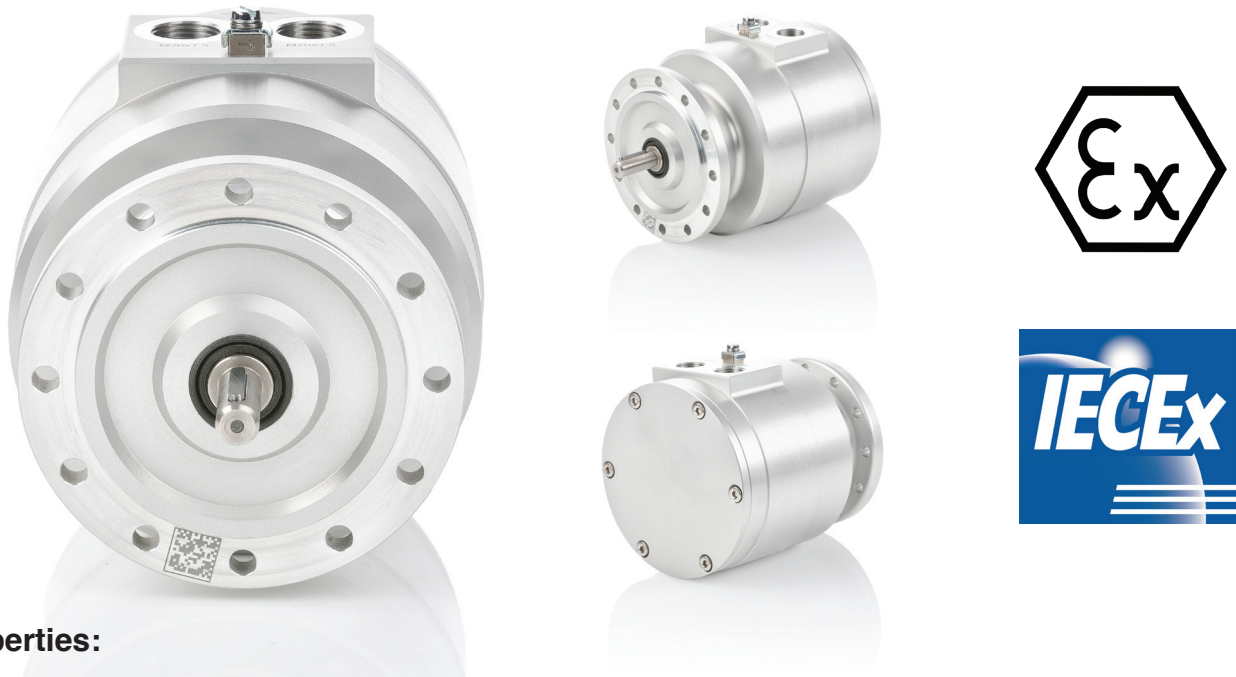


## Incremental encoder Ex FG 40

The new standard, designed for hazardous areas (gas/dust) subject to heavy-duty demands



### Properties:

- ATEX and IECEx certified for Zones 1 and 2 (gas) as well as Zones 21 und 22 (dust)
- Ex marking: II 2G Ex db IIC T6-T5 Gb (gas)  
II 2D Ex tb IIIC T85°C Db IP6x (dust)
- Explosion-proof, thick-walled housing made of seawater-resistant aluminum
- High corrosion protection thanks to anodized coating
- Long service life thanks to large ball bearings and rugged stainless-steel shafts with feather keys
- High shock and vibration resistance
- Maximum speed range: up to 6.000 rpm
- Protection class IP66
- Field of application up to 4.000 m above sea level
- Maximum ambient temperature range: -40 °C up to max. +65 °C
- Premium optical scanning delivers high signal quality
- Pulse rates between 500 and 62,500 per revolution
- One or two systems optionally with HTL, TTL or sinus output respectively
- Max. transmission frequency: up to 200 kHz
- Access to cable connection by removing terminal box cover, allows variable cable lengths with just one device
- Flange with 12 bore holes, allows variable mounting in 30° steps depending on preferred cable direction

<b>Type key</b>	<b>Ex FG</b>	<b>40</b>	-	-	-
Incremental encoder with Ex certification					
Series					
<b>Connection technology, axial version</b>					
AK: One system with terminal strip AKK: Two systems with terminal strip					
<b>System 1:</b>					
<b>Basic pulse rates (for square wave and sinus signals)</b>					
500, 600, 1000, 1024, 1200, 1300, 2500					
<b>Only for square wave signals:</b>					
<b>Increase of resolution by signal interpolation of basic pulse rates</b>					
Interpolation factors: 1, 2, 4, 8, 10, 20, 25					
(Basic pulse rate x Interpolation factor = Resolution)					
<b>Output signals</b>					
All signals with inverted signals Supply voltage 12 to 30 V each					
<b>With square wave signals</b>					
AH: 0°, 90°, N, Error as HTL signals AT: 0°, 90°, N, Error as TTL signals					
<b>With sinus signals</b>					
SH: Sin, Cos, N as 1Vpp signals; Error as HTL signal					
ST: Sin, Cos, N as 1Vpp signals; Error as TTL signal					
} Only in combination with basic pulse rates					
<b>System 2:</b>					
<b>Basic pulse rates (same basic pulse rate as system 1)</b>					
<b>Only for square wave signals:</b>					
<b>Increase of resolution by signal interpolation of basic pulse rate</b>					
Interpolation factors: 1, 2, 4, 8, 10, 20, 25					
(Basic pulse rate x Interpolation factor = Resolution)					
<b>Output signals</b>					
All signals with inverted signals Supply voltage 12 to 30 V each					
<b>With square wave signals</b>					
AH: 0°, 90°, N, Error as HTL signals AT: 0°, 90°, N, Error as TTL signals					
<b>With sinus signals</b>					
SH: Sin, Cos, N as 1Vpp signals; Error as HTL signal					
ST: Sin, Cos, N as 1Vpp signals; Error as TTL signal					
} Only in combination with basic pulse rates					