

**NEEDLE VALVE**

The needle valve is specially designed to meet the specific application in hydraulic power plant and normally it will work in severe condition. Then the reliability is the key concern for this kind of valve. The seat and needle (shaft + plug) has to take the challenge of high speed or high differential pressure. Our needle valve is approved and used by Voith and Alstom group.

- With 90° layout (Angle type) or 120° layout (Elbow type)
- With manual operation, electrical/manual operation, hydraulic operation
- With clear mechanical valve opening indicator
- With full open and full close position output signal (Please clarify particularly with manual operation)
- The Modulating type needle valve with DC4~20mA (Default) or 0~5V valve opening real time output signal



**Angle type Needle Valve**



**Elbow type Needle Valve**

**FEATURE**

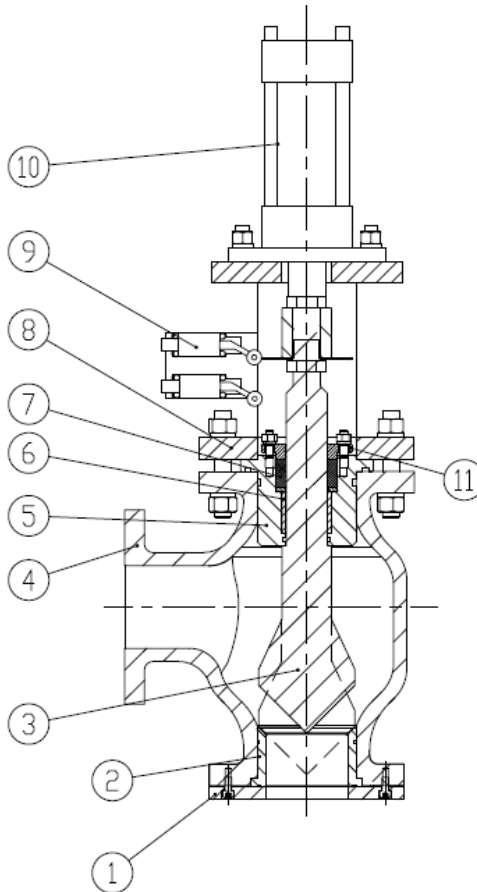
- Compact design
- Minimum vibration and noise
- Reliable sealing
- Stainless steel stop pin
- Easy installation and maintenance

**APPLICATION**

- In-line cutoff or regulating the pressure or flow
- Free discharge to atmosphere at terminal
- Submerged discharge regulating at terminal
- By-pass valve for Penstock
- By-pass filling valve between the inlet valve and turbine

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**PARTS LIST & MATERIAL**

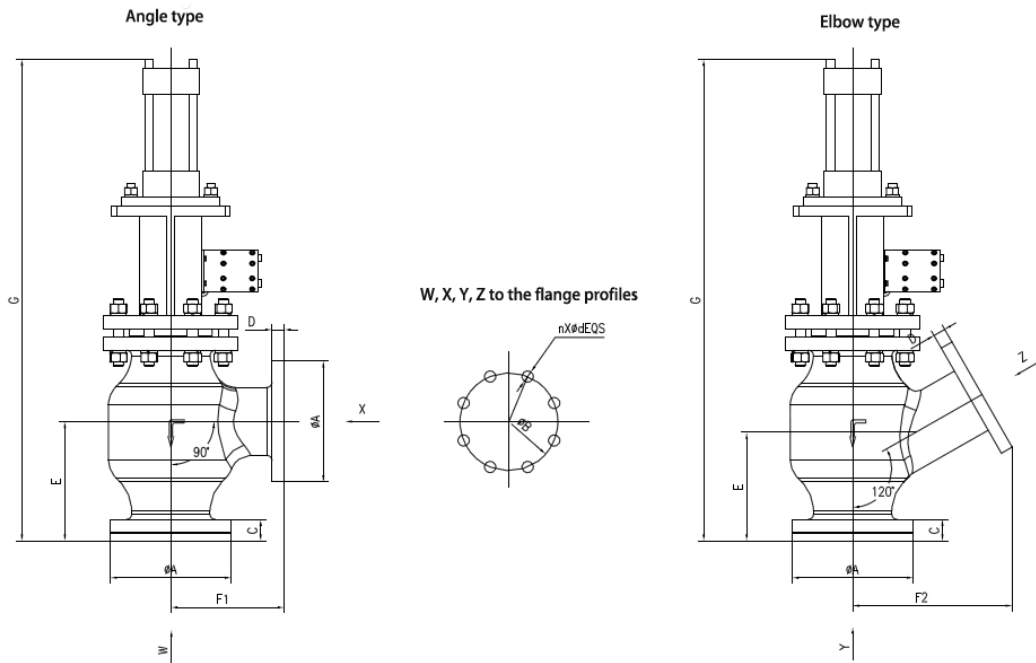


Item	Parts Name	Material (standard)
1	Plate	Copper alloy
2	Sealing seat	Special stainless steel
3	Plug	Stainless Steel
4	Body	Carbon steel or stainless steel
5	Bush	Carbon Steel
6	Bearing	Copper alloy
7	Sealing	NBR or EPDM
8	Bracket	Carbon Steel
9	Limit switch box	
10	Cylinder	Carbon Steel
11	Gland	Copper alloy

\*More material specifications are available on request.

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**DIMENSION**



**NEEDLE VALVE**

DN	PN	A	B	C	D	E	n-d	F1	F2	G
80	1.0	200	160	38	20	208	8-18	192	300	970
	1.6	200	160	38	20	208	8-18	192	300	970
	2.5	200	160	42	24	212	8-18	196	304	975
	4.0	200	160	42	24	212	8-18	196	304	975
	6.3	215	170	46	28	216	8-22	200	310	985
	10.0	230	280	50	32	220	8-26	204	315	995
100	1.0	220	180	40	22	230	8-18	218	370	1000
	1.6	220	180	40	22	230	8-18	218	370	1000
	2.5	235	190	42	24	232	8-22	220	372	1002
	4.0	235	190	42	24	232	8-22	220	372	1002
	6.3	250	200	48	30	238	8-26	226	378	1110
	10.0	265	210	54	36	244	8-30	232	385	1120
150	1.0	285	240	42	24	246	8-22	256	410	1250
	1.6	285	240	42	24	246	8-22	256	410	1250
	2.5	300	250	46	28	250	8-26	260	414	1254
	4.0	300	250	46	28	250	8-26	260	414	1285
	6.3	345	280	54	36	258	8-33	268	422	1315
	10.0	355	290	62	44	266	12-33	276	430	1350
200	1.0	340	295	42	24	287	8-22	294	480	1450
	1.6	340	295	42	24	287	12-22	294	480	1450
	2.5	360	310	48	30	295	12-26	300	486	1485
	4.0	375	320	52	34	300	12-30	305	495	1493
250	1.0	395	350	44	26	342	12-22	320	520	1650
	1.6	405	355	44	26	342	12-26	320	520	1650
	2.5	425	370	50	32	348	12-30	326	526	1680
	4.0	450	385	56	38	354	12-33	342	542	1720
300	1.0	445	400	44	26	392	12-22	352	580	1900
	1.6	460	410	46	28	394	12-26	354	582	1902
	2.5	485	430	52	34	400	16-30	360	590	1910
	4.0	515	450	60	42	410	16-33	380	610	1930

\*More dimension specifications are available on request.