VARIOSUB RJ45/IP67
Plug Connectors

VARIOSUB-RJ45 was developed for using RJ45 plug connectors in harsh industrial environments. With it, devices for Industrial Ethernet can also utilize the standard plug connectors of the IT world.

The VARIOSUB-RJ45/IP67 plug connector is suitable for use on devices, infrastructural components and control cabinets. It fulfills the requirements of IAONA for use in heavy duty areas and for EN 50 173:2001 and is thus suitable for Fast Ethernet transmission at 100 Mbit/s in accordance with Cat 5e. Female inserts with two-way female connectors and a cable connection are available for the equipment side, as is a panel mounting frame. A sleeve and a male insert are available for the conductor side. The female and male inserts are completely shielded to allow reliable data transmission where electromagnetic interference is present.

In addition, commercially available male inserts can still be used. In this case, there is no need for adapter cables or other special solutions during startup and servicing.

The sleeve with its Push-Pull locking system safeguards the connection against mechanical stress, shocks and vibration. Also, it makes it possible to use cables with a diameter from 5 to 8.5 mm and a core cross section from AWG 24 to AWG 26 as solid or stranded conductors. This locking method saves space and provides ease of accessibility. It can be operated without tools and, when locked, provides the IP 67 degree of protection.



VARIOSUB-RJ45/IP67 plug connectors satisfy the requirements of IAONA for use in heavy duty areas.

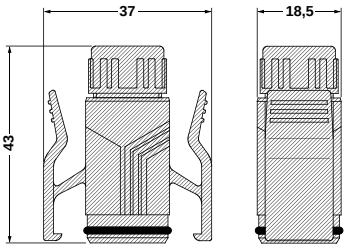
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VARIOSUB RJ45/IP67
Sleeve Housings



Description	Type	Order No.	Pcs./Pkt.
Plastic sleeve housing, with push-pull locking to the panel mounting frame	**VS-08-T-RJ45/IP67**	**16 88 69 6**	5

Technical data		
Temperature range	[°C]	-40 to + 85
Material		PA
Insertion/withdrawal cycles		≥ 100
Cable diameter	[mm]	5 - 8.5
Inflammability class acc. to UL 94		V0



Dimensional drawing: VS-08-T-RJ45IP67

VARIOSUB RJ45/IP67
Protective Cover



Description	Type	Order No.	Pcs./Pkt.
Protective cover, for covering the contact insert in the panel mounting frame or sleeve housing	**VS-08-SD**	**16 89 20 0**	5

Technical data		
Temperature range	[°C]	-40 to + 85
Material		PA
Inflammability class in acc. with UL 94		V0

VARIOSUB RJ45
Male Insert



Description		Type	Order No.	Pcs./Pkt.
Male insert RJ45, 8-pos., with IDC connection system		**VS-08-ST-RJ45**	**16 88 57 3**	5
Accessories				
Crimping pliers, without die die for VARIOSUB RJ45 male insert		**CRIMPFOX-LC** **CRIMPFOX-LC-RJ 45 S**	**12 06 69 6** **12 07 42 0**	1
Bend-protection sleeve[1]), for male insert VS-08-ST-RJ45, if no VARIOSUB sleeve is used	gray green	**VS-08-KS/GR** **VS-08-KS/GN**	**16 89 21 3** **16 89 22 6**	5

Technical data		
Number of positions		8
Nominal voltage/Nominal current	[V] / [A]	60 / 1
Transmission rate	[Mbit/s]	100
Surge voltage category		II
Contamination class		2
Core cross section	[mm^2] / AWG	0.14 - 0.25 / 26 - 24
Core diameter	[mm]	≤ 1
Temperature range	[°C]	-40 to + 85
Inflammability class acc. to UL 94		V0

[1]) We recommend the gray color for connections that are not crossed (Line = Li) and the green color for crossed connections (Crossover = Co).

VARIOSUB RJ45
Female Inserts

VS-08-BU-RJ45/BU



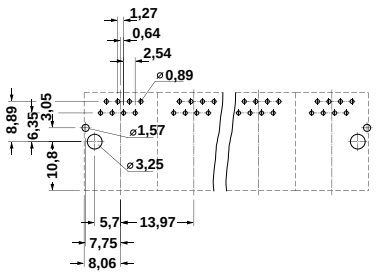


VS-08-BU-RJ45/LP-1

VS-08-BU-RJ45/KA/LSA

Description		Type	Order No.	Pcs./Pkt.
Female insert RJ45, 8-pos.	Female / Female Female / Cable (LSA)	**VS-08-BU-RJ45/BU** **VS-08-BU-RJ45/KA/LSA**	**16 89 06 4** **16 89 45 9**	5
Female insert RJ45, 8-pos., for PCB assembly	1-slot	**VS-08-BU-RJ45/LP-1**	**16 88 58 6**	5
Accessories				
LSA split-core tool, for connecting the cables to LSA strips		**CT-WT/A**	**27 65 50 5**	1

Technical data		
Number of positions		8
Nominal voltage / current	[V] / [A]	60 / 1
Transmission rate	[Mbit/s]	100
Surge voltage category		II
Contamination class		2
Core cross section	[mm^2] / AWG	0.14 - 0.25 / 24 - 22
Core diameter	[mm]	≤ 1
Cable diameter	[mm]	5 – 6.5
Temperature range	[°C]	-40 to + 85
Inflammability class acc. to UL 94		V0



VS-08-BU-RJ45/LP-...

VARIOSUB RJ45/IP 67
Panel Mounting Frame

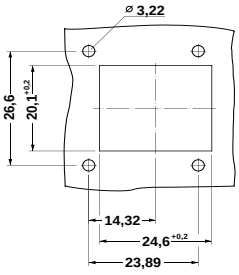


VS-08-A-RJ45/LP-1-IP67

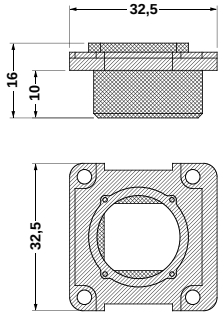


VS-08-A-RJ45/MOD-1-IP67

Description		Type	Order No.	Pcs./Pkt.
Panel mounting frame RJ45/IP67, without fixing screws, for modular female inserts	1-slot	**VS-08-A-RJ45/MOD-1-IP67**	**16 89 08 0**	5
Panel mounting frame RJ45/IP67, without fixing screws, for female inserts for PCB assembly	1-slot	**VS-08-A-RJ45/LP-1-IP67**	**16 89 44 6**	5
Set of panel mounting frame RJ45/IP67, with panel mounting frame and RJ45 female connector type:	VS-08-BU-RJ45/BU VS-08-BU-RJ45/KA	**VS-08-A-RJ45/MOD-1-IP67-SET-BU** **VS-08-A-RJ45/MOD-1-IP67-SET-KA**	**16 89 48 8** **16 89 49 1**	5
Accessories				
Hand punch pliers, pliers for punching tool		**VS-LWZH**	**16 89 51 4**	1
Square punch, punching tool for cutting out the panel mounting frame		**VS-LWZL/24,6/20,1**	**16 89 52 7**	1
Technical data				
Material		PA		
Temperature range	[°C]	-40 to + 85		
Inflammability class acc. to UL 94		V0		



Panel cutout: VS-08-A-RJ45/MOD-1-IP67

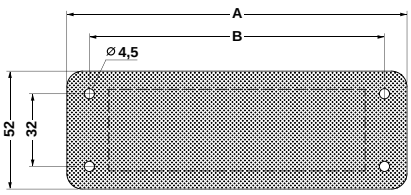


Dimensional drawing: VS-08-A-RJ45/MOD-1-IP67

VARIOSUB RJ45/IP 67
Adapter Plates



Description		Type	Order No.	Pcs./Pkt.
Adapter plate, including panel mounting frames	2 x RJ45 1 x RJ45, 1 x DSUB 9 1 x RJ45, 1 x DSUB 15	**VS-ADP16-RJ45/RJ45** **VS-ADP24-VS9/RJ45** **VS-ADP24-VS15/RJ45**	**16 52 15 6** **16 52 17 2** **16 52 18 5**	1
Accessories				
Hand punch pliers, pliers for punching tool		**VS-LWZH**	**16 89 51 4**	1
Square punch, punching tool for cutting out the panel mounting frame		**VS-LWZL/24,6/20,1**	**16 89 52 7**	1



Type	A	B
VS-ADP 16…	123	103
VS-ADP 24…	150	130

Table of dimensions for VS-ADP... adapter plates

VARIOSUB RJ45/IP65
Terminal Box, 1 Slot



Description	Color	Type	Order No.	Pcs./Pkt.
Terminal box RJ45/IP65, surface-mounted, with a front slot, including female insert, protective cover and cable gland, for cable connection	gray	**VS-08-TB-RJ45/IP65**	**16 89 35 2**	1

Technical data		
Material		PA
Temperature range	[°C]	0 to + 70
Inflammability class acc. to UL 94		V0

VARIOSUB RJ45/IP65
Terminal Box, 2 Slots

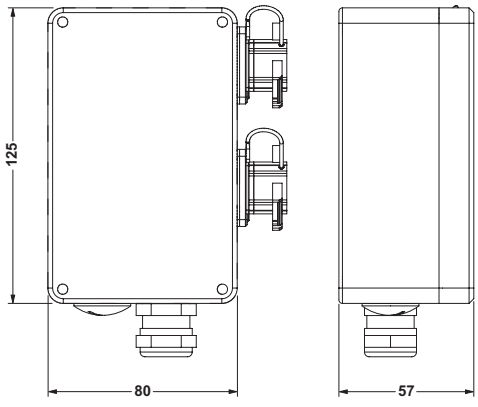


VS-08-TB2-RJ45/IP67



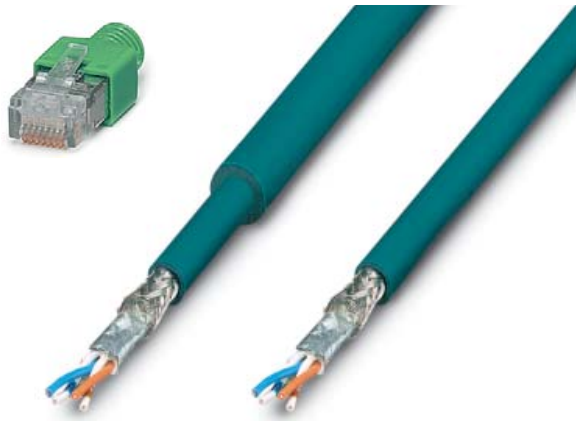
VS-08-TB-2LL-RJ45/IP67…

Description	Color	Type	Order No.	Pcs./Pkt.
Terminal box RJ45/IP65, surface-mounted, with two lateral slots 1 x left and 1 x right, including female inserts LSA, protective cover, two M20-5X8 cable glands and one cover cap, for cable connection	gray pure white	**VS-08-TB2-RJ45/IP65** **VS-08-TB2-RJ45/IP65/WH**	**16 89 36 5** **16 89 50 1**	1
Terminal box RJ45/IP65, surface-mounted, with two lateral slots 2 x right, incl. terminal strips on PCB, protective cover, two M20 cable glands and one cover cap, for round cables with a cable diameter of 5-13 mm	RAL 7032	**VS-08-TB-2LL-RJ45/IP65**	**16 52 23 7**	1
Terminal box RJ45/IP65, surface-mounted, with two lateral slots 2 x right, incl. terminal strips on PCB, protective cover, two M20-5X8cable glands and one cover cap, for cable type: **Dätwyler Uninet 3004 4P**	RAL 7032 RAL 9010 RAL 3005	**VS-08-TB-2LL-RJ45/IP65-7032** **VS-08-TB-2LL-RJ45/IP65-9010** **VS-08-TB-2LL-RJ45/IP65-3005**	**16 52 07 5** **16 52 08 8** **16 52 09 1**	1
Accessories				
Cable gland	M 20 5X8 M 20 9-13	**VS-08-KV-M20-5X8** **HC-M-KV-M20(9-13)**	**16 89 46 2** **16 90 56 1**	1
Technical data				
Material		PA		
Temperature range	[°C]	0 to + 70		
Inflammability class acc. to UL 94		V0		



VS-08-TB-2LL-RJ45/IP65

VARIOSUB
Ethernet Cables



Description	Color	Type	Order No.	Pcs./Pkt.
CAT 5-S/UTP cable (J-02YS(ST)C HP 2 x 2 x 24 AWG), heavy-duty installation cable 2 x 2 x 0.22 mm^2, solid conductor, shielded, outer sheath: ∅ 7.8 mm, inner sheath: ∅ 5.2 mm		**FL CAT5 HEAVY**	**27 44 81 4**	1
CAT 5-S/UTP cable (J-LI02YS(ST)C H 2 x 2 x 26 AWG)**,** light-duty flexible installation cable 2 x 2 x 0.14 mm^2, stranded, shielded, outer sheath: ∅ 5.2 mm		**FL CAT5 FLEX**	**27 44 83 0**	1
CAT 5-S/UTP cable, (J-LI02YS(ST)C H 4 x 2 x 26 AWG)**,** light-duty flexible installation cable 4 x 2 x 0.14 mm^2, stranded, shielded, outer sheath: ∅ 5.2 mm		**VS-CAT5-4x2x26AWG**	**16 52 10 1**	1
Preassembled cable, preassembled at both ends with VARIOSUB RJ45 or RJ45 connector, (see ordering example)[1])		**VS-RJ45 CONF/…**	**16 89 34 9**	1
Accessories				
Bend-protection sleeve[2]), for male insert VS-08-ST-RJ45, if no VARIOSUB sleeve is used	gray green	**VS-08-KS/GR** **VS-08-KS/GN**	**16 89 21 3** **16 89 22 6**	5
Crimping pliers, without die die for VARIOSUB RJ45 male insert		**CRIMPFOX-LC** **CRIMPFOX-LC-RJ 45 S**	**12 06 69 6** **12 07 42 0**	1

[1]) Minimum length: 0.2 m, Maximum length: 50 m FLEX, 100 m HEAVY, Minimum order quantity: 10 pcs.; steps: 0.1 m

[2]) We recommend the gray color for connections that are not crossed (Line = Li) and the green color for crossed connections (Crossover = Co).

Ordering example for cable **with** connector assembly

Heavy-duty installation cable, preassembled at one end with the VARIOSUB-RJ45/IP67 connector and at the other end with a standard RJ45 connector and a green bend-protection sleeve as crossover connection, 3.5 m long

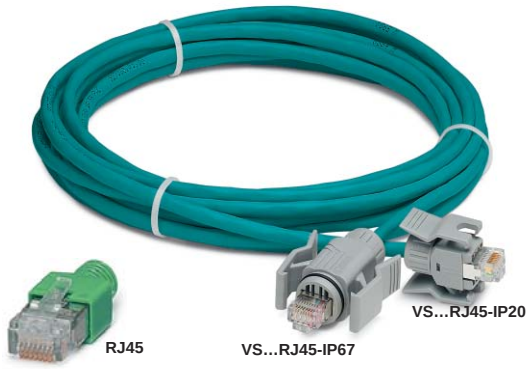
Qty.	Order No.	Cable type	Connection	Head 1	Head 2	Cable type	Length of cable in meters
1	16 89 34 9	VS-RJ45 CONF	/ CO	/ VS IP67	/ RJ45	/ CH	/ 3,5
			Crossover **CO** Line **LI**	VS-RJ45 IP67 **VS IP67** VS-RJ45 IP20 **VS IP20** RJ-45 **RJ45**	VS-RJ45 IP67 **VS IP67** VS-RJ45 IP20 **VS IP20** RJ-45 **RJ45**	FL CATS HEAVY **CH** FL CATS FLEX **CF**	

VARIOSUB
Ethernet Cables, Preassembled



Description	Cable length [m]	Type	Order No.	Pcs./Pkt.
Ethernet cable, Daetwyler Uninet 5502 flex, 4 x 2-pair, with sleeve housing VS-08-T-RJ45/IP67 at both ends, shielded, preassembled, connection not crossed (Line)	1	**VS-08-VS67-VS67/4P-AWG26-OF/1,0**	**16 89 37 8**	1
	2	**VS-08-VS67-VS67/4P-AWG26-OF/2,0**	**16 89 38 1**	
	5	**VS-08-VS67-VS67/4P-AWG26-OF/5,0**	**16 89 39 4**	
Ethernet cable, Daetwyler Uninet 5502 flex, 4 x 2-pair, with sleeve housing VS-08-T-RJ45/IP67 and RJ45 connector with bend-protection sleeve, shielded, preassembled, connection not crossed (Line)	1	**VS-08-VS67-RJ45/4P-AWG26-OF/1,0**	**16 89 40 4**	1
	2	**VS-08-VS67-RJ45/4P-AWG26-OF/2,0**	**16 89 41 7**	
	5	**VS-08-VS67-RJ45/4P-AWG26-OF/5,0**	**16 89 42 0**	
Ethernet cable, VS-CAT5-4x2x26AWG, 4 x 2-pair, with sleeve housing VS-08-T-RJ45/IP67 at both ends, shielded, preassembled, connection not crossed (Line)	1	**VS-08-VS67-VS67/4P-AWG26-CF/1,0**	**16 52 01 7**	1
	2	**VS-08-VS67-VS67/4P-AWG26-CF/2,0**	**16 52 02 0**	
	5	**VS-08-VS67-VS67/4P-AWG26-CF/5,0**	**16 52 03 3**	
Ethernet cable, VS-CAT5-4x2x26AWG, 4 x 2-pair, with sleeve housing VS-08-T-RJ45/IP67 and RJ45 connector with bend-protection sleeve, shielded, preassembled, connection not crossed (Line)	1	**VS-08-VS67-RJ45/4P-AWG26-CF/1,0**	**16 52 04 6**	1
	2	**VS-08-VS67-RJ45/4P-AWG26-CF/2,0**	**16 52 05 9**	
	5	**VS-08-VS67-RJ45/4P-AWG26-CF/5,0**	**16 52 06 2**	

VARIOSUB
Ethernet Cables, Patch Cables, Preassembled



Description	Types of plug connectors to cable ends			Type	Order No.	Pcs./Pkt.
Ethernet cable,	VS-RJ45/IP67	–	VS-RJ45/IP67	**VS-08-LI-VSIP67-VSIP67-CF-5,0**	**16 89 57 2**	1
Patch cable FL CAT5 FLEX,	VS-RJ45/IP67	–	VS-RJ45/IP20	**VS-08-LI-VSIP67-VSIP20-CF-5,0**	**16 89 58 5**	
2 x 2-pair, shielded, preassembled,	VS-RJ45/IP67	–	RJ45	**VS-08-LI-VSIP67-RJ45-CF-5,0**	**16 89 59 8**	
connection not crossed (Line),	VS-RJ45/IP20	–	VS-RJ45/IP20	**VS-08-LI-VSIP20-VSIP20-CF-5,0**	**16 89 60 8**	
Length: 5 m	VS-RJ45/IP20	–	RJ45	**VS-08-LI-VSIP20-RJ45-CF-5,0**	**16 89 61 1**	
	RJ45	–	RJ45	**VS-08-LI-RJ45-RJ45-CF-5,0**	**16 89 62 4**	

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