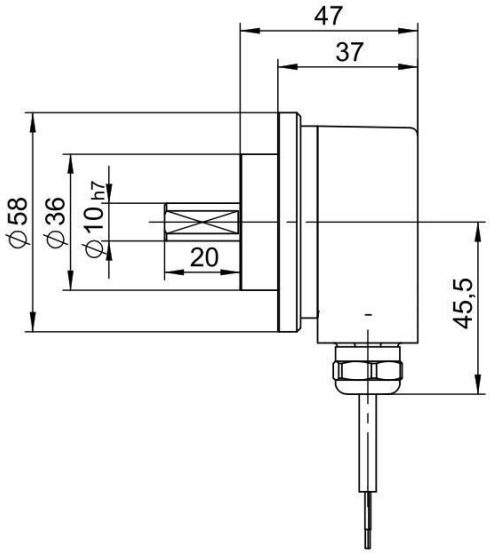
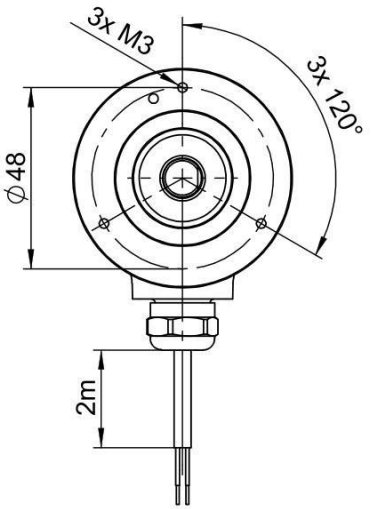
approval for production: | date | checked: company & sign

technical subject to modifications

Mechanical characteristics:

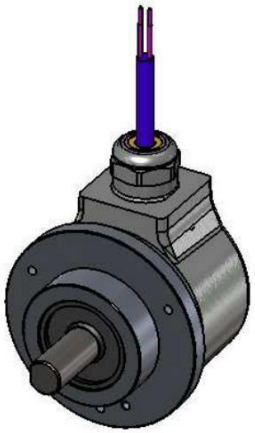
Speed:	6000 min^{-1}
	3000 min^{-1} (continuous)
Rotor moment of inertia:	approx. $1.8x10^{-6}$ kgm^2
Starting torque:	< 0.05 Nm
Radial load capacity shaft:	80 N
Axial load capacity shaft:	40 N
Weight:	approx. 0.4 kg
Protection acc. to EN 60 529:	IP 67
Working temperature:	- 20° C ... + 85° C
Shaft:	stainless steel
Shock resistance acc. to EN 60068-2-27:	2500m/s², 6ms
Vibration resistance acc. to EN 60068-2-6:	100m/s², 10...2000 Hz





Electrical characteristics:

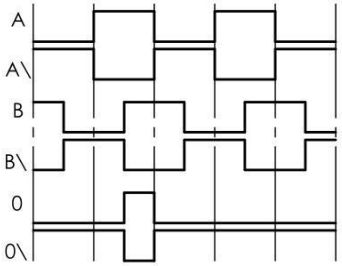
Output circuit:	Push-pull
Supply voltage:	10...30V DC
Power consumption	typ. 50 mA /
with inverted signal (no load):	max. 100 mA
Permissible load/channel:	max. ±20 mA
Pulse frequency:	max. 300 kHz
Signal level high:	min. Ub - 1 V
Signal level low:	max. 0.5 V
Rise time tr:	max. 1 µs
Fall time tf:	max. 1 µs
Short circuit proof outputs [1]:	yes
Reverse connection protection at UB:	yes
UL-certified:	File 224618
CE compliant acc. to	EN 61000-6-2, EN 61000-6-4
	and EN 61000-6-3
RoHS compliant acc. to	EU guideline 2002/95/EG



Terminal assignment:

Cable	
Colour	**Signal**
WH	0V GND
BN	+UB
GY PK	0V Sens
RD BU	+UB Sens
GN	A
YE	A\
GY	B
PK	B\
BU	0
RD	0\

Signal:



A leads B when shaft is rotated clockwise viewing the encoder shaft end

			Unit of measurement millimeter	I.R electric	Fritz Kübler GmbH Zähl- und Sensortechnik 78054 VS-Schwenningen
			Tolerances unless otherwise specified ISO 2768 mH	Customer Type:	Kübler Type: 8.5000.735B.1024.0020
0	17.11.11	ih	scale 1:2	Incremental Encoder	drawing ID. A1987
Index	Date	Name			customer drawing Sheet 1 / 2

Kübler Incremental encoder 결선도

시그날	0V(GND)	0V(Sens)	UB (전원)	Ub(Sens)	A	A/	B	B/	0(Z)	O/(Z/)	Shield
cable 색상	WH 흰색	GY+PK 회색+분홍	BN 갈색	RD+BU 빨강+파랑	GN 녹색	YE 노랑	GY 회색	PK 분홍	BU 파랑	RD 빨강	실드선은 반드시 접지시켜야 함.
참조	0V(GND)와 OV(Sens) 단락하여 0V에 연결, UB와 Ub(Sens) 단락하여 전원에 연결. : Encoder 내에서는 연결되어 있으나 결선시 Sens를 연결하지 않았을때 그 선을 통해 Noise가 발생할 수 있으므로 연결하여 사용할 것.