

Repeater and extender

■ Description

An FX9R031 repeater and FX9R032 extender can extend the AS-i transmission distance by up to 100m respectively. Up to 2 repeaters can be connected in series. The 2 lines (segments) connected to a repeater are insulated and those connected to an extender are not.

- The power supply status of the 2 lines connected to a repeater is indicated on the repeater.



■ Ratings and specifications

Type	Repeater FX9R031	Extender FX9R032
Power supply	Supplied from AS-i line	
Power consumption from the AS-i cable	Up to 100mA per AS-i line	
Insulation between AS-i LINE1 and LINE2	Insulated	Not insulated
Indication	AS-i power supply LINE1 and LINE2: Green LED	
Cable extension length	100m (Total distance: up to 300m, using 2 repeaters in series)	Up to 100m, 1 extender only
Degree of protection (IEC60529)	IP67 (with mounting plate and cables)	
Operating temperature	0 to +60°C (no icing or no condensation)	
Storage temperature	-40 to +70°C (no icing or no condensation)	
Electrical protection for AS-Interface	Reverse polarity protection Electrostatic discharge resistance Electromagnetic field noise immunity Burst noise	— Contact discharge method: ±4kV, Aerial discharge method: ±8kV, IEC61000-4-2 (Class B) 80 to 1000MHz, Electric field strength: 10V/m, IEC61000-4-3 (Class A) 2kV (Class B)/1kV (Class A), IEC61000-4-4
Shock resistance (IEC68-2-27)	300m/s ² (18ms) (screw mounting) / 150m/s ² (11ms) (rail mounting)	
Vibration resistance (IEC68-2-6)	10 to 55Hz, 1mm (screw mounting) / 0.5mm one-way amplitude (rail mounting)	
Mounting method	Rail/screw dual mounting	
Accessory	Mounting plate	
Mass	Approx. 200g (including mounting plate)	

■ Connection example

Repeater

Since the two cables connected to a repeater R are isolated each other, an AS-i power supply must be installed between repeaters.

In one AS-i system, up to 2 repeaters can be connected in series, and multiple repeaters in parallel.

The total maximum AS-i cable length is 100m that can be connected to an AS-i power supply.

The AS-i transmission distance can be extended up to 300m if up to 100m AS-i cable per segment is connected in series. (Please consult with Fuji Electric FA when you intend to use 2 repeaters in series.)

Extender

No AS-i slaves and AS-i power supplies cannot be installed between the AS-i master and extender E.

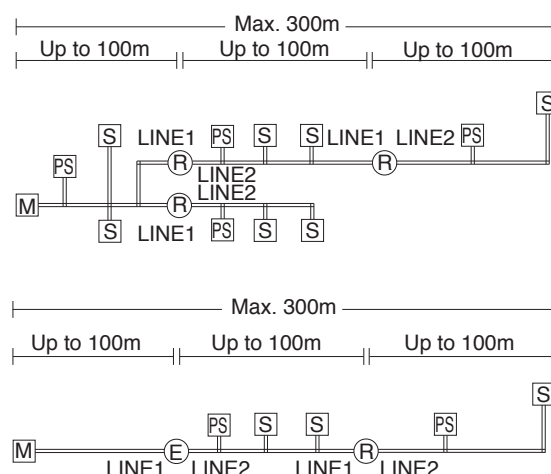
The cable length is max. 100m.

Extenders cannot be connected in parallel.

The total maximum AS-i cable length is 100m that can be connected to an AS-i power supply.

The AS-i transmission distance can be extended up to 300m if up to 100m AS-i cable per segment is connected in series.

(Please consult with Fuji Electric FA when you intend to use an extender and repeater in series.)



R: AS-i repeater
E: AS-i extender
M: AS-i master
S: AS-i slave
(Total No. of slaves = Max. 62)
PS: AS-i power supply

AS-Interface

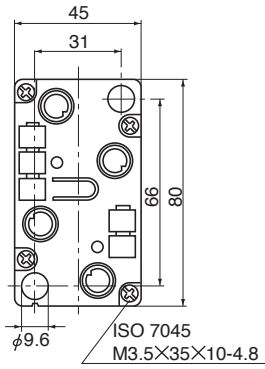
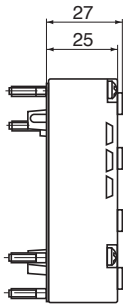
■ Dimensions, mm

Repeater FX9R031

Extender FX9R032



AF99-107



Dedicated mounting plate (supplied)



AF99-98

