



BRUSHLESS SERVO GEAR MOTORS

Gear motor consisting of a BS series brushless servomotor and a 1 or 2-stage planetary reduction.

MOTOR: 4-pole sinusoidal brushless, enclosed. Rotor with NdFeB magnets. Thermal safety device. Class F winding. IP65 protection in accordance with the CEI EN 60529 standards. Feedback with 2-pole resolver. Reduced clearance bearings with special grease for high temperatures.

PLANETARY REDUCTION UNIT: casing in hardened and tempered steel UNI7874 with precision teeth class 7. Planet gear in nitrided hardened and tempered steel. Satellite gears in nitrided 42CrMo4 steel UNI7874 (Tenifer) for types BSE35 and BSE45 and in carbonated steel 17NiCrMo6 UNI EN 10084 for types BSE55 and BSE80. Self lubricating with special synthetic oil with additives for extreme pressures (EP). Special seal rings in fluoridated rubber for high temperatures. Reduction unit output shaft in high tensile steel (about 145030 lb in²). Output shaft support bearings for high torques and loads. Reduced clearances on request.

MOTORREDUCTORES BRUSHLESS

Motorreductor formado por servomotor brushless serie BS y reductor epicicloidal con 1 ó 2 etapas.

MOTOR: *brushless sinusoidal de 4 polos, en forma cerrada. Rotor con imanes NdFeB. Protector térmico de seguridad. Aislamiento clase F. Protección IP65 según normas CEI EN 60529. Realimentación con resolver 2 polos. Cojinetes con juego reducido, con grasa especial para altas temperaturas.*

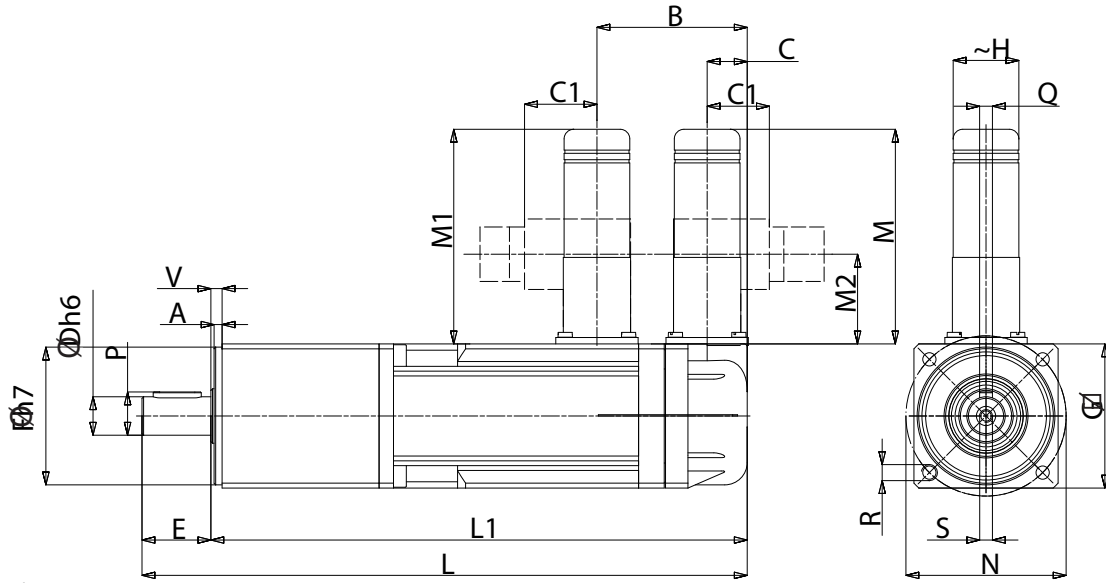
REDUCTOR EPICICLOIDAL: *caja de acero endurecido UNI7874 con dentadura de precisión clase 7. Engranaje solar de acero endurecido nitrurado. Engranajes satélites de acero 42CrMo4 UNI7874 nitrurados (Tenifer) para los tipos BSE35 y BSE45, y de 17NiCrMo6 UNI EN 10084 carbo-nitrurados para los tipos BSE55 y BSE80. Lubricación de por vida con aceite especial sintético con aditivos para presiones extremas (EP). Retenes herméticos especiales de goma fluorada para altas temperaturas. Eje de salida reductor de acero de alta resistencia (aprox. 145030 lb in²). Cojinetes de soporte del eje de salida para altos pares y cargas. Juegos reducidos a petición.*



Type Tipo	Stages Etapas	Ratios Relaciones	Nominal speed (rpm) Revoluciones nominales (rpm)	Torque (in lbs) Pares (in lbs)
BSE 35/30	1	4	1000	2.567
		7	571	4.514
	2	16	250	9.735
		49	82	30.09
BSE 35/60	1	4	1000	4.956
		7	571	8.850
	2	16	250	18.59
		49	82	57.53
BSE 45/35	1	5	800	7.611
		7	571	10.62
	2	25	160	36.73
		49	82	77.88
BSE 45/70	1	5	800	13.63
		7	571	19.03
	2	25	160	65.22
		49	82	129.2
BSE 55/50	1	5	800	19.47
		7	571	26.55
	2	25	160	92.04
		49	82	184.1
BSE 55/100	1	5	800	30.09
		7	571	39.83
	2	25	160	142.5
		49	82	276.1
BSE 80/50	1	5	800	46.73
		7	571	65.40
	2	25	160	223.9
		49	82	438.9
BSE 80/100	1	5	800	89.39
		7	571	124.8
	2	25	160	427.4
		49	82	838.1



BSE



RC

Resolver - connector
 Resolver - conector

BSE... RC

Type Tipo	A	B	C	C1	D	E	F	G	H	L
BSE 35/30 RC	0.879	1.417	0.472	1.063	0.354	0.787	1.299	1.378	0.827	6.417 - 6.772*
BSE 35/60 RC	0.879	1.417	0.472	1.063	0.354	0.787	1.299	1.378	0.827	7.598 - 7.953*
BSE 45/35 RC	0.098	1.850	0.492	1.063	0.472	0.846	1.693	1.772	0.827	7.520 - 8.031*
BSE 45/70 RC	0.098	1.850	0.492	1.063	0.472	0.846	1.693	1.772	0.827	8.898 - 9.409*
BSE 55/50 RC	0.118	1.673	0.492	1.063	0.551	1.181	2.008	2.165	0.827	8.464 - 8.976*
BSE 55/100 RC	0.118	1.673	0.492	1.063	0.551	1.181	2.008	2.165	0.827	10.433 - 10.945*
BSE 80/50 RC	0.157	1.791	0.492	0.866	0.945	2.008	2.992	3.150	0.984	12.126 - 13.150*
BS 80/100 RC	0.157	1.791	0.492	0.866	0.945	2.008	2.992	3.150	0.984	14.094 - 15.118*

Type Tipo	L1	M	M1	M2	N	P	Q	R	S	V	Weight Peso lbs
BSE 35/30 RC	5.630 - 5.984*	2.677	2.835	0.984	1.575	0.402	0.118	M4x8	M4x10	0.118	1.63/3.09*
BSE 35/60 RC	6.811 - 7.165*	2.677	2.835	0.984	1.575	0.402	0.118	M4x8	M4x10	0.118	2.12/3.57*
BSE 45/35 RC	6.673 - 7.185*	2.835	2.835	0.984	1.969	0.531	0.157	M5x10	M4x10	0.138	3.24/3.55*
BSE 45/70 RC	8.051 - 8.563*	2.835	2.835	0.984	1.969	0.531	0.157	M5x10	M4x10	0.138	3.99/4.26*
BSE 55/50 RC	7.283 - 7.795*	2.835	2.835	0.984	2.480	0.630	0.197	M6x12	M5x15	0.157	4.92/5.69*
BSE 55/100 RC	9.252 - 9.764*	2.835	2.835	0.984	2.480	0.630	0.197	M6x12	M5x15	0.157	6.57/7.34*
BSE 80/50 RC	10.118 - 11.142*	3.346	2.677	0.709	3.622	3.622	0.315	M10x16	M8x18	0.197	13.00/14.55*
BS 80/100 RC	12.087 - 13.110*	3.346	2.677	0.709	3.622	3.622	0.315	M10x16	M8x18	0.197	16.32/17.86*

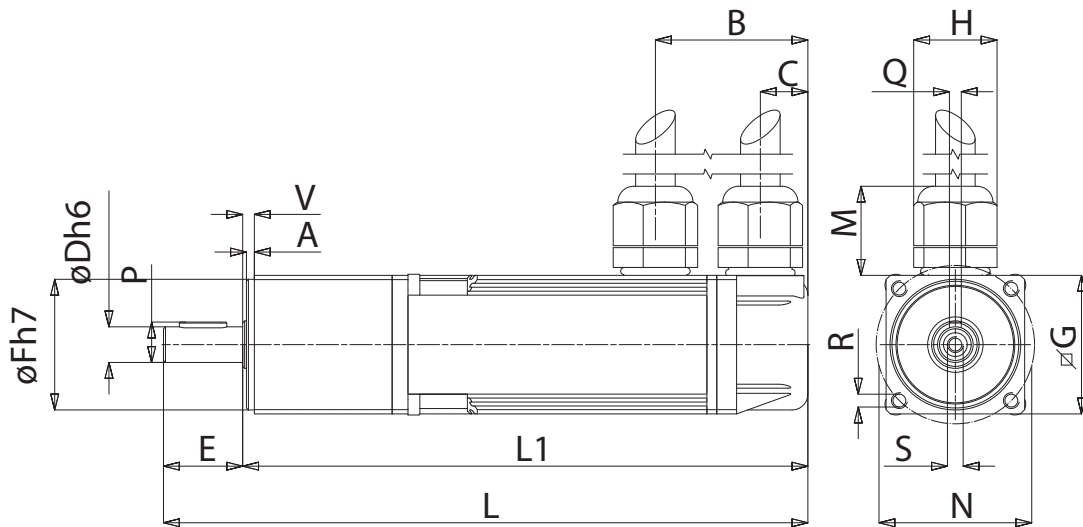
* 2 stages - 2 etapas

Prewired resolver and power cables with lengths of 98.40/196.85/393.70 in are available on request

Resolver y cables de potencia precableados de 98.40/196.85/393.70 in de longitud están disponibles a petición

For the self-braking version add the letter K to the model code. Measurements L. L1 increase by: 0.945 in (BS35). 1.102 (BS45). 1.142 (BS55). 1.535 (BS80).

En la versión freno, añadir la letra K a la sigla del tipo. Las cotas L. L1 aumentan de: 0.945 in (BS35). 1.102 (BS45). 1.142 (BS55). 1.535 (BS80).



RP

Resolver - cable clamp with cables 98.40 in long
 Resolver - prensaestopas con cables L=98.40 in

BSE... RP

Type Tipo	A	B	C	D	E	F	G	H	L
BSE 35/30 RP	0.079	1.417	0.472	0.354	0.787	1.299	1.378	0.748	6.417 - 6.772*
BSE 35/60 RP	0.079	1.417	0.472	0.354	0.787	1.299	1.378	0.748	7.598 - 7.953*
BSE 45/35 RP	0.098	1.850	0.492	0.472	0.846	1.693	1.772	0.748	7.520 - 8.031*
BSE 45/70 RP	0.098	1.850	0.492	0.472	0.846	1.693	1.772	0.748	8.898 - 9.409*
BSE 55/50 RP	0.118	1.673	0.492	0.551	1.181	2.008	2.165	0.748	8.465 - 8.976*
BSE 55/100 RP	0.118	1.673	0.492	0.551	1.181	2.008	2.165	0.748	10.433 - 10.945*
BSE 80/50 RP	0.157	1.791	0.492	0.945	2.008	2.992	3.150	0.748	12.126 - 13.150*
BSE 80/100RP	0.157	1.791	0.492	0.945	2.008	2.992	3.150	0.748	14.094 - 15.118*

Type Tipo	L1	M	N	P	Q	R	S	V	Weight Peso lbs
BSE 35/30 RP	5.630 - 5.984*	0.827	1.575	0.402	0.118	M4x8	M4x10	0.118	1.300/2.756
BSE 35/60 RP	6.811 - 7.165*	0.827	1.575	0.402	0.118	M4x8	M4x10	0.118	1.786/3.241
BSE 45/35 RP	6.673 - 7.185*	0.925	1.969	0.531	0.157	M5x10	M4x10	0.138	2.337/2.646
BSE 45/70 RP	8.051 - 8.563*	0.925	1.969	0.531	0.157	M5x10	M4x10	0.138	3.087/3.352
BSE 55/50 RP	7.283 - 7.795*	0.925	2.480	0.630	0.197	M6x12	M5x15	0.157	4.013/4.785
BSE 55/100 RP	9.252 - 9.764*	0.925	2.480	0.630	0.197	M6x12	M5x15	0.157	5.667/6.439
BSE 80/50 RP	10.118 - 11.142*	0.925	3.622	1.063	0.315	M10x16	M8x18	0.197	12.567/14.112
BSE 80/100RP	13.110 - 12.090*	0.925	3.622	1.063	0.315	M10x16	M8x18	0.197	15.876/17.420

* 2 stages - 2 etapas

Prewired resolver and power cables with lengths of 98.40/196.85/393.70 in are available on request

Resolver y cables de potencia precableados de 98.40/196.85/393.70 in de longitud están disponibles a petición

For the self-braking version add the letter K to the model code. Measurements L, L1 increase by: 0.945 in (BS35), 1.102 (BS45), 1.142 (BS55), 1.535 (BS80).

En la version freno, añadir la letra K a la sigla del tipo. Las cotas L, L1 aumentan de: 0.945 in (BS35), 1.102 (BS45), 1.142 (BS55), 1.535 (BS80).