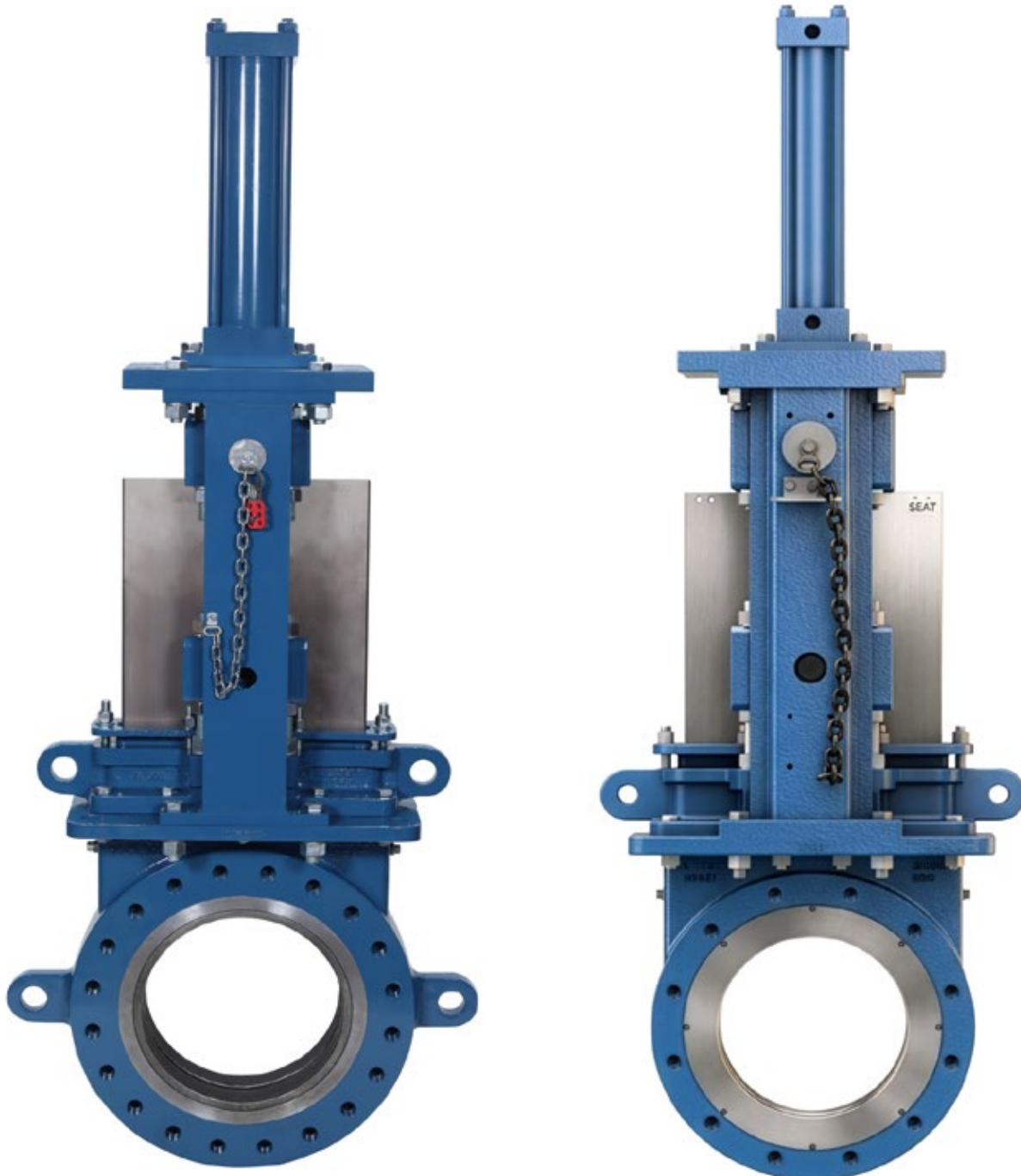


DeZURIK KSV SEVERE SERVICE KNIFE GATE VALVES



Design and Construction

The KSV Severe Service Knife Gate Valve is specially designed to withstand high pressures and abrasive slurries – some of the toughest services in mining, (including oil sands processing), steel, power, chemical, municipal sludge, bio-fuels production, and paper industries.

Numerous features make this valve style ideal for isolation in high-pressure, high-density slurry lines. The rigid one-piece body, specifiable port diameter, hard-faced gate and rotatable seat or wear rings make this valve ideal for the most rigorous applications. KSV valves are pressure/temperature rated to ASME B16.34 Class 150 and 300 and are available in either standard or short body design face-to-face dimensions. Standard design valves are available in sizes 2-60" (50-1500mm) and short body design valves are available in sizes 2-24" (50-600mm). All KSV valves provide bi-directional drip-tight shutoff and meet the MSS SP-135 standard for High Pressure Knife Gate Valves.



Purge ports in the chest area, cast lifting lugs and a robust packing system make this valve ideal for isolation service in high-pressure, high density slurry lines.

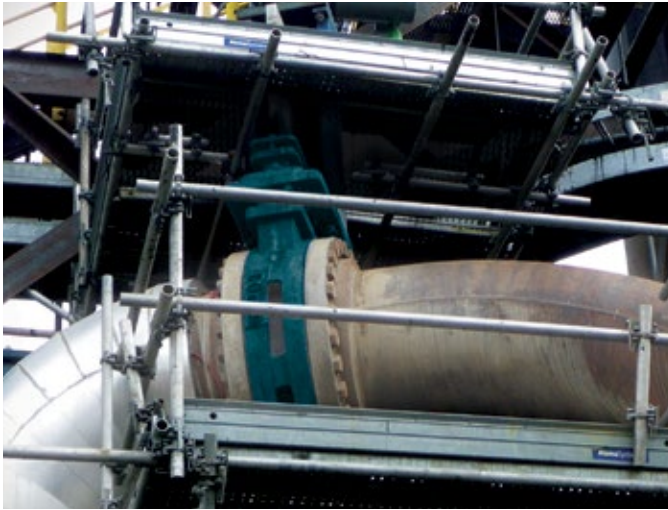
Robust Packing System

The robust packing system includes six rows of a superior expanded PTFE Fiber with Graphite braided packing or PTFE packing, a resilient O-ring to provide live loading and two copper wire or nickel chromium alloy scraper rings. The KSV valves have a rounded gate edge, machined packing chamber and an adjustable packing gland. This live-loaded, multi-ring packing system minimizes any external leakage, extends packing life and reduces maintenance. The scraper rings prevent process media from entering the packing chamber.

Rigid, One-Piece Body

Severe Service Knife Gate Valve bodies in cast carbon steel, low temperature carbon steel, 316 Stainless Steel or 2205 Duplex Stainless Steel meet demanding performance requirements. The raised face body has drilled and tapped flanges in accordance with ASME B16.5 and B16.47. Purge-ports in the chest area as standard allow flushing of media from the valve interior. Lifting lugs cast into the packing chamber on all valve sizes (and additional cast and machined lugs in the body on larger sizes), make the KSV valve easy and safe to handle, install and maintain.





A Class 300 manual isolation KSV Knife Gate Valve handles coarse tailings at 350 psi with velocities of 13-14 ft. per second.

Short Body Design (SBD) Features

The SBD incorporates all the capabilities of the standard design configuration while delivering in a short body design face-to-face matching MSS SP-135. Its dual-seat construction provides tight shutoff in both flow directions, eliminating valve-orientation requirements and streamlining installation.

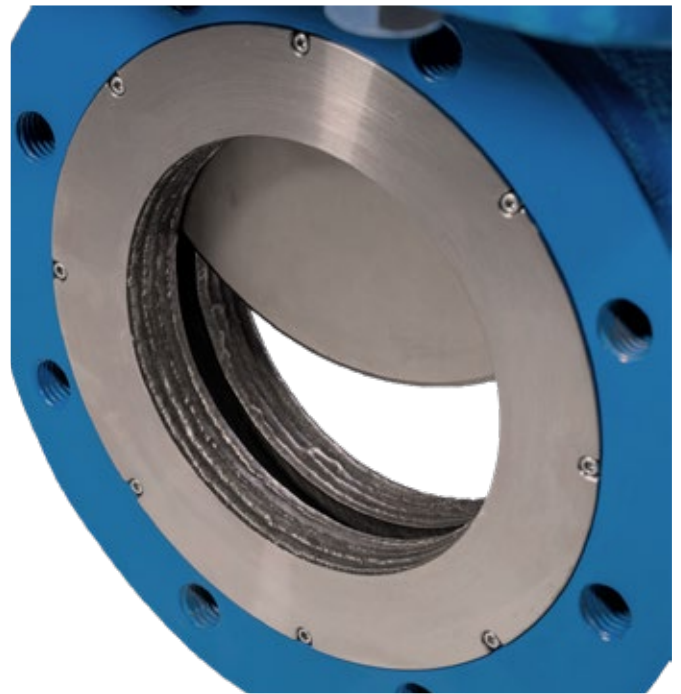
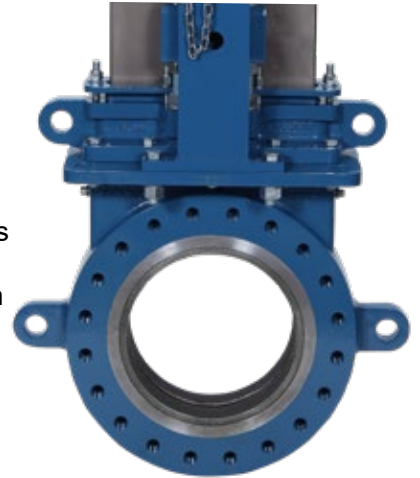
In addition to these installation advantages, the SBD is engineered for seamless compatibility with rubber-lined piping systems, including dead end service, a proven choice for industries handling abrasive slurry applications. Rubber linings play a vital role in extending system life by protecting steel piping from severe wear, absorbing high-impact forces, and resisting aggressive chemical attack. Together, these features ensure long-term reliability in even the most demanding operating environments.



Specifiable Port Diameter

The KSV's specifiable port diameter reduces turbulence, wear and pressure loss across the valve, downstream piping, and equipment.

The valve port inside diameter (ID) for ASME Class 150 valves are specifiable to match any pipe ID, and ASME Class 300 valves match extra-strong pipe ID per ASME B36.10.



Hardened Gate

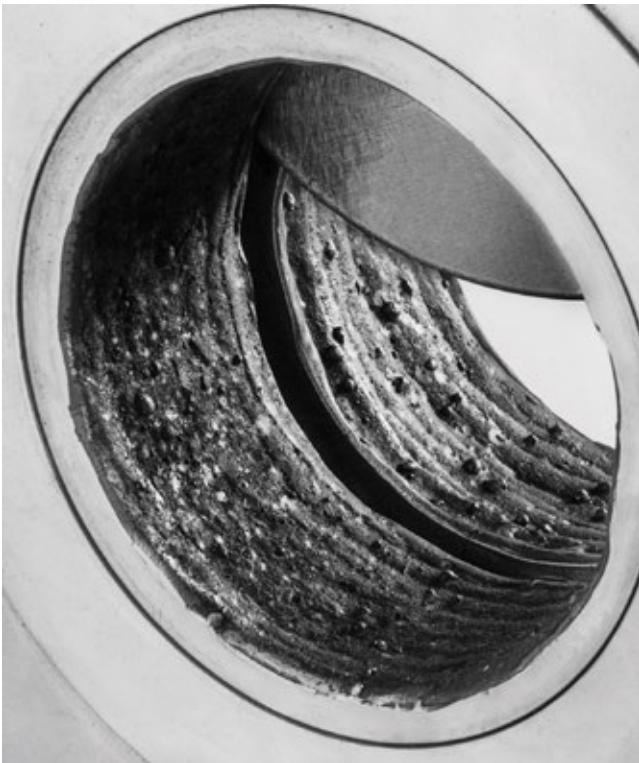
The beveled, knife-like gate edge cuts through solids in the flow stream. Gates with a hardened nickel-based non-stick overlay and Tungsten bevel provide extra protection against abrasion.

Interchangeable, Rotatable, Configurable Hardened Seat Rings

The KSV Severe Service Valves also feature a “dual wear ring design.” The hardened seat rings are identical so that they can be interchanged, rotated or replaced in the field to achieve maximum service life. The durable seat rings can be rotated 3 times through 4 positions to extend valve life and replacement intervals, providing improved asset utilization and process productivity. In addition, Tungsten Carbide or Chrome Carbide overlays, in either 6mm or 13mm thicknesses, are available for high velocity applications.

Full Pressure Dead-End Service

The dead-end design allows the valve to hold its full rated pressure, even when the downstream side is not connected to piping and is open to atmosphere, making it ideal for end-of-line and maintenance isolation applications.



Seat rings hardened with Tungsten Carbide or Chrome Carbide overlays are available for high velocity applications.

Bi-Directional, Drip-Tight Shutoff

The KSV's mechanically retained seats provide bi-directional, dead-end service without a mating flange. Resilient seats provide bi-directional, drip-tight shutoff. Resilient seats are available in a variety of materials for services up to 400°F (204°C) as standard. Metal seated valves conform to MSS SP-135 shutoff requirements for metal seated high pressure knife gate valves.

360° Gate Guiding & Support

For maximum sealing performance, the seat rings work together to provide 360° guiding for the gate. The gate is fully supported and properly aligned within the machined packing chamber of the bolt-on packing box.



Full-Force Lockout System

The KSV lockout system is designed to hold the full actuator force, plus a safety factor. This ultimate lockout system is available on either manual or powered actuators.

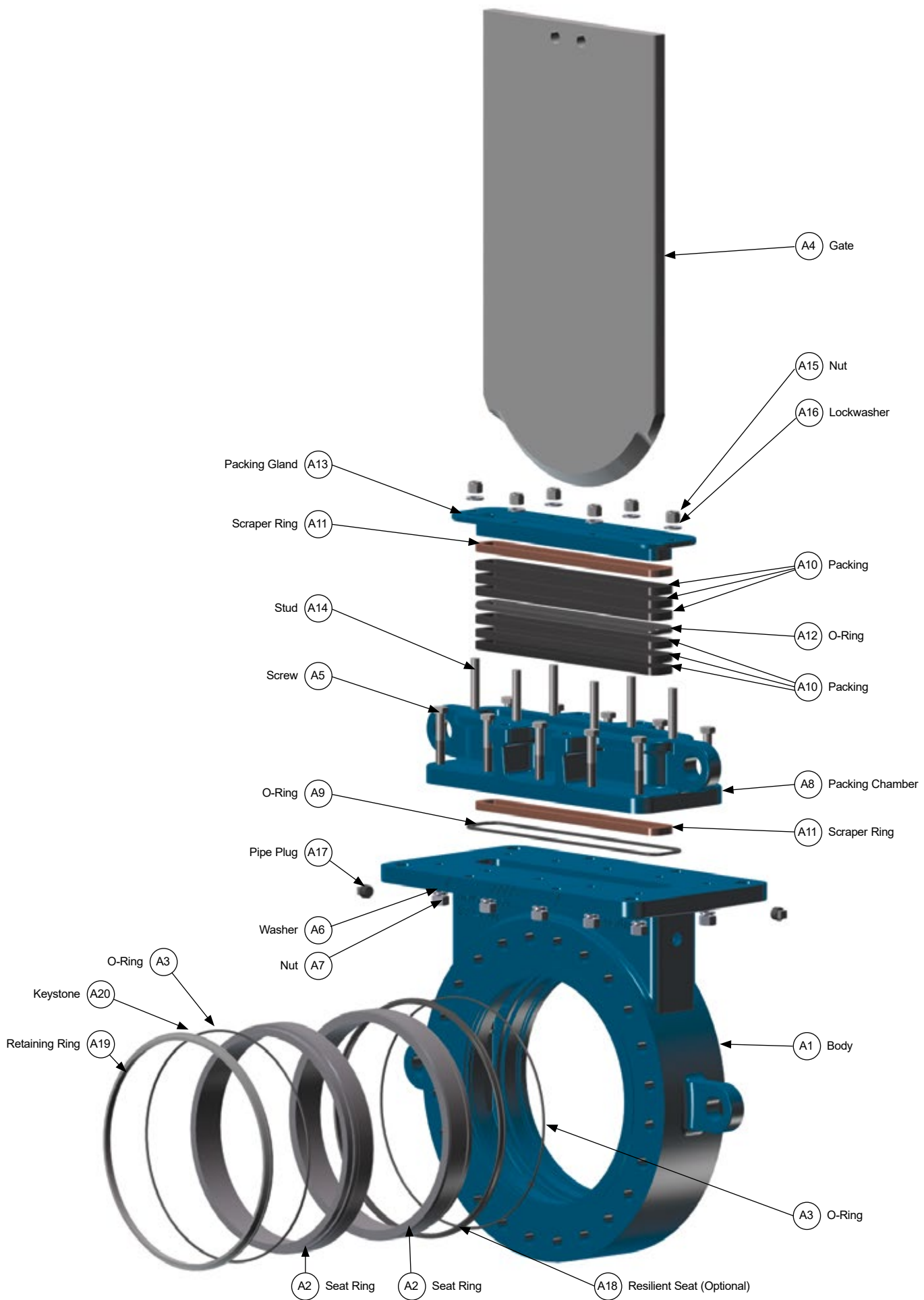
Actuator & Accessory Options

As standard, valves are available with bevel gear handwheels, pneumatic cylinders or hydraulic cylinders, with other actuators available on application. A full complement of accessories and options are available including bonnets, gate guards, and a double block and bleed design. Accessories include solenoids, switches, positioners, and more.

Materials of Construction

Standard Design Class 150/300

Item	Description	Material
A1	Body	Carbon Steel, ASTM A216 WCB
		2205 Duplex Stainless Steel, ASTM A995 CD3MN
		316 Stainless Steel, ASTM A351 CF8M
		Low Temperature Carbon Steel, ASTM A352 LCC
A2	Seat Ring (Base Material)	Carbon Steel
		316 Stainless Steel
		Hardened 17-4 PH Stainless Steel RC43
		White Iron Solid, ASTM A532, Class I-A
		Abrasion Resistant Cast Iron per ASTM A532, Class II-B
	Seat Ring (Coating Material)	No Coating
		Cobalt Chromium Alloy
		Chrome Carbide Tungsten Carbide
A3	O-Ring	NBR - Acrylonitrile-Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C)
		VGF - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A4	Gate	2205 Duplex Stainless Steel, CD7MCUN
		Hardened 400 Series Stainless Steel RC43, ASTM A240
		Hardened 17-4 Stainless Steel H900
		Hardened 17-4 Stainless Steel H900 with a hardened nickel-based, nonstick coating
		Hardened 17-4 Stainless Steel H900 with Tungsten Bevel
		Hardened 17-4 Stainless Steel H900 with Tungsten Bevel, and a hardened nickel-based, nonstick coating
		Carbon Steel Hardened RC43, with a hardened nickel-based, nonstick coating Abrasion Resistant, with a hardened nickel-based, nonstick coating
A5	Screw	Carbon Steel Zinc Plated 316 Stainless Steel
A6	Lockwasher	Carbon Steel Zinc Plated 316 Stainless Steel
A7	Nut	Carbon Steel Zinc Plated 316 Stainless Steel
A8	Packing Chamber	Same as body material
A9	O-Ring	NBR - Acrylonitrile-Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C)
		VGF - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A10	Packing	Expanded PTFE Fiber with Graphite to 500°F (260°C) PTFE to 500°F (260°C)
A11	Scraper Ring	Braided Copper Nickel-Chromium alloy
A12	O-Ring	NBR - Acrylonitrile-Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C)
		VGF - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A13	Packing Gland	Same as body material
A14	Stud	Carbon Steel Zinc Plated 304 Stainless Steel
A15	Nut	Carbon Steel Zinc Plated 304 Stainless Steel
A16	Lockwasher	Carbon Steel Zinc Plated 304 Stainless Steel
A17	Pipe Plug	Carbon Steel Zinc Plated 304 Stainless Steel
A18	Resilient Seat	NBR - Acrylonitrile - Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C) VGF - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A19	Retaining Ring	Carbon Steel
A20	Keystone	Carbon Steel

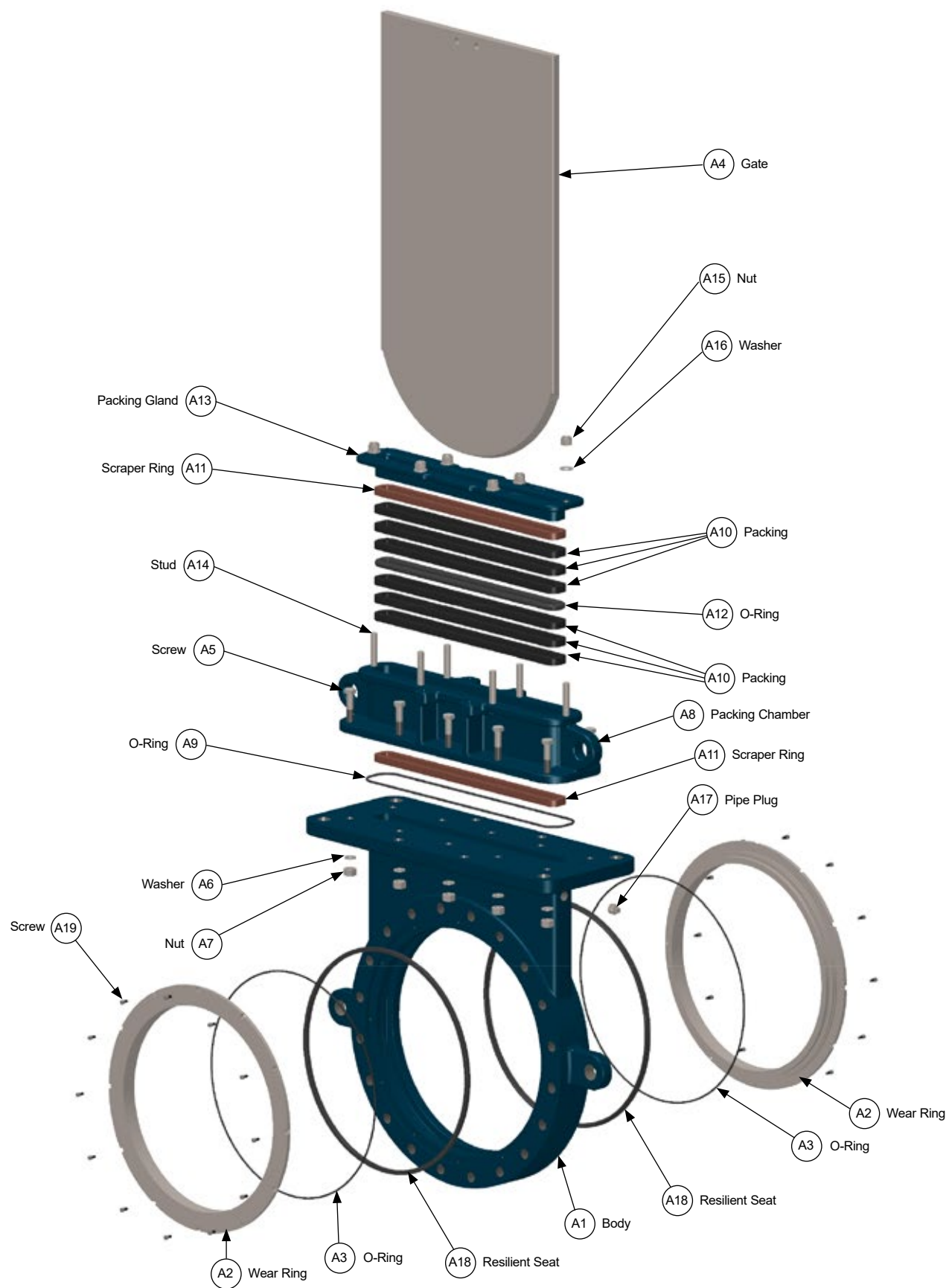


Standard Design Class 150/300

Materials of Construction

Short Body Design SBD Class 150

Item	Description	Material
A1	Body	Carbon Steel, ASTM A216 WCB
		2205 Duplex Stainless Steel, ASTM A995 CD3MN
		316 Stainless Steel, ASTM A351 CF8M
		Low Temperature Carbon Steel, ASTM A352 LCC
A2	Wear Ring (Base Material)	Carbon Steel
		316 Stainless Steel
		Hardened 17-4 PH Stainless Steel RC43
		White Iron Solid, ASTM A532, Class I-A
		Abrasion Resistant Cast Iron per ASTM A532, Class II-B
	Wear Ring (Coating Material)	No Coating
		Cobalt Chromium Alloy
		Chrome Carbide
		Tungsten Carbide
A3	O-Ring	NBR - Acrylonitrile-Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C)
		VGf - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A4	Gate	2205 Duplex Stainless Steel, CD7MCUN
		Hardened 400 Series Stainless Steel RC43, ASTM A240
		Hardened 17-4 Stainless Steel H900
		Hardened 17-4 Stainless Steel H900 with a hardened nickel-based, nonstick coating
		Hardened 17-4 Stainless Steel H900 with Tungsten Bevel
		Hardened 17-4 Stainless Steel H900 with Tungsten Bevel, and a hardened nickel-based, nonstick coating
		Carbon Steel Hardened RC43, with a hardened nickel-based, nonstick coating
A5	Screw	Abrasion Resistant, with a hardened nickel-based, nonstick coating
		Carbon Steel Zinc Plated
A6	Lockwasher	316 Stainless Steel
		Carbon Steel Zinc Plated
A7	Nut	316 Stainless Steel
		Carbon Steel Zinc Plated
A8	Packing Chamber	Same as body material
A9	O-Ring	NBR - Acrylonitrile-Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C)
		VGf - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A10	Packing	Expanded PTFE Fiber with Graphite to 500°F (260°C)
		PTFE to 500°F (260°C)
A11	Scraper Ring	Braided Copper
		Nickel-Chromium alloy
A12	O-Ring	NBR - Acrylonitrile-Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C)
		VGf - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A13	Packing Gland	Same as body material
A14	Stud	Carbon Steel Zinc Plated
		304 Stainless Steel
A15	Nut	Carbon Steel Zinc Plated
		304 Stainless Steel
A16	Lockwasher	Carbon Steel Zinc Plated
		304 Stainless Steel
A17	Pipe Plug	Carbon Steel Zinc Plated
		304 Stainless Steel
A18	Resilient Seat	NBR - Acrylonitrile - Butadiene to 180°F (83°C)
		CR - Chloroprene to 180°F (83°C)
		HNBR - Hydrogenated Nitrile to 302°F (150°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		EPDM - Terpolymer of Ethylene Propylene and a Diene to 250°F (122°C)
		VGf - Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)
A19	Screw	Carbon Steel



Short Body Design SBD Class 150

Valve Selection

Flow Parameters

Class 150

Standard and Short Body Design

Valve Size	$\frac{Cv^*}{Kv^*}$ 100% Open	K Factor** (resistance)	Port Area (in ² /cm ²)
2" 50mm	315 272	0.160	3.36 21.65
3" 80mm	665 576	0.120	7 45
4" 100mm	1199 1038	0.120	13 84
6" 150mm	2697 2334	0.120	28 181
8" 200mm	4794 4149	0.112	50 323
10" 250mm	7491 6483	0.112	79 510
12" 300mm	10787 9338	0.104	113 729
14" 350mm	13152 11383	0.104	138 890
16" 400mm	17421 15078	0.104	183 1181
18" 450mm	22290 19292	0.096	234 1510
20" 500mm	27759 24025	0.096	291 1877
22" 550mm	33864 29314	0.096	355 2290
24" 600mm	40494 35053	0.096	425 2742
26" 650mm	45790 35047	0.096	501 3232
28" 700mm	53332 46166	0.096	583 3761
30" 750mm	64090 55438	0.096	672 4335
32" 800mm	70138 60704	0.096	767 4948
36" 900mm	93080 80560	0.096	976 6297
42" 1100mm	125987 108973	0.096	1320 8516
48" 1200mm	129337 111960	0.096	1735 11194
54" 1400mm	Contact DeZURIK		
60" 1500mm			

Applicable Standards

DeZURIK KSV Knife Gate Valves are designed and/or tested to meet the following standards:	
ASME B16.34	Valves-Flanged, Threaded and Welding End. All KSV Knife Gate Valves comply with requirements of this standard.
MSS SP-135	High Pressure Knife Gate Valves. Metal Seated Valves.
ASME B16.5 2-24" (50-600mm)	Carbon Steel Flanges and Flanged Fittings, ASME 150 or 300. Conforms to Related Dimensions.
ASME 16.47 26-60" (650-1525mm)	Large diameter Steel Flanges. Series A. Conforms to related dimensions.
API 598	Soft Seated Valves Meet the Procedure and Duration Requirement of this Standard.
International Standards	Conforms to flanged bolt guides: DIN 10, 16, 25, 40; ISO 7005/PN10, PN16, PN25, PN40; BS 4504/PN10; and AS2129 Tables D, E or F; SANS 1123-1000, 1600, 2500 or 4000.
ASME B36.10	Welded Seamless Wrought Steel Pipe. Port diameters match pipe diameters.

Class 300 Standard Design

Valve Size	$\frac{Cv^*}{Kv^*}$ 100% Open	K Factor** (resistance)	Port Area (in ² /cm ²)
2" 50mm	280 242	0.160	295 19.05
3" 80mm	627 543	0.120	6.6 43
4" 100mm	1015 879	0.120	11 71
6" 150mm	2504 2168	0.120	26 168
8" 200mm	3643 3154	0.112	38 245
10" 250mm	6069 5254	0.112	64 413
12" 300mm	9069 7851	0.104	95 613
14" 350mm	12675 10972	0.104	133 858
16" 400mm	16850 14586	0.104	177 1142
18" 450mm	21623 18718	0.096	227 1465
20" 500mm	27091 23451	0.096	284 1832
22" 550mm	33005 28571	0.096	346 2232
24" 600mm	39541 34228	0.096	415 2677
26" 650mm	44876 38846	0.096	491 3167
28" 700mm	52417 38847	0.096	573 3697
30" 750mm	63041 54571	0.096	661 4265
32" 800mm	69041 59720	0.096	755 4811
36" 900mm	92222 78831	0.096	967 6206
42" 1100mm	127024 109876	0.16	1320 8517
48" 1200mm	Contact DeZURIK		
54" 1400mm			
60" 1500mm			

*Cv = Flow in GPM of water at 1 psi pressure drop.

Kv = Flow in m³/hr. of water at 100 kPa pressure drop.

** K = The resistance coefficient of the valve. The constant (K) can be used to determine the equivalent length of pipe.

$L = \frac{K \times D}{f}$ Where
 L = Equivalent length of pipe in feet
 K = Resistance coefficient
 D = Pipe diameter in feet
 f = Friction factor, related to type of pipe

Shut-Off Capabilities

Resilient Seats	Drip tight Bi-directional
Metal Seats	Meets MSS SP-135

Pressure Ratings (100°F (38°C))

Material	Class 150	Class 300
Carbon Steel (CS)	285 psi (1960 kPa)	740 psi (5100 kPa)
Duplex Stainless Steel (S10)	290 psi (1980 kPa)	750 psi (5170 kPa)
316 Stainless Steel (S10)	275 psi (1890 kPa)	720 psi (4960 kPa)
Low Temperature Carbon Steel (LCC)	290 psi (1980 kPa)	750 psi (5170 kPa)

Valve Selection

Valve & Actuator Weights

Class 150 Standard Design

Valve Size	Basic Valve	With Bevel Gear Handwheel*
2" 50mm	41 19	128 58
3" 80mm	108 49	203 93
4" 100mm	138 63	235 107
6" 150mm	121 55	220 100
8" 200mm	177 81	296 135
10" 250mm	244 111	381 173
12" 300mm	368 167	526 239
14" 350mm	500 227	697 317
16" 400mm	600 273	874 397
18" 450mm	763 347	1052 478
20" 500mm	883 401	1179 535
22" 550mm	Contact DeZURIK	
24" 600mm	1365 620	1745 792
26" 650mm	1814 823	2326 1056
28" 700mm	2236 1015	2777 1260
30" 750mm	2584 1173	3113 1413
32" 800mm	3082 1398	3612 1639
36" 900mm	3831 1738	4412 2002
42" 1100mm	6504 2951	8100 3675
48" 1200mm	8415 3817	10042 4555
54" 1400mm	Contact DeZURIK	
60" 1500mm		

Class 300 Standard Design

Valve Size	Basic Valve	With Bevel Gear Handwheel*
2" 50mm	41 19	128 58
3" 80mm	108 49	206 94
4" 100mm	139 64	239 109
6" 150mm	190 87	292 133
8" 200mm	293 133	446 203
10" 250mm	424 193	613 279
12" 300mm	659 299	920 418
14" 350mm	856 389	1236 561
16" 400mm	1054 479	1441 654
18" 450mm	1389 631	1813 823
20" 500mm	1688 766	2117 961
22" 550mm	Contact DeZURIK	
24" 600mm	2446 1110	2890 1311
26" 650mm	3006 1364	3637 1650
28" 700mm	3547 1609	4184 1898
30" 750mm	4361 1979	5023 2279
32" 800mm	5333 2419	5554 2973
36" 900mm	6829 3098	7681 3485
42" 1100mm	Contact DeZURIK	
48" 1200mm		
54" 1400mm		
60" 1500mm		

Class 150 Short Body Design SBD

Valve Size	Basic Valve	With Bevel Gear Handwheel*
2" 50mm	36 16	129 58
3" 80mm	82 37	177 81
4" 100mm	106 48	203 92
6" 150mm	119 54	218 99
8" 200mm	179 81	298 135
10" 250mm	237 108	374 170
12" 300mm	371 168	529 240
14" 350mm	467 212	664 302
16" 400mm	581 264	855 388
18" 450mm	734 333	1023 464
20" 500mm	916 415	1212 549
24" 600mm	1312 595	1692 767

Pounds
Kilograms

* 2" Valve has standard handwheel

Ordering

To order, simply complete the valve order code from information shown. An ordering example is shown for your reference.

Valve Style

Give valve style code as follows:

KSV = Severe Service Knife Gate Valve

Valve Size

Give valve size code as follows:

2	=	2"	(50mm)	24	=	24"	(600mm)
3	=	3"	(80mm)	26	=	26"	(650mm)
4	=	4"	(100mm)	28	=	28"	(700mm)
6	=	6"	(150mm)	30	=	30"	(750mm)
8	=	8"	(200mm)	32	=	32"	(800mm)
10	=	10"	(250mm)	36	=	36"	(900mm)
12	=	12"	(300mm)	42	=	42"	(1100mm)
14	=	14"	(350mm)	48	=	48"	(1200mm)
16	=	16"	(400mm)	54	=	54"	(1400mm)
18	=	18"	(450mm)	60	=	60"	(1500mm)
20	=	20"	(500mm)				
22	=	22"	(550mm)				

5" (125mm) on application

Body Style

Give valve style code as follows:

----- = Standard Body
SBD = Short Body (2-24" only)

End Connection

Give end connection code as follows:

F1 = Flanged, ASME 150
F110 = ISO 7005/PN10 Drilling
F116 = ISO 7005/PN16 Drilling
F1DA = AS2129 Table D Drilling
F1EA = AS2129 Table E Drilling
F1S10 = SANS 1123-1000
F1S16 = SANS 1123-1600
F2 = Flanged, ASME 300
F225 = ISO 7005/PN25 Drilling
F240 = ISO 7005/PN40 Drilling
F2FA = AS2129 Table F Drilling
F2S25 = SANS 1123-2500
F2S40 = SANS 1123-4000

Other end connections available on application.

Body Material

Give body material code as follows:

CS = Carbon Steel
S2 = 316 Stainless Steel
S10 = 2205 Duplex Stainless Steel
LCC = Low Temperature Carbon Steel

Packing Material

Give packing material code as follows:

GLCW = Expanded PTFE Fiber with Graphite live loading with copper wiper, 500°F (260°C)
TLCW = PTFE live loading with copper wiper, 500°F (260°C)
GLIW = Expanded PTFE Fiber with Graphite live loading with a Nickel-Chromium alloy wiper, 500°F (260°C)
TLIW = PTFE live loading with Nickel-Chromium alloy wipers, 500°F (260°C)

On Application

RSCW = Rod Seal with copper wiper, bonneted valves only, 180°F (82°C)
RSIW = Rod Seal with a Nickel-Chromium wiper, bonneted valves only, 180°F (82°C)

Note: The limiting factor in valve selection is the lowest temperature of the packing or seat.

Gate Material

Give gate material code as follows:

S10 = 2205 Duplex Stainless Steel
S8 = Hardened 400 Series Stainless Steel RC43
S5 = Hardened 17-4 PH Stainless Steel H900
S5C = Hardened 17-4 PH Stainless Steel H900 with a hardened nickel-based, non-stick coating
S5T = Hardened 17-4 PH Stainless Steel H900 with Tungsten Bevel
S5TC = Hardened 17-4 PH Stainless Steel H900 with Tungsten Bevel, with a hardened nickel-based, non-stick coating
CSHC = Carbon Steel Hardened RC43 with a hardened nickel-based, non-stick coating
ARC = Abrasion Resistant with a hardened nickel-based, non-stick coating

Seat Material

Give seat material code as follows:

CS = Carbon Steel
S2 = 316 Stainless Steel
S5 = Hardened 17-4 PH Stainless Steel RC43 (NR seat facing only)
WIS = White Iron Solid (NR seat facing only)
NHS = Abrasion Resistant Cast Iron, per ASTM A532 (NR seat facing only)

Seat Facing Overlay

Give seat facing code as follows:

NR = No coating
ST = Cobalt Chromium Alloy
TW13 = Tungsten Carbide (Welded) (13mm coating thickness)
TW6 = Tungsten Carbide (Welded) (6mm coating thickness)
CC13 = Chrome Carbide, (13mm coating thickness)
CC6 = Chrome Carbide, (6mm coating thickness)

Seat Seals

Give option code as follows:

M = Metal
NBR = Acrylonitrile-Butadiene to 180°F (82°C)
CR = Chloroprene to 180°F (82°C)
HNBR = Hydrogenated Nitrile to 302°F (150°C)
FKM = Fluoro Rubber to 400°F (204°C)
EPDM = Terpolymer of Ethylene, Propylene and a Diene to 250°F (122°C)
VGF = Fluorinated Hydro Carbon Fluoro Rubber to 400°F (204°C)

Note: The limiting factor in valve selection is the lowest temperature of the packing or seat.

Options

Give options code as follows:

CRT = Certified Physical and Chemical Test Report
CMC = Certificate of Material Conformance
SL37 = Custom Specification
SNCR = Custom Specification
DTR = DeZURIK Standard Certified Hydrostatic and Seat Test Report
CRN = Canadian Registration Number Certification

On Application

B = Bonnet
DBB = Double Block and Bleed Design

Ordering Example

KSV,6,F1,CS,GLCW,CSHC-CS-TW13,CR*MNB-HD12-CS

Bevel Gear Actuators

Bevel gear actuators provide vertical mounting of the handwheel. A mechanical advantage makes large valve operation easier and faster. Handwheels are sized for 80lb.(36Kg) rim pull maximum. All actuators are sized to the full pressure rating of the valve. Contact DeZURIK for manual actuator on 2" (50mm) valves.

Bevel Gear Handwheel Actuators

Class 150

Standard and Short Body Design (3-24" only)

Valve Size	Order Code Carbon Steel (CS) Yoke	Order Code 304 SST (S1) Yoke	Number of Turns
3" 80mm	MNB-HD12-CS	MNB-HD12-S1	60
4" 100mm	MNB-HD12-CS	MNB-HD12-S1	75
6" 150mm	MNB-HD12-CS	MNB-HD12-S1	106
8" 200mm	MNB-HD12-CS	MNB-HD12-S1	139
10" 250mm	MNB-HD12-CS	MNB-HD12-S1	173
12" 300mm	MNB-HD12-CS	MNB-HD12-S1	162
14" 350mm	MNB-HD16-CS	MNB-HD16-S1	177
16" 400mm	MNB-HD16-CS	MNB-HD16-S1	201
18" 450mm	MNB-HD24-CS	MNB-HD24-S1	225
20" 500mm	MNB-HD24-CS	MNB-HD24-S1	249
22" 550mm	MNB-HD24-CS	MNB-HD24-S1	*
24" 600mm	MNB-HD24-CS	MNB-HD24-S1	198
26" 650mm	MNB-HD24-CS	MNB-HD24-S1	430
28" 700mm	MNB-HD24-CS	MNB-HD24-S1	462
30" 750mm	MNB-HD24-CS	MNB-HD24-S1	494
32" 800mm	MNB-HD24-CS	MNB-HD24-S1	524
36" 900mm	MNB-HD24-CS	MNB-HD24-S1	443
42" 1100mm	MNB-HD24-CS	MNB-HD24-S1	3078
48" 1200mm	MNB-HD24-CS	MNB-HD24-S1	3510

Class 300

Standard Design

Valve Size	Order Code Carbon Steel (CS) Yoke	Order Code 304 SST (S1) Yoke	Number of Turns
3" 80mm	MNB-HD12-CS	MNB-HD12-S1	48
4" 100mm	MNB-HD12-CS	MNB-HD12-S1	59
6" 150mm	MNB-HD12-CS	MNB-HD12-S1	82
8" 200mm	MNB-HD12-CS	MNB-HD12-S1	110
10" 250mm	MNB-HD24-CS	MNB-HD24-S1	134
12" 300mm	MNB-HD24-CS	MNB-HD24-S1	159
14" 350mm	MNB-HD24-CS	MNB-HD24-S1	232
16" 400mm	MNB-HD24-CS	MNB-HD24-S1	265
18" 450mm	MNB-HD24-CS	MNB-HD24-S1	296
20" 500mm	MNB-HD24-CS	MNB-HD24-S1	328
22" 550mm	MNB-HD24-CS	MNB-HD24-S1	*
24" 600mm	MNB-HD24-CS	MNB-HD24-S1	392
26" 650mm	MNB-HD24-CS	MNB-HD24-S1	848
28" 700mm	MNB-HD24-CS	MNB-HD24-S1	912
30" 750mm	MNB-HD24-CS	MNB-HD24-S1	732
32" 800mm	MNB-HD24-CS	MNB-HD24-S1	792
36" 900mm	MNB-HD24-CS	MNB-HD24-S1	888
42" 1100mm	MNB-HD24-CS	MNB-HD24-S1	O/A
48" 1200mm	MNB-HD24-CS	MNB-HD24-S1	O/A

Note:
For alternate mounting of bevel gear actuators, add -90, -180 or -270 after the actuator code.

* = Contact DeZURIK

Pneumatic Cylinder Actuators

Double-acting pneumatic cylinders for on/off services are sized for 80 psig (550 kPa) with a safety factor capable of maximum non-shock pressure. All actuators are sized to the full pressure rating of the valve.

Class 150 Standard Design

Valve Size	Order Code	
	Carbon Steel (CS) Yoke	304 SST (S1) Yoke
<u>2"</u> 50mm	Contact DeZUIRK	
<u>3"</u> 80mm	CY-PC6-CS	CY-PC4-S1
<u>4"</u> 100mm	CY-PC6-CS	CY-PC6-S1
<u>6"</u> 150mm	CY-PC8-CS	CY-PC8-S1
<u>8"</u> 200mm	CY-PC8-CS	CY-PC8-S1
<u>10"</u> 250mm	CY-PC10-CS	CY-PC10-S1
<u>12"</u> 300mm	CY-PC12-CS	CY-PC12-S1
<u>14"</u> 350mm	CY-PC12-CS	CY-PC12-S1
<u>16"</u> 400mm	CY-PC14-CS	CY-PC14-S1
<u>18"</u> 450mm	CY-PC16-CS	CY-PC16-S1
<u>20"</u> 500mm	CY-PC16-CS	CY-PC16-S1
<u>24"</u> 600mm	CY-PC16-CS	CY-PC16-S1
<u>26"</u> 650mm	CY-PC16-CS	CY-PC16-S1
<u>28"</u> 700mm	CY-PC16-CS	CY-PC16-S1
<u>30"</u> 750mm	CY-PC18-CS	CY-PC18-S1
<u>32"</u> 800mm	CY-PC18-CS	CY-PC18-S1

Class 300 Standard Design

Valve Size	Order Code	
	Carbon Steel (CS) Yoke	304 SST (S1) Yoke
<u>2"</u> 50mm	Contact DeZUIRK	
<u>3"</u> 80mm	CY-PC6-CS	CY-PC6-S1
<u>4"</u> 100mm	CY-PC8-CS	CY-PC8-S1
<u>5"</u> 125mm	CY-PC10-CS	CY-PC10-S1
<u>6"</u> 150mm	CY-PC10-CS	CY-PC10-S1
<u>8"</u> 200mm	CY-PC12-CS	CY-PC12-S1
<u>10"</u> 250mm	CY-PC14-CS	CY-PC14-S1
<u>12"</u> 300mm	CY-PC16-CS	CY-PC16-S1
<u>14"</u> 350mm	CY-PC20-CS	CY-PC20-S1
<u>16"</u> 400mm	CY-PC20-CS	CY-PC20-S1
<u>18"</u> 450mm	CY-PC20-CS	CY-PC20-S1

Class 150 Short Body Design SBD

Valve Size	Order Code	
	Carbon Steel (CS) Yoke	304 SST (S1) Yoke
<u>2"</u> 50mm	Contact DeZUIRK	
<u>3"</u> 80mm	CY-PC8-CS	CY-PC8-S1
<u>4"</u> 100mm	CY-PC8-CS	CY-PC8-S1
<u>6"</u> 150mm	CY-PC10-CS	CY-PC10-S1
<u>8"</u> 200mm	CY-PC12-CS	CY-PC12-S1
<u>10"</u> 250mm	CY-PC14-CS	CY-PC14-S1
<u>12"</u> 300mm	CY-PC14-CS	CY-PC14-S1
<u>14"</u> 350mm	CY-PC16-CS	CY-PC16-S1
<u>16"</u> 400mm	CY-PC16-CS	CY-PC16-S1
<u>18"</u> 450mm	CY-PC18-CS	CY-PC18-S1
<u>20"</u> 500mm	CY-PC18-CS	CY-PC18-S1
<u>24"</u> 600mm	CY-PC20-CS	CY-PC20-S1

Hydraulic Cylinder Actuators

Hydraulic cylinders for on/off services are sized for 1500 psig (10350 kPa) with a safety factor capable of maximum non-shock pressure. All actuators are sized to the full pressure rating of the valve.

Class 150

Standard and Short Body Design SBD (3-24" only)

Valve Size	Order Code		Area		In ² cm ²	Swept Volume	In ³ cm ³
	Carbon Steel (CS) Yoke	304 SST (S1) Yoke	Open	Closed	Open	Closed	
2" 50mm	CY-HC2-CS	CY-HC2-S1	2.36 15.23	3.14 20.26	9 147	13 213	
3" 80mm	CY-HC2-CS	CY-HC2-S1	2.36 15.23	3.14 20.26	9 147	13 213	
4" 100mm	CY-HC2-CS	CY-HC2-S1	2.36 15.23	3.14 20.26	12 197	16 262	
6" 150mm	CY-HC2-CS	CY-HC2-S1	2.36 15.23	3.14 20.26	16 262	22 361	
8" 200mm	CY-HC2.5-CS	CY-HC2.5-S1	4.12 26.58	4.91 31.68	37 606	44 721	
10" 250mm	CY-HC2.5-CS	CY-HC2.5-S1	4.12 26.58	4.91 31.68	45 737	54 885	
12" 300mm	CY-HC3.25-CS	CY-HC3.25-S1	6.81 43.94	8.30 53.55	89 1458	108 1770	
14" 350mm	CY-HC3.25-CS	CY-HC3.25-S1	6.81 43.94	8.30 53.55	102 1671	124 2032	
16" 400mm	CY-HC4-CS	CY-HC4-S1	10.16 65.55	12.57 81.10	173 2835	214 3507	
18" 450mm	CY-HC4-CS	CY-HC4-S1	10.16 65.55	12.57 81.10	193 3163	239 3916	
20" 500mm	CY-HC4-CS	CY-HC4-S1	10.16 65.55	12.57 81.10	213 3490	264 4326	
22" 550mm	CY-HC4-CS	CY-HC4-S1	10.16 65.55	12.57 81.10	233 3818	289 4736	
24" 600mm	CY-HC4-CS	CY-HC4-S1	10.16 65.55	12.57 81.10	254 4162	314 5146	
26" 650mm	CY-HC5-CS	CY-HC5-S1	16.49 106.39	19.63 126.64	445 7292	530 8685	
28" 700mm	CY-HC5-CS	CY-HC5-S1	16.49 106.39	19.63 126.64	478 7833	569 9324	
30" 750mm	CY-HC5-CS	CY-HC5-S1	16.49 106.39	19.63 126.64	511 8374	609 9980	
32" 800mm	CY-HC5-CS	CY-HC5-S1	16.49 106.39	19.63 126.64	544 8915	648 10619	
36" 900mm	CY-HC6-CS	CY-HC6-S1	23.37 150.77	28.27 182.39	865 14175	1046 17141	
42" 1100mm	CY-HC10-CS	CY-HC10-S1	62.64 404.13	78.54 506.71	2694 44147	3377 55339	
48" 1200mm	CY-HC10-CS	CY-HC10-S1	62.64 404.13	78.65 507.42	3069 50292	3848 63057	
54" 1400mm	Contact DeZURIK						
60" 1500mm							

Hydraulic Cylinder Actuators

Class 300

Standard Design

Valve Size	Order Code		Area		Swept Volume	
	Carbon Steel (CS) Yoke	304 SST (S1) Yoke	In ² cm ²		In ³ cm ³	
			Open	Closed	Open	Closed
2" 50mm	CY-HC2-CS	CY-HC2-S1	2.36 15.23	3.14 20.26	9 147	13 213
3" 80mm	CY-HC2-CS	CY-HC2-S1	2.36 15.23	3.14 20.26	9 147	13 213
4" 100mm	CY-HC2.5-CS	CY-HC2.5-S1	4.12 26.58	4.91 31.68	21 344	25 410
6" 150mm	CY-HC2.5-CS	CY-HC2.5-S1	4.12 26.58	4.91 31.68	29 475	34 557
8" 200mm	CY-HC3.25-CS	CY-HC3.25-S1	6.81 43.94	8.30 53.55	48 787	58 950
10" 250mm	CY-HC4-CS	CY-HC4-S1	10.16 65.55	12.57 81.10	112 1835	138 2261
12" 300mm	CY-HC4-CS	CY-HC4-S1	10.16 65.55	12.57 81.10	132 2163	163 2671
14" 350mm	CY-HC5-CS	CY-HC5-S1	16.49 106.39	19.63 126.64	247 4048	295 4834
16" 400mm	CY-HC5-CS	CY-HC5-S1	16.49 106.39	19.63 126.64	280 4588	334 5473
18" 450mm	CY-HC6-CS	CY-HC6-S1	23.37 150.77	28.27 182.39	444 7276	537 8800
20" 500mm	CY-HC6-CS	CY-HC6-S1	23.37 150.77	28.27 182.39	491 8046	594 9734
22" 550mm	CY-HC6-CS	CY-HC6-S1	23.37 150.77	28.27 182.39	538 8816	651 10668
24" 600mm	CY-HC6-CS	CY-HC6-S1	23.37 150.77	28.27 182.39	584 9586	707 11602
26" 650mm	CY-HC7-CS	CY-HC7-S1	31.42 202.71	38.48 248.26	848 13896	1039 17026
28" 700mm	CY-HC7-CS	CY-HC7-S1	31.42 202.71	38.48 248.26	911 14929	1116 18288
30" 750mm	CY-HC7-CS	CY-HC7-S1	31.42 202.71	38.48 248.26	974 15961	1193 19550
32" 800mm	CY-HC8-CS	CY-HC8-S1	40.64 262.19	50.27 324.32	1425 23351	1659 27186
36" 900mm	CY-HC8-CS	CY-HC8-S1	40.64 262.19	50.27 324.32	1504 24646	1860 30480
42" 1100mm	CY-HC14-CS	CY-HC14-S1	62.64 404.13	78.54 506.71	2694 44147	3377 55339
48-60" 1200-1800mm	Contact DeZURIK					

Accessories

Lockout Device

The KSV Lockout Device is designed to hold the full actuator force plus a safety factor. Available on bevel gear handwheel and cylinder actuated valves. To order, add "LK" after the actuator code.

Solenoid Valves

A 4-Way Solenoid controls the flow of air to the pneumatic actuator, directing the actuator to either open or close. Solenoid valves may be ordered mounted and piped as part of a complete valve/actuator assembly or they can be ordered as a separate item. Indicate whether the solenoid should open or close the valve when energized. Standard solenoids are brass body, 24 VDC.

Limit Switches

Limit switches can be ordered to signal when the valve has reached its fully open, fully closed, or both open and closed positions. They can be ordered for either hazardous locations or for explosion proof applications.

Visual Position Indicator

A Visual Position Indicator Scale and Pointer can be ordered to provide a clear, at-a-glance visual indication of the knife gate valve's position by using a pointer that moves along a graduated scale to show the valve's degree of opening or closing.

Air Filter Regulator

The DeZURIK air filter regulator is designed to provide clean, accurate air pressure to actuators.

Junction Box

Switches, solenoid valves, and air filter regulators can be factory-wired to a NEMA 4/4X junction box with a 12-point terminal block for simplified field installation.

Gate Guards

Gate Guards are protective covers that shield the exposed gate travel area, helping prevent personnel contact with moving parts and protecting the valve from debris and environmental exposure.

Dimensions – Standard Design

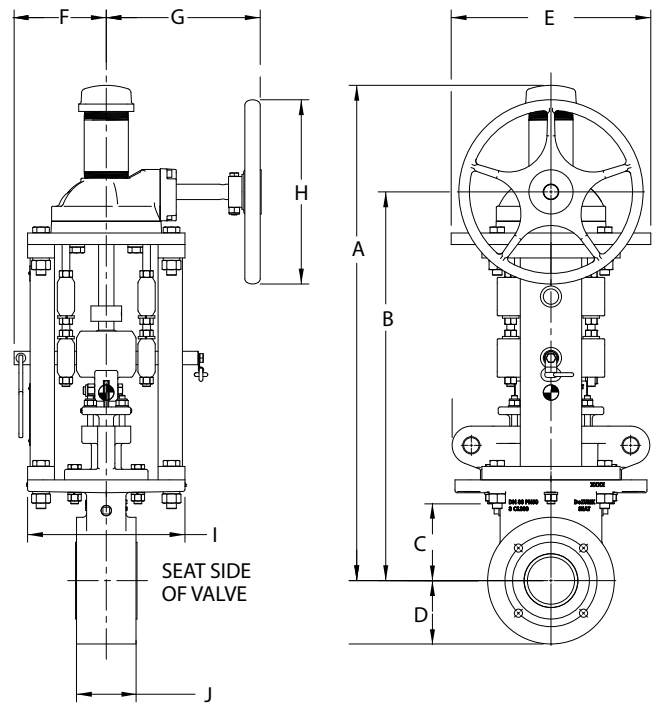
Bevel Gear Actuators

Class 150

2-10" (50-250mm)

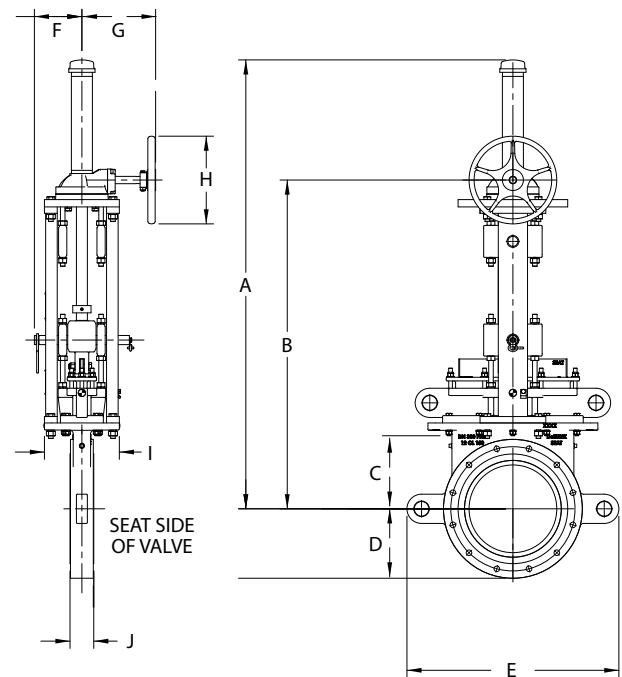
Valve Size*	A	B	C	D	E	F	G	H	I	J
3"	32.26	25.32	5.00	4.13	13.00	6.00	10.03	12.00	10.25	4.00
80mm	819	643	127	105	330	152	255	305	260	102
4"	33.49	26.80	5.50	5.00	13.00	6.00	10.03	12.00	10.25	4.13
100mm	851	681	140	127	330	152	255	305	260	105
6"	38.31	29.49	5.94	5.50	13.00	6.00	10.03	12.00	10.25	2.50
150mm	973	749	151	140	330	152	255	305	260	64
8"	45.18	32.74	7.00	6.75	13.00	6.00	10.03	12.00	10.25	2.88
200mm	1148	832	178	171	330	152	255	305	260	73
10"	52.40	37.96	8.31	8.00	13.00	6.50	10.03	12.00	10.25	3.13
250mm	1331	964	211	203	330	165	255	305	260	80

* Contact DeZURIK for 2" (50mm) dimensions



12-48" (300-1200mm)

Valve Size	A	B	C	D	E	F	G	H	I	J
12"	60.43	44.99	10.00	9.50	29.00	6.50	10.09	12.00	10.25	3.25
300mm	1535	1143	254	241	737	165	256	305	260	83
14"	64.33	48.30	11.13	10.50	31.00	8.92	10.34	16.00	12.25	3.63
350mm	1634	1227	283	267	787	227	263	406	311	92
16"	73.49	53.05	12.88	11.75	33.50	8.97	10.34	16.00	13.75	3.75
400mm	1867	1347	327	298	851	228	263	406	349	95
18"	78.49	58.05	14.28	12.50	35.00	8.25	18.34	24.00	14.25	4.13
450mm	1994	1474	363	318	889	210	466	610	362	105
20"	84.12	61.68	16.50	13.75	37.50	8.00	18.34	24.00	14.25	4.50
500mm	2137	1567	419	349	953	203	466	610	362	114
22"	Contact DeZURIK									
550mm										
24"	96.82	71.60	19.00	16.00	42.00	8.86	20.98	24.00	14.63	5.00
600mm	2459	1819	483	406	1067	225	533	610	372	127
26"	104.90	77.18	20.88	17.13	44.25	9.38	21.16	24.00	16.50	6.75
650mm	2664	1960	530	435	1124	238	537	610	419	171
28"	118.81	81.87	23.75	18.25	46.50	10.55	21.16	24.00	17.00	7.13
700mm	3018	2079	603	464	1181	268	537	610	432	181
30"	120.88	83.93	23.13	19.38	48.75	9.94	21.16	24.00	19.00	7.38
750mm	3070	2132	588	492	1238	252	537	610	483	187
32"	124.45	87.49	22.86	20.88	51.75	10.00	21.16	24.00	18.00	8.13
800mm	3161	2222	581	530	1314	254	537	610	457	207
36"	136.20	98.18	24.52	23.00	61.00	10.00	21.16	24.00	18.00	8.88
900mm	3459	2494	623	584	1549	254	537	610	457	226
42"	160.74	118.79	34.25	26.75	68.50	14.00	27.66	24.00	28.00	9.75
1100mm	4083	3017	870	679	1740	356	703	610	711	248
48"	177.99	130.04	40.00	30.00	75.00	14.00	27.66	24.00	28.00	11.50
1200mm	4521	3303	1016	762	1905	356	703	610	711	292



Dimensions – Standard Design

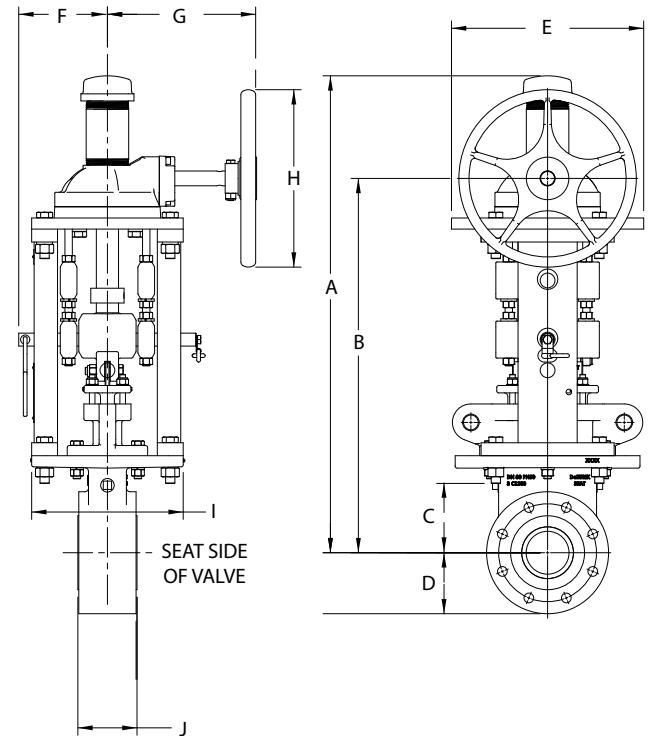
Bevel Gear Actuators

Class 300

2-6" (50-150mm)

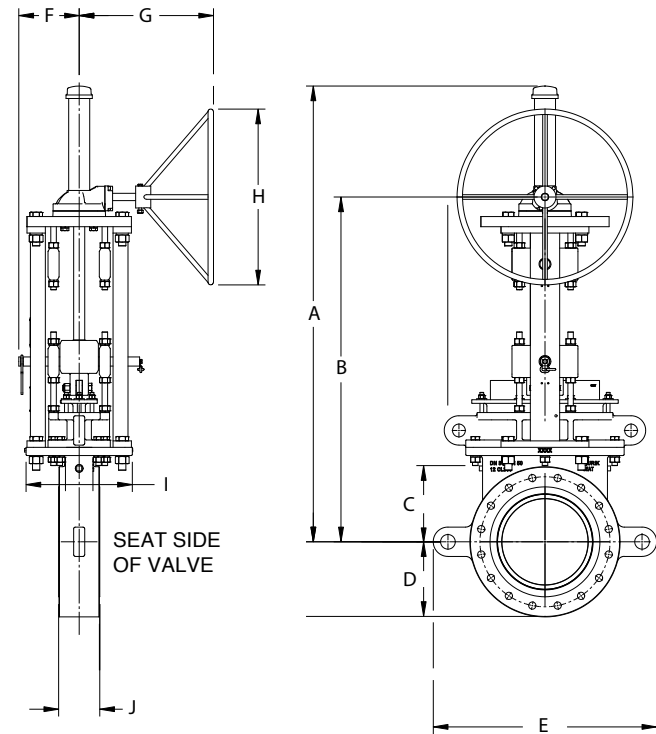
Valve Size*	A	B	C	D	E	F	G	H	I	J
3"	32.26	25.32	4.69	4.13	13.00	6.00	10.03	12.00	10.25	4.00
80mm	819	643	119	105	330	152	255	305	260	102
4"	33.49	26.80	5.50	5.00	13.00	6.00	10.03	12.00	10.25	4.13
100mm	851	681	140	127	330	152	255	305	260	105
6"	39.09	30.28	7.00	6.25	13.00	6.00	10.03	12.00	10.25	4.13
150mm	993	769	178	159	330	152	255	305	260	105

* Contact DeZURIK for 2" (50mm) dimensions



8-42" (200-1200mm)

Valve Size	A	B	C	D	E	F	G	H	I	J
8"	51.70	37.30	8.25	7.50	24.00	6.50	10.03	12.00	10.50	4.63
200mm	1313	947	210	191	610	165	255	305	267	118
10"	54.49	41.43	9.25	8.75	27.50	6.50	18.34	24.00	11.75	5.38
250mm	1384	1052	235	222	699	165	466	610	298	137
12"	62.22	47.08	10.40	10.19	30.50	8.25	18.34	24.00	14.50	5.63
300mm	1580	1196	264	259	775	210	466	610	368	143
14"	66.51	51.30	11.81	11.50	33.00	9.00	21.16	24.00	16.38	6.25
350mm	1689	1303	300	292	838	229	537	610	416	159
16"	74.01	54.56	13.75	12.75	35.50	9.57	21.16	24.00	16.38	6.63
400mm	1880	1386	349	324	902	243	537	610	416	168
18"	80.95	59.99	14.63	14.00	38.00	9.00	21.16	24.00	16.13	7.00
450mm	2056	1524	372	356	965	229	537	610	410	178
20"	84.95	63.99	16.63	15.25	40.50	9.00	21.16	24.00	16.13	7.44
500mm	2158	1625	422	387	1029	229	537	610	410	189
22"	Contact DeZURIK									
550mm										
24"	97.13	72.18	17.66	18.00	46.00	9.00	21.16	24.00	16.13	8.50
600mm	2467	1833	449	457	1168	229	537	610	410	216
26"	107.26	82.41	20.13	19.13	48.25	10.50	25.55	24.00	19.00	8.50
650mm	2724	2093	511	486	1226	267	649	610	483	216
28"	112.38	85.53	21.25	20.38	48.88	10.50	25.55	24.00	19.00	10.00
700mm	2854	2172	540	518	1242	267	649	610	483	254
30"	124.01	89.66	22.88	21.50	53.00	10.50	25.55	24.00	19.00	10.50
750mm	3150	2277	581	546	1346	267	649	610	483	267
32"	129.13	94.78	24.50	22.63	60.25	12.61	25.55	24.00	22.50	11.50
800mm	3280	2407	622	575	1530	320	649	610	572	292
36"	138.07	102.66	27.13	25.00	65.50	12.61	25.55	24.00	22.50	12.00
900mm	3507	2608	689	635	1664	320	649	610	572	305
42-48"	Contact DeZURIK									
1100-1200mm										



Dimensions – Standard Design

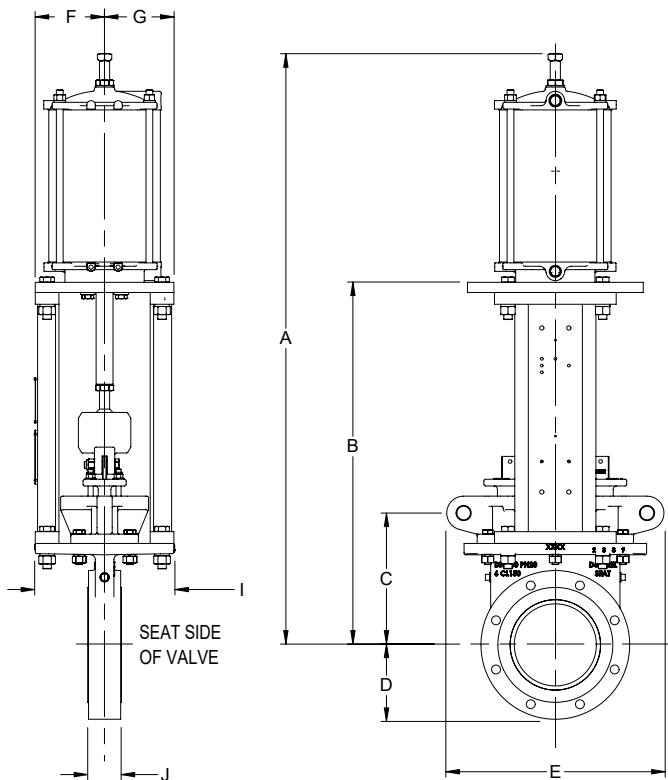
Pneumatic Cylinder Actuators

Class 150

2-32" (50-800mm)

Valve Size*	A	B	C	D	E	F	G	I	J
4" 100mm	38.71 983	24.13 613	5.50 140	5.00 127	13.88 352	6.00 152	6.71 170	10.25 260	4.13 105
6" 150mm	43.74 1111	26.81 681	5.94 151	5.50 140	16.06 408	6.00 152	6.71 170	10.25 260	2.50 64
8" 200mm	52.16 1325	30.06 764	7.00 178	6.75 172	18.38 467	6.00 152	6.71 170	10.25 260	2.88 73
10" 250mm	57.90 1471	35.28 896	8.31 211	8.00 203	21.13 537	6.50 165	7.27 185	10.25 260	3.13 79
12" 300mm	68.46 1739	42.31 1075	9.75 248	9.50 241	29.00 737	7.38 187	6.50 165	10.25 260	3.25 83
14" 350mm	71.40 1814	45.25 1149	10.88 276	10.50 267	28.62 727	8.89 226	8.25 210	12.25 311	3.63 92
16" 400mm	80.29 2039	50.00 1270	13.50 343	11.75 299	30.75 781	9.26 235	8.25 210	13.75 349	3.75 95
18" 450mm	81.00 2057	54.00 1372	14.63 372	12.50 318	35.00 889	8.25 210	8.97 228	14.25 362	4.13 105
20" 500mm	85.69 2177	59.31 1507	16.25 413	13.75 349	37.50 953	8.25 210	8.59 218	14.25 362	4.50 114
22" 550mm	Contact DeZURIK								
24" 600mm	100.19 2545	67.94 1726	19.38 492	16.00 406	42.00 1067	8.99 228	8.25 210	14.63 372	5.00 127
26" 650mm	108.13 2746	72.13 1832	Contact DeZURIK	17.13 435	44.25 1124	9.38 238	9.67 246	16.50 419	6.75 172
28" 700mm	112.94 2869	76.50 1943	23.50 597	18.25 464	46.50 1181	10.39 264	10.00 254	17.00 432	7.13 181
30" 750mm	119.19 3027	78.81 2002	23.13 587	19.38 492	48.75 1238	10.00 254	11.63 295	19.00 483	7.38 187
32" 800mm	124.37 3159	83.81 2129	25.13 638	20.88 530	51.75 1315	10.00 254	11.75 299	18.00 457	8.13 206

* Contact DeZURIK for 2" & 3" (50 & 80mm) dimensions



Dimensions – Standard Design

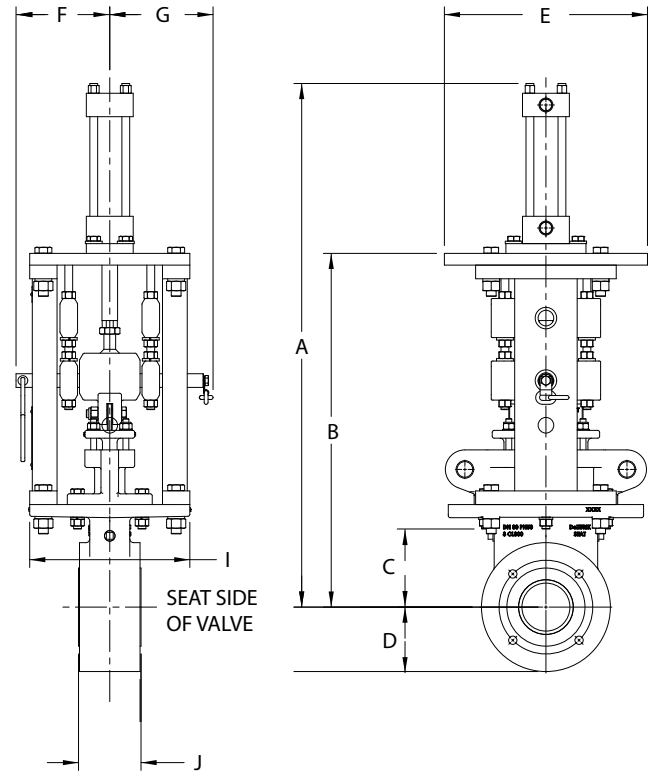
Hydraulic Cylinder Actuators

Class 150

2-10" (50-250mm)

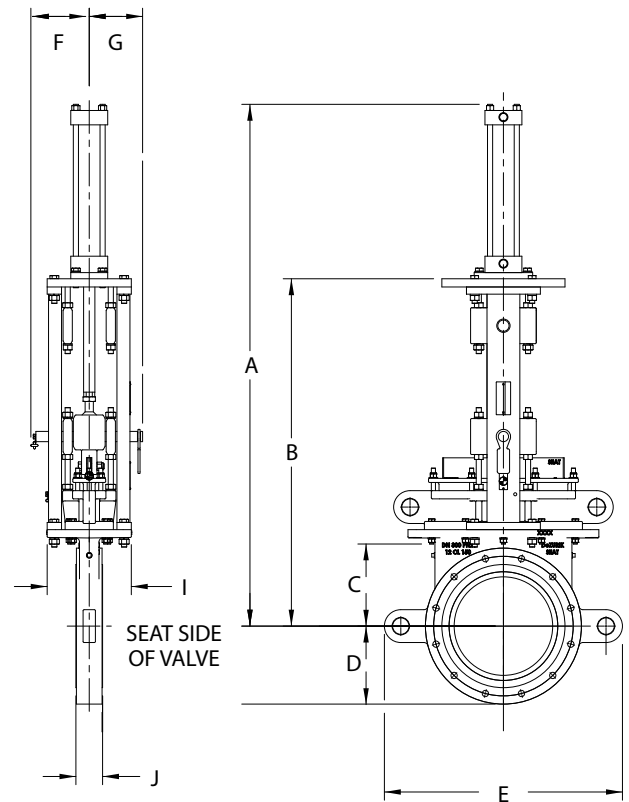
Valve Size*	A	B	C	D	E	F	G	I	J
3" 80mm	33.52 851	22.64 575	5.00 127	4.13 105	13.00 330	6.00 152	6.61 168	10.25 260	4.00 102
4" 100mm	36.00 914	24.13 613	5.50 140	5.00 127	13.00 330	6.00 152	6.57 167	10.25 260	4.13 105
6" 150mm	41.07 1043	26.81 681	5.94 151	5.50 140	13.00 330	6.00 152	6.57 167	10.25 260	2.50 64
8" 200mm	46.06 1170	30.06 764	7.00 178	6.75 171	13.00 330	6.00 152	6.57 167	10.25 260	2.88 73
10" 250mm	53.53 1360	35.28 896	8.31 211	8.00 203	13.00 330	6.50 165	7.07 180	10.25 260	3.13 80

* Contact DeZURIK for 2" (50mm) dimensions



12-48" (300-1200mm)

Valve Size	A	B	C	D	E	F	G	I	J
12" 300mm	63.56 1614	42.31 1075	10.00 254	9.50 241	29.00 737	7.07 180	6.50 165	10.25 260	3.25 83
14" 350mm	68.13 1731	45.63 1159	11.50 292	10.50 267	31.00 787	7.97 202	8.25 210	12.25 311	3.63 92
16" 400mm	75.37 1914	50.38 1280	13.50 343	11.75 298	33.50 851	8.82 224	8.25 210	13.75 349	3.75 95
18" 450mm	82.25 2089	55.38 1407	14.88 378	12.50 318	35.00 889	8.01 203	8.56 217	14.25 362	4.13 105
20" 500mm	87.88 2232	59.00 1499	16.50 419	13.75 349	37.50 953	8.00 203	8.57 218	14.25 362	4.50 114
22" 550mm	Contact DeZURIK								
24" 600mm	100.88 2562	68.00 1727	19.38 492	16.00 406	42.00 1067	8.25 210	8.86 225	14.63 372	5.00 127
26" 650mm	109.19 2773	73.31 1862	20.88 530	17.13 435	44.25 1124	9.38 238	9.67 246	16.50 419	6.75 171
28" 700mm	115.75 2940	78.00 1981	23.50 597	18.25 464	46.50 1181	10.55 268	9.94 252	17.00 432	7.13 181
30" 750mm	119.82 3043	80.06 2034	23.13 588	19.38 492	48.75 1238	9.94 252	10.55 268	19.00 483	7.38 187
32" 800mm	125.25 3181	83.63 2124	24.65 626	20.88 530	51.75 1314	10.00 254	10.61 269	18.00 457	8.13 207
36" 900mm	141.56 3596	94.31 2395	28.63 727	23.00 584	61.00 1549	10.00 254	10.61 269	18.00 457	8.88 226
42" 1100mm	170.19 4323	111.38 2829	34.25 870	26.75 679	68.50 1740	14.00 356	14.00 356	28.00 711	9.75 248
48" 1200mm	187.44 4761	122.63 3115	40.00 1016	30.00 762	75.00 1905	14.00 356	14.00 356	28.00 711	11.50 292



Dimensions – Standard Design

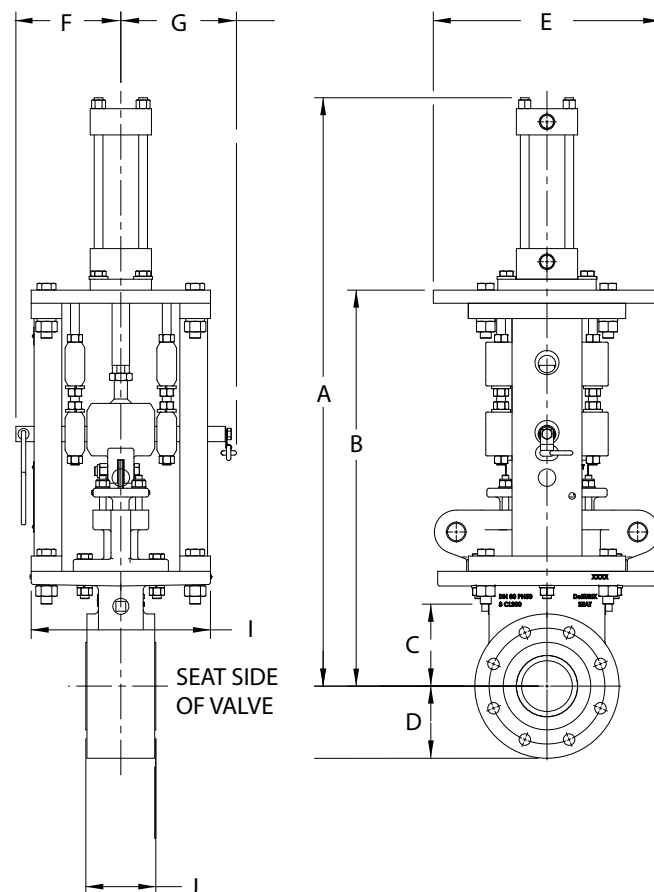
Hydraulic Cylinder Actuators

Class 300

2-6" (50-150mm)

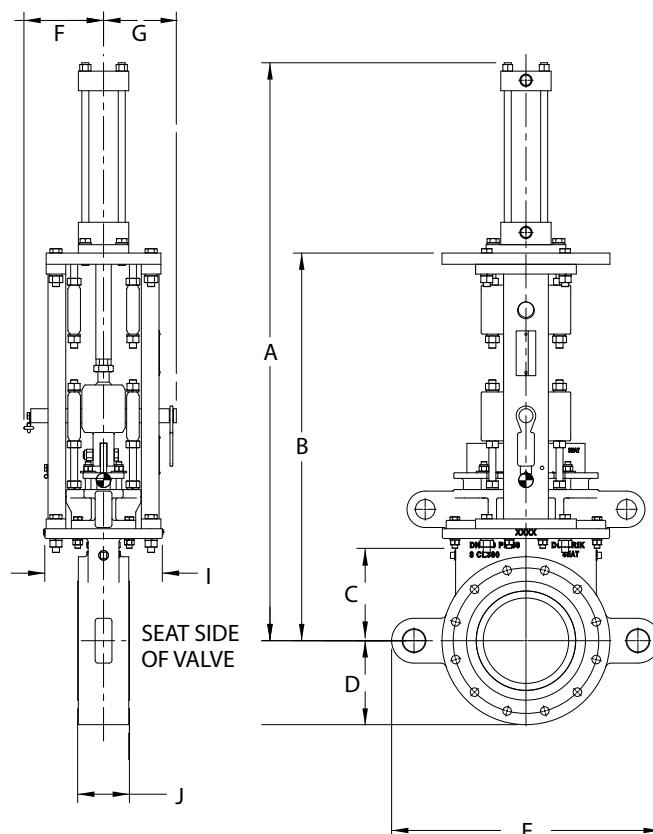
Valve Size*	A	B	C	D	E	F	G	I	J
3" 80mm	33.64 854	22.64 575	4.69 119	4.13 105	13.00 330	6.00 152	6.61 168	10.25 260	4.00 102
4" 100mm	35.88 911	24.13 613	5.50 140	5.00 127	13.00 330	6.00 152	6.57 167	10.25 260	4.13 105
6" 150mm	41.35 1050	27.60 701	7.00 178	6.25 159	13.00 330	6.00 152	6.61 168	10.25 260	4.13 105

* Contact DeZURIK for 2" (50mm) dimensions



8-48" (200-1200mm)

Valve Size	A	B	C	D	E	F	G	I	J
8" 200mm	51.63 1311	34.63 880	8.25 210	7.50 191	24.00 610	7.11 181	6.50 165	10.50 267	4.63 118
10" 250mm	58.13 1477	38.75 984	9.25 235	8.75 222	26.50 673	6.50 165	7.07 180	11.75 298	5.38 137
12" 300mm	65.78 1671	44.40 1128	10.40 264	10.25 260	30.50 775	8.72 221	8.38 213	14.50 368	5.63 143
14" 350mm	70.94 1802	47.44 1205	12.25 311	11.50 292	33.00 838	9.00 229	9.59 244	16.38 416	6.25 159
16" 400mm	76.20 1935	50.69 1288	13.75 349	12.75 324	35.50 902	9.00 229	9.57 243	16.38 416	6.63 168
18" 450mm	85.38 2169	56.13 1426	14.63 372	14.00 356	38.00 965	9.00 229	8.72 221	16.13 410	7.00 178
20" 500mm	90.88 2308	60.13 1527	16.63 422	15.25 387	40.50 1029	9.00 229	9.60 244	16.13 410	7.44 189
22" 550mm	Contact DeZURIK								
24" 600mm	103.06 2618	68.31 1735	19.00 483	18.00 457	46.00 1168	9.00 229	9.60 244	16.13 410	8.50 216
26" 650mm	113.94 2894	75.94 1929	20.13 511	19.13 486	48.25 1226	10.50 267	11.07 281	19.00 483	8.50 216
28" 700mm	119.06 3024	79.06 2008	21.25 540	20.38 518	50.75 1289	10.50 267	11.07 281	19.00 483	10.00 254
30" 750mm	125.19 3180	83.19 2113	22.58 574	21.50 546	53.00 1346	10.50 267	11.11 282	19.00 483	10.50 267
32" 800mm	134.06 3405	88.31 2243	24.50 622	22.63 575	60.25 1530	12.03 306	12.58 320	22.50 572	11.50 292
36" 900mm	145.94 3707	96.19 2443	27.13 689	25.00 635	65.50 1664	12.61 320	12.00 305	22.50 572	12.00 305
42-48" 1100-1200mm	Contact DeZURIK								



Dimensions – Short Body Design

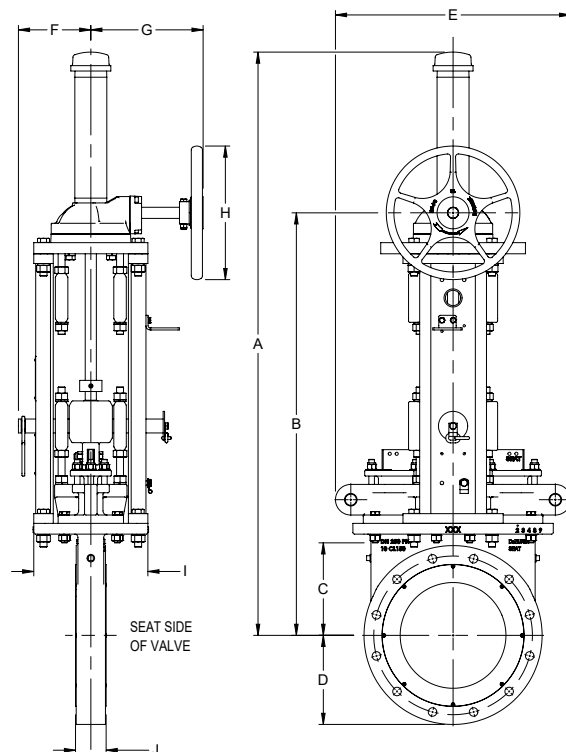
Bevel Gear Actuators

Class 150

2-10" (50-250mm)

Valve Size*	A	B	C	D	E	F	G	H	I	J
3" 80mm	32.26 819	25.32 643	5.00 127	3.75 95	12.88 327	6.00 152	10.09 256	12.00 305	10.25 260	2.00 51
4" 100mm	33.74 857	26.80 681	5.50 140	5.00 127	13.88 352	6.00 152	10.09 256	12.00 305	10.25 260	2.00 51
6" 150mm	38.31 973	29.49 749	5.94 151	5.50 140	16.06 408	6.00 152	10.09 256	12.00 305	10.25 260	2.25 57
8" 200mm	45.18 1148	32.74 832	7.00 178	6.75 171	18.38 467	6.00 152	10.09 256	12.00 305	10.25 260	2.75 70
10" 250mm	52.40 1331	37.96 964	8.31 211	8.00 203	21.13 537	6.50 165	10.09 256	12.00 305	10.25 260	2.75 70

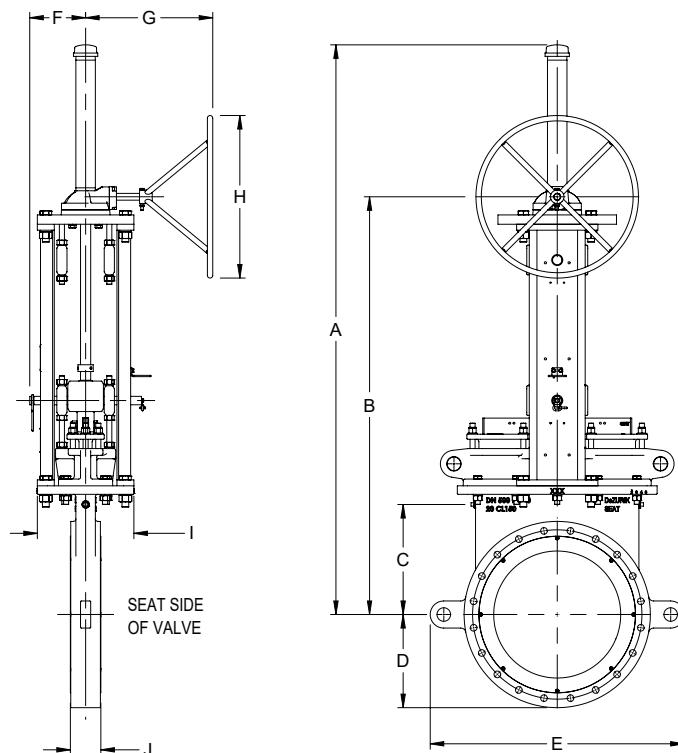
* Contact DeZURIK for 2" (50mm) dimensions



12-24" (300-600mm)

Valve Size	A	B	C	D	E	F	G*	H	I	J
12" 300mm	61.44 1560	45.00 1143	9.76 248	9.50 241	29.00 737	6.50 165	10.09 256	12.00 305	10.25 260	3.00 76
14" 350mm	64.74 1644	48.30 1227	11.25 286	10.50 267	31.00 787	8.25 210	10.46 266	16.00 406	12.25 311	3.00 76
16" 400mm	73.49 1867	53.05 1347	12.88 327	11.75 298	33.50 851	8.97 228	10.46 266	16.00 406	13.75 349	3.50 89
18" 450mm	78.49 1994	58.05 1474	14.25 362	12.50 318	35.00 889	8.25 210	18.78 477	24.00 610	14.25 362	3.50 89
20" 500mm	84.12 2137	61.68 1567	16.25 413	13.75 349	37.50 953	8.25 210	18.78 477	24.00 610	14.25 362	4.50 114
24" 600mm	96.82 2459	71.60 1819	19.38 492	16.00 406	42.00 1067	8.85 225	21.41 544	24.00 610	14.63 372	4.50 114

* Sizes 12", 14", and 16" have flat handwheel



Dimensions – Short Body Design

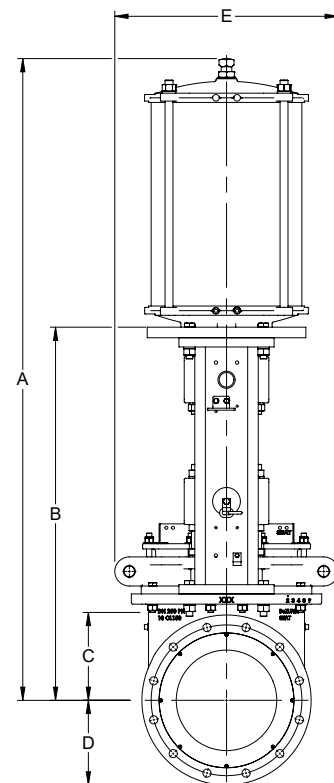
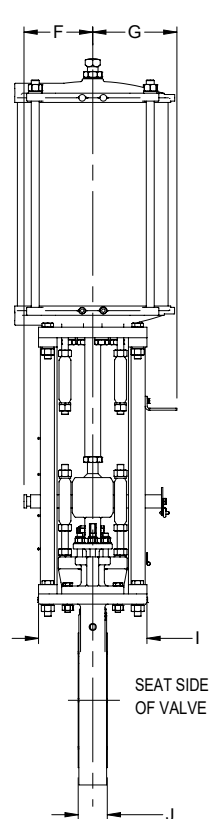
Pneumatic Cylinder Actuators

Class 150

2-10" (50-250mm)

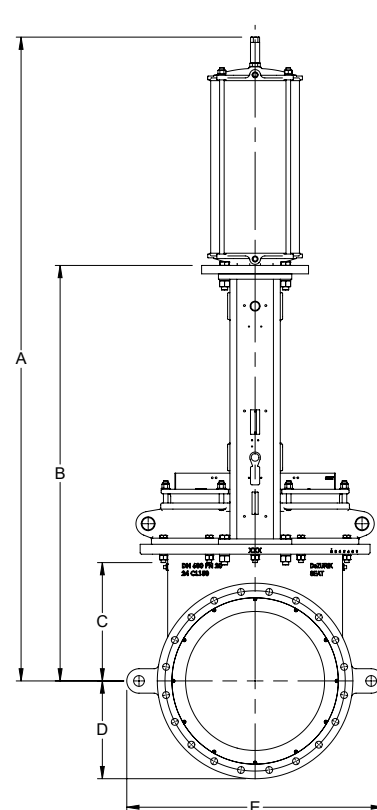
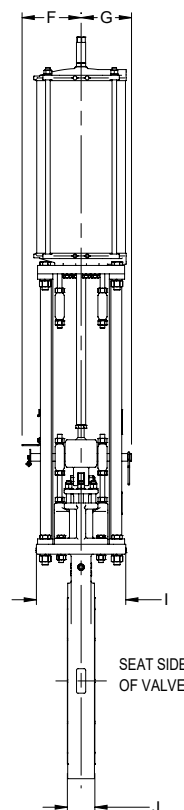
Valve Size*	A	B	C	D	E	F	G	I	J
3" 80mm	37.57 954	22.64 575	5.00 127	3.75 95	12.88 327	6.00 152	6.74 171	10.25 260	2.00 51
4" 100mm	39.06 992	24.13 613	5.50 140	5.00 127	13.88 352	6.00 152	7.08 180	10.25 260	2.00 51
6" 150mm	45.43 1154	26.80 681	5.94 151	5.50 140	16.06 408	6.00 152	7.08 180	10.25 260	2.25 57
8" 200mm	52.83 1342	30.31 770	7.00 178	6.75 171	18.38 467	6.00 152	7.08 180	10.25 260	2.75 70
10" 250mm	61.18 1554	35.28 896	8.31 211	8.00 203	21.13 537	6.50 165	7.96 202	10.25 260	2.75 70

* Contact DeZURIK for 2" (50mm) dimensions



12-24" (300-600mm)

Valve Size	A	B	C	D	E	F	G	I	J
12" 300mm	68.84 1749	42.32 1075	9.76 248	9.50 241	29.00 737	7.96 202	6.50 165	10.25 260	3.00 76
14" 350mm	70.81 1799	45.25 1149	11.25 286	10.50 267	31.00 788	8.96 227	8.25 210	12.25 311	3.00 76
16" 400mm	75.55 1919	50.00 1270	13.50 343	11.75 298	33.50 851	9.41 239	8.25 210	13.75 349	3.50 89
18" 450mm	80.75 2051	54.00 1372	14.63 371	12.50 318	35.00 889	9.66 245	8.25 210	14.25 362	3.50 89
20" 500mm	87.37 2219	59.31 1506	16.25 413	13.75 349	37.50 952	9.66 245	8.25 210	14.25 362	4.50 114
24" 600mm	113.38 2879	68.38 1736	19.38 492	16.00 406	42.00 1067	9.66 245	8.25 210	14.63 371	4.50 114



Dimensions – Short Body Design

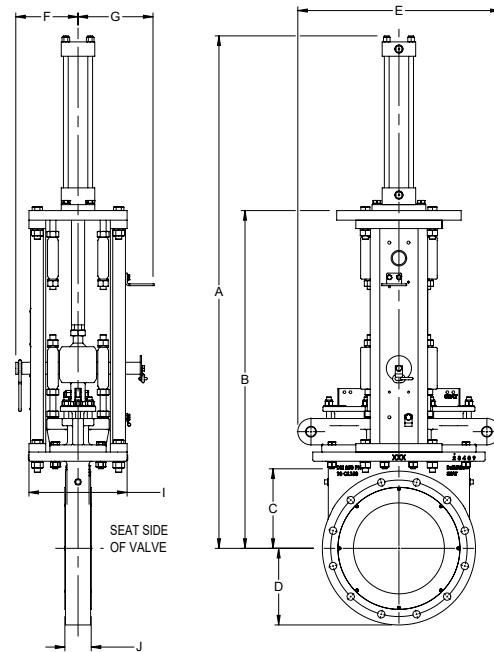
Hydraulic Cylinder Actuators

Class 150

2-10" (50-250mm)

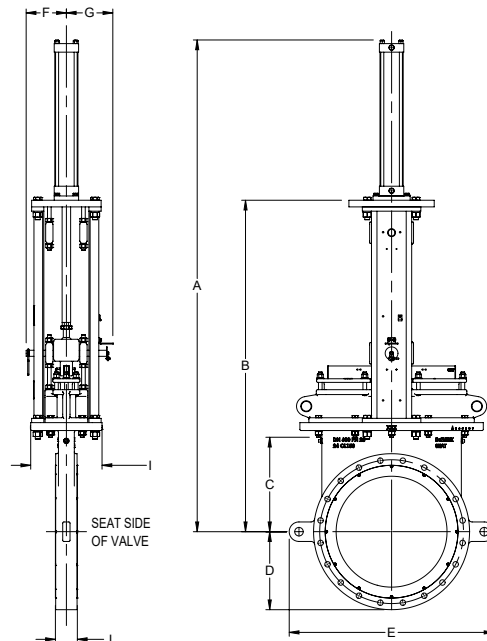
Valve Size*	A	B	C	D	E	F	G	I	J
3" 80mm	33.52 851	22.64 575	5.00 127	3.75 95	12.88 327	6.00 152	6.44 164	10.25 260	2.00 51
4" 100mm	36.00 914	24.13 613	5.50 140	5.00 127	13.88 352	6.00 152	7.08 180	10.25 260	2.00 51
6" 150mm	41.07 1043	26.81 681	5.94 151	5.50 140	16.06 408	6.00 152	7.08 180	10.25 260	2.25 57
8" 200mm	46.06 1170	30.06 764	7.00 178	6.75 171	18.38 467	6.00 152	7.08 180	10.25 260	2.75 70
10" 250mm	53.53 1360	35.28 896	8.31 211	8.00 203	21.13 537	6.50 165	7.96 202	10.25 260	2.75 70

* Contact DeZURIK for 2" (50mm) dimensions



12-24" (300-600mm)

Valve Size	A	B	C	D	E	F	G	I	J
12" 300mm	63.57 1615	42.32 1075	9.76 248	9.50 241	29.00 737	6.50 165	7.75 197	10.25 260	3.00 76
14" 350mm	68.55 1741	46.05 1170	11.25 286	10.50 267	31.00 788	8.25 210	8.94 227	12.25 311	3.00 76
16" 400mm	75.37 1914	50.38 1279	13.50 343	11.75 298	33.50 851	8.25 210	9.41 239	13.75 349	3.50 89
18" 450mm	82.25 2089	55.38 1406	14.63 371	12.50 317	35.00 889	8.25 210	9.66 245	14.25 362	3.50 89
20" 500mm	87.88 2232	59.00 1499	16.25 413	13.75 349	37.50 952	8.25 210	9.66 245	14.25 362	4.50 114
24" 600mm	100.88 2562	68.00 1727	19.38 492	16.00 406	42.00 1067	8.25 210	9.66 245	14.63 371	4.50 114



Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

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