

R Series

Application
cylinder

GLC HCA MFC SHC



(R1, Excluding R4)



R*/R*Y



R*B

Specifications

Item	2-wire proximity			3-wire proximity	
	R1/R1K	R2/R2K	R2Y/ R2YK (2-color LED)	R3/R3K	R 3Y/R3YK (2-color LED)
Applications	Programmable controller, relay, compact solenoid valve	Dedicated for programmable controller		Programmable controller, relay, IC circuit, solenoid valve	
Output method	-			NPN output	
Power supply voltage	-	-		4.5 to 28 VDC	
Load voltage	85 to 265 VAC	10 to 30 VDC		30 VDC or less	30 VDC or less
Load current	5 to 100mA	5 to 30mA		200 mA or less	100 mA or less
Current consumption	-	-		With 24 VDC (when ON)	
				10 mA or less	16 mA or less
Internal voltage drop	10% or less of load voltage	4 V or less		0.5 V or less with 150 mA	0.5 V or less
Indicator	Red LED (Lit when ON)		Red/green LED (Lit when ON)	Red LED (Lit when ON)	Red/green LED (Lit when ON)
Leakage current	1 mA or less with 100 VAC, 2 mA or less with 200 VAC	1 mA or less		10 μA or less	
Lead wire length	1 m (oil resistant vinyl cabtyre cable 2-conductor 0.3mm ²)			1 m (oil resistant vinyl cabtyre cable 3-conductor 0.2mm ²)	
Shock resistance	980 m/s ²				
Insulation resistance	20 MΩ and over with 500 VDC megger				
Withstand voltage	1500 VAC, per minute No failure after application	No failure after 1 minute of 1,000 VAC application.			
Ambient temperature	-10 to +60°C				
Degree of protection	Grommet: IEC standards IP67, JIS C0920 (water-tight)				
Option	With terminal box R*B (no waterproof)				
Weight	1 m: 42 g 3 m: 100 g 5 m: 158 g		1 m: 56 g 3 m: 114 g 5 m: 172 g	1 m: 42 g 3 m: 100 g 5 m: 158 g	1 m: 56 g 3 m: 114 g 5 m: 172 g

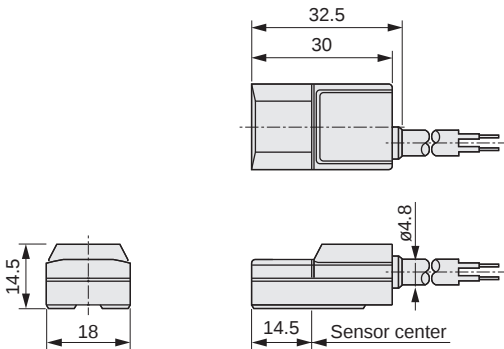
Item	2-wire reed								
	R 0			R 4		R 5			R 6
Applications	Relay, programmable For controllers			For high capacity relay, solenoid valve		For programmable controller, relay, IC circuit (no indicator lamp), serial connection			Dedicated for programmable controller (with DC self-hold)
Power supply voltage	-			-		-			-
Load voltage	12/24 VDC	110 VAC	220 VAC	110 VAC	220 VAC	5/12/24 VDC	110 VAC	220 VAC	24 VDC ±10%
Load current	5 to 50mA	7 to 20mA	7 to 10mA	20 to 200mA	10 to 200mA	50 mA or less	20 mA or less	10 mA or less	5 to 50mA
Current consumption	-			-		-			-
Internal voltage drop	3.0 V or less			2 V or less		0.5V or less (*1)			5 V or less
Indicator	Red LED(Lit when ON)			Neon light OFF (Lit when OFF)		No			Red LED (Lit when ON)
Leakage current	0 mA			1 mA or less		0 mA			0.1 mA or less
Lead wire length	1 m (oil resistant vinyl cabtyre cable 2-conductor 0.3mm ²)								
Shock resistance	294 m/s ²								
Insulation resistance	20 MΩ and over with 500 VDC megger								
Withstand voltage	No failure after 1 minute of 1,500 VAC application.								
Ambient temperature	-10 to +60°C								
Degree of protection	Grommet: IEC standards IP67, JIS C0920 (water-tight)								
Contact protection circuit*2	Yes								None
Option	With terminal box R*B (no waterproof)								
Weight	1 m: 42 g 3 m: 100 g 5 m: 158 g								

*1: Internal resistance 10 Ω or less.

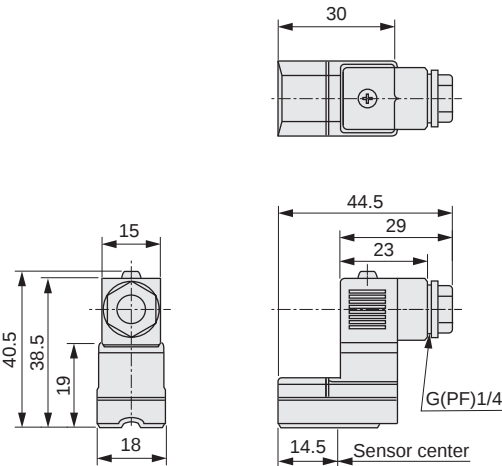
*2: Refer to Intro Page 80 for contact protective measures.

Dimensions

● R Series (grommet)



● R Series (terminal box R*B)



Switch internal circuit diagram

● R1	● R2/R2Y	● R3/R3Y		
● R0	● R4	● R5	● R6	Cylinder switch

Cylinder switch