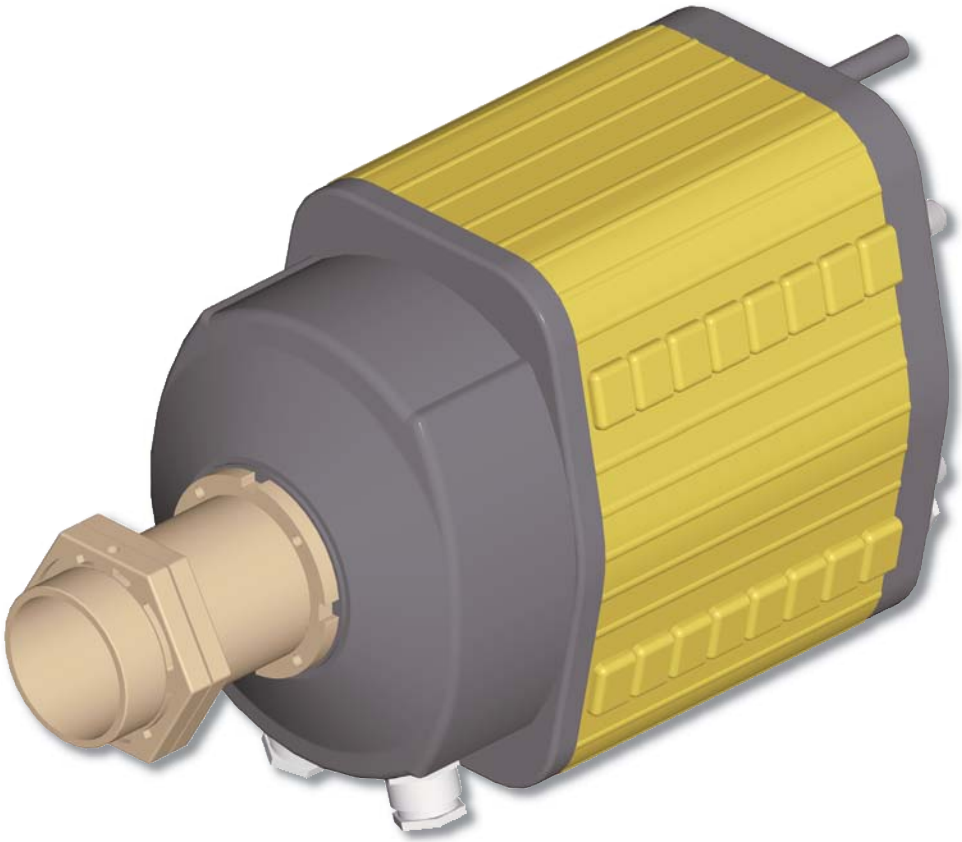
Slip Ring Collector 30A



The 30A slip ring collectors are sets of rings coupled with brushes designed to allow current to pass from a fixed to a rotating part. The 30A series is used to supply crane motors, cable winders etc..
These units are suitable only for transmitting currents with 50/60Hz supply frequency.

The 30A slip ring collectors may have only 30A line rings or they may have both 30A line rings and 10A auxiliary rings. They have an shock-resistant thermoplastic protection to prevent accidental contacts with live parts; the protection has small downward holes to allow air circulation and prevent moisture. The lower support plate is also provided with three holes to drain the moisture which may form inside the unit.

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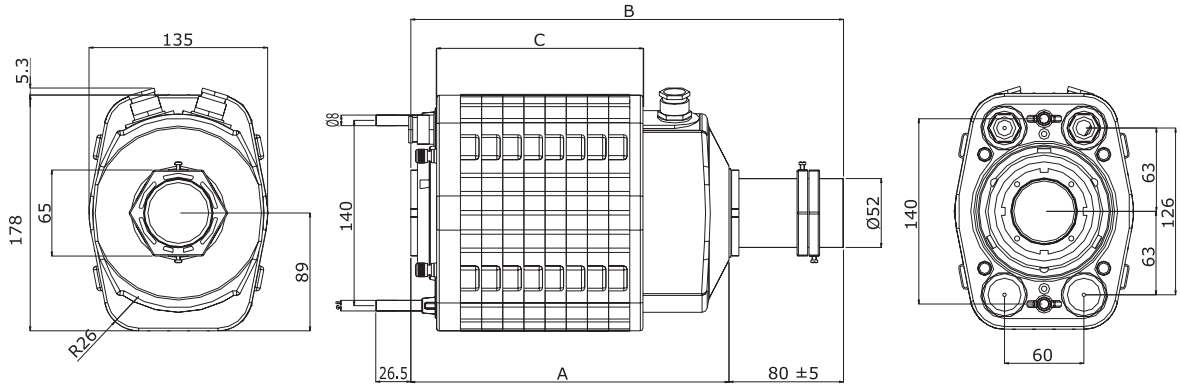
Technical Specifications

Conformity to Community Directives	73/23/CEE	93/68/CEE
Conformity to Standards	EN 60529	
Ambient temperature	Storage	-40°C/+70°C
	Operational	-25°C/+70°C
Protection degree	IP 22	
Insulation category	Class I	
Cable entry	Cable clamps M25	
Operating positions	Any position	

Electrical Specifications

Rated operational current	10 A - 30 A
Rated operational voltage	400 V
Rated insulation voltage	660 V
Mechanical life	Max. 3 turns/min
Connections	Screw-type terminals
Homologations and markings	CE

Overall Dimensions



Standard Codes and Dimensions

No. 10A rings	No. 30A rings	Code	Dimensions (mm) A	B	C
1	4	MY2305B001	195	265	108
2	4	MY2306B003	211	281	124
3	4	MY2307B002	211	281	124
4	4	MY2308B001	227	297	140
5	4	MY2309B001	227	297	140
6	4	MY2310B001	243	313	156
7	4	MY2311B001	243	313	156
8	4	MY2312B001	259	329	172
9	4	MY2313B002	259	329	172
10	4	MY2314B001	275	345	188
11	4	MY2315B002	275	345	188
12	4	MY2316B001	291	261	204

Max. No. of rings: 40

No. 30A rings	Code	Dimensions (mm) A	B	C
3	MY2303B001	179	249	92
4	MY2304B001	195	265	108
5	MY2305B002	211	281	124
6	MY2306B002	227	297	140
7	MY2307B001	243	313	156
8	MY2308B003	259	329	172
9	MY2309B002	275	345	188
10	MY2310B003	291	361	204
11	MY2311B002	307	377	220
12	MY2312B002	323	393	326
13	MY2313B003	339	409	252
14	MY2314B003	355	425	268
15	MY2315B005	371	441	284
16	MY2316B004	387	457	300

Max. No. of rings: 20

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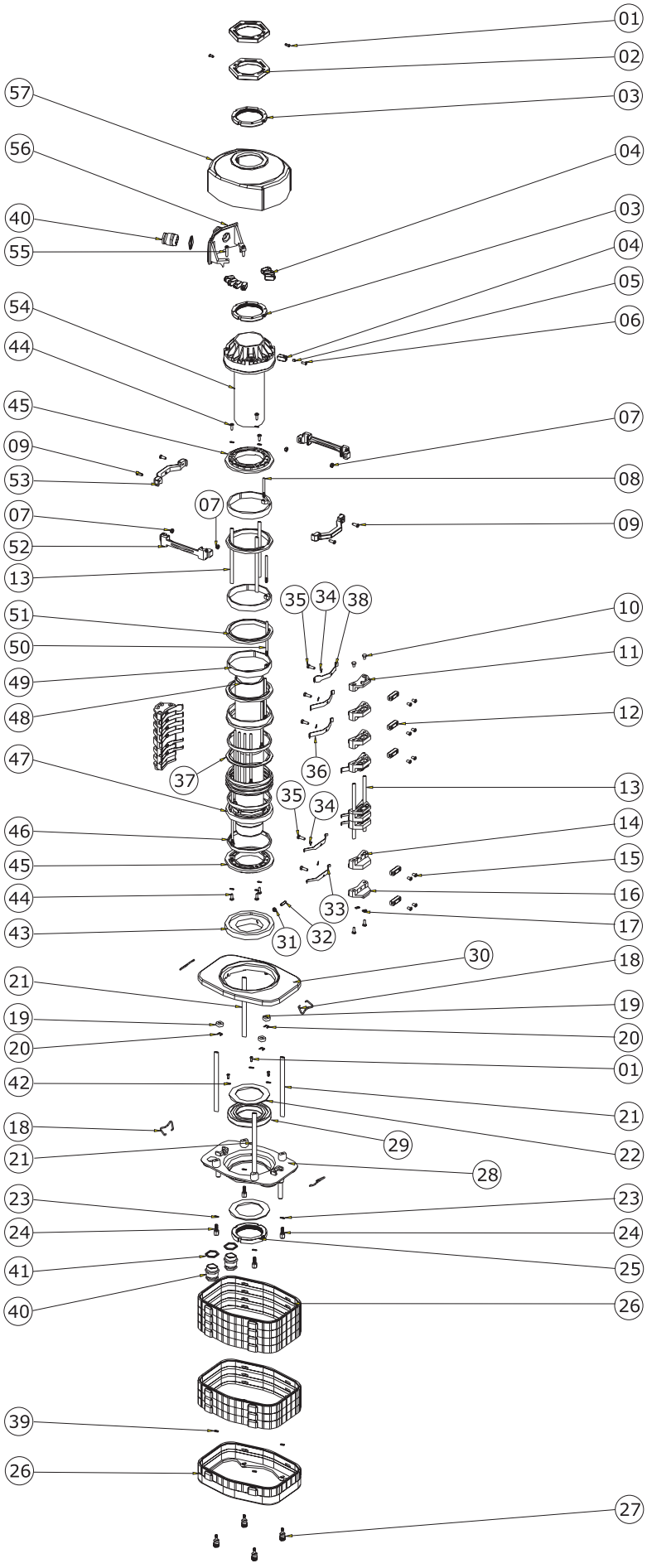
Detailed Drawing



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Components

Reference	Description
01	Screw 3x7.5
02	Nut
03	Nut - pitch 1.5
04	Terminal
05	Screw M4x4
06	Screw M4x6
07	Nut
08	Rod
09	Screw 4x10
10	Screw M4x12
11	Hexagonal seat short brush holder
12	Line brush terminal
13	Bruch holder rotor rod
14	Standard brush holder
15	Screw M4x6
16	Screw seat short brush holder
17	Washer
18 E	Brush holder spring-hook
19	Guide pin
20	Elastic ring
21	Protection rod
22	Bearing covering ring 50A
23	Toothed washer
24	Screw
25	Nut - pitch 1
26	Sector
27	Knob
28	Lower plate
29	Ball bearing
30	Upper plate
31	Nut
32	Elastic pin
33	Auxiliary brush
34	Washer
35	Screw M4x12
36	Line brush
37	Spacer 2mm
38	Earth brush
39	Washer
40	Cable clamp PG16
41	Cable clamp gasket
42	Washer
43	Plaque
44	Screw M4x10
45	Earth rotor sector
46	Auxiliary ring

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Components

Reference	Description
47	Spacer 10mm
48	Tube
49	Line ring
50	Rod 72.5
51	Spacer 4mm
52	Lower brush holder
53	Upper brush holder
54 i	Internal protection tube
55	Screw 4x20
56	Cable clamp support
57	1 hole cover

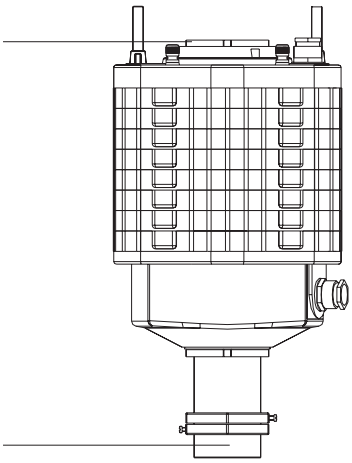
Request form for Non Standard Slip Ring Collectors

Rings

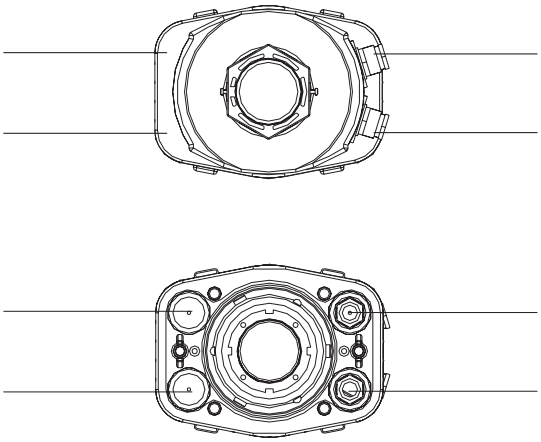
No. of 10A rings_____

No. of 30 A rings_____

Tube Length



Cable Clamps



Instructions

- Write the number of **10A and 30 A rings** required.
- Write the input and output length of the **tube** required, when different from the length showed in the Overall Dimensions.
- Write the number and type of **cable clamps** required on the upper cover and on the lower plate.

Remarks

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Use and Maintenance Instructions

The slip ring collector 30A is an electromechanical device for low voltage control circuits (EN 60947-1, EN 60947-5-1) for use as electric equipment on machines (EN 60204-1) in compliance with the essential requisites of the Low Voltage Directive 73/23/EEC and the Machine Directive 89/392/EEC.

The collector is designed for use in industrial environments with even very severe climatic conditions (working temperatures from -25°C to +70°C and is suitable for use in tropical environments). The equipment is not suitable for use in environments with a potentially explosive atmosphere, in the presence of corrosive agents or high percentage of sodium chloride (saline mist). Contact with oil, acids and solvents may damage the equipment.

We recommend cleaning the rings on the collector during routine maintenance to remove any dust, usually metallic.
Cleaning should be done regularly on the basis of the use of the device (number of working hours per day, rotation speed). After about 250 working hours clean the rings.

Installation
Unscrew the two fastening lockrings (02) and remove the lockring closing the cap (03), remove the protective cap (57) and insert the mobile electric connecting wire in the wire clamp (40).
Tighten the electric wires starting with the ground wire and continuing clockwise (seen from the front of the terminals). After completing electric connection of the terminals, replace the cap (57) and manually tighten the closing lockring (02); and the wire clamps (40).
NOTE: tighten the lockring (03) manually so as not to damage the insulating cap.
Unscrew the four closing screws (27) and remove the guard(s), insert the wire in the wire clamps (40) and proceed to wire the brushes separately, taking care not to leave any sections of bare wire in sight or in contact with the mechanical parts of the product.
Turn the rotor manually and make sure the brushes (33) adhere to the rings (51) and that the wires do not interfere with any mechanical parts in motion.
Fit the guard (26) back in place and manually tighten the closing screws (27); tighten the wire clamps (40).
Fasten the rotor (or mobile part) on a cylindrical structure (max diameter 52.5mm) using the two hexagonal dowels (02) after adjusting the correct position and tighten the fastening screws (01).
Fasten the fixed part by the drive pins on the bottom plate (28).
NOTE: the degree of protection is IP22, so you must isolate the device electrically during operations of installation and maintenance.
We recommend that you do all wiring in a workmanlike manner, taking care not to force the wires into tight bends and to keep the wires isolated in the device. On completion of the work, make sure the electric wires DO NOT interfere with active parts of the machine. Failure to follow these instructions will endanger operation of the product.
After completing the installation make sure the system functions normally.

Maintenance
NOTE: the degree of protection is IP22, so you must isolate the device electrically during operations of installation and maintenance, and ascertain that the active parts of the machine do not interfere or come into contact with the parts of the collector.
The device should be checked and inspected every 250 working hours, as follows.
Detach the collector from the mechanical fastenings, unscrew the four fastening screws (27) of the guard (26) and remove the guard(s).
Blow jets of compressed air to remove residues due to wear, and check for wear on the brushes (33) and rings (51). If one or more brushes appear worn and/or damaged, replace them as follows: loosen the wire clamps (40) on the bottom plate (28) and create some slack in the wires, loosen the two springs (18) and remove the entire brush unit, replacing any that are no longer suitable for use.
NOTE: it is a good rule to replace all the brushes. If one or more rings are excessively worn, replace the product.
Return the brush unit to its place and fasten it with the two springs (18), making sure that it is securely fastened and that vibrations and/or impacts will not loosen it.
Make sure the terminals are properly tightened and the wires are in place without any bare parts in sight.
Control of bearing: make sure the bearing is intact and allows fluid rotation of the rotor. If the device is particularly noisy, inspect the bearing with care. Once a year, lubricate the bearing with special grease for revolving bearings, such as Arcanol, or lithium-based grease taking care to let the grease penetrate among the spheres. Do not use too much grease to prevent it from depositing on the rings and brushes.
Fit the guard (26) back in place and fasten it with the four screws (27).
Loosen the wire clamps (40) on the cap (57) and unscrew the lockring (03), raise the cap (57) and check that the terminals are securely fastened and the wires are in the correct position. Replace the cap (57), manually tighten the lockring (03) and tighten the wire clamps (40).
NOTE: tighten the lockring (03) manually so as not to damage the insulating cap.
Fasten the collector mechanically to the fixed and mobile ends.

Any change to parts of the collector will invalidate the rating plate data and identification of the device, and render the warranty null and void. In case of replacement of any part, use only original replacements.

MEYLE is not liable for damages caused by improper use of the device and installation which is not made correctly.

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