

DC SERVOMOTORS PI, PC, 3PI

KEY FEATURES

High stall torque
Wide range of operation
High demagnetization current
Long life

CONSTRUCTION

Insulation class F;
Ball bearings mounted shaft;
Standard protection degree
IP 44 (IEC 34-5-81);
Power supply connection;

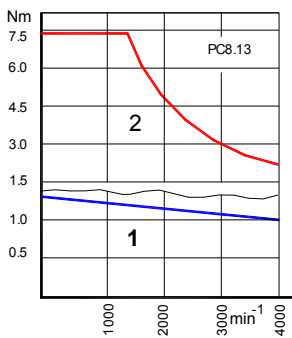
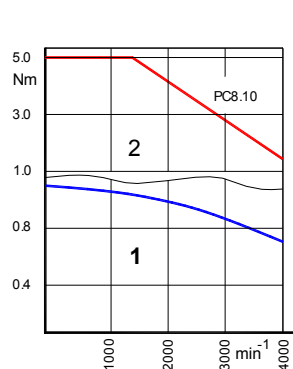
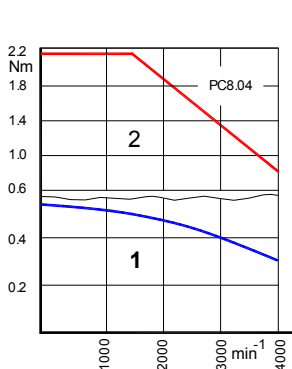
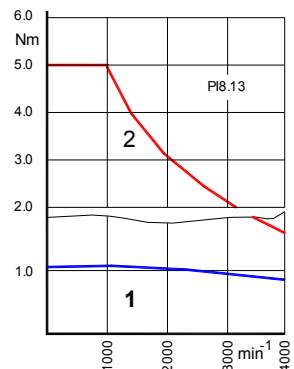
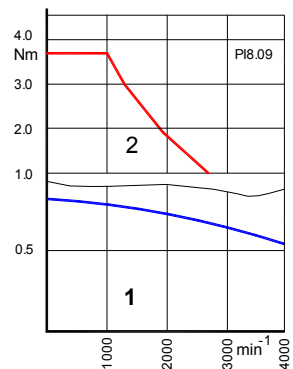
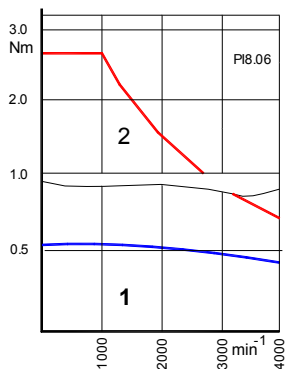
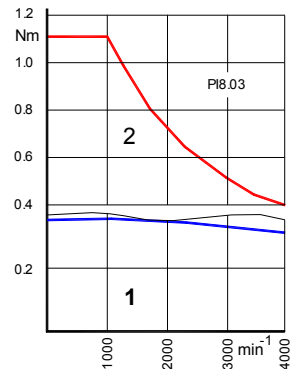
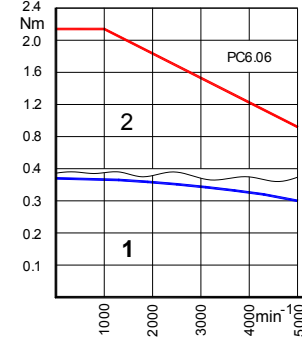
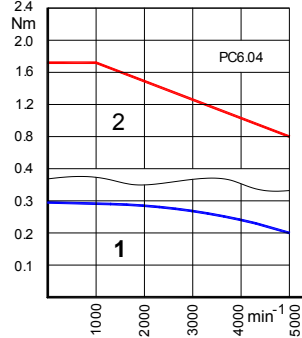
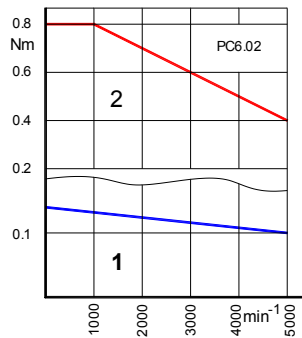
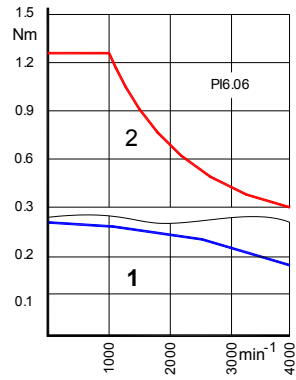
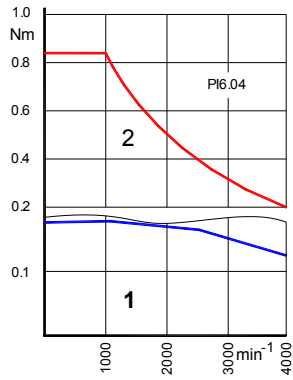
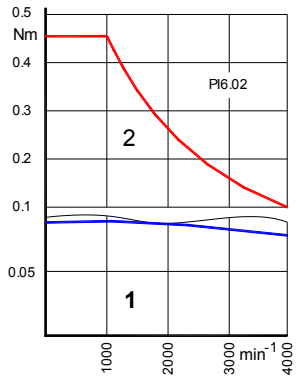
OPTION

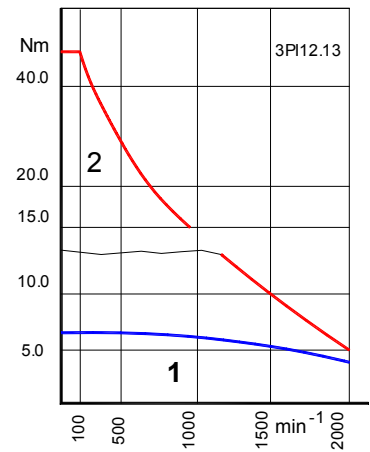
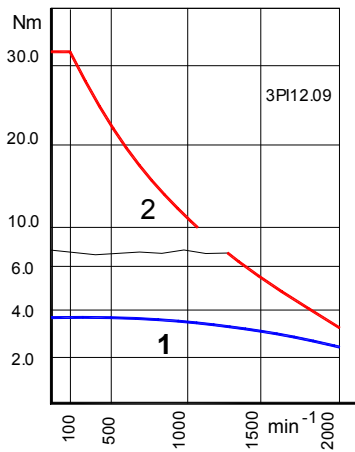
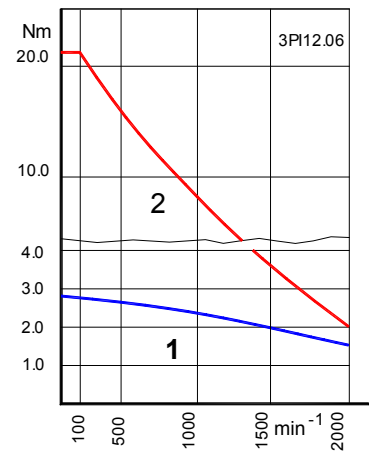
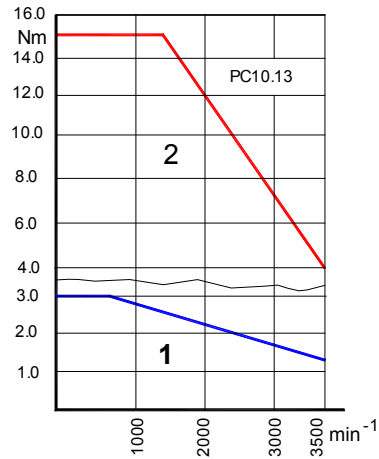
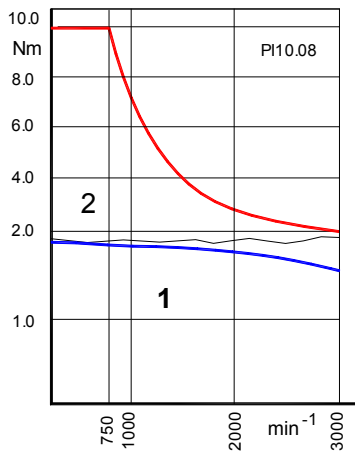
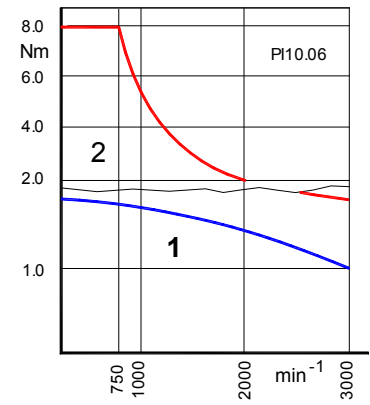
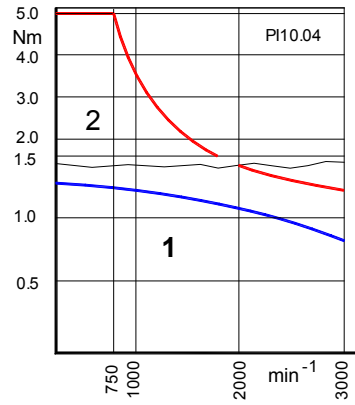
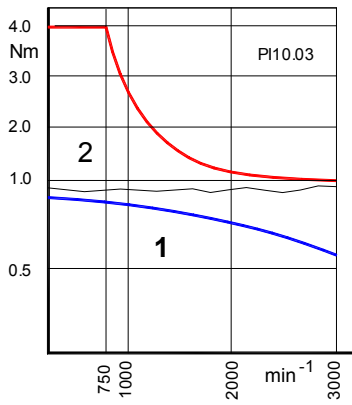
Tachometer
Encoder
Electrmagnetic brake
Gear

TECHNICAL DATA

Motor type	Continuous stall torque (M d0)	Maximum speed (n_{max})	Mech. power at 0.8 n_{max}	Maximum voltage	Continuous stall current Mdo	Peak current	Voltage constant	Torque constant	Armature resistance without brushes	Armature inductance	Moment of inertia	Mechanical time constant	Thermal time constant	Weight
	Nm	min ⁻¹	W	V	A	A	$\frac{V}{1000min^{-1}}$	Nm/A	Ω	mH	kg.m ² .10 ⁷	ms	min	kg
PI6.02	0.09	4000	23	24	2.8	17	4.5	0.04	2.1	5.5	0.03	46	9	0.85
PI6.04	0.17	4000	45	24	5.2	33	4.6	0.04	0.64	2.4	0.051	26	10	1.10
PI6.06	0.25	4000	65	24	6.7	45	4.9	0.05	0.45	1.7	0.072	24	13	1.50
PC6.02	0.14	5000	45	32	3.4	21	5.2	0.05	1.54	4.5	0.03	37	9	0.90
PC6.04	0.28	5000	90	32	4.8	33	5.8	0.06	0.64	2.4	0.051	16	10	1.20
PC6.06	0.38	5000	128	60	4	35	11	0.11	1.4	5.9	0.072	12	13	1.60
PI8.03	0.3	4000	80	48	3.7	20	10.3	0.1	1.1	9	0.15	27	16	2.00
PI8.06	0.6	4000	160	48	7	35	10.4	0.1	0.4	3	0.25	21	17	2.90
PI8.09	0.8	4000	190	48	9.7	49	10.2	0.1	0.2	1.8	0.35	19	20	3.90
PI8.13	1.1	4000	300	48	11.2	56	11	0.11	0.23	1.7	0.45	15	22	4.80
PC8.04	0.5	4000	125	77	3.6	17	17.4	0.17	1.83	14	0.21	19	17	2.50
PC8.10	0.9	4000	230	79	6	34	18.1	0.17	0.71	5.5	0.42	15.4	21	4.00
PC8.13	1.2	4000	340	109	5.8	31	24.7	0.24	1.1	5	0.53	14	22	4.90
PI10.03	0.8	3000	150	80	4.7	24	23	0.22	1.16	9	0.6	24	21	3.20
PI10.04	1.1	3000	205	80	6.2	31	24	0.23	0.72	4.8	0.8	13.6	23	4.10
PI10.06	1.6	3000	280	80	8	45	24	0.23	0.38	1.9	1.1	12	24	5.30
PI10.08	2	3000	400	80	10	36	24	0.23	0.22	1.6	1.35	10	26	6.00
PC10.13	3	3500	495	110	11.4	78	30	0.29	0.21	1.1	2.2	10.5	30	8.40
3PI12.06	2.7	2000	350	55	12.5	100	25	0.24	0.22	1.6	2.2	16	23	11.00
3PI12.09	3.5	2000	470	80	12.5	100	37	0.35	0.26	2.2	2.9	10.7	21	12.50
3PI12.12	5.4	2000	625	110	12.5	100	50	0.48	0.3	2.7	3.7	8	20	14.00
3PI12.18	7	2000	695	155	12.5	100	70	0.67	0.53	3.8	5.1	8	18	17.00

CHARACTERISTICS "TORQUE - SPEED"





1- Continuous operating zone

2- Acceleration/Deceleration zone

TACHOMETER

Precise Tachometer Generator type T5-10 with the following data may be incorporated in all kinds of electric motor: Tachometer Generator T5-10 may be supplied unit in two design options: for building-in and with own bearing system

Type	Voltage constant V/ min ⁻¹	Load impedance ,Ω	Maximum speed min ⁻¹	Ripple at 400min ⁻¹ %	Temperature error %/°C
TG-5/6	0,006	Min5000	5000	Max 1,2	0,02
TG-5/10	0,010				
TG-5/15	0,015				

BRAKE

In electric motors types PI10, PC10 и 3PI12 may be built-in retaining electromagnetic brake, supplied with DC voltage and with the following data:

Voltage	Current	Torque
V	A	Nm
24	0.7	2,0-7,0

At building of brake, the axial length of the motor is increased with approximately 60mm.

ENCODER

At customer's request there can be attached different types of encoder

RESOLVER

At customer's request there can be attached resolver type PБ-2 and multiplier or 1:5

GEAR

At request there can be attached planetary gear with gear ratio $i=4-64, 5-125, 6-216$.

At customer's request the servomotors can be delivered with other joint dimensions of the flange and the shaft.

Produces: Automotive Alternators and Starters; DC electric Motors with permanent magnets and electric magnet excitation; Complete main drives of numerically controlled machine tools, for driving of machines, equipments, manipulators, automation and mechanization systems of technological processes; Portable boring and welding machine.