



HARTING PushPull Hybride
type acc. to IEC 61 076-3-106 variant 4

Advantages

HARTING PushPull Hybrid

In the future all new machine generations will be equipped with Fast Ethernet, no matter if PROFINET, Ethernet/IP, Powerlink, Ethercat, Varan or other Ethernet profiles.

With the change of the communication technology also the possibility is offered of simplifying the machine installation and of introducing an innovative Hybrid installation concept. This simplification will unite by data and 24V (5A)-supply in a Hybrid cable, at least with the space requirement of a M12-connector.

For this new installation solution HARTING with the HARTING PushPull Hybrid offers the trend-setting installation technology.

Everything is halved: the number of pluggings, the number of cables and the space requirement for the connection technology. Everything becomes simpler: the installation, attaching and safe plugging.

The Hybrid connectors were developed particular under the criteria of simple attaching in the field and the particular safe data communication with the patented omega screen concept. As contacts D-Sub and HDD Sub contacts worked world-wide are used. This socket pin contact system ensures highest reliability and optimal shock and vibration stability.

With the optional available coding pins 6 different codings can be realized.

This connector is available in the variants straight or angled as well as for field assembling or overmolded.

Technical characteristics

Advantages

- Compact, space-saving design
- Very compact housing with high degree of protection
- Polarisation with nose
- Sixfold codable

Typical application areas

- Factory and building automation
- Industrial electronics
- Telecommunication and wireless networks
- Transportation
- Industrial monitoring and camera systems
- Lighting and display technology
- Access control systems

Recommended pin assignment

- Power contacts

Contact	Function	Conductor colour
1	V +	Red
2	Ground	Brown
3	V + (switched)	Yellow

- Data contacts

Contact	Signal	Function	Conductor colour
4	RD –	Receiver Data –	Blue
5	RD +	Receiver Data +	White
6	TD –	Transmission Data –	Orange
7	TD +	Transmission Data +	Yellow



Structure Hybride cable

Data: 4x AWG26/7

Power: 3x AWG20/7



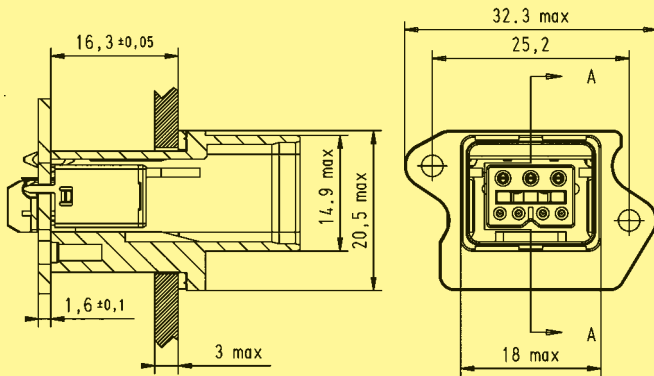
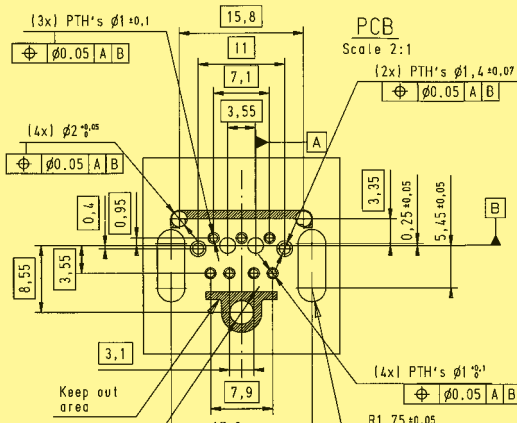
HARTING PushPull Hybride, type acc. to IEC 61 076-3-106 variant 4
device side

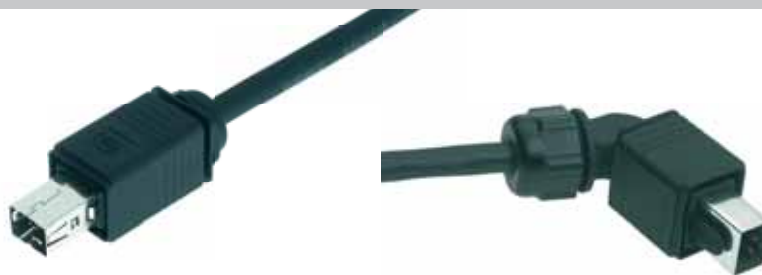
Advantages

- Combined data- and power-supply up to 5A/32V included to one connector
- HARTING PushPull technology
- Compact design
- High packing density
- Sixfold codable
- Suitable for all Fast-Ethernet variants

Technical characteristics

Locking	PushPull Technology acc. to IEC 61 076-3-106 variant 4
Degree of protection	IP 65 / IP 67
Termination	Solder pins
Transmission performance	Category 5 / Class D up to 100 MHz acc. to ISO/IEC 11 801:2002, EN ISO 50 173-1
Transmission rate	10 / 100 Mbit/s
Number of contacts	Data: 4, shielded (Ethernet) Power: 3, (5A / 32V)
Housing material	Plastic, black
Flammability acc. to UL 94	V 0

Identification	Part No.	Drawing	Dimensions in mm
Components device side			
Set straight HARTING PushPull Hybride housing bulkhead mounting and pcbs female shielded, IP 65 / IP 67, black, 180° straight	09 45 245 1300		
Set angled HARTING PushPull Hybride housing bulkhead mounting and pcbs female shielded, IP 65 / IP 67, black, 90° angled	09 45 245 1310 (in preparation)		
Female insert PCB jack shielded 180° straight PCB jack shielded 90° angled	09 45 545 1300 09 45 545 1305 (in preparation)		
Housing bulkhead mounting for female insert straight for female insert angled	09 45 545 1320 09 45 545 1325 (in preparation)		
Panel feed-through 1 x Hybride female IP 65 / IP 67 on 1 x RJ45 female and 3 pcb clamps, board drillings for M2.5	09 45 245 1320		



HARTING PushPull Hybride, type acc. to IEC 61 076-3-106 variant 4
Hybride connector

Advantages

- Combined data- and power-supply up to 5A / 32V included to one connector
- HARTING PushPull technology
- Compact design
- High packing density
- Sixfold condable
- Suitable for all Fast-Ethernet variants

Technical characteristics

Locking	PushPull Technology acc. to IEC 61 076-3-106 variant 4
Degree of protection	IP 65 / IP 67
Termination	Crimp
Cable diameter	AWG 26 for Ethernet AWG 20 for Power
Transmission performance	Category 5 / Class D up to 100 MHz acc. to ISO/IEC 11 801:2002, EN ISO 50 173-1
Number of contacts	Data: 4, shielded (Ethernet) Power: 3, (5A / 32V)
Housing material	Plastic, black
Flammability acc. to UL 94	V 0

Identification

Part No.

Drawing

Dimensions in mm

Connector

HARTING PushPull Hybride connector, IP 65/ 67, black, with cable gland and crimp contacts

straight
angled

09 45 145 1300
09 45 145 1310
(in preparation)

Accessories – Coding pin set

to avoid accidental incorrect mating a coding system is required. This coding pins are inserted without loss of contact.

09 45 845 1300

Tools

Crimping tool for data contacts

09 99 000 0596

Crimping tool for power contacts

09 99 000 0175

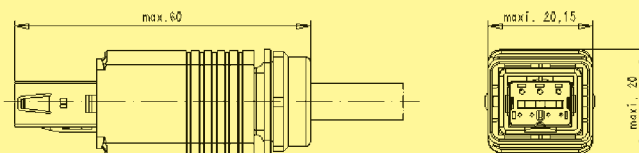
Insertion and removal tool

for data contacts

09 99 000 0513

for power contacts

09 99 000 0171





HARTING PushPull Hybride, type acc. to IEC 61 076-3-106 variant 4
umspritzte Hybride system cables

Advantages

- Combined data- and power-supply up to 5A / 32V included to one connector
- HARTING PushPull technology
- Robust design, suitable for industrial applications
- High packing density
- Sixfold codable
- Suitable for all Fast-Ethernet variants

Technical characteristics

Cable construction:	Twisted Pair shielded + 3 Power Leitungen
Core structure	Data: 4x AWG 26/7 Power: 3x AWG 20/7
Transmission performance	Category 5 / Class D up to 100 MHz acc. to ISO/IEC 11 801:2002, EN ISO 50 173-1
Sheath material	FRNC
Cable-outer diameter	ø (7.0 ±0.4) mm
Shielding	Shielding foil and shielding braid
Temperature range	- 40 up to + 80 °C
Colour	black

Identification	Part No.	Drawing	Dimensions in mm
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System cables 2x HARTING PushPull Hybride

Length	0,5 m	09 47 616 1005
	1 m	09 47 616 1010
	2 m	09 47 616 1020
	3 m	09 47 616 1030
	5 m	09 47 616 1050
	10 m	09 47 616 1100
	20 m	09 47 616 1200

System cables 1x HARTING PushPull Hybride, second side open

Length	0,5 m	09 47 610 0005
	1 m	09 47 610 0010
	2 m	09 47 610 0020
	3 m	09 47 610 0030
	5 m	09 47 610 0050
	10 m	09 47 610 0100
	20 m	09 47 610 0200

Hybride cable

Ring	20 m	09 45 600 0331
Ring	50 m	09 45 600 0341
Ring	100 m	09 45 600 0301
Trommel	500 m	09 45 600 0321



Structure Hybride cable