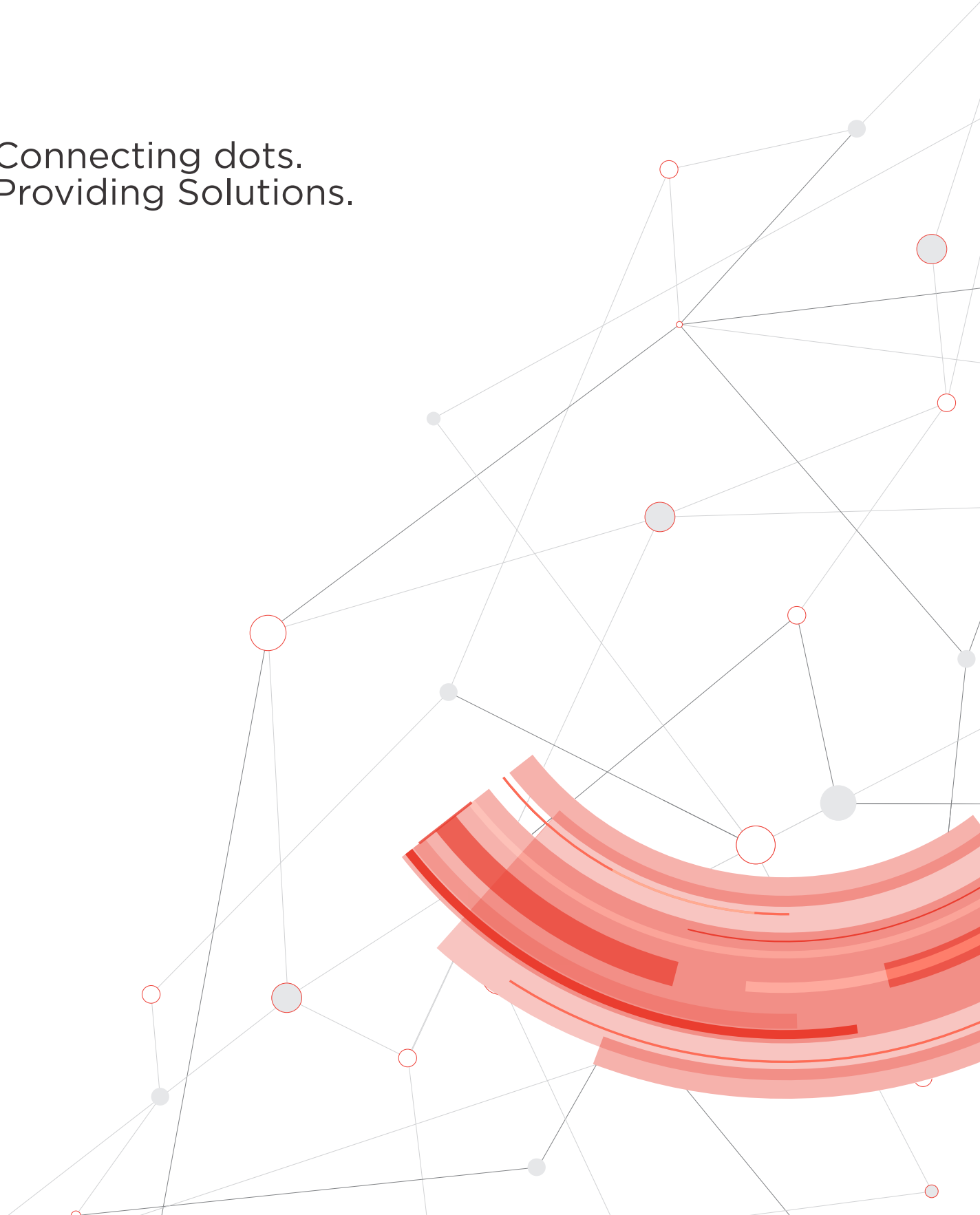


# SLIP RINGS



**servotecnica**

Connecting dots.  
Providing Solutions.





# Contents

A SERIES	<b>Capsule Slip Rings</b> for Signals for High Current for Radio Frequency	<b>in ∅</b> N/A	<b>out ∅</b> 12-25mm 22mm 22mm	<b>circuits</b> up to 56 3 up to 24	10 - 29 12 - 17 18 - 21 22 - 25
B SERIES	<b>Faston Slip Rings</b>	<b>in ∅</b> N/A	<b>out ∅</b> 32-77mm	<b>circuits</b> up to 8	30 - 35
C SERIES	<b>Through-Bore Slip Rings</b>	<b>in ∅</b> 3-100mm	<b>out ∅</b> 17-203mm	<b>circuits</b> up to 96	36 - 49
D SERIES	<b>Rugged Slip Rings</b>	<b>in ∅</b> N/A	<b>out ∅</b> 75-87mm	<b>circuits</b> up to 96	50 - 55
E SERIES	<b>Open Slip Rings</b>	<b>in ∅</b> 25-60mm	<b>out ∅</b> 74-130mm	<b>circuits</b> 3	56 - 61
F SERIES	<b>Flat Slip Rings</b>	<b>in ∅</b> 40mm	<b>out ∅</b> 180mm	<b>circuits</b> 20	62 - 67
	<b>Custom Slip Rings</b>				68 - 75



## 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 since 1980, Servotecnica manufactures and proposes unique products based on cutting-edge technologies developed by leading global manufacturers.

The concernment 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.

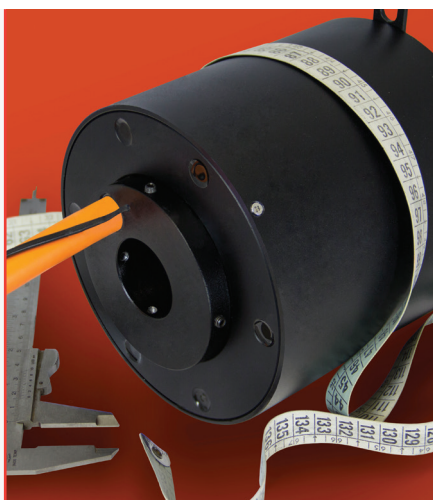
## Cost Effective

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.



## Custom

Our team of experts can support you in the development of a custom solution: electrical specifications, mechanical bounds, cables, connectors and more. Furthermore, we can deliver integrated solutions mixing fluidic and fiber optic rotary joints to grant a whole coverage of your needs and the most innovative technologies in a single partner. This philosophy granted us the capacity to work in mission critical applications.



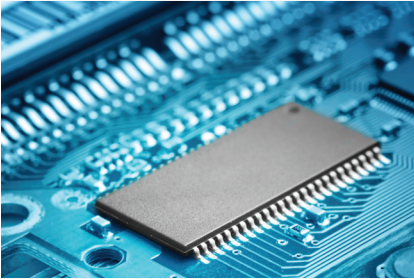
## The widest range

More than 2000 standard and 400 custom models of electrical rotary joints, 150 standard and 300 custom models of fluidic rotary joints and 50 models of fiber optic rotary joints grant us the possibility of an impressive number of combinations. The possibility to customize easily our products and the continuous attention to market needs and trends constantly increase our proposal to customers.



# Industries

## Electronics



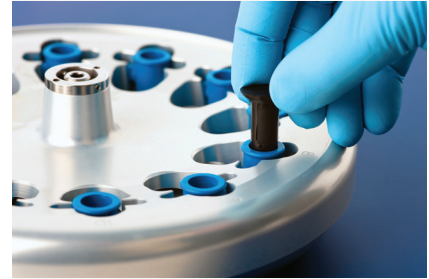
Semiconductors  
Test  
Wafer

## Aerospace



Air  
Land  
Sea

## Medical



Diagnosis  
Pharm & Beauty  
Radiology  
Odontology  
Mobile tools

## Robotics



Humanoid robotics  
Inspection robotics  
Flexible automation  
Welder's tongs

## Packaging



Filling & labelling  
Capping  
Food & beverage  
Packaging  
Scales

## Automatic doors



Lifts  
Linear doors  
Revolving doors  
Locks

## Machine tool



Machine centre  
Sheet metal forming  
Electrical discharge  
Press machines  
Lathe machines

## Energy



Renewable energy  
Not renewable energy  
Wind turbines

## Converting



Digital ink jet  
Flexographic printing  
Offset printing  
Plane printing  
Rotogravure

## Amusement parks



Merry-go-round

## Plastics



Blow molding  
Plastic bags  
Extrusion

## Oil & gas



Oil  
Gas  
Atex  
Valves



# Build it yourself.

The new online **Slip Ring configurator** is here!



## Define

Define your limits whether they are mechanical -like internal and external diameter- or electrical -like current and number of circuits. Choose among a world of features and find what best fits your requirements among over 2000 models.

## Compare

Add your starting choices to the comparative table. Sort the items as you please with the drag-n-drop logic and quickly spot the differences between them.

## Select

Pick one or more options and add them to the basket. Get the complete part number and the summary of the technical specifications.

## Get a quote

Fill the form with your contact information and drop a line if needed. We will get back to you within 24 hours.



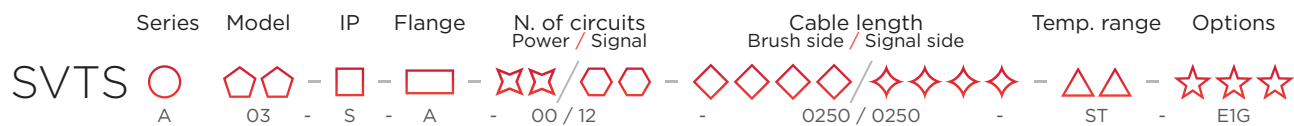
## Try it now!

Scan the **QR code**  
or visit  
[www.servotecnica.com](http://www.servotecnica.com)

What you are looking for isn't there?  
Not a problem, let's work together on your custom solution.

[info@servotecnica.com](mailto:info@servotecnica.com)  
+39 03624921

# Part number



## ○ Series

- A / Capsule Slip Rings
- B / Faston Slip Rings
- C / Through-Bore Slip Rings
- D / Stainless Steel Slip Rings
- E / Frameless Slip Rings
- F / Flat Slip Rings

## ◻ IP grade

- R / IP00
- S / IP51
- T / IP54
- U / IP65

## ☆☆ Power circuits

See specific section for available multiples

## ◊ Cable length / Brush side

SVTS A /  
Custom cable length increase  
possible as multiple of 250mm

SVTS B, C, D, E, F /  
Custom cable length increase  
possible as multiple of 500mm

## △ Temperature range

ST / -20°C +80°C

ET / -40°C +80°C

## ☆☆ Special Options

### SVTS A 03

- 001 / 4A circuits
- 002 / 8A circuits
- 003 / 10A circuits
- 004 / 20A circuits
- E1M / 100 BaseT Ethernet
- E1G / 1000 BaseT Ethernet

### SVTS A 04

- E1M / 100 BaseT Ethernet
- E1G / 1000 BaseT Ethernet

### SVTS A 06

- Coax cable
- 01\* / RG174
- 02\* / RG316
- 03\* / RG178
- 04\* / RG179

### Connectors

- \*\*1 / MMCX
- \*\*2 / SMA
- \*\*3 / SMB
- \*\*4 / MCX
- \*\*5 / BNC

## ◡ Model

01, 02, 03, ... / See specific section

## ◻ Flange

- A / Standard
- B, C, D, E, F / See specific section

## ◡ Signal circuits

See specific section for available multiples

## ◊ Cable length / Ring side

SVTS A /  
Custom cable length increase  
possible as multiple of 250mm

SVTS B, C, D, E, F /  
Custom cable length increase  
possible as multiple of 500mm

### SVTS C 05

- E1M / 100 BaseT Ethernet
- E1G / 1000 BaseT Ethernet
- OP1 / 6mm air plastic passage
- OP2 / 10mm air plastic passage

### SVTS E 01

- 001 / 20A Circuits
- 002 / 40A Circuits

### SVTS E 03

- 001 / 20A Circuits
- 002 / 40A Circuits
- 003 / 60A Circuits

### SVTS E 02

- 001 / 20A Circuits
- 002 / 40A Circuits

### SVTS E 04

- 001 / 20A Circuits
- 002 / 40A Circuits
- 003 / 60A Circuits

# SVTS A Series

Capsule Slip Rings

High-current Capsule Slip Rings

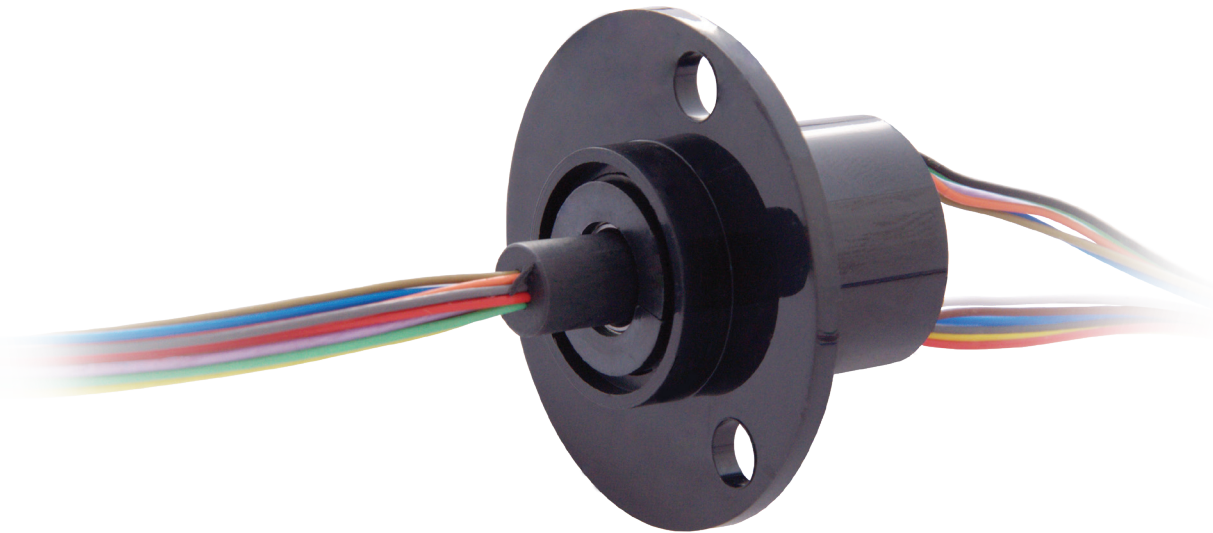
Radio Frequency Capsule Slip Rings

# Contents

	Model	Out ø	Page
CAPSULE	SVTS A 01	12mm	14
	SVTS A 02	15mm	14
	SVTS A 03	22mm	15
	SVTS A 03 - Ethernet	22mm	15
	SVTS A 04	25mm	16
	SVTS A 04 Ethernet	25mm	16
HIGH CURRENT	SVTS A 05	22mm	20
RF	SVTS A 06	22mm	24
	Flange types		26

# SVTS A Series

Capsule



OPTIMAL SIGNAL TRANSMISSION



COMPACT



HIGH CIRCUIT DENSITY

The capsule A Series Slip Rings, thanks to their reduced diameter, guarantees a low peripheral speed between rings and brushes, thus to reduce material consumption so as to enhance its lifetime and minimise electrical noise and interferences between rings.

This Series has been designed keeping signal transmission optimisation, compactness and reliability in mind. Moreover, this Slip Ring family is available in a wide range of configurations, from 3 to 56 circuits.

The gold-gold technology used for both rings and brushes, makes high data rate and high frequency signal transmission possible.

## Benefits

Optimal signal transmission (gold-gold technology)

Compact

Light

Many customisations

High circuits density

Combinable with fluidic rotary joints and FORJ

Water resistant (IP65)\*

Cost-effective

## Main applications

Video systems

Moving head projectors

Packaging

Hose & cable reels






















Control systems











Medical / pharmaceutical

Wind turbines

\*Optional: SVTS A 03 only

## Product code (go to page 9 for the detailed coding system)

SVTS A   -  -  -   /   -     /     -   -   

-  Series
-  Model
-  IP grade <sup>1</sup>
-  Flange type
-  Power circuits
-  Signal circuits
-  Cable length (brush side)
-  Cable length (ring side)
-  Temperature range <sup>2</sup>
-  Special options <sup>3</sup>

<sup>1</sup> IP51 [S]; IP65 [U]

<sup>2</sup> Standard [ST]; Extended [ET]

<sup>3</sup> Ethernet 100BaseT [E1M]; Ethernet 1000BaseT [E1G]

## Features

Current	1A: continuous - 2A peak: AWG28 2A: AWG26 4A: AWG22 6A: AWG20 8A: AWG16
Voltage	240 VDC / 240 VAC
Cables	Silver plated / PTFE insulated / colour coded
Cables length	Standard: 250mm; custom cable length increase possible as multiples of 250mm
Dielectric strength	500 VAC @ 60Hz @ 60 sec
Insulation resistance	> 500 MΩ / 500 VDC
Dynamic contact resistance	< 10 mΩ
Nominal speed	250 rpm (higher speed, up to 600 rpm, upon request)
Bearings	Miniature high-precision stainless steel ball bearings
Housing	ABS (hard plastic); Alluminium (SVTS A04)
Contact	Gold-gold (alloy)
Temperature	-20°C to +80°C (-40°C as option)
Protection	IP51; IP65*
Expected lifetime	10 <sup>7</sup> revolutions (depending on speed, environmental conditions and size)

\*Optional: SVTS A 03 only

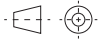
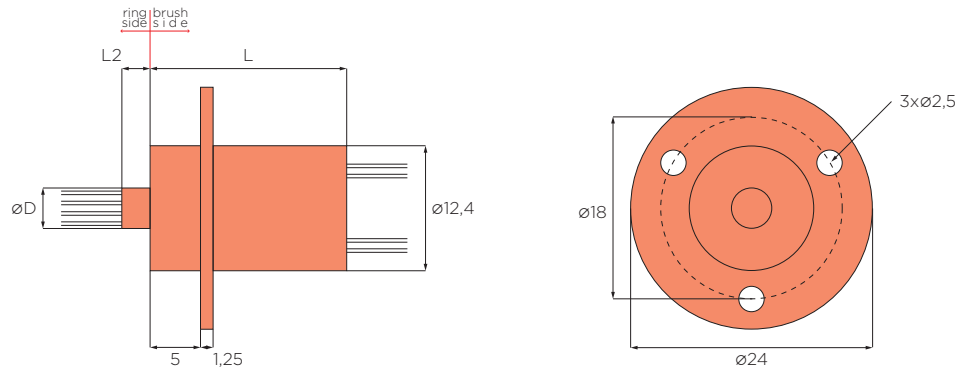
## Combinations

Electric	Fieldbus	Fluidic (combined solutions)
Signals	EtherCAT	Air
	Profinet	Oil
	Sercos	Water
	Powerlink	
	Ethernet	

## Customizations

Cables	Mechanical design	Flange
Materials		

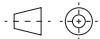
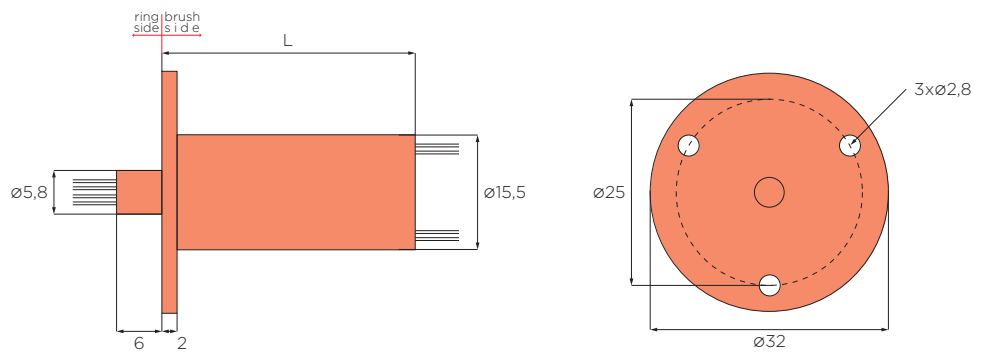
# SVTS A 01



See page 26 for different flange options  
 Custom cable length increase possible as multiples of 250mm

Model	Number of circuits		Dimensions				Housing
	Total	Signals	Outside $\varnothing$	L	L2	D	
		1-2A					
SVTS A 01-S-A-00/06	6	6	12.4	14	2.8	4	ABS
SVTS A 01-S-A-00/12	12	12	12.4	19.5	2.8	4	ABS
SVTS A 01-S-A-00/18	18	18	12.4	23	2.8	4	ABS
IP65 SVTS A 01-U-A-00/06	6	6	12.4	18	9.5	6	AI
SVTS A 01-U-A-00/12	12	12	12.4	23.5	9.5	6	AI
SVTS A 01-U-A-00/18	18	18	12.4	27	9.5	6	AI

# SVTS A 02

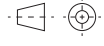
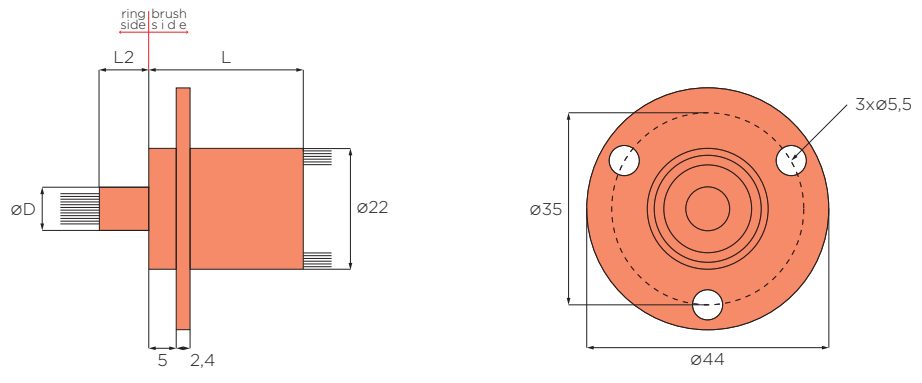


See page 26 for different flange options  
 Custom cable length increase possible as multiples of 250mm

Model	Number of circuits			Dimensions		Housing	
	Total	Signals	Power	Outside $\varnothing$	L		
		1-2A	6A	8A			
SVTS A 02-S-A-00/24	24	24	-	-	15.5	34	ABS

All dimensions in millimeters, unless otherwise specified

# SVTS A 03



See page 26 for different flange options  
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits				Dimensions			Housing	
	Total	Signals	Power		Outside $\varnothing$	L	L2		D
		1-2A	6A	8A					
SVTS A 03-S-A-00/06	6	6	-	-	22	19	9	7,8	ABS
SVTS A 03-S-A-00/12	12	12	-	-	22	28	9	7,8	ABS
SVTS A 03-S-A-02/02	4	2	2	-	22	28	9	7,8	ABS
SVTS A 03-S-A-00/15	15	15	-	-	22	29,5	9	7,8	ABS
SVTS A 03-S-A-00/18	18	18	-	-	22	33,4	9	7,8	ABS
SVTS A 03-S-A-03/00	3	-	-	3	22	33,4	9	7,8	ABS
SVTS A 03-S-A-00/24	24	24	-	-	22	41,2	9	7,8	ABS
SVTS A 03-S-A-04/06	10	6	4	-	22	41,2	9	7,8	ABS
SVTS A 03-S-A-00/30	30	30	-	-	22	49,2	6	7,8	ABS
SVTS A 03-S-A-00/36	36	36	-	-	22	57	9	7,8	ABS
IP65 SVTS A 03-U-A-00/06	6	6	-	-	22	23	12,5	13	Al
SVTS A 03-U-A-00/12	12	12	-	-	22	32	12,5	13	Al
SVTS A 03-S-A-02/02	4	2	2	-	22	33,5	12,5	13	Al
SVTS A 03-S-A-00/15	15	15	-	-	22	38	12,5	13	Al
SVTS A 03-S-A-00/18	18	18	-	-	22	38	12,5	13	Al
SVTS A 03-U-A-00/24	24	24	-	-	22	45,2	12,5	13	Al
SVTS A 03-S-A-04/06	10	6	4	-	22	45,2	12,5	13	Al
SVTS A 03-S-A-00/30	30	30	-	-	22	53,2	12,5	13	Al
SVTS A 03-S-A-00/36	36	36	-	-	22	61	12,5	13	Al

## Ethernet option\*

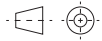
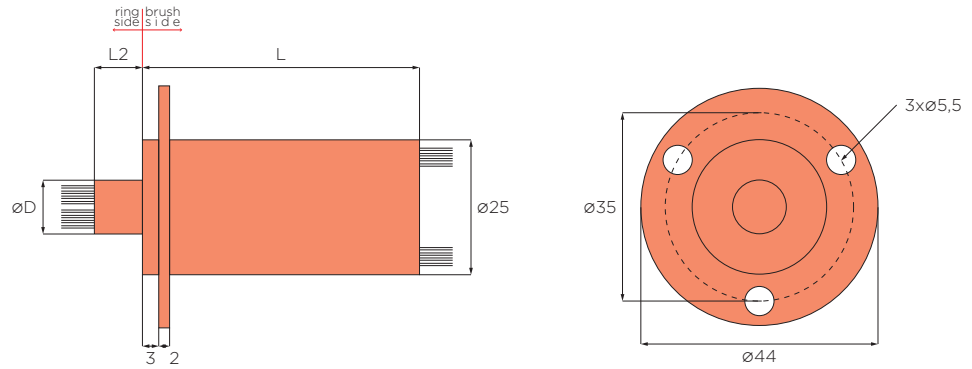
Model	Number of circuits			L	Weight (kg)
	Total	Signals 2A	Ethernet		
SVTS A 03-S-A-00/00-...-E1M	-	-	100BaseT	19	0,03
SVTS A 03-S-A-00/06-...-E1M	6	6	100BaseT	28	0,05
SVTS A 03-S-A-00/09-...-E1M	9	9	100BaseT	29,5	0,05
SVTS A 03-S-A-00/12-...-E1M	12	12	100BaseT	33,4	0,05
SVTS A 03-S-A-00/18-...-E1M	18	18	100BaseT	41,2	0,07
SVTS A 03-S-A-00/30-...-E1M	30	30	100BaseT	57	0,08
SVTS A 03-S-A-00/00-...-E1G	-	-	1000BaseT	28	0,05
SVTS A 03-S-A-00/03-...-E1G	3	3	1000BaseT	29,5	0,05
SVTS A 03-S-A-00/06-...-E1G	6	6	1000BaseT	33,4	0,05
SVTS A 03-S-A-00/12-...-E1G	12	12	1000BaseT	41,2	0,07
SVTS A 03-S-A-00/24-...-E1G	24	24	1000BaseT	57	0,08

\*RJ 45 connectors included

All dimensions in millimeters, unless otherwise specified



# SVTS A 04



See page 26 for different flange options  
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits				Dimensions				Housing
	Total	Signals	Power		Outside ø	L	L2	D	
		1-2A	6A	8A					
SVTS A 04-S-A-00/30	30	30	-	-	25	51.5	9	9.8	AI
SVTS A 04-S-A-04/18	22	18	4	-	25	51.5	9	9.8	AI
SVTS A 04-S-A-03/15	18	15	-	3	25	51.5	9	9.8	AI
SVTS A 04-S-A-00/36	36	36	-	-	25	59.5	9	9.8	AI
SVTS A 04-S-A-04/24	28	24	4	-	25	59.5	9	9.8	AI
SVTS A 04-S-A-04/16	20	16	-	4	25	59.5	9	9.8	AI
SVTS A 04-S-A-00/46	46	46	-	-	25	72.5	9	9.8	AI
SVTS A 04-S-A-00/56	56	56	-	-	25	85.5	9	9.8	AI
SVTS A 04-S-A-04/44	48	44	4	-	25	85.5	9	9.8	AI
SVTS A 04-S-A-04/36	40	36	-	4	25	85.5	9	9.8	AI
<b>IP65</b> SVTS A 04-U-A-00/30	30	30	-	-	25	55.7	12.5	11.5	AI
SVTS A 04-U-A-04/18	22	18	4	-	25	55.7	12.5	11.5	AI
SVTS A 04-U-A-03/15	18	15	-	3	25	55.7	12.5	11.5	AI
SVTS A 04-U-A-00/36	36	36	-	-	25	63.5	12.5	11.5	AI
SVTS A 04-U-A-04/24	28	24	4	-	25	63.5	12.5	11.5	AI
SVTS A 04-U-A-04/16	20	16	-	4	25	63.5	12.5	11.5	AI
SVTS A 04-U-A-00/46	46	46	-	-	25	76.5	12.5	11.5	AI
SVTS A 04-U-A-00/56	56	56	-	-	25	89.5	12.5	11.5	AI
SVTS A 04-U-A-04/44	48	44	4	-	25	89.5	12.5	11.5	AI
SVTS A 04-U-A-04/36	40	36	-	4	25	89.5	12.5	11.5	AI

## Ethernet option\*

Model	Number of circuits			L	Weight (kg)
	Total	Signals 2A	Ethernet		
SVTS A 04-S-A-00/24-...-E1M	24	24	100BaseT	51,5	0,10
SVTS A 04-S-A-00/30-...-E1M	30	30	100BaseT	59,5	0,12
SVTS A 04-S-A-00/40-...-E1M	40	40	100BaseT	72,5	0,14
SVTS A 04-S-A-00/50-...-E1M	50	50	100BaseT	85,5	0,16
SVTS A 04-S-A-00/18-...-E1G	18	18	1000BaseT	51,5	0,10
SVTS A 04-S-A-00/24-...-E1G	24	24	1000BaseT	59,5	0,12
SVTS A 04-S-A-00/34-...-E1G	34	34	1000BaseT	72,5	0,14
SVTS A 04-S-A-00/44-...-E1G	44	44	1000BaseT	85,5	0,16

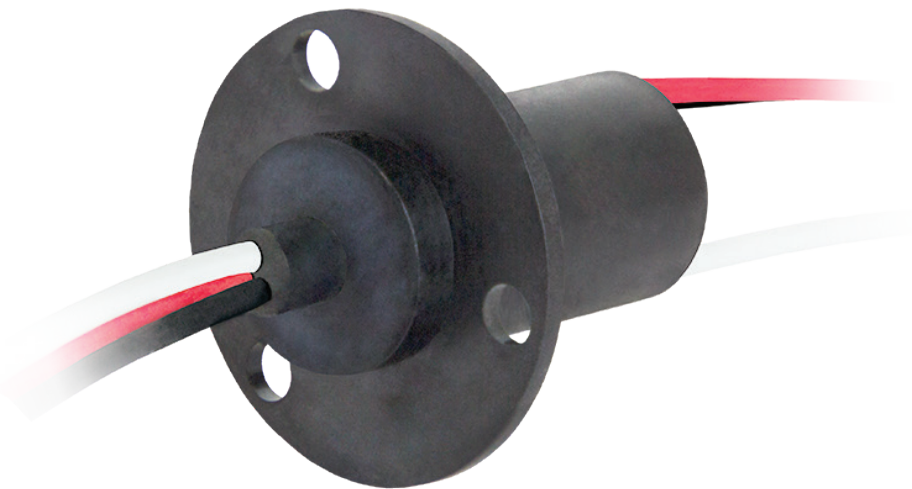
\*RJ 45 connectors included

All dimensions in millimeters, unless otherwise specified




# SVTS A Series

High current capsule Slip Rings



 HIGH POWER

 COMPACT

 COST-EFFECTIVE

The high-current capsule A Series Slip Rings, thanks to their extreme compactness, guarantees a low outer speed between rings and brushes, thus to reduce material consumption so as to enhance its lifetime. This Series has been designed keeping flexibility, cost-effectiveness and reliability in mind. Moreover, this Slip Ring family is available in a wide range of configurations, from 3 to 56 circuits. The gold-gold technology used between rings and brushes, minimise noise and interferences between the rings, allowing high data rate and frequency signal transmission.

In addition, the SVTS A 05 model has been designed to guarantee power circuits in a very small footprint (up to 20 A @ 250 VAC).

## Benefits

High power in little space

Compact

Light

Cost-effective

## Main applications

Wind turbines

Packaging

Hose & cable reels

Control systems

Packaging

Moving head projectors

Medical / pharmaceutical

## Product code (go to page 9 for the detailed coding system)

SVTS A 05 - □ - □ - ☆☆ / ○○ - ◇◇◇◇ / ◆◆◆◆ - △△ - ☆☆☆

A Series    05 Model    □ IP grade<sup>1</sup>    □ Flange type    ☆ Power circuits    ○ Signal circuits  
 ◇ Cable length (brush side)    ◆ Cable length (ring side)    △ Temperature range<sup>2</sup>    ☆ Special options<sup>3</sup>

<sup>1</sup> Only IP51 [S]

<sup>2</sup> Standard [ST]; Extended [ET]

<sup>3</sup> 4A circuits [001]; 8A circuits [002]; 10A circuits [003]; 20A circuits [004]

## Features

Current	4A: AWG22 6A: AWG20 8A/10A: AWG16 20A: AWG14
Voltage	240 VDC / 240 VAC
Cables	Tin plated / PTFE insulated / colour coded
Cables length	Standard: 250mm; custom cable length increase possible as multiples of 250mm
Dielectric strength	500 VAC @ 60Hz @ 60 sec
Insulation resistance	> 500 MΩ / 500 VDC
Dynamic contact resistance	< 10 mΩ
Nominal speed	250 rpm
Bearings	Miniature high-precision stainless steel ball bearings
Housing	ABS (hard plastic)
Contact	Gold-gold (alloy)
Temperature	-20°C to +80°C (-40°C as option)
Protection	IP51
Expected lifetime	10 <sup>7</sup> revolutions (depending on speed, environmental conditions and size)

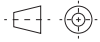
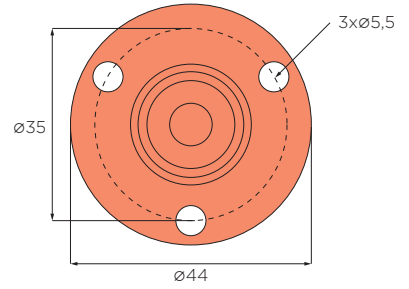
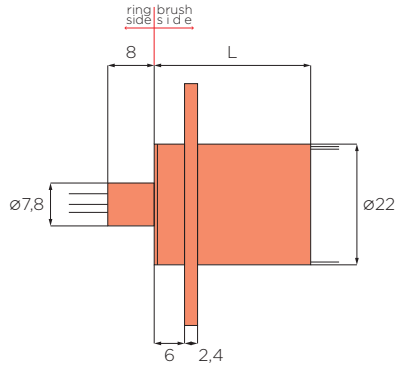
## Combinations

Electric	Fluidic (combined solutions)
Power	Air
	Oil
	Water

## Customizations

Cables	Mechanical design	Flange
Materials		

# SVTS A 05



See page 26 for different flange options  
 Custom cable length increase possible as multiples of 250mm

Model	Number of circuits					Dimensions		Housing
	Total	Power		Outside ø	L			
		4A	8A	10A	20A			
SVTS A 05-S-A-03/00-...-001	3	3	-	-	-	22	21	ABS
SVTS A 05-S-A-03/00-...-002	3	-	3	-	-	22	29	ABS
SVTS A 05-S-A-03/00-...-003	3	-	-	3	-	22	35	ABS
SVTS A 05-S-A-03/00-...-004	3	-	-	-	3	22	43	ABS

All dimensions in millimeters, unless otherwise specified

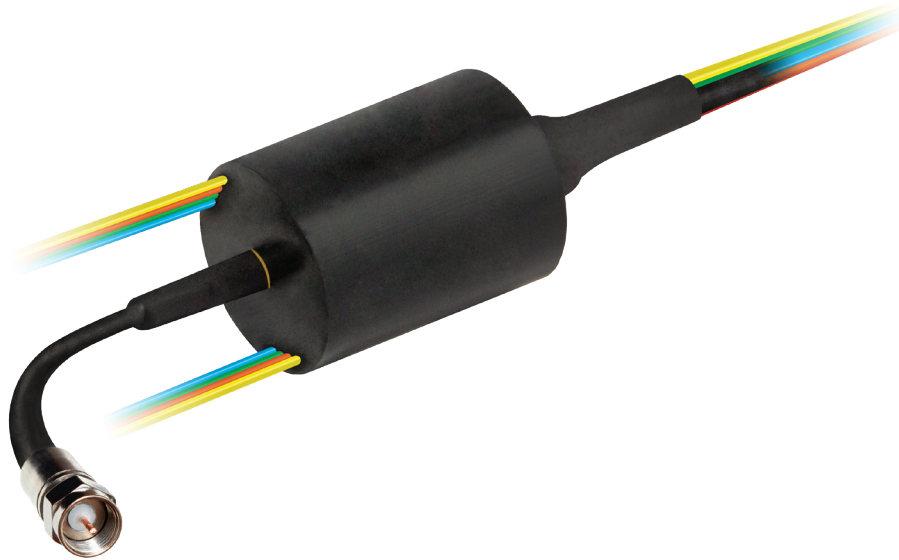


# Notes

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# SVTS A Series

Radio frequency capsule Slip Rings



 HI-DEF VIDEO TRANSMISSION

 COMPACT

 HIGH CIRCUITS DENSITY

The radio frequency A Series Slip Rings are used to transfer up to 24 electrical signals from a stationary to a rotating structure, in conjunction with an RF channel.

The RF channel can transfer up to 3 GHz. Designed specifically for transferring high definition video signals (1080p / 3G-SDI o 1080i/HD-SDI), this series can fit RG178, RG316 and RG174 type coaxial cables.

## Benefits

RF coaxial connection

High definition video transmission

Optimal signal transmission (gold-gold technology)

Compact

Light

High circuits density

Combinable with fluidic rotary joints and FORJ

Cost-effective

## Main applications

RF systems

High definition video systems / CCTV

Optical heads

## Product code (go to page 9 for the detailed coding system)

SVTS A 06 - □ - □ - ☆☆ / ○○ - ◇◇◇◇ / ☆☆☆☆ - △△ - ☆☆☆

A Series    06 Model    □ IP grade<sup>1</sup>    □ Flange type    ☆ Power circuits    ○ Signal circuits

◇ Cable length (brush side)    ☆ Cable length (ring side)    △ Temperature range<sup>2</sup>    ☆ Special options<sup>3</sup>

<sup>1</sup> Only IP51 [S]

<sup>2</sup> Standard [ST]; Extended [ET]

<sup>3</sup> RG174 [01\*]; RG316 [02\*]; RG178 [03\*]; RG179 [04\*]; MMCX [\*\*1]; SMA [\*\*2]; SMB [\*\*3]; MCX [\*\*4]; BNC [\*\*5]

## Features

Speed	100 rpm
Temperature	-20°C +80°C (-40°C as option)
Contact	Gold-gold (alloy)
Bearings	Miniature high-precision stainless steel ball bearings
Housing	ABS (hard plastic)
Connector	MMCX, SMA, SMB, MCX, BNC
Cable	RG174, RG136, RG178, RG179

## Combinations

Electric	
Signals	
Video	

## Customizations

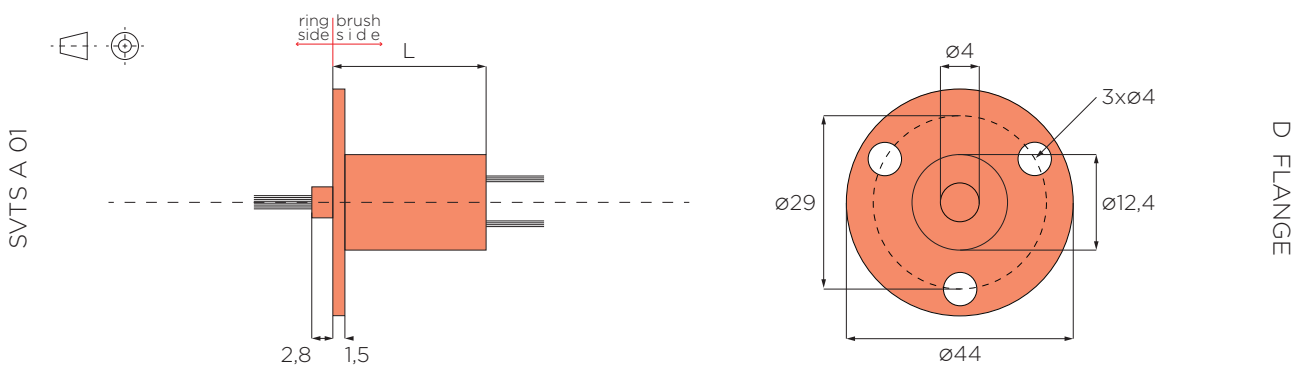
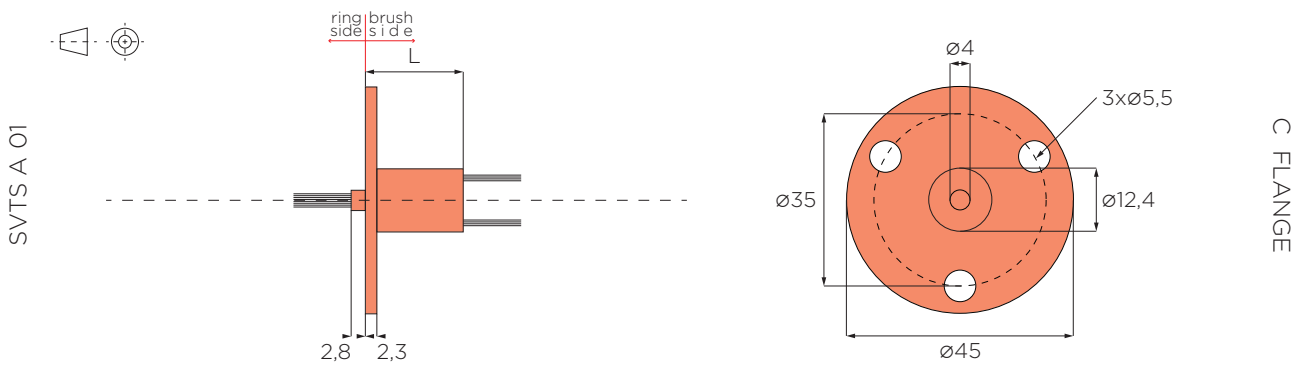
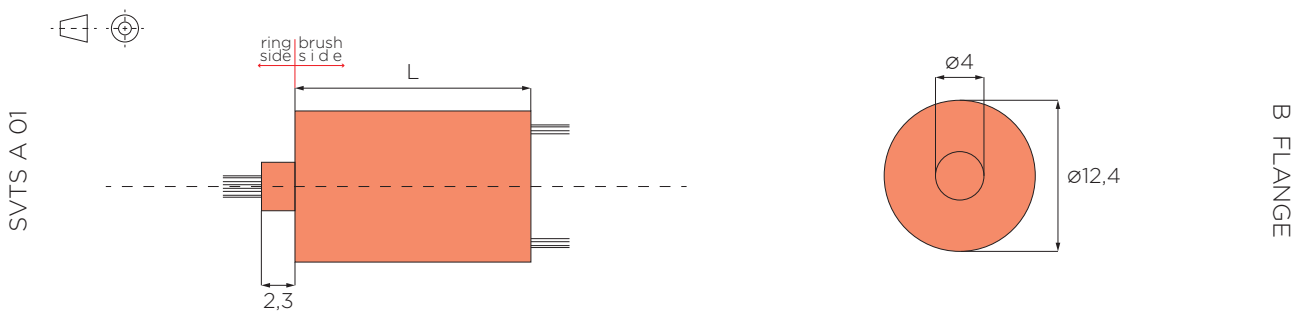
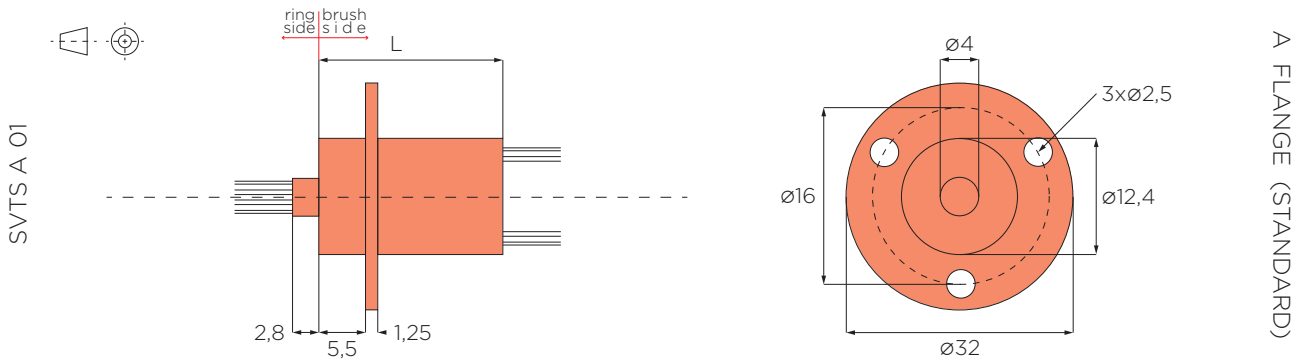
Cables	Mechanical design	Flange
Materials		



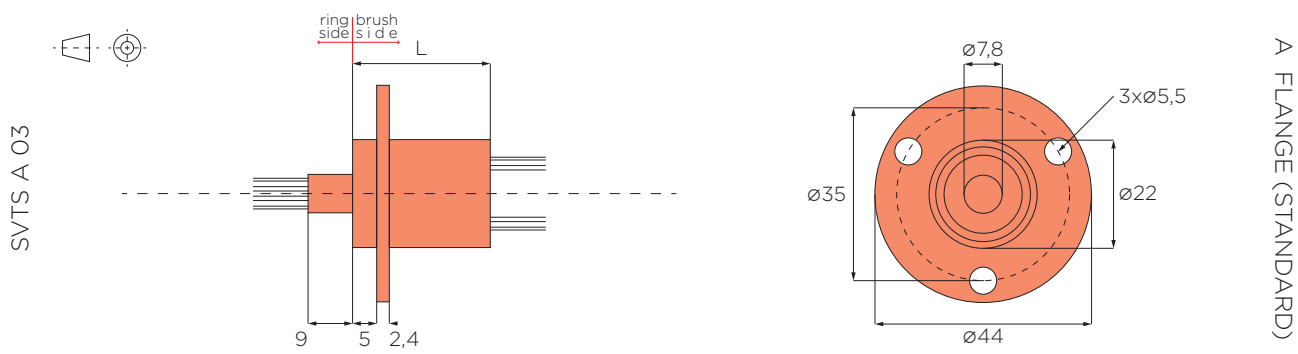
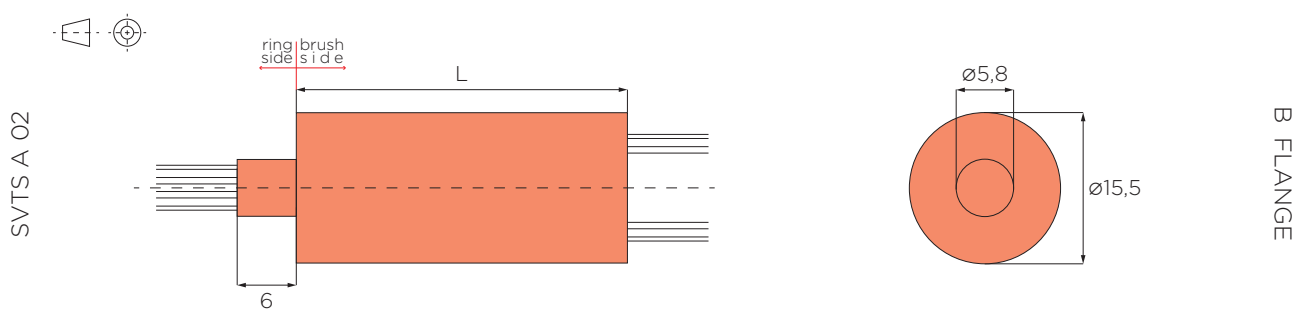
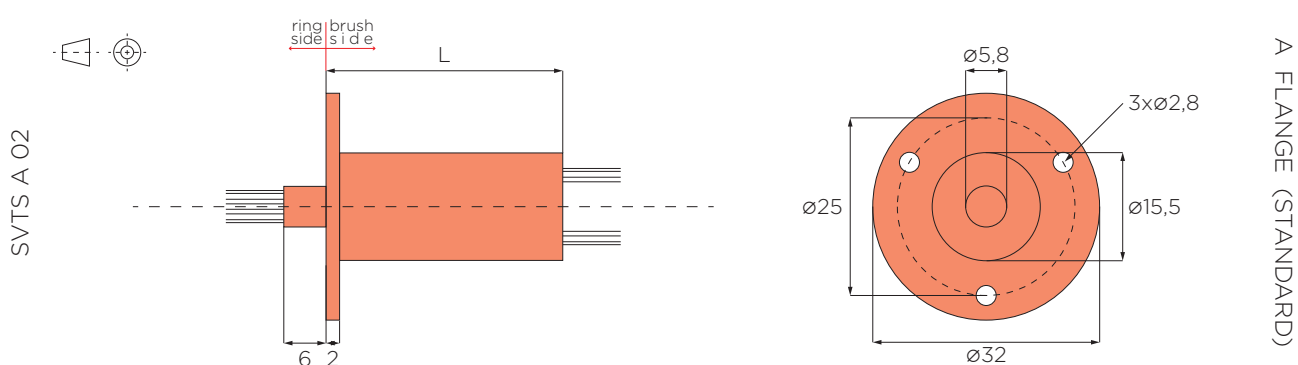
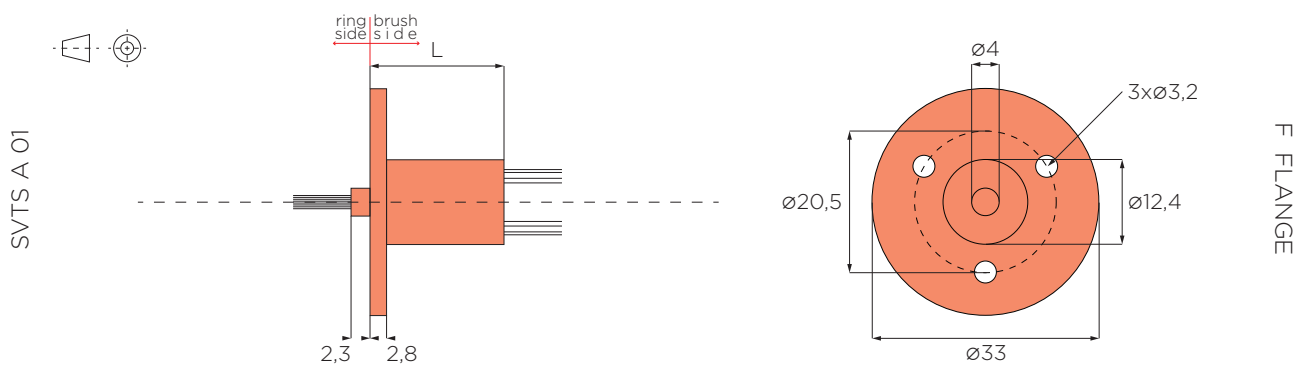
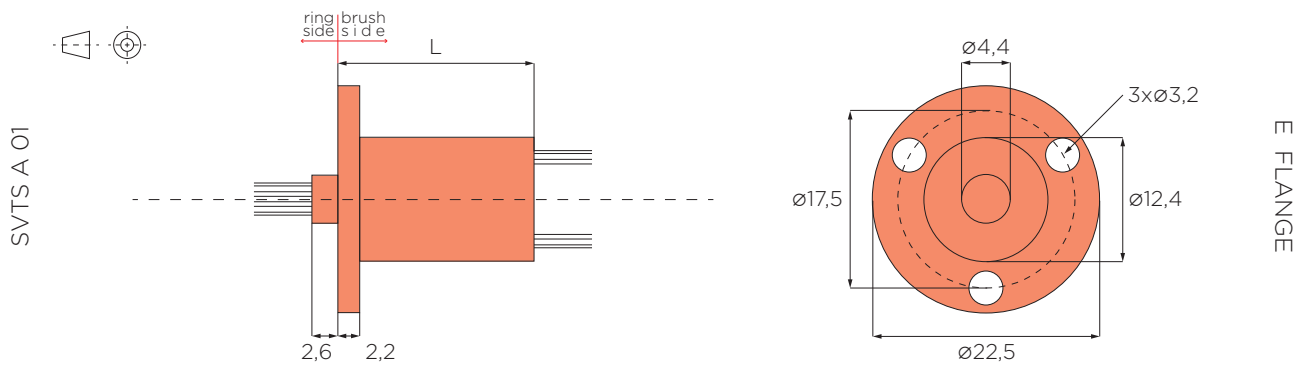




# Flange types

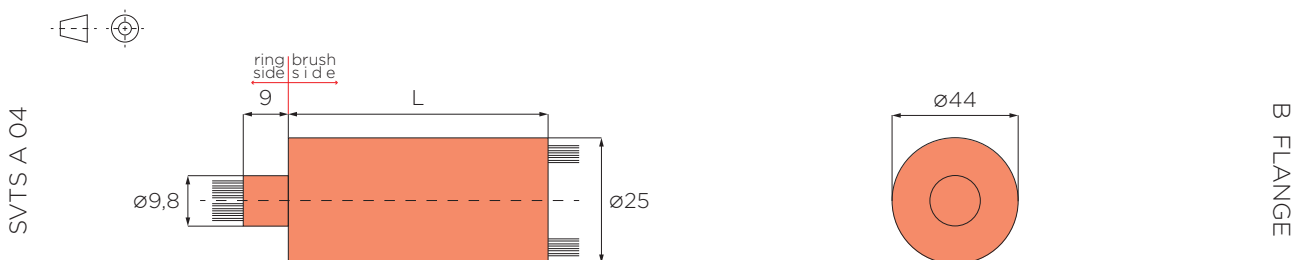
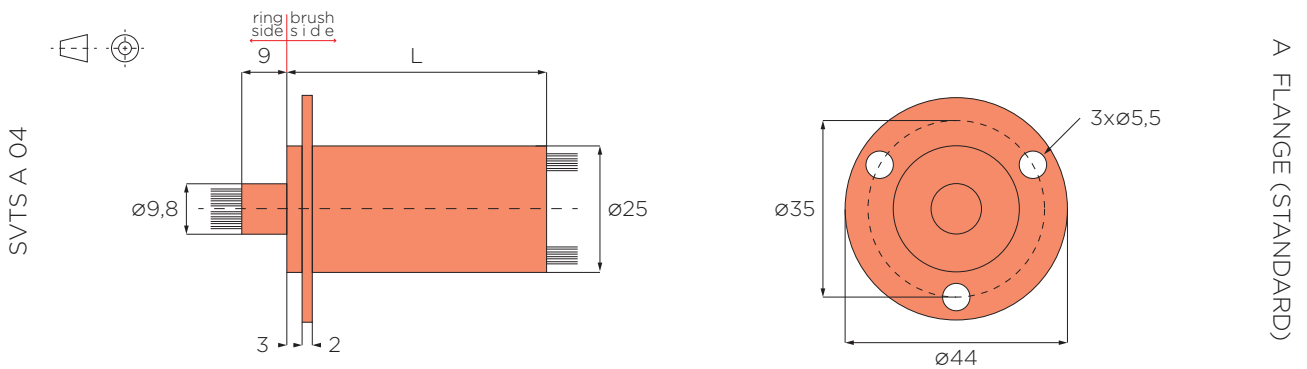
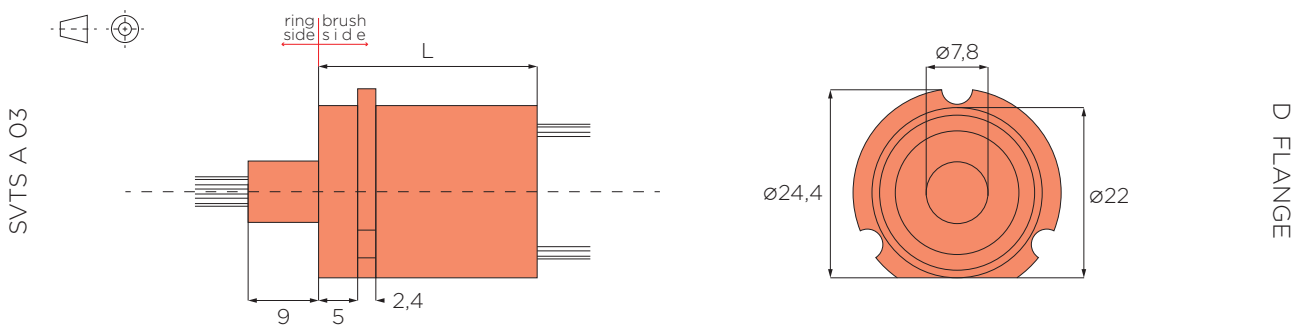
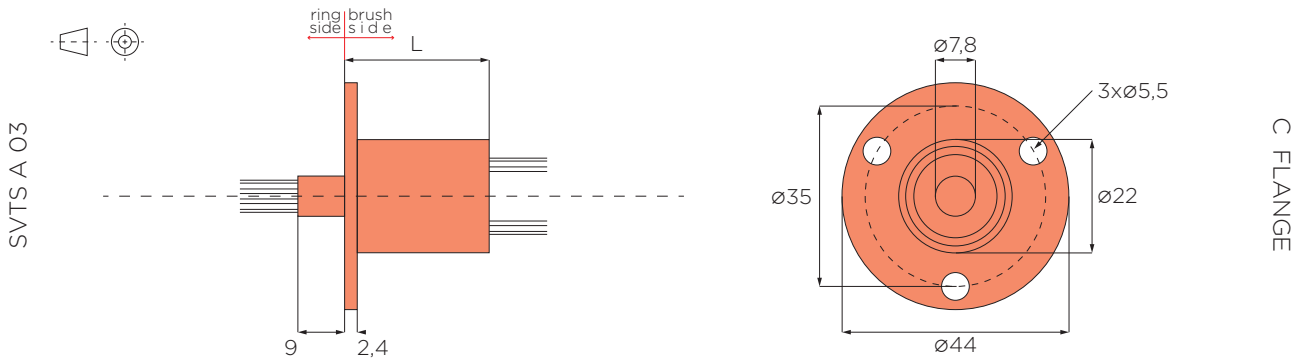
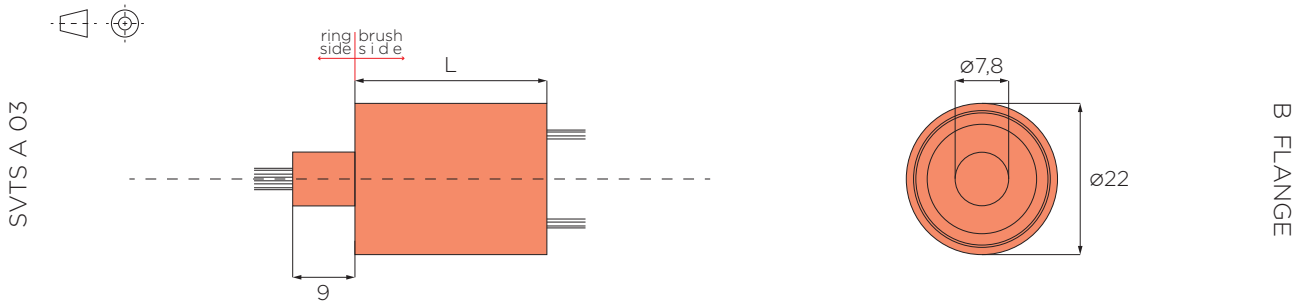


All dimensions in millimeters, unless otherwise specified

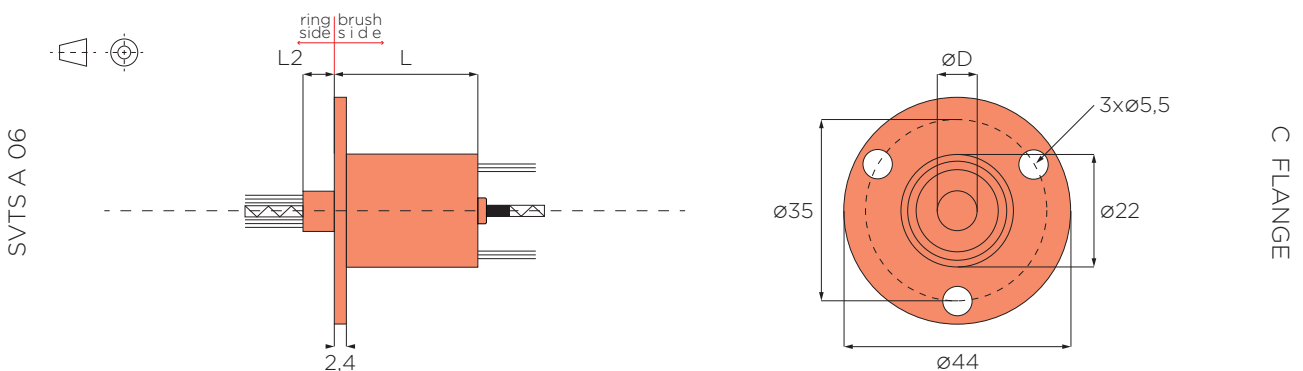
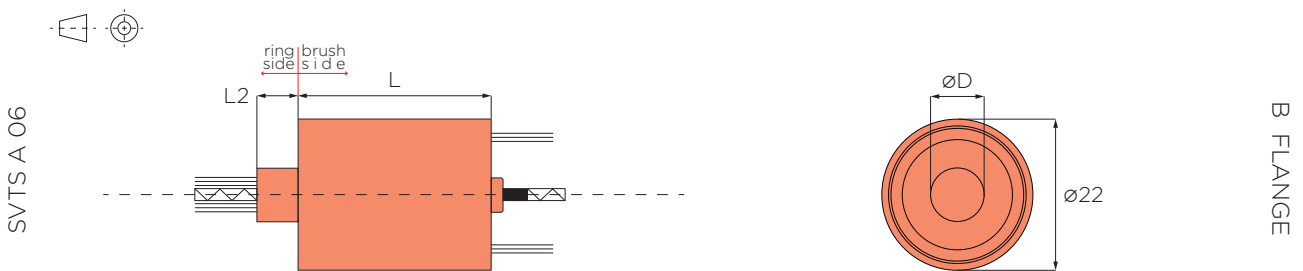
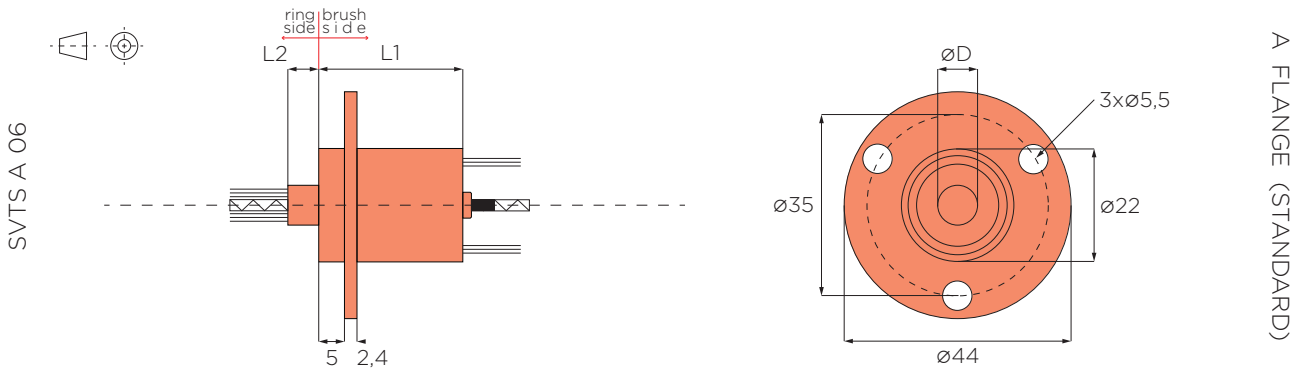
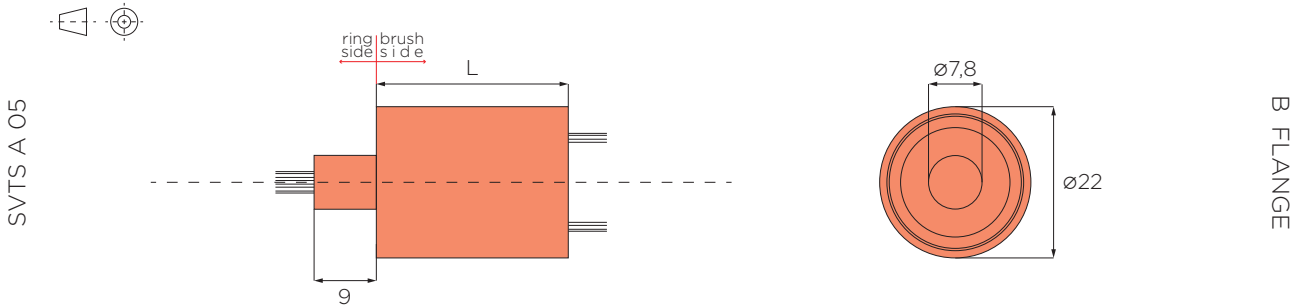
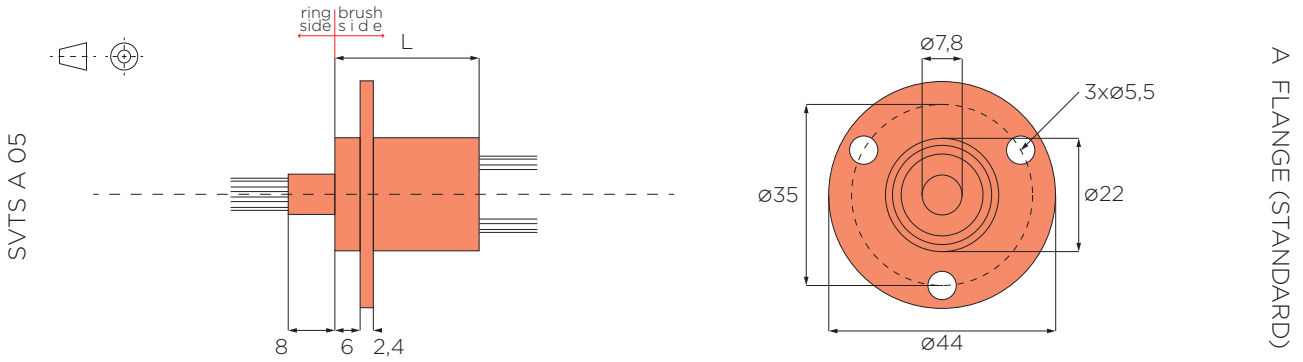


All dimensions in millimeters, unless otherwise specified

Specifications subject to change.



All dimensions in millimeters, unless otherwise specified



All dimensions in millimeters, unless otherwise specified

Specifications subject to change.

# SVTS B Series

Terminals Slip Rings





# SVTS B Series

Terminals Slip Rings



The most compact solution with fibre brush technology. Thanks to the multiple contact points, the Terminals B Series Slip Rings ensures longer life due to the low contact wear rates, while granting low contact resistance. Specially designed for intensive use at high speed and to transmit power and sensitive signals, like thermocouple ones, these rotary joints are particularly suitable for use on flowpack packaging machines ensuring a compact and reliable solution; the use of terminals type connectors avoids the use of welds that may affect the reading of thermocouple signals. Moreover, the IP65 version makes it washable, delivering protection against low pressure jets if watered from all directions.

## Benefits

Electrical power & signals in one unit

Compact

Long lifetime

Easy connection (Faston connectors)

Cost-effective

Water resistant (IP65)\*

## Main applications

Flowpack machines

Hose & cable reels

Medical / pharmaceutical

Packaging

Process control






















Rotating tables











Converting

Wind turbines

\*Optional

## Product code (go to page 9 for the detailed coding system)

SVTS B   -  -  -   /   -     /     -   -   

-  Series
-  Model
-  IP grade<sup>1</sup>
-  Flange type
-  Power circuits
-  Signal circuits
-  Cable length (brush side)
-  Cable length (ring side)
-  Temperature range<sup>2</sup>
-  Special options

<sup>1</sup> IP51 [S]; IP65 [U]

<sup>2</sup> Only Standard [ST]; Extended [ET]

## Features

Current	SVTS B 01: 400 VAC / 400 VDC power circuits SVTS B 02: 400 VAC / 400 VDC
Dielectric voltage strength	500 VAC @ 60 Hz @ 60 sec
Insulation resistance	> 1000 MΩ / 500 VDC
Dynamic contact resistance	< 10 mΩ
Nominal speed	400 rpm (higher speeds, up to 600 rpm, upon request)
Bearings	High-precision stainless steel ball bearings
Housing	ABS (hard plastic)
Contact	Gold-gold (alloy)
Temperature	-20°C to +80°C
Protection	IP51; IP65*
Expected lifetime	10 <sup>8</sup> revolutions (depending on speed, environmental conditions and size)

\*Optional

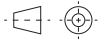
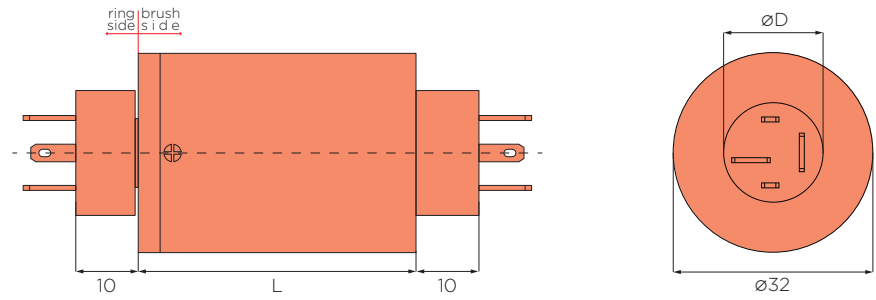
## Combinations

Electric  
Signals  
Power

## Customizations

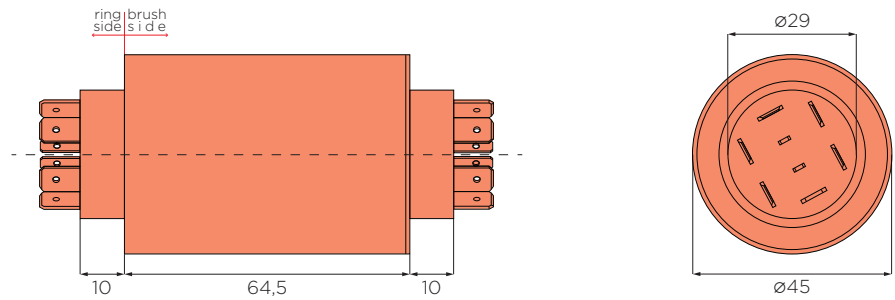
Cables | Mechanical design | Materials

# SVTS B 01



Model	Number of circuits					Dimensions		Terminals	
	Total	Power		Signals		D	L	Fastons	
		14A	20A	2A	5A			Power	Signals
SVTS B 01	2	2	-	-	-	16	28	0.8x6.3	-
SVTS B 01-S-A-03/00	3	3	-	-	-	16	28	0.8x6.3	-
SVTS B 01-S-A-02/02	4	2	-	2	-	16	28	0.8x6.3	0.8x2.8
IP65 SVTS B 01-U-A-02/00	2	-	2	-	-	20	44,5	0.8x6.3	0.8x2.8
SVTS B 01-U-A-03/00	3	-	3	-	-	20	44,5	0.8x6.3	0.8x2.8
SVTS B 01-U-A-02/02	4	-	2	-	2	20	44,5	0.8x6.3	0.8x2.8
SVTS B 01-U-A-02/03	5	-	2	-	3	20	44,5	0.8x6.3	0.8x2.8

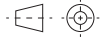
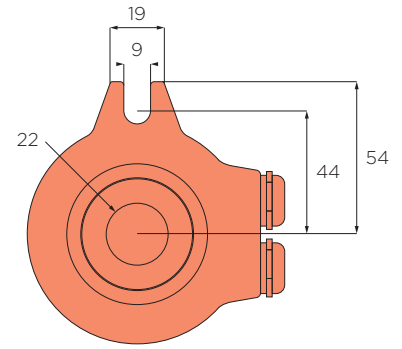
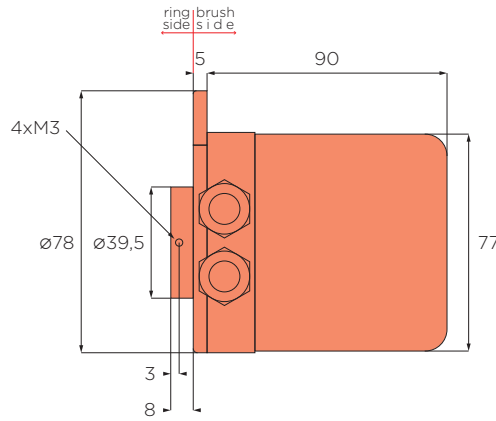
# SVTS B 02



Model	Number of circuits					Terminals	
	Total	Power		Signals		Fastons	
		14A	20A	2A	5A	Power	Signals
SVTS B 02-S-A-06/00	6	-	6	-	-	0.8x6.3	-
SVTS B 02-S-A-06/02	8	-	6	-	2	0.8x6.3	0.8x2.8

All dimensions in millimeters, unless otherwise specified

# SVTS B 03



IP65 once installed

Model	Number of circuits			Terminals Screw connections
	Total	Power 20A	2A	
SVTS B 03-U-A-02/00	2	2	-	2xM5
SVTS B 03-U-A-03/00	3	3	-	3xM5
SVTS B 03-U-A-02/02	4	2	2	4xM5
SVTS B 03-U-A-03/02	5	3	2	5xM5

servotecnica

TERMINALS

## Notes

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All dimensions in millimeters, unless otherwise specified

Specifications subject to change.

# SVTS C Series

Through-bore Slip Rings

# Contents

Model	In ø	Out ø	Page
SVTS C 01	3mm	17mm	40
SVTS C 02	4,5mm	22mm	40
SVTS C 03	12,7mm	54mm	41
SVTS C 04	25,4mm	78mm	41
SVTS C 05	38,1mm	99mm	42
SVTS C 05 - Ethernet	38,1mm	99mm	42
SVTS C 05 - Single pneumatic passage	-	99mm	43
SVTS C 06	50mm	120mm	44
SVTS C 07	60mm	135mm	45
SVTS C 08	70mm	155mm	46
SVTS C 09	80mm	180mm	47
SVTS C 10	90mm	190mm	48
SVTS C 11	100mm	203mm	49

# SVTS C Series

Through-bore Slip Rings



THROUGH-BORE



MANY CUSTOMISATIONS



POWER, SIGNALS & FIELDBUS

The hollow shaft Slip Rings C Series provides an economical readily available solution when a compact through-bore configuration is required to be easily mounted on the customers' mechanics. Available in a wide range of sizes and models starting from 3 mm up to over 100 mm through-bore diameter. The use of fibre brush technology and the ability to use gold-gold technology for signal circuits ensure long life and low electrical noise allowing high data rate field bus transmission. The extreme flexibility of the C series rotary joints also makes it possible to customise configurations, such as for the use of special cables or connectors, at customer's request.

## Benefits

Transmission of electric power/signals and fieldbuses in one unit

Mountable on the shaft

Many sizes

Many customisations

Combinable with fluidic rotary joints and FORJ

Cost-effective

## Main applications

Packaging

Automatic machines

Filling machines

Capping machines

Labelling machines

Converting machines

Machine tools

Rotary tables










Robots










Palletisers

Medical / pharmaceutical

Cable reels

## Product code (go to page 9 for the detailed coding system)

SVTS C   -  -  -   /   -     /     -   -   

-  Series
-  Model
-  IP grade<sup>1</sup>
-  Flange type
-  Power circuits
-  Signal circuits
-  Cable length (brush side)
-  Cable length (ring side)
-  Temperature range<sup>2</sup>
-  Special options<sup>3</sup>

<sup>1</sup> IP51 [S]; IP54 [T]; IP65 [U]

<sup>2</sup> Standard [ST]; Extended [ET]

<sup>3</sup> Pneumatic Ø6mm [OP1]; pneumatic Ø10mm [OP2]; Ethernet 100BaseT [E1M]; Ethernet 1000BaseT [E1G]

## Features

<b>Current</b>	
Power	10A: AWG16 15A: AWG14 20A:AWG14
Signals	2A: AWG26 5A: AWG22
<b>Voltage</b>	
Power	600 VAC / 600 VDC
Signals	240 VAC / 240 VDC
Cables	Tin plated (power circuits); silver plated (signal circuits) PTFE insulated / colour coded
Cables length	Standard: 500mm*; custom cable length increase possible as multiples of 500mm*
<b>Insulation resistance</b>	
Power	> 1000 MΩ / 500 VDC
Signals	> 500 MΩ / 500 VDC
Dynamic contact resistance	< 0,01 Ω
Bearings	Steel
Housing	ABS (hard plastic)
Temperature	-20°C / +80°C (-40°C as option)
Protection	IP51 (IP54 and IP65 as option)
Expected lifetime	10 <sup>8</sup> revolutions** (depending on speed, environmental conditions and size)

\*SVTS C 01, SVTS C 02: 250mm

\*\*SVTS C01, SVTS C 02: 10<sup>7</sup> revolutions

## Combinations

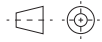
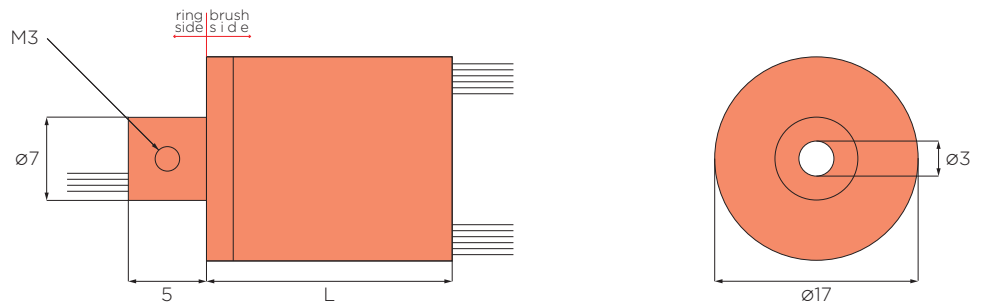
Electric	Fieldbus	Fluidic (combined solutions)
Signals	Ethernet	Air
	Profinet	Oil
	Canbus	Gas
	RS 232	Water

## Customizations

Cables	Mechanical design	Flange
Materials	Treatments	Cable exits



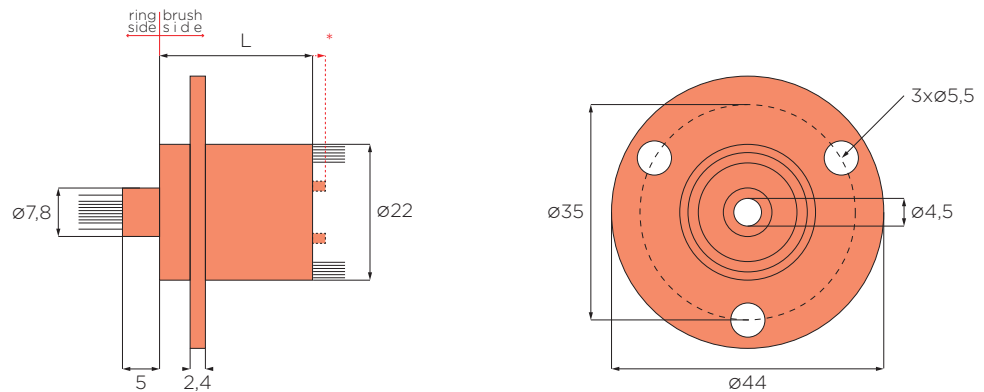
# SVTS C 01



Custom cable length increase possible as multiples of 250mm

Model	Number of circuits			L
	Total	Power	Signals 2A	
SVTS C 01-S-A-00/02	2	-	2	13,3
SVTS C 01-S-A-00/03	3	-	3	21
SVTS C 01-S-A-00/06	6	-	6	21
SVTS C 01-S-A-00/08	8	-	8	21

# SVTS C 02

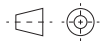
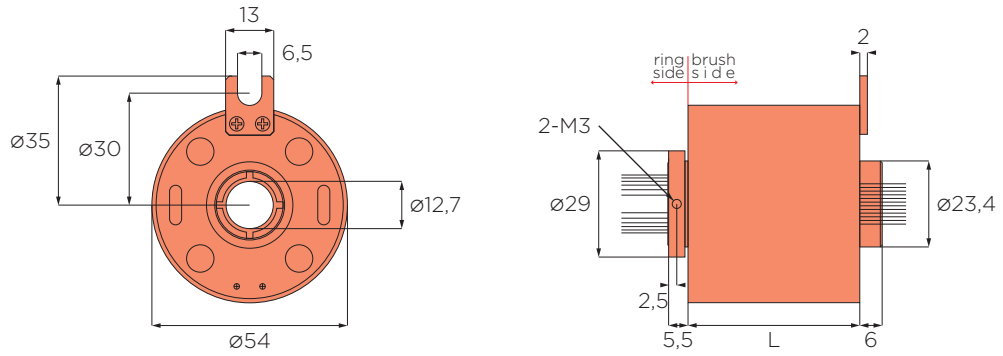


\* SVTS C 02-S-A-00/12  
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits			L
	Total	Power	Signals 2A	
SVTS C 02-S-A-00/02	2	-	2	19,4
SVTS C 02-S-A-00/06	6	-	6	19,4
SVTS C 02-S-A-00/08	8	-	8	19,4
SVTS C 02-S-A-00/12	12	-	12	26,6 *

All dimensions in millimeters, unless otherwise specified

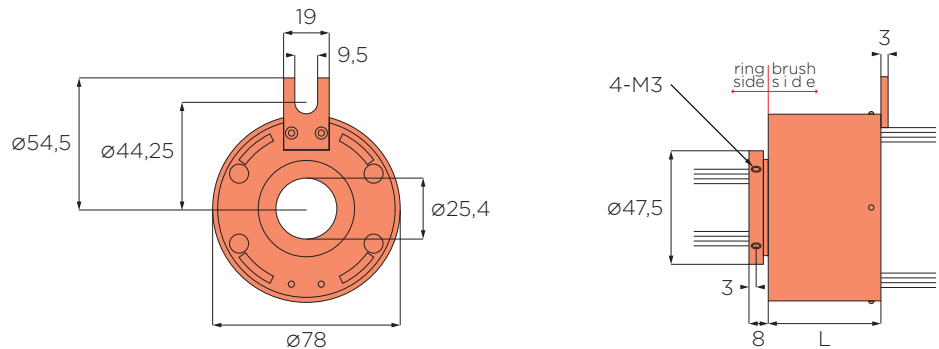
# SVTS C 03



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power	Signals	IP51	IP65
SVTS C 03-X-A-00/06	6	-	6	33.5	37.5
SVTS C 03-X-A-00/12	12	-	12	47.5	51.5
SVTS C 03-X-A-00/18	18	-	18	61.5	64.5
SVTS C 03-X-A-00/24	24	-	24	75.5	79.5

# SVTS C 04

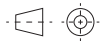
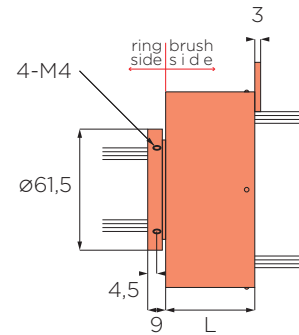
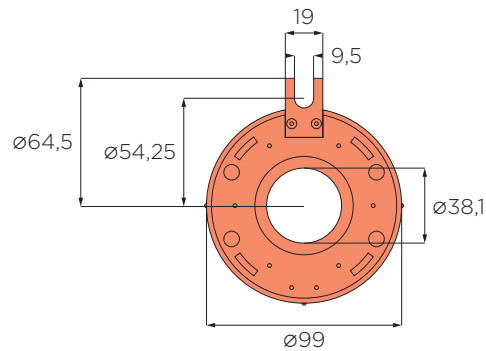


Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power	Signals	IP51	IP65
SVTS C 04-X-A-06/00	6	6	-	47	62
SVTS C 04-X-A-00/12	12	-	12	47	62
SVTS C 04-X-A-12/00	12	12	-	71	86
SVTS C 04-X-A-06/12	18	6	12	71	86
SVTS C 04-X-A-00/24	24	-	24	71	86
SVTS C 04-X-A-18/00	18	18	-	95	110
SVTS C 04-X-A-12/12	24	12	12	95	110
SVTS C 04-X-A-06/24	30	6	24	95	110
SVTS C 04-X-A-00/36	36	-	36	95	110
SVTS C 04-X-A-24/00	24	24	-	119	134
SVTS C 04-X-A-18/12	30	18	12	119	134
SVTS C 04-X-A-12/24	36	12	24	119	134
SVTS C 04-X-A-06/36	42	6	36	119	134
SVTS C 04-X-A-00/48	48	-	48	119	134

All dimensions in millimeters, unless otherwise specified

# SVTS C 05



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power 15A	Signals 2A	IP51	IP65
SVTS C 05-X-A-06/00	6	6	-	45.2	65.2
SVTS C 05-X-A-00/12	12	-	12	45.2	65.2
SVTS C 05-X-A-12/00	12	12	-	69.2	89.2
SVTS C 05-X-A-06/12	18	6	12	69.2	89.2
SVTS C 05-X-A-00/24	24	-	24	69.2	89.2
SVTS C 05-X-A-18/00	18	18	-	93.2	113.2
SVTS C 05-X-A-12/12	24	12	12	93.2	113.2
SVTS C 05-X-A-06/24	30	6	24	93.2	113.2
SVTS C 05-X-A-00/36	36	-	36	93.2	113.2
SVTS C 05-X-A-24/00	24	24	-	117.2	137.2
SVTS C 05-X-A-18/12	30	18	12	117.2	137.2
SVTS C 05-X-A-12/24	36	12	24	117.2	137.2
SVTS C 05-X-A-06/36	42	6	36	117.2	137.2
SVTS C 05-X-A-00/48	48	-	48	117.2	137.2

## Ethernet option\*

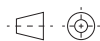
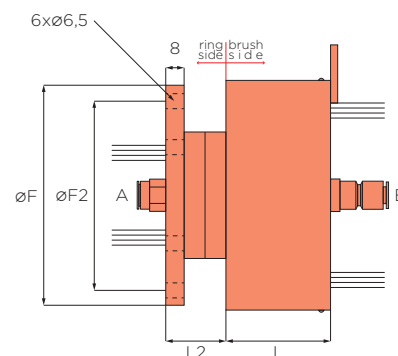
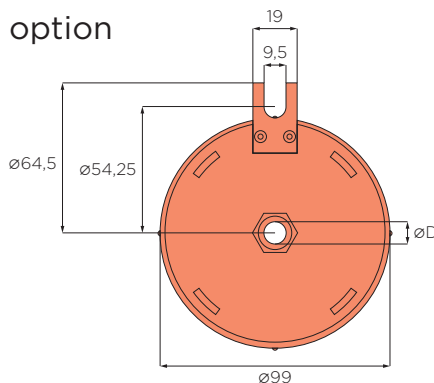
Model	Number of circuits			L	
	Total	Power 15A	Ethernet	IP51	IP65
SVTS C 05-X-A-00/00-...-E1M	5	-	100BaseT	45.2	65.2
SVTS C 05-X-A-06/00-...-E1M	11	6	100BaseT	69.2	89.2
SVTS C 05-X-A-12/00-...-E1M	17	12	100BaseT	93.2	113.2
SVTS C 05-X-A-18/00-...-E1M	23	18	100BaseT	117.2	137.2
SVTS C 05-X-A-00/00-...-E1G	9	-	1000BaseT	69.2	89.2
SVTS C 05-X-A-06/00-...-E1G	15	6	1000BaseT	93.2	113.2
SVTS C 05-X-A-12/00-...-E1G	21	12	1000BaseT	117.2	137.2

\*CAT5e Ethernet cable and CAT6 RJ45 connectors included

All dimensions in millimeters, unless otherwise specified

# SVTS C 05

Single pneumatic passage option



Custom cable length increase possible as multiples of 500mm

Model	N. of circuits		Dimensions								
	Power	Signal	L		L2		D	F		F2	
	15A	2A	IP51	IP65	IP51	IP65	(pneumatic passage)	IP 51	IP65	IP51	IP65
SVTS C 05-X-A-06/00-...-OP1	6	-	45	65	26	14	6	95	130	81	116
SVTS C 05-X-A-00/12-...-OP1	-	12	45	65	26	14	6	95	130	81	116
SVTS C 05-X-A-12/00-...-OP1	12	-	69	89	26	14	6	95	130	81	116
SVTS C 05-X-A-06/12-...-OP1	6	12	69	89	26	14	6	95	130	81	116
SVTS C 05-X-A-00/24-...-OP1	-	24	69	89	26	14	6	95	130	81	116
SVTS C 05-X-A-18/00-...-OP1	18	-	93	113	26	14	6	95	130	81	116
SVTS C 05-X-A-12/12-...-OP1	12	12	93	113	26	14	6	95	130	81	116
SVTS C 05-X-A-06/24-...-OP1	6	24	93	113	26	14	6	95	130	81	116
SVTS C 05-X-A-00/36-...-OP1	0	36	93	113	26	14	6	95	130	81	116
SVTS C 05-X-A-24/00-...-OP1	24	-	117,5	137,5	26	14	6	95	130	81	116
SVTS C 05-X-A-18/12-...-OP1	18	12	117,5	137,5	26	14	6	95	130	81	116
SVTS C 05-X-A-12/24-...-OP1	12	24	117,5	137,5	26	14	6	95	130	81	116
SVTS C 05-X-A-06/36-...-OP1	6	36	117,5	137,5	26	14	6	95	130	81	116
SVTS C 05-X-A-00/48-...-OP1	-	48	117,5	137,5	26	14	6	95	130	81	116
SVTS C 05-X-A-06/00-...-OP2	6	-	45	65	26	14	10	95	130	81	116
SVTS C 05-X-A-00/12-...-OP2	-	12	45	65	26	14	10	95	130	81	116
SVTS C 05-X-A-12/00-...-OP2	12	-	69	89	26	14	10	95	130	81	116
SVTS C 05-X-A-06/12-...-OP2	6	12	69	89	26	14	10	95	130	81	116
SVTS C 05-X-A-00/24-...-OP2	-	24	69	89	26	14	10	95	130	81	116
SVTS C 05-X-A-18/00-...-OP2	18	-	93	113	26	14	10	95	130	81	116
SVTS C 05-X-A-12/12-...-OP2	12	12	93	113	26	14	10	95	130	81	116
SVTS C 05-X-A-06/24-...-OP2	6	24	93	113	26	14	10	95	130	81	116
SVTS C 05-X-A-00/36-...-OP2	-	36	93	113	26	14	10	95	130	81	116
SVTS C 05-X-A-24/00-...-OP2	24	-	117,5	137,5	26	14	10	95	130	81	116
SVTS C 05-X-A-18/12-...-OP2	18	12	117,5	137,5	26	14	10	95	130	81	116
SVTS C 05-X-A-12/24-...-OP2	12	24	117,5	137,5	26	14	10	95	130	81	116
SVTS C 05-X-A-06/36-...-OP2	6	36	117,5	137,5	26	14	10	95	130	81	116
SVTS C 05-X-A-00/48-...-OP2	-	48	117,5	137,5	26	14	10	95	130	81	116

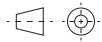
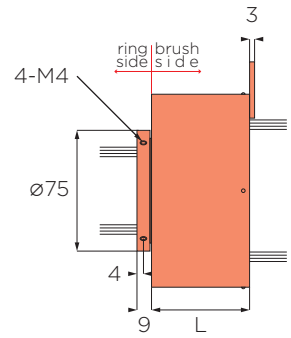
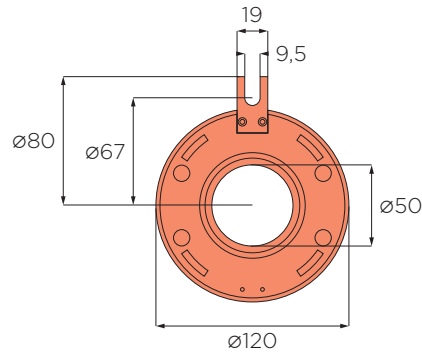
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All dimensions in millimeters, unless otherwise specified

Specifications subject to change.

# SVTS C 06

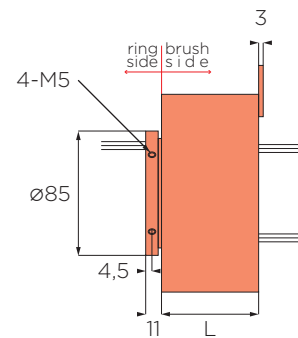
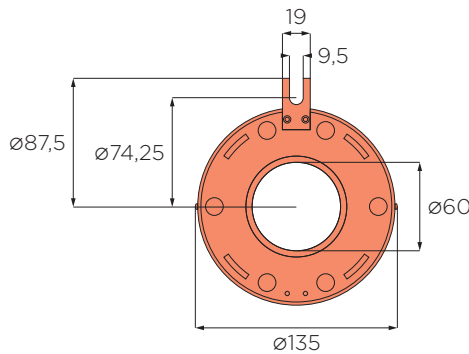


Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	IP51	IP65
	Total	Power 20A	Signals 5A			
SVTS C 06-X-A-06/00	6	6	-	60.5	81.5	
SVTS C 06-X-A-00/12	12	-	12	60.5	81.5	
SVTS C 06-X-A-12/00	12	12	-	90.5	111.5	
SVTS C 06-X-A-06/12	18	6	12	90.5	111.5	
SVTS C 06-X-A-00/24	24	-	24	90.5	111.5	
SVTS C 06-X-A-18/00	18	18	-	120.5	141.5	
SVTS C 06-X-A-12/12	24	12	12	120.5	141.5	
SVTS C 06-X-A-06/24	30	6	24	120.5	141.5	
SVTS C 06-X-A-00/36	36	-	36	120.5	141.5	
SVTS C 06-X-A-24/00	24	24	-	150.5	171.5	
SVTS C 06-X-A-18/12	30	18	12	150.5	171.5	
SVTS C 06-X-A-12/24	36	12	24	150.5	171.5	
SVTS C 06-X-A-06/36	42	6	36	150.5	171.5	
SVTS C 06-X-A-00/48	48	-	48	150.5	171.5	
SVTS C 06-X-A-30/00	30	30	-	180.5	201.5	
SVTS C 06-X-A-24/12	36	24	12	180.5	201.5	
SVTS C 06-X-A-18/24	42	18	24	180.5	201.5	
SVTS C 06-X-A-12/36	48	12	36	180.5	201.5	
SVTS C 06-X-A-06/48	54	6	48	180.5	201.5	
SVTS C 06-X-A-00/60	60	-	60	180.5	201.5	
SVTS C 06-X-A-36/00	36	36	-	210.5	231.5	
SVTS C 06-X-A-30/12	42	30	12	210.5	231.5	
SVTS C 06-X-A-24/24	48	24	24	210.5	231.5	
SVTS C 06-X-A-18/36	54	18	36	210.5	231.5	
SVTS C 06-X-A-12/48	60	12	48	210.5	231.5	
SVTS C 06-X-A-06/60	66	6	60	210.5	231.5	
SVTS C 06-X-A-18/36	54	18	36	210.5	231.5	
SVTS C 06-X-A-12/48	60	12	48	210.5	231.5	
SVTS C 06-X-A-06/60	66	6	60	210.5	231.5	
SVTS C 06-X-A-00/72	72	-	72	210.5	231.5	

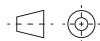
All dimensions in millimeters, unless otherwise specified

# SVTS C 07



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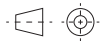
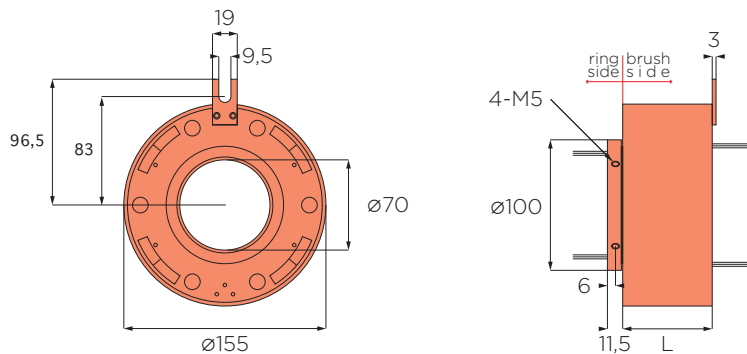
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Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power 20A	Signals 5A	IP51	IP65
SVTS C 07-X-A-06/00	6	6	-	66.5	80.5
SVTS C 07-X-A-00/12	12	-	12	66.5	80.5
SVTS C 07-X-A-12/00	12	12	-	96.5	110.5
SVTS C 07-X-A-06/12	18	6	12	96.5	110.5
SVTS C 07-X-A-00/24	24	-	24	96.5	110.5
SVTS C 07-X-A-18/00	18	18	-	126.5	140.5
SVTS C 07-X-A-12/12	24	12	12	126.5	140.5
SVTS C 07-X-A-06/24	30	6	24	126.5	140.5
SVTS C 07-X-A-00/36	36	-	36	126.5	140.5
SVTS C 07-X-A-24/00	24	24	-	156.5	170.5
SVTS C 07-X-A-18/12	30	18	12	156.5	170.5
SVTS C 07-X-A-12/24	36	12	24	156.5	170.5
SVTS C 07-X-A-06/36	42	6	36	156.5	170.5
SVTS C 07-X-A-00/48	48	-	48	156.5	170.5
SVTS C 07-X-A-30/00	30	30	-	186.5	200.5
SVTS C 07-X-A-24/12	36	24	12	186.5	200.5
SVTS C 07-X-A-18/24	42	18	24	186.5	200.5
SVTS C 07-X-A-12/36	48	12	36	186.5	200.5
SVTS C 07-X-A-06/48	54	6	48	186.5	200.5
SVTS C 07-X-A-00/60	60	-	60	186.5	200.5
SVTS C 07-X-A-36/00	36	36	-	216.5	230.5
SVTS C 07-X-A-30/12	42	30	12	216.5	230.5
SVTS C 07-X-A-24/24	48	24	24	216.5	230.5
SVTS C 07-X-A-18/36	54	18	36	216.5	230.5
SVTS C 07-X-A-12/48	60	12	48	216.5	230.5
SVTS C 07-X-A-06/60	66	6	60	216.5	230.5
SVTS C 07-X-A-00/72	72	-	72	216.5	230.5
SVTS C 07-X-A-42/00	42	42	-	246.5	260.5
SVTS C 07-X-A-36/12	48	36	12	246.5	260.5
SVTS C 07-X-A-30/24	54	30	24	246.5	260.5
SVTS C 07-X-A-24/36	60	24	36	246.5	260.5
SVTS C 07-X-A-18/48	66	18	48	246.5	260.5
SVTS C 07-X-A-12/60	72	12	60	246.5	260.5
SVTS C 07-X-A-06/72	78	6	72	246.5	260.5
SVTS C 07-X-A-00/84	84	-	84	246.5	260.5
SVTS C 07-X-A-48/00	48	48	-	276.5	290.5
SVTS C 07-X-A-42/12	54	42	12	276.5	290.5
SVTS C 07-X-A-36/24	60	36	24	276.5	290.5
SVTS C 07-X-A-30/36	66	30	36	276.5	290.5
SVTS C 07-X-A-24/48	72	24	48	276.5	290.5
SVTS C 07-X-A-18/60	78	18	60	276.5	290.5
SVTS C 07-X-A-12/72	84	12	72	276.5	290.5
SVTS C 07-X-A-06/84	90	6	84	276.5	290.5
SVTS C 07-X-A-00/96	96	-	96	276.5	290.5

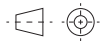
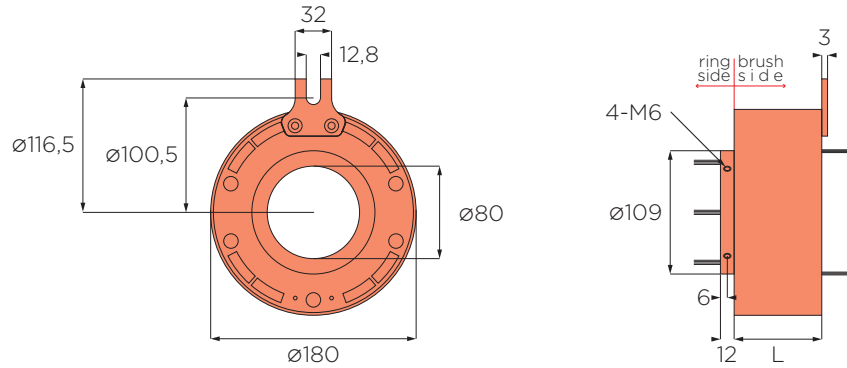
# SVTS C 08



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power 20A	Signals 5A	IP51	IP65
SVTS C 08-X-A-06/00	6	6	-	69.3	93.3
SVTS C 08-X-A-00/12	12	-	12	69.3	93.3
SVTS C 08-X-A-12/00	12	12	-	99.3	123.3
SVTS C 08-X-A-06/12	18	6	12	99.3	123.3
SVTS C 08-X-A-00/24	24	-	24	99.3	123.3
SVTS C 08-X-A-18/00	18	18	-	129.3	153.3
SVTS C 08-X-A-12/12	24	12	12	129.3	153.3
SVTS C 08-X-A-06/24	30	6	24	129.3	153.3
SVTS C 08-X-A-00/36	36	-	36	129.3	153.3
SVTS C 08-X-A-24/00	24	24	-	159.3	183.3
SVTS C 08-X-A-18/12	30	18	12	159.3	183.3
SVTS C 08-X-A-12/24	36	12	24	159.3	183.3
SVTS C 08-X-A-06/36	42	6	36	159.3	183.3
SVTS C 08-X-A-00/48	48	-	48	159.3	183.3
SVTS C 08-X-A-30/00	30	30	-	189.3	213.3
SVTS C 08-X-A-24/12	36	24	12	189.3	213.3
SVTS C 08-X-A-18/24	42	18	24	189.3	213.3
SVTS C 08-X-A-12/36	48	12	36	189.3	213.3
SVTS C 08-X-A-06/48	54	6	48	189.3	213.3
SVTS C 08-X-A-00/60	60	-	60	189.3	213.3
SVTS C 08-X-A-36/00	36	36	-	220	244
SVTS C 08-X-A-30/12	42	30	12	220	244
SVTS C 08-X-A-24/24	48	24	24	220	244
SVTS C 08-X-A-18/36	54	18	36	220	244
SVTS C 08-X-A-12/48	60	12	48	220	244
SVTS C 08-X-A-06/60	66	6	60	220	244
SVTS C 08-X-A-00/72	72	-	72	220	244
SVTS C 08-X-A-42/00	42	42	-	250	274
SVTS C 08-X-A-36/12	48	36	12	250	274
SVTS C 08-X-A-30/24	54	30	24	250	274
SVTS C 08-X-A-24/36	60	24	36	250	274
SVTS C 08-X-A-18/48	66	18	48	250	274
SVTS C 08-X-A-12/60	72	12	60	250	274
SVTS C 08-X-A-06/72	78	6	72	250	274
SVTS C 08-X-A-00/84	84	-	84	250	274
SVTS C 08-X-A-48/00	48	48	-	280	304
SVTS C 08-X-A-42/12	54	42	12	280	304
SVTS C 08-X-A-36/24	60	36	24	280	304
SVTS C 08-X-A-30/36	66	30	36	280	304
SVTS C 08-X-A-24/48S	72	24	48	280	304
SVTS C 08-X-A-18/60	48	18	60	280	304
SVTS C 08-X-A-12/72	84	12	72	280	304
SVTS C 08-X-A-06/84	90	6	84	280	304
SVTS C 08-X-A-00/96	96	-	96	280	304

# SVTS C 09



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power 20A	Signals 5A	IP51	IP65
SVTS C 09-X-A-06/00	6	6	-	76.5	109
SVTS C 09-X-A-00/12	12	-	12	76.5	109
SVTS C 09-X-A-12/00	12	12	-	106.5	139
SVTS C 09-X-A-06/12	18	6	12	106.5	139
SVTS C 09-X-A-00/24	24	-	24	106.5	139
SVTS C 09-X-A-18/00	18	18	-	136.5	169
SVTS C 09-X-A-12/12	24	12	12	136.5	169
SVTS C 09-X-A-06/24	30	6	24	136.5	169
SVTS C 09-X-A-00/36	36	-	36	136.5	169
SVTS C 09-X-A-24/00	24	24	-	136.5	199
SVTS C 09-X-A-18/12	30	18	12	136.5	199
SVTS C 09-X-A-12/24	36	12	24	136.5	199
SVTS C 09-X-A-06/36	42	6	36	136.5	199
SVTS C 09-X-A-00/48	48	-	48	136.5	199
SVTS C 09-X-A-30/00	30	30	-	196.5	229
SVTS C 09-X-A-24/12	36	24	12	196.5	229
SVTS C 09-X-A-18/24	42	18	24	196.5	229
SVTS C 09-X-A-12/36	48	12	36	196.5	229
SVTS C 09-X-A-06/48	54	6	48	196.5	229
SVTS C 09-X-A-00/60	60	-	60	196.5	229
SVTS C 09-X-A-36/00	36	36	-	227	259
SVTS C 09-X-A-30/12	42	30	12	227	259
SVTS C 09-X-A-24/24	48	24	24	227	259
SVTS C 09-X-A-18/36	54	18	36	227	259
SVTS C 09-X-A-12/48	60	12	48	227	259
SVTS C 09-X-A-06/60	66	6	60	227	259
SVTS C 09-X-A-00/72	72	-	72	227	259
SVTS C 09-X-A-42/00	42	42	-	257	289
SVTS C 09-X-A-36/12	48	36	12	257	289
SVTS C 09-X-A-30/24	54	30	24	257	289
SVTS C 09-X-A-24/36	60	24	36	257	289
SVTS C 09-X-A-18/48	66	18	48	257	289
SVTS C 09-X-A-12/60	72	12	60	257	289
SVTS C 09-X-A-06/72	78	6	72	257	289
SVTS C 09-X-A-00/84	84	-	84	257	289
SVTS C 09-X-A-48/00	48	48	-	287	319
SVTS C 09-X-A-42/12	54	42	12	287	319
SVTS C 09-X-A-36/24	60	36	24	287	319
SVTS C 09-X-A-30/36	66	30	36	287	319
SVTS C 09-X-A-24/48	72	24	48	287	319
SVTS C 09-X-A-18/60	78	18	60	287	319
SVTS C 09-X-A-12/72	84	12	72	287	319
SVTS C 09-X-A-06/84	90	6	84	287	319
SVTS C 09-X-A-00/96	96	-	96	287	319

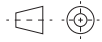
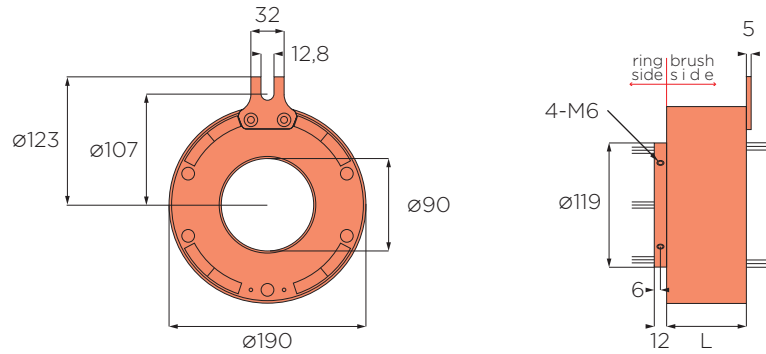
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All dimensions in millimeters, unless otherwise specified



# SVTS C 10

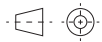
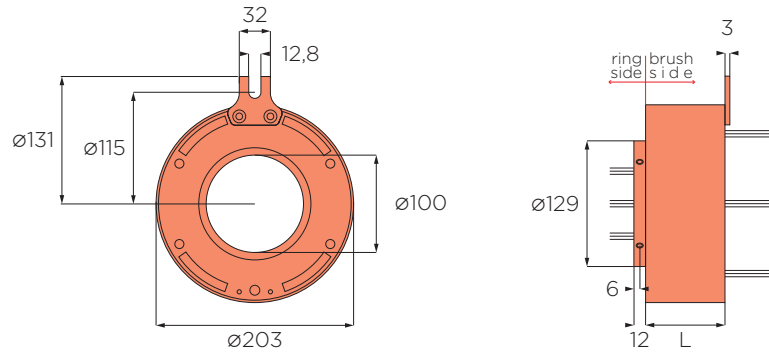


Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power 20A	Signals 5A	IP51	IP65
SVTS C 10-X-A-06/00	6	6	-	76.5	105
SVTS C 10-X-A-00/12	12	-	12	76.5	105
SVTS C 10-X-A-12/00	12	12	-	106.5	135
SVTS C 10-X-A-06/12	18	6	12	106.5	135
SVTS C 10-X-A-00/24	24	-	24	106.5	135
SVTS C 10-X-A-18/00	18	18	-	106.5	165
SVTS C 10-X-A-12/12	24	12	12	136.5	165
SVTS C 10-X-A-06/24	30	6	24	136.5	165
SVTS C 10-X-A-00/36	36	-	36	136.5	165
SVTS C 10-X-A-24/00	24	24	-	136.5	195
SVTS C 10-X-A-18/12	30	18	12	136.5	195
SVTS C 10-X-A-12/24	36	12	24	136.5	195
SVTS C 10-X-A-06/36	42	6	36	136.5	195
SVTS C 10-X-A-00/48	48	-	48	136.5	195
SVTS C 10-X-A-30/00	30	30	-	196.5	225
SVTS C 10-X-A-24/12	36	24	12	196.5	225
SVTS C 10-X-A-18/24	42	18	24	196.5	225
SVTS C 10-X-A-12/36	48	12	36	196.5	225
SVTS C 10-X-A-06/48	54	6	48	196.5	225
SVTS C 10-X-A-00/60	60	-	60	196.5	225
SVTS C 10-X-A-36/00	36	36	-	227	255.5
SVTS C 10-X-A-30/12	42	30	12	227	255.5
SVTS C 10-X-A-24/24	48	24	24	227	255.5
SVTS C 10-X-A-18/36	54	18	36	227	255.5
SVTS C 10-X-A-12/48	60	12	48	227	255.5
SVTS C 10-X-A-06/60	66	6	60	227	255.5
SVTS C 10-X-A-00/72	72	-	72	227	255.5
SVTS C 10-X-A-42/00	42	42	-	257	285.5
SVTS C 10-X-A-36/12	48	36	12	257	285.5
SVTS C 10-X-A-30/24	54	30	24	257	285.5
SVTS C 10-X-A-24/36	60	24	36	257	285.5
SVTS C 10-X-A-18/48	66	18	48	257	285.5
SVTS C 10-X-A-12/60	72	12	60	257	285.5
SVTS C 10-X-A-06/72	78	6	72	257	285.5
SVTS C 10-X-A-00/84	84	-	84	257	285.5
SVTS C 10-X-A-48/00	48	48	-	287	315.5
SVTS C 10-X-A-42/12	54	42	12	287	315.5
SVTS C 10-X-A-36/24	60	36	24	287	315.5
SVTS C 10-X-A-30/36	66	30	36	287	315.5
SVTS C 10-X-A-24/48	72	24	48	287	315.5
SVTS C 10-X-A-18/60	78	18	60	287	315.5
SVTS C 10-X-A-12/72	84	12	72	287	315.5
SVTS C 10-X-A-06/84	90	6	84	287	315.5
SVTS C 10-X-A-00/96	96	-	96	287	315.5

All dimensions in millimeters, unless otherwise specified

# SVTS C 11



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			L	
	Total	Power 20A	Signals 5A	IP51	IP65
SVTS C 11-X-A-06/00	6	6	-	81.5	106,5
SVTS C 11-X-A-00/10	10	-	10	81.5	106,5
SVTS C 11-X-A-12/00	12	12	-	113	138
SVTS C 11-X-A-06/10	16	6	10	113	138
SVTS C 11-X-A-00/20	20	-	20	113	138
SVTS C 11-X-A-18/00	18	18	-	144.5	169,5
SVTS C 11-X-A-12/10	22	12	10	144.5	169,5
SVTS C 11-X-A-06/20	26	6	20	144.5	169,5
SVTS C 11-X-A-00/30	30	-	30	144.5	169,5
SVTS C 11-X-A-24/00	24	24	-	176	201
SVTS C 11-X-A-18/10	28	18	10	176	201
SVTS C 11-X-A-12/20	32	12	20	176	201
SVTS C 11-X-A-06/30	36	6	30	176	201
SVTS C 11-X-A-00/40	40	-	40	176	201
SVTS C 11-X-A-30/00	30	30	-	207.5	232,5
SVTS C 11-X-A-24/10	34	24	10	207.5	232,5
SVTS C 11-X-A-18/20	38	18	20	207.5	232,5
SVTS C 11-X-A-12/30	42	12	30	207.5	232,5
SVTS C 11-X-A-06/40	46	6	40	207.5	232,5
SVTS C 11-X-A-00/50	50	-	50	207.5	232,5
SVTS C 11-X-A-36/00	36	36	-	239	264
SVTS C 11-X-A-30/10	40	30	10	239	264
SVTS C 11-X-A-24/20	44	24	20	239	264
SVTS C 11-X-A-18/30	48	18	30	239	264
SVTS C 11-X-A-12/40	52	12	40	239	264
SVTS C 11-X-A-06/50	56	6	50	239	264
SVTS C 11-X-A-00/60	60	-	60	239	264
SVTS C 11-X-A-42/00	42	42	-	270.5	295,5
SVTS C 11-X-A-36/10	46	36	10	270.5	295,5
SVTS C 11-X-A-30/20	50	30	20	270.5	295,5
SVTS C 11-X-A-24/30	54	24	30	270.5	295,5
SVTS C 11-X-A-18/40	58	18	40	270.5	295,5
SVTS C 11-X-A-12/50	62	12	50	270.5	295,5
SVTS C 11-X-A-06/60	66	6	60	270.5	295,5
SVTS C 11-X-A-00/70	70	-	70	270.5	295,5
SVTS C 11-X-A-48/00	48	48	-	302	327
SVTS C 11-X-A-42/10	52	42	10	302	327
SVTS C 11-X-A-36/20	56	36	20	302	327
SVTS C 11-X-A-30/30	60	30	30	302	327
SVTS C 11-X-A-24/40	64	24	40	302	327
SVTS C 11-X-A-18/50	68	18	50	302	327
SVTS C 11-X-A-12/60	72	12	60	302	327
SVTS C 11-X-A-06/70	76	6	70	302	327
SVTS C 11-X-A-00/80	80	-	80	302	327

servotecnica

THROUGH-BORE

All dimensions in millimeters, unless otherwise specified

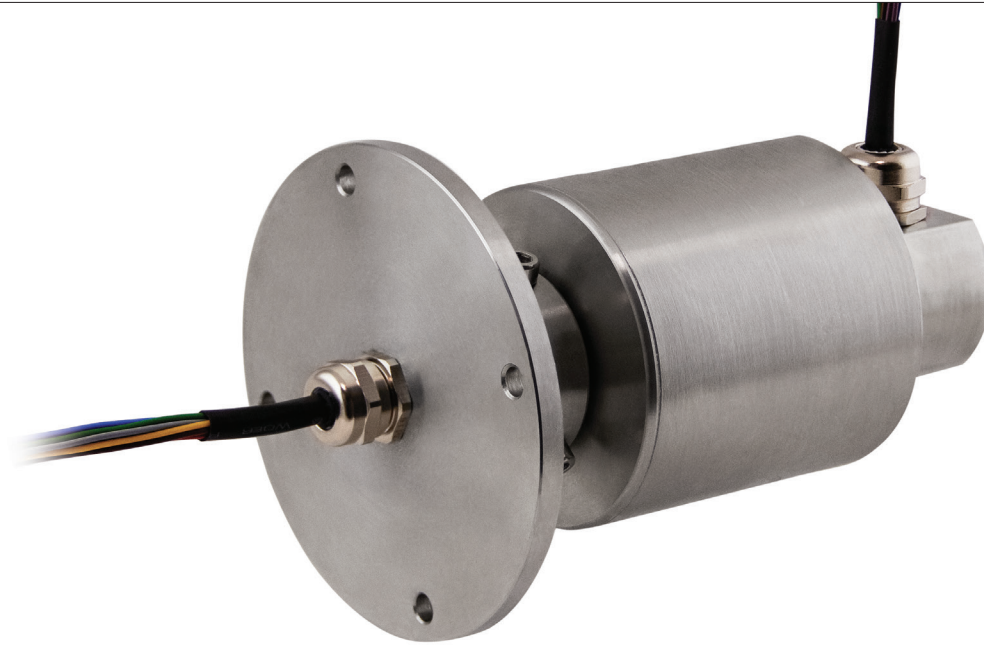
# SVTS D Series

Rugged Slip Rings



# SVTS D Series

Rugged Slip Rings



ROBUST



IP 65



POWER, SIGNALS & FIELDBUS

The robust D Series Slip Rings have a stainless steel/aluminium housing and cable fittings on the slip ring inlet and outlet.

Particularly suitable for harsh environments where environmental conditions require sturdy objects and suitable materials for the food & beverage industry.

The use of fibre brush and gold-gold technology in the D series rotary joints, ensures a long life and high-quality signal transmission.

## Benefits

Robust mechanical construction

Transmission of electric power/signals and fieldbuses in one unit

Water resistant IP65 (standard)

Many sizes

Many customisations

Combinable with fluidic rotary joints and FORJ

## Main applications

Fillin & labelling machines

Capping machines

Converting machines

Automatic machines

Hose reels

Machine tools

Medical systems

Packaging






















Printing machines










Process control

Robots

Rotary tables

## Product code (go to page 9 for the detailed coding system)

SVTS D   -  -  -   /   -     /     -   -   

-  Series
-  Model
-  IP grade<sup>1</sup>
-  Flange type
-  Power circuits
-  Signal circuits
-  Cable length (brush side)
-  Cable length (ring side)
-  Temperature range<sup>2</sup>
-  Special options

<sup>1</sup> Only IP65 [U]

<sup>2</sup> Standard [ST]; Extended [ET]

## Features

Current	
Power	5A: AWG22 10A: AWG16 15A: AWG14
Signals	2A: AWG26
Voltage	400 VAC / 240 VDC
Cables	Tin plated (power); silver (signals) / PTFE insulated / colour coded
Cables length	Standard: 500mm; custom cable length increase possible as multiples of 500mm
Dialectic strength	500 VAC @ 50 Hz @ 60 sec
Insulation resistance	> 1000 MΩ / 500 VDC
Nominal speed	400 rpm (higher speeds upon request)
Dynamic contact resistance	< 0.01 Ω
Bearings	Steel
Housing	Stainless steel (SVTS D 01) / aluminium (SVTS D 02)
Temperature	-20°C to +80°C (-40°C as option)
Protection	IP65
Expected lifetime	10 <sup>8</sup> revolutions (depending on speed, environmental conditions and size)

RUGGED

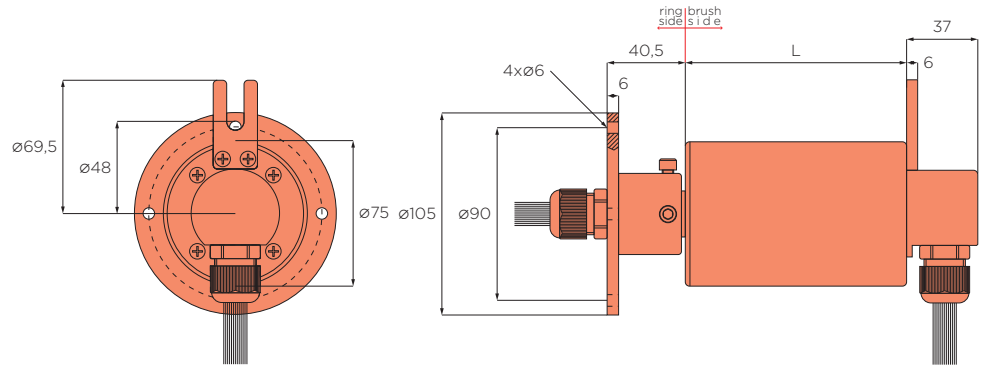
## Combinations

Electric	Fieldbus	Fluidic (combined solutions)
Signals	EtherCAT	Air
Power	Profinet	Oil
	Sercos	Gas
	Powerlink	Water
	Ethernet	
	Canbus	

## Customizations

Cables	Mechanical design	Flange
Materials	Treatments	Cable exits

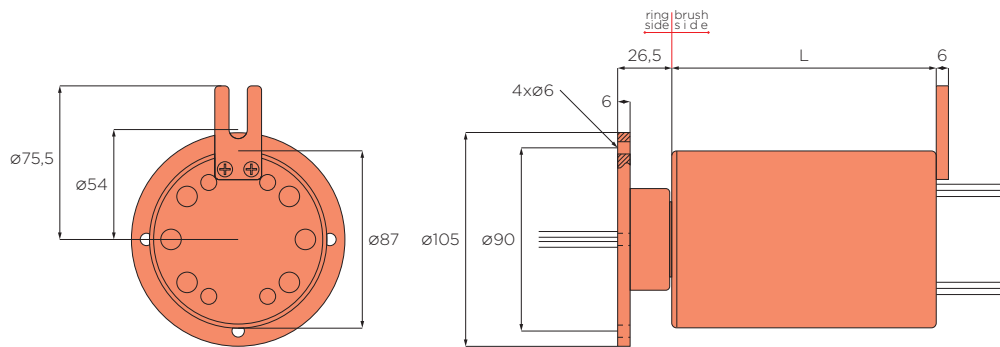
# SVTS D 01



Model	Number of circuits			L	PG type
	Total	Power	Signals 5A		
SVTS D 01-U-A-00/06	6	-	6	63	PG7
SVTS D 01-U-A-00/12	12	-	12	77	PG9
SVTS D 01-U-A-00/18	18	-	18	91	PG11
SVTS D 01-U-A-00/24	24	-	24	105	PG16
SVTS D 01-U-A-00/30	30	-	30	119	-
SVTS D 01-U-A-00/36	36	-	36	133	-
SVTS D 01-U-A-00/42	42	-	42	147	-
SVTS D 01-U-A-00/48	48	-	48	161	-

All dimensions in millimeters, unless otherwise specified

# SVTS D 02



Model	Number of circuits			L	PG type
	Total	Power 15A	Signals 2A		
SVTS D 02-U-A-06/00	6	6	-	57	-
SVTS D 02-U-A-00/12	12	-	12	57	-
SVTS D 02-U-A-12/00	12	12	-	81	-
SVTS D 02-U-A-06/12	18	6	12	81	-
SVTS D 02-U-A-00/24	24	-	24	81	-
SVTS D 02-U-A-18/00	18	18	-	105	-
SVTS D 02-U-A-12/12	24	12	12	105	-
SVTS D 02-U-A-06/24	30	6	24	105	-
SVTS D 02-U-A-00/36	36	-	36	105	-
SVTS D 02-U-A-24/00	24	24	-	129	-
SVTS D 02-U-A-18/12	30	18	12	129	-
SVTS D 02-U-A-12/24	36	12	24	129	-
SVTS D 02-U-A-06/36	42	6	36	129	-
SVTS D 02-U-A-00/48	48	-	48	129	-
SVTS D 02-U-A-30/00	30	30	-	153	-
SVTS D 02-U-A-24/12	36	24	12	153	-
SVTS D 02-U-A-18/24	42	18	24	153	-
SVTS D 02-U-A-12/36	48	12	36	153	-
SVTS D 02-U-A-06/48	54	6	48	153	-
SVTS D 02-U-A-00/60	60	-	60	153	-
SVTS D 02-U-A-36/00	36	36	-	177	-
SVTS D 02-U-A-30/12	42	30	12	177	-
SVTS D 02-U-A-24/24	48	24	24	177	-
SVTS D 02-U-A-18/36	54	18	36	177	-
SVTS D 02-U-A-12/48	60	12	48	177	-
SVTS D 02-U-A-06/60	66	6	60	177	-
SVTS D 02-U-A-00/72	72	-	72	177	-
SVTS D 02-U-A-42/00	42	42	-	201	-
SVTS D 02-U-A-36/12	48	36	12	201	-
SVTS D 02-U-A-30/24	54	30	24	201	-
SVTS D 02-U-A-24/36	60	24	36	201	-
SVTS D 02-U-A-18/48	66	18	48	201	-
SVTS D 02-U-A-12/60	72	12	60	201	-
SVTS D 02-U-A-06/72	78	6	72	201	-
SVTS D 02-U-A-00/84	84	-	84	201	-
SVTS D 02-U-A-48/00	48	48	-	225	-
SVTS D 02-U-A-42/12	54	42	12	225	-
SVTS D 02-U-A-36/24	60	36	24	225	-
SVTS D 02-U-A-30/36	66	30	36	225	-
SVTS D 02-U-A-24/48	72	24	48	225	-
SVTS D 02-U-A-18/60	78	18	60	225	-
SVTS D 02-U-A-12/72	84	12	72	225	-
SVTS D 02-U-A-06/84	90	6	84	225	-
SVTS D 02-U-A-00/96	96	-	96	225	-

All dimensions in millimeters, unless otherwise specified



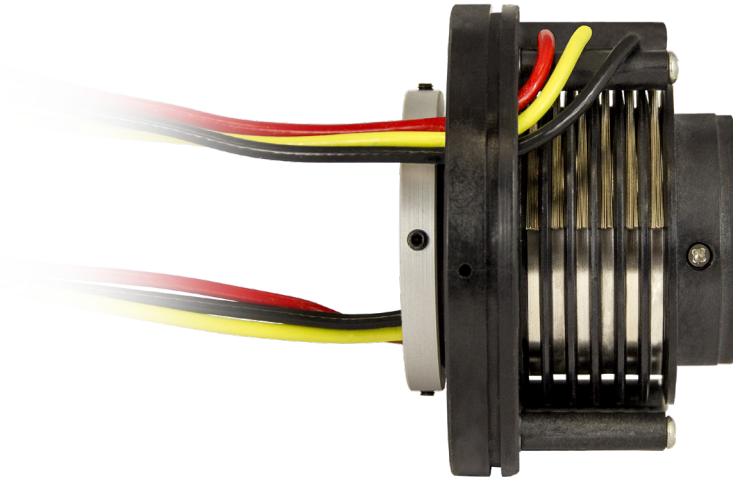
# SVTS E Series


Open Slip Rings



# SVTS E Series

Open Slip Rings



 COST-EFFECTIVE

 THROUGH-BORE

 EASY INTEGRATION

The open E series provides high performances while keeping the Slip Ring compact in size and at a competitive price. Available with through holes with diameters ranging from 25 mm to 60 mm and currents from 20 A to 60 A.

The affordable rotary joints of the E series are ideal for integration into machine structures where there are no particular risks of contamination.

## Benefits

Cost-effective

Easy integration

## Main applications

Wind turbines

Rotating billboards

Rotary tables

Cable reels

Palletisers

## Product code (go to page 9 for the detailed coding system)

SVTS E - - - / - / - -

- Series
- Model
- IP grade<sup>1</sup>
- Flange type
- Power circuits
- Signal circuits
- Cable length (brush side)
- Cable length (ring side)
- Temperature range<sup>2</sup>
- Special options<sup>3</sup>

<sup>1</sup> Only IP00

<sup>2</sup> Only Standard [ST]

<sup>3</sup> 20A circuits [001]; 40A circuits [002]; 60A circuits [003]

## Features

Current	
Power	20A: 1xAWG14 (each circuit) 40A: 2xAWG14 (each circuit) 60A: 3xAWG14 (each circuit)
Signals	2A: AWG26
Voltage	400 VAC/DC
Cables	Tin plated - PVC insulation
Cables length	Standard: 500mm; custom cable length increase possible as multiples of 500mm
Insulation resistance	> 1000 MΩ/500 VDC
Nominal speed	300 rpm (higher speed upon request)
Dynamic contact resistance	< 0.01Ω
Bearings	Steel
Housing	ABS (hard plastic)
Temperature	-20°C +80°C
Protection	IPO0
Expected lifetime	10 <sup>8</sup> revolutions (depending on speed, environmental conditions and size)

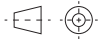
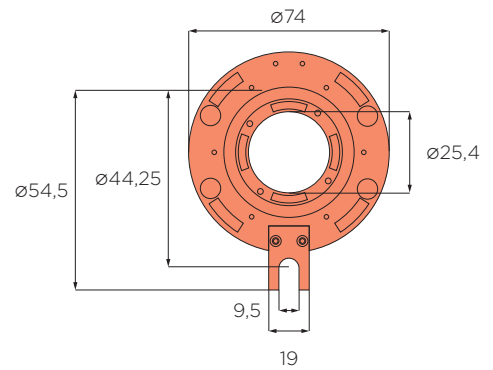
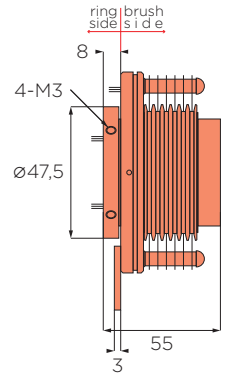
## Combinations

Electric	Fluidic (combined solutions)
Signals	Air
Power	Oil
	Gas
	Water

## Customizations

Cables		
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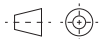
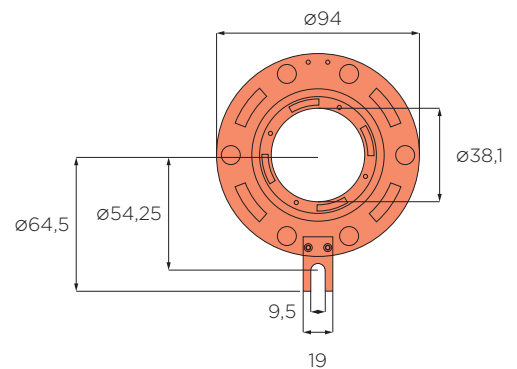
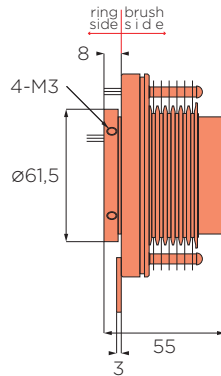
# SVTS E 01



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			Diameters	
	Total	Power		Inside $\varnothing$ (trough-bore)	L
		20A	40A		
SVTS E 01-R-A-03/00-...-001	3	3	-	25,4	55
SVTS E 01-R-A-03/00-...-002	3	-	3	25,4	55

# SVTS E 02

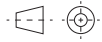
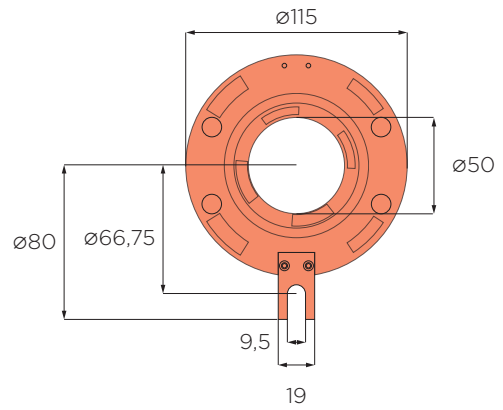
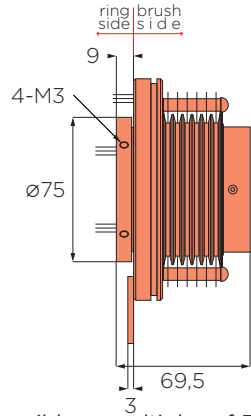


Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			Dimensions	
	Total	Power		Inside $\varnothing$ (trough-bore)	L
		20A	40A		
SVTS E 02-R-A-03/00-...-001	3	3	-	38,1	55
SVTS E 02-R-A-03/00-...-002	3	-	3	38,1	55

All dimensions in millimeters, unless otherwise specified

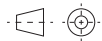
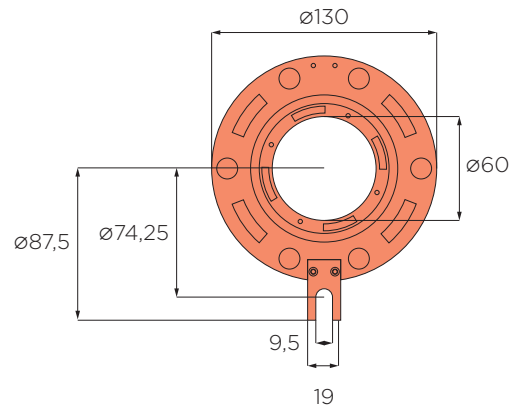
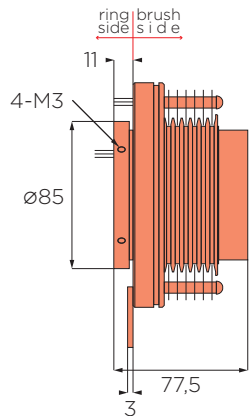
# SVTS E 03



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			Dimensions		
	Total	Power		Inside ø (trough-bore)	L	
		20A	40A	60A		
SVTS E 03-R-A-03/00-...-001	3	3	-	-	50	70
SVTS E 03-R-A-03/00-...-002	3	-	3	-	50	70
SVTS E 03-R-A-03/00-...-003	3	-	-	3	50	70

# SVTS E 04



Custom cable length increase possible as multiples of 500mm

Model	Number of circuits			Dimensions		
	Total	Power		Inside ø (trough-bore)	L	
		20A	40A	60A		
SVTS E 04-R-A-03/00-...-001	3	3	-	-	60	78
SVTS E 04-R-A-03/00-...-002	3	-	3	-	60	78
SVTS E 04-R-A-03/00-...-003	3	-	-	3	60	78

All dimensions in millimeters, unless otherwise specified

Specifications subject to change.

# SVTS F Series

Flat Slip Rings

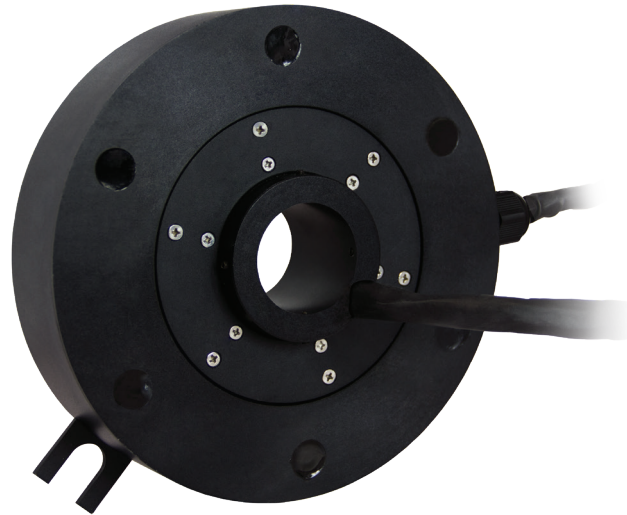
# Contents

Model	In ø	Out ø	Page
SVTS F 01	40mm	180mm	66



# F Series

## Flat Slip Rings



 SUPER FLAT

 POWER, SIGNALS & FIELDBUS

 LONG-LIFE

The flat F Series Slip Rings have a special design, that means these rotary joints have a height of only 45 mm ensuring up to 17 signal circuits and 3 power circuits up to 15 A.

These rotary joints are designed for applications where height is a critical factor, they provide performance similar to the C series from which they derive and are maintenance-free.

## Benefits

Flat design

Long-life

Transmission of electric power/signals and fieldbuses in one unit

Many customisations available

## Main applications

Revolving doors

Rotary tables






















Robots




Medical equipments

Packaging

Cable reels

## Product code (go to page 9 for the detailed coding system)

SVTS F   -  -  -   /   -     /     -   -   

- F Series
-  Model
-  IP grade<sup>1</sup>
-  Flange type
-  Power circuits
-  Signal circuits
-  Cable length (brush side)
-  Cable length (ring side)
-  Temperature range<sup>2</sup>
-  Special options

<sup>1</sup> Only IP51 [S]

<sup>2</sup> Only Standard [ST]

## Features

Nbr. of circuits	20 (more upon request)
Current	
Power	15A: AWG16
Signals	5A: AWG22
Voltage	400 VAC / 240 VDC
Cables	
Power	Tin plated / PVC insulated
Signals	Silver plated / PVC insulated
Cables length	500 mm standard (more lengths upon request)
Insulation resistance	
Power	> 1000 MΩ/500 VDC
Signals	> 500 MΩ/500 VDC
Nominal speed	250 rpm (higher speeds upon request)
Bearings	Steel
Housing	Aluminium
Temperature	-20°C to +80°C
Protection	IP51
Expected lifetime	10 <sup>8</sup> revolutions (depending on speed, environmental conditions and size)

## Combinations

Electric  
Signals  
Power

## Customizations

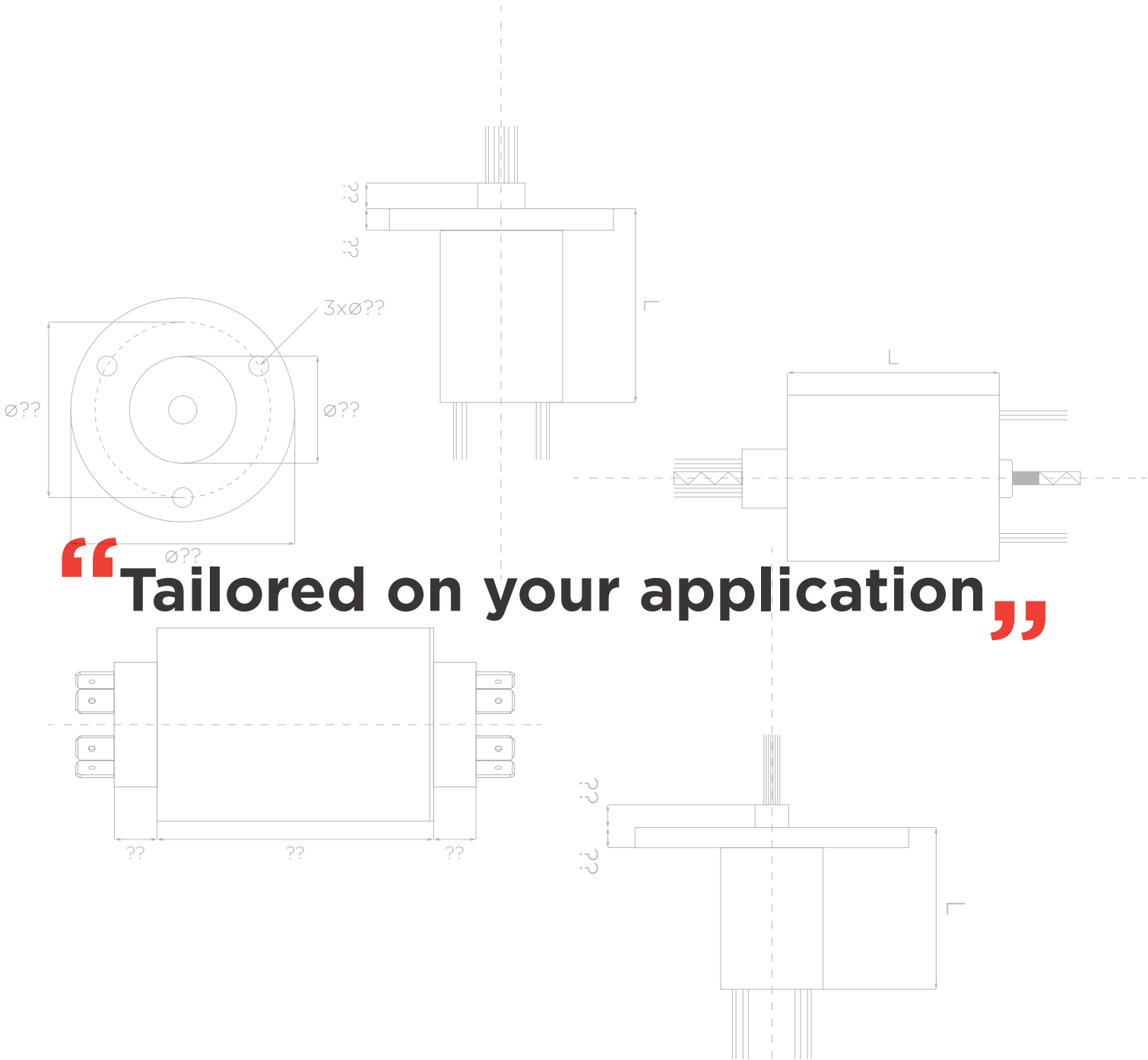
Cables Treatments	Flange	Materials
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# Custom Slip Rings

Case Histories



“Tailored on your application”

## Customer-driven development

We can design products tailored to your needs, starting from scratch. Some examples of motor customizations are on cables, on mechanical geometry or high temperature environment.

Our metal-on-metal technology can be adapted to your project's requirements granting the finest transmission quality. Our engineers have the necessary know-how to significantly minimize the development time to provide a solution driven by a proactive flow of information.

The 40 years' experience in the automation world, the focus on contact technologies and the customer commitment approach, are what have always led us to deliver the best solutions and services.

The wide range of electric rotary joints can furthermore be combined with fluidic or optical rotary joints and likewise be customized.

The result is an unlimited number of combinations coupled with a single interface that offers simple solutions to complex applications.

## What can we customize?

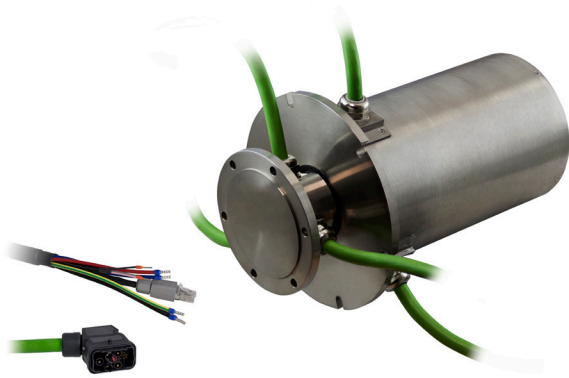
- Cables
- Connectors
- Current
- Voltage
- Fieldbuses
- Mechanical geometry
- Materials
- Treatments
- Speed
- Sealing
- Feedback integrations
- Special quality controls and tests before delivery



## Rugged Slip Ring with Schneider hybrid cable

### High data-rate Rotary Joint

Custom solution specifically designed for the labeling industry. The request was to bring onto a rotating carousel from one to three Schneider Hybrid cables, carrying: power, Sercos III communication and signals. The exposure to an harsh environment has required the use of a stainless steel housing and IP65 protection degree.



Power circuits

Up to 3 hybrid Schneider - Elau cables (with connectors)

Sercos III (100 BaseT EtherNet)

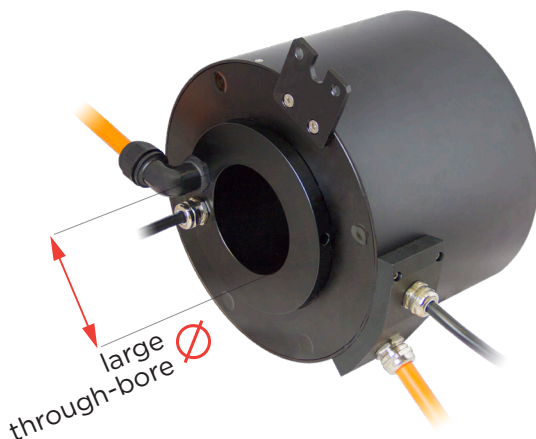
Stainless steel housing

IP 65 Protection

## Through-bore Slip Ring with Bosch hybrid cable

### High data-rate Rotary Joint

Custom solution specifically designed for the printing industry capable of transmitting: high quality Sercos III communication, power supply and signals over a single hybrid cable with minimum decay, no matter how long the distance. The challenge was to obtain a clean output signal despite the through-hole width, minimizing noise and crosstalk between channels.



Through-bore: 100mm

BOSCH hybrid cables (complete with connectors)

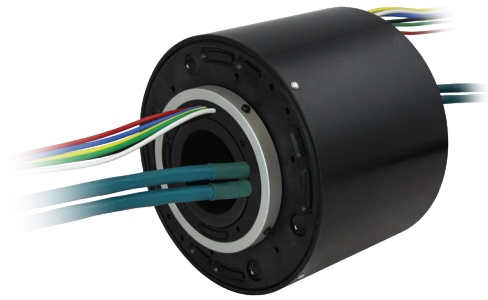
Sercos III (100 BaseT EtherNet)

Custom mechanical design with tight centring tolerance

# Through-bore Slip Ring with EtherCAT

## High data-rate Rotary Joint

Custom solution specifically designed for the electronics industry. The customer came to us requiring to switch from a CAN solution to an EtherCAT one. To address this request, our team developed a Slip Ring integrated in a network with more than 100 EtherCAT nodes, providing power and EtherCAT onto a rotary table. We finalised the development running special tests to ensure transmission quality over time.



- Power circuits
- EtherCAT cables
- 100 BaseT EtherNet fieldbuses

# Hybrid Rotary Joint + Inductive transducer

## Electric & Fiber Optic Rotary Joint + IncOder

Custom solution specifically designed for a drone antenna. The main purpose was to obtain a very high number of circuits in very little space and weight. Furthermore the environmental conditions were very tough requiring extended temperature range and special surface treatment to reduce external noise and corrosion. The integration with the Zettlex incOder, sealed the partnership between our customer and us.

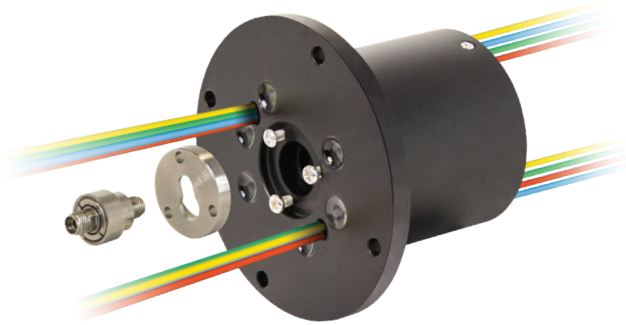


- Rugged design**
  - Operating temperature: -40° C + 80° C
  - Protection IP 65
  - Shock & vibration resistant
- Rotary joint**
  - 10 power circuits
  - 55 signal circuits
  - One multi-mode fiber optic channel
  - Aluminium housing
  - Anticordal 6061 aluminium housing and surface treatment Surtec 650
- Absolute IncOder**
  - Inductive encoder
  - Resolution: up to 22 bit/turn
  - Interfaces: SSI / BiSS / TTL

# Compact Slip Ring with Radio Frequency

## Electric Rotary Joint with RF connector

Mixed custom solution designed for an antenna, featuring 12 circuits and a high frequency RF joint at 18 GHz. Special materials have also been used to ensure the operating temperature range of -40 +80°C, and the custom flange, in addition to a special reaction shaft, made possible to fully meet the customer's needs.



### Electric

Nominal speed: 100rpm  
Protection: IP51  
Operating temperature: -20°C +80°C  
Circuits: 4 x 5 A; 8 x 250 mA

### RF

Frequency: 18 GHz  
VSWR: 1,3  
Insertion loss: 0,2  
Connectors: SMA-K

# Hybrid Rotary Joint with Bosch cable

## Electric & Fluidic Rotary Joint + Sercos III

Mixed custom solution with electric Rotary Joint composed by a Bosch hybrid cable for the transmission of power supply, Sercos III, signals and additional DC power. The Slip Ring was then combined with a 2-passage pneumatic rotary joint that can work at different pressures.

The modular design also allows to assemble Slip Rings of different lengths and sizes.



Power circuits  
Signal circuits  
Sercos III (100 BaseT EtherNet)  
Bosch hybrid cables  
2 pneumatic passages

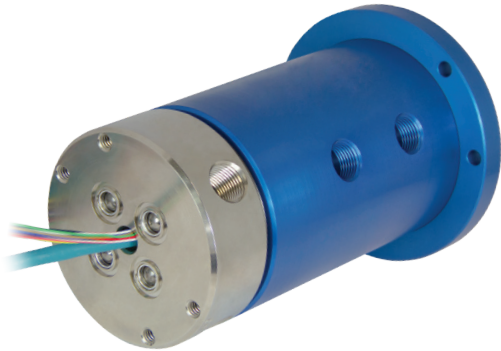
# Hybrid Rotary Joint with Ethernet

## Electric & Fluidic Rotary Joint + Ethernet

Custom mixed solution designed for a robotic arm. The main purpose was to obtain a compact and lightweight rotary joint to minimise inertia load.

The perfect solution turned out to be the combination of a customized SVTS A electric Rotary Joint with 15 signals and an Ethernet channel (ensuring the higher circuit density possible in the smallest size), with a 4 independent passages 3/8" LT fluidic rotary joint.

What did the trick was the compact and light aluminum body of the rotary union.

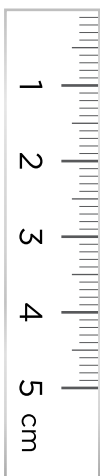


- Compact
- 4 3/8" passages
- Max pressure: 40 bar
- 1000baseT Ethernet
- 15 signal circuits

# Micro Slip Ring

## Miniaturized Technology

Custom solution specifically designed for a robotic arm. The target was to reduce dimensions and weight to the minimum maintaining a good mechanical resistance. We redesigned the internal structure and developed a new platform that granted the possibility to miniaturize our solutions. We came up with a 6 circuits Slip Ring in a sturdy stainless-steel housing limiting the dimensions to an incredible 8mm diameter and a length of 11mm.



- Up to 6mm diameter
- Up to 36 circuits
- Ethernet option
- Stainless steel housing

## HEADQUARTERS - ITALY

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## GERMANY

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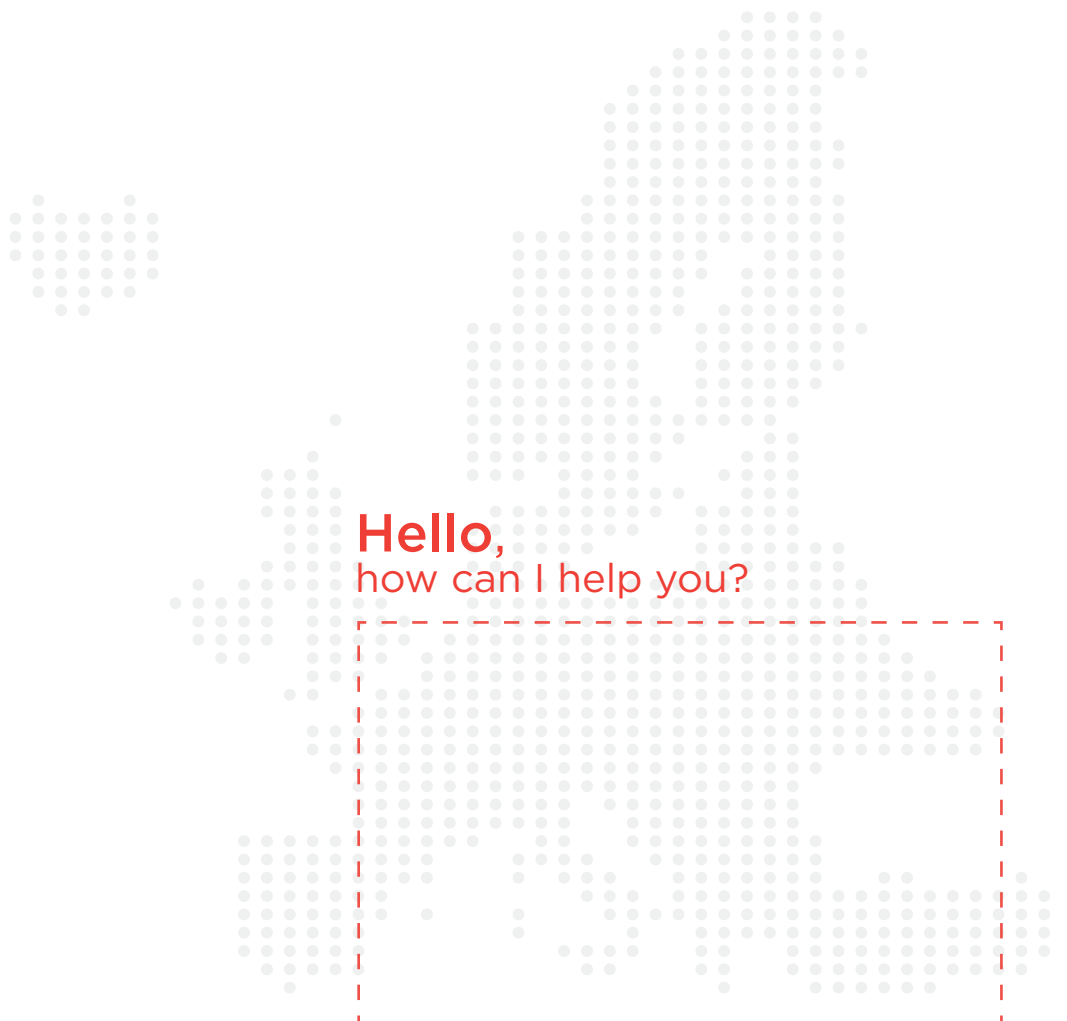


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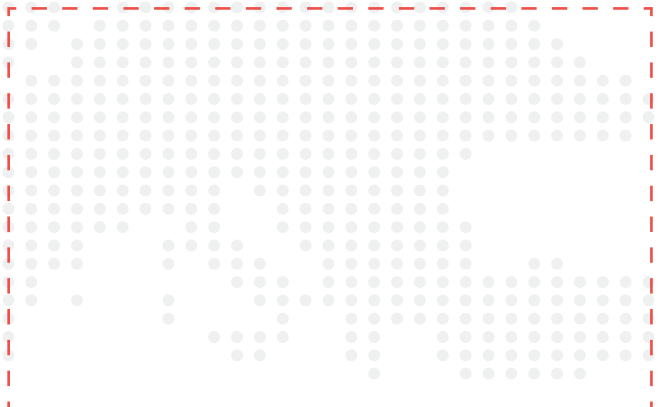
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how can I help you?





Your local contact