

Penstocks

KWT®Medium pressure penstock type: KSA-MD 100-800

Application

KWT 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 Althon'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 KWT. The range has been extended to include a lighter duty penstock (KSA-LD) and 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 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 penstock is supplied with a non-rising spindle as standard. On request the penstock can also be supplied with a rising spindle. The wall mounted type is the most popular, we can also supply these with pipe and flange connections. The KSA-MD is made as a standard for a circular pipe, on request it can be manufactured to be suitable for a square or rectangular culvert.

Benefits

- ▶ Circular, square, rectangular or ellipse openings available
- ▶ Virtually no maintenance
- ▶ Easy to install
- ▶ Circular models available from stock
- Various mounting methods available, wall/pipe/flange mounted
- ▶ Can be customised on request for non-standard applications



Specifications

- ▶ Pipe Diameter: Ø 100 mm to Ø 800 mm
- ▶ Operating pressure: 5 MwC on/off seating as standard
- ▶ Operation method: Manual or through actuator
- ▶ Operation point: KWT connection (half moon)
- ▶ Movement mechanism: Non-rising spindle
- ▶ Higher pressures and larger dimensions on request

Materials

▶ Moving plate: HDPE with SS316L stiffeners

Spindle: SS 316
Spindle block: POM
Bearing ring: OLG
Back plate: HDPE

▶ Seals: EPDM

▶ Mounting material: SS316









Althon reserves the right to modify the design without prior notification



NW	0	Р	BS										
	D	DU	DC	Α	В	С	E	V	Υ	Z		Nm	KG
mm.	mm.	mm.		mm.	mm.	mm.	mm.	mm.	mm.				
	110/800		±	D+50	(2XD)+50	(2XD)+180	D+100	(0,5D)+50	(0,5D)+80	(D+35)/6		±	
100	110	110		260	470	130	400	210	105	135	24	10	14
125	125	125		275	500	130	430	225	112,5	142,5	26	10	14
150	160	160		310	570	130	500	260	130	160	32	10	14
200	200	200		350	650	130	580	300	150	180	39	10	17
250	250	250		400	750	130	680	350	175	205	47	10	21
300	315	315	290	465	80	130	810	415	207,5	237,5	58	15	28
400	400	400	390	550	1050	130	980	500	250	280	72	20	39
500	500	500	490	650	1250	130	1180	600	300	330	89	30	60
600	600	630	590	750	1450	145	1380	700	350	380	105	45	80
700	700		690	850	1650	155	1580	800	400	430	122	55	106
800	800		790	950	1850	170	1780	900	450	480	139	70	136

Product Overview

- Penstock, type Althon KSA-MD 100 800
- ▶ Manufactured by: KWT Waterbeheersing
- ▶ Materials: HDPE, SS316, EPDM and POM
- ▶ Standard culvert: Ø 100 mm to Ø 800 mm
- ▶ Operating pressure: 5 MwC on/off seating

The penstock is provided with a non-rising spindle as standard. It has an OLG spindle bearing and an HDPE back plate. It has an HDPE moving plate fitted with RVS316L stiffeners with a POM spindle block. The mounting material and the spindle are made of SS316. The seal between the moving and back plate consists of an EPDM lip seal, which does not require any adjustment after installation.