

Incremental-Encoder IEV 58

IEV58-INC-1-GB-1
04/12 Revision 01
010101-00589999-9999



- + Incremental interface
- + Type with solid shaft
- + Modular product line
- + Extensive parameter setting possibilities
- + Special parameters upon request
- + Short lead times
- + Further interfaces available
- + Modular construction for mechanical customizations

Characteristics

Supply voltage.....	11...28 VDC, optional 5 VDC $\pm 5\%$
Current consumption without load.....	< 65 mA, < 80 mA at 5 VDC
Number of pulses/revolution ¹⁾	$\geq 2 \dots \leq 1.024, > 1.024: 2.048, 4.096, 8.192$
Version with push-pull	
- Output level	11...28 VDC, supply voltage
- Output current	$\leq 30 \text{ mA}$
- Output frequency	150 kHz, $\pm 15^\circ$
- Supply voltage	11...28 V DC
Version with line driver	
- Output level	5 VDC, RS422
- Output current	$\leq 50 \text{ mA}$
- Output frequency	300 kHz, $\pm 15^\circ$
- Supply voltage	11...28 V DC, optional 5 VDC
Incremental signals	A+, A-, B+, B-
Zero pulse	Ref+, Ref-
Programmable parameters	
- Number of pulses	
- Phase position: A / B, Zero pulse(s)	
- Zero pulse: Pulse length, Number of pulses	
- Enable/Disable Preset function, Set Ref+, Ref-	
Preset	electronic adjustment of the reference signals Ref+, Ref-
Logic level	"0" < + 2 VDC, "1" = Supply voltage
Mechanically permissible speed	$\leq 12.000 \text{ min}^{-1}$
Shaft load, at the shaft end.....	$\leq 10 \text{ N axial}, \leq 20 \text{ N radial}$
Bearing life time.....	$\geq 3.9 * 10^{10}$ revolutions at
- Speed.....	$\leq 6.000 \text{ min}^{-1}$
- Operating temperature	$\leq 60^\circ \text{C}$
- Shaft load, at the shaft end.....	$\leq 5 \text{ N axial}, \leq 10 \text{ N radial}$
Permissible angular acceleration.....	$\leq 10^4 \text{ rad/s}^2$
Moment of inertia	typically $2.5 * 10^{-6} \text{ kg m}^2$
Start-up torque at 20°C.....	typically 2 Ncm
Mass.....	0.3 kg...0.5 kg

¹⁾ programmable parameter

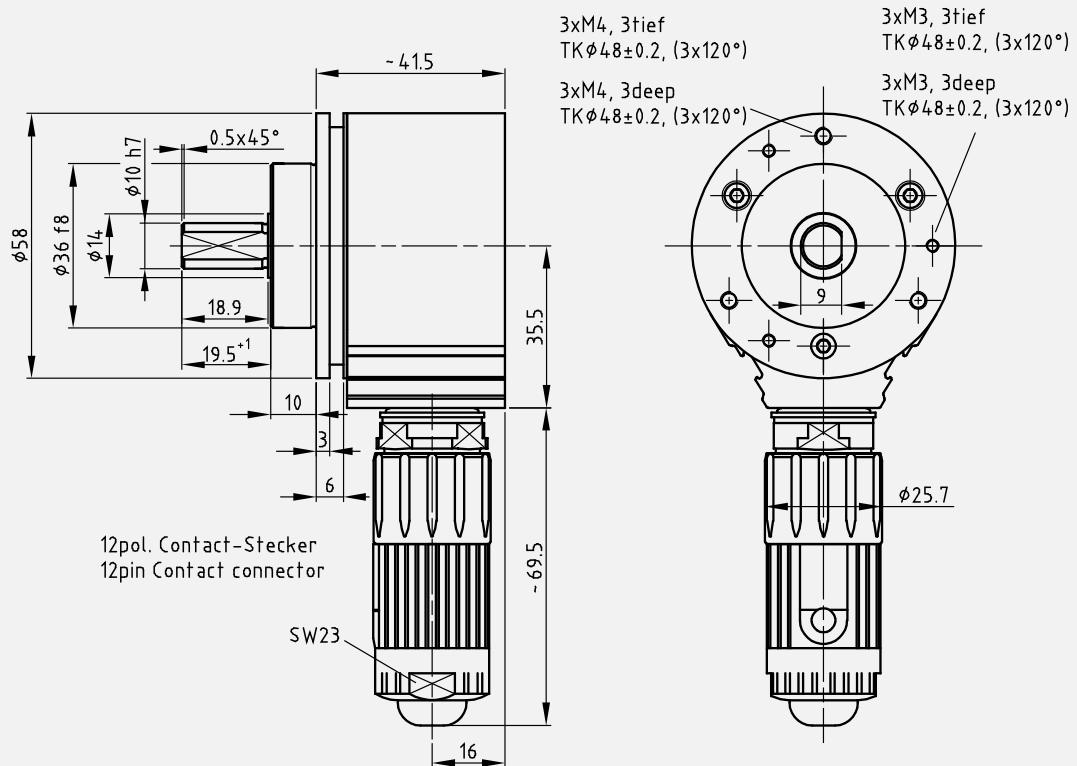
Environmental conditions

Vibration, DIN EN 60068-2-6: 1996	$\leq 100 \text{ m/s}^2$, sine 50-2000 Hz
Shock, DIN EN 60068-2-27: 1995.....	$\leq 1000 \text{ m/s}^2$, half-sine 11ms
EMC	
- Immunity to disturbance, DIN EN 61000-6-2: 2006	
- Transient emissions, DIN EN 61000-6-3: 2007	
Working temperature	0 °C...+60 °C, optional -20 °C...+70 °C
Storage temperature	-30 °C...+80 °C, dry
Relative humidity, DIN EN 60068-3-4: 2002	98 %, non condensing
Protection class, DIN EN 60529: 1991 ²⁾	IP 65

²⁾ valid with screwed on mating connector and / or screwed together cable gland

Dimension drawing

(For project planning please request customized dimensional drawing!)



Subject to change