

ROTOCON UHS Series

Ultra High-Speed Brushless Slip Rings

ROTOCON | BRUSHLESS SLIP RINGS

Features:

- Channels: 1, 4, 8 or 12
- Speed: up to 40,000 RPM
- Resistance: < 0.2 mOhms
- Noise: 25 μ V
- Signal: up to 0.3 A per cell
- 60 Volts AC/DC
- Very low inertia
- Brushless (fluid metal contact)
- Insensitive to electromagnetic disturbance
- Long lifetime

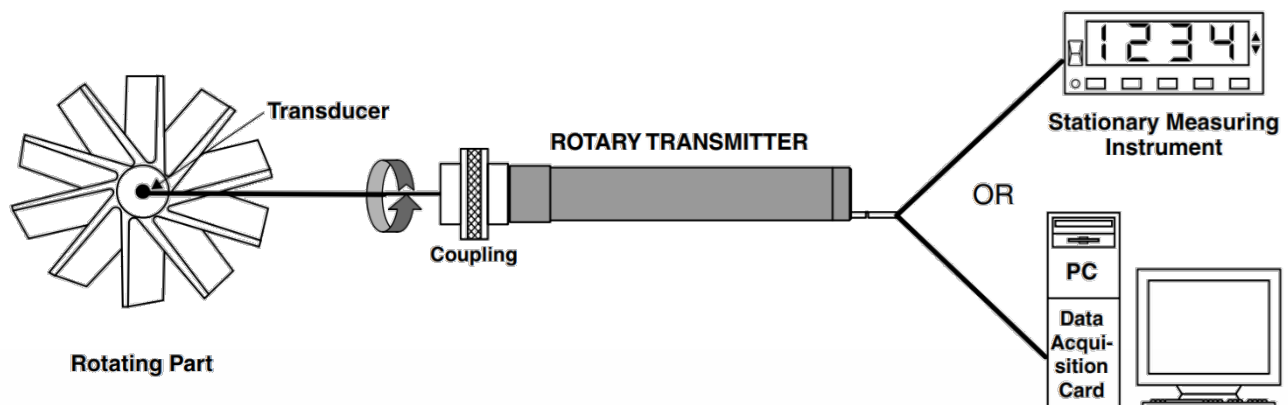
Description

For applications with demanding operating speeds up to 40,000 RPM, Meridian Laboratory offers the ROTOCON UHS Series. With up to 12 contacts available, the ROTOCON UHS Series of ultra high-speed slip rings is capable of transmitting both low current power, as well as signal and data within the same assembly. Like all ROTOCON brushless slip rings, the contact resistance is extremely low, both when stationary and while rotating. The UHS Series of slip rings is especially well utilized in high-speed applications (above 10,000 RPM) and remains unaffected in performance & reliability. If you have limited mounting space and/or require operating speeds at 3,000 to 8,000 RPM, see our MM-Series, Miniature High Speed, ROTOCON rotary electrical connectors.



Applications

ROTOCON UHS slip rings are used wherever measurement of rotating items is needed. Whether in research & development laboratories, or in duration tests on objects under working conditions. Through high-performance data transmission, ROTOCON UHS slip rings enable the measurement of pressure, acceleration, oscillation, vibration, shock, force, torque, temperature and displacement of rotating parts such as: turbines, jet engines, turbocompressors, propellers, motors, machine tools, bearings, and other machines, as well as for running tests on all types of road and rail vehicles.

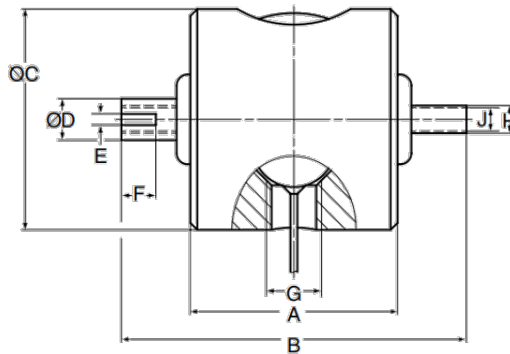


Ratings

	Cell	UHS 204	UHS 208	UHS 212
Number of Channels	1	4	8	12
Speed Ranges		Standard Version : 0 to 20,000 RPM (Part #: UHS 2__ / 011) High-Speed Version : 0 to 40,000 RPM (Part #: UHS 2__ / 111)		
Total Noise		Typically 25 μ V (max. 50 μ V) with two cells in series at speeds from 0 to 20,000 RPM		
Contact Resistance of Cell		Max. 0.2 milliohms for 2 cells in series with an instantaneous variation from 0 to 5000 RPM		
Insulation Resistance		More than 10 GigaOhms for two adjacent cells		
Load Current		Max. 0,3 A per cell		
Load Voltage		60 V AC or DC between two cells or between cell and transmitter housing		
Temperature Range		-13°F to 140°F (-25°C to 60°C)		
Thermal EMF		Typically 2 μ V with two cells connected in series and at speeds from 0 to 20,000 RPM; corresponding to a possible error of 0.05% for a constantan-chromium nickel thermocouple, at a temperature difference of 1112°F (600°C)		
Connections (In/Out)	Soldering contact	Cables (400 mm input and 400 mm output cables included)		

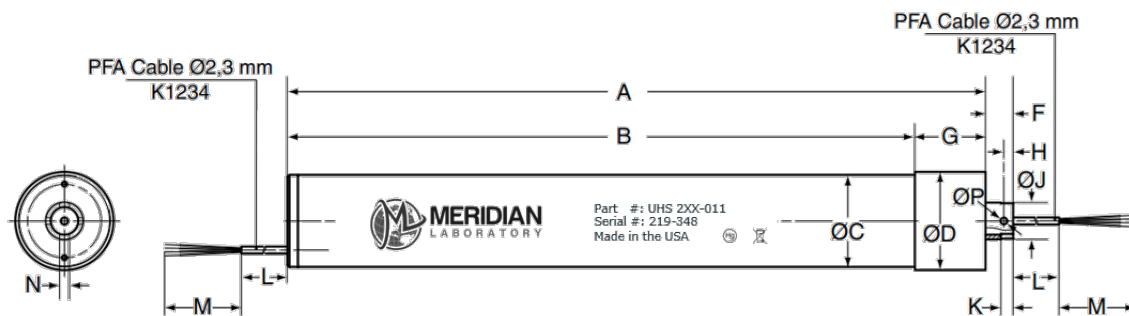
Dimensions

Cell



	mm
A	15
B	25
ØC	16h9
ØD	3
E	0,8
F	2,5
G	M4
ØH	2h7
ØJ	1,7

Models UHS 204, 208, 212



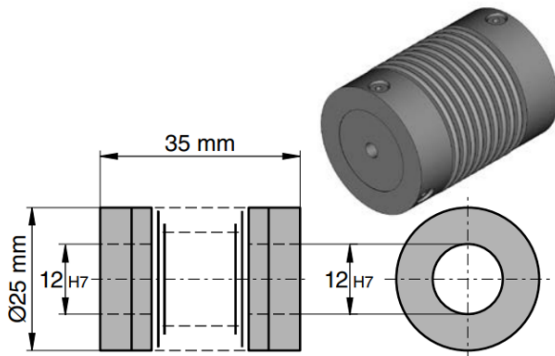
Model	A	B	ØC	ØD	F	G	H	ØJ	K	L	M	N	ØP
UHS 204	131,6	108,6	30	32h6	9	23	3	12 -0,05 -0,1	4	375	25	3,1 +0,01 0	2,2
UHS 208	227,6	204,6	30	32h6	9	23	3	12 -0,05 -0,1	4	375	25	3,1 +0,01 0	2,2
UHS 212	323,6	300,6	30	32h6	9	23	3	12 -0,05 -0,1	4	375	25	3,1 +0,01 0	2,2

Options & Ordering Information

MODEL NUMBER:	UHS 2 __ __ / __ 11
UHS Slip Ring with:	
NUMBER OF CHANNELS	
• 4 channels	0 4
• 8 channels	0 8
• 12 channels	1 2
HIGH-SPEED CAPABILITY	
• without (standard)	0
• with (option)	1
Slip Ring Cell:	P/N 198-101-010-011V

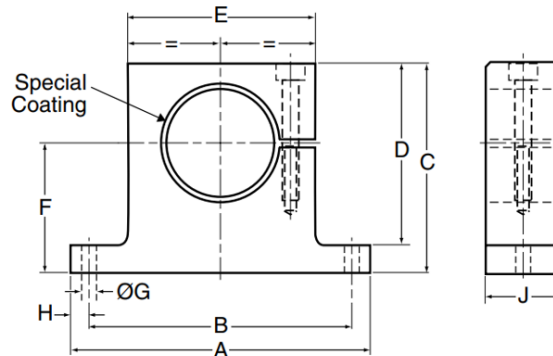
Accessories

Miniature Flexible Couplings



Coupling Model Number	Fits Rotary Transmitter
MK1/20/35/12H7/12H7	2XX-011 (standard)
MK1/20/35/12H7/12H7/HS	2XX-111 (high-speed)

Mounting Bracket



A	B	C	D	E	F	ØG	H	J
80,0	70,0	57,0	49,0	50,0	35,0	4,3	5,0	20,0


Part Number: 198-102-955-011

*UHS-201/F = 198-204-030-011V = 198-101-010-011V; these part numbers come with flanges on both ends
 Part # 198-204-03VS004 does not have flanges on both ends*

Due to the continual development of our products, we reserve the right to modify specifications without forewarning.


PHONE

608-836-7571
800-837-6010



EMAIL

info@meridianlab.com



VISIT

2415 N. Pleasant View Rd.
Middleton, WI 53562

[see map](#)