

SERIE HL

Cilindros Hidráulicos *Hydraulic Cylinders*

Presión de trabajo 160 bar
Working Pressure 160 bar



ESPERIA S.A.

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IDENTIFICACIÓN DEL CILINDRO

Dimensiones de intercambiabilidad en el montaje del cilindro de la serie HL, transmisiones hidráulicas - dimensiones para cilindros de simple vástago, serie 16 MPa (160 bar).

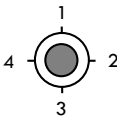
CYLINDER IDENTIFICATION

Interchangeable cylinder mounting dimensions selected in accordance with the serie HL, Hydraulic fluid power - mounting dimensions for single rod cylinders, 16 MPa (160 bar) series.

CARACTERÍSTICAS / SPECIFICATIONS

Tipo de construcción <i>Construction Type</i>	Con brida y soldadura <i>With flange and welding</i>						
Presión Máxima <i>Maximum Pressure</i>	160 bar						
Presión Mínima <i>Minimum Pressure</i>	10 bar						
Posición de montaje <i>Mounting Position</i>	Indiferente <i>Indifferent</i>						
Rango de temperatura <i>Temperature Range</i>	-20°C... +80°C +T ^a a pedido/ +T ^a on request						
Pistón/ <i>Piston</i>	40	50	63	80	100	125	160
Vástago/ <i>Rod</i>	20	25	30	40	50	60	90
Material Vástago <i>Rod Material</i>	Barra de acero cromado y rectificado con terminal roscado <i>Steel plated bar and grinding with threaded terminal</i>						
Material Cuerpo <i>Body Material</i>	Barra de acero ST-52 lapeado <i>Steel bar ST-52 lapping</i>						
Velocidad máxima <i>Maximun Speed</i>	0,5 m/s						
Sujeciones <i>Fastening</i>	Brida Delantera, Brida Trasera, Charnela Posterior, Charnela Intermedia, Patas <i>Front Flange, Rear Flange, Rear Eye, Intermediate Eye, Foot Mounting</i>						

CÓDIGO DE PEDIDO

SERIE HL		HL - - / / x / - - -									
OPCIÓN: Doble Vástago =DV											
Modelo "E" Brida delantera	= E										
Modelo "E" Brida delantera VÁSTAGO REFORZADO	= E VR										
Modelo "D" Brida trasera	= D										
Modelo "L" Charnela trasera	= L										
Modelo "B" Con patas	= B										
Modelo "F"	= F										
Charnela intermedia											
Cilindro rotativo	= ROT.										
Ø de pistón (40 hasta 160 mm)											
Ø de vástago (20 hasta 90 mm)*											
*Vástago reforzado (de 25 hasta 60 mm)											
En caso de Doble Vástago , indicar su diámetro											
Carrera (mm)											
Conexión de tuberías en cabeza y base											
		= 1 = 2 = 3 = 4									
Vista hacia el vástago											

Tipo de Juntas

Standard = **S**

Vitón = **V**

Distanciador

0 (Sin distanciador) = **0**

50 mm. = **2**

100 mm. = **4**

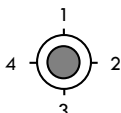
150 mm. = **6**

200 mm. = **8**

EJEMPLO DE CÓDIGO DE PEDIDO:

HL-E Ø40/20x100-1-0-S

ORDERING CODE

SERIE HL		HL - - / / x / - - -									
OPTION: Double Rod =DV											
"E" Type Front Flange Mounting = E "E" Type Front Flange Mounting STRENGTHED ROD = E VR "D" Type Rear Flange Mounting = D "L" Type Rear Eye Mounting = L "B" Type Foot Mounting = B "F" Type Intermediate Eye Mounting = F Rotary Cylinder = ROT.											
Piston Ø (from 40 to 160 mm)											
Rod Ø (from 20 to 90 mm)* *Reinforced Rod (from 25 to 60 mm)											
In case of Double Rod , indicate its diameter											
Stroke (mm)											
Connection ports at head and base											
		= 1 = 2 = 3 = 4									
Viewed on the rod											

Seals Type
 Standard = S
 Viton = V

Spacer
 0 (Without Spacer) = 0
 50 mm. = 2
 100 mm. = 4
 150 mm. = 6
 200 mm. = 8

ORDERING EXAMPLE: HL-E Ø40/20x100-1-0-S

TIPOS DE SUJECCIÓN - MOUNTING TYPE

“E” Brida Delantera “E” Front Flange Mounting

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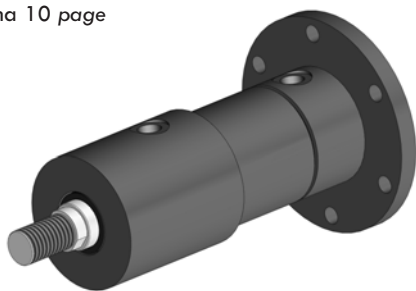
“E” Vástago Reforzado “E” Reinforced Rod

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“D” Brida Trasera “D” Rear Flange Mounting

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“L” Charnela Trasera “L” Rear Eye Mounting

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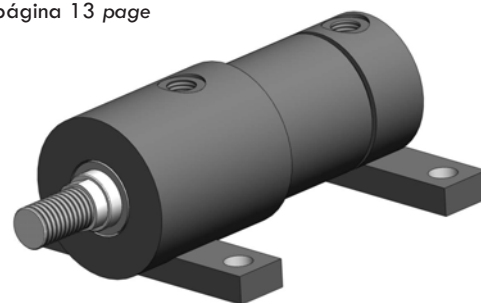
“E” Doble Vástago “E” Double Rod

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“B” Patas “B” Foot Mounting

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“F” Charnela Intermedia “F” Intermediate Eye Mounting

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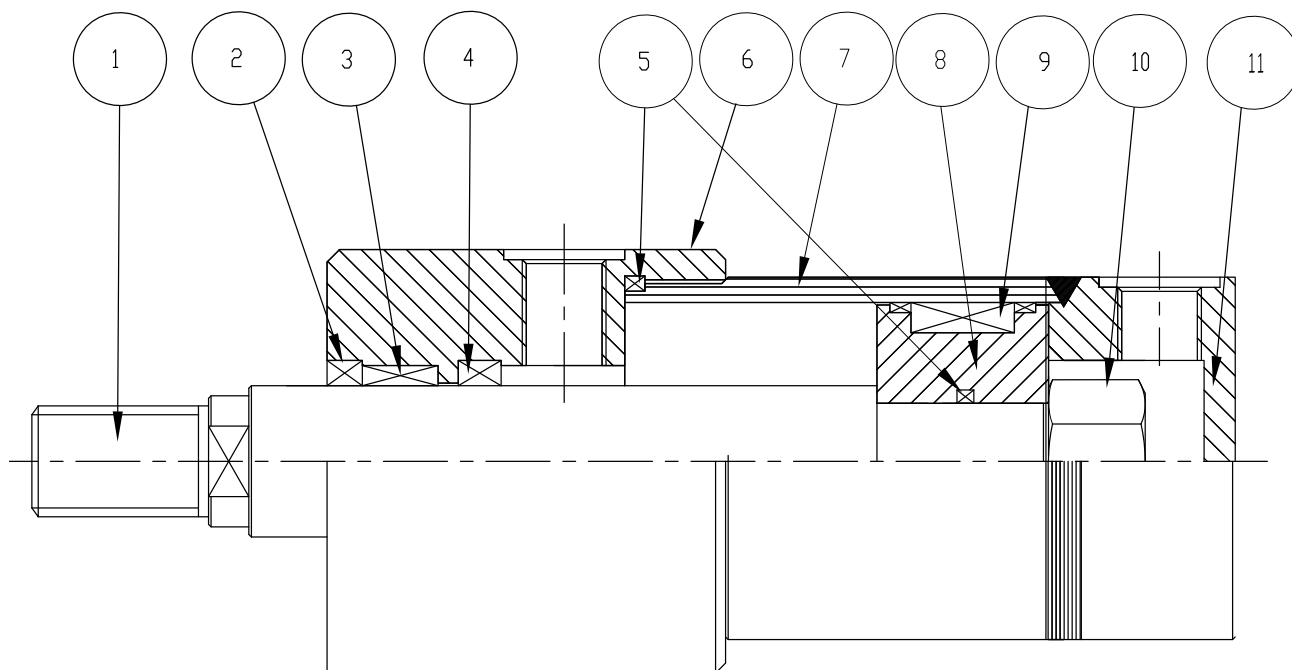


Cilindro Rotativo Rotary cylinder

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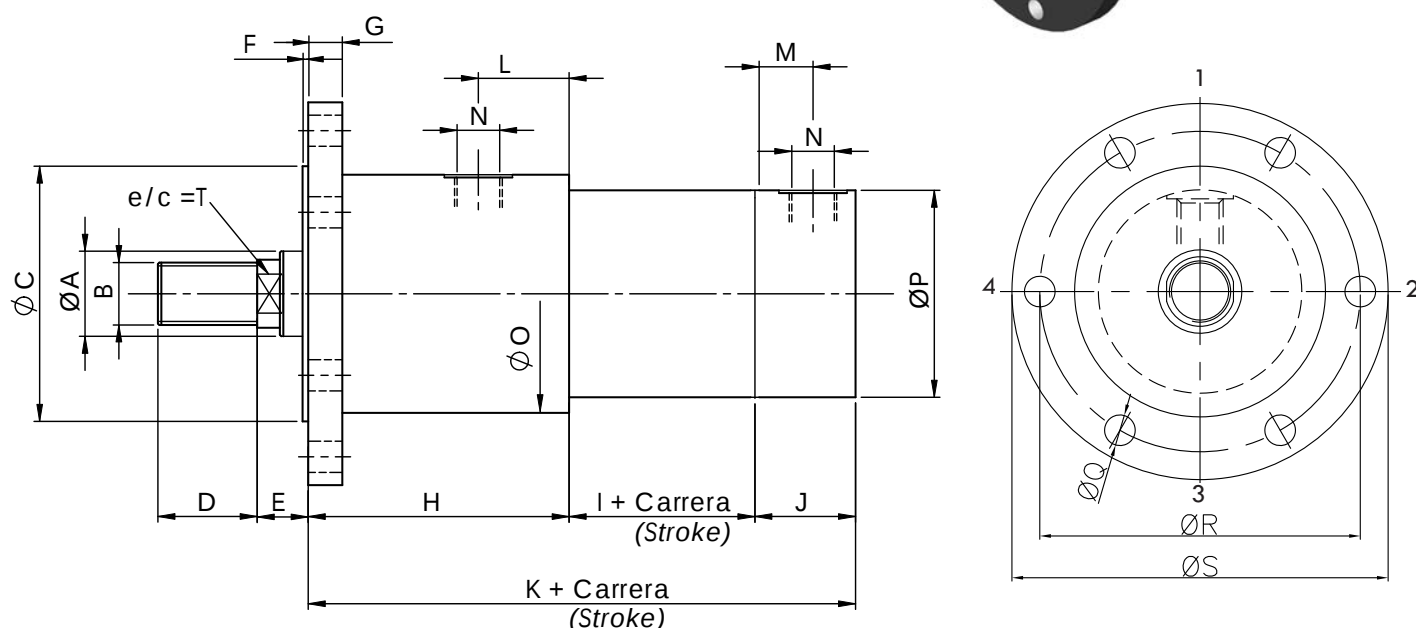


LISTA DE MATERIALES / PARTS LIST



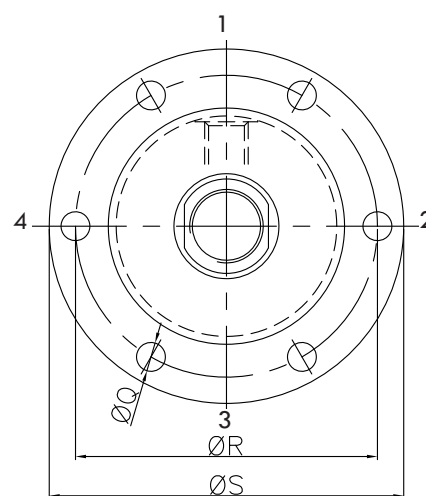
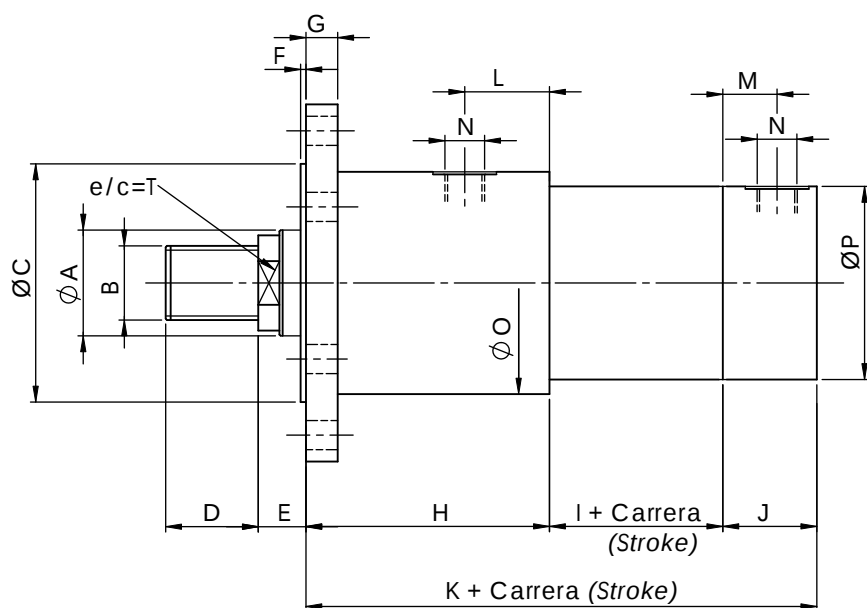
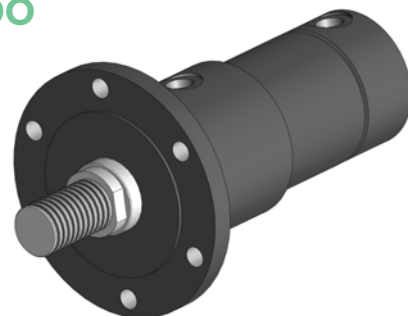
POSICIÓN POSITION	DENOMINACIÓN DENOMINATION	MATERIALES MATERIALS
1	Vástago/Rod	Acero Cromado/Chromium Steel
2	Rascador Wiper	Goma Nitrílica/Chapa Nitrile Rubber/Plate
3	Guía-Vástago/Rod guide	Bronce/Bronze
4	Junta Vástago/Rod Seal	Poliuretano/Polyurethane
5	Junta Tórica OR/O Ring	Goma Nitrílica/Nitrile Rubber
6	Cabeza Anterior/Front Head	Acero/Steel
7	Camisa/Cylinder Housing	Acero ST-52 Steel
8	Pistón/Piston	Acero/Steel
9	Junta Pistón/Piston Seal	Goma Nitrílica + Cinta guía Nitrile Rubber + Wear Ring
10	Tuerca/Nut	Acero ST-52 Steel
11	Cabeza Posterior/ Rear Head	Acero/Steel

MODELO "E" BRIDA DELANTERA "E" TYPE FRONT FLANGE MOUNTING



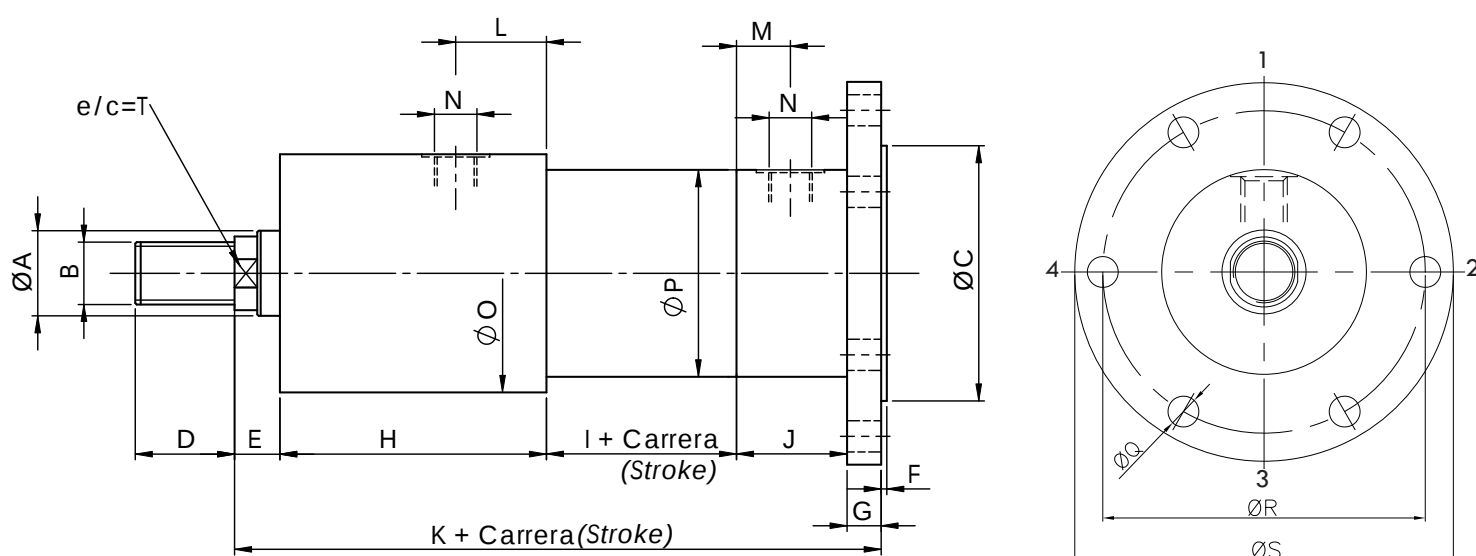
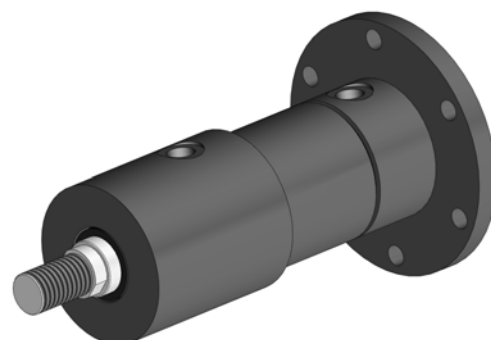
Cilindro Cylinder	A	B	C	D	E	F	G	H	I	J	K	L	M	N Gas	O	P	Q	R	S	T
Ø40/20/-/	20	M14x1,5	58	25	14	2	10	76	14	28	118	25	12	G 1/4"	58	50	7	84	98	17
Ø50/25/-/	25	M16x1,5	70	30	16	2	10	81	18	28	127	28	12	G 1/4"	68	60	9	95	114	22
Ø63/30/-/	30	M22x1,5	90	35	18	2	12	92	17	34	143	32	14	G 3/8"	84	73	11	115	135	24
Ø80/40/-/	40	M28x2	110	45	23	3	15	109	19	40	168	36	17	G 1/2"	102	90	13	135	160	32
Ø100/50/-/	50	M36x2	145	50	28	3	15	111	19	40	170	36	17	G 1/2"	124	110	13	170	195	41
Ø125/60/-/	60	M45x2	170	56	33	3	18	125	25	48	198	42	21	G 3/4"	154	140	15	195	220	50
Ø160/90/-/	90	M56x2	200	75	48	3	20	137	20	53	210	47	21	G 3/4"	196	180	17	235	270	70

MODELO “E” BRIDA DELANTERA - VÁSTAGO REFORZADO
“E” TYPE FRONT FLANGE MOUNTING - REINFORCED ROD



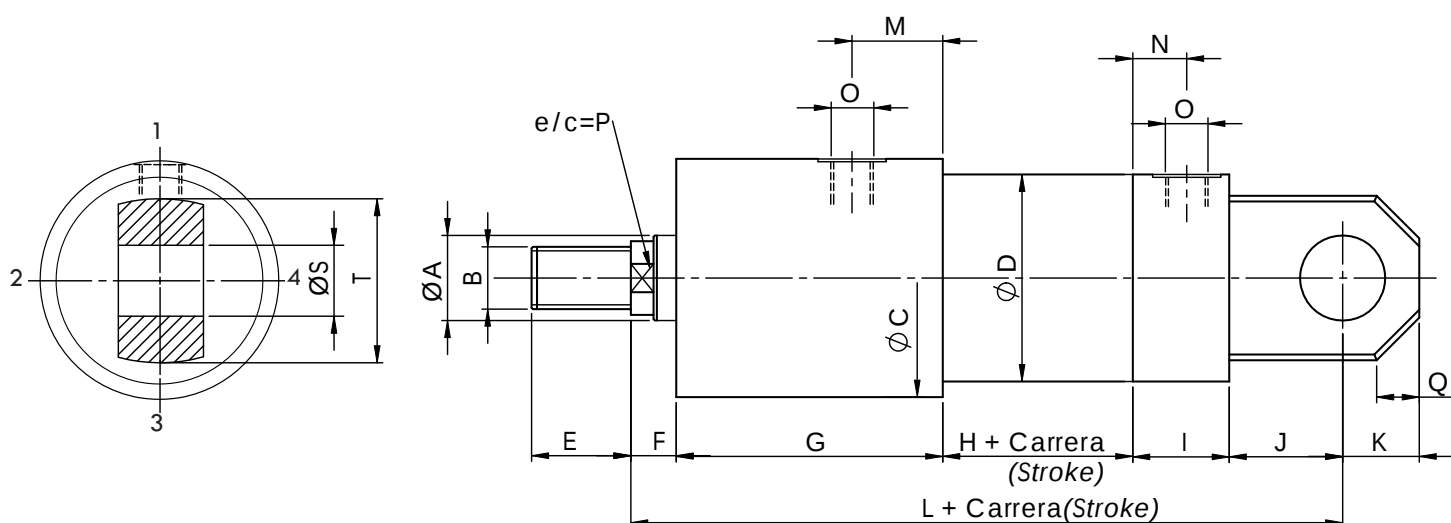
Cilindro Cylinder	A	B	C	D	E	F	G	H	I	J	K	L	M	N Gas	O	P	Q	R	S	T
Ø40/25/-/	25	M16x1,5	58	30	16	2	10	76	14	28	114	25	12	G 1/4"	58	50	7	84	98	22
Ø50/30/-/	30	M22x1,5	70	35	18	2	10	81	18	28	123	28	12	G 1/4"	68	60	9	95	114	24
Ø63/40/-/	40	M28x2	90	45	22	2	12	92	17	34	138	32	14	G 3/8"	84	73	11	115	135	32
Ø80/50/-/	50	M36x2	110	50	28	3	15	109	19	40	163	36	17	G 1/2"	102	90	13	135	160	41
Ø100/60/-/	60	M45x2	145	56	33	3	15	111	19	40	165	36	17	G 1/2"	124	110	13	170	195	50

MODELO "D" BRIDA TRASERA "D" TYPE REAR FLANGE MOUNTING



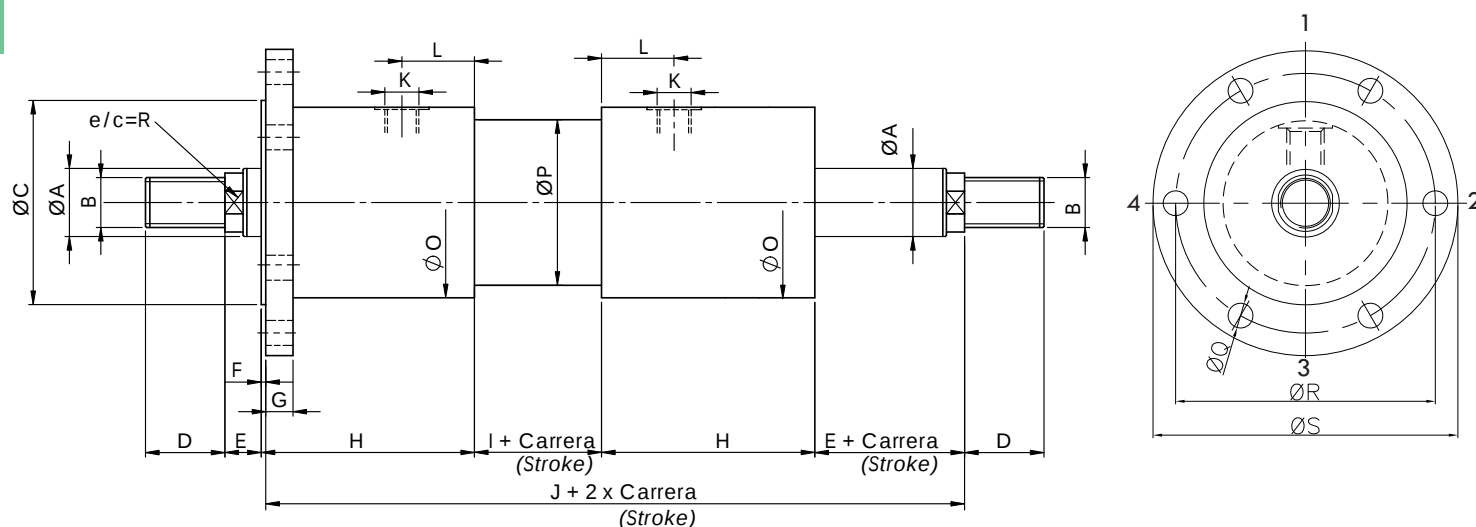
Cilindro Cylinder	A	B	C	D	E	F	G	H	I	J	K	L	M	N Gas	O	P	Q	R	S	T
Ø40/20/-/	20	M14x1,5	58	25	12	2	10	78	14	32	146	25	12	G 1/4"	58	50	7	84	98	17
Ø50/25/-/	25	M16x1,5	70	30	14	2	10	83	18	32	157	28	12	G 1/4"	68	60	9	95	114	22
Ø63/30/-/	30	M22x1,5	90	35	16	2	12	94	17	39	178	32	15	G 3/8"	84	73	11	115	135	24
Ø80/40/-/	40	M28x2	110	45	20	3	15	112	19	45	211	36	18	G 1/2"	102	90	13	135	160	32
Ø100/50/-/	50	M36x2	145	50	25	3	15	114	19	47	220	36	18	G 1/2"	124	110	13	170	195	41
Ø125/60/-/	60	M45x2	170	56	30	3	18	128	25	55	256	42	22	G 3/4"	155	140	15	195	220	50
Ø160/90/-/	90	M56x2	200	75	45	3	20	140	20	60	285	47	22	G 3/4"	196	180	17	235	270	70

MODELO "L" CHARNELA TRASERA
"L" TYPE REAR EYE MOUNTING



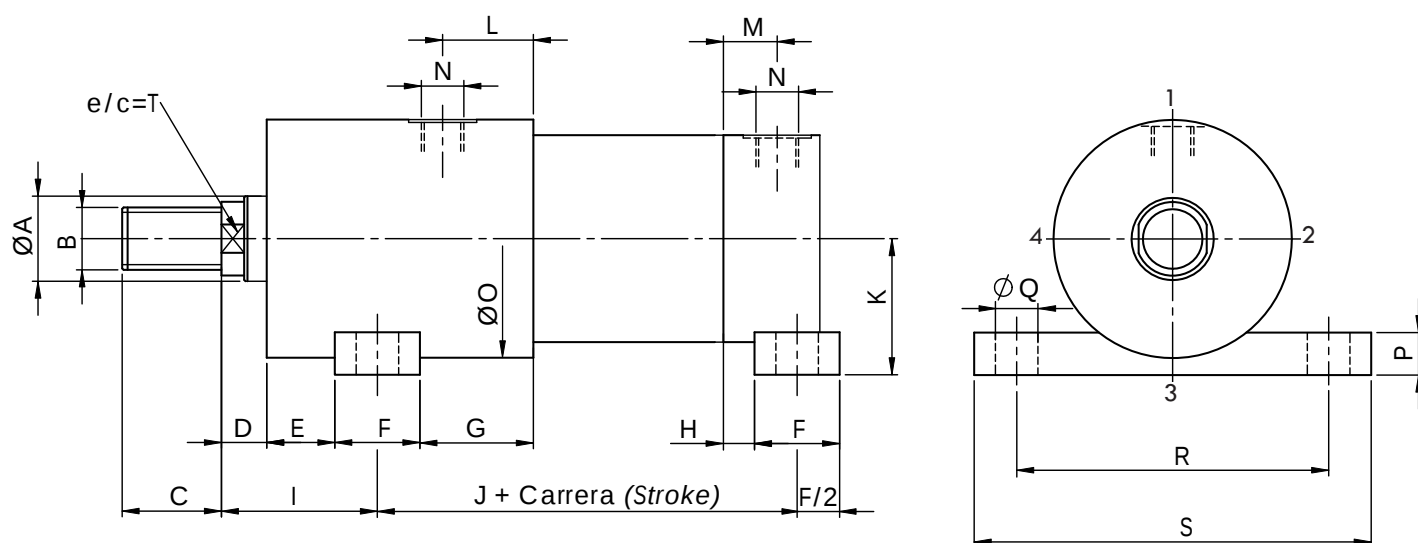
Cilindro Cylinder	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O Gas	P	Q	R	S	T
Ø40/20/-/	20	M14x1,5	58	50	25	12	78	14	28	30	18	162	25	12	G 1/4"	17	8	20	15	38
Ø50/25/-/	25	M16x1,5	68	60	30	14	83	18	28	35	22	178	28	12	G 1/4"	22	12	25	20	48
Ø63/30/-/	30	M22x1,5	84	73	35	16	94	17	34	40	27	201	32	14	G 3/8"	24	15	30	25	58
Ø80/40/-/	40	M28x2	102	90	45	20	112	19	40	50	30	241	36	17	G 1/2"	32	17	35	30	74
Ø100/50/-/	50	M36x2	124	110	50	25	114	19	40	60	37	258	36	17	G 1/2"	41	20	40	35	86
Ø125/60/-/	60	M45x2	155	140	56	30	128	25	48	70	45	301	42	21	G 3/4"	50	22	40	40	98
Ø160/90/-/	90	M56x2	196	180	75	45	140	20	53	85	55	353	47	21	G 3/4"	70	25	50	50	118

MODELO "E" BRIDA DELANTERA DOBLE VÁSTAGO "E" TYPE FRONT FLANGE MOUNTING DOUBLE ROD



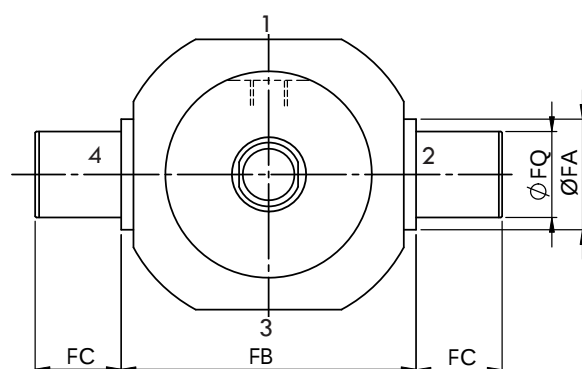
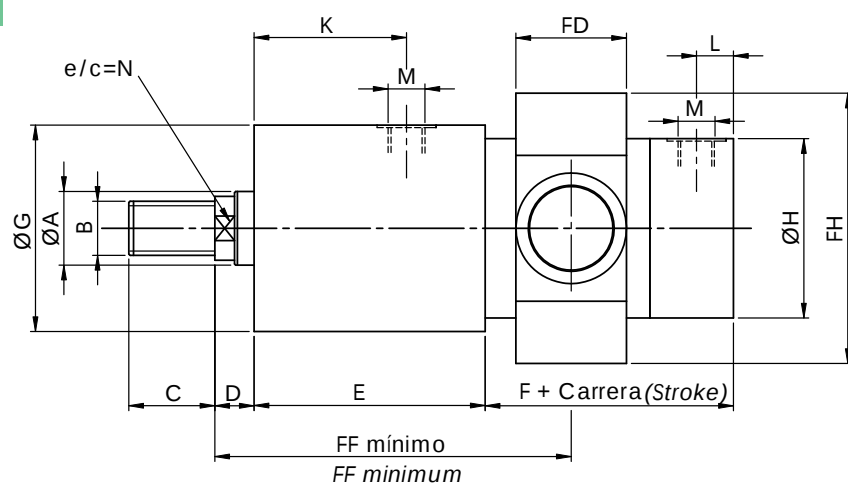
Cilindro Cylinder	A	B	C	D	E	F	G	H	I	J	K Gas	L	M	N	O	P	Q	R
Ø40/20/-/	20	M14x1,5	58	25	12	2	10	78	3	171	G 1/4"	25	98	84	58	50	7	17
Ø50/25/-/	25	M16x1,5	70	30	14	2	10	83	2	182	G 1/4"	28	114	95	68	60	9	22
Ø63/30/-/	30	M22x1,5	90	35	16	2	12	94	6	210	G 3/8"	32	135	115	84	73	11	24
Ø80/40/-/	40	M28x2	110	45	20	3	15	112	6	250	G 1/2"	36	160	135	102	90	13	32
Ø100/50/-/	50	M36x2	145	50	25	3	15	114	6	259	G 1/2"	36	195	170	124	110	13	41
Ø125/60/-/	60	M45x2	170	56	30	3	18	128	4	290	G 3/4"	42	220	195	155	140	15	50
Ø160/90/-/	90	M56x2	200	75	45	3	20	140	14	339	G 3/4"	47	270	235	196	180	17	70

MODELO "B" CON PATAS
"B" TYPE FOOT MOUNTING



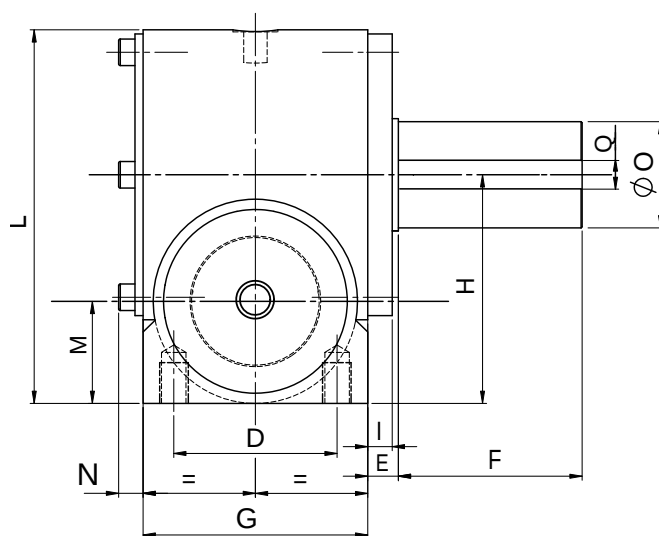
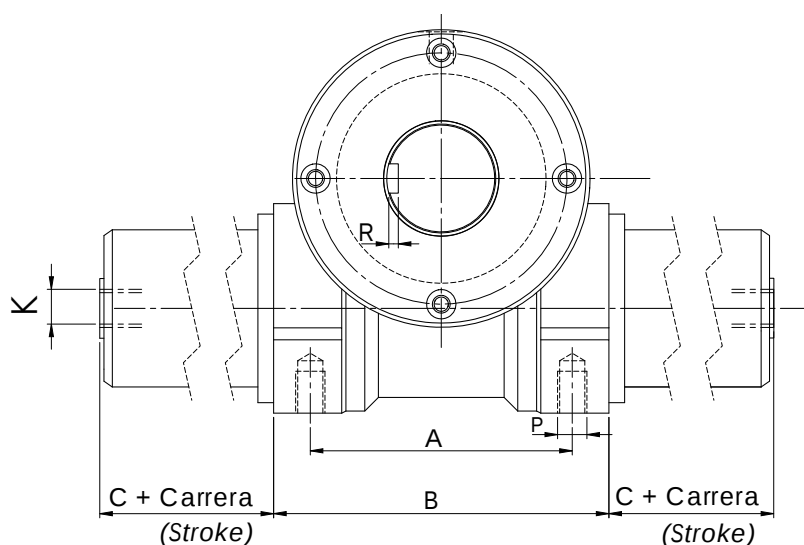
Cilindro Cylinder	A	B	C	D	E	F	G	H	I	J	K	L	M	N Gas	O	P	Q	R	S	T
Ø40/20/-/	20	M14x1,5	25	12	15	30	33	10	42	87	32	25	12	G 1/4"	58	10	11	80	105	17
Ø50/25/-/	25	M16x1,5	30	14	19	30	34	11	48	93	40	28	12	G 1/4"	68	12	13	90	115	22
Ø63/30/-/	30	M22x1,5	35	16	24	30	40	11	55	98	48	32	14	G 3/8"	84	15	15	110	140	24
Ø80/40/-/	40	M28x2	45	20	29	40	43	11	69	113	55	36	17	G 1/2"	102	15	17	130	165	32
Ø100/50/-/	50	M36x2	50	25	29	40	45	14	74	118	67	36	17	G 1/2"	124	15	19	155	190	41
Ø125/60/-/	60	M45x2	56	30	32	50	46	13	87	134	85	42	21	G 3/4"	155	20	21	190	230	50
Ø160/90/-/	90	M56x2	75	45	34	50	56	13	104	139	105	47	21	G 3/4"	196	20	23	240	285	70

MODELO "F" CHARNELA INTERMEDIA "F" TYPE INTERMEDIATE EYE MOUNTING



Cilindro Cylinder	A	B	C	D	E	F	G	H	K	L	M Gas	N	FA	FB	FC	FD	FF min.	FH	FQ
Ø40/20/-/	20	M14x1,5	25	12	78	42	58	50	54	12	G 1/4"	17	35	90	25	35	120	80	25
Ø50/25/-/	25	M16x1,5	30	14	83	46	68	60	55	12	G 1/4"	22	40	100	30	40	130	90	30
Ø63/30/-/	30	M22x1,5	35	16	94	51	84	73	62	15	G 3/8"	24	45	120	35	45	145	110	35
Ø80/40/-/	40	M28x2	45	20	112	59	102	90	76	18	G 1/2"	32	50	140	40	50	170	125	40
Ø100/50/-/	50	M36x2	50	25	114	59	124	110	77	18	G 1/2"	41	55	160	45	60	212	145	45
Ø125/60/-/	60	M45x2	56	30	128	73	155	140	87	22	G 3/4"	50	60	200	50	60	230	185	50
Ø160/90/-/	90	M56x2	75	45	140	73	196	180	93	27	G 3/4"	70	70	230	50	70	270	220	60

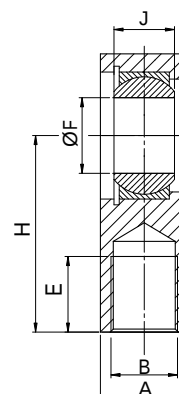
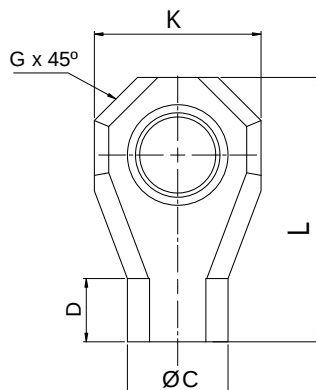
CILINDRO ROTATIVO
ROTARY CYLINDER



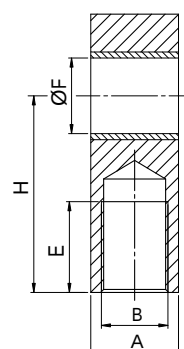
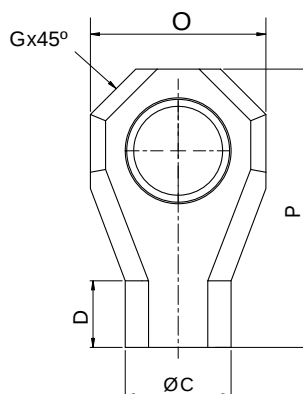
PRESIÓN MÁXIMA: 150Kg/cm²
MAXIMUM PRESSURE: 150Kg/cm²

Cilindro Cylinder	Par en m.Kg.a 70kg/m ² .	Carrera 90°/360° Stroke	A	B	C	D	E	F	G	H	I	J	K Gas	L	M	N	O	P	Q	R
Ø40	30 m.Kg.	55/220	105	125	17	60	11	70	80	78	9	50	G 1/4"	135	35	10	38	M10	10	4,7
Ø50	52 m.Kg.	60/239	115	140	13	65	13	80	90	90	11	60	G 1/4"	152	40	12	42	M12	12	4,9
Ø63	98 m.Kg.	71/283	125	160	15	80	13	90	110	112	11	73	G 3/8"	183	50	12	52	M14	14	5,5
Ø80	184 m.Kg.	83/330	150	180	19	100	13	100	130	132	11	90	G 1/2"	212	60	12	60	M16	18	6,8
Ø100	284 m.Kg	90/360	160	200	22	120	18	110	150	152	15	110	G 3/4"	242	70	15	65	M20	20	7,5

ACCESORIOS ACCESSORIES



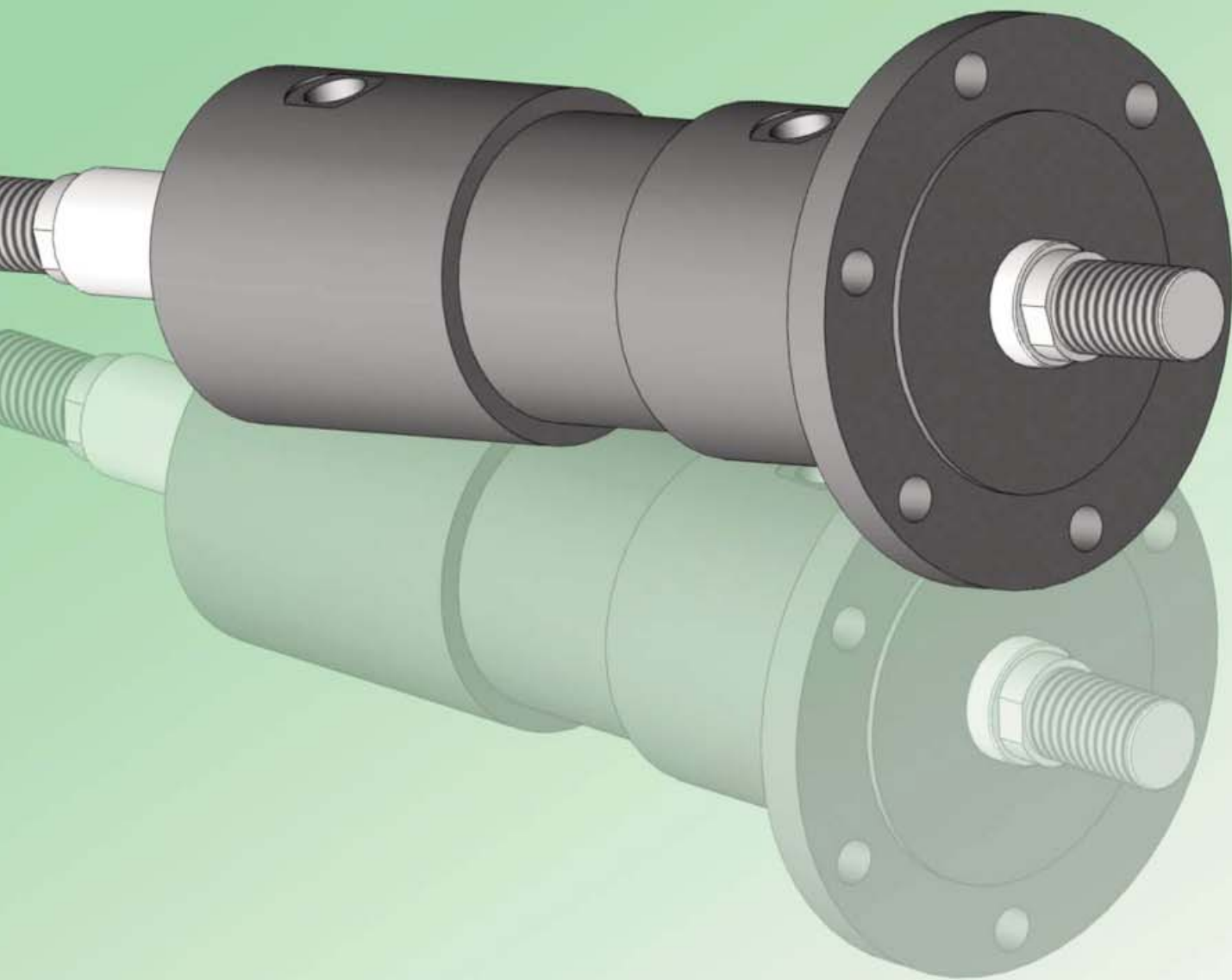
HORQUILLA RÓTULA HR
ROD CLEVIS BRACKETS HR



HORQUILLA CASQUILLO HG
ROD CLEVIS CASE HG

Cilindro Cylinder	A	B	C	D	E	F	G	H	J	K	L	RÓTULA	O	P	CASQUILLO
Ø40/20/-/	19	M14x1,5	25	15	20	15	8	50	12	38	68	GE-15-DO	38	68	15-20-20
Ø50/25/-/	22	M16x1,5	30	20	25	20	12	55	16	48	77	GE-20-DO	48	77	20-25-25
Ø63/30/-/	29	M22x1,5	35	22	30	25	15	65	20	58	92	GE-25-DO	58	92	25-30-30
Ø80/40/-/	38	M28x2	48	25	45	30	17	80	22	74	110	GE-30-DO	74	106	30-38-40
Ø100/50/-/	48	M36x2	60	30	55	35	20	100	25	86	137	GE-35-DO	78	134	35-45-50
Ø125/60/-/	58	M45x2	70	35	60	40	22	115	28	98	160	GE-40-DO	88	155	40-50-60
Ø160/90/-/	72	M56X2	95	40	80	50	25	145	35	118	200	GE-50-DO	98	190	50-60-35 (2 unidades/ 2 units)

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.



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