SVTS C Series

Through-bore Slip Rings

Many customisations | Through-bore | 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	Machine tools
Automatic machines	Rotary tables
Filling machines	Robots
Capping machines	Palletisers
Labelling machines	Medical / pharmaceutical
Converting machines	Cable reels

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

C 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]; IP54 [T]; IP65 [U]

[2] Standard [ST]; Extended [ET]

[3] Pneumatic ⌀6mm [0P1]; pneumatic ⌀10mm [0P2]; Ethernet 100BaseT [E1M]; Ethernet 1000BaseT [E1G]

Features

Current	2A: AWG26 5A: AWG22 15A: AWG14 20A:AWG14
Voltage	
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*
Dielectric strength	
Power	1500 VAC @ 60Hz @ 60 sec
Signals	500 VAC @ 60Hz @ 60 sec
Insulation resistance	
Power	> 1000 MΩ / 500 VDC
Signals	> 500 MΩ / 500 VDC
Dynamic contact resistance	< 10 mΩ
Nominal speed	up to 500 rpm (others on request)
Bearings	Steel
Housing	ABS; Alluminium
Temperature	-20°C / +80°C (-40°C as option)
Protection	IP51 (IP54 and IP65 as option)
Expected lifetime	10^8 revolutions** (depending on speed, environmental conditions and size)

*SVTS C 01, SVTS C 02: 250mm **SVTS C01, SVTS C 02: 10^7 revolutions

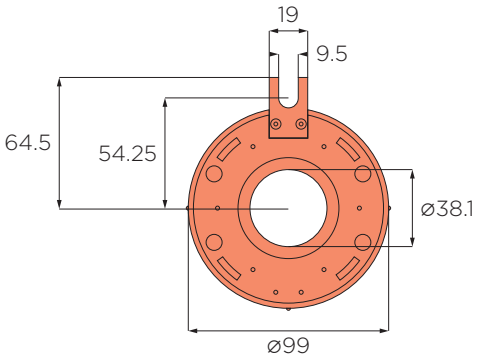
Combinations

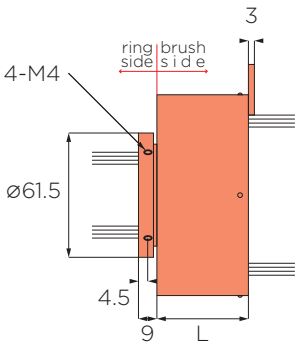
Electric	Fieldbus	Fluidic (combined solutions)
Signals	Ethernet	Air
	Profinet	Oil
	Canbus	Gas
	RS 232	Water

Customizations

Cables	Mechanical design	Flange
Materials	Treatments	Cable exits

SVTS C 05





Custom cable length increase possible as multiples of 500mm

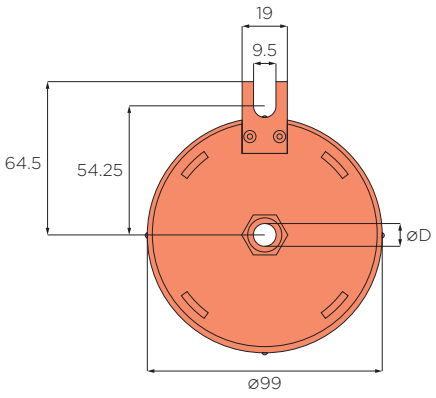
Model	Number of circuits			*L*		Color code	
	Total	Power 15A	Signals 2A	IP51	IP65	IP51 p. 82	IP65
SVTS C 05-X-A-06/00	6	6	-	45	65	CC 5	CC 7
SVTS C 05-X-A-00/12	12	-	12	45	65	CC 5	CC 7
SVTS C 05-X-A-12/00	12	12	-	69	89	CC 5	CC 7
SVTS C 05-X-A-06/12	18	6	12	69	89	CC 5	CC 7
SVTS C 05-X-A-00/24	24	-	24	69	89	CC 5	CC 7
SVTS C 05-X-A-18/00	18	18	-	93	113	CC 5	CC 7
SVTS C 05-X-A-12/12	24	12	12	93	113	CC 5	CC 7
SVTS C 05-X-A-06/24	30	6	24	93	113	CC 5	CC 7
SVTS C 05-X-A-00/36	36	-	36	93	113	CC 5	CC 7
SVTS C 05-X-A-24/00	24	24	-	117	137	CC 5	CC 7
SVTS C 05-X-A-18/12	30	18	12	117	137	CC 5	CC 7
SVTS C 05-X-A-12/24	36	12	24	117	137	CC 5	CC 7
SVTS C 05-X-A-06/36	42	6	36	117	137	CC 5	CC 7
SVTS C 05-X-A-00/48	48	-	48	117	137	CC 5	CC 7

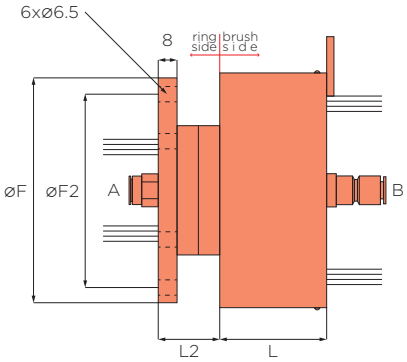
Ethernet option*

Model	Number of circuits				*L*		Wiring color code	
	Total	Power 15A	Signal 2A	Ethernet	IP51	IP65	IP51 p. 82	IP65
SVTS C 05-x-A-00/00-...-E1M	5	-	-	100BaseT	45	65	CC 5	CC 7
SVTS C 05-x-A-06/00-...-E1M	11	6	-	100BaseT	69	89	CC 5	CC 7
SVTS C 05-x-A-00/12-...-E1M	17	-	12	100BaseT	69	89	CC 5	CC 7
SVTS C 05-x-A-12/00-...-E1M	17	12	-	100BaseT	93	113	CC 5	CC 7
SVTS C 05-x-A-06/12-...-E1M	23	6	12	100BaseT	93	113	CC 5	CC 7
SVTS C 05-x-A-00/24-...-E1M	29	-	24	100BaseT	93	113	CC 5	CC 7
SVTS C 05-x-A-18/00-...-E1M	23	18	-	100BaseT	117.5	137.5	CC 5	CC 7
SVTS C 05-x-A-12/12-...-E1M	29	12	12	100BaseT	117.5	137.5	CC 5	CC 7
SVTS C 05-x-A-06/24-...-E1M	35	6	24	100BaseT	117.5	137.5	CC 5	CC 7
SVTS C 05-x-A-00/36-...-E1M	41	-	36	100BaseT	117.5	137.5	CC 5	CC 7
SVTS C 05-x-A-24/00-...-E1M	29	24	-	100BaseT	141	161	CC 5	CC 7
SVTS C 05-x-A-18/12-...-E1M	35	18	12	100BaseT	141	161	CC 5	CC 7
SVTS C 05-x-A-12/24-...-E1M	41	12	24	100BaseT	141	161	CC 5	CC 7
SVTS C 05-x-A-06/36-...-E1M	47	6	36	100BaseT	141	161	CC 5	CC 7
SVTS C 05-x-A-00/48-...-E1M	53	-	48	100BaseT	141	161	CC 5	CC 7
SVTS C 05-x-A-00/00-...-E1G	21	12	-	1000BaseT	69	89	CC 5	CC 7
SVTS C 05-x-A-06/00-...-E1G	15	6	-	1000BaseT	93	113	CC 5	CC 7
SVTS C 05-x-A-00/12-...-E1G	21	-	12	1000BaseT	93	113	CC 5	CC 7
SVTS C 05-x-A-12/00-...-E1G	21	12	-	1000BaseT	117.5	137.5	CC 5	CC 7
SVTS C 05-x-A-06/12-...-E1G	27	6	12	1000BaseT	117.5	137.5	CC 5	CC 7
SVTS C 05-x-A-00/24-...-E1G	33	-	24	1000BaseT	117.5	137.5	CC 5	CC 7

*CAT5e Ethernet cable and CAT6 RJ45 connectors included

Single pneumatic passage option





Custom cable length increase possible as multiples of 500mm

Model	N. of circuits			Dimensions									Color code	
	Total	Power	Signal	*L*		*L2*		*D*	*F*		*F2*		IP51	IP65
		15A	2A	IP51	IP65	IP51	IP65		IP 51	IP65	IP51	IP65	p. 82	
SVTS C 05-X-A-06/00-...-0P1	6	6	-	45	65	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/12-...-0P1	12	-	12	45	65	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-12/00-...-0P1	12	12	-	69	89	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-06/12-...-0P1	18	6	12	69	89	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/24-...-0P1	24	-	24	69	89	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-18/00-...-0P1	18	18	-	93	113	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-12/12-...-0P1	24	12	12	93	113	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-06/24-...-0P1	30	6	24	93	113	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/36-...-0P1	36	0	36	93	113	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-24/00-...-0P1	24	24	-	117.5	137.5	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-18/12-...-0P1	30	18	12	117.5	137.5	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-12/24-...-0P1	36	12	24	117.5	137.5	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-06/36-...-0P1	42	6	36	117.5	137.5	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/48-...-0P1	48	-	48	117.5	137.5	26	14	6	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-06/00-...-0P2	6	6	-	45	65	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/12-...-0P1	12	-	12	45	65	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-12/00-...-0P2	12	12	-	69	89	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-06/12-...-0P2	18	6	12	69	89	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/24-...-0P2	24	-	24	69	89	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-18/00-...-0P2	18	18	-	93	113	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-12/12-...-0P2	24	12	12	93	113	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-06/24-...-0P2	30	6	24	93	113	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/36-...-0P2	36	-	36	93	113	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-24/00-...-0P2	24	24	-	117.5	137.5	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-18/12-...-0P2	30	18	12	117.5	137.5	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-12/24-...-0P2	36	12	24	117.5	137.5	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-06/36-...-0P2	42	6	36	117.5	137.5	26	14	10	95	130	81	116	CC 5	CC 7
SVTS C 05-X-A-00/48-...-0P2	48	-	48	117.5	137.5	26	14	10	95	130	81	116	CC 5	CC 7

All dimensions in millimeters, unless otherwise specified

CC 4

Signal				
	Shrink Tube🟥	Shrink Tube🟦	Shrink Tube🟩	Shrink Tube⬛
Color	Ring no.	Ring no.	Ring no.	Ring no.
RD🔴	1	2	3	4
GN🟢	5	6	7	8
YE🟡	9	10	11	12
VT🟣	13	14	15	16
GY⚪	17	18	19	20
BK⚫	21	22	23	24
BU🔵	25	26	27	28
DBU🔵	29	30	31	32
BN🟤	33	34	35	36
OG🟠	37	38	39	40
WH⚪	41	42	43	44
KH🟤	45	46	47	48
WH-RD⚪🔴	49	50	51	52
WH-BK⚪⚫	53	54	55	56

CC 5

Power	
Color	Ring no.
RD🔴	1
YE🟡	2
BK⚫	3
BU🔵	4
GN🟢	5
WH⚪	6
VT🟣	7
GY⚪	8
BN🟤	9
OG🟠	10
DBU🔵	11
KH🟤	12

and repeat

Signal	
Color	Ring no.
RD🔴	1
YE🟡	2
BK⚫	3
BU🔵	4
GN🟢	5
WH⚪	6
VT🟣	7
GY⚪	8
BN🟤	9
OG🟠	10
DBU🔵	11
KH🟤	12

and repeat

CC 6

Power	
Color	Ring no.
RD🔴	1
YE🟡	2
BK⚫	3
BU🔵	4
GN🟢	5
WH⚪	6
VT🟣	7
GY⚪	8
BN🟤	9
OG🟠	10
DBU🔵	11
KH🟤	12

and repeat

Signal	
Color	Ring no.
RD🔴	1
YE🟡	2
BK⚫	3
BU🔵	4
GN🟢	5
WH⚪	6
VT🟣	7
GY⚪	8
BN🟤	9
OG🟠	10

and repeat

Color code

CC 7

Power	
Color	Ring no.
RD	1
YE	2
BK	3
BU	4
GN	5
WH	6

and repeat

Signal	
Color	Ring no.
RD	1
YE	2
BK	3
BU	4
GN	5
WH	6
VT	7
GY	8
BN	9
OG	10
DBU	11
KH	12

and repeat

CC 8

Power	
Color	Ring no.
RD	1
YE	2
BK	3
BU	4
GN	5
WH	6
VT	7
GY	8
BN	9
OG	10

and repeat

Signal	
Color	Ring no.
RD	1
YE	2
BK	3
BU	4
GN	5
WH	6

and repeat

CC 9

Power	
Color	Ring no.
RD	1
YE	2
BK	3

and repeat

Hello,
how can I help you?

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