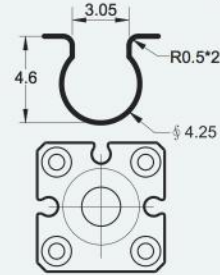


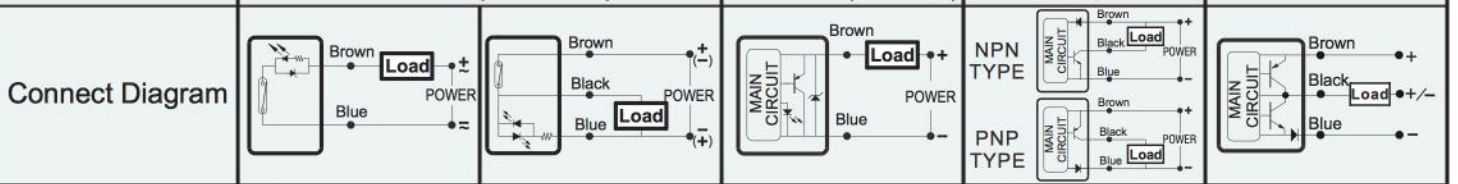
**SPECIFICALLY FOR SHORT-STROK CYLINDERS**  
Strong fixing strength

**GROOVE DIMENSION (SMC)**



## SPECIFICATION

TYPE	AL-28R	AL - 28RD	AL - 28DF	AL - 28N(P)	AL - 28S
CHARACTERISTIC					
SWITCHING LOGIC	SPST Normally Open	SPST Normally Open	Normally Open	Solid State Output, Normally Open	
SENSOR TYPE	Reed Switch	Reed Switch	2 Wire Solid State	NPN Current Sinking (PNP Current Sourcing)	NPN/PNP Automatic Detection
OPERATING VOLTAGE	5 ~ 120V DC/AC	5 ~ 30V DC	10 ~ 28V DC	5 ~ 30V DC	
SWITCHING CURRENT	0 ~ 100 mA	0 ~ 300 mA	1 ~ 50 mA	0 ~ 200 mA	0 ~ 100 mA
SWITCHING RATING	3.5 W Max.	3.5 W Max.	1.4 W Max.	6 W Max.	3.5 W Max.
CURRENT CONSUMPTION	—	10 mA Max. @ 24V	40 µA Max. @ 24V	7.5 mA Max. @ 24V	
VOLTAGE DROP	2.5V Max. @ 100mA DC	0.1V Max. @ 300mA DC	2.65V Max. @ 50mA DC	0.5 V Max. @ 200 mA DC	1 V Max. @ 200 mA DC
LEAKAGE CURRENT	—	—	90 µA Max. @ 28V	0.01 mA Max.	
INDICATOR	Red LED	Dual Yellow LED	Red LED	Red LED(Green LED)	Red LED
CABLE	2.9 φ, 2C, Grey Oil-Resistant PVC	2.9 φ, 3C, Black Oil-Resistant PVC	2.9 φ, 2C, Black Oil-Resistant PVC	2.9 φ, 3C, Black Oil-Resistant PVC	
SENSITIVITY	40 ~ 50 Gauss	40 ~ 50 Gauss	40 ~ 800 Gauss	40 ~ 800 Gauss	
SWITCHING FREQUENCY	1000 Hz	1000 Hz	1000 Hz	5000 Hz	
TEMPERATURE RANGE	-10 ~ 70 °C	-10 ~ 70 °C	-10 ~ 70 °C	-10 ~ 70 °C	
SHOCK	30 G	30 G	50 G	50 G	
VIBRATION	9 G	9 G	9 G	9 G	
ENCLOSURE CLASSIFICATION	IP 67 (EN60529)	IP 67 (EN60529)	IP 67 (EN60529)	IP 67 (EN60529)	
PROTECTION CIRCUIT	—		Surge Suppression	Power Reverse Polarity; Surge Suppression	
CE Certificate NO.	E8N 11 04 53334 005		No. E8N 1104 53334 004	No. E8N 1104 53334 006	—
3C Certificate NO.	No. : 2004010305127433		—	—	—
CNEx Certificate NO.	CNEx16.2333X(ExnCICT6GC)		CNEx16. 1850 (ExiallBT6Ga)	CNEx16. 1851 (ExiallBT6Ga)	—



<b>AL-28R</b> <b>AL-28R-QD8</b> <b>AL-28R-QD12</b> <b>AL-28R-EZ2M</b>	<b>AL-28S</b> <b>AL-28S-QD8</b> <b>AL-28S-QD12</b> <b>AL-28S-EZ3M</b>	<b>AL-28DF</b> <b>AL-28DF-QD8</b> <b>AL-28DF-QD12</b> <b>AL-28DF-EZ2M</b>	<b>AL-28N(P)</b> <b>AL-28N(P)-QD8</b> <b>AL-28N(P)-QD12</b> <b>AL-28N(P)-EZ3M</b>	<b>M8, M12, EZ QUICK CONNECTOR (IEC61076-2-101)</b> 2 wire QD wiring <b>M83M</b> 4 (NC) Brown(+) 1 3 Blue(-) <b>M124M</b> 2 (NC) Blue(-) 3 1 Brown(+) 4 (NC) <b>EZ2M</b> Blue(-) 2 1 Brown(+)	3 wire QD wiring <b>M83M</b> 4 Black(OUT) Brown(+) 1 3 Blue(-) <b>M124M</b> 2 (NC) Blue(-) 3 1 Brown(+) 4 Black(OUT) <b>EZ3M</b> Blue(-) 3 2 Black(OUT) 1 Brown(+)

- NOTE: 1. The max. operating voltage of AL-28R-QD8 is 60V DC (Based on IEC61076-2-101).  
 2. Measuring standard target: 15.5 \* 8 \* 5t(Anisotropic Plastic Magnet).  
 3. Sin Wave / X, Y, Z 3 Directions / 3 Times Each Direction / 11mS Each Time.  
 4. Double Amplitude 1.5mm / 10Hz~55Hz~10Hz(Sweep 1min) / X, Y, Z 3 Directions / 1Hour Each Time.  
 5. All trademarks used in this catalog are the property of their respective owners.  
 6. We reserve the right to make changes without notice.

