

Choosing the right Knife Gate Valve

FIRST

INFO

Valve selection is so important – especially at the system design stage. The system should run better and longer, if the right valves are selected at the outset. With the appropriate valve for a specific application, increased downtime, poor fluid system performance, and safety risks can all be avoided.

DIE ERSTE has more Knife Gate Valve options than ever in the recent years, from the basic to high performance, for Pulp & Paper, Sewage Treatment, Chemical, Food processing, Petrochemical, Steel Mills, Mining Operations, Cement Manufacturing, and more. Many features to choose from, and many questions we've received about how to choose the right knife gate valves.

If you know exactly the specifics below, share with Die Erste. Following discussion with you, our engineers can recommend the most suitable solution.

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Crucial points:

HELP

5- Operating Frequency

6- Percentage of Solids

7- Location

1- Application

2- Operation (Actuation or Manual)

3- Working temperature









4- Working pressure

8- Media (corrosiveness)

9- Particle Size

Or, read on please, and we outline the strengths and features of each in our Knife Gate Valves.

Quick Guide to choose the right Knife Gate Valve

Series UKG	Series OKG	Series SKG			Series TKG		Series BKG	
								
UNI-DIRECTIONAL KNIFE GATE VALVE (Standard)	UNI-DIRECTIONAL KNIFE GATE VALVE (High Performance)	SLURRY KNIFE GATE VALVE			THROUGH -CONDUIT KNIFE GATE VALVE		BI-DIRECTIONAL KNIFE GATE VALVE	
Most Common Most Economical Installed with seat on the downstream side to avoid damage of seat.	Installed with seat on upstream side to reduce seat wear and improve flow characteristics, in some vertical flow applications using dry or abrasive media. ⊙ See remark	< 30% concentration Slurry or pulp No slurry residue area on the valve seats and inner cavity, which can prevent the medium from accumulating	> 30% concentration Slurry or pulp No slurry residue area on the valve seats and inner cavity, which can prevent the medium from accumulating		No slurry or particles residue area on the valve seats and inner cavity, which can prevent the medium from accumulating		Bi-directional sealing Higher rating pressure available 16bar ~ 40 bar (Optional)	
DN50 - DN800		DN50 - DN1000			DN50-DN600	DN50 - DN600		DN50-DN800
PN10 CLASS 150 JIS 10K AS 2129	PN10 CLASS 150 JIS 10K AS 2129	PN10 CLASS 150 JIS 10K AS 2129	PN10 CLASS 150 JIS 10K AS 2129	PN10 CLASS 150 AS 2129	PN10 CLASS 150 JIS 10K	PN10 CLASS 150 JIS 10K	PN10 CLASS 150	
Comes with flush port	Self-Cleaning	Self-Cleaning	Self-Cleaning	Self-Cleaning	Self-Cleaning	Self-Cleaning	Self-Cleaning	
-	-	On-Line Maintenance In-line replaceable gate Lubrication ports	On-Line Maintenance In-line replaceable gate Lubrication ports	On-Line Maintenance In-line replaceable gate Lubrication ports	-	-	-	
Standard Port Shape	Standard Port Shape	Standard Port Shape	Standard Port Shape	Standard Port Shape	Standard Port Shape	Standard Port Shape	⊙, △, U, V CUSTOMIZED PORT SHAPE	
UNI-BODY	UNI-BODY	SPLIT BODY CNC MACHINED	MONOBLOCK	SPLIT BODY CNC MACHINED	SPLIT BODY CNC MACHINED	SPLIT BODY CNC MACHINED	SPLIT BODY CNC MACHINED	
Ductile Iron Stainless Steel Alloy	Ductile Iron Stainless Steel Alloy	Ductile Iron Stainless Steel Alloy	Ductile Iron Stainless Steel Alloy	Ductile Iron Stainless Steel Alloy	Stainless Steel Alloy	Stainless Steel Alloy	Ductile Iron Stainless Steel Alloy	
NBR EPDM FKM	EPDM FKM UHMWPE	NR, EPDM. (Modularized seats)	NR, EPDM. (Modularized seats)	NR, EPDM. (Modularized seats)	PTFE UHMWPE	PTFE UHMWPE	NBR EPDM FKM	
METAL SEAT	N/A	N/A	N/A	N/A	METAL SEAT ※ See remark	METAL SEAT ※ See remark	N/A	
WAFER LUG	WAFER LUG	WAFER LUG	WAFER LUG	FLANGE	WAFER LUG	WAFER LUG	WAFER LUG	
Top bracket Manual Bevel gear Actuator	Top bracket Manual Bevel gear Actuator	Top bracket Manual Bevel gear Actuator	Top bracket Manual Bevel gear Actuator	Top bracket Manual Bevel gear Actuator	Top bracket Manual Bevel gear Actuator	Top bracket Manual Bevel gear Actuator	Top bracket Manual Bevel gear Actuator	
Spindle Cover	Spindle Cover	Spindle Cover	Spindle Cover	Spindle Cover	Spindle Cover	Spindle Cover	Spindle Cover	
Indicator&safety covers on pneumatic type	Indicator&safety covers on pneumatic type	-	Actuated: w. Indicator	-	Indicator&safety covers on pneumatic type	Indicator&safety covers on pneumatic type	-	
-	Jacket & covers	Optional	Optional	Optional	Jacket & covers	Jacket & covers	Jacket & covers	
-	-	Lockout	Lockout	Lockout	-	-	-	
MSS-SP-81	MSS-SP-81	Zero Leakage	Zero Leakage	Zero Leakage	PTFE : Zero leakage	PTFE : Zero leakage	Zero Leakage	
	⊙Reminder: Do not exceed the reverse flow pressure rating of the available valve.				※ Check with DIE ERSTE for details			

Share about your specific needs, and let's talk!

