

SVTS A Series

Capsule Slip Rings

High-current Capsule Slip Rings

Radio Frequency Capsule Slip Rings

SVTS A Series

Capsule



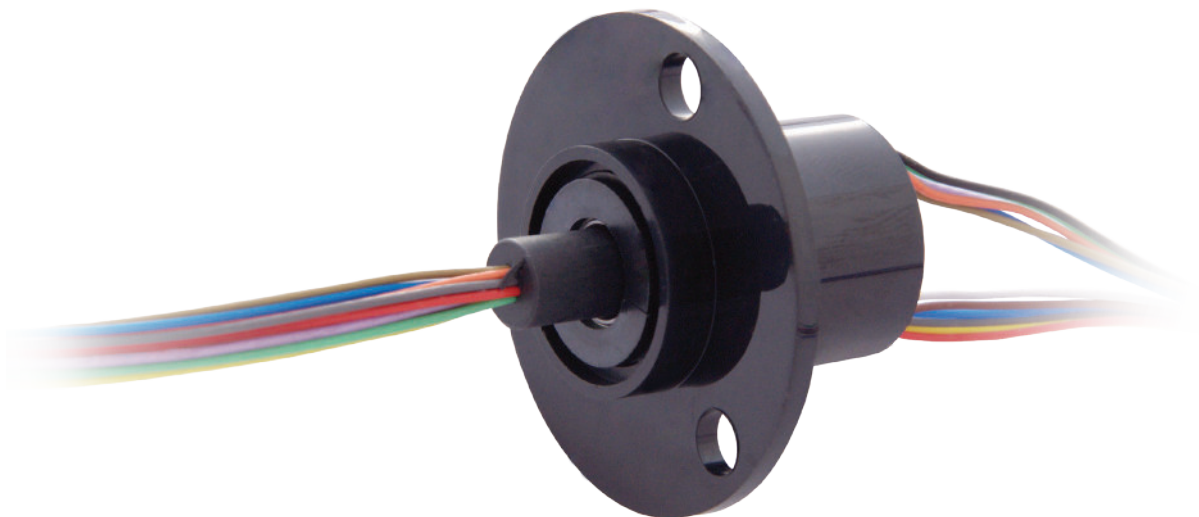
Optimal signal transmission



High circuit density



Compact



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

Control systems

Moving head projectors

Medical / pharmaceutical






















Packaging











Wind turbines

Hose & cable reels

*Option not available for SVTS A 02

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

SVTS A   -  -  -   /   -     /     -   -   

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

¹ IP51 [S]; IP65 [U]

² Standard [ST]; Extended [ET]

³ 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	up to 500 rpm (others on request)
Bearings	Miniature high-precision stainless steel ball bearings
Housing	ABS; Alluminium
Contact	Gold-gold
Temperature	-20°C to +80°C (-40°C as option)
Protection	IP51; IP65
Expected lifetime	10 ⁷ revolutions (depending on speed, environmental conditions and size)

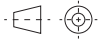
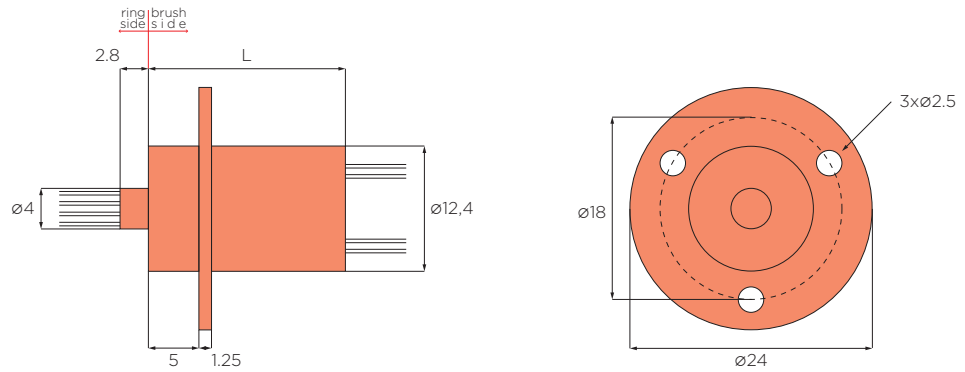
Combinations

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

Customizations

Cables	Mechanical design	Flange
Materials		

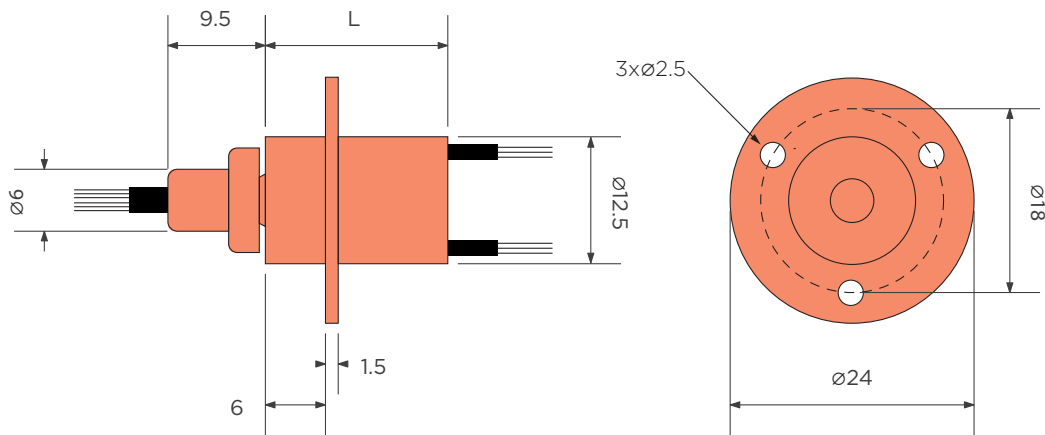
SVTS A 01



See page 28 for different flange options
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits		Dimensions L	Housing	Color code p. 82
	Total	Signals 1-2A			
SVTS A 01-S-A-00/06	6	6	14	ABS	CC 1
SVTS A 01-S-A-00/12	12	12	19.5	ABS	CC 1
SVTS A 01-S-A-00/18	18	18	23	ABS	CC 1

IP65 option

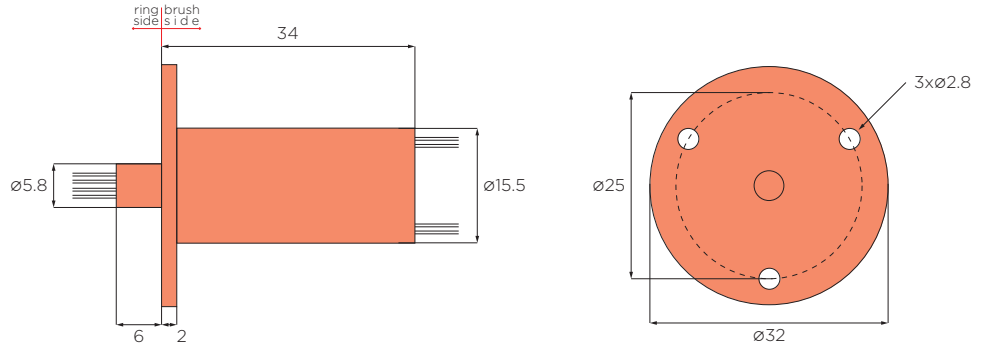


See page 28 for different flange options
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits		Dimensions L	Housing	Color code p. 82
	Total	Signals 1-2A			
SVTS A 01-U-A-00/06	6	6	21.5	Al	CC 1
SVTS A 01-U-A-00/12	12	12	27	Al	CC 1
SVTS A 01-U-A-00/18	18	18	32	Al	CC 1

All dimensions in millimeters, unless otherwise specified

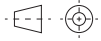
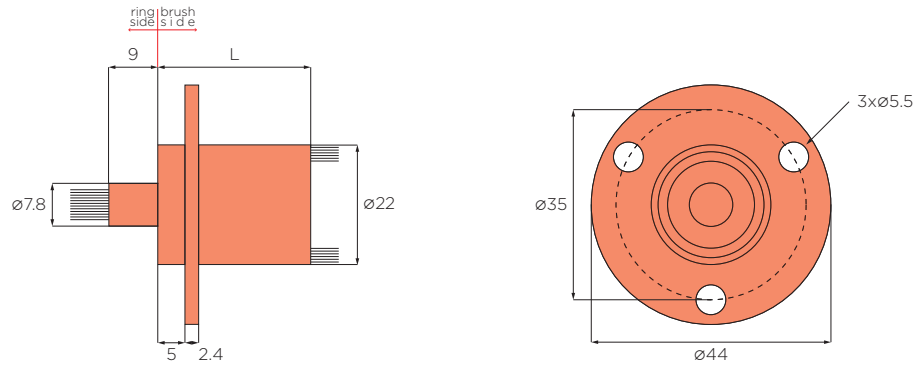
SVTS A 02



See page 28 for different flange options
 Custom cable length increase possible as multiples of 250mm

Model	Number of circuits Signals	Housing	Color code p. 82
	1-2A		
SVTS A 02-S-A-00/24	24	ABS	CC 1

SVTS A 03



See page 28 for different flange options
 Custom cable length increase possible as multiples of 250mm

Model	Number of circuits				L	Housing	Color code p. 82
	Total	Signals					
		1-2A	6A	8A			
SVTS A 03-S-A-00/06	6	6	-	-	19	ABS	CC 1
SVTS A 03-S-A-00/12	12	12	-	-	28	ABS	CC 1
SVTS A 03-S-A-02/02	4	2	2	-	28	ABS	CC 1
SVTS A 03-S-A-00/15	15	15	-	-	29.5	ABS	CC 1
SVTS A 03-S-A-00/18	18	18	-	-	33.4	ABS	CC 1
SVTS A 03-S-A-03/00	3	-	-	3	33.4	ABS	CC 1
SVTS A 03-S-A-00/24	24	24	-	-	41.2	ABS	CC 1
SVTS A 03-S-A-04/06	10	6	4	-	41.2	ABS	CC 1
SVTS A 03-S-A-00/30	30	30	-	-	49.2	ABS	CC 2
SVTS A 03-S-A-00/36	36	36	-	-	57	ABS	CC 2

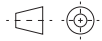
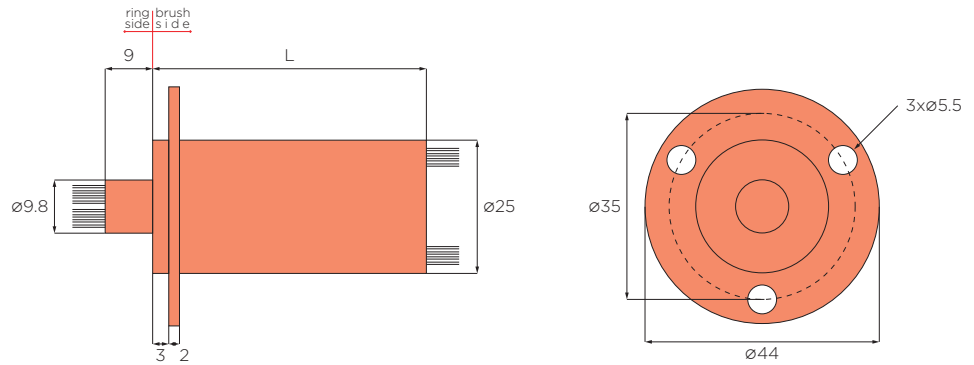
Ethernet option*

Model	Number of circuits			L	Housing	Color code
	Total	Signals				
		2A	Ethernet			
SVTS A 03-S-A-00/00-...-E1M	5	-	100BaseT	19	ABS	Contact factory
SVTS A 03-S-A-00/06-...-E1M	11	6	100BaseT	28	ABS	Contact factory
SVTS A 03-S-A-00/09-...-E1M	14	9	100BaseT	29.5	ABS	Contact factory
SVTS A 03-S-A-00/12-...-E1M	17	12	100BaseT	33.4	ABS	Contact factory
SVTS A 03-S-A-00/18-...-E1M	23	18	100BaseT	41.2	ABS	Contact factory
SVTS A 03-S-A-00/30-...-E1M	35	30	100BaseT	57	ABS	Contact factory
SVTS A 03-S-A-00/00-...-E1G	9	-	1000BaseT	28	ABS	Contact factory
SVTS A 03-S-A-00/03-...-E1G	12	3	1000BaseT	29.5	ABS	Contact factory
SVTS A 03-S-A-00/06-...-E1G	15	6	1000BaseT	33.4	ABS	Contact factory
SVTS A 03-S-A-00/12-...-E1G	21	12	1000BaseT	41.2	ABS	Contact factory
SVTS A 03-S-A-00/24-...-E1G	33	24	1000BaseT	57	ABS	Contact factory

*RJ 45 connectors included

All dimensions in millimeters, unless otherwise specified

SVTS A 04



See page 28 for different flange options
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits				L	Housing	Color code p. 82
	Total	Signals	Power				
		1-2A	6A	8A			
SVTS A 04-S-A-00/30	30	30	-	-	51.5	Al	CC 3
SVTS A 04-S-A-04/18	22	18	4	-	51.5	Al	CC 3
SVTS A 04-S-A-03/15	18	15	-	3	51.5	Al	CC 3
SVTS A 04-S-A-00/36	36	36	-	-	59.5	Al	CC 3
SVTS A 04-S-A-04/24	28	24	4	-	59.5	Al	CC 3
SVTS A 04-S-A-04/16	20	16	-	4	59.5	Al	CC 3
SVTS A 04-S-A-00/46	46	46	-	-	72.5	Al	CC 3
SVTS A 04-S-A-00/56	56	56	-	-	85.5	Al	CC 4
SVTS A 04-S-A-04/44	48	44	4	-	85.5	Al	CC 3
SVTS A 04-S-A-04/36	40	36	-	4	85.5	Al	CC 3

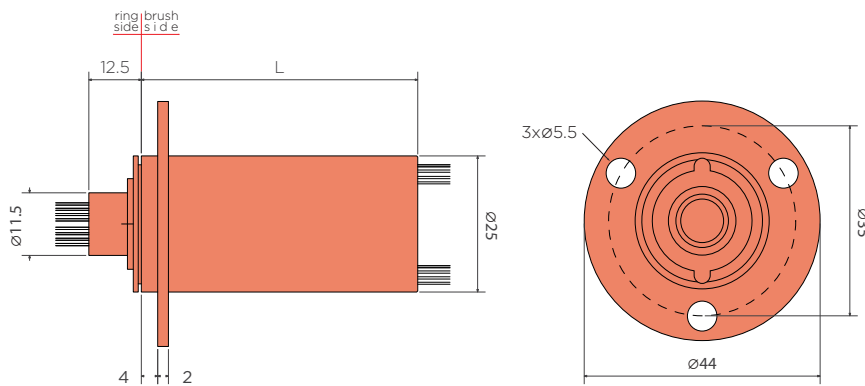
Ethernet option*

Model	Number of circuits			L	Housing	Color code
	Total	Signals	Ethernet			
		2A				
SVTS A 04-S-A-00/24-...-E1M	24	24	100BaseT	51.5	Al	Contact factory
SVTS A 04-S-A-00/30-...-E1M	30	30	100BaseT	59.5	Al	Contact factory
SVTS A 04-S-A-00/40-...-E1M	40	40	100BaseT	72.5	Al	Contact factory
SVTS A 04-S-A-00/50-...-E1M	50	50	100BaseT	85.5	Al	Contact factory
SVTS A 04-S-A-00/18-...-E1G	18	18	1000BaseT	51.5	Al	Contact factory
SVTS A 04-S-A-00/24-...-E1G	24	24	1000BaseT	59.5	Al	Contact factory
SVTS A 04-S-A-00/34-...-E1G	34	34	1000BaseT	72.5	Al	Contact factory
SVTS A 04-S-A-00/44-...-E1G	44	44	1000BaseT	85.5	Al	Contact factory

*RJ 45 connectors included

All dimensions in millimeters, unless otherwise specified

IP65 option



See page 28 for different flange options
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits				L	Housing	Color code p. 82
	Total	Signals 1-2A	Power 6A 8A				
SVTS A 04-U-A-00/30	30	30	-	-	60	Al	CC 3
SVTS A 04-U-A-04/18	22	18	4	-	60	Al	CC 3
SVTS A 04-U-A-03/15	18	15	-	3	60	Al	CC 3
SVTS A 04-U-A-00/36	36	36	-	-	68	Al	CC 3
SVTS A 04-U-A-04/24	28	24	4	-	68	Al	CC 3
SVTS A 04-U-A-04/16	20	16	-	4	68	Al	CC 3
SVTS A 04-U-A-00/46	46	46	-	-	81	Al	CC 3
SVTS A 04-U-A-00/56	56	56	-	-	94	Al	CC 4
SVTS A 04-U-A-04/44	48	44	4	-	96	Al	CC 3
SVTS A 04-U-A-04/36	40	36	-	4	94	Al	CC 3

+NEW

Ethernet option*

Model	Number of circuits			L	Housing	Color code
	Total	Signals 2A	Ethernet			
SVTS A 04 -U-A-00/24-...-E1M	29	24	100BaseT	60	Al	Contact factory
SVTS A 04 -U-A-00/30-...-E1M	35	30	100BaseT	68	Al	Contact factory
SVTS A 04 -U-A-00/40-...-E1M	45	40	100BaseT	81	Al	Contact factory
SVTS A 04 -U-A-00/50-...-E1M	55	50	100BaseT	94	Al	Contact factory
SVTS A 04 -U-A-00/18-...-E1G	27	18	1000BaseT	60	Al	Contact factory
SVTS A 04 -U-A-00/24-...-E1G	33	24	1000BaseT	68	Al	Contact factory
SVTS A 04 -U-A-00/34-...-E1G	43	34	1000BaseT	81	Al	Contact factory
SVTS A 04 -U-A-00/44-...-E1G	53	44	1000BaseT	94	Al	Contact factory

*RJ 45 connectors included

All dimensions in millimeters, unless otherwise specified

SVTS A Series

High current capsule Slip Rings



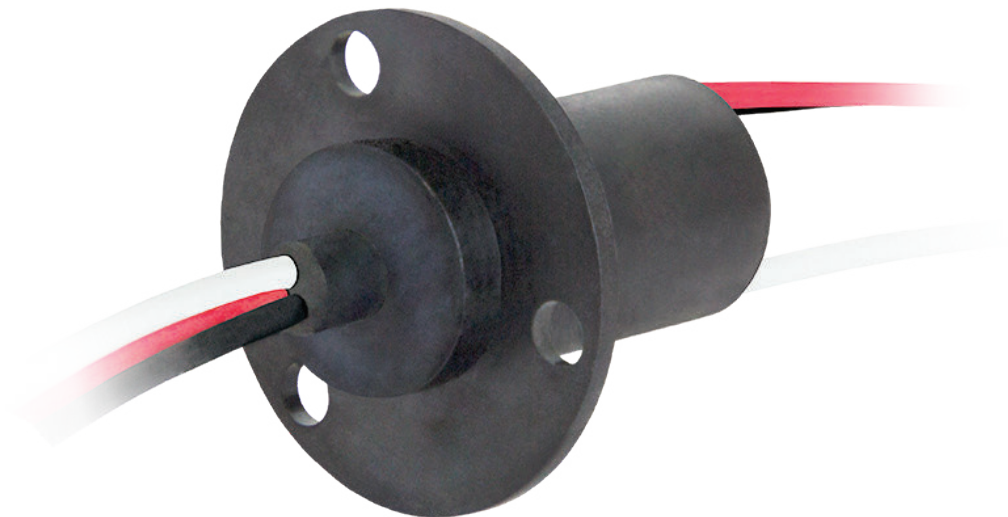
Cost effective



High power



Compact



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 grade¹ □ Flange type ☆ Power circuits ○ Signal circuits
 ◇ Cable length (brush side) ◆ Cable length (ring side) △ Temperature range² ☆ Special options³

¹ Only IP51 [S]

² Standard [ST]; Extended [ET]

³ 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; Alluminium
Contact	Gold-gold
Temperature	-20°C to +80°C (-40°C as option)
Protection	IP51
Expected lifetime	10 ⁷ revolutions (depending on speed, environmental conditions and size)

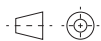
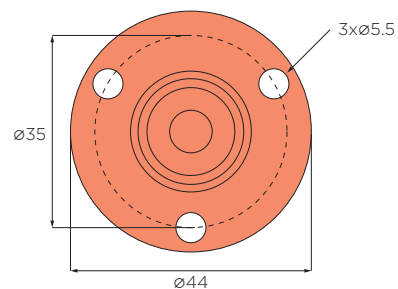
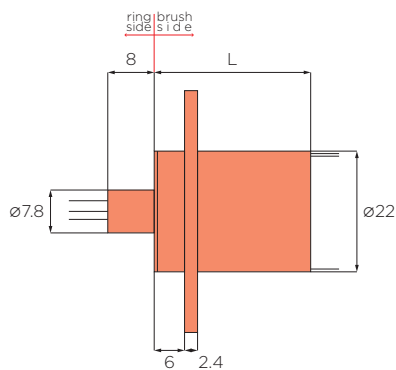
Combinations

Electric	Fluidic (combined solutions)
Power	Air
	Oil
	Water

Customizations

Cables	Mechanical design	Flange
Materials		

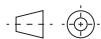
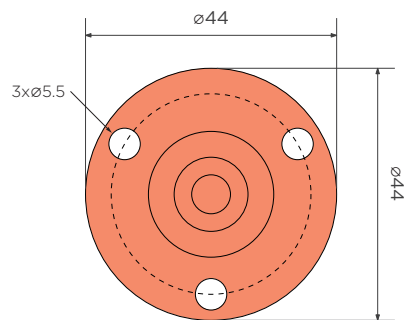
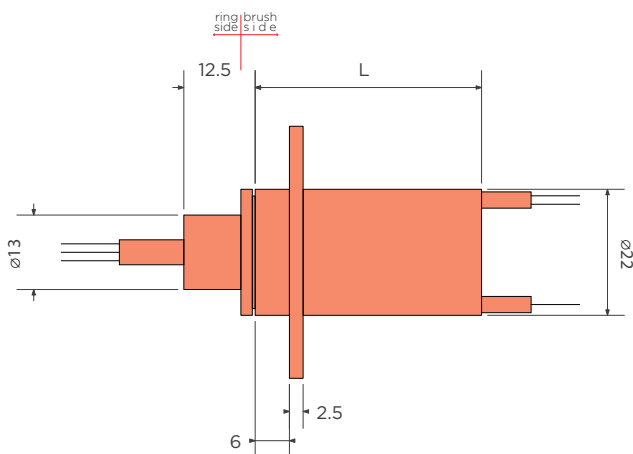
SVTS A 05



See page 28 for different flange options
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits					L	Housing	Color code p. 82
	Total	Power						
		4A	8A	10A	20A			
SVTS A 05-S-A-03/00-...-001	3	3	-	-	-	21	ABS	CC 9
SVTS A 05-S-A-03/00-...-002	3	-	3	-	-	29	ABS	CC 9
SVTS A 05-S-A-03/00-...-003	3	-	-	3	-	35	ABS	CC 9
SVTS A 05-S-A-03/00-...-004	3	-	-	-	3	43	ABS	CC 9

IP65 option



See page 28 for different flange options
Custom cable length increase possible as multiples of 250mm

Model	Number of circuits					L	Housing	Color code p. 82
	Total	Power						
		4A	8A	10A	20A			
SVTS A 05-U-A-03/00-...-001	3	3	-	-	-	28	Al	CC 9
SVTS A 05-U-A-03/00-...-002	3	-	3	-	-	36	Al	CC 9
SVTS A 05-U-A-03/00-...-003	3	-	-	3	-	42	Al	CC 9
SVTS A 05-U-A-03/00-...-004	3	-	-	-	3	50	Al	CC 9

All dimensions in millimeters, unless otherwise specified

SVTS A Series

Radio frequency capsule Slip Rings



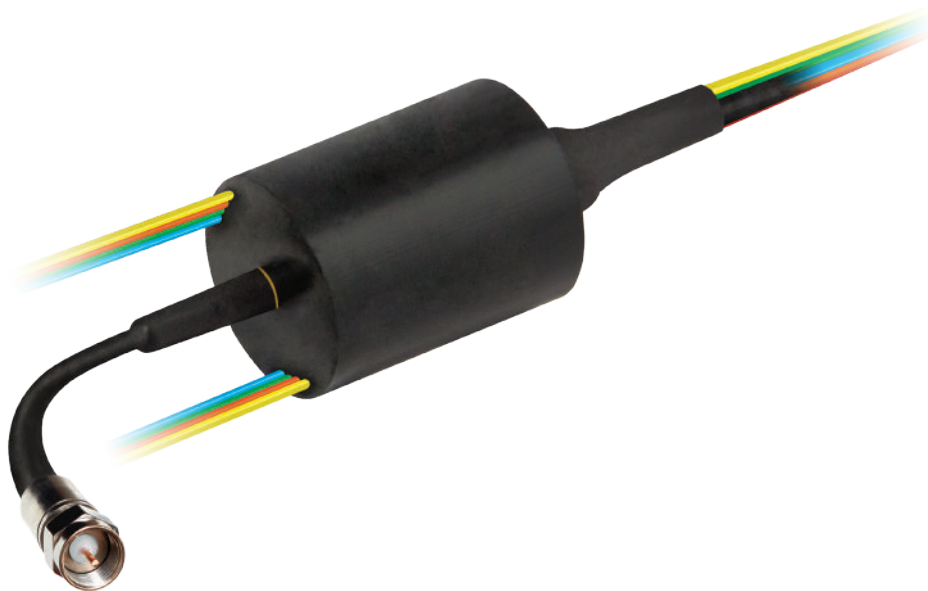
Hi-def video transmission



High circuit density



Compact



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 grade¹ □ Flange type ☆ Power circuits ○ Signal circuits

◇ Cable length (brush side) ☆ Cable length (ring side) △ Temperature range² ☆ Special options³

¹ Only IP51 [S]

² Standard [ST]; Extended [ET]

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

Features

Current	2A: AWG26
Voltage	240 VDC / 240 VAC
Cables	Silver plated / PTFE insulated / colour coded RG174, RG136, RG178, RG179
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	100 rpm
Bearings	Miniature high-precision stainless steel ball bearings
Housing	ABS
Contact	Gold-gold
Temperature	-20°C to +80°C (-40°C as option)
Protection	IP51
Connector	MMCX, SMA, SMB, MCX, BNC
Expected lifetime	3x10 ⁶ revolutions (depending on speed, environmental conditions and size)

Combinations

Electric

Signals

Video

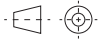
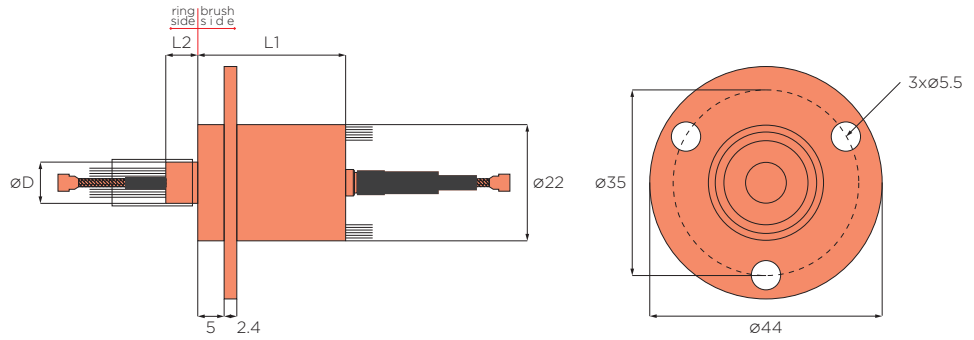
Customizations

Cables
Materials

Mechanical design

Flange

SVTS A 06

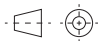
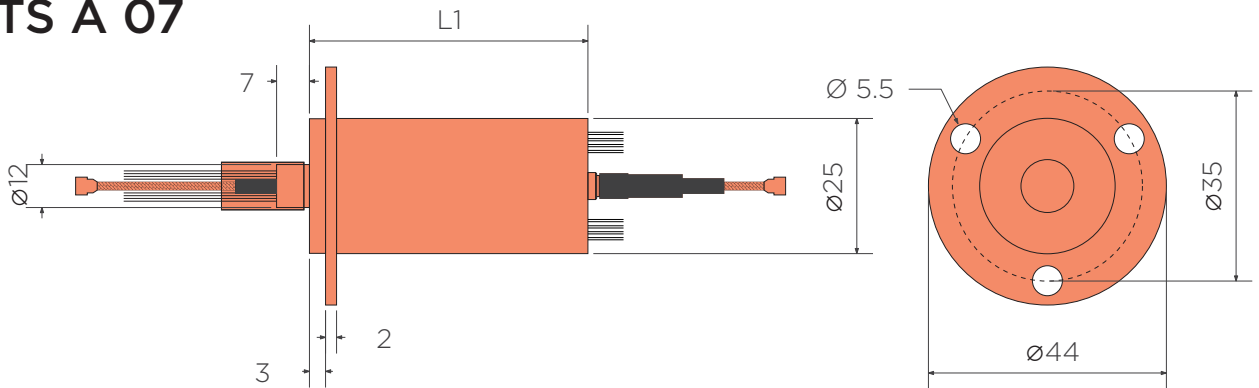


See page 28 for different flange options
 Custom cable length increase possible as multiples of 250mm

Model	Number of circuits Signals	Dimensions			Housing	Color code p. 82
		D	L1	L2		
	2A					
SVTS A 06-S-A-00/08	8	8	24	6	ABS	CC 1
SVTS A 06-S-A-00/12	12	8	28	6	ABS	CC 1
SVTS A 06-S-A-00/18	18	8.8	38	6.8	ABS	CC 1
SVTS A 06-S-A-00/24	24	12	43	8.2	ABS	CC 1

+NEW

SVTS A 07

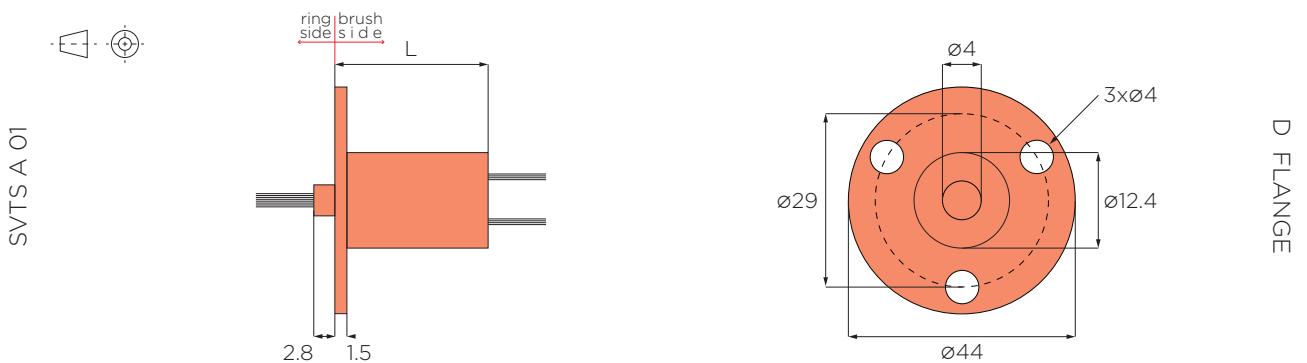
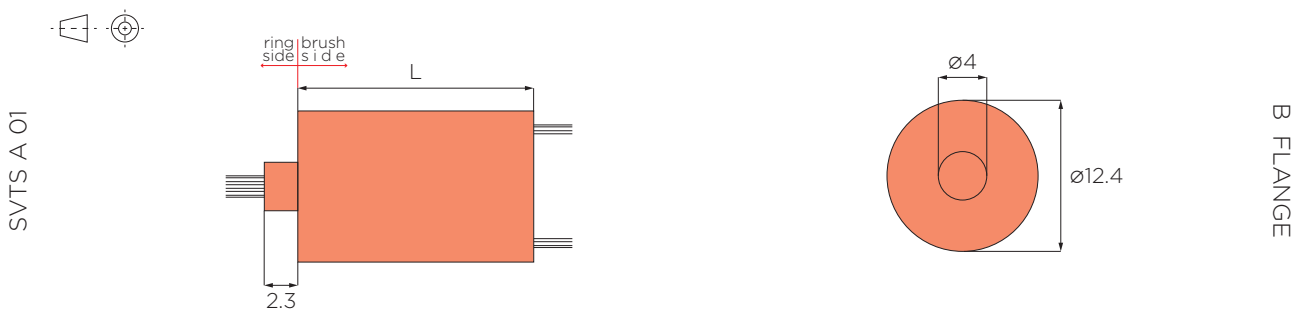
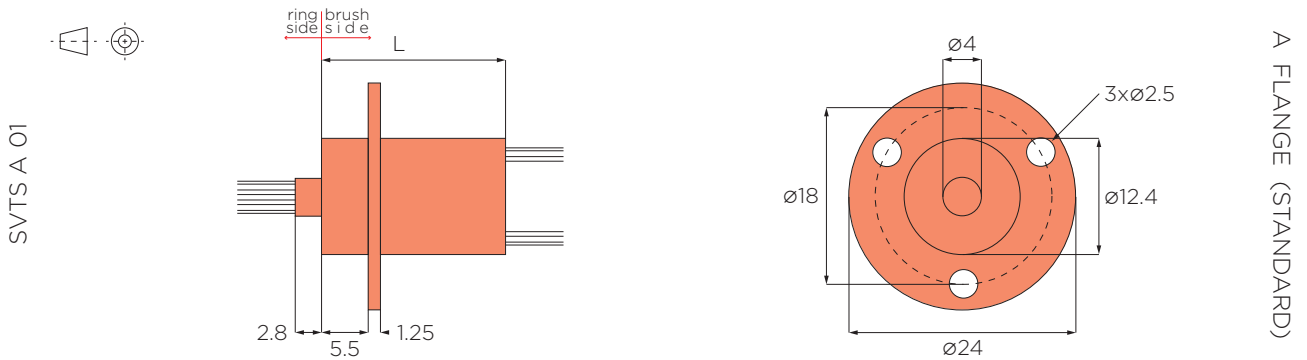


See page 28 for different flange options
 Custom cable length increase possible as multiples of 250mm

Model	Number of circuits Signals	L1	Housing	Color code p. 82
SVTS A 07-S-A-00/30	30	51.7	AI	CC 3
SVTS A 07-S-A-00/36	36	64	AI	CC 3

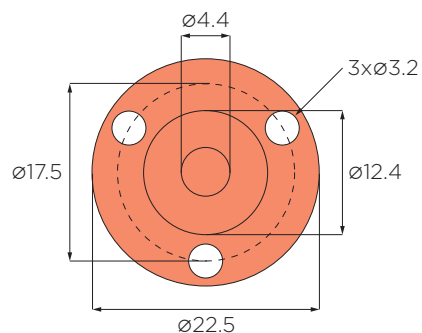
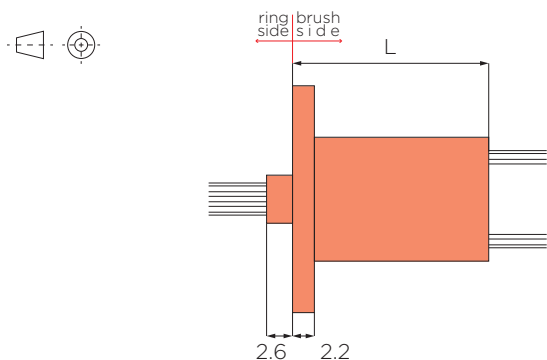
All dimensions in millimeters, unless otherwise specified

Flange types



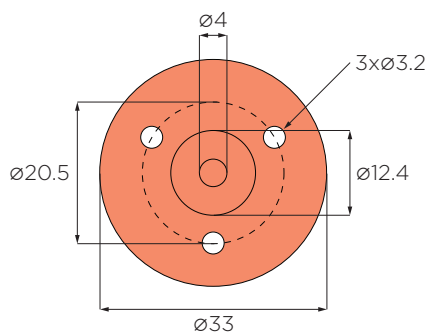
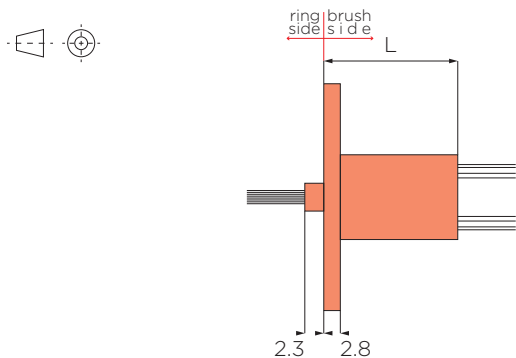
All dimensions in millimeters, unless otherwise specified

SVTS A 01



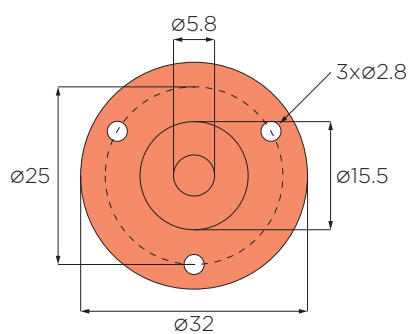
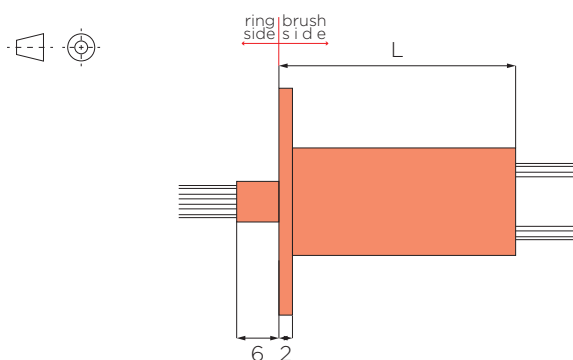
E FLANGE

SVTS A 01



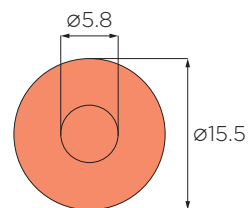
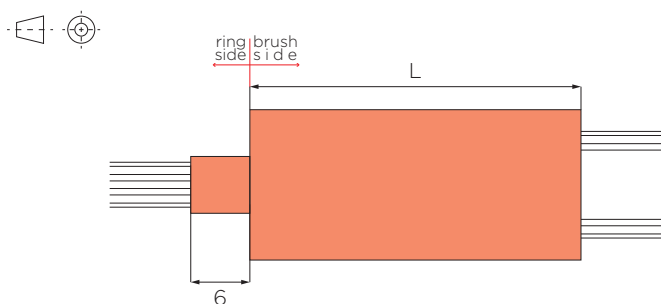
F FLANGE

SVTS A 02



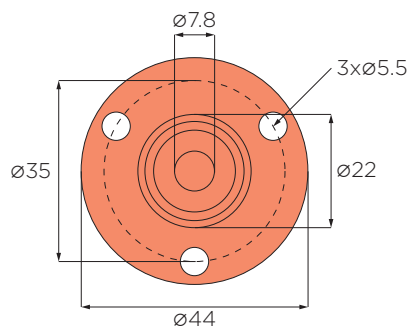
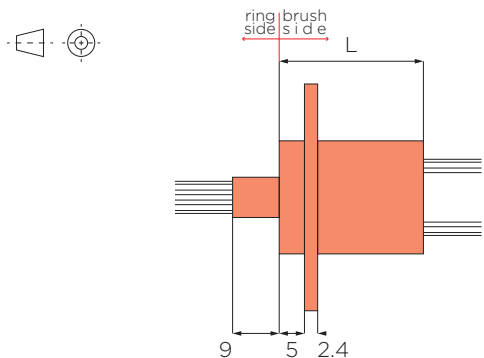
A FLANGE (STANDARD)

SVTS A 02



B FLANGE

SVTS A 03 | SVTS A 06

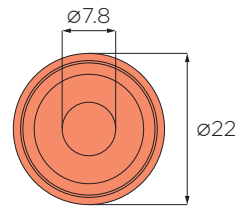
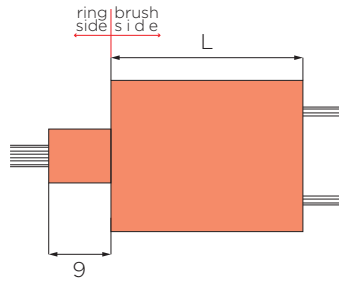


A FLANGE (STANDARD)

All dimensions in millimeters, unless otherwise specified

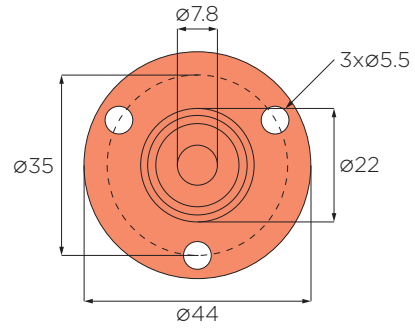
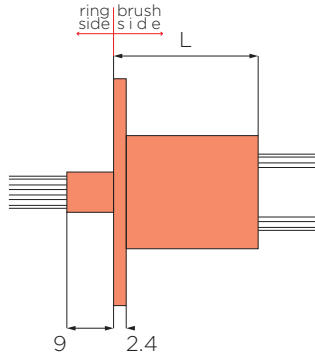
Specifications subject to change.

SVTSA A 03 | SVTSA A 06



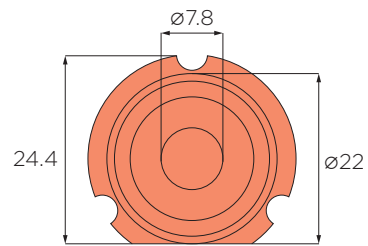
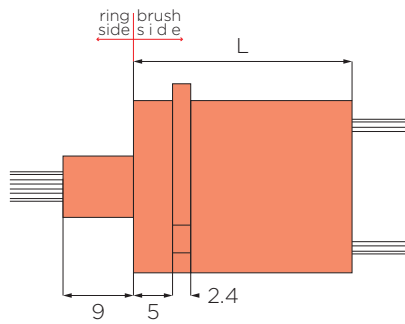
B FLANGE

SVTSA A 03 | SVTSA A 06



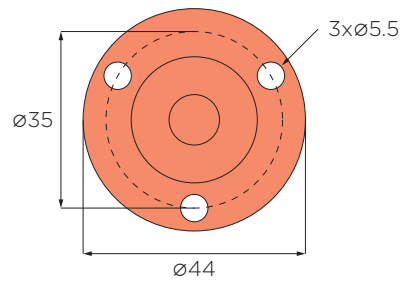
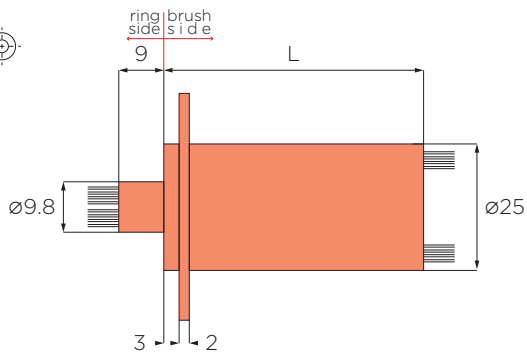
C FLANGE

SVTSA A 03 | SVTSA A 06



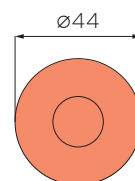
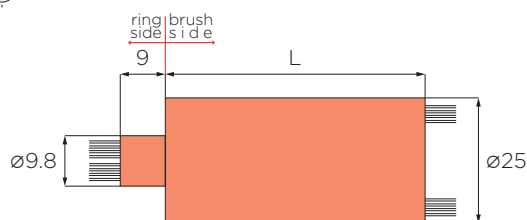
D FLANGE

SVTSA A 04 | SVTSA A 07



A FLANGE (STANDARD)

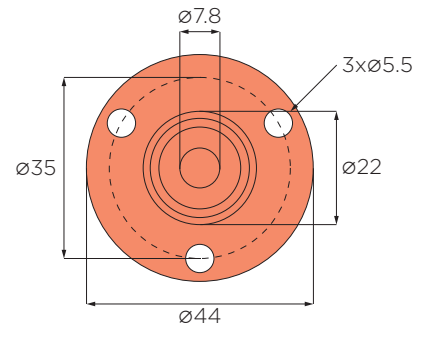
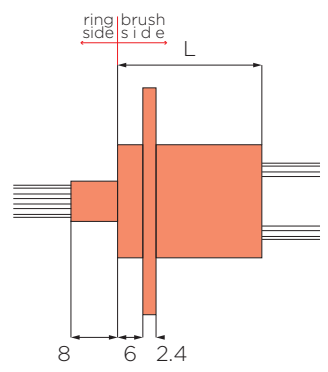
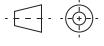
SVTSA A 04 | SVTSA A 07



B FLANGE

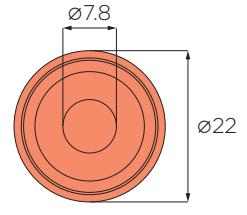
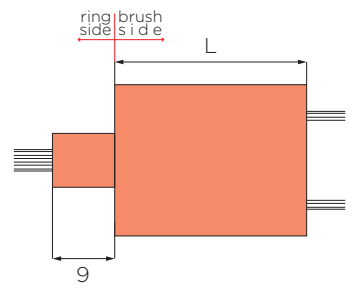
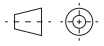
All dimensions in millimeters, unless otherwise specified

SVTS A 05



A FLANGE (STANDARD)

SVTS A 05



B FLANGE