

Series

**I65 • IT65**



- Robust die cast housing
- High shaft load
- Protection up to IP66 (shaft side)
- Clamp flange
- Square flange, US size
- Preferential versions available



I65 • IT65

### ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
Protection:	IP65
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-25°C +85°C (-13°F +185°F) (98% R.H. without condensation)
Options:	<ul style="list-style-type: none"> <li>• Operating temperature range: -40°C +100°C (-40°F +212°F)</li> <li>• IP66 Protection shaft end (torque 2,5 Ncm and 3000 rpm max.)</li> </ul>

### MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6, 8, 9.52, 10, 12 mm
Shaft loading (axial, radial):	100 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	0,4 Ncm (typical)
Bearings life:	400 x 10 <sup>6</sup> rev. min. (10 <sup>9</sup> rev. min. with 20 N shaft loading max.)
Electrical connections:	MIL 7 pin, MIL 10 pin plug or cable output 1 m (3.3 ft)
Weight:	~ 400 g (14,1 oz)
Option:	• additional cable

### ELECTRICAL SPECIFICATIONS

Standard resolution with magnetic sensing (PPR): <i>(output circuits N, P, Y, L, H)</i>	2-4-5-6-8-10-12-15-16-20-24-25-30-35-36-40-50-60-64-70 80-90-120-125-127-142-150-160-180-216-230-236-240-254 267-270-314-360-375-410-435-471-635-800-1068-1270 1400-2250 (other on request)
Standard resolution with unbreakable disk (PPR): <i>(output circuits N, P, Y, L, H)</i>	100-200-250-256-300-400-500-512-600-720-750-900-1000 1024-1200-1250-1440-1500-1800-2000-2048-2500-3000 3600-4000-4096-5000
High accuracy glass disk (PPR): <i>(output circuits N, P, Y, L, H)</i>	5K=5000, 6K=6000, 9K=9000, 10K=10000 4KB=4096, 8KB=8192
Counting frequency:	300 kHz max.
Output circuits:	NPN, PNP, Push-Pull, Line Driver, Universal circuit
Power supply:	+5V±5%, +10V +30V,+5V +30V
Consumption:	70 mA (typical)
Output current (each channel):	40 mA max.
Protection:	against inversion of polarity and short-circuit (except L circuit)
EMC:	electro-magnetic immunity, according to: EN 61000-4-2 EN 61000-4-4

### MATERIALS

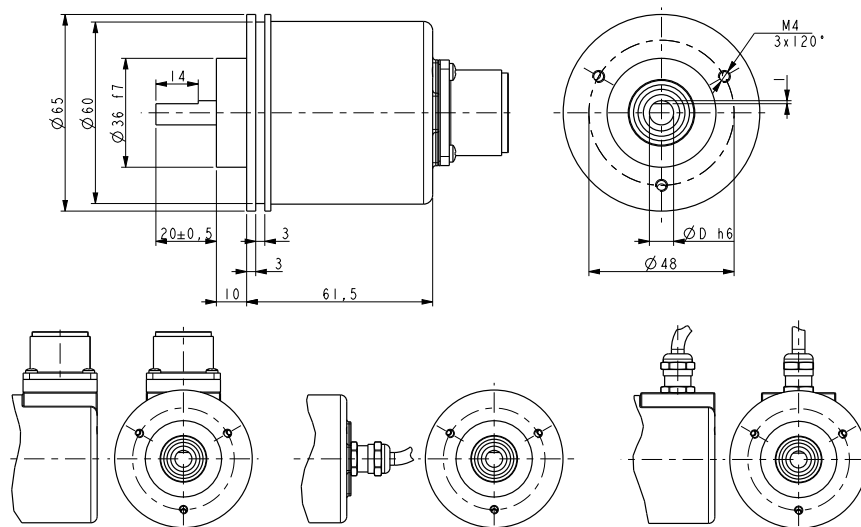
Flange:	anticorodal, UNI EN AW-6082
Housing:	zamac die cast
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic - UNI EN 4305

### PREFERENTIAL MODELS

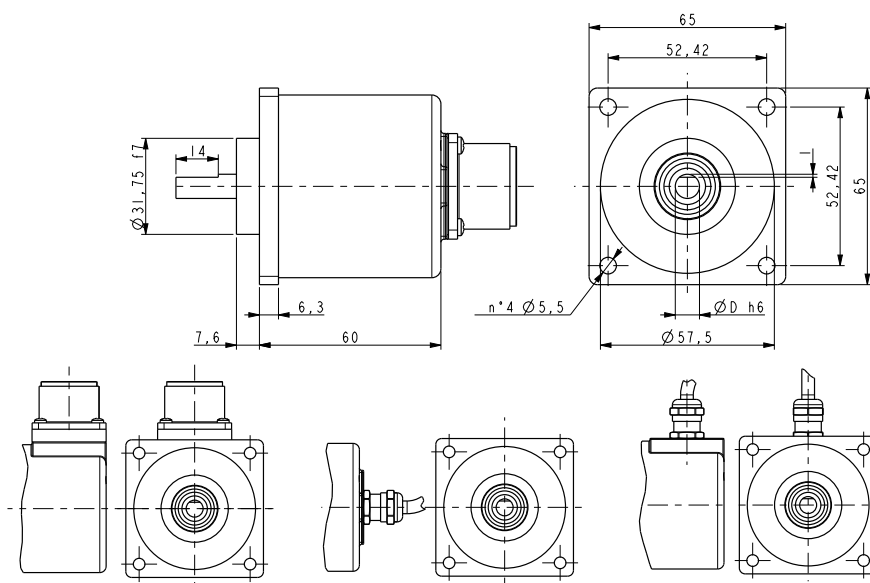
IT65-H4-00100-ZCP-08-PT-R-L010	100 PPR, HTL/TTL output
IT65-H4-00500-ZCP-08-PT-R-L010	500 PPR, HTL/TTL output
IT65-H4-01000-ZCP-08-PT-R-L010	1000 PPR, HTL/TTL output
IT65-H4-01024-ZCP-08-PT-R-L010	1024 PPR, HTL/TTL output
IT65-H4-02500-ZCP-08-PT-R-L010	2500 PPR, HTL/TTL output
IT65-H4-05000-ZCP-08-PT-R-L010	5000 PPR, HTL/TTL output

### ACCESSORIES

EC-M10F-LK-18-050:	Cordset MIL 10 pin conn. 5 meters cable
EC-M10F-LK-18-100:	Cordset MIL 10 pin conn. 10 meters cable
E7MLS:	7 pin MIL mating connector
E10MLS:	10 pin MIL mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps



I65



IT65

Order code

I65	-	XX	-	XXXXX	-	XXX	-	XX	-	X	X	-	X	XXXX	/Sxxx
IT65		(a)		(b)		(c)		(d)		(e)	(f)		(g)	(h)	(i)

<p><b>(a) OUTPUT CIRCUITS / POWER SUPPLY</b>                  N2 = NPN o.c., +10V÷ +30V                  P2 = PNP o.c., +10V÷ +30V                  Y2 = Push Pull, +10V÷ +30V                  L1 = Line Driver (RS422), +5V±5%                  H4 = PP/LD universal circuit, +5V÷ +30V                  L2 = Line Driver (RS422), +10V÷ +30V</p> <p><b>(b) RESOLUTION (PPR)</b>                  See electrical specifications</p>	<p><b>(c) OUTPUT SIGNALS / CONNECTIONS</b>                  BNF = AB, cable output                  ZNF = ABO, cable output                  BND= AB, MIL 7 pin plug                  ZND= ABO, MIL 7 pin plug                  BCU = AB /AB, cable output                  ZCU = ABO /ABO, cable output                  BCP = AB /AB, MIL 10 pin plug                  ZCP = ABO /ABO, MIL 10 pin plug</p>	<p><b>(d) SHAFT DIAMETER</b>                  O6 = 6 mm                  O8 = 8 mm                  P9 = 9.52 mm - 3/8"                  I0 = 10 mm                  I2 = 12 mm</p> <p><b>(e) PROTECTION</b>                  P = IP65 (standard)                  Q = IP66 protection shaft side</p> <p><b>(f) OPERATING TEMPERATURE</b>                  T = -25°C +85°C (-13°F +185°F) stand.                  K = -40°C +100°C (-40°F +212°F)</p>	<p><b>(g) CONNECTION POSITION</b>                  A = axial                  R = radial</p> <p><b>(h) CABLE LENGTH</b>                  L010 = cable output 1 m (standard)                  L020 = cable output 2 m                  Lxx0 = cable output x m (max. length 10 m)</p> <p><b>(i) CUSTOM VERSION</b></p>
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Document release	Date	Description
1.0	September 2023	New order code