

SI Cilindro ISO 15552 Doble Efecto

Strokmatic
Automation Technology



Articulaciones para Cilindro



**Horquilla I
Macho**



**Horquilla
Hembra Y**

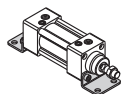


**Junta
Flotante**

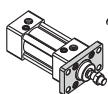


Rótula

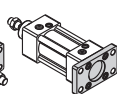
Tipos de Montaje



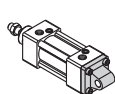
LB



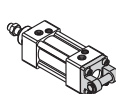
FA



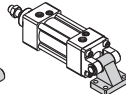
FB



CA



CB



CR

$$F = P \times A$$

Fuerza

(Empuje del Cilindro) N

=

Presión de Aire

MPa

x

Área de Cilindro

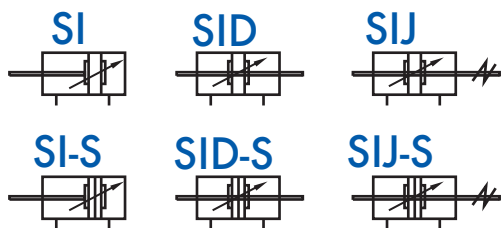
mm²

Fuerza de Trabajo

Unidad: Newton(N)													
Ø Cilindro (mm)	Ø Vástago (mm)	Tipo de Accionamiento		Área de Presión (mm²)	0.1	0.2	0.3	Presión de Trabajo (MPa)					
								0.4	0.5	0.6	0.7	0.8	0.9
32	12	Doble	Avance	804	80.4	160.8	241.2	321.6	402.0	482.4	562.8	643.2	723.6
		Efecto	Retorno	690	69.0	138.0	207.0	276.0	345.0	414.0	483.0	552.0	621.0
40	16	Doble	Avance	1256	125.6	251.2	376.8	502.4	628.0	753.6	879.2	1002.4	1130.4
		Efecto	Retorno	1055	105.5	211.0	316.5	422.0	527.5	633.0	738.5	844.0	949.5
50	20	Doble	Avance	1963	196.3	392.6	588.9	785.2	981.5	1177.8	1374.1	1570.4	1766.7
		Efecto	Retorno	1649	164.9	329.8	494.7	659.6	824.5	989.4	1154.3	1399.2	1484.1
63	20	Doble	Avance	3117	311.7	623.4	935.1	1246.8	1558.5	1870.2	2181.9	2493.6	2805.3
		Efecto	Retorno	2803	280.3	560.6	840.9	1121.2	1401.5	1681.8	1962.1	2242.4	2522.7
80	25	Doble	Avance	5026	502.6	1005.2	1507.8	2010.4	2513.0	3015.6	3518.2	4020.8	4523.4
		Efecto	Retorno	4536	453.6	907.2	1360.8	1814.4	2268.0	2721.6	3175.2	3628.8	4082.4
100	25	Doble	Avance	7853	785.3	1570.6	2355.9	3141.2	3926.5	4711.8	5497.1	6282.4	7067.7
		Efecto	Retorno	7362	736.2	1472.4	2208.6	2948.6	3681.0	4417.2	5153.4	5889.6	6625.8
125	32	Doble	Avance	12272	1227.2	2454.4	3681.6	4908.8	6136.0	7363.2	8590.4	9817.6	11044.8
		Efecto	Retorno	11468	1146.8	2293.6	3440.4	4587.2	5734.0	6880.8	8027.6	9174.4	10321.2
160	40	Doble	Avance	20106	2010.6	4021.2	6031.8	8042.4	10053.0	12063.6	14074.2	16084.8	18095.4
		Efecto	Retorno	18849	1884.9	3769.8	5654.7	7539.6	9424.5	11309.4	13194.3	15079.2	16964.1
200	40	Doble	Avance	31416	3141.6	6283.2	9424.8	12566.4	15708.0	18849.6	21991.2	25132.8	28274.4
		Efecto	Retorno	30157	3015.7	6031.4	9047.1	12062.8	15078.5	18094.2	21109.9	24125.6	27141.3



Simbología



Especificaciones SI

Ø Cilindro (mm)	32	40	50	63	80	100	125	160	200
Tipo de Accionamiento		Doble Efecto							
Fluido		Aire (filtrado a 40 µm)							
Tipo de Montaje	SI	Básico: FA FB CA CB CR LB TC FTC TCM1 TCM2							
	SID SIJ	Básico: FA LB TC FTC TCM1 TCM2							
Presión de Trabajo		0.15 - 1.0 MPa (22 - 145 psi) (1.5 - 10.0 bar)							
Presión de Prueba		1.5 MPa (215 psi) (15 bar)							
Temperatura °C		-20 a 70							
Velocidad mm/s		30 - 800						30 - 500	
Tolerancia de Carrera		0 - 250 ^{+1.0} ₀ 251 - 1000 ^{+1.5} ₀ 1001 - 1500 ^{+2.0} ₀							
Tipo de Amortiguación		Amortiguación Variable							
Carrera de amortiguación ajustable		27		30		36		40	50
Tamaño de Puerto		1/8"		1/4"		3/8"		1/2"	3/4"
TPU Sellos Normal -5 a 80 °C									
NBR Sellos Viton Maximo 180 °C (Recomendado Hasta 120 °C)									

Cómo Ordenar

SI	80	x 50	S	□
SID	80	x 50	S	□
SIJ	80	x 50 - 20	S	□
①	②	④	⑤	⑥

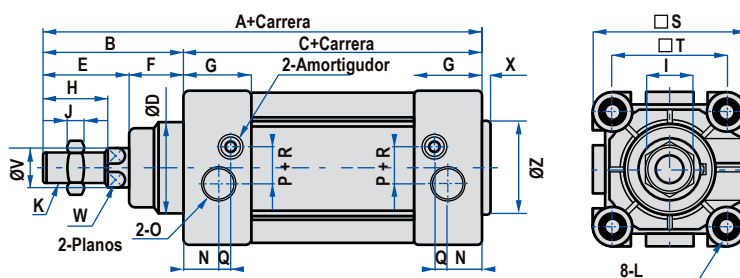
① Modelo	② Diámetro	③ Carrera	④ Ajuste de Carrera	⑤ Imán	⑥ Opciones
SI: Doble Efecto	32 40 50 63 80 100 125 160 200	Tomar referencia de tabla Límites de Carrera	SI: Vacío SID: Vacío SIJ: 10 20 30 40 50 75 100	Vacío: Sin Imán S: Con Imán	Vacío: TPU HT: Alta Temperatura SR: Rosca especial SSR: Vástago de Acero Inoxidable 304 EXV: Extensión de vástago EXC: Extensión de cuerda AG: Anti Giro TC: Trunion

Tipo de Montaje	
Vacío	
LB	
FA	
FB	
SE: CA	
CB	
CR	
FTC	
TC	
SED	
SEJ	
FA	
FTC	
TC	

Material Vástago
Acero al Carbón 1045
20 micras de cromo

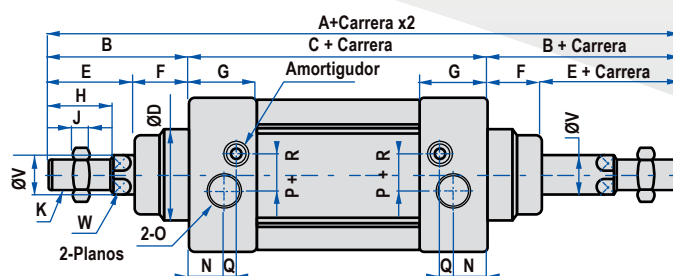
Límites de Carrera

Ø Cilindro (mm)	Carrera Estándar (mm)																		Máxima Carrera Estándar	Máxima Carrera
32	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500			1000	1800
40	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1200	1800
50	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1200	1800
63	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1500	1800
80	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1500	1800
100	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1500	1800
125	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1500	1800
160	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1500	2000
200	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	1500	2000



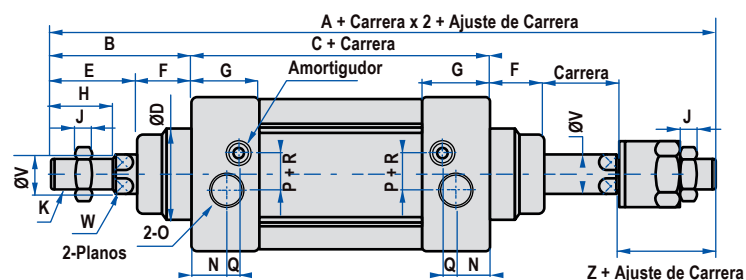
Dimensiones SI

Ø Cilindro (mm)	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	X	Z
32	142	48	94	30	29	19	27.5	22	17	6	M10 x 1.25	M6 x 1	13	1/8"	5.5	6	6	47	32.5	12	10	3	30
40	159	54	105	35	33	21	32	24	17	7	M12 x 1.25	M6 x 1	17	1/4"	6	7.5	8.5	53	38	16	13	3.5	35
50	175	69	106	40	42	27	31	32	23	8	M16 x 1.5	M8 x 1.25	15.5	1/4"	7.5	6.5	9.5	65	46.5	20	17	3.5	40
63	190	69	121	45	42	27	33	32	23	8	M16 x 1.5	M8 x 1.25	16.5	3/8"	7.5	7.5	11.5	75	56.5	20	17	4	45
80	214	86	128	45	53	33	33	40	26	10	M20 x 1.5	M10 x 1.5	16.5	3/8"	9	7.5	13.5	95	72	25	22	4	45
100	229	91	138	55	55	36	37	40	26	10	M20 x 1.5	M10 x 1.5	18.5	1/2"	9.5	8.5	13.5	115	89	25	22	4	55
125	279	119	160	60	74	45	46	54	41	13.5	M27 x 2	M12 x 1.75	23	1/2"	14	12	14	140	110	32	27	4	60
160	332	152	180	65	94	58	50	72	55	18	M36 x 2	M16 x 2	25	3/4"	15	12	20	180	140	40	36	4	65
200	347	167	180	75	100	67	50	72	55	18	M36 x 2	M16 x 2	25	3/4"	15	12	20	220	175	40	36	5	75



Dimensiones SID Doble Vástago

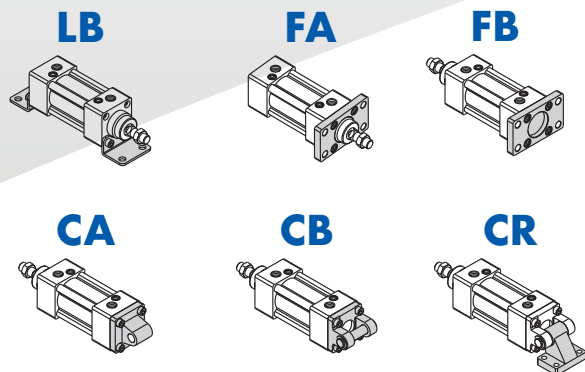
Ø Cilindro (mm)	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W
32	190	48	94	30	29	19	27.5	22	17	6	M10x1.25	M6 x 1	13	1/8"	5.5	6	6	47	32.5	12	10
40	213	54	105	35	33	21	32	24	17	7	M12X1.25	M6 x 1	16	1/4"	6	7.5	8.5	53	38	16	13
50	244	69	106	40	42	27	31	32	23	8	M16X1.5	M8 x 1.25	15.5	1/4"	7.5	6.5	9.5	65	46.5	20	17
63	259	69	121	45	42	27	33	32	23	8	M16x1.5	M8 x 1.25	16.5	3/8"	7.5	7.5	11.5	75	56.5	20	17
80	300	86	128	45	53	33	33	40	30	10	M20x1.5	M10 x 1.5	16.5	3/8"	9	7.5	13.5	95	72	25	22
100	320	91	138	55	55	36	37	40	30	10	M20x1.5	M10 x 1.5	18.5	1/2"	9.5	8.5	13.5	115	89	25	22
125	398	119	160	60	74	45	46	54	41	13.5	M27x2	M12 x 1.75	23	1/2"	14	12	14	140	110	32	27
160	484	152	180	65	94	58	50	72	55	18	M36x2	M16 x 2	25	3/4"	15	12	20	180	140	40	36
200	514	167	180	75	100	67	50	72	55	18	M36x2	M16 x 2	25	3/4"	15	12	20	220	175	40	36



Dimensiones SIJ Ajuste de Carrera

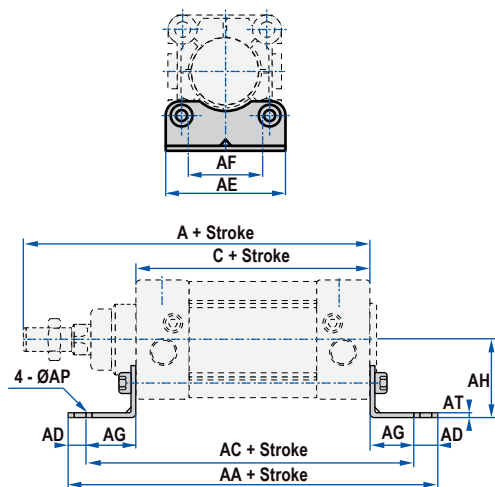
Ø Cilindro (mm)	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	Z
32	190	48	94	30	29	20	27.5	22	17	6	M10x1.25	M6	13	1/8"	5.5	6	6	47	32.5	12	10	27
40	213	54	105	35	33	22	32	24	17	7	M12X1.25	M6	17	1/4"	6	7.5	8.5	53	38	16	13	28
50	244	69	106	40	42	27	31	32	23	8	M16X1.5	M8	15.5	1/4"	7.5	6.5	9.5	65	46.5	20	17	29
63	259	69	121	45	42	29	33	32	23	8	M16x1.5	M8	16.5	3/8"	7.5	7.5	11.5	75	56.5	20	17	29
80	300	86	128	45	53	33	33	40	26	10	M20x1.5	M10	16.5	3/8"	9	7.5	13.5	95	72	25	22	35.5
100	320	91	138	55	55	36	37	40	26	10	M20x1.5	M10	18.5	1/2"	9.5	8.5	13.5	115	89	25	22	35.5
125	398	119	160	60	74	45	46	54	41	13.5	M27x2	M12	23	1/2"	14	12	14	140	110	32	27	42.5
160	484	152	180	65	94	58	50	72	55	18	M36x2	M16	25	3/4"	15	12	20	180	140	40	36	68
200	514	167	180	75	100	67	50	72	55	18	M36x2	M16	25	3/4"	15	12	20	220	175	40	36	68

Montajes



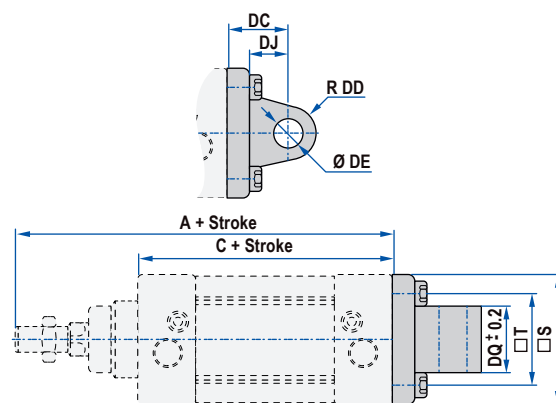
Códigos de Accesorios Montajes

Ø Cilindro (mm)	Accesorios de Montaje				
	LB	FA / FB	CA	CB	CR
32	F-SI32LB	F-SI32FA	F-SE32CA	F-SE32CB	F-SI32CR
40	F-SI40LB	F-SI40FA	F-SE40CA	F-SE40CB	F-SI40CR
50	F-SI50LB	F-SI50FA	F-SE50CA	F-SE50CB	F-SI50CR
63	F-SI63LB	F-SI63FA	F-SE63CA	F-SE63CB	F-SI63CR
80	F-SI80LB	F-SI80FA	F-SE80CA	F-SE80CB	F-SI80CR
100	F-SI100LB	F-SI100FA	F-SE100CA	F-SE100CB	F-SI100CR
125	F-SI125LB	F-SI125FA	F-SE125CA	F-SE125CB	F-SI125CR
160	F-SI160LB	F-SI160FA	F-SI160CA	F-SI160CB	F-SI160CR
200	F-SI200LB	F-SI200FA	F-SI200CA	F-SI200CB	F-SI200CR



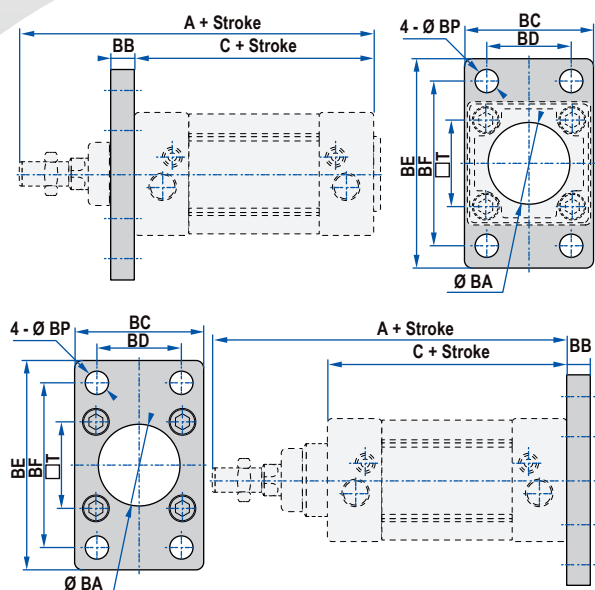
Dimensiones LB

Ø Cilindro (mm)	A	C	AA	AC	AD	AE	AF	AG	AH	AP	AT
32	142	94	158	142	8	47	32	24	32	7	3
40	159	105	179	161	9	53	36	28	36	9	3
50	175	106	190	170	10	65	45	32	45	9	3
63	190	121	209	185	12	75	50	32	50	9	3
80	214	128	248	210	19	95	63	41	63	12.5	4
100	229	138	266	228	19	115	75	45	71	14.5	4
125	279	160	290	250	20	140	90	45	90	16.5	8
160	332	180	340	300	20	180	115	60	115	18.5	8
200	347	180	380	320	30	220	135	70	135	24	9



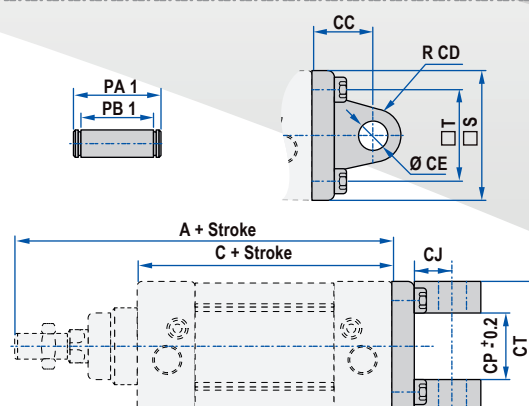
Dimensiones CA

Ø Cilindro (mm)	A	C	S	T	DC	DD	DE	DJ	DQ
32	142	94	47	32.5	22	9	10	13	25.8
40	159	105	52	38	25	10.5	12	16	27.8
50	175	106	64	46.5	27	11	12	17	31.7
63	190	121	74	56.5	32	13.5	16	22	39.7
80	214	128	93	72	36	14.5	16	22	49.7
100	229	138	113	89	41	17	20	27	59.7
125	279	160	139	110	50	22	25	33	69.7
160	332	180	180	140	55	30	30	35.5	89.7
200	347	180	220	175	60	30	30	37	89.7



Dimensiones FA / FB

Ø Cilindro (mm)	A	C	BA	BB	BC	BD	BE	BF	BP	T
32	142	94	30.5	10	47	32	80	64	7	32.5
40	159	105	35.5	10	53	36	90	72	9	38
50	175	106	40.5	12	65	45	108	90	9	46.5
63	190	121	45.5	12	75	50	118	100	9	56.5
80	214	128	45.5	16	95	63	150	126	12.5	72
100	229	138	55.5	16	115	75	176	150	14.5	89
125	279	160	60.5	20	139	90	218	180	16.5	110
160	332	180	65.5	20	180	115	280	230	18.5	140
200	347	180	75.5	25	220	135	320	270	24	175

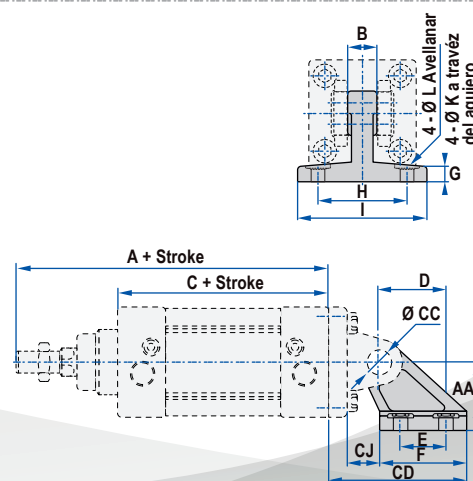


Dimensiones CB

Ø Cilindro (mm)	A	C	CC	CD	CE	CJ	CP	CT	PA1	PB1	S	T
32	142	94	22	9	10	13	26	45	51	45.5	47	32.5
40	159	105	25	10.5	12	16	28	52	59	52.5	52	38
50	175	106	27	11	12	17	32	60	67	60.5	64	46.5
63	190	121	32	13	16	22	40	70	77	70.5	74	56.5
80	214	128	36	14	16	22	50	90	97	90.5	94	72
100	229	138	41	17.5	20	27	60	110	119	110.5	113	89
125	279	160	50	21.5	25	33	70	130	139	130.5	139	110
160	332	180	55	30	30	35.5	90	170	181	170.5	180	140
200	347	180	60	30	30	36	90	170	181	170.5	220	175

Dimensiones CR

Ø Cilindro (mm)	A	AA	B	C	CC	CD	CJ	D	E	F	G	H	I	K	L
32	142	32	26	94	10	50	10	21	18	31	8	38	51	6.6	
40	159	36	28	105	12	56	12	24	22	35	10	41	54	6.6	
50	175	45	32	106	12	68	13	33	30	45	12	50	65	9	
63	190	50	40	121	16	77	17	37	35	50	12	52	67	9	
80	214	63	50	128	16	93	19	47	40	60	14	66	86	11	18
100	229	71	60	138	20	106	22	55	50	70	15	76	96	11	18
125	279	90	70	160	25	135	26	70	60	90	20	94	124	14	20
160	332	115	90	180	30	171	25	97	88	126	25	118	156	14	20
200	347	135	90	180	30	185	31	105	90	130	30	122	162	18	26



Articulaciones



Horquilla I Macho



Horquilla Y Hembra



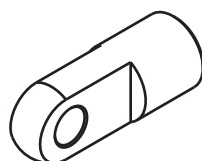
Junta Flotante



Rótula

Códigos de Accesorios Articulaciones para Cilindros

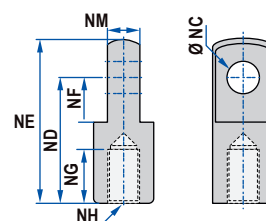
Ø Cilindro (mm)	Horquillas				Sensor Switch	
	I	Y	F	U	CMSE	DMSE
32	F-M10x125I	F-M10x125Y	F-M10x125F	F-M10x125U	CMSE	DMSE
40	F-M12x125I	F-M12x125Y	F-M12x125F	F-M12x125U		
50	F-M16x150I	F-M16x150Y	F-M16x150F	F-M16x150U		
63	F-M16x150I	F-M16x150Y	F-M16x150F	F-M16x150U		
80	F-M20x150I	F-M20x150Y	F-M20x150F	F-M20x150U		
100	F-M20x150I	F-M20x150Y	F-M20x150F	F-M20x150U		
125	F-M27x200I	F-M27x200Y	F-M27x200F	F-M27x200U		
160	F-M36x200I	F-M36x200Y	F-M36x200F	F-M36x200U		
200	F-M36x200I	F-M36x200Y	F-M36x200F	F-M36x200U		



Horquilla I Macho

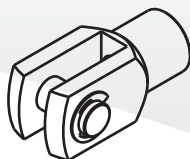
Cómo Ordenar

F M16 x 150 I			
① Código Accesorio	② Rosca de Tornillo	③ Paso de Rosca	④ Código
	M10	125: 1.25mm	I: Horquilla I Macho
	M12		
	M16	150: 1.5mm	
	M20		
	M27		
	M36	200: 2.0mm	



Dimensiones

Item	NC	ND	NE	NF	NG	NH	NM
F-M10x125I	10	40	50	15	20	M10x1.25	10
F-M12x125I	12	48	62	24	20	M12x1.25	12
F-M16x150I	16	64	82	32	23	M16x1.5	16
F-M20x150I	20	80	102	40	30	M20x1.5	20
F-M27x200I	30	110	139	51	45	M27x2.0	30
F-M36x200I	35	144	181	65	55	M36x2.0	35



Horquilla Hembra Y

Cómo Ordenar

1 Código Accesorio	2 Rosca de Tornillo	3 Paso de Rosca	4 Código
	F M16 x 150 Y		
	1	2	3
	M10	125: 1.25mm	Y: Horquilla Y Hembra
	M12		
	M16	150: 1.5mm	
	M20		
	M27		
	M36	200: 2.0mm	

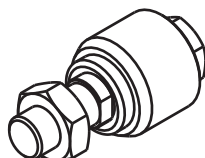
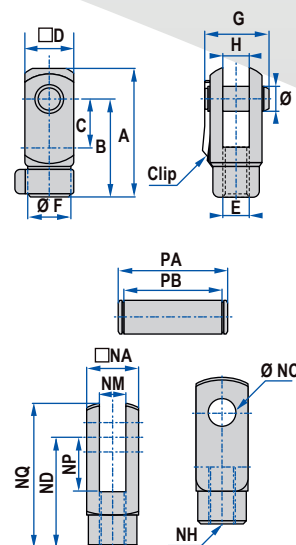
Dimensiones

Item	A	B	C	D	F
F-M10x125Y	52	40	20	19	18

Item	E	G	H	I
F-M10x125Y	M10x1.25	25	10	10

Item	NA	NC	ND	NP	NQ
F-M12x125Y	25.4	12	48	24	62
F-M16x150Y	32	16	64	32	80
F-M20x150Y	44.4	20	80	40	101
F-M27x200Y	54	30	110	55	139
F-M36x200Y	70	35	144	73	179

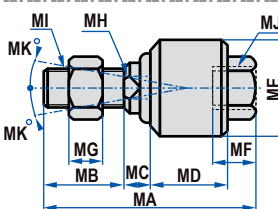
Item	NM	NH	PA	PB
F-M12x125Y	12	M12x1.25	32.4	26.2
F-M16x150Y	16	M16x1.5	39	32.8
F-M20x150Y	20	M20x1.5	53.4	45.2
F-M27x200Y	30	M27x2.0	64.2	54.8
F-M36x200Y	35	M36x2.0	80.2	70.8



Junta Flotante F

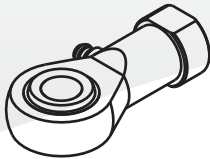
Cómo Ordenar

1 Código Accesorio	2 Rosca de Tornillo	3 Paso de Rosca	4 Código
	F M22 x 150 F		
	1	2	3
	M10	125: 1.25mm	F: Junta Flotante
	M12		
	M16	150: 1.5mm	
	M20		
	M27		
	M36	200: 2.0mm	



Dimensiones

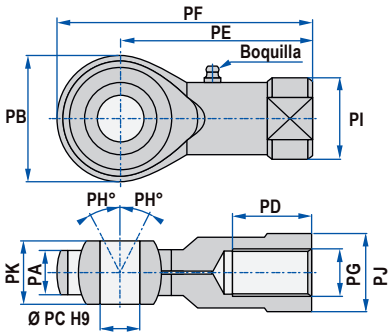
Item	MA	MB	MC	MD	ME	MF	MG	MH	MI/MJ	MK
F-M10x125F	58	22	7	21	26	11	6	10	M10x1.25	12
F-M12x125F	58	22	8	21	28	11.5	7	12	M12x1.25	12
F-M16x150F	90	27	10	41	44.5	19	8	17	M16x1.5	7
F-M20x125F	102	29	13	46	53	22	10	22	M20x1.5	10
F-M27x200F	136.5	40	14.5	52.5	59.5	40	13.5	27	M27x2.0	5
F-M36x200F	194.5	60	20.5	77.5	84	54	18	36	M36x2.0	5



Rótula U

Cómo Ordenar

F M10 x 125 U			
	①	②	③ ④
① Código Accesorio	② Rosca de Tornillo		
	M10	125: 1.25mm	
	M12		
	M16		
	M20	150: 1.5mm	
	M27		
	M36	200: 2.0mm	
③ Paso de Rosca		④ Código	
		U: Rótula	



Dimensiones

Item	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK
F-M10x125U	11	26	10	20	43	56	M10x1.25	13	19	17	14
F-M12x125U	12	32	12	22	50	66	M12x1.25	13	22	19	16
F-M16x150U	15	40	16	28	64	84	M16x1.5	15	27	22	21
F-M20x150U	18	46	20	33	77	100	M20x1.5	15	34	30	25
F-M27x200U	25	70	30	51	110	145	M27x2.0	15	50	41	37
F-M36x200U	27.5	80	35	56	125	165	M36x2.0	15	57.5	50	43