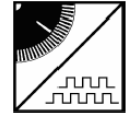


Incremental encoder-ISE58G series

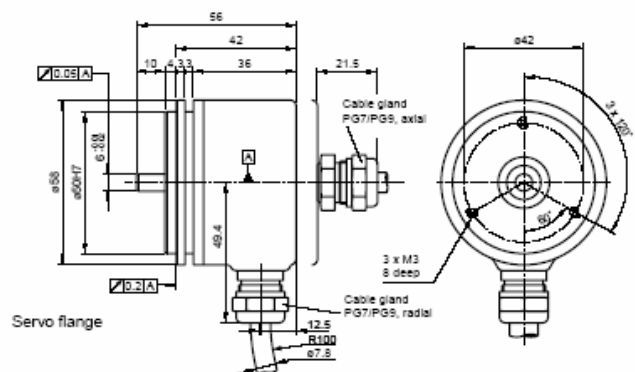
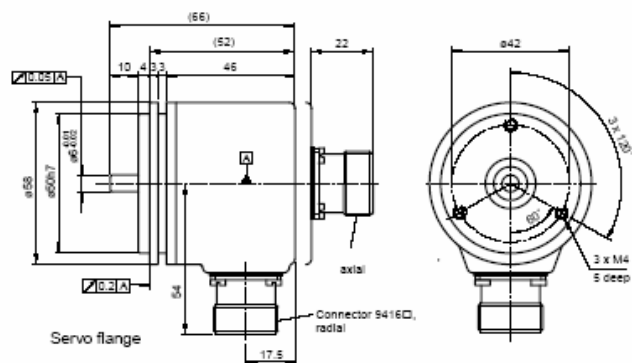
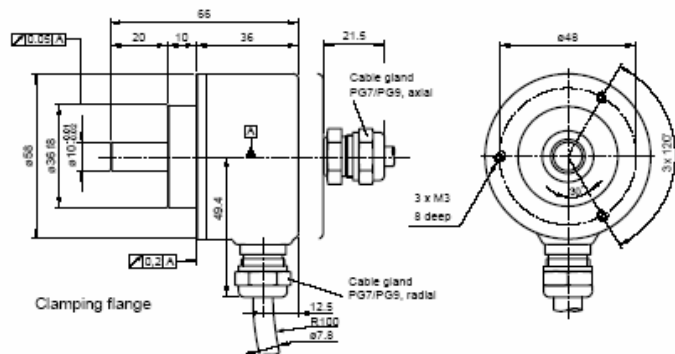
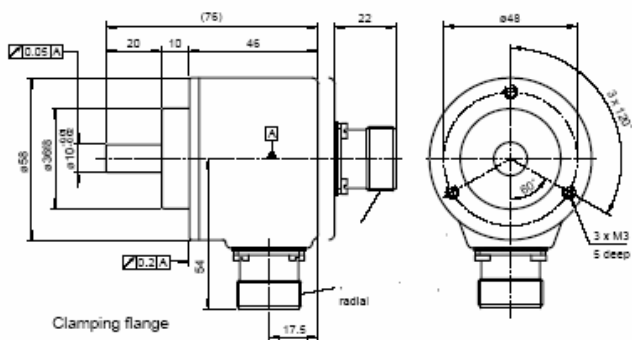
Clamp flange, Servo flange



- Industrial standard housing Ø 58mm
- Up to 5000 PPR
- 10...30V with short circuit-proof push-pull output
- 10V...30V with RS422 interface
- 5V with RS422 interface
- IP65



Dimensions

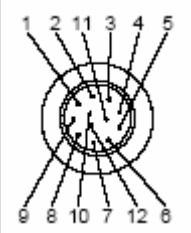
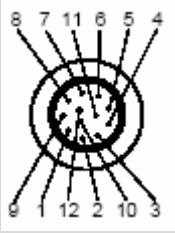


Clamp flange, Servo flange

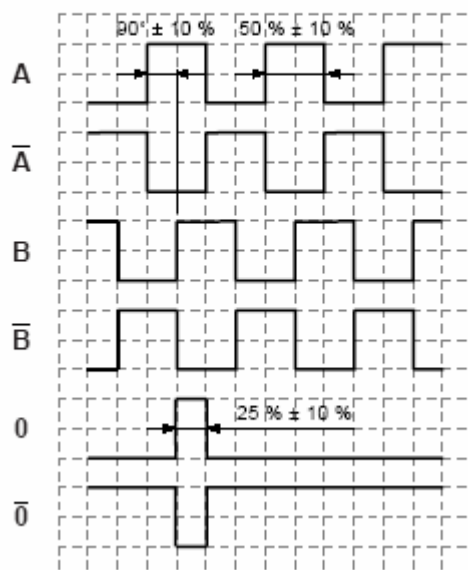
General specifications	ISE58G-*****A	ISE58G-*****B	ISE58G-*****C
Pulse count (ppr)	max. 5000	max. 5000	max. 5000
Output			
Output type	Push-pull, incremental	RS 422, incremental	RS 422, incremental
Operating voltage	10 ... 30 V DC	10 ... 30 V DC	5 V DC $\pm 5\%$
No-load supply current	max. 50 mA	max. 50 mA	max. 70 mA
Load current	max. per channel 40 mA, short-circuit-proof (not with Ub), reverse polarity protected	max. per channel 20 mA, conditionally short-circuit-proof (not with Ub), reverse polarity protected	max. per channel 20 mA, conditionally short-circuit-proof (not with Ub)
Voltage drop	< 3 V	-	-
Output frequency	max. 200 kHz	max. 200 kHz	max. 200 kHz
Rise time	400 ns	100 ns	100 ns
Error output			
Malfunction status	Low level	Low level	Low level
Kind of output	Open collector with pull-up resistor (5.6 k _{against} +Ub)	Open collector with pull-up resistor (5.6 k _{against} +Ub)	Open collector with pull-up resistor (5.6 k _{against} +Ub)
Load current	-40 mA	-40 mA	-40 mA
Connection type			
Connector	Type F12 12-pin	Type F12 12-pin	Type F12 12-pin
Cable	Ø7.8 mm, 6 x 2 x 0.14 mm ² , 1 m	Ø7.8 mm, 6 x 2 x 0.14 mm ² , 1 m	Ø7.8 mm, 6 x 2 x 0.14 mm ² , 1 m
Operating temperature			
Glass disk	-5 ... +80 °C, cable movable -20 ... +80 °C, fixed cable	-5 ... +80 °C, cable movable -20 ... +80 °C, fixed cable	-5 ... +80 °C, cable movable -20 ... +80 °C, fixed cable
Plastic disk	-5 ... +60 °C, cable movable -20 ... +60 °C, fixed cable	-5 ... +60 °C, cable movable -20 ... +60 °C, fixed cable	-5 ... +60 °C, cable movable -20 ... +60 °C, fixed cable
Storage temperature			
Glass disk	-40 ... +100 °C	-40 ... +100 °C	-40 ... +100 °C
Plastic disk	-40 ... +70 °C	-40 ... +70 °C	-40 ... +70 °C
Standard conformity			
Climatic testing	DIN EN 60068-2-3, no moisture condensation	DIN EN 60068-2-3, no moisture condensation	DIN EN 60068-2-3, no moisture condensation
Emitted interference	DIN EN 50081-1	DIN EN 50081-1	DIN EN 50081-1
Interference rejection	DIN EN 61000-6-2	DIN EN 61000-6-2	DIN EN 61000-6-2
Shock resistance	DIN EN 60068-2-27, 100 g, 6 ms	DIN EN 60068-2-27, 100 g, 6 ms	DIN EN 60068-2-27, 100 g, 6 ms
Vibration resistance	DIN EN 60028-2-6, 10 g, 10 ... 2000 Hz	DIN EN 60028-2-6, 10 g, 10 ... 2000 Hz	DIN EN 60028-2-6, 10 g, 10 ... 2000 Hz
Protection degree	DIN EN 60529, IP65	DIN EN 60529, IP65	DIN EN 60529, IP65
Mechanical specifications			
Housing	Aluminium, powder-coated	Aluminium, powder-coated	Aluminium, powder-coated
Flange	Aluminium 3.1645	Aluminium 3.1645	Aluminium 3.1645
Shaft	Stainless steel 1.4305	Stainless steel 1.4305	Stainless steel 1.4305
Mass	approx. 350 g	approx. 350 g	approx. 350 g
Rotational speed	max. 12000 min ⁻¹	max. 12000 min ⁻¹	max. 12000 min ⁻¹
Moment of inertia	≤25 gcm ²	≤25 gcm ²	≤25 gcm ²
Starting torque	≤1.5 Ncm	≤1.5 Ncm	≤1.5 Ncm
Shaft load			
axial	40/10 N at max. 6000 min ⁻¹ / max. 12000 min ⁻¹	40/10 N at max. 6000 min ⁻¹ / max. 12000 min ⁻¹	40/10 N at max. 6000 min ⁻¹ / max. 12000 min ⁻¹
radial	60/20 N at max. 6000 min ⁻¹ / max. 12000 min ⁻¹	60/20 N at max. 6000 min ⁻¹ / max. 12000 min ⁻¹	60/20 N at max. 6000 min ⁻¹ / max. 12000 min ⁻¹

Clamp flange, Servo flange

Electrical connection:

Signal	Cable Ø7.8 mm, 12-core	Connector F12, 12-pin	Connector F12L, 12-pin
GND	White	10	10
U _b	Brown	12	12
A	Green	5	5
B	Grey	8	8
A	Yellow	6	6
B	Pink	1	1
0	Blue	3	3
0	Red	4	4
U _b Sens	Violet	2	2
Alarm	Grey/Pink	7	7
Screen	—	Housing	Housing
NC	—	9	9
GND Sens	Black	11	11
			

Signal outputs



Incremental encoder-ISE58G series



Clamp flange, Servo flange

Type code :

I S E 58 G / [A].[B].[C].[D].[E].[F].[G]

ISE58G – incremental shaft encoder housing ø58 mm

A: 10 – shaft 10x20mm clampling flange

06- shaft 6x10mm servo flange

B: C0 -F12 connector

C1 –F12L connector

K1 – Cable 1m

C: A – axial

R – radial

D: 3 – A+B+O

6 – A+B+O and A/+B/+O/

E: A – 10-30VDC Push pull

B – 5V RS422

C – 10-30VDC RS422

F: G – general version

G: Pulse – 100, 360, 500, 1000, 1024, 2048, 2500, 3600, 4096, 5000