

Materials of Construction

Item	Description		
A1	Body	304 Stainless Steel ASTM A351 CF8	
		316 Stainless Steel ASTM A351 CF8M	
	Packing	MSP - Square Braided PTFE Impregnated Synthetic	
		Fiber to 500°F (260°C) (pH Range 4-10)	
		CWP - Square Braided PTFE Impregnated	
		Synthetic Fiber with One Ring Copper Wire	
ı		Braided Scraper to 500°F (260°C)	
		(pH Range 4-10)	
		TDP - Dry Service Square Braided PTFE Packing	
۸,		with Solid PTFE Cord to 500°F (260°C)	
A2		(pH Range 0-14) HBP - High Temperature Braided Packing to 1000°F	
		(540°C) (pH Range 4-10)	
		KWP - Square Braided PTFE Packing with One	
		Ring Kevlar® (para-aramid) Fiber Scraper to 500ºF	
		(260°C) (pH Range 4-10)	
		M03055 - PTFE Square Braided Packing with	
		AFLAS® Fluoroelastomer Cord to 400°F (205°C)	
		(pH Range 0-14)	
A3	Gate	304 Stainless Steel ASTM A240	
		316 Stainless Steel ASTM A240	
A4		304 Stainless Steel ASTM A351 CF8	
A.F.	316 Stainless Steel ASTM A351 CF8M		
A5	Washer	304 Stainless Steel	
A6	Gland Nut	304 Stainless Steel	
A7	Gland Screw	304 Stainless Steel	
B1	Handwheel	Painted Cast Iron	
B2	Drive Sleeve	Brass	
B3	Stem	410 Stainless Steel	
B4	Thrust Washer	Brass	
B5	Locknut	Zinc Plated Carbon Steel	
B6	Yoke Block	Painted Carbon Steel or 304 Stainless Steel	
B7	Leg	Painted Carbon Steel or 304 Stainless Steel	
B8	Yoke Screw	304 Stainless Steel	
B9	Lock Washer	304 Stainless Steel	
B10	Gate Nut	304 Stainless Steel	
B11	Gate Screw	304 Stainless Steel	
B12	Grease Fitting	Brass	
B13	Data Plate	316 Stainless Steel	
B14	Drive Screw	Stainless Steel	

Valve Selection Shut-Off Capabilities

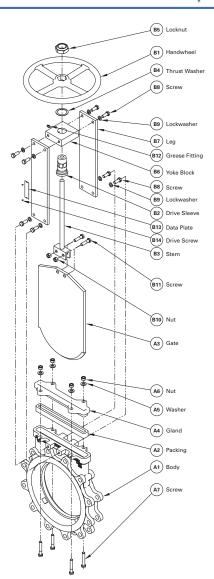
Metal Seats | Meet MSS SP-81 and TAPPI TIS 405-8

Pressure Ratings

2-24" (50-600mm)	150 psi C.W.P. (1030 kPa)
Above 24" (600mm)	100 psi C.W.P. (690 kPa)

Applicable Standards

DeZURIK KGN Knife Gate Valves are designed and/or tested to meet the following standards:				
MSS SP-81	Metal Seated Valves, Stainless Steel Bonnetless Flanged Knife Gate Valves.			
TAPPI TIS 405-8*	Recommendations for Stainless Steel Bonnetless Flanged Wafer Knife Gate Valves. * Revoked by TAPPI Same as MSS SP-81.			
ASME B16.5 2-24" (50-600mm)	Flanges and Flanged Fittings ASME 150. Conforms to related drilling dimensions.			
ASME 16.47 Above 24" (600mm)	Large diameter Steel Flanges. Series A. Conforms to related dimensions.			



Flow Parameters

Valve Size	<u>Cv*</u> Kv 100% Open	Port Area (in²/cm²)
<u>2"</u>	232	<u>3.04</u>
50mm	201	19.6
<u>3"</u>	<u>505</u>	<u>6.31</u>
80mm	437	40.7
<u>4"</u>	<u>890</u>	<u>10.76</u>
100mm	770	69.4
<u>6"</u>	<u>2050</u>	<u>24.2</u>
150mm	1773	156.1
<u>8"</u>	<u>3695</u>	41.66
200mm	3196	268.8
<u>10"</u>	<u>5935</u>	<u>65.53</u>
250mm	5134	422.8
<u>12"</u>	<u>8545</u>	92.73
300mm	7391	598.3
<u>14"</u>	<u>10505</u>	<u>111.76</u>
350mm	9087	721
<u>16"</u>	14030	<u>147.93</u>
400mm	12136	954.4
<u>18"</u>	<u>17900</u>	<u>189.94</u>
450mm	15484	1225.4
<u>20"</u>	<u>22730</u>	<u>235.69</u>
500mm	19661	1520.6
<u>24"</u>	33280	344.55
600mm	28787	2222.9
<u>30"</u>	64900	648.72
750mm	56139	4185.3
<u>36"</u>	<u>95400</u>	<u>934.82</u>
900mm	82521	6031.1

^{*}Cv = Flow in GPM of water at 1 psi pressure drop. Kv = Flow in $m^3/hr.$ of water at 100kPa pressure drop.

