

# Encoder MDG 40 A



- Robust and economical encoder with small dimensions
- Servo flange
- Protection to IP67, shaft sealed to IP65

**Application fields:**

Food processing and packaging machines, wood processing machines, testing machines and cleaning installations

**Specifications**

**Available Pulses Per Revolution:**

9, 10, 15, 20, 25, 28, 30, 40, 50, 60, 90, 100, 120, 125, 128, 150, 160, 180, 200, 235, 250, 300, 314, 318, 360, 400, 500, 600, 625, 635, 720, 900, 1000, 1024, 1080, 1200, 1250, 1500

**Mechanical Data**

<b>Housing</b>	
- Servo flange:	Aluminum
- Housing:	Aluminum, powder coated
- Cam mounting:	pitch $\varnothing$ 5.1 mm
<b>Shaft</b>	
- Material:	stainless steel
- Load on shaft end:	max. 80 N radial
- Torque:	max. 50 Naxial approx. 0.2 Nm at ambient temperature
<b>Bearings</b>	
- Type:	2 precision ball bearings
- Service life:	$10^9$ revs. at 100% of full rated shaft load. $10^{10}$ revs. at 40% $10^{11}$ revs. at 20%
<b>Operating speed:</b> max. 12,000 rpm	
<b>Weight:</b> approx. 100g	
<b>Connections:</b> Shielded cable or connector	

**Optics**

Light source:	IR-LED
Service life:	typ. 100,000 hrs.
Scanning:	differential

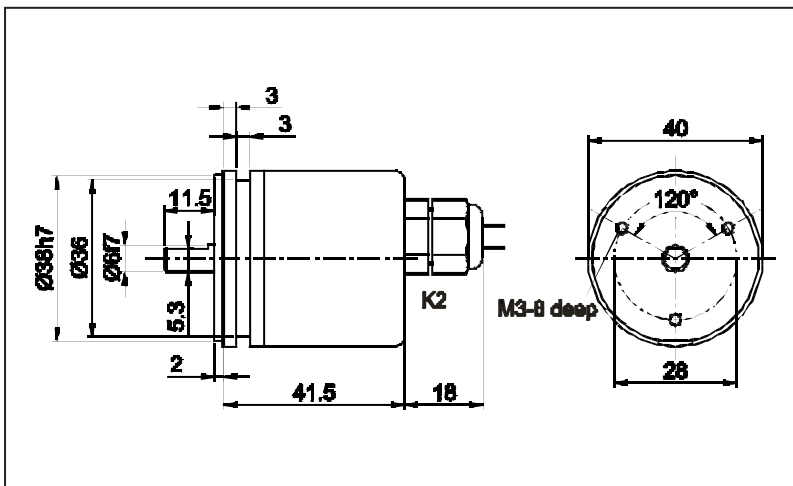
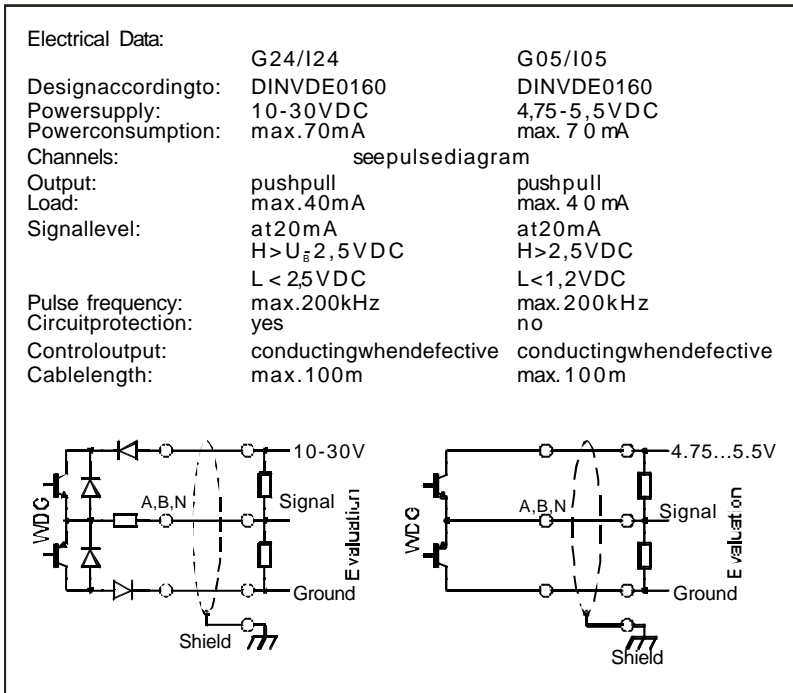
**Accuracy**

Quadrature phasing:	$90^\circ \pm 7.5\%$
Pulse on/off-ratio:	$50\% \pm 7\%$

**Environmental Data**

Measured mounted and housing grounded

ESD (DIN EN 61000-4-2):	8 kV
Burst (DIN EN 61000-4-4):	2 kV
Protection rating :	IP67. Shaft sealed to IP65.
Vibration (DIN EN 60068-2-6):	50 m/s <sup>2</sup> (10-2,000 Hz)
Shock (DIN EN 60068-2-27):	1000 m/s <sup>2</sup> (11 ms)
Operating temperature:	-10°C to +70°C
Storage temperature:	-30°C to +80°C



Dimensional drawing MDG 40 A with K2, dimensional specifications in mm

Customer-specific adaptations on request.

