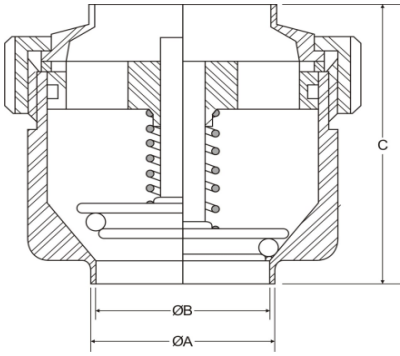


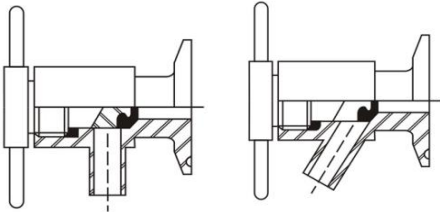
Válvula de retenção para solda (VRA)

	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

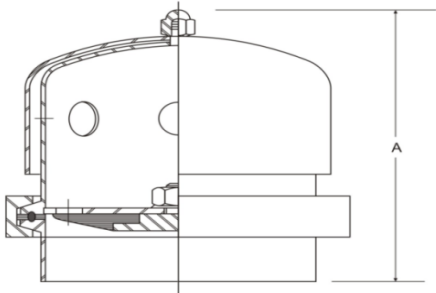


Torneira de amostra

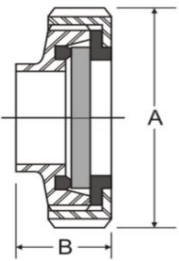
Terminais	
TC	½" e ¾"
	1" e 1½"
BSP	½"
	¾"
NPT	½"
	¾"



Válvula quebra vácuo



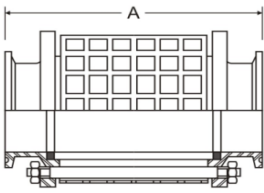
Visor de linha tipo macho (medidas e mm)



Ø	A	B	Pressão Máx. (Kgf/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

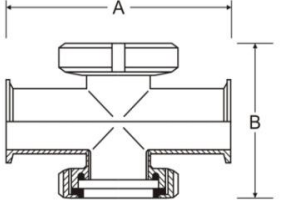
Ø	A
2"	82,0
4"	117,0

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

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

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

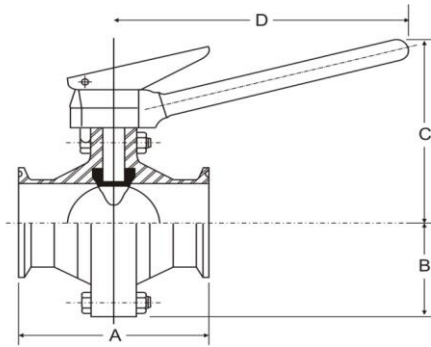
Sob consulta
Para as normas DIN, RJT e SMS foram considerada terminais tipo macho.

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



DIN RJT SMS
 Sol 2TC 2M MNP 2M MNP 2N MNP

Ø	A								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

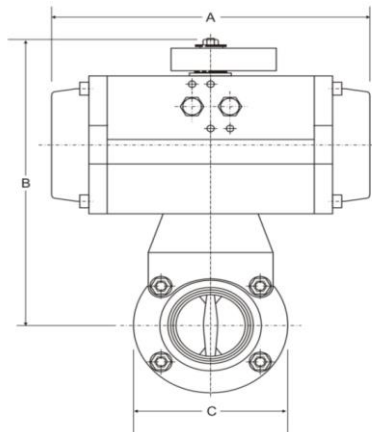
Torque da Válvula Borboleta:

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

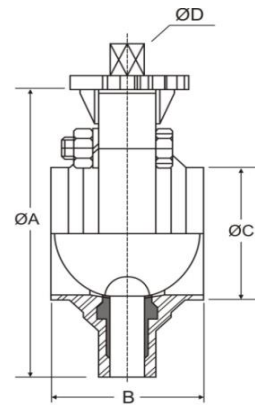


DEMAIS NORMAS OU GRAUS, SOB CONSULTA.

Válvula Borboleta tipo VB com terminais para Solda

(medidas e mm)

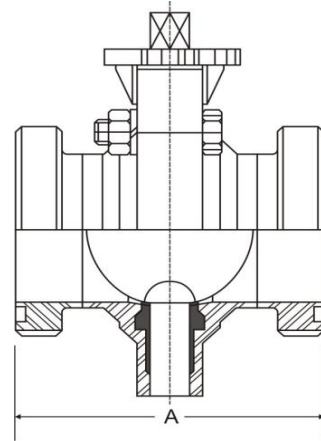
	Ø A	B	Ø C	Ø D
1"	74,0	36,0	25,4	9,5
1.1½"	97,0	44,0	38,1	9,5
2"	110,0	44,0	50,8	9,5
2.1½"	127,0	44,0	63,5	9,5
3"	140,0	48,0	76,2	9,5
4"	160,0	48,0	101,6	9,5
5"	192,0	60,0	127,0	15,0
6"	220,0	60,0	152,4	15,0



Válvula Borboleta tipo VB com dois machos

(medidas e mm)

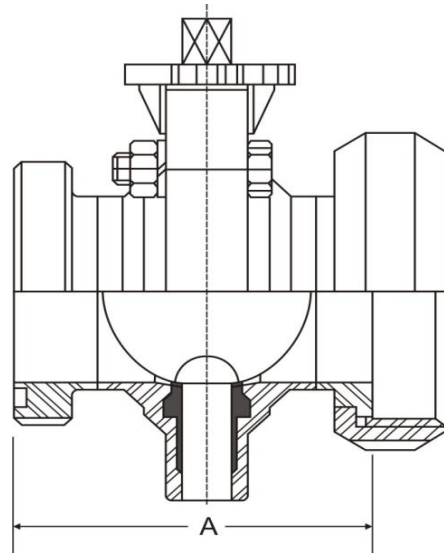
	A			
	DIN	RJT	SMS	IDF
1"	80,0	84,0	76,0	79,0
1.1½"	88,0	92,0	84,0	87,0
2"	88,0	92,0	84,0	87,0
2.1½"	96,0	92,0	92,0	87,0
3"	108,0	96,0	96,0	91,0
4"	108,0	96,0	118,0	91,0
5"	128,0	110,0	130,0	103,0
6"	140,0	118,0	130,0	103,0



Válvula Borboleta tipo VB com Macho / Niple + Porca

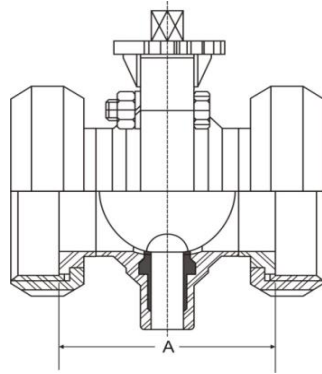
(medidas e mm)

	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



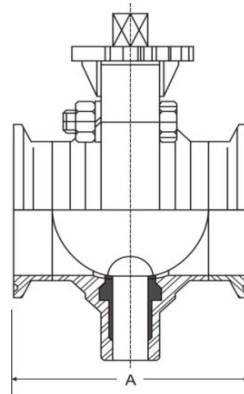
Válvula Borboleta tipo VB com dois Niples + Porca

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



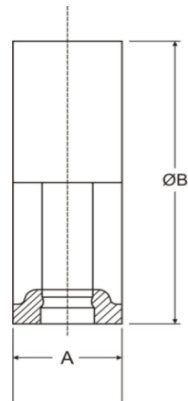
Válvula Borbolete tipo VB com dois Biples Clamp

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



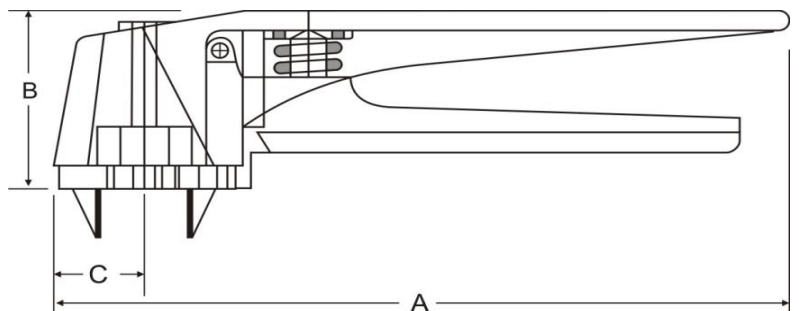
Vedação para Valvula Borboleta tipo VB

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

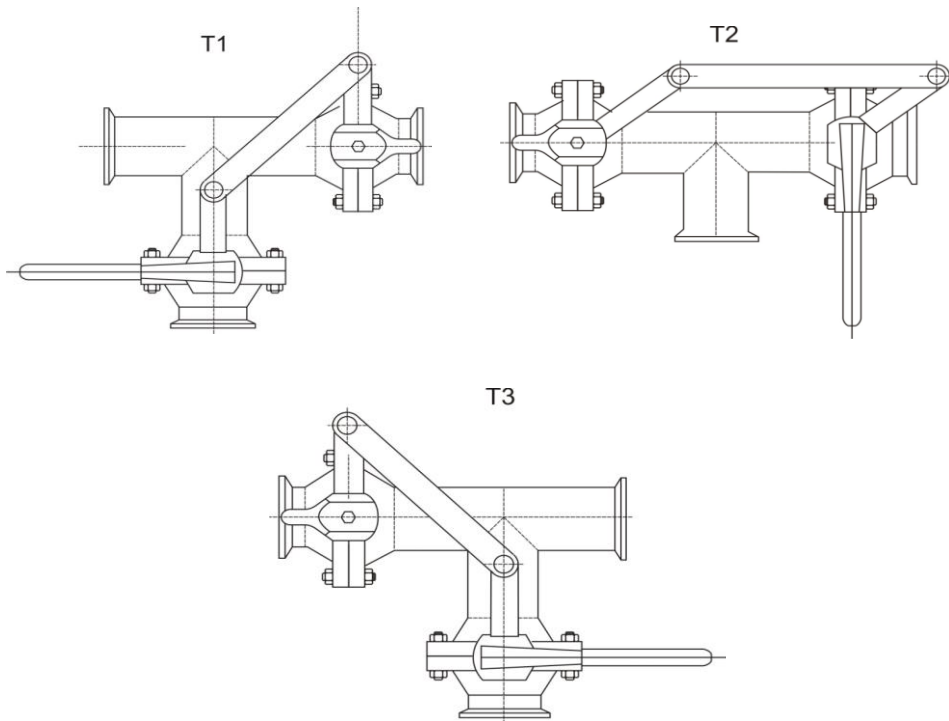
A	B	C
171	46,0	21,0



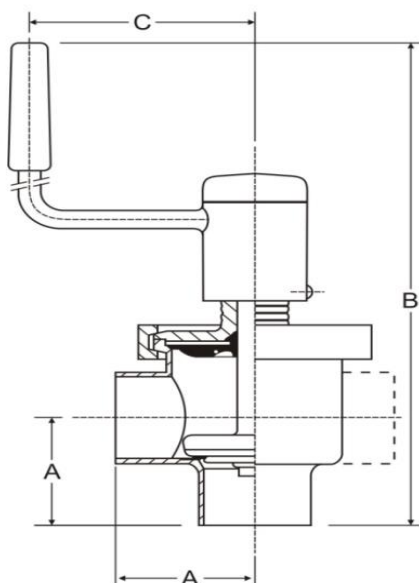
Multivias tipo T

(medidas e mm)

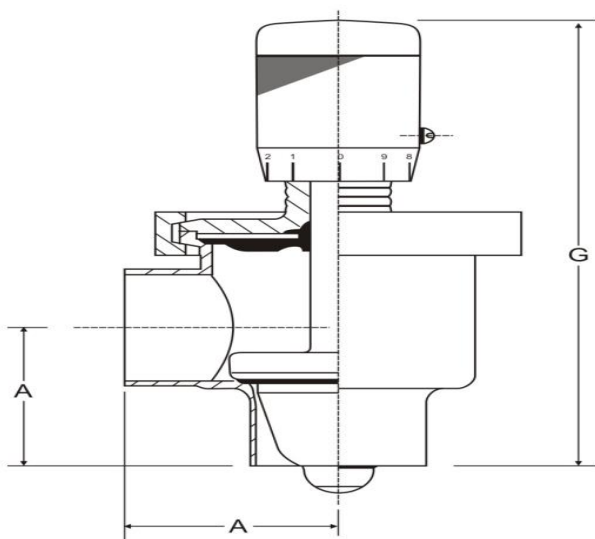
Ø	A	B	TC	C						D			
				RJT	SMS	IDF	DIM	TC	RJT	SMS	IDF	DIM	
1"	40,0	148,0	61,0	75,0	64,0	70,0	72,0	131,0	145,0	134,0	140,0	142,0	
1.1/2"	48,0	148,0	70,0	84,0	77,2	79,0	81,0	140,0	153,5	147,0	149,0	151,0	
2"	55,5	148,0	89,0	103,0	96,2	98,0	100,0	159,0	172,5	166,0	168,0	170,0	
2.1/2"	52,5	194,0	90,0	104,0	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	



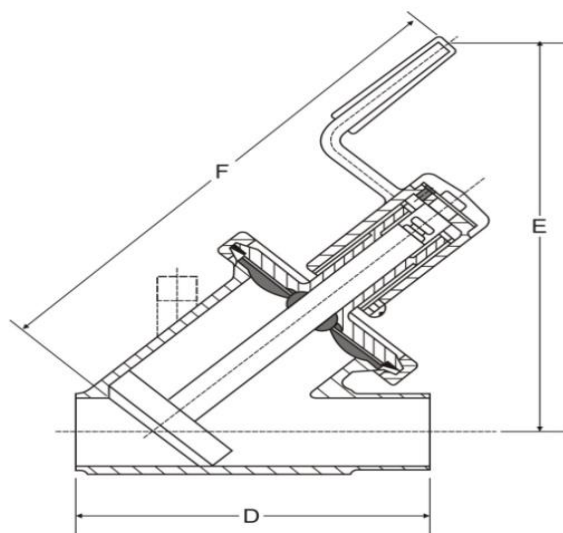
SMF Modelo 20



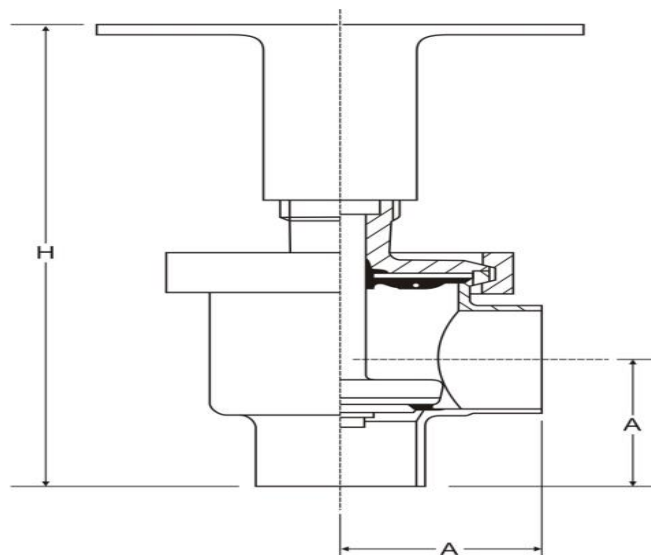
Micrométrica



Planagem Reta



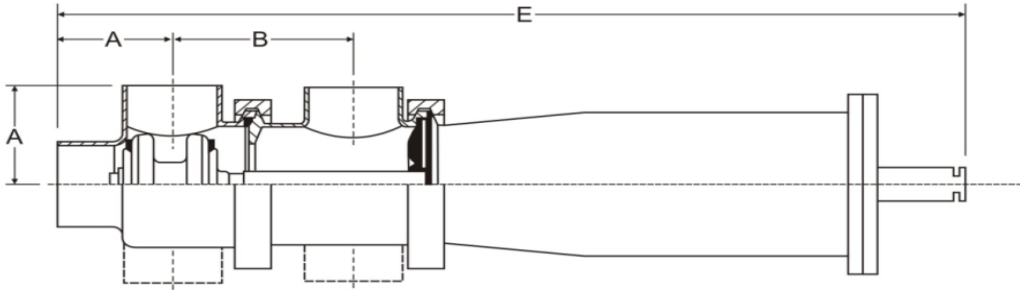
Segurança



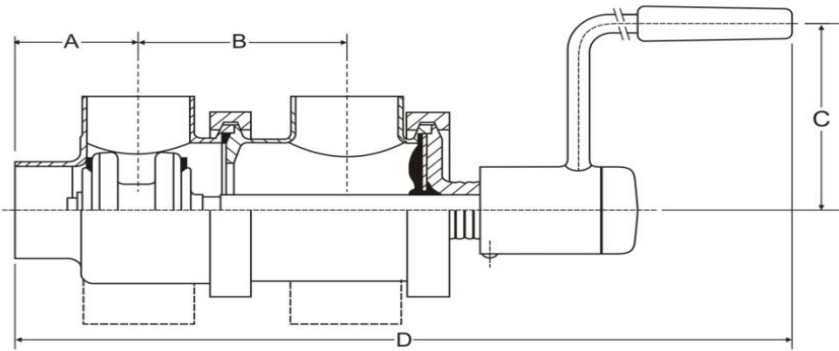
Ø	A	B	C	D	E	F	G	H
1"	48,2	298,5	100,0	-	-	-	214,5	272,5
1½"	48,5	292,5	100,0	-	-	-	208,5	266,5
2"	61,5	302,5	100,0	182,0	204,0	289,5	218,5	276,5
2½"	82,3	337,6	100,0	-	-	-	253,6	311,6
3"	87,3	355,2	100,0	-	-	-	271,2	329,2
4"	133,0	425,0	100,0	-	-	-	341,0	399,0

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

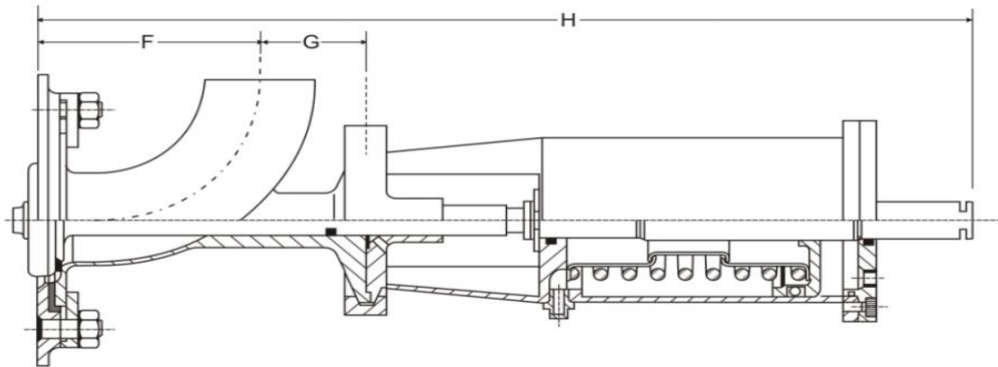
SPF Modelo 21



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.