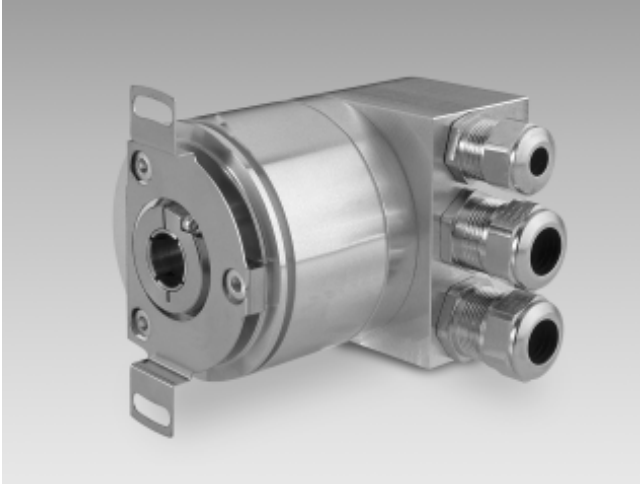


# Optical Absolute Encoder, End shaft Singleturn or Multiturn, high-resolution Profibus-DP, CANopen, DeviceNet, SSI, LIGHTBUS



## GDAMS, GDMMS

**activo**<sup>®</sup>



### Features

- Interfaces: Profibus-DP, CANopen, DeviceNet, SSI and optic fiber bus
- Resolution: 31 bit multiturn, 18 bit singleturn
- Parameterizable operating modes
- Parameterizable preset value
- Parameterizable scaling

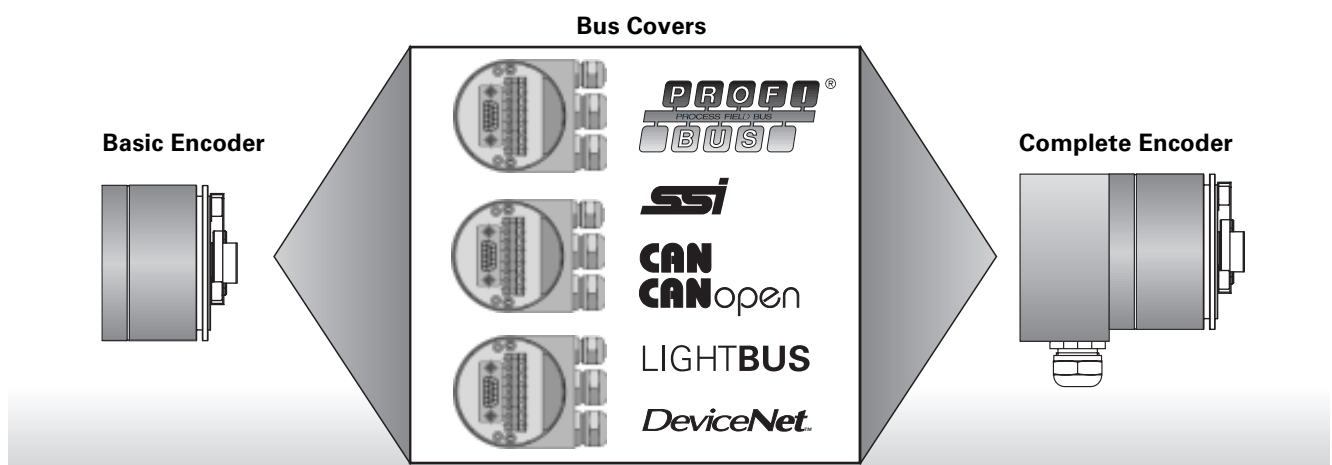
### Mechanical data

Speed	
mechanical	Max. 10000 rpm
electrical	Max. 6000 rpm
Operating torque	Typ. 0.0175 Nm (3000 rpm 20 °C)
Moment of inertia	1.84 x 10 <sup>-6</sup> kgm <sup>2</sup>
Cable gland	Metric thread, EMC certified
Material	Aluminum
Weight	Approx. 600 g

### Electrical data

Operating voltage	10...30 VDC with reverse voltage protection
Current consumption	Max. 120 mA (w/o load) at 24 VDC
Max. resolution	Singleturn 18 bit, programmable Multiturn 31 bit, programmable in steps
Accuracy	±0.01°
Preset	Value parameterizable in set resolution range
User address	Settable with rotary switch
Rotating direction	Clockwise (cw) when the shaft is viewed from the front (parameterizable with parameters)

### How to combine your encoders (interchangeable bus cover)



**Order designation for GDAMS (Singleturn)**

Order No.	End shaft	
1	12 mm dia., clamping ring, coupling spring, IP 64	
	Description file	
2	Without GSD/EDS file	
3	With GSD/EDS file	
<b>GDAMS.□ 20 3P3 □</b>		<b>Profibus-DP</b>
<b>GDAMS.□ 20 5P3 □</b>		<b>CANopen</b>
<b>GDAMS.□ 20 8P2 □</b>		<b>DeviceNet</b>
<b>GDAMS.□ 20 LM32</b>		<b>Optic fiber bus</b>
<b>GDAMS.□ 20 2PA2</b>		<b>SSI</b>
<b>GDAMS.□ 20 00 00</b>		<b>Basic encoder w/o bus cover</b>

**Order designation for GDMMS (Multiturn)**

Order No.	End shaft	
1	12 mm dia., clamping ring, coupling spring, IP 64	
	Description file	
2	Without GSD/EDS file	
3	With GSD/EDS file	
<b>GDMMS.□ 20 3P3 □</b>		<b>Profibus-DP</b>
<b>GDMMS.□ 20 5P3 □</b>		<b>CANopen</b>
<b>GDMMS.□ 20 8P2 □</b>		<b>DeviceNet</b>
<b>GDMMS.□ 20 LM32</b>		<b>Optic fiber bus</b>
<b>GDMMS.□ 20 2PA2</b>		<b>SSI</b>
<b>GDMMS.□ 20 00 00</b>		<b>Basic encoder w/o bus cover</b>

**Bus cover description**

The matching bus covers are listed from page 154.

**Accessories**

Order No.	
Z 119.034	Optic fiber bus connectors
Z 119.042	Coupling spring
Z 150.022	CD with GSD/EDS files and manuals

Z 163.3P33	Bus cover for Profibus-DP
Z 163.5P33	Bus cover for CANopen
Z 163.8P23	Bus cover for DeviceNet
Z 163.2PA2	Bus cover for SSI
Z 163.LM32	Bus cover for optic fiber bus

171.02.153 Installation instructions for optic fiber bus

Suitable optical-fiber cable:  
LAPP-Kabel, Stuttgart, Art.: 2185030  
HITRONIC<sup>®</sup> POF SIMPLEX PUR-PE

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## GDAMS, GDMMS

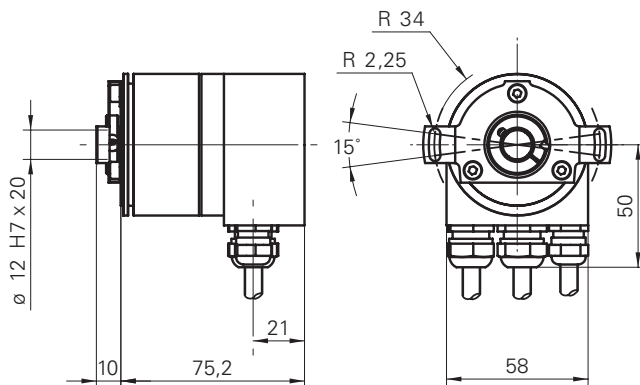
activo®

### Ambient conditions

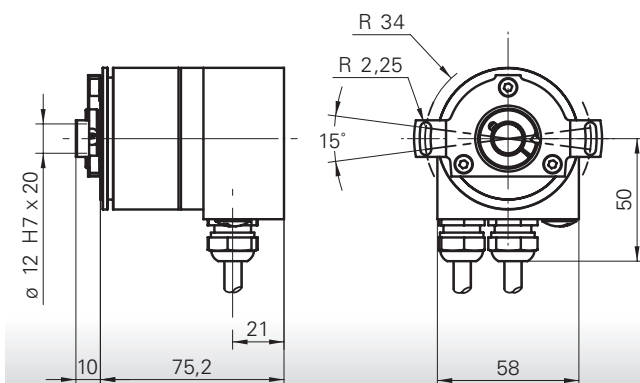
Operating temperature	-20...+85 °C
Protection type	IP 64
Humidity	Max. relative humidity 95 %, non-condensing
Resistance	
Vibration	DIN EN 60068-2-6 ≤100 m/s <sup>2</sup> , 10-2000 Hz
Shock	DIN EN 60068-2-27 ≤500 m/s <sup>2</sup> , 11 ms
Interference resistance	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4

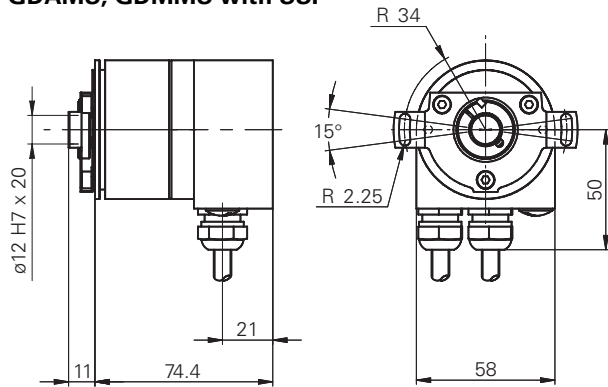
### Dimensions

#### GDAMS, GDMMS with Profibus-DP, CANopen



#### GDAMS, GDMMS with DeviceNet



**Dimensions**
**GDAMS, GDMMS with SSI**

**GDAMS, GDMMS with optic fiber bus**
