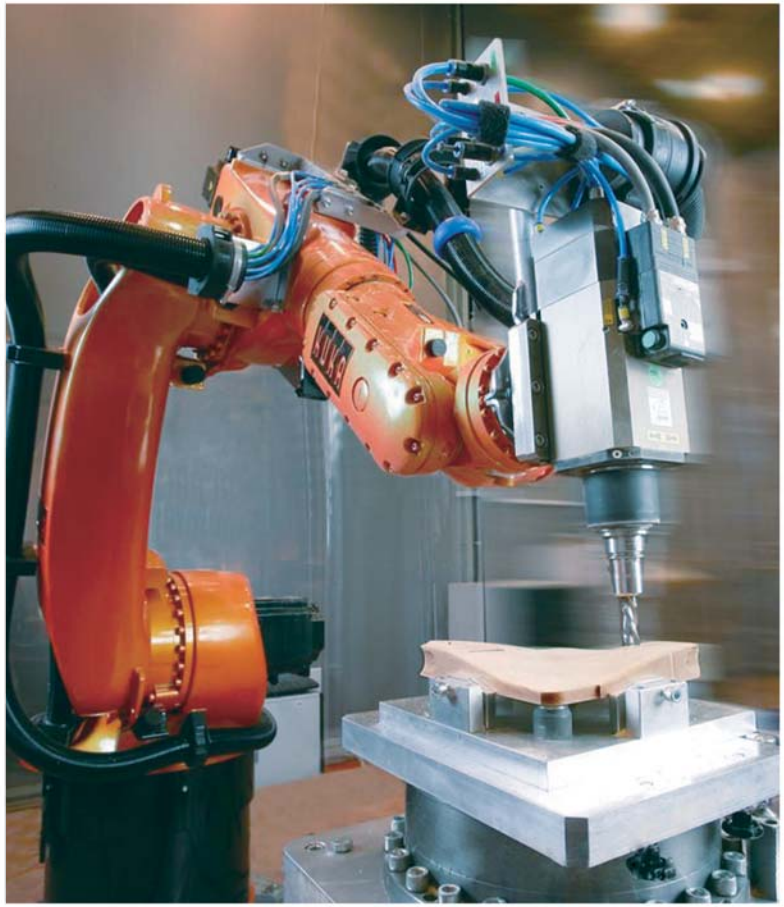
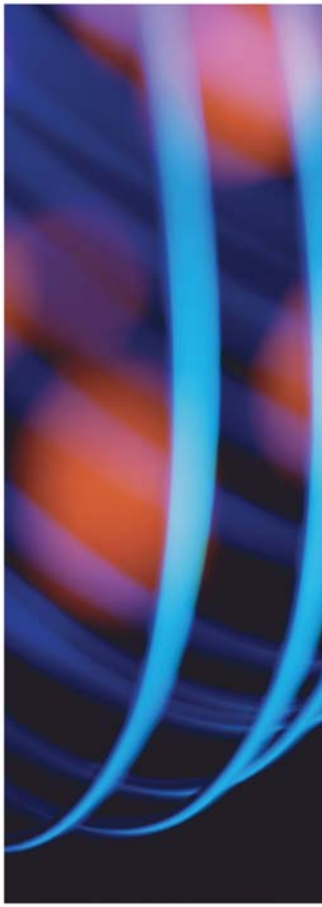
YFC-BonEagle

YFC-BonEagle
Industrial Ethernet Cable
Solutions





YFC-BonEagle Industrial Cable

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QR Code

COMPAY PROFILE

YFC-BonEagle Technology (stock code 6220) was established in September 1983 and is one of the leading network cable manufacturers in Asia. Products are sold all over the world, throughout the Americas, Europe, Asia, Oceania and Africa. Complete product certifications, including UL, CSA, ETL, 3P, CCC and other product certifications, show YFC-BonEagle insistence on product safety and quality.

WUXI Universal Network Corporation is a subsidiary of YFC, covers an area of 130,000 square meters, we have more than 800 employees, 20 senior engineers, 45 engineers, one-stop integration of terminal sales, channels and production end, effectively master customer needs and manufacturing Cost, providing global consumers with the most valuable products (industrial, commercial and household products), creating a dual momentum of revenue and profitable growth.

Company Vision

The invention of power lines and networks has made our lives simpler and shortened distances around the world. Through advanced electronic and network products, the convenience of human life can be improved to the extreme. Therefore, YFC-BonEagle never stops pursuing innovation, constantly developing excellent products, and is determined to become a leading manufacturer of electronic and network products in order to contribute to the human society.

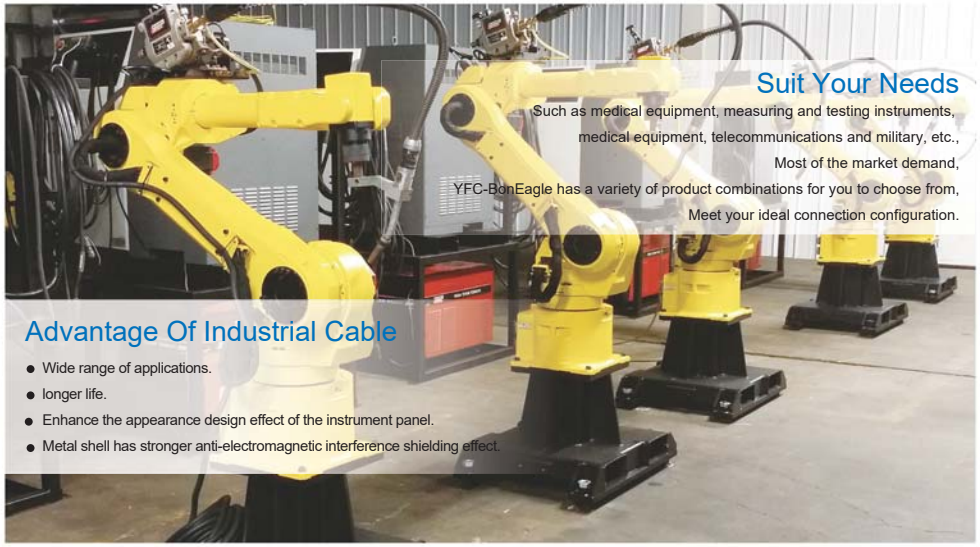
Mission and Values

Over the past 10 years, the Internet has revolutionized the way we live and explore the world, transforming how we work, play, learn and communicate like never before. YFC-BonEagle new product development The principle is to lay a solid foundation first and then extend outwards. We start with the power cord, from wires, network cables, to industrial lines, network connector products, optoelectronic products and wireless communication products.

High Quality

Quality is life, and high quality is the most important insistence for YFC-BonEagle. In each R&D and production process, YFC-BonEagle Group reviews quality management and details from time to time, in order to allow YFC-BonEagle customers to enjoy high-quality solutions that are cost-effective. YFC-BonEagle quality assurance system meets the requirements of ISO9001 and ISO14001, and YFC-BonEagle high-quality products have been recognized by global customers.

YFC-BonEagle ELECTRONIC CO., LTD. | YFC-BONEAGLE ELECTRONIC TECH CO., LTD. (DONGGUAN) | WUXI UNIVERSAL NETWORK CORPORATION CO.LTD



Suit Your Needs

Such as medical equipment, measuring and testing instruments, medical equipment, telecommunications and military, etc., Most of the market demand, YFC-BonEagle has a variety of product combinations for you to choose from, Meet your ideal connection configuration.

Advantage Of Industrial Cable

- Wide range of applications.
- longer life.
- Enhance the appearance design effect of the instrument panel.
- Metal shell has stronger anti-electromagnetic interference shielding effect.

Suitable For Applications In Cable Tracks, Robots, Machine Tools And Automation Equipment.

Comprehensive Range Of Signal, Data And Power Transmission Cables

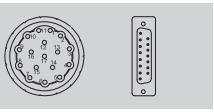
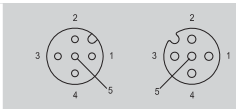
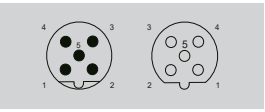
The rapid development of industrial electronic equipment also puts forward new requirements for connection technology.

YFC-BonEagle Electronics provides a variety of innovative equipment and machines for different applications.

The modular construction of these device connectors allows easy integration of data,

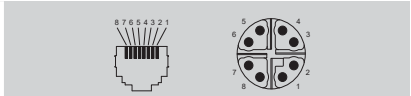
signal and power pins, providing a cost-effective device connection solution.

Cable Color	Use Agreement	
RAL2003	Sensor	
RAL7001	Sensor	
RAL7021	Sensor	
RAL3020	Sercos CC-Link	CC-Link
RAL1021	Ethernet	Ethernet
RAL5021	Ethernet Ethernet/IP	EtherNet/IP
RAL6018	PROFINET EtherCAT	PROFINET
RAL4001	PROFIBUS DeviceNet CANopen	PROFIBUS

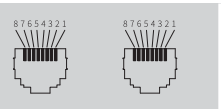
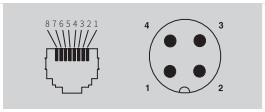
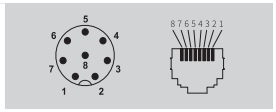
Technical Parameter

Transmission Characteristics	Encoder	PROFIBUS	PROFIBUS
Cable Structure	20AWGx1P; 26AWGx5P	24AWGx2C	24AWGX2C
AWG	26	24	24
Cable Diameter	10.5mm	7.8mm	7.8mm
Conductor Resistance	≤ 42.3Ω/km(20℃); ≤ 140Ω/km(20℃)	≤ 81.6Ω/km(20℃)	≤ 81.6Ω/km(20℃)
Conductor Material	Copper	Copper	Copper
Jacket Material	Special PVC	TPU	TPU
Jacket Color	Green	Purple	Purple
Color, Single Core	Grey-Grey/Black, White-White/Black	Green, Red	Green, Red
	Orange-Orange/Black, Yellow-Yellow/Black		
Ambient Temperature			
Fixed Installation[℃]	-40…80	-40…80	-40…80
Active Installation[℃]	-40…80	-40…80	-40…80



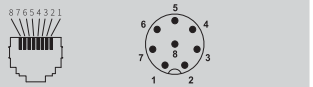
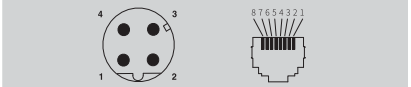
Technical Parameter

Transmission Characteristics	Ethernet	Ethernet
	CAT6A	CAT6A
cable structure	4×2×26AWG; S/FTP	4×2×26AWG; S/FTP
Conductor cross section	4×2×0.14mm²	4×2×0.14mm²
Signal line structure	7×0.16mm	7×0.16mm
Cable diameter	6.4mm	6.4mm
Conductor resistance	≤ 140Ω/km(20℃)	≤ 140Ω/km(20℃)
shield type	The Shielding Net Adopts Tinned Copper Wire	The Shielding Net Adopts Tinned Copper Wire
Twisted pair shield type	Film With Aluminum Coating	Film With Aluminum Coating
Conductor material	Copper	Copper
Jacket Material	PUR	PUR
Jacket Color	Aqua Blue RAL 5021	Aqua Blue RAL 5021
Color, Single Core	White-Blue/Blue, White-Orange/Orange	White-Blue/Blue, White-Orange/Orange
	White-Green/Green, White-Brown/Brown	White-Green/Green, White-Brown/Brown
ambient temperature		
Fixed installation[℃]	-20…80	-20…80
Active installation[℃]	-20…80	-20…80

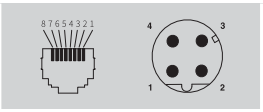
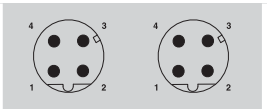
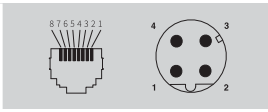
Technical Parameter

Transmission Characteristics	Ethernet CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)	Ethernet CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)	Ethernet CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)
Conductor Cross Section	4×2×0.14mm²	4×2×0.14mm²	4×2×0.14mm²
AWG	26	26	26
Cable Diameter	6.4mm	6.0mm	6.4mm
Conductor Resistance	≤ 140Ω/km(20℃)	≤ 140Ω/km(20℃)	≤ 140Ω/km(20℃)
Conductor Material	Copper	Copper	Copper
Jacket Material	PUR	PUR	PUR
Jacket Color	Aqua Blue RAL 5021	Black RAL 9005	Aqua Blue RAL 5021
Color, Single Core	White-Blue/Blue, White-Orange/Orange White-Green/Green, White-Brown/Brown	White-Blue/Blue, White-Orange/Orange	White-Blue/Blue, White-Orange/Orange White-Green/Green, White-Brown/Brown
Ambient Temperature			
Fixed Installation[℃]	-40...80	-40...80	-40...80
Active Installation[℃]	-40...80	-40...80	-40...80

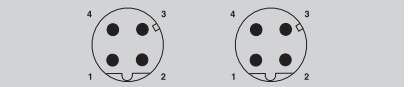
Technical Parameter

	Ethernet	Ethernet
Transmission Characteristics	CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)	CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)
Conductor cross section	4×2×0.14mm²	4×2×0.14mm²
AWG	26	26
Cable diameter	6.2mm	6.4mm
Conductor resistance	≤ 140Ω/km(20℃)	≤ 140Ω/km(20℃)
Conductor material	Copper	Copper
Jacket Material	PUR	PUR
Jacket Color	Black RAL 9005	Aqua Blue RAL 5021
Color, Single Core	White-Blue/Blue, White-Orange/Orange White-Green/Green, White-Brown/Brown	White-Blue, Blue, White-Orange, Orange
ambient temperature		
Fixed installation[℃]	-40...80	-40...80
Active installation[℃]	-40...80	-40...80

Technical Parameter

Transmission Characteristics	PROFINET CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)	PROFINET CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)	PROFINET CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)
Conductor Cross Section	4×0.34mm²	4×0.34mm²	4×0.34mm²
AWG	22	22	22
Cable Diameter	6.5mm	6.5mm	6.5mm
Conductor Resistance	≤ 53.6Ω/km(20℃)	≤ 53.6Ω/km(20℃)	≤ 53.6Ω/km(20℃)
Shield Type	Aluminum Foil, Tinned Copper Shielding	Aluminum Foil, Tinned Copper Shielding	Aluminum Foil, Tinned Copper Shielding
Conductor Material	Copper	Copper	Copper
Jacket Material	PUR/PVC	PUR/PVC	PUR/PVC
Jacket Color	Green RAL 6018	Green RAL 6018	Green RAL 6018
Color, Single Core	White, Yellow, Blue, Orange	White, Yellow, Blue, Orange	White, Yellow, Blue, Orange
Ambient Temperature			
Fixed Installation[℃]	-40...70	-40...70	-40...70
Active Installation[℃]	-40...70	-40...70	-40...70

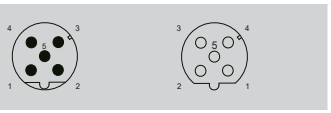
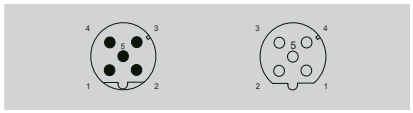


Technical Parameter

	PROFINET	PROFINET
Transmission Characteristics	Cat.5 (IEC 11801:2002) Cat.5e (TIA 568B:2001)	CAT.5 (IEC 11801:2002) CAT.5e (TIA 568B:2001)
Conductor Cross Section	4×0.34mm²	4×0.34mm²
AWG	22	22
Cable Diameter	6.5mm	6.5mm
Conductor Resistance	≤ 53.6Ω/km(20℃)	≤ 53.6Ω/km(20℃)
Shield Type	Aluminum Foil, Tinned Copper Shielding	Aluminum Foil, Tinned Copper Shielding
Conductor Material	Copper	Copper
Jacket Material	PUR/PVC	PUR/PVC
Jacket Color	Green RAL 6018	Green RAL 6018
Color, Single Core	White, Yellow, Blue, Orange	White, Yellow, Blue, Orange
Ambient Temperature		
Fixed Installation[℃]	-40...70	-40...70
Active Installation[℃]	-40...70	-40...70

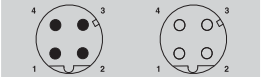
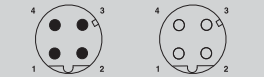
Technical Parameter

	M12 4PIN Male T Code to Female T Code	M12 4PIN Male T Code to Female T Code	M12 4PIN Male T Code to Female T Code
Transmission Characteristics	PROFIBUS	PROFIBUS	PROFIBUS
Cable Structure	22AWGX4C	22AWGX4C	22AWGX4C
AWG	22	22	22
Cable Diameter	4.7mm	4.7mm	4.7mm
Conductor Resistance	≤ 0.55Ω/km(20℃);	≤ 0.55Ω/km(20℃);	≤ 0.55Ω/km(20℃);
Conductor Material	Copper Stranded Wire	Copper Stranded Wire	Copper Stranded Wire
Jacket Material	PVC/PUR/Customized Materials	PVC/PUR/Customized Materials	PVC/PUR/Customized Materials
Jacket Color	Black/Custom Color	Black/Custom Color	Black/Custom Color
Color, Single Core	Black, Blue, White, Brown	Black, Blue, White, Brown	Black, Blue, White, Brown
Ambient Temperature			
Fixed Installation[℃]	-40…80	-40…80	-40…80
Active Installation[℃]	-40…80	-40…80	-40…80

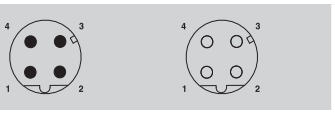
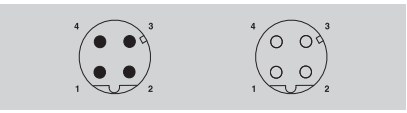
Technical Parameter

	M12 5PIN Male B Code To Female B Code UnShielded	M12 5PIN Male B Code To Female B Code Shield
Transmission Characteristics	PROFIBUS	PROFIBUS
Cable Structure	22AWGX5C	22AWGX5C
AWG	22	22
Cable Diameter	5.0mm	5.0mm
Conductor Resistance	≤ 0.55Ω/km(20℃);	≤ 0.55Ω/km(20℃);
Conductor Material	Copper Stranded Wire	Copper Stranded Wire
Jacket Material	PVC/PUR/Customized Materials	PVC/PUR/Customized Materials
Jacket Color	Black/Custom Color	Black/Custom Color
Color, Single Core	Black, Blue, Brown, White, Grey	Black, Blue, Brown, White, Grey
Ambient Temperature		
Fixed Installation[℃]	-40…80	-40…80
Active Installation[℃]	-40…80	-40…80

Technical Parameter

	M12 4PIN Male D Code To Female D Code	M12 4PIN Male D Code To Female D Code	M12 4PIN Male D Code To Female D Code
Transmission Characteristics	PROFIBUS	PROFIBUS	PROFIBUS
Cable Structure	22AWGX4C	22AWGX4C	22AWGX4C
AWG	22	22	22
Cable Diameter	4.7mm	4.7mm	4.7mm
Conductor Resistance	≤ 0.55Ω/km(20℃);	≤ 0.55Ω/km(20℃);	≤ 0.55Ω/km(20℃);
Conductor Material	Copper Stranded Wire	Copper Stranded Wire	Copper Stranded Wire
Jacket Material	PVC/PUR/Customized Materials	PVC/PUR/Customized Materials	PVC/PUR/Customized Materials
Jacket Color	Black/Custom Color	Black/Custom Color	Black/Custom Color
Color, Single Core	Black, Blue, White, Brown	Black, Blue, White, Brown	Black, Blue, White, Brown
Ambient Temperature			
Fixed Installation[℃]	-40…80	-40…80	-40…80
Active Installation[℃]	-40…80	-40…80	-40…80

技术参数

	M12 4PIN Male D Code To Female D Code Unshielded	M12 4PIN Male D Code To Female D Code Shield
Transmission Characteristics	PROFIBUS	PROFIBUS
Cable Structure	22AWGX4C	22AWGX4C
AWG	22	22
Cable Diameter	4.7mm	4.7mm
Conductor Resistance	≤ 0.55Ω/km(20℃);	≤ 0.55Ω/km(20℃);
Conductor Material	Copper Stranded Wire	Copper Stranded Wire
Jacket Material	PVC/PUR/Customized Materials	PVC/PUR/Customized Materials
Jacket Color	Black/Custom Color	Black/Custom Color
Color, Single Core	Black, Blue, White, Brown	Black, Blue, White, Brown
Ambient Temperature		
Fixed Installation[℃]	-40…80	-40…80
Active Installation[℃]	-40…80	-40…80

Industrial Cable
System Overview-Network

Ethernet

	Ethernet	Ethernet	Ethernet	Ethernet	Ethernet
Application Field	Ethernet (4 Core) Industrial Environment	Ethernet M12 (4 Core) Industrial Environment	Ethernet M12 (8 Core) Industrial Environment	Ethernet M12/10G (8 Core) Industrial Environment	Ethernet Hybrid M12 (8-cor) Industrial Environment
Data Transmission	Max. 100 Mbps	Max. 100 Mbps	Max. 1 Gbps	Max. 10 Gbps	Max. 100 Mbps
Special Connectors				M12 With Shielded Cross Wire	M12 With Y Type Shielded

Pin Assignment

Signal Indication	Connector RJ45	Connector M8
TD+	1	1
TD-	2	4
Red+	3	2
Red-	6	3

Signal Indication	Connector RJ45	Connector M12
TD+	1	1
TD-	2	3
Red+	3	2
Red-	6	4

Signal Indication	Connector RJ45	Connector M12
D1+	1	6
D1-	2	4
D3-	5	1
D3+	4	7
D2+	3	5
D2-	6	8
D4+	7	2
D4-	8	3

Signal Indication	Connector RJ45	Connector M12
D1+	1	1
D1-	2	2
D3-	5	7
D3+	4	8
D2+	3	3
D2-	6	4
D4+	7	5
D4-	8	6

Signal Indication	Connector M12
TD+	1
TD-	2
Red+	3
Red-	4

Signal Indication Line Assignment

Core Color	Signal
Yellow	TD+
Orange	TD-
White	Red+
Blue	Red-

Core Color	Signal
White/Orange	TD+
Orange	TD-
White/Green	Red+
Green	Red-

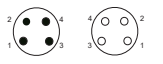
Core Color	Signal
White/Orange	D1+
Orange	D1-
White/Blue	D3-
Blue	D3+
White/Green	D2+
Green	D2-
White/Brown	D4+
Brown	D4-

Core Color	Signal
White/Orange	D1+
Orange	D1-
White/Blue	D3-
Blue	D3+
White/Green	D2+
Green	D2-
White/Brown	D4+
Brown	D4-

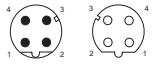
Core Color	Signal
White/Orange	TD+
Orange	TD-
White/Green	Red+
Blue	
White	
Brown	
Black	

Segment Length	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance
User Group					
Standard	ISO/IEC 24702	ISO/IEC 24702	ISO/IEC 24702	ISO/IEC 24702	

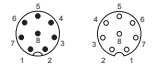
Connector Pin Assignment



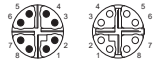
Pin Type	Bore Type
M8, 4 Core	



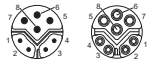
Pin Type	Bore Type
M12, 4 Core, D Code	



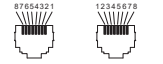
Pin Type	Bore Type
M12, 8 Core, A Code	



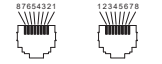
Pin Type	Bore Type
M12, 8 Core, X Code	



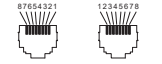
Pin Type	Bore Type
M12, Hybrid Type, 8 Core, Y-Code	



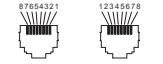
Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	

EtherNet/IP™ | PROFINET | EtherCAT | Sercos III | POWERLINK

	EtherNet/IP™	EtherNet/IP™	PROFINET	EtherCAT	Sercos III	POWERLINK
Application Field	Automation Application of Industrial Control Technology	Automation Application of Industrial Control Technology	Automation Industrial Production & Process Automation	Automation Technology	Motion Control Application	Motion Control Application Automation Technology
Data Transmission	Max.10Gbps	Max.100 Mbps	Max.100 Mbps~1 Gbps	Upgrade to Gigabit Ethernet that is reach 100 Mbps	Fast Ethernet 100 Mbps	Fast Ethernet 100 Mbps

Pin Assignment

Signal Indication	Connector RJ45	Connector M12
D1+	1	1
D1-	2	2
D3+	5	7
D3-	4	8
D2+	3	3
D2-	6	4
D4+	7	5
D4-	8	6

Signal Indication	Connector RJ45	Connector M12
TD+	1	1
TD-	2	3
Red+	3	2
Red-	6	4

Signal Indication	Connector RJ45	Connector M12
TD+	1	1
TD-	2	3
Red+	3	2
Red-	6	4

Signal Indication	Connector RJ45	Connector M12
TD+	1	1
TD-	2	3
Red+	3	2
Red-	6	4

Signal Indication	Connector RJ45	Connector M12
TD+	1	1
TD-	2	3
Red+	3	2
Red-	6	4

Signal Indication	Connector RJ45	Connector M12
TD+	1	1
TD-	2	3
Red+	3	2
Red-	6	4

Signal Indication Line Assignment

Core Color	Signal
White/Orange	D1+
Orange	D1-
White/Blue	D3+
Blue	D3-
White/Green	D2+
Green	D2-
White/Brown	D4+
Brown	D4-

Core Color	Signal
White/Orange	TD+
Orange	TD-
White/Blue	
Blue	
White/Green	Red+
Green	Red-
White/Brown	
Brown	

Core Color	Signal
Yellow	TD+
Orange	TD-
White	Red+
Blue	Red-

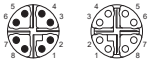
Core Color	Signal
Yellow	TD+
Orange	TD-
White	Red+
Blue	Red-

Core Color	Signal
Yellow	TD+
Orange	TD-
White	Red+
Blue	Red-

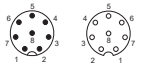
Core Color	Signal
White/Orange	D1+
Orange	D1-
White/Blue	D3-
Blue	D3+
White/Green	D2+
Green	D2-
White/Brown	D4+
Brown	D4-

Segment Length	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance	The Max. Distance Is 100M FromConcentrator/Switch To Terminal Resistance
User Group	www.odva.org	www.odva.org	www.profibus.com	www.ethercat.org	www.sercos.de	www.ethernet-powerlink.org
Standard	IEC 61784-5-2	IEC 61784-5-2	IEC 61784-5-3		IEC 61784-5-16	ISO/IEC 24702

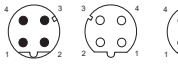
Connector Pin Assignment



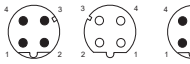
Pin Type	Bore Type
M12, 8 Core, X Code	



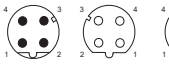
Pin Type	Bore Type
M12, 8 Core, A Code	



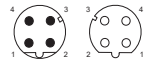
Pin Type	Bore Type
M12, 4 Core , D Code	



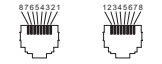
Pin Type	Bore Type
M12, 4 Core , D Code	



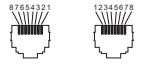
Pin Type	Bore Type
M12, 4 Core , D Code	



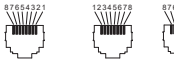
Pin Type	Bore Type
M12, 4 Core, D Code	



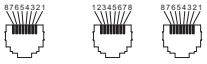
Pin Type	Bore Type
RJ45, 8 Core	



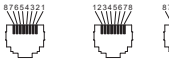
Pin Type	Bore Type
RJ45, 8 Core	



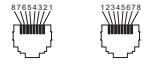
Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	

Industrial Cable
System Overview-Fieldbus

	INTERBUS	PROFIBUS DP	PROFIBUS PA	DeviceNet™
Application Field	Sensor/Actuator Layer, Process Automation, Monitoring PC	Distributed I/O Devices For Controller Networks	Process Automation In Explosive Areas (Ex 0 And 1)	Automation Technology
Data Transmission	Speeds From 500 Kbps To 16Mbps, Depending On Segment Length	Fastest 12Mbps	Fastest 31.25Kbps	Fastest 500Kbaud
Special Connectors				

Pin Assignment

Signal Indication	Plug-in Connector: D-SUB 9	M12
DO	1	1
DO	6	2
DI	2	3
DI	7	4
COM	3	5

Signal Indication	Plug-in Connector: D-SUB 9	M12
A Cable	8	
B Cable	3	

Signal Indication	Plug-in Connector: M12	
DATA+	1	
DATA-	3	
Shield	4	

Signal Indication	Plug-in Connector: COMBICON	M12	7/8"	M8
CAN_L	2	5	5	5
CAN_H	4	4	4	3
V+	5	2	2	2
V-	1	3	3	4
Drain	3	1	1	1

Signal Indication Line Assignment

Core Color	Signal
Yellow	DO
Green	DO
Gray	DI
Pink	DI
Brown	COM
White	NC

Core Color	Signal
Green	A Cable
Red	B Cable

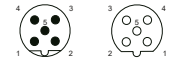
Core Color	Signal
Orange	DATA+
Blue	DATA-

Filled Litz Wire

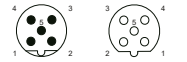
Core Color	Signal
Blue	CAN_L
White	CAN_H
Red	V+
Black	V-

Shielded Enclosure	Shielded Enclosure	Shield Pin	Shield Pin
Segment Length	The Length Of The Network Segment Between Devices Is 400M; 13Km In Length.	The Longest Copper Cable Installation Is 1200M, And The Optical Cable Installation Is Up To 15Km.	Up To 1900M	Up To 500M
User Group	www.interbusclub.com	www.profibus.com	www.profibus.com	www.odva.org
Standard	IEC 61158	IEC 61158/IEC 61784	IEC 61158/IEC 61784	IEC 61158 IEC 61784-1 CPF 2/3

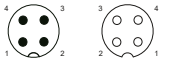
Connector Pin Assignment



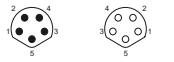
Pin Type	Bore Type
M12, 5 Core, B Code	



Pin Type	Bore Type
M12, 5 Core, B Code	

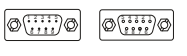


Pin Type	Bore Type
M12, 3 Core, A Code	

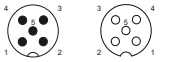


Pin Type	Bore Type
M8, 5 Core, B Code	

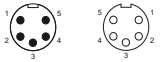
Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
RJ45, 8 Core	



Pin Type	Bore Type
7/8" 16UNF, 5 Core	

	CANopen®	AS-Interface	FOUNDATION Fieldbus	USB	CC-Link
Application Field	Automation Technology And Complex Plant Networks	Sensor/Actuator Layer	Process Automation	All Industrial Environments	Production Application
Data Transmission	10 Kbaud To 1 Mbaud	167 kbps	H1: 31.25 Kbps, IEC Physical Transmission Channel, Including Ex Bus H2: 1.0 And 2.5mbps Data Transfer Rate Over Two-wire Cable Or Fiber Optic Cable	Fastest 480Mbps	Fastest 10Mbps
Special Connectors					

Pin Assignment

Signal Indication	Plug-in Connector: COMBICON	D-SUB 9	M12	RJ45	7/8"
CAN_L	2	2	5	2	5
CAN_H	4	7	4	1	4
V+	5	9	2	8	2
V-	1	3	3	3	3
Drain	3	4	1	6	1

Signal Indication	Plug-in Connector: M12
AS-i+	1
AS-i+	3

Signal Indication	Plug-in Connector: M12	7/8"
DATA+	2	1
DATA-	1	4
Shield	3	3

Signal Indication	Plug-in Connector: M12, MINI-USB	USB
$V_{Blue\ S}$	1	1
D-	2	2
D+	3	3
ID	4	
GND	5	4

Signal Indication	Plug-in Connector: M12
SLD	1
DS	2
DG	3
DA	4

Signal Indication Line Assignment

Core Color	Signal
Blue	CAN_L
White	CAN_H
Red	V+
Black	V-

Core Color	Signal
Brown	AS-i+
White	
Blue	AS-i+
Black	

Core Color	Signal
Orange	DATA+
Blue	DATA-

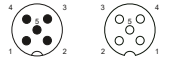
Filled Litz Wire

Core Color	Signal
White/Orange	D-
White	$V_{Blue\ S}$
Orange	D+
n.c.	ID
Black	GND

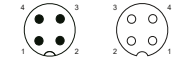
Core Color	Signal
Shield	SLD
White	DS
Yellow	DG
Blue	DA

Shield Pin			Shield Pin3		
Segment Length	According To The Transmission Speed, Up To 1000M; With Repeaters, The Length Can Be Extended.	The Cable Is Up To 100 Meters Long, With A Terminating Resistance Of 300M, And Can Be Extended To 500M With A Repeater.	Up To 1900M; With Repeaters Can Be Extended To 9500M, Depending On The Selected Cable	5M Per Section	Up To 1200M, With Repeaters, It Can Be Extended To 13.2Km.
User Group	www.can-cia.de	www.as-interface.net	www.fieldbus.org	www.usb.org	www.clpa-europe.com
Standard	EN 50325-4	EN 50295 And IEC 62026-2	IEC 1158, IEC 61158	No Regulation	IEC 61784-1 CPF 8

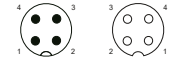
Connector Pin Assignment



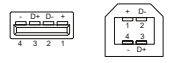
Pin Type	Bore Type
M12, 5 Core, A Code	



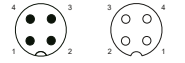
Pin Type	Bore Type
M12, 4 Core, A Code	



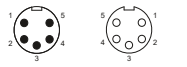
Pin Type	Bore Type
M12, 4 Core, A Code	



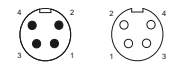
Pin Type	Bore Type
USB, 4 Core	



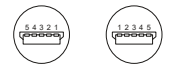
Pin Type	Bore Type
M12, 4 Core, A Code	



Pin Type	Bore Type
7/8" 16UNF, 5 Core	



Pin Type	Bore Type
7/8" 16UNF, 4 Core	



Pin Type	Bore Type
M12 Mini-USB, 5 Core	

Pin Type	Bore Type
D-SUB 9	