



EN Operating instructions.pages 1 to 2
Original

Product description

Purpose

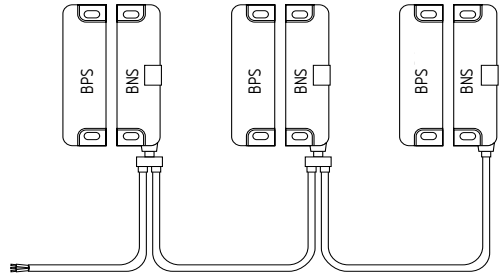
The Y-adapter BNS-Y-.. permits the connection of safety sensors BNS so that they can be routed to a common safety-monitoring module. All commercially available 4-core cables with M8 x 1 male connectors and female connectors (A-coded) can be used.

The adapter BNS-Y-11 is intended for safety sensors BNS with normally closed and normally open contacts. With the BNS-Y-11, a series-parallel circuit is set up where the normally closed contacts on the safety sensors are connected in series and the normally open contacts are connected in parallel.

The adapter BNS-Y-02 is intended for safety sensors BNS with two normally closed contacts. With the BNS-Y-02, a series circuit is set up where the two normally closed contacts per sensor are connected in a two-channel series arrangement.

Only safety sensors with the same contact configuration can be connected in series. The types BNS-Y-11 and BNS-Y-02 are not allowed to be connected together in a mixed configuration. The maximum length of the series wiring is 50 m.

Series-wiring of BNS safety sensors



Legend: Safety sensor BNS
Actuator BPS

Technical data

Operating voltage:	max. 30 V
Rated current:	max 400 mA
Protection class:	IP67 (in the screwed together state)
Y-distributor, screw-on type with:	1 x male connector; M8 x 1, straight 2 x female connector, M8 x1, straight
Recommended tightening torque:	0.6 Nm
Mechanical life:	min. 100 insertion cycles
Ambient temperature T _u :	- 25 °C ... + 70 °C

i Further technical information can be found in the Schmersal catalogues or in the online catalogue on the Internet: www.schmersal.net.

The information contained in this operating instructions manual is provided without liability and is subject to technical modifications.

Mounting and electrical connection

! The electrical connection may only be carried out by authorised personnel in a de-energised condition.

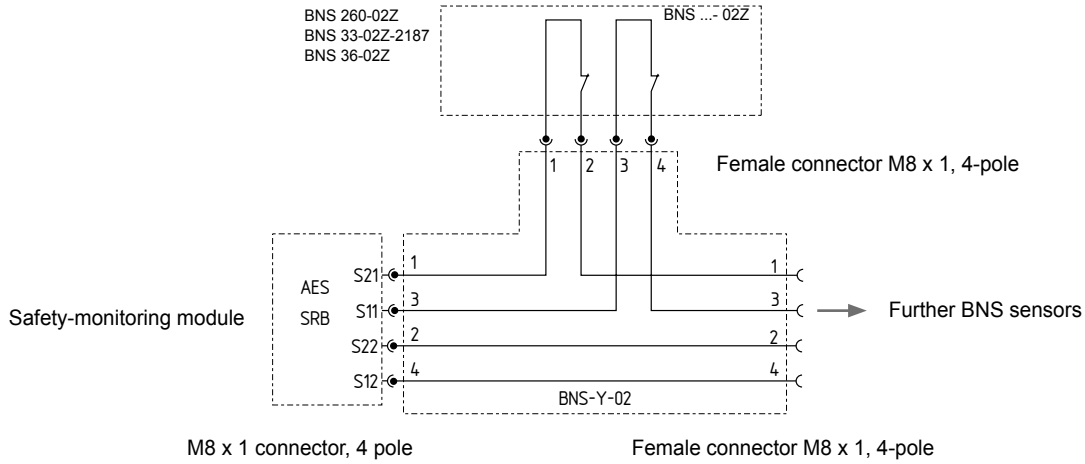
After installation, the correct function of all safety sensors on the safety-monitoring module connected is to be checked.

The Y-adapters reduce the control category the overall circuit can achieve due to the way the sensors are connected. The function of the individual safety sensors should therefore be tested regularly on the safety door, because the malfunction of a safety sensor, e.g. due to a short circuit or wire break, can be overwritten by the actuation of another safety sensor.

Connection assignment with Y-adapter BNS-Y-02 for BNS ...-02Z sensors

The series wiring for the first normally closed chain is on pin 1 and 2 (safety-monitoring module S21 and S22) of the male connector for the connection of the monitoring module. The series connection for the second normally closed chain is on pin 3 and 4 (safety-monitoring module S11 and S12)

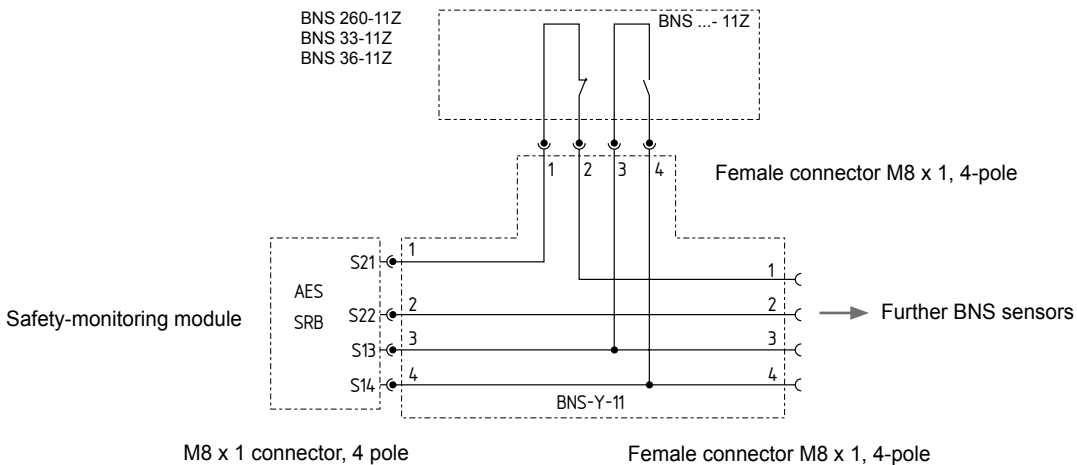
The sensor chain is extended by connecting further Y-adapters BNS-Y-02 in the direction of the arrow. The last safety sensor is connected to the female connector on the extension as the termination.



Connection assignment with Y-adapter BNS-Y-11Z for BNS ...-11Z sensors

The series connection for the normally closed chain is on pin 1 and 2 (safety-monitoring module S21 and S22) on the male connector for the connection of the monitoring module. The parallel circuit for the normally open chain is on pin 3 and 4 (safety-monitoring module S13 and S14)

The sensor chain is extended by connecting further Y-adapters BNS-Y-11 in the direction of the arrow. The last safety sensor is connected to the female connector on the extension as the termination.



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