

# VKE VALVES

*SERIES 3000*



VKE VALVES INDUSTRIES PVT. LTD.



**PRESSURE REGULATORS**



## ABOUT VKE PRESSURE REGULATOR



VKE self-actuating manually adjustable Outlet Pressure Regulators are used in various industries and play an important role & appreciated in India as well as abroad in process automation. Since three decades these Pressure Regulator Valves are manufactured by utilising the latest technologies and most sophisticated machinery like CNC's.

Pressure Reducing Valves are widely used for energy conservation in Chemical Industries, Steel Plants, Fertilizer Plants, Thermal / Nuclear Power Station, Textile Industries etc.

VKE has various products in its range to meet your requirements of automation & safety. Some of the products are Up-stream & Down-stream pressure regulating valves, High Pressure Reducing Stations with various safety devices, low pressure gas trains with monitoring valve electro pneumatic trip device & slum shut off valve.

### PHYSICAL CHARACTERISTICS

VKE Pressure Regulators are non-bleeding type. These valves are designed to withstand different desirable pressure and environmental conditions for which VKE has developed different models with robust construction available in C.I, C.S, S.S, grades as per ASTM standard which can be used for your application and can be selected from VKE's selection guide in this catalogue.

### OPERATION OF PRV

When these regulators are connected with the high pressure in the upstream side, no downstream pressure will be gained in the normal condition without adjusting bolt provided on the top of the valve. When the bolt is rotated in the clockwise direction, the spring provided on the top of the sensing piston / diaphragm is compressed and piston / diaphragm moves downwards to open the orifice of the valve by making a clearance between seat and plug to develop the outlet pressure in the outlet, to acting against piston / diaphragm and it is balanced with the spring force against down-stream pressure. When the down stream pressure acting against piston / diaphragm is just above the equilibrium force the plug closes the orifice. When the down-stream pressure goes below the required set pressure by consumption, the valve gets opened automatically by the downward thrust of spring to maintain the required downstream set pressure with constant flow.

### HIGHLIGHTS OF VKE SERIES – 3000

#### **MODEL 3100**

VKE Pressure Regulators listed under this series are pilot diaphragm operated, which are suitable for low-pressure gas applications. These valves can be used for air, water and other liquids below 80 C. temperature and liquids for which neoprene sealing parts has compatibility. Minimum reducing pressure range can be referred in model selection chart in this catalogue.

#### **MODEL 3200**

VKE Pressure Regulators listed under this series are multi purpose regulators having a very reliable working construction but relatively high P. These regulators are basically pilot diaphragm operated. These regulators are suitable for gas, air, liquid and some corrosive liquids too because these can be supplied with S.S. diaphragms. Also this is the only regulator in the VKE's series 3000 which can be used for steam application in normal constructions, whereas others need modification in the construction.

#### **MODEL 3300**

This Pressure Regulator has a different internal construction from that of 3100 or 3200 pilot piston construction which make these valves more compatible for high pressure & higher size also. These are very reliable valves for high pressure applications.



### **MODEL 3400**

3400 model is a high Pressure Regulator in the range of VKE. This Regulator also has a very robust piston type construction. Same can be used up to maximum 200 Kgs/Cm<sup>2</sup>. Inlet of gas, water or air application. Many of these valves are working very safely all over India and abroad on high-pressure applications.

### **MODEL 3500**

The regulator listed under this model is designed for high flow capacity. It can discharge approximately 15% more flow than that in the other pressure regulators in this series. This is also a piston type regulator but function of the main regulator is controlled by pilot regulator. This construction helps to reduce the overall size of the main regulator. It can be used for air, gas and water as well as steam on high temperature.

### **MODEL - 3600/3650**

This regulator is designed for high flow. Basic application is for pressure reduction. This valve is designed for higher sizes i.e. form 2" and above.

### **MODEL - 3700**

The regulator listed under this model is designed for application of controlling pressure, flow, level or overflow.

### **MODEL - 3800 / 3900**

The regulators listed under this model are designed to control or regulate upstream pressure of the valve. These regulators are also spring balanced & suitable for air, gas, oil, water and other fluids compatible with the material of construction. These regulators can't be used when there is pressure at outside. These valves are of robust construction and, if correctly installed have a long trouble-free life. When eventually replacement of internal part is needed, access to all wearing parts is possible without removing the body from the line. This regulator has an internal sensing and is therefore a completely self-contained unit which will control upstream pressure at a set range. VKE offers two types of upstream pressure regulators having an internal construction of pilot diaphragm type 3800 and pilot piston type 3900. The technical references can be taken from particular detailed catalogue/data sheet.

\* For Back pressure in series 3800/3900 please refer VKE.

## **INSTRUCTION FOR HANDLING**

### **CAUTION FOR INSTALLATION.**

**Vibration, stress or bending should not continue indefinitely.**

**Pipe should be completely cleaned by blowing before installation as flux, sand or dust remaining in pipes may cause scratching or damage to the valve seat.**

**The pressure reducing valves should be mounted vertically as arrow is provided to show the direction of flow.**

**Always insist on by-pass in piping for pressure reducing valve to facilitate maintenance and repair.**

### **ADJUSTMENT**

Close the outlet and inlet Stop Valves and set the adjusting spring free by adjusting bolt provided on the top of the valve.

Slowly open the inlet stop valve so that the minimum flow will run when the pressure-reducing valve is set.

Turn the adjusting bolt of the pressure-reducing valve to press the spring as required. The outlet pressure gauge indicates the specified pressure. Then slowly open the outlet stop valve.

**REFERENCE DATA**

For Steam :  $CV = \frac{W}{19.4\sqrt{(p1-p2)p2}} K$  ( When  $P1 - P2 < 1/2 P1$  ).

$CV = \frac{W}{9.7P1} K$  ( When  $P1 - P2 \geq 1/2 P1$  ).

For Gases :  $CV = \frac{Q\sqrt{G(t+273)}}{406\sqrt{(p1-p2)p2}}$  ( When  $P1 - P2 < 1/2 P1$  ).

$CV = \frac{Q\sqrt{G(t+273)}}{203 P1}$  ( When  $P1 - P2 \geq 1/2 P1$  ).

For Liquid :  $CV = \frac{1.167 Q\sqrt{G}}{\sqrt{\Delta P}}$

Q1	=	Flow of gas / Liquid (NM3/hr.)
P1	=	Primary side pressure (Kgs/cm2 abs)
P2	=	Secondary side pressure (Kgs/cm2 abs)
G	=	Specific gravity
T	=	Temperature (deg. Centi.)
W	=	Steam quantity(K g/Hr.)
K	=	1+ 0.0013 t
P	=	Pressure difference between up-stream & down-stream in kgs/cm2
F	=	Viscosity factor (for water is 1, for other liquids Pls. refer VKE)

**Cv value Table for Metal Diaphragm Valves**

BODY SIZE	1/2", 3/4", 1"				1.1/2"		2"		2.1/2"		3"	4"	
PORT SIZE	3/8"	1/2"	3/4"	1"	1"	1.1/2"	1"	1.1/2"	2"	2"	2.1/2"	3"	4"
Cv	0.28	0.50	1.0	1.95	1.95	4.44	1.95	4.44	6.85	6.85	12.0	16.90	28.0

**Cv value Table for Rubber Diaphragm & Piston Valves**

BODY SIZE	1/4", 3/8", 1/2", 3/4", 1"								1.1/2"		2"		2.1/2"	3"	4"	6"	8"	10"			
PORT SIZE	1/32"	1/16"	1/8"	3/16"	1/4"	3/8"	1/2"	3/4"	1"	3/4"	1"	1.1/2"	1"	1.1/2"	2"	2.1/2"	3"	4"	6"	8"	10"
Cv	0.01	0.05	0.2	0.4	0.8	1.2	1.8	3.2	4.9	3.2	4.9	12.7	4.9	12.7	20	39	46	80	180	390	620



## FLOW CAPACITIES OF STANDARD VALVE SIZES

<b>S</b> Saturated steam capacity in pounds per hour.																						
<b>A</b> Air capacity in standard cubic feet per minute.																						
<b>W</b> Water capacity in gallons per minute.																						
PSIG		3/8"			1/2"			3/4"			1"			1 1/4"			1 1/2"			2"		
IN	OUT	S	A	W	S	A	W	S	A	W	S	A	W	S	A	W	S	A	W	S	A	W
15	5	15	6.7	1.5	23	8.7	1.9	42	13	2.8	55	17	3.8	84	18	4.1	110	28	6.3	170	51	11
25		21	9.5	2.2	33	12	2.8	60	18	4	75	24	5.3	120	26	5.8	150	39	8.9	240	70	16
50		34	15	3.3	53	20	4.3	100	28	6	125	38	8	200	41	8.7	240	67	13	400	110	25
75		48	21	4.2	73	27	5.5	135	42	7.5	157	51	10	270	58	11	350	90	17	540	160	31
100		60	27	4.8	93	35	6.2	171	52	8.7	198	65	12	340	73	13	440	115	20	680	200	36
150		87	29	6	135	51	7.8	246	74	10	289	94	14	500	105	16	600	170	24	1000	280	45
100		117	52	7	180	60	9.1	330	100	12	385	127	17	660	141	18	820	220	28	1320	380	52
150		138	61	7.9	217	80	10	420	120	14	467	150	19	840	167	20	980	260	31	1680	450	59
25	10	23	10	2	32	13	2.6	57	17	3.5	95	28	5.8	114	32	6.6	170	52	10	230	80	15
50		37	17	3.3	52	22	4.3	96	28	5.7	155	46	9.5	192	54	11	290	85	16	400	140	25
75		52	24	4.2	72	31	5.5	132	38	7.3	220	64	12	265	74	14	390	120	21	530	170	32
100		69	31	4.9	94	40	6.4	171	49	8.5	280	82	14	340	96	16	520	150	21	680	240	38
150		98	42	6.1	135	55	8	246	68	10	400	118	17	500	138	20	730	220	31	1000	340	47
200		129	57	7.1	180	75	9.4	330	92	12	540	156	20	660	185	23	970	250	36	1320	460	55
250		155	70	8.1	217	91	11	420	112	14	650	189	23	840	218	26	1250	345	40	1700	540	62
40	25	34	17	2.7	66	22	3.5	100	39	6.2	143	53	8.5	200	62	9.7	230	77	12	400	120	19
50		46	23	3.5	84	30	4.5	127	49	8	186	68	11	250	79	13	310	100	16	500	160	25
75		65	32	4.9	120	42	6.4	182	70	11	265	94	16	360	113	18	430	143	22	720	220	35
100		83	42	6	152	55	7.8	233	90	14	335	119	19	470	145	21	550	180	28	940	290	43
150		120	60	7.8	210	78	10	333	130	18	486	174	24	660	206	28	800	262	36	1320	420	56
200		154	77	9.2	290	100	12	445	172	21	639	231	29	900	276	33	1040	344	42	1800	540	66
250		185	93	10	350	120	13	590	208	24	760	273	33	1200	328	37	1260	410	48	2400	660	75
60	50	40	21	2.6	77	28	3.4	130	56	6.9	180	79	9.8	260	87	11	300	105	13	520	150	19
75		63	33	4.1	110	43	5.3	204	87	11	285	123	16	410	136	18	460	166	21	820	230	30
100		86	45	5.8	170	59	7.5	384	122	15	404	170	22	580	190	25	660	236	30	1560	330	42
150		123	65	8.2	242	85	11	418	178	22	584	250	31	830	279	35	930	341	42	1700	460	60
200		163	86	10	320	112	13	557	237	27	777	333	38	1100	372	43	1230	455	51	2200	610	73
250	210	102	12	382	132	15	700	279	31	900	395	44	1400	435	50	1600	555	59	2300	740	85	
100	75	92	42	4.5	140	55	6	255	105	12	398	150	16	510	160	20	670	235	24	1000	340	35
150		161	74	7.8	240	96	10	450	184	20	677	260	28	900	283	35	1190	410	42	1800	600	60
200		214	78	10	320	102	14	620	249	25	912	350	36	1250	390	45	1550	540	54	2500	800	78
250		250	114	12	380	150	15	750	289	30	1060	410	42	1500	450	53	1950	640	63	3000	940	93
125	100	122	54	5	190	71	6.5	311	135	13	520	175	17	620	220	20	850	280	26	1250	410	40
150		174	77	7.1	275	100	9.2	444	193	18	734	247	23	900	324	28	1170	395	37	1800	570	56
175		214	94	8.6	335	122	11	504	234	22	795	309	28	1000	356	35	1470	500	45	2000	710	69
200		250	111	10	385	145	14	622	271	25	1000	350	33	1200	440	40	1670	560	52	2400	810	80
250		305	135	12	490	175	15	870	328	30	1300	422	39	1650	525	49	2100	700	64	3300	1040	98
150	125	135	60	5	215	78	6.5	355	155	13	575	200	17	710	240	20	940	330	27	1420	460	40
175		186	83	7.1	300	100	9.2	500	223	18	809	284	23	1000	338	28	1330	462	39	2000	650	56
200		240	107	8.6	360	140	11	617	271	22	1010	347	28	1200	417	35	1670	580	48	2400	820	69
250		300	133	11	490	174	14	802	340	28	1260	441	37	1600	542	45	2120	720	61	3200	1040	89
175	150	145	65	5	228	85	6.5	387	165	13	675	210	17	800	260	20	1000	380	30	1600	500	40
200		203	91	7.1	320	118	9.2	557	237	18	980	299	23	1100	375	28	1410	550	42	2200	710	56
225		247	110	8.6	390	143	11	665	285	22	1185	360	28	1300	445	35	1770	690	52	2600	880	69
250		290	130	10	460	170	13	775	331	25	1350	422	33	1550	520	40	2030	800	60	3100	1020	80

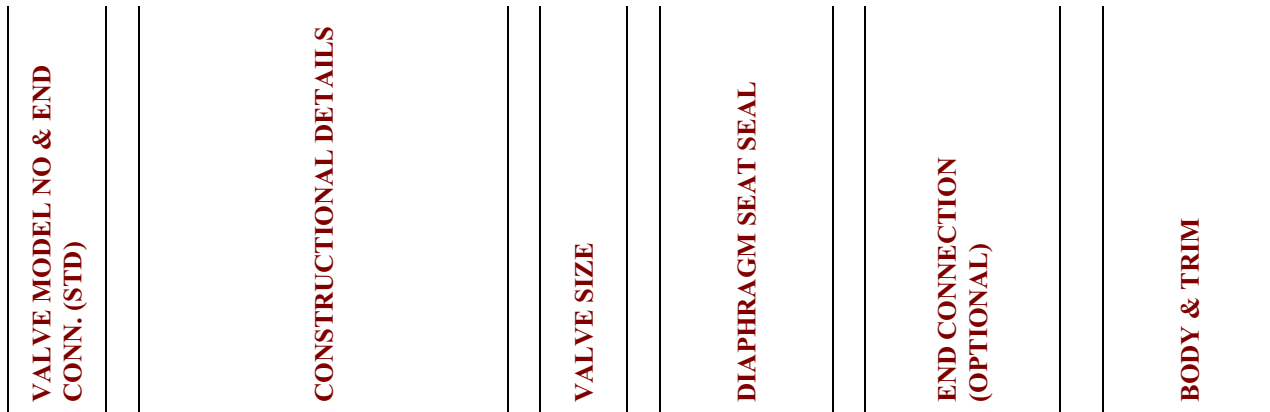


## HOW TO READ VKE MODEL CODE



VKE VALVES INDUSTRIES PVT. LTD.

**3100 / XP / BP / IF / SD - 50 - NR / TF - SW / PE - CS / S4**



### Suffixes used after Catalogue Model Number for Valve Features

BODY MATERIAL	CODE
Bronze	BZ
Aluminium	AI
Cast iron	CI
Cast steel	CS
S.S. 304.	S4
S.S. 304-L	S4L
S.S. 316	S6
S.S. 316-L	S6L
Aluminium Bronze	AB
Alloy 20	A20
Hest alloy	HA

TRIMS	CODE
Brass	BR
S.S. 304.	S4
S.S. 13% Cr.	S13
S.S. 304-L.	S4L
S.S. 316.	S6
S.S. 316-L.	S6L
Monel 400	M4
Monel K 500	MK5
Stellite 6	ST
Surface Hardened	SH

END CONNECTION	CODE
BSP Screwed (STD)	S
NPT Screwed	NPT
Flanged (STD)	F
Butt Weld End	BW
Socket Weld End	SW
Extended Pipe End	PE
Special Construction which is not noted in this Catalogue	SP

SEAT, SEAL & DIAPHRAGM	CODE
Phosphor Bronze	PB
Neoprene	NR
EPDM	EP
VITON	VI
PTFE	TF
Nitrile	NT
S.S. 304	S4
S.S. 316	S6
Metal to Metal	MM

CONSTRUCTIONAL DETAILS	CODE
External Pilot	XP
Balanced Plug	BP
In-Built Filter	IF
Noise Abatement Cage	NAC
Safety Diaphragm	SD
Travel Indicator	TI



# LOW PRESSURE RUBBER DIAPHRAGM REGULATOR



MODEL NO.: 3100

## SPECIFICATIONS

SERVICE MEDIUM	GAS & LIQUID
MAX INLET PRESSURE	6.5 Kg/Cm <sup>2</sup> g
ADJUSTABLE PRESSURE	20mm WC-1.5Kg/Cm <sup>2</sup> g
MAX WORKING TEMP.	*80° C TO 150° C

\* Depend on material of diaphragm & Seat Seal

## SEAT LEAKAGE RATE

DISC & SEAT	NBR,VITON,PTFE
LEAKAGE CLASS	VI

## SPRING RANGE

CODE	SET PRESSURE RANGE	COLOUR
D-10	20-150mm WC	YELLOW
D-20	130mm WC-3000 mm/WC	ORANGE
D-30	3000 mm/WC~ 1.5 Kg/Cm <sup>2</sup> g	RED

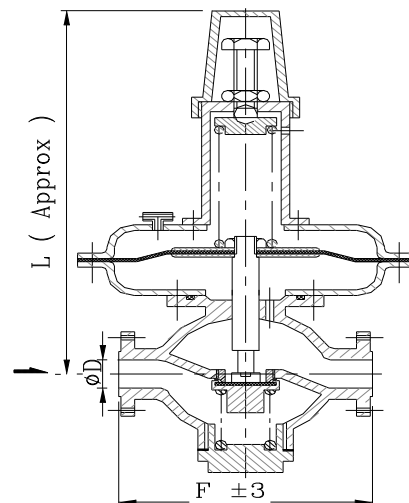
## CONSTRUCTION

1	Internal/External pilot pulse, rubber diaphragm type down stream low pressure-regulating valve.
2	Flanges will be drilled unless otherwise specified.
3	End Connections are available in Flanged, Screwed as standard.
4	As a special construction safety diaphragm can be provided for hazardous application. Refer VKE

## MATERIAL LIST

1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Neoprene, EPDM, Viton.
3	Valve Stem	AISI 304 and AISI 316.
4	Diaphragm	Neoprene, EPDM, Viton. Teflon & Padded neoprene
5	Spring	I.S. 4454 Grade III
6	Adjusting Bolt	S.S.304.

Optional MOC: CN7M, CG8M, Monnel, Hest alloy are also available.



DIMENSIONS: IN mm (Dimensions are approximate)

SIZE	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"	
F	Flanged	NA	NA	110	195	195	235	265	295	318	382	460	560	705	*
	Screwed	88	88	118	118	118	138	174	NA						
L	Flanged	NA	NA	330	348	348	470	485	485	550	570	650	700	750	*
	Screwed	330	330					NA							

\* Please refer VKE

Note: - Dimensions are subject to change without prior notice.



# MID RANGE METAL DIAPHRAGM REGULATOR

MODEL NO.: 3200



VKE VALVES INDUSTRIES PVT. LTD.

## SPECIFICATIONS

SERVICE MEDIUM	GAS & LIQUID	STEAM
MAX INLET PRESSURE	15 Kg/Cm <sup>2</sup> g	10Kgs/Cm <sup>2</sup> g
ADJUSTABLE PRESSURE	0.5-12Kg/Cm <sup>2</sup> g	0.5-8Kgs/Cm <sup>2</sup> g
MAX WORKING TEMP.	*300° C	

\* Depend on material of diaphragm & Seat Seal

## SEAT LEAKAGE RATE

DISC & SEAT	METAL	PTFE	NBR & VITON
LEAKAGE CLASS	IV	VI	VI

## SPRING RANGE

CODE	SET PRESSURE RANGE	COLOUR
A-40	0.5~ 4 Kgs/Cm <sup>2</sup> g.	PLATED
A-50	4 ~8 Kgs/Cm <sup>2</sup>	PLATED
A-60	8 ~ 12Kg/Cm <sup>2</sup> g	PLATED

## CONSTRUCTION

1	Internal/External pilot pulse, metal diaphragm type down stream pressure-regulating valve.
2	Flanges will be drilled unless otherwise specified.
3	End Connections are available in Flanged, Screwed as standard.
4	As a special construction safety diaphragm can be provided for hazardous application. Refer VKE

## MATERIAL LIST

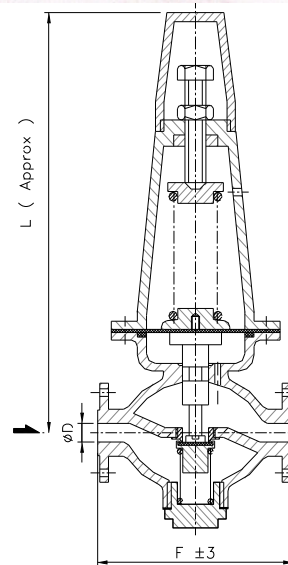
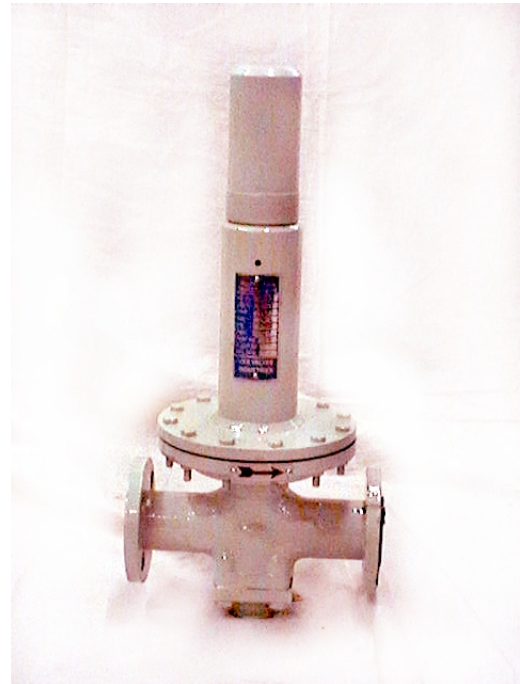
1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Teflon, Metal to Metal*.
3	Valve Stem	AISI 304 and AISI 316.
4	Diaphragm	Phosphor Bronze, S.S.304, S. S.316.
5	Spring	I.S. 4454 Grade III.
6	Adjusting Bolt	S.S.304.

Optional MOC: CN7M, CG8M, Monnel, Hest alloy are also available\*.  
DIMENSIONS: IN mm (Dimensions are approximate)

SIZE		½"	¾"	1"	1½"	2"	2½"	3"	4"
F	Flanged	110	195	195	235	265	295	318	382
	Screwed	88	118	118	138	174	NA		
L	Flanged	285	350	350	475	485	485	533	550
	Screwed						NA		

\* Please refer VKE

Note: - Dimensions are subject to change without prior notice.





# HIGH PRESSURE PILOT PISTON REGULATOR

MODEL NO.: 3300



VKE VALVES INDUSTRIES PVT. LTD.

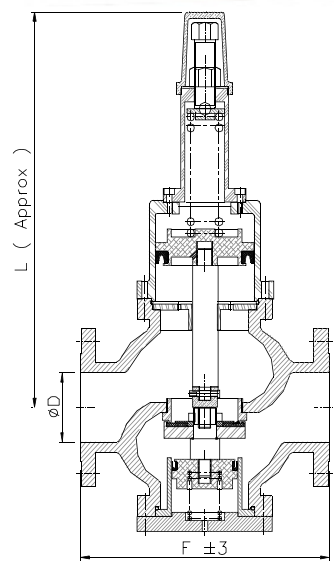
SPECIFICATIONS		
SERVICE MEDIUM	SIZE	GAS & LIQUID
Max Inlet Pressure	½" ~ 2"	45 Kgs/Cm2g
Adjustable Pressure	½" ~ 2"	1-30 Kgs/cm2g
Max Working Temp.	80 ~ 108° C	
1. NBR : 80°C, Viton : 180°C<		
2. Max Pressure Of C.I. Body 10 Kgs/Cm2g.		

SEAT LEAKAGE RATE		
DISC & SEAT	PTFE	NBR & VITON
LEAKAGE CLASS	VI	VI

SPRING RANGE		
CODE	SET PRESSURE RANGE	COLOUR
B-60	1 ~ 10 Kgs/Cm2g.	PLATED
B-70	10 ~ 30 Kgs/cm2g.	PLATED
B-80	0.5 ~ 6 Kgs/Cm2	PLATED
B-90	6 ~ 15 Kg/Cm²g	PLATED

CONSTRUCTION	
1	Internal/External pilot pulse, High pressure pilot piston down stream pressure-regulating valve for Temperature up to 180°C max.
2	Flanges will be drilled unless otherwise specified.
3	End Connections are available in Flanged, Screwed as standard.
4	Temperature above 45 kgs/cm2 g refer model No. 3400.

MATERIAL LIST		
1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Neoprene, Viton, Teflon.
3	Stem	AISI 304 and AISI 316.
4	Piston	M.S. hard chrome plated, S.S.304*, S.S.316*
5	Spring	I.S. 4454 Grade III.
6	Adjusting Bolt	S.S.304.



DIMENSIONS: IN mm (Dimensions are approximate)

SIZE		½"	¾"	1"	1½"	2"
F	Flanged	110	165	165	240	240
	Screwed	88	118	118	138	138
L	Flanged	340	398	390	425	525
	Screwed					

\* Please refer VKE

Note: - Dimensions are subject to change without prior notice.



# HIGH PRESSURE PISTON TYPE REGULATOR



MODEL NO.: 3400

SPECIFICATIONS	
SERVICE MEDIUM	GAS & LIQUID
MAX INLET PRESSURE	100 Kg/Cm <sup>2</sup> g
ADJUSTABLE PRESSURE	1-75 Kg/Cm <sup>2</sup> g
MAX WORKING TEMP.	*80° C

\* Higher pressure is available up to 200 kgs/cm<sup>2</sup>g inlet refer VKE

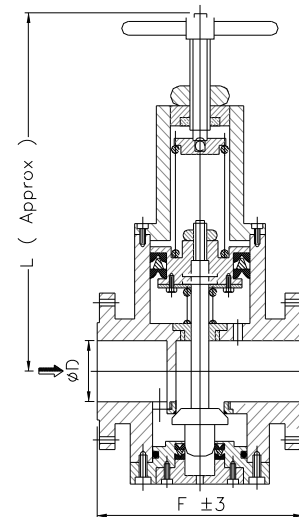
SEAT LEAKAGE RATE		
DISC & SEAT	METAL	PTFE
LEAKAGE CLASS	IV	VI

SPRING RANGE		
CODE	SET PRESSURE RANGE	COLOUR
H-100	1 ~ 30 Kgs/Cm <sup>2</sup> g.	PLATED
H-110	30 ~75 Kgs/Cm <sup>2</sup>	PLATED

CONSTRUCTION	
1	Internal pilot Piston operated High pressure reducing valve up to 100 Kgs/Cm <sup>2</sup> . For pressure range of 100 to 200 kgs/cm <sup>2</sup> please refer VKE.
2	Flanges will be drilled unless otherwise specified.
3	End Connections are available in Flanged, Screwed and Socket Welded also.

MATERIAL LIST		
1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Teflon, Metal to Metal*.
3	Valve Stem	S.S. 13% Cr., AISI 316.
4	Piston	M.S. hard chrome plated.
5	Spring	I.S. 4454 Grade III
6	Adjusting Bolt	S.S.304.

Optional MOC: CN7M, CG8M, Monel, Hast alloy are also available\*.



DIMENSIONS: IN mm (Dimensions are approximate)

SIZE		¾"	1"	1½"	2"
F	Flanged	200	200	240	240
	Screwed				
L	Flanged	385	385	400	425
	Screwed				

\* Please refer VKE

Note: - Dimensions are subject to change without prior notice.



# PILOTVALVE TYPE STEAM PRESSURE REGULATOR



MODEL NO.: 3500

VKE VALVES INDUSTRIES PVT. LTD.

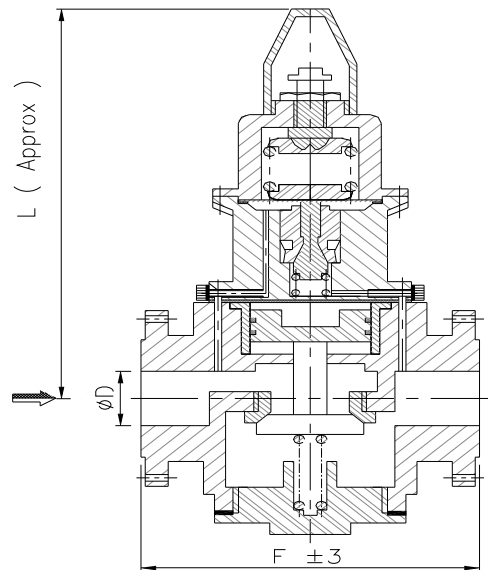
SPECIFICATIONS	
SERVICE MEDIUM	STEAM
MAX INLET PRESSURE	25 Kg/Cm <sup>2</sup> g
ADJUSTABLE PRESSURE	2 – 20 Kg/Cm <sup>2</sup> g
MAX WORKING TEMP.	250° C

SEAT LEAKAGE RATE		
DISC & SEAT	METAL	PTFE
LEAKAGE CLASS	IV	VI

SPRING RANGE		
CODE	SET PRESSURE RANGE	COLOUR
P-120	2 – 10 Kgs/cm <sup>2</sup> g	PLATED
P-130	10 – 20 Kgs/cm <sup>2</sup> g	PLATED

CONSTRUCTION	
1	Pilot valve type High pressure & High temperature down stream pressure regulating valve.
2	This valve can be provided with IBR IIIC certificate
3	Flanges will be drilled unless otherwise specified.
4	End Connections are available in Flanged, Screwed as standard.

MATERIAL LIST		
1	Body	Cast iron, ASTM A216-WCB,
2	Seat	S.S. 304, S.S. 316.
3	Valve Stem	S.S. 304 and S.S.316.
4	Piston	A216 – WCB, CF8, CF8M
5	Diaphragm	S.S. 304, S.S.316.
6	Spring	I.S. 4454 Grade III. & S.S.
7	Adjusting Bolt	S.S.304.



DIMENSIONS: IN mm (Dimensions are approximate)

SIZE		1"	1½"	2"	3"	4"	6"	8"	10"
F	Flanged	180	245	260	330	390	470	540	620
	Screwed								
L	Flanged	360	375	440	500	575	620	700	800
	Screwed								

\* Please refer VKE

Note: - Dimensions are subject to change without prior notice.



# HIGH FLOW REGULATOR

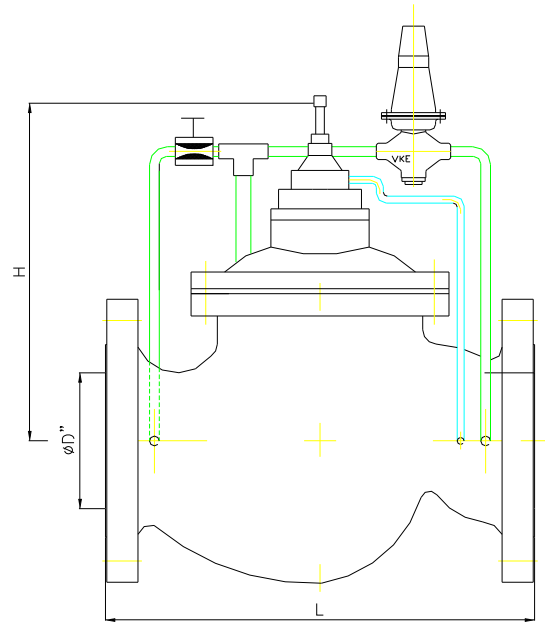
MODEL NO.: 3600/3650

SPECIFICATIONS	
SERVICE MEDIUM	WATER, LIQUID & GAS
MAX INLET PRESSURE	10 kgs/cm <sup>2</sup>
ADJUSTABLE PRESSURE	1000 mm WC to 8 kgs/cm <sup>2</sup>
MAX WORKING TEMP.	*130°C
* Depend on material of diaphragm & Seat Seal	

SEAT LEAKAGE RATE		
DISC SEAT	PDM	PTFE
LEAKAGE CLASS	VI	VI

SPRING RANGE		
CODE	INLET PRESSURE	SET PRESSURE
3600	10 kgs/cm <sup>2</sup>	1000 mm WC- 5 Kgs/cm <sup>2</sup>
3650	10 kgs/cm <sup>2</sup>	1-8 kgs/cm <sup>2</sup>

MATERIAL LIST		
<i>Pilot Valve</i>		
1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Working Parts	S.S. 13%Cr., S.S. 316
3	Diaphragm	EPDM
4	Seating	PTFE
<i>Main Flow Valve</i>		
1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Neoprene, EPDM, Viton.
3	Valve Stem	AISI 304 and AISI 316.
4	Diaphragm	EPDM,
5	Spring	I.S. 4454 Grade III
6	Adjusting Bolt	S.S.304.



Optional MOC: CN7M, CG8M, Monnel, Hest alloy are also available

DIMENSIONS: IN mm (Dimensions are approximate)

SIZE		2"	3"	4"	6"	8"	10"	12"
<b>3600 &amp; 3650</b>	L	230	310	350	480	600	673	740
	H	300	350	500	600	650	700	900
	Cv (usg)	45	99	156	345	490	820	1190

\* Please refer VKE

Note :- Dimensions are subject to change without prior notice.



## EXCESS FLOW CONTROL VALVE

### SPECIFICATIONS

<b>SERVICE MEDIUM</b>	<b>GAS &amp; LIQUID</b>
<b>MAX INLET PRESSURE</b>	20 Kgs/cm <sup>2</sup>
<b>MAX WORKING TEMP.</b>	*90°C
* Depend on material of diaphragm & Seat Seal	

### SEAT LEAKAGE RATE

<b>DISC SEAL</b>	EPDM/PTFE
<b>LEAKAGE CLASS</b>	VI

### MATERIAL LIST

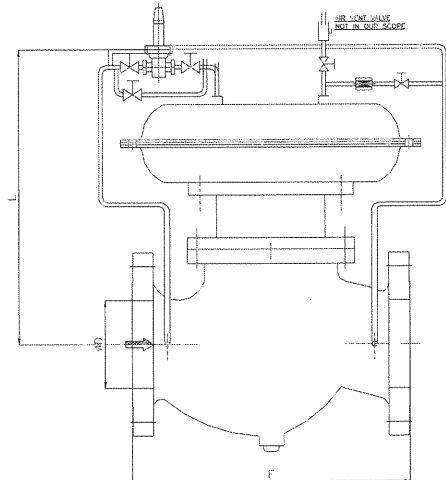
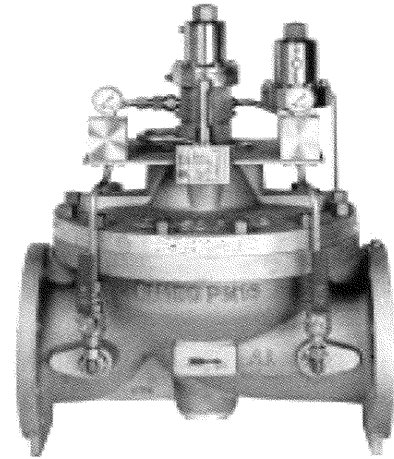
#### Pilot Valve

1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Working Parts	S.S. 13%Cr., S.S. 316
3	Diaphragm	EPDM
4	Sealing	PTFE

#### Main Flow Valve

1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Neoprene, EPDM, Viton.
3	Valve Stem	AISI 304 and AISI 316.
4	Diaphragm	EPDM,
5	Spring	I.S. 4454 Grade III.
6	Adjusting Bolt	S.S.304.

MODEL NO.: 3700



Optional MOC: CN7M, CG8M, Monnel, Hest alloy are also available

DIMENSIONS: IN mm (Dimensions are approximate)

SIZE	2"	3"	4"	6"	8"	10"	12"
F	300	350	500	60	650	700	900
L	242	329	376	515	642	708	719

\* Please refer VKE

Note :- Dimensions are subject to change without prior notice.



VKE VALVES INDUSTRIES PVT. LTD.

# UP- STREAM LOW PRESSURE RUBBER DIAPHRAGM REGULATOR

MODEL NO.: 3800

SPECIFICATIONS	
<b>SERVICE MEDIUM</b>	<b>GAS &amp; LIQUID</b>
ADJUSTABLE PRESSURE	20mm WC-1.5Kg/Cm <sup>2</sup> g
MAX WORKING TEMP.	*80° C
* Depend on material of diaphragm & Seat Seal	

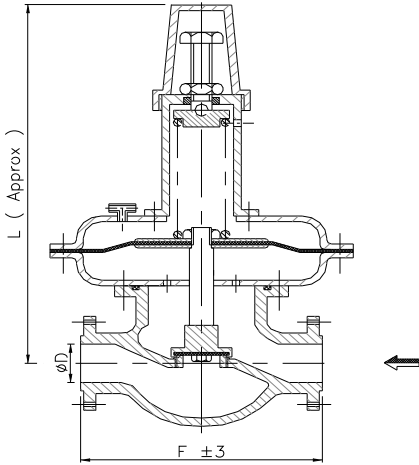
SEAT LEAKAGE RATE		
<b>DISC &amp; SEAT</b>	NBR	PTFE
<b>LEAKAGE CLASS</b>	VI	VI

SPRING RANGE		
<b>CODE</b>	<b>SET PRESSURE RANGE</b>	<b>COLOUR</b>
<b>D-10</b>	20-200 mm/WC	WHITE
<b>D-20</b>	200-3000 mm/WC	GRAY
<b>D-30</b>	3000 mm/WC ~1.5 Kg/Cm <sup>2</sup> g	BLUE

CONSTRUCTION	
1	Internal/External pilot pulse, rubber diaphragm type up stream low pressure-regulating valve.
2	Flanges will be drilled unless otherwise specified.
3	End Connections are available in Flanged, Screwed as standard.
4	Safety Diaphragm can be provided for Ha zards appli cation*.

MATERIAL LIST		
1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Neopren e, EPDM, Viton.
3	Stem	AISI 304 and AISI 316.
4	Diaphragm	Neopren e, Viton.
5	Spring	I.S. 4454 Grade III.
6	Adjusting Bolt	S.S.304.

Optional MOC: CN7M, CG8M, Monnel, Hest alloy are also availa



DIMENSIONS: IN mm (Dimensions are approximate)

SIZE		½"	¾"	1"	1½"	2"	2½"	3"	4"	6"	8"	10"
<b>F</b>	<b>Flanged</b>	110	150	150	165	200	225	225	320	407	495	625
	<b>Screwed</b>	108	108	108	130	150	NA					
<b>L</b>	<b>Flanged</b>	290	290	320	325	330	350	370	420	*	*	*
	<b>Screwed</b>						NA					

\* Please refer VKE  
**Note:** - Dimensions are subject to change without prior notice.



# UP- STREAM MID RANGE PILOT PISTON REGULATOR

MODEL NO.: 3900

SPECIFICATIONS	
SERVICE MEDIUM	GAS & LIQUID
ADJUSTABLE PRESSURE	2 -15Kg/Cm <sup>2</sup> g
MAX WORKING TEMP.	*80° C
* Depend on material of diaphragm & Seat Seal	

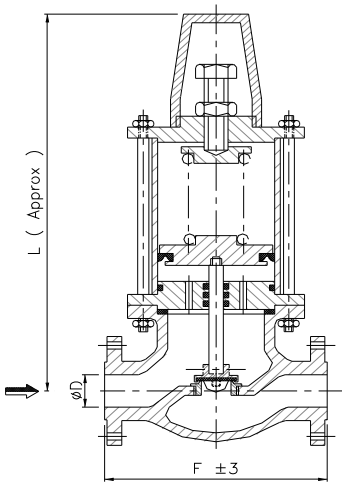
SEAT LEAKAGE RATE		
DISC & SEAT	NBR	PTFE
LEAKAGE CLASS	VI	VI

SPRING RANGE		
CODE	SET PRESSURE RANGE	COLOUR
DH-10	2 –10 Kgs/cm <sup>2</sup> g.	PLATED
DH-20	10 – 15 Kgs/cm <sup>2</sup> g	PLATED

CONSTRUCTION	
1	Internal pilot Spring loaded piston type up stream low pressure-regulating valve.
2	Flanges will be drilled unless otherwise specified.
3	End Connections are available in Flanged, Screwed as standard.

MATERIAL LIST		
1	Body	Cast iron, ASTM A216-WCB, ASTM A351-CF8 & ASTM A351-CF8M
2	Seat	Neoprene, Viton, Teflon.
3	Stem	AISI 304 and AISI 316.
4	Piston	ASTM A216 – WCB, ASTM A351 – CF8, & CF8M.
5	Spring	I.S. 4454 Grade III.
6	Adjusting Bolt	S.S.304.

Optional MOC: CN7M, CG8M, Monnel, Hest alloy are also available\*.



DIMENSIONS: IN mm (Dimensions are approximate)

SIZE		½"	¾"	1"	1½"	2"	3"	4"
F	Flanged	110	160	160	165	225	250	320
	Screwed	108	108	108	130	130	NA	
L	Flanged	330	360	360	365	365	410	550
	Screwed							

\* Please refer VKE  
 Note: - Dimensions are subject to change without prior notice.

