AS53 / AS54 / AS63

Devices Connection Cables with 17-pin Connector

AS53

AS54

AS63

AS53 17-pin connector on pyrometer side, wire with wire end ferrules on the connection side, incl. 1 m interface cable with 9-pin SUB-D connector (female)

AS54 17-pin connector on pyrometer side, wire with wire end ferrules on the connection side

AS63 17-pin connector on pyrometer side, Wire with wire end ferrules on the connection side RS485⇔USB2 interface converter (connector type A, 1.7 m cable, soldered, for point-to-point connection to a PC)

For all Metis pyrometers with 17-pin connector
(All cables 20-wire + shield, ferrules, screw terminals)

Versions / Order Numbers

Order no:	Connector / Cable:
AS53-05	Straight connector, 5 m +Sub-D
AS53-10	Straight connector, 10 m +Sub-D
AS53-15	Straight connector, 15 m +Sub-D
AS54-05	Straight connector, 5 m
AS54-10	Straight connector, 10 m
AS54-15	Straight connector, 15 m

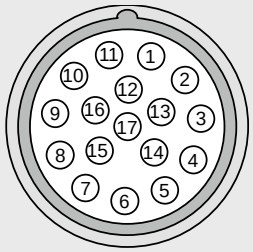
Order no:	Connector / Cable:
AS63-05	Straight connector, 5 m (+1.7 m RS485⇔USB converter cable)
AS63-10	Straight connector, 10 m (+1.7 m RS485⇔USB converter cable)
AS63-15	Straight connector, 15 m (+1.7 m RS485⇔USB converter cable)

Technical Data

Cable:	Twisted pairs, screened data transmission cable with color code acc. to DIN 47100, RoHS conform
Designation:	LiYwCYw (TP)
Conductor:	10 x 2 x 0.14 mm² + shield
Capacity:	120 nF / km
Conductor resistance:	142 Ω / km
Outer sheath:	PVC black, heat resistant
Temperature range:	-20°C up to +90°C, short-term +105°C
Outer diameter:	7.6 mm +/-0.2 mm
Minimum bending radius:	flexible use: 110 mm; fixed installation: 55 mm
Burning rate:	flame-retardant to VDE 0482 - part 265-2-1 / IEC 6033-1-2

Pin assignment Connection Cable AS

Cable color	No.	Function	Pins
White	1	+ 24 V DC Power supply (18–30 V DC)	3
Brown	2	0 V DC Power supply	1
Green	3	+ Analog output 1 (0 / 4–20 mA)	4
Yellow	4	- Analog output 1 (0 / 4–20 mA)	6
Blue	7	+ Analog output 2 (0 / 4–20 mA)	2
Red	8	- Analog output 2 (0 / 4–20 mA)	9
Black	9	Digital input 1 [1]	7
Violet	10	Digital input 2 [1]	10
Pink	6	Digital input 3 [1]	5
Grey	5	Digital input 4 [1]	8
Brown-green	14	Analog In [1]	14
Grey-pink	11	Digital output 1 [1]	11
Red-blue	12	Digital output 2 [1]	12
White-yellow	15	RS232: RxD; RS485: B (+) [2]	15
White-grey	17		
Brown-yellow	16	RS232: TxD; RS485: A (-) [2]	17
Brown-grey	18		
White-pink	19	DGND (ground for interface)	16
Brown-pink			
White-green	13	Reference voltage output (10 V ±1%, max. 10 mA) [1]	13
Housing	20	Shield (connect only for cable extension, do not connect in the control cabinet)	

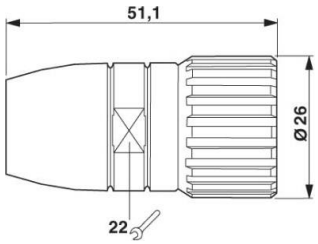


View from outside to the 17-pin pyrometer device plug

[1] Reference potential 0 V, brown [2] H3 models only RS485

Note: To prevent accidental shorts that could damage the device, cover all non-used open lead wires or secure them to a terminal strip with no connection.

Dimensions



Driver for Interface Converter

Suitable drivers can be found on the CD supplied with the pyrometer's software *SensorTools* in the directory Drivers → FTDI_USB_COM or after installing *SensorTools* in the installation directory
(updated driver for Windows from the FTDI website:
http://www.ftdichip.com/Drivers/CDM/CDM%20v2.12.00%20WHQL%20Certified.exe).
To achieve the maximum transfer speed, it is absolutely necessary to change the latency time in the advanced connection settings from 16 ms to 1 ms (settings in the Control Panel → device manager → Ports (COM & LPT) → USB Serial Port → Port Settings → Advanced → Latency Timer (at BM options)).
More information is available in the FTDI application note AN_107 - Advanced Driver Options.