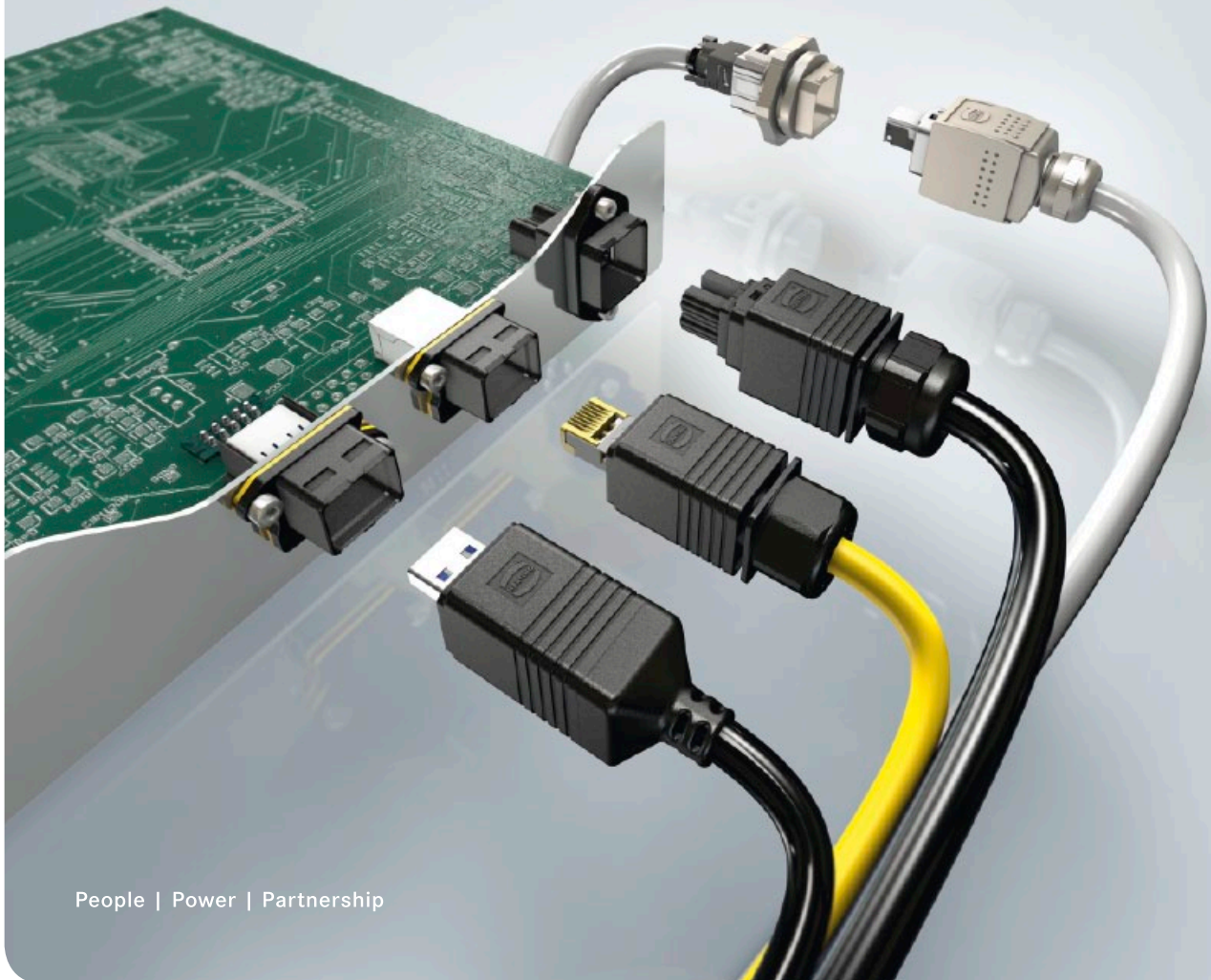




Pushing Performance



People | Power | Partnership

# HARTING

## PushPull Selection Guide

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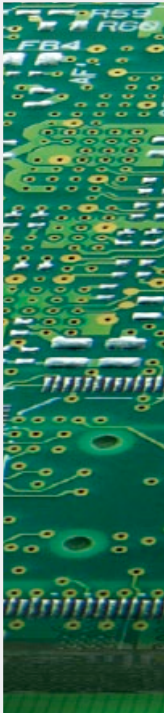
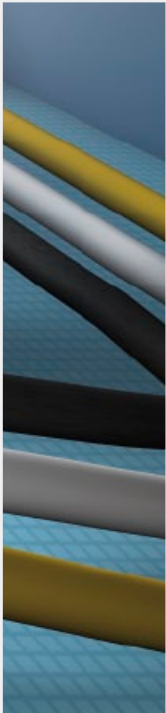
# HARTING PushPull Device Connectivity for Signal – Data – Power

HARTING Connectivity & Networks generates solutions throughout the triad of Installation Technology, Device Connectivity, and Automation IT for all automation lifelines – namely data, signals and power. In line with this strategic course, the HARTING PushPull equipment interfaces provide universal solutions for specific user applications. The range of available contact inserts extends from solutions for 1/10 Gigabit Ethernet through to 690 V / 16 A power supply applications.

A consistent, ongoing innovation process ensures that users of HARTING's continuously expanding PushPull product range always benefit from the latest interface technology – combining the life lines of devices in IP 65/67 housings with simple and reliable operation.

This Selection Guide supports you in choosing the ideal solution for your specific application from one the numerous interface combinations available, while keeping the focus set squarely on the specific lifeline to be transferred. Based on the interface function required, you select the suitable contact insert for the PCB and a corresponding bulkhead housing, and complete the connection by opting for the appropriate connectors, system cables, and accessories. The housing's size depends on the contact insert you selected, while environmental conditions determine the housing material.

Drawing on these strengths, PushPull is an ideal solution for IP 65/67 Device Connectivity featuring convenient handling and universal functionality for all lifelines.

DEVICE SIDE		CABLE SIDE	
HOUSING MATERIALS	CONTACT INSERT	CONTACT INSERT	HOUSING MATERIALS
 <ul style="list-style-type: none"> <li>• METAL</li> <li>• PLASTIC</li> </ul>	<b>DATA</b>		 <ul style="list-style-type: none"> <li>• METAL</li> <li>• PLASTIC</li> </ul>
	RJ45		
	LC duplex		
	SCRJ		
	USB		
	<b>SIGNAL</b>		
	Hybrid 48 V / 5 A + 100 MBit Ethernet		
	50 V / 5 A 10 poles		
	<b>POWER</b>		
	48 V / 5 A 4 poles		
250 V / 16 A 3 poles			
400/690 V / 16 A 5 poles			
24 V / 16 A 5 poles			

DIRECT DEVICE INTEGRATION ON PCB			
	HARTING PushPull EasyInstall bulkhead housing for device integration	Metal, angled, without fixing clip	09 45 595 0030
		Metal, angled, with fixing clip	09 45 595 0031
	HARTING PushPull Compact bulkhead housing for device integration	Plastic, angled, without fixing clip	09 45 545 0030
		Plastic, angled, with fixing clip	09 45 545 0031
	HARTING PushPull RJ45 jack, Cat. 5	Plastic, angled, without fixing clip	09 45 545 0023/... 33
		Plastic, angled, with fixing clip	09 45 545 0021/... 29
	HARTING PushPull RJ45 jack, Cat. 5	Plastic, straight, without fixing clip	09 45 545 0027
		angled SMD 90°	09 45 551 1100
	HARTING PushPull RJ45 jack, Cat. 5	angled SMD 90° T&R packaging	09 45 551 1110
		angled 90°, THT	09 45 551 1102
	HARTING PushPull RJ45 jack, Cat. 5	straight 180°, THT	09 45 551 1103

DEVICE INTEGRATION WITH PANEL FEED THROUGH

	HARTING PushPull RJ45 panel feed through, metal	EasyInstall, Cat. 5	09 45 295 1130
	HARTING PushPull RJ45 panel feed through, plastic	EasyInstall, Cat. 5 EasyInstall, Cat. 6 Compact, Cat. 5 Compact, Cat. 6	09 45 245 1130 09 45 245 1590 09 45 245 1102 09 45 245 1560
	HARTING PushPull RJ45 panel feed through, plastic with cable jack	EasyInstall housing Compact housing Cable jack, 8 pole, Cat. 6, AWG 28 - 24 Cable jack, 8 pole, Cat. 6, AWG 24 - 22	09 45 545 0032 09 45 545 0028 09 45 545 1561 09 45 545 1562

V4

CONNECTOR CABLE SIDE

	HARTING PushPull RJ45 connector with IDC- or piercing termination, metal	4 poles, Cat. 5 IDC 8 poles, Cat. 6 <sub>A</sub> 8 poles, Cat. 6 IDC	09 45 195 1100 09 45 195 1520 09 45 195 1560
	HARTING PushPull RJ45 connector with IDC- or piercing termination, plastic	4 poles, Cat. 5 IDC 8 poles, Cat. 6 <sub>A</sub> 8 poles, Cat. 6 IDC	09 45 145 1100 09 45 145 1520 09 45 145 1560

SYSTEM CABLE PUR, RJ45, 8 POLES

	HARTING PushPull system cable RJ45, 8 poles, Cat. 6, yellow, PUR cable 8x AWG 26/7 stranded (other cable types and length on request)	1.5 m	09 45 744 1523
		3.0 m	09 45 744 1525
		5.0 m	09 45 744 1527
		10.0 m	09 45 744 1532

OUTLETS

	HARTING PushPull RJ45 outlet, Cat. 6, 2 times	Plastic, black Plastic, white	09 45 845 1500 09 45 845 1501
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DIRECT DEVICE INTEGRATION ON PCB




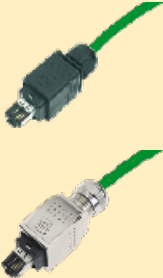
	Han® PushPull RJ45 bulkhead housing for device integration	Metal Plastic	09 35 002 0301 09 35 002 0321
	Han® PushPull RJ45 jack insert for PCB mounting, 8 poles, shielded, Cat. 6, with straight and angled solder pins	angled 90° straight 180°	09 35 002 2101 09 35 002 2102

V14


DEVICE INTEGRATION WITH PANEL FEED THROUGH

	Han® PushPull RJ45, panel feed through with RJ45 contact insert, 8 poles	Metal, straight, Cat. 6, rectangular Metal, straight, Cat. 6, circular Plastic, straight, Cat. 6	09 35 225 0311 09 35 225 0312 09 35 225 0331
	Han® PushPull RJ45, panel feed through with cable jack	Metal housing, rectangular Metal housing, circular Plastic housing, rectangular Cable jack, 8 pole, Cat. 6, AWG 28 - 24 Cable jack, 8 pole, Cat. 6, AWG 24 - 22	09 35 012 0311 09 35 012 0312 09 35 012 0331 09 45 545 1561 09 45 545 1562



V14

CONNECTOR CABLE SIDE				
	Han® PushPull RJ45, connector, with IDC- or piercing termination	Metal, RJ45 4 poles, Cat. 5 IDC Metal, RJ45 4 poles, Cat. 5, IDC, PROFINET Metal, RJ45 8 poles, Cat. 6A Metal, RJ45 8 poles, Cat. 6 IDC Metal, angled, cable exit bottom, RJ45 8 poles, Cat. 6 IDC Metal, angled, cable exit top, RJ45 8 poles, Cat. 6 IDC	09 35 221 0401 09 35 226 0401 09 35 227 0401 09 35 225 0401 09 35 225 0402 09 35 225 0403	
	Han® PushPull RJ45, connector, with IDC- or piercing termination	Plastic, RJ45 4 poles, 6.5 - 9.5 mm, IDC Plastic, RJ45 4 poles, 5 - 8 mm, IDC Plastic, RJ45 4 poles, Cat. 5, IDC, PROFINET Plastic, RJ45 8 poles, Cat. 6 Plastic, RJ45 8 poles, Cat. 6 IDC	09 35 221 0421 09 35 222 0421 09 35 226 0421 09 35 227 0421 09 35 225 0421	
ACCESSORIES				
	Han® PushPull RJ45, gender changer / cable coupling, 8 poles, Cat. 6, class E <sub>A</sub>	Gender changer RJ45, metal Cable coupling, metal	09 35 221 0501 61 04 201 1084	
SYSTEM CABLE				
	Han® PushPull system cable RJ45, 4 poles type A, round cable, green, copper, shielded, outer jacket PVC, Cat. 5, 10/100 Mbit/s (other cable types and lengths on request)	Length	Metal	Plastic
		1.5 m	09 47 565 6003	09 47 555 5003
		3.0 m	09 47 565 6005	09 47 555 5005
		5.0 m	09 47 565 6007	09 47 555 5007
		10.0 m	09 47 565 6012	09 47 555 5012
	20.0 m	09 47 565 6014	09 47 555 5014	
	Han® PushPull system cable RJ45, 4 poles type B, round cable, green, copper, shielded, outer jacket PVC, Cat. 5, 10/100 Mbit/s (other cable types and lengths on request)	1.5 m	09 47 565 6033	09 47 555 5033
		3.0 m	09 47 565 6035	09 47 555 5035
		5.0 m	09 47 565 6037	09 47 555 5037
10.0 m		09 47 565 6042	09 47 555 5042	
20.0 m	09 47 565 6044	09 47 555 5044		
Han® PushPull system cable RJ45, 4 poles type C, round cable, green, copper, shielded, outer jacket PUR, Cat. 5, 10/100 Mbit/s (other cable types and lengths on request)	1.5 m	09 47 565 6063	09 47 555 5063	
	3.0 m	09 47 565 6065	09 47 555 5065	
	5.0 m	09 47 565 6067	09 47 555 5067	
	10.0 m	09 47 565 6072	09 47 555 5072	
	20.0 m	09 47 565 6074	09 47 555 5074	

V4  
V14

TOOLING			
	HARTING RJ Industrial® stripping tool	Stripping for Ethernet cable inclusive blade cassette	09 45 800 0000
		Blade cassette	09 45 800 0001
	HARTING RJ Industrial® universal stripping tool		09 45 800 0002
	HARTING RJ Industrial® cable cutter		09 45 800 0004
	HARTING RJ Industrial® side cutter		09 45 800 0005
	HARTING RJ Industrial® Gigalink mounting tool	for HARTING RJ Industrial® Gigalink connectors	09 45 800 0520








V4





DEVICE INTEGRATION WITH PANEL FEED THROUGH			
	HARTING PushPull LC duplex panel feed through	Metal, multimode GOF EasyInstall Metal, singlemode GOF EasyInstall Plastic, multimode GOF EasyInstall Plastic, singlemode GOF EasyInstall Plastic, multimode GOF Compact Plastic, singlemode GOF Compact	09 57 468 0500 000 09 57 468 0501 000 09 57 441 0500 000 09 57 441 0501 000 09 57 442 0502 001 09 57 442 0503 001
CONNECTOR CABLE SIDE			
	HARTING PushPull metal LC duplex cable connector Different cable types and lengths are available on request	Metal, multimode GOF Metal, singlemode GOF Plastic, multimode GOF Plastic, singlemode GOF	09 57 409 0500 000 09 57 409 0501 000 09 57 402 0500 000 09 57 402 0501 000





V14

DIRECT DEVICE INTEGRATION ON PCB			
	Han® PushPull SCRJ bulkhead housing for device integration	Metal Plastic	09 35 002 0303 09 35 002 0323
DEVICE INTEGRATION WITH PANEL FEED THROUGH			
	Han® PushPull SCRJ panel feed through, duplex, for multimode-glass, HCS- and polymer fibres	Metal, optical panel feed through Plastic, optical panel feed through	09 35 242 0313 09 35 242 0333
CONNECTOR CABLE SIDE			
	Han® PushPull SCRJ connector, duplex, for multimode-glass, HCS- and polymer fibres	Metal, inclusive 2x SC POF contacts Metal, order SC contacts separately Metal, inclusive 2x SC POF crimp contacts Plastic, inclusive 2x SC POF contacts Plastic, order SC contacts separately	09 35 241 0401 09 35 241 0402 09 35 242 0401 09 35 241 0421 09 35 241 0422
	IP 20 SCRJ POF connector, duplex, plastic	inclusive 2x SC POF contacts	09 35 002 4002
TOOLING			
	Mounting case POF, cutting without polishing	for field termination of SC-POF contacts for field termination of SC-crimp contacts	09 35 000 9913 09 35 000 9915
SYSTEM CABLE			
	IP 20 cable assembly, round cable, green, outer jacket PUR, both sides assembled with SCRJ IP 20 connector (other cable types and lengths on request)	1.0 m 2.0 m 5.0 m 10.0 m 20.0 m	33 02 211 0010 001 33 02 211 0020 001 33 02 211 0050 001 33 02 211 0100 001 33 02 211 0200 001
	Cable assembly, round cable, green, outer jacket PUR, both sides IP 65 / IP 67, plastic version (other cable types and lengths on request)	1.0 m 2.0 m 5.0 m 10.0 m 20.0 m	33 53 211 0010 001 33 53 211 0020 001 33 53 211 0050 001 33 53 211 0100 001 33 53 211 0200 001
	Cable assembly, round cable, green, outer jacket PUR, both sides IP 65 / IP 67, metal version (other cable types and lengths on request)	1.0 m 2.0 m 5.0 m 10.0 m 20.0 m	33 53 211 0010 002 33 53 211 0020 002 33 53 211 0050 002 33 53 211 0100 002 33 53 211 0200 002

V4

DIRECT DEVICE INTEGRATION ON PCB			
	HARTING PushPull EasyInstall bulkhead housing for device integration	Plastic, angled, without fixing clip Plastic, angled, with fixing clip	09 45 545 0030 09 45 545 0031
	HARTING PushPull Compact bulkhead housing for device integration	Plastic, angled, without fixing clip Plastic, angled, with fixing clip	09 45 545 0023/... 33 09 45 545 0021/... 29
	HARTING PushPull USB solder jack, angled 90°, THT	USB 2.0 type B	09 45 541 1900
	HARTING PushPull USB adapter PCB	USB 2.0 type A to pin header USB 3.0 type A to solder points USB 2.0 type B-B USB 2.0 type A-B	09 45 541 1902 09 45 541 1905 09 45 541 1906 09 45 541 1910
DEVICE INTEGRATION WITH PANEL FEED THROUGH			
	HARTING PushPull USB Compact, panel feed through, jack to jack	USB 2.0 type A USB 3.0 type A	09 45 245 1902 09 45 245 1904
	HARTING PushPull USB EasyInstall, panel feed through, jack to jack	USB 2.0 type A USB 3.0 type A	09 45 245 1903 09 45 245 1905
SYSTEM CABLE			
	HARTING PushPull USB shielded system cable (other cable types and lengths on request)	USB 2.0 type B, double sided PushPull 1.5 m USB 2.0 type A, double sided PushPull 1.5 m USB 3.0 type A, double sided PushPull 1.5 m	09 45 145 3902 09 45 145 1902 09 45 145 2902
		USB 2.0 type B, PushPull - IP 20 1.5 m USB 2.0 type A, PushPull - IP 20 1.5 m USB 3.0 type A, PushPull - IP 20 1.5 m	09 45 145 3912 09 45 145 1912 09 45 145 2912

SIGNAL (HYBRID – DATA + POWER)	V4	DIRECT DEVICE INTEGRATION ON PCB			
			HARTING PushPull Hybrid Compact bulkhead housing for device integration	Plastic, straight Plastic, angled	09 45 545 1320 09 45 545 1325
			HARTING PushPull Hybrid shielded jack insert, THT, power: 3 poles, 48 V / 5 A; data: 4 poles Cat. 5 for 10/100 Mbit Ethernet	straight 180° angled 90°	09 45 545 1300 09 45 545 1305
		DEVICE INTEGRATION WITH PANEL FEED THROUGH			
			HARTING PushPull Hybrid panel feed through, power: 3 poles terminal block 0.08 – 2.5 mm <sup>2</sup> , 48 V / 5 A; data: RJ45 jack 8 poles Cat. 5 for 10/100 Mbit Ethernet	Plastic	09 45 245 1320
		SYSTEM CABLE			
	HARTING PushPull Hybrid shielded system cable, power: 3 poles, 48 V / 5 A; data: 4 poles Cat. 5 for 10/100 Mbit Ethernet	System cable double sided PushPull 0.5 m System cable double sided PushPull 1.0 m System cable double sided PushPull 2.0 m System cable double sided PushPull 3.0 m System cable double sided PushPull 5.0 m System cable double sided PushPull 10.0 m System cable double sided PushPull 20.0 m	09 47 616 1005 09 47 616 1010 09 47 616 1020 09 47 616 1030 09 47 616 1050 09 47 616 1100 09 47 616 1200		
	HARTING PushPull Hybrid shielded system cable, power: 3 poles, 48 V / 5 A; data: 4 poles Cat. 5 for 10/100 Mbit Ethernet	System cable single sided PushPull 0.5 m System cable single sided PushPull 1.0 m System cable single sided PushPull 2.0 m System cable single sided PushPull 3.0 m System cable single sided PushPull 5.0 m System cable single sided PushPull 10.0 m System cable single sided PushPull 20.0 m	09 47 610 0005 09 47 610 0010 09 47 610 0020 09 47 610 0030 09 47 610 0050 09 47 610 0100 09 47 610 0200		

SIGNAL 10 POLES	V4	DEVICE INTEGRATION WITH PANEL FEED THROUGH			
			HARTING PushPull Signal panel feed through, 10 poles, 50 V / 5 A, plastic	EasyInstall housing Compact housing Insert for crimp contacts (Order male D-Sub contacts separately)	09 45 545 0032 09 45 545 0028 09 45 545 9010
		CONNECTOR CABLE SIDE			
		HARTING PushPull Signal connector, 10 poles, 50 V / 5 A, plastic	Connector for crimp contacts (Order female D-Sub contacts separately)	09 45 145 9010	
	V14	DEVICE INTEGRATION WITH PANEL FEED THROUGH			
			Han® PushPull Signal panel feed through, 10 poles, 50 V / 5 A	Metal housing, rectangular Metal housing, circular Plastic housing, rectangular Insert for crimp contacts (Order male D-Sub contacts separately)	09 35 012 0311 09 35 012 0312 09 35 012 0331 09 45 545 9010
CONNECTOR CABLE SIDE					
	Han® PushPull Signal connector, 10 poles, 50 V / 5 A	Metal connector for crimp contacts Plastic connector for crimp contacts (Order female D-Sub contacts separately)	09 35 261 0401 09 35 261 0421		



## POWER (48 V / 5 A)

V4

DIRECT DEVICE INTEGRATION ON PCB			
	HARTING PushPull EasyInstall bulkhead housing for device integration	Metal, angled, without fixing clip Plastic, angled, without fixing clip Plastic, angled, with fixing clip	09 45 595 0030 09 45 545 0030 09 45 545 0031
	HARTING PushPull Compact bulkhead housing for device integration	Plastic, angled, without fixing clip Plastic, angled, with fixing clip	09 45 545 0023/... 33 09 45 545 0021/... 29
	HARTING PushPull Power jack insert, 4 poles, 48 V / 12 A	angled, 90° for PCB mounting straight, 180° for PCB mounting straight, for crimp contacts	09 46 500 4400 09 46 500 4402 09 46 500 4401
DEVICE INTEGRATION WITH PANEL FEED THROUGH			
	HARTING PushPull Power panel feed through, 4 poles 48 V / 12 A, metal	EasyInstall without crimp contacts EasyInstall with spring-cage connection	09 46 295 4430 09 46 295 4031
	HARTING PushPull Power panel feed through, 4 poles 48 V / 12 A, plastic	EasyInstall with crimp contacts AWG 16 - 14 Compact with crimp contacts AWG 16 - 14 EasyInstall with spring-cage connection Compact with spring-cage connection	09 46 245 4430 09 46 245 4400 09 46 245 4031 09 46 245 4001
CONNECTOR CABLE SIDE			
	HARTING PushPull Power connector, 4 poles 48 V / 12 A	Metal, without contacts	09 46 195 4400
	HARTING PushPull Power connector, 4 poles 48 V / 12 A	Plastic, with crimp contacts AWG 16 - 14 Plastic, without contacts	09 46 145 4400 09 46 145 4401




## POWER (250 V / 16 A)


V4






DEVICE INTEGRATION WITH PANEL FEED THROUGH			
	HARTING PushPull Power panel feed through, 3 poles 250 V / 16 A, plastic	EasyInstall with crimp contacts AWG 16 - 14 Compact with crimp contacts AWG 16 - 14 Power female with solder termination, angled Power female with crimp termination, without contacts	09 46 245 3430 09 46 245 3410 09 46 500 3400 09 46 500 3401
CONNECTOR CABLE SIDE			
	HARTING PushPull Power connector, 3 poles 250 V / 16 A	Plastic, with crimp contacts AWG 16 - 14 Plastic, without contacts	09 46 145 3410 09 46 145 3411

## POWER (ACCESSORIES)

V4



ACCESSORIES			
	HARTING PushPull Power female crimp contacts for HARTING PushPull panel feed through	for 0.75 mm <sup>2</sup> (AWG 20 - 18) for 1.0 mm <sup>2</sup> (AWG 18) for 1.0 - 1.5 mm <sup>2</sup> (AWG 16 - 14) for 2.5 mm <sup>2</sup> (AWG 12)	09 46 500 0404 09 46 500 0408 09 46 500 0402 09 46 500 0406
	HARTING PushPull Power male crimp contacts for HARTING PushPull connector	for 0.75 mm <sup>2</sup> (AWG 20 - 18) for 1.0 mm <sup>2</sup> (AWG 18) for 1.0 - 1.5 mm <sup>2</sup> (AWG 16 - 14) for 2.5 mm <sup>2</sup> (AWG 12)	09 46 500 0403 09 46 500 0407 09 46 500 0401 09 46 500 0405
	HARTING PushPull Power coding pin set	for 4 different codings	09 46 840 0000

DIRECT DEVICE INTEGRATION ON PCB			
	Han® PushPull Power bulkhead housing for device integration	Metal Plastic	09 35 002 0303 09 35 002 0323
	Han® PushPull Power, jack insert for PCB mounting, 5 poles, 16 A, 400/480 V, with straight and angled solder pins	angled 90° straight 180°	09 35 002 3003 09 35 002 3004
DEVICE INTEGRATION WITH PANEL FEED THROUGH			
	Han® PushPull Power, panel feed through, 5 poles, 16 A, 690 V, with crimp or Quick Lock®-termination, touch-proof, 4 times codeable, order Han® P male crimp contacts separately	Metal, crimp termination – rectangular cut-out Metal, Quick Lock® termination, 0.5 ... 2.5 mm <sup>2</sup> Metal, Quick Lock® termination, 0.25 ... 1.5 mm <sup>2</sup> Metal, crimp termination – circular cut-out Metal, Quick Lock® termination, 0.5 ... 2.5 mm <sup>2</sup> Metal, Quick Lock® termination, 0.25 ... 1.5 mm <sup>2</sup>	09 35 231 0311 09 35 232 0311 09 35 234 0311 09 35 231 0312 09 35 232 0312 09 35 234 0312
		Plastic, crimp termination – rectangular cut-out Plastic, Quick Lock® termination, 0.5 ... 2.5 mm <sup>2</sup> Plastic, Quick Lock® termination, 0.25 ... 1.5 mm <sup>2</sup> Plastic, crimp termination – circular cut-out Plastic, Quick Lock® termination, 0.5 ... 2.5 mm <sup>2</sup> Plastic, Quick Lock® termination, 0.25 ... 1.5 mm <sup>2</sup>	09 35 231 0331 09 35 232 0331 09 35 234 0331 09 35 231 0332 09 35 232 0332 09 35 234 0332
CONNECTOR CABLE SIDE			
	Han® PushPull Power, connector, 5 poles, 16 A, 690 V, with crimp or Quick Lock®-termination, cable diameter 4-11 mm (metal), 6.5-9.5 / 9-13 mm (plastic), touch-proof, 4 times codeable, order Han® P female crimp contacts separately	Metal, crimp termination Metal, Quick Lock® termination, 0.5 ... 2.5 mm <sup>2</sup> Metal, Quick Lock® termination, 0.25 ... 1.5 mm <sup>2</sup>	09 35 231 0401 09 35 232 0401 09 35 234 0401
		Plastic, crimp termination, 9 - 13 mm Plastic, Quick Lock® termination, 6.5 - 9.5 mm, 0.5 ... 2.5 mm <sup>2</sup> Plastic, Quick Lock® termination, 6.5 - 9.5 mm, 0.25 ... 1.5 mm <sup>2</sup> Plastic, Quick Lock® termination, 9 - 13 mm, 0.5 ... 2.5 mm <sup>2</sup>	09 35 231 0423 09 35 232 0421 09 35 234 0421 09 35 232 0423
ACCESSORIES			
	Han® PushPull Power coding key set, 4 times codeable, set includes 10 pieces for device and cable side each	Coding keys	09 35 000 6190
	Han® P male crimp contacts for Han® PushPull Power panel feed through	for 0.5 mm <sup>2</sup> for 0.75 mm <sup>2</sup> for 1.0 mm <sup>2</sup> for 1.5 mm <sup>2</sup> for 2.5 mm <sup>2</sup>	09 35 000 6103 09 35 000 6104 09 35 000 6105 09 35 000 6106 09 35 000 6107
	Han® P female crimp contacts for Han® PushPull Power connector	for 0.5 mm <sup>2</sup> for 0.75 mm <sup>2</sup> for 1.0 mm <sup>2</sup> for 1.5 mm <sup>2</sup> for 2.5 mm <sup>2</sup>	09 35 000 6203 09 35 000 6204 09 35 000 6205 09 35 000 6206 09 35 000 6207

DIRECT DEVICE INTEGRATION ON PCB			
	Han® PushPull Power L bulkhead housing for device integration	Metal Plastic	09 35 004 0301 09 35 004 0321
	Han® PushPull Power L, jack insert for PCB mounting, 5 poles, 16 A, 24 V, with straight and angled solder pins	angled 90°, fixed coding, 24 V straight 180°, fixed coding, 24 V	09 35 004 3003 09 35 004 3004
DEVICE INTEGRATION WITH PANEL FEED THROUGH			
	Han® PushPull Power L, panel feed through, 5 poles, 16 A, 24 V, spring-cage connection, 0.75 - 2.5 mm <sup>2</sup> , touch-proof	Metal, fixed coding, 24 V acc. PNO Guideline Metal, variable coding Plastic, fixed coding, 24 V acc. PNO Guideline	09 35 431 0311 09 35 431 0313 09 35 431 0331
CONNECTOR CABLE SIDE			
	Han® PushPull Power L, connector, 5 poles, 16 A, 24 V, spring-cage connection, 0.75 - 2.5 mm <sup>2</sup> , cable diameter 9-13 mm, touch-proof	Metal, fixed coding, 24 V acc. PNO Guideline Metal, variable coding Plastic, fixed coding, 24 V acc. PNO Guideline	09 35 431 0401 09 35 432 0401 09 35 431 0421
ACCESSORIES			
	Han® PushPull Power L, gender changer, 5 poles, 16 A, 24 V	Gender changer Power L	09 35 431 0501
	Han® PushPull Power L, protection cover IP 65 / IP 67	for bulkhead housing for cable side	09 35 004 5401 09 35 004 5411



POWER (ACCESSORIES)

		TOOLING V4		
V4		HARTING PushPull Power crimping tool		09 46 800 0000
		Insertion and removal tools for HARTING PushPull Power contacts	Removal tool Insertion tool	09 46 800 0098 09 46 800 0099
		Locator for HARTING PushPull Power contacts	for use with crimping tool 09 99 000 0001	09 46 800 0010
		TOOLING V14		
V14		Crimping tool	Wire gauge: 0.14 - 2.5 mm <sup>2</sup>	09 99 000 0001
		Locator Han P <sup>®</sup>	for crimping tool	09 99 000 0329
		Multiple crimping tool depth adjustment gauge, wire gauge: 0.5 - 1 mm <sup>2</sup> and 1.5 - 2.5 mm <sup>2</sup>	for crimping tool	09 99 000 0379
		Removal tool Han P <sup>®</sup>	for Han P <sup>®</sup> contacts	09 99 000 0319

ACCESSORIES

		ACCESSORIES V4		
V4		HARTING PushPull protection covers for Hybrid Signal, USB, RJ45, Power and LC duplex, device side, plastic	Protection cover IP 40	09 45 845 0003
			Protection cover IP 65 / IP 67, passive locking without fixing cord passive locking with plastic fixing cord passive locking with nylon fixing cord	09 45 845 0009 024 09 45 845 0009 09 45 845 0011 024
			Protection cover IP 65 / IP 67, active locking without fixing cord active locking with plastic fixing cord active locking with nylon fixing cord	09 45 845 0015 09 45 845 0014 09 45 845 0013
		HARTING PushPull protection covers for Hybrid Signal, USB, RJ45, Power and LC duplex, connector, plastic	Protection cover IP 65 / IP 67, with fixing cord	09 45 845 0010
		Security clip for connectors		09 45 845 0020
		HARTING PushPull housings, plastic	Cable to cable, cable diameter 6.5 - 9.5 mm Bulkhead	09 45 345 0000 09 45 345 0001
		ACCESSORIES V14		
V14		Han <sup>®</sup> PushPull protection cover, plastic, for RJ45, SCRJ, Power, Signal, device side, passive locking	Protection cover IP 40	09 35 002 5401
			Protection cover IP 65 / IP 67 without fixing cord with plastic fixing cord with nylon fixing plastic cord	09 35 002 5403 XL 09 35 002 5402 09 35 002 5404
			Protection cover IP 40	09 35 002 5412
		Han <sup>®</sup> PushPull protection cover, plastic, for RJ45, SCRJ, Power, Signal, cable side	Protection cover IP 65 / IP 67 without fixing cord with nylon fixing cord	09 35 002 5411 09 35 002 5413
		Han <sup>®</sup> PushPull cable to cable plastic housing	for outer cable diameter 6.5 ... 9.5 mm for outer cable diameter 9 ... 13 mm	09 35 002 0431 09 35 002 0433



**Pushing Performance**

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