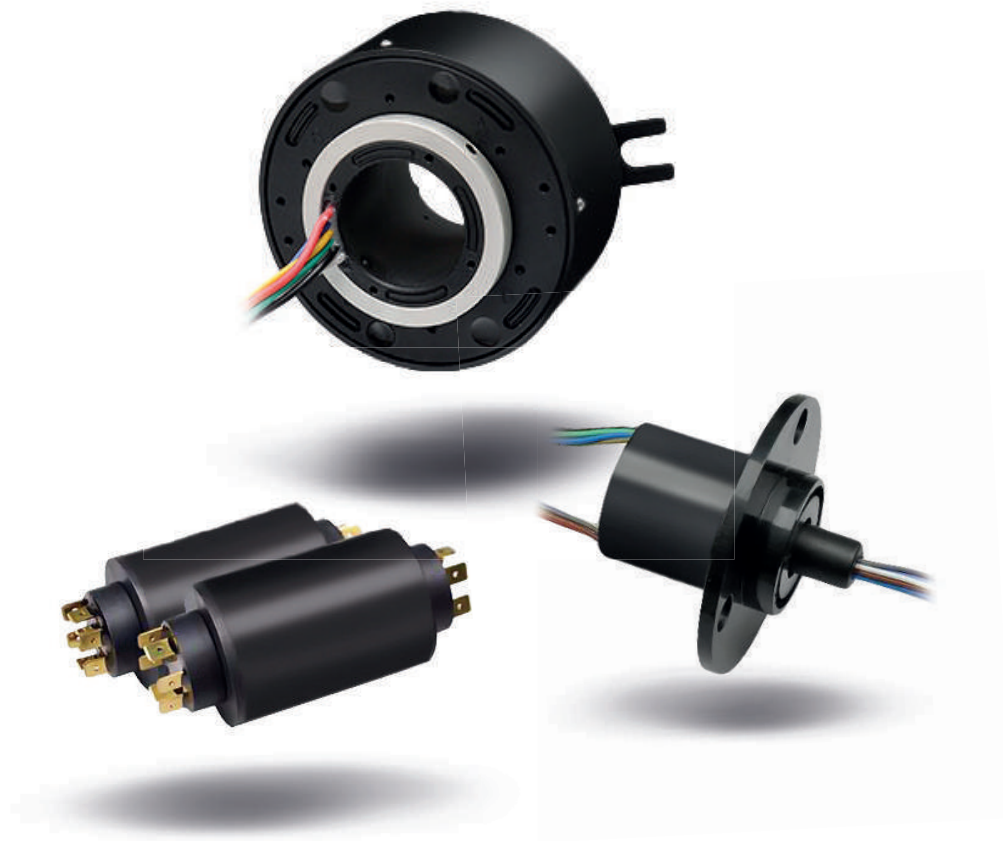


# SLIP RING CATALOG 2019

PSC Series, PSH Series & Modification





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Penlink AB  
Vretensborgsvägen 28  
SE-126 30 Hägersten  
Sweden

Publisher's Cataloging-in-Publication Layout  
Espinoza, Daniela.

Slip Ring Catalog 2019: PSC Series, PSH Series & Modification /  
Penlink AB.





## EXPERTISE AT YOUR SERVICE

All-around services and solutions. A product selection and software development are the best proposal for specific applications.

In the automation and motion control industry, Penlink manufactures and proposes unique products based on cutting-edge technologies developed by leading global manufacturers.

The importance of giving a wide range of products guarantees its presence in all sectors of the industry requiring high performances, skilled engineers, reducing machine developing time and offering a service support which grants a reliable partner for your applications.



## COST-EFFECTIVE

A wide range of models and solutions that can fit perfectly your applications, a team of experts able to support you during the design and development, a history from which to draw to develop the future. We can shorten the time to market delivering our experience and thus reducing costs and problems.

## MODIFICATION

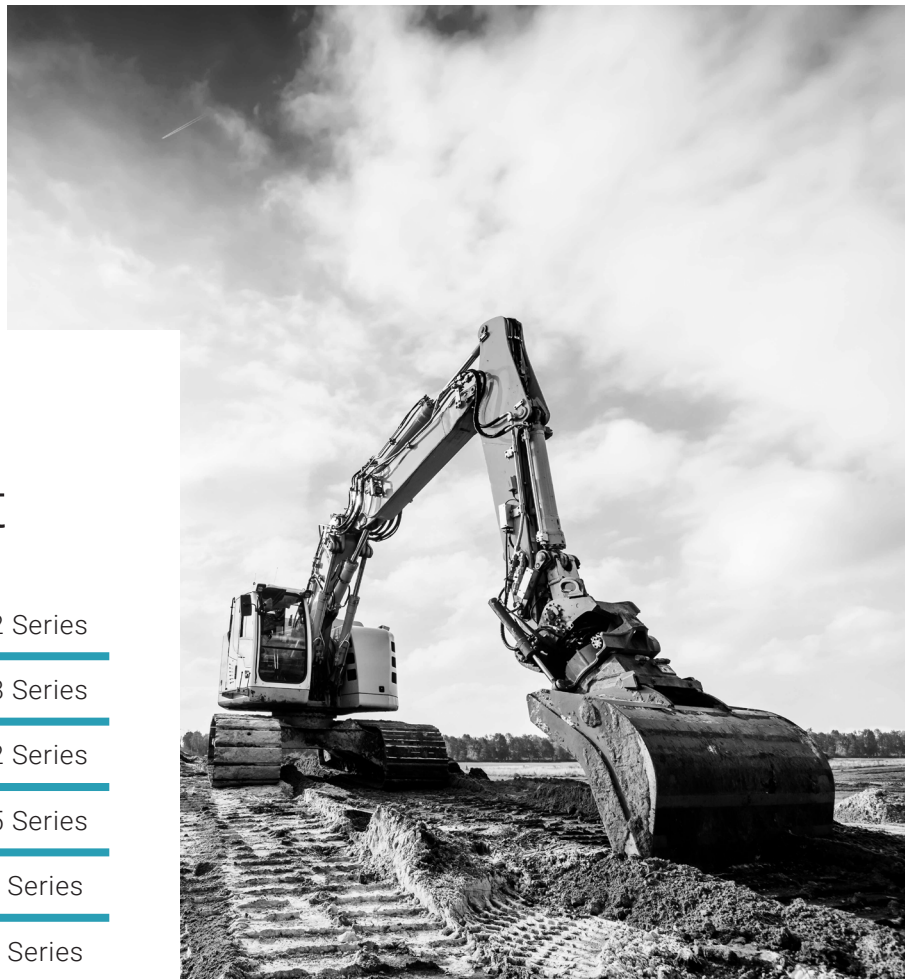
Our team of experts can support you in the development of a modified solution: electrical specifications, mechanical design, cables, connectors and more. Furthermore, we can deliver integrated solutions combining fluid, fiber optic, radio frequency, encoders and angle transducers with our rotary joints. This allow us to cover your needs and offer the most innovative technologies with a single partner.

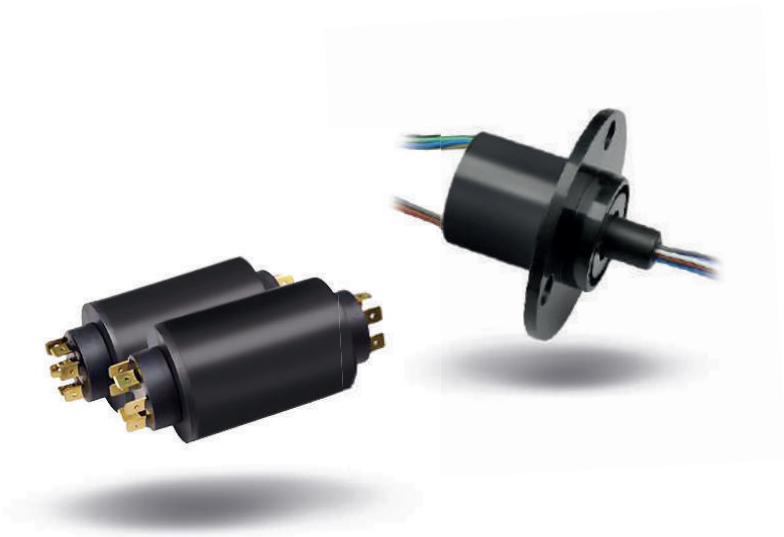
## A WIDE RANGE OF PRODUCTS

More than 500 standard and 400 custom models of electrical rotary joints, 150 standard and 300 custom models of fluid rotary joints and 50 models of fiber optic rotary joints grant us the possibility of an impressive number of combinations. The possibility to easily customize our products and the continuous attention to market needs and trends, constantly increase our proposal to customers.

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55	Signals & Bus







## PSC-X12 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 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 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 18 circuits. The compact size allows installation into small systems with high performance requirements.

## TECHNICAL SPECIFICATION

Number Of Circuits	6, 12, 15, 18
Voltage	240VDC / 240VAC Max.
Cables/Current Rating	Silver plated - PTFE insulation and colour coded 2A: AWG26 or AWG28; 6A: AWG20; 10A: AWG16
Cable Length	250mm. Standard (other lengths on demand)
Dielectric Strength	500VAC at 60Hz
Insulation Resistance	> 500MΩ / 500VDC
Noise	< 10Ω at 6Vcc and 50 mA (at 5 rpm)
Nominal Speed	250 rpm (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	Gold on Gold
Protection	IP51 or higher on request

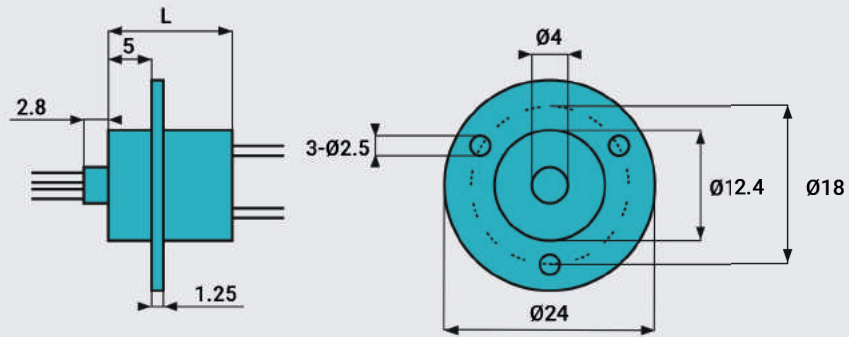
### PRODUCT FEATURES

- 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





Model	No. Of Circuits		Possible modification		Dimensions		Housing
	Total	Signals	Power		Outside Ø	L=mm	
PSC-X12-6	6	6	6A	10A	12.4	14	ABS
PSC-X12-12	12	12	-	-	12.4	19.5	ABS
PSC-X12-15	15	15	-	-	12.4	23	ABS
PSC-X12-18	18	18	-	-	12.4	23	ABS

## 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

### FLANGE

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

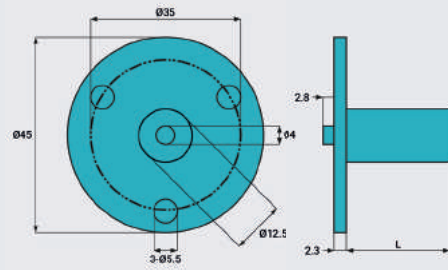
### TRANSFER

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

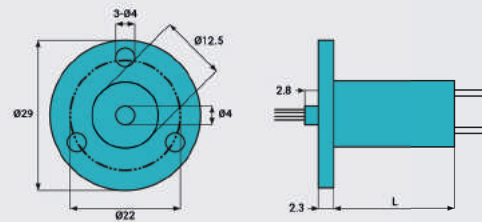
### HOUSING

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

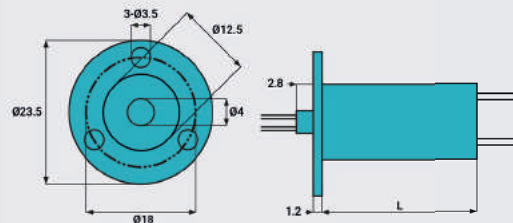
## A MODEL PSC-X12A



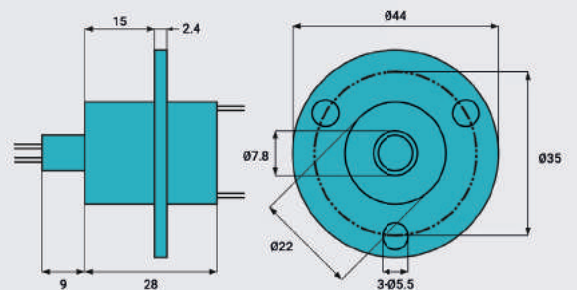
## A MODEL PSC-X12A1



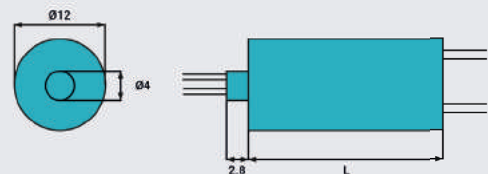
## A MODEL PSC-X12A2



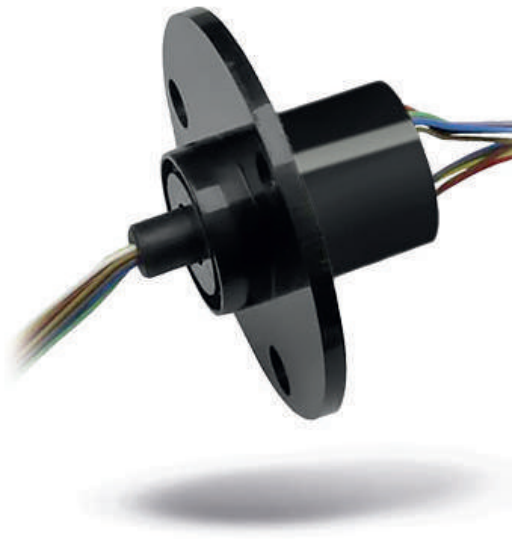
## A MODEL PSC-X12A2



## C MODEL PSC-X12C







## 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

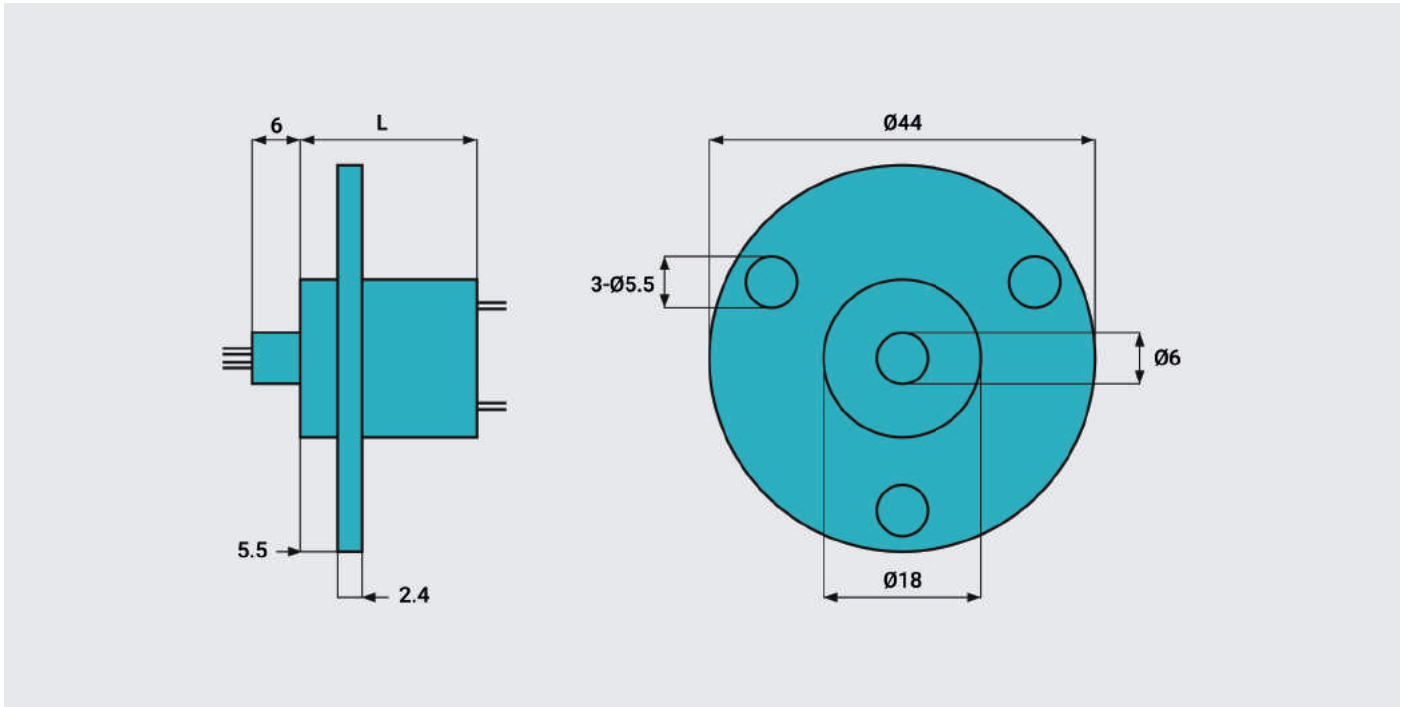
Number Of Circuits	6, 12, 14
Voltage	240VDC / 240VAC Max.
Cables/Current Rating	Silver plated - PTFE insulation and colour coded 2A: AWG26 or AWG28; 6A: AWG20; 10A: AWG16
Cable Length	250mm. Standard (other lengths on demand)
Dielectric Strength	500VAC at 60Hz
Insulation Resistance	> 500MΩ / 500Vcc
Noise	< 10Ω at 6Vcc and 50mA (at 5rpm)
Nominal Speed	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	Gold on Gold
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

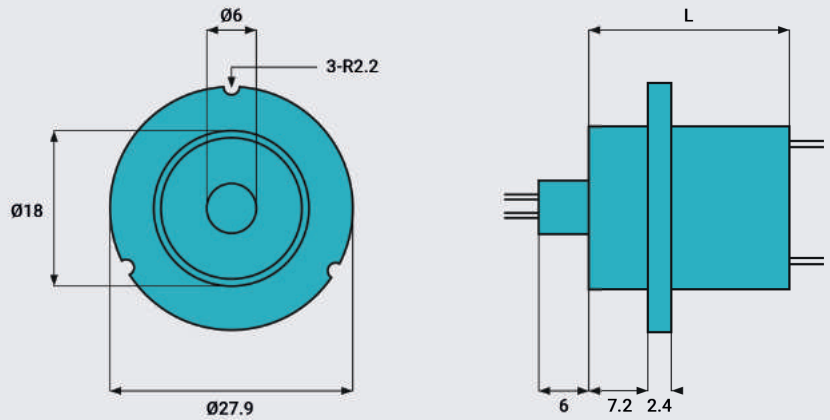
### APPLICATIONS

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

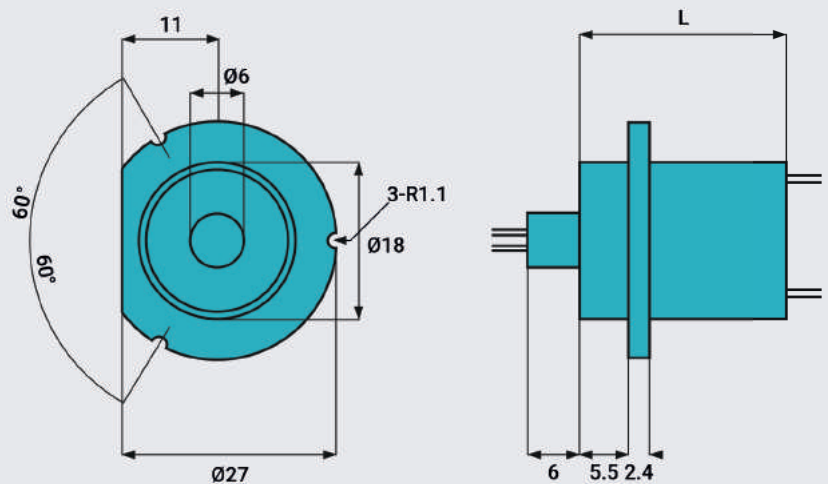


Model	No. Of Circuits		Possible modification		Dimensions		Housing
	Total	Signals	Power		Outside Ø	L=mm	
		1-2A	6A	10A			
PSC-X18-6	6	6	-	-	18	14	ABS
PSC-X18-12	12	12	-	-	18	19.5	ABS
PSC-X18-14	14	14	-	-	18	23	ABS

## A MODEL PSC-X18A1



## B MODEL PSC-X18B



## 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

### FLANGE

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

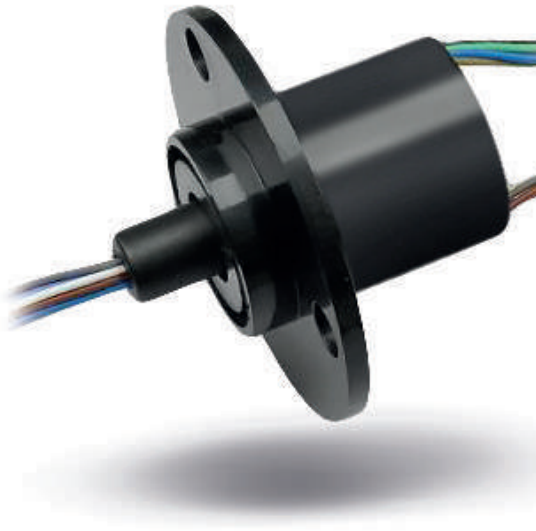
### TRANSFER

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

### HOUSING

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





## PSC-X22 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. Moreover, the use of noble metals (gold to gold alloy) assures long lasting using life, reduced electric noise and interferences among circuits, low contact electric resistance.

The above features make the PSC X Series specially suited to transmission of critical signals, such as hi frequency signals (video, field buses, etc.), very low currents and voltages (strain gages, thermocouples, measuring equipment etc.), even versions with 2A circuits are available. For higher than 2A please contact us.

Conceived to deliver a flexible, cost-effective, reliable and hi-quality solution, These units are available in many standard configurations and with 6 to 36 circuits. Their compact size allows installation into small systems thus requiring high performances.

## TECHNICAL SPECIFICATION

Number Of Circuits	6, 12, 18, 24, 36
Voltage	240VDC / 240VAC Max.
Cables/Current Rating	Silver plated - PTFE insulation and colour coded 2A: AWG26
Cable Length	250mm. Standard (other lengths on demand)
Dielectric Strength	500VAC at 60Hz
Insulation Resistance	> 500MΩ / 500Vcc
Noise	< 10Ω at 6Vcc and 50mA (at 5rpm)
Nominal Speed	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	Gold on Gold
Protection	IP51 or higher on request

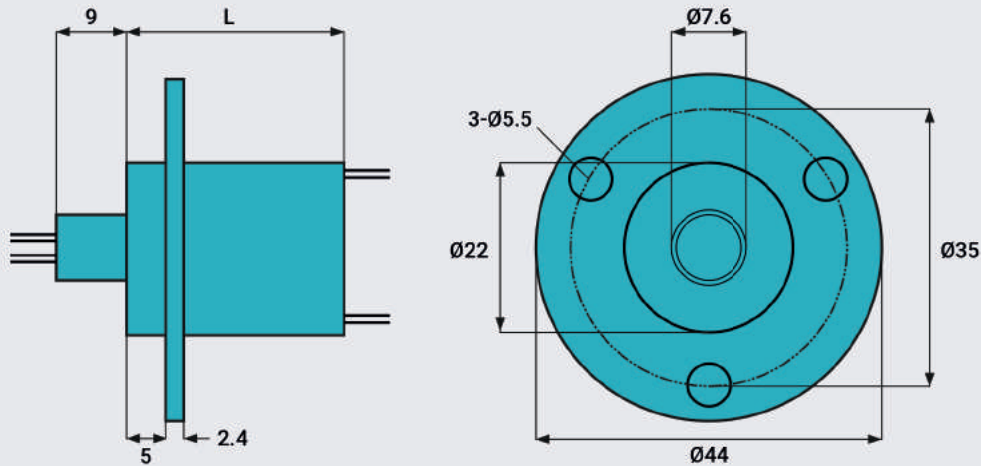
### PRODUCT FEATURES

- 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





Model	No. Of Circuits		Possible modification		Dimensions		Housing
	Total	Signals 1-2A	Power 6A	10A	Outside Ø	L=mm	
PSC-X22-6	6	6			22	19	ABS
PSC-X22-7	7	7			22	19	ABS
PSC-X22-12	12	12			22	28	ABS
PSC-X22-12-2P/2S	4	2	2		22	28	ABS
PSC-X22-15	15	15			22	29.5	ABS
PSC-X22-18	18	18			22	33.4	ABS
PSC-X22-18-3P	3			3	22	33.4	ABS
PSC-X22-24	24	24			22	41.2	ABS
PSC-X22-24-4P/6S	10	6	4		22	41.2	ABS
PSC-X22-36	36	36			22	56.8	ABS

## 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

### FLANGE

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

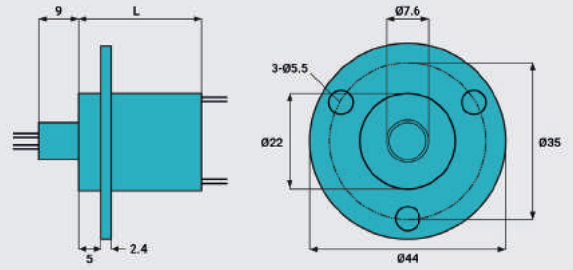
### TRANSFER

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

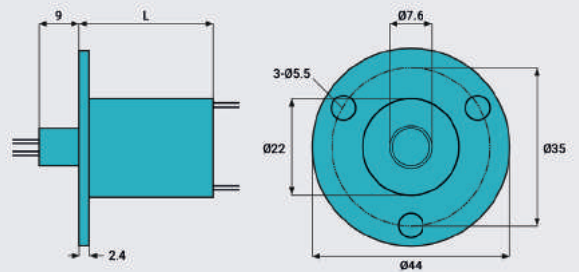
### HOUSING

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

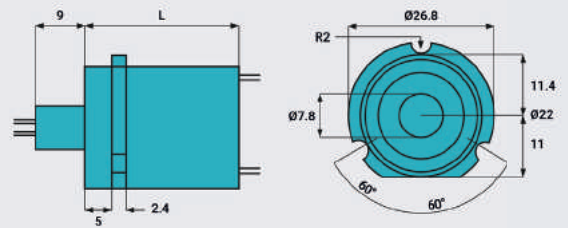
## A MODEL PSC-X22



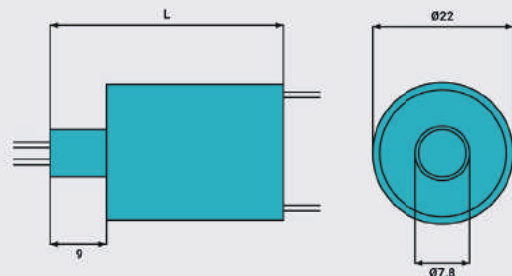
## A MODEL PSC-X22A



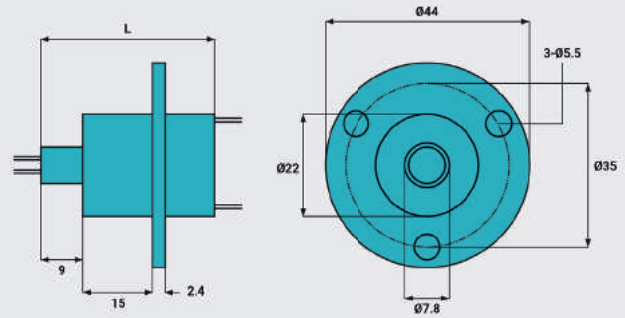
## B MODEL PSC-X22B



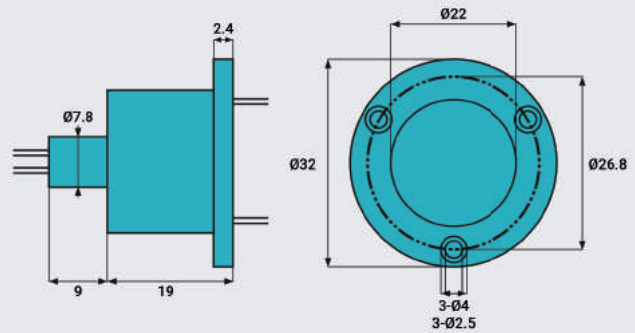
## C MODEL PSC-X22C



## D MODEL PSC-X22D



## E MODEL PSC-X22E



## 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

### FLANGE

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

### TRANSFER

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

### HOUSING

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



## PSC-X25 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. Moreover, the use of noble metals (gold to gold alloy) assures long lasting using life, reduced electric noise and interferences among circuits, low contact electric resistance.

The above features make the PSC X Series specially suited to transmission of critical signals, such as hi frequency signals (video, field buses, etc.), very low currents and voltages (strain gages, thermocouples, measuring equipment etc.), even if versions with up to 2A, 6A and 10A circuits are available.

Designed for a flexible, cost-effective and reliable solution, these units are available in many standard configurations using 6 to 56 circuits. The compact size allows installation into small systems with high performance requirements. COAX: Can be combined with RG178 50 Ω and RG170 75 Ω.

## TECHNICAL SPECIFICATION

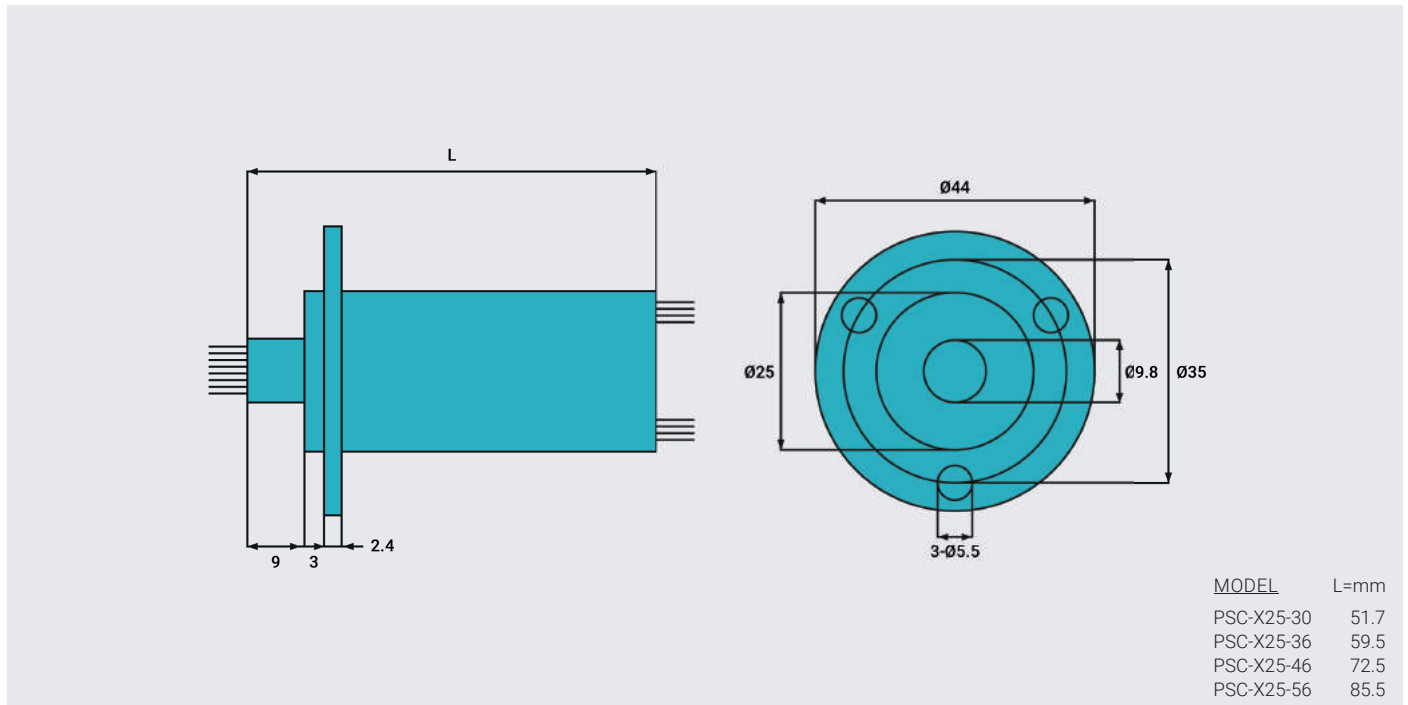
Number Of Circuits	Up to 56
Voltage	240VDC / 240VAC Max
Cables/Current Rating	Silver plated - PTFE insulation and colour coded 2A: AWG26 or AWG28 6A: AWG20; 10A: AWG16
Cable Length	250mm standard (other lengths on demand)
Dielectric Strength	500VAC at 50Hz, 60S
Insulation Resistance	1000MΩ / 500Vcc
Noise	< 0.01Ω
Nominal Speed	0~300rpm
Temperature	-20°C to +80°C
Rating Life	12 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
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



Model	No. Of Circuits				RG178 or RG179
		Total	10A	6A	
PSC-X25-30	30	-	-	30	-
PSC-X25-30-4P/18S	22	-	4	18	-
PSC-X25-30-3P/15S	18	3	-	15	-
PSC-X25-36	36	-	-	36	-
PSC-X25-36-4P/24S	28	-	4	24	-
PSC-X25-36-4P/20S-2RG178	26	-	4	20	2
PSC-X25-46	46	-	-	46	-
PSC-X25-46-4P/34S	38	-	4	34	-
PSC-X25-46-4P/30S-2RG178	36	-	4	30	2
PSC-X25-56	56	-	-	56	-
PSC-X25-56-4P/44S	48	-	4	44	-
PSC-X25-56-4P/40S-2RG178	46	-	4	40	2

## 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

### FLANGE

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

### TRANSFER

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

### HOUSING

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



## PST-X32 STANDARD

The PST X Series is developed initially for the packaging industries and are mostly used by flow pack machines. The slip rings allow high current circuits, combined with signals for sensors, and is suited for high operation speed with a long lifetime. The terminals pins are connected on the slip ring, that allows smooth installation.

PST-X32 has 2 or 3 high currents circuits and can be combined with two circuits for sensors. The PST X32 is also available in an IP65 version suitable to be installed in machines, that needs regular cleaning with water. The PST-X45 Series has 6 power circuits and a model with additional 2 circuits for signals.

Their compact size allows installation into small systems thus requiring high performances.

## TECHNICAL SPECIFICATION

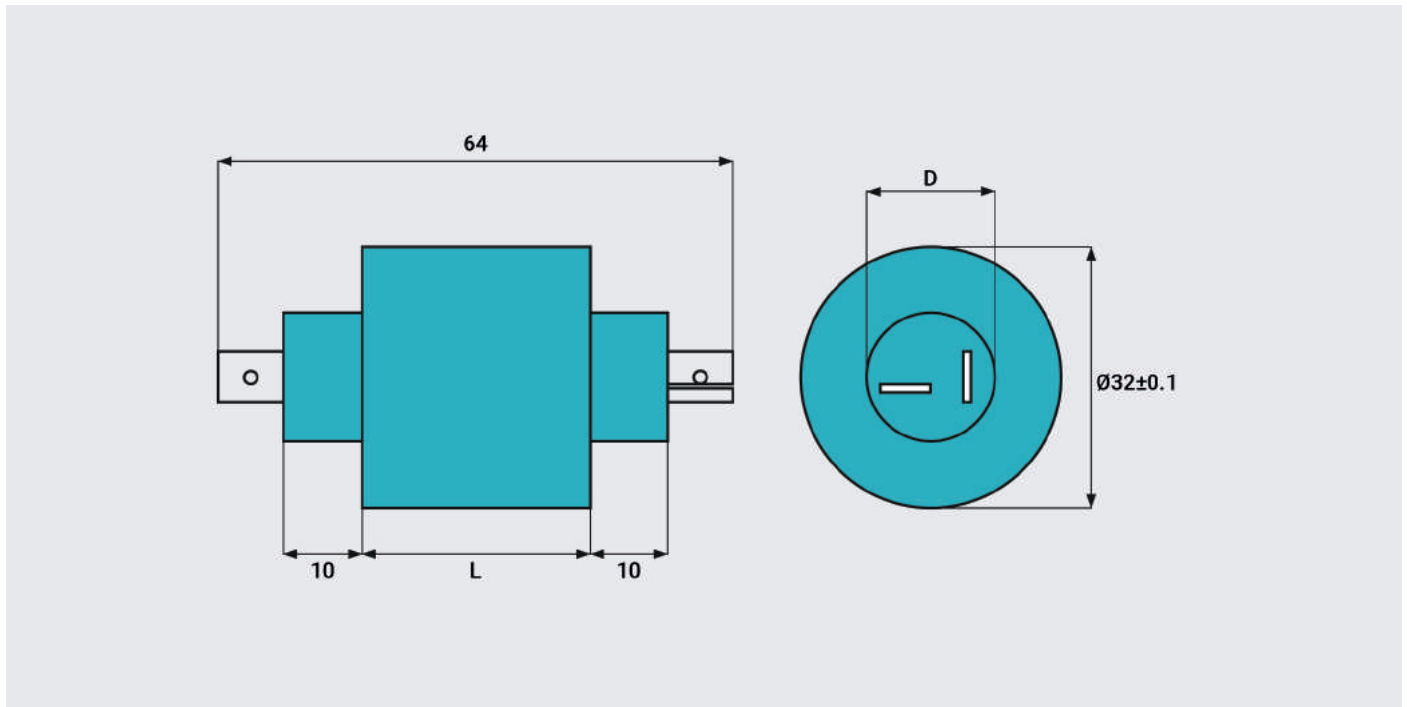
Number Of Circuits	2, 3, 4, 5
Voltage	240VDC / 240VAC Max.
Cables/Current Rating	Silver plated - PTFE insulation and colour coded 2A: AWG26 or AWG28 6A: AWG20; 10A: AWG16
Cable Length	250mm. Standard (other lengths on demand)
Dielectric Strength	500VAC at 60Hz
Insulation Resistance	> 500MΩ / 500Vcc
Noise	≤10mΩ
Nominal Speed	0~400rpm (for higher speed, please contact us)
Temperature	-20°C to +80°C (option: -40 to +80°C on AL housing)
Rating Life	10 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold
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

- Flow Pack
- Wind Turbine
- Packaging

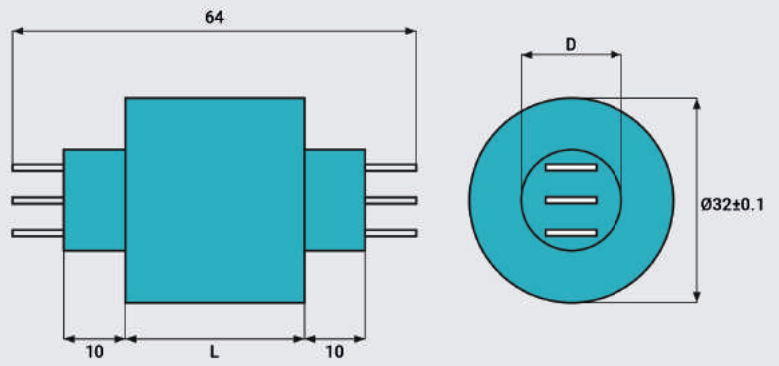


Model	No. Of Circuits			Length	Diameter	Terminal	
	Total	Power	2A			Power	Signal
PST-X32-2 (IP51)	2	2x14A	-	28 mm	-	0.8 x 6.3 mm	-
PST-X32-3 (IP51)	3	3x14A	-	28 mm	-	0.8 x 6.3 mm	-
PST-X32-4 (IP51)	4	2x14A	2x2A	28 mm	16	0.8 x 6.3 mm	0.8 x 2.8 mm
PST-X32-3M (IP65)	3	3x20A	-	44.5 mm	20	0.8 x 6.3 mm	-
PST-X32-5M (IP65)	5	2x20A	3x5A	44.5 mm	-	0.8 x 6.3 mm	0.8 x 2.8 mm

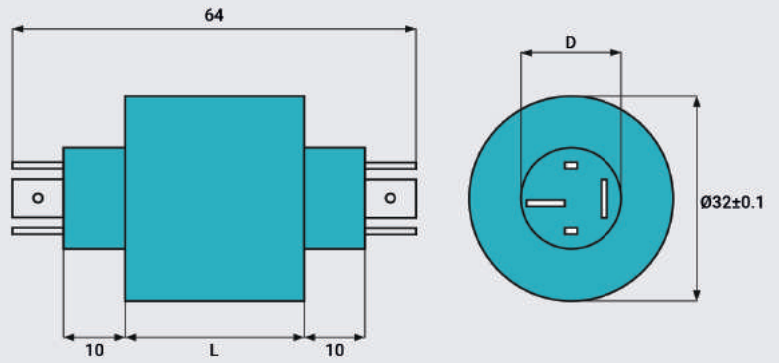


**WATER RESISTANCE  
IP65**

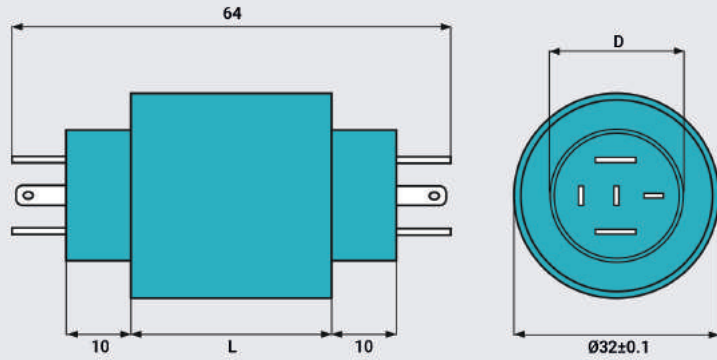
MODEL PST-X32-3



MODEL PST-X32-4



MODEL PST-X32-5









## PST-X45 STANDARD

The PST X Series is developed initially for the packaging industries and are mostly used by flow pack machines. The slip rings allow high current circuits, combined with signals for sensors, and is suited for high operation speed with a long lifetime. The terminals pins are connected on the slip ring, that allows smooth installation.

PST-X32 has 2 or 3 high currents circuits and can be combined with two circuits for sensors. The PST X32 is also available in an IP65 version suitable to be installed in machines, that needs regular cleaning with water. The PST-X45 Series has 6 power circuits and a model with additional 2 circuits for signals.

Their compact size allows installation into small systems thus requiring high performances.

## TECHNICAL SPECIFICATION

Number Of Circuits	6, 8
Voltage	240VDC / 240VAC Max.
Cables/Current Rating	Silver plated - PTFE insulation and colour coded 2A: AWG26 or AWG28 6A: AWG20; 10A: AWG16
Cable Length	250 mm. Standard (other lengths on demand)
Dielectric Strength	500VAC at 60Hz
Insulation Resistance	> 500MΩ / 500Vcc
Noise	≤10mΩ
Nominal Speed	0~400rpm (for higher speed, please contact us)
Temperature	-20°C to +80°C (option: -40 to +80°C on AL housing)
Rating Life	10 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold
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

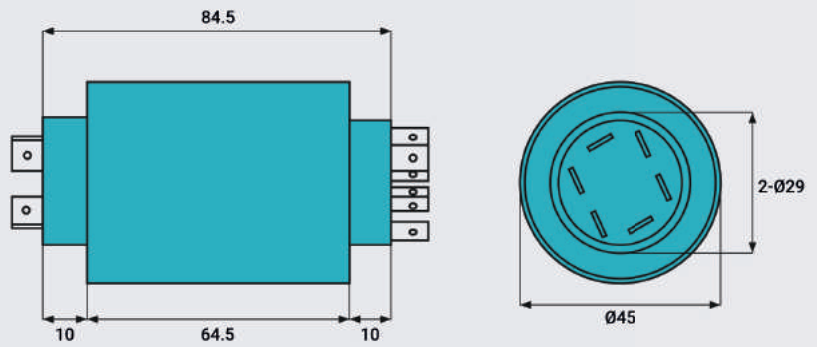
- Flow Pack
- Wind Turbine
- Packaging

# PST-X45 SERIES

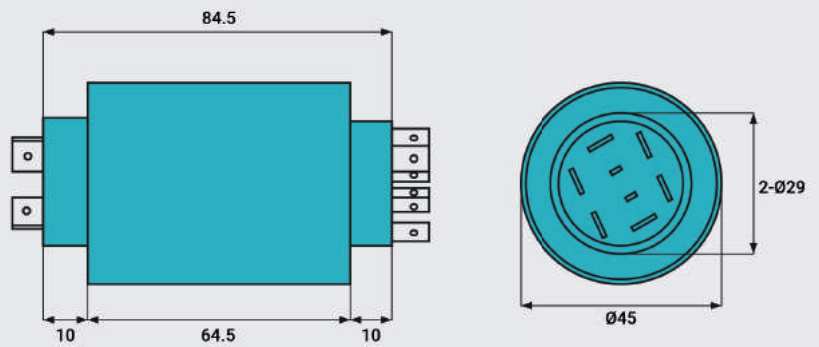
Pin Variations

PSC SERIES

MODEL PST-X45-6



MODEL PST-X32-8



Model	No. Of Circuits			Length	Terminal	
	Total	20A	5A		Power	Signal
PST-X45-6	6	6	-	64.5 mm	0.8 x 6.3 mm	-
PST-X45-8-6P/2S	8	6	2	64.5 mm	0.8 x 6.3 mm	0.8 x 2.8 mm



WATER RESISTANCE  
IP65

# 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
<i>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.</i>						

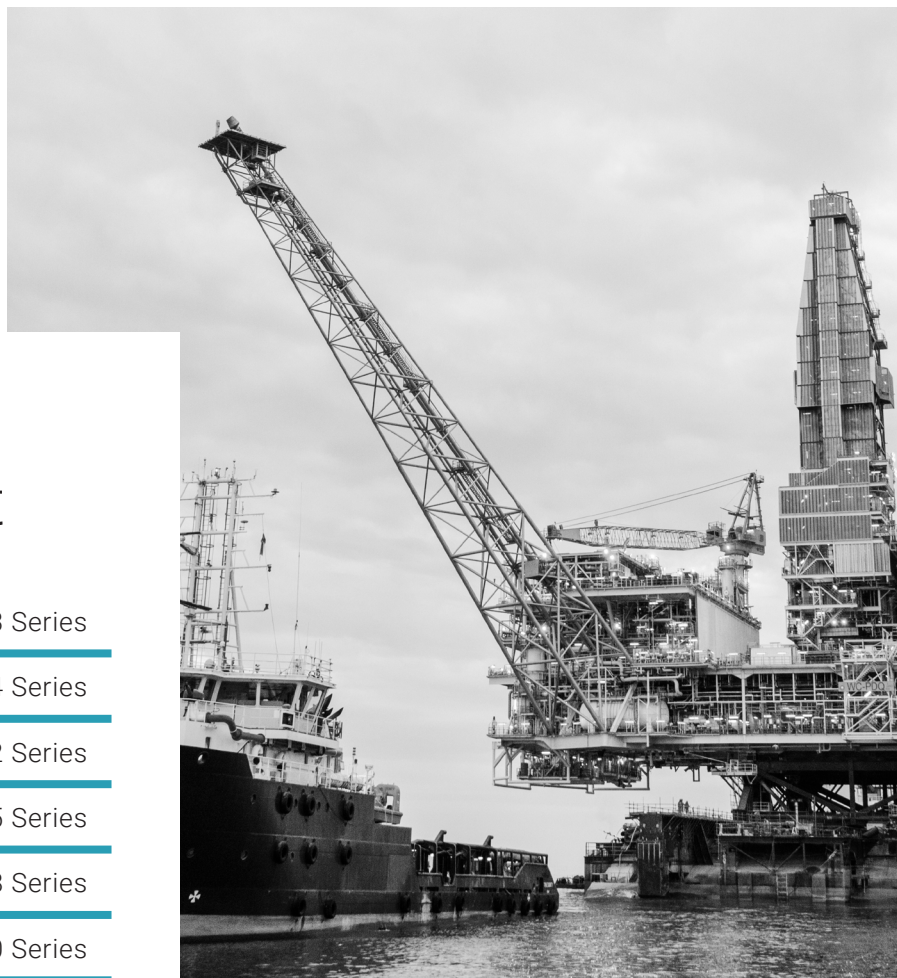
## DISCLAIMER

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.



## Table Of Content

08-11	PSH-X03 Series
12-15	PSH-X04 Series
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	PSH-X60 Series
	PSH-X70 Series
28	PSH Lead Colour
55	Signals & Bus







## PSH-X03 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

Dimensions	Inner: Ø3mm, Outer: Ø17mm
Number Of Circuits	2, 8
Voltage	240VAC
Cables/Current Rating	Tin plated, PTFE insulation / 2A: AWG26;
Dielectric Strength	500VAC@50Hz±60S
Insulation Resistance	1000MΩ/500VDC
Nominal Speed	250rpm
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
Protection	IP51 or higher on request

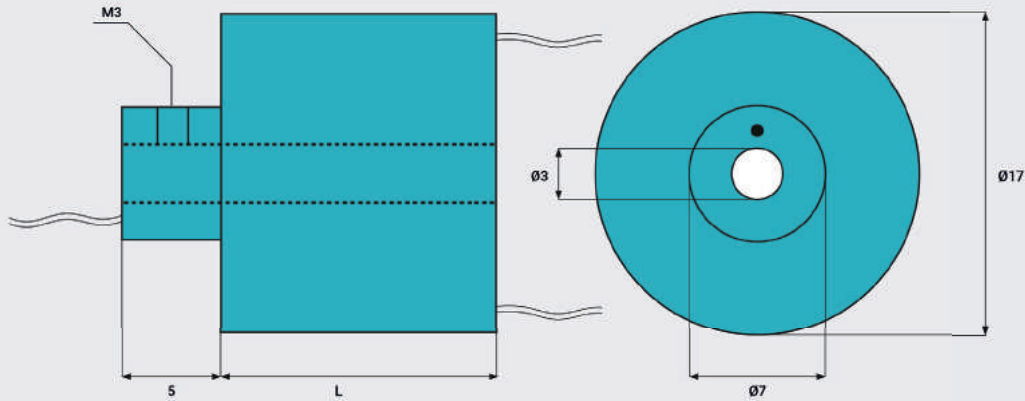
### PRODUCT FEATURES

- 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

- Cable reels
- Medical equipment
- Packaging machines





Model	No. Of Circuits			Length (mm)
	Total	10A	2A	
PSH-X03	2	-	2	13.3-20
	3	-	3	13.3-20
	6	-	6	13.3-20
	8	-	8	13.3-20

## 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

### HOLLOW SHAFT

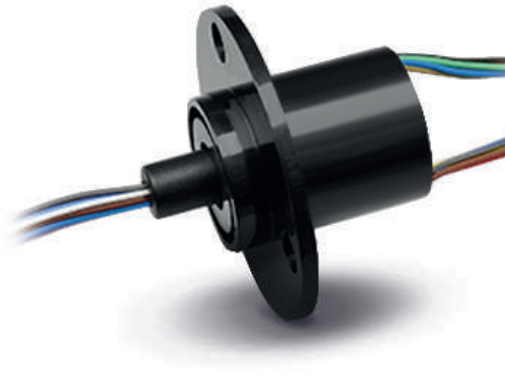
- Size according to requirements
- Packing/sealing

### TRANSFER

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

### HOUSING

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



## PSH-X04 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

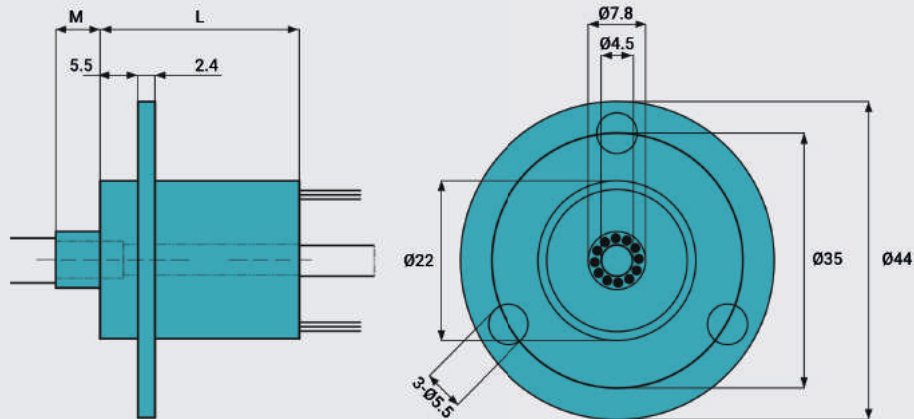
Dimensions	Inner: Ø4mm, Outer: Ø22mm
Number Of Circuits	8, 12, 18, 24
Voltage	1000 VAC
Cables/Current Rating	Tin plated, PTFE insulation / 2A: AWG26;
Dielectric Strength	500VAC@50Hz@60S
Insulation Resistance	1000MΩ/500VDC
Nominal Speed	250rpm
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
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

- Cable reels
- Medical equipment
- Packaging machines



Model	No. Of Circuits			Length (mm)
	Total	10A	2A	
PSH-X04	8	-	8	19.4 - 43
	12	-	12	19.4 - 43
	18	-	18	19.4 - 43
	24	-	24	19.4 - 43

## 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

### HOLLOW SHAFT

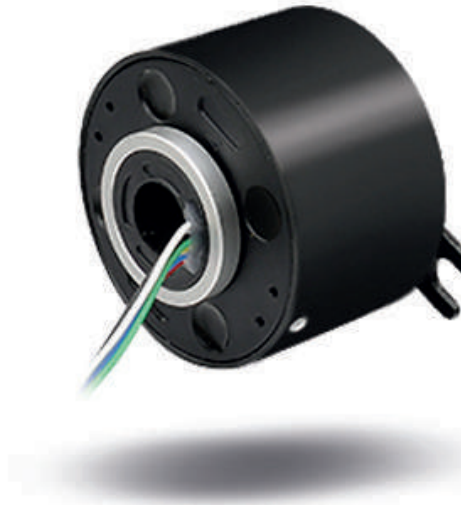
- Size according to requirements
- Packing/sealing

### TRANSFER

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

### HOUSING

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



## PSH-X12 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

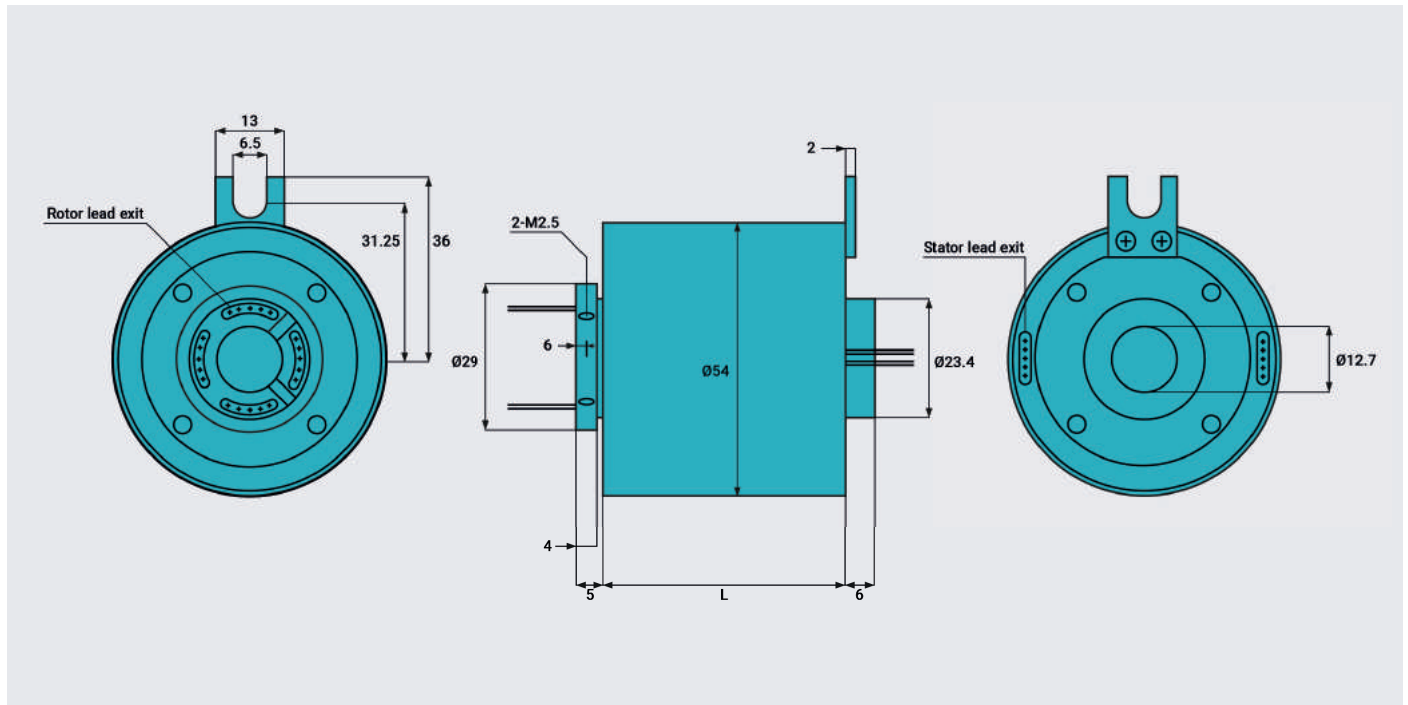
Dimensions	Inner: Ø12.7mm, Outer:Ø54mm
Number Of Circuits	6, 12, 18, 24
Voltage	600VAC
Cables/Current Rating	Tin plated, PTFE insulation / 5A: AWG22;
Dielectric Strength	1000VAC at 60Hz
Insulation Resistance	500VAC at 60Hz; > 1000MΩ / 500Vcc
Nominal Speed	400rpm
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
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

- Cable reels
- Medical equipment
- Packaging machines



Model	No. Of Circuits			Length (mm)
	Total	10A	2A	
PSH-X12-6	6	6	-	33.8
PSH-X12-12	12	12	-	47.3
PSH-X12-18	18	18	-	61.6
PSH-X12-24	24	24	-	75.7

## 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

### HOLLOW SHAFT

- Size according to requirements
- Packing/sealing

### TRANSFER

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

### HOUSING

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



## PSH-X25 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

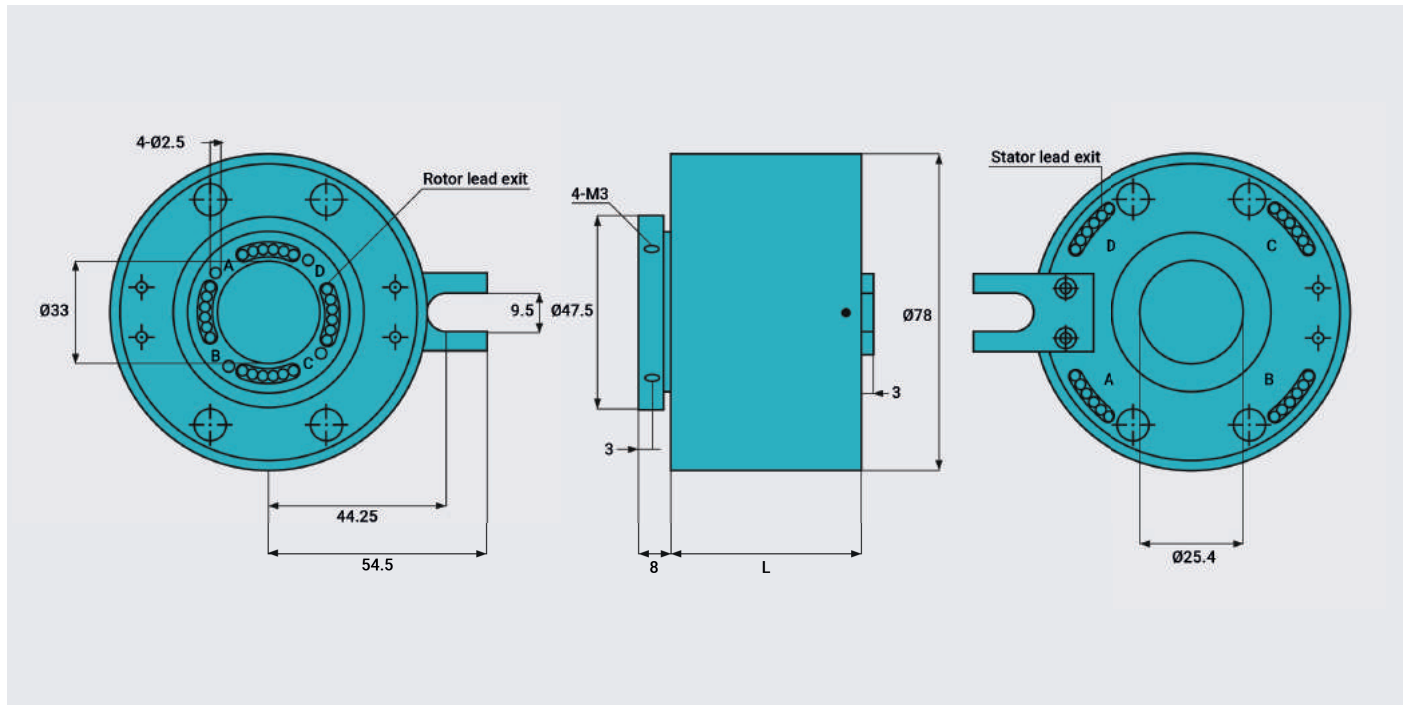
Dimensions	Inner: Ø25mm, Outer:Ø78mm
Number Of Circuits	6, 12, 18, 24, 36, 48
Voltage	600 VAC
Cables/Current Rating	Tin plated, PTFE insulation / 10A: AWG16; 2A:AWG26;
Dielectric Strength	1000 VAC at 60 Hz
Insulation Resistance	500 VAC at 60 Hz; > 1000 MΩ / 500 Vcc
Nominal Speed	250/500 rpm or higher on demand
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
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

- Cable reels
- Medical equipment
- Packaging machines



Model	No. Of Circuits			Length (mm)
	Total	10A/15A	2A	
PSH-X25-6P	6	6	—	55
PSH-X25-12S	12	—	12	55
PSH-X25-12P	12	12	—	79
PSH-X25-6P/12S	18	6	12	79
PSH-X25-24S	24	—	24	79
PSH-X25-18P	18	18	—	103
PSH-X25-12P/12S	24	12	12	103
PSH-X25-6P/24S	30	6	24	103
PSH-X25-36S	36	—	36	103
PSH-X25-24P	24	24	—	127
PSH-X25-18P/12S	30	18	12	127
PSH-X25-12P/24S	36	12	24	127
PSH-X25-6P/36S	42	6	36	127
PSH-X25-48S	48	—	48	127

## 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

### HOLLOW SHAFT

- Size according to requirements
- Packing/sealing

### HOUSING

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



## PSH-X38 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

Dimensions	Inner: Ø38mm, Outer:Ø99mm
Number Of Circuits	6, 12, 18, 24, 36, 48
Voltage	600VAC
Cables/Current Rating	Tin plated, PTFE insulation / 10A/15A: AWG16; 2A:AWG26;
Dielectric Strength	1000VAC at 60Hz
Insulation Resistance	500VAC at 60Hz; > 1000MΩ / 500Vcc
Nominal Speed	400rpm
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
Protection	IP51 or higher on request

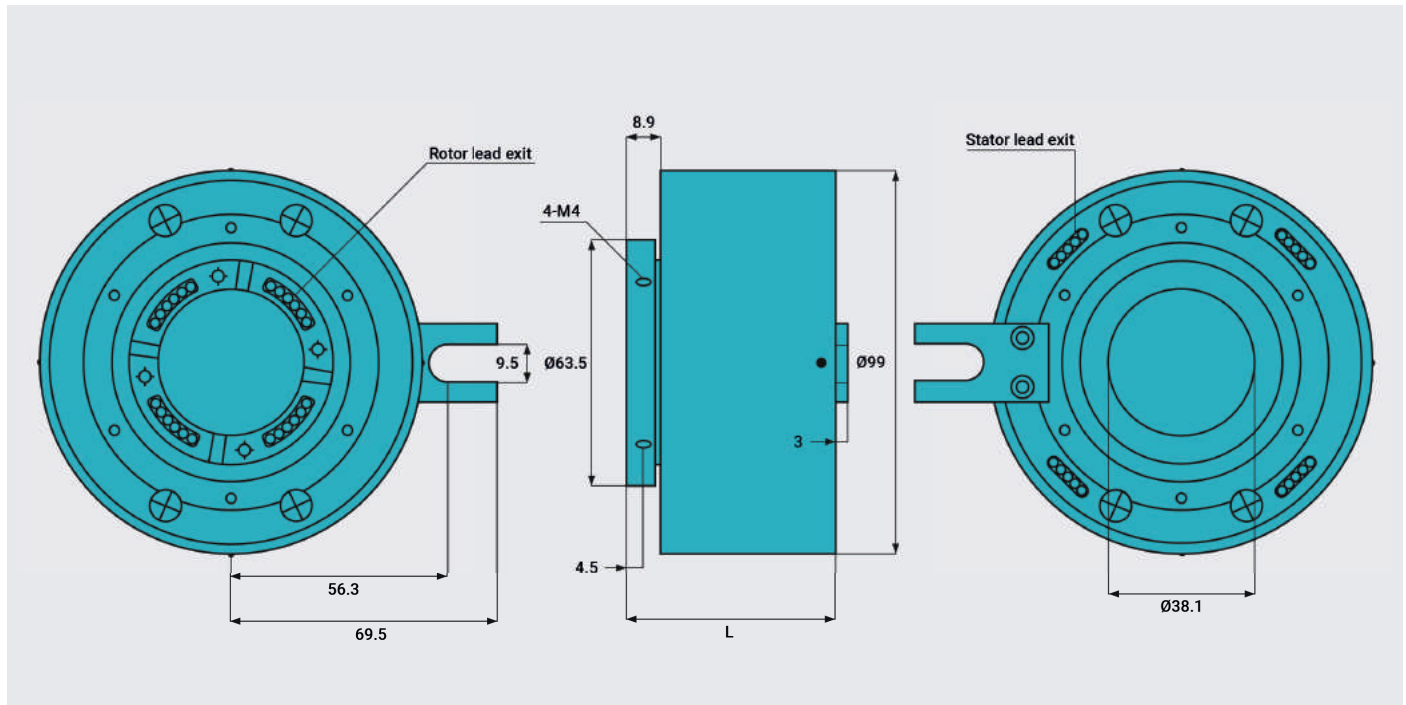
### PRODUCT FEATURES

- 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

- Cable reels
- Medical equipment
- Packaging machines





Model	No. Of Circuits			Length (mm)
	Total	10A/15A	2A	
PSH-X38-6P	6	6	—	54.1
PSH-X38-12S	12	—	12	54.1
PSH-X38-12P	12	12	—	77.9
PSH-X38-6P/12S	18	6	12	77.9
PSH-X38-24S	24	—	24	77.9
PSH-X38-18P	18	18	—	101.7
PSH-X38-12P/12S	24	12	12	101.7
PSH-X38-6P/24S	30	6	24	101.7
PSH-X38-36S	36	—	36	101.7
PSH-X38-24P	24	24	—	125.5
PSH-X38-18P/12S	30	18	12	125.5
PSH-X38-12P/24S	36	12	24	125.5
PSH-X38-6P/36S	42	6	36	125.5
PSH-X38-48S	48	—	48	125.5

## 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

### HOLLOW SHAFT

- Size according to requirements
- Packing/sealing

### TRANSFER

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

### HOUSING

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



## PSH-X50 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

Dimensions	Inner: Ø50mm, Outer:Ø120mm
Number Of Circuits	6, 12, 18, 24, 36, 48, 60, 72
Voltage	600VAC
Cables/Current Rating	Tin plated, PTFE insulation / 15A or 10A: AWG16; 5A: AWG22;
Dielectric Strength	1000VAC at 60Hz
Insulation Resistance	500VAC at 60Hz; > 1000MΩ / 500Vcc
Nominal Speed	400rpm
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
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

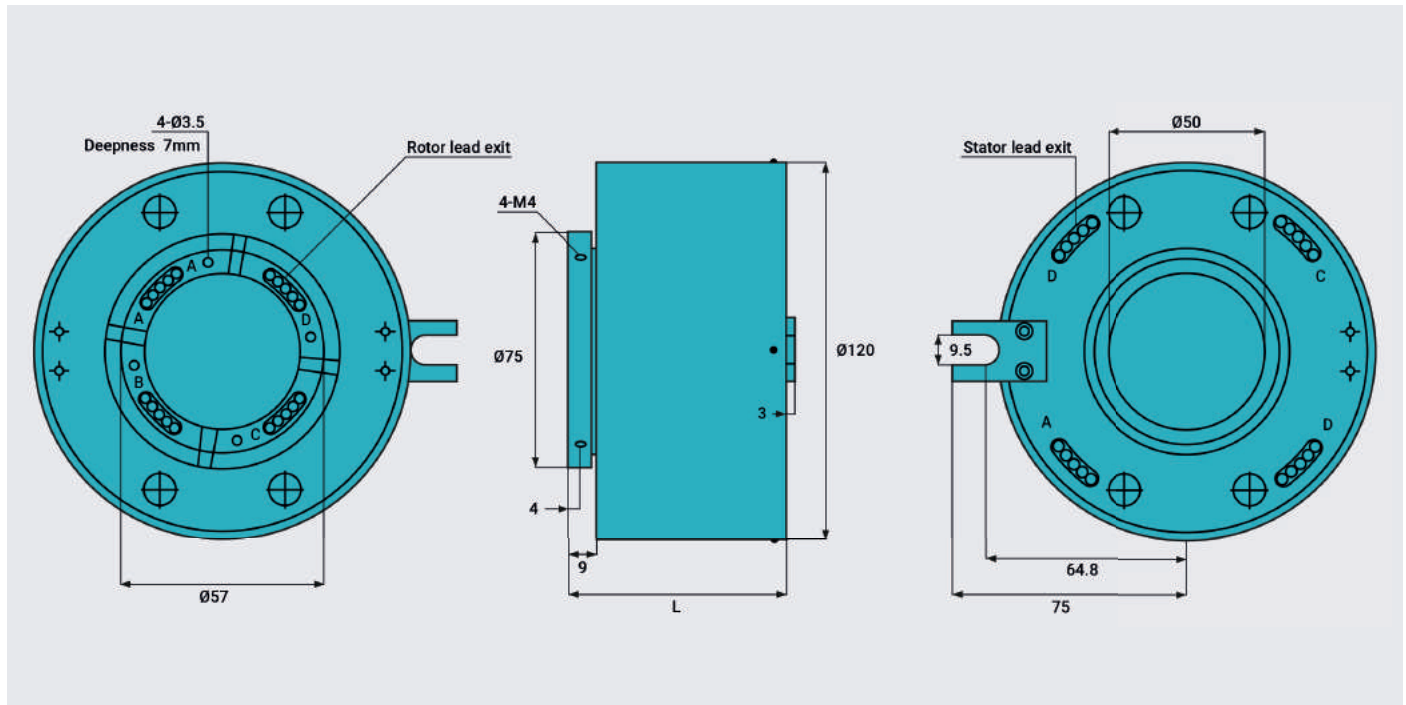
### APPLICATIONS

- Cable reels
- Medical equipment
- Packaging machines

# PSH-X50 SERIES

Standard Hollow Shaft

PSH SERIES



Model	No. Of Circuits			Length (mm)
	Total	10A/15A	5A	
PSH-X50-6P	6	6	—	70
PSH-X50-12S	12	—	12	70
PSH-X50-12P	12	12	—	100
PSH-X50-6P/12S	18	6	12	100
PSH-X50-24S	24	—	24	100
PSH-X50-18P	18	18	—	130
PSH-X50-12P/12S	24	12	12	130
PSH-X50-6P/24S	30	6	24	130
PSH-X50-36S	36	—	36	130
PSH-X50-24P	24	24	—	160
PSH-X50-18P/12S	30	18	12	160
PSH-X50-12P/24S	36	12	24	160
PSH-X50-6P/36S	42	6	36	160
PSH-X50-48S	48	—	48	160
PSH-X50-30P	30	30	—	190
PSH-X50-24P/12S	36	24	12	190
PSH-X50-18P/24S	42	18	24	190
PSH-X50-12P/36S	48	12	36	190
PSH-X50-6P/48S	54	6	48	190
PSH-X50-60S	60	—	60	190
PSH-X50-36P	36	36	—	220
PSH-X50-30P/12S	42	30	12	220
PSH-X50-24P/24S	48	24	24	220
PSH-X50-18P/36S	54	18	36	220
PSH-X50-12P/48S	60	12	48	220
PSH-X50-6P/60S	66	6	60	220
PSH-X50-72S	72	—	72	220

## Lead Colour Codes

Contact Penlink with your drawing for more information on Lead Colour Codes.

## Signal and Bus Compliances

See page 55 for signal possibilities and modifications on our standard PSH slip rings.

## 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

### HOLLOW SHAFT

- Size according to requirements
- Packing/sealing

### HOUSING

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





## PSH-X60 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

Dimensions	Inner: Ø60mm, Outer:Ø135mm
Number Of Circuits	6, 12, 18, 24, 36, 48, 60, 72-96
Voltage	600VAC
Cables/Current Rating	Tin plated, PTFE insulation / 20A, 15A or 10A: AWG16; 5A: AWG22;
Dielectric Strength	1000VAC at 60Hz
Insulation Resistance	500VAC at 60Hz; > 1000MΩ / 500Vcc
Nominal Speed	400rpm
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
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

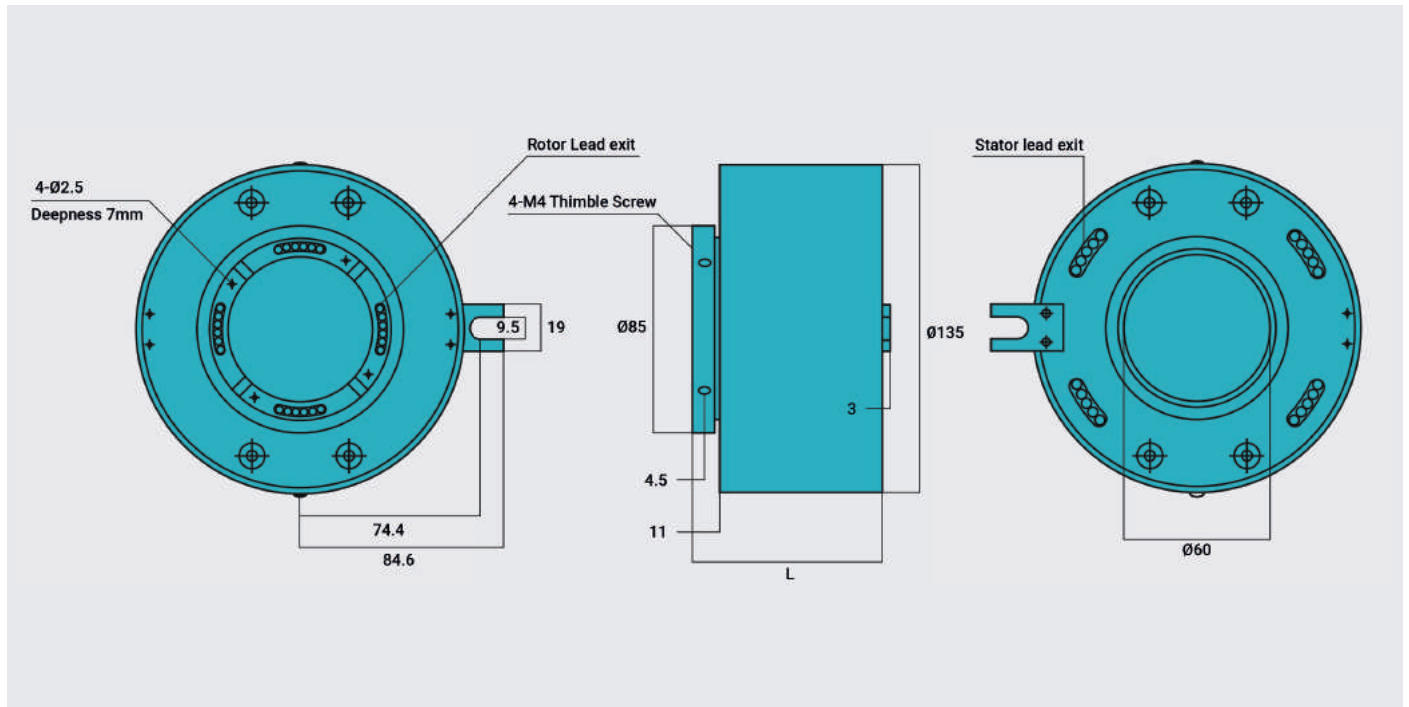
### APPLICATIONS

- Cable reels
- Medical equipment
- Packaging machines

# PSH-X60 SERIES

Standard Hollow Shaft

PSH SERIES



Model	No. Of Circuits			Length (mm)
	Total	10A/15A/20A	5A	
PSH-X60-6P	6	6	—	77.5
PSH-X60-12S	12	—	12	77.5
PSH-X60-12P	12	12	—	107.5
PSH-X60-6P/12S	18	6	12	107.5
PSH-X60-24S	24	—	24	107.5
PSH-X60-18P	18	18	—	137.5
PSH-X60-12P/12S	24	12	12	137.5
PSH-X60-6P/24S	30	6	24	137.5
PSH-X60-36S	36	—	36	137.5
PSH-X60-24P	24	24	—	167.5
PSH-X60-18P/12S	30	18	12	167.5
PSH-X60-12P/24S	36	12	24	167.5
PSH-X60-6P/36S	42	6	36	167.5
PSH-X60-48S	48	—	48	167.5
PSH-X60-30P	30	30	—	197.5
PSH-X60-24P/12S	36	24	12	197.5
PSH-X60-18P/24S	42	18	24	197.5
PSH-X60-12P/36S	48	12	36	197.5
PSH-X60-6P/48S	54	6	48	197.5
PSH-X60-60S	60	—	60	197.5
PSH-X60-36P	36	36	—	227.5
PSH-X60-30P/12S	42	30	12	227.5
PSH-X60-24P/24S	48	24	24	227.5
PSH-X60-18P/36S	54	18	36	227.5
PSH-X60-12P/48S	60	12	48	227.5
PSH-X60-6P/60S	66	6	60	227.5
PSH-X60-72S	72	—	72	227.5
PSH-X60-42P	42	42	—	257.5
PSH-X60-36P/12S	48	36	12	257.5
PSH-X60-30P/24S	54	30	24	257.5
PSH-X60-24P/36S	60	24	36	257.5
PSH-X60-18P/48S	66	18	48	257.5
PSH-X60-12P/60S	72	12	60	257.5

# PSH-X60 SERIES

Standard Hollow Shaft

PSH SERIES

Model	No. Of Circuits			Length (mm)
	Total	10A/15A/20A	5A	
PSH-X60-6P/72S	78	6	72	257.5
PSH-X60-84S	84	—	84	257.5
PSH-X60-48P	48	48	—	287.5
PSH-X60-42P/12S	54	42	12	287.5
PSH-X60-36P/24S	60	36	24	287.5
PSH-X60-30P/36S	66	30	36	287.5
PSH-X60-24P/48S	72	24	48	287.5
PSH-X60-18P/60S	78	18	60	287.5
PSH-X60-12P/72S	84	12	72	287.5
PSH-X60-6P/84S	90	6	84	287.5
PSH-X60-96S	96	—	96	287.5

## Lead Colour Codes

Contact Penlink with your drawing for more information on Lead Colour Codes.

## Signal and Bus Compliances

See page 55 for signal possibilities and modifications on our standard PSH slip rings.

## 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

### HOLLOW SHAFT

- Size according to requirements
- Packing/sealing

### TRANSFER

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

### HOUSING

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







## PSH-X70 STANDARD HOLLOW SHAFT

Slip rings can be used in any electromechanical system requiring unrestrained, continuous rotation, while transmitting power and/or data from a stationary to a rotating structure. A slip ring is sometimes referred to as a rotary electrical interface, collector, swivel or rotary joint.

The PSH-X Series uses multiple contact point technology, allowing for low contact electric resistance between brushes and ring. This reduces electrical noise and the slip ring gets a longer lifetime. No lubrication required.

We can also offer modified design. As a customer you have the possibility to specify the slip ring to comply with your needs. We can also offer hybrid units, for example a combined slip ring and fiber optic rotary joint, integrated into one small housing. Other options we can offer inclusion of coax and miniature data bus cables, harnessing of lead wires into chosen crimps and connectors.

## TECHNICAL SPECIFICATION

Dimensions	Inner: Ø70mm, Outer:Ø155mm
Number Of Circuits	6, 12, 18, 24, 36, 48, 60, 72-96
Voltage	600VAC
Cables/Current Rating	Tin plated, PTFE insulation / 15A or 10A:AWG16
Dielectric Strength	1000VAC at 60Hz
Insulation Resistance	500VAC at 60Hz; > 1000MΩ / 500Vcc
Nominal Speed	400rpm
Temperature	-20°C to +80°C
Rating Life	80 million revolutions (depending on speed and on environmental conditions)
Contact	Gold on Gold / Silver on Silver
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

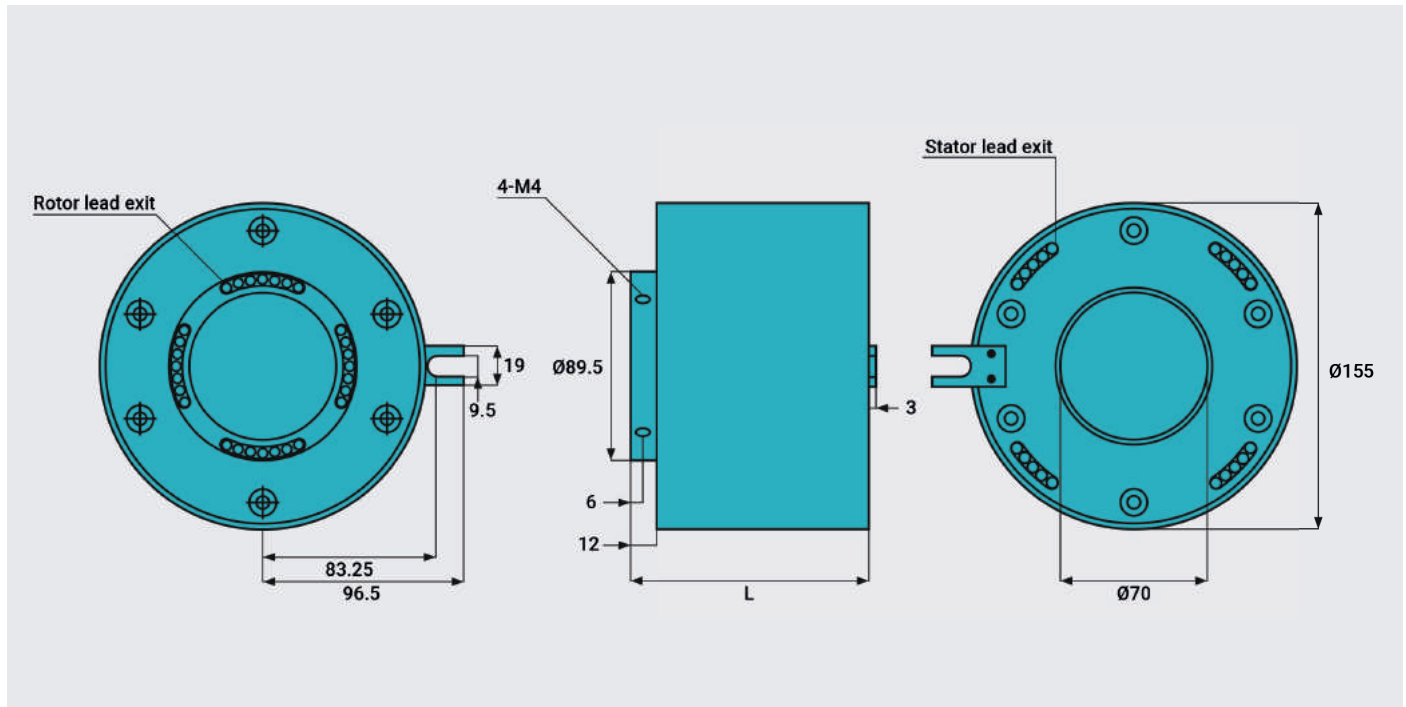
### APPLICATIONS

- Cable reels
- Medical equipment
- Packaging machines

# PSH-X70 SERIES

Standard Hollow Shaft

PSH SERIES



Model	No. Of Circuits			Length (mm)
	Total	10A/15A	5A	
PSH-X70-6P	6	6	—	80.8
PSH-X70-12S	12	—	12	80.8
PSH-X70-12P	12	12	—	110.8
PSH-X70-6P/12S	18	6	12	110.8
PSH-X70-24S	24	—	24	110.8
PSH-X70-18P	18	18	—	140.8
PSH-X70-12P/12S	24	12	12	140.8
PSH-X70-6P/24S	30	6	24	140.8
PSH-X70-36S	36	—	36	140.8
PSH-X70-24P	24	24	—	170.8
PSH-X70-18P/12S	30	18	12	170.8
PSH-X70-12P/24S	36	12	24	170.8
PSH-X70-6P/36S	42	6	36	170.8
PSH-X70-48S	48	—	48	170.8
PSH-X70-30P	30	30	—	200.8
PSH-X70-24P/12S	36	24	12	200.8
PSH-X70-18P/24S	42	18	24	200.8
PSH-X70-12P/36S	48	12	36	200.8
PSH-X70-6P/48S	54	6	48	200.8
PSH-X70-60S	60	—	60	200.8
PSH-X70-36P	36	36	—	230.8
PSH-X70-30P/12S	42	30	12	230.8
PSH-X70-24P/24S	48	24	24	230.8
PSH-X70-18P/36S	54	18	36	230.8
PSH-X70-12P/48S	60	12	48	230.8
PSH-X70-6P/60S	66	6	60	230.8
PSH-X70-72S	72	—	72	230.8
PSH-X70-42P	42	42	—	260.8
PSH-X70-36P/12S	48	36	12	260.8
PSH-X70-30P/24S	54	30	24	260.8
PSH-X70-24P/36S	60	24	36	260.8
PSH-X70-18P/48S	66	18	48	260.8
PSH-X70-12P/60S	72	12	60	260.8
PSH-X70-6P/72S	78	6	72	260.8

# PSH-X70 SERIES

Standard Hollow Shaft

PSH SERIES

Model	No. Of Circuits			Length (mm)
	Total	10A/15A	5A	
PSH-X70-84S	84	—	84	260.8
PSH-X70-48P	48	48	—	290.8
PSH-X70-42P/12S	54	42	12	290.8
PSH-X70-36P/24S	60	36	24	290.8
PSH-X70-30P/36S	66	30	36	290.8
PSH-X70-24P/48S	72	24	48	290.8
PSH-X70-18P/60S	78	18	60	290.8
PSH-X70-12P/72S	84	12	72	290.8
PSH-X70-6P/84S	90	6	84	290.8
PSH-X70-96S	96	—	96	290.8

## Lead Colour Codes

Contact Penlink with your drawing for more information on Lead Colour Codes.

## Signal and Bus Compliances

See page 55 for signal possibilities and modifications on our standard PSH slip rings.

## MODIFY ACCORDING TO YOUR NEEDS

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

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### CABLES

- Twisted Cables
- Colour Coded
- Rg Cable For Video

### HOLLOW SHAFT

- Size according to requirements
- Packing/sealing

### TRANSFER

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

### HOUSING

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



# PSH LEAD COLOURS

Standard Colour Codes

PSH SERIES

Standard Colour Codes						
Circuits 1-6 Exit A Red Shrink Tube	1.RED	2.YELLOW	3.BLACK	4.BLUE	5.GREEN	6.WHITE
Circuits 7-12 Exit B Black Shrink Tube	7.PURPLE	8.GRAY	9.BROWN	10.ORANGE	11.DEEP BLUE	12.KHAKI
Circuits 13-18 Exit C Blue Shrink Tube	13.RED	14.YELLOW	15.BLACK	16.BLUE	17.GREEN	18.WHITE
Circuits 19-24 Exit D Green Shrink Tube	19.PURPLE	20.GRAY	21.BROWN	22.ORANGE	23.DEEP BLUE	24.KHAKI

## DISCLAIMER

Colour can mismatch depending on configuration. 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 PSH model to get correct colour coding.

## 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!

**PENLÍNK**