

**Inductive Shaft encoder, Absolute**

- Certified according to ATEX and IECEx*
- 78 mm diameter
- 31 bit Multiturn resolution
- Inductive scanning
- Stainless steel A4, EN 1.4404/AISI 316L
- *Please refer to web page for other possible options/performances

**Encoder configuration**

Code key description	648100110
Type	ISA
Model	648 Multiturn stainless steel
Shaft type	Ø10 mm with partial flat
Flange type	Synchro flange
Power supply	9-30 Vdc
Output interface	PROFIBUS DP
Absolute resolution	31 bit (19 bit singleturn + 12 bit multiturn)
Connection type	3 x M20 entries for Ex d-certified cable glands
Connecting direction	Radial

Mechanical data

Operating temperature	-40° C.+60° C
Ingress protection class [IEC 60529]	IP67 / IP66 (Encoder body/Shaft inlet)
Vibration [IEC 60068-2-6]	≤ 20 g, 55-2000 Hz
Shock [IEC 60068-2-27]	100 g, 11 ms / 200 g, 6 ms
Shaft load (axial/radial)	50 / 60 N
Rotational speed max	500 rpm
Shaft material	Stainless steel A4, AISI 316L/EN 1.4404
Cover material	Stainless steel A4, AISI 316L/EN 1.4404
Weight	3000 g
Certification ATEX	EX II 2G Ex db IIC T6, EX II 2D Ex tb IIIC T85 °C
Certification IECEx	Ex db IIC T6, Ex tb IIIC T85 °C

Electrical data

Polarity protected	Yes
Current consumption	95 mA at 24 Vdc
Absolute accuracy	± 100 arcsec
Supported profile	Encoder profile 3.062 (DPV0) and 3.162 v4.1 (DPV2)
Node adress	Settable via DIP switches, 0...99
Baud rate	Max. 12 Mbit/s

Supported functions

Preset, Scaling, Code sequence, Isosynchronous mode (only DPV2), Velocity (only DPV0 class 2)

Pin Configuration

Function	Terminal
+E Volt	+ (1)
0 Volt	- (2)
B** (Bus in)	B (3)
A* (Bus in)	A (4)
B** (Bus out)	B (5)
A* (Bus out)	A (6)
*A terminals are connected	
**B terminals are connected	

Order information

Part number	1086431-01
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