

# SRT石油海洋专用滑环

## SRT Marine and Oilfield Slip Ring

### 特点 Features

■ 特殊耐高压5000V结构，能够满足海上大功率设备电力传输需求。

Special structure for high voltage 5000V can transmit high power on the sea

■ 全不锈钢壳体，以及优异的密封性能，使得滑环具备优良的耐候性,最高防护等级可达IP67。

Stainless steel material and the good sealing makes slip ring can work in harsh oilfield conditions, protection level can be up to IP67

■ 每环多点接触，低接触压力，低噪音和低接触磨损，超长的使用寿命。

Multi contact point in each circuit, low contact pressure, low noise, low contact wear,; extremely long life time

■ 可内置编码器和光纤旋转连接器。

These designs can be integrated with other products such as encoder and fiber optical rotary joints

### 可选项Options

- 额定电流、电压 Current / Voltage
- 额定速度 Operating speed
- 工作温度 Operating temperature
- 路数 Number of rings
- 外壳材料及颜色 Housing material and color
- 外型尺寸 Outline dimension
- 专用导线 Special lead wire
- 导线出口方向 Lead exit location
- 导线长度 Lead length
- 端子类型 Terminal type

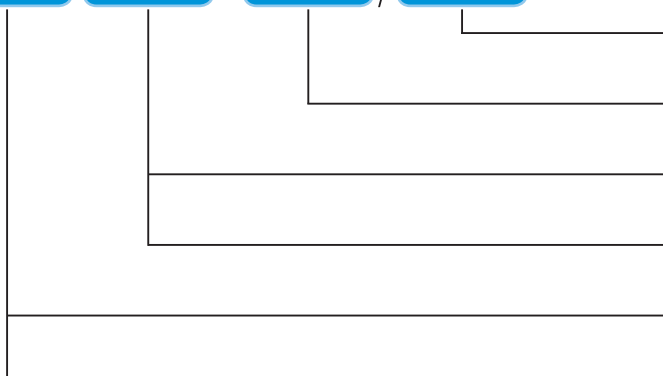
### 典型应用 Typical Application

- 船用吊装机械  
Marine lifting machinery
- 石油钻井平台、船舶机械  
Oil drilling platform, marine machinery

### 型号选用说明 Model explanation

#### SRT 标准滑环系列 SRT Standard Slip Ring

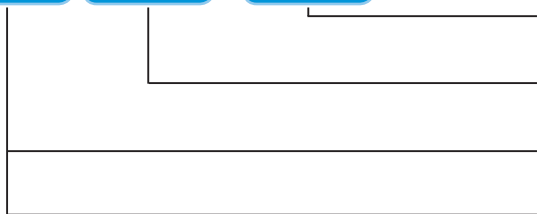
SRT 20 87 - 6P / 12S



- 12S代表12路信号通道  
12: 12 channels for signal (5A/channel)
- 6P代表6路功率通道  
6P: 6 channels for power  
(P for 10A; P1 for 15A)
- 20代表出线孔孔径  
20: Rotor lead exit diameter
- 87代表外径87mm  
87: Outside diameter 87mm
- T代表特制滑环  
T: Special
- SR代表导电滑环  
SR: Slip ring

#### SRT 特制滑环系列 SRT Special Slip Ring

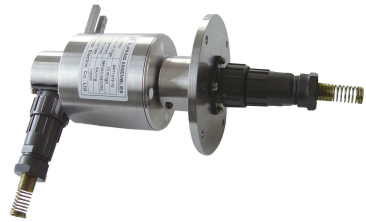
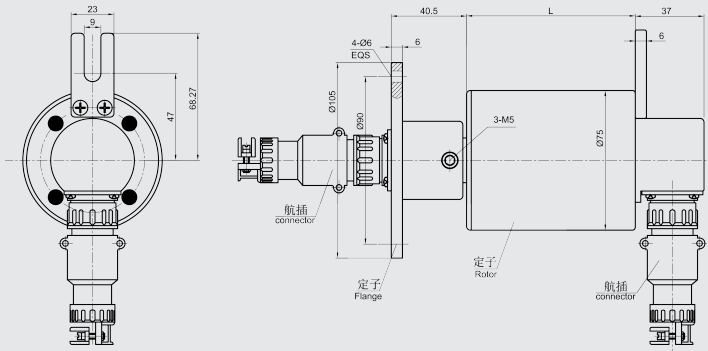
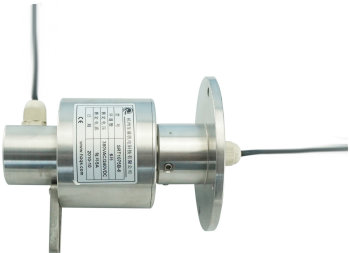
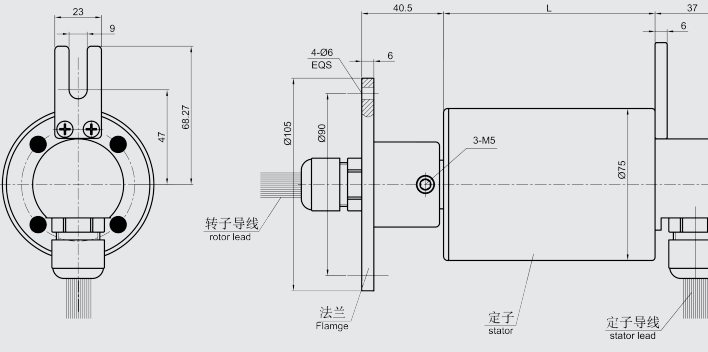
SRT 140 - 12



- 12代表12路通道 (每通道5A)  
12: 12 circuits (5A/circuit)
- 140代表主体外径140mm  
140: outside diameter 140mm
- SR代表导电滑环  
SR: slip ring
- T代表特殊系列  
T: slip rings without hole

# SRT 标准滑环系列 SRT Standard Slip Ring


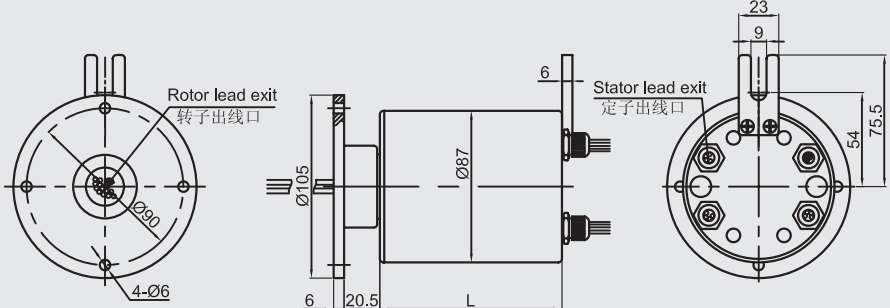
## SRT1075 系列 Series

型号 TYPE	外形尺寸 OUTLINE DIMENSION 单位UNIT (mm)
 <p>● 带航空插头(SRT1075A) with connectors</p> <p>SRT1075A</p>	 <p>Technical drawing showing outline dimensions for SRT1075A with connectors. Dimensions include: 23, 9, 47, 68.27, 40.5, 6, 37, 6, 4-Ø6 EQS, Ø105, Ø90, 3-M5, Ø75, 航插 connector, 定子 Flange, 转子 Rotor, 航插 connector.</p>
 <p>● 带导线(SRT1075B) with free leads</p> <p>SRT1075B</p>	 <p>Technical drawing showing outline dimensions for SRT1075B with free leads. Dimensions include: 23, 9, 47, 68.27, 40.5, 6, 37, 6, 4-Ø6 EQS, Ø105, Ø90, 3-M5, Ø75, 法兰 Flange, 定子 stator, 转子导线 rotor lead, 定子导线 stator lead.</p>

$L=48.98+2.32 \times n$  n: 代表路数 n: number of circuits

说明: 转子法兰可以按客户需求定制 Note: different flange type can be made as request

## SRT2087 系列 Series

型号 TYPE	外形尺寸 OUTLINE DIMENSION 单位UNIT (mm)
	 <p>Technical drawing showing outline dimensions for SRT2087. Dimensions include: 23, 9, 6, 54, 75.5, 4-Ø6, Ø90, Ø105, 6, 20.5, L, Rotor lead exit 转子出线口, Stator lead exit 定子出线口.</p>

### 机械技术指标 Mechanical data

参数 Specification	数值 Values
额定转速 Rated Speed	0~500 rpm
工作温度 Working temperature	-20°C ~ +80°C
工作湿度 Operating Humidity	60%RH 或更高 60%RH or higher
接触材料 Contact Material	贵金属 Precious Metals
结构材料 Housing material	不锈钢Stainless steel
防护等级 Protection level	IP65

## SRT1075系列 电气技术指标 Electrical data

参数 Specification	数值 Values
路数 No. of Circuits	6、12、18、24、30、36、42、48
额定电压 Rated Voltage	240VAC / VDC
额定电流 Rated Current	5A/路 5A/ring
绝缘电阻 Insulation Resistance	≥500MΩ/500VDC
绝缘体强度 Dielectric Strength	500VAC@50Hz, 60s
动态电阻变化值 Electrical Noise	≤10mΩ
连接器 Connectors	采用防水、镀金插针，或采用导线 (Use waterproof, gilded pin, or wires)


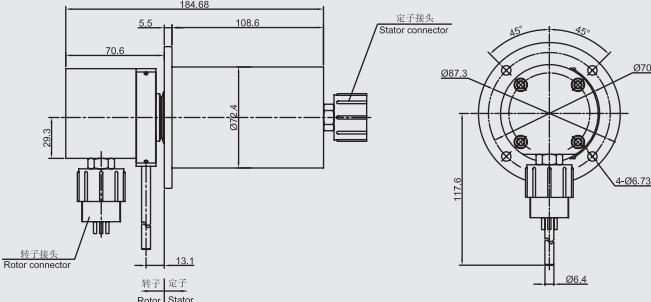
## SRT2087系列 电气技术指标 Electrical data

参数 Specification	数值 Values	
	功率 Power	信号 Signal
路数 No. of Circuits	6、12、18、24、30、36、42、48	
额定电压 Rated Voltage	380VAC	240VAC/ 240VDC
额定电流 Rated Current	10A/路	2A/路
绝缘电阻 Insulation Resistance	≥1000MΩ/ 500VDC	≥500MΩ/ 500VDC
绝缘体强度 Dielectric Strength	500VAC@50Hz, 60s	500VAC@50Hz, 60s
动态电阻变化值 Electrical Noise	≤10mΩ	≤10mΩ
导线规格 Lead Size	AWG16镀锡铁氟龙绝缘或PVC绝缘 AWG16 tin plated, PTFE insulated or PVC	AWG26 镀银铁氟龙绝缘 AWG26 silver plated, PTFE insulated
导线长度 Lead Length	500mm或根据客户要求提供 500mm(or as request)	


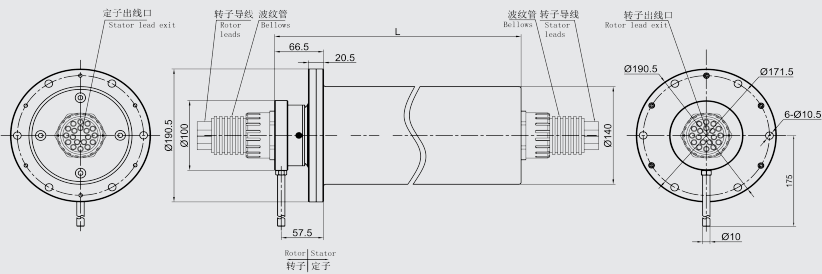
导线色码表见第28页 Lead Color Code: P28

## SRT 特制滑环系列 SRT Special Slip Ring


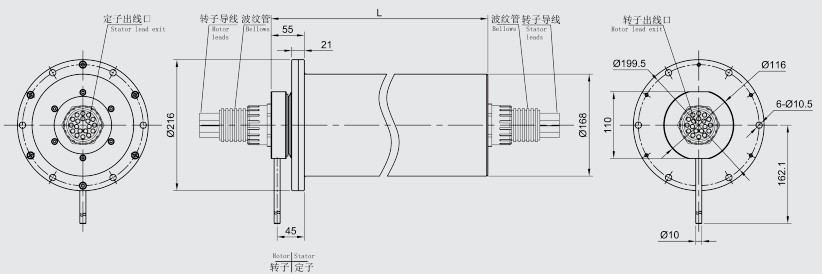
### SRT1072F 系列 Series

型号 TYPE	外形尺寸 OUTLINE DIMENSION 单位UNIT (mm)
 <p>SRT1072F</p>	 <p>Technical drawing showing dimensions and labels for the SRT1072F slip ring. Dimensions include 184.68, 108.6, 70.6, 5.5, 20.3, 13.1, 117.6, 4-Ø6.73, Ø70, Ø87.3, and Ø6.4. Labels include 定子接头 (Stator connector), 转子接头 (Rotor connector), 转子 (Rotor), and 定子 (Stator).</p>

## SRT140F 系列 Series

型号 TYPE	外形尺寸 OUTLINE DIMENSION 单位UNIT (mm)
	
SRT140F	

## SRT168F 系列 Series

型号 TYPE	外形尺寸 OUTLINE DIMENSION 单位UNIT (mm)
	
SRT168F	

## 电气技术指标 Electrical data

参数 Specification	数值 Values		
型号 Type	SRT1072F	SRT140F	SRT168F
额定电压 Rated Voltage	600VAC / VDC	3300VAC/ VDC	5000VAC / VDC
额定电流 Rated Current	10A/路 10A/ring	20A/路 20A/ring	
绝缘体强度 Dielectric Strength	$\geq 1000\text{VAC}@50\text{Hz}, 60\text{s}$	$\geq 10000\text{VAC}@50\text{Hz}, 60\text{s}$	$\geq 15000\text{VAC}@50\text{Hz}, 60\text{s}$
绝缘电阻 Insulation Resistance	$\geq 800\text{M}\Omega/1000\text{VDC}$	$\geq 1000\text{M}\Omega/5000\text{VDC}$	
动态电阻变化值 Electrical Noise	$\leq 10\text{m}\Omega$		

## 机械技术指标 Mechanical data

参数 Specification	数值 Values		
型号 Type	SRT1072F	SRT140F	SRT168F
额定转速 Operating Speed	250 rpm	100 rpm	
工作温度 Operating Temperature	$-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$		
工作湿度 Operating Humidity	$\leq 95\%\text{RH}$		
接触材料 Contact Material	贵金属 Precious metal		
壳体材料 Housing Material	304或316不锈钢 Stainless steel 304 or stainless steel 316		
防护等级 Protection level	最高可达IP67 Up to IP67		