

- For redundant FO network structures (PROFIBUS DP, Modbus RTU) in Cl. I, Div. 2 and Zone 2 hazardous areas
- "Ex op is" interface make for easy installation and maintenance
- Diagnostic function for early error detection and signalling
- Compatible with devices from series 9186

MY R. STAHL 9186B



The 9186 series FO fieldbus isolating repeater transmits PROFIBUS DP and Modbus RTU signals over distances of up to 1.2 mi / 2 km as part of redundant fiber optic network structures. Standard plug connectors can be connected to the inherently safe optical interfaces "Ex op is". The diagnostic functions detect critical signal conditions early and report them to the control room.

	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface						
Installation in						

	CE Code Section 18					
	NEC® 505 Class I			NEC® 506		
Zone	0	1	2	20	21	22
Ex interface			•			
Installation in			•			

	IECEX / ATEX					
	Zone	0	1	2	20	21
Ex interface			•			•
Installation in			•			

Selection Table			
Installation	Cl. I, Div. 2; Cl. I, Zone 2; Zone 2 or safe area		
Network structure	Product Type	Art. No.	Weight
Line Ring Point-to-point	9186/15-12-11	160624	244 g
Point-to-point End of line	9186/25-12-11	160625	244 g

Technical Data	
Explosion Protection	
cULus certificate	E81680
Marking cULus	Class I, Zone 2, AEx/Ex nC Group IIC
IECEX gas explosion protection	Ex nA nC [op is T6 Ga] IIC T4 Gc
IECEX dust explosion protection	[Ex op is Da] IIIC
Certificates	ATEX (BVS), Brazil (ULB), Canada (UL), IECEX (BVS), USA (UL)
Ship approval	CCS, EU RO MR (DNV)
Electrical Data	
Electrical interface data rate	9.6 kbps – 1.5 Mbps
Protocols	HART over RS485 Modbus RTU PROFIBUS DP ServiceBus R.STAHL (IS1+)
Electric interface version	RS 485
Electric interface connection	Sub-D socket X1, 9-pole
Protocols optical interface	Protocol-transparent with RS-485 interface

Technical Data

Electrical Data

Optical interface connection ST®, BFOC/2.5 socket

FO wavelength 850 nm

Optical interface transmission distance ≤ 2000 m


Error control

Power supply failure: Fault-contact is open
 Transmission level is good: LED green and yellow "FO signal", fault-contact is closed.
 Transmission level reduced (-1,5 dBm): LED yellow "FO ERR", fault-contact is open.
 Fiber breakage or transmission level is too low (-3 dBm): LED red "FO ERR", fault-contact is open.

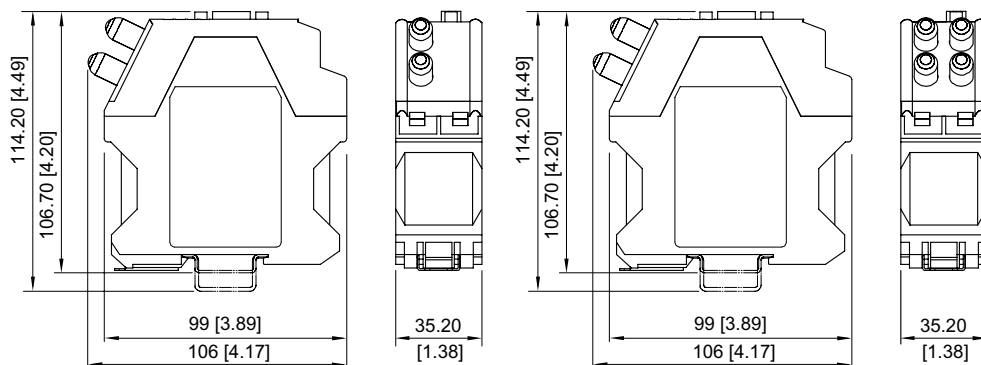
Auxiliary Power

Auxiliary power 24 V DC

Accessories

Figure	Description	Art. No.	Weight
	9-pin for connecting fieldbus or ServiceBus to CPU & power module Type 9440/15, 9185 fieldbusisolatingrepeater and 9786/15-12 media converter. The end-of-line resistor is installed and switchable. For non-intrinsically safe RS-485. Ambient temperature: -40 °C to +75 °C	105715	60 g

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Type 9186/25

Type 9186/15