

**UKL PISTON VALVE:-**

THE PISTON VALVE principle is a KLINGER idea. One of many ideas which has achieved world-wide recognition. Continuously modified and matched to modern requirement, the piston Valve has provided itself to the millions throughout the world. Today we can say with pride that our group is worlds largest manufacturer of valves, based on this design principle. KLINGER Piston valve performance is backed by central R & D of KLINGER at Switzerland.

The shut off assembly comprises of a stainless steel piston, two resilient valve rings and a ferrous metal lantern bush. The sealing consists of the cylindrical surface of the piston and the corresponding inner surface area of the sealing rings. This provides a very large sealing compared with globe valves with conventional design- one of the reasons for the Piston valve's excellent seal.

The valve Rings are the heart of the piston valve. They are made from KXGT, a material specially developed and exclusively used for the manufacture of valve ring. KXGT consists essentially of graphite and tanged stainless steel between each layer of graphite. KLINGER valve rings are not merely surface graphited; the graphite content extends throughout the ring. For this reason its outstanding self lubricating properties are retained throughout the rings entire service life. KLINGER valve rings are resilient, accurately dimensioned and in consequence of their good recovery characteristics have excellent form retention and long service life. KLINGER valve rings are resistant to water, steam, oils, solvents and wide range of other media. KLINGER valve rings can be used for more than 230 listed fluid media.

**FEATURES:-**

- Seatless and Gland less valve.
- Economic, easy to service.
- No erosion of sealing surface.
- Saves Energy, environment friendly.
- Maintenance free.
- Compensation for thermal expansion with use of Belleville washer.
- Leak-tight across ports and to atmosphere.

**MATERIAL OF CONSTRUCTION:-**

ASTM A216 Gr. WCB  
ASTM A351 Gr. CF8M

**APPLICATIONS:-**

Steam, Thermic fluids, Acids, Gases, vacuum and other critical media.

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- Steam
- Thermic fluids
- Acids
- Gases
- Vacuum
- Other critical media.



**Piston Valve with Actuator  
(on request)**



**ON REQUEST:-**

IBR/Non-IBR  
MOC : Cast Stainless / Alloy Steel  
Valve with extended spindle.  
Valve with Heating Jacket  
Pneumatic / Electrical Actuator

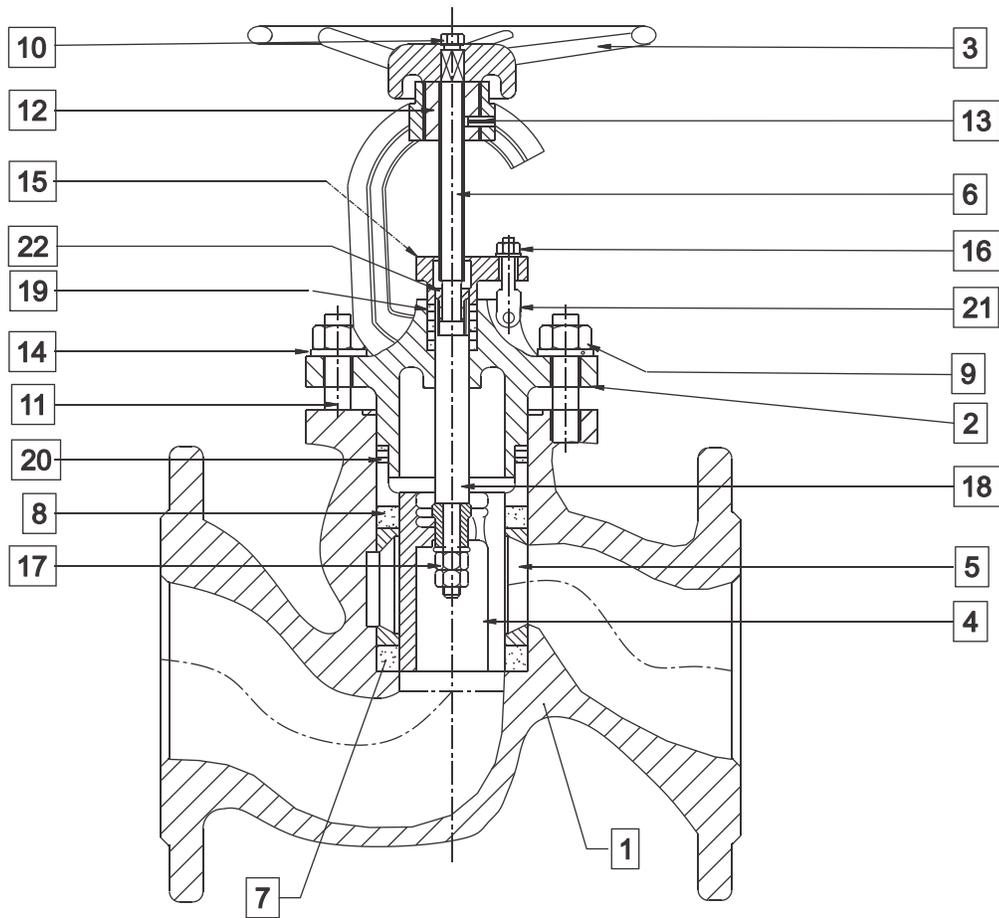
**AVAILABLE SIZES:-**

65, 80, 100, 125, 150, 200 NB  
[65NB and 125 NB NB available in DIN Overall length only]

**INSTALLATION:-**

Preferred direction is as per arrow, however this valve is a Bi Directional Valve. This valve can be installed in any position without any adverse effect on performance, seal ability or flow. Due to soft sealing principle it is advisable to install a strainer upstream of the valve to avoid damage to the rings caused by weld slag, metal and other solid impurities.

# Piston Valve KVN 65- 200



## BILL OF MATERIAL

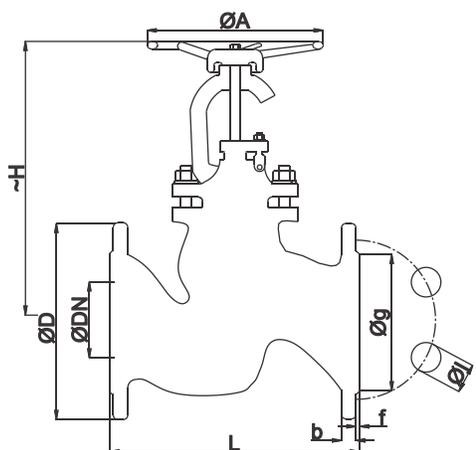
No	PART NAME	MATERIAL	MATERIAL CODE
1	Body	Cast Steel	ASTM A 216 Gr WCB
2	Bonnet	Cast Steel	ASTM A 216 Gr WCB
3#	Hand Wheel	C.I. / M.I.	GG 20 / FG 200 / M.I.
4#	Piston	Stainless Steel	ASTM A 351 Gr CF8
5#	Lantern Bush	Stainless Steel	ASTM A 743 Gr CA 15
6	Spindle	Stainless Steel	ASTM A 276 TP 410
7#	Lower Valve Ring	Klinger Standard	KXGT
8#	Upper Valve Ring	Klinger Standard	KXGT
9#	Bonnet Nut	Carbon Steel	ASTM A 194 Gr 2H
10	Handwheel	Carbon Steel	ASTM A 194 Gr 2H
11	Stud Bolt	Alloy Steel	ASTM A 193 Gr B7

## BILL OF MATERIAL

No	PART NAME	MATERIAL	MATERIAL CODE
12	Threaded Bush	Cast Iron	GG 20 / FG 200
13	Tension Pin	Spring Steel	50 Cr V4
14	Belleville Washer	Spring Steel	50 Cr V4
15	Gland	Cast Steel	ASTM A 216 Gr WCB
16	Gland Nut	Carbon Steel	ASTM A 194 Gr 2H
17	Lock Nut	Stainless Steel	AISI 316
18	Piston Shaft	Stainless Steel	AISI 304
19#	Stuffing Box Ring	Klinger Standard	KXGT
20#	Additional Valve Ring	Klinger Standard	KXGT
21	Eye Bolt	Stainless Steel	EN 8
22	Split Bush	Brass / S.S.	---

# - Available as Spares

# Piston Valve KVN 65- 200



## LIMITING CONDITIONS:

Rating	P <sub>max</sub> (kg/cm <sup>2</sup> )	Temp °C	T <sub>max</sub> °C	Press (kg/cm <sup>2</sup> )
#150	14.08	200	425	5.61
#300	44.68	200	425	29.07
PN40	38.66	200	425	22.85

## DIMENSIONS (mm)

Rating	ØDN	L	H	ØA	ØD	b	Øg	f	No. of	ØI	ØK	Weight(kg)
									Holes, N			
#150	65	215.90	306.00	250.00	180.00	20.70	104.80	2.00	4	19.05	139.7	24.0
	80	241.30	327.00	250.00	190.00	22.30	127.00	2.00	4	19.05	152.4	33.00
	100	292.10	374.00	280.00	230.00	22.30	157.20	2.00	8	19.05	190.5	48.70
	125	355.60	447.00	360.00	255.00	22.30	185.70	2.00	8	22.22	215.9	80.00
	150	406.40	477.00	360.00	280.00	23.90	215.90	2.00	8	22.22	241.3	100.00
200	495.30	561.00	400.00	345.00	27.00	269.90	2.00	8	22.22	298.5	174.00	

#300	65	292.10	306.00	250.00	190.00	23.90	104.80	2.00	8	22.22	149.20	30.00
	80	317.50	327.00	250.00	210.00	27.00	127.00	2.00	8	22.22	168.30	41.50
	100	355.60	374.00	280.00	255.00	30.20	157.20	2.00	8	22.22	200.00	61.50
	125	400.05	447.00	360.00	280.00	33.40	185.70	2.00	8	22.22	235.00	95.00
	150	444.50	477.00	360.00	320.00	35.00	215.90	2.00	12	22.22	269.90	127.30
	200	558.80	561.00	400.00	380.00	39.70	269.90	2.00	12	25.40	330.20	220.0

PN40	65	290.00	306.00	250.00	185.00	22.00	122.00	3.00	8.00	18.00	145.00	29.0
	80	310.00	327.00	250.00	200.00	24.00	138.00	3.00	8.00	18.00	160.00	40.0
	100	350.00	374.00	280.00	235.00	24.00	162.00	3.00	8.00	22.00	190.00	60.0
	125	400.00	447.00	320.00	270.00	26.00	188.00	3.00	8.00	26.00	220.00	94.0
	150	480.00	477.00	360.00	300.00	25.00	218.00	3.00	8.00	26.00	250.00	125.0
	200	600.00	561.00	400.00	375.00	34.00	285.00	3.00	12.00	30.00	320.00	210.0

## HOW TO ORDER

KLINGER PISTON VALVE KVN 80, Steam, IBR, FLANGED TO #150

Please mention the media, its design and working pressure/Temperature

## Product Range

### **UTD-55 | UTD-62 | UTD-120**

*Thermodynamic steam trap*

### **UTST | UCT-10**

*Thermostatic steam trap & Sanitary steam trap*

### **UFT-15 to 100 | UCA**

*Ball Float Trap for Steam and air application*

### **UG 25/45 | UP64Ti | UP215Ti**

*Bi-metallic Steam Trap*

### **UITVS**

*Compact Trap Valve Station*

### **UIBT-28US**

*Inverted bucket Steam Trap in complete stainless steel construction*

### **UIBT 1701 to 7004**

*Inverted bucket steam trap in cast/forged steel construction*

### **UDCV**

*Wafer type disc check valve / NRV*

### **UMS**

*Moisture separator for Steam & Air*

### **UAV**

*Thermostatic air vent for steam with air bottle for proper venting*

### **UAE**

*Air eliminator for liquid application*

### **UBSV**

*Bellow seal gate/globe valve*

### **UPHV**

*High pressure (#1500/#2500) gate/globe valve*

### **USTR**

*Y & T type strainers in cast carbon steel and stainless steel*

### **USG**

*Double window sight glass*

### **USI**

*Steam injector for boiler feed water tank*

### **UFV**

*Condensate flash vessel*

### **UPPPU**

*Condensate pressure powered pump unit*

### **UDH**

*Atmospheric de-aerator head for boiler feedwater tank*

### **UAPT**

*Automatic pumping trap – Combination of a conventional trap & pump for proper condensate discharge for varied applications*

### **UCCDS**

*Online (24x7) condensate contamination detection system*

### **UBBHRS**

*Boiler blowdown heat recovery system*

### **UHWGS**

*Instant Hot water generator system*

### **UPRS / UPRDS**

*Pressure reducing system & de-superheating system*

### **UCCM / USDM**

*Steam / Condensate manifolds*



*Cast / Forged Steel Piston Valves, Bellow seal valves, High Pressure valves (Gate/Globe), Strainers – “Y” Type, ITVS Steam Traps (Thermodynamic, Thermostatic, Ball Float Traps and IBT), Pressure Reducing Station, Condensate Recovery Products. Level Gauges (Reflex, Transparent, Bicolor), Sight Glass, Hot Water Generation System, Safety and Relief Valves.*

**FSD Products :** *Compressed Asbestos / Non Asbestos Fiber Sheeting / Cut Gaskets, Spiral Wound Gaskets / Gland Packing*