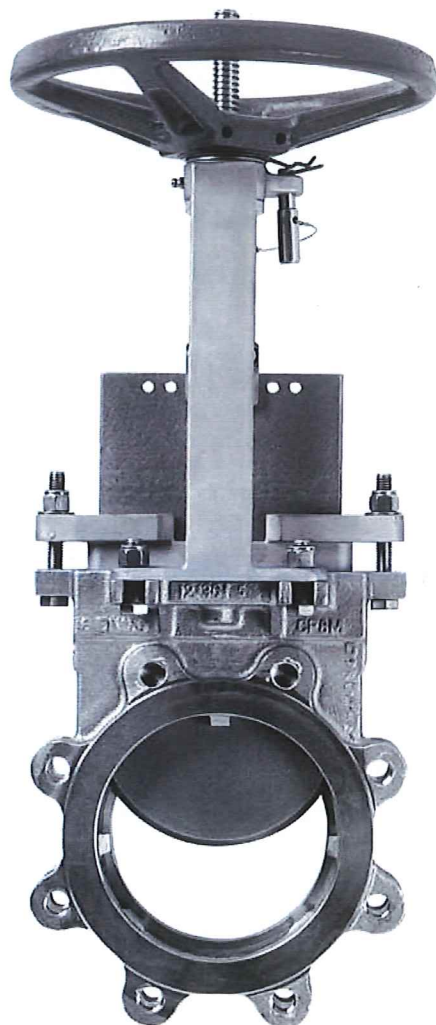


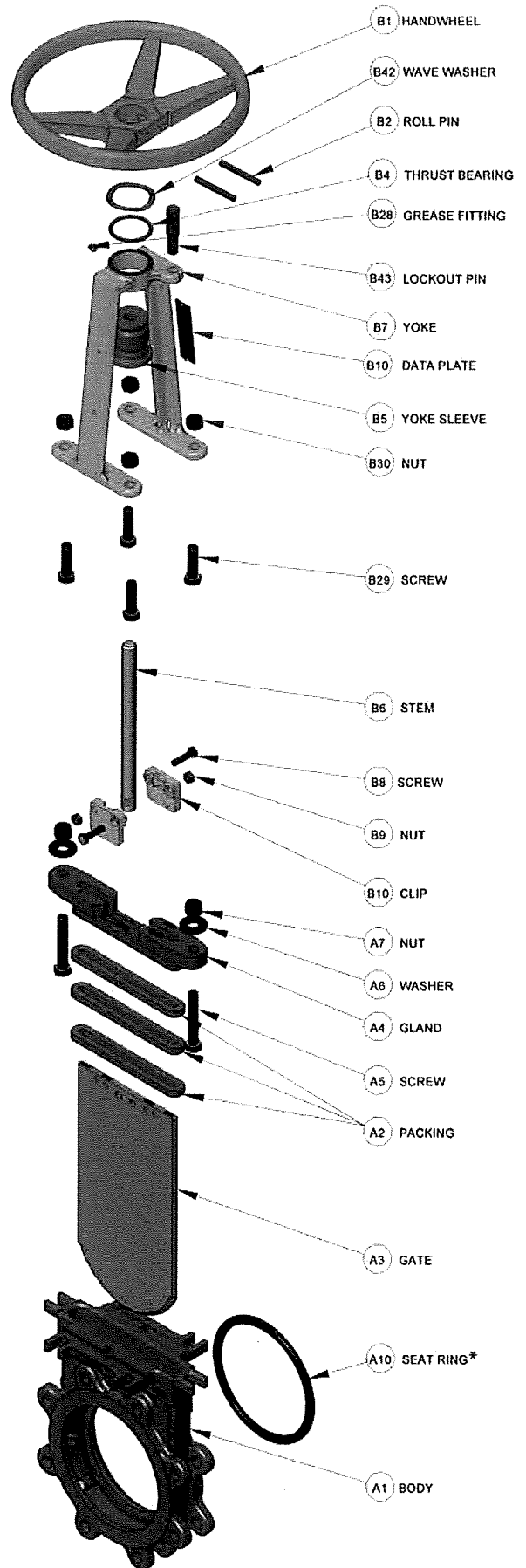


**DeZURIK KGC-HD HEAVY DUTY
CAST STAINLESS STEEL
KNIFE GATE VALVES
TECHNICAL SPECIFICATIONS**



Materials of Construction

Item	Description	Material
A1	Body	304 Stainless Steel, ASTM A351 CF8
		316 Stainless Steel, ASTM A351 CF8M
		317 Stainless Steel, ASTM A351 CG8M
		254-SMO Stainless Steel, ASTM A351 CK3MCuN
		2205 Duplex Stainless Steel, ASTM A890 CD3MN
		Hastelloy C 276, ASTM A494 CW12MW
A2	Packing	SMP - PTFE Braided Packing to 500°F (260°C) (pH Range 0-14)
		TDP - Dry Service, Dry PTFE Braided Packing with Solid PTFE Cord to 500°F (260°C) (pH Range: 0-14)
		HTP - High Temperature Braided Packing to 650°F (343°C) (pH Range: 1-12)
		HMP - High Temperature Braided Packing with Metal Scraper Ring to 1000°F (540°C) (pH Range: 3-10)
		FGP - Food Grade Service to 450°F (232°C) (pH Range: 3-11)
A3	Gate	304 Stainless Steel, ASTM A240
		316 Stainless Steel, ASTM A240
		317 Stainless Steel, ASTM A240
		17-4 Stainless Steel H900 Heat Treated, ASTM A564
		254 - SMO Stainless Steel, ASTM A240
		2205 Duplex Stainless Steel, ASTM A276
		Hastelloy C 276, ASTM B574
410 Stainless Steel, ASTM A240		
A4	Gland	Matches Body Material
A5	Screw	304 Stainless Steel
A6	Washer	304 Stainless Steel
A7	Nut	304 Stainless Steel
A10	Seat Ring*	CR - Chloroprene to 180°F (83°C)
		NBR - Acrylonitrile-Butadiene to 180°F (83°C)
		EPDM - Terpolymer of Ethylene, Propylene and a Diene to 250°F (122°C)
		FKM - Fluoro Rubber to 400°F (204°C)
		17-4 PH Stainless Steel H900 Heat Treated
		CRW - Chloroprene, Off White to 140°F (60°C)
		PTFE - Polytetrafluoroethylene, white to 450°F (230°C)
Reinforced PTFE - Polytetrafluoroethylene, to 500°F (260°C)		
B1	Handwheel	Painted, Cast Iron
B2	Roll Pin	Carbon Steel or 420 Stainless Steel
B4	Thrust Bearing	Oil Impregnated Bronze
B5	Yoke Sleeve	Aluminum Bronze
B6	Stem	304 Stainless Steel
B7	Yoke	Cast Steel or 304 Stainless Steel
B8	Screw	Zinc Plated Steel or 18-8 Stainless Steel
B9	Nut	Zinc Plated Steel or 18-8 Stainless Steel
B10	Clip	304 Stainless Steel
B23	Data Plate	316 Stainless Steel
B28	Grease Fitting	Zinc Plated Steel
B29	Screw	Zinc Plated Steel or 18-8 Stainless Steel
B30	Nut	Zinc Plated Steel or 18-8 Stainless Steel
B42	Wave Washer	304 Stainless Steel
B43	Lockout Pin	304 Stainless Steel



*The replaceable Seat Ring is standard on resilient-seated valves and optional on metal-seated valves. The standard integral metal seat matches the body material.

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:
KGC = Cast Stainless Steel Knife Gate Valve

Valve Size
Give valve size code as follows:

2 = 2" (50mm)	20 = 20" (500mm)
3 = 3" (80mm)	22 = 22" (550mm)
4 = 4" (100mm)	24 = 24" (600mm)
5 = 5" (125mm)	26 = 26" (650mm)
6 = 6" (150mm)	28 = 28" (700mm)
8 = 8" (200mm)	30 = 30" (750mm)
10 = 10" (250mm)	32 = 32" (800mm)
12 = 12" (300mm)	36 = 36" (900mm)
14 = 14" (350mm)	42 = 42" (1050mm)
16 = 16" (400mm)	48 = 48" (1200mm)
18 = 18" (450mm)	

Body Style
Give body style code as follows:
HD = Heavy Duty

End Connection
Give end connection code as follows:

F1 = ANSI 150 UNC Tapping for Threads
F110 = ISO 7005/PN10 Drilling
F116 = ISO 7005/PN16 Drilling
F1DA = AS2129 Table D Drilling
F1EA = AS2129 Table E Drilling
F1UN(1) = ANSI 150 UN-8 Tapping for Threads
F1S10 = SANS1123-1000
F1S16 = SANS1123-1600

Optional End Connections
F1T = ANSI 150 Through Bolting

On Application
F1J1 = JIS 10 Drilling

Body Material
Give body material code as follows:
Standard
S1 = 304 Stainless Steel
S2 = 316 Stainless Steel
S3 = 317 Stainless Steel

On Application
HC = Hastelloy C
S6 = 254 Stainless Steel
S10 = 2205 Duplex Stainless Steel

Packing Material
Give packing material code as follows:
Standard Packing
SMP = PTFE Braided Packing to 500°F (260°C) (pH Range 0-14)

Optional Packing
TDP = Dry Service, Dry PTFE Braided Packing with Solid PTFE Cord to 500°F (260°C) (pH Range: 0-14)
HTP = High Temperature Braided Packing to 650°F (343°C) (pH Range: 1-12)
HMP = High Temperature Braided Packing with Metal Scraper Ring to 1000°F (540°C) (pH Range: 3-10)
FGP = Food Grade Service to 450°F (232°C) (pH Range: 3-11)

Gate Material (3)
Give gate material code as follows:
Standard Gate Materials
S1 = 304 Stainless Steel (Standard for S1 body material)
S2 = 316 Stainless Steel (Standard for S2 body material)
S3 = 317 Stainless Steel (Standard for S3 body material)

Optional Gate Materials
S5 = 17-4 Stainless Steel H900 Heat Treated (Used with S1, S2, & S3 body materials)

On Application
S6 = 254-SMO Stainless Steel (Used with S6 body material)
S8 = 410 Stainless Steel (Used with S1, S2 & S3 body materials)
S10 = 2205 Duplex Stainless Steel (Used with S2, S3 OR S10 body materials)
HC = Hastelloy C (Used with HC body materials)

Seat Material (2)
Give seat material code as follows:
Standard Seat Materials
M = Metal
V = V-Orifice All Metal
CR = Chloroprene to 180°F (83°C)
NBR = Acrylonitrile-Butadiene to 180°F (83°C)
EPDM = Terpolymer of Ethylene, Propylene and Diene to 250°F (122°C)

Optional Seat Materials
FKM = Fluoro Rubber to 400°F (204°C)
S5D = 17-4 PH Stainless Steel H900 Heat Treated

On Application
CRW = Chloroprene, Off White to 140°F (60°C)
PTFE or RTFE

Standard Options
Give option code as follows:

ARRA = ARRA Compliant
PSA = Purge Ports in Seat Area
PCA = Purge Ports in Chest Area
PSC = Purge Ports in Seat and Chest Area
CMC = Certificate of Material Conformance
CRT = Certified Physical and Chemical Test Reports
— = Optional Coating
— = DeZURIK Standard Test Certification
P100 = 30" and 36" (750 and 900mm) valves with 100 psi (690 kPa) rating

- Notes:
- (1) Applies to valves 18" (450mm) and larger. Flange bolt hole threads are 8 threads per inch in accordance with ANSI, API and MSS standards.
 - (2) The limiting factor in valve selection is the lowest temperature of the packing or seat.
 - (3) Gate material limitations by body style in parentheses.

Ordering Example:
KGC,6,HD,F1,S2,SMP,S2-CR*Actuator

BASIC VALVE WITH HANDWHEEL ACTUATOR

Manual Actuators

Lever Actuators

Lever actuators can be furnished on 2-12" (50-300mm) valves for applications where rapid valve operation is required or where space prevents use of a standard handwheel or bevel gear actuator. Maximum pressure differential required for valves with lever actuators should not exceed the limits listed. Maximums are based on the operating force for each valve size. Lever actuators are carbon steel only. SMP packing recommended with MN-LV.

To order, add the lever actuator code to the basic valve order code.

Ordering Example:

KGC,6,HD,F1,S2,SMP,S2-M*MN-LV-CS

Lever Actuator

Valve Size	Order Code	Maximum Pressure Differential psi/kPa
	Carbon Steel (CS) Yoke	
2-4" 50-100mm	MN-LV-CS	75 520
5-6" 125-150mm	MN-LV-CS	45 310
8" 200mm	MN-LV-CS	25 170
10" 250mm	MN-LV-CS	20 140
12" 300mm	MN-LV-CS	14 100

Handwheel and Chainwheel Actuators

All 2-24" (50-600mm) valves can be furnished with handwheel actuators, and 2-20" (50-500mm) with chainwheel actuators. To order handwheel or chainwheel actuators, add the appropriate order code to the basic valve order code. Refer to information on bevel gear actuators for use on dry solids, paper stock, slurries or when pressure exceeds limits shown. Order chain for chainwheel actuators as a separate item.

Handwheel Actuator

Valve Size	Order Code	Order Code	Maximum Pressure Differential psi/kPa
	Carbon Steel (CS) Yoke	304 SST (S1) Yoke	
2-4" 50-100mm	MN-HD8-CS	MN-HD8-S1	150 1030
5-8" 125-200mm	MN-HD12-CS	MN-HD12-S1	150 1030
10-12" 250-300mm	MN-HD16-CS	MN-HD16-S1	150 1030
14" 350mm	MN-HD20-CS*	MN-HD20-S1*	125 860
16" 400mm	MN-HD20-CS*	MN-HD20-S1*	100 680
18" 450mm	MN-HD20-CS*	MN-HD20-S1*	75 515
20" 500mm	MN-HD20-CS*	MN-HD20-S1*	50 340
22" 550mm	MN-HD20-CS*	MN-HD20-S1*	25 170
24" 600mm	MN-HD20-CS*	MN-HD20-S1*	25 170

*Bevel gear actuators recommended for dry solids, paper stocks, slurries, or when pressure exceeds limits shown.

Ordering Example:

KGC,6,HD,F1,S2,SMP,S2-M*MN-HD12-CS

Chainwheel Actuator

Valve Size	Order Code	Order Code	Maximum Pressure Differential psi/kPa
	Carbon Steel (CS) Yoke	304 SST (S1) Yoke	
2-4" 50-100mm	MN-CW8-CS	MN-CW8-S1	150 1030
5-8" 125-200mm	MN-CW12-CS	MN-CW12-S1	150 1030
10-12" 250-300mm	MN-CW20-CS	MN-CW20-S1	150 1030
14" 350mm	MN-CW20-CS*	MN-CW20-S1*	125 860
16" 400mm	MN-CW20-CS*	MN-CW20-S1*	100 680
18" 450mm	MN-CW20-CS*	MN-CW20-S1*	75 515
20" 500mm	MN-CW20-CS*	MN-CW20-S1*	50 340

*Bevel gear actuators recommended for dry solids, paper stocks, slurries, or when pressure exceeds limits shown.

Ordering Example:

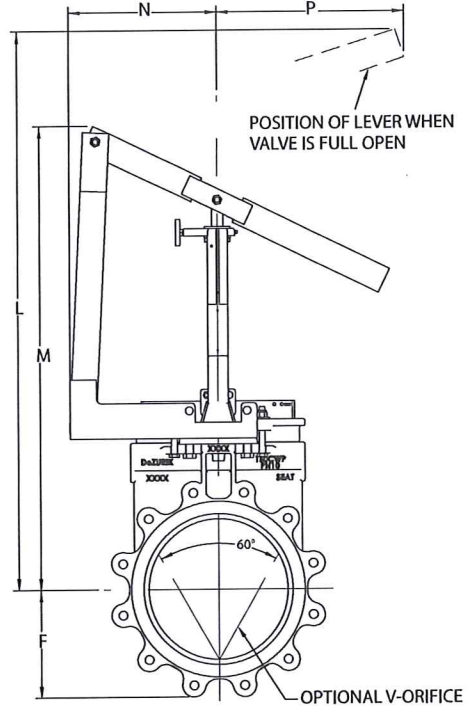
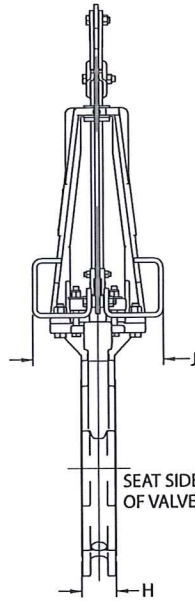
KGC,4,HD,F1,S2,SMP,S2-CR*MN-CW8-S1

Dimensions

Basic Valve with Lever Actuator

Valve Size	Dimensions						
	F	H	J	L	M	N	P
2" 50mm	3.0 76	1.88 48	5.75 146	15.96 405	14.78 375	4.38 111	8.00 203
3" 80mm	3.75 95	2.00 51	7.75 197	21.78 553	17.75 451	5.38 137	17.88 454
4" 100mm	4.50 114	2.00 51	7.88 200	29.40 747	19.87 505	6.12 155	24.12 613
5" 125mm	5.00 127	2.25 57	8.62 219	37.50 953	22.76 578	7.38 187	19.81 503
6" 150mm	5.50 140	2.25 57	8.62 219	42.00 1067	23.32 592	7.38 187	16.81 427
8" 200mm	6.75 171	2.75 70	9.38 238	58.12 1476	27.68 703	7.88 200	21.12 536
10" 250mm	8.00 203	2.75 70	11.25 286	68.19 1732	35.13 892	10.62 270	21.53 699
12" 300mm	9.50 241	3.00 76	11.25 286	76.03 1931	39.47 1003	12.69 322	33.44 849

Inches
Millimeters



Basic Valve with Handwheel Actuator

Valve Size	Dimensions					
	F	H	J	L	M	N
2" 50mm	3.00 76	1.88 48	4.00 102	14.93 379	12.90 328	8.00 203
3" 80mm	3.75 95	2.00 51	4.75 121	16.65 423	14.62 371	8.00 203
4" 100mm	4.50 114	2.00 51	5.00 127	19.93 506	16.90 429	8.00 203
5" 125mm	5.00 127	2.25 57	5.75 146	24.30 618	19.56 497	12.00 305
6" 150mm	5.50 140	2.25 57	5.75 146	25.88 657	21.07 535	12.00 305
8" 200mm	6.75 171	2.75 70	6.38 162	31.43 798	24.65 626	12.00 305
10" 250mm	8.00 203	2.75 70	8.25 210	39.13 994	30.00 762	16.00 406
12" 300mm	9.50 241	3.00 76	8.25 210	44.75 1137	33.63 854	16.00 406
14" 350mm	10.50 267	3.00 76	8.25 210	54.75 1391	40.82 1037	20.00 508
16" 400mm	11.75 298	3.50 89	8.69 221	58.44 1484	42.38 1076	20.00 508
18" 450mm	12.50 318	3.50 89	9.06 230	67.75 1721	49.69 1262	20.00 508
20" 500mm	13.75 349	4.50 114	9.19 233	71.31 1811	51.25 1302	20.00 508
22" 550mm	15.5 394	4.50 114	9.19 233	77.22 1961	55.36 1406	20.00 508
24" 600mm	16.00 406	4.50 114	9.19 233	83.29 2116	59.22 1504	20.00 508

Inches
Millimeters

