I.S. Isolators

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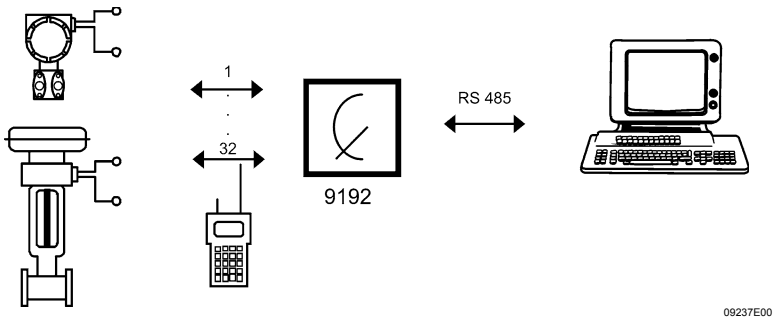
HART-Multiplexer
Type 9192

- Compatible to Cornerstone, AMS, PDM, PRM etc.
- 32 HARt channels per multiplexer
- Up to 128 HART-Multiplexer on one PC interface
- Up to 4096 HART field devices
- Galvanic isolation between power supply, RS 485 bus and HART channels
- Installation possible in Zone 2 and Div. 2
- Can be used up to SIL 3 (IEC 61508)

Basic function: multiplexer for HART field devices, 32 channels. The HART-Multiplexer type 9192 is used for digital connection of up to 32 HART-capable field devices, such as transmitters and regulating valves, to a PC. The PC communicates with the HART-Multiplexer via an RS 485 bus. The software Cornerstone, AMS, PDM or PRM allows configuration and diagnostics of all connected HART-capable field devices, plus continuous documentation of the process variables and status.



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Selection table

Version	Channels	Ordering code
HART-Multiplexer type 9192	32 channels	**9192/32-10-10**
	incl. 14-core connection cable for pac-carrier type 9195 or HART connection board type 9196	

Technical Data

Certificates	BVS 03 E 213 X		
Other certificates	USA (FM), Canada (CSA), Russia (VNIIEF), Brazil (UL do Brasil), Shipping (DNV)		
Explosion protection	Ⓔx II 3 G EEx nAC II T4		
Installation	In Zone 2, Div. 2 and in the safe area		
Power supply	(Supply via pac-carrier type 9195 or HART connection board type 9196)		
	Nominal voltage U_N		24 V DC
	Voltage range		18 V ... 31.2 V
	Residual ripple	<	3.6 V_{pp}
	Nominal current (24 V)		55 mA
	Power consumption		1.35 W
	Indication		LED green „PWR“
	Undervoltage monitoring		yes (no faulty module / output states)
Galvanic isolation	Test voltage under regulations EN 50178		
	HART signal to RS 485		350 V AC
	HART signals to each other		100 V DC capacitive
	Power supply to HART signal		350 V AC
	Power supply to RS 485		350 V AC
Field device interface (HART)	Channels		16 or 32, setting via switch
	Connection		Ribbon cable, 14-pole (inclusive)
	Signal		HART FSK
	HART Specification		HART Field Communication Protocol Rev. 6.0 (downwards compatible to Rev. 4.0); FSK Physical Layer Specification (Rev. 8.1)
	Average influence on analog signals	<	± 0,1 %
	Indication data transmission		2 LED yellow „Tx“ and „Rx“ „HART“
	Error detection		LED red „ERR“ (flashes at error on HART bus)
RS 485 interface	Number		1
	Connection		Sub-D socket, 9-pole
	Signal		RS 485
	Protocol		compatible to Cornerstone, AMS, PDM and PRM
	Number of HART-Multiplexer per bus segment		maximum 31
	Address setting		0 ... 127; via front-side rotary switch
	Transmission speed		9,600; 19,200; 38,400; 57,600 [bit/s]
	Settings	≤	via front-side rotary switch
	Line length		1200 m
	Indication		2 LED yellow „Tx“ and „Rx“ „RS 485“
Fault monitoring	Detection and messaging		Processor error: LED „PWR“ flashes HART communication disturbed: LED „ERR“ flashes
	Settings		none
Electromagnetic compatibility	Tested under the following standards and regulations: EN 61326 (IEC/EN 61000-4-1...6 and 11; EN 55022 Class B); NAMUR NE 21 (IEC/EN 61000-4-1...6, 8 and 11; EN 55022 Class B)		
Ambient conditions	Ambient temperature		- 20 °C ... + 60 °C / + 70 °C (watch instructions)
	Storage temperature		- 40 °C ... + 80 °C
	Relative humidity (no condensation)	≤	95 %

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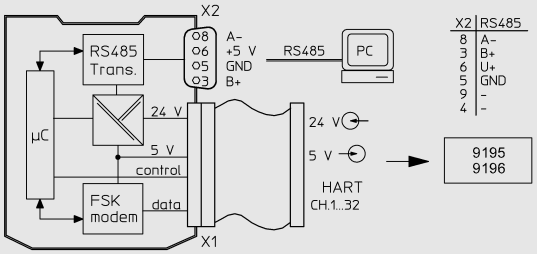
Technical Data

Connection diagram	Safe area / Zone 2



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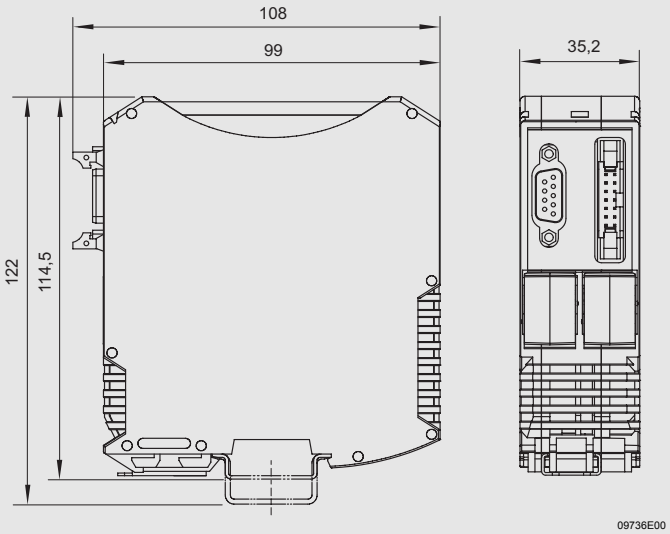
Mechanical data	Weight	approx. 170 g
	Mounting type	on DIN rail, EN 50022 (NS35/15; NS35/7.5)
	Mounting position	horizontal or vertical
	Casing protection class	IP 30
	Connector protection class	IP 20
	Casing material	PA 6.6
	Fire protecting class (UL-94)	V0

Accessories and spare parts

Designation	Description	Ordering code
Fieldbus isolating repeater		**9185/12-45-10**
pac-carrier	8 slots, HART	**9195/08H-...-...**
	16 slots, HART	**9195/16H-...-...**
	8 slots, HART	**9195/08A-...-...**
	16 slots, HART	**9195/16A-...-...**
Connection board	for none Ex-applications, HART, 16 channels	**9196/16H-XX0-...**

Dimension drawing (all dimensions in mm) - subject to alterations



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We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice. The illustrations cannot be considered binding.