

REED SENSOR

2025



**SOLID STATE
SENSOR**

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HOW TO ORDER

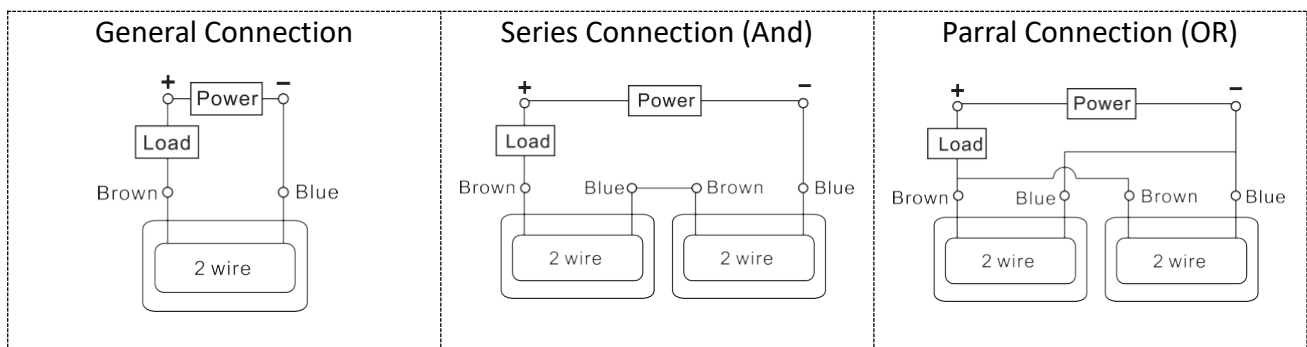
KM **S** **H** - **P** - **L**



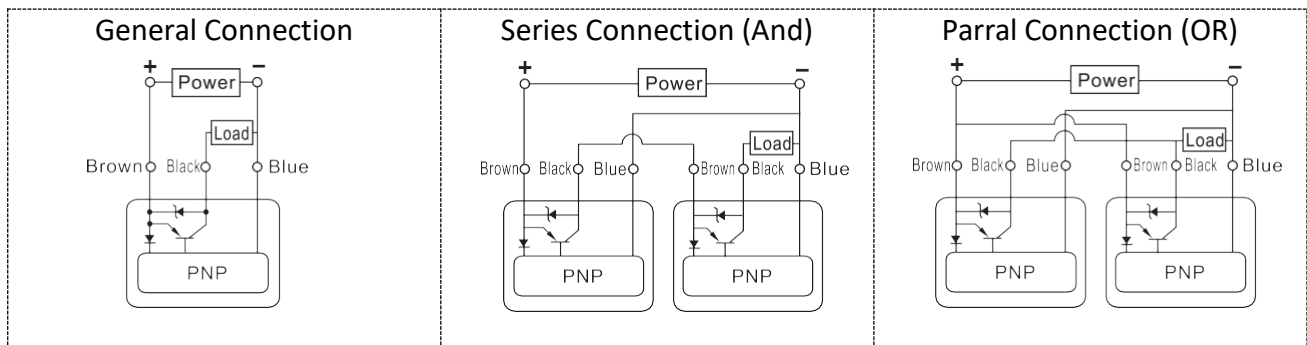
Type	R: Reed Switch S: Solid State Sensor
Cross Section	H E M K T U
Output Type	Blank: 2 Wire P: PNP Type N: NPN Type
Lead Wire	L: 2 mtr Lead Wire C8: 300mm with M8 Plug Connector

Connection Method

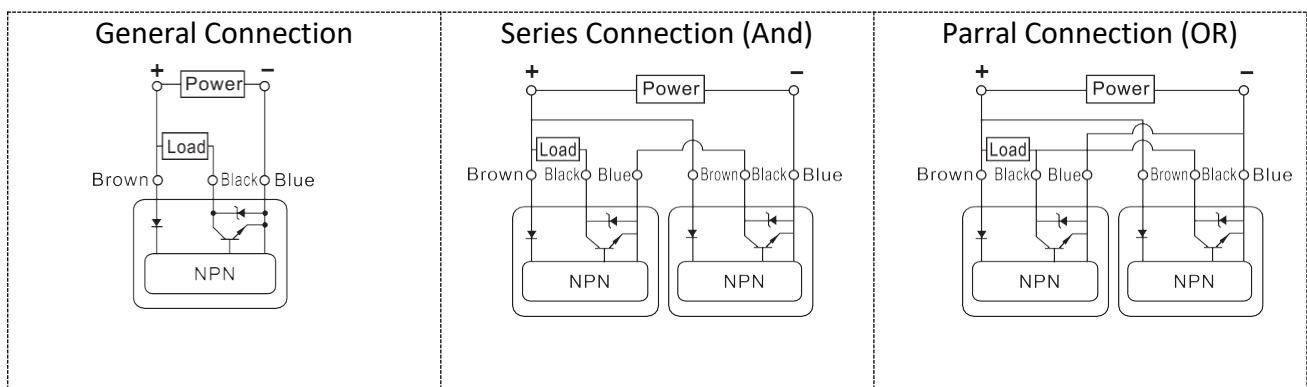
2 Wire Reed Sensor Connection



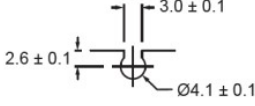
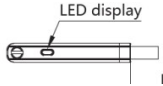
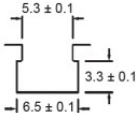
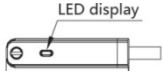
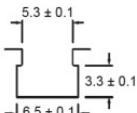
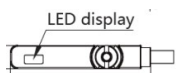
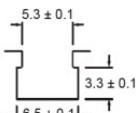
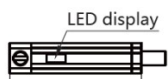
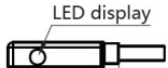
3 Wire Solid State PNP Connection



3 Wire Solid State NPN Connection



Quick Selection Guide

KESTECH	Cylinder Section	Sensor Section	SMC	FESTO	PNEUMAX	JANATICS	CAMOZZI
KMRH			D-A93		1581.U		CSC-220
KMSH			D-M9B	SMT-10M-ZS			
KMSH-P			D-M9P	SMT-10M-PS	1581.HAP		CSD-334
KMSH-N			D-M9N	SMT-10M-NS			
KMRE			D-Z73	SME-8-ZS	1580.U		CST-220
KMSE			D-Y59B				
KMSE-P			D-Y59P		1580.HAP		CST-332
KMSE-N			D-Y59N				
KMRK				SME-8M-ZS		AM42-0	CSG-223
KMSK				SMT-8M-ZS			CSG-324
KMSK-P				SMT-8M-PS	1595.HAP	AM42-2	CSG-334
KMSK-N				SMT-8M-NS		AM42-3	CSG-534
KMRT						AM41-0	CSH-223
KMST-P						AM41-2	CSH-334
KMST-N						AM41-3	
KMRU	Tie Rod Mounting with Bracket					880006	
KMRM	For Round Cylinder (Bore 20 -80mm) (Select Band/Bracket on Ref Page No-11)						
KMSM							
KMSM-P							
KMSM-N							

Caution

Do not exceed specification, permanent damage to the sensor may occur.

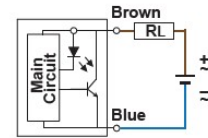
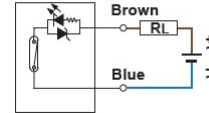
For reed sensor type sensors, polarity must also be observed for the proper function of LED. Connect the brown wire in series with load to positive (+) and the blue wire to negative (-) of power source. If the polarity is reversed, reed sensor remain functional but LED will remain in " OFF " state.

For solid-state type sensors, polarity must also be observed. Connect brown wire to the positive (+) and the blue to the negative (-) of DC power source. The black wire must connect to the load only. If the black wire is accidentally connected to the power source, permanent damage to the sensor may occur.

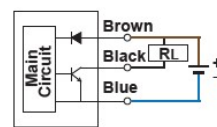
An external protection circuit may be required if the magnetic sensor is used with inductive load, such as relay or solenoid. For DC inductive load, attach an external diode parallel to the load and use R-C circuit parallel with AC inductive load as illustrated below.

Keep sensors away from strong magnetic field to prevent malfunctioning.

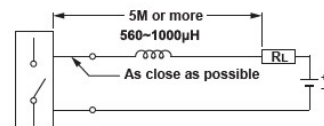
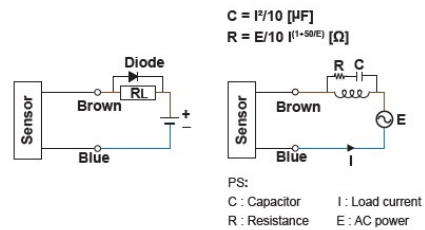
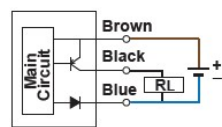
Reed sensors are without protection circuit. When a reed sensor is used with a capacitive load or with more than 5 meters lead wire, the life of the contact will be shortened. (especially when the switch is always ON)



(NPN Output)



(PNP Output)



H-Series

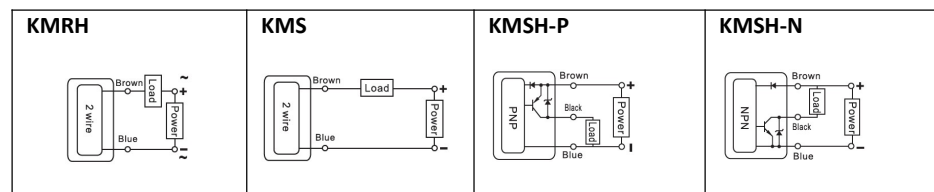


Cylinder Sensor Specification

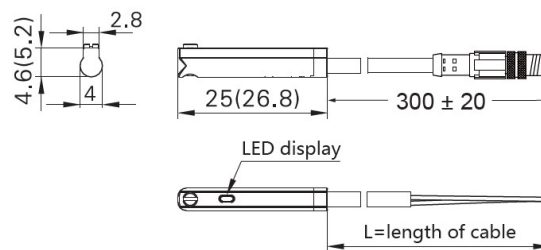
Auto Switch Model	KMRH	KMSH	KMSH-P	KMSH-N
Wiring Type	2-Wire	2-Wire	3-Wire	3-Wire
Switching	SPST Normally Open	Solid State Output Normally Open	Solid State Output Normally Open	Solid State Output Normally Open
Sensor Type	Reed Switch		PNP Current Sourcing	NPN Current Sinking
Operating Voltage	5 ~ 220V DC / AC	10 ~ 28 V DC	5 ~ 30 V DC	
Switching Current	100 mA max.		200 mA max.	
Contact Rating 1*	10 W max.	2.8W max.	6 W max.	
Current Consumption		40 μ A @ 24 V DC max.	7.5 mA @ 24 V DC max.	
Voltage Drop	2.5 V max.	2.65 V max.	0.5 V @ 200 mA max.	
Leakage Current		90 μ A @ 28 V DC max.	0.01 mA max.	
Indicator	Red			
Cable	$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 2 cores		$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 3 cores	
Operating Frequency	200 Hz	1000 Hz Max.		
Operating Temp. Range	-10 to 70 $^{\circ}$ C			
Encloser Classification	IEC 60529 IP67	IEC 60529 IP68		
Protection Circuit	None	Short Circuit Surge Suppression	Short Circuit Reverse Polarity Surge Suppression	Short Circuit Reverse Polarity Surge Suppression
Note 1 * - Never exceed rating (Watt = Voltage x Amperage).Permanent damage to sensor will occur.				

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Circuit Diagram



Dimensions



2 wire EQD wiring

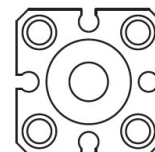
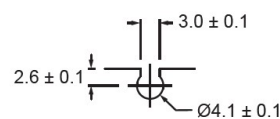


3 wire QD wiring



* All Dimension mm

Groove Dimensions



Unit : mm

E-Series

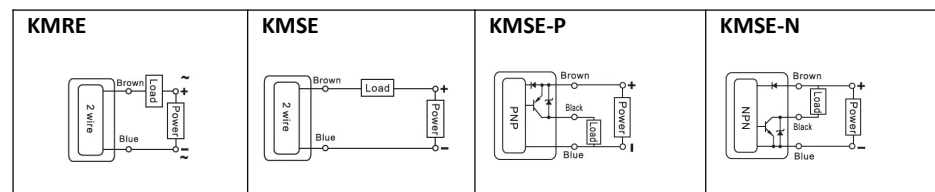
Cylinder Sensor Specification



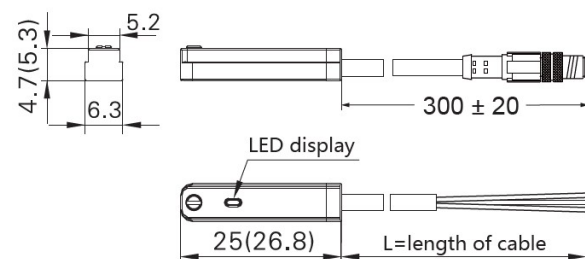
Auto Switch Model	KMRE	KMSE	KMSE-P	KMSE-N
Wiring Type	2-Wire	2-Wire	3-Wire	3-Wire
Switching	SPST Normally Open	Solid State Output Normally Open	Solid State Output Normally Open	Solid State Output Normally Open
Sensor Type	Reed Switch		PNP Current Sourcing	NPN Current Sinking
Operating Voltage	5 ~ 220V DC / AC	10 ~ 28 V DC	5 ~ 30 V DC	
Switching Current	100 mA max.		200 mA max.	
Contact Rating 1*	10 W max.	2.8W max.	6 W max.	
Current Consumption		40 μ A @ 24 V DC max.	7.5 mA @ 24 V DC max.	
Voltage Drop	2.5 V max.	2.65 V max.	0.5 V @ 200 mA max.	
Leakage Current		90 μ A @ 28 V DC max.	0.01 mA max.	
Indicator	Red			
Cable	$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 2 cores		$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 3 cores	
Operating Frequency	200 Hz	1000 Hz Max.		
Operating Temp. Range	-10 to 70 $^{\circ}$ C			
Encloser Classification	IEC 60529 IP67	IEC 60529 IP68		
Protection Circuit	None	Short Circuit Surge Suppression	Short Circuit Reverse Polarity Surge Suppression	Short Circuit Reverse Polarity Surge Suppression
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Circuit Diagram



Dimensions



2 wire EQD wiring



3 wire QD wiring



* All Dimension mm

Groove Dimensions

Unit : mm



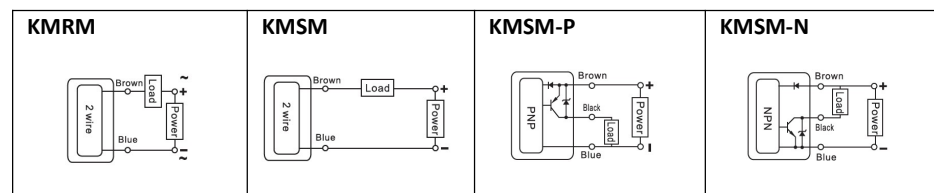
M-Series

Cylinder Sensor Specification

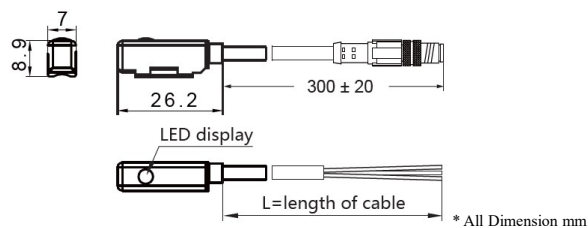


Auto Switch Model	KMRM	KMSM	KMSM-P	KMSM-N
Wiring Type	2-Wire	2-Wire	3-Wire	3-Wire
Switching	SPST Normally Open	Solid State Output Normally Open	Solid State Output Normally Open	Solid State Output Normally Open
Sensor Type	Reed Switch		PNP Current Sourcing	NPN Current Sinking
Operating Voltage	5 ~ 220V DC / AC	10 ~ 28 V DC	5 ~ 30 V DC	
Switching Current	100 mA max.		200 mA max.	
Contact Rating 1*	10 W max.	2.8W max.	6 W max.	
Current Consumption		40 μ A @ 24 V DC max.	7.5 mA @ 24 V DC max.	
Voltage Drop	2.5 V max.	2.65 V max.	0.5 V @ 200 mA max.	
Leakage Current		90 μ A @ 28 V DC max.	0.01 mA max.	
Indicator	Red			
Cable	Ø2.8 PVC - 26 AWG (0.18 mm ²) - 2 cores		Ø2.8 PVC - 26 AWG (0.18 mm ²) - 3 cores	
Operating Frequency	200 Hz	1000 Hz Max.		
Operating Temp. Range	-10 to 70 °C			
Encloser Classification	IEC 60529 IP67	IEC 60529 IP68		
Protection Circuit	None	Short Circuit Surge Suppression	Short Circuit Reverse Polarity Surge Suppression	Short Circuit Reverse Polarity Surge Suppression
Note 1* - Never exceed rating (Watt = Voltage x Amperage).Permanent damage to sensor will occur.				

Circuit Diagram



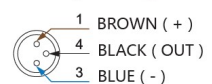
Dimensions



2 wire EQD wiring



3 wire QD wiring



K-Series

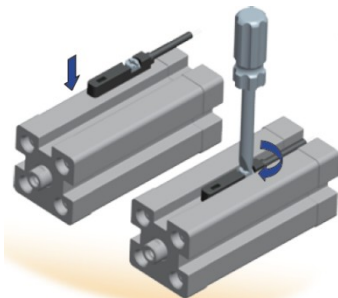
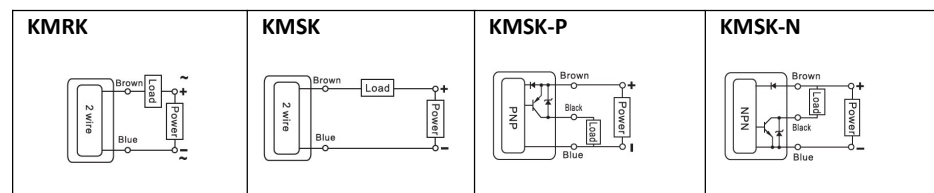
Cylinder Sensor Specification



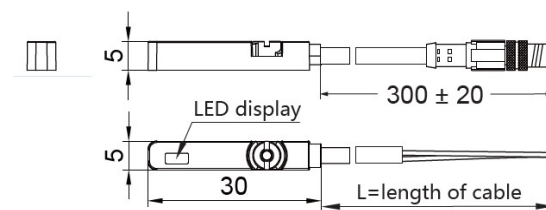
Auto Switch Model	KMRK	KMSK	KMSK-P	KMSK-N
Wiring Type	2-Wire	2-Wire	3-Wire	3-Wire
Switching	SPST Normally Open	Solid State Output Normally Open	Solid State Output Normally Open	Solid State Output Normally Open
Sensor Type	Reed Switch		PNP Current Sourcing	NPN Current Sinking
Operating Voltage	5 ~ 220V DC / AC	10 ~ 28 V DC	5 ~ 30 V DC	
Switching Current	100 mA max.		200 mA max.	
Contact Rating 1*	10 W max.	2.8W max.	6 W max.	
Current Consumption		40 μ A @ 24 V DC max.	7.5 mA @ 24 V DC max.	
Voltage Drop	2.5 V max.	2.65 V max.	0.5 V @ 200 mA max.	
Leakage Current		90 μ A @ 28 V DC max.	0.01 mA max.	
Indicator	Red			
Cable	$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 2 cores		$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 3 cores	
Operating Frequency	200 Hz	1000 Hz Max.		
Operating Temp. Range	-10 to 70 $^{\circ}$ C			
Encloser Classification	IEC 60529 IP67	IEC 60529 IP68		
Protection Circuit	None	Short Circuit Surge Suppression	Short Circuit Reverse Polarity Surge Suppression	Short Circuit Reverse Polarity Surge Suppression
Note 1* - Never exceed rating (Watt = Voltage x Amperage).Permanent damage to sensor will occur.				

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Circuit Diagram



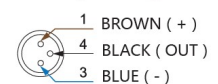
Dimensions



2 wire EQD wiring

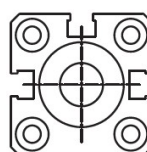
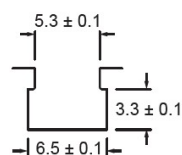


3 wire QD wiring



* All Dimension mm

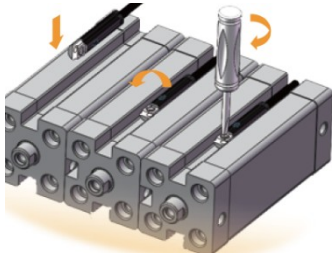
Groove Dimensions



Unit : mm

T-Series

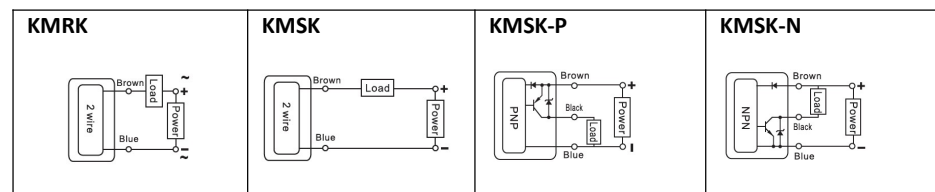
Cylinder Sensor Specification



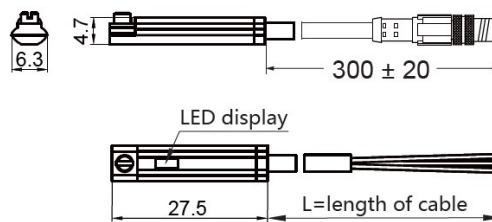
Auto Switch Model	KMRT	KMST	KMST-P	KMST-N
Wiring Type	2-Wire	2-Wire	3-Wire	3-Wire
Switching	SPST Normally Open	Solid State Output Normally Open	Solid State Output Normally Open	Solid State Output Normally Open
Sensor Type	Reed Switch		PNP Current Sourcing	NPN Current Sinking
Operating Voltage	5 ~ 220V DC / AC	10 ~ 28 V DC	5 ~ 30 V DC	
Switching Current	100 mA max.		200 mA max.	
Contact Rating 1*	10 W max.	2.8W max.	6 W max.	
Current Consumption		40 μ A @ 24 V DC max.	7.5 mA @ 24 V DC max.	
Voltage Drop	2.5 V max.	2.65 V max.	0.5 V @ 200 mA max.	
Leakage Current		90 μ A @ 28 V DC max.	0.01 mA max.	
Indicator	Red			
Cable	$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 2 cores		$\varnothing$ 2.8 PVC - 26 AWG (0.18 mm ²) - 3 cores	
Operating Frequency	200 Hz	1000 Hz Max.		
Operating Temp. Range	-10 to 70 $^{\circ}$ C			
Encloser Classification	IEC 60529 IP67	IEC 60529 IP68		
Protection Circuit	None	Short Circuit Surge Suppression	Short Circuit Reverse Polarity Surge Suppression	Short Circuit Reverse Polarity Surge Suppression
Note 1* - Never exceed rating (Watt = Voltage x Amperage).Permanent damage to sensor will occur.				

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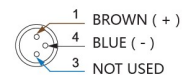
Circuit Diagram



Dimensions



2 wire EQD wiring

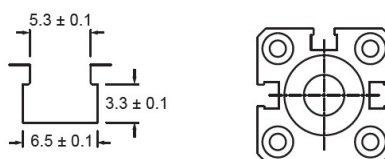


3 wire QD wiring



* All Dimension mm

Groove Dimensions



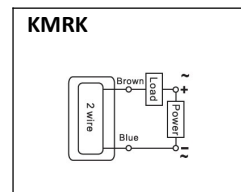
U-Series



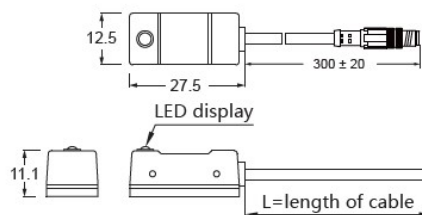
Cylinder Sensor Specification

Auto Switch Model	KMRM
Wiring Type	2-Wire
Switching	SPST Normally Open
Sensor Type	Reed Switch
Operating Voltage	5 ~ 220V DC / AC
Switching Current	100 mA max.
Contact Rating 1*	10 W max.
Current Consumption	
Voltage Drop	2.5 V max.
Leakage Current	
Indicator	Red
Cable	Ø2.8 PVC - 26 AWG (0.18 mm ²) - 2 cores
Operating Frequency	70 Hz
Operating Temp. Range	-10 to 70°C
Encloser Classification	IEC 60529 IP67
Protection Circuit	None
Note 1* - Never exceed rating (Watt = Voltage x Amperage).Permanent damage to sensor will occur.	

Circuit Diagram

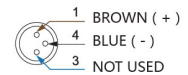


Dimensions



* All Dimension mm

2 wire EQD wiring



3 wire QD wiring



Sensor Bracket/Clamp For M Series

ALUMINIUM ALLOY				Stainless Steel		
Part Code	Series	Bore Size		Part Code	Series	Bore Size
KF-MEA16	MCK	Φ 16		KS-MEA06	PB/PBR MI/MF/MG MA/MAC CG1/CG3	Φ 6
KF-MEA20	MAL/MBL C85/C75 CJ2/CM2	Φ 20		KS-MEA10		Φ 10
KF-MEA25		Φ 25		KS-MEA12		Φ 12
KF-MEA32		Φ 32		KF-MEA16		Φ 16
KF-MEA40		Φ 40		KF-MEA20		Φ 20
				KF-MEA25		Φ 25
				KF-MEA32		Φ 32
				KF-MEA40		Φ 40
			KF-MEA50	Φ 50		
			KF-MEA63	Φ 63		

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