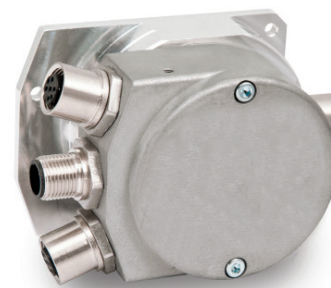
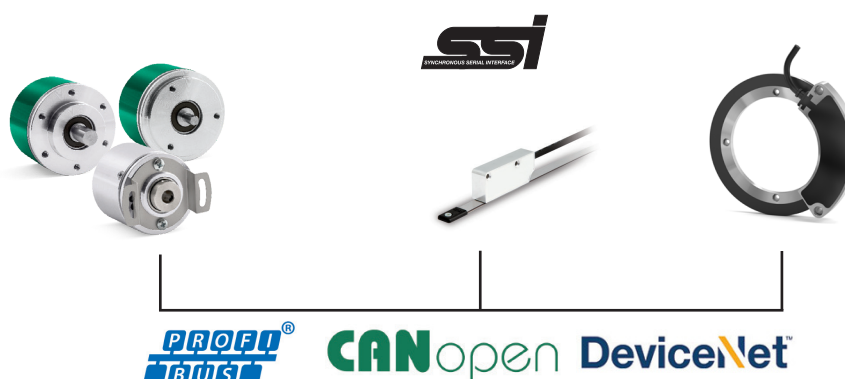


- SSI linear & rotary encoder gateway and converter
- All typical encoder functions available
- Position output
- Selectable encoder supply 5, 24Vdc
- Robust metal housing, IP65 protection
- DIN-rail snap-on installation possible
- For Ethernet interfaces please see IF56 series



IF55



PROFI
BUS

CANopen DeviceNet

FUNCTIONS

Position output, scaling function, preset, offset, counting direction, diagnostics

ENVIRONMENTAL SPECIFICATIONS

Shock:	250 g, 6 ms acc. to CEI EN 60068-2-27
Vibrations:	10 g, 5-2000 Hz acc. to CEI EN 60068-2-6
Protection:	IP65
Operating temperature range:	-25°C +85°C (-13°F +185°F)
Storage temperature range:	-25°C +85°C (-13°F +185°F)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Electrical connections:	SSI input M12 8 pin connector (female) Output with PG or M12 connectors according to bus specifications
Weight:	~ 250 g

ELECTRICAL SPECIFICATIONS

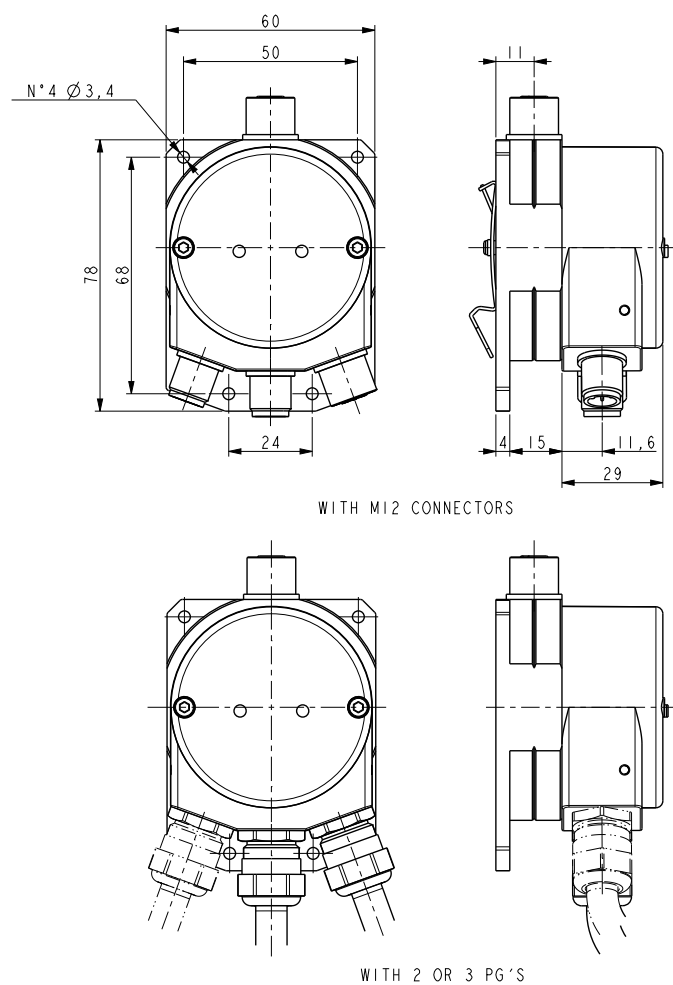
Output power supply (for encoders):	10Vdc +30Vdc, 5Vdc selectable
Output current:	with output voltage set to 5Vdc: 500 mA with output voltage set to 10Vdc: 1000 mA(*) (*) output voltage is equal to power supply
Power consumption (excl. sensor):	1,5 W max. interface CB, PB, EC 2,5 W max. interface EP, PL, PT, MT
SSI input:	single turn: 18 bit max. multi turn: 16 x 16 bit, max. 30 bit linear sensors: 30 bit max., resolution 1µm ÷ 5000µm code: binary or gray, LSB or MSB aligned protocol, max. 32 clock clock frequency: 500 ÷ 600 kHz
Output interfaces:	CANopen: device profile for encoders class 2 (DS301, DS406) Profibus: Profibus-DP V0 slave class 1, class 2 DeviceNet C/P

ACCESSORIES – Ax58 Profibus

CC-PB-CON:	Kit of 3 mating conn. for PB
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ACCESSORIES – Ax58 CANopen / DeviceNet

CC-PB-CON:	Kit of 2 mating conn. for CB
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The number and type of connectors and LEDs change depending on the output interface

IF55

Recommended encoder series

Linear encoder, up to 0.001mm:	SMA2, SMA21 series
Rotary miniature encoder:	EHOM36, EH036 series
Bearingless encoder:	SMAB / MRAB series
Contactless encoder for round axes:	SMLA

Order code

IF55	XXX a	XX b
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a) INPUT ROT = rotary sensors LIN = linear sensors	b) OUTPUT PB = Profibus-DP with 3 x PG PB-C = Profibus-DP with 3 x M12 CB = CANopen with 2 x PG CB-C = CANopen with 2 x M12 FD = DeviceNet with 3 x PG FD-C = DeviceNet with 3 x M12
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Document release	Date	Description
1.0	25.07.2025	Phase out IF55 PT, EC, PL, EP, MB, NPC25011