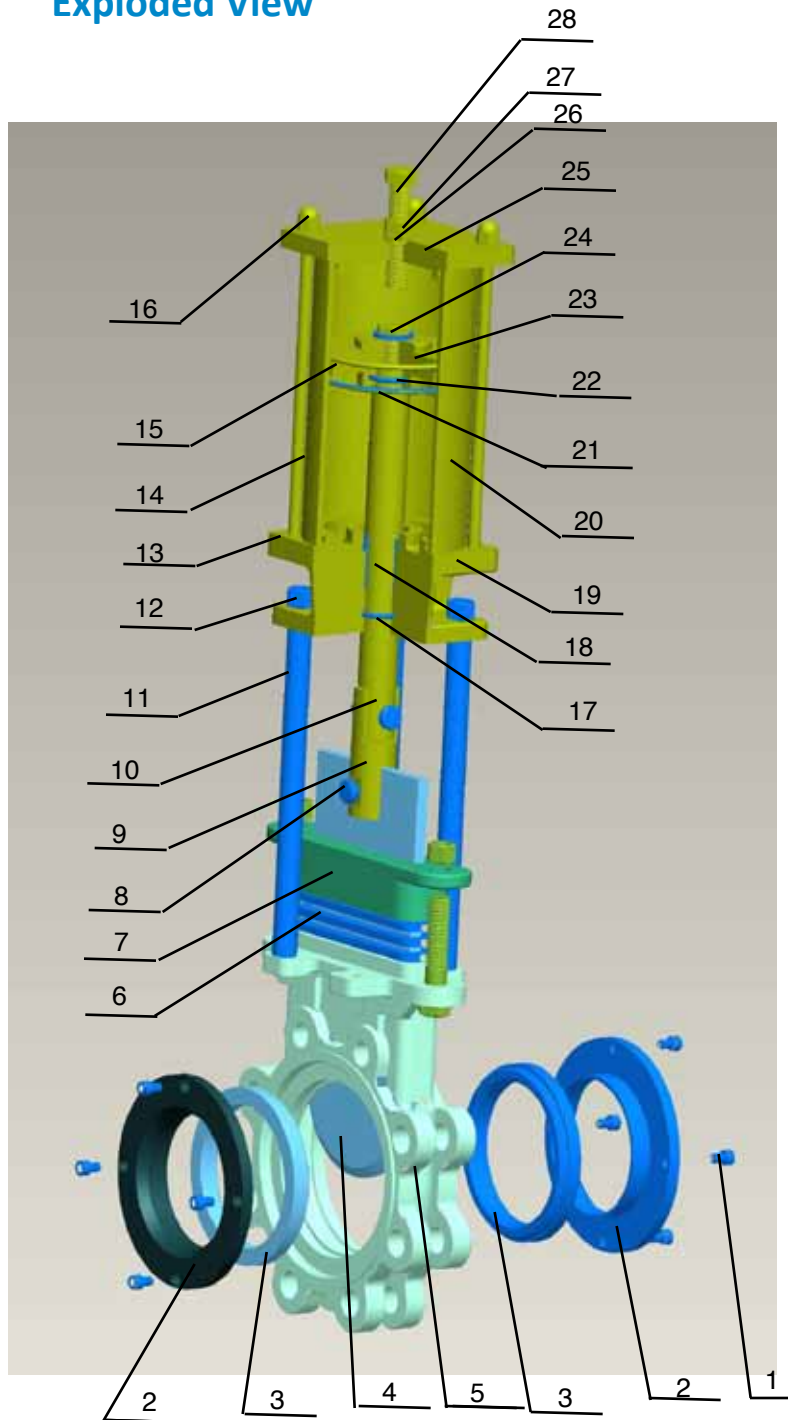


NO.	PARTS	QTY	MATERIAL
1	Screw	8	Stainless steel
2	Retainer	2	Carbon steel,Stainless steel
3	Seat	2	EPDM,NBR,VITON
4	Body	1	Carbon steel,Stainless steel
5	Gate	1	Stainless steel hard Chrome plating
6	Packing	1	PTFE
7	Gland	1	Stainless steel
8	Nut	2	Stainless steel
9	Bolt	2	Stainless steel
10	Yoke	4	Stainless steel
11	Nut	4	Stainless steel
12	Stem	1	Stainless steel
13	Stem Nut	1	Stainless steel
14	Bearing	2	GCR6
15	Square Plate	1	WCB
16	Retainer	1	Stainless steel
17	Handwheel	1	WCB
18	Washer	1	45#
19	Nut	1	Stainless steel

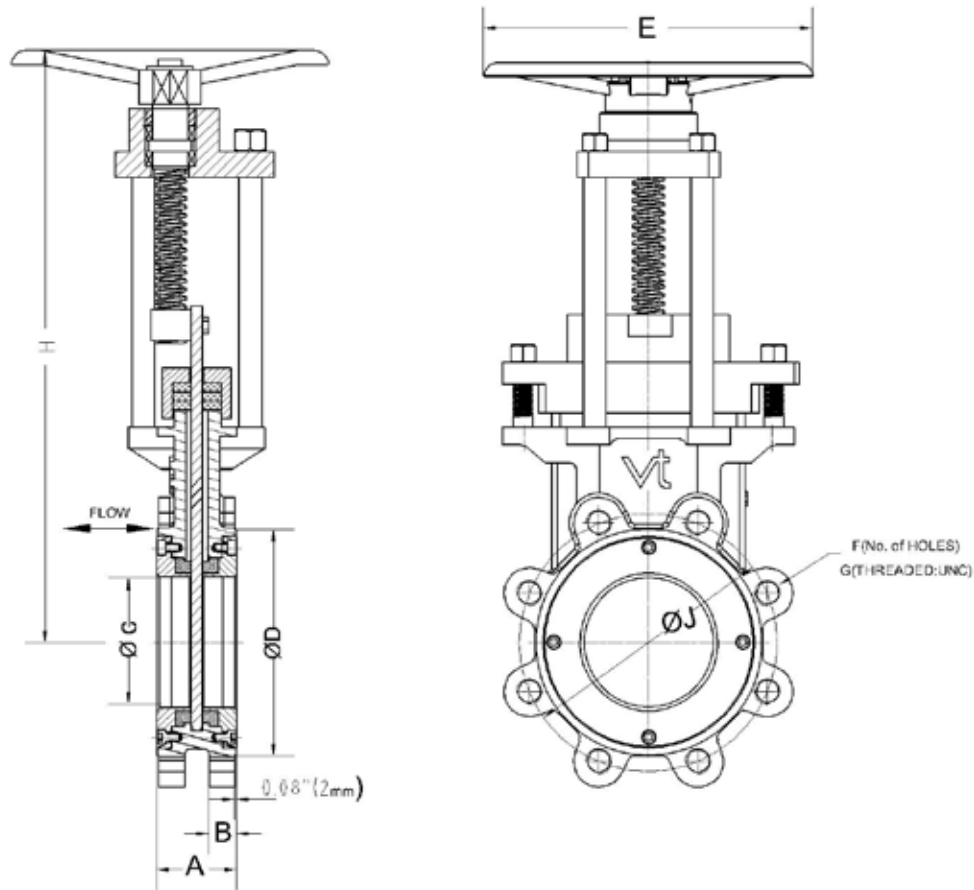
Operation Torque N.m (Full differential pressure of Class 150)

Size	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"
Torque Value	50	100	100	100	150	200	300	400	500	800	1200	1200	1500	1500	1800	1800

Exploded View



NO.	PART	QTY	MATERIAL
1	Screw	8	Stainless steel
2	Retainer	2	Carbon steel,Stainless steel
3	Seat	2	EPDM,NBR,VITON
4	Gate	1	Carbon steel,Stainless steel
5	Body	1	Stainless steel +HCr plating
6	Packing	1	PTFE
7	Gland	1	Carbon steel,Stainless steel
8	Pin	1	Stainless steel
9	Connection rod	1	Carbon steel,Stainless steel
10	Pin	1	Stainless steel
11	Yoke	4	Carbon steel,Stainless steel
12	Nut	4	Stainless steel
13	Cover	1	Carbon steel
14	Screw	4	Stainless steel
15	Tape	1	RTFE
16	Nut	4	Stainless steel
17	O ring	1	NBR
18	Bearing	1	Composite material
19	Y ring	1	TPU
20	Cylinder	1	Alumin.alloy+HCr plating
21	O ring	1	NBR
22	O ring	1	NBR
23	Piston	1	ZL102,Carbon steel
24	Nut	1	Stainless steel
25	Cover	1	Carbon steel
26	Washer	1	Carbon steel
27	Nut	1	Stainless steel
28	Bolt	1	Stainless steel

Dimensions


Size	Class 150								
	A	B	Ø C	Ø D	E	F	G	H	Ø J
2"	1.89" (48.00mm)	0.55" (14.00mm)	1.81" (48.00mm)	3.62" (92.00mm)	7.87" (200mm)	4	5/8" - 11	11.81" (300.00mm)	4.74" (120.50mm)
4"	2.01" (51.00mm)	0.67" (17.00mm)	3.58" (91.00mm)	6.18" (157.00mm)	8.66" (220mm)	8	5/8" - 11	16.54" (420.00mm)	7.5" (190.50mm)
6"	2.24" (57.00mm)	0.67" (17.00mm)	5.43" (138.00mm)	8.50" (216.00mm)	11.02" (280mm)	8	3/4" - 10	20.08" (510.00mm)	9.51" (242.00mm)
8"	2.76" (70.00mm)	0.71" (18.00mm)	7.28" (185.00mm)	10.62" (269.80mm)	11.02" (280mm)	8	3/4" - 10	24.02" (610.00mm)	11.75" (298.50mm)
10"	2.76" (70.00mm)	0.71" (18.00mm)	9.25" (235.00mm)	12.75" (323.85mm)	11.02" (280mm)	12	7/8" - 9	30.12" (765.00mm)	14.25" (362.00mm)
12"	2.99" (76.00mm)	0.79" (20.00mm)	11.22" (285.00mm)	15.00" (381.00mm)	14.96" (380mm)	12	7/8" - 9	32.28" (820.00mm)	17.01" (432.00mm)
14"	2.99" (76.00mm)	0.79" (20.00mm)	12.80" (325.00mm)	16.26" (413.00mm)	17.72" (450mm)	12	1" - 8	38.19" (970.00mm)	18.74" (476.00mm)
16"	3.50" (89.00mm)	0.94" (24.00mm)	14.76" (375.00mm)	18.50" (470.00mm)	19.69" (500mm)	16	1" - 8	40.31" (1024.00mm)	21.26" (540.00mm)
18"	3.50" (89.00mm)	0.94" (24.00mm)	17.13" (435.00mm)	20.98" (533.00mm)	23.62" (600mm)	16	1 1/8" - 7	48.62" (1235.00mm)	22.76" (578.00mm)
20"	4.49" (114.00mm)	0.94" (24.00mm)	18.90" (480.00mm)	22.99" (584.00mm)	23.62" (600mm)	20	1 1/8" - 7	50.63" (1286.00mm)	25.00" (635.00mm)