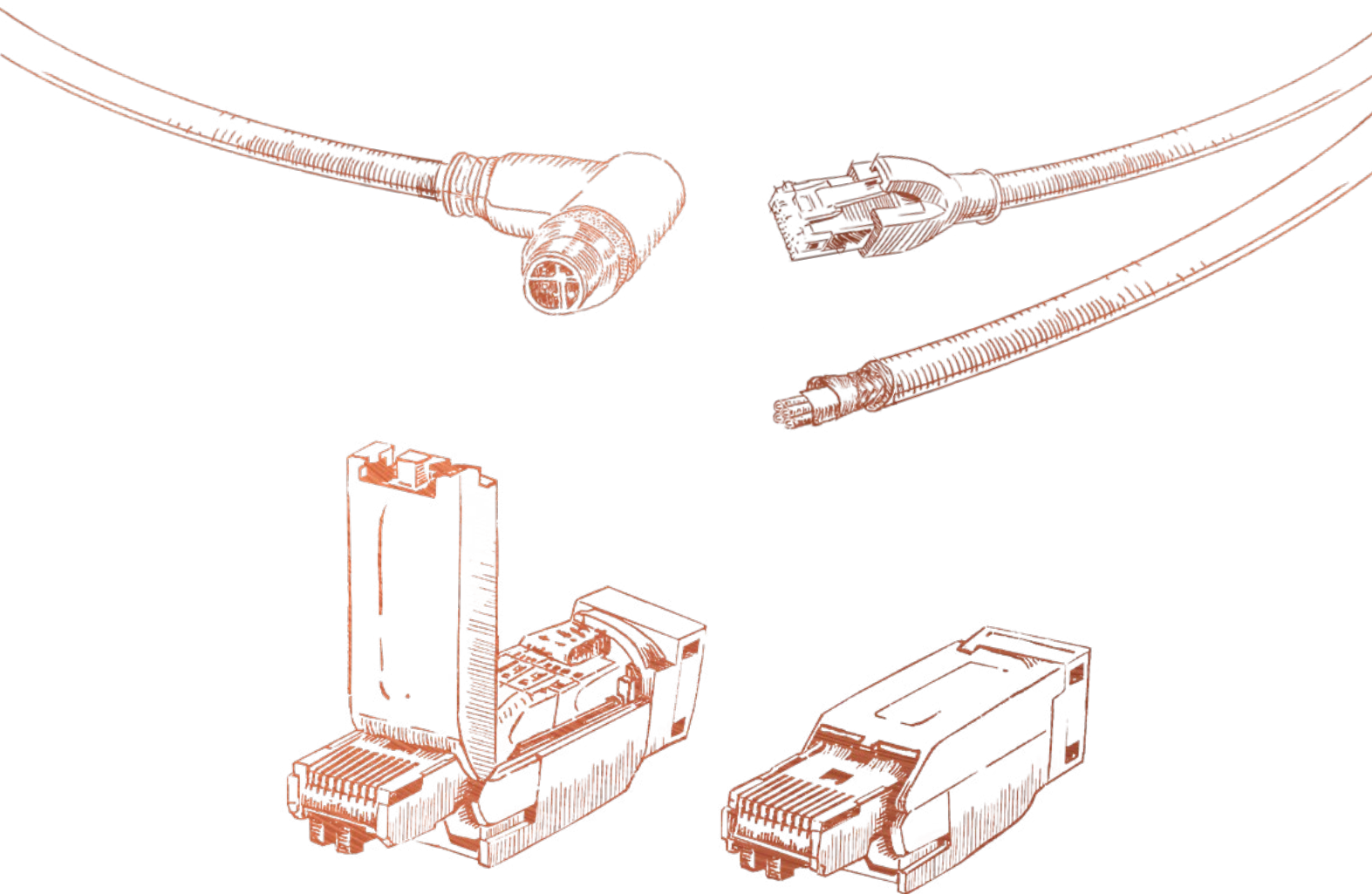


Cables, Connectors, Pre-assembly, Tools

INDUSTRIAL ETHERNET

Ed. 1.1 // EN



Copper Cables

Part no.	Type		Application	Cat.	UL	Core Ø	Cable Ø
						nom. in mm	
800653	PROFInet A	2x2xAWG22/1 PVC	Standard, fixed	5	CMG PLTC AWM 600V	1.5	6.5
805653		2x2xAWG22/1 FRNC	Halogen-free, fixed		CM AWM 600V		
801194		2x2xAWG22/1 PUR	Robust, fixed		N/A		
801195		2x2xAWG22/1 PUR	Radiation-resistant, fixed		N/A		
801650		2x2xAWG22/1 PVC/PE	Armoured, outdoor, fixed		N/A		
800654	PROFInet B	2x2xAWG22/7 PVC	Standard, flexible		CMG PLTC AWM 600V		9.3
805654		2x2xAWG22/7 FRNC	Halogen-free, flexible		CM AWM 600V		
802185		2x2xAWG22/7 FRNC	Shipbuilding, flexible		CM PLTC 60 V		
803295		2x2xAWG22/7 PVC	Festoon, flexible		CMG PLTC AWM 600V		
802293		2x2xAWG22/7 X-FRNC	Wind turbines, flexible		AWM 300V		
801651	PROFInet B Hybrid	2x2xAWG22/7+4x1,5 FRNC	Halogen-free, flexible		AWM 150V		10.3
802914	PROFInet C	2x2xAWG22/7 PVC	Drag chain		CMG PLTC AWM 600V		
800655		2x2xAWG22/7 PUR	Drag chain		CMX		6.5
11007800	PROFInet R	2x2xAWG22/19 PUR	Robotics		AWM 1000V		
11022499		2x2xAWG22/19 PUR	Robotics	6 _A	AWM 600V	1.5	6.5
805699	Industrial Ethernet	2x2xAWG24/1 FRNC	Halogen-free, fixed	5	N/A	1.0	5.6
805700		2x2xAWG24/1 PUR	Robust, fixed		N/A	1.0	5.6
805701		2x2xAWG26/7 FRNC	Halogen-free, flexible		N/A	1.0	5.6
805702		2x2xAWG26/7 PUR	PUR, flexible		AWM 1000V	1.0	5.7
800068		4x2xAWG26/7 PUR	Robustflex, flexible		AWM 1000V	1.0	5.8
82838		4x1xAWG26/19 PUR	Drag chain Eco		AWM 30V	1.0	4.8
82839		4x2xAWG26/19 PUR	Drag chain Eco		AWM 30V	1.0	6.6
11007779		4x2xAWG26/19 PUR	Drag chain Eco		AWM 1000V	1.0	6.6
800088		4x1xAWG24/19 PUR	Drag chain		N/A	1.25	6.2
81155		4x2xAWG24/19 PUR	Drag chain		N/A	1.25	9.5
802186		2x2xAWG22/19 PUR	Torsion		AWM 80V	1.5	6.5
800067		4x2xAWG26/19 PUR	Torsion		AWM 30V	1.0	7.5
805655		4x2xAWG24/1 PVC	Standard, fixed	6	CMG	1.0	8.0
805681		4x2xAWG24/1 PVC	Standard, fixed		AWM 30V	1.0	8.0
805658		4x2xAWG24/7 PVC	Drag chain		CMG	1.1	8.0
803387		4x2xAWG26/7 PUR	Drag chain		CMX AWM 1000V	1.0	7.8
803693		4x2xAWG24/1 PVC	Standard, fixed	6 _A	CMG	1.5	9.6
11007777		4x2xAWG22/1 FRNC	Halogen-free, fixed		CM	1.5	8.7
11007778		4x2xAWG22/1 PUR	Robust, fixed		CMX AWM 600V	1.5	8.7
11007776		4x2xAWG22/1 PVC	Standard, fixed		CMG AWM 600V	1.5	8.7
805704		4x2xAWG24/7 PVC	Drag chain		CM	1.3	8.9
805703		4x2xAWG24/7 PUR	Drag chain		CMX AWM 1000V	1.3	8.9
805548		4x2xAWG26/7 PUR	Drag chain		CMX AWM 600V	1.05	7.8
801197		4x2xAWG23/1 PUR	Robust, fixed	7e	AWM 1000V	1.4	7.7
802184		4x2xAWG26/7 PUR	Robustflex	7	AWM 30V	1.05	6.4
11021853		4x2xAWG24/7 FRNC	Shipbuilding, flexible		GL DNV	1.4	8.7
805614		4x2xAWG24/7 PUR	Drag chain		CMX AWM 600V	1.3	8.7
805828		4x2xAWG24/7 PUR	Robotics		CMX AWM 600V	1.3	8.7
11007775	CC-Link IE	4x2xAWG23/1 FRNC	Halogen-free, fixed	7e	AWM 600V	1.3	7.8
805680		4x2xAWG23/1 PUR	Robust, fixed	7 _A	AWM 300V	1.4	7.8
805684		4x2xAWG26/7 PUR	Robustflex, flexible		AWM 600V	1.05	6.2
81610		4x2xAWG24/1 PVC	Standard, fixed	5	N/A	1.0	6.4
803693		4x2xAWG22/1 PVC	Standard, fixed	6 _A	CMG	1.5	9.6
80810		4x2xAWG23/1 FRNC	Halogen-free, fixed	7e	N/A	1.3	7.5
801197		4x2xAWG23/1 PUR	Robust, fixed		AWM 1000V	1.4	7.7
805614		4x2xAWG24/7 PUR	Drag chain	7	CMX	1.3	8.7

TOOLS

Part no.	Type	Description
801497	PROFInet SK Stripping Tool	Dismantling and stripping of the PROFInet™ type A, B and C with nom. 6.5 mm external diameter in one working cycle
82902	ETHERNET Stripping Tool	Dismantling of screened or unscreened data cables of 0.5 - 12.5 mm. Cutting of cables to 4 mm² possible.

801497



82902

Please find details in our "Data, Network and Bus Technology" catalogue.

Copper Connectors

RJ45 - Copper Connectors

Part no.	Cat.	Connector	Pins	Core Ø in mm	Cable Ø in mm	AWG solid	AWG stranded	UL	Cl.	Standard			
800986	5	straight	4	max. 1,6	6,1-6,9	22-23	22-24/7	ja	IP20	PROFINet			
803841		straight			4,5-8,0	22-26	22-26/7			PROFINet			
802920		straight	8		4,5-8,0	22-26/7				TIA 568 A/B			
804234		angled 90°			4,5-8,0	23-26	26-23/7			TIA 568 A/B			
805401		straight, metal	4		6,3-6,7	22-24				PROFINet			
805402		angled 90°, metal								PROFINet			
11017443		angled 145°			6,5-9,5	22-27	22-27/7			PROFINet			
11008569		PushPull straight, metal				22-24	22-27			IP67	PROFINet		
805781		straight			4,5-9,0				PROFINet				
805782		angled 45°			4,5-8,0				PROFINet				
11017540		6	straight		8	k.A.	max. 8,0		24	24/7	nein	IP20	PROFINet
11026484			angled 90°			6,8-8,2	max. 8,0		24	24,7			PROFINet
805783	straight	max. 1,6	4,5-9,0	22-24		22-27	ja	TIA 568 A/B					
805784	angled 45°	max. 1,6	4,5-8,0	22-24		22-27		TIA 568 A/B					
804544	straight, metal	max. 1,6	5,0-9,5	22-26		22-27/7		TIA 568 A					
11022946	straight, metal	1,0-1,6	5,5-10,0	22-24		22-24/19		TIA 568 B					
11017885	straight	1,0-1,4	6,0-7,5	26-23		26-23		TIA 568 A/B					
11017766	straight	1,0-1,4	7,0-8,5	26-23		26-23		TIA 568 A/B					
11017767	8	straight	1,0-1,4	7,0-8,5		24-22		24-22	TIA 568 A/B				



800986



803841/802920



804234



805401



805402/11026484



11017443



11008569



805781



805782



805783



11017540



805784



804544



11022946



11017885



11017766



11017767

M12 - Copper Connectors

Part no.	Cat.	Connector	Pins	Core Ø in mm	Cable Ø in mm	AWG Dr. / Li.	UL	Cl.	Standard
803894	5	straight, metal	4	max. 1.6	4.0-8.0	22-26	yes	IP67	
805958		angled 90°, metal				22-26			
805966		straight, metal				22-26			PROFINet
806205		straight, metal		max. 2	5.0-9.7	20-24			PROFINet
805967		angled 90°, metal		max. 1.6	4.0-8.0	22-26			PROFINet
805959	6 _A	straight, metal	8	N/A		26			
806206		straight, metal		max. 2	5.0-9.7	22-26			
805960		angled 90°, metal		N/A	4.0-8.0	26			



803894



805958



805966



806205



805967



805959



806206



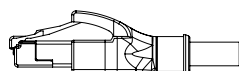
805960

Pre-assembled Copper Cables

PROFINET & INDUSTRIAL ETHERNET & CC-LINK IE

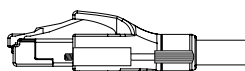
Connector side A	Cable type & length according to specifications	Connector side B
RJ45 or M12	PROFinet A	RJ45 or M12
	PROFinet B	
	PROFinet C	
	Industrial Ethernet fixed, flexible or drag chain / torsion	
RJ45	CC-Link IE	RJ45

RJ45 - Conector IP20



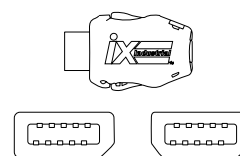
RJ45 180° central

RJ45 - ScrewVision



RJ45 180° central

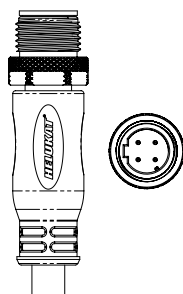
ix Industrial



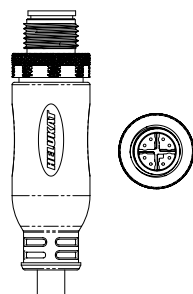
A- coded

C- coded

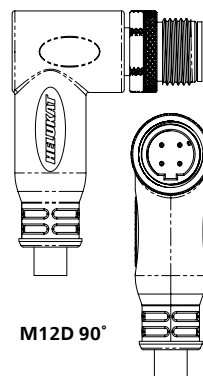
M12 - Male Connector IP67



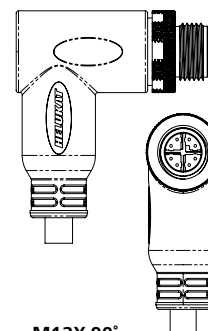
M12D 180°



M12X 180°

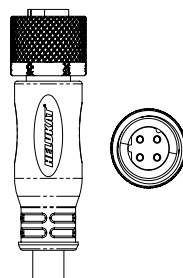


M12D 90°

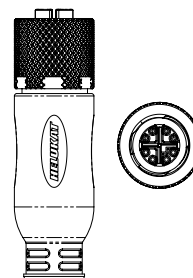


M12X 90°

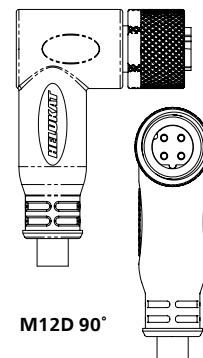
M12 - Female Connector IP67



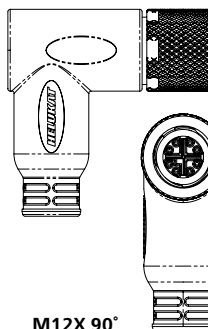
M12D 180°



M12X 180°



M12D 90°



M12X 90°

PATCHCABLE HELUKAT® CONNECTING SYSTEMS INDUSTRY

PROFInet A 2x2xAWG22/1

PVC jacket, fixed, UL CMG 75°C,
PLTC / AWM 21694 600V CSA FT4
Technical data: **Part no. 800653**

Part no.	Connector Combination	Length in m
806393	double-sided straight RJ45 IP20 4P	0.5
806394		1.0
806395		2.0
806396		3.0
806397		5.0
806398		10.0
806399		15.0
11023954		20.0
806400		25.0
806457	straight on both sides M12 D-coded IP 67	0.5
806458		1.0
806459		2.0
806460		3.0
806461		5.0
806462		10.0
806463		15.0
11020958		20.0
806464		25.0
806489	double-sided 90° angled M12 D-coded IP 67	0.5
806490		1.0
806491		2.0
806492		3.0
806493		5.0
806494		10.0
806495		15.0
11023955		20.0
806496		25.0
11023956	RJ45, IP20 4P to M12 D-coded IP 67	0.5
11023957		1.0
11023958		2.0
11023959		3.0
11023960		5.0
11023961		10.0
11023962		15.0
11001527		20.0
11023963		25.0
11001526		30.0
11023964		40.0
11023965		50.0
11023966		60.0
11023967		70.0
11023968		80.0
11023969		90.0
11023970		100.0

PROFInet B 2x2xAWG22/7

PVC jacket, flexible use, UL CMG 75°C,
PLTC / AWM 21694 600V CSA FT4
Technical data: **Part no. 800654**

Part no.	Connector Combination	Length in m
806401	double-sided straight RJ45 IP20 4P	0.5
806402		1.0
806403		2.0
806404		3.0
806405		5.0
806406		10.0
806407		15.0
11023971		20.0
806408		25.0
806465	straight on both sides M12 D-coded IP 67	0.5
806466		1.0
806467		2.0
806468		3.0
806469		5.0
806470		10.0
806471		15.0
11021043		20.0
806472		25.0
806497	double-sided 90° angled M12 D-coded IP 67	0.5
806498		1.0
806499		2.0
806500		3.0
806501		5.0
806502		10.0
806503		15.0
11023972		20.0
806504		25.0
11009234	RJ45, IP20 4P to M12 D-coded IP 67	0.5
11023973		1.0
11008404		2.0
11009235		3.0
806521		5.0
806522		10.0
11020222		15.0
806523		20.0
806524		25.0
11023974		30.0
806525		40.0
806526		50.0
806527		60.0
806528		70.0
806529		80.0
806530		90.0
806531		100.0

PROFInet C 2x2xAWG22/7

PUR jacket, drag chain,
UL CMX 75°C
Technical data: **Part no. 800655**

Part no.	Connector Combination	Length in m
806409	double-sided straight RJ45 IP20 4P	0.5
806410		1.0
806411		2.0
806412		3.0
806413		5.0
806414		10.0
806415		15.0
806733		20.0
806416		25.0
806481	straight on both sides M12 D-coded IP 67	0.5
806482		1.0
806483		2.0
806484		3.0
806485		5.0
806486		10.0
806487		15.0
11000566		20.0
806488		25.0
806505	double-sided 90° angled M12 D-coded IP 67	0.5
806506		1.0
806507		2.0
806508		3.0
806509		5.0
806510		10.0
806511		15.0
11023975		20.0
806512		25.0
11008341	RJ45, IP20 4P to M12 D-coded IP 67	0.5
11008342		1.0
11008343		2.0
11008344		3.0
11008345		5.0
11008346		10.0
11008347		15.0
11021516		20.0
11008348		25.0
11021886		30.0
11009067		40.0
11023976		50.0
11023977		60.0
11023978		70.0
11023979		80.0
11023980		90.0
11023981		100.0

* M12 D-coded 4-pin assignment only



Our products are UL/CSA approved.

For further information, variants and dimensions, see data sheets under:
www.helukabel.com/999999en (replace the **red numbers** with the relevant part no.)

Further information can be found in our Download Center:
www.helukabel.de/download-center

PROFInet C 2x2xAWG22/7

PVC jacket, drag chain,
UL CMG 75°, PLTC / AWM 600V CSA FT4
Technical data: **Part no. 802914**

Part no.	Connector Combination	Länge in m
806417	straight on both sides RJ45 IP20 4P	0.5
806418		1.0
806419		2.0
806420		3.0
806421		5.0
806422		10.0
806423		15.0
11023982		20.0
806424		25.0
806473	straight on both sides M12 D-coded IP 67	0.5
806474		1.0
806475		2.0
806476		3.0
806477		5.0
806478		10.0
806479		15.0
11023983		20.0
806480		25.0
806513	double-sided angled 90° M12 D-coded IP 67	0.5
806514		1.0
806515		2.0
806516		3.0
806517		5.0
806518		10.0
806519		15.0
11023984		20.0
806520		25.0
11007406	RJ45, IP20 4P to M12 D-coded IP 67	0.5
11007407		1.0
11007408		2.0
11007409		3.0
11007410		5.0
11007411		10.0
11007412		15.0
11007413		25.0
11023985		30.0
11009039		40.0
11023986		50.0
11023987		60.0
11023988		70.0
11023989		80.0
11023990		90.0
11023991		100.0

PROFInet B 2x2xAWG22/7

PVC jacket, blue, flexible use, UL CMG 75°C, PLTC / AWM 21694 600V CSA FT4
Technical data: **Part no. 804283**

Part no.	Connector Combination	Length in m
11023915	straight on both sides RJ45 IP20 4P	0.5
11023917		1.0
11023918		2.0
11023919		3.0
11023920		5.0
11023992		10.0
11023993		15.0
11023994		20.0
11023995		25.0
11023996	straight on both sides M12* D-coded IP67	0.5
11023907		1.0
11023997		2.0
11023998		3.0
11023921		5.0
11023905		10.0
11023906		15.0
11023908		20.0
11023909		25.0

HELUKAT® 100IND

2x2xAWG26/7, PUR jacket, blue flexible use, UL AWM 21576 1kV technical details: **Part no. 805702**

Part no.	Connector Combination	Length in m
11023999	straight on both sides RJ45 IP20 4P	0.5
11024000		1.0
11024001		2.0
11024002		3.0
11024003		5.0
11024004		10.0
11024005		15.0
11024006		20.0
11024007		25.0
11021852	straight on both sides M12* D-coded IP67	0.5
11007422		1.0
11007423		2.0
11009212		3.0
11009213		5.0
11007426		10.0
11024008		15.0
11024009		20.0
11024010		25.0
11024011	RJ45, IP20 4P to M12 D-coded IP 67	0.5
11024012		1.0
11017649		2.0
11024013		3.0
11024014		5.0
11024015		10.0
11024016		15.0
11024017		20.0
11024018		25.0

* M12 D-coded only 4-pin assignment

HELUKAT® 100 SF/UTP Cat.5e

4x2xAWG26/19, PUR jacket, Drag chain, UL AWM
Technical data: **Part no. 82839**

Part no.	Connector Combination	Length in m
806546	straight on both sides RJ45 IP20 4P	0.5
806547		1.0
806548		2.0
806549		3.0
806550		5.0
806551		10.0
806552		15.0
806553		20.0
806554		25.0
806564	straight on both sides M12 D-coded IP 67	0.5
806565		1.0
806566		2.0
806567		3.0
806568		5.0
806569		10.0
806570		15.0
806571		20.0
806572		25.0
806573	double-sided 90° angled M12 D-coded IP 67	0.5
806574		1.0
806575		2.0
806576		3.0
806577		5.0
806578		10.0
806579		15.0
806580		20.0
806581		25.0
11024019	RJ45, IP20 4P to M12 D-coded IP 67	0.5
11024020		1.0
11024021		2.0
11007876		3.0
11024022		5.0
806754		10.0
806757		15.0
806756		20.0
11024023		25.0

HELUKAT® 200INDSF/UTP Cat.5e

4x2xAWG26/7, PUR jacket for flexible use, AWM 21576
Technical data: **Part no. 800068**

Part no.	Connector Combination	Length in m
806532	straight on both sides RJ45 IP20 8P	0.5
806533		1.0
806534		2.0
806535		3.0
806536		5.0
806537		10.0
806538		15.0
806539		20.0
806540		25.0
806541	straight on both sides M12 D-coded IP 67	0.5
806542		1.0
806543		2.0
806544		3.0
806545		5.0

HELUKAT® 500IND Extraflex

4x2xAWG26/7, LS0H-TPE jacket,
flexible use

technical details: **Part no. 11023932**

Part no.	Connector Combination	Length in m
11007747	straight on both sides RJ45 IP20 8P	0.15
11007748		0.25
11007749		0.5
11007750		1.0
11007751		1.5
11007752		2.0
11007753		3.0
11007754		5.0
11007755		7.5
11007756		10.0
11007757		15.0

HELUKAT® 500S SF/FTP Cat.6_A

4x2xAWG26/7, PUR jacket
for drag chain, UL CMX 75°

technical details: **Part no. 805548**

Part no.	Connector Combination	Length in m
806600	straight on both sides M12 X-coded IP 67	0.5
806601		1.0
806602		2.0
806603		3.0
806604		5.0
806605		10.0
806606		15.0
806607		20.0
806608		25.0
806609		0.5
806610		1.0
806611		2.0
806612		3.0
806613		5.0
806614		10.0
806615		15.0
806616		20.0
806617		25.0

HELUKAT® 600IND S/FTP Cat.6_A

4x2xAWG26/7, PUR jacket
flexible use, UL AWM 20963

technical details: **Part no. 802184**

Part no.	Connector Combination	Length in m
806618	straight on both sides RJ45 IP20 8P	0.5
806619		1.0
806620		2.0
806621		3.0
806622		5.0
806623		10.0
806624		15.0
806625		20.0
806626		25.0
806636		0.5
806637		1.0
806638		2.0
806639		3.0
806640		5.0
806641		10.0
806642		15.0
806643		20.0
806644		25.0
806645	double sided 90° angled M12 X-coded IP 67	0.5
806646		1.0
806647		2.0
806648		3.0
806649		5.0
806650		10.0
806651		15.0
806652		20.0
806653		25.0

HELUKAT® 100IND S/FTP Cat.6_A

4x2xAWG26/7, patchcable 600V, PUR
green jacket, flexible use, UL AWM 20963

technical details: **Part no. 805684**

Part no.	Connector Combination	Length in m
11018102	straight on both sides RJ45 IP20 8P	0.5
11018814		1.0
11018103		2.0
11018104		3.0
11018174		5.0
11019013		10.0
11027282		15.0
11027283		20.0
11027284		25.0

HELUKAT® 600IND S/FTP Cat.6_A

4x2xAWG26/7, PUR jacket
flexible use, UL AWM

technical details: **Part no. 802184**

Part no.	Connector Combination	Length in m
11023236	straight on both sides ix A-coded	0.2
11023281		0.25
11023237		0.3
11023282		0.5
11022931		0.75
11023238		1.0
11022932		1.5
11022933		2.0
11022934		2.5
11022935		3.0
11023239		5.0
11023240		7.5
11023241		10.0
11023283		0.2
11023285		0.25
11023227		0.3
11023228		0.5
11023229		1.0
11023230		1.5
11023231		2.0
11023232		3.0
11023233		5.0
11023234		7.5
11023235		10.0
11020172	straight on both sides RJ45 IP20 8P to RJ45 ScrewVision	0.25
11019218		0.5
11020173		1.0
11020174		1.5
11020175		2.0
11020176		3.0
11020177		5.0
11020178		7.5
11020179		10.0
11020180		15.0

Contact



Our product expert is available to answer your questions and provide customised solutions:

Horst Messerer

Senior Product Manager
Industrial Communication
Tel.: +49 7150 9209 129
Horst.Messerer@helukabel.de

**(Channeling
POWER)** 