
















Quarter Turn Valves Selection Chart

DeZURIK						
Plug Valves				Butterfly Valves		
Eccentric Plug Valves		3-Way & 4-Way		AWWA	Resilient Seated	
						
MODEL	PEC	PEF	PTW/PFW	BAW	BOS-US	BOS-CL
Size Range	½-72" (15-1800 mm)	3-36" (80-900 mm)	2-16" (50-400 mm)	3-144" (80-3700 mm)	2-20" (50-500 mm) Larger sizes on application	2-24" (50-600 mm)
Seat Type	Metal & Resilient	Resilient	Metal & Resilient	Resilient	Resilient	Resilient
Cavitation (Kc) @ 60% Open	0.59	0.59	N/A	0.35	0.35	0.35
Recovery Factor F_L^2 at 60% Open	0.7	0.7	N/A	0.4	0.4	0.4
Shutoff Class	ASME IV, VI or better	ASME VI or better	N/A	AWWA C504	ASME VI or better	ASME VI or better
Pressure Rating	125-450 psi CWP (860-3100 kPa)	150-175 psi CWP (1030-1210 kPa)	125 psi CWP (860 kPa)	AWWA 25, 75, 150 & 250	200-250 psi CWP (1380-1720 kPa)	150-175 psi CWP (1030-1210 kPa)
On-Off	Typical Application	Typical Application	Not Used	Typical Application	Typical Application	Typical Application
Throttling	Typical Application	Typical Application	May Be Used	Typical Application	Typical Application	Typical Application
Control	Typical Application	Typical Application	Limited Application	Typical Application	Typical Application	Limited Application
Diversion	Not Used	Not Used	Typical Application	Limited Application	Limited Application	Limited Application
Liquids (Clean)	Typical Application	Typical Application	Typical Application	Typical Application	Typical Application	Typical Application
Liquids (Dirty)	Typical Application	Typical Application	Typical Application	Limited Application	Limited Application	Limited Application
Liquids (Viscous)	Typical Application	Typical Application	Typical Application	Limited Application	Limited Application	Limited Application
Liquids (Corrosive)	Typical Application	Typical Application	Typical Application	Not Used	Limited Application	Limited Application
Slurries (Sludge)	Typical Application	Typical Application	Typical Application	Not Used	Not Used	Not Used
Liquids & Slurries (Scaling)	May Be Used	May Be Used	Not Used	Not Used	Not Used	Not Used
Slurries (Abrasive)	May Be Used	May Be Used	May Be Used	Not Used	Not Used	Not Used
Slurries (Fibrous)	May Be Used	May Be Used	Typical Application	Not Used	Not Used	Not Used
High Pressure Steam (+150lbs.)	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
Low Pressure Steam	Limited Application	Limited Application	Limited Application	Not Used	Not Used	Not Used
Gasses (Clean)	Typical Application	Typical Application	Typical Application	Typical Application	Typical Application	Typical Application
Gasses (Dirty)	Typical Application	Typical Application	Typical Application	May Be Used	May Be Used	May Be Used
Gasses (Corrosive)	Typical Application	Typical Application	Typical Application	Not Used	May Be Used	May Be Used
Dry Materials	May Be Used	May Be Used	Not Used	Not Used	Limited Application	Limited Application
High Flow Capacity	May Be Used	Typical Application	Typical Application	Typical Application	Typical Application	Typical Application
Low Head Loss (Wide Open)	May Be Used	Typical Application	Typical Application	Typical Application	Typical Application	Typical Application
Low Torque/Thrust	May Be Used	May Be Used	Typical Application	May Be Used	May Be Used	May Be Used
High Temp., 800°F+ (425°C+)	Limited Application	Limited Application	Not Used	Not Used	Not Used	Not Used
Cryogenic	Not Used	Not Used	Not Used	Not Used	Not Used	Not Used
Erosion Resistance	May Be Used	May Be Used	Limited Application	Not Used	Limited Application	Limited Application

DeZURIK		
Butterfly/Control Valves	Rotary Control Valves	
High Performance	Rotary Control Valves	V-Port Control Valve
		
BHP	RCV	VPB
2-60" (50-1500 mm)	1-12" (25-500 mm)	1-20" (25-500mm)
Metal & Resilient	Metal	Metal & Resilient
0.35	0.6	0.49
0.43	0.7	0.61
ASME IV, V, VI or better	ASME IV-VI	ASME II, IV, VI or better
ASME 150 & 300	ASME 150 & 300	ASME 150 & 300
Typical Application	Typical Application	May Be Used
Typical Application	Typical Application	Typical Application
Typical Application	Typical Application	Typical Application
Limited Application	Not Used	Not Used
Typical Application	Typical Application	Typical Application
Limited Application	Typical Application	Typical Application
May Be Used	Typical Application	Typical Application
Typical Application	Typical Application	Typical Application
Limited Application	Typical Application	Limited Application
Not Used	May Be Used	Limited Application
May Be Used	Typical Application	Limited Application
May Be Used	Not Used	Typical Application
Typical Application	Typical Application	Limited Application
Typical Application	Typical Application	Typical Application
Typical Application	Typical Application	Typical Application
Limited Application	Typical Application	Typical Application
Typical Application	Typical Application	Typical Application
Not Used	Not Used	Not Used
Typical Application	Typical Application	Typical Application
Typical Application	Typical Application	Typical Application
Typical Application	May Be Used	Typical Application
Limited Application	Limited Application	Not Used
Limited Application	May Be Used	Not Used
May Be Used	Typical Application	Limited Application

Knife Gate Valves Selection Chart

	General Service		Heavy Duty & Enhanced Performance			
						
MODEL	KGN-MSU	KGN-RSB	KGC-HD	KGC-ES	KGC-BD	KGC-MD
Valve Type	Metal Seat	Bi-Directional Resilient Seat	Heavy Duty Design Metal & Resilient Seat	Extended Service Design Metal & Resilient Seat	Premium Bi-Directional Resilient Seat	Maximum Duty Metal Seat & Dual Metal/Resilient Seat
Valve Design & Characteristics	Standard, Rugged & Economical	Perimeter Seat, Economical Direct & Reverse Shutoff	Expanded Materials, Options & Applications	DeZURIK Premium Packing System for Extended Seal Life		
				Premium KGC	Perimeter Seat Direct & Reverse Shutoff	Shearing Action with Hard Seats
GENERAL SPECIFICATIONS						
Size Range	2-36" (50-900mm)	2-24" (50-600mm)	2-48" (50-1200 mm)	2-48" (50-1200 mm)	2-36" (50-900mm)	3-24" (50-600mm)
Face-To-Face	MSS-SP81	MSS-SP81	MSS-SP81	MSS-SP81	MSS-SP81	MSS-SP81
Maximum Pressure Rating	100 or 150 psi CWP (690-1030kPa)	150 psi CWP (1030 kPa)	to 150 psi CWP (1030 kPa)	150 psi CWP (1030 kPa)	to 150 psi CWP (1030 kPa)	150 psi CWP (1030 kPa)
Shutoff Class	MSS-SP81	Driptight	MSS-SP81 or Driptight*	MSS-SP81 or Driptight*	Driptight	MSS-SP81 or Driptight*
Temperature (Up To)	1000°F (540°C)	400°F (204°C)	1000°F (540°C)	1000°F (540°C)	400°F (204°C)	500°F (260°C)
Throttling	Limited Application	Limited Application	May Be Used	May Be Used	Limited Application	Limited Application
COMMON MEDIA						
Raw & Treated Water	May Be Used	May Be Used	Typical Application	Typical Application	Maximum Performance	Typical Application
Clean Liquids	May Be Used	May Be Used	Typical Application	Typical Application	Maximum Performance	Typical Application
Dirty Liquids	May Be Used	May Be Used	Typical Application	Maximum Performance	Typical Application	Typical Application
Viscous Fluids	May Be Used	May Be Used	Typical Application	Maximum Performance	May Be Used	Typical Application
Water Conveyed Solids	May Be Used	May Be Used	Typical Application	Maximum Performance	Limited Application	Typical Application
Scaling	Not Used	Not Used	Limited Application	Limited Application	Not Used	Limited Application
Dry Material	May Be Used	Not Used	Typical Application	Typical Application	Not Used	Typical Application
Hot Gasses	May Be Used	Limited Application	May Be Used	May Be Used	Limited Application	May Be Used
PULP & PAPER						
Paper Stock To 3%	Typical Application	Typical Application	Typical Application	Maximum Performance	Typical Application	May Be Used
Paper Stock 3 To 6%	Typical Application	Limited Application	Typical Application	Maximum Performance	Typical Application	May Be Used
Paper Stock 6% Plus	May Be Used	Not Used	May Be Used	May Be Used	Not Used	May Be Used
Liquor Service	Limited Application	Limited Application	Typical Application	Maximum Performance	Maximum Performance	May Be Used
Recycle Trash	Limited Application	Limited Application	May Be Used	Typical Application	Limited Application	Maximum Performance
MINING, MINERALS PROCESSING						
Slurry: 0 To 15% Solids	May Be Used	May Be Used	Typical Application	Typical Application	May Be Used	Typical Application
Slurry: 15 To 30% Solids	Limited Application	Limited Application	May Be Used	May Be Used	Limited Application	May Be Used
Slurry: 30% Plus Solids	Limited Application	Not Used	Limited Application	Limited Application	Limited Application	Limited Application
Cyclones	Limited Application	Limited Application	May Be Used	May Be Used	Limited Application	May Be Used
CHEMICAL & PETROCHEMICAL						
Pellets, Dry Material	May Be Used	Limited Application	Typical Application	Maximum Performance	May Be Used	May Be Used
Process Fluids, Chemicals	May Be Used	May Be Used	Typical Application	Maximum Performance	Maximum Performance	Typical Application
Petroleum Products	May Be Used	May Be Used	Typical Application	Maximum Performance	Maximum Performance	Typical Application
MUNICIPAL & HYDRO						
Pump/Equipment Isolation	May Be Used	Typical Application	Typical Application	Typical Application	Typical Application	Limited Application
Dewatered Sludge	Typical Application	May Be Used	Typical Application	Typical Application	May Be Used	Limited Application
POWER**						
Fly Ash	Limited Application	Not Used	Typical Application	Typical Application	Not Used	Maximum Performance
Bottom Ash	Limited Application	Not Used	Typical Application	Typical Application	Not Used	Maximum Performance
FGD Scrubbers	May Be Used	Not Used	Typical Application	Typical Application	Not Used	May Be Used
Hydraulic Flow Control	May Be Used	May Be Used	May Be Used	May Be Used	May Be Used	May Be Used
Hydro Power & Dams	May Be Used	May Be Used	May Be Used	May Be Used	May Be Used	May Be Used
FOOD & BEVERAGE						
Raw Material Handling	May Be Used	Limited Application	Typical Application	Typical Application	May Be Used	Typical Application

*Resilient seated valves only

**For Coal Burner Isolation applications, refer to KCI or BIV (Hilton)

CWP = Cold Working Pressure

NA = Not Applicable

Abrasion Resistant		Severe Service		O-Port
				
KUL	KSL-LA	KSV	DBB	KGO
Urethane Lined Body Bi-Directional	Slurry Valve, Resilient Sleeve Lined, Bi-Directional	ASME Class 150 & 300 for Severe, Abrasive Services, Bi-Directional	Double Block & Bleed Design Bi-Directional	Metal Seat O-Port for Recycle Paper
Economical, General Abrasion Resistance	Broad Range Abrasion & Corrosion Resistance	High Pressure, High Abrasive Shutoff & Direct & Reverse Shutoff	Dual KSV Bodies with Isolating Chamber Direct & Reverse Shutoff	Recycle Trash, Hi-Density Stock, Pellets, Wood Chips
2-48" (50-1200 mm)	2-24" (50-600mm)	3-60" (80-1500mm)	3-60" (80-1500mm)	2-24" (50-600mm)
MSS-SP81	NA	MSS-SP135	NA	MSS SP-81
150 or 250 psi CWP (1030 or 1720 kPa)	100 psi CWP (690 kPa)	285 or 740 psi ASME (1960 or 5100 kPa)	285 or 740 psi ASME (1960 or 5100 kPa)	150 psi CWP (1030 kPa)
Driptight	Driptight	MSS-SP135 or Driptight*	MSS-SP135 or Driptight*	MSS SP-81
265°F (130°C)	to 300°F (149°C)	450°F (232°C)	450°F (232°C)	1000°F (537°C)
Limited Application	Not Used	Limited Application	Limited Application	May Be Used
Typical Application	May Be Used	May Be Used	May Be Used	Typical Application
Typical Application	May Be Used	May Be Used	May Be Used	Typical Application
Maximum Performance	May Be Used	May Be Used	May Be Used	Typical Application
Maximum Performance	Typical Application	May Be Used	May Be Used	Typical Application
Maximum Performance	Typical Application	May Be Used	May Be Used	Typical Application
May Be Used	Typical Application	May Be Used	May Be Used	Typical Application
Maximum Performance	Limited Application	Limited Application	Limited Application	Typical Application
Limited Application	May Be Used	May Be Used	May Be Used	Limited Application
May Be Used	May Be Used	May Be Used	May Be Used	Typical Application
May Be Used	May Be Used	May Be Used	May Be Used	Typical Application
Limited Application	May Be Used	May Be Used	May Be Used	Maximum Performance
Limited Application	Limited Application	May Be Used	May Be Used	Limited Application
Limited Application	Limited Application	May Be Used	May Be Used	Typical Application
Maximum Performance	Typical Application	Maximum Performance	Maximum Performance	Typical Application
Typical Application	Maximum Performance	Maximum Performance	Maximum Performance	Maximum Performance
May Be Used	Maximum Performance	Maximum Performance	Maximum Performance	Maximum Performance
May Be Used	Typical Application	Maximum Performance	Not Used	Limited Application
May Be Used	May Be Used	Limited Application	Limited Application	Limited Application
Typical Application	May Be Used	Typical Application	Typical Application	Not Used
Typical Application	May Be Used	Typical Application	Typical Application	Limited Application
May Be Used	Limited Application	Limited Application	Not Used	Limited Application
May Be Used	Not Used	Limited Application	Not Used	Limited Application
May Be Used	Limited Application	May Be Used	May Be Used	Typical Application
Maximum Performance	Limited Application	May Be Used	May Be Used	Typical Application
Typical Application	Maximum Performance	May Be Used	May Be Used	Limited Application
May Be Used	May Be Used	May Be Used	May Be Used	Limited Application
May Be Used	May Be Used	May Be Used	May Be Used	Not Used
Maximum Performance	Limited Application	May Be Used	May Be Used	Limited Application