

Direct Current Tachometer generator

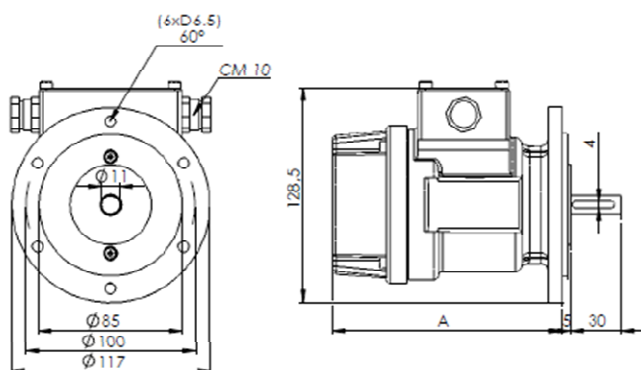


- Industry
- Speed control & regulation

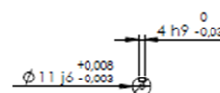
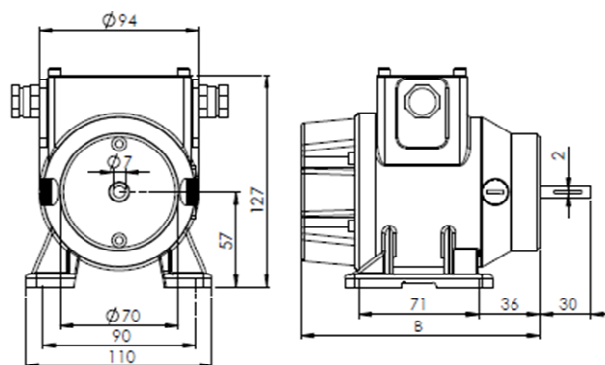
- Robust design
- High quality signal
- Terminal box
- Mechanical combinations with encoders & speed switches
- Various electrical options



RE.0444R – B3 foot



	1 commutator	2 commutators
A	136 mm	155 mm
B	142 mm	161 mm



DESCRIPTION	SYMB	VALUE	CONSTRUCTION DETAILS	
Max. speed	n_m	12 000 rpm	Number of poles	2
Moment of inertia	J	0,95 Kg cm ²	Armature slots number	19
No-load driving torque	M_r	1,5 N.cm	Commutator blades number	57
Max. radial shaft stress	F	1,0 da N	Insulation class	B (IEC 34-1)
Maximum E.M.F.	E_m	600 V	Operating temperature	-30 +130 °C
Maximum linearity error	ΔE	$\leq 0,15 \% E_T$	Climatic protection	C _a (IEC 68-1)
Overall ripple rate (peak to peak)	ΔE_c	$\leq 0,5 \% E_c$	Ingress protection	IP54 (IEC 34-5) IP56 with sealing ring
Rotation harmonics (f=2 p.n)	ΔE_p	$\leq 0,2 \% E_c$	Direction of rotation	reversible
Slots harmonics (f=Z.n.)	ΔE_z	$\leq 0,3 \% E_c$	Excitation	Permanent magnets Alnico
Calibration precision	ΔE_o	+ 1 %E _{To}		
E.M.F. temperature drift				
Not compensated	ΔE_e	0,02 %/°C		
Compensated		0,005 %/°C		
Time constant	C_t	2,5 ms		
*Filter :				
Time constant of filter		0,47 ms		
Load current	L_c	5 mA		
Speed	n	3000 rpm		
			Weight	2,8 kg (1 commutator) 3,2 kg (2 commutators)



RE.0444R - Robust

Direct Current Tachometer generator

MECHANICAL OPTIONS

	MOUNTING SIDE			OPPOSITE MOUNTING SIDE (upon request)		
	D (mm)	L (mm)	Ball-bearing	D (mm)	L (mm)	Ball-bearing
Standard shaft	11	30	12 x 28 x 8 ZZ	7	30	8 x 22 x 7 ZZ
Special shaft	14 max	30	15 x 32 x 9 ZZ	8 max	30	8 x 22 x 7 ZZ
Various adaptors available for mounting devices on the rear of the tachometer generator						



Markings and polarity of terminals (cables) for counter-clockwise rotation, seen from the shaft

1 COMMUTATOR	2 COMMUTATORS
1 A1 : +	2 A1 : +
1 A2 : -	2 A2 : -

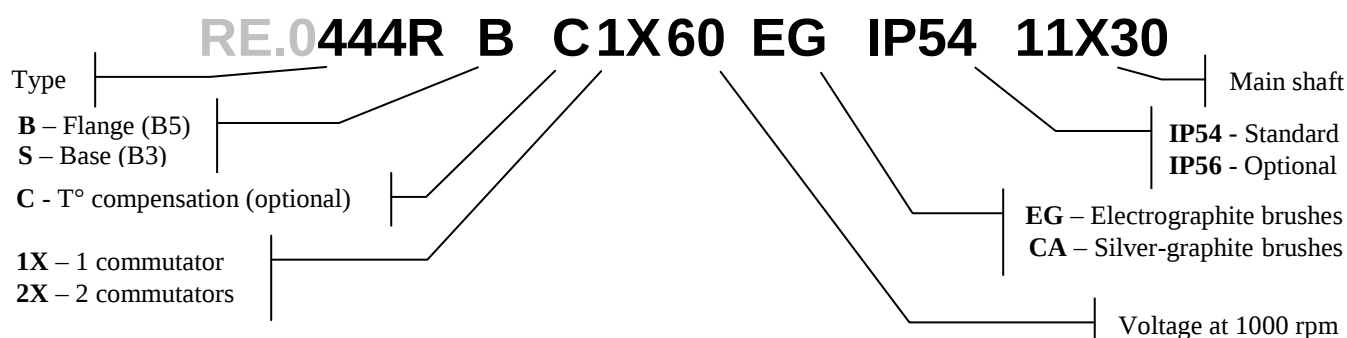
ELECTRICAL OPTIONS

DESCRIPTION	SYMB	UNIT	VALUES											
E.M.F at 1 000 rpm	E _n	V	1 com. 2 com.	6 2 x 20	20 2 x 30	30 40	50 2 x 50	60 2 x 60	80 100	120 2 x 100	150	200		
Voltage gradient	C _v	V/rpm	1 com. 2 com.	0,006 2 x 0,02	0,02 2 x 0,03	0,03 0,04	0,05 2 x 0,05	0,06 2 x 0,06	0,08 100	0,1 2 x 0,1	0,12	0,15 0,2		
Armature resistance	R _a	Ω	1 com. 2 com.	1,50 2 x 24	12 2 x 55	28 45	70 2 x 150	100 2 x 200	180 280	400 2 x 470	640	900		
Max thermal load	I _{th}	A	1 com. 2 com.	1.4 2 x 0,23	0,55 2 x 0,14	0,35 0,25	0,22 2 x 0,09	0,18 2 x 0,09	0,14 0,11	0,09 2 x 0,05	0,07	0,07		
Max. Allowed speed	n _a	rpm	EG CA	12000 6000				10000 5000	7500 3750	6000 3000	5000 2500	4000 2000	3000 1500	

BRUSHES

QUANTITY	DIMENSION	GRADE	MAX OUTPUT VOLTAGE	PART NO
4	3,1 x 4,1 x 12,5 mm	EG - Electrographite	600 V	/0002607
4	3,1 x 4,1 x 12,5 mm	CA - Silver-graphite	< 300 V	/0001397

PRODUCT DESCRIPTION



When inquiring, please advise the serial number of the tachogenerator to be replaced.