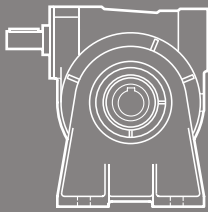
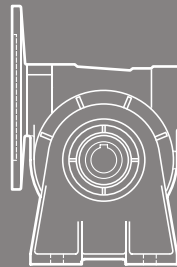


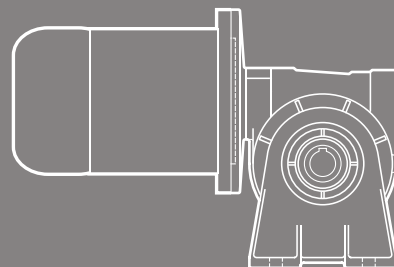
REDUCTORES DE TORNILLO SIN FIN
WORM GEARBOXES
REDUCTEURS A ROUE ET VIS SANS FIN



R



F



M

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Prestaciones de los reductores	<i>Performance of reduction gear</i>	Performances des réducteurs	16
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SERIE / SERIES / SERIE

S

▶ 20

SERIE / SERIES / SERIE

B

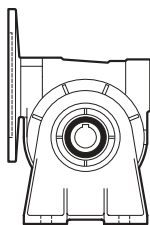
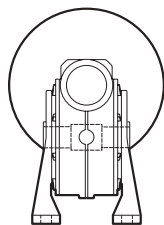
▶ 28

2.1 FORMA CONSTRUCTIVA

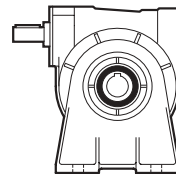
2.1 VERSIONS

2.1 VERSIONS

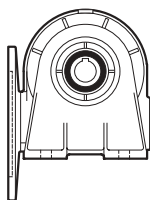
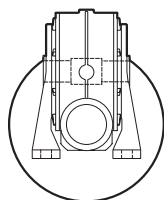
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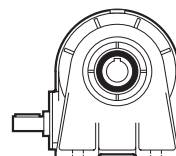
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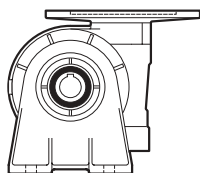
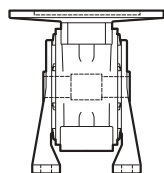
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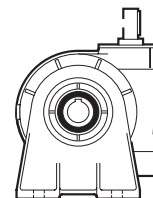
R.../B



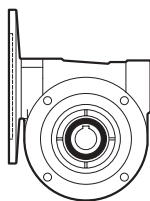
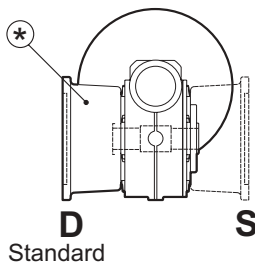
F.../V



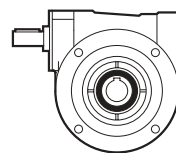
R.../V



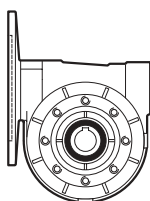
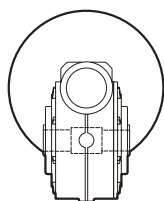
F.../F



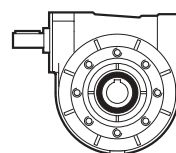
R.../F



F.../P



R.../P



* Si no se especifica lo contrario, la brida de salida vendrá montada según catálogo en la posición estándar D (Derecha)

* Unless otherwise specified, the output flange is installed in the standard position D (right) as shown in the catalogue.

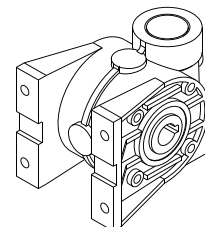
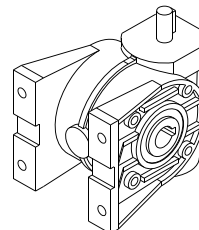
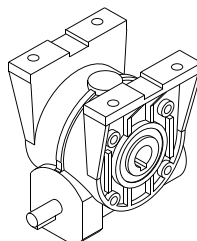
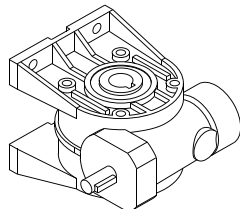
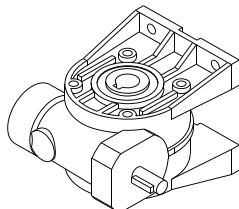
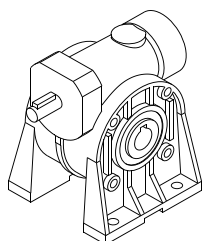
* Sauf indication contraire, la brida de sortie est montée dans la position standard D (droite) conformément au catalogue.



2.2 POSICIÓN DE MONTAJE

2.2 MOUNTING POSITIONS

2.2 POSITIONS DE MONTAGE



B3	B6	B7	B8	V5	V6
-----------	-----------	-----------	-----------	-----------	-----------

		Cantidad de Aceite <i>Oil quantity</i> Quantité d'huile [lt]		Peso <i>Weight</i> Poids [kg]		
		Posición de montaje <i>Mounting position</i> Position de montage		Forma constructiva <i>Design</i> Forme de construction		
		B3 - V5 - V6	B6 - B7 - B8	A - B - V	F	P
Tamaño <i>Frame size</i> Taille	30	0.06	0.06	1.2	1.2	1.2
	40	0.18	0.15	2.3	2.3	2.3
	50	0.28	0.25	4.5	4.5	4.5
	63	0.6	0.5	7.2	7.2	6.5
	70	0.8	0.7	8	8	7.4
	85	1.2	1.1	24	22	20

Especificar siempre en el pedido la posición de montaje y la forma constructiva.

Specify the version and the mounting position when ordering.

Bien spécifier la version et la position de montage lors de la commande.



2.3 PRESTACIONES DE LOS REDUCTORES

2.3 PERFORMANCE OF REDUCTION GEAR

2.3 PERFORMANCES DES REDUCTEURS

R 30															
i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					$n_1 = 2800 \text{ min}^{-1}$				
	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd
7.5	120	20	0.30	0.41	0.83	186	18	0.41	0.56	0.86	373	14	0.58	0.79	0.89
10	90	24	0.27	0.37	0.80	140	20	0.35	0.48	0.84	280	14	0.46	0.63	0.87
15	60	24	0.20	0.27	0.75	93	22	0.28	0.38	0.78	186	17	0.38	0.52	0.83
20	45	23	0.15	0.20	0.71	70	20	0.20	0.27	0.74	140	16	0.28	0.38	0.80
30	30	28	0.13	0.18	0.64	46	23	0.17	0.23	0.67	93	18	0.23	0.31	0.75
40	23	27	0.10	0.14	0.61	35	25	0.13	0.18	0.70	70	18	0.18	0.25	0.69
50	18	26	0.08	0.11	0.60	28	23	0.10	0.14	0.65	56	17	0.15	0.20	0.65
60	15	22	0.07	0.10	0.47	23	18	0.09	0.12	0.50	47	15	0.12	0.16	0.61
70	13	18	0.05	0.07	0.45	20	17	0.07	0.10	0.49	40	13	0.09	0.12	0.58
80						17	15	0.05	0.07	0.52	35	11	0.07	0.10	0.55
100						14	10	0.03	0.04	0.48	28	9	0.05	0.07	0.52

R 40															
i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					$n_1 = 2800 \text{ min}^{-1}$				
	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd
7.5	120	51	0.75	1.0	0.86	186	41	0.95	1.2	0.88	373	29	1.30	1.7	0.90
10	90	39	0.54	0.70	0.83	140	35	0.60	0.82	0.85	280	25	0.83	1.1	0.87
15	60	57	0.45	0.60	0.79	93	44	0.52	0.71	0.82	186	29	0.70	0.90	0.85
20	45	47	0.30	0.40	0.74	70	38	0.35	0.48	0.78	140	29	0.50	0.70	0.82
30	30	59	0.27	0.36	0.69	46	48	0.32	0.44	0.72	93	36	0.43	0.60	0.78
40	23	60	0.23	0.30	0.63	35	45	0.25	0.34	0.65	70	31	0.33	0.40	0.75
50	18	64	0.20	0.27	0.60	28	46	0.22	0.30	0.60	56	38	0.30	0.41	0.72
60	15	51	0.14	0.19	0.56	23	41	0.17	0.23	0.58	47	31	0.23	0.30	0.68
70	13	48	0.12	0.16	0.54	20	34	0.14	0.19	0.50	40	23	0.18	0.20	0.65
80	11	42	0.10	0.13	0.50	17	31	0.12	0.16	0.48	35	24	0.14	0.19	0.62
100	9	36	0.08	0.10	0.45	14	32	0.10	0.14	0.45	28	23	0.12	0.16	0.56

R 50															
i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					$n_1 = 2800 \text{ min}^{-1}$				
	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min^{-1}]	T_{2M} [Nm]	P [kW] [HP]		Rd
7.5	120	105	1.5	2.0	0.86	186	84	1.9	2.5	0.87	373	60	2.6	3.5	0.90
10	90	119	1.3	1.8	0.83	140	87	1.5	2.0	0.84	280	61	2.0	2.3	0.88
15	60	90	0.70	0.95	0.79	93	81	0.98	1.3	0.80	186	57	1.3	1.7	0.86
20	45	105	0.66	0.90	0.73	70	83	0.80	1.1	0.75	140	59	1.1	1.5	0.80
30	30	112	0.50	0.68	0.69	46	96	0.65	0.88	0.72	93	68	0.88	1.2	0.75
40	23	120	0.44	0.60	0.63	35	98	0.55	0.75	0.65	70	68	0.68	0.92	0.72
50	18	98	0.30	0.41	0.60	28	82	0.38	0.52	0.62	56	62	0.51	0.69	0.70
60	15	102	0.29	0.39	0.55	23	87	0.35	0.48	0.60	47	60	0.44	0.60	0.65
70	13	98	0.25	0.34	0.52	20	81	0.30	0.41	0.56	40	54	0.37	0.50	0.60
80	11	60	0.15	0.20	0.47	17	55	0.20	0.27	0.50	35	42	0.26	0.35	0.58
100	9	67	0.14	0.19	0.44	14	59	0.18	0.24	0.48	28	46	0.24	0.33	0.55



R 63

i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					$n_1 = 2800 \text{ min}^{-1}$				
	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd
7	128	156	2.4	3.3	0.87	200	132	3.1	4.2	0.89	400	99	4.6	6.2	0.90
10	90	162	1.8	2.4	0.85	140	142	2.4	3.3	0.87	280	103	3.4	4.6	0.89
15	60	150	1.2	1.5	0.82	93	135	1.6	2.1	0.85	186	105	2.4	3.2	0.87
20	45	148	0.88	1.2	0.79	70	145	1.3	1.8	0.82	140	103	1.8	2.4	0.84
25	36	165	0.82	1.1	0.76	56	148	1.1	1.5	0.79	112	112	1.6	2.2	0.82
30	30	160	0.70	0.9	0.72	46	158	1.0	1.4	0.76	93	106	1.3	1.7	0.79
35	26	165	0.66	0.8	0.68	40	148	0.85	1.2	0.73	80	106	1.2	1.5	0.77
40	23	153	0.56	0.75	0.66	35	134	0.70	0.95	0.70	70	106	1.1	1.4	0.74
45	20	150	0.50	0.70	0.63	31	134	0.65	0.90	0.67	62	105	0.95	1.3	0.72
50	18	127	0.40	0.50	0.60	28	125	0.58	0.75	0.63	56	93	0.80	1.1	0.68
60	15	134	0.37	0.50	0.57	23	121	0.48	0.63	0.61	46	96	0.70	0.95	0.66
70	13	117	0.30	0.40	0.53	20	115	0.43	0.58	0.56	40	92	0.62	0.85	0.62
80	11	113	0.26	0.35	0.50	17	118	0.39	0.53	0.54	35	90	0.55	0.75	0.60
100	9	110	0.23	0.31	0.45	14	106	0.32	0.43	0.48	28	88	0.48	0.65	0.54

R 70

i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					$n_1 = 2800 \text{ min}^{-1}$				
	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd
7	128	188	2.90	3.9	0.87	200	149	3.5	4.7	0.89	400	123	5.8	7.8	0.90
10	90	219	2.40	3.3	0.86	140	162	2.7	3.7	0.88	280	137	4.5	6.1	0.89
15	60	225	1.70	2.3	0.83	93	177	2.0	2.7	0.86	186	152	3.4	4.6	0.87
20	45	221	1.30	1.8	0.80	70	181	1.6	2.2	0.83	140	145	2.5	3.4	0.85
25	36	225	1.10	1.5	0.77	56	191	1.4	1.9	0.80	112	154	1.8	2.5	0.83
30	30	229	1.00	1.4	0.72	46	197	1.3	1.7	0.76	93	146	1.8	2.5	0.79
35	26	219	0.85	1.2	0.70	40	194	1.1	1.5	0.74	80	143	1.6	2.1	0.77
40	23	209	0.75	1.00	0.67	35	184	0.95	1.3	0.71	70	153	1.5	2.0	0.75
45	20	202	0.65	0.90	0.65	31	170	0.80	1.1	0.69	62	146	1.3	1.8	0.73
50	18	197	0.60	0.82	0.62	28	169	0.75	1.0	0.66	56	141	1.2	1.6	0.72
60	15	188	0.50	0.68	0.59	23	167	0.65	0.90	0.62	46	134	0.95	1.3	0.68
70	13	178	0.44	0.60	0.55	20	158	0.57	0.77	0.58	40	130	0.85	1.2	0.64
80	11	172	0.38	0.52	0.52	17	154	0.50	0.68	0.55	35	125	0.75	1.0	0.61
100	9	146	0.30	0.40	0.46	14	127	0.38	0.50	0.49	28	122	0.65	0.90	0.55

R 85

i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					$n_1 = 2800 \text{ min}^{-1}$				
	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd	n_2 [min ⁻¹]	T_{2M} [Nm]	P [kW] [HP]		Rd
7	128	276	4.3	5.8	0.87	200	245	5.8	7.8	0.89	400	185	8.6	11.7	0.90
10	90	292	3.2	4.4	0.86	140	270	4.5	6.1	0.88	280	199	6.6	8.9	0.89
15	60	337	2.6	3.5	0.83	93	296	3.4	4.6	0.86	186	221	5.0	6.7	0.87
20	45	306	1.8	2.5	0.80	70	287	2.5	3.4	0.84	140	205	3.5	4.8	0.86
25	36	331	1.6	2.2	0.78	56	304	2.2	3.0	0.81	112	229	3.2	4.4	0.84
30	30	367	1.6	2.2	0.72	46	352	2.2	3.0	0.77	93	247	3.0	4.1	0.80
35	26	339	1.3	1.8	0.71	40	322	1.8	2.5	0.75	80	255	2.7	3.7	0.79
40	23	349	1.2	1.6	0.70	35	339	1.7	2.3	0.73	70	273	2.6	3.5	0.77
45	20	357	1.1	1.5	0.68	31	306	1.4	1.9	0.71	62	236	2.0	2.8	0.75
50	18	362	1.1	1.4	0.65	28	294	1.3	1.7	0.69	56	227	1.8	2.5	0.74
60	15	325	0.81	1.1	0.63	23	292	1.1	1.4	0.67	46	209	1.4	1.9	0.72
70	13	308	0.70	0.95	0.60	20	281	0.92	1.2	0.64	40	214	1.3	1.8	0.69
80	11	281	0.60	0.82	0.54	17	296	0.85	1.1	0.62	35	192	1.1	1.4	0.67
100	9	254	0.50	0.68	0.48	14	257	0.70	0.9	0.54	28	174	0.85	1.2	0.60



2.4 POSIBLES PREDISPOSICIONES

2.4 POSSIBLE SET-UPS

2.4 POSSIBILITES DE MONTAGE

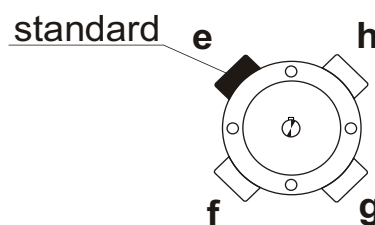
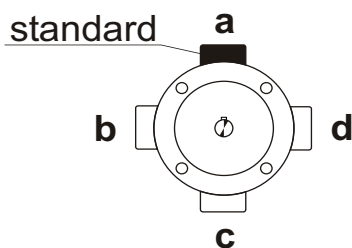
		PAM B5 - B14						
i		56	63	71	80	90	100	112
F 30	7.5 - 40							
	50 - 100							
F 40	7.5 - 40							
	50 - 70							
	80 - 100	*						
F 50	7.5 - 40							
	40 - 80		*					
	100		*					
F 63	7 - 35							
	40 - 60			*				
	70 - 100			*				
F 70	7 - 15				*	*		
	20 - 40				*	*		
	45 - 100				*			
F 85	7 - 35				*	*		
	40 - 60				*	*		
	70 - 100				*			

* La brida B14 tiene los taladros de acople al motor dispuestos en axis. Verificar las dimensiones de montaje para el correcto posicionamiento de la caja de bornes del motor.

* *B14 flanges have the motor mounting holes arranged along the axes. Check overall dimensions to determine correct position of motor terminal box.*

* Les brides B14 ont les trous de fixation du moteur le long des axes. Vérifier les encombrements pour déterminer la position correcte de la boîte à bornes du moteur

Posición caja de bornes
Terminal board position
Position de la boîte à bornes





2.5 PRESTACIONES
DE LOS MOTORREDUCTORES

2.5 PERFORMANCE
OF MOTOR REDUCTION GEAR

2.5 PERFORMANCES
DES MOTO REDUCTEURS

		$n_1 = 1400 \text{ min}^{-1}$															
		i	7	7.5	10	15	20	25	30	35	40	45	50	60	70	80	100
		n2	200	186.7	140	93.3	70	56	46.7	40	35	31.1	28	23.3	20	17.5	14
30	P ₁ [kW]			0.18	0.18	0.18	0.18		0.18		0.13		0.09	0.09	0.09	0.09	0.09
	T ₂ [Nm]			8	10	14	18		25		25		20	18	21	26*	30*
	F _s			2.3	1.9	1.5	1.1		0.9		1.0		1.2	1.0	0.8	0.6*	0.3*
	PAM			63						63		63		56			
40	P ₁ [kW]			0.37	0.37	0.37	0.25		0.25		0.25		0.18	0.18	0.13	0.13	0.13
	T ₂ [Nm]			17	22	31	27		37		44		37	43	31	34	40
	F _s			2.5	1.6	1.4	1.4		1.3		1.0		1.3	1.0	1.1	0.9	0.8
	PAM			71						71		71		63			
50	P ₁ [kW]			0.75	0.75	0.75	0.75		0.55		0.55		0.37	0.37	0.25	0.25	0.18
	T ₂ [Nm]			33	43	61	77		81		98		78	91	67	68	59
	F _s			2.5	2.0	1.3	1.1		1.2		1.0		1.1	1.0	1.2	0.8	1.0
	PAM			80						80		80		71			
63	P ₁ [kW]	1.50			1.5	1.5	1.1	1.1	1.1	1.1	0.75	0.55	0.55	0.55	0.37	0.37	0.25
	T ₂ [Nm]	64			89	131	123	148	171	192	143	113	118	137	99	109	82
	F _s	2.07			1.6	1.0	1.2	1.0	0.9	0.8	0.9	1.2	1.1	0.9	1.2	1.1	1.3
	PAM	90			90						80					71	
70	P ₁ [kW]	3.00			2.2	2.2	1.5	1.1	1.1	1.1	1.1	0.75	0.75	0.55	0.55	0.55	0.55
	T ₂ [Nm]	127.5			132	194	170	150	171	194	213	159	169	140	152	165	184*
	F _s	1.17			1.2	0.9	1.1	1.3	1.2	1.0	0.9	1.1	1.0	1.2	1.0	0.9	0.7*
	PAM	100			100			90					80				
85	P ₁ [kW]	4.00			4.00	3.00	2.20	2.20	2.20	1.50	1.50	1.10	1.10	1.10	0.75	0.75	0.55
	T ₂ [Nm]	170.0			240	264	252	304	347	269	299	240	259	302	229	254	203
	F _s	1.44			1.1	1.1	1.1	1.0	1.0	1.2	1.1	1.3	1.1	1.0	1.2	1.2	1.3
	PAM	112			112	100					90					80	

* ATENCIÓN: el par máximo permitido (T_{2M}) se tiene que calcular utilizando el factor de servicio T_{2M} = T₂ x F_s

* WARNING: Maximum allowable torque [T_{2M}] must be calculated using the following service factor:
 $T_{2M} = T_2 \times F_s$

* ATTENTION : le couple maximum admissible (T_{2M}) se calcule en utilisant le facteur de service suivant : $T_{2M} = T_2 \times F_s$



S

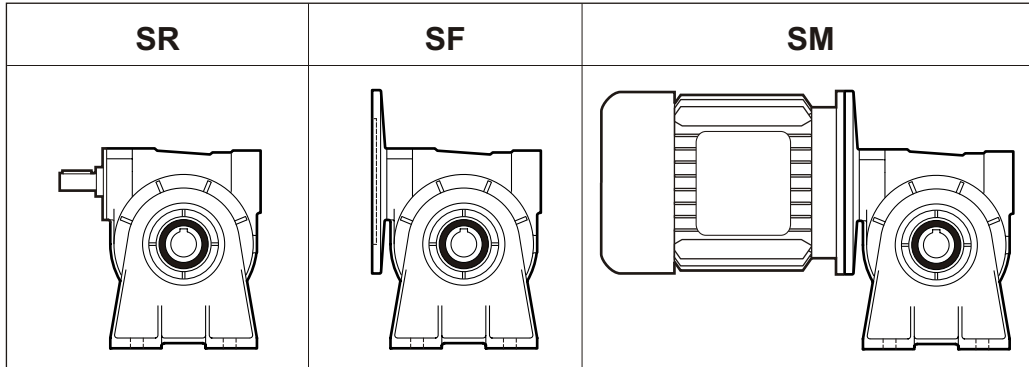
REDUCTORES DE TORNILLO SIN FIN WORM GEAR UNITS AND WORM GEARED MOTORS REDUCTEURS ET MOTOREDUCTEURS A ROUE ET VIS SANS FIN

			Página Page Page
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Extremos del eje de entrada	<i>Input shaft end</i>	Bout d'arbre d'entrée	25
Eje hueco	<i>Hollow shaft</i>	Arbre creux	25
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Versiones

Versions

Versions



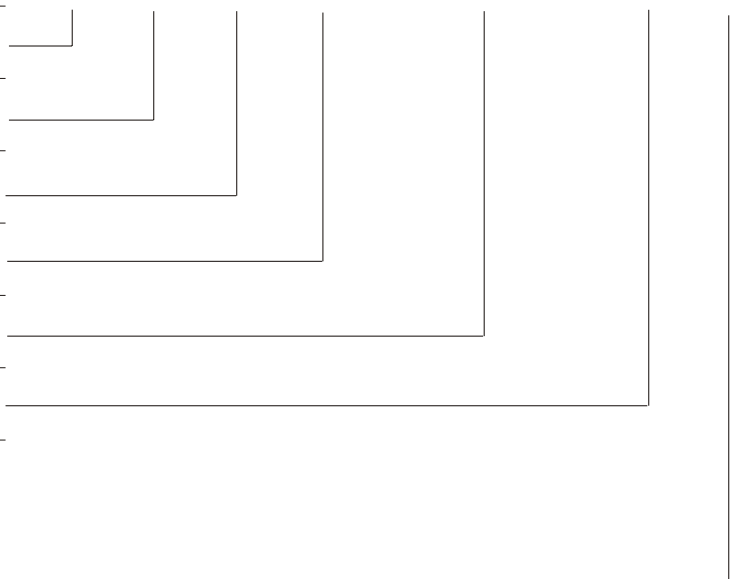
Designación

Designation

Désignation

SF	50	A	1:30	PAM	71	B5	B3
----	----	---	------	-----	----	----	----	------

Versión <i>Version</i> Version	SR - SF - SM							
Tamaño <i>Frame size</i> Taille	30 - 40 - 50							
Forma constructiva <i>Design</i> Forme de construction	A - B - V - F - P							
Relación <i>Ratio</i> Rapport de réduction	7.5 ÷ 100							
Ataque a motor <i>Motor coupling</i> Accouplement moteur	➔ 14							
Posición de montaje <i>Mounting position</i> Position de montage	➔ 11							
Opciones / Options / Options								
<ul style="list-style-type: none"> • Montaje brida de salida opuesto al montaje de catálogo (S) <i>Flange installed at opposite end as catalogue position (S)</i> Montage de la bride de sortie contraire au catalogue (S) • Rodamientos cónicos en la corona <i>Worm wheel taper bearings</i> Roulements coniques sur la roue • Sin fin prolongado <i>Double ended worm shaft</i> Vis avec deux arbres dépassants 								

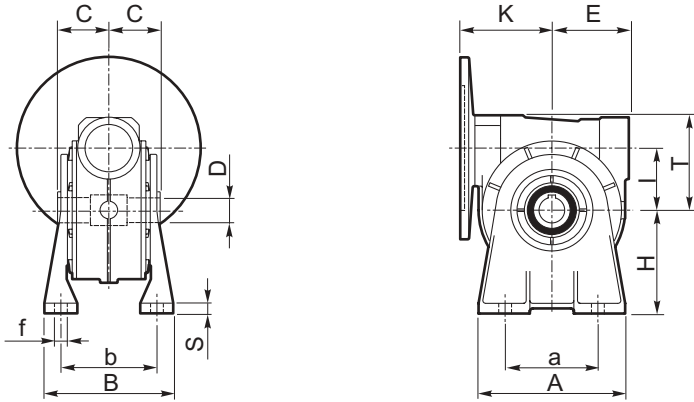


3.2 DIMENSIONES SERIE S

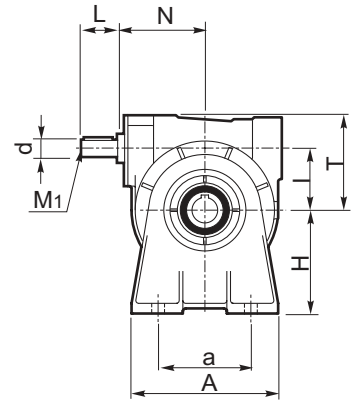
3.2 DIMENSIONS S SERIES

3.2 DIMENSIONS SERIE S

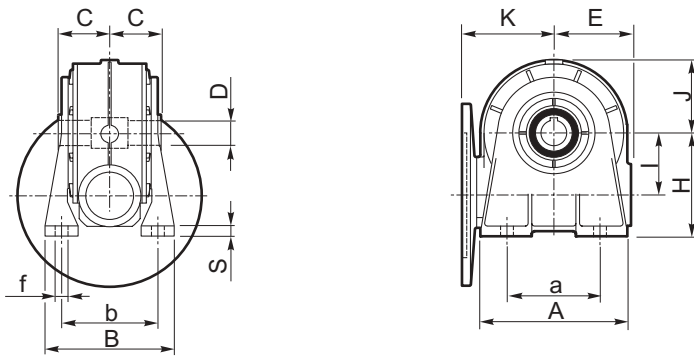
SF.../A



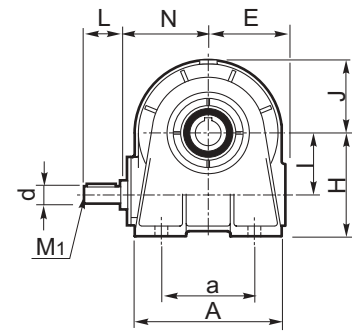
SR.../A



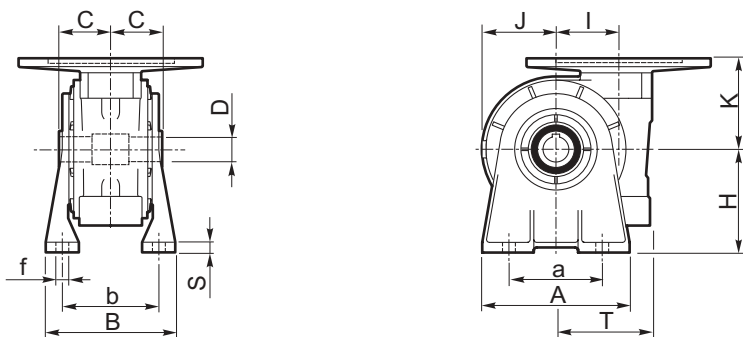
SF.../B



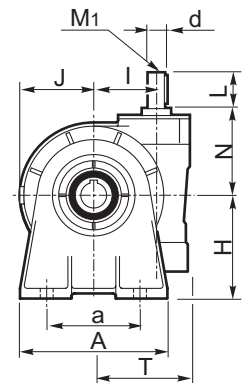
SR.../B



SF.../V



SR.../V



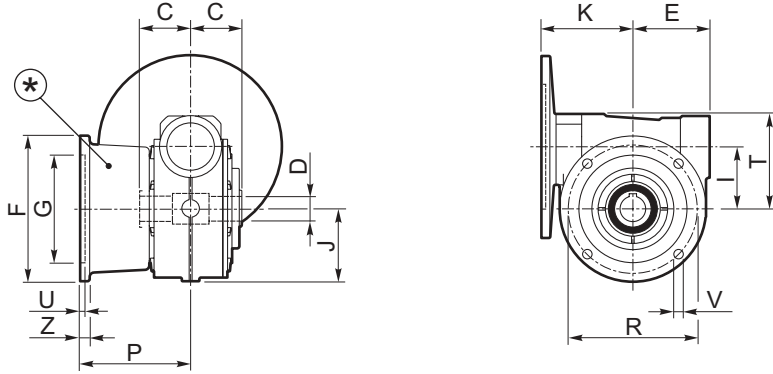
S	A	a	B	b	C	D (H7)	d (j6)	E	f ∅	F ∅	F _p ∅	G (H8)	G _p	H	I	J	K	L	M ₁	M ₂	N	P	P _p	R ∅	R _p ∅	S	T	U	V ∅	X	Z		
30	78	52	80	66	31	14	9	46	6.5	80	74	40	42	H8	52	31.5	39	54	20	M4	n°4	M6x8	48	50	36	56	56	6.5	51	3	6	5.5	6
40	106	70	102	84	41	19	11	60	7	140	100	95	60	h8	71	40	53	67	22	M5	n°4	M6x8	62	82	38	115	83	8	70	5	9	2	10
50	126	85	115	96/99	49	24	14	70	9	160	120	110	70	h8	85	50	64	79	30	M6	n°4	M8x10	75	92	46	130	85	12	81	5	9	2	10

3.2 DIMENSIONES SERIE S

3.2 DIMENSIONS S SERIES

3.2 DIMENSIONS SERIE S

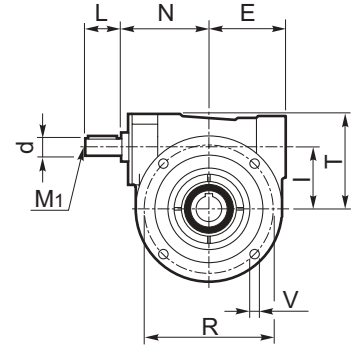
SF.../F



* **NOTA:** A partir del tamaño S 50 la brida de salida F es modular, siendo ésta montada sobre la brida pendular S50P

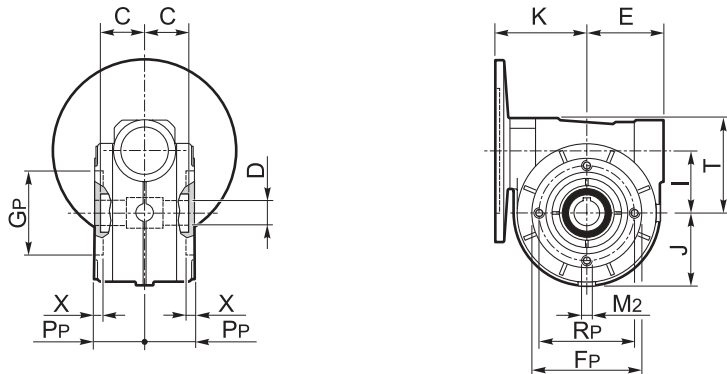
* **NOTE:** Frame size S 50 uses a modular output flange F mounted to the shaft-mounted flange S 50P.

SR.../F

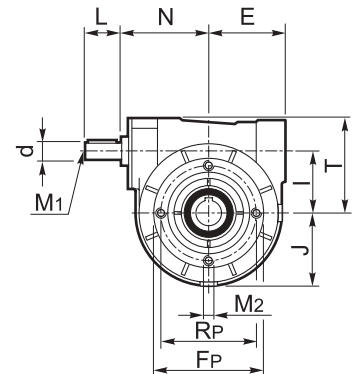


* **NOTE :** la taille S 50 utilise une brida de sortie F modulable, adaptable à la brida pendulaire S 50 P

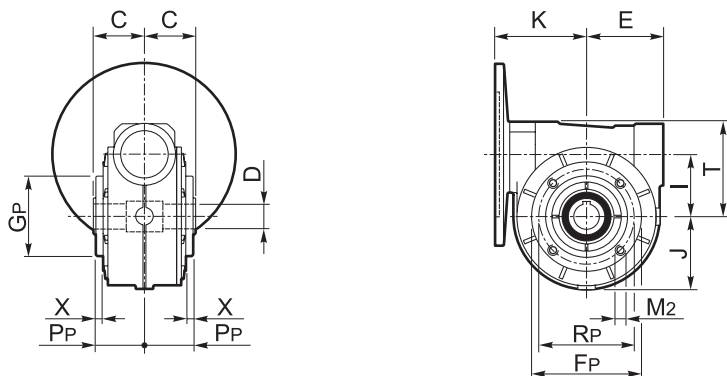
SF 30/P



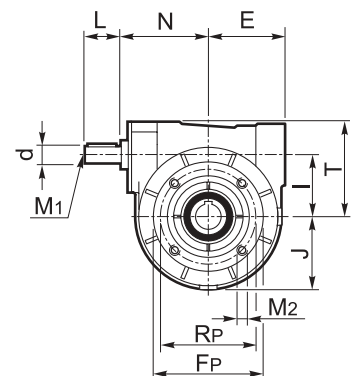
SR 30/P



SF 40/P - SF 50/P



SR 40/P - SR 50/P



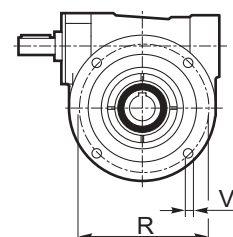
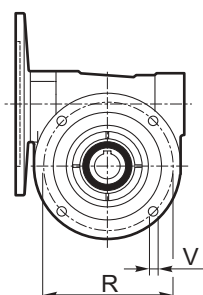
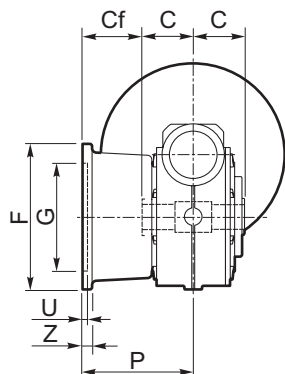
3.3 VERSIONES CON BRIDA DE SALIDA ESPECIAL

3.3 VERSIONS WITH SPECIAL OUTPUT FLANGE

3.3 VERSIONS AVEC BRIDE DE SORTIE SPECIALE

SF.../F

SR.../F



S		DIMENSIONES/ DIMENSIONS / DIMENSIONS								
		C	C _f	F	G ^[H8]	P	R +/- 0.1	U	V	Z
30	FB2	31	22.5	80	50	53.5	58-68	4	6	9
	FB3 *	31	42.5	105	70	73.5	85	4	6.5	8.5
40	FB2	41	19	115	60	60	87	4	9	8
	FB3	41	28	110	60	69	87	6	9	17
	FB4	41	19	115	80	60	100	4	9	8
	FB5	41	21	115	80	62	100	5	9	10
50	FB2	49	44	125	70	93	90	5	10	12.5
	FB3	49	24	125	70	73	100	4	9	7.5
	FB4	49	36	125	70	85	90	4.5	10	10.5
	FB5	49	32	140	95	81	115	5	10	11
	FB6	49	26	140	95	75	115	4	10	8.5

* Brida modular (No se puede montar sobre la brida FP estándar) Su configuración se debe indicar en el pedido.

* Modular flanges (will not fit standard FP. Configuration must be determined on order).

* Brides modulables (Ne se montent pas sur la FP standard. La configuration doit être confirmée lors de la commande).

Taladros ranurados.

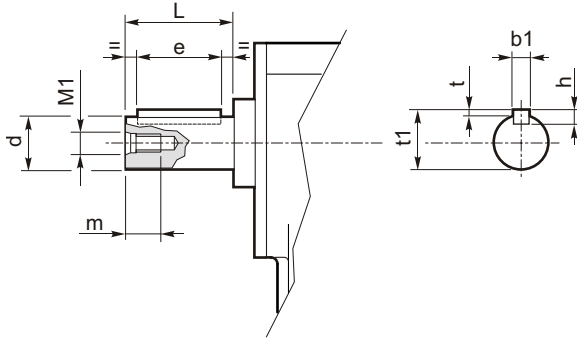
Slotted holes

Trous oblongs

3.4 EXTREMOS DEL EJE DE ENTRADA

3.4 INPUT SHAFT END

3.4 BOUT D'ARBRE D'ENTREE

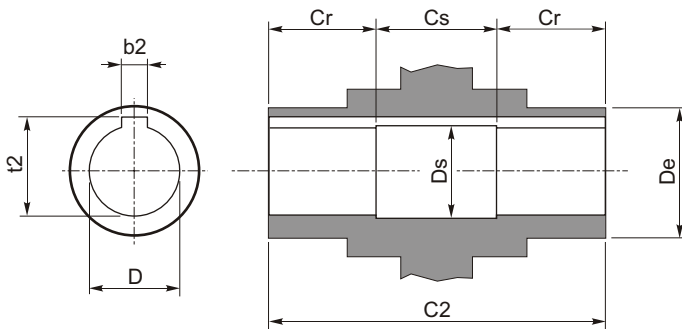


S	b ₁	d (j6)	e	h	L	m	M ₁	t	t ₁
30	3	9	15	3	20	8	M4	1.2	10.2
40	4	11	15	4	22	10	M5	1.5	12.5
50	5	14	25	5	30	12	M6	2.0	16.0

3.5 EJE HUECO

3.5 HOLLOW SHAFT

3.5 ARBRE CREUX

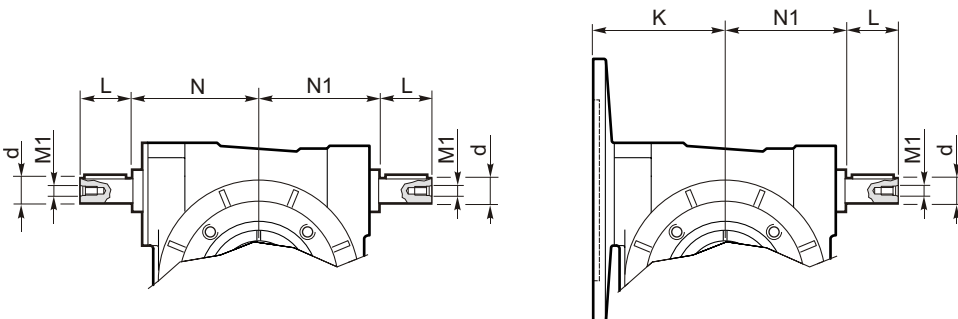


S	b ₂ (H8)	D (H7)	D _e	D _s	t ₂	C ₂	C _r	C _s
30	5	14	25	14.5	16.3	62	22	18
40	6	19	30	19.5	21.8	82	30	22
50	8	24	40	24.5	27.3	98	35	28

3.6 EJECUCIÓN CON SIN FIN PROLONGADO (Bajo pedido)

3.6 DOUBLE EXTENDED WORM SHAFT DESIGN (on request)

3.6 VERSION AVEC DEUX ARBRES DEPASSANTS (Sur demande)



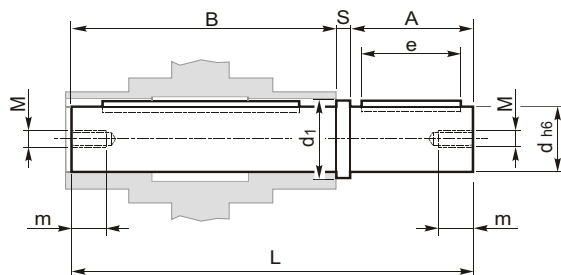
S	d (j6)	L	M ₁	N	N ₁	K
30	9	20	M4	48	48	54
40	11	22	M5	62	63	67
50	14	30	M6	75	73	79

3.7 ACCESORIOS

3.7 ACCESSORIES

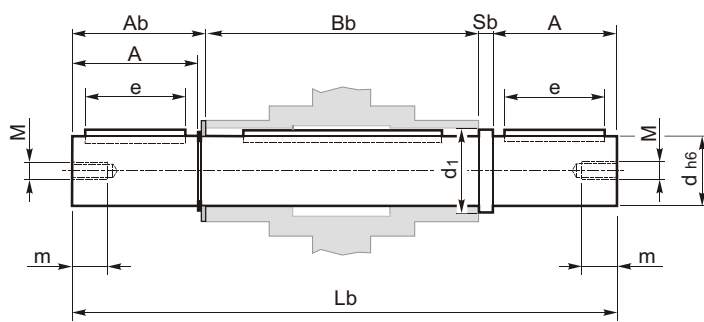
3.7 ACCESSOIRES

Eje lento simple
Single output shaft
Arbre de sortie simple

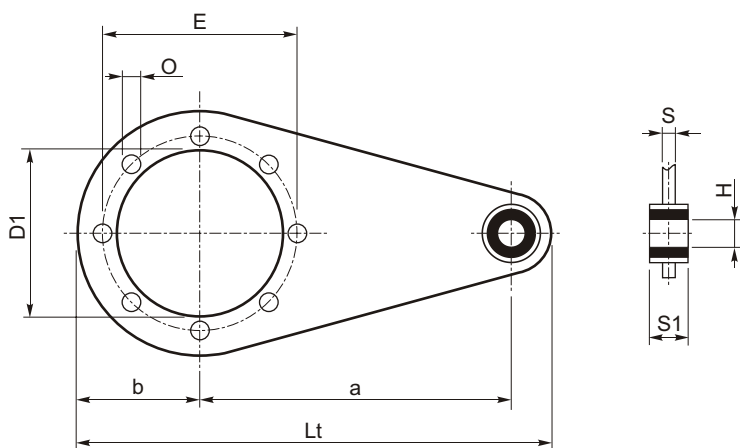


S	d (h7)	A	A _b	B	B _b	e	L	L _b	m	M	S	S _b
30	14	30	32.5	60	62	20	93	127	14	M6	3	2.5
40	19	40	42.5	80	82	25	125	167	15	M6	5	2.5
50	24	50	53	95	98	30	150	204	18	M8	5	3

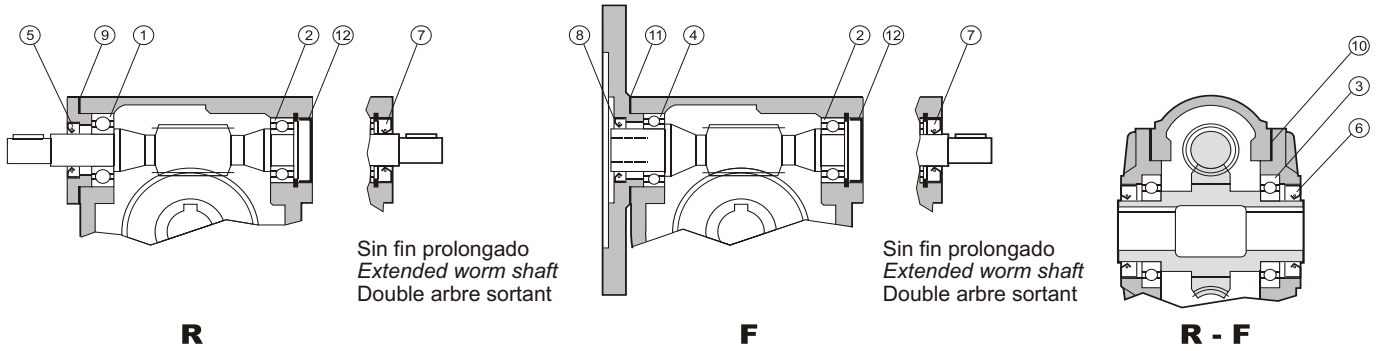
Eje lento doble
Double output shaft
Arbre de sortie double



Brazo de reacción
Torque arm
Bras de réaction



S	a	b	D ₁	E	H	L _t	O	S	S ₁
40	90	50	60	83	8	165	7	4	15
50	100	55	70	85	8	180	9	4	15



Vers.	Rodamientos / Bearings / Roulements					Retenes / Oilseals / Bagues d'étanchéité					Juntas / Gasket / Joints				Tapones de goma / Rubber plugs / Bouchons en caoutchouc
	R	R - F		F		R	R - F		F	R	R - F		F	R - F	
Pz. n. / Part nb. / Numéro de pièce	1	2	3	IEC	4	5	6	7	IEC	8	9	10	IEC	11	12
30	6002	6000	16005	56 63	6002 61804	15/24/7	25/35/7	10/26/7	56 63	15/24/7 20/30/7	7330110010	7330110001	56 63	7330110010	RCA 26
40	6004	6202	6006	56 63 71	6004 6005	20/30/7	30/47/7	15/35/7	56 63 71	20/30/7 25/35/7	7330115010	7330115001	56 63 71	7330115010 7330115011	RCA 35
50	6005	6203	6008	56 63 71 80	6005 6006	25/35/7	40/56/8 (40/52/7) ⁽¹⁾	17/40/7	56 63 71 80	25/35/7 30/47/7	7330120010	7330120001	56 63 71 80	7330120010 7330120011	RCA 40

(1) Solo en FB2, FB3, FB4, FB5, FB6

(1) Only for FB2, FB3, FB4, FB5, FB6

(1) Uniquement pour FB2, FB3, FB4, FB5, FB6



B

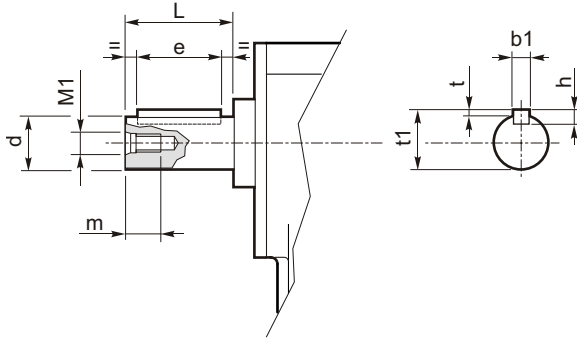
REDUCTORES Y MOTORREDUCTORES DE TORNILLO SIN FIN WORM GEAR UNITS AND WORM GEARED MOTORS REDUCTEURS ET MOTOREDUCTEURS A ROUE ET VIS SANS FIN

			Página Page Page
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Extremos del eje de entrada	<i>Input shaft end</i>	Bout d'arbre d'entrée	33
Eje hueco	<i>Hollow shaft</i>	Arbre creux	33
Ejecución con sin fin prolongado (bajo pedido)	<i>Double extended worm shaft design</i>	Version avec deux arbres dépassants	33
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Lista de repuestos	<i>Spare parts list</i>	Liste des pièces détachées	35

4.4 EXTREMOS DEL EJE DE ENTRADA

4.4 INPUT SHAFT END

4.4 BOUT D'ARBRE D'ENTREE

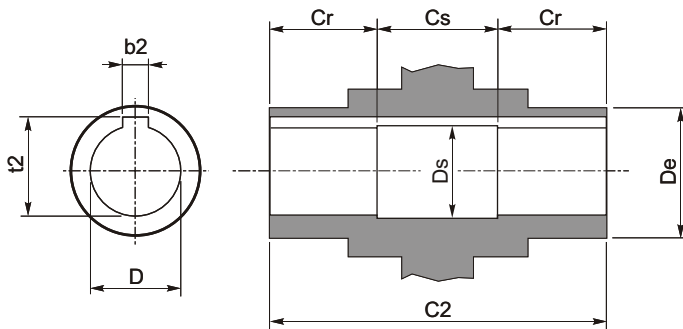


B	b ₁	d (j6)	e	h	L	m	M ₁	t	t ₁
30	3	9	15	3	20	8	M4	1.2	10.2
40	4	11	15	4	22	10	M5	1.5	12.5
50	5	14	25	5	30	12	M6	2.0	16.0
63	6	18	40	6	45	15	M6	2.5	20.5
70	6	19	35	6	40	16	M6	2.5	21.5
85	8	24	45	7	50	20	M8	3.0	27.0

4.5 EJE HUECO

4.5 HOLLOW SHAFT

4.5 ARBRE CREUX

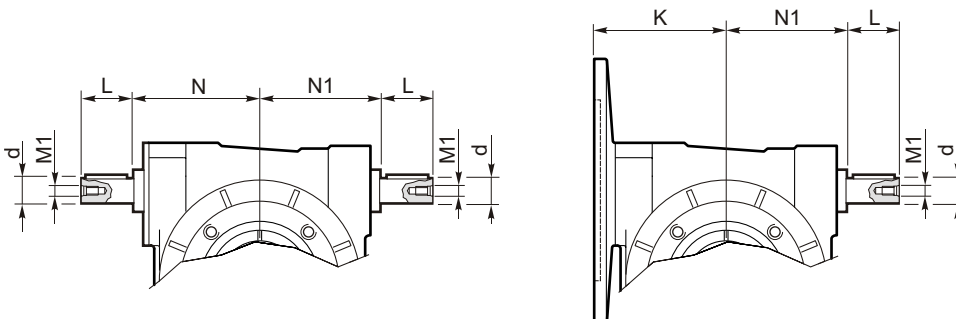


B	b ₂ (H8)	D (H7)	D _e	D _s	t ₂	C ₂	C _r	C _s
30	5	14	25	14.5	16.3	55	20	15
40	6	18	30	18.5	20.8	64	22	20
50	8	25	40	25.5	28.3	82	30	22
63	8	25	40	25.5	28.3	120	45	30
70	8	28	45	28.5	31.3	120	45	30
85	10	35	50	35.5	38.3	140	45	50

4.6 EJECUCIÓN CON SIN FIN PROLONGADO (Bajo pedido)

4.6 DOUBLE EXTENDED WORM SHAFT DESIGN (on request)

4.6 VERSION AVEC DEUX ARBRES DEPASSANTS (Sur demande)



B	d (j6)	L	M ₁	N	N ₁	K
30	9	20	M4	48	48	54
40	11	22	M5	62	63	67
50	14	30	M6	75	73	79
63	18	45	M6	90	85	95
70	19	40	M6	98	90	103 108
85	24	50	M8	120	110	125

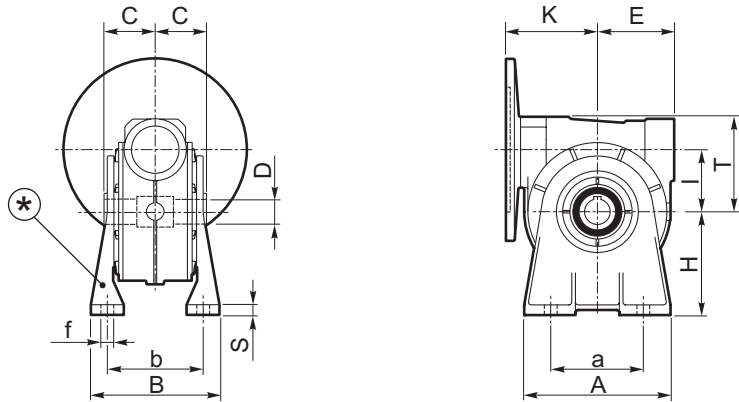
solo para PAM 112
 Only for PAM 112
 Uniquement pour PAM 112

4.2 DIMENSIONES SERIE B

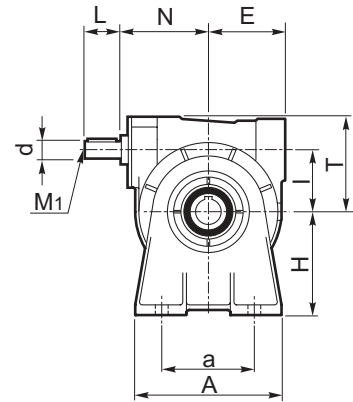
4.2 DIMENSIONS B SERIES

4.2 DIMENSIONS SERIE B

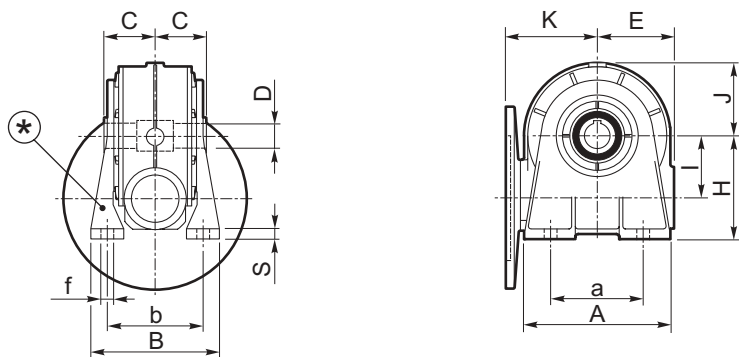
BF.../A



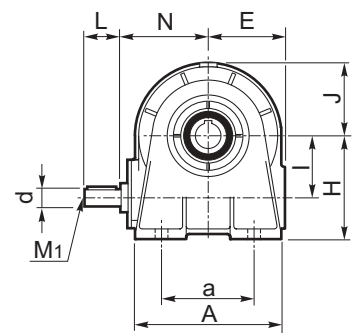
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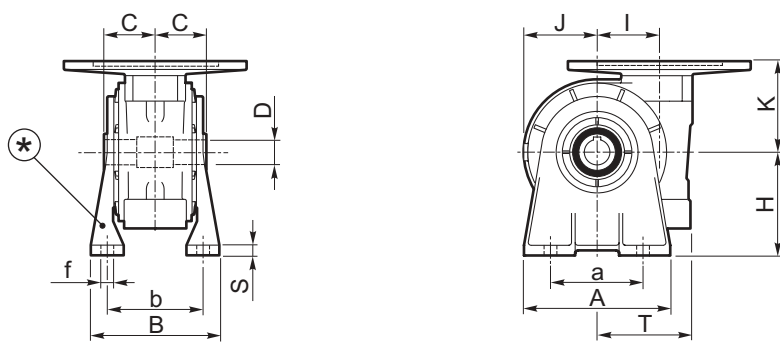
BF.../B



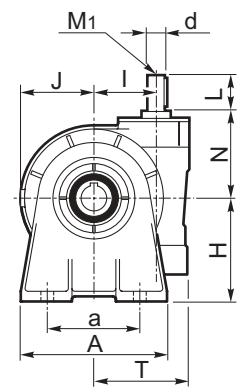
BR.../B



BF.../V



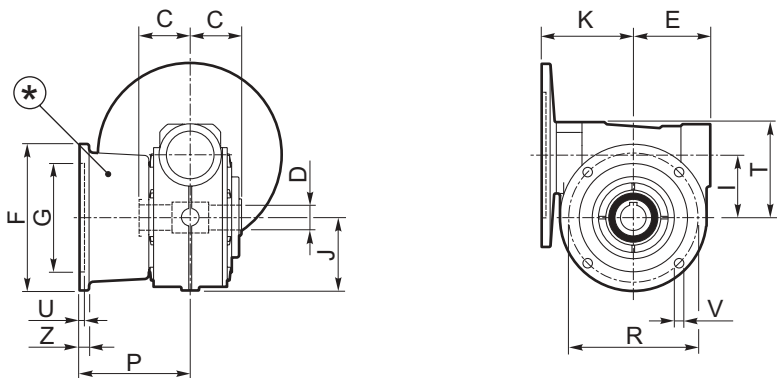
BR.../V



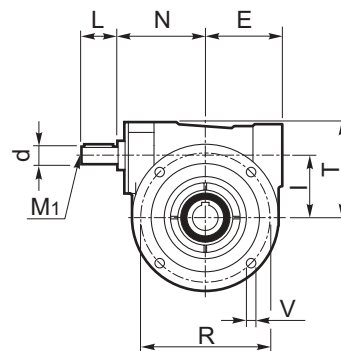
B	A	a	B	b	C	D (H7)	d (j6)	E	f	F	F _p	G (H8)	G _p toll.	H	I	J	K	L	M ₁	M ₂	N	P	P _p	R	R _p	S	T	U	V	X	Z
30	78	50	80	66	27.5	14	9	46	6.5	80	74	50	h8	55	31.5	39	54	20	M4	n°4 M6x7	48	50.5	30	68	65	7.5	51	3	6	1.5	6.5
40	106	52	99	81	32	18	11	60	8.5	110	100	60	h8	72	40	53	67	22	M5	n°4 M6x8	62	60	38	87	65	9	70	5	9	1.5	8
50	126	63	115	98.5	41	25	14	70	9	125	120	70	h8	82	50	64	79	30	M6	n°4 M6x8	75	85	44	90	94	10	81	4.5	10	2	11
63	136	95	136	111	60	25	18	80	11	180	106	115	h8	100	63	75	95	45	M6	n°8 M8x12	90	116	45	150	90	12	98	7	11	12	11
70	156	120	144	116	60	28	19	85	11	200	128	130	h8	115	70	85	103 108	40	M6	n°8 M8x12	98	111	50	165	110	12	112	5	12	7	12
85	200	140	176	140 147	70	35	24	105	12	200	150	152	h8	142	85	100	125	50	M8	n°8 M10x14	120	151	56.5	176	130	14	129	6	13	10	13

☐ Solo para PAM112 / Only for PAM 112 / Uniquement pour PAM 112

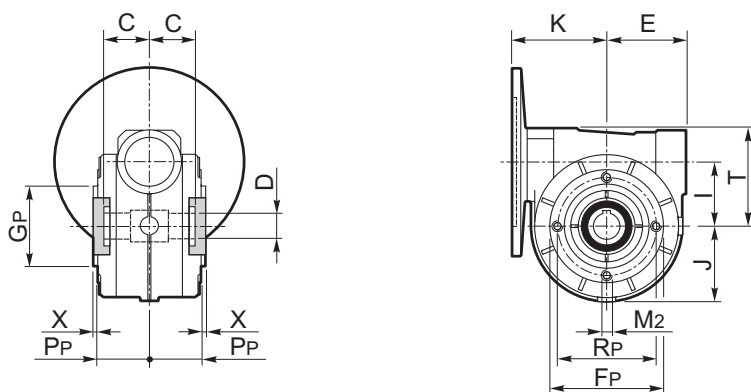
BF.../F



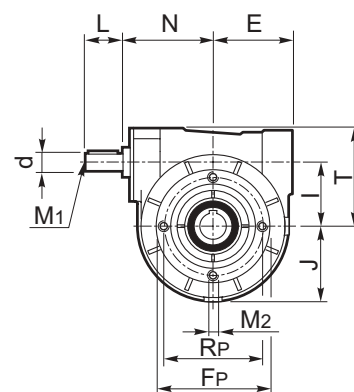
BR.../F



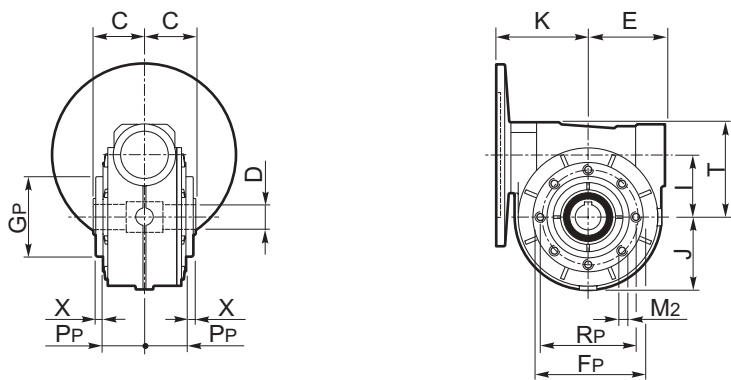
BF 30- 40-50/P



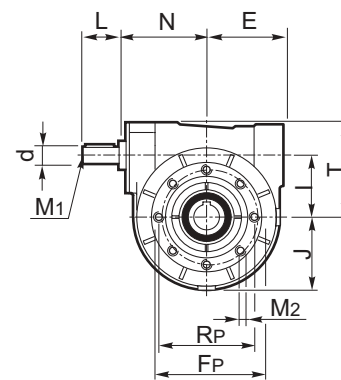
BR 30- 40-50/P



BF 63-70-85/P



BR 63-70-85/P



* **NOTA:** A partir del tamaño B 40 la brida de salida F es modular, siendo ésta montada sobre la brida pendular B40P.
En los tamaños 63-70-85 las patas y la brida de salida son siempre modulares por lo tanto siempre estarán montadas sobre la brida pendular B.P.

* **NOTE:** Frame size B 40 uses a modular output flange F mounted to the shaft-mounted flange B 40P.
Frame sizes 63 - 70 - 85 come with modular feet and output flanges mounted to shaft-mounted flanges B.P. as standard.

* **NOTE :** la taille B40 utilise une brida de sortie F modulable montée sur la brida pendulaire B40P.
Sur les tailles 63, 70 et 85 les pattes et les brides de sortie sont toujours modulaires et donc toujours montées sur les brides pendulaires BP.

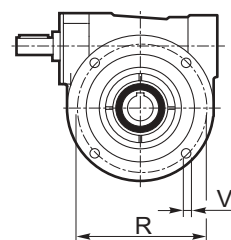
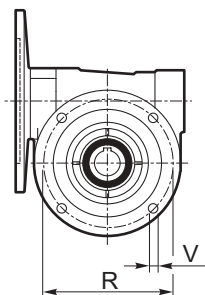
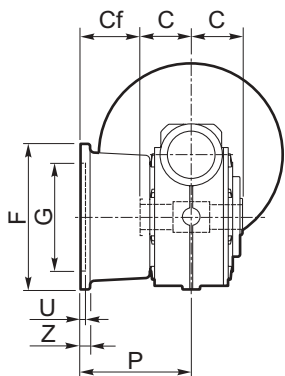
4.3 **VERSIÓN CON BRIDA DE SALIDA ESPECIAL**

4.3 **VERSIONS WITH SPECIAL OUTPUT FLANGE**

4.3 **VERSIONS AVEC BRIDE DE SORTIE SPECIALE**

BF.../F

BR.../F



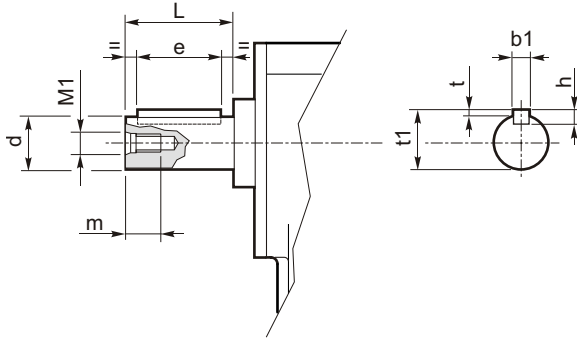
B		DIMENSIONES / DIMENSIONS / DIMENSIONS								
		C	C _f	F	G [H8]	P	R	U	V	Z
63	FB1 *	60	26	180	115	86	150	5	11	11
	FB2 *	60	42	200	130	102	165	6	13	11
	FB3 *	60	22	160	110	82	130	5	10	11
70	FB1 *	60	25	200	130	85	165	5	12	13
	FB2 *	60	56	175	115	116	150	5	12	11
	FB3 *	60	25	175	115	85	150	5	12	11
	FB3A *	60	25	160	110	85	130	5	12	11
	FB4 *	60	41	160	110	101	130	6	12	11
85	FBA *	70	80	200	130	150	165	5	12.5	12
	FB1 *	70	40.5	200	152	110.5	176	6	13	13
	FB1A *	70	39	200	130	109	165	5	12	13

* Brida modular
 * Modular flanges
 * Brides modulables

4.4 EXTREMOS DEL EJE DE ENTRADA

4.4 INPUT SHAFT END

4.4 BOUT D'ARBRE D'ENTREE

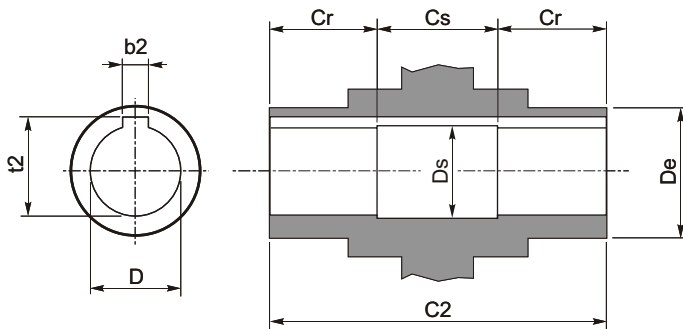


B	b ₁	d (j6)	e	h	L	m	M ₁	t	t ₁
30	3	9	15	3	20	8	M4	1.2	10.2
40	4	11	15	4	22	10	M5	1.5	12.5
50	5	14	25	5	30	12	M6	2.0	16.0
63	6	18	40	6	45	15	M6	2.5	20.5
70	6	19	35	6	40	16	M6	2.5	21.5
85	8	24	45	7	50	20	M8	3.0	27.0

4.5 EJE HUECO

4.5 HOLLOW SHAFT

4.5 ARBRE CREUX

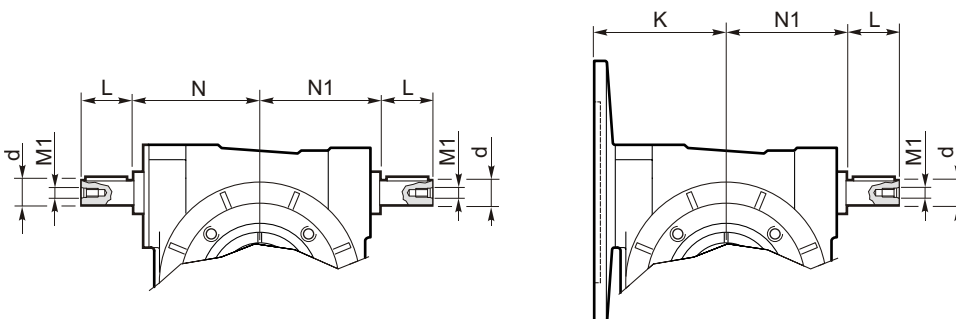


B	b ₂ (H8)	D (H7)	D _e	D _s	t ₂	C ₂	C _r	C _s
30	5	14	25	14.5	16.3	55	20	15
40	6	18	30	18.5	20.8	64	22	20
50	8	25	40	25.5	28.3	82	30	22
63	8	25	40	25.5	28.3	120	45	30
70	8	28	45	28.5	31.3	120	45	30
85	10	35	50	35.5	38.3	140	45	50

4.6 EJECUCIÓN CON SIN FIN PROLONGADO (Bajo pedido)

4.6 DOUBLE EXTENDED WORM SHAFT DESIGN (on request)

4.6 VERSION AVEC DEUX ARBRES DEPASSANTS (Sur demande)



B	d (j6)	L	M ₁	N	N ₁	K
30	9	20	M4	48	48	54
40	11	22	M5	62	63	67
50	14	30	M6	75	73	79
63	18	45	M6	90	85	95
70	19	40	M6	98	90	103 108
85	24	50	M8	120	110	125

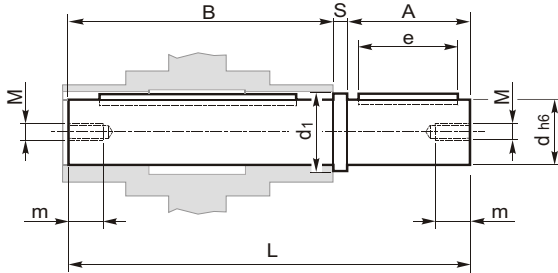
solo para PAM 112
 Only for PAM 112
 Uniquement pour PAM 112

4.7 ACCESORIOS

4.7 ACCESSORIES

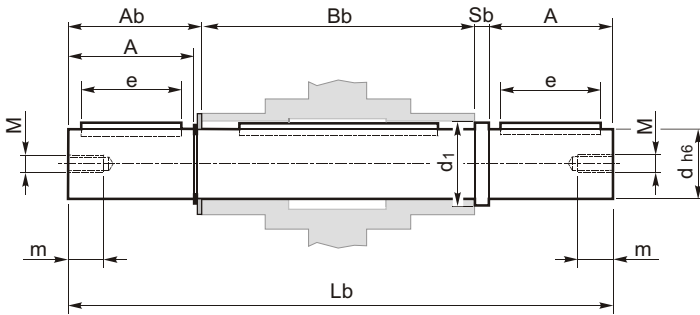
4.7 ACCESSOIRES

Eje lento simple
Single output shaft
Arbre de sortie simple

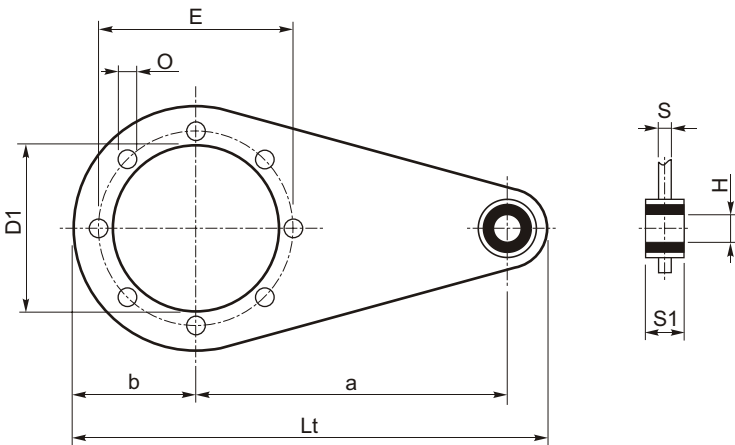


B	d (h7)	A	A _b	B	B _b	e	L	L _b	m	M	S	S _b
30	14	30	32.5	53	55	20	88	120	14	M6	5	2.5
40	18	40	42.5	62	64	25	107	149	14	M6	5	2.5
50	25	60	63	80	82	40	145	208	18	M8	5	3
63	25	60	63	117	120	40	182	246	18	M8	5	3
70	28	60	63.5	117	120	40	187	247	18	M8	10	3.5
85	35	60	64	135	140	40	200	268	25	M10	5	4

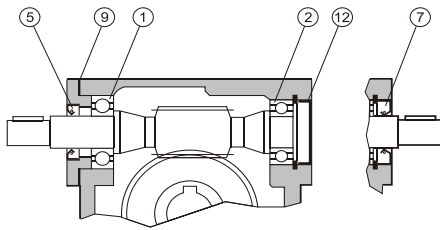
Eje lento doble
Double output shaft
Arbre de sortie double



Brazo de reacción
Torque arm
Bras de réaction

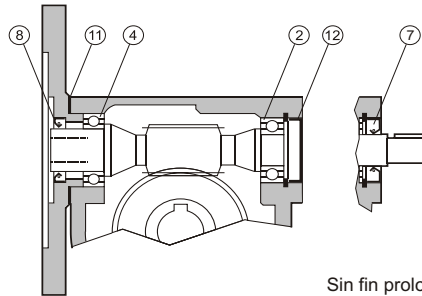


B	a	b	D ₁	E	H	L _t	O	S	S ₁
30	100	40	50	65	8	157.5	7	4	15
40	100	40	50	65	8	157.5	7	4	15
50	100	55	68	94	8	175	7	4	15
63	150	55	75	90	10	233	9	6	20
70	200	63	90	110	10	300	9	6	25
85	200	80	110	130	20	320	11	8	25



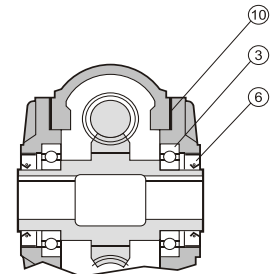
R

Sin fin prolongado
Extended worm shaft
Vis dépassant



F

Sin fin prolongado
Extended worm shaft
Vis dépassant



R - F

Vers.	Rodamientos / Bearings / Roulements					Retenes / Oilseals / Bagues d'étanchéité					Juntas / Gasket / Joints				Tapones de goma Rubber plugs Bouchons en caoutchouc
	R	R - F		F		R	R - F		F		R	R - F		F	
Pz. n. Part nb. Numéro de pièce	1	2	3	PAM	4	5	6	7	PAM	8	9	10	PAM	11	12
30	6002	6000	16005	56 63	6002 61804	15/24/7	25/35/7	10/26/7	56 63	15/24/7 20/30/7	7330110010	7330110001	56 63	7330110010	RCA 26
40	6004	6202	16006	56 63 71	6004 6005	20/30/7	30/45/8	15/35/7	56 63 71	20/30/7 25/35/7	7330115010	7330115001	56 63 71	7330115010 7330115011	RCA 35
50	6005	6203	6008	56 63 71 80	6005 6006	25/35/7	40/56/8 (40/52/7) ⁽¹⁾	17/40/7	56 63 71 80	25/35/7 30/47/7	7330120010	7330120001	56 63 71 80	7330120010 7330120011	RCA 40
63	30206	30204	6008	71 80 90	30206 32007	30/47/7	40/56/8	20/47/7	71 80 90	30/47/7 35/47/7	7330125010	7330125001	71 80 90	7330125010	RCA 47
70	32008	30304	6009	todos/all/ tous	32008	40/56/8	45/60/8	20/52/8	todos/all/ tous	40/56/8	7330130010	7330130001	todos/ all/tous	7330130010	RCA 52
85	32008	30206	6010	todos/all/ tous	32008	40/56/8	50/65/8	30/62/8	todos/all/ tous	40/56/8	7330140010	7330140001	todos/ all/tous	7330140010	RCA 62

(1) Solo en F / Only for F / Uniquement pour F

