

## **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 by 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 asbestos, a high quality elastomer and 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 (On Request)

AVAILABLE SIZES:65,80,100,125,150,200 NB
2½", 3", 4", 5", 6", 8"
[65NB and 125 NB NB available in DIN Overall length only]
[2½" and 5" available in DIN Overall length only]



#### **ON REQUEST:-**

IBR/Non-IBR

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

### **APPLICATIONS:**

- Steam.
- · Thermic fluids,
- · Acids,
- Gases,
- Vacuum and other critical media.

#### **INSTALLATION:-**

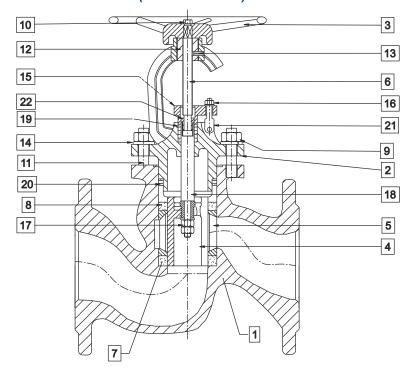
Preferred direction is as per arrow, however this valve is a Bi Directional Valve. This valve can be installed in any position without any adverse effect on performance, seal ability or flow.

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.

#### **LIMITING CONDITIONS:**

Datina	P	тах	Ten	ıp <sup>0</sup> C	Tn	пах	Press.			
Rating	Kg/cm2	PSI	о <b>С</b>	<sup>0</sup> <b>F</b>	°C	<sup>0</sup> <b>F</b>	Kg/cm2	PSI		
#150	14.08	200	200	392	425	797	5.61	79.8		
#300	44.68	635.6	200	392	425	797	29.07	413.5		
PN40	38.66	550	200	392	425	797	22.85	325		

# **BILL OF MATERIAL (KVN 65-200 NB)**



#### RILL OF MATERIAL

DILL	UF 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. CA15					
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 Nut	Carbon Steel	ASTM A 194 Gr 2H					
11	Stud Bolt	Alloy Steel	ASTM A 193 Gr B7					
12	Threaded Bush	Cast Iron	GG 20 / FG 200					
13	Tension Pin	Spring Steel	50 Cr V4					
14	Bellevile 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

#### **DIMENSIONS:**

Rating	ØD N		L		Н		ØA		ØD		b		Øg		f		No.of Holes	ØI		ØK		Weight (kg)	
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	N	mm	in	mm	in	mm	in
	65	2 1/2"	108	8.5	306	12.0	250	9.8	180	7.1	20.7	0.8	104.8	4.1	2	0.1	4	19.05	0.8	139.7	5.5	24	53.8
	80	3"	117	9.5	327	12.9	250	9.8	190	7.5	22.3	0.9	127	5.0	2	0.1	4	19.05	0.8	152.4	6.0	33	73.9
#150	100	4"	127	11.5	374	14.7	280	11.0	230	9.1	22.3	0.9	157.2	6.2	2	0.1	8	19.05	0.8	190.5	7.5	48.7	109.1
#100	125	<i>5</i> "	140	14.0	447	17.6	360	14.2	255	10.0	22.3	0.9	185.7	7.3	2	0.1	8	22.22	0.9	215.9	8.5	80	179.2
	150	6"	165	16.0	477	18.8	360	14.2	280	11.0	22.3	0.9	215.9	8.5	2	0.1	8	22.22	0.9	241.3	9.5	100	224.0
	200	8"	203	19.5	561	22.1	400	15.7	345	13.6	27	1.1	269.9	10.6	2	0.1	8	22.22	0.9	298.5	11.8	174	389.8
	0.5	0.4/00	000.4	44 5	000	12.0	050	0.0	100	7.5	22.0	0.0	1040	1 1		0.1	0	20.00	0.0	1 10 0	F 0	20	07.0
	65	2 1/2"		11.5	306	12.0	250	9.8	190	7.5	23.9	0.9	104.8		2	0.1	8	22.22	0.9	149.2	5.9	30	67.2
	80	3"	317.5	_	327	12.9	250	9.8	210	8.3	27	1.1	127	5.0	2	0.1	8	22.22	0.9	168.3	6.6	41.5	93.0
#300	100	4"	355.6	14.0	374	14.7	280	11.0	255	10.0	30.2	1.2	157.2	6.2	2	0.1	8	22.22	0.9	200	7.9	61.5	137.8
	125	5"	400	15.8	447	17.6	360	14.2	280	11.0	33.4	1.3	185.7	7.3	2	0.1	8	22.22	0.9	235	9.3	95	212.8
	150	6"	444.5	17.5	477	18.8	360	14.2	320	12.6	35	1.4	215.9	8.5	2	0.1	12	22.22	0.9	269.9	10.6	127.3	285.2
	200	8"	558.8	22.0	561	22.1	400	15.7	380	15.0	39.7	1.6	269.9	10.6	2	0.1	12	25.40	1.0	330.2	13.0	220	492.8
	65	2 1/2"	200	11 1	200	12.0	250	0.0	185	7.0	22	0.9	122	4.8	3	0.1	8	18	0.7	145	5.7	29	65.0
			290	11.4	306	_		9.8		7.3					<u> </u>	• • •	8	18					
	80	3"	310	12.2	327	12.9	250	9.8	200	7.9	24	0.9	138	5.4	3	0.1	-		0.7	160	6.3	40	89.6
PN40	100	4"	350	13.8	374	14.7	280	11.0	235	9.3	24	0.9	162	6.4	3	0.1	8	22	0.9	190	7.5	60	134.4
	125	5"	400	15.7	447	17.6	360	14.2	270	10.6	26	1.0	188	7.4	3	0.1	8	26	1.0	220	8.7	94	210.6
	150	6"	480	18.9	477	18.8	360	14.2	300	11.8	25	1.0	218	8.6	3	0.1	8	26	1.0	250	9.8	125	280.0
	200	8"	600	23.6	561	22.1	400	15.7	375	14.8	34	1.3	285	11.2	3	0.1	12	30	1.2	320	12.6	210	470.4

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.