Features

- 16-channel
- No external power required
- HART field device input (revision 5 to 7)
- Used with HART Multiplexer Master KFD2-HMM-16
- Up to SIL3 acc. to IEC 61508

Function

This HART Multiplexer Slave operates up to 16 analog field instruments. It can be operated only with the HART Multiplexer Master KFD2-HMM-16 and is powered by the master across a 14-pin flat cable connection.

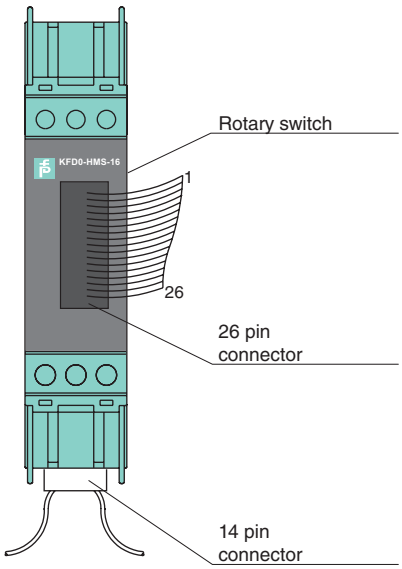
Up to 15 slaves can be connected to the master.

The slave address is set with a 16-position rotary switch (addresses 1 ... 16). If only one slave is connected to the master, then the slave address should be 1. If multiple slaves are connected, slaves must be assigned addresses in ascending order.

The analog signals are fed into the slave by means of a 26-pin flat cable. Sixteen leads are reserved for the HART signal of the analog measurement circuits. The remaining 10 leads are assigned to ground.

Assembly

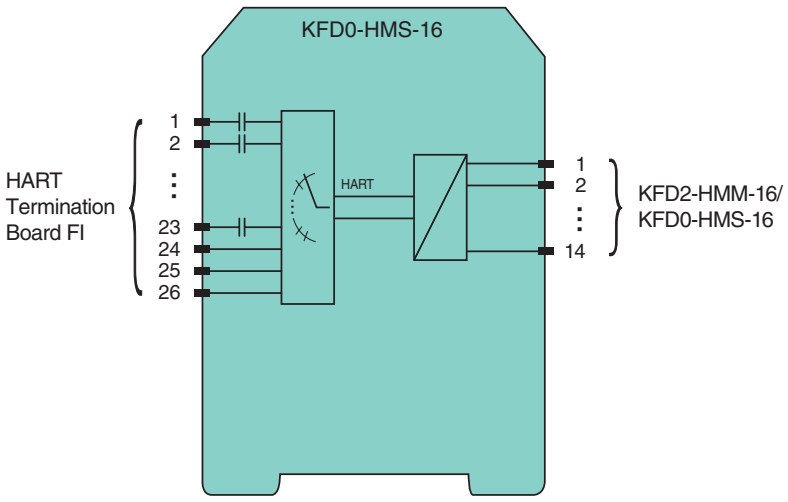
Front view



SIL3

HART COMMUNICATION PROTOCOL

Connection



Zone 2
Div. 2

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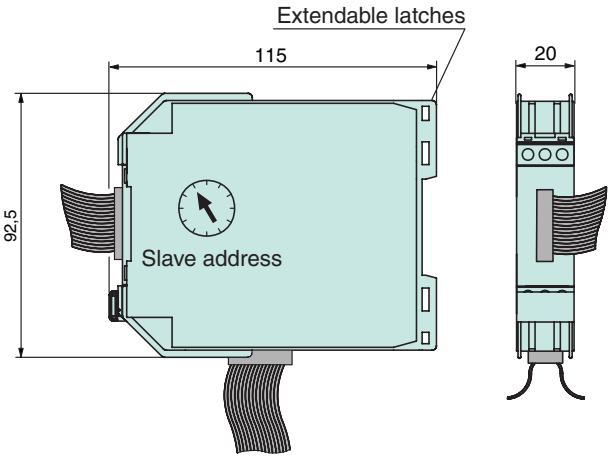
Supply	
Connection	via 14-channel flat cable form master KFD2-HMM-16
HART signal channels (non-intrinsically safe)	
Conformity	HART field device input (revision 5 to 7)
Connection	26-pin flat cable for analog connections 14-pin flat cable for master-slave connection between KFD2-HMM-16 and KFD0-HMS-16
Leakage current	< 3 µA at -20 ... 85 °C (-4 ... 185 °F)
Terminating resistor	external 230 ... 500 Ω standard (up to 1000 Ω possible)
Output voltage	≥ 400 mV $_{ss}$ (with the terminator resistance specified above)
Output resistance	100 Ω or smaller, capacitive coupling
Input impedance	according to HART specification
Input voltage range	0.08 ... 4 V $_{ss}$; typ. ± 5.2 V as local reference
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Conformity	
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Mechanical specifications	
Protection degree	IP20
Mass	approx. 100 g
Dimensions	20 x 93 x 115 mm (0.8 x 3.7 x 4.5 in) , housing type B1
Data for application in connection with Ex-areas	
Statement of conformity	Pepperl+Fuchs (observe statement of conformity)
Group, category, type of protection, temperature classification	⟨Ex⟩ II 3G Ex nA II T4 X
General information	
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com.

Dimensions



Accessories

Connection cable

K-HM14	Connecting cable Multiplexer Master to Multiplexer Slave, standard length (0.45 m) or custom legnth (up to 8 m)
K-HM26	Connecting cable Multiplexer Master or Multiplexer Slave to Termination Board, standard length (1 m) or custom legnth (up to 8 m)

Termination Boards

Standard Board (suitable for most applications)

FI-PFH-110469	Termination Board, serial connection in loop, with coupling resistor, with galvanic isolation

optional Boards

FI-DO-R-Y41610	Termination Board, serial connection in loop, with coupling resistor, without galvanic isolation

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FI-DO-R-Y49092	Termination Board, serial connection in loop, without coupling resistor, without galvanic isolation
FI-DO-Y37023	Termination Board, parallel connection to loop, without galvanic isolation
FI-PFH-108874	Termination Board, parallel connection to loop, with galvanic isolation
FI-PFH-127720	Termination Board, serial connection in loop, without coupling resistor, with galvanic isolation

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