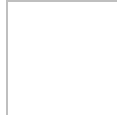


Incremental-Encoder IOS 58

IOS58-INC-1-GB-1
04/12 Revision 02
010101-00589999-9999



- + Incremental interface
- + Type with blind shaft
- + Modular product line
- + Extensive parameter setting possibilities
- + Special parameters upon request
- + Number of pulses up to 36.000
- + 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⁾	≤ 36.000
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	
- Overspeed	
- 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	≤ 12.000 min ⁻¹
Shaft load.....	Own mass
Bearing life time.....	$\geq 3.9 * 10^{10}$ revolutions at
- Speed	≤ 6.000 min ⁻¹
- Operating temperature	≤ 60 °C
Shaft diameter in mm.....	8H7, 10H7, 12H7
Permissible angular acceleration.....	$\leq 10^4$ rad/s ²
Moment of inertia	typically $2.5 * 10^{-6}$ kg m ²
Start-up torque at 20°C.....	typically 2 Ncm
Mass.....	0.3 kg...0.5 kg

¹⁾ programmable parameter

Subject to change

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 $0 \text{ }^\circ\text{C} \dots +60 \text{ }^\circ\text{C}$, optional $-20 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$
 Storage temperature $-30 \text{ }^\circ\text{C} \dots +80 \text{ }^\circ\text{C}$, 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!)

