

Technical Sheet

Sliprings

Type PRN ROLLER PLUS

Main Performances

Housing	In aluminium
Positioning	On vertical axis, with cover assembled on top
Connections	Rings cabled with 2m cable
Cable entry	Inside the fastener pipe for the rings and through the side cable inlets for brush holders
Brushes	10A copper graphite, silver graphite for signals
Executions	from 23 to 36 rings 10A
Optional	1/4" air passage
Marking	UE
Armonized rules	EN 60947-1 EN 60529 EN 60204-1
Directives	2014/35/UE - 2014/30/UE - 2006/42/CE

Electrical Features

Nominal voltage	400 V ac - dc
Nominal current	Ith 10 A
Test voltage	2 kV
Insulation resistant	>200 MOhm at 500V ac - dc
Max rotating speed	100 revs / min
Protection degree	IP 65
Operating temperature	- 20 °C ÷ + 60 °C

Standard Models

Electrical passages

Code	Rings type	H = mm
GPRNA23	23 x 10A	177
GPRNA27	27 x 10A	198
GPRNA36	36 x 10A	240

Electrical passages + 1/4"- 10 bar air passage

Code	Rings type	H = mm
GPRNA19K3F1	19 x 10A + 1 x 1/4"	177
GPRNA23K3F1	23 x 10A + 1 x 1/4"	198
GPRNA32K3F1	32 x 10A + 1 x 1/4"	240

Optional air passage



Installation and Wiring

The **PRN PLUS** slipring must be installed only by qualified personnel in compliance with current safety standards.

Power feeding must be turned off before installing connections cabling.

Connections must follow the wiring scheme of the controlled equipment.

After installation has been completed, the installer should inspect all connections for proper operation.

Avoid prolonged contact with oils and acids when using the equipment, as these may damage the product.

- 1) Using the locknuts (Ref. 2), attach the central pipe (Ref. 1) to a minimum 3 mm thick plate with a central hole of $\varnothing 40,5$ mm. Alternatively the central pipe (Ref. 1) can be connected to a plate with a threaded hole of $\varnothing 40$ mm, 1.5 mm pitch using the locknuts as jam nuts (Ref. 2).
- 2) Rotation is achieved using the two pivots of the base (Ref.3). We recommend the coupling to be made with slack to take up any possible runout during rotation. Rotation can also be achieved by attaching the base (Ref. 3) using the pivot (Ref. 24) situated on the plate, enabling the central pipe to rotate (Ref. 1) thanks to a suitable coaxial joint.
- 3) The cables are connected to the brushes through the cable inlets (Ref. 4). Ensure that the wires do not interfere with any moving parts. The cables connected to the rings protrude from the central pipe by approx 2 m (Ref. 1). Longer cables are available upon request.
- 4) Using the cables provided check the equipotential of any surfaces not generally recommended to be used under voltage and the ground connection.

Maintenance

Periodic maintenance is required to ensure that the PRN PLUS slipring is kept in perfect working conditions. All maintenance is to be performed by qualified personnel using only original spare parts. The first maintenance must be done within 600 operation hours (100 revs/min) or in any case within 12 months from the installation. Subsequent maintenance should be carried out every 18 months. Any defective or worn parts must be replaced promptly, even out of the maintenance schedule, as they could affect on the safety of the device. In particular:

- 1) Disconnect from power source and wait until the internal parts have cooled down;
- 2) Remove the cover (Ref. 5);
- 3) Check the brushes for wear and tear and that they fit properly to the rings;
- 4) Remove copper-graphite dust with de-humidified compressed air or a clean brush;
- 5) Check cables tightness;
- 6) Check the cover seal conditions;
- 7) Replace the cover (Ref. 5).

Please note that the guarantee does not cover any equipment which parts have been modified or tampered.

RAVIOLI declines all responsibility for damage caused by incorrect installation or improper use of the product.

Dimensions

