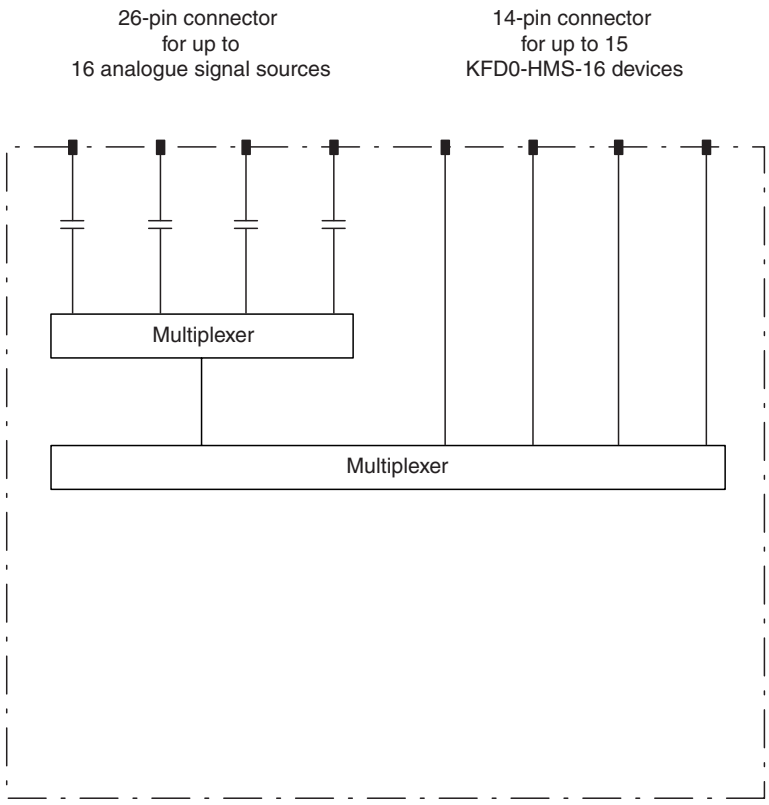
- No external power supply
- Up to 16 analogue transmitters can be connected
- 14-pin flat cable for connection to master unit
- Usable up to SIL 3 acc. to IEC 61508

Function

The Hart multiplexer slave is supplied by the HART multiplexer master via a 14-pin flat cable. Connection to the flat cable is performed with IDC connectors so that the cable can be tapped at any location. In this manner, the power supply and data lines are linked from one component to the next. The address ($\neq 0$) is set by means of a 16 position rotary switch. If the master is only operated with one slave, then the slave address should be set to 1. If more than one slave is connected to the KFD2-HMM-16, then the addresses are to be assigned in ascending order.
The analogue signals are fed into the KFD0-HMS-16 by means of a 26-pin flat cable. 16 leads are designated for the HART signal of the analogue measurement circuit (the remaining 10 leads are sent to ground).
The minimum load resistance of the analogue measurement circuit is 230 Ohm (minimum load resistance per HART specifications), the maximum load resistance is 500 Ohm. It is possible to have load resistances of up to 1000 Ohm although resistances of 500 Ohm or greater may cause HART communication faults.

Application

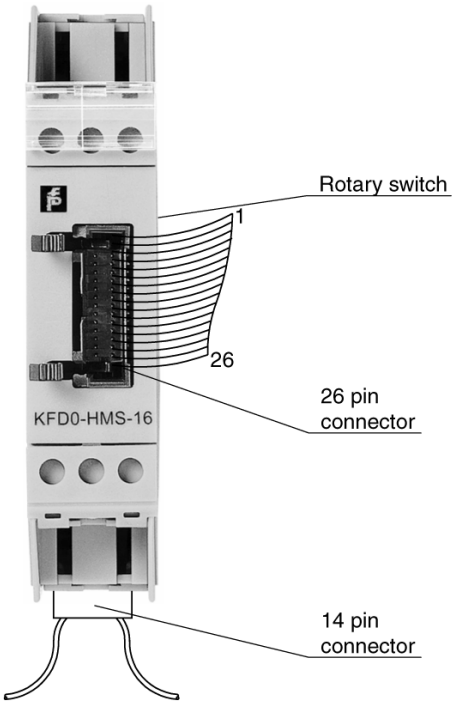
The KFD0-HMS-16 can operate up to 16 analogue transmitters. The slave KFD0-HMS-16 can only be operated in conjunction with the HART multiplexer master KFD2-HMM-16 .
The connection between the KFD0-HMS-16 and the KFD2-HMM-16 is accomplished via a 14-pin flat cable. The slave address is set by means of a 16 position rotary switch.



Composition

Front View

Housing type A1
(see system description)



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HART signal channels	
Connection	26-pin flat cable for analogue 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 (253 ... 358 K)
Terminating resistor	external 230 ... 500 Ohm standard (up to 1000 Ohm possible)
Output voltage	400 mV $_{ss}$ (with the terminator resistance specified above)
Output resistance	100 Ohm 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
Ambient conditions	
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Mechanical specifications	
Protection degree	IP20
Data for application in conjunction with hazardous areas	
Statement of conformity	TÜV 00 ATEX 1547 X (observe statement of conformity)
Group, category, type of protection, Temperature classification	⟨Ex⟩ II 3 G EEx nA II T4

Notes

Dimensions