



RASAII

SLEEVED PLUG VALVES



About Ourselves

RASAII is an International Company. Founded in 1981, Rasaii Flow Lines has been engaged in design, Manufacture and Distribution of High Tech Valves.

Over the last 20 years, **RASAII** has been providing its Valves for various end - uses and applications in refineries, petrochemicals, fertilizers, sugar, paper, steel, cement, chemical and pharmaceutical industries as well as in power plants around the world.

RASAII's design and engineering are novel and unique and conform to international standards and specifications. Our products are tested for various standards and ratings and are superior in quality.

Manufactured by :

M/s. RASAII FLOW LINES PVT LTD,
TS No: Ferndale, 1st Avenue,
RWD Layout, Near Gayathri Nagar,
Medavakkam, Chennai - 600100.
Tel: + 91-44-2244 7285, + 91-44-2245 7658
Fax: + 91-44-2244 7616
Email: rfl@md2.vsnl.net.in
URL: www.rflexports.com

Our Distributor / Representative :



RASAII

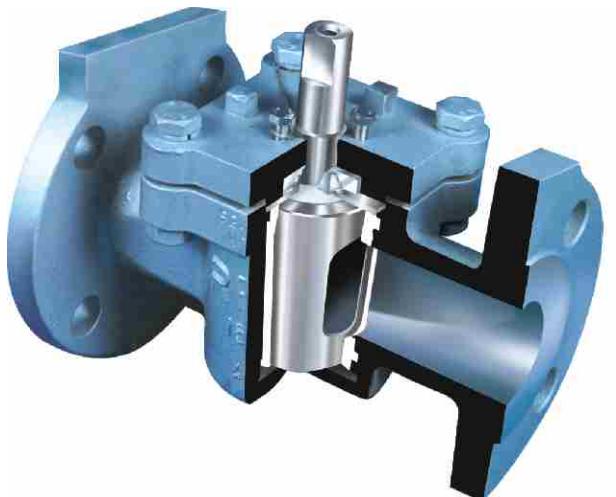
SLEEVED PLUG VALVES

MATCHLESS IN QUALITY AND VALUE



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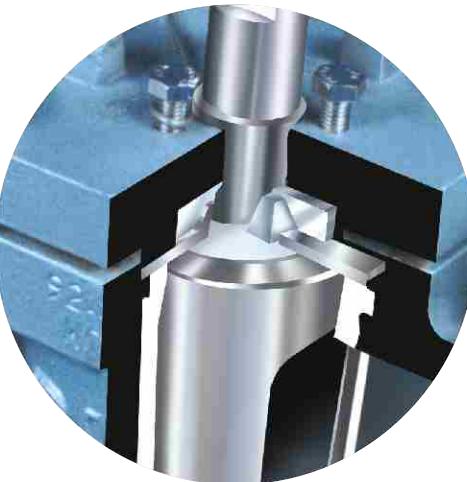
**Most Efficient, Non-Lubricated,
Corrosion Resisting, Self-Sealing and Long Lasting.**



Components

Body / Cover
Plug
Sleeve
Diaphragm And
Wedge Ring
Metal Diaphragm
Thrust Collar
Washer
Studs & Nut

See Page No 7
PTFE
PTFE
SS 316
SS 316
PTFE
B7 & 2H / SS 316



DIAPHRAGM AND
WEDGE RING
EXPOSED VIEW

Design Features

- Valves up to 4" in investment casting.
- 6" and above made out of Sand or Shell Casting.
- Superior Finish and longer life of valve body.
- Bi-directional flow.
- Positive shut-off with inline adjustment.
- Positive stem seal with reverse lip design.
- Inline PTFE sleeve surrounds the plug.
- PTFE sleeve locked in the body and field replaceable, on line.
- Designed for throttling.
- Unique plug and body design for low torque operation.
- Non-Lubricated, self-cleaning of plugs while in operation.
- Zero leakage (Bubble tight shut-off).
- Easy assembling and disassembling.
- Technologically superior design, our speciality.
- Cost effective and top value for your dollar.
- Proven performance.
- Self sealing.

RASAI SLEVED PLUG VALVES WITH IMPECCABLE PERFORMANCE!

Material and Specifications:

Refer to page 7,

How to order RASAI sleeved plug valves ?

For Class 150#

Size	Break - Away Torque inch Lbs (Nm)	Flow Rate (Value)	
		Cv	Kv
1/2	15	192 (25.5)	9.5 11
3/4	20	192 (25.5)	9.5 11
1	25	308 (35)	42 49
1 1/2	40	460 (52)	95 112
2	50	630 (71)	190 224
3	80	965 (110)	326 384
4	100	1450 (165)	694 816
6	150	3820 (370)	1112 1308
8	200	6366 (721)	1665 1960

Torque

Start - Break - Away Torque



Running - 60% of B.A.T

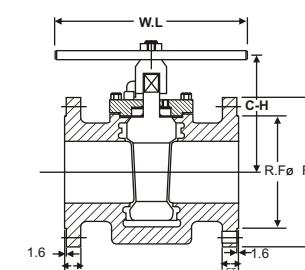
Close - 80% of B.A.T

To obtain - Kv Value multiply
Cv Value by 0.85

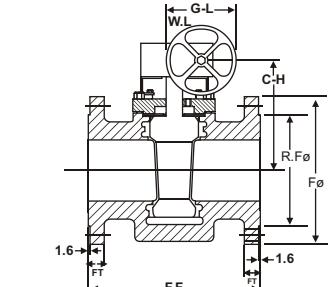
4 inch Class 300# plug valve with gear box
on special request.

SLEEVED PLUG VALVE DRAWINGS

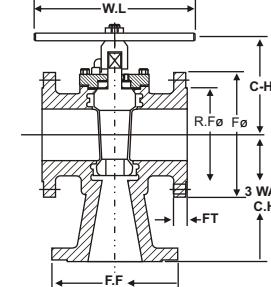
1/2" TO 4"



6" and Above, Gear Operated



3-Way Valves

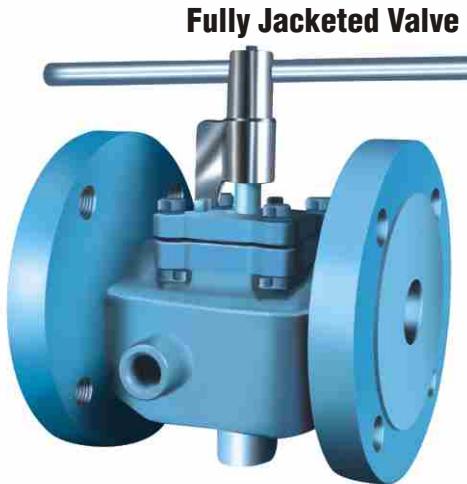


British Unit

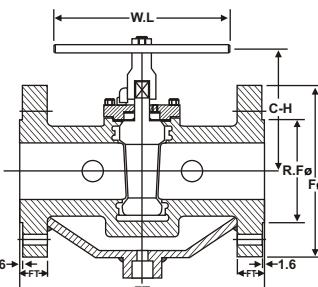
Size	F-F		FØ		F.T		RFØ	RFT	P.C.D		NOH		SOH		W.L	G.L	C-H		3-WAY C.H				
	CLASS		CLASS		CLASS				CLASS		CLASS		CLASS					CLASS		CLASS			
	150#	300#	150#	300#	150#	300#	150#	300#	150#	300#	150#	300#	150#	300#			150#	300#	150#	300#			
1/2	4.25	5.50	3.50	3.75	.44	.56	1.38	.06	2.38	2.63	4	4	.63	.63	6.38	6.38	2.92	2.92	2.75	2.88			
3/4	4.63	6.00	3.88	4.63	.44	.63	1.69	.06	2.75	3.25	4	4	.63	.75	6.38	6.38	2.92	2.92	2.88	3.00			
1	5.00	6.50	4.25	4.88	.44	.69	2.00	.06	3.13	3.50	4	4	.63	.75	8.75	8.75	3.25	3.25	3.50	3.78			
1 1/2	6.50	7.50	5.00	6.13	.56	.81	2.88	.06	3.88	4.50	4	4	.63	.88	12.50	12.50	3.75	3.75	4.13	4.38			
2	7.00	8.50	6.00	6.50	.63	.88	3.63	.06	4.75	5.00	4	8	.75	.75	18.00	18.00	4.50	4.50	4.50	4.78			
2 1/2	8.00	11.13	7.50	8.25	.75	1.13	4.13	.06	5.50	5.88	4	8	.75	.88	24.00	24.00	4.75	4.75	5.13	5.58			
3	8.00	11.13	7.50	8.25	.75	1.13	5.00	.06	6.00	6.63	4	8	.75	.88	24.00	24.00	5.00	5.00	6.13	5.58			
4	9.00	12.00	9.00	10.00	.94	1.25	6.19	.06	7.50	7.88	8	8	.75	.88	30.00	30.00	6.10	6.10	6.00	6.78			
6	10.50	15.88	11.00	12.50	1.00	1.44	8.50	.06	9.50	10.63	8	12	.88	.88	18	18	7.75	7.75	7.50	8.50			
8	11.50	16.50	13.50	15.00	1.13	1.63	10.63	.06	11.75	13.00	8	12	.88	1.00	18	18	9.50	9.50	9.00	10.00			
10	13.00	18.00	16.00	17.50	1.19	1.88	12.75	.06	14.25	15.25	12	16	1.00	1.13	24	24	11.00	11.00	11.00	12.00			
12	14.00	19.75	19.00	20.50	1.25	2.00	15.00	.06	17.00	17.75	12	16	1.00	1.25	30	30	12.50	12.50	12.50	12.50			
14	15.00	30.00	21.00	23.00	1.38	2.12	16.25	.06	18.75	20.25	12	20	1.13	1.25	30	30	13.00	13.00	13.00	13.00			
16	30.00	33.00	23.50	25.50	1.44	2.25	18.50	.06	21.25	22.50	16	20	1.13	1.38	24	24	15.00	15.00	15.00	15.00			

Metric Unit

Size	F-F		FØ		F.T		RFØ	RFT	P.C.D		NOH		SOH		W.L	G.L	C-H		3-WAY C.H		
	CLASS		CLASS		CLASS				CLASS		CLASS		CLASS					CLASS		CLASS	
	150#	300#	150#	300#	150#	300#	150#	300#</th													


Fully Jacketed Valve

- Fully jacketed valve is specially designed for circulation of hot or cold gas or liquids.
- Design permits through hydrostatic or pneumatic testing of the body prior to addition of jacket.
- Proven performance in critical temperature control applications.
- Multiple connections allow for proper jacket drainage.
- Fully jacketed sleeved plug valve is the chosen preference for complex fluid applications.
- Over-sized flange in accordance with international standards.
- Can withstand up to 270°C temperature.
- Anti-static eliminator is a standard feature in RASAI valves.

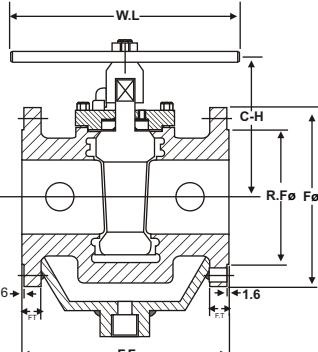

British Unit

all dimensions in Inches

Size	F-F		FØ		F.T		RFØ	RFT	P.C.D		NOH		SOH		C-H		3-WAY C.H.			
	CLASS		CLASS		CLASS				CLASS		CLASS		CLASS		CLASS		CLASS			
	150#	300#	150#	300#	150#	300#			150#	300#	150#	300#	150#	300#	150#	300#	150#	300#		
1/2 x 1	5.00	6.50	4.25	4.88	.44	.69	2.00	.06	3.13	3.50	4	4	.63	.75	3.25	3.25	3.50	3.75		
3/4 x 1	5.00	6.50	4.25	4.88	.44	.69	2.00	.06	3.13	3.50	4	4	.63	.75	3.25	3.25	3.50	3.75		
1 x 2	7.00	8.50	6.00	6.50	.63	.88	3.63	.06	4.75	5.00	4	8	.75	.75	4.50	4.50	4.50	4.75		
1 1/2 x 2 1/2	8.00	11.13	7.50	8.25	.75	1.13	4.13	.06	5.50	5.88	4	8	.75	.88	4.75	4.75	5.13	5.56		
2 x 3	8.00	11.13	7.50	8.25	.75	1.13	5.00	.06	6.00	6.63	4	8	.75	.88	5.00	5.00	5.13	5.56		
3 x 4	9.00	12.00	9.00	10.00	.94	1.25	6.19	.06	7.50	7.88	8	8	.75	.88	6.10	6.10	6.00	6.75		
4 x 6	10.50	15.88	11.00	12.50	1.00	1.44	8.50	.06	9.50	10.63	8	12	.88	.88	7.75	7.75	7.50	8.50		
6 x 8	11.50	16.50	13.50	15.00	1.13	1.63	10.63	.06	11.75	13.00	8	12	.88	.88	9.50	9.50	9.00	10.00		
8 x 10	13.00	18.00	16.00	17.50	1.19	1.88	12.75	.06	14.25	15.25	12	16	1.00	1.13	11.00	11.00	11.00	12.00		
10 x 12	14.00	19.75	19.00	20.50	1.25	2.00	15.00	.06	17.00	17.75	12	16	1.00	1.25	12.50	12.50				
12 x 14	15.00	30.00	21.00	23.00	1.38	2.12	16.25	.06	18.75	20.25	12	20	1.13	1.25	13.00	13.00				

Partially Jacketed Valve

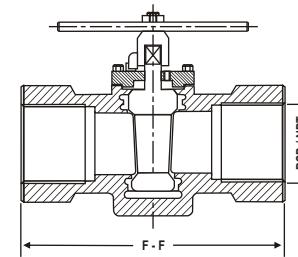
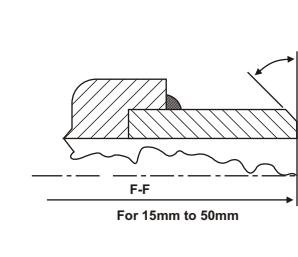
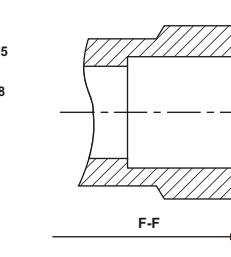

- Designed in compliance with international standards.
- Design portion extends up to body level only with normal flanges.
- Anti-static eliminator is a standard feature in RASAI valves.
- F-F Dimensions and Flange Diametre will vary to that of Fully Jacketed type.
- Total height of the valve including handle cup will differ.


British Unit

all dimensions in Inches

Size	F-F		FØ		F.T		RFØ	RFT	P.C.D		NOH		SOH		C-H		SWAY C.H.			
	CLASS		CLASS		CLASS				CLASS		CLASS		CLASS		CLASS		CLASS			
	150#	300#	150#	300#	150#	300#			150#	300#	150#	300#	150#	300#	150#	300#	150#	300#		
1	5.00	6.50	4.25	4.88	.44	.69	2.00	.06	3.13	3.50	4	4	.63	.75	3.25	3.25	3.50	3.75		
1 1/2	6.50	7.50	5.00	6.13	.56	.81	2.88	.06	3.88	4.50	4	4	.63	.88	3.75	3.75	4.13	4.38		
2	7.00	8.50	6.00	6.50	.63	.88	3.63	.06	4.75	5.00	4	8	.75	.75	4.50	4.50	4.50	4.75		
2 1/2	8.00	11.13	7.50	8.25	.75	1.13	4.13	.06	5.50	5.88	4	8	.75	.88	4.75	4.75	5.13	5.50		
3	8.00	11.13	7.50	8.25	.75	1.13	5.00	.06	6.00	6.63	4	8	.75	.88	5.00	5.00	5.13	5.50		
4	9.00	12.00	9.00	10.00	.94	1.25	6.19	.06	7.50	7.88	8	8	.75	.88	6.10	6.10	6.00	6.77		
6	10.50	15.88	11.00	12.50	1.00	1.44	8.50	.06	9.50	10.63	8	12	.88	.88	7.75	7.75	7.50	8.50		
8	11.50	16.50	13.50	15.00	1.13	1.63	10.63	.06	14.25	15.25	12	16	1.00	1.13	1.00	1.00	12.00			
10	13.00	18.00	16.00	17.50	1.19	1.88	12.75	.06												

all dimensions in Inches

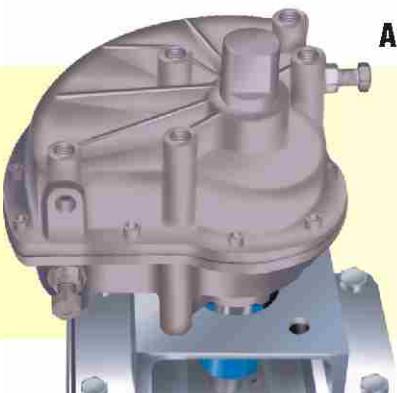

Screwed End

Butt Weld

Socket Weld

 Both straightway screwed end and 3-way screwed end valves are available upon request.
Class 150 and 300 wrench standard is maintained for all valves.

SIZE	.5	.75	1	1.5	2
F-F	3.25	3.25	4.63	5.5	6.5

SIZE	15	20	25	40	50
F-F	82.55	82.55	117.6	139.7	165.1

 Welding is possible without disassembling of the valve. Welding of ductile iron is not recommended.
Manufactured in compliance with ANSI B16.11

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Actuator Mounting (Pneumatic Actuator)

RASAI offers actuator mounting for sleeved plug valves to suit customers' requirements. We offer mounting provisions with actuator mounting brackets, with necessary holes pre drilled for easy mounting of pneumatic actuators. The actuator style number to be specified at the time of ordering the valve. Trouble free on/off operation of valve through pneumatic actuators is assured. The valves are tailor-made according to customer's preference.

Vane Type Actuator

Sleeved plug valve with locking device

Sleeved Plug Valves with locking device is also our specialty. **RASAI** provides only the provision for locking device, not the locks themselves, this ensures protection of valves from any unauthorized operation.



Rotary Mounting

RASAI offers rotary mountings for sleeved plug valves to suit customers' requirements. We offer mounting provisions with rotary mounting brackets, with necessary holes pre drilled for easy mounting of rotary actuator. Actuator style to be specified at the time of ordering. The valve is tailor-made according to customers' preference.

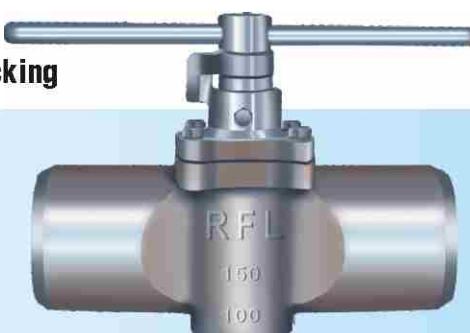
RASAI can also offer electrical actuator mountings for sleeved plug valve to suit customers' requirements. We offer mounting provisions with electrical actuator mounting brackets, with necessary holes pre drilled for easy mounting of electrical actuators. Electrical Actuator model is to be specified at the time of ordering the valve. Trouble free on/off operation of the valves through electrical actuator is assured.



Mounting Bracket for Actuator

Sleeved plug valve with extended gland packing

Extended Gland Packing is also a **RASAI**'s specialty. Extended Packing is available upon customers' request, when specified.



VALVE TYPE

SPV	SLEEVED PLUG VALUE
SPJ	SLEEVED PLUG VALVE JACKETED

PRESSURE CLASS

1	150#
3	300#
6	600#

PLUG

02	DI
03	WCB
04	SS 316 (CF8M)
05	SS 316L (CF3M)
06	CD4Mcu
07	ALLOY 20 (CN7M)
08	Hastalloy 'B'
09	Hastalloy 'C'
10	Monel 400

BODY / END PIECE MATERIAL

02	DI
03	WCB
04	SS 316 (CF8M)
05	SS 316L (CF3M)
06	CD4Mcu
07	ALLOY 20 (CN7M)
08	Hastalloy 'B'
09	Hastalloy 'C'
10	Monel 400

LINING

N	NO LINING *
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*Created to Balance Part Nos.

END CONNECTION

FE	FLANGED END
SE	SCREWED END
BW	BUTT WELD
SW	SOCKET WELD
3W	3 WAY
4W	4 WAY

Easy Method of Ordering Using Part Numbers

EXAMPLE*

Sleeved plug valve	SPV
Class 300#	3
WCB Body	03
SS 316 Plug	04
No lining	N
Wrench Operated	W
Flanged End	FE
Size 1 1/2"	0150

SIZES

SIZES	INCHES	MM
0050	1/2"	15
0075	3/4"	20
0100	1"	25
0150	1 1/2"	40
0200	2"	50
0300	3"	80
0400	4"	100
0600	6"	150
0800	8"	200
1000	10"	250
1200	12"	300
1400	14"	350
1600	16"	400

For easy method of Ordering use the chart and use the part numbers specified above.

*Example:

SPV30304NWFE0150
SLEEVED PLUG VALVE, CLASS 300#, BODY - WCB, PLUG-SS316, SLEEVE-N(No LINING) WRENCH OPERATED, END CONNECTION - FLANGED END, SIZE - 1 1/2"

Note

Available in both ANSI class 150# & 300# & DIN and BS standards.

Special alloy valves are also available upon request. Pressure tested to standard **API-598** and designed as per **API - 599**