



SLIP RING AND CABLE REEL

- **EXPLOSION PROOF SERIES**
- **MARINE SERIES**
- **STEEL INDUSTRY AND EARTHMOVING MACHINERY**
- **MINING AND DRILLING**
- **INDUSTRIAL AND AUTOMATION**

2023





SPM Special Machine is a young company from Milan (Italy) specialized in slip ring and cable reel.

The strength of the SPM is the twenty-year experience of Team working in different industrial sectors (mining, marine and industrial, automotive and testing).

Thanks to their creative ability, the team over the years has revised all the products on the market in terms of technology, quality, reliability and safety, differentiating themselves from competitors with extremely different and effective solutions.





Mission , Vision and Values

MISSION

- Building devices and electromechanical systems, in an innovative way and with materials of excellence. The main business objective is that all products manufactured by SPM must function reliably and safely in hazardous and harsh environments in compliance with international standards.

VISION

- Designing and building devices and electromechanical systems by focusing on customer needs, structuring together with him a vision of continuous improvement of the product and the service.

VALUES

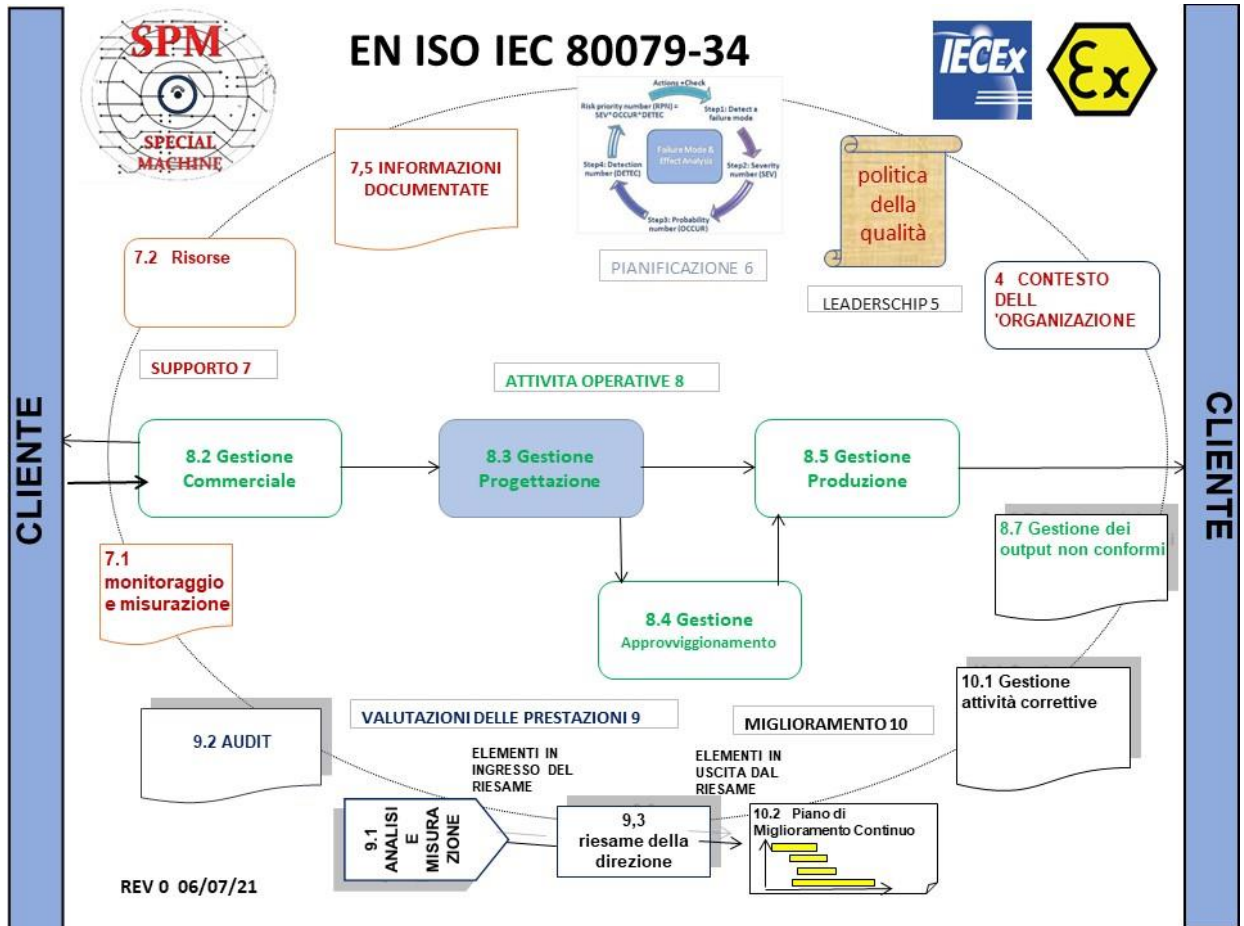
- Transparency;
- Professionalism;
- Continuous improvement;
- Customer satisfaction;
- The reliability;
- The responsibility;
- Innovation and creativity.



The Quality System and production processes

EN ISO IEC 80079-34:2018

Explosive atmospheres -- Part 34: Application of quality systems for ex product manufacture



REV 0 06/07/21





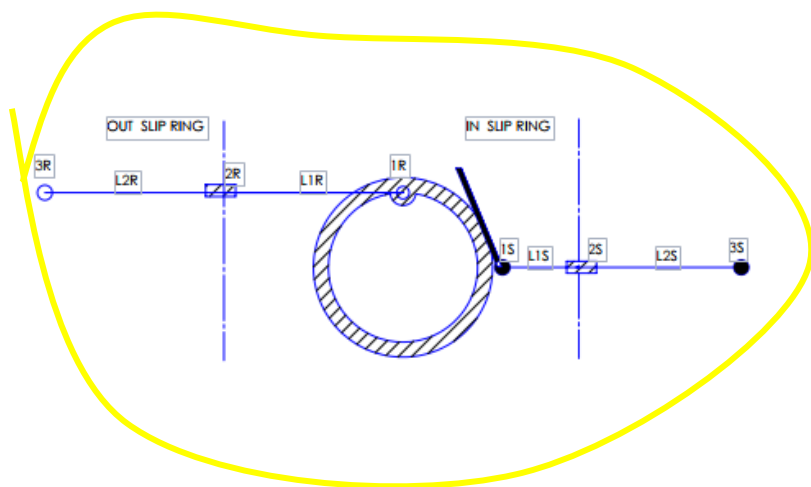
Our innovative patented electrical contact system

The leaf foil brush system is a particular brush that slides on a surface of a brass or bronze ring.

It has the function of transmitting power electricity, analog and digital signals from a fixed point (brush) to a rotating mobile one (ring) (input = ring / output = brush)

The main advantages of the system are:

- 1) Compactness and constructive simplicity;
- 2) Ease of maintenance;
- 3) Low electrical resistivity values ($0.2 < R < 6$ mohm)
- 4) Good values of the characteristic impedance of the ring / brush system
- 5) Low friction value (Good ring / brush smoothness).
- 7) Low overheating at the contact point.
- 8) Low overtemperature values of the terminals in case of failure
- 9) Rapid cooling in case of failure at the contact point





EXPLOSION PROOF SERIES



SLIP RING



SLIP RING EXPLOSION PROOF SREX150 SERIES

SLIP RING TYPE	SREX150 SERIES
Protetion Ex	Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=150 A
Max Voltage	Vn=1000 VCA
Number size	SREX151/SREX152/SREX153
ATEX SCHEME	II 2G Edb IIB T5 Gb
IECEX SCHEME	Exdb IIB T5 Gb



SLIP RING



ROTARY JOINT EXPLOSION PROOF RJEX SERIES

ROTARY JOINT	RJEX
Protetion Ex	Ex h
TYPE OF FLUID	OIL, AIR, WATER
max. pressure	500 bar
Max diameter	500 mm
Type port	G3/8- ---G2
ATEX SCHEME	II 2G Exh IIB T5 Gb



SLIP RING



SLIP RING EXPLOSION PROOF SREX300 SERIES

SLIP RING TYPE	SREX300 SERIES
Protetion Ex	Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=300 A
Max Voltage	Vn=1000 VCA
Number size	SREX301/SREX302/SREX302
ATEX SCHEME	II 2G Edb IIB T5 Gb
IECEX SCHEME	Exdb IIB T5 Gb



SLIP RING



SLIP RING EXPLOSION PROOF SREX506 SERIES

SLIP RING TYPE	SREX506 SERIES
Protetion Ex	Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=638 A
Max Voltage	Vn=24 KV
Number size	SREX506
ATEX SCHEME	II 2G Edb IIB T5 Gb
IECEX SCHEME	Exdb IIB T5 Gb



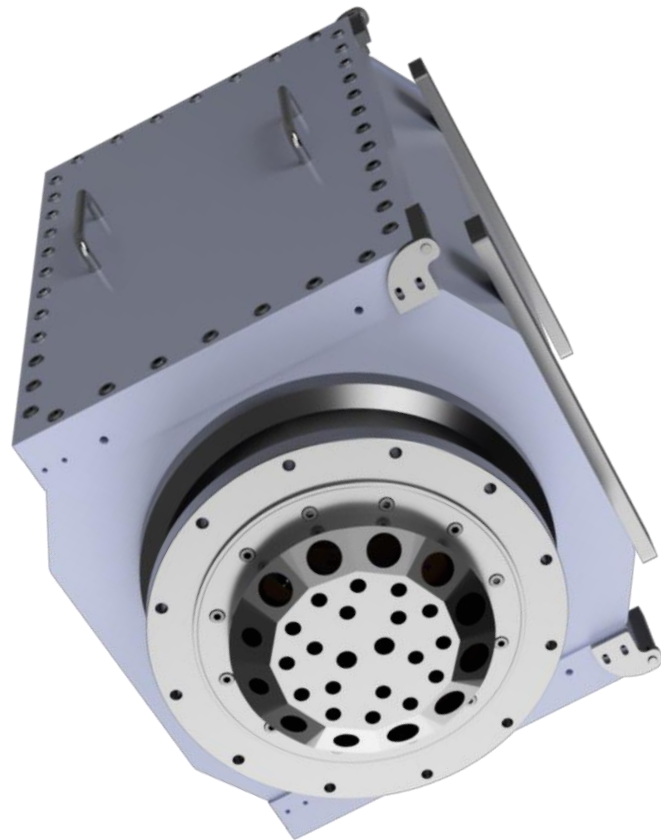
SLIP RING



**SREX690
SERIES**

SLIP RING EXPLOSION PROOF SREX690 SERIES

SLIP RING TYPE	SREX690 SERIES
Protetion Ex	Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=2000 A
Max Voltage	Vn=24 KV
Number size	SREX691,SREX692, SREX693
ATEX SCHEME	II 2G Edb IIB T5 Gb
IECEX SCHEME	Exdb IIB T5 Gb

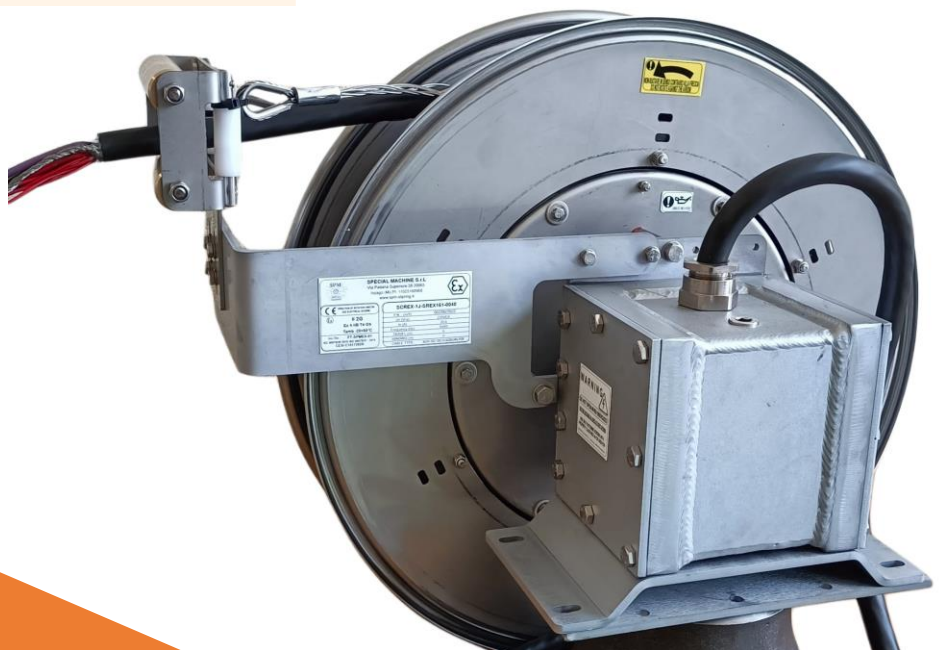


SPRING CABLE REEL



SPRING CABLE REEL EXPLOSION PROOF SCREX-A SERIES

SLIP RING TYPE	SCREX-A SERIES
Protetion Ex	Ex h / Exdb
TYPE OF RING	POWER ,AUXILIAR , SIGNAL +ROTAY SENSOR+ICLINOMETER
max. Current	In=50 A
Max Voltage	Vn=680 V
Meter max	20 mt
ATEX SCHEME	II 2G Exh IIB T5 Gb

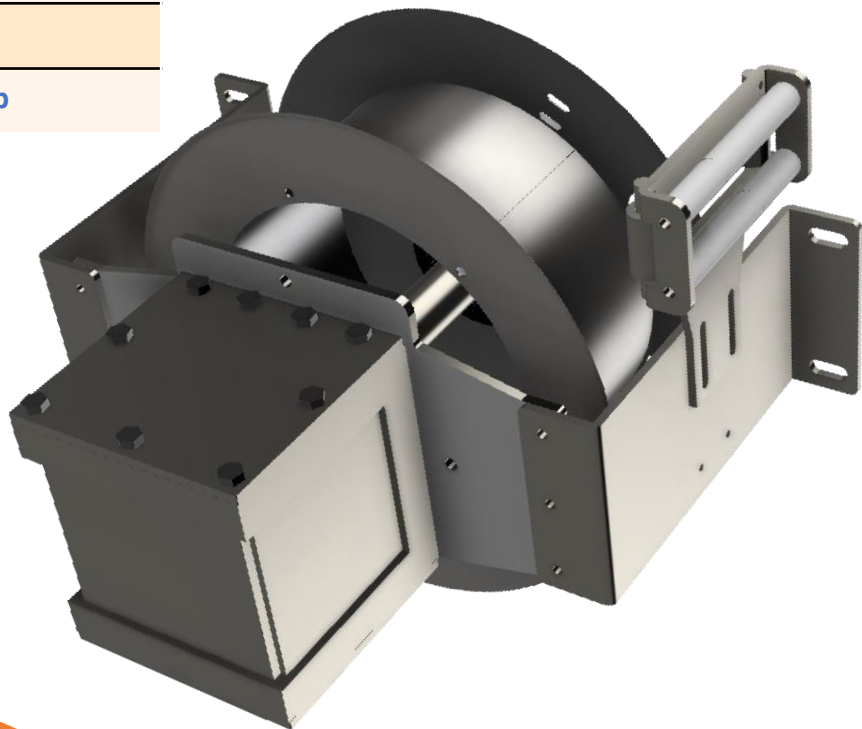


SPRING CABLE REEL



SPRING CABLE REEL EXPLOSION PROOF SCREX-B SERIES

SLIP RING TYPE	SCREX-B SERIES
Protetion Ex	Ex h / Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL +ROTAY SENSOR+ICLINOMETER
max. Current	In=50 A
Max Voltage	Vn=680 V
Meter max	20 mt
ATEX SCHEME	II 2G Exh IIB T5 Gb

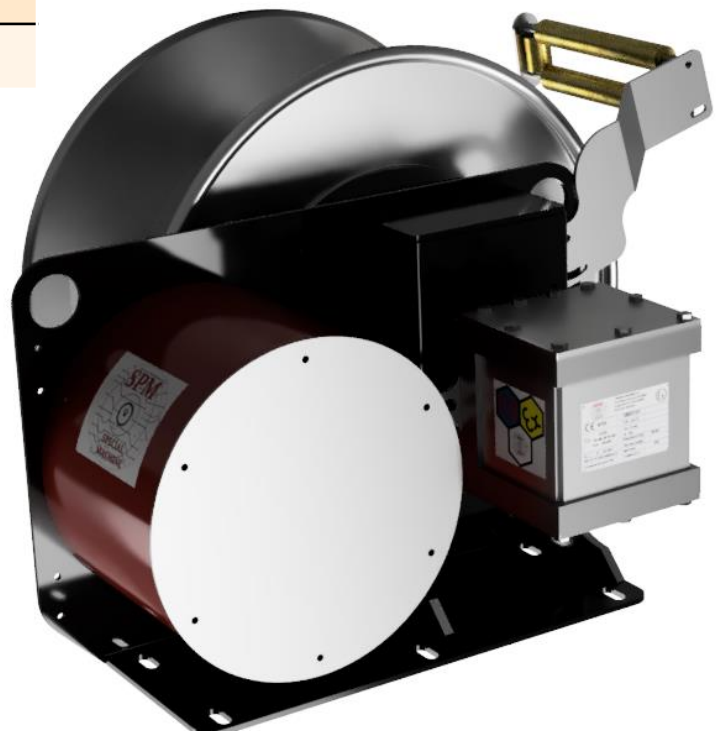


SPRING CABLE REEL



SPRING CABLE REEL EXPLOSION PROOF SCREX-SK SERIES

SLIP RING TYPE	SCREX-SK SERIES
Protetion Ex	Ex h / Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL +ROTAY SENSOR+ICLINOMETER
max. Current	In=150A
Max Voltage	Vn=680 V
Meter max	50 mt
ATEX SCHEME	II 2G Exh IIB T5 Gb



MOTOR CABLE REEL



MOTOR CABLE REEL EXPLOSION PROOF MCREX- SERIES

SLIP RING TYPE	MCREX-SERIES
Protetion Ex	Ex h / Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL +ROTAY SENSOR+ICLINOMETER
max. Current	In=150 A
Max Voltage	Vn =690 V
Meter max	200 mt
ATEX SCHEME	II 2G Exh IIB T5 Gb

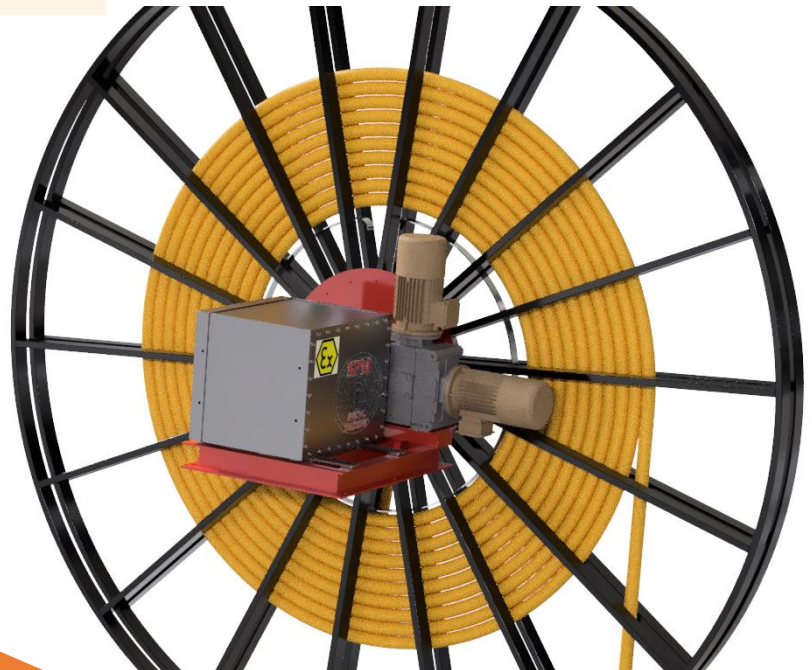


MOTOR CABLE REEL



MOTOR CABLE REEL EXPLOSION PROOF MCREX-HP SERIES

SLIP RING TYPE	MCREX-HP SERIES
Protetion Ex	Ex h / Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL +ROTAY SENSOR+ICLINOMETER
max. Current	In=640 A
Max Voltage	Vn =24kV
Meter max	400 mt
ATEX SCHEME	II 2G Exh IIB T5 Gb



MOTOR CABLE REEL



MOTOR CABLE REEL EXPLOSION PROOF MINING MCREX-MMV SERIES

SLIP RING TYPE	MCREX-MMV SERIES
Protetion Ex	Ex h / Exdb IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL +ROTAY SENSOR+ICLINOMETER
max. Current	In=640 A
Max Voltage	Vn =24kV
Meter max	500 mt
ATEX SCHEME	I M2 Exh I Mb



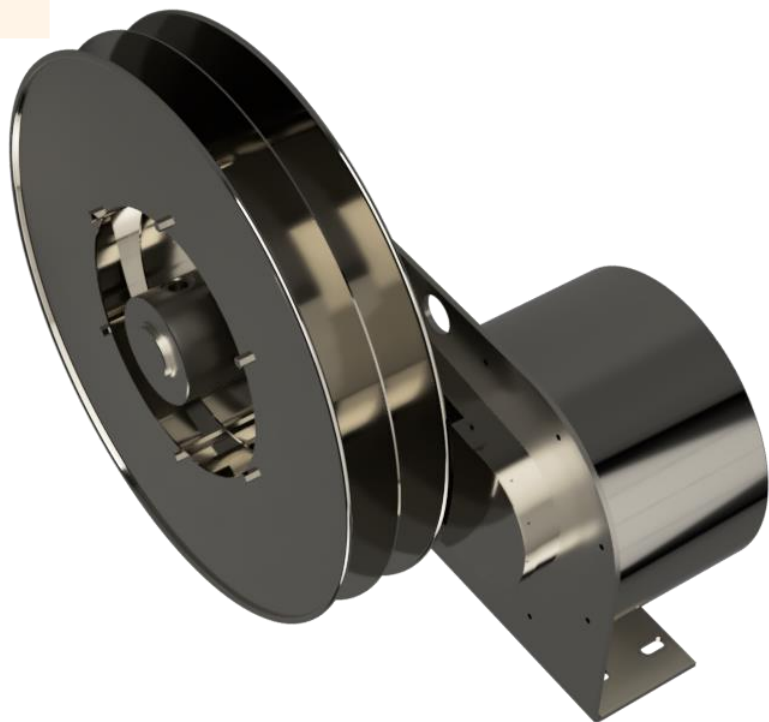
Slip Ring
Medium
Voltage

SPRING HOSE REEL



SPRING HOSE REEL EXPLOSION PROOF SHREX-SK SERIES

SLIP RING TYPE	SHREX-SK SERIES
Protetion Ex	Ex h
TYPE OF FLUID	OIL, AIR, WATER
max. pressure	500 Bar
Type port	G3/8—G2
Meter max	30 mt
ATEX SCHEME	II 2G Exh IIB T5 Gb

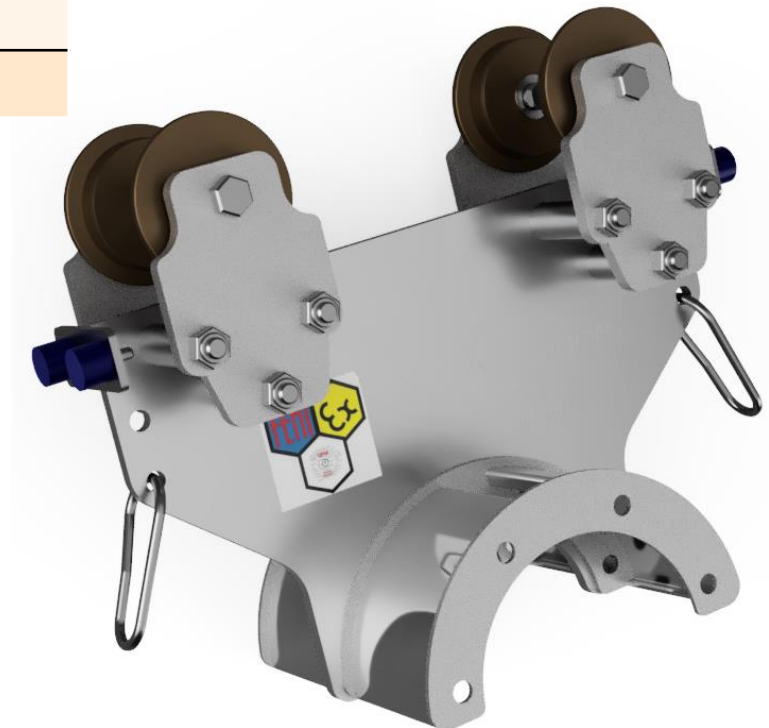


CABLE TROLLEY



CABLE TROLLEY EXPLOSION PROOF CT100EX SERIES

SLIP RING TYPE	SHREX-SK SERIES
Protetion Ex	Ex h
STRUCTURE	AISI316L / STEEL WITH SPECIAL GALVANIC TREATMENT
WEELS	SPARK-PROOF
STATIC ELECTRICITY	Grounding system
ATEX SCHEME	II 2G Exh IIB T5 Gb





MARINE SERIES



SLIP RING



AISI
316L

MARINE SAFETY SLIP RING SR150 SERIES

SLIP RING TYPE	SR150 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=150 A
Max Voltage	Vn=1000 VCA
Number size	SR151/SR152/SR153
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07

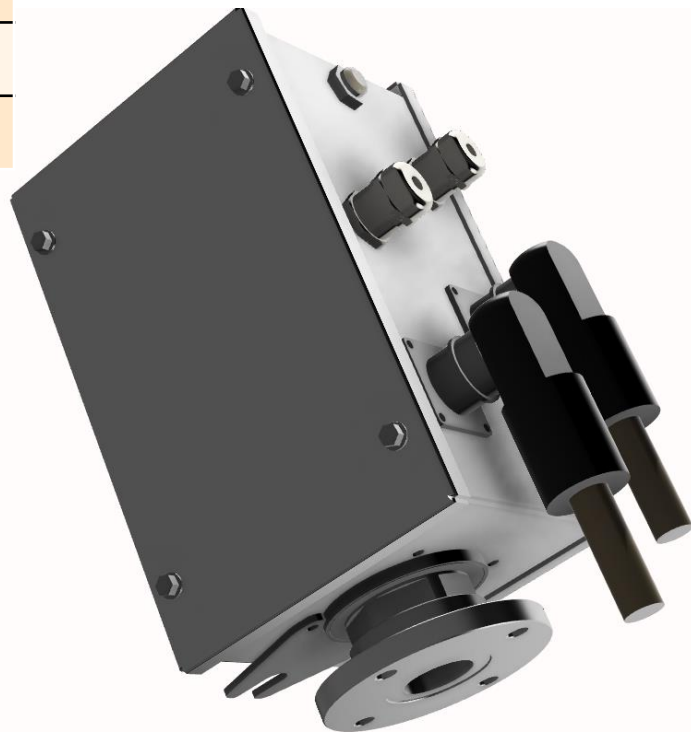


SLIP RING



MARINE SAFETY SLIP RING SR200 SERIES

SLIP RING TYPE	SR200 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=200 A
Max Voltage	Vn=1000 VCA
Number size	SR201/SR202/SR203/SR204
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



SLIP RING



**AISI
316L**

MARINE SAFETY SLIP RING SR250 SERIES

SLIP RING TYPE	SR250 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=250 A
Max Voltage	Vn=1000 VCA
Number size	SR253/SR254/SR255/SR256 / SR257/SR258
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



SLIP RING



**AISI
316L**

MARINE SAFETY SLIP RING+BOX SR250 SERIES

SLIP RING TYPE	SR250 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=250 A
Max Voltage	Vn=1000 VCA
Number size	SR253/SR254/SR255/SR256/ SR257/SR258
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



SLIP RING



**AISI
316L**

MARINE SAFETY SLIP RING SR320 SERIES

SLIP RING TYPE	SR320 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=300 A
Max Voltage	Vn=1000 VCA
Number size	SR323/SR324/SR325/SR326
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



SLIP RING



**AIISI
316L**

MARINE SAFETY SLIP RING SR400 SERIES

SLIP RING TYPE	SR400SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=500 A
Max Voltage	Vn=1000 VCA
Number size	SR406/SR408/SR4/SR326
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



SLIP RING



**AISI
316L**

MARINE SAFETY SLIP RING SR500 SERIES

SLIP RING TYPE	SR500 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=600 A
Max Voltage	Vn=1000 VCA
Number size	SR508/SR510/SR512/SR514
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



SLIP RING



**AISI
316L**

MARINE SAFETY SLIP RING SR600 SERIES

SLIP RING TYPE	SR600 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	$I_n=600$ A
Max Voltage	$V_n=24KVCA$
Number size	SR608/S6510/SR612/SR614
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



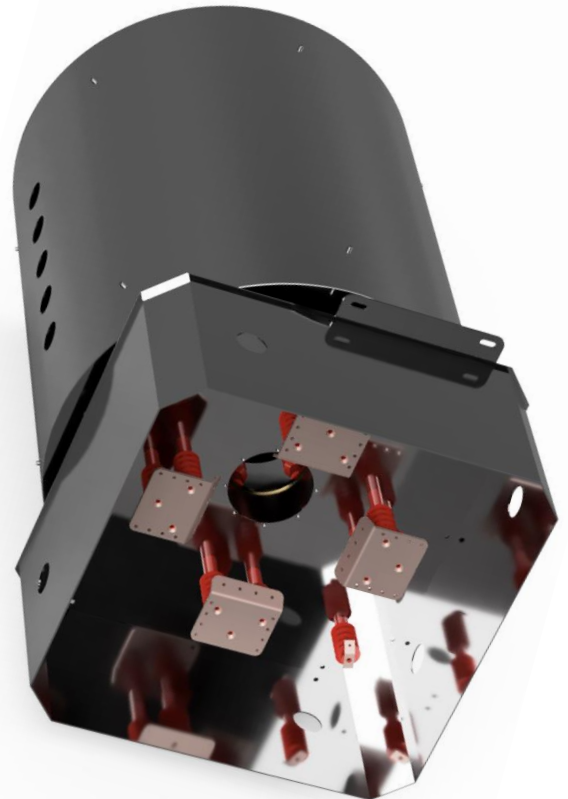
**Slip Ring
Medium
Voltage**

SLIP RING



MARINE SAFETY SLIP RING SR1000 SERIES

SLIP RING TYPE	SR600 SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=600 A
Max Voltage	Vn=24KVCA
Number size	SR608/S6510/SR612/SR614
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



Slip Ring
Medium
Voltage

SPRING CABLE REEL MARINE



**AISI
316L**

MARINE SAFETY

SPRING CABLE REEL MARINE SCRL SERIES

CABLE REEL TYPE	SCRL SERIES
Protetion	IP67
TYPE OF RING	POWER ,AUXILIAR , SIGNAL +ROTAY SENSOR+ICLINOMETER
max. Current	In=150 A
Max Voltage	Vn=1000
Number size	SCR0L2/SCRL03/SCRL05
Meter max	50 mt
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



MOTOR CABLE REEL MARINE



**AISI
316L**

MARINE SAFETY

MOTOR CABLE REEL MARINE MCRL SERIES

SPRING CABLE REEL TYPE	MCRL SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=1000 A
Max Voltage	Vn=24KV
Number size	MCRL A140 , MCRL A160 MCRL A200
Meter max	400 mt
UE SCHEME	2006/42/CE
DNV SCHEME	Ships 2019-07



**Slip Ring
Medium
Voltage**

MOTOR CABLE REEL



**AISI
316L**

MARINE SAFETY

OPS (ON SHORE POWER SUPPLY)

SPRING CABLE REEL TYPE	MCRL SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=2000 A
Max Voltage	Vn=24KV
Number size	MCRL OPS 1/2/3/4/5
Meter max	60 mt
UE SCHEME	2006/42/CE
SCHEME	IEC/IEEE 80005-1



The OPS (On shore power supply) allows you to electrically connect ships stopped for repairs to shore, and to power them using the shore power network.

In this way ships can switch off their auxiliary generators reducing polluting emissions and noise. The mobile structure is placed, using telescopic cranes; on the dock near the ship's power supply door.



**Slip Ring
Medium
Voltage**



STEEL INDUSTRY AND EARTHMOVING MACHINERY



SLIP RING



SLIP RING SR135 SERIES

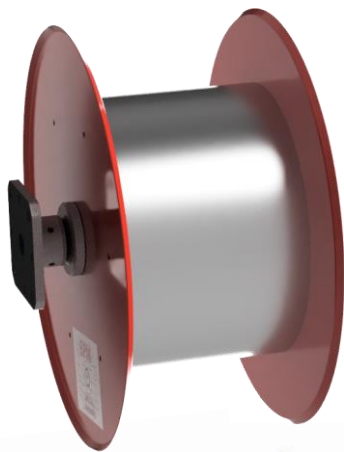


SLIP RING TYPE	SR135 SERIES
Protetion	IP67
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=100 A
Max Voltage	Vn=1000 VCA
Number size	SR135/SR136/SR1137/SR138
UE SCHEME	2006/42/CE
PL PERFORMANCE LEVEL	ISO 13849-1 2016

SPRING CABLE REEL



SPRING CABLE REEL SCR SERIES



SPRING CABLE REEL TYPE	SCR SERIES
Protection	IP65
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=1000 A
Max Voltage	Vn=1000V
Number size	SCR01, SCR02, SCR03,SCR04
Meter max	50 m
UE SCHEME	2006/42/CE

SPRING CABLE REEL



SPRING CABLE REEL SCR-SK SERIES



SPRING CABLE REEL TYPE	SCR-SK SERIES
Protetion	IP65
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=1000 A
Max Voltage	Vn=1000V
Number size	SCR-SK MULTISPIARAL , SCR-SK PLURISPIRAL
Meter max	100
UE SCHEME	2006/42/CE

MOTOR CABLE REEL



MOTOR CABLE REEL MCR SERIES



SPRING CABLE REEL TYPE	MCR SERIES
Protetion	IP65
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=1000 A
Max Voltage	Vn=1000V
Number size	MCR A090 , MCR A112 , MCR A140
Meter max	200
UE SCHEME	2006/42/CE

CABLE TROLLEY



CABLE TROLLEY CT100 SERIES



CABLE TROLLEY TYPE	CT100 SERIE
STRUCTURE	STEEL WITH SPECIAL GALVANIC TREATMENT
WEELS	STEEL WITH SPECIAL GALVANIC TREATMENT
STATIC ELECTRICITY	Grounding system
UE SCHEME	2006/34CE



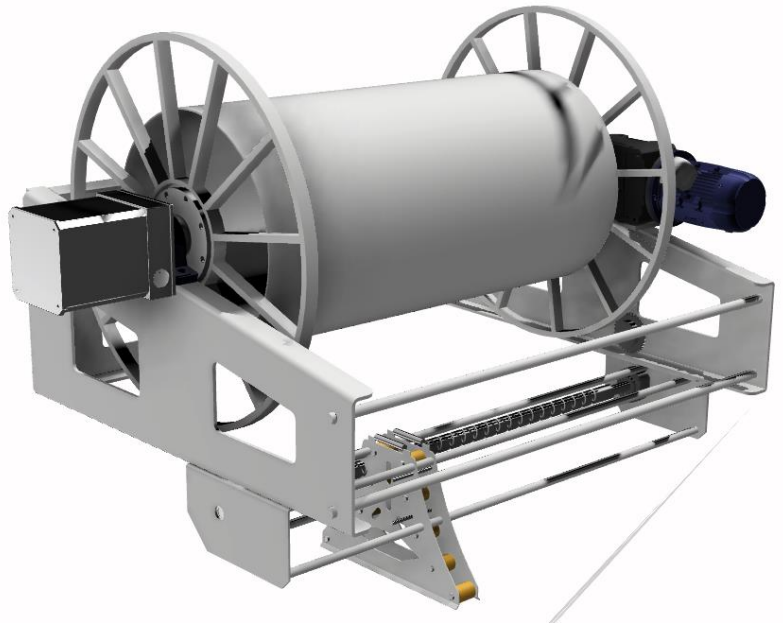
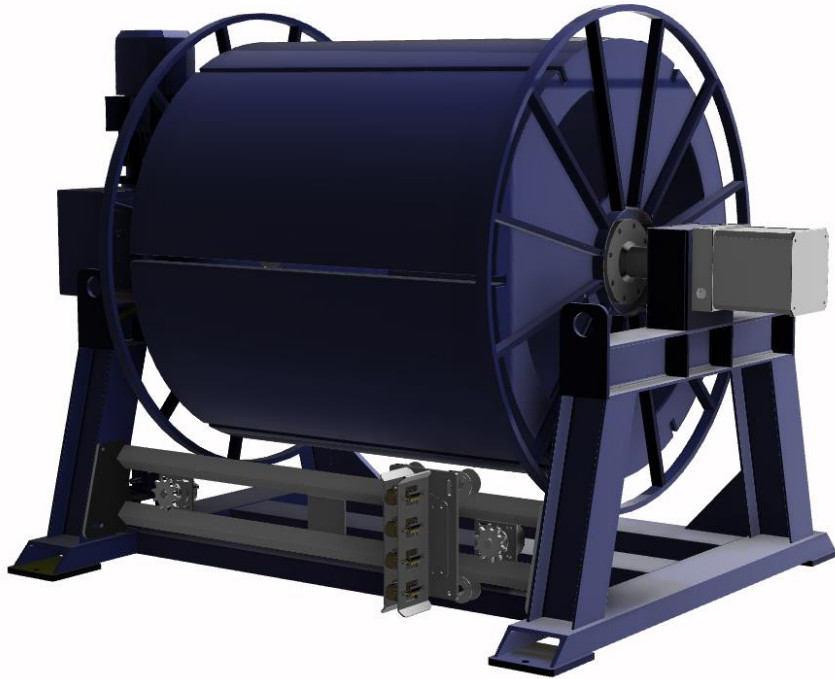
MINING AND DRILLING



MOTOR CABLE REEL



MACR MINE & EHART MOVING MOTOR CABLE REEL



HYDRAULIC CABLE REEL



AISI
316L

MHCR MOBILE STATION AUTOMATIC MOTOR HYDRAULIC CABLE REEL VERTICAL APPLICATION

SPRING CABLE REEL TYPE	MHCR SERIES
Protetion	IP66
TYPE OF RING	POWER ,AUXILIAR , SIGNAL
max. Current	In=300 A
Max Voltage	Vn=1000KV
Number size	MHCR
Meter max	60 mt
UE SCHEME	2006/42/CE





INDUSTRIAL AND AUTOMATION



SLIP RING

CAN

PROFI[®]
PROCESS FIELD BUS
BUS

PROFI[®]
INDUSTRIAL ETHERNET
NET

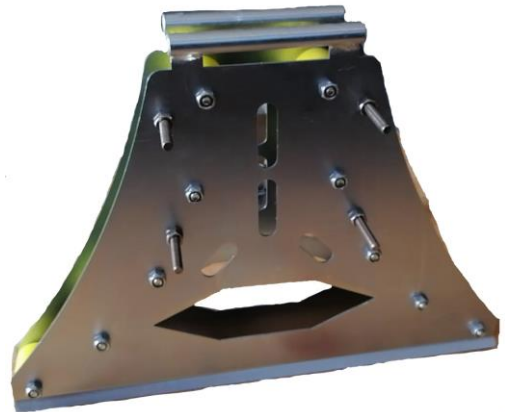
SLIP RING ANALOGIC AND DIGITAL SIGNAL SRDH SERIES



ACCESSORIES



ACCESSORIES SPRING AND MOTOR CABLE REEL

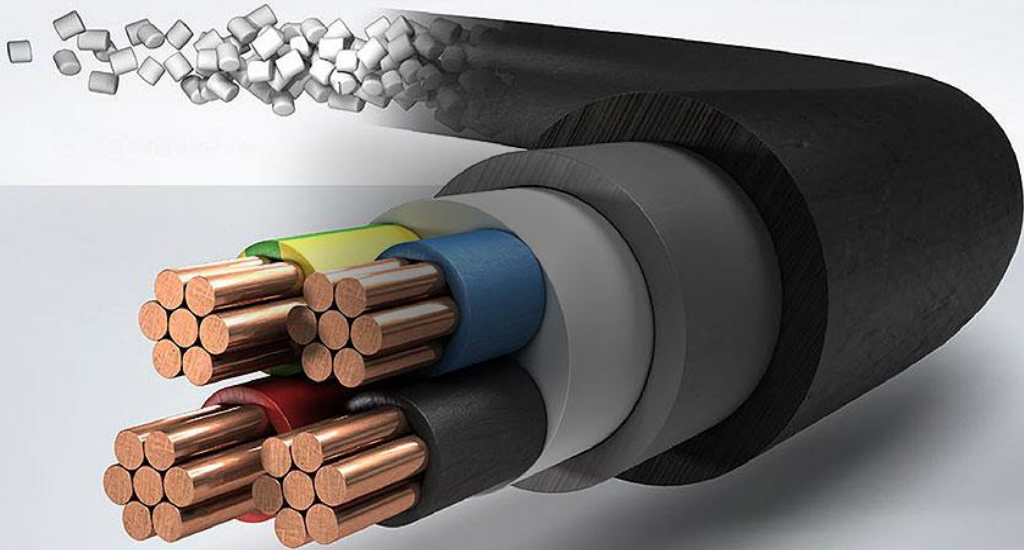


- BIDIRETIONAL CABLE GUIDE
- CABLE FEED POINTCABLE
- CABLE SOCKS
- SPRING
- CABLE GUIDE
- ROLLER CABLE REEL

SPECIAL CABLE



EXTREME KABEL



CABLE DESIGN:

- **HYBRIDS: POWER, AUXILIARIES AND SIGNALS**
- **SPECIAL FOR MOBILE INSTALLATION FOR HARD ENVIRONMENTS**



SPM SPECIAL MACHINE s.r.l

Via Padana superiore 38 20065 Inzago (MI)

C.F P.iva 11025160968 SDI **J6URRTW**

Tel +39 0209948040 cell.+39 3286972169

www.spm-slipring.it

2023

