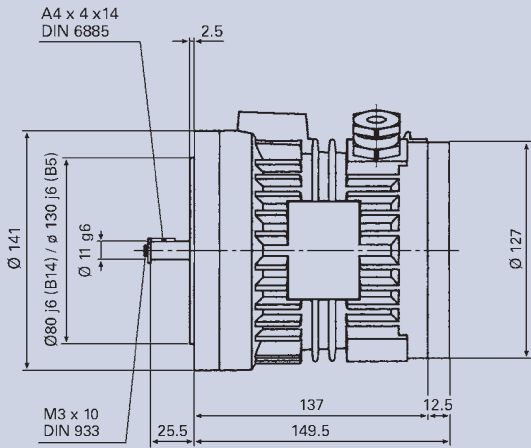
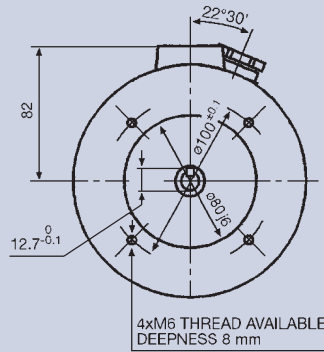


MS-2 EExdIIC

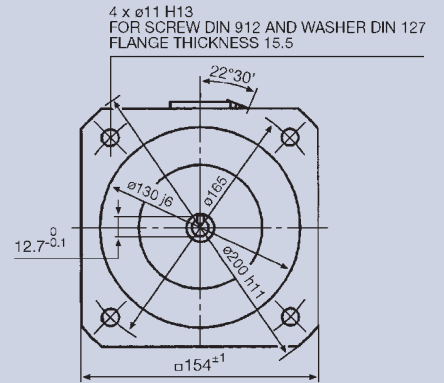
MA-3 EExdIIC



FLANGE B-14

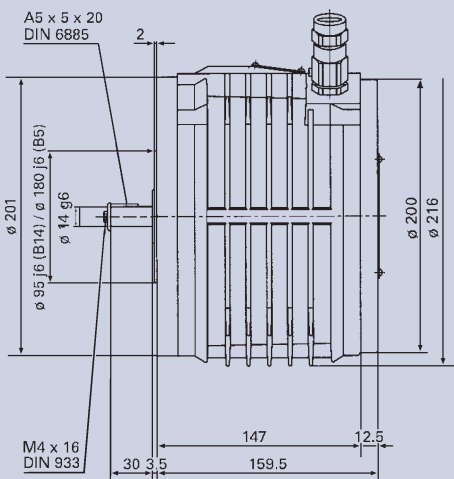


FLANGE B-5 (OPTIONAL)

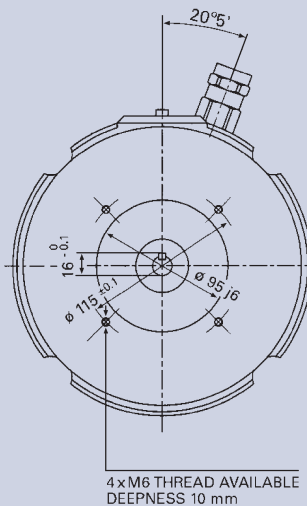


**MS-4 EExdIIC
MS-6 EExdIIC
MS-8 EExdIIC**

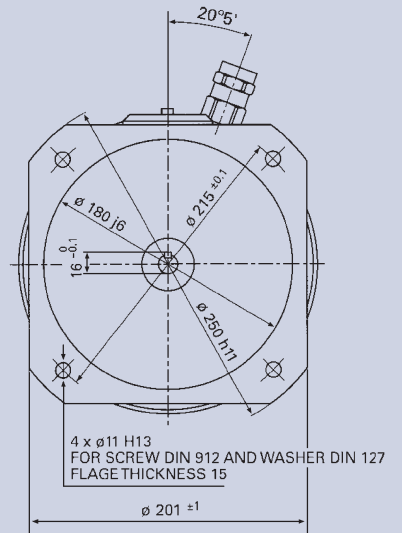
**MA-6 EExdIIC
MA-10 EExdIIC**



FLANGE B-14

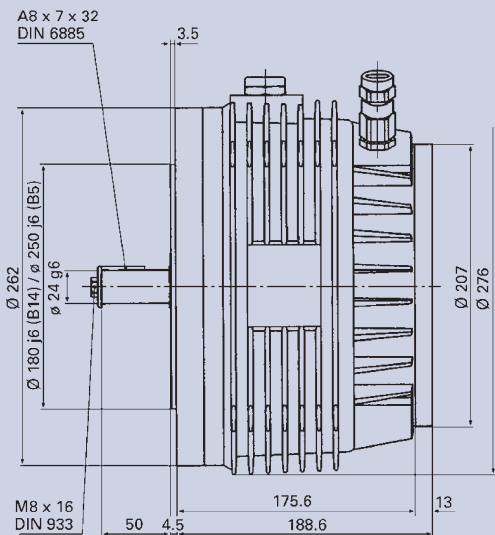


FLANGE B-5 (OPTIONAL)

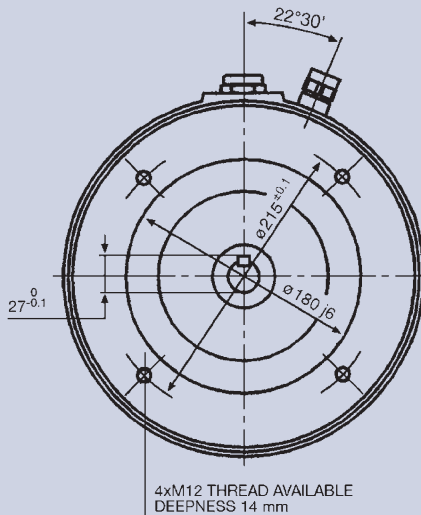


**MS-12 EExdIIC
MS-22 EExdIIC**

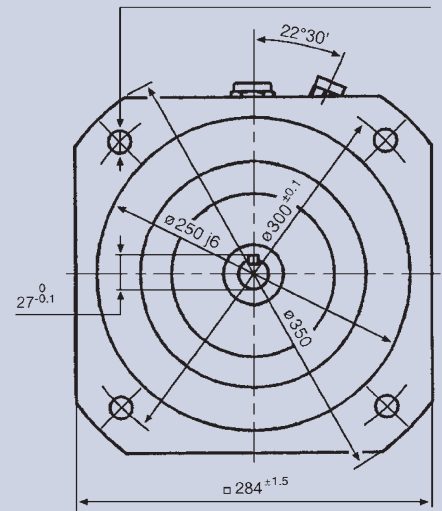
**MA-20 EExdIIC
MA-30 EExdIIC**



FLANGE B-14



FLANGE B-5 (OPTIONAL)



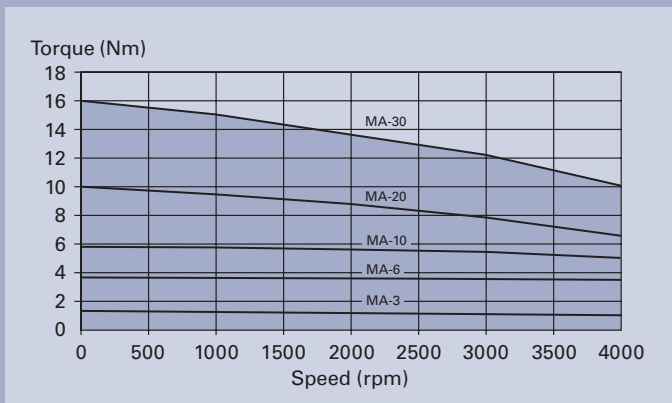
FLANGE B-5 (OPTIONAL)

AC Servo Motors EExdIIC Series

Technical Specifications

ALL CHARACTERISTICS MEASURED AT 40° AMBIENT TEMPERATURE EXCEPT TERMINAL RESISTANCE (25° C)			SYMBOLS	UNITS	MA-3	MA-6	MA-10	MA-20	MA-30
MAX MECHANICAL SPEED	n	rpm			9,000	6,000	6,000	6,000	6,000
STALL TORQUE (1) ±10%	M _S	Nm			1.3	3.6	5.8	10.0	16.0
STALL CURRENT	I _S	A			2.2	4.2	6.8	10.3	16.5
PEAK TORQUE ±10%	M _J	Nm			5.2	28.5	40.7	69.8	96.0
TORQUE-WEIGHT RATIO ±10%	T _W	Nm/kg			0.7	0.8	1.1	1.2	1.6
EMF CONSTANT ±5%	K _E	Vs/rad			0.3	0.5	0.5	0.6	0.6
TORQUE CONSTANT ±5%	K _T	Nm/A			0.6	0.9	0.9	1.0	1.0
RELUCTANCETORQUE ±10%	T _R	Nm			<0.02	<0.1	<0.1	<0.2	<0.3
WINDING RESISTANCE ±5%	R	Ω			10.2	5.3	2.2	1.4	0.5
WINDING INDUCTANCE ±5%	L	mH			25.0	11.6	0.4	7.0	4.0
ROTOR INERTIA	J	kg m ² 10 ⁻³			0.04	0.30	2.10	0.80	1.60
MECHANICAL TIME CONSTANT	T _M	ms			2.0	3.8	3.6	2.1	1.6
ELECTRICAL TIME CONSTANT	T _E	ms			2.5	2.2	7.5	5.0	7.5
THERMAL TIME CONSTANT	T _{TH}	s			1,500	1,500	1,800	1,500	1,500
THERMAL RESISTANCE	R _{TH}	°C/W			1.1	0.6	0.5	0.4	0.4
MASS (motor with resolver)	M	kg						34	36
RADIAL LOAD (at mid-length of shaft)	F _R	N			218	410	410	600	600
AXIAL LOAD	F _A	N			218	225	225	390	390
INSULATION					CLASS-F				
PROTECTION					IP-54				
(1) With an aluminium heat sink plate					300x300x10	400x400x10	410	830x830x10	
(2) The information contained in this catalog is for informational purposes only and is not contractual									

Performance Curves



Resolver Specifications

	UNITS	2T8 (Transmitter Speed 1)
Input Voltage/Frequency	V/kHz	10/4.5
Primary Element		Rotor
Number of Speed		1X
Transformation Ratio		0.5 ± 5%
Electrical Error	minutes	±10 max.
Dielectric Strength	VAC/1 minute	500
Mass	kg	0.230
Rotor Moment of Inertia	kg m ² 10 ⁻³	0.0123
Operating Temperature Range	°C	-55 ~ +155

Brake Specifications

	UNITS	MS-2	MS-4	MS-6	MS-8	MS-12	MS-22	MA-3	MA-6	MA-10	MA-20	MA-30
	SIZE	04	06	06	06	07	09	07 (*)	10	10	10	10
Holding Torque	Nm	1.2	2.5	2.5	2.5	5	12	1	4	4	8	8
DC Voltage	V	24	24	24	24	24	24	4.8	24	24	24	24
Input Power	W	8	12	12	12	16	18	5	22	22	22	22
Inertia	kg cm ²	0.05	0.23	0.23	0.23	0.65	2.14	0.08	0.3	0.3	0.3	0.3
Response Time												
Disengagement	ms	4	7	7	7	15	30	7	30	30	30	30
Engagement	ms	3	5	5	5	7	13	5	7	7	7	7
Mass	kg	0.19	0.3	0.3	0.3	0.6	1.1	0.3	0.8	0.8	0.8	0.8

(*) with chopper