

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.
- Maintenance free.
- Compensation for thermal expansion with use of Belleville washer.
- Leak-tight across ports and to atmosphere.

END CONNECTIONS:-

Socket weld #800 Rating
Screwed BSPT/ NPT
Flanged to ANSI #150/#300

MATERIAL OF CONSTRUCTION:-

ASTMA105
ASTMA182 Gr.F316

APPLICATIONS:-

- 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

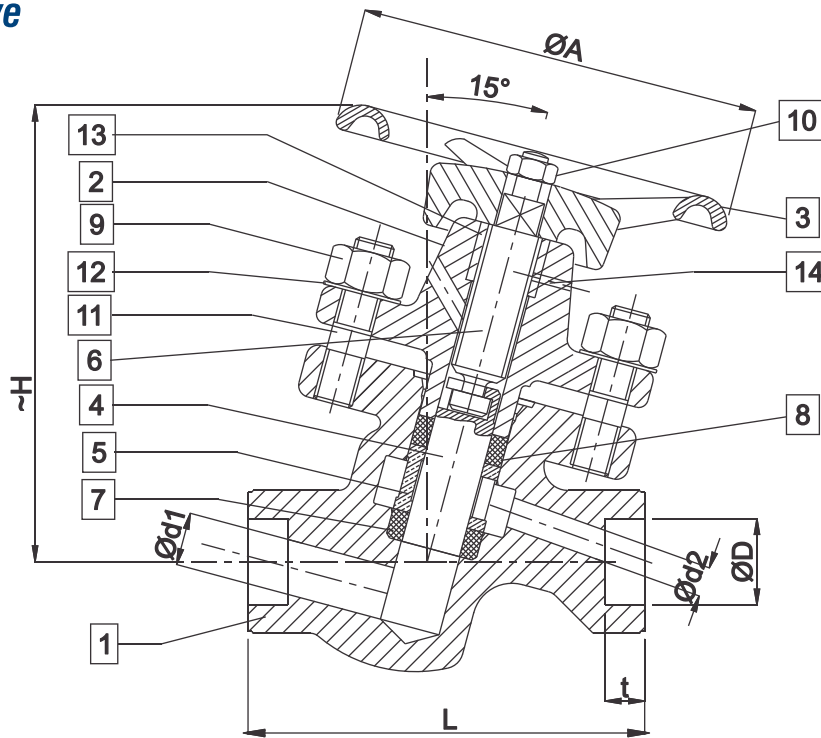
AVAILABLE SIZES:-

15,20,25, and 40 NB Pr Rating #800
KVSN 50 as per PN40 Rating

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.

Forged Piston Valve USN 15-40



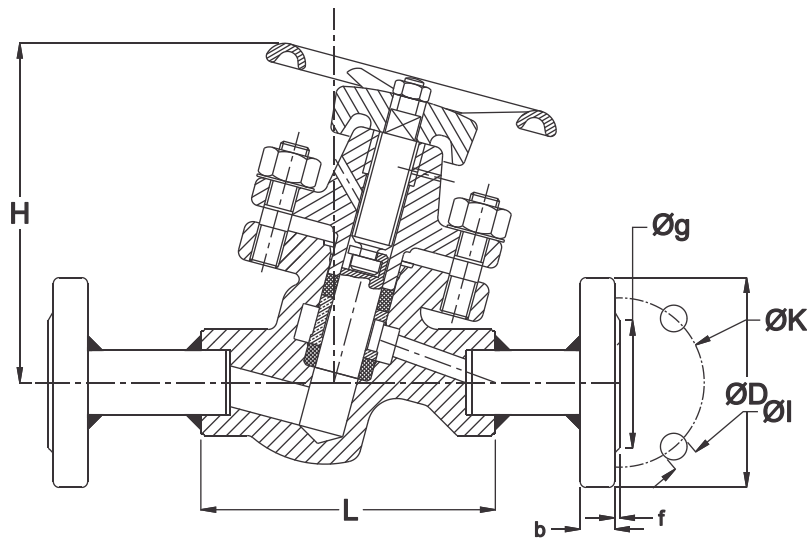
BILL OF MATERIAL

No.	PART NAME	MATERIAL	MATERIAL CODE
1	Body	Forged Steel	ASTM A105
2	Bonnet	Forged Steel	ASTM A105
3#	Hand Wheel	Fabricated / C.I.	M.S. / C.I.
4#	Piston	Stainless Steel	Cast Equivalent of AISI 430
5#	Lantern Bush	Stainless Steel	ASTM A276 TP410
6#	Spindle	Stainless Steel	ASTM A276 - TP410
7#	Lower Valve Ring	Klinger Std.	KXGT
8#	Upper Valve Ring	Klinger Std.	KXGT
9	Bonnet Nut	Carbon Steel	ASTM A 194 Gr.2H
10	Hand Wheel Nut	Carbon Steel	ASTM A 194 Gr.2H
11	Stud	Alloy Steel	ASTM B 193 Gr. B7
12	Bel. Washer	Spring Steel	50 Cr V4
13*	Threaded Bush	Cast Iron	GG20 / FG200
14*	Tension Pin	Spring Steel	50 Cr V4
# Available as Spares			

DIMENSIONS(mm)

Size	Class	L	H	ØA CI / MS	ØD	t	Ød1	Ød2
15	800	110.00	110.00	100 / 106	21.80	10.00	11.00	11.00
20	800	110.00	110.00	100 / 106	27.20	13.00	11.00	11.00
25	800	135.00	155.00	140 / 146	33.90	13.00	19.00	17.00
40	800	185.00	215.00	180 / 200	48.80	13.00	36.50	24.00

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DIMENSION (mm)

Size	Overall Dimensions		Connection Dimensions (#150)						
	Length (L)	Height (H)	ØA	ØD	b	Øg	No of holes	ØI	ØK
15 NB	212	118	100	90	9.6	35	4	16	60.3
20 NB	232	134	120	100	11.2	42.9	4	16	69.9
25 NB	251	155	140	110	12.7	50.8	4	16	79.4
40 NB	311	215	180	125	15.9	73	4	16	98.4

Size	Overall Dimensions		Connection Dimensions (#150)						
	Length (L)	Height (H)	ØA	ØD	b	Øg	No of holes	ØI	ØK
15 NB	226	118	100	95	16	45	4	14	65
20 NB	252	134	120	105	18	58	4	14	75
25 NB	269	155	140	115	18	68	4	14	85
40 NB	327	215	180	150	18	88	4	14	110

Rating	Pmax (bar.g)	Temp °C	T max °C	Press. (bar.g)
#150	13.8	200	425	5.5
#300	43.8	200	425	28.5
SW# 800	138.9	Amb.	426.5	77.35
BSP	12.25		260	
BSPT/NPT	31.6		425	

Special Instructions:-1) Flush pipelines, 2) Open/Close the valve using hand wheel only, 3) Hot Tighten, 4) Lubricate spindle, 5) Use original Klinger rings only.

HOW TO ORDER

KLINGER PISTON VALVE USN 25, 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

Other Products :



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

In view of technical progress designs and dimensions are subject to change without notice.



UNI KLINGER LIMITED

A joint venture of the Neterwala group of companies and KLINGER AG, Switzerland.



HARSH ENGINEERING SALES & SERVICE PVT. LTD

Only Authorized Dealers for UNI KLINGER products, Telangana

Add: 2-3-692/22/13 Lal Bagh, Zinda Tilismath Road, Ganga Nagar, Amberpet, Hyderabad - 500013

Tel: +91-40-2740 3329 | Website: harsh-engineering.com | E-mail: sales@harsh-engineering.com