

RE.0444R - Robust

Direct Current Tachometer generator



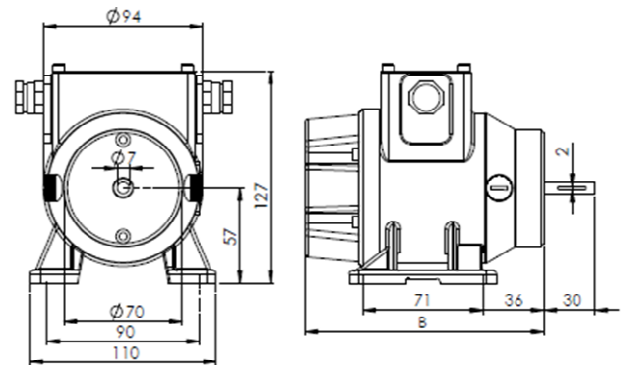
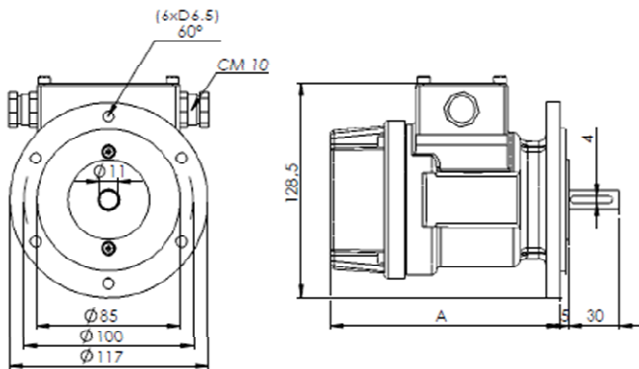
- Applications :**
- Industry
 - Speed control & regulation

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

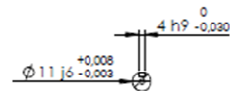


RE.0444R – B5 flange

RE.0444R – B3 foot



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



MAIN CHARACTERISTICS

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

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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 : -

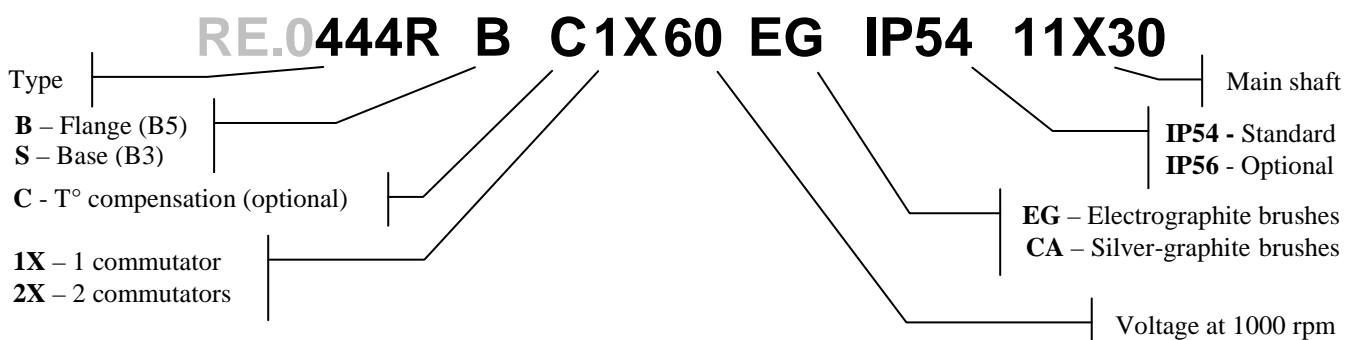
ELECTRICAL OPTIONS

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