

ROTAPULS

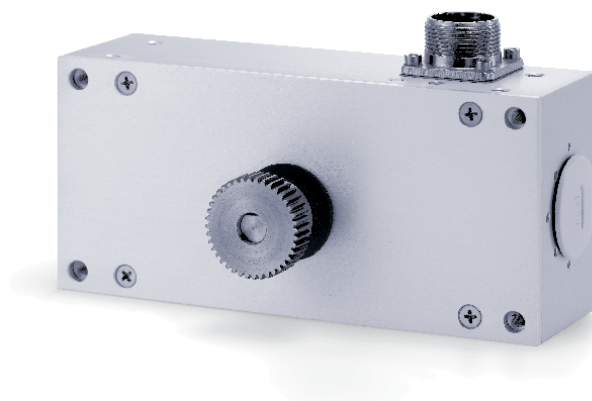
Incremental encoder

Series

ICS



- Robust & corrosion resistant housing
- For linear measurements with pinion + rack or metric wheel
- Movable shaft absorbs mounting misalignments
- Absolute version on request



ICS

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
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)
Protection:	IP67, connector IP65

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft hollow:	Ø 12 mm
Shaft loading (axial and radial):	100 N max.
Shaft rotational speed:	6000 rpm max.
Starting torque at 20°C:	≤ 3 Ncm (typical)
Bearings life:	400 x 10 ⁶ rev. min. (10 ⁹ rev. min. with 20 N shaft loading max)
Weight:	~ 1,2 kg (42,3 oz)

ELECTRICAL SPECIFICATIONS

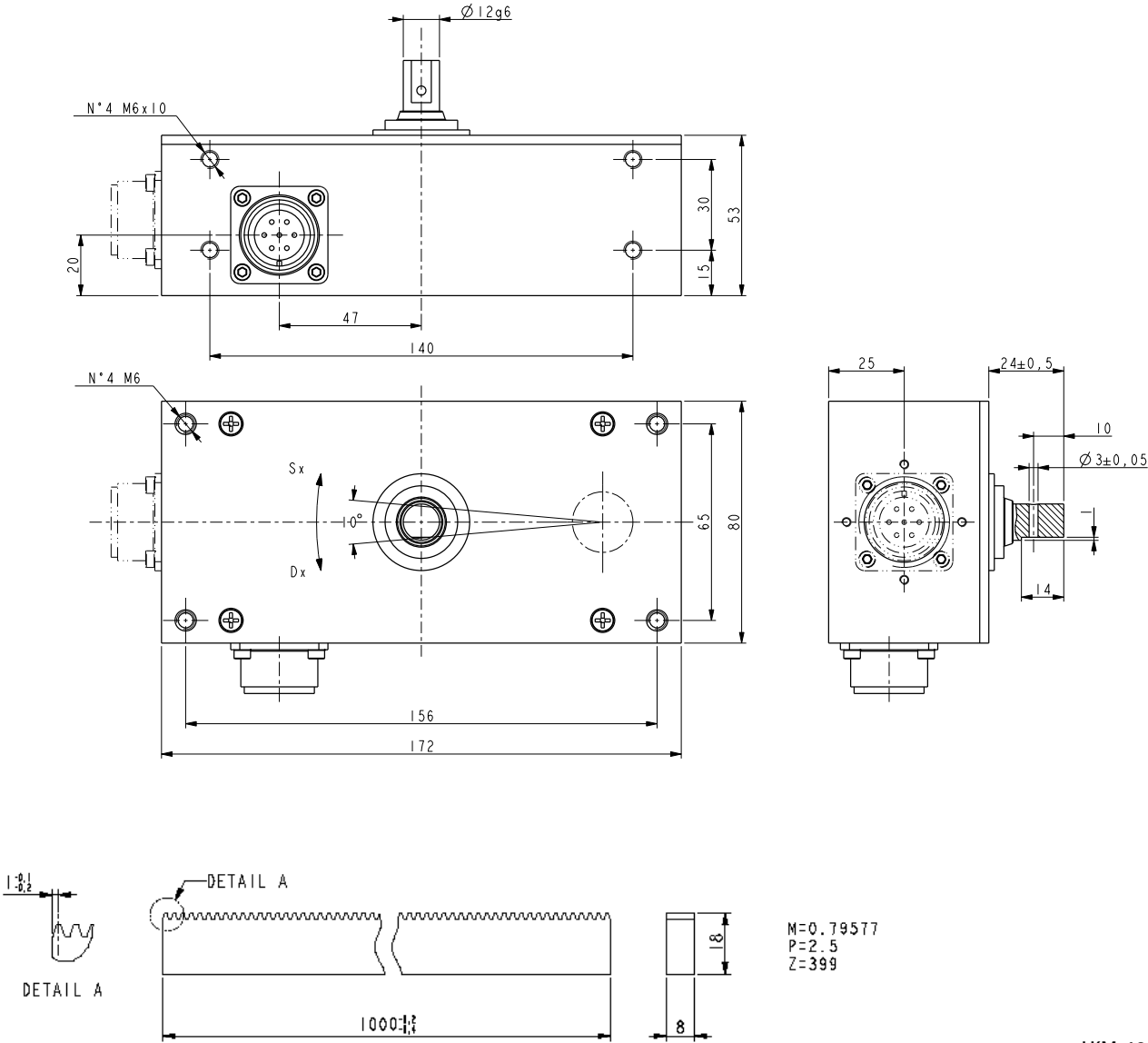
Resolution (PPR):	4-5-6-8-10-12-15-16-20-24-25-30-36-40-50-60-70-80 100-120-125-127-150-160-200-216-230-240-250-254 256-300-314-360-375-400-471-500-512-600-720-750 900-1000-1024-1068-1200-1250-1270-1400-1440 1500-1800-2000-2048-2250-2400-2500
Pulses/mm:	to be result of pinion and rack ratio
Counting frequency:	60 kHz max.
Output circuit:	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
EMC:	electro-magnetic immunity, according to EN 61000-4-2 EN 61000-4-4
Optoelectronic life:	100.000 hrs min.

MATERIALS

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

ACCESSORIES

E7MLS:	7 pin MIL mating connector
E10MLS:	10 pin MIL mating connector
PF4260:	Z40 pinion
LKM-1224:	M0,79 rack



ICS

LKM-1224 (rack)

Order code

ICS	-	X	-	XXXXX	XXX	X	X	XX	X	/Sxxx
		(a)		(b)	(c)	(d)	(e)	(f)	(g)	(h)

(a) OUTPUT CIRCUITS N = NPN o.c. P = PNP o.c. Y = Push Pull L = Line Driver (RS422) H = PP/LD universal circuit (b) RESOLUTION (PPR) See electrical specifications	(c) OUTPUT SIGNALS / CONNECTIONS BND = AB, MIL 7 pin plug BCP = AB /AB, MIL 10 pin plug (only radial) ZND = AB0, MIL 7 pin plug ZCP = AB0 /AB0, MIL 10 pin plug (only radial) (d) SUPPLY VOLTAGE 1 = +5V±5% (L output circuit) 2 = +10V÷ +30V (Y output circuit) 4 = +5V÷ +30V (H output circuit)	(e) SHAFT DIAMETER F = 12 mm (f) SHAFT REST POSITION DX = right (see drawing) SX = left (see drawing) (g) CONNECTION POSITION - = axial R = radial (with BCP, ZCP) (h) CUSTOM VERSION
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