

<b>F Series</b>	Applicable cylinder	LCG LCM LCR MDC2 MSD MSDG-L MVC SSD2 STM
-----------------	---------------------	--

\* There are bore sizes which cannot be combined.



F\*S



F\*V

F\*H



F\*YV  
F3PV



F\*YH  
F3PH



## Specifications

Descriptions	Reed 2-wire		Proximity 2-wire		Proximity 3-wire	Proximity 3-wire	Proximity 3-wire
	F0H/V	F2H/V / F2S	F2YH / F2YV	F3H/V / F3S	F3PH/V	F3YH / F3YV	
Applications	Dedicated for programmable controller			For programmable controller, relay			
Output method	-			NPN output	PNP output	NPN output	
Power supply voltage	-			10 to 28 VDC	4.5 to 28 VDC	10 to 28 VDC	
Load voltage	24 VDC ±10%	10 to 30 VDC	24 VDC ±10%	30 VDC or less			
Load current	5 to 20 mA (*1)			50 mA or less			
Current consumption	-			10 mA or less with 24 VDC			
Internal voltage drop	4 V or less			0.5 V or less	0.5 V or less at 30 mA	0.5 V or less	
Indicator lamp	Yellow LED (Lit when ON) *3		Red/green LED (Lit when ON)	Yellow LED *3 (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	
Leakage current	1 mA or less			10 µA or less			
Lead wire length	1 m (oil resistant vinyl cabtyre cable 2-conductor 0.15 mm <sup>2</sup> )			1 m (oil resistant vinyl cabtyre cable 3-conductor 0.15 mm <sup>2</sup> )			
Shock resistance	294 m/s <sup>2</sup>	980 m/s <sup>2</sup>					
Insulation resistance	20 MΩ and over with 500 VDC megger						
Withstand voltage	No failure after 1 minute of 1,000 VAC application						
Ambient temperature	-10 (14°F) to +60°C (140°F)						
Degree of protection	IEC Standard IP67, JIS C0920 (water-tight), oil resistance						
Contact protection circuit *4	None		-				
Weight	1 m:10 g 3 m:29 g			1 m:10 g 3 m:29 g			

\*1: Max. load current: 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C. (5 to 10 mA at 60°C)

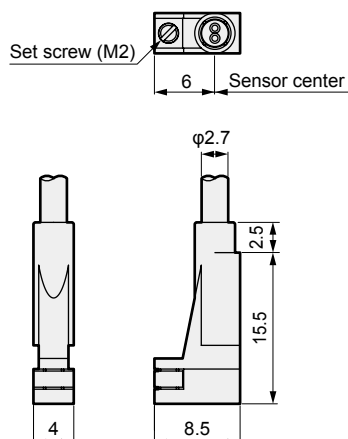
\*2: With F2S and F3S, if mounting two switches in one groove to enable detection at both ends, mount them so that their set screws face outward.

\*3: Indicator lamps for F2S and F3S are red.

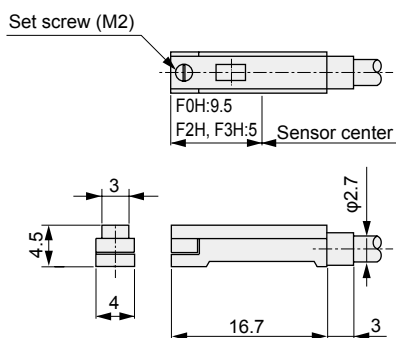
\*4: Refer to Intro Page 80 for contact protective measures.

### Dimensions

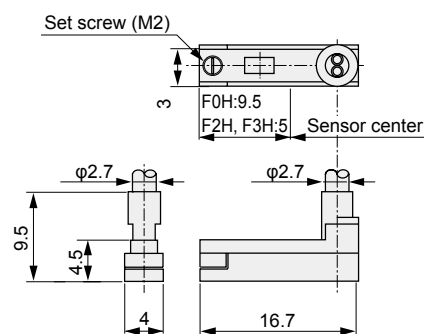
- F\*S Series (Lead wire vertical lead-out, for short stroke length detection)



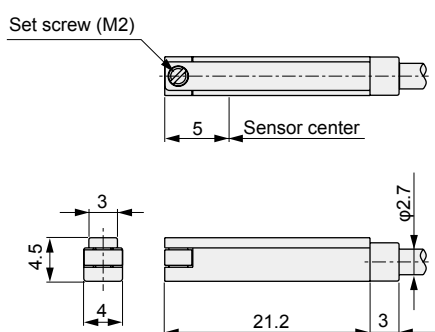
- F\*H Series (lead wire straight)



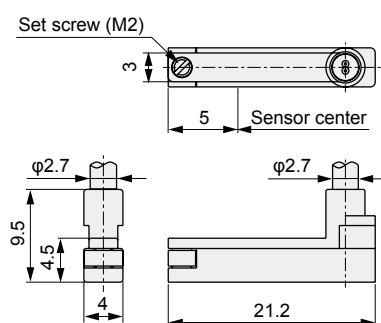
- F\*V Series (radial lead wire)



- F\*YH/F3PH Series (lead wire straight)



- F\*YV/F3PV Series (lead wire L-shaped)



### Switch internal circuit diagram

● F0H/F0V	● F2S/F2H/F2V/F2YH/F2YV	● F3S/F3H/F3V/F3YH/F3YV	● F3PH/F3PV