

Overview



M18 type

The Sonar proximity switches of compact range M18 are ready-to-use all-in-one units with a cylindrical enclosure.

- Operates as diffuse sensor, thru-beam sensor and can be parameterized as a reflex sensor with SONPROG
- Adjustable via a potentiometer, with SONPROG programming device
- Background suppression and can be set as foreground suppression with SONPROG
- Synchronization capability, multiplex operation
- Temperature compensation
- Solid-state outputs:
 - Switching output
 - Analog output
 - Frequency output, suitable for connection to LOGO!
- Connection via M12, 4-pin, Type F connector

Design

The devices of compact range M18 are all supplied with permanently installed sensors in the longitudinal axis.

Technical specifications

Type		3RG62 32	3RG62 33
Sensing range	cm	5 ... 30	15 ... 100
Standard target	cm	1 × 1	2 × 2
Hysteresis <i>H</i>	mm	10	
Repeat accuracy <i>R</i>	mm	± 1	± 2
Operational voltage (DC)	V	12 ... 30 (including +/- 10 % residual ripple; at 12 V to 20 V DC sensitivity reduced by up to 20%)	
Rated operational current <i>I_e</i>	mA	150	
No-load supply current <i>I₀</i>	mA	Max. 60	
Ultrasonic frequency	kHz	400	200
Switching frequency <i>f</i>	Hz	5	4
Response time	ms	100	120
Power-up delay <i>t_v</i>	ms	280	280
Switching status display		Yellow LED	
Enclosure material		Brass, nickel-plated; CRASTIN converter cover; epoxy resin converter surface	
Degree of protection		IP67	
Ambient temperature			
• During operation	°C	-25 ... +70	
• During storage	°C	-40 ... +85	

Function

The devices are suitable for operation as diffuse sensor, reflex sensor and thru-beam sensor. The sensors can be supplied with switching, analog or frequency outputs.

Up to 10 sensors of the M18 compact range can be synchronized with each other via the enable inputs. The devices are also suitable for multiplex mode.

For a detailed description, see compact ranges M30 K2.

Programming

SONPROG For optimizing to the operating conditions, all sensors of the M18 compact range can be programmed using a PC and the SONPROG 3RX4 000 interface device.

The main parameters that can be changed are:


- Lower and upper limit of the operating range
- Differential travel
- Switching function NO or NC
- Switching frequency
- Lower and upper limit of the analog range
- Analog characteristic, rising or falling
- End of close range
- End of sensing range
- Mean value generation
- Multiplex function
- Temperature compensation
- Susceptibility.

Sonar proximity switches with non-standard values available on request. The minimum ordering quantity is 10 units.

Sonar Proximity Switches SIMATIC PXS300

Compact range M18

Selection and Ordering data

	Sensing range	Rated operational current	Switching output	Analog/frequency output	Order No.
	cm	mA	pnp		
	5 ... 30	150	1 NO	–	B 3RG62 32-3AB00
	15 ... 100		1 NO	–	3RG62 33-3AB00
	5 ... 30		1 NC	–	B 3RG62 32-3AA00
	15 ... 100		1 NC	–	3RG62 33-3AA00
	5 ... 30	–	–	4 ... 20 mA	B 3RG62 32-3LS00
	15 ... 100		–	4 ... 20 mA	B 3RG62 33-3LS00
	5 ... 30		–	0 ... 20 mA	B 3RG62 32-3TS00
	15 ... 100		–	0 ... 20 mA	B 3RG62 33-3TS00
	5 ... 30	–	–	0 ... 10 V	B 3RG62 32-3JS00
	15 ... 100		–	0 ... 10 V	B 3RG62 33-3JS00
5 ... 30		–	250 ... 1500 Hz	B 3RG62 32-3RS00	
15 ... 100		–	150 ... 1000 Hz	3RG62 33-3RS00	

Communication-capable proximity switches of the M18 IQ-Sense range

5 ... 30	From IQ-Sense	IQ-Sense	3SF62 32-3JA00
15 ... 100	From IQ-Sense	IQ-Sense	3SF62 33-3JA00

Accessories

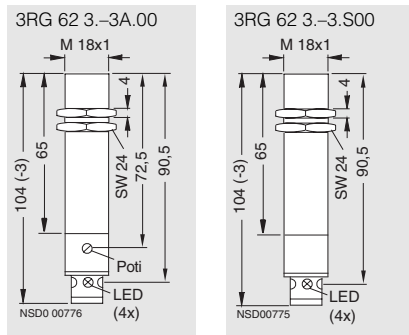


SONPROG interface unit
100 ... 240 V AC, 24 V DC

3RX4 000

B: Subject to export regulations: AL = N and ECCN = EAR99

Dimensions



Schematics

