
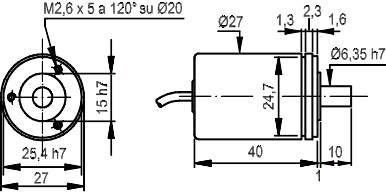

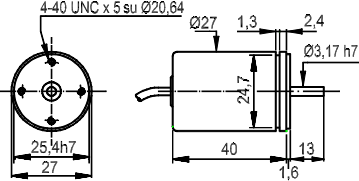

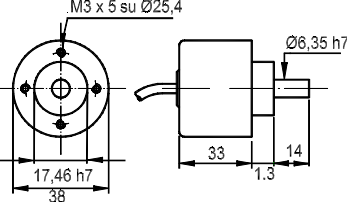

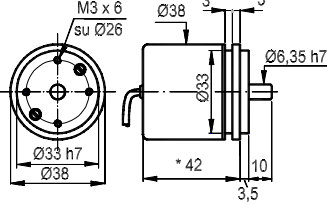

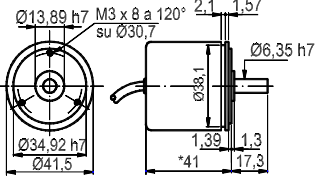

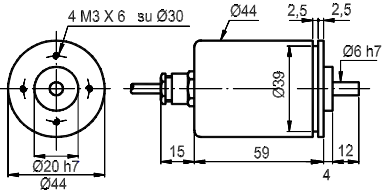

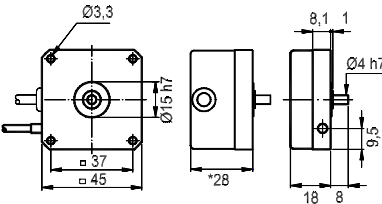



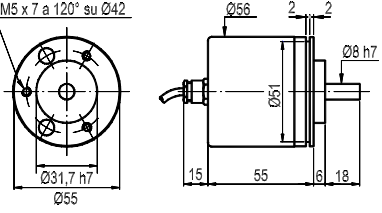

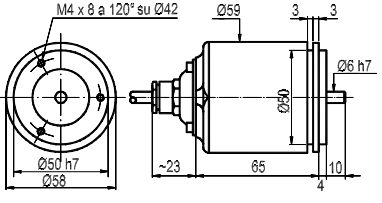

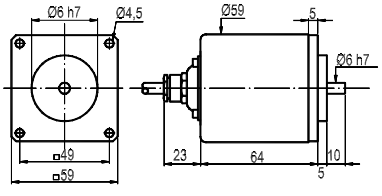

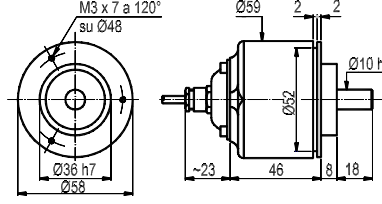

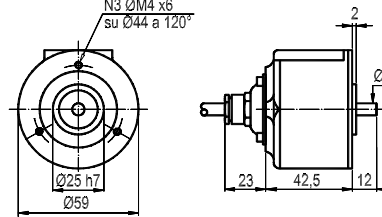

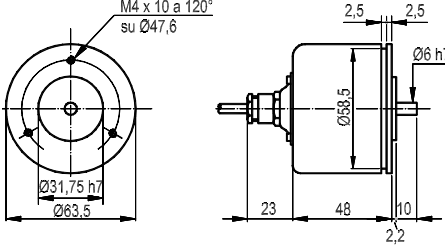

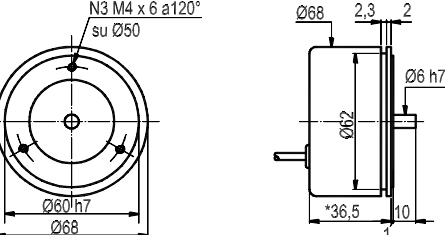
- Incremental encoders
- Absolute encoders
- Linear transducers
- Helical couplings




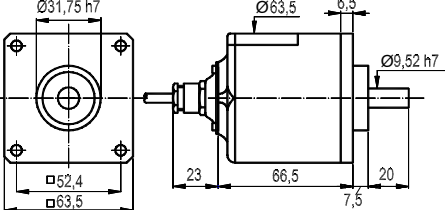

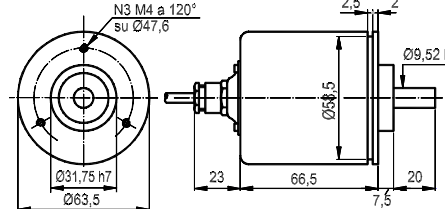

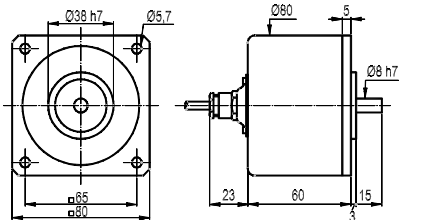

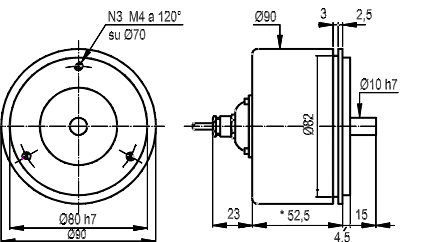

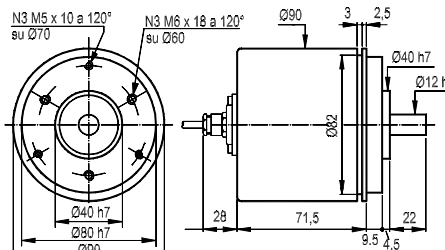

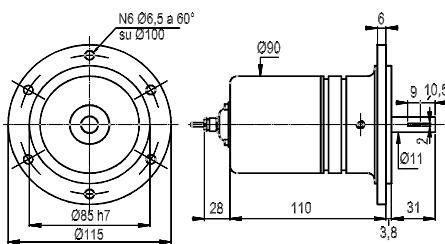

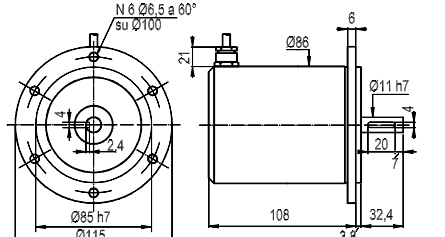
“MINIATURE” INCREMENTAL ENCODERS

B7 		<p>Weight: about 90 g. Max rad./ax. load: 0,4 kg Protection: IP63 Axial connections: cable Radial connections: cable Electronics: -, K, B, N, T, U, R Power supply: 5V Max freq.: 60 KHz Max pulses/rev.: 800</p>
B7L 		<p>Weight: about 90 g. Max rad./ax. load: 0,4 kg Protection: IP63 Axial connections: cable Radial connections: cable Electronics: -, K, B, N, T, U, R Power supply: 5V Max freq.: 60 KHz Max pulses/rev.: 800</p>
C8 		<p>Weight: about 100 g. Max rad./ax. load: 1 kg Protection: IP63 Axial connections: cable Radial connections: cable Electronics: -, K, B, N, C, T, U, R Power supply: 5V, 8 ÷ 24V, 18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 2540</p>
C8S 		<p>Weight: about 1090 g. Max rad./ax. load: 1 kg Protection: IP63 Axial connections: cable Radial connections: cable Electronics: -, K, B, N, C, T, U, R Power supply: 5V, 8 ÷ 24V, 18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 2540</p>
D1S 		<p>Weight: about 120 g. Max rad./ax. load: 1 kg Protection: IP63 Axial connections: cable Radial connections: cable Electronics: -, K, B, N, C, T, U, R Power supply: 5V, 8 ÷ 24V, 18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 2540</p>
D4S 		<p>Weight: about 230 g. Max rad./ax. load: 1,5 kg Protection: IP66 Axial connections: cable Radial connections: cable Electronics: -, K, B, N, C, T, U, R Power supply: 5V, 8 ÷ 24V, 18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 2540</p>
D5 		<p>Weight: about 120 g. Max rad./ax. load: 0,7 kg Protection: IP63 Axial connections: cable Radial connections: cable Electronics: -, K, B, N, C, T, U, R Power supply: 5V, 8 ÷ 24V, 18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 5000</p>

"STANDARD" INCREMENTAL ENCODERS

<p>E55</p>			<p>Weight: about 270 g. Max rad/ax. load: 8 kg Protection: IP64 Axial conn.: cable Radial conn.: cable Electronics: -, K, B, N, C, T, U, R Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 1270</p>
<p>E8S</p>			<p>Weight: about 300 g. Max rad/ax. load: 3 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
<p>E8</p>			<p>Weight: about 330 g. Max rad/ax. load: 3 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
<p>E8H</p>			<p>Weight: about 320 g. Max rad/ax. load: 4 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
<p>E9A</p>			<p>Weight: about 300 g. Max rad/ax. load: 3 kg Protection: IP64 Axial conn.: cable Radial conn.: cable Electronics: -, K, B, N, C, Q, U, R Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
<p>F3SC</p>			<p>Weight: about 450 g. Max rad/ax. load: 4 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: -, K, B, N, C, Q, U, R Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
<p>F8</p>			<p>Weight: about 300 g. Max rad/ax. load: 2 kg Protection: IP63 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: -, K, B, N, C, Q, U, R Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulse/rev.: 10000</p>

"STURDY" INCREMENTAL ENCODERS

F3			<p>Weight: about 570 g. Max rad./ax. load: 10 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
F3S			<p>Weight: about 550 g. Max rad./ax. load: 10 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
H8			<p>Weight: about 570 g. Max rad./ax. load: 10 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
K9			<p>Peso: circa .600 g. Max rad./ax. load: 10 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
K9A			<p>Weight: about 800 g. Max rad./ax. load: 15 kg Protection: IP64 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: all Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
M5			<p>Weight: about 850 g. Max rad./ax. load: 18 kg Protection: IP65 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: -, K, B, N, T, U, R Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>
M5R			<p>Weight: about 1450 g. Max rad./ax. load: 18 kg Protection: IP66 Axial conn.: cable or connector Radial conn.: cable or connector Electronics: -, K, B, N, T, U, R Power supply: 5V,8 ÷ 24V,18 ÷ 28V Max freq.: 100 KHz Max pulses/rev.: 10000</p>

ORDERING CODE



Shaft \varnothing with H option

M - Monodirectional
B - Bidirectional
BZ - Bidirectional +Zero
MZ - Monodir +Zero

-- Axial
R - Radial

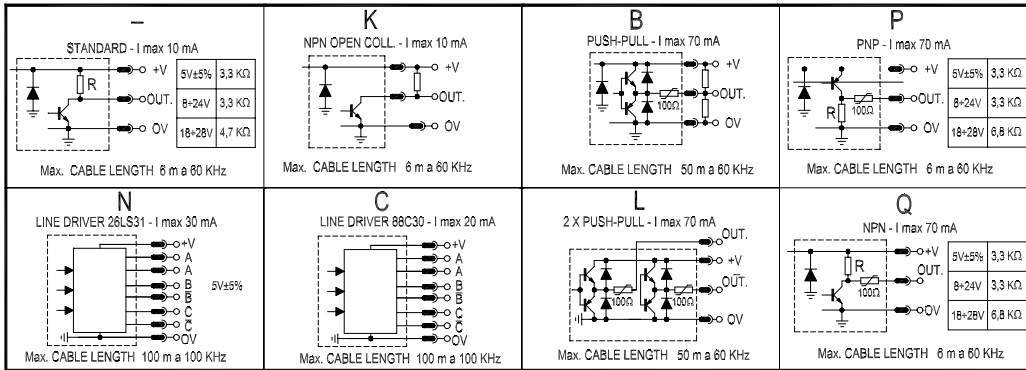
CV -Cable
CD -DE9P connector
CM -MS3102A16S-1P connector
CL - MS3102A18S-1P connector
CI - UTG014-12P connector
CH -Eml 121 connector
MS -Terminal box
SM -CM sealed connector
SL - CL sealed connector
VM -MS3102A16S connector at end cable
VL - MS3102A18 connector at end cable
VD - DE9P connector at end cable
VI - UTG06-12P connector at end cable
VK -MS3102A20 connector at end cable
VH -Pml121 connector at end cable
VN -RLK121MRV connector at end cable
VS -840-31-570 connector at end cable
TM -CM sealed connector at end cable

L -Low temperature
Y -Unbreakable disk
Z -Sealed ball bearings
B -Low torque ball bearings
H - Different \varnothing shaft
W -300 kHz frequency
J - Zero logic combination
G -Tropicalization
M -Impregnated electronics
A -High temperature
X - Custom options

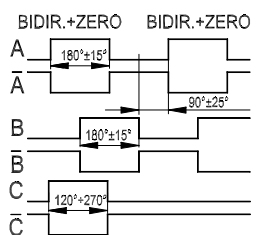
5 - 5V \pm 5%
824 - 8 \div 24 V
1828 - 18 \div 28 V
815 - 8 \div 15 V
1230 - 12 \div 30V out 12V
8245 - 8 \div 24V out 5V
18285 - 18 \div 28V out 5V
1030 - 10 \div 30 V

-- Standard
K - Open collector 10 mA
C - Line Driver 88C30
N - Line driver 26LS31
B - Push-pull with protection
L - 2x Push-Pull with protection
H - Push-Pull without protection
Q - NPN 70 mA with protection
R - NPN 70 mA without protection
M - 2x Push-Pull without protection
P - PNP 70 mA with protection
U - PNP 70 mA without protection
D - Discrim.
T - 7404 integrated
Y - Sinusoidal
X - Custom options

OUTPUT ELECTRONICS



OUTPUT SIGNALS



COMMON SPECIFICATIONS

SHOCK RESISTANCE: 50 G (11 mS)
VIBRATION RESISTANCE: 12 G (10 \div 2000 Hz)
STAINLESS STEEL SHAFT (h7) AND BALL BEARINGS (ABEC 5)
BALL BEARINGS LIFE: 1,5 X 10 ⁹ revolutions
LIGHT SOURCE: LED WITH LIFE > 100000 h
OPERATING TEMPERATURE: 0 \div +70 °C others on request
STORAGE TEMPERATURE: - 30 \div +85 °C
DETECTORS: PHOTOTRANSISTORS IN PUSH-PULL
CONSUMPTION: ~100 mA, ~ 130 mA WITH LINE DRIVER
BURN-IN: 72 h
PULSE PER REVOLUTIONS
Please see specifications of each model for max. Pulses number. -1 \div 500 (all) - 504 - 508 - 512 - 520 - 525 - 528 - 534 - 540 - 544 - 545 - 550 - 576 - 594 - 600 - 619 - 620 - 625 - 635 - 640 - 700 - 710 - 720 - 722 - 750 - 762 - 800 - 810 - 816 - 890 - 900 - 942 - 960 - 980 - 1000 - 1005 - 1008 - 1021 - 1024 - 1036 - 1044 - 1068 - 1180 - 1185 - 1200 - 1215 - 1250 - 1270 - 1440 - 1500 - 1600 - 1602 - 1800 - 1920 - 1950 - 1979 - 2000 - 2042 - 2048 - 2136 - 1160 - 2200 - 2250 - 2304 - 2356 - 2400 - 2500 - 2540 - 2600 - 2618 - 2700 - 2880 - 3000 - 3600 - 4000 - 4096 - 5000 - 5400 - 6000 - 6350 - 7200 - 7500 - 8192 - 9000 - 10000 - 10800 - 12700 - 14400 - 15000 - 18000 - other on request