

High Pressure Multistage Valve Drain/Blowdown Valve (ACTx83)

ANSI STANDARD

NB 1/2 "-3"	CLASS 900-2500
ACTW 83	BUTT WELD
ACTM 83	SOCKET WELD
ACTA 83	FLANGED

DIN STANDARD

DN 15-80	PN 160-400
ACTS 83	BUTT WELD
ACTF 83	FLANGED

The ACT x 83 Three Stage Angle Pattern Valve is Suitable for High Pressure Drain and Blow Down Service. Typical applications for this valve are Boiler Drum Continuous Blow Down and Turbine Drain Lines. These valves are designed for pressure drops as high as 200 bar.

The Multistage Valve design integrates the advantages of a High Pressure Stop Valve Design and the Reliability of a High Pressure Reduction Valve

The Valve has a replaceable seat bush with stellite deposition at the seat. Slots in the seat bush and control plug are designed such that the spindle is guided throughout its travel by the seat bush eliminating the harmful effects of vibration. Velocities are restricted to 2-3 m/s inside the valve when used on hot water services. For short duration, velocities may exceed these values but not more than 5 m/s. This is done to limit the damage due to cavitation and flashing associated with drain of condensate at high pressure. Individual stages in the valve are designed so as to accommodate the increased specific volume of the medium.

The valve yoke is provided with a roller thrust bearing for ease of operation. High density pure graphite rings and roller burnishing of spindle and stuffing box bore, eliminate leakage through gland packing.

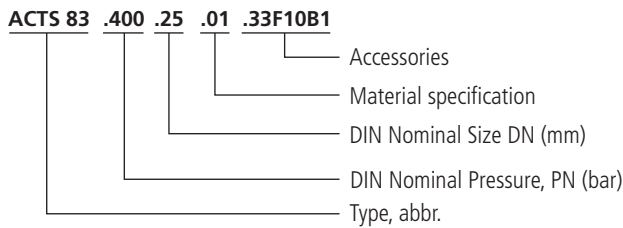


Size	Area of Stage(mm ²)			Kv
	I	II	III	
1" (25mm)	54	82	132	1.7 m ³ /hr
2" (50mm)	177	255	407	5.4m ³ /hr

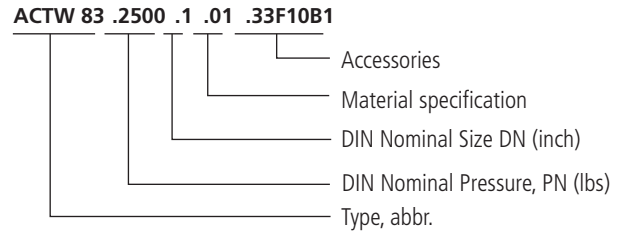
Valve operation can be done by a hand wheel or with an electrical actuator without major modification to the yoke.

Butt weld and socket weld ends are standard. Flanged ends can be supplied as special.

Example for Designation of Multistage Valves



Example for Designation of Multistage Valves

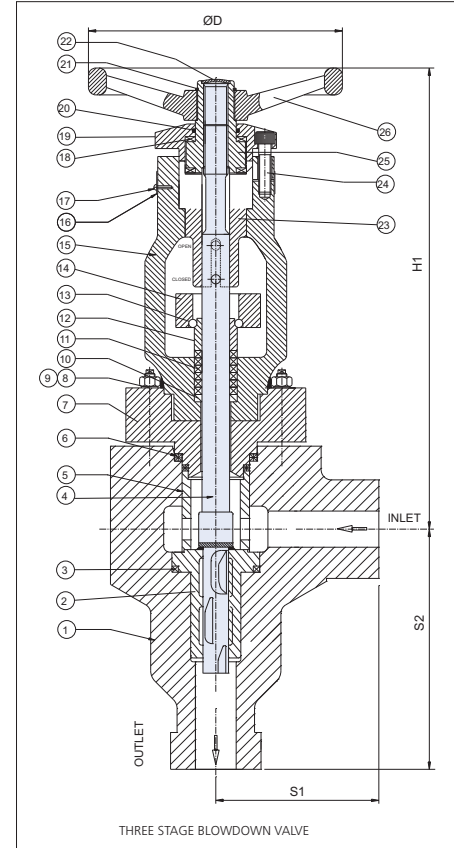


Part List

Sr.	Description	Qty	Carbon Steel	Alloy Steel
1	Body	1	ASTM A 105	ASTM A182 F22
2	Seat Bush Bottom •	1	ASTM A276 Gr.431	ASTM A276 Gr.431
3	Gasket •	2	Graphite	Graphite
4	Spindle •	1	SS431	SS431
5	Seatbush Top •	1	ASTM A276 Gr.431	ASTM A276 Gr.431
6	Gasket •	1	Graphite	Graphite
7	Bonnet Flange	1	ASTM A 105	ASTM A 105
8	Stud	4	ASTM A193 Gr.B7	ASTM A193 Gr.B7
9	Nut	4	ASTM A193 Gr.2H	ASTM A193 Gr.2H
10	Bottom Ring	1	ASTM A276 Gr.410	ASTM A276 Gr.410
11	Packing •	6	Pure Graphite	Pure Graphite
12	Stuffing Box Pipe	1	ASTM A276 Gr.410	ASTM A276 Gr.410
13	Thrust Ring	1	SS 304	SS 304
14	Gland Flange	1	ASTM A 105	ASTM A 105
15	Bonnet	1	ASTM A 105	ASTM A 182 F22
16	Name Plate	1	SS	SS
17	Rivet	2	SS 304	SS 304
18	Thrust Bearing	2	STD	STD
19	Cover	1	ASTM A 105	ASTM A 105
20	O Ring	1	Viton	Viton
21	Circlip	1	SS	SS
22	Sealing Washer	1	CRCA Sheet	CRCA Sheet
23	Bush	1	A276 GR 410	A276 GR 410
24	Allen Bolt	4	GR.12.9	GR.12.9
25	Yoke Bush •	1	Brass	Brass
26	Hand Wheel	1	SG Iron	SG Iron

Note: Recommended Spares indicated by Dot (•) against the Part Number

MAXIMUM WORKING PRESSURE KG/CM2															
Matl. Spec	Body Matl.	Class	Working Temperature Deg. C.												
			93	149	204	260	315	343	371	399	427	454	510	538	593
01	A105	1500	237	230	223	210	192	188	157	177	144				
		2500	395	384	371	350	320	314	312	295	241				
13	A182 F22	1500			227	225	212	206	199	187	178	171	132	94	39
		2500			379	374	354	344	332	311	297	285	221	156	55



DIN DN	ANSI PN	DIMENSIONS IN MM				WEIGHT KGS
		DN	PN	H1	D	
25	160	1"	900	290	170	~12
	250	1500	1500	~100	~150	
40	160	1 1/2"	900	440	170	~30
	250		1500	~125	~200	
50	160	2"	900	440	170	~30
	250		1500	~125	~200	
80	160	3"	900	440	250	~70
	250		1500	~125	~200	

SN Standardized Accessories of Design

- SN 25 Copper free material
- SN 33 Valve Yoke with connection acc. ISO 5210/DIN 3210
- SN 33.4 Valve Yoke for pneumatic actuator



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