Цилиндричен дизайн M18 – с резба

The M18 detect small objects with pinpoint accuracy. They are IP67 rated and thus also applicable in rough environments.

The electronics is incorporated in a small 18 mm threaded barrel made of nickel-plated brass. Different types are available with operating ranges of 30 cm or 100 cm and with switching or Analog output. In order to avoid crosstalk, up to six devices can be synchronized simply by connecting the power supply. Alternate operation of several sensors is also possible through external control.

Features

- M18, threaded barrel
- Nickel-plated brass
- Protection class IP67
- Ambient temperature -25…+70 °C
- Diffuse mode
- Max. range 100 cm
- Beam angle 6°
- Switching or Analog output
- LED indicates the switching status
- Operating range adjusted via potentiometer and programming device
- Synchronizing/enable input

Type code CP40, M18, M18K, M30, Q12, Q30

RUR	70	M18KS	AP8X	H1141	3GD

RUR	Series	70	Sensing range	M18KS	Design

Series

RU	ultrasonic sensor, diffuse mode
RUC	ultrasonic sensor, programmable synchronizable, multiplex function diffuse mode
RUN	ultrasonic sensor, diffuse mode
RUR	ultrasonic sensor, retroreflective mode

Sensing range

70	max. sensing range in cm

Design

CP40	rectangular, plastic 40 x 40 x 160 mm or 40 x 40 x 177.5 mm
EM18	cylinder/thread M18, stainless steel, Ø 18 mm
EM30	cylinder/thread M30 stainless steel, Ø 30 mm
EMT18	cylinder/thread, M18, stainless steel, teflon-coated ultrasonic transducer surface (containing silicone) Ø 18 mm
EMT30	cylinder/thread M30, stainless steel, teflon-coated ultrasonic transducer surface (containing silicone), Ø 30 mm
M18	cylinder/thread, M18, metal, CuZn nickel-plated, Ø 18 mm
M18K	compact design, cylinder/thread M18, metal, CuZn, nickel-plated Ø 18 mm
M18KS	compact design,side emission, cylinder/thread M18, metal, CuZn, nickel-plated, Ø 18 mm
M30	cylinder/thread M30, metal CuZn, nickel-plated, Ø 30 mm
M3047	cylinder/thread M30, metal CuZn, nickel-plated sonic transducer Ø 47 mm
M3065	cylinder/thread M30, metal CuZn nickel-plated sonic transducer Ø 65 mm, Ø 18 mm
MT18	cylinder/thread M18, metal, CuZn, nickel-plated, teflon-coated ultrasonic transducer surface (containing silicone), Ø 18 mm
MT18K	compact design, cylinder/thread M18, metal, CuZn, nickel-plated, teflon-coated ultrasonic transducer surface (containing silicone) Ø 18 mm
MT3047	cylinder/thread M30, metal, CuZn, nickel-plated, teflon-coated ultrasonic transducer surface (containing silicone), ultrasonic transducer Ø 47 mm
Q12	compact, rectangular plastic 31 x 12 x 20 mm
Q30	compact, rectangular plastic, 65 x 30 x 88 mm

AP8X	Electrical version	H1141	Electrical connection

Electrical version

A	NO
2A	2 x NO
F	frequency output
I	analog output 0 . . . 20 mA or 4 . . . 20 mA
L	analog
N	NPN
P	PNP
U	analog output 0 . . . 10 V
X	LED display
X2	2 x LEDs
6	10 . . . 30 VDC input current
8	18 . . . 35 VDC input current

Electrical connection

H1141	connector, M12 x 1, 4-pole
H1151	connector, M12 x 1, 5-pole
V1141	connector, M8 x 1, 4-pole
blank	cable connection, 2 m, with CP40 = terminal chamber

3GD	Approval

Approval

3GD	ATEX declaration of conformity 3163M, EX II 3 G EEx nA II T6 X / II 3 D IP65 T 60 °C X (only valid for RUC. . . M30 family)

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M18 – Switching output

General data

Operating voltage	20…30 VDC	**Ambient temperature**	-25…+70 °C
Output	_⟍⟍_, PNP	**Converter ring material**	plastic
Protection class	IP67	**Converter ring quality**	PBT
Electrical connection	connector, M12 x 1		

Types and data – selection table

Type	Switching frequency	Dimensions	Housing material	Range	Approach speed	Ultrasound frequency	w	d
RU30-M18-AP8X-H1141	≤ 5 Hz	Ø18 x 101 mm	metal, CuZn, nickel-plated	5…30 cm	4 m/s	400 kHz	w081	d569
RU100-M18-AP8X-H1141	≤ 4 Hz	Ø18 x 104 mm	metal, CuZn, nickel-plated	15…100 cm	8 m/s	230 kHz	w081	d570
RU100-MT18-AP8X-H1141	≤ 4 Hz	Ø18 x 104 mm	metal, CuZn, nickel-plated	15…100 cm	8 m/s	230 kHz	w081	d570
RU30-EM18-AP8X-H1141	≤ 5 Hz	Ø18 x 101 mm	stainless steel, V2A (1.4305), nickel-plated	5…30 cm	4 m/s	400 kHz	w081	d569
RU100-EM18-AP8X-H1141	≤ 4 Hz	Ø18 x 104 mm	stainless steel, V2A (1.4305), nickel-plated	15…100 cm	8 m/s	230 kHz	w081	d570

M18 – Analog output

General data

Operating voltage	20…30 VDC	**Analog output**	4…20 mA
Protection class	IP67	**Converter ring material**	plastic
Electrical connection	connector, M12 x 1	**Converter ring quality**	PBT
Ambient temperature	-25…+70 °C		

Types and data – selection table

Type	Dimensions	Housing material	Range	Response time	Approach speed	Ultrasound frequency	w	d
RU100-M18-LIX-H1141	Ø18 x 104 mm	metal, CuZn, nickel-plated	15…100 cm	120 ms	8 m/s	230 kHz	w139	d571
RU30-M18-LIX-H1141	Ø18 x 101 mm	metal, CuZn, nickel-plated	5…30 cm	100 ms	4 m/s	400 kHz	w139	d572
RU100-MT18-LIX-H1141	Ø18 x 104 mm	metal, CuZn, nickel-plated	15…100 cm	120 ms	8 m/s	230 kHz	w139	d571
RU30-EMT18-LIX-H1141	Ø18 x 101 mm	stainless steel, V2A (1.4305), nickel-plated	5…30 cm	100 ms	4 m/s	400 kHz	w139	d572

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