



ACE penstocks are available in various forms and are used in surface, sewer and process water systems. The KSA-MD is a proven design which has now become ACE's most popular penstock type.

The KSA-MD is a tried and tested penstock type, as it has been a long-standing product supplied by ACE. The range has been recently extended to include a heavier duty penstock (KSA-HD), however the KSA-MD continues to be a very popular product for the majority of applications.

The penstock consists of a vertically sliding door that closes a round opening, moving within a stainless steel 316L frame with HDPE guides. The seal between the door and frame is achieved through an EPDM lip seal positioned in the moving plate that retains up to 5MwC of water pressure from both sides.

The KSA-MD 801-1500 penstocks are similar in design to the smaller models, however they have added features due to the more demanding duty, such as jacking bolts at the sides and additional mounting brackets for added strength.

The penstock is supplied with a non-rising spindle as standard, however on request the penstock can also be supplied with a rising spindle.



Technical Specification:

Sizes:	Ø 801 mm and over
Operating pressure:	5MwC on/off seating as standard
Operation point:	Square 25mm
Operation method:	Manual or actuator
Movement mechanism:	Non-rising spindle

Higher pressures and larger dimensions on request.

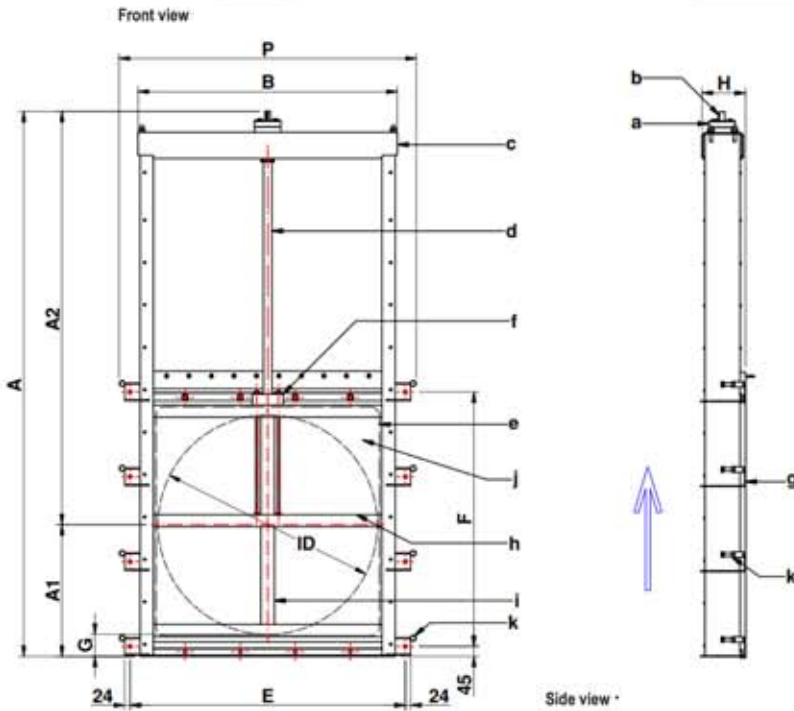
Materials

Moving plate:	HDPE with SS316L stiffeners
Spindle:	SS316
Spindle block:	POM
Bearing ring:	OLG
Back plate:	HDPE
Seals:	EPDM
Mounting material:	SS316

Easy to install- no grouting required
Light weight strong HDPE construction
Virtually maintenance free
UV & Impact Resistant
Standard sizes available from stock for quick dispatch
Various mounting methods available, wall/ pipe/flange mounted.
Can be customised on request for non-standard applications

Penstock over 800mm

The original maintenance free penstock



A- Spindle bearing B- Terminal C- Top member D- Spindle E- Seal F- Spindle nut
G- Back plate H- Reinforcement rib I- Protection tube J- Sliding plate



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Data (mm)

KWT item nr	DN	ID Ø	A	A1	A2	B	E	F	G	H	P
211Z0900	DN900	900	2230	610	1620	1220	1160	1160	160	165	1380
211Z1000	DN1000	1000	2450	660	1790	1350	1280	1280	160	175	1510
211Z1100	DN1100	1100	2900	710	2190	1520	1460	1460	160	195	1680
211Z1200	DN1200	1200	2900	760	2140	1520	1460	1460	160	195	1680
211Z1250	DN1250	1250	2900	785	2115	1520	1460	1460	160	195	1680
211Z1500	DN1500	1500	3390	910	2480	1770	1710	1710	160	215	1930

DN					
DN900	160	102	128	10	5
DN1000	176	124	160	16	5
DN1100	193	150	180	16	5
DN1200	210	176	208	18	5
DN1250	218	192	221	18	5
DN1500	260	272	330	22	5

Leakage rate - Taux de fuite - Leckrate - Leckgrad

KSA MD DN>800	MwC	L/min ²		AWWA 561 / BS 7775 (resilient)					DIN 19569-4	
				MwC						
900mm - 1500 mm	5	0,3	0,5	5	0,5	0,5	1,2 - 3,0	1,2 - 3,0		

Measured values (L/min²)

Norm values (L/min²)

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