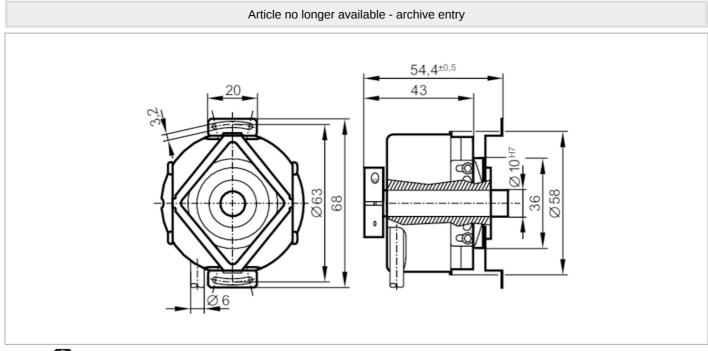
## RO6328

#### Incremental encoder with hollow shaft



RO-1024-I24/N11



# 

Product characteristics		
Resolution		1024 resolution
Shaft design		continuous hollow shaft
Shaft diameter	[mm]	10
Electrical data		
Operating voltage	[V]	1030 DC
Current consumption	[mA]	< 150
Outputs		
Electrical design		HTL
Max. current load per output	[mA]	50
Switching frequency	[kHz]	300
Type of short-circuit protection		< 60 s
Phase difference A und B	[°]	90
Measuring/setting range		
Resolution		1024 resolution
Operating conditions		
Ambient temperature	[°C]	-3085
Note on ambient temperature		firmly laid cable: -30 °C
Max. relative air humidity	[%]	98
Protection		IP 64; (on the housing: IP 66; on the shaft: IP 64)
Tests / approvals		
Shock resistance		200 g
Vibration resistance		30 g

## RO6328

### Incremental encoder with hollow shaft



RO-1024-I24/N11

Weight       [g]       454.8         Dimensions       [mm]       Ø 58 / L = 54.4         Material       aluminum         Max. revolution, mechanical [U/min]       12000; (when using both shaft clamping rings)         Max. starting torque       [Nm]         Max. starting torque       [Nm]         Reference temperature       [°C]         torque       20         Shaft design       continuous hollow shaft         Shaft diameter       [mm]         Shaft diameter       [mm]         Shaft diameter       [mm]         Shaft material       10         Shaft material       10         Installation depth/shaft       [mm]         Max. axial shaft misalignment [mm]       1; (max. radial shaft alignment: ± 0,05 mm)         Electrical connection       Cable: 1 m, PUR; radial, can also be used axially         brown       A         green       A inverted         grey       B         pink       B inverted         red       0 index         black       0 index inverted         black       0 index         black       0 index         b				
Material     aluminum       Max. revolution, mechanical [U/min]     12000; (when using both shaft clamping rings)       Max. starting torque     [Nm]       Reference temperature     [°C]       torque     20       Shaft design     continuous hollow shaft       Shaft design     10       Shaft diameter     [mm]       Shaft material     stainless steel       Installation depth/shaft     [mm]       Max. axial shaft misalignment [mm]     10       Max. axial shaft misalignment [mm]     1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection     Electrical connection       Cable: 1 m, PUR; radial, can also be used axially     brown       brown     A       green     A inverted       red     0 index       black     0 index inverted       black     0 index inverted       blue				
Max. revolution, mechanical [U/min]     12000; (when using both shaft clamping rings)       Max. starting torque     [Nm]       Reference temperature     [°C]       20     20       Shaft design     20       Shaft design     0       Shaft diameter     [mm]       Shaft diameter     [mm]       Shaft fit     10       Shaft material     10       Installation depth/shaft     [mm]       Max. axial shaft misalignment [mm]     1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection     Implement in the implement is the i				
Max. starting torque     [Nm]       Reference temperature     [°C]       torque     20       Shaft design     continuous hollow shaft       Shaft diameter     [mm]       Shaft material     H7       Shaft material     Stainless steel       Installation depth/shaft     [mm]       Max. axial shaft misalignment     10       Max. axial shaft misalignment     10       Max. axial shaft misalignment     11       Cable: 1 m, PUR; radial, can also be used axially     0.05 mm)       Electrical connection     Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       red     0 index       black     0 index       black     0 index       blue     L+ sensor       white     0V sensor       brown/green     L+ (Up)				
Reference temperature     [°C]       torque     20       Shaft design     continuous hollow shaft       Shaft diameter     [mm]       Shaft diameter     [mm]       Shaft fit     H7       Shaft material     stainless steel       Installation depth/shaft     [mm]       Max. axial shaft misalignment [mm]     10       Max. axial shaft misalignment [mm]     1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection     Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       red     0 index       black     0 index inverted       blue     L+ sensor       white     OV sensor       brown/green     L+ (Up)				
torque   20     Shaft design   continuous hollow shaft     Shaft diameter   [mm]     Shaft fit   H7     Shaft material   H7     Installation depth/shaft   [mm]     Installation depth/shaft   [mm]     Max. axial shaft misalignment [mm]   10     Max. axial shaft misalignment [mm]   1; (max. radial shaft alignment: ± 0,05 mm)     Electrical connection     Cable: 1 m, PUR; radial, can also be used axially     brown   A     green   A inverted     grey   B     pink   B inverted     red   0 index     black   0 index inverted     blue   L+ sensor     white   OV sensor     brown/green   L+ (Up)				
Shaft diameter     [mm]     10       Shaft fit     H7       Shaft material     stainless steel       Installation depth/shaft     [mm]       Max. axial shaft misalignment     [mm]       Max. axial shaft misalignment     [mm]       Max. axial shaft misalignment     [mm]       Shaft misalignment     10       Max. axial shaft misalignment     [mm]       1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection       Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       black     0 index       black     0 index inverted       blue     L+ sensor       white     OV sensor       brown/green     L+ (Up)				
Shaft fit     H7       Shaft material     Installation depth/shaft     Imm]       Installation depth/shaft     Imm]     10       Max. axial shaft misalignment [mm]     1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection       Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       red     0 index       black     0 index inverted       blue     L + sensor       white     0V sensor       brown/green     L + (Up)				
Shaft material     stainless steel       Installation depth/shaft     [mm]       10     10       Max. axial shaft misalignment [mm]     1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection       Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       red     0 index       black     0 index inverted       blue     L+ sensor       white     OV sensor       brown/green     L+ (Up)				
Installation depth/shaft     [mm]     10       Max. axial shaft misalignment     [mm]     1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection       Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       red     0 index       black     0 index inverted       blue     L+ sensor       white     OV sensor       brown/green     L+ (Up)				
Max. axial shaft misalignment [mm]     1; (max. radial shaft alignment: ± 0,05 mm)       Electrical connection       Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       red     0 index       black     0 index inverted       blue     L+ sensor       white     OV sensor       brown/green     L+ (Up)				
Electrical connection       Cable: 1 m, PUR; radial, can also be used axially       brown     A       green     A inverted       grey     B       pink     B inverted       red     0 index       black     0 index inverted       blue     L+ sensor       white     OV sensor       brown/green     L+ (Up)				
Cable: 1 m, PUR; radial, can also be used axiallybrownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhiteOV sensorbrown/greenL+ (Up)				
brownAgreenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhite0V sensorbrown/greenL+ (Up)				
greenA invertedgreyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhiteOV sensorbrown/greenL+ (Up)	Cable: 1 m, PUR; radial, can also be used axially			
greyBpinkB invertedred0 indexblack0 index invertedblueL+ sensorwhite0V sensorbrown/greenL+ (Up)				
pinkB invertedred0 indexblack0 index invertedblueL+ sensorwhite0V sensorbrown/greenL+ (Up)				
red0 indexblack0 index invertedblueL+ sensorwhite0V sensorbrown/greenL+ (Up)				
black0 index invertedblueL+ sensorwhite0V sensorbrown/greenL+ (Up)				
blueL+ sensorwhite0V sensorbrown/greenL+ (Up)				
white0V sensorbrown/greenL+ (Up)				
brown/green L+ (Up)				
white $arcon = 0 / (1 n)$				
white/green 0V (Un)				
screen housing				
lilac error inverted				
Diagrams and graphs				
Pulse diagram				
Direction of rotation clockwise (looking at the shaft)				