

TYPE

RDC 205

RDC 206

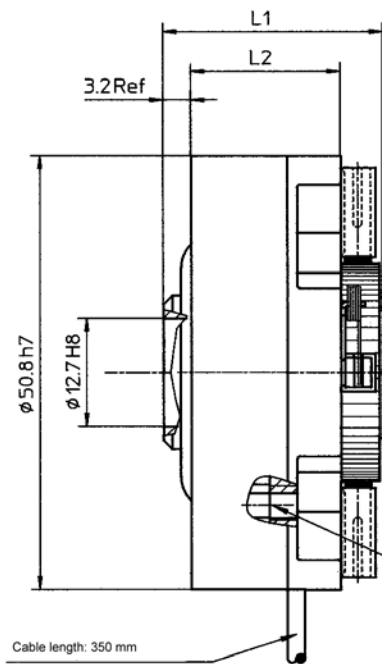


DESTINATION

- Industrial applications
- Machine tools
- Robots

DISCRIBTION

- Hollow shaft tachometer generator: rotor / stator set
- Permanent magnet excitation
- Small size
- Collector on opposite of mounting side
- Mounted on smooth shaft or fixed by key
- **SILVER COLLECTOR**



TYP	L1	L2
RDC 205	25,8	17,5
RDC 206	33	24

	RDC 205	RDC 206
Weight kg	0,17	0,25

Cable length: 350 mm

2 bores ø 2,9, 180° on ø 43

GENERAL DATA

Designation	Symbol	Unit	Value	
Maximum speed (mechanical)	n_m	rpm	6000	6000
Moment of inertia	J	Kg cm ²	0,08	0,08
No load driving torque	M_r	N. cm	≤ 0,3	≤ 0,3
Maximum E.M.F.	E_m	V	100	100
Maximum linearity error	ΔE	% E_T	≤ 0,15	≤ 0,15
Overall ripple rate (peak to peak)	ΔE_C	% E_C	≤ 0,5	≤ 0,5
Rotation harmonics (f = 2 p. n.)	ΔE_P	% E_C	≤ 0,05	≤ 0,05
Slot harmonics (f = Z. n.)	ΔE_Z	% E_C	≤ 0,45	≤ 0,45
Calibration precision	ΔE_O	% E_{T_0}	± 2,0	± 2,0
E.M.F. temperature drift - not compensated - compensated	ΔE_θ	% /°C	0,03 -	0,03 -
Time constant	C_t	ms	0,2	0,4
*Filter: Time constant	RF x CF	ms	0,1	0,1
Load current	I_c	mA	2	2
Speed	n	rpm	3000	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° - 80 °C
Climatic protection	C _a (IEC 68-1)
Protection degree	IP 00 (IEC 34-5)**
Direction of rotation	Reversible
Excitation	Permanent magnets SmCo

* Filter-connection diagram see following pages
 ** The protection degree refers to a mounted machine

Rev.: 03

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Mechanical options

Armature bore Ø d (mm)			Motor centring end frame Ø D (mm)			Armature clamping system		
Standard	Max.	Min.	Standard					
12,7 ^{H7}	12,7	6	50,8			Smooth shaft - Mounted by pressing		

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

1 collector	2 collector
red: + - blue: -	

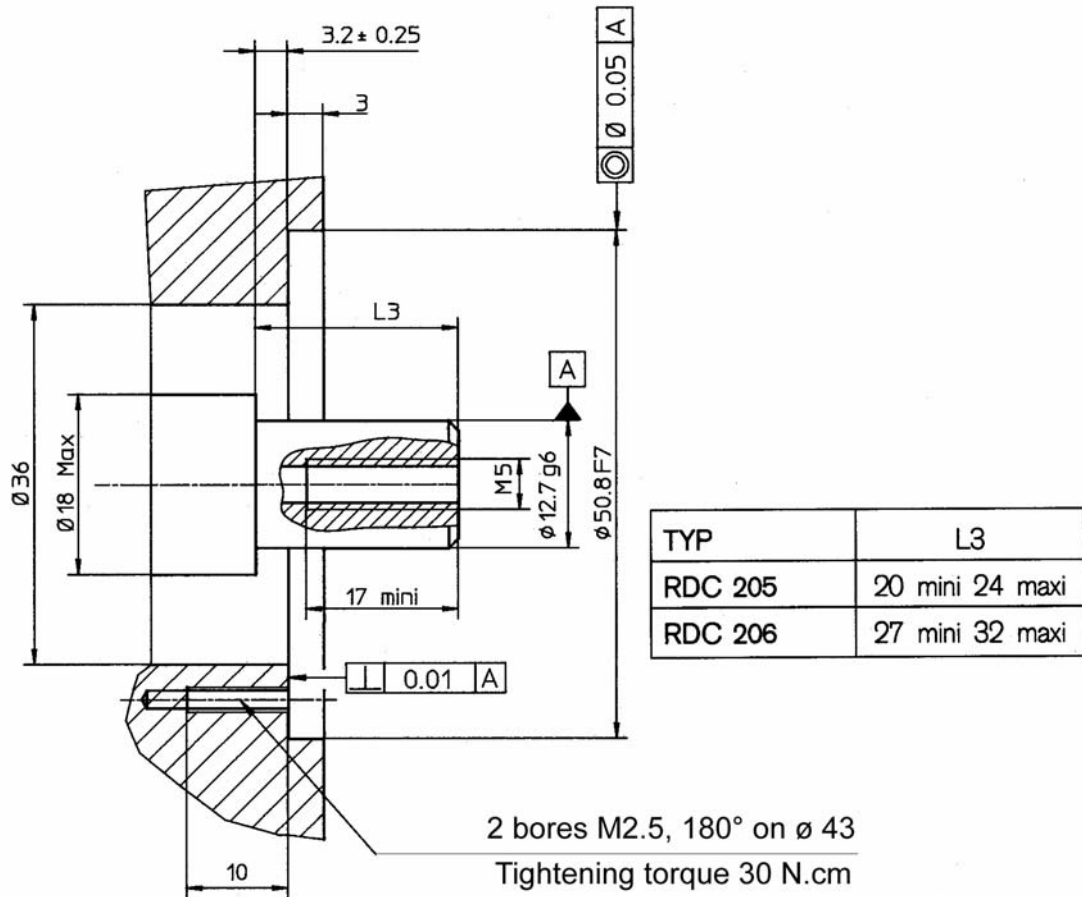
Electrical options

				Min.						Max.				
E.M.F. at 1000 rpm.	E _n	V	RDC 205 RDC 206	2	3	7	10	10	14	20				
Voltage gradient	C _v	V/rpm	RDC 205 RDC 206	0,002	0,003	0,007	0,010	0,01	0,014	0,020				
Armature resistance	R _a	Ω	RDC 205 RDC 206	5	11	62	112	34	77	140				
Max. thermal load	I _{th}	mA	RDC 205 RDC 206	164	118	48	37	76	48	37				
Max. allowed speed	n _a	rpm	RDC 205 RDC 206	8000	8000	8000	8000	6000	6000	6000				

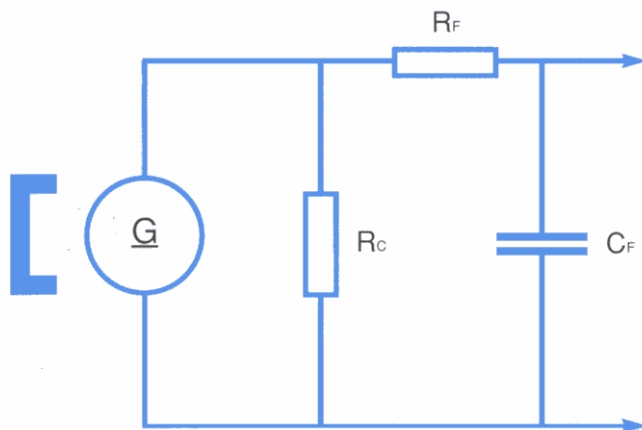
Brushes

Number	Size	Quality	Application limits	Reference
4	3,5 x 3 x 10	Electro-graphite (EG)	Special applications, on request	
		Silver-graphite (CA)	STANDARD for normal use at E.M.F. < 100 V	35 - 30 - CA

MOUNTING INSTRUCTION



Filter Scheme



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