

Incremental-Encoder IDV 58

IDV58-INC-1-GB-1
08/13 Revision 03
010101-00589999-9999



- + Double Incremental interface
- + Type with solid shaft
- + Modular product line
- + Redundant scanning system
- + Extensive parameter setting possibilities
- + Special parameters upon request
- + Further interface variants upon request
- + Modular construction for mechanical customizations

Characteristics

Supply voltage.....	2 * 11...28 VDC, optional 2 * 5 VDC $\pm 5\%$, or combined
Current consumption without load	< 130 mA, < 160 mA at 5VDC, < 145 mA
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	≤ 30 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	≤ 50 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	≤ 6.000 min ⁻¹
Shaft load, at the shaft end	≤ 10 N axial, ≤ 20 N radial
Bearing life time	$\geq 3.9 * 10^{10}$ revolutions at
- Speed	≤ 6.000 min ⁻¹
- Operating temperature	≤ 60 °C
- Shaft load, at the shaft end	≤ 5 N axial, ≤ 10 N radial
Permissible angular acceleration	$\leq 10^4$ rad/s ²
Moment of inertia	typically $5 * 10^{-6}$ kg m ²
Start-up torque at 20°C	typically 2 Ncm
Mass	0.6 kg...1 kg

¹⁾ programmable parameter

Subject to change

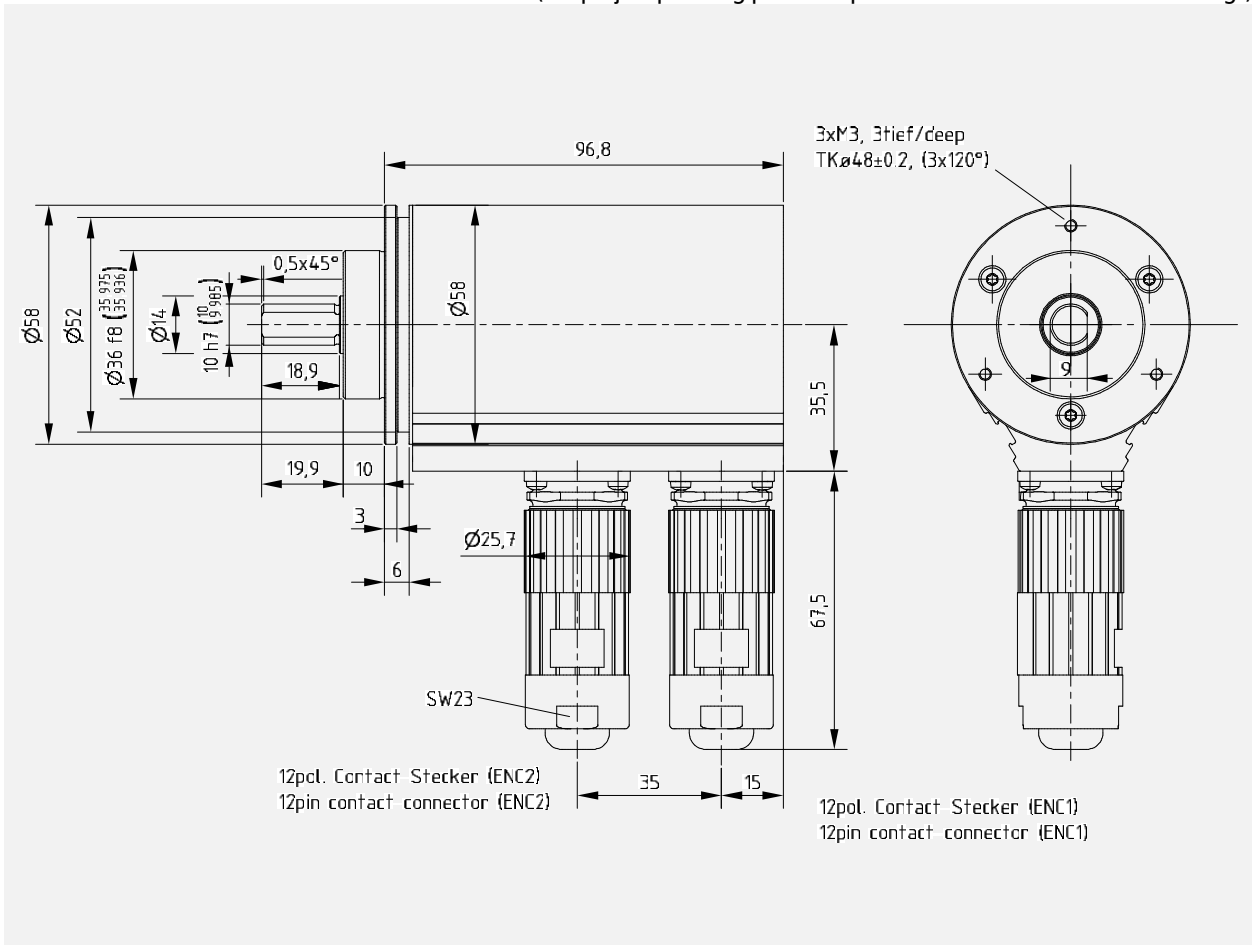
Environmental conditions

Vibration, DIN EN 60068-2-6: 1996	≤ 100 m/s ² , sine 50-2000 Hz
Shock, DIN EN 60068-2-27: 1995.....	≤ 1000 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!)



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