

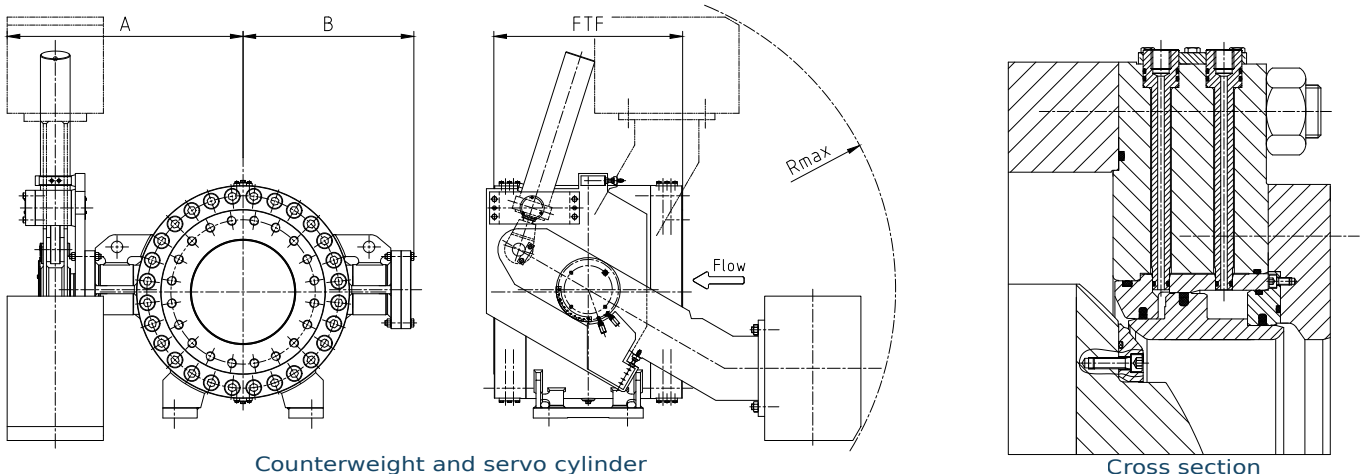
ID	Parts	Materials
1	Body	carbon steel
2	Rotor	carbon steel
3	Main seal	stainless steel
4	Maintenance seal	stainless steel
5	Static seal	stainless steel
6	Shaft	stainless steel
7	Seals	polyurethane / NBR
8	Bearings	maintenance-free slide bearings

DRIVE TYPES

- servo cylinder for opening, counterweight for closing
- double acting oil servo cylinder
- double acting water servo cylinder
- double acting oil / water servo cylinder

FEATURES & OPTIONS

• 3 parts compact short body with threaded holes flange	• special shape of the rotor seals for positive, long term tightness,
• heavy forged design	• for water service in temperature up to 70°C / 158°F
• full bore rotor	• suitable for emergency closing under nominal flow
• movable, water operated service seal system (metal to metal)	
• double seals (internal - external) on the shafts	
• movable, water operated maintenance seal system (metal to metal), allows replacing the service seal without emptying the penstock and removing the valve from the pipeline	
• valve body drainage and air vent	
• limit switches for close and open position	
• no lubrication points / maintenance free	
• seal with optical and electrical position indicator	
	OPTIONS
	+ additional hydraulic and electrical equipment
	+ wiring with terminal box
	+ flexible hydraulic hose for servo cylinder
	+ hydraulic control system
	+ locking bolts for maintenance seal ring



Counterweight and servo cylinder

Cross section

DN	FTF	PN25				PN40				PN63				PN100			
		A	B	R max	Valve weight	A	B	R max	Valve weight	A	B	R max	Valve weight	A	B	R max	Valve weight
[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[kg]
150	450	500	350	500	180	550	400	550	200	550	400	600	300	600	450	650	350
200	590	550	400	700	380	620	420	750	450	650	450	800	550	650	550	850	620
250	680	650	500	900	700	650	500	1000	800	700	550	1100	950	800	650	1200	1160
300	790	700	600	1000	800	700	600	1100	1300	800	650	1200	1400	850	700	1300	1800
350	850	750	650	1200	1800	800	700	1300	2050	850	700	1350	2300	950	850	1400	2900
400	920	850	750	1500	2500	900	800	1600	2900	950	800	1700	3200	1100	900	1800	3800
450	960	900	800	1700	2900	950	850	1800	3350	1000	850	1900	3500	1200	950	2000	4200
500	1000	1000	900	1900	4200	1100	950	2000	4650	1200	950	2100	5400	1300	1100	2200	6700
600	1140	1100	1000	2200	6400	1200	1100	2400	7400	1250	1100	2500	8500	1450	1300	2600	10300
700	1210	1200	1100	2400	9100	1300	1200	2600	10200	1450	1300	2800	11800	1700	1500	2900	15000
800	1350	1400	1300	2600	12500	1500	1300	2800	14500	1600	1500	3000	16500	2000	1600	3100	18500
900	1450	1600	1500	2700	16200	1700	1600	2900	19200	1900	1700	3200	21500	2100	1800	3300	24500
1000	1650	1800	1600	2800	20000	1900	1800	3000	23000	2000	1800	3300	26000	2300	2000	3400	31000
1200	2000	2000	1800	3000	24000	2200	2000	3200	26000	2300	2100	3500	29000	2500	2300	3600	33000
1300 - 2200	Dimensions available on request.																

Other PN and DN upon request.

Valve weights in dimensions table are given without a drive weight.

Flange in accordance with EN 1092-1. ANSI and MSS flanges available on request.

Dimensions and weights are preliminary only. Final dimensions and weights are established after detail design.

Other materials are available upon request.

Painting for standard valves - two-component epoxy coating.

Drawings are schematic only.