

TYPE

RDC 14

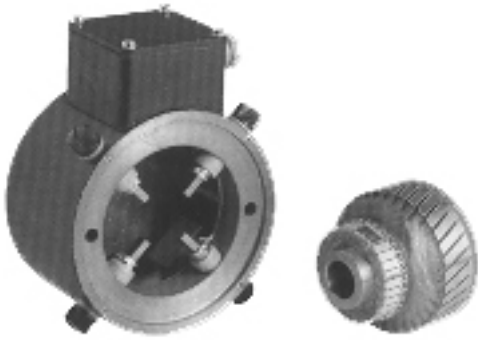


DESTINATION

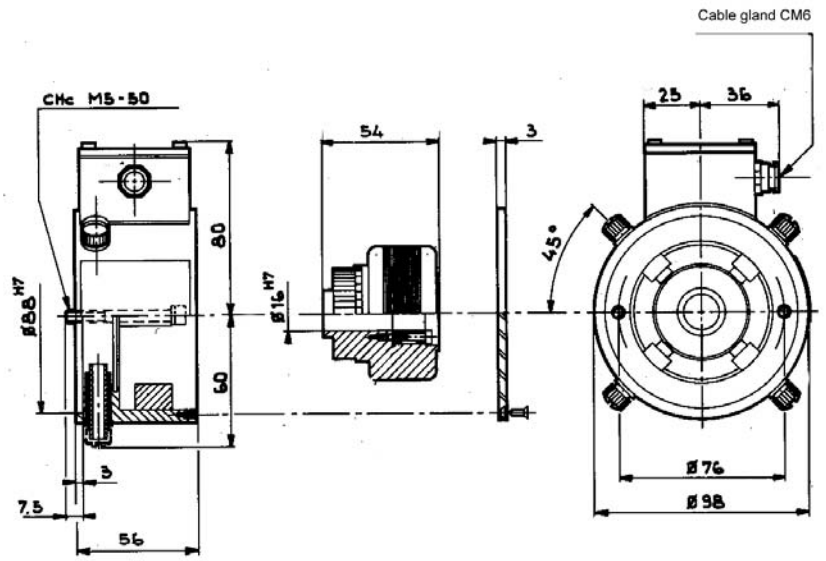
- Industrial applications
- Machine tools
- Robots

DISCRIPTION

- Hollow shaft tachometer generator: rotor / stator set
- Permanent magnet excitation
- Sturdy machine
- Collector on mounting side
- Mounted on smooth shaft



Weight	kg	1,8
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GENERAL DATA

Designation	Symbol	Unit	Value	
Maximum speed (mechanical)	n_m	rpm	7500	
Moment of inertia	J	kg cm ²	1,8	
No load driving torque	M_r	N. cm	≤ 0,5	
Maximum E.M.F.	E_m	V	300	
Maximum linearity error	ΔE	% E_T	≤ 0,15	
Overall ripple rate (peak to peak)	ΔE_C	% E_C	≤ 0,6	
Rotation harmonics (f = 2 p. n.)	ΔE_P	% E_C	≤ 0,05	
Slot harmonics (f = Z. n.)	ΔE_Z	% E_C	≤ 0,55	
Calibration precision	ΔE_O	% E_{T0}	± 2,0	
E.M.F. temperature drift - not compensated - compensated	ΔE_e	% /°C	0,005	
Time constant	C_t	ms	0,7	
*Filter: Time constant	RF x CF	ms	0,1	
Load current	I_C	mA	1,5	
Speed	n	rpm	3000	

Construction Details	
Number of poles	4
Number of armature slots	33
Number of collector blades	33
Insulation class	B (IEC 34-1)
Operating temperature	-20° - 110 °C
Climatic protection	C _a (IEC 68-1)
Protection degree	IP 44 (IEC 34-5)**
Direction of rotation	Reversible
Excitation	Permanent magnets Alnico

* Filter-connection diagram see following pages

** The protection degree refers to a mounted machine

Rev.: 02

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

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Mechanical options

Armature bore Ø d (mm)			Motor centring end frame Ø D (mm)			Armature clamping device		
Standard	Max.	Min.	Standard					
16 ^{H7}	16	14	88					Expanding device

Options

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Available options

- On request

Markings and Polarity of Terminals (cables) for counter clockwise rotation viewing the mounting face

1 collector	2 collector
A1: + - A2: -	

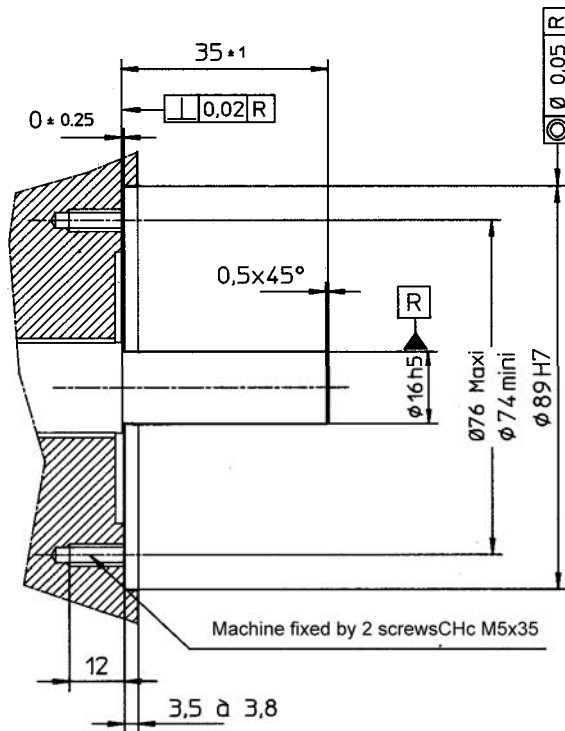
Electrical options

			Min.					Max.					
E.M.F. at 1000 rpm.	E _n	V	10	20	30	40	50	60					
Voltage gradient	C _v	V/rpm	0,01	0,02	0,03	0,04	0,05	0,06					
Armature resistance	R _a	Ω	8	33	73	130	200	290					
Max. thermal load	I _{th}	A	400	200	150	100	80	60					
Max. allowed speed	n _a	rpm	7500	7500	7500	7500	6000	5000					

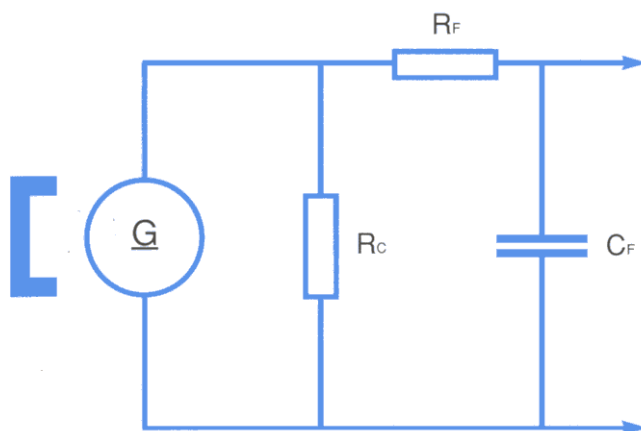
Brushes

Number	Size	Quality	Application limits		Reference
4	4 x 4 x 16	Electro-graphite (EG)	Special applications, on request		
		Silver-graphite (CA)	STANDARD for normal use at E.M.F. < 300 V		40 - 50 - CA

MOUNTING INSTRUCTION



Filter Scheme



R_C : Load resistance
 R_F : Filter resistance
 C_F : Filter capacity