

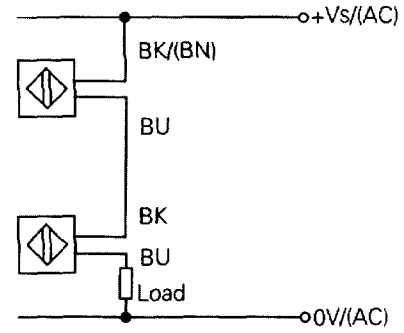
Electrical specifications

Series switching

The voltage drop across each conducting sensor reduces the voltage available to drive the load. The number of proximity switches which can be connected in series is therefore limited and may be worked out by summing the individual voltage drops plus the load requirement.

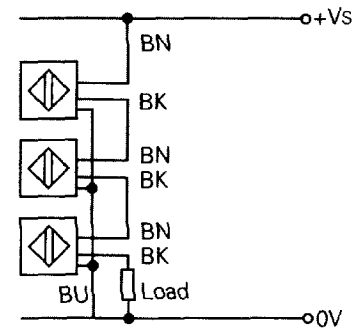
2-wire AC/DC

These units may be connected as shown. This does not apply to NAMUR sensors. Series connection of 2-wire devices is not recommended.



3-wire DC (PNP circuit shown)

The number of switches connected in series is limited by the total amount of voltage drop.



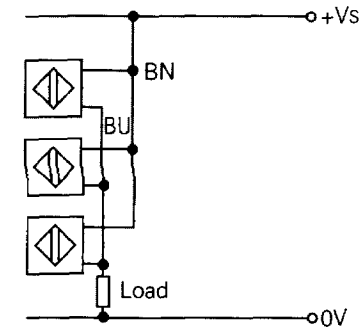
Parallel switching

2-wire DC

These may be connected as shown. Note: combined off-state current of all sensors in parallel flows via the load resistor.

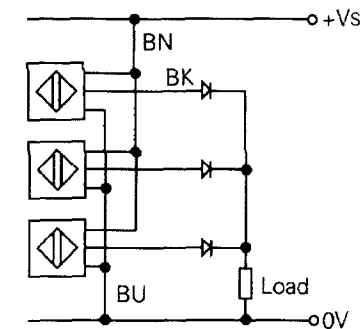
2-wire AC

Parallel switching of AC type sensors is not recommended since the starting oscillations can cause false triggerings.



3-wire DC

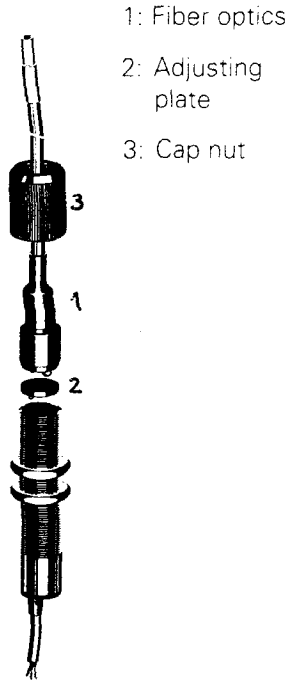
3-wire DC sensors may be connected in parallel as shown. A parallel connection, however, must incorporate a decoupling diode.



Fiber optics program for series 18, 30

Glass fiber optics
A-type

Series 18



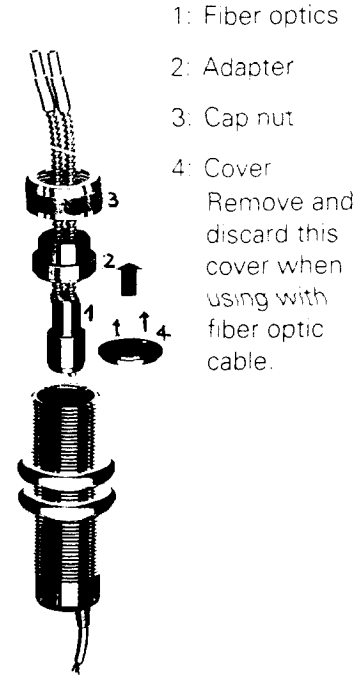
- 1: Fiber optics
- 2: Adjusting plate
- 3: Cap nut

Mounting

The adjusting plate and the cap nut are supplied with each fiber optic cable. In case of damage or loss they can be ordered as an accessory under the following part numbers:

Adjusting plate	101958
Cap nut	101480

Series 30



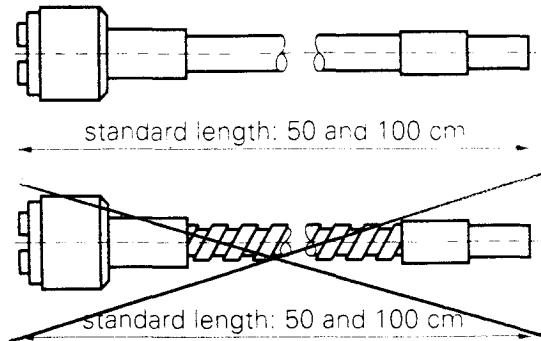
- 1: Fiber optics
- 2: Adapter
- 3: Cap nut
- 4: Cover
Remove and discard this cover when using with fiber optic cable.

Mounting

The correct adapter and the cap nut must to be ordered separately with each fiber optic cable as an accessory under the following part numbers:

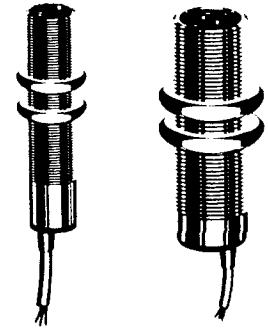
Adapter	102757
Cap nut	102801

Reflective types



Available in either plastic or metal sheaths. The reflective types come in standard lengths of 50 and 100 cm with randomly assembled fibers.

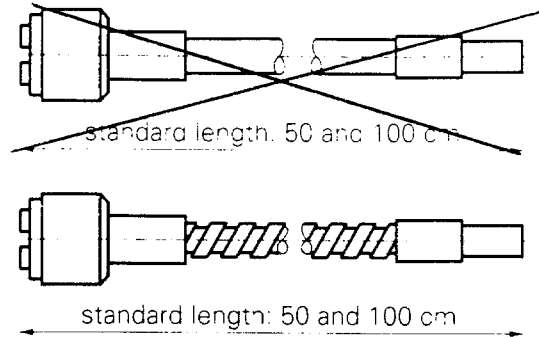
Series 18 Series 30



Adapter and cap nut must be ordered separately when used with series 30

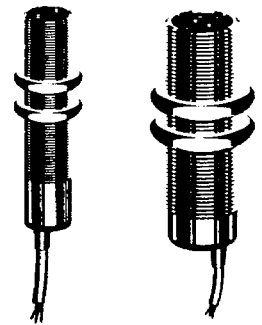
Fiber diameter 2 x 0.5 mm ²		Sensing Distance	
Sheath material: PVC ø 2,5 mm			
	Part number		
RS 631-610	FUE 050A2004 (length 50 cm)	10 mm	35 mm
	FUE 100A2004 (length 100 cm)	5 mm	30 mm
RS 636-463	FUE 050A4004 (length 50 cm)	10 mm	35 mm
	FUE 100A4004 (length 100 cm)	5 mm	30 mm

Reflective types



Available in either plastic or metal sheaths. The reflective types come in standard lengths of 50 and 100 cm with randomly assembled fibers.

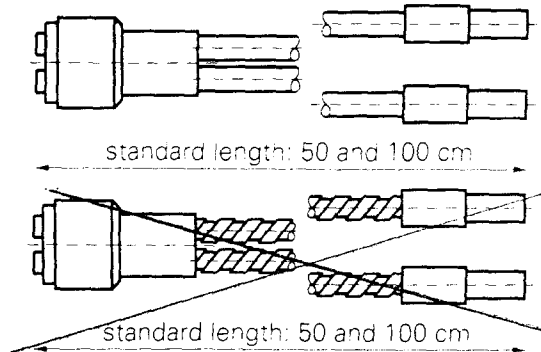
Series 18 Series 30



Adapter and cap nut must be ordered separately when used with series 30

Fiber diameter 2 x 3 mm ²		Sensing Distance	
Sheath material: brass chromium plated ø 6 mm	Part number		
	FUF 050A2003 (length 50 cm)	60 mm	210 mm
	FUF 100A2003 (length 100 cm)	55 mm	200 mm
RS 636-441 	FUF 050A1003 (length 50 cm)	60 mm	210 mm
	FUF 100A1003 (length 100 cm)	55 mm	200 mm
RS 636-457			

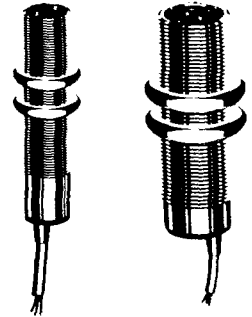
Through beam types



Fiber optics available with plastic or metal sheaths. The through beam types come in standard lengths of 50 and 100 cm with randomly assembled fibers.

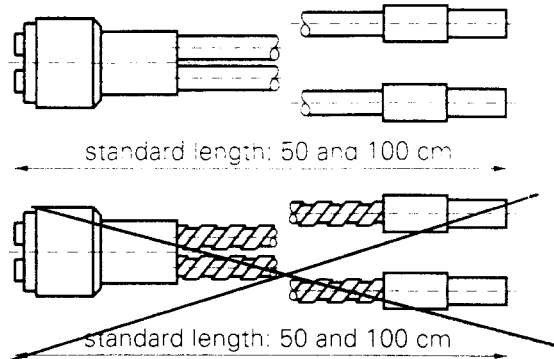
Adapter and cap nut must be ordered separately when used with series 30

Series 18 Series 30



Fiber diameter 2 x 1 mm ²		Actual Range		
Sheath material: PVC ø 2,5 mm				
Part number				
RS 636-479		FSE 050A4003 (length 50 cm)	90 mm	450 mm
		FSE 100A4003 (length 100 cm)	90 mm	500 mm

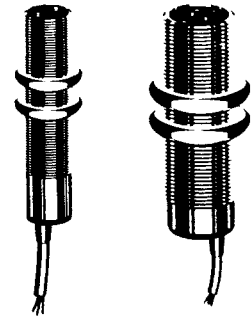
Through beam types



Fiber optics available with plastic or metal sheaths. The through beam types come in standard lengths of 50 and 100 cm with randomly assembled fibers.

Adapter and cap nut must be ordered separately when used with series 30

Series 18 Series 30



Fiber diameter 2 x 4 mm ²		Actual Range	
Sheath material: PVC ø 4 mm			
	FSE 050A2003 (length 50 cm)	310 mm	500 mm
	FSE 100A2003 (length 100 cm)	300 mm	1,4 m
RS 631-604 	FSE 050A1003 (length 50 cm)	310 mm	500 mm
	FSE 100A1003 (length 100 cm)	300 mm	1,4 m

Part number key

F U E 050 A 1 002

