

TYPE

RE.0110

RE.0122

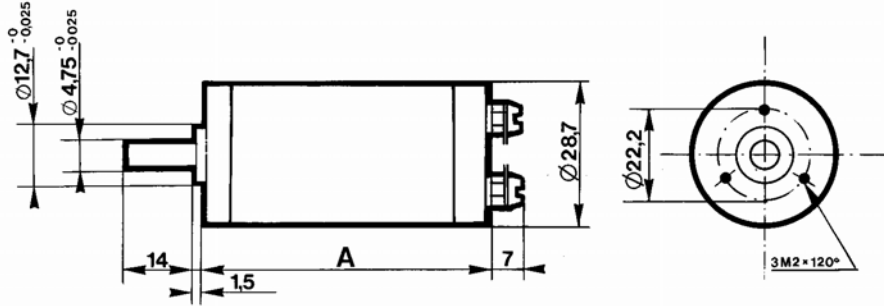


DESTINATION

- General applications

DESCRIPTION

- Small size DC tachometer generator
- Permanent magnet-excitation
- Armature with frontal commutators
- Connection on two terminals used also as brush- holders
- Flange B 14



		RE.0110	RE.0122
A	mm	46	58
Weight	kg	0,10	0,15

GENERAL DATA

Designation	Symbol	Unit	Value	
Maximum speed (mechanical)	n_m	rpm	12000	12000
Moment of inertia	J	kg cm ²	0,011	0,024
No load driving torque	M_r	N. cm	$\leq 0,10$	$\leq 0,10$
Maximum radial shaft stress	F	da N	0,10	0,10
Maximum E.M.F.	E_m	V	100	100
Maximum linearity error	ΔE	% E_T	$\leq 0,15$	$\leq 0,15$
Overall ripple rate (peak to peak)	ΔE_c	% E_c	≤ 3	≤ 3
Rotation harmonics (f = 2 p. n.)	ΔE_p	% E_c	$\leq 0,3$	$\leq 0,3$
Slot harmonics (f = Z. n.)	ΔE_z	% E_c	$\leq 2,7$	$\leq 2,7$
Calibration precision	ΔE_o	% E_{T_o}	$\pm 1,0$	$\pm 1,0$
E.M.F. temperature drift	ΔE_e	%/°C	-	-
- not compensated			0,005	0,005
- compensated				
Time constant	C_t	ms	0,2	0,2
Load resistance	RF x CF	ms	0,33	0,33
*Filter: Load current	I_c	mA	3	3
Speed	n	rpm	3000	3000

Construction details	
Number of poles	2
Number of armature slots	11
Number of collector blades	11
Insulation class	B (IEC 34-1)
Operating temperature	-30° - 130 °C
Climatic protection	C _a (IEC 68-1)
Protection degree	IP 44 (IEC 34-5)
Direction of rotation	Reversible
Excitation	Permanent magnets Alnico

* Filter-connecting diagram on demand

Rev.: 01

We reserve the right to modify technical features in the interest of technical advance.

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Shaft ends and bearings

	Mounting side			Opposite mounting side		
	D (mm)	L (mm)	Bearings	D (mm)	L (mm)	Bearings
Standard	4,75	14	5 x 13 x 4 ZZ	-	-	3 x 8 x 3 FF
Max.	4,75	-	5 x 13 x 4 ZZ	3	-	3 x 8 x 3 FF

Options

- Other shaft ends

Available options on 2nd shaft end**Markings and polarity of terminals (cables) for counter-clockwise rotation viewing the mounting face**

1 collector	2 collector
A1: + - A2: -	

Electrical options

				Min.										
E.M.F. at 1000 rpm.	E_n	V	RE.0110 RE.0122	2	3	5	7	8	10	15	20			
Voltage gradient	C_v	V/rpm	RE.0110 RE.0122	0,002	0,003	0,005	0,007	0,008	0,010	0,015	0,020			
Armature resistance	R_a	Ω	RE.0110 RE.0122	50	80	215	460	185	290	670	900			
Max. thermal load	I_{th}	A	RE.0110 RE.0122	0,05	0,05	0,03	0,02	0,04	0,03	0,02	0,02			
Max. allowed speed	n_a	rpm	RE.0110 RE.0122	12000	12000	12000	12000	12000	10000	6500	5000			

Brushes

Number	Size	Grade	Application limits	Reference
4	2,5 x 2,5 x 6	Electro-graphite (EG)		
		Silver-graphite (CA)	STANDARD for normal use at E.M.F. < 100 V	25 - 25 - CA