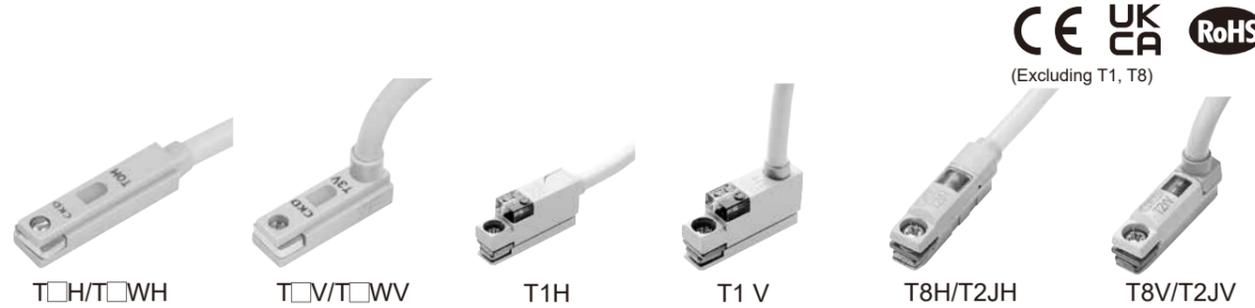


T Series	Applicable Cylinder	CAC4 CKV2 CMA2CMK2 HCM JSC3 JSC4 JSG JSK2 JSM2 LCG LCR LCW
		LCX MRG2MRL2RCS2 RCC2RRC SCA2 SCG SCM SCP□3 SCS2 SRM3SSD SSD2 SSG STG STS/STLSTK UCA2 UCAC2 ULK GripperChuck



Specifications

Item	Solid state 2-wire type					Solid state 3-wire type			
	T1H, T1V	T2H, T2V	T2HR3, T2VR3 (Flexible lead wire type)	T2JH, T2JV (Off-delay type)	T2WH, T2WV (2-color indicator type)	T3H, T3V	T3PH, T3PV (PNP output type)	T3WH, T3WV (2-color indicator type)	
Applications	For programmable controller, relay, small solenoid valve		For programmable controller only			For programmable controller, relay			
Output method	-					NPN output	PNP output	NPN output	
Power supply voltage	-					10 to 28 VDC			
Load voltage	85 to 265 VAC	10 to 30 VDC		24 VDC ±10%		30 VDC or less			
Load current	5 to 100 mA	5 to 20 mA (*1)					100 mA or less	50 mA or less	
Current consumption	-	-					10 mA or less at 24 VDC	10 mA or less at 24 VDC	10 mA or less at 24 VDC
Internal voltage drop	10% or less of load voltage	4 V or less					0.5 V or less		
Off-delay time	-		200 ±50 ms		-				
Indicator Lamp	Red LED (Lights up when ON)					Red/Green LED (Lights up when ON)	Red LED (Lights up when ON)	Yellow LED (Lights up when ON)	Red/Green LED (Lights up when ON)
Leakage current	1 mA or less at 100 VAC, 2 mA or less at 200 VAC	1 mA or less					10 µA or less		
Lead wire length *6	1 m (Oil-resistant vinyl cabtyre cord 2-core 0.3 mm ²)	1 m (Oil-resistant vinyl cabtyre cord 2-core 0.2 mm ²)	3 m (Flexible, oil-resistant vinyl cabtyre cord 2-core 0.2 mm ²)	1 m (Oil-resistant vinyl cabtyre cord 2-core 0.3 mm ²)	1 m (Oil-resistant vinyl cabtyre cord 2-core 0.2 mm ²)	1 m (Oil-resistant vinyl cabtyre cord 3-core 0.2 mm ²)		1 m (Oil-resistant vinyl cabtyre cord 3-core 0.2 mm ²)	
Shock resistance	980 m/s ²								
Insulation resistance	100 MΩ or more with 500 VDC megger	20 MΩ or more with 500 VDC megger	100 MΩ or more with 500 VDC megger	20 MΩ or more with 500 VDC megger	20 MΩ or more with 500 VDC megger	20 MΩ or more with 500 VDC megger	20 MΩ or more with 500 VDC megger	20 MΩ or more with 500 VDC megger	
Dielectric strength	No abnormality when 1500 VAC is applied for 1 minute								
Ambient Temperature	-10 to +60°C								
Protection structure	IEC standard IP67, JIS C0920 (Immersible type)								
Weight	1 m: 33 g 3 m: 87 g 5 m: 142 g	1 m: 18 g 3 m: 49 g 5 m: 80 g	1 m: 33 g 3 m: 87 g 5 m: 142 g	1 m: 18 g 3 m: 49 g 5 m: 80 g	1 m: 18 g 3 m: 49 g 5 m: 80 g	1 m: 18 g 3 m: 49 g 5 m: 80 g	1 m: 18 g 3 m: 49 g 5 m: 80 g	1 m: 18 g 3 m: 49 g 5 m: 80 g	

Item	Reed 2-wire type						
	T0H, T0V	T5H, T5V		T8H, T8V			
Applications	For programmable controller, relay	For programmable controller, relay, IC circuit (no indicator light), series connection			For programmable controller, relay		
Power supply voltage	-						
Load voltage	12/24 VDC	110 VAC	5/12/24 VDC	110 VAC	12/24 VDC	110 VAC	220 VAC
Load current	5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA
Current consumption	-						
Internal voltage drop	3 V or less (In case of DC, when load current is 30 mA)		0.1 V or less (*4)		4 V or less		
Indicator Lamp	Red LED (Lights up when ON)		No Indicator Lamp		Red LED (Lights up when ON)		
Leakage current	0 mA						
Lead wire length	1 m (Oil-resistant vinyl cabtyre cord 2-core 0.2 mm ²)			1 m (Oil-resistant vinyl cabtyre cord 2-core 0.3 mm ²)			
Shock resistance	294 m/s ²						
Insulation resistance	20 MΩ or more with 500 VDC megger			100 MΩ or more with 500 VDC megger			
Dielectric strength	No abnormality when 1000 VAC is applied for 1 minute			No abnormality when AC1500 V is applied for 1 minute			
Ambient Temperature	-10 to +60°C						
Protection structure	IEC standard IP67, JIS C0920 (Immersible type)						
Contact protection circuit *5	None			Yes			
Weight	1 m: 18 g 3 m: 49 g 5 m: 80 g			1 m: 33 g 3 m: 87 g 5 m: 142 g			

*1: Maximum load current for T2H, T2V, T2HR3, T2VR3: 20 mA, is at 25°C. If the switch operating ambient temperature is higher than 25°C, it will be lower than 20 mA. (It will be 5 to 10 mA at 60°C.)
 *2: For T2JH and T2JV switches, when mounting on SRL3 (ø32 to ø100), MRL2, LCR, UCAC2, or gripper/chuck, it will be handled as a custom product.
 *3: Some cylinders have limited mountable switches. Please refer to the P. for each cylinder for details.
 *4: Internal resistance 0.5Ω or less.
 *5: For contact protection measures, see P. 1026.

T Series	For AC Magnetic Field	Applicable Cylinder	CAC4 JSC3 JSC4 JSG RCC2 RCS2 SCA2 SCG
			SCM SCS2 SRG3 SRL3 SRM3 SRT3 SSD SSD2 SSG STG STS/STL UCAC2 USC USSD



Specifications

Item	Solid state 2-wire type		
	T2YD	T2YDT	T2YDU (Custom Products)
Applications	For programmable controller only		
Indicator Lamp	Red/Green LED (Lights up when ON)		
Load voltage	24 VDC ±10%		
Load current	5 to 20 mA		
Internal voltage drop	6 V or less		
Leakage current	1.0 mA or less		
Output delay time *1 (ON-delay, OFF-delay)	60 ms or less		
Lead wire length	1 m (Oil-resistant vinyl cabtyre cord ø6, 0.5 mm ² x 2 cores) *2	1 m (Flame-retardant cabtyre cord ø6, 0.5 mm ² x 2 cores) *2	0.3 m (Flame-retardant vinyl cabtyre cord with M12 cable connector, AWG20, 2-core)
Insulation resistance	100 MΩ or more with 500 VDC megger		
Dielectric strength	No abnormality when AC1000 V is applied for 1 minute		
Shock resistance	980 m/s ²		
Ambient Temperature	-10 to +60°C		
Protection structure	JIS C0920 (Immersible type), IEC standard IP67		
Weight	1 m: 61 g 3 m: 166 g 5 m: 272 g		35

*1: Indicates the time from when the magnetic sensor detects the piston magnet until the switch output occurs.
 *2: 3 m and 5 m lead wire lengths are available as options.
 3: Since AC magnetic field switches (T2YD) are for AC welding machines, the strong magnetic field resistance performance cannot be obtained with DC welding machines.

T Series	For Cutting Oil	Applicable Cylinder	CMK2-G2/3 HRL-G2/3 SCA2-G2/3 SCG-G2/3
			SSD-G2/3 SSD2-G2/3 STG-G2/3 STS/STL-G2/3

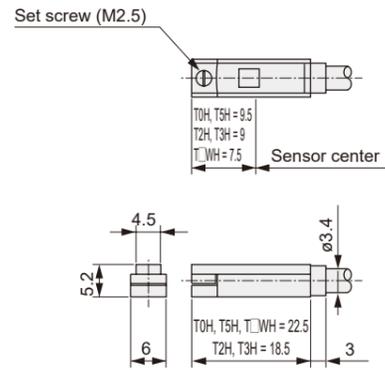


Specifications

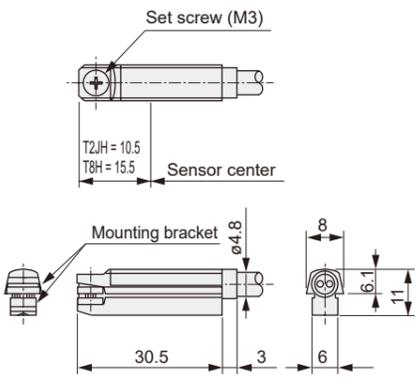
Item	Solid state 2-wire type		Solid state 3-wire type	
	T2YLH, T2YLV	T3YLH, T3YLV		
Applications	For programmable controller only		Programmable controller, Relay	
Output method	-		NPN output	
Power supply voltage	-		10 to 28 VDC	
Load voltage	10 to 30 VDC		30 VDC or less	
Load current	5 to 20 mA		50 mA or less	
Current consumption	-		10 mA or less at 24 VDC (When ON)	
Internal voltage drop	4 V or less		0.5 V or less	
Leakage current	1 mA or less		10 µA or less	
Indicator Lamp	Red/Green LED (Lights up when ON)			
Lead Wire	Oil-resistant vinyl cabtyre cord 0.3 mm ² , 2-core 1 m		Oil-resistant vinyl cabtyre cord 0.2 mm ² , 3-core 1 m	
Insulation resistance	100 MΩ or more with 500 VDC megger			
Dielectric strength	No abnormality when AC1000 V is applied for 1 minute			
Shock resistance	980 m/s ²			
Hysteresis	1.5 mm or less			
Ambient Temperature	-10 to +60°C			
Protection structure	IEC standard IP67, JIS C0920 (Immersible type), Oil resistant (PCB coating)			
Weight	1 m: 33 g 3 m: 87 g 5 m: 142 g			

Outline Dimension Drawing

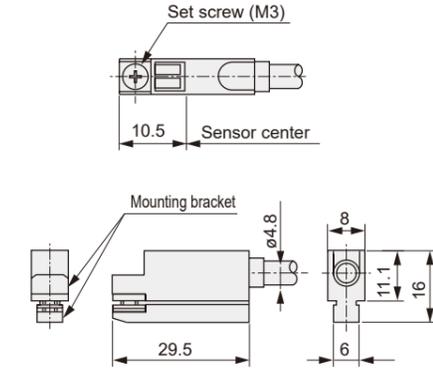
● T□H, T□WH Series
(Straight lead wire type)



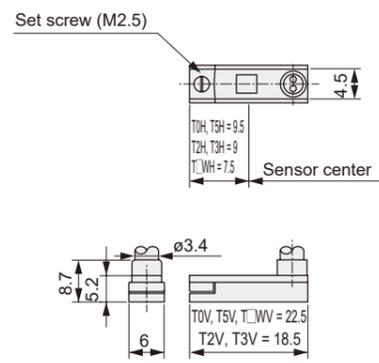
● T2JH, T8H Series
(Straight lead wire type)



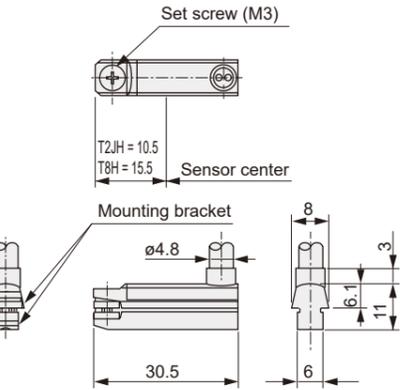
● T1H Series
(Straight lead wire type)



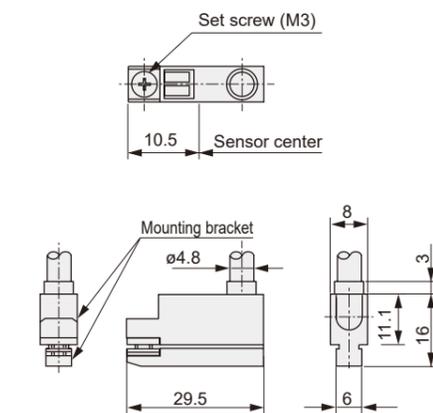
● T□V, T□WV Series
(L-shaped lead wire type)



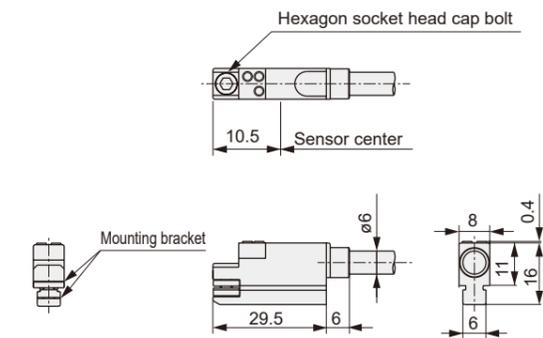
● T2JV, T8V Series
(L-shaped lead wire type)



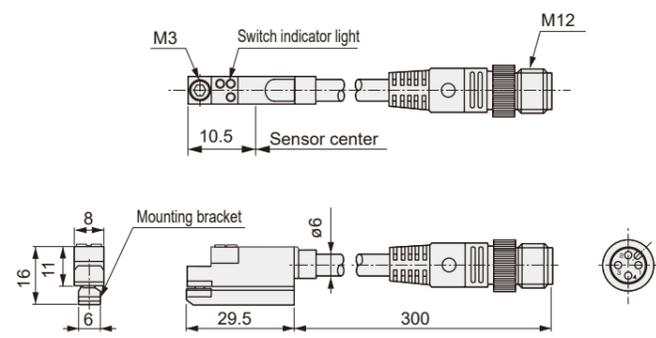
● T1V Series
(L-shaped lead wire type)



● T2YD (AC magnetic field switch)



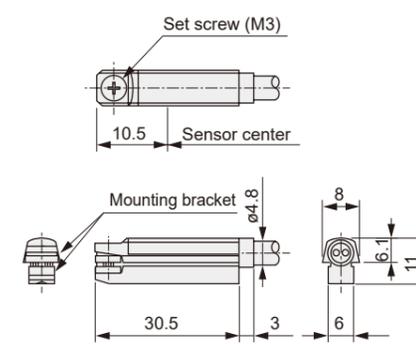
● T2YDU (Switch for AC magnetic field with M12 cable connector)



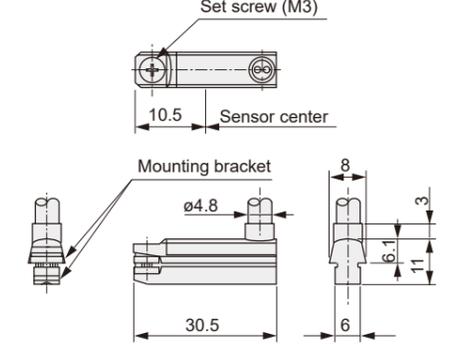
External dimension diagram / Switch internal circuit diagram

Outline Dimension Drawing

● T□YLH Series
(Straight lead wire type)



● T□YLV Series
(L-shaped lead wire type)



Switch internal circuit diagram

● T1H, T1V	● T2H, T2V, T2WH, T2WV, T2JH, T2JV, T2YLH, T2YLV	● T3H, T3V, T3WH, T3WV, T3YLH, T3YLV	● T3PH, T3PV
● T0H, T0V	● T5H, T5V	● T8H, T8V	● T2YD, T2YDT, T2YDU

This switch has no polarity. Values in () are pin assignments for T2YDU. However, Pin 1 and Pin 2 are N.C. (Not Connected).

T Series	Improved Water Resistance	Applicable Cylinder	SCP□3CMK2 CMA2 SCM SCG SCA2 SCS2 CKV2 COV□2CAV2 SSD2
			SSG SSD STK SRL3 SRG3 SRM3 SRT3 MRL2 MRG2 LCR LCG
			LCX STG STS/L HCM CAC4 CAC-NRCS2 RCC2 MCP RRC GRC



Specifications

Item	Solid state 2-wire type	
	T2WLH, T2WLV	T2WLHW, T2WLWV
Applications	For programmable controller only	
Load voltage	24 VDC ±10%	
Load current	5 to 20 mA	
Internal voltage drop	4 V or less	
Leakage current	1 mA or less	
Indicator Lamp	Red/Green LED (Lights up when ON)	
Lead wire length	1 m (PUR cord 2-core 0.2 mm ²)	0.3 m (PUR cord with M8 connector)
Insulation resistance	20 MΩ or more with 500 VDC megger	
Dielectric strength	No abnormality when 1000 VAC is applied for 1 minute	
Shock resistance	980 m/s ²	
Ambient Temperature	-10 to +60°C	
Protection structure	IEC standard IP67 JIS C0920 (Immersible type)	
Weight	1 m: 18 g 3 m: 49 g 5 m: 80 g	11 g

*1: Cannot be mounted on drop prevention type.
*2: For switch mountability, refer to the next page.

Model No. Notation Method

Water-resistant Cylinder Switch



1 Lead Wire Extraction Direction

2 Lead wire length, connector specification

1 Lead Wire Extraction Direction

Code	Content
H	Straight lead wire type
V	L-shaped lead wire type

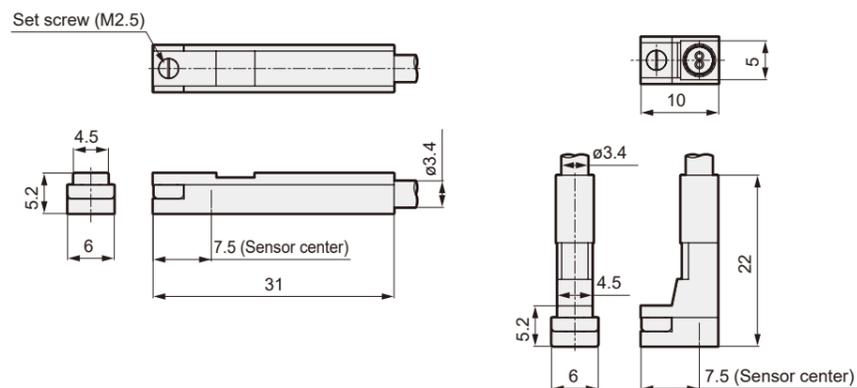
2 Lead wire length, connector specification

Code	Content
Blank	1 m lead wire
3	3 m lead wire
5	5 m lead wire
W	M8 connector, 1PIN (+) 4PIN (-)

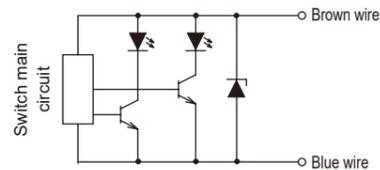
Outline Dimension Drawing

T2WLH Series (Straight lead wire type)

T2WLV Series (L-shaped lead wire type)



Switch internal circuit diagram



Switch applicable model list

Applicable Model	Bore size	
Pencil Shaped Cylinder	SCP□3	ø6 to 16
Tight Cylinder	CMK2	ø20 to 40
Small Bore Size Cylinder	CMA2	ø20 to 40
Round shaped cylinder	SCM	ø20 to 100
Tie Rod Cylinder	SCG	ø32 to 100
Medium Bore Size Cylinder	SCA2	ø40 to 100
Large Bore Size Cylinder	SCS2	ø125 to 250
Compact cylinder with valve	CKV2	ø20 to 40
Cell Cylinder	COV□2	ø50 to 100
Cell Cylinder	CAV2	ø50 to 100
Compact Cylinder	SSD2	ø12 to 100
Guided Compact Cylinder	SSG	ø12 to 100
Compact Cylinder	SSD	ø12 to 160
Stopper Cylinder	STK	ø20 to 50
Rodless Cylinder	SRL3	ø12 to 100
Rodless Cylinder with High-Precision Guide	SRG3	ø12 to 25
Rodless Cylinder with High-Precision Guide	SRM3	ø25 to 63
Rodless Cylinder with Brake	SRT3	ø12 to 63
Super rodless cylinder with magnet	MRL2	ø6 to 32
Super rodless cylinder with magnet, high precision guide type	MRG2	ø50 to 700
Linear Slide Cylinder	LCR	ø16 to 25
Linear Slide Cylinder	LCG	ø16
Thin Linear Slide Cylinder	LCX	ø25, 32
Guided Cylinder	STG	ø12 to 100
Guided Cylinder	STS/L	ø8 to 100
High Energy Absorption Cylinder	HCM	ø20 to 63
Clamp Cylinder	CAC4	ø40 to 80
Lightweight Clamp Cylinder	CAC-N	N32, N40
Rotary Clamp Cylinder	RCS2	ø12 to 63
Rotary Clamp Cylinder	RCC2	ø16 to 63
Mechanical Power Cylinder	MCP	Size 2t, 5t
Selex Rotary	RRC	Size 8 to 63
Table Type Rotary Actuator	GRC	Size 5 to 80

T Series	Magnetized environment	Applicable Cylinder	CMK2	SCM	SCG	SCA2	SCS2	SSD2	SSG	SSD
			STK	STG	STS/L	JSG	JSC3	JSC4	USSD	HCM
			CAC4	UCAC2	CAC-N	UCAC-N32	RCS2	RCC2	PCC	



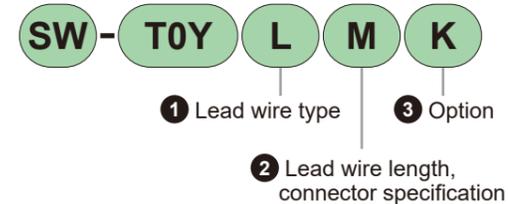
Specifications

Item	Reed 2-wire type		
	TOY	T0YL	T0YT
Applications	For programmable controller only		
Switch polarity	No polarity		
Load voltage	24 VDC ±10%		
Load current	5 to 20 mA		
Internal voltage drop	4.5 V or less		
Leakage current	0.5 mA or less		
Indicator Lamp	Red/Green LED (Lights up when ON)		
Lead wire length	1 m (Oil-resistant vinyl cabtyre cord 2-core 0.2 mm ²)	1 m (Flame-retardant cabtyre cord 2-core 0.2 mm ²) UL certified wire	1 m (Flame-retardant vinyl cabtyre cord 2-core 0.2 mm ²)
Insulation resistance	20 MΩ or more with 500 VDC megger		
Dielectric strength	No abnormality when AC1000 V is applied for 1 minute		
Shock resistance	294 m/s ²		
Ambient Temperature	-10 to +60°C		
Protection structure	IEC standard IP67 JIS C0920 (Immersible type)		
Contact protection circuit	None		
Weight	1 m: 18 g 3 m: 49 g 5 m: 80 g		
Weight of connector only	M12: Connector code B/M: 10 g M8: Connector code F: 4 g		

Note: For switch mountability, please refer to the next page.

Model No. Notation Method

● Magnetized environment cylinder switch



① Lead wire type

Code	Content
Blank	Oil-resistant vinyl cabtyre cord
L	UL wire
T	Spatter-resistant wire

③ Option

Code	Content
Blank	No option
K	With spatter adhesion prevention cover

② Lead wire length, connector specification

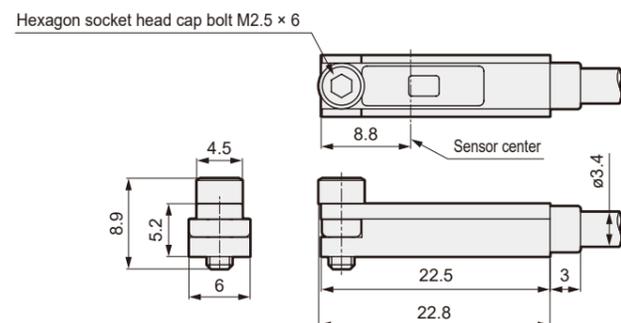
Code	Content
Blank	1 m lead wire
3	3 m lead wire
5	5 m lead wire
B	M12 connector (4PIN specification), 3-4PIN no polarity, 0.3 m lead wire
M	M12 connector (4PIN specification), 1-4PIN no polarity, 0.3 m lead wire
F	M8 connector (3PIN specification), 1-4PIN no polarity, 0.3 m lead wire

Note: For connector specification "F", only lead wire type "L" can be selected.

Switch applicable model list

Applicable Model	Bore size	
Small bore size cylinder	CMK2	ø32, ø40
Round shaped cylinder	SCM	ø32 to 100
Tie Rod Cylinder	SCG	ø40 to 100
Medium Bore Size Cylinder	SCA2	ø40 to 100
Large Bore Size Cylinder	SCS2	ø125 to 250
Compact Cylinder	SSD2	ø32 to 200
Guided Compact Cylinder	SSG	ø32 to 100
Compact Cylinder	SSD	ø32 to 160
Stopper Cylinder	STK	ø32 to 50
Guided Cylinder	STG	ø32 to 80
Guided Cylinder	STS/L	ø32 to 100
Tie Rod Cylinder with Brake	JSG	ø40 to 100
Cell top cylinder (Medium bore)	JSC3	ø40 to 100
Cell top cylinder (Large bore)	JSC4	ø125 to 180
Compact Cylinder with Drop Prevention	USSD	ø40 to 63
High Energy Absorption Cylinder	HCM	ø32 to 63
Clamp Cylinder	CAC4	ø40 to 80
Clamp Cylinder with Fall Prevention	UCAC2	ø50, ø63
Lightweight Clamp Cylinder	CAC-N	ø32, ø40
Lightweight Clamp Cylinder	UCAC-N32	ø32, ø40
Rotary Clamp Cylinder	RCS2	ø32 to 63
Rotary Clamp Cylinder	RCC2	ø32 to 63
Pin Clamp Cylinder	PCC	(ø50)

Outline Dimension Drawing



Switch internal circuit diagram

