

Sine-wave encoders



- Harmonic distortion less than 1 %
- Extended temperature range, -40 ° to +100 °C
- 500 kHz sine-wave incremental signal frequency response
- All accessible components, including the electrical connections, are resistant to common industrial coolants and lubricants
- Self-monitoring and error compensation
- Secure against short-circuit and overload
- Hot plug
- Unit is protected against overloads of 10 V/50 ms
- 10 or 12 mm one sided open hub shaft with stator coupling

TECHNICAL DATA mechanical

	RIS 58-H with hollow shaft
Protection bearings	IP 64
Protection housing	IP 65
Shaft diameter	10 mm, 12 mm
Max. speed	12000 min ⁻¹
Starting torque	< 1 Ncm
Torque support	
Axial compensations range	±1.5 mm
Radial compensations range	±0.2 mm
Operating temperature	-40 ... +100 °C
Storage temperature	-20 ... +80 °C
Weight approx.	270 g
Vibration resistance (IEC 68-2-6)	100 m/s ² (10 ... 2000 Hz)
Shock resistance (IEC 68-2-27)	1000 m/s ² (6 ms)

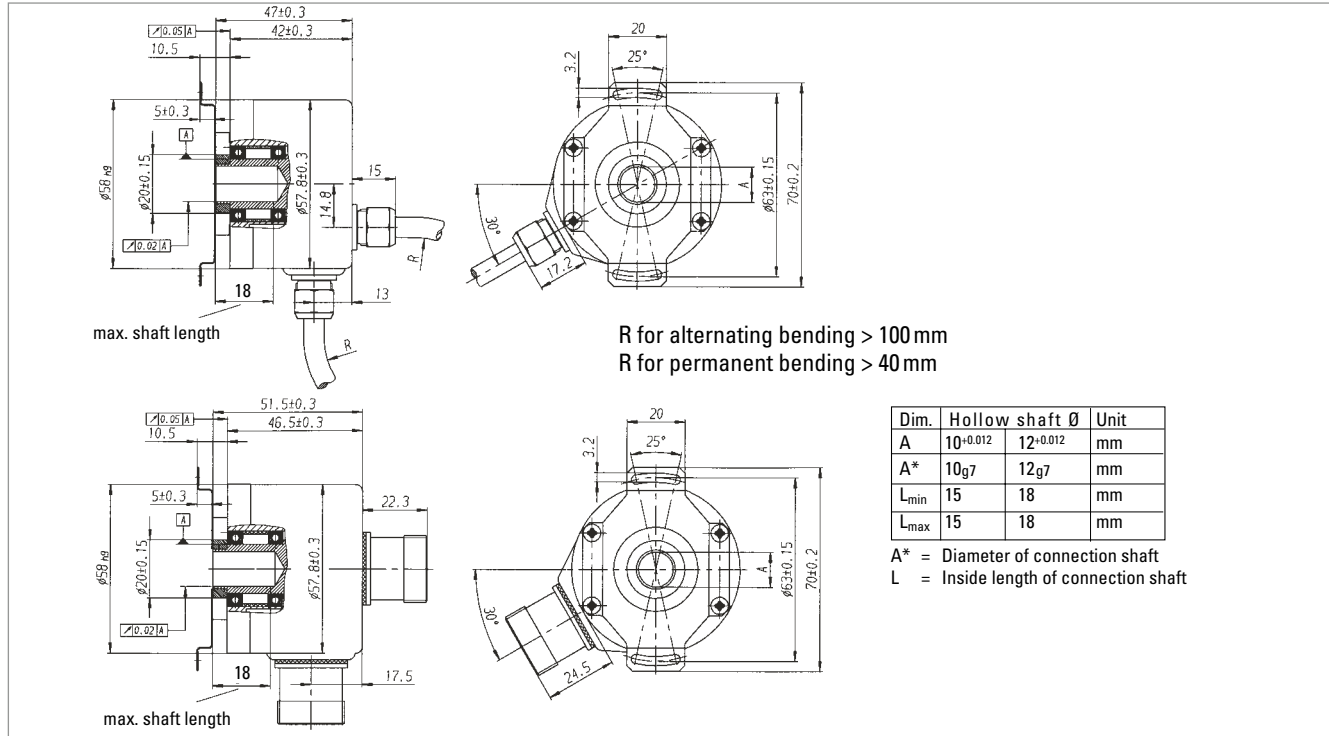
TECHNICAL DATA electrical

General design	as per DIN EN 61010-1, protection class III, Contamination level 2, over voltage level III
Supply voltage	DC 5 V ±10 % (SELV)
Max. current w/o load	max. 120 mA
Incremental signal	Sinus – Cosinus 1 V _{ss}
Line count	1 000, 1 024, 2 048, 2 500, 5 000
Absolute accuracy	±35"
Repeatability	±7"
Max. frequency	500 kHz
Reference signal	> 0.4 V (1 pulse/revolution)
Connection	TPE cable or conin, axial or radial

Incremental Shaft Encoders Type RIS 58-H

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DIMENSIONAL DRAWINGS RIS 58-H with hollow shaft



PIN ASSIGNMENT

Signal	Conin 12 pole	TPE cable
+5 V	12	brown/green
0 V	10	white/green
A+	5	brown
A-	6	green
B+	8	grey
B-	1	pink
R+	3	red
R-	4	black
+5 V Sense	2	blue
N. C.	7	violet
N. C.	9	-
0V Sense	11	white
Housing	screen	screen

ORDERING INFORMATION

Type	Model	Number of pulses	Supply voltage	Flange, Protection, Shaft	Output	Connection
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RIS58-	H Hollow shaft	1 000 1 024 2 048 2 500 5 000	A DC 5 V	F.42 Hubshaft with tether, IP 64, 10 mm F.47 Hubshaft with tether, IP 64, 12 mm	V SinCos	A TPE cable axial B TPE cable radial G Conin connector axial, 12 pin male, ccw H Conin connector radial, 12 pin male, ccw