

M8 / M12 / 7/8" Circular Connectors Complete Selection Guide

Introduction to HARTING's Selection Guide



HARTING's selection guide on M8, M12, and 7/8" products is a user-friendly way to find a solution that is compatible with any situation or application that a customer may need. It also features the most up-to-date variations of HARTING's circular connectors including PushPull, Ha-VIS preLink®, and more.

Unlike a catalog, this guide incorporates links to other product or information pages that can be helpful when choosing parts for a solution. There is also a Table of Contents button on every page for convenience.

- Not sure about a specific termination type on a connector?
- Looking for the technical characteristics of a product?
- Want a picture of the product?

Simply click on the blue title or part number and it will bring up the information that is needed.



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Introduction





HARTING's extensive collection on M8 and M12 connectors fulfills today's industrial needs for connected communication and machinery devices. The product reliability that HARTING offers can make a difference when choosing connectors vs. hard-wiring, as HARTING can be the better choice in the long run.

The selection ranges from the standard M12 A-Code connectors to M8 D-Code connectors, which are great for Ethernet applications in a more compact setting.

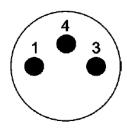
Coding Options



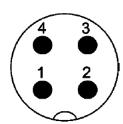
There is a wide variety on the kinds of M8 and M12 connectors that exist, and coding helps users see the differences between the connectors - but it is mainly used to prevent incorrect mating. Below are the codings that HARTING offers as well as the mating faces that are paired with each code.

- A-Code: Primarily used as connections for sensors and actuators
- B-Code: Connections for Profibus and Interbus
- D-Code: Used for 100 MB Ethernet/IP Connections
- X-Code: For high-speed 10 Gigabit Ethernet Connections
- L-Code: Connections for power solutions, comes at 63 V / 16A
- 7/8": Used for power connections

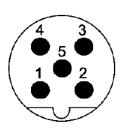




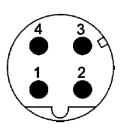
M8 A-Code



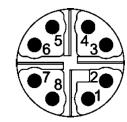
M12 A-Code



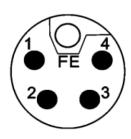
M12 B-Code



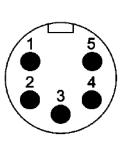
M12 D-Code



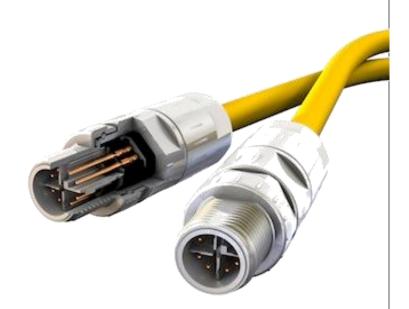
M12 X-Code



M12 L-Code



7/8"



Incomplete Part Numbers



In most cases, there will be incomplete part numbers for the cable assemblies in this selection guide. HARTING offers various standard lengths that are already assembled, and custom assembly lengths can be ordered as well.

For example, the "xxx" in the incomplete part number 21348300388xxx can be filled in with whichever length extension that is desired, as shown through the standard length table below.

The links that follow each product's part number will be set to various lengths of the assembly.

Standard Lengths for All Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)



Wire Termination Types



So how exactly are wires connected to the connector? HARTING has three different kinds of technologies that ensure a secure connection between the wire and connector.

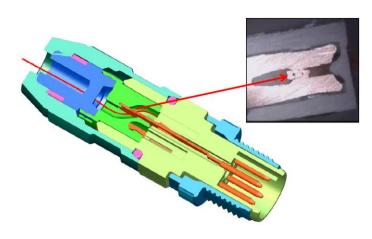
- HARAX® / IDC
 - HARTING's own version of insulation-displacement contact, HARAX ®, combines IDC with a wire guide element for conveniently producing on-site field installing without special tools
 - Produces a gas-proof and vibration resistant connection
 - Follow this link for a quick video tutorial on HARAX ®
- Screw
 - There are different designs for how a wire is held under the screw, including using a set screw or a ferrule
- Crimp
 - A conductor is inserted to a crimp contact and is retained by controlled deformation
 - Provides gas-proof, shock, and vibration resistance
 - Follow this link for a video tutorial on crimp termination



Screw Termination



The HARTING Crimp Termination



The HARTING HARAX® / IDC Termination



PushPull and Ha-VIS preLink®



Push Pull

- Ensures rapid, vibration-free Ethernet connections with just one click
- Ideal for installation in tight spaces, such as railway applications
- Click <u>here</u> to learn more about HARTING PushPull



The HARTING PushPull Technology

Ha-VIS preLink®

- A technology from HARTING on Ethernet cabling
- Combines the benefits of data networking technology with industry requirements
- Installation: preLink® separates cable connection and mating face, while a assembly tool is required to press the cable and termination block together
- Click <u>here</u> to learn more about HARTING preLink ®



The HARTING Ha-VIS preLink® IDC Termination Block



The HARTING Ha-VIS preLink® Connector



M8 A-Code Connectors





M8 A-Code Connectors









M8-S HARAX® Female 3-pole

M8 Screw Male 4-pole Straight Unshielded

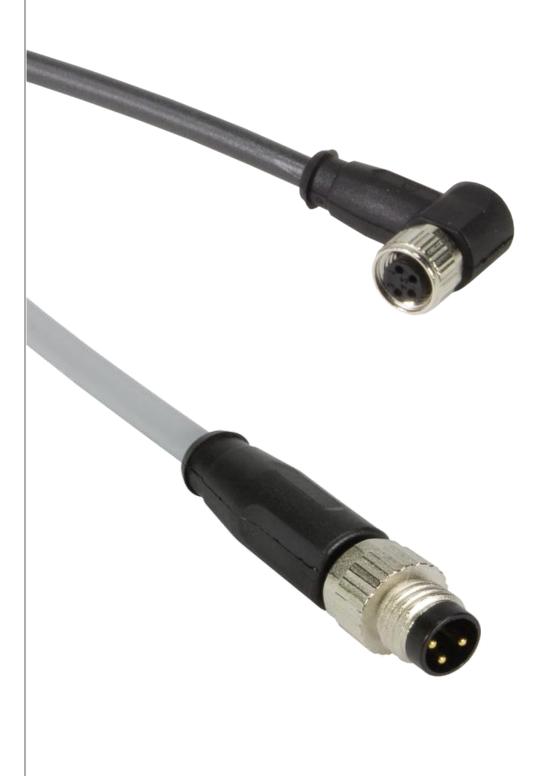
M8 Panel Feed Through Female 3-pole

HARAX® / IDC Termination	HARTING Part Number	
Description	Male	Female
3pin straight, unshielded, AWG 26-22 (0.14-0.34mm2), for cable 2.5-5.1mm (S)	21021511305	21021512305
3pin straight, unshielded, AWG 27-26 (0.08-0.14mm2), for cable 1.9-3.5mm (XS)	21021591305	
4pin straight, unshielded, AWG 26-22 (0.14-0.34mm2), for cable 2.5-5.1mm (S)	21021511405	21021512405
Screw Termination		
3pin straight, unshielded, max AWG 20, for cable 4-5.5mm	21023591301	21023592301
3pin angled, unshielded, max AWG 20, for cable 4-5.5mm	21023593301	21023594301
3pin straight, shielded, max AWG 20, for cable 4-5.5mm	21023691301	21023692301
4pin straight, unshielded, max AWG 20, for cable 4-5.5mm	21023591401	21023592401
4pin angled, unshielded, max AWG 20, for cable 4-5.5mm	21023593401	21023594401
4pin straight, shielded, max AWG 20, for cable 4-5.5mm	21023691401	21023692401
Panel Feed Through (PFT) *		
3pin Panel Receptacle to flying leads, 0.5m		21023576305
4pin Panel Receptacle to flying leads, 0.5m		21023576405

^{*}These PFTs do not come with a lock nut – if needed, please use 21010000048

M8 A-Code Cable Assemblies

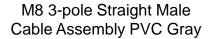




M8 A-Code 3pin Assemblies









M8 3-pole Straight Male to Female PVC Gray

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

3pin Overmolded Single Ended Assemblies	HARTING Part Num	nber
Description	PVC Gray	PUR Black
3pin, straight, male, xx.xm	21348000380xxx	21348000388xxx**
3pin, straight, female, xx.xm	21348100380xxx	21348100388xxx
3pin, angled, male, xx.xm	21348200380xxx**	
3pin, angled, female, xx.xm	21348300380xxx	21348300388xxx
3pin Overmolded Double Ended Assemblies		
3pin, straight male to straight female, xx.xm	21348081380xxx	21348081388xxx
3pin, straight male to angled female, xx.xm	21348083380xxx	21348083388xxx
3pin, angled male to angled female, xx.xm	21348283481xxx**	

^{**}Check on available lengths

M8 A-Code 4pin Assemblies







M8 4-pole Angled Female Cable Assembly PUR Gray

M8 4-pole Straight Male to Female PUR Black

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

4pin Overmolded Single Ended Assemblies	HARTING Part Nu	mber
Description	PVC Gray	PUR Black
4pin, straight, male, xx.xm	21348000481xxx	
4pin, straight, female, xx.xm	21348100481xxx	21348100489xxx
4pin, angled, female, xx.xm	21348300481xxx	21348300489xxx
4pin Overmolded Double Ended Assemblies		
4pin, straight male to straight female, xx.xm	21348081481xxx	21348081489xxx
4pin, straight male to angled female, xx.xm	21348083481xxx**	21348083489xxx**
4pin, straight male to straight male, xx.xm		21348080489xxx**
4pin, straight female to M12 A-code straight male, xx.xm**		21348184489xxx***

^{**}Check on available lengths

M8 D-Code Connectors







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M8 D-Code Connectors





M8 PCB Female 4-pole Straight, Shielded, 4mm height



M8 PCB mount Female 4-pole Straight, Shielded

PCB Mount Connectors using THT (Through-Hole Technology) Termination	HARTING Part Number
Description	Female
4pin straight PCB mount, shielded version, IP67, (4mm height)	21420000005
4pin straight PCB mount, shielded version, IP67, (8mm height)	21420000014
4pin straight PCB mount (w/o housing), shielded version, IP67	21420000006
M8 Housing, front mounting, M10x1, 9mm height	21410000016
M8 Housing, front mounting, M10x1, 13mm height	21410000017

Click here to learn more about M8 D-Code Connectors

M8 D-Code Cable Assemblies





M8 D-Code Assemblies





M8 4-pole Straight Male Single Ended Cable Assembly PVC

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

(xxx extension is 0.5m = "005", 1.0m = "010", 1.5m = "015", 2.0m = "020", 5.0m = "050", 7.5m = "075", 10m = "100", etc.)

4pin Overmolded Single Ended Shielded Assemblies	ded Assemblies HARTING Part Number		
4pin straight male, PVC, xx.xm	2134C700405xxx		
4pin straight male, PUR, xx.xm	2134C700477xxx		
4pin Overmolded Double Ended Shielded Assemblies			
4pin straight male to straight male, PVC, xx.xm	2134C7C7405xxx		
4pin straight male to straight male, PUR, xx.xm	2134C7C7477xxx		

Click <u>here</u> to learn more about M8 D-Code Connectors

M12 A-Code Connectors





M12 A-Code IDC Connectors









M12 HARAX® Female 4-pole Angled

M12 HARAX® Male 4-pole

M12 HARAX® Male 8-pole shielded

HARAX® / IDC Termination	HARTING Par	t Number
Description	Male	Female
3pin, unshielded, AWG22-18, for cable 6-8mm (pins 1,3,4)	21032121306	21032122306
3pin, unshielded, AWG22-18, for cable 6-8mm (pins 3,4,5)	21032121400	21032122400
3pin, unshielded, AWG26-22, for cable 2.9-5.1mm (pins 1,3,4)	21031111305	21031112305
4pin, unshielded, AWG26-22, for cable 2.9-5.1mm (S)	21031111405	21031112405
4pin, unshielded, AWG22-18, for cable 6-8mm (L)	21032121305	21032122305
4pin, unshielded, AWG22-18, for cable 7-8.8mm (L)	21032121407	21032122407
4pin, unshielded, angled, AWG24/7-20, cable 4-5.1mm	21011405081	21011405091
4pin, shielded, AWG26-22, for cable 4.5-8.8mm (L)	21032211405	21032212405
4pin, shielded, slim design, AWG 22, for cable 5.7-8.8mm	21033221400	21033222400
5pin, unshielded, AWG22-20, for cable 6-8mm (L)	21032721505	21032722505
8pin, shielded, AWG 26-22, for cable 4-8mm	21031211801	21031212801

Click $\underline{\text{here}}$ for PushPull options

M12 A-Code Screw and Crimp Connectors









M12 Screw Male 4-pole Angled



M12 Screw Female 4pole Straight Shielded

Screw Termination	HARTING Part Number	
Description	Male	Female
4pin, unshielded, straight, max. AWG16, for cable 4-8mm	21033191401	21033192401
4pin, unshielded, angled, max. AWG16, for cable 4-8mm	21033193401	21033194401
4pin, shielded, straight, max. AWG16, for cable 4-8mm	21033291401	21033292401
5pin, unshielded, angled, max. AWG16, for cable 4-8mm	21033193501	21033194501
5pin, unshielded, straight, max. AWG16, for cable 4-8mm	21033191501	21033192501
5pin, shielded, straight, max. AWG16, for cable 4-8mm	21033291501	21033292501
8pin, unshielded, straight, max. AWG20, for cable 4-8mm	21033191801	21033192801
8pin, unshielded, angled, max. AWG20, for cable 4-8mm	21033193801	21033194801
8pin, shielded, straight, max. AWG20, for cable 4-8mm	21033291801	21033292801
Crimp Termination		
4/5pin, shielded, slim design, straight, for cable 5.7-8.8mm	21038211505	21038212505
4/5pin, shielded, slim design, angled, for cable 5.7-8.8mm	21038213505	<u>21038214505</u>
8pin, shielded, slim design, straight, for cable 5.7-8.8mm	21038211805	<u>21038212805</u>
8pin, shielded, slim design, angled, for cable 5.7-8.8mm	21038213805	<u>21038214805</u>

Click here for PushPull options



M12 A-Code Connectors – Panel Feed Through







M12 HARAX® Male 4pole Shielded

M12 Crimp Female 8-pole Shielded

HARAX® / IDC Termination	HARTING Par	t Number
Description	Male	Female
4pin male, shielded, PFT, AWG26-22, for cable 4.5-8.8mm	21033211425	21033212425
Crimp Termination		
4/5pin female shielded, PFT, slim design, for cable 5.7-8.8mm**	21038	<u>212525</u>
8pin female shielded, PFT, slim design, straight, for cable 5.7-8.8mm**	21038	<u>212825</u>

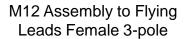
^{**}Compatible with PushPull

Click here for Crimp Contacts and Tooling

M12 A-Code Connectors – Panel Feed Through









M12 Assembly to Flying Leads Female 12-pole

Assembly to Flying Leads (without lock nut) If lock nut is needed, please use 21010000018	HARTING P	art Number
3pin female PFT to 0.5m AWG24 flying leads, PVC (pins 1,3,4)	21033	<u>3176305</u>
4pin female PFT to 0.5m AWG24 flying leads, PVC	<u>21033</u>	<u>3176405</u>
5pin female PFT to 0.5m AWG24 flying leads, PVC	21033	<u>3176505</u>
8pin female PFT to 0.5m AWG24 flying leads, PVC	21033	<u>3176805</u>
12pin female PFT to 0.5m AWG26 flying leads, PVC	21033	8532C00
Assembly to Flying Leads (with lock nut)	Male	Female
4pin PFT to 0.5m AWG20 flying leads	21033111402	21033112400
5pin PFT to 0.5m AWG20 flying leads	21033111501	21033112501

M12 A-Code Connectors – PCB Mounts





M12 PCB Mount Male 4-pole Straight IP20



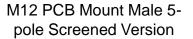
M12 PCB Mount Female 4-pole Angled Shielded

IP67 Versions	HARTING Part Number	
Description	Male	Female
4pin straight panel feed through PCB mount, IP67	21033211420	21033216420
5pin straight panel feed through PCB mount, IP67	21033211520	21033216520
8pin angled PCB mount, shielded, front mounting, IP67		21033214801
12pin angled PCB mount, shielded, front mounting, IP67		21033214201
IP67 THR (Through-Hole Reflow)		
4pin angled PCB mount, shielded, THR, IP67	21033213401	21033214401
5pin angled PCB mount, shielded, THR, IP67	21033213501	21033214501
IP20 Versions		
4pin straight panel feed through PCB mount, IP20	21033211410	21033216410
5pin straight panel feed through PCB mount, IP20	21033211510	21033216510

M12 A-Code Connectors – PCB Mounts









M12 PCB Mount SMT Male 4-pole Straight



M12 PCB Mount Male 8-pole Screened Version + Rear Mount Housing

Through-Hole PCB Mounts	HARTING Part	Number
Description	Male	Female
4pin straight PCB mount (w/o housing), screened version**	21033211418	
5pin straight PCB mount (w/o housing), screened version**	21033211518	21033212518
5pin straight PCB mount, screened version + rear mount housing	21033211530	21033212530
8pin straight PCB mount (w/o housing), screened version**	21033211818	21033212818
8pin straight PCB mount, screened version + rear mount housing	21033211830	21033212830
SMT (Surface Mount Technology) – without housing		
4pin straight, SMT PCB mount, unshielded	21033111415	21033112410
4pin straight, SMT PCB mount, unshielded, reel of 75pieces	21033111416	21033112411
5pin straight, SMT PCB mount, unshielded	21033111515	21033112510
5pin straight, SMT PCB mount, unshielded, reel of 75pieces	21033111516	21033112511
8pin straight, SMT PCB mount, unshielded	21033111815	21033112810
8pin straight, SMT PCB mount, unshielded, reel of 75pieces	21033111816	21033112811
8pin straight, SMT PCB mount, shielded	21033211802	21033212803
8pin straight, SMT PCB mount, shielded, reel of 75pieces	21033211803	21033212802

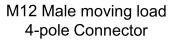
^{**}Compatible with PushPull

Click <u>here</u> for Housing and SMT Housing options

M12 A-Code Connectors – Other









M12 5-pole T-Coupler Profibus

Other	HARTING Part Number
M12 A-Code male moving load 4pin connector	21030301400
M12 A-code 5pin T-Coupler Profibus	21033219400

M12 A-Code Cable Assemblies





M12 A-Code 3pin Assemblies







M12 3-pole Single Ended Overmolded Angled PUR Black

M12 3-pole Double Ended Overmolded Straight

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

3pin Overmolded Single Ended Assemblies	HARTING Part Number	
Description	PVC Gray	PUR Black
3pin, straight, male, xx.xm	21348400383xxx	21348400390xxx**
3pin, straight, female, xx.xm	21348500383xxx	21348500390xxx
3pin, angled, female, xx.xm	21348700383xxx	21348700390xxx
3pin Overmolded Double Ended Assemblies		
3pin, straight male to straight female, xx.xm	21348485383xxx	21348485390xxx

^{**}Check on available lengths

M12 A-Code 4pin Assemblies





M12 4-pole Double Ended Overmolded Straight to Straight



M12 4-pole Double Ended Overmolded Straight to Angled

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

4pin Overmolded Single Ended Assemblies	HARTING Part Number	
Description	PVC Gray	PUR Black
4pin, straight, male, xx.xm	21348400484xxx	21348400491xxx**
4pin, straight, female, xx.xm	21348500484xxx**	21348500491xxx**
4pin, angled, male, xx.xm	21348600484xxx	21348600491xxx
4pin, angled, female, xx.xm	21348700484xxx	21348700491xxx
4pin Overmolded Double Ended Assemblies		
4pin, straight male to straight female, xx.xm	21348485484xxx	21348485491xxx
4pin, straight male to angled female, xx.xm	21348487484xxx	21348487491xxx
4pin, straight male to straight male, xx.xm		21348484484xxx**

^{**}Check on available lengths
See the Sensor Actuator Boxes page for more M12 A-Code 4pin assemblies

M12 A-Code 5pin Assemblies







M12 5-pole Single Ended Female Angled PVC Gray

M12 5-pole Single Ended Male Straight PVC Gray

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

5pin Overmolded Single Ended Assemblies	HARTING Part Number	
Description	PVC Gray	PUR Black
5pin, straight, male, xx.xm	21348400585xxx	21348400592xxx**
5pin, straight, female, xx.xm	21348500585xxx	21348500592xxx**
5pin, angled, female, xx.xm	21348700585xxx	21348700592xxx**
5pin Overmolded Double Ended Assemblies		
5pin, straight male to straight female, xx.xm	21348485585xxx	21348485592xxx**

^{**}Check on available lengths

M12 A-Code 8pin Assemblies





M12 8-pole Single Ended Overmolded Straight



M12 8-pole Double Ended Overmolded Straight

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

8pin Overmolded Single Ended Assemblies	HARTING Part Number	
Description	PVC Gray	PUR Black
8pin, straight, male, xx.xm	21348400882xxx	21348400870xxx**
8pin, straight, female, xx.xm	21348500882xxx	
8pin, angled, female, xx.xm	21348700882xxx**	
8pin Overmolded Double Ended Assemblies		
8pin, straight male to straight female, xx.xm	21348485882xxx	21348485870xxx
8pin, straight male to straight male, xx.xm	21348484882xxx	21348484870xxx**

M12 A-Code 12pin Assemblies







M12 12-pole Double Ended Overmolded Angled Male to Angled Female

M12 12-pole Single Ended Overmolded Straight PVC Gray

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

12pin Overmolded Single Ended Assemblies	HARTING Part Number	
Description	PVC Gray	PUR Black
12pin, straight, male, xx.xm	21348400C79xxx	
12pin, straight, female, xx.xm	21348500C79xxx	21348500C78xxx
12pin, angled, male, xx.xm	21348600C79xxx	
12pin, angled, female, xx.xm	21348700C79xxx	21348700C78xxx
12pin Overmolded Double Ended Assemblies		
12pin, straight male to straight female, xx.xm	21348485C79xxx	21348485C78xxx
12pin, straight male to angled female, xx.xm		21348487C78xxx
12pin, angled male to angled female, xx.xm		21348687C78xxx

M12 A-Code Ha-VIS EtherRail® Assemblies



Lengths for EtherRail® Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0, 15.0, 20.0 meters (Other lengths available upon request)

4pin Overmolded Single Ended	HARTING Part Number
4pin, straight female, Nexans Flamex MAZ PUR (4x0.5mm2), xx.xm	210351224yy
5pin, Press and Go, straight male, Tronic-CY (LiY-CY) PVC (4xAWG20), xx.xm	21331000502xxx
4pin Double Ended	
Slim Design, 4pin, straight male to straight male, EtherRail Flex (4xAWG22/7), xx.xm	21330202401xxx

M12 B-Code Connectors





M12 B-Code Connectors









M12 HARAX® 2-pole Male Shielded

M12 Screw 5-pole Male Shielded

M12 Crimp 5-pole Female Shielded

HARAX® / IDC Termination	HARTING Part Number	
Description	Male	Female
2pin, shielded, AWG 24-22, for cable 5-8.8mm (L)	21032411301	21032412301
Screw Termination		
5pin, straight, shielded, max. AWG16, for cable 4-8mm	21033491501	21033492501
Crimp Termination		
5pin, shielded	21038411505	<u>21038412505</u>

Click here for Crimp Contacts and Tooling

M12 B-Code Connectors – Panel Feed Through









M12 PFT Flying Leads 5-pole Male

M12 HARAX® 2-pole Male Shielded

M12 PFT 5-pole Male / Female

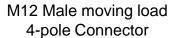
HARAX® / IDC Termination	HARTING Part Number	
Description	Male	Female
2pin, shielded, AWG 24-22, for cable 7-8.8mm	21033411425	21033412425
Crimp Termination		
5pin, shielded, crimp	21038411525	21038412525
Flying Leads		
4pin, PFT, to 0.5m AWG24 flying leads, PVC*		21033386405
5pin, PFT to 0.25m AWG20 flying leads*	21033391301	21033392301
Male to Female		
5pin male/female PFT	21033	301300

^{*}This PFT does not come with a lock nut – if needed, please use <u>21010000018</u>
Click <u>here</u> for Crimp Contacts and Tooling

M12 B-Code Connectors – PCB Mounts and Other









M12 Male 5-pole Straight PFT PCB mount IP67

IP67 Degree of Protection	HARTING Par	t Number
Description	Male	Female
5pin straight panel feed through PCB mount, IP67	21033411505	21033412505
Screened Version		
5pin, straight PCB mount (w/o housing), screened version**	21033411518	21033412518
Other		
Male moving load 4pin connector	21030301300	
5pin T-Coupler Profibus	21033	416401

^{**}Need housing? Click here to see housing options

M12 B-Code Cable Assemblies





M12 B-Code Standard Assemblies









M12 2-pole Male Single Ended Angled

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

2pin Overmolded Single Ended Assemblies	HARTING Part Number	
Description	PVC Violet	PUR Violet
2pin, straight, male, xx.xm	21348800486xxx	
2pin, angled, male, xx.xm	21349000486xxx	
2pin, straight, female, xx.xm	21348900486xxx	21348900487xxx
2pin, angled, female, xx.xm	21349100486xxx	21349100487xxx
2pin Overmolded Double Ended Assemblies		
2pin, straight male to straight female, xx.xm	21348889486xxx	21348889487xxx
2pin, angled male to angled female, xx.xm		21349091487xxx

M12 D-Code Connectors





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M12 D-Code Connectors









M12 Screw Male 4-pole straight shielded

M12 Crimp Male 4-pin Slim Design Straight

M12 HARAX® Female 4-pole straight shielded

HARAX® / IDC Termination	HARTING Part	Number
Description	Male	Female
4pin, shielded, slim design, AWG 22, for cable 5.7-8.8mm	21033821400	21033822400
4pin, shielded, M12-L, AWG 26-22, for cable 4.5-8.8mm (L)	21032811405	21032812405
4pin, shielded, M12-L, AWG 22-18, for cable 4.5-8.8mm (L)	21032821405	21032822405
Screw Termination		
4pin straight, shielded, max. AWG16, for cable 4-8mm	21033891402	21033892402
Crimp Termination		
4pin, shielded, slim design, straight, for cable 5.7-8.8mm	21038811405	21038812405
4pin, shielded, slim design, angled, for cable 5.7-8.8mm	21038813405	21038814405
4pin male shielded, crimp, for conduit M17	21038821411	21038822411

Click <u>here</u> for PushPull options

Click here for preLink® options

Click here for Crimp Contacts and Tooling

M12 D-Code Connectors – Panel Feed Through









M12 Crimp Female 4-pole Shielded Slim Design M12 HARAX® Male 4pole Shielded M12 Flying Leads Female 4-pole

HARAX® / IDC Termination	HARTING Part	Number
Description	Male	Female
4pin, shielded, AWG 26-22	21033811425	21033812425
Crimp Termination		
4pin shielded, slim design, straight, for cable 5.5-8.8mm **		21038812425
Flying Leads		
4pin, panel feed through to 0.5m AWG22 flying leads, PVC*		21033752400
4pin panel feed through (M16) to 0.5m AWG22 flying leads (comes with Lock Nut)	21033711403	21033712403

^{*}This PFT does not come with a lock nut – if needed, please use 21010000018

Click $\underline{\text{here}}$ for Crimp Contacts and Tooling

^{**}Compatible with PushPull

M12 D-Code Connectors – Panel Feed Through











M12 4-pole to RJ45 Cable Assembly

M12 4-pole Gender Changer

M12 4-pole Female to RJ45 Straight

Cables coming out of the back	HARTING Part Number
4pin female PFT (M16) to 360mm flex cable 2x2xAWG26/7	21033836407
Single Ended Cable Assembly, female panel mount, EtherRail Flex (4xAWG22/7), 0.7m	21332100401007
4pin female PFT (PG9) to 700mm flex cable 2x2xAWG26/7	21033836405
Other	
4pin female to RJ45 panel feed through angled, 4poles	21033814401
4pin female to RJ45 panel feed through straight, 4poles	21033812401
4pin gender changer female/female**	21033816403
M12 Wall Mount Bracket	21010000036

^{**}Compatible with PushPull





M12 4-pole Male Straight PFT IP67



M12 4-pole Female Angled w/o fixing hole IP67

IP67 Degree of Protection	HARTING Part Number
4pin male, straight panel feed through (PFT) PCB mount	21033711400
4pin female, straight panel feed through (PFT) PCB mount	21033712415
4pin female, straight panel feed through (PFT) PCB mount	21033816420
4pin female, angled PCB mount w/o fixing hole (exit right)	21033814430
4pin female, angled PCB mount w/o fixing hole (exit down)	21033814431
4pin female, angled PCB mount with fixing hole (exit right)	21033814432
4pin female, angled PCB mount with fixing hole (exit down)	21033814433
4pin female, angled PCB mount w/o fixing hole**	21033814436
4pin female, angled PCB mount with fixing hole**	21033814437

^{**}Compatible with PushPull





M12 4-pole Female Angled w/o fixing hole IP20



M12 4-pole Female Straight PFT IP20

IP20 Degree of Protection	HARTING Part Number
4pin female straight panel feed through (PFT) PCB mount	21033816410
4pin female, angled PCB mount w/o fixing hole (exit right)	21033814410
4pin female, angled PCB mount w/o fixing hole (exit down)	<u>21033814411</u>
4pin female, angled PCB mount with fixing hole (exit right)	21033814412
4pin female, angled PCB mount with fixing hole (exit down)	21033814413
4pin female, angled PCB mount w/o fixing hole**	<u>21033814434</u>
4pin female, angled PCB mount with fixing hole**	<u>21033814435</u>

^{**}Compatible with PushPull





M12 4-pole Male Straight with rear mount housing



M12 4-pole Female Angled THR rear-mounting

Through-Hole Reflow Termination (THR)	HARTING Part Number
4pin female angled PCB mount, shielded, rear-mounting, THR termination	21033814440
PCB Mounts	
4pin male straight PCB mount (w/o housing), shielded version	21033811418
4pin female straight PCB mount (w/o housing), shielded version	21033812418
4pin male straight PCB mount, shielded version, with rear mount housing (individual piece)	21033811430
4pin male straight PCB mount, shielded version, with front mount housing (individual piece)	21033811431
4pin female straight PCB mount, shielded version, with rear mount housing (individual piece)	21033812430
4pin female straight PCB mount, shielded version, with front mount housing (individual piece)	21033812431
Other	
4pin female straight, SMT (surface mount technology) PCB mount, shielded*	<u>21033812404</u>
4pin female straight, SMT PCB mount, shielded, reel of 75pieces*	<u>21033812405</u>





M12 4-pole Female Angled SMT with transformer



M12 4-pole Female Straight SMT with transformer, PoE enabled

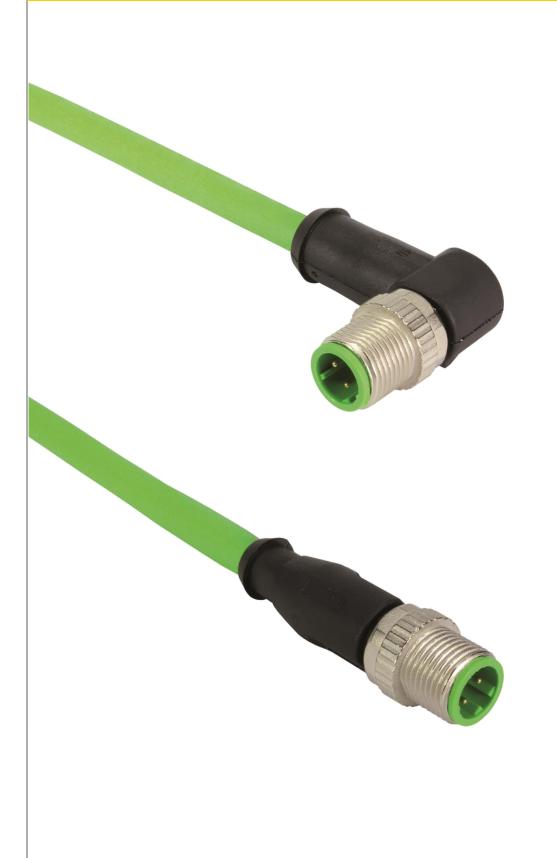
SMT PCB Mounts with transformers, shielded	HARTING Part Number
4pin female straight, (w/o housing)	21033812410
4pin female straight, PoE (Power over Ethernet) enabled (w/o housing)	21033812411
4pin female straight, PoE enabled, (w/ housing 21033012006)	21033812421
4pin female angled, (w/o housing)	21033814420
4pin female angled, PoE enabled, (w/o housing)	21033814421
4pin female angled, PoE enabled, (w/ housing 21033012006)	21033814422

^{*}For housing, please use <u>21410000010</u> or <u>21410000013</u>

To learn more about M12 PCB Mounts with transformers, click here

M12 D-Code Cable Assemblies





M12 D-Code Standard Assemblies







M12 4-pole Single Ended Overmolded Straight M12 4-pole Single Ended Overmolded Angled

Standard Lengths for Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

4pin Overmolded Single Ended Assemblies	HARTING Part Number	
Description	PVC Green	PUR Green
4pin, straight, male, xx.xm	21349200405xxx	21349200477xxx
4pin, straight, female, xx.xm	21349300405xxx	21349300477xxx
4pin, angled, male, xx.xm	21349400405xxx	21349400477xxx
4pin, angled, female, xx.xm	21349500405xxx	21349500477xxx
4pin Overmolded Double Ended Assemblies		
4pin, straight male to straight female, green, xx.xm	21349293405xxx	21349293477xxx
4pin, straight male to straight male, green, xx.xm	21349292405xxx	21349292477xxx
4pin, angled male to angled male, green, xx.xm	21349494405xxx	21349494477xxx

M12 D-Code Outdoor Assemblies









M12 4-pole Double Ended Outdoor Overmolded Straight

4pin Overmolded Single Ended – PVC Black	HARTING Par	t Number
Description	Straight	Angled
Male to flying leads 4xAWG22/7, 1.0m	09472200002	09478000002
Male to flying leads 4xAWG22/7, 1.5m	09472200003	09478000003
Male to flying leads 4xAWG22/7, 3.0m	09472200005	09478000005
Male to flying leads 4xAWG22/7, 5.0m	09472200006	09478000006
Male to flying leads 4xAWG22/7, 7.5m	09472200022	09478000022
Male to flying leads 4xAWG22/7, 10.0m	09472200011	09478000011
Male to flying leads 4xAWG22/7, 20.0m	09472200013	09478000013
4pin Overmolded Double Ended – PVC Black		
Description	Straight (both males)	Angled (both males)
Male to male, 4xAWG22/7, 1.0m	09472222002	09478080002
Male to male, 4xAWG22/7, 1.5m	09472222003	09478080003
Male to male, 4xAWG22/7, 3.0m	09472222005	09478080005
Male to male, 4xAWG22/7, 5.0m	09472222006	09478080006
Male to male, 4xAWG22/7, 7.5m	09472222022	09478080022
Male to male, 4xAWG22/7, 10.0m	09472222011	09478080011
		

M12 D-Code Outdoor Assemblies



4pin Overmolded Single Ended – SERCOS Red	HARTING Part Number
Description	Straight
Male to flying leads 4xAWG22/7, 1.0m	09472200002018
Male to flying leads 4xAWG22/7, 1.5m	09472200003018
Male to flying leads 4xAWG22/7, 3.0m	09472200005018
Male to flying leads 4xAWG22/7, 5.0m	09472200007018
Male to flying leads 4xAWG22/7, 7.5m	09472200018018
Male to flying leads 4xAWG22/7, 10.0m	09472200012018
Male to flying leads 4xAWG22/7, 20.0m	09472200014018
4pin Overmolded Double Ended – SERCOS Red	
Description	Straight (both males)
Male to male, 4xAWG22/7, 1.0m	09472222002018
Male to male, 4xAWG22/7, 1.5m	09472222003018
Male to male, 4xAWG22/7, 3.0m	09472222005018
Male to male, 4xAWG22/7, 5.0m	09472222007018
Male to male, 4xAWG22/7, 7.5m	09472222018018
Male to male, 4xAWG22/7, 10.0m	09472222012018
Male to male, 4xAWG22/7, 20.0m	09472222014018

M12 D-Code RJ45 Assemblies





M12 4-pole Straight Male to RJ45 PUR Green

4pin Overmolded Double Ended – M12 to RJ45	HARTING Part Number	
Description	PVC Black Outdoor Cable	PUR Green Trailing Cable
Straight male to RJ45 Cat5, 4xAWG22/7, 1.0m	09457005063	09457005022
Straight male to RJ45 Cat5, 4xAWG22/7, 1.5m		09457005023
Straight male to RJ45 Cat5, 4xAWG22/7, 3.0m	09457005066	09457005025
Straight male to RJ45 Cat5, 4xAWG22/7, 5.0m	09457005068	09457005027
Straight male to RJ45 Cat5, 4xAWG22/7, 10m	09457005073	09457005051
Straight male to RJ45 Cat5, 4xAWG22/7, 20m	09457005075	09457005053

M12 D-Code Ha-VIS EtherRail® Assemblies





M12 4-pole Single Ended Straight EtherRail Cat 5 Black



M12 4-pole Single Ended Straight EtherRail Cat 5 Blue

Lengths for EtherRail® Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0, 15.0, 20.0 meters (Other lengths available upon request)

Overmolded Single Ended	HARTING Part Number
Straight male, EtherRail® Flex (4xAWG22/7), Cat5 Black xx.xm	09482200011xxx
Straight male, EtherRail® Flex (4xAWG22/7), Cat5 Blue xx.xm	21333900413xxx
Straight male, EtherRail® UltraFlex (4xAWG22/19), xx.xm	09482200012xxx
Angled male, EtherRail® Flex (4xAWG22/7), xx.xm	09488000011xxx
Angled male, EtherRail® Ultra Flex (4xAWG22/19), xx.xm	09488000012xxx
Single Ended Press & Go	
Straight male, EtherRail® Flex (4xAWG22/7), xx.xm	21330900401xxx
Straight male, EtherRail® UltraFlex (4xAWG22/19), xx.xm	21330900400xxx
Straight female, EtherRail® Flex (4xAWG22/7), xx.xm	21331600401xxx

M12 D-Code Ha-VIS EtherRail® Assemblies



Lengths for EtherRail® Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0, 15.0, 20.0 meters (Other lengths available upon request)

Overmolded Double Ended	HARTING Part Number
Straight male to straight male, EtherRail® Flex (4xAWG22/7), xx.xm	09482222011xxx
Straight male to straight male, EtherRail® UltraFlex (4xAWG22/19), xx.xm	09482222012xxx
Angled male to angled male, EtherRail® Flex (4xAWG22/7), xx.xm	09488080011xxx
Angled male to angled male, EtherRail® Ultra Flex (4xAWG22/19), xx.xm	09488080012xxx
Double Ended Press & Go	
Press&Go, straight male to straight male, EtherRail® Flex (4xAWG22/7), xx.xm	21330909401xxx
PushPull Press&Go, straight male to straight male, EtherRail® Flex (4xAWG22/7), xx.xm**	21332323401xxx

^{**}Compatible with PushPull

M12 D-Code Ha-VIS EtherRail® Assemblies





M12 4pin Straight Male to RJ45

Lengths for EtherRail® Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0, 15.0, 20.0 meters (Other lengths available upon request)

Panel Feed Through (PFT)	HARTING Part Number
Single Ended, female panel mount, EtherRail® Flex (4xAWG22/7), xx.xm	21332100401xxx
PushPull Single Ended, female panel mount, EtherRail® Flex (4xAWG22/7), xx.xm**	21332200401xxx
Double Ended, female crimp panel mount to male crimp, EtherRail® Flex (4xAWG22/7), xx.xm	21331211401xxx
RJ45 Assemblies	
Overmolded, straight male M12 to RJ45, EtherRail® Flex (4xAWG22/7), xx.xm	09480222011xxx
Straight female Press and Go M12 to Overmolded RJ45, EtherRail® Flex (4xAWG22/7), xx.xm	09482402711xxx

^{**}Compatible with PushPull

M12 L-Code Connectors





M12 L-Code Connectors, PFTs, PCB Mounts









M12 PFT 5-pole Male AWG16

M12 HARAX® 5-pole Male

M12 PCB Mount 5-pole Female front mounting

HARAX® / IDC Termination	HARTING Part Number	
Description	Male	Female
4+PE pin, shielded	<u>21032961505</u>	<u>21032962505</u>
Crimp Termination		
4+PE pin, shielded	<u>21038961505</u>	<u>21038962505</u>
Panel Feed Throughs (Flying Leads)		
4+PE pin PFT to 0.3m 1.5mm2 (AWG16) flying leads	<u>21035961505</u>	<u>21035962505</u>
4+PE pin PFT to 0.3m 2.5mm2 (AWG14) flying leads	21035991505	21035992505
PCB Mounts		
4+PE pin female PCB mount for rear mounting		21033962530
4+PE pin female PCB mount for front mounting		21033962531
4+PE pin male straight PCB mount (w/o housing)**	<u>21033961505</u>	

Click here for Crimp Contacts and Tooling

^{**}Need housing? Click $\underline{\text{here}}$ to see housing options

M12 L-Code Cable Assemblies





M12 L-Code Standard Assemblies





M12 5-pole Double Ended Female to Male

Standard Lengths for All Cable Assemblies are 1.0, 2.0, 5.0, 10.0, 15.0, 20.0 meters (Other lengths available upon request)

(xxx extension is 1.0m = "010", 2.0m = "020", 5.0m = "050", 10m = "100", 15m = "150", 20m = "200")

5pin Single Ended Assemblies	HARTING Part Number	
Description	Unshielded	Shielded
4+PE, Female, 16AWG. PVC grey, xx.xm	2133A700523xxx	2133A700518xxx
4+PE, Female, 14AWG. PVC grey, xx.xm	2133A700524xxx	2133A700519xxx
5pin Double Ended Assemblies		
4+PE, Female to Male, 16AWG. PVC grey, xx.xm	2133A7A8523xxx	2133A7A8518xxx
4+PE, Female to Male, 14AWG. PVC grey, xx.xm	2133A7A8524xxx	2133A7A8519xxx

M12 X-Code Connectors





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M12 X-Code Connectors









M12 Crimp Female 8-pole Slim Design Straight

Crimp Termination	HARTING Part Number	
Description	Male	Female
8pin, slim design, straight, for cable diameter 4.4-8.8mm	21038811805	
8pin, slim design, angled, for cable diameter 5.7-8.8mm	21038813805	21038814805
8pin, slim design, straight, for cable diameter 5.7-8.8mm		21038812805

Click <u>here</u> for PushPull options

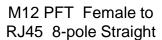
Click here for preLink® options

Click here for Crimp Contacts and Tooling

M12 X-Code Connectors – Panel Feed Through









M12 PFT Crimp Female 8-pole Slim Design

Crimp Termination	HARTING Part Number
8pin female connector, PFT, slim design, straight, for cable diameter 5.5-8.8mm**	<u>21038812825</u>
8pin female connector, PFT, slim design, straight, for cable diameter 4.5-8.8mm**	21038812835
Other	
8pin female to RJ45 panel feed through straight, Cat6A	21033812800
8pin female to RJ45 panel feed through angled, Cat6A	21033814800
8pin female/female gender changer, Cat6A**	<u>21033816816</u>
M12 D-code (4pin) female to PushPull X-code (8pin) female gender changer**	<u>21033816404</u>

^{**}Compatible with PushPull

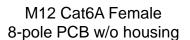
Click here for PushPull options

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Click here for Crimp Contacts and Tooling









M12 Cat 5 Female 8-pole PCB with rear panel mounting



M12 Cat 6A Female 8-pole PCB with rear panel mounting

Cat 6A Versions	HARTING Part	Number
Description	Straight	Angled
8pin female PCB without housing, Cat6A**	21033812806	21033814806
8pin female PCB with rear panel mounting, Cat6A (w/ housing 21033012000)	21033812810	21033814807
8pin female PCB with rear panel mounting, Cat6A (w/ housing 21033012000) (individual piece)	21033812811	21033814809
8pin female PCB with rear panel mounting, Cat6A (w/ housing 21033012002)	21033812804	21033814804
8pin female PCB with front panel mounting, Cat6A (w/ housing 21033012003)**	21033812802	21033814802
8pin female PCB with front panel mounting, Cat6A (w/ housing 21033012003) (individual piece)**	21033812813	21033814810
Cat 5 Versions		
8pin female PCB without housing, straight, Cat5**	21033	8812807
8pin female PCB with rear panel mounting, straight, Cat5 (w/ housing 21033012002)	<u>21033812805</u>	
8pin female PCB with rear panel mounting, straight, Cat5 (w/ housing 21033012000)	<u>21033812809</u>	
8pin female PCB with rear panel mounting, straight, Cat5 (w/ housing 21033012000) (individual piece)	21033812812	
8pin female PCB with front panel mounting, straight, Cat5 (w/ housing 21033012003)**	<u>21033812803</u>	
8pin female PCB with front panel mounting, straight, Cat5 (w/ housing 21033012003) (individual piece)**	21033812814	

^{**}Compatible with PushPull





M12 Female 8-pole Straight SMT PCB Mount



M12 Female 8-pole Straight SMT with transformer PCB Mount

SMT PCB Mounts with transformers, shielded	HARTING Part I	Number
Description	1 Gbit	10 Gbit
8pin female straight*	<u>21033</u>	<u>812820</u>
8pin female straight, reel of 75pieces*	21033812821	
8pin female straight, shielded, (w/o housing)	21033812815	21033812818
8pin female straight, PoE (Power over Ethernet) enabled (w/o housing)	21033812817	21033812823
8pin female straight, PoE enabled (w/ housing 21033012006)	21033812824	21033812825
8pin female straight, (w/o housing)	21033814820	21033814823
8pin female straight, PoE enabled (w/o housing)	21033814822	21033814825
8pin female angled, PoE enabled (w/ housing 21033012006)	21033814826	21033814827

^{*}For housing, please use <u>21410000010</u> or <u>21410000013</u>

To learn more about M12 PCB Mounts with transformers, click here

M12 X-Code Cable Assemblies





M12 X-Code Standard Assemblies





M12 8-pole PFT Single Ended Female

8pin Single Ended Press & Go	HARTING Part Number
Straight male, 4x2xAWG26/7 Cat6a, PVC yellow, xx.xm	21330500855xxx
Straight male, 4x2xAWG26/7 Cat7a, PUR yellow, xx.xm	21330500854xxx
8pin Double Ended Press & Go	
Straight male to straight male, 4x2xAWG26/7 Cat6a, PVC yellow, xx.xm	21330505855xxx
Straight male to straight male, 4x2xAWG26/7 Cat7a, PUR yellow, xx.xm	21330505850xxx
8pin Single Ended - Panel Feed Through	
Female Panel Feed Through, (4x2xAWG26/7) Cat7a, PUR yellow xx.xm	<u>21330800850003</u>

M12 X-Code Standard Assemblies





M12 8-pole PushPull Press & Go Straight Male to RJ45



M12 8-pole Press & Go Straight Male to RJ45

8pin to RJ45 Press & Go	HARTING Part Number
Male to Cat6 RJ45, 4x2xAWG26/7, PVC, 1m	09478411001
Male to Cat6 RJ45, 4x2xAWG26/7, PVC, 2m	09478411002
Straight male to RJ45, 4x2xAWG26/7 Cat6a, PVC yellow, xx.xm	09489323757xxx
Straight male to RJ45, 4x2xAWG26/7 Cat6a, PUR yellow, xx.xm	09489323756xxx
Straight male to RJ45, 4x2xAWG26/7 Cat5e, PVC Outdoor black, xx.xm	09489323754xxx
8pin Panel Feed Through to RJ45	
Double Ended, female PFT to RJ45, (4x2xAWG26/7) Cat5e, PVC outdoor black, xx.xm	09482369754xxx
Har-port RJ45 to M12 female PFT, 4x2xAWG26/7 Cat5e, PVC outdoor black, xx.xm	09481369754xxx
8pin PushPull Press & Go to RJ45	
PushPull Press&Go, straight male to RJ45, 4x2xAWG26/7 Cat6a, PVC yellow, xx.xm**	09488223757xxx
PushPull Press&Go, straight male to RJ45, 4x2xAWG26/7 Cat6a, PUR yellow, xx.xm**	09488223756xxx
Profinet Options	
Press&Go, straight female, Profinet PVC (4x2xAWG23/7) Cat6a green, xx.xm	21331500857xxx
Straight female to straight female, Profinet PVC (4x2xAWG23/7) Cat6a green, xx.xm	21331515857xxx

^{**}Compatible with PushPull, for PushPull Press & Go standard lengths are 1m, 2m, 3m, 5m, 10m

M12 X-Code Ha-VIS EtherRail® Assemblies





M12 8-pole PushPull Press & Go Straight Male EtherRail Flex

Lengths for EtherRail® Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0, 15.0, 20.0 meters (Other lengths available upon request)

8pin Single Ended Press & Go	HARTING Part Number
Press&Go, straight male, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	21330500853xxx
Press&Go, straight female, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	21331500853xxx
8pin Single Ended Panel Feed Through	
Female Panel Feed Through to Flying Leads, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	21330700853xxx
Press&Go, straight male to female panel feed through, EtherRail® Flex (4x2xAWG24/7) Cat7 black, PVC, xx.xm	21330705853xxx
8pin Single Ended <u>PushPull</u> Press & Go	
PushPull Press&Go, straight male, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm**	21332900853xxx

^{**}Compatible with PushPull, for PushPull Press & Go standard lengths are 1m, 2m, 3m, 5m, 10m

M12 X-Code Ha-VIS EtherRail® Assemblies



Lengths for EtherRail® Cable Assemblies are 0.5, 1.0, 1.5, 2.0, 5.0, 7.5, 10.0, 15.0, 20.0 meters (Other lengths available upon request)

8pin Double Ended – Slim Design, Press & Go	HARTING Part Number
Straight male to straight male, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	21330505853xxx
Straight male to straight female, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	21331505853xxx
Straight female to straight female, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	21331515853xxx
Straight male to Slim Design angled male, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	213305B8853xxx
8pin Double Ended – <u>PushPull</u> Press & Go	
PushPull Press&Go, straight male to straight male, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm**	21332929853xxx
8pin Double Ended – RJ45	
Female panel feed through to RJ45, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	09484463751xxx
Male slim design to RJ45, EtherRail® Flex (4x2xAWG24/7) Cat7 black, xx.xm	09487063751xxx

^{**}Compatible with PushPull, for PushPull Press & Go standard lengths are 1m, 2m, 3m, 5m, 10m

7/8" Connectors





7/8" Connectors and Panel Receptacles







7/8" 4-pole Female PFT to 0.5 AWG18 flying leads

7/8" 4+PE Female HARAX®

Connectors	HARTING Part Number
HARAX® / IDC Termination	
7/8" circular 5pin male	<u>21041161505</u>
7/8" circular 4+PE female	<u>21041162505</u>
Panel Receptacles	
7/8" circular 2+PE pin male panel feed through to 20cm AWG18 flying leads	21043161305
7/8" circular 2+PE pin female panel feed through to 0.5m AWG18 flying leads	<u>21043162301</u>
7/8" circular 4pin female panel feed through to 20cm AWG18 flying leads	21043162400
7/8" circular 4pin female panel feed through to 0.5m AWG18 flying leads	21043162401
7/8" circular 4+PE pin male panel feed through to 0.5m AWG18 flying leads	<u>21347400571005</u>
7/8" circular 4+PE pin female panel feed through to 0.5m AWG18 flying leads	<u>21043162501</u>

7/8" Cable Assemblies





7/8" Standard Assemblies





7/8" 4-pole Female Single Ended Angled

Standard Lengths for 7/8" Single Ended Cable Assemblies are 1.5, 3.0, 5.0, 7.5, 10.0 meters (Other lengths available upon request)

(xxx extension is 1.5m = "015", 3.0m = "030", 5.0m = "050", 7.5m = "075", 10m = "100")

2pin+GND Single Ended	HARTING Part Number	
Description	PVC Gray	PUR Black
2pin+PE, straight female, xx.xm	21349700393xxx	21349700394xxx
4pin Single Ended		
4pin, straight female, xx.xm	21349700495xxx	21349700496xxx
4pin, angled female, xx.xm	21349900495xxx	21349900496xxx
4pin+PE Single Ended		
4pin+PE, straight female, xx.xm	21349700597xxx	21349700598xxx
4pin+PE, angled female, xx.xm	21349900597xxx	21349900598xxx
Other		
2pin+PE, straight female, TPU, 2.0m	21045162302**	
4pin, straight male, TPU, 2.0m	21045161402**	

7/8" Standard Assemblies







7/8" 4-pole Double Ended Straight 7/8" 4-pole Double Ended Angled

Standard Lengths for 7/8" Double Ended Cable Assemblies are 0.3, 0.6, 1.0, 1.5 and 2.0 meters (Other lengths available upon request)

(xxx extension is 0.3m = "003", 0.6m = "006", 0.1m = "010", 1.5m = "015", 2.0m = "020")

4pin Double Ended		
Description	PVC Gray	PUR Black
4pin, straight male/ straight female, xx.xm	21349697495xxx	21349697496xxx
4pin, angled male/ angled female, xx.xm	21349899495xxx	21349899496xxx
4pin + PE Double Ended		
4pin+PE, straight male/ straight female, xx.xm	21349697597xxx	21349697598xxx
4pin+PE, angled male/ angled female, xx.xm	21349899597xxx	21349899598xxx

Ha-VIS preLink® Options







Ha-VIS preLink®: M12 D-Code Connectors







Assembly Tool

M12 preLink® Housing and Insert Connector Set

Ha-VIS preLink®	HARTING Part Number
Housing - shielded, straight	20820001210
Male Insert – 4pin	20820051214
Connector Set (housing and insert) – Male (buy cube separate)	20820050001
Connector Set (housing and insert) – Female (buy cube separate)	20820052001
RJ45 terminal block, AWG 22/23 (yellow) – 10 pieces	20820000001
RJ45 terminal block, AWG 26/27 (white) – 10 pieces	20820000003
RJ45 terminal block (4pin), AIDA compliant, AWG 23-22 (10 pieces) – Black	<u>20820000005</u>
RJ45 terminal block (4pin), AIDA compliant, AWG 23-22 (100 pieces) – Black	20820000005XL
Assembly Tool	20820009901

Ha-VIS preLink®: M12 X-Code Connectors









Terminal Block

M12 preLink® Housing and Insert Connector Set

Ha-VIS preLink®	HARTING Part Number
Housing - shielded, straight	20820001210
Male Insert – 8pin	20820061218
Connector Set (housing and insert) – Male (buy cube separate)	20820050002
Connector Set (housing and insert) – Female (buy cube separate)	<u>20820062001</u>
RJ45 terminal block, AWG 22/23 (yellow) – 10 pieces	20820000001
RJ45 terminal block, AWG 26/27 (white) – 10 pieces	20820000003
Assembly Tool	20820009901

Ha-VIS preLink®: Cable Assemblies







Ha-VIS preLink® preLink terminal to RJ45

Ha-VIS preLink® preLink terminal double sided

Ha-VIS preLink®	HARTING Part Number
Cat5 Type C 2x2xAWG22/7, preLink terminal to RJ45, PUR green, xx.xm	20826311xxx
Cat5 Type C 2x2xAWG22/7, preLink terminal double sided, PUR green, xx.xm	20826302xxx
Cat6a 4x2AWG27/7, preLink terminal with protection cap to flying leads, PUR yellow, xx.xm	20826001xxx
Cat6a 4x2AWG27/7, preLink terminal with protection cap - double ended, PUR yellow, xx.xm	20826002xxx
Cat6a 4x2AWG27/7, preLink terminal with protection cap to overmolded RJ45, PUR yellow, xx.xm	20826011xxx

PushPull Options

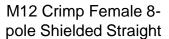




PushPull: M12 A-Code and Compatible Parts









M12 Crimp Male 4/5-pole slim design straight shielded

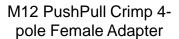
PushPull Connectors			
HARAX® / IDC Termination	HARTING Pa	rt Number	
4pin, shielded, slim design, AWG 22, for cable 5.7-8.8mm	21033221401	21033222401	
Crimp Termination			
4/5pin male shielded, crimp, straight, for cable 5.7-8.8mm	21038	<u>3211530</u>	
4/5pin male shielded, crimp, angled, for cable 5.7-8.8mm	21038213530		
8pin male shielded, crimp, straight, for cable 5.7-8.8mm	21038211830		
8pin female shielded, crimp, straight, for cable 5.7-8.8mm	21038212830		
8pin male shielded, crimp, angled, for cable 5.7-8.8mm	21038213830		
Crimp Termination - Panel Feed Through			
4/5pin female shielded, PFT, for cable 5.7-8.8mm	21038	<u>212525</u>	
8pin female shielded, PFT, straight, for cable 5.7-8.8mm	21038	<u>212825</u>	
8pin female shielded, PFT, straight, for cable 4.5-8.8mm	21038212835		
Through-Hole PCB Mounts	M	ale	
4pin straight PCB mount (w/o housing), screened version	21033	<u>3211418</u>	
5pin straight PCB mount (w/o housing), screened version	21033	<u>3211518</u>	
8pin straight PCB mount (w/o housing), screened version	21033	<u>3211818</u>	

Click $\underline{\text{here}}$ for Crimp Contacts and Tooling

PushPull: M12 D-Code and Compatible Parts









M12 PushPull Crimp 4-pole Male Shielded

PushPull Connectors	
HARAX® / IDC Termination	HARTING Part Number
4pin male shielded, HARAX/IDC, AWG 22, for cable 5.7-8.8mm	21033821401
4pin female shielded, HARAX/IDC, AWG 22, for cable 5.7-8.8mm	21033822401
Crimp Termination	
4pin male shielded, crimp, straight, for cable 5.7-8.8mm	21038811430
4pin male shielded, crimp, angled, for cable 5.7-8.8mm	21038813430
4pin female shielded, crimp, straight, for cable 5.7-8.8mm	21038812430
Female adapter to PushPull female (to convert standard female M12 to PushPull M12)	21033812403
Crimp Termination - Panel Feed Through version	
4pin shielded, PFT, straight, female, for cable 5.7-8.8mm **	21038812425
PCB Mounts	
4pin female, angled PCB mount w/o fixing hole**	21033814436
4pin female, angled PCB mount with fixing hole**	21033814437
Other	
4pin gender changer female/female**	21033816403

Click here for Crimp Contacts and Tooling

PushPull: M12 X-Code and Compatible Parts









M12 PushPull Crimp Male 8-pole Slim Design Angled

PushPull Connectors			
Crimp Termination	HARTING F	art Number	
8pin male connector, straight, for cable 5.7-8.8mm	21038	8811830	
8pin male connector, angled, for cable 5.7-8.8mm	21038	813830	
Crimp Termination – Panel Feed Through			
8pin female connector, PFT, straight, for cable 5.5-8.8mm	21038	812825	
Cat 6A PCB Mount Versions	Straight	Angled	
8pin female PCB without housing	21033812806	21033814806	
8pin female PCB with front panel mounting, (w/ housing 21033012003)	21033812802	21033814802	
8pin female PCB with front panel mounting, (w/ housing 21033012003) (individual piece)	21033812813	21033814810	
Cat 5 PCB Mount Versions			
8pin female PCB without housing, straight,	21033	812807	
8pin female PCB with front panel mounting, straight, (w/ housing 21033012003)	21033	812803	
8pin female PCB with front panel mounting, straight, (w/ housing 21033012003) (individual piece)	21033	812814	
Other			
8pin female/female gender changer, Cat6A	21033	<u>816816</u>	
M12 D-code (4pin) female to PushPull X-code (8pin) female gender changer	21033	816404	

Click here for Crimp Contacts and Tooling

Stainless Steel (INOX) Options

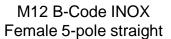




Stainless Steel (INOX) Options









M12 D-Code INOX Male 4-pole straight

M12 A-Code	HARTING Part Number	
Description	Male	Female
4pin female, HARAX® (IDC)		21032222435
4/5pin, crimp, for cable 4.5-8.8mm	21038222535	21038221535
M12 B-Code		
5pin, shielded, crimp, for cable diameter 4.5-8.8mm	21038411535	<u>21038412535</u>
M12 D-Code		
4pin, shielded, crimp, for cable diameter 4.5-8.8mm	21038821435	

Crimp Flange Options





Crimp Flange Connectors



- Innovative solutions from HARTING are always in development, and the latest circular product to come out is the M12 Crimp provides near-perfect shielding for the connector and cable. Crimp flange improves mechanical resistance and shielding by incorporating the crimp flange piece that crimps the cable and connector together for a solid connection. These have been specifically designed for rail application where higher shielding is required.
- Please contact HARTING's Tech Support for more information on this new product here.



Crimp Flange Options







M12 D-Code 4pin Male Straight, for cable 6.6mm

M12 A-Code 4/5pin Male Angled, for cable 6.0mm

Cable	Crimp Flange	Diameter
BETAtrans GKW C-flex R 600/1000V 2x0.75mm ²	21010100017	5.3mm
BETAtrans GKW C-FLEX R 600/1000V 4x0.75mm ²	21010100018	6.0mm
BETAtrans Data C-FLEX Cat5 1x4xAWG 22/7	21010100019	6.6mm
RADOX DATABUS 120 OHM 2x0.5mm ² +0.5mm ²	21010100020	7.8mm
BETAtrans Data C-FLEX 4x2xAWG24/7	21010100021	8.1mm
RADOX DATABUS 100 OHM Cat5 COM 4XAWG22	21010100022	7.3mm
DTREN150002-300V-4x0,5mm², Qadrax 100 Ohms- Filotex	21010100024	8.5mm
Connectors with Crimp Flange Set Included		
Using Crimp Flange Set 21010100017 (5.3mm)	Male	Female
M12 A-Code 4/5pin shielded, crimp, straight	21038211511	<u>21038212511</u>
M12 A-Code 4/5pin shielded, crimp, angled	21038213511	<u>21038214511</u>
Using Crimp Flange Set 21010100018 (6.0mm)		
M12 A-code 4/5pin shielded, crimp, straight	21038211512	21038212512
M12 A-code 4/5pin shielded, crimp, angled	21038213512	21038214512
Using Crimp Flange Set 21010100019 (6.6mm)		
M12 D-code 4pin shielded, crimp, straight	21038211512	21038212512
M12 D-code 4pin shielded, crimp, angled	21038213512	21038214512
Using Crimp Flange Set 21010100020 (7.8mm)		
M12 D-code 4pin shielded, crimp, straight	21038811412	21038812412

There are more crimp flange options available for specific cables, please contact HARTING's Tech Support for more information here.

Please use the links to see the datasheets that provide information on the corresponding tools and crimp inserts for each set.



Sensor Actuator Boxes



Sensor Actuator Boxes

- Power strips they're everywhere and commonly used when there are many devices that need power. Sensor actuator boxes are the same concept, except for M8/M12 connectors
- This allows easy and fast installation that can be close to the sensors / devices
- They can be applied in various industries including robotics, food + beverage, automation, and many more
- Click <u>here</u> to learn more about sensor actuator boxes
- See HARTING's selection on sensor actuator boxes <u>here</u>



M8 A-Code Snap-In Assemblies





M8 Snap-In A Code to M8 A Code

M8 Snap-In A Code to M12 A Code

M8 Snap-In A Code to M8 A-Code	HARTING Part Number		
Description	3pin	4pin	
Male angled to female straight 0.5m, PUR black	2136D3D5328005	2136D3D5428005	
Male angled to female straight 1m, PUR black	2136D3D5328010	2136D3D5428010	
Male angled to female straight 2m, PUR black	2136D3D5328020	2136D3D5428020	
M8 Snap-In A Code to M12 A-Code			
Male angled to female straight 0.5m, PUR black	2136D3D4328005	2136D3D4428005	
Male angled to female straight 1m, PUR black	2136D3D4328010	2136D3D4428010	
Male angled to female straight 2m, PUR black	2136D3D4328020	2136D3D4428020	

These cord sets are especially designed to work with HARTING Sensor Actuator Boxes.

The male angled M8 side of the connector allows for fast easy snap in connection.

M12 A-Code 4pin Assemblies for har-SAB









4pin Orange Overmolded Single Ended Assemblies (for SAB)	PUR Black
120degree angled male with black mating face for left side, 4xAWG22, xx.xm	2137B600430xxx
120degree angled male with orange mating face for right side, 4xAWG22, xx.xm	2137B700430xxx

For the M12 connection to sensor actuator boxes, straight circular connectors are normally used. However, they will result in an increased space requirement because of the bending radius. HARTING has set up M12 A-code overmolded cord sets which have a 120° angled cable entry to allow for a more efficient use of space. There are two different versions of the mating face in order to simplify orientation - the mating face for the left side is black while the right side is orange.

The articles can be ordered by following P/N:





Mating Face Left, 0°, black	Mating Face Right, 90°, orange	Length
2137B600430010	2137B700430010	1,0m
2137B600430020	2137B700430020	2,0m
2137B600430030	2137B700430030	3,0m
2137B600430050	2137B700430050	5,0m

Han® M23 Connectors





Han® M23 Connectors

- The combination of signal, data, and power pins allows M23 circular connectors to have a variety of applications
- Robust hoods and housings allow them to withstand harsh environments
- See HARTING's selection on M23 connectors here



M12 Ethernet Switches







- Ethernet switches are needed for networks in production facilities, and HARTING has a wide variety of switches available – including the Ha-VIS eCon 4000 and 9000 families with an M12 interface.
- Click <u>here</u> to see HARTING's selection on Ethernet switches
- Follow this <u>link</u> to see a flyer for Ethernet switches

Accessories







TABLE OF CONTENTS

Housings and Lock Nuts





M12 Housing Rear Mount for Male PCB Mount



Metal Lock Nut PG 13.5

Housings	HARTING Part Number	
Description	Male	Female
M12 Housing, rear mount, for PCB mount	21033011000	21033012000
M12 Housing, front mount, for PCB mount**	21033011003	21033012003
M12 SMT Housing M14x1, 9mm height	21410000012	21410000010
M12 SMT Housing M14x1, 13mm height		21410000013
SMT Counter Nut M14x1	21410000011	
Lock Nuts		
Metal Lock Nut M16 (SW18)	21010000018	
Metal Lock Nut PG13.5 (SW23)	21010000020	
Lock Nut - PG13.5 (SW24)	<u>21010000039</u>	

Caps and Covers





Plastic Dust Cap for M12 (Viton)



Plastic Cover for M12 Female w/ lanyard for cable

Caps and Covers	HARTING Part Number	
Description	Male	Female
Metal Cover for M12 w/ lanyard for cable	21010000033	21010000030
Metal Cover for M12 w/ lanyard with small eyelet (lanyard screwed to cap)	21010000038	21010000031
Plastic Dust Cap for M12 (Viton)	21010000003	
Plastic Cover for M12 w/ lanyard for cable	21410000001	21410000002
Plastic Cover for M8 w/ lanyard for cable	21410000003	21410000004

Crimp Contacts and Tooling for A, B, D, X, Coding









D-Sub Crimp Tool Locator for M12 A-Code

A, B, D Code Tools and Crimp Contacts	HARTING Part Number	
Description	Male	Female
D-Sub Turned Contact for AWG 22-18 PL1	09670003576	09670003476
D-Sub Turned Contact for AWG 24-20 PL1	09670008576	09670008476
D-Sub Turned Contact for AWG 26-22 PL1	09670005576	09670005476
D-Sub Crimp Tool (Turned Contacts)	<u>09990000501</u>	
D-Sub Crimp Tool Locator for D-Sub turned contacts	0999000531	
8-pin Crimp Contacts and Tools		
M12 A-code 8pin contact AWG26-22 (0.13-0.33mm2), PL1	21011009020	21011009025
D-Sub Crimp Tool Locator for M12 A-code 8pin contacts	61036000023	09990000637
X-Code Tools and Crimp Contacts		
M12 X-code contact AWG28-24 (0.08-0.22mm2), PL1	21011009014	21011009023
M12 X-code contact AWG26-23 (0.13-0.25mm2), PL1	21011009019	21011009021
D-Sub Crimp Tool (Turned Contacts)	<u>09990000501</u>	
D-Sub Crimp Tool Locator for X-code male contacts	09990000525	
D-Sub Crimp Tool Locator for X-code female contacts	<u>09990000635</u>	

M12 L-Code Crimp Contacts and Tooling









M12 Power Contact Male AWG16 M12 Power Contact Female AWG14 M12 D-Sub Crimp Tool for Power Contacts

Crimp Contacts and Tooling	HARTING Part Number	
Description	Male	Female
D-Sub Crimp Tool for Power Contacts	0999000509	
D-Sub Crimp Tool Locator for M12 L-Code Power Contacts	0999000638	
M12 Power Contact, 23.2mm, AWG21 / 0.5mm2	21011009923	21011009931
M12 Power Contact, 23.2mm, AWG20 / 0.75mm2	21011009924	21011009932
M12 Power Contact, 23.2mm, AWG16 / 1.5mm2	21011009925	21011009933
M12 Power Contact, 23.2mm, AWG14 / 2.5mm2	21011009926	21011009934
M12 Power PE Contact, male, 24.8mm, AWG21 / 0.5mm2	21011009927	
M12 Power PE Contact, male, 24.8mm, AWG20 / 0.75mm2	21011009928	
M12 Power PE Contact, male, 24.8mm, AWG16 / 1.5mm2	21011009929	
M12 Power PE Contact, male, 24.8mm, AWG14 / 2.5mm2	21011009930	

M8 / M12 / 7/8" Dynamometric Screwdrivers







M8 Dynamometric Screwdriver

M12 - L Dynamometric Screwdriver

Description	HARTING Part Number
M8 Dynamometric Torque Screwdriver, SW9 (0.4Nm)	0999000380
M12 Dynamometric Torque Screwdriver, SW13 (0.6Nm) for M12-S	09990000382
M12 Dynamometric Torque Screwdriver, SW15 (0.6Nm) for M12 Slim Design	0999000646
M12 Dynamometric Torque Screwdriver, SW17 (0.6Nm) for M12-L	09990000384
7/8" Dynamometric Torque Screwdriver, SW22 (1.5Nm)	09990000395