

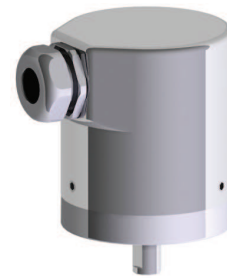
EA 36 A / F / G

SINGLETURN ABSOLUTE MAGNETIC ENCODER



MAIN FEATURES

- Compact absolute magnetic singleturn encoder
- Magnetic technology without contact
- Sturdy construction (separated chambers)
- Maximum resolution 12 bit
- Power supply 5 Vdc or 8 ... 30 Vdc
- SSI as electronic interface
- Code reset for easy setup
- Enclosure rating up to IP 67
- Working temperature -20° ... +85°C
- Radial cable output, M12 / M23 / MIL C 5015 connector available on cable end



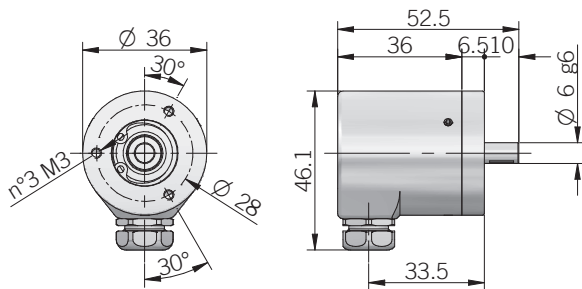
MAGNETIC ABSOLUTE ENCODERS

ORDERING CODE

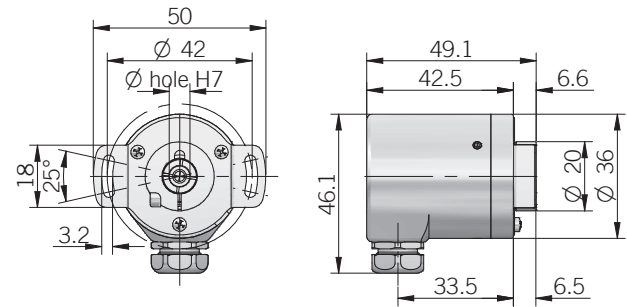
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|---|-----------------------------|---|--|---|---|---|---|--|---|--|---|---|--|-----------------------------------|------------|
| EA | 36 | G | 12 | G | 8/30 | S | P | X | 6 | X | 8 | P | R | . | XXX |
| SERIES singleturn absolute encoder EA | SIZE mm 36 | FLANGE / FIXING TYPE solid shaft - fixing flange \varnothing 28 mm A blind hollow shaft - spring F blind hollow shaft - antirotation pin G | SINGLETURN RESOLUTION from 1 to 12 bit 360 / 720 ppr <i>N.B.: please directly contact our offices for pulses availability</i> | CODE TYPE Binary B Gray G Binary offset code (0-XXX) BC Gray offset code (0-XXX) GC <i>N.B.: powers of 2 except for the offset code</i> | POWER SUPPLY 5 V DC 5 8 ... 30 V DC 8/30 | ELECTRONIC INTERFACE SSI S | VARIANT XXX custom version | OUTPUT DIRECTION R radial | OUTPUT TYPE P cable output (standard length 0.5 m) | MAX ROTATION SPEED 8 8000 rpm | ENCLOSURE RATING X IP 67 cover side / IP 65 shaft side | SOLID / BLIND HOLLOW SHAFT DIAMETER 6 mm | OPTIONS X unused option ZE code reset | LOGIC P positive | |

EA 36 A / F / G

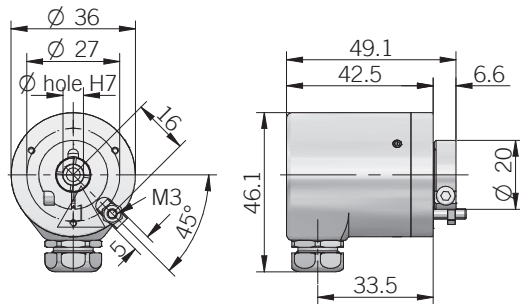
EA 36 A



EA 36 F



EA 36 G



Electrical specifications

| | |
|---------------------------------------|--|
| Singleturn resolution | from 1 to 12 bit 360 / 720 ppr magnetic technology without contact |
| Power supply | 4,75 ... 5,25 V DC 7,6 ... 30 V DC |
| Power draw without load | 600 mW |
| Electronic interface | SSI RS422 |
| Clock frequency | 100 kHz - 1 MHz SSI |
| SSI pause time (Tp) | > 35 μ s |
| SSI monostable time (Tm) | 20 μ s |
| Auxiliary inputs (U/D - Reset) | active high (+Vdc) connect to 0V if not used / Reset t_{min} 150 ms |
| Accuracy | +/- 0,35° max |
| Counting direction | decreasing clockwise (shaft view) |
| Start-up time | 150 ms |
| Electromagnetic compatibility | IEC 61000-6-2 IEC 61000-6-4 |

Mechanical specifications

| | |
|--|---|
| Solid shaft / Blind hollow shaft diameter | $\varnothing 6$ mm |
| Enclosure rating | IP 67 cover side / IP 65 shaft side (IEC 60529) |
| Max rotation speed | 8000 rpm continuous / 10000 rpm instantaneous |
| Shaft load | 20 N axial / radial |
| Shock | 50 G, 11 ms (IEC 60068-2-27) |
| Vibrations | 20 G, 10 ... 2000 Hz (IEC 60068-2-6) |
| Moment of inertia | 0,001 x 10 ⁻⁶ kgm ² |
| Fixing torque for collar clamping | recommended max 0,6 Nm |
| Life bearing | 10 ⁹ revolutions |
| Bearings | n° 2 ball bearings |
| Shaft material | 1.4305 / AISI 303 stainless steel |
| Bearing stage material | EN-AW 2011 aluminium |
| Housing material | AISI 420 stainless steel |
| Working temperature | -20° ... +85°C (-4° ... +185°F) |
| Storage temperature | -20° ... +85°C (-4° ... +185°F) |
| Weight | 150 g |

Connections for SSI output

| Function | Cable colour |
|--------------|--------------|
| + V dc | red |
| 0 Volt | black |
| data + | green |
| data - | brown |
| clk + | yellow |
| clk - | orange |
| U / D | red / blue |
| RESET | white |
| --- | shield |

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