

## PSC-X18 STANDARD

Slip rings can be used in any system requiring the transmission of electrical and/or power signals to an intermittently or continuously rotating shaft. Thanks to the small ring diameter, the PSC X series grants low peripheral speed between brushes and rings, as well as reduced dynamic imbalance what means very low wear. The use of noble metals (gold to gold alloy) assures long lifetime with low resistance, low electrical noise and low interference between circuits.

The very low electrical noise makes the PSC X series suited to transmission of critical signals, such as high frequency signals (video, field buses) and weak signals (strain gages, thermocouples, measuring equipment). Versions with up to 2A, 6A or 10A circuits are available.

Designed for a flexible, cost-effective and reliable solution, these units are available in many standard configurations using 6 to 14 circuits. The compact size allows installation into small systems with high performance requirements.

## TECHNICAL SPECIFICATION

|                       |   |
|-----------------------|---|
| Number Of Circuits    | 6-14 Circuits   |
| Rated Voltage         | 240VDC/240VAC   |
| Cable Size            | AWG28, color coded, FEP insulated, silver plated copper.                    |
| Cable Length          | 250mm. Standard (other lengths on demand)                                   |
| Dielectric Strength   | 500VAC@50Hz 60s   |
| Insulation Resistance | 1000MΩ/500VDC   |
| Noise                 | < 0.01Ω   |
| Operating Speed       | 0~300rpm (For higher speed please contact us)                               |
| Temperature           | -20°C to +80°C (option: -40 to +80°C on AL housing)                         |
| Rating Life           | 12 million revolutions (depending on speed and on environmental conditions) |
| Contact               | Precious Metals   |
| Protection            | IP51 or higher on request   |

## PRODUCT FEATURES

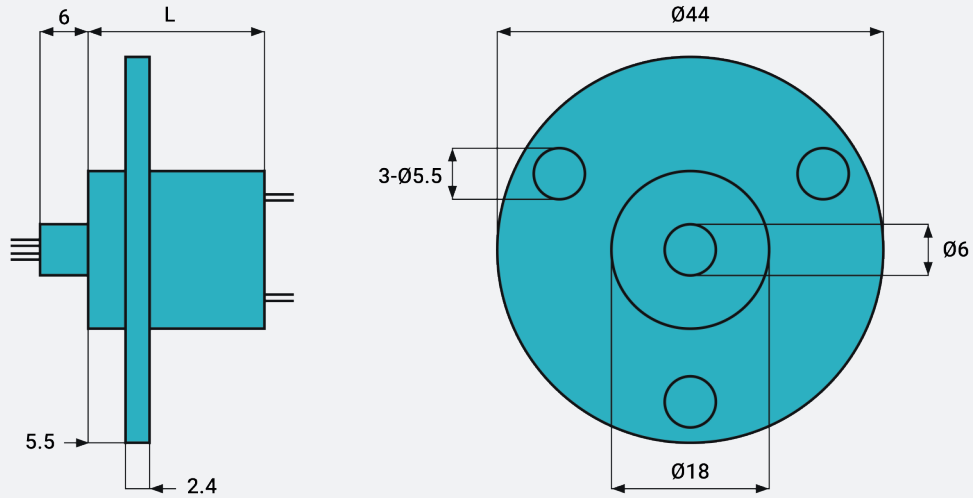
- Quick Delivery
- Low Cost
- Ideal For Video & Digital Signals
- Gold Alloy Rings & Brushes
- High Reliability
- Low Friction Torque
- Smooth Rotation
- In Compliance With Ce & Rohs Standards

## APPLICATIONS

- Video Systems
- Robotics
- Hose & Cable Reels
- Medical / Pharmaceutical
- Wind Turbines (small)
- Packaging

## STANDARD MODEL PSC-X18

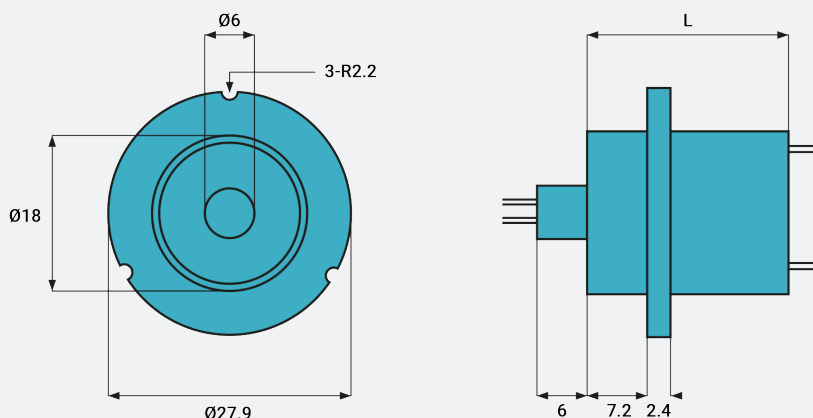
### OUTLINE DIMENSIONS



| Model      | No. Of Circuits |         | Possible modification |     | Dimensions |      | Housing |
|------------|-----------------|---------|-----------------------|-----|------------|------|---------|
|            | Total           | Signals | Power                 |     | D=mm       | L=mm |         |
|            |                 | 1-2A    | 6A                    | 10A |            |      |         |
| PSC-X18-6  | 6               | 6       | -                     | -   | Ø18        | 15.9 | ABS     |
| PSC-X18-12 | 12              | 12      | -                     | -   | Ø18        | 23.7 | ABS     |
| PSC-X18-14 | 14              | 14      | -                     | -   | Ø18        | 25.5 | ABS     |

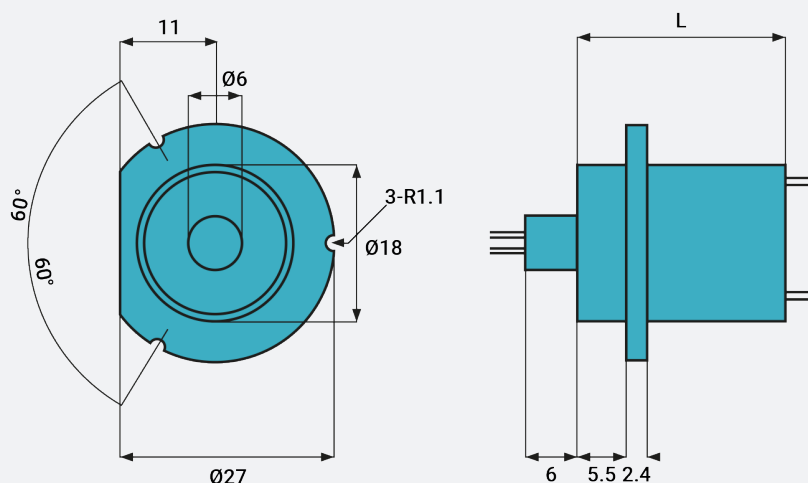
## A MODEL PSC-X18A1

OUTLINE DIMENSIONS



## B MODEL PSC-X18B

OUTLINE DIMENSIONS



## MODIFY ACCORDING TO YOUR NEEDS

Our standard range of slip ring can be modified to suit your applications requirement. It is possible to modify the current capacity and signal type through the slip ring, or integrate the electrical slip ring with optical or fluid rotary joint, or why not integrate the slip ring with an angle transducer, or modify the slip ring with mechanical flanges and connectors.

Through modifying our standard slip rings, we can offer a solution that suit your application and fulfils your requirement.

Get in touch with us today to learn more about possibilities, as they are endless. We work hard to bring you the very best and quality that will last.

### CABLES

- Twisted Cables
- Colour Coded
- Rg Cable For Video

### TRANSFER

- EtherCAT
- Profinet
- Powerlink
- Can Bus
- Gigabit Ethernet

### FLANGE

- Different Mounting
- Slip Ring Inside Flange
- Encoder Shaft Through

### HOUSING

- IP-rating of 51 or Higher on request.
- Plastic
- Aluminium
- Stainless steel

## SIGNALS & BUS

Our standard slip rings comes with signals for data, video and power transmission. Your transmission requirements are key when picking out the right product. Knowing the transmission will enable us to find the right slip ring for your project.

If you can't find a model with the right transmission we can always modify the slip ring for you. This may alter the design of the slip ring so always get in touch with us for more information regarding your model and specification.

### DATA CIRCUITS

Our slip ring handle up to 1 GB of data (1000Base-X), and can be equipped with different cable to be used for all known industry standard data, as example, Profinet, Can-bus, Profibus, DMX, 100Base-X or similar type. It's even possible to transfer several independent data channels through one slip ring.

### VIDEO SIGNALS

Our slip ring handle both standard and high definition videos, up to SMPTE 424M/2,97 gb/s with 3G HD-SDI. Combined with our optical joint, the slip ring handle up to 24G-SDI.

### POWER CIRCUITS

For the compact PSC Series, 2A rings are default, but it can be combined up to 16A depending on your needs and the slip ring configurations. Please contact us for help to specify your slip ring!



# PSC LEAD COLOURS

Standard Colour Codes

PSC SERIES

## Standard Colour Codes

|       |                 |                 |               |                  |                |                 |
|-------|-----------------|-----------------|---------------|------------------|----------------|-----------------|
| PSC-X | 1.RED           | 2.YELLOW        | 3.BLACK       | 4.BLUE           | 5.GREEN        | 6.WHITE         |
|       | 7.PURPLE        | 8.GREY          | 9.BROWN       | 10.ORANGE        | 11.DEEP BLUE   | 12.KHAKI        |
|       | 13.WHITE/RED    | 14.WHITE/BLACK  | 15.WHITE/BLUE | 16.WHITE /PURPLE | 17.WHITE/BROWN | 18.WHITE/GREEN  |
|       | 19.WHITE/ORANGE | 20.WHITE/YELLOW | 21.WHITE/GREY | 22.BLACK/RED     | 23.BLACK/BLUE  | 24.YELLOW/GREEN |

*For slip rings with more than 24 circuits, the colours is repeated, and placed in separate identified shrink tubes. Labels can be added on request.*

## DISCLAIMER

Colour can mismatch depending on configuration and cable type. The colours listed in the table above are standard colour codes, this means that they can change on different models and housing. Please contact Penlink with your PSC model for correct colour coding.