

High Pressure Stop Valve Forged Design



Specialists in Process Efficiency and Energy Conservation

The VKINx 11. High Pressure Stop Valve incorporates state-of-the-art technology in an easy to operate and maintain design that can be advantageously used for most high pressure and temperature applications. A choice of materials of construction cover a wide range for most application, from cryogenic to superheated steam and for most chemicals and gases. Choices are also offered in the block design for other materials and configurations.

The welded body/bonnet, is machined with high quality and accuracy. Design features such as the unique plug/seat geometry and stuffing box design allow these valves to operate for extended periods of time without the commonly occurring problems like gland leakage and passing.

The sealed yoke and bearings ensure long service life with low and uniform operating forces that require smaller actuators. These actuators can be installed without any modification directly on the valve yoke.

These valves can be easily dismantled without removing it from the pipeline thereby allowing on-line maintenance. This reduces the need for spare valves inventory and costly replacements.

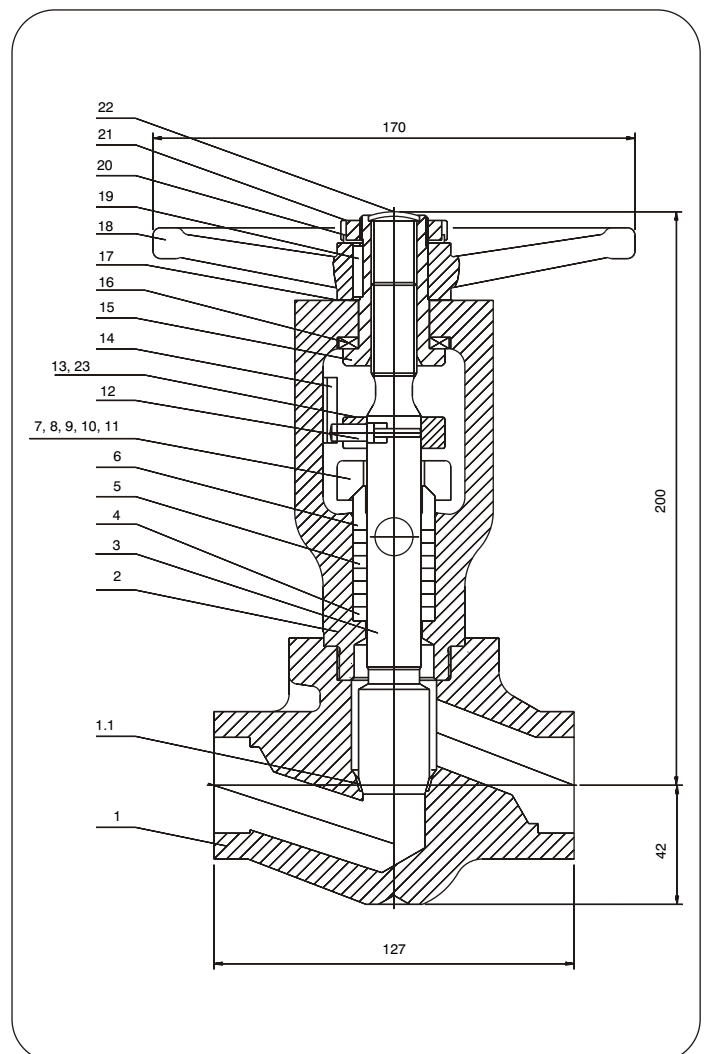
Valves with flanged ends are made by pre-welding flanges by a unique procedure where root runs are eliminated and penetration is complete. These valves are also offered in the angle pattern for blowdown application.

The VKINX11 design hence is very cost effective and practical. These valves can be fitted with electrical actuators on request.

Special Features

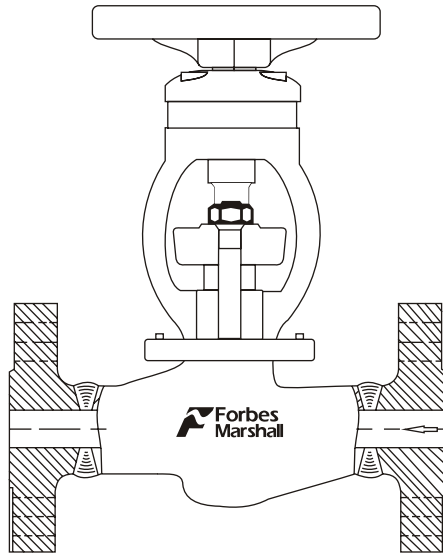
- ▶ Valves are designed for PN 500 (Class 2500). Are offered for all ratings upto PN 500 and Class 2500.
- ▶ Body seat integral stellite is hard faced by a special Automatic welding process (hardness 350 400 BHN).
- ▶ Unique non-rotating single piece spindle plug design guarantees long seat life as grinding between plug and seat is eliminated.
- ▶ Hollow plug permits flexibility of sealing and line sealing ensures high leak tightness (class VI).
- ▶ Flow is normally under the plug, which ensures that in the closed position, the stuffing box is not pressurized.
- ▶ A single piece spindle plug ensures stability of operation and eliminates problems of loose plug design such as high frequency vibration and grinding on seat due to binding. Special control cone (SN 46) design allows the valve to be used for regulating and blow down applications.
- ▶ Preformed pure graphite packing rings and roller burnished surfaces on the spindle and stuffing box bore to a mirror finish, ensure stuffing box tightness. Absolute zero leakage through gland packing. Extended packing life due to lower friction of linear motion of spindle in the stuffing box.
- ▶ Needle bearings on sliding surfaces reduces operational friction, hence is easier to operate. Bearings are designed upto 50,000 double strokes at a maximum lead of 500 bar.
- ▶ Easy on-line disassembly design is available on request. This design allows disassembly of complete valve internals without cutting weld at Body Bonnet. Valves are provided without back seat arrangement with this feature.

Part	Part Name	Material
1.	Body	ASTM A 105 (Code 1) ASTM A 182 F22 (Code 13) ASTM A 182 F316 (Code 17)
1.1	Body Seat	Stellite-6
2	Bonnet	ASTM A 105 (Code 1) ASTM A 182 F22 (Code 13) ASTM A 182 F316 (Code 17)
3	Spindle	SS 431
4	Bottom Ring	SS 410
5	Packing	Pure Graphite
6	Stuffing Box	SS 410
7	Gland Flange	ASTM A 105
8	Eye Bolt	ASTM A 193 Gr. B7
9	Nut	ASTM A 194 Gr. 2H
10	Washer	C 45
11	External Circlip (A-13)	SS
12	Pin	SS 431
13	Holder	SS 410
14	Guide Pad	ASTM A 105
15	Yoke Bush	Brass
16	Thrust Needle Bearing	ID 25 x OD 39 x 4TH.
17	Slide Ring	Spring Steel
18	Hand Wheel	S G Iron
19	Parrellel Key (5x5x16L)	SS 410
20	Locking Washer (Dia 24)	Spring Steel
21	Ring Nut (M24x1.5)	SS 410
22	Sealing Washer	MS
23	Grub Screw M6x1	HT



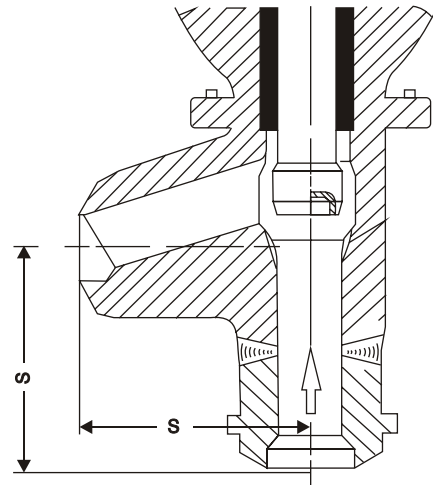
Flanged End Valves

DIN VKINF 11
ANSI VKINA 11



Angle Pattern Valves

DIN EKINS 11, EKINF 11
ANSI EKINW 11, EKINM 11, EKINA 11



Range of Application		ADMISSIBLE OPERATING PRESSURE kg/cm ²																
		ADMISSIBLE OPERATING TEMPERATURE °C																
Matl. Spec.	Body Material	PR. Class	up to 37	93	149	204	260	315	343	371	399	427	454	482	510	538	565	593
01	A 105 GrB	1500 2500	260 433	237 395	230 385	223 371	210 351	192 320	189 315	187 312	177 295	145 241	Not suitable above - 427°C					
13	A 182 F22		Not suitable below - 29°C			228 380	225 374	212 354	206 345	199 333	187 311	178 297	171 285	158 263	132 221	94 157	70 117	39 66
17	A 182 F316	1500 2500	211 352	178 297	160 266	145 242	134 224	126 211	123 205	120 201	118 197	116 193	113 188	Not suitable above - 450°C				
00	A 350 LF2	1500 2500	260 433	237 395	230 385	223 371	210 351	192 320	189 315	Not suitable above - 343°C & below - 40°C								

ACCESSORY SN - 46 PLUG WITH REGULATING CONE (ALSO USED FOR BLOWDOWN SERVICE)

