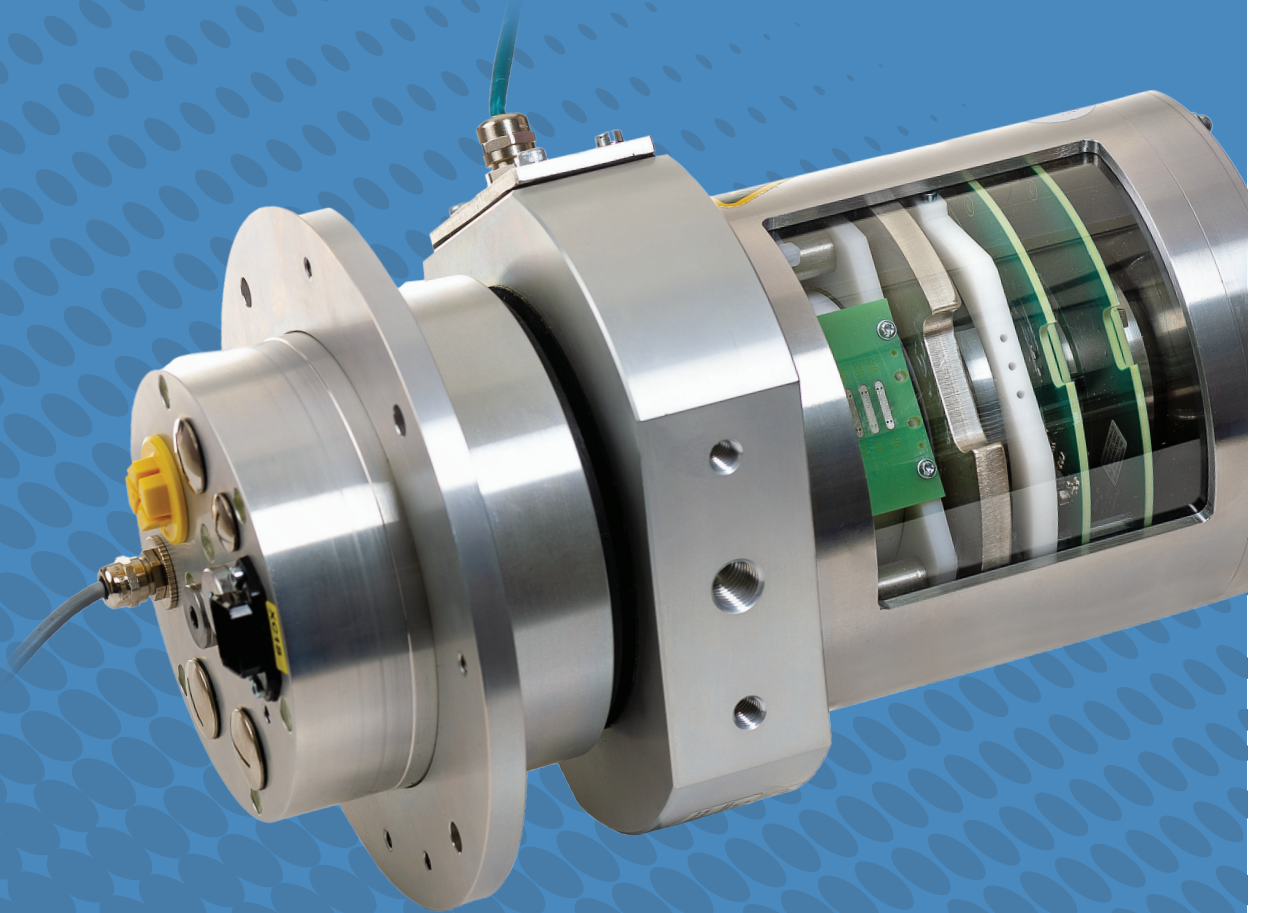


ROTOCAP



SLIP RING WITH CONTACTLESS
CAPACITIVE DATA TRANSMISSION



GAT[®]

MOOG

ROTOCAP

SLIP RING WITH CONTACTLESS CAPACITIVE DATA TRANSMISSION

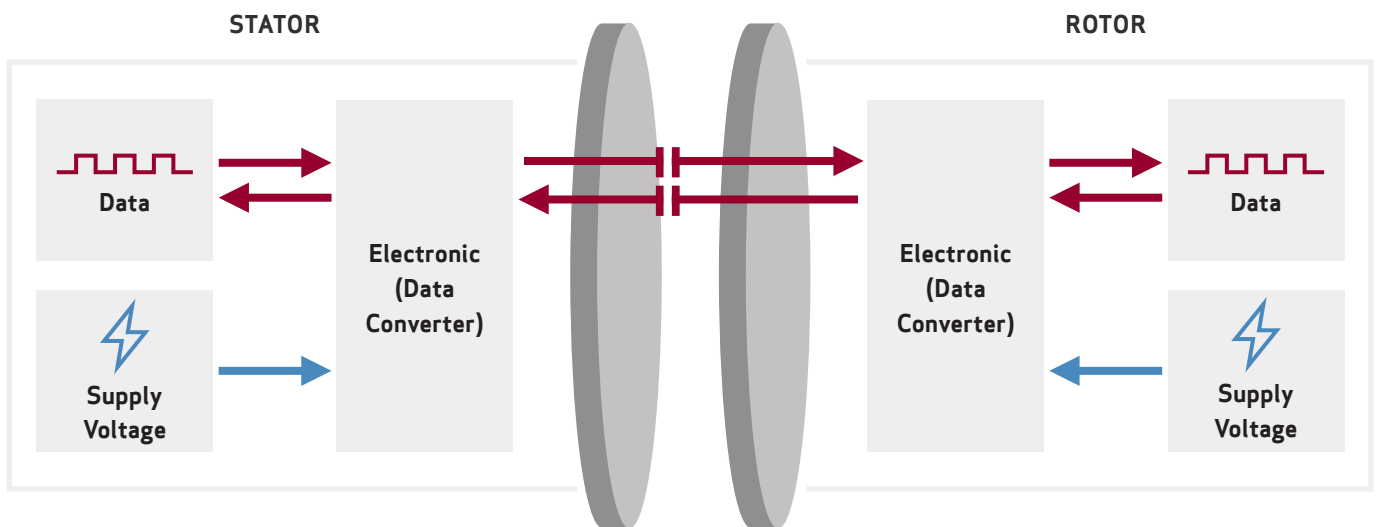
The RTOCAP is used wherever high data rates such as Ethernet must be reliably and safely transmitted to or from a rotating system. In combination with our contacting slip ring tracks, which are used for the power supply of the RTOCAP, we offer you a complete system. Besides a wide range of standard designs, individual solutions are available that are optimally adapted to your applications and installation conditions.



ROTOCAP for FANUC Bus 150 Mbit/s FSSB CAP220-FB1-0

Supply voltage	12 V DC - 24 V DC
Power requirement	max. 10 W
Bit error rate	better 10^{-12}
Device status indication	Voltage / Signal OK - visual display and for control
Speed	max. 500 rpm
Ambient temperature	0° C - 70° C
Vibration	Based on DIN 61373, Class B: 5.72m/s^2
Shock	50 m/s^2 , 3 times

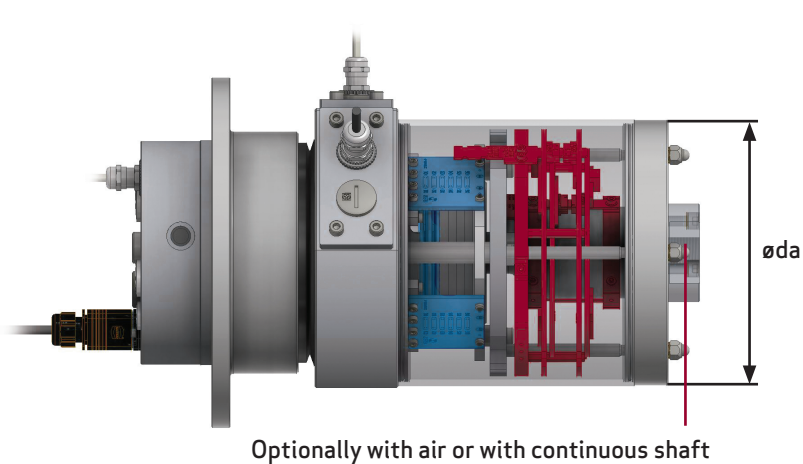
SCHEMATIC FUNCTION PRINCIPLE



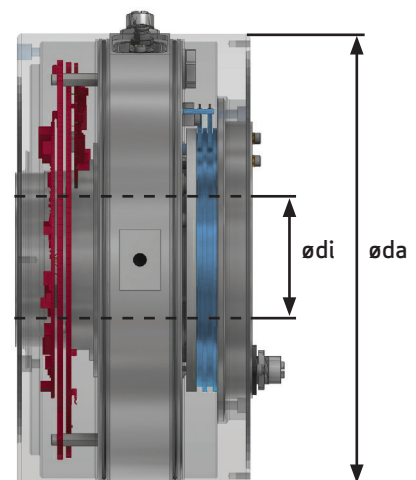
The integrated „data converter“ of the ROTOCAP processes and cleans the data signals.

STANDARD DESIGNS

SCHEMATIC DEVICE PRINCIPLE



Optionally with air or with continuous shaft



SIZES

Type	$\varnothing di$ (inner diameter)	$\varnothing da$ (outer diameter)
CAP 160	0 - 50 mm	160 mm
CAP 220	0 - 90 mm	220 mm
CAP 350	0 - 220 mm	350 mm
CAP 400	0 - 250 mm	400 mm

- ROTOCAP
Capacitive data transmission
- Contacting slip ring tracks
Voltage supply

The construction length depends on the contacting slip ring paths and the number of ROTOCAP modules!

MODULAR SYSTEM DESIGNS

Electronic module

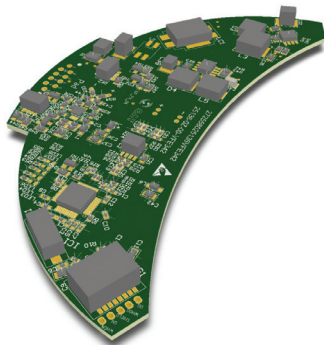
Contains the electronic,
suitable for all structural
models



Structure module

Contains the antenna
for transmitting and
receiving

FAST-ETHERNET-MODULE (ELECTRONIC MODULE)



Data transmission rates with
100 Mbit/s Fast Ethernet

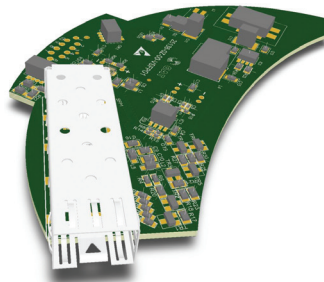
Transmittable protocols

- PROFINET
- SERCOS III
- POWERLINK

Qualified protocols

- EtherCAT
- MECHATROLINK-III

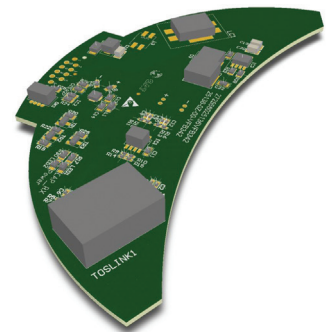
SFP-MODULE (ELECTRONIC MODULE)



Data transmission rates
with 2.5 Gbit/s

- Gigabit Ethernet
- Video

FANUC-MODULE (ELECTRONIC MODULE)



Data transmission rates
with 150 Mbit/s

- FANUC Bus FSSB

EtherCAT®

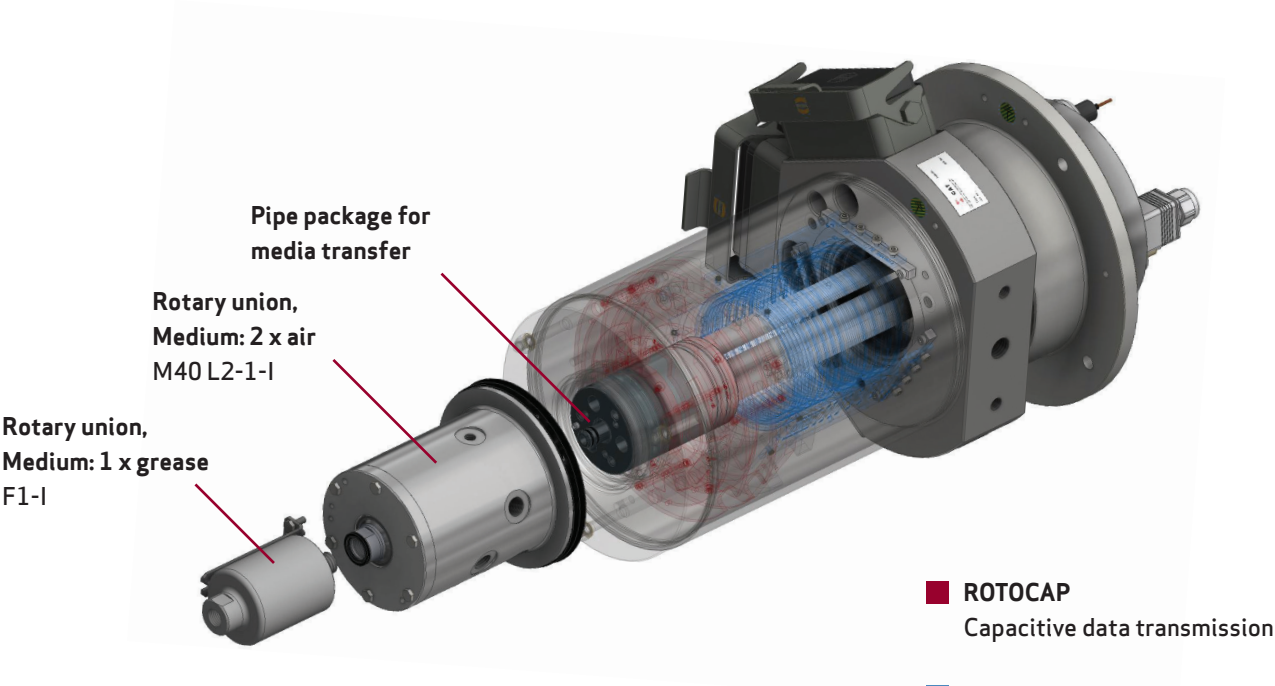
MECHATROLINK

DIFFERENT SFP MODULES AVAILABLE



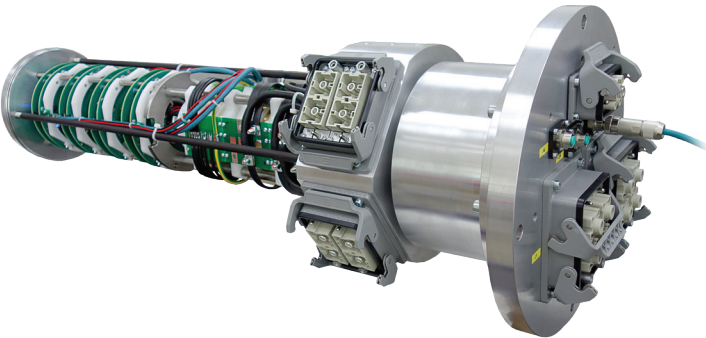
On request we can offer you customer-specific solutions!

COMBINATIONS WITH ROTARY UNIONS



Complex combination of rotary unions with different sealing technologies, contacting slip ring tracks and ROTOCAP.

APPLICATION EXAMPLES



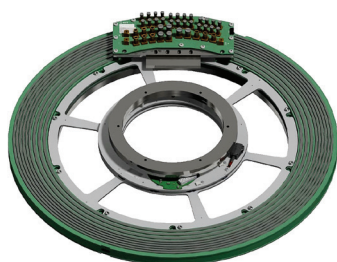
Power	4 x 600 VAC / 70 A 1 x PE
Power	2 x 80 VDC / 20 A
Ethernet	4 x Fast Ethernet 100 Base-TX IEEE 802.3 Clause 25
Speed	max. 50 rpm

Complete system with 4 ROTOCAP modules
CAP200-FE4-0/122/14



Combination of contacting slip ring tracks,
ROTOCAP and rotary union
CAP160-FE1-0//51/33-L2-1-G3/8 + M60 L2-1-I + S0-I

Power	9 x 600 VAC / 5 A
Power	10 x 230 VAC / 15 A 1 x PE
Power	6 x 24 VDC / 20 A 1 x PE
Power	13 x 24 VDC / 10 A
Ethernet	1 x Fast Ethernet 100 Base-TX IEEE 802.3 Clause 25
Air	2 x 10 bar
Grease	1 x 150 bar
Speed	max. 50 rpm



Open slip ring system with large
inner diameter ø 260 mm, CAP844-036/024/02.5G

Power	2 x 400 VAC / 20 A 1 x PE
Power	6 x 48 VDC / 5 A
Signal	2,5 Gbit/s Video
Speed	max. 150 rpm

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For product information, visit www.gat-mbh.de/en/products

For service information, visit www.gat-mbh.de/en/contact/service

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Moog GAT GmbH
Rotocap/Rev. A, June 2020, Id. CDL GATD-000213-en

