

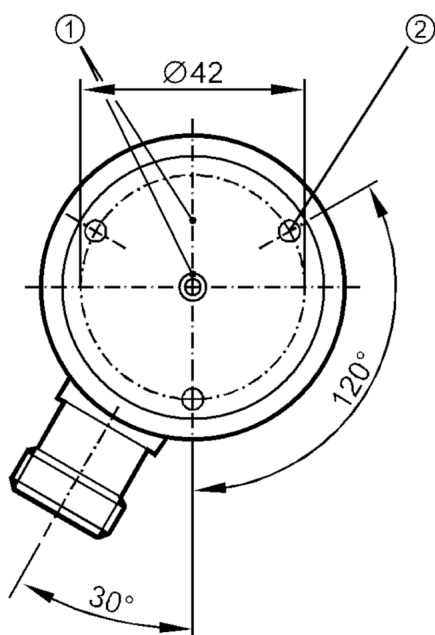
RU1176

Incremental encoder with solid shaft

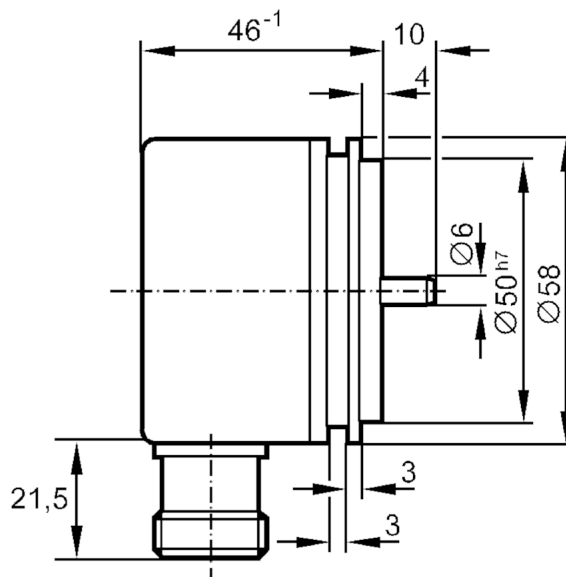
RU-4096-I05/K



Status Archive



- 1 reference mark
- 2 M4 Depth 5 mm



Application

Function principle	incremental
--------------------	-------------

Electrical data

Operating voltage tolerance	[%]	10
Operating voltage	[V]	5 DC
Current consumption	[mA]	150

Outputs

Electrical design		TTL
Max. current load per output	[mA]	20
Switching frequency	[kHz]	300
Phase difference A und B	[°]	90

Measuring/setting range

Resolution	4096 resolution
------------	-----------------

Operating conditions

Ambient temperature	[°C]	-30...100
Note on ambient temperature	for firmly laid cable: -30 °C	
Storage temperature	[°C]	-30...100
Max. relative air humidity	[%]	98
Protection	IP 64	

RU1176



Incremental encoder with solid shaft

RU-4096-I05/K

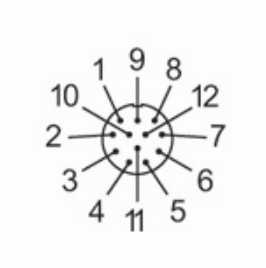
Tests / approvals		
Shock resistance		100 g (6 ms)
Vibration resistance		15 g (55...2000 Hz)
MTTF	[years]	190
Mechanical data		
Weight	[g]	422.4
Dimensions	[mm]	Ø 58 / L = 56
Materials		aluminium
Max. revolution, mechanical [U/min]		12000
Max. starting torque	[Nm]	1
Reference temperature torque	[°C]	20
Shaft design		solid shaft
Shaft diameter	[mm]	6
Shaft material		steel (1.4104)
Max. shaft load axial (at the shaft end)	[N]	10
Max. shaft load radial (at the shaft end)	[N]	20
Fixing flange		synchro-flange
Remarks		
Notes		discontinued article
Electrical connection		
pink (1)	B inverted	
blue (2)	L+ sensor	
red (3)	0 index	
black (4)	0 index inverted	
brown (5)	A	
green (6)	A inverted	
lilac (7)	failure inverted	
grey (8)	B	
pin 9	n.c.	
white/green (10)	0V	
white (11)	0V sensor	
brown/green (12)	L+	
Screen	housing	
Connector: 1 x M23 (ifm 1001.4), radial		

RU1176



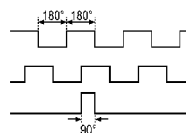
Incremental encoder with solid shaft

RU-4096-I05/K



Diagrams and graphs

Pulse diagram



Output A

Output B

0 index

Status Archive