RHOMBERG

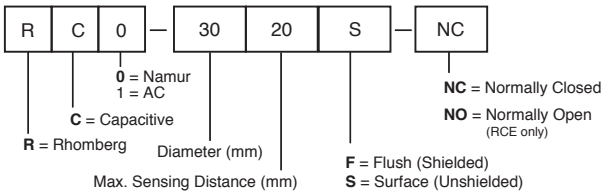
Capacitive Proximity Switches (2 wire)

RC0: Namur DIN 19234
RC1: AC

RC0
RC1

RC0-3010F-NC RC1-3020S- RC1-1805F- RC1-1810S-

ORDERING CODE

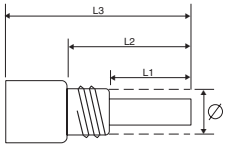


Note: Add ì-MTPî for sensor with plug instead of cable (RC0 only)

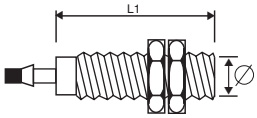
Part Number	Diameter θ mm	Sensing Distance Sn mm	Length L1 mm	Length L2 mm	Length L3 mm	Type
NAMUR						
RC0-3010F-NC	M30x1.5	10	80			2 Wire Shielded
RC0-3020S-NC	M30x1.5	20	80	15		2 Wire Unshielded
RC0-4020S-NC-PBT	1.5î BSP	20				
AC						
RC1-1805F- *	M18x1	5	80			2 Wire Shielded
RC1-1810S- *	M18x1	10	80	15		2 Wire Unshielded
RC1-3010F- *	M30x1.5	10	80			2 Wire Shielded
RC1-3020S- *	M30x1.5	20	80	15		2 Wire Unshielded

*** specify NO or NC**

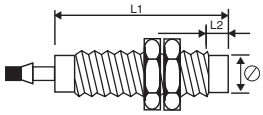
RC0-4020S-NC-PBT



1.5î BSP Thread



Flush (shielded)



Non-flush (unshielded)

Technical Specifications

NAMUR

Supply voltage: 8.2 to 10 VDC
Sensing current: < 1mA (0.8mA typical)
Non-sensing current: > 2.2mA (4mA typical)

AC/DC

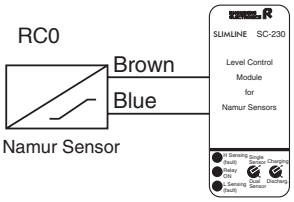
Supply voltage: 20-250V
Minimum load current: 10mA
Max Continuous load current: 400mA (ambient temp ≤30°C)
Off state Quiescent current: ≤ 2.5mA at 250 VAC

Temperature Drift: < 25% (10% typical)
Protection: IP67
Operational Temp: -20°C to 70°C
Cable length: 2m
Cable colour stripe: blue (Namur), red (AC)

The Namur sensor has been designed to conform to the DIN 19234 standard, which specifies the magnitude of current that flows in the circuit relative to its active or non-active state. Due to their ìcurrent loopî method of operation, Rhomberg Namur sensors are highly reliable and robust even in the harshest environments and tend to be immune to electrical noise as induced voltages have minimal effect on the current signal.
Namur sensors are designed to provide a current signal to a suitable Namur control module **(refer to Rhomberg SC230, SC300)**. Load switching and other control functions are performed by the control module and not by the sensor. The control module provides the sensor with a supply voltage (8.2-10 VDC) and signals whether it is sensing a target or not by varying its current consumption: Non-activated state: > 2.2mA, Activated state: < 1mA

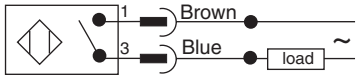
RC1 sensors are always connected in series with the load. Though protected by an internal VDR clamp, it is advisable to add an external snubber network in parallel with highly inductive loads, eg. contactors and relays.
Since these sensors receive their operating current via the load, a residual current (≤ 2.5mA) is maintained through the load at all times. In the non-active (open) state, this current may prevent light loads, such as small relays and electronic timers, from releasing. This problem can be overcome by connecting a dummy load (eg. light bulb) in parallel with the load.

RC0



Namur Sensor

RC1



Important: RC1 sensors are not protected against sustained over current fault conditions. The fitting of an external inline 0.4A fuse is therefore advised.