



## CAN Fiber Optic Router CG-FL

### Special Features

- Optical fiber based router for connection of CAN subnets
- Overcomes the relationship of cable length to data rate for the complete system
- Fiber length up to 1 km (CG-FL1000) or 4 km (CG-FL4000)
- Different baud rates in subnets possible
- Switchable termination resistor

### Description

The router CG-FL, fitted in a compact housing with integrated connector, transmits data between CAN subnets via optical fiber.

It allows the realization of high CAN data rates on the copper based segments while high system extension and short latency times are achieved at the same time.

The underlying technology offers the possibility to run the subnets on both ends with 1000 kbit/s, earning the benefits of short reaction times and high data throughput.

Safety related control with SafetyBUS p is supported by the model SBR-FL (see picture). This model has automatic baud rate detection and baud rate switching capability compliant with the SafetyBUS p standard.

## Technical Data

### Layout and Connection

CG-FL has a male and a female D-Sub9 connector to attach both CAN and power supply. The optical fiber is connected by a pair of ST plugs. 62.5/125  $\mu\text{m}$  or 50/125  $\mu\text{m}$  multi mode glass fibers can be used.

### Limiting Values

Parameter	Minimal	Maximal	Unit
Storage temperature	-20	+80	°C
Operating temperature	0	+60	°C
Supply voltage (CG-FL)	-100	+30	V
Supply voltage (SBR-FL)	0	7	V
Voltage on CAN bus connections	-30	+30	V

Any (also temporary) stress in excess of the limiting values may cause permanent damage on CG-FL and other connected devices. Exposure to limiting conditions for extended periods may affect the reliability and shorten the life cycle of the device.

### Nominal Values

Parameter	Minimal	Typical	Maximal	Unit
Current consumption	-	30	-	mA
Supply voltage (CG-FL)	10	24	30	V
Supply voltage (SBR-FL)	4,6	5	6,5	V
Optical damping (CG-FL1000, SBR-FL1000)	-	-	7	db
Optical damping (CG-FL4000, SBR-FL4000)	2	-	12	db
Switchable termination resistor	-	125	200	$\Omega$
Admissible fiber length (CG-FL1000, SBR-FL1000)	-	1000	-	m
Admissible fiber length (CG-FL4000, SBR-FL4000)	-	4000	-	m

All values, unless otherwise specified, refer to a supply voltage of 24 V (CG-FL) or 5 V (SBR-FL) and an environmental temperature of 20 °C. Fiber length specifications are valid for fiber damping of 3 dB/km without additional patch panels.

### Scope of Delivery

- CAN fiber optic router CG-FL or SBR-FL
- User manual

### Accessories

- Rail mountable adapter

