

ROTAPULS

Incremental encoders

Series

I40 • I41



- Compact industrial encoders
- Preferential versions with fast delivery
- Universal output circuit HTL/TTL
- High resolution up to 4096 PPR



I41 • I40

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP64
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)
Option:	• IP65, IP66 protection shaft end

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft diameter:	Ø 6, 6.35 mm
Shaft loading (axial, radial):	20 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque (at 20°C):	0,1 Ncm (typical)
Bearings life:	10 ⁹ rev. min.
Electrical connections:	cabl output 1 m (3.3 ft)
Weight:	~ 100 g (3,5 oz)
Option:	• additional cabl

ELECTRICAL SPECIFICATIONS

Resolution (PPR):	1-2-5-8-10-15-20-30-32-40-50-56-60-72-84-90-100-120 125-127-150-176-180-200-250-256-300-314-320-360-400 500-512-540-600-625-635-720-900-1000-1024(*)-1080-1200 1250-1440-1500-1600-1800-2000-2048(*)-2400-2500-2880 3600-4000(*)-4096(*)
(*) not available for I40 series	
Counting frequency:	50 ÷ 100 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
Optoelectronic life:	100.000 hrs min.

MATERIALS

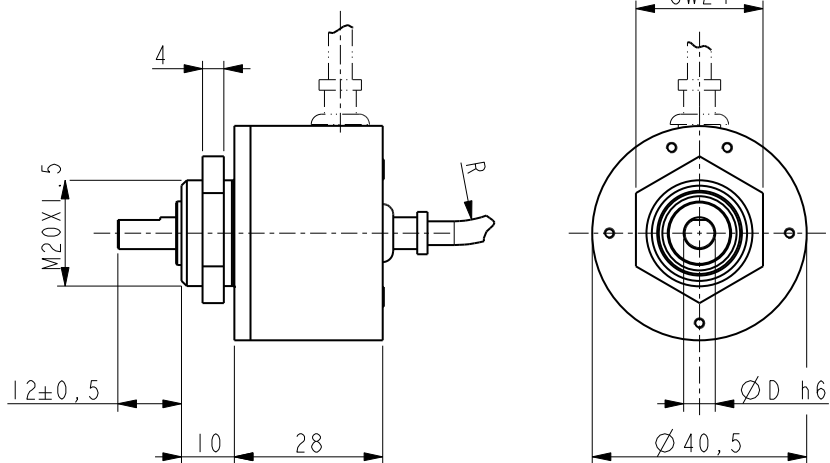
Flange:	anticorodal, UNI EN AW-6082
Housing:	fibre glass epoxy resin
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic, UNI EN 4305
Light source:	GaAl diodes

PREFERENTIAL MODELS

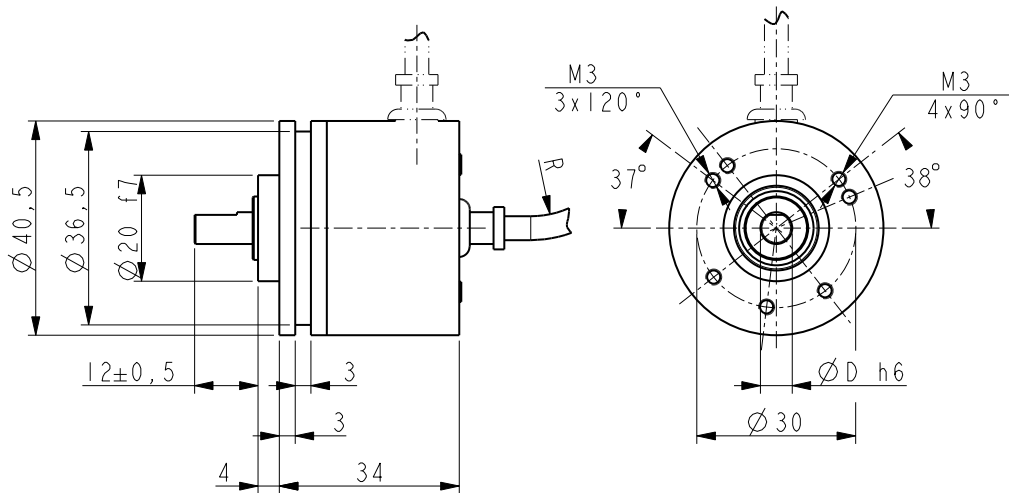
I41-H-100ZCU46L2	100 PPR, HTL/TTL output
I41-H-200ZCU46L2	200 PPR, HTL/TTL output
I41-H-360ZCU46L2	360 PPR, HTL/TTL output
I41-H-500ZCU46L2	500 PPR, HTL/TTL output
I41-H-1000ZCU46L2	1000 PPR, HTL/TTL output
I41-H-1024ZCU46L2	1024 PPR, HTL/TTL output

ACCESSORIES

EDE9S:	9 pin DSub mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps



I40



I41

Order code

I40	-	X	-	XXXX	XXX	X	XX	X	X	XX	/Sxxx
I41		(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)

(a) OUTPUT CIRCUITS N = NPN o.c. P = PNP o.c. Y = Push Pull L = Line Driver (RS422) H = PP/LD universal circuit	(c) OUTPUT SIGNAL BNF = AB BCU = AB, /AB ZNF = AB0 ZCU = AB0, /AB0	(e) SHAFT DIAMETER 6 = 6 mm P6 = 6.35 mm - 1/4"	(g) CONNECTION POSITION - = axial R = radial
(b) RESOLUTION (PPR) See electrical specifications	(d) POWER SUPPLY 1 = +5V±5% (L output circuit) 2 = +10V÷ +30V (Y, N, P output circuit) 4 = +5V÷ +30V (H output circuit)	(f) PROTECTION - = IP64 P = IP65 Q = IP66 shaft side (only I41)	(h) CABLE LENGTH - = cable output 1 m (standard) L2 = cable output 2 m Lx = cable output x m CLx = x m cable with DSub 9 pin inline plug
(i) CUSTOM VERSION			