

ROTAMAG

Magnetic incremental encoders

series

MI58 • MI58S



- Magnetic sensing, incremental
- Exceptional shock resistance
- IP67, sealed circuits



MI58



MI58S

ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms (acc. to MIL STD 202F)
Vibrations:	10 g, 5-2000 Hz (acc. to MIL STD 202F)
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:	IP64
Options:	• IP67 Protection (only with cable output)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Shaft:	Ø 6, 8, 9.52, 10, 12 mm
Shaft loading (axial and radial):	100 N max.
Shaft rotational speed:	12000 rpm max.
Starting torque at 20°C:	MI58: 0,15 Ncm (typical) MI58S: 0,40 Ncm (typical)
Moment of inertia:	~15 gcm ²
Bearings life:	10 ⁹ rev. min.
Weight:	~ 0,3 kg (10,6 oz)

ELECTRICAL SPECIFICATIONS

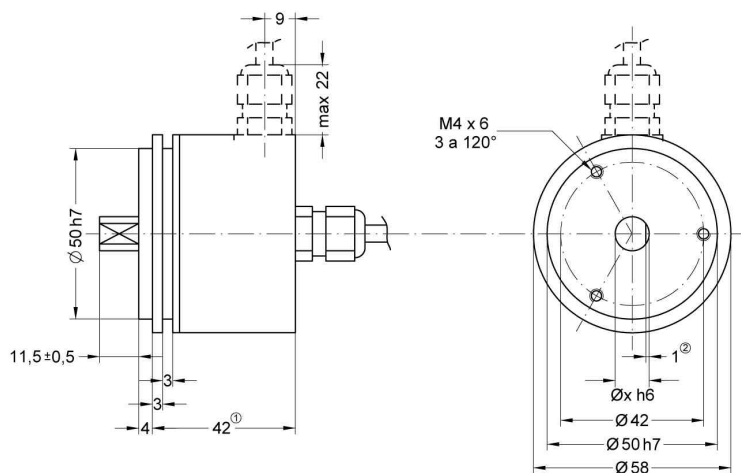
STD pulse rate (other PPR upon request):	20-40-80-160-200-320-400-500-640-800-1000 1280-1600-2000-2500-2560-5000-10000
Power supply:	+5V±5%, +10V +30V,+5V +30V
Output circuits:	Push-Pull, Line Driver, PP/LD
Output current (per channel):	40 mA max.
Output frequency:	500 kHz max.
Input current:	60 mA max.
Protection:	against inversion of polarity (except +5V version) outputs are protected against short-circuit (except Line Driver version)

MATERIALS

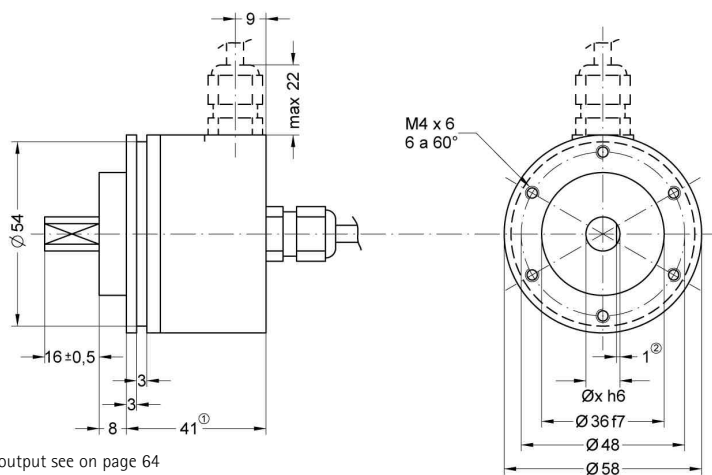
Flange:	non corroding
Housing:	non corroding
Bearings:	ABEC 5
Shaft:	stainless steel, non-magnetic

ACCESSORIES

E7MLS:	7 pin MIL mating connector
E10MLS:	10 pin MIL mating connector
T3475001:	7 pin TUCHEL mating connector
T3635000:	12 pin TUCHEL mating connector
EPFL 121:	12 pin CONNEL mating connector
PAN/PGF:	flexible couplings
LKM-386:	fixing clamps



MI58



MI58S

(1) Mechanical dimensions with connector output see on page 64
 (2) 0,5 mm with Ø 6 shaft

ORDERING CODE

ADDITIONAL CODE (indicate only if necessary)

XXXX	-	X	-	XXXX	X	X	X	X	X	X	X	X
SERIES	OUTPUT CIRCUITS	PULSE RATE (PPR)	OUTPUT SIGNALS CONFIGURATION	SHAFT DIAMETER	ELECTRICAL CONNECTIONS	SUPPLY VOLTAGE VS OUTPUT CIRCUIT	Cable length on request	IP67 Protection	Side mount cable or connector			
MI58 - MI58S	Push-Pull Y Line Driver AD26LS31 or equiv. L PP/LD universal circuit H	See electrical specifications	B Bidirectional Z Bidirectional with Index pulse	6 6 mm 8 8 mm 9.52 9.52 mm / 3/8" 10 10 mm 12 12 mm	N Normal output C Complementary outputs	+5V±5% (L output circuit) 1 +10V ÷ +30V (N, P and Y output circuits) 2 +5V ÷ +30V (PP/LD universal circuit) 4	Lx Ex.: L4 = 4 meters (13.2 ft) L7 = 7 meters (23.0 ft)	J IP67 Protection (only with cable output)	R Side mount cable or connector			