



Repeaters

- Lengthens line by 100 m (max. 2 repeaters in series)
- Galvanic isolation
- IP67 or IP20 housings
- No address required

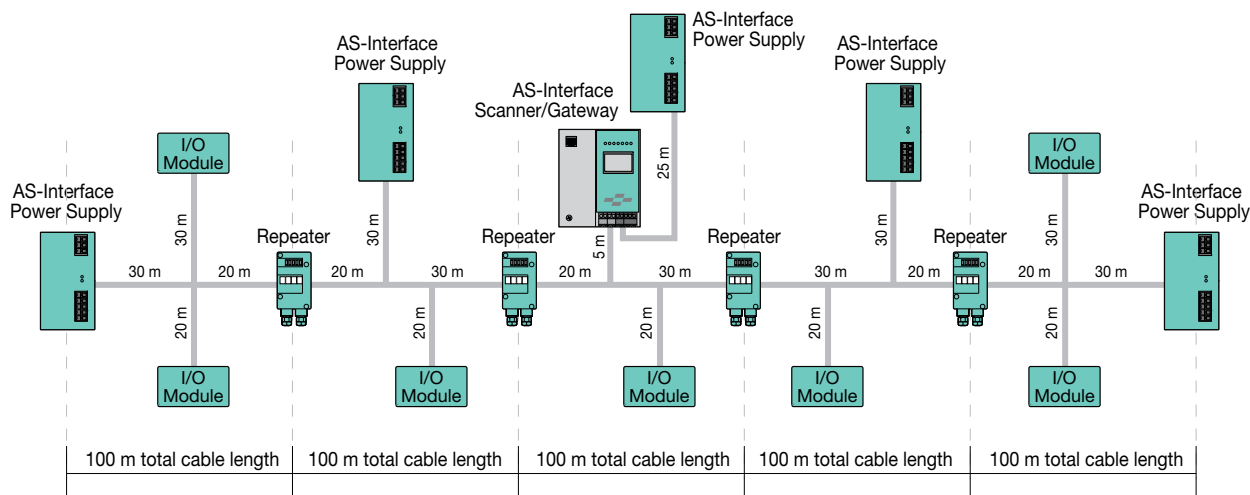
Repeaters Overview

AS-Interface cable length can be increased an additional 100 meters with the use of a repeater. Since repeaters isolate the connected network segments, an AS-Interface power supply must be located in both segments. A maximum of two repeaters can be used back-to-back in a single cable run resulting in an overall length of 300 meters. As long as a signal traveling from the scanner/gateway to a module does not cross more than two repeaters, longer networks can be built. A linear network of 500 m is easily possible by placing the scanner/gateway in the middle section. When using repeaters, I/O modules can be placed in any cable segment. Regardless of the cable length and number of repeaters, a maximum of 62 modules per gateway can be placed on an AS-Interface network.

The enclosure mount repeater VAR-KE3-TERM, only 22.5 mm in width, takes up little space in the control cabinet. The new KE3 Series modules feature color-coded terminals to help simplify the installation. This method of mounting permits easy removal during initial operation or servicing.

The VAR-KE3-TERM also includes a termination switch. Once enabled, this termination can extend the first segment to 200 m. In this case, the incoming segment is 200 m long and the outgoing segment is 100 m, for a total length of 300 m. If termination is used the power supply must be located as far from the termination as possible at the other end of the network.

See pages 68-69 for repeater wiring and dimensions.



Subject to modifications without notice

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776-4411
fa-info@de.pepperl-fuchs.com

Copyright Pepperl+Fuchs
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com



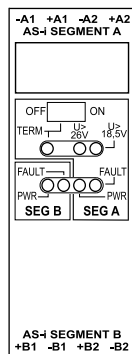
Specifications		Advanced Repeaters	
TYPE	Advanced Repeaters		
MODEL NUMBER(S)	VAR-KE3-TERM ⚡	VAR-G4F ⚡	
BASE	Flat cable base included, U-G1PP base optional		
MAX. SEGMENT LENGTH (1/2)	100 m (200 m with termination)/100 m		100 m/100 m
OPERATING CURRENT			
NETWORK 1	60 mA		
NETWORK 2	60 mA		
DELAY TIME	9 µs	9 µs	
TERMINATION SWITCH	Yes	No	
PROTECTION (IEC)	IP20	IP67	
TEMPERATURE RANGE			
WORKING	+32 °F to +131 °F (0 °C to +55 °C)		+14 °F to +131 °F (-10 °C to +55 °C)
STORAGE	-13 °F to +167 °F (-25 °C to +75 °C)		-13 °F to +167 °F (-25 °C to +75 °C)
HOUSING MATERIAL	PA66-FR	PA6-GF	
WEIGHT	120 g (6 oz)		
APPROVALS			
MOUNTING	DIN rail	DIN rail, mounting holes	
AS-INTERFACE CONNECTION	Removable terminals	Flat yellow or round cable	

⚡ Stocked item
Consult factory for all other models

Wiring Diagrams

TERMINALS

VAR-KE2



LED Indicators

PWRx: Green: Power on
Off: no power

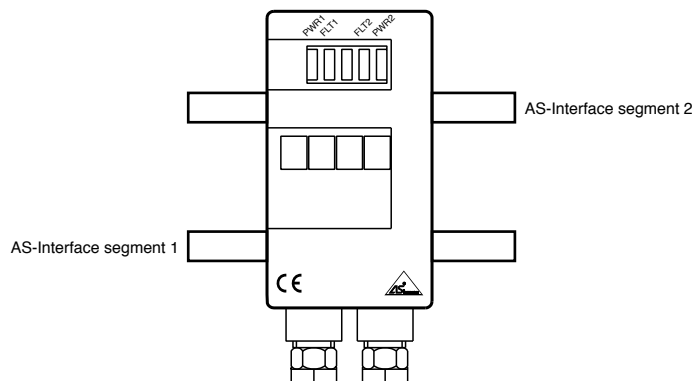
FAULT: Off: no errors
Red: Communication errors

TERM: On: Termination connected
Off: No termination

26V: On: Voltage above 26 V
Off: Voltage below 26 V

18.5V: On: Voltage above 18.5 V
Off: Voltage below 18.5 V

VAR-G4F



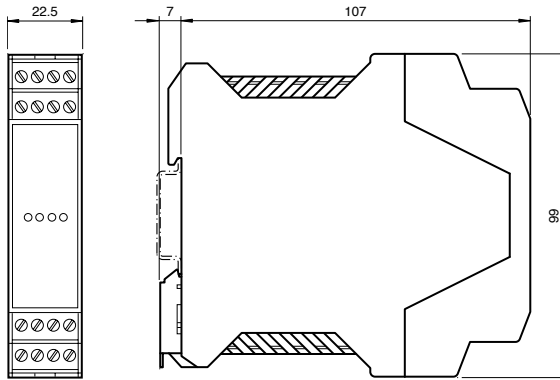
LED Indicators

PWRx: Green: Power on
Off: no power

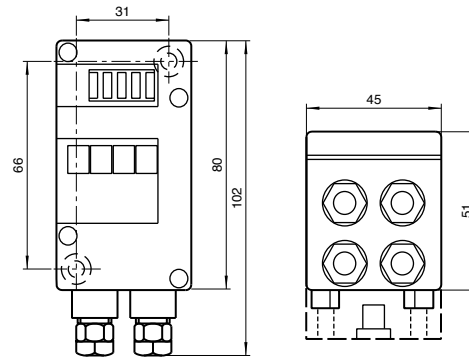
FLTx: Off: no errors
Red: Communication errors

Dimensions (mm)

VAR-KE3



VAR-G4F



Accessories

U-G1PP

Round cable base with external power terminals



PG11-1/2NPT

PG11 male to 1/2" NPT female conduit adapter



See pages 201-216 for complete AS-Interface accessory listing.