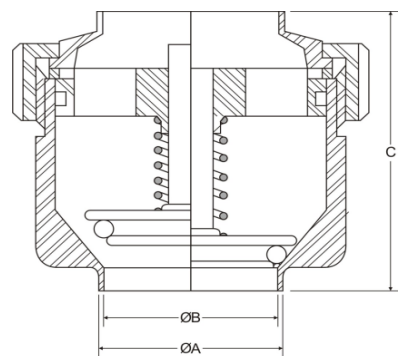




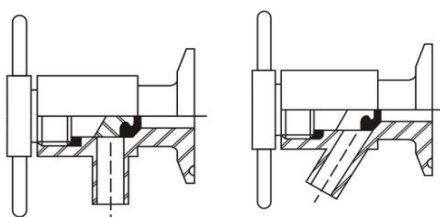
Válvula de retenção para solda (VRA)

	ØA	ØB	C
1"	25,4	22,4	93
1½"	38,1	35,1	93
2"	50,8	47,8	104
2½"	63,5	59,5	122
3"	76,2	72,2	122
4"	101,6	97,6	154
5"	127	122	176
6"	152,4	147,4	176
8"	203,2	198,2	212



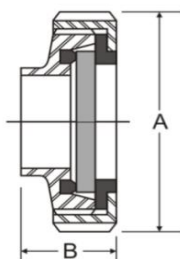
Torneira de amostra

Terminais	
TC	½" e ¾"
	1" e 1½"
BSP	½"
	¾"
NPT	½"
	¾"



Visor de linha tipo macho

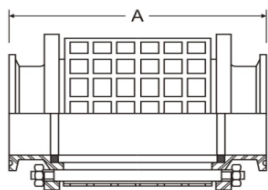
(medidas e mm)



Ø	A	B	Pressão Máx. (Kg/cm²)
1"	63,0	31,0	15,0
1½"	78,0	31,0	11,0
2"	92,0	31,0	10,0
2½"	112,0	35,0	10,0
3"	127,0	40,0	8,0
4"	148,0	41,0	6,0
5"	178,0	57,0	5,0
6"	210,0	62,0	4,0

Visor de linha tubular

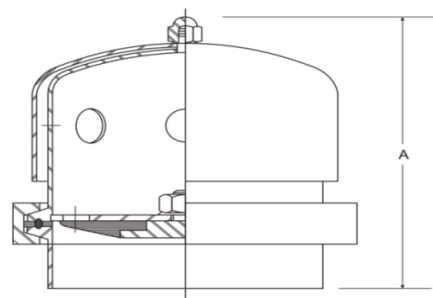
(medidas e mm)



Ø	solda	2TC	A					
			RJT		SMS		DIN	
			2M	M-NP	2M	M-NP	2M	M-NP
1"	145,0	170,4	198,0	184,5	177,0	174,0	193,0	189,0
1½"	145,0	170,4	198,0	184,5	185,0	178,0	193,0	189,0
2"	145,0	170,4	198,0	184,5	185,0	178,0	193,0	190,0
2½"	149,0	174,4	202,0	188,5	197,0	186,0	203,0	200,0
3"	153,0	178,4	206,0	192,5	201,0	190,0	215,0	208,0
4"	171,0	202,8	224,0	217,5	241,0	223,0	233,0	230,0

Os visores são fabricados em borosilicato temperado que possui alta resistência a ataques químicos, suporta temperaturas de até 320° C e tolera choques térmicos de até 265° C

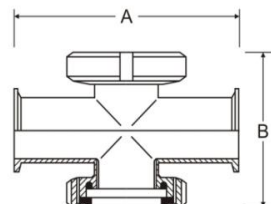
Válvula quebra vácuo



Ø	A
2"	82,0
4"	117,0

Visor de linha tipo cruzeta

(medidas e mm)



Ø	A					B
	solda	TC	SMS	RJT	DIN	
1"	96	121,4	149	128	144	93,4
1½"	114,4	140	167,4	154	163	105
2"	152,4	177,8	205,4	192	202	119
2½"	154	179,4	207	202	208	139,5
3"	166	191,4	219	214	228	162,2
4"	197	228,8	250	267	259	189,6
5"	226	257,8	-	-	-	247
6"	226	257,8	-	-	-	282,4

Sob consulta

Para as normas DIN, RJT e SMS foram considerada terminais tipo macho.

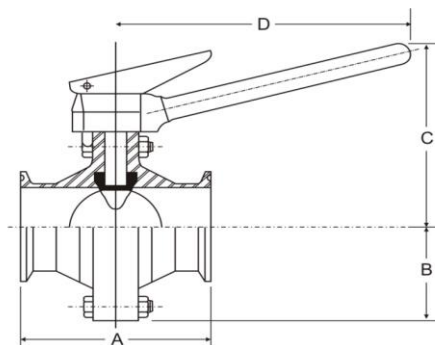


Pneumática

(medidas e mm)

Pressão de teste hidrostático: 1" a 3" - 13kgf/cm² 22°C
4" - 6kgf/cm² 22°C

Temperatura máxima de trabalho: EPDM - 90°C
Silicone - 140°C
Viton - 250°C



Ø	DIN								RJT		SMS	
	Sol	2TC	2M	MNP	2M	MNP	2N	MNP	2N	MNP	B	C
1"	48,0	73,0	92,0	90,0	92,0	83,0	80,0	77,0	75,0	106		
1½"	48,0	73,0	92,0	90,0	92,0	83,0	88,0	81,0	82,0	106		
2"	48,0	73,0	92,0	90,0	92,0	83,0	88,0	81,0	90,0	106		
2½"	52,0	77,0	104,0	102,0	96,0	88,0	100,0	89,0	97,0	106		
3"	52,0	77,0	112,0	106,0	96,0	90,0	100,0	89,0	102,0	158		
4"	64,0	96,0	124,0	122,0	118,0	107,0	140,0	119,0	116,0	158		

Esta válvula possui uma posição intermediária de 45° (entre fechada e aberta), permanecendo assim, ele permite esta regulagem de fluxo.

Pneumática

(medidas e mm)

Para operações automatizadas a Válvula Borboleta pode ser fornecida com atuador pneumático com acionamento por AR retorno por AR ou acionamento por AR e retorno por Mola, assumindo a posição NF (Normalmente Fechada) ou NA (Normalmente Aberta).

Opcionais:

Uma ou duas chaves de fim de curso (microswitches) para indicação remota da posição da válvula (alternativa) também disponível na Válvula Manual
Válvula Solenóide para controle do ar do Atuador

Torque da Válvula Borboleta:

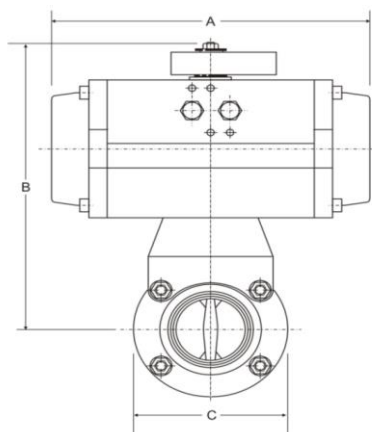
Bitola 1" 1½" 2" 2½" 3" 4"
Torque Kgf.m 0,7 1,0 1,4 2,0 2,4 3,1

Ar Comprimido:

Pressão mínima de ar recomendável: 6,0 Kgf/cm²
Pressão máxima de ar recomendável: 10,0 Kgf/cm²

Ø	A	B	C
1"	152,0	148,6	80,0
1½"	152,0	176,3	96,0
2"	152,0	173,4	111,0
2½"	193,0	184,4	125,0
3"	193,0	201,8	132,0
4"	225,0	210,1	156,0

DEMAIS NORMAS OU GRAUS, SOB CONSULTA.

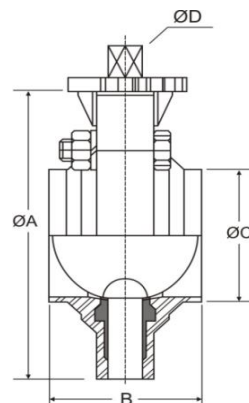




Válvula Borboleta tipo VB com terminais para Solda

(medidas e mm)

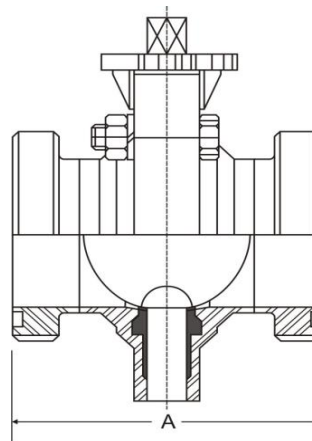
	Ø A	B	Ø C	Ø D
1"	74,0	36,0	25,4	9,5
1.1½"	97,0	44,0	38,1	9,5
2"	110,0	44,0	50,8	9,5
2.1½"	127,0	44,0	63,5	9,5
3"	140,0	48,0	76,2	9,5
4"	160,0	48,0	101,6	9,5
5"	192,0	60,0	127,0	15,0
6"	220,0	60,0	152,4	15,0



Válvula Borboleta tipo VB com dois machos

(medidas e mm)

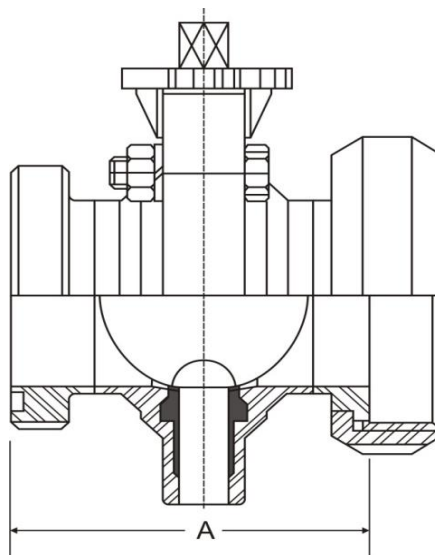
	A			
	DIN	RJT	SMS	IDF
1"	80,0	84,0	76,0	79,0
1.1½"	88,0	92,0	84,0	87,0
2"	88,0	92,0	84,0	87,0
2.1½"	96,0	92,0	92,0	87,0
3"	108,0	96,0	96,0	91,0
4"	108,0	96,0	118,0	91,0
5"	128,0	110,0	130,0	103,0
6"	140,0	118,0	130,0	103,0



Válvula Borboleta tipo VB com Macho / Niple + Porca

(medidas e mm)

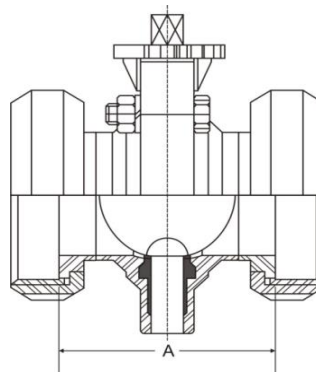
	A			
	DIN	RJT	SMS	IDF
1"	78,0	74,0	69,0	79,0
1.1½"	86,0	83,0	77,0	87,0
2"	88,0	84,0	77,0	87,0
2.1½"	94,0	84,0	81,0	87,0
3"	102,0	88,0	86,0	91,0
4"	105,0	88,0	99,0	91,0
5"	124,0	104,0	115,0	103,0
6"	130,0	109,0	115,0	103,0





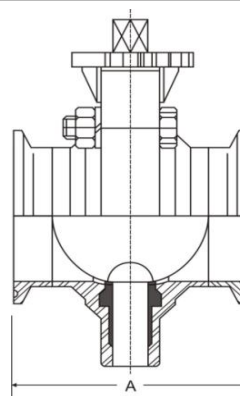
Válvula Borboleta tipo VB com dois Niples + Porca

A				
	DIN	RJT	SMS	IDF
1"	76,0	64,0	62,0	79,0
1.1½"	84,0	74,0	70,0	87,0
2"	88,0	76,0	70,0	87,0
2.1½"	92,0	76,0	70,0	87,0
3"	96,0	80,0	76,0	91,0
4"	102,0	80,0	80,0	91,0
5"	120,0	100,0	100,0	103,0
6"	120,0	100,0	100,0	103,0



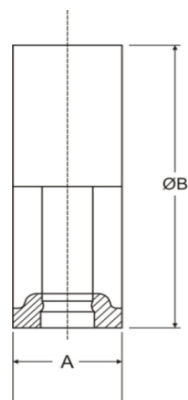
Válvula Borboleta tipo VB com dois Biples Clamp

Ø	A
1"	62,0
1.1½"	70,0
2"	70,0
2.1½"	70,0
3"	74,0
4"	74,0
5"	90,0
6"	90,0



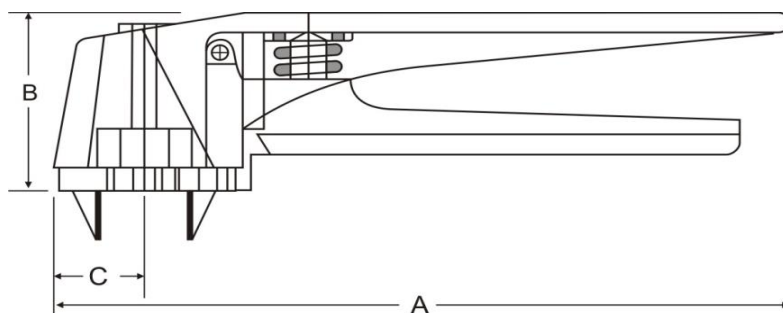
Vedação para Válvula Borboleta tipo VB

Ø	A	
1"	22,7	35,8
1.1½"	22,7	54,0
2"	22,7	66,0
2.1½"	22,7	82,0
3"	22,7	97,0
4"	26,5	116,4
5"	32,5	143,0
6"	32,5	168,0



Manipulo com trava e regulagem de 0 a 90 graus

A	B	C
171	46,0	21,0

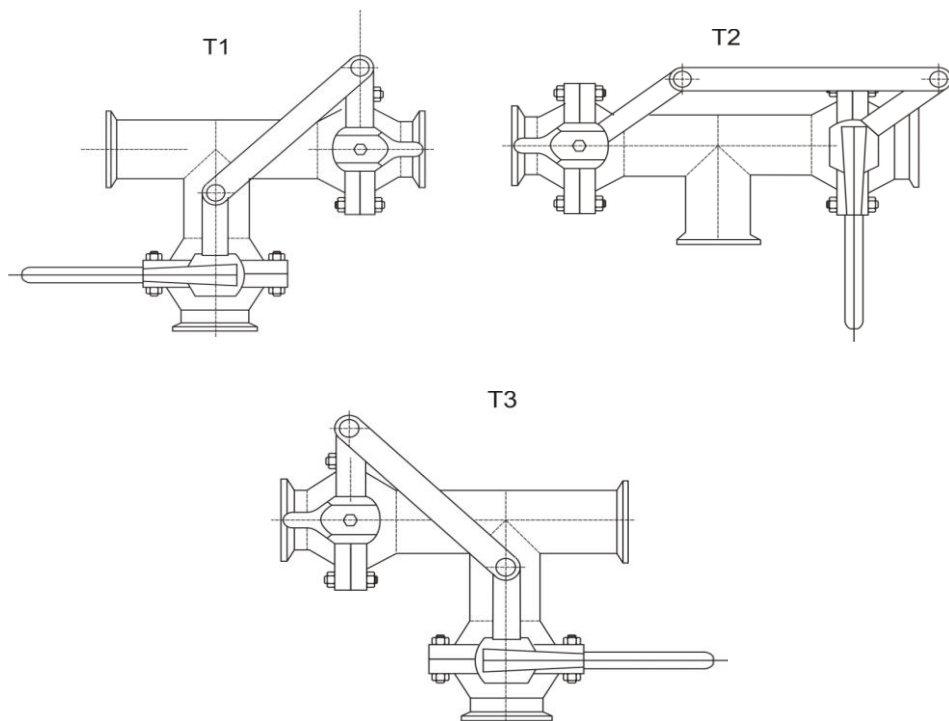




Multivias tipo T

(medidas e mm)

Ø	A	B	TC	C						D			
				RJT	SMS	IDF	DIM	TC	RJT	SMS	IDF	DIM	
1"	40,0	148,0	61,0	75,0	64,0	70,0	72,0	131,0	145,0	134,0	140,0	142,0	
1.1/2"	48,0	148,0	70,0	84,0	77,2	79,0	81,0	140,0	153,5	147,0	149,0	151,0	
2"	55,5	148,0	89,0	103,0	96,2	98,0	100,0	159,0	172,5	166,0	168,0	170,0	
2.1/2"	52,5	194,0	90,0	104,0	101,0	99,0	104,0	160,0	173,5	171,0	169,0	174,0	
3"	66,0	194,0	96,0	110,0	107,0	105,0	114,0	166,0	179,5	177,0	175,0	184,0	
4"	78,0	194,0	114,0	125,0	134,0	129,0	130,0	184,0	195,0	204,0	199,0	200,0	
5"	92,0	230,0	122,0	132,0	-	-	152,0	212,0	222,5	-	-	242,0	
6"	108,5	230,0	129,0	140,0	-	-	163,0	244,0	254,5	-	-	278,0	

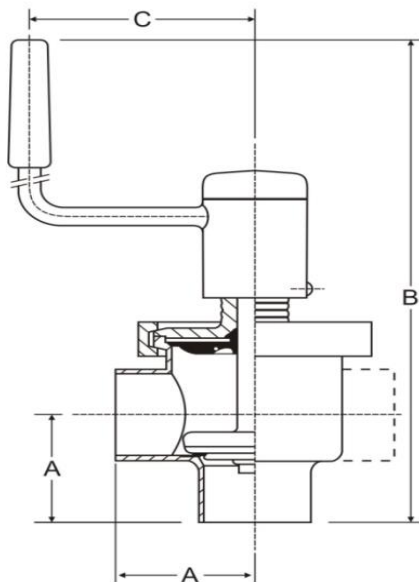




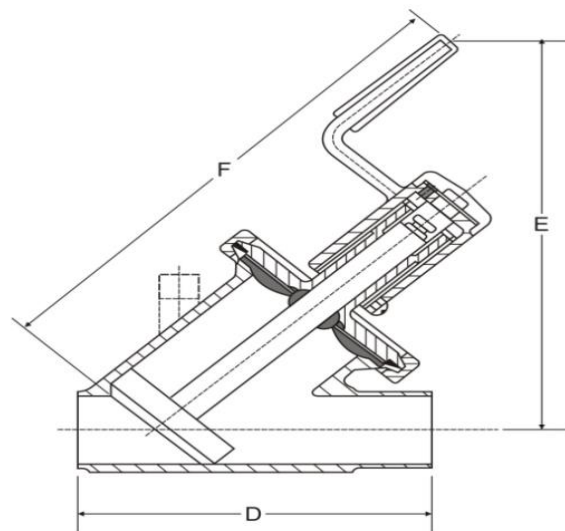
TUBOS E CONEXÃO
INOXIDÁVEIS

Válvula SMF e SPF

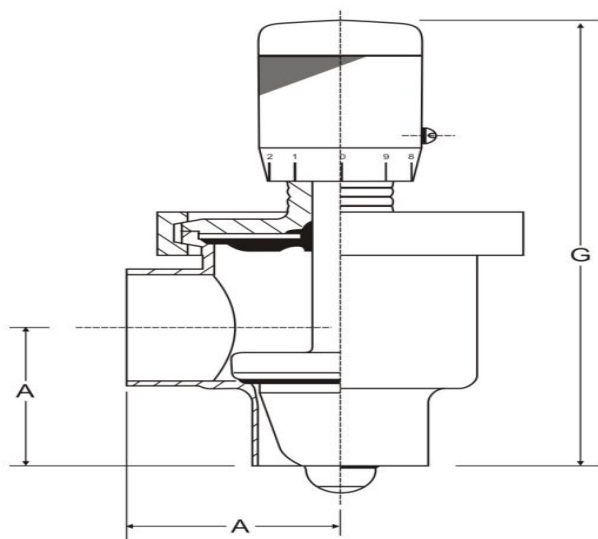
SMF Modelo 20



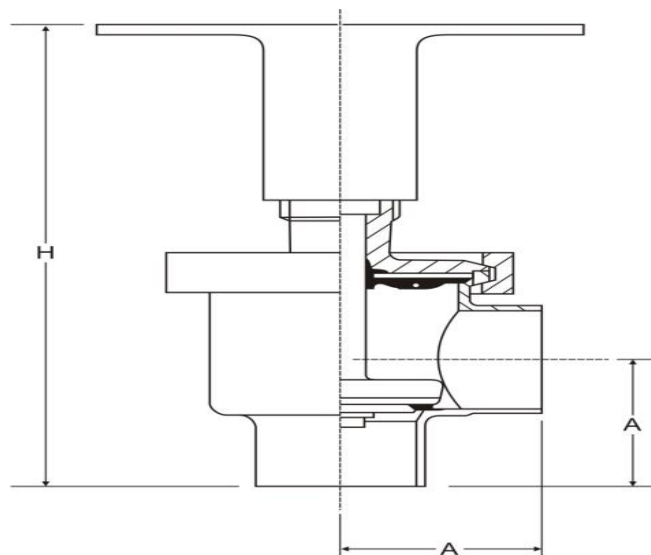
Planagem Reta



Micrométrica



Segurança

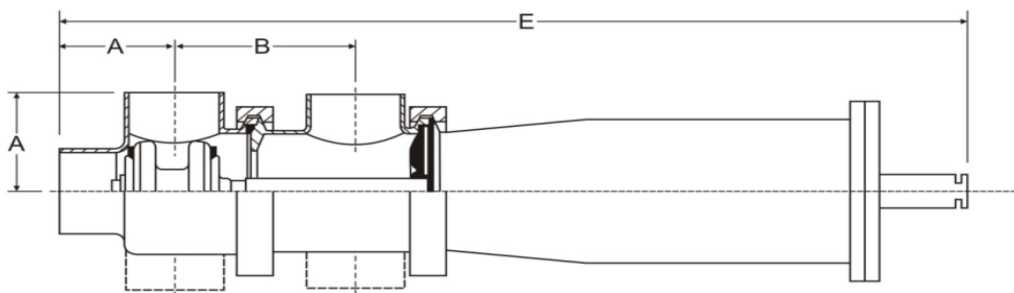


Ø	A	B	C	D	E	F	G	H
1"	48,2	298,5	100,0	-	-	-	214,5	272,5
1½"	48,5	292,5	100,0	-	-	-	208,5	266,5
2"	61,5	302,5	100,0	182,0	204,0	289,5	218,5	276,5
2½"	82,3	337,6	100,0	-	-	-	253,6	311,6
3"	87,3	355,2	100,0	-	-	-	271,2	329,2
4"	133,0	425,0	100,0	-	-	-	341,0	399,0

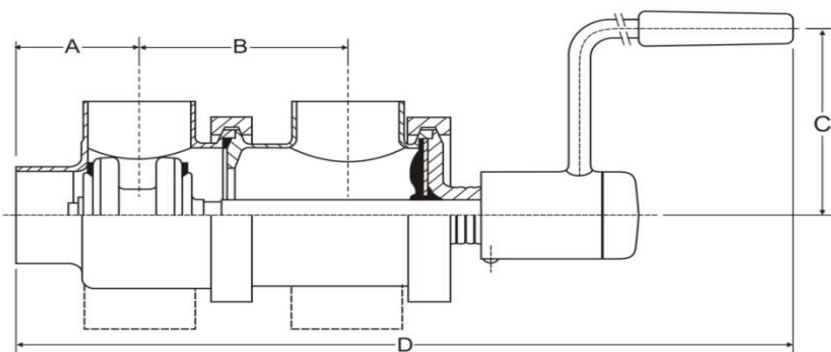
As dimensões referem-se à
válvula para solda. Fornecemos
também soldadas à terminais
TC, RJT, SMS E DIN.



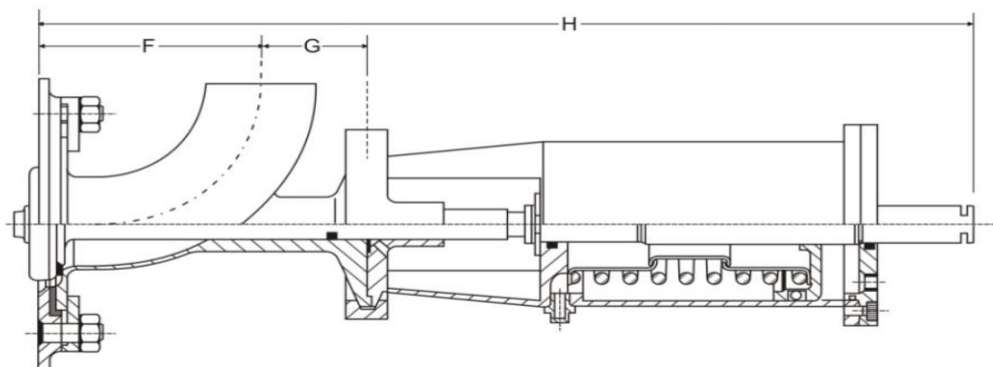
SPF Modelo 21



SPF Modelo 21



SPF Modelo 21



Ø	A	B	C	D	E	F	G	H
1"	48,2	85,7	100,0	298,5	377,0	63,5	38,1	384,8
1½"	48,5	79,5	100,0	292,5	371,0	82,6	44,5	410,3
2"	61,5	94,0	100,0	302,5	381,0	101,6	50,8	435,6
2½"	82,3	113,1	100,0	337,6	416,1	120,7	57,2	461,1
3"	87,3	131,9	100,0	355,2	438,2	139,7	63,5	486,4
4"	133,0	181,0	100,0	425,0	508,0	179,0	76,2	538,4

Nossa linha de válvulas da série SMF / SPF possuem peças modulares e intercambiáveis, facilitando assim a transformação de um modelo em outro. As válvulas manuais podem ser convertidas em pneumáticas apenas trocando-se o comando manual pelo atuador.