



# Inductive (metal sensing) Proximity Switches

AC (Tubular 2 Wire)

# RI1



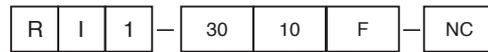
RI1-4025S-

RI1-3010F-

RI1-1808S-

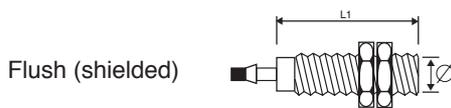
RI1-1202F-

## ORDERING CODE



R = Rhombberg  
I = Inductive  
1 = AC  
30 = Diameter (mm)  
10 = Max. Sensing Distance (mm)  
F = Flush (Shielded)  
S = Surface (Unshielded)  
NO = Normally Open  
NC = Normally Closed

Part Number	Diameter θ mm	Sensing Distance Sn mm	Length		Type
			L1 mm	L2 mm	
RI1-1202F-NO	M12x1	2	85		2 Wire NO Shielded
RI1-1202F-NC	M12x1	2	85		2 Wire NC Shielded
RI1-1204S-NO	M12x1	4	85	6	2 Wire NO Unshielded
RI1-1204S-NC	M12x1	4	85	6	2 Wire NC Unshielded
RI1-1805F-NO	M18x1	5	60		2 Wire NO Shielded
RI1-1805F-NC	M18x1	5	60		2 Wire NC Shielded
RI1-1808S-NO	M18x1	8	60	10	2 Wire NO Unshielded
RI1-1808S-NC	M18x1	8	60	10	2 Wire NC Unshielded
RI1-3010F-NO	M30x1.5	10	60		2 Wire NO Shielded
RI1-3010F-NC	M30x1.5	10	60		2 Wire NC Shielded
RI1-3015S-NO	M30x1.5	15	60	15	2 Wire NO Unshielded
RI1-3015S-NC	M30x1.5	15	60	15	2 Wire NC Unshielded
RI1-4020F-NO	M40x1.5	20	60		2 Wire NO Shielded
RI1-4020F-NC	M40x1.5	20	60		2 Wire NC Shielded
RI1-4025S-NO	M40x1.5	25	60	15	2 Wire NO Unshielded
RI1-4025S-NC	M40x1.5	25	60	15	2 Wire NC Unshielded



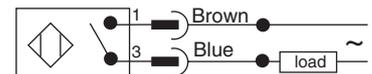
## Technical Specifications

**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:** 10%  
**Hysteresis (typical):** 10%  
**Protection:** IP68  
**Operational Temp:** -20°C to 70°C  
**Cable length:** 2m  
**Cable colour stripe:** red (for AC 2 wire)  
**LED colour:** Red (NO) or Green (NC)

**Max switching frequency:** 25Hz

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



RI1 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.