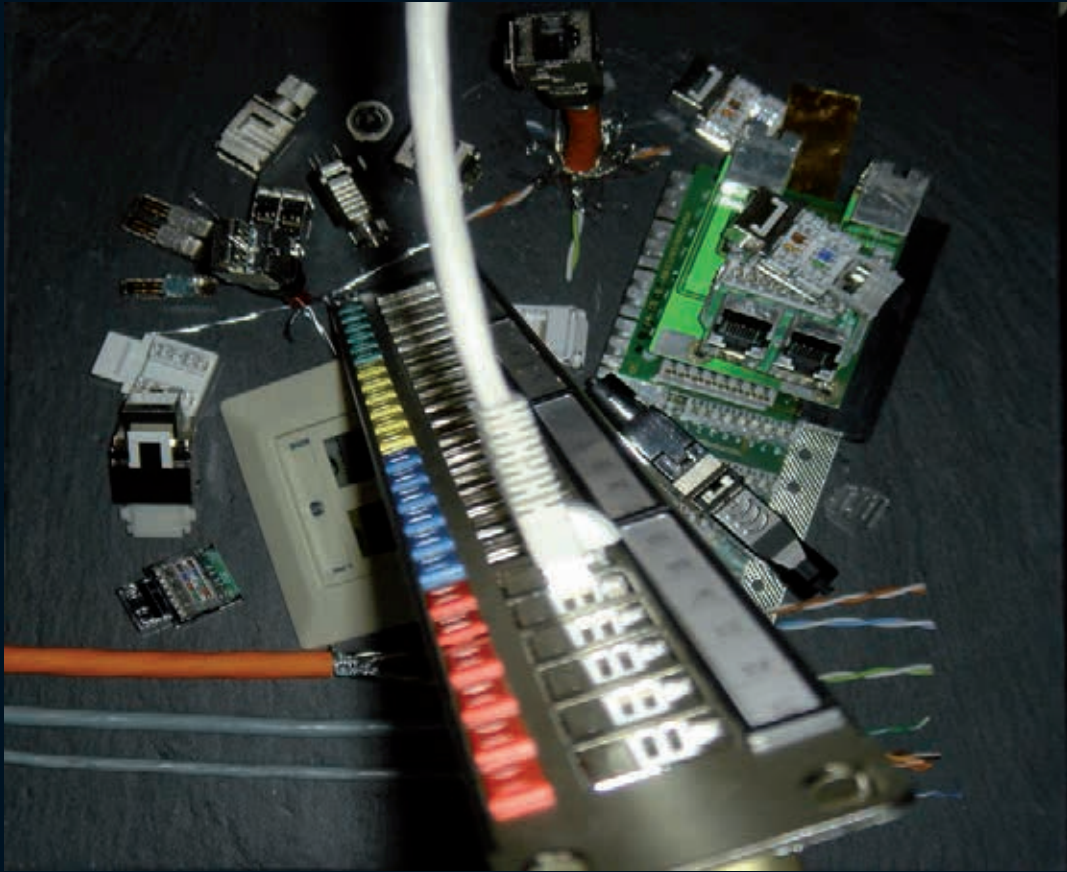# Copper

SilverLink

Connectivity

PATCHCORDS

STANDARD COMPLIANCE

All components of/and the final product are designed and tested to conform the requirements of IEC 61935, EN 60603-7, EN 61076-3 , EN 50288, recommendations of international standards for structured cabling, ISO/IEC 11801 2nd Ed., EN 50173-1 2002 and EIA/TIA 568B 2.0/2.1.

PRODUCTION RANGE

System options	:	unshielded (*UTP*) and shielded (*STP*)
Performance ranges	:	Cat.3, Cat5e, Cat6, Cat.6$_A$ and Cat.7 & Cat.7$_A$ (*shielded only*)
Connectors	:	RJ11, RJ12, RJ45 & FX (*Tera*)-connector
Cable outer sheaths	:	LSZH, LSZHFR, PVC and PUR
Lengths	:	0.5m, 1m, 1.5m, 2m, 3m, 4m, 5m, 7.5m, 10m, 15m
		- customized specifications and lengths available on request -

SilverLink

Patchcords

PART-NUMBER KEY

Example: **SL - PT - RJ45/RJ45 - C6UTP - LSZH - 2**   —   *Patchcord RJ45/RJ45 Cat.6 unshielded, LSOH outer sheath, 2m*
     1 2   3   4 5   6 7

1   SilverLink - copper main product range

2   Product range: Patchcords

3   Connectors: RJ11 / RJ12 / RJ45 / FX - *other connectors available on request*

4   Performance: C3 = Cat.3 (*16MHz*), C5e = Cat.5e (*100MHz*), C6 = Cat.6 (*250MHz*), C6a = Cat.6$_A$ (*500MHz*),

                C7 = Cat.7 *(600MHz)*, C7a = Cat.7$_A$ *(1000MHz)*

5   System option: UTP = unshielded, STP = shielded

6   Outer sheath: LSZH = low smoke zero halogen, LSZHFR = low smoke zero halogen flame retardent,

                PVC = Polyvinyl Chloride, PUR = Polyurethane

7   Length in meters

TRUNK CABLES

STANDARD COMPLIANCE

All components of/and the final product are designed and tested to conform the requirements of the international structured cabling standards ISO/IEC 11801, EN 50/173 and EIA/TIA 568, as well as the specific norms of ISO/IEC, EN, EIA/TIA, ITU-T, Bellcore/Telcordia, ANSI, IEEE and the relevant national regulations.

PRODUCTION RANGE

Connectors	:	keystone jacks *(see pages 190 - 191)*, RJ45 plugs
Shielding	:	unshielded *(UTP)* & shielded *(STP)*
Cable types	:	all cable types *(see pages 220 - 221)*
Cable outer sheaths	:	PVC, PE, PUR & LSZH-compounds
Tubes	:	PVC or LSZH tube in various dimensions & colors

— Trunk cables are also available in fiber optic version; see „LightLine" section. —
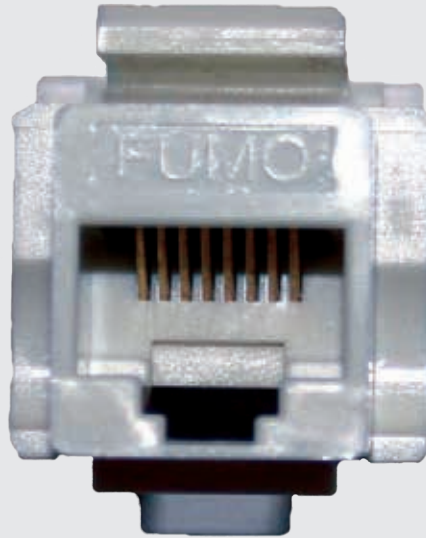
Trunk Cables

PART-NUMBER KEY

Example: **SL - TRUNK - CA.... - 12 - CT.... - 30 - EYE** — *Trunk cable, 12 simplextrunks, 30 meters, with pulling-eye*
    [1]   [2]   [3]   [4] [5] [6] [7]

[1]   SilverLink - copper main product range

[2]   Trunk cable

[3]   Cable types: part no. see *pages 220 - 221*

[4]   Trunk count

[5]   Connector types: part no. see *pages 190 - 191*

[6]   Cable length in meters

[7]   Pulling-eye

Keystone-Jacks

STANDARD COMPLIANCE

All components of/and the final product are designed and tested to conform the requirements of IEC 61935, EN 60603-7, recommendations of international standards for structured cabling, ISO/IEC 11801 2nd Ed., EN 50173-1 2002 and EIA/TIA 568B 2.0/2.1.

PRODUCTION RANGE

System options	:	unshielded (*UTP*) and shielded (*STP*)
Performance ranges	:	Cat5e, Cat6, Cat.6$_A$ and Cat.7 & Cat.7$_A$ (*shielded only*)
Termination	:	tool-less or punch-down tools
Body	:	plastic compound or metal

SilverLink

Keystone-Jacks

PART-NUMBERS

SL-CT-UTPRJ11KEY-C3	*RJ11 Keystone-Jack, unshielded Cat.3 16MHz*
SL-CT-UTPRJ11KEY-C3	*RJ11 Keystone-Jack, unshielded Cat.3 16MHz, tool-less*
SL-CT-UTPRJ45KEY-C5e	*RJ45 Keystone-Jack, unshielded Cat.5e 100MHz*
SL-CT-UTPRJ45TLKEY-C5e	*RJ45 Keystone-Jack, unshielded Cat.5e 100MHz, tool-less*
SL-CT-UTPRJ45KEY-C6	*RJ45 Keystone-Jack, unshielded Cat.6 250MHz*
SL-CT-UTPRJ45TLKEY-C6	*RJ45 Keystone-Jack, unshielded Cat.6 250MHz, tool-less*
SL-CT-UTPRJ45KEY-C6a	*RJ45 Keystone-Jack, unshielded Cat.6$_A$ 500MHz*
SL-CT-UTPRJ45TLKEY-C6a	*RJ45 Keystone-Jack, unshielded Cat.6$_A$ 500MHz*
SL-CT-STPRJ45KEY-C5e	*RJ45 Keystone-Jack, shielded Cat.5e 100MHz*
SL-CT-STPRJ45TLKEY-C5e	*RJ45 Keystone-Jack, shielded Cat.5e 100MHz, tool-less*
SL-CT-STPRJ45KEY-C6	*RJ45 Keystone-Jack, shielded Cat.6 250MHz*
SL-CT-STPRJ45TLKEY-C6	*RJ45 Keystone-Jack, shielded Cat.6 250MHz, tool-less*
SL-CT-STPRJ45KEY-C6a	*RJ45 Keystone-Jack, shielded Cat.6$_A$ 500MHz*
SL-CT-STPRJ45TLKEY-C6a	*RJ45 Keystone-Jack, shielded Cat.6$_A$ 500MHz*
SL-CT-FX600-C7	*Keystone-Jack, shielded Cat.7 600MHz*
SL-CT-FX1000-C7a	*Tera Keystone-Jack, shielded Cat.7$_A$ 1000MHz*

Outlets

STANDARD COMPLIANCE

All components of/and the final product are designed and tested to conform the requirements of IEC 61935, EN 60603-7, recommendations of international standards for structured cabling, ISO/IEC 11801 2nd Ed., EN 50173-1 2002 and EIA/TIA 568B 2.0/2.1.

PRODUCTION RANGE

System options	:	unshielded (*UTP*) and shielded (*STP*)
Types	:	wall-mount, built-in, floor-mount
Connectors	:	all types (*see keystone-jacks section*)
Styles	:	UK, US, French, Italian, German and customized

OUTLETS

PART-NUMBER KEY

Example: **SL - OUT/US/BI-2RJ45emp** — *Outlet, US-style, built-in version, keystone-type, 2x RJ45, empty*
⬚1   ⬚2   ⬚3 ⬚4 ⬚5 ⬚6 ⬚7

⬚1   SilverLink - copper main product range

⬚2   Outlet/Faceplate

⬚3   Style: UK = Great Britain, US = American, F = French, IT = Italian, G = German, C = customized

⬚4   Version: WM = wall-mounting, BI = built-in, FM = floor-mounting

⬚5   Ports

⬚6   Type: RJ45 or FX

⬚7   Assembling: emp = empty, eq = equipped with keystone-jacks

Patchpanels

STANDARD COMPLIANCE

All components of/and the final product are designed and tested to conform the requirements of IEC 61935, EN 60603-7, recommendations of international standards for structured cabling, ISO/IEC 11801 2nd Ed., EN 50173-1 2002 and EIA/TIA 568B 2.0/2.1.

PRODUCTION RANGE

System options	:	unshielded (*UTP*) and shielded (*STP*)
Performance ranges	:	Cat5e, Cat6, Cat.6$_A$, Cat.7$_A$ (*shielded only*)
Styles	:	fixed, modular and keystone in various height units
Colors	:	black, grey and metal (*other colors available on request*)

SilverLink

Patchpanels

PART-NUMBER KEY

Example: **SL - PP/1U/19-24RJ45KEYeq-C6UTP** — *19" Patchpanel 24-port 1U, RJ45 Keystone-Jacks Cat.6 unshielded, equipped*
         [1] [2] [3] [4]   [5]   [6] [7] [8] [9]

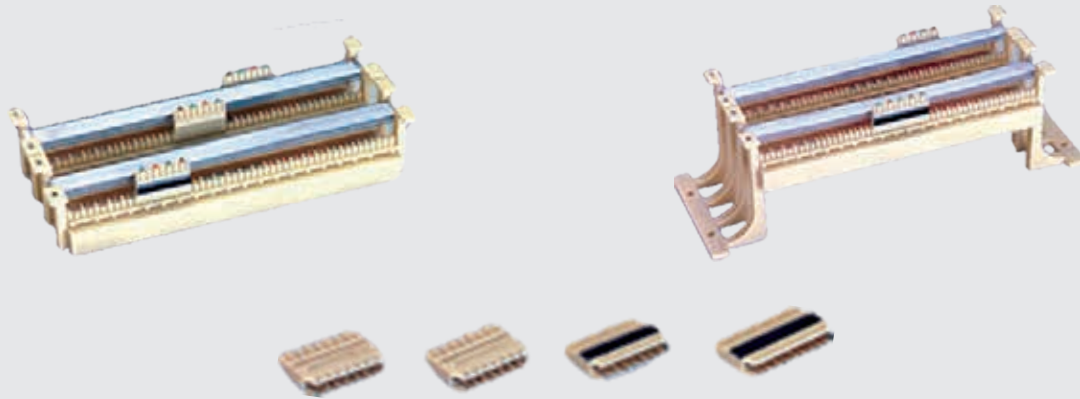| [1] | SilverLink - copper main product range |
[2]	Patchpanel
[3]	Height units
[4]	Width: 10" and 19"
[5]	Ports: 6, 12, 16, 24, 32 & 48 RJ45 or FX
[6]	Version: KEY = keystone-jacks, FIX = PCB *(fixed jacks),* MOD = modular, LM = label marking
[7]	Assembling: emp = empty, eq = equipped with keystone-jacks
[8]	Performance: C3 =16MHz, C5e = 100MHz, C6 = 250MHz, C6a = 500MHz & C7a = 1000MHz
[9]	System options: UTP = unshielded, STP = shielded

110 Cross Connect

APPLICATION

Fumo's cross connect solution offers a reliable, economical high-density system, supporting applications from voice to high-speed data. All components and system variations meet or exceed the relevant ISO/IEC and EIA/TIA specifications, and are compatible with the industry's standard impact tools.

PRODUCTION RANGE

System option	:	unshielded (*UTP*)
Performance ranges	:	Cat3, Cat5e & Cat6,
Ranges	:	Wiring blocks, connecting blocks, cable management, patchcords
Versions	:	Wiring block with stands, wiring block w/o stands 19" mounted panel

SilverLink

110 CROSS CONNECT

PART-NUMBER KEY

Example: **SL - CC-WB/STD-C3-50** — *Cross Connect wiring block with stands, 50-pairs, Cat3*
  [1]   [2]   [3]   [4] [5] [6]

[1]   SilverLink - copper main product range

[2]   Cross Connect

[3]   Range: WB = wiring block, CB = connecting block, CMP = cable management panel, PT = patchcord
         WMF = wall-mounting frame

[4]   Type: STD = with stands, blank = w/o stands, 19 = 19" mounting, 110/1 = 110 patch plug 1-pair,
        110/2 = 110 patch plug 2-pairs, 110/4 = 110 patch plug 4-pairs, RJ11, RJ12 & RJ45

[5]   Performance: C3 =16MHz, C5e = 100MHz, C6 = 250MHz

[6]   Pairs/length: For connecting items pair count and for patchcords length in meters

Test Equipment
SilverLink

IDEAL INDUSTRIES

Test Equipment

CABLE CERTIFIER – LANTEK® II

APPLICATION

Superior performance, revolutionary fiber options and an outstanding value mark LanTEK® II the ultimate cable certification platform. Covering the full range of test capabilities needed today, LanTEK® II comes in three ETL-verified models: 350 MHz - Class E/Cat 6, 500 MHz - Class E_A/Cat 6_A and 1000 MHz - Class F_A/Cat 7_A as a future-proof investment. Models 350MHz and 500MHz are fully upgradable to 1000MHz at very reasonable costs.

Productivity on the job is granted by 11-seconds Class D/Cat 5e and 14-seconds Class E/Cat 6 autotests, including full graphical data storage. Costs and efficiency are further improved by a patented universal adapter system, which certifies most cablings with off-the-shelf patch cords. This unique feature replaces the requirements of cost-intensive and proprietary permanent link adapters.

The LanTEK® II series also offers ultimate versatility with options for Alien Crosstalk testing, certification of TERA, GG45 and EC7 Class F/F_A / Category 7/7_A, plus M12 Industrial Ethernet, and coaxial test adapters.

Optional FiberTEK® FDX modules provide the world's only dual wavelength, bi-directional test certification for multimode, singlemode and Gigabit applications.

Cable Certifier - LanTek® II

PART-NUMBERS

SL-IDEAL-LT2-350	*EIA/TIA Cat. 6, ISO Class E certifier w/ Cat. 6 adapters*
SL-IDEAL-LT2-500	*EIA/TIA Cat. 6_A, ISO Class E_A certifier w/ Cat. 6_A adapters*
SL-IDEAL-LT2-1000	*EIA/TIA Cat, 7_A, ISO Class F/F_A certifier w/ Cat. 6_A adapters*

Contents: LanTEK® II display and remote handset, two smart lithium ion batteries, two 110-240V power adapters with US/EU/UK plugs, lockable semi-rigid carrying case, Cat. 6_A F/FTP patch cords, USB cable, IDEAL DataCENTER data management and reporting software, two headsets, hanging straps, calibration and ETL accuracy certificate, quick reference guide, user manual on CD.

Accessories

SL-IDEAL-LT2-GB10KIT	*10 Gigabit Alien Crosstalk testing kit*
SL-IDEAL-LT2-C7FX	*Cat.7/ISO-F TERA testing kit*
SL-IDEAL-LT2-C7GG	*Cat.7/ISO-F NEXANS GG-45 testing kit*
SL-IDEAL-LT2-COAX	*Coax testing kit*
SL-IDEAL-LT2-SCC	*Small carrying case*
SL-IDEAL-LT2-LCC	*Large carrying case*
SL-IDEAL-LT2-AD/C6	*Category 6/Class E universal channel/permanent link adapter*
SL-IDEAL-LT2-AD/C6a	*Category 6_A/Class E_A universal channel/permanent link adapter*
SL-IDEAL-LT2-PT/C6a	*Replacement category 6_A F/FTP patchcord*
SL-IDEAL-LT2-PS	*Replacement power supply*
SL-IDEAL-LT2-TS	*Replacement talking set*
SL-IDEAL-LT2-USB	*USB cable*
SL-IDEAL-LT2-BAT/LI	*Lithium Ion battery*

SilverLink

Cable Performance Tester - SignalTek™

APPLICATION

SIGNALTEK™ provides a technically innovative method to test and document the performance of voice-, data-, and video-applications for network installers and -technicians.

FEATURES

- Gigabit performance qualification test according to IEEE 802.3 standards
- Data monitoring to detect intermittent network problems
- Intuitive graphical user interface for fast and easy operation
- Performs Gigabit Ethernet link establishment test in 10 seconds
- Internal and USB data storage to store 20,000 tests internally or unlimited on USB drive
- Prints easy-to-read pass/fail qualification reports

PART-NUMBER

SL-IDEAL-SIGNALTEK

SIGNALTEK™ Near-end and remote-end handset, incl. black nylon carrying case, 2x 30.5cm RJ11 silver satin cables, 2x 61cm RJ45-to-F patchcords, 2x 30.5cm RJ45 shielded patchcords, 2x 30.5cm RJ45-twin alligator clip cords, 8x AA alkaline batteries, USB cable, quickstart guide, CD-ROM user manual

SilverLink

Gigabit Ethernet Analyzer

APPLICATION

High-performance testing and trouble-shooting tool for Ethernet networks up to 1Gbit/s.

FEATURES

- Continuity tests, traffic generation and statistics for physical layer installation (copper and fiber)
- RFC 2544, IP ping and trace route for Ethernet and IP layers
- SLA certification, including traffic load, bandwidth, service integrity and latency
- Throughput, link utilization and MAC errored frames testing for accurate performance statistics
- Trace route for network path tracing
- IP ping to locate bad routing configurations
- Copper tests: cable length, pair and polarity swap, BERT
- Fiber tests: continuity check, BERT, optical power

PART-NUMBER

SL-IDEAL-GbEnet

Gigabit Ethernet Analyzer, including Pocket PC, user guide, software CD-ROM, main power supply, 2x short haul 850nm optic modules with cables, RJ-45 Ethernet cable, serial cable, carrying case

Industrial Tester – IENet™ Pro

APPLICATION

The IENet™ PRO features a unique easy-to-use cable test for 2-pairs and 4-pairs Industrial Ethernet cabling. With shielded 2-pairs, M12 and RJ-45 ports, the IENet™ PRO is compatible to most Industrial Ethernet cabling. Test results are displayed in PROFINET® Industrial Ethernet required format.

FEATURES

- selection between voice, 2- & 4-pairs data, and coax testing features (voice and video/security tests via optional adaptors)
- tests for opens, shorts, miswirings, reversals, split-pairs (user selectable) and length
- indicates correct wiremap to T568A/B standards for shielded and unshielded cabling
- easy-to-read LCD display with "PASS" or "Miswire" indicator for each test
- identifies presence of voltage on cables
- tone generator supports four different tones making fault isolation easier
- integrated remote unit to make storage and carrying easier
- can support additional optional remotes making it efficient for one person testing
- blinks network link LED for visual cable tracing
- numerical indication for UTP "No Shield" and STP "Shield" to comply with industrial ethernet PROFINET® requirements

SilverLink

Industrial Tester – IENet™ Pro

PART-NUMBERS

SL-IDEAL-IEN/SR   *IENet™ PRO with single remote*

SL-IDEAL-IEN/8R   *IENet™ Pro with eight remotes*

Accessories

SL-IDEAL-IEN-8CTK   *Eight coax terminator kit*

SL-IDEAL-IEN-8RK   *IENet™ Pro eight remote kit (ID 1-8)*

SL-IDEAL-IEN/AT-RJ45/RJ11   *RJ-45 to RJ-11 jack adaptor (2/card)*

SL-IDEAL-IEN/AT-RJ45/F   *RJ-45 to F-connector adaptor (2/card)*

SL-IDEAL-IEN/AT-F/BNC   *F to BNC adaptor kit*

SilverLink

Cable Tester – LinkMaster™

APPLICATION

The LinkMaster™ is designed to test wiring configurations on twisted-pair UTP/STP cables. Checks for shorts, miswirings, reversals and split pairs. Debug feature, automatic shut-off and low battery LED indication.

FEATURES

- Tests wiring configuration on UTP and STP
- Checks shorts, miswiring, reversals and split-pairs
- Debug feature, automatic shut-off and low battery LED indicator
- Main unit and remote allow single person testing
- Designed to test installed twisted pair wiring
- Tests unshielded & shielded modular plugs

PART-NUMBER

SL-IDEAL-LM   *LinkMaster™ twisted-pair wiring tester*

SilverLink

Cable Tester VDV MultiMedia

APPLICATION

The VDV MultiMedia Cable Tester is an easy-to-use cable testing and verification device that can quickly test all wiring requirements found throughout today's residential and commercial environments.

FEATURES

- Easy-to-use push button to select between voice-, data-, and video-/security-testing modes
- Tests opens, shorts, miswirings, reversals and split-pairs
- Indicates correct wiremap to T568A/B standards
- Easy-to-read LCD display with "PASS" or "Miswire" indicator for each test
- Identifies voltage on cables
- Tone generator supports 4 different tones, making fault isolation easier
- Integrated remote unit to make storage and carrying easier
- Can support additional optional remotes, making it efficient for single person testing

PART-NUMBER

SL-IDEAL-VDV   *VDV MultiMedia cable testing kit, the tester, built-in remote, satin RJ11 patchcord, satin RJ45 patchcord, user manual - carrying case available on request*

SilverLink

Tool Kits

PART-NUMBERS

SL-TOOL-LAN/K1

installation tool kit LAN-Kit1, including
1x Punchmaster™ II with LSA+ blade
1x Data T®-cutter for UTP-/STP-/coax-cables
1x stripping tool for or UTP-/STP-/coax-cables
1x PocketPal™ belt pouch

SL-TOOL-LAN/K2

installation tool kit LAN-Kit2, including
1x LSA+ termination tool with integrated
screw driver and pull-out hook
1x Data T®-cutter for UTP-/STP-/coax-cables
1x stripping tool for or UTP-/STP-/coax-cables
1x PocketPal™ belt pouch

SL-TOOL-TSK

technician service tool kit, including
1x Punchmaster™ II with 110er blade
1x 66er blade
1x electrician scissor
1x pull-out hook
1x multi-screw driver
1x stripping tool for or UTP-/STP-/coax-cables
1x nylon belt pouch

*- **customized tool kits available on request** -*

SilverLink

Tools

PART-NUMBERS

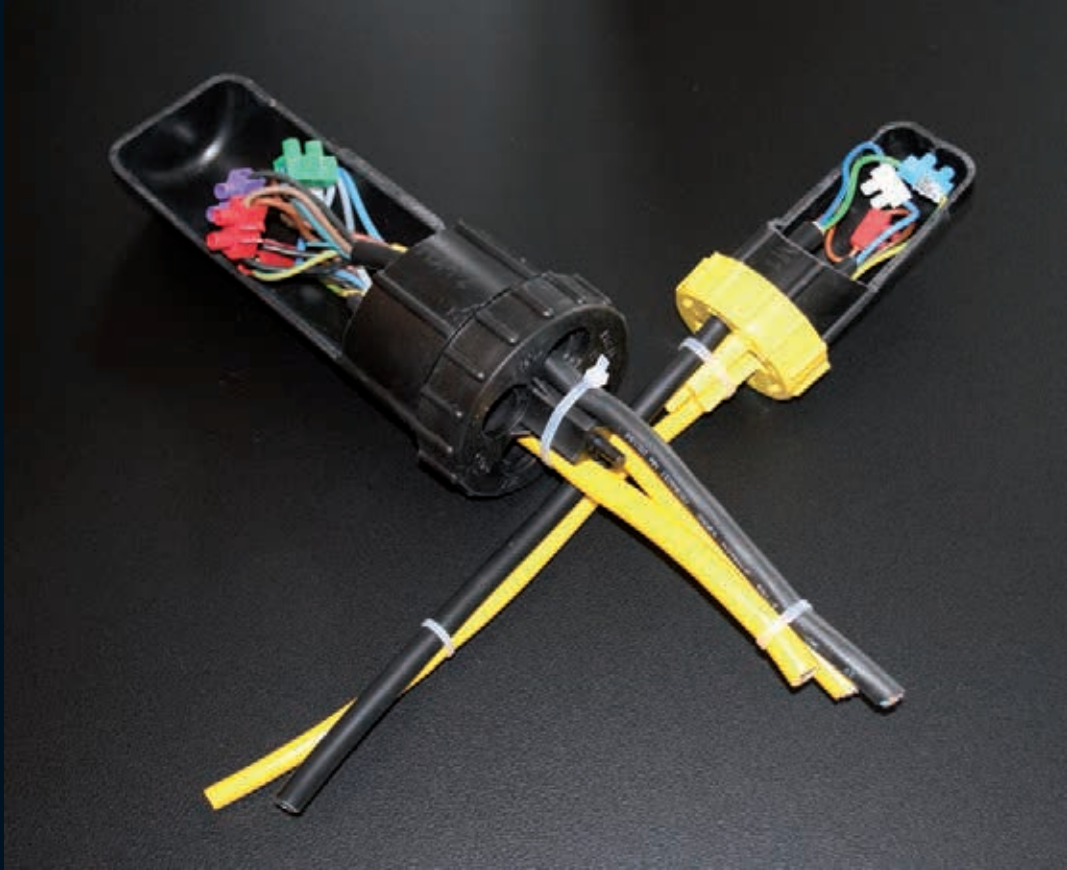|	
SL-TOOL-PMII	*Punchmaster™ II without blades*
SL-TOOL-PMII/110	*Punchmaster™ II with 110er blades*
SL-TOOL-PMII/11066	*Punchmaster™ II with 110er + 66er blades*
SL-TOOL-PT/LSA+	*Punchmaster™ II with LSA+ blades*
SL-TOOL-PT/KR	*Punchmaster™ II with Krone® blades*
SL-TOOL-PT/BIX	*Punchmaster™ II with BIX® blades*
SL-TOOL-CC/USC	*Data T®-cutter for UTP-/STP-/coax-cables*
SL-TOOL-CC/USC	*Data T®-cutter for coax-cable RG59/-6*
SL-TOOL-ST1	*stripping tool for FO- & RG174/-187 coax-cables, Ø up to 3,2mm*
SL-TOOL-ST2	*stripping tool for FO- & RG58/CB/mini-coax-cables, Ø from 3,2mm up to 5,556mm*
SL-TOOL-ST3	*stripping tool for FO- & RG11/-8-coax-cables, Ø from 6,4mm up to 14,3mm*
SL-TOOL-ST4	*stripping tool for UTP-/STP-/RG59-coax-cables, Ø from 4,8mm up to 8mm*
SL-TOOL-BLADES/I	*blades for stripping tools ST1, ST2 and ST4*
SL-TOOL-BLADES/II	*blades for stripping tool ST3*
SL-TOOL-SC	*multi-screw driver*
SL-TOOL-SHEAR	*electrician scissor*

- further tools available on request -

Closures

SilverLink

Closures

Square Closures

APPLICATION

Fumo's closures are developed to avoid the problem of the earlier complicated and dangerous heat shrinking system. They are increasingly acknowledged and successful, due to exceeding the expectations of both, technology and economy. All closures are re-openable and -usable for in- and outdoor applications, and do match all common cable types.

PRODUCT RANGE

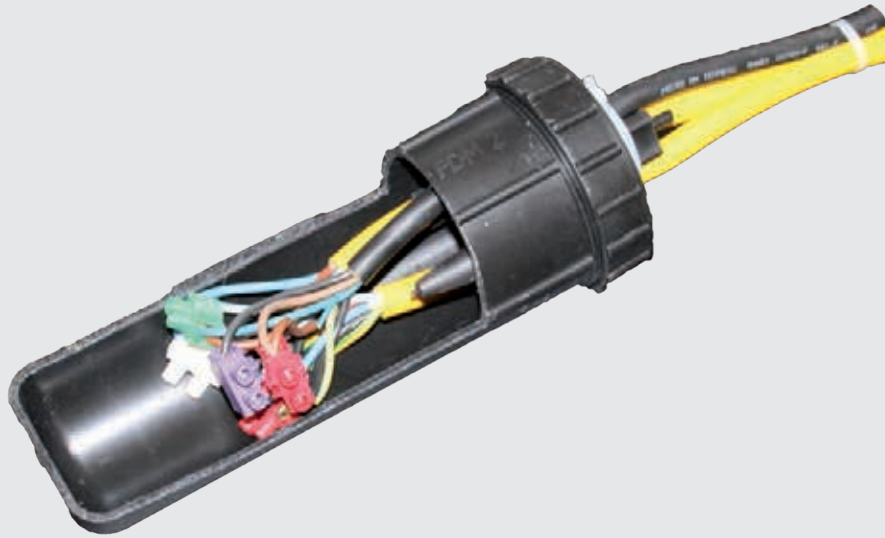|	
Cable entries	: 6 *(single cable grommet)*, 12 *(duplex cable grommet)*
Cable Ø	: up to 71mm *(single cable grommet)*, up to 36mm *(duplex cable grommet)*
Cable types	: energy & multipair cables
Protection grade	: IP68 *(absolutely sealed)*
Resistance	: against chemicals, ultra-violet rays, acids
Installation	: direct burial, wall- / pole-mount, between aerial cables, man- / hand-holes
Materials	: body = Polypropylene, rubber caps = Polyolefine, screws = stainless steel Niro A2 - entirely non-corrosive

SilverLink

Square Closures

PART-NUMBERS

SL-CLOSURE-OUT23/J

*outdoor joint version, single grommet: 2 cable entries max. cable Ø23mm
or duplex grommet: 4 cable entries max. cable Ø13mm*

SL-CLOSURE-OUT23/D

*outdoor distribution version, single grommet: 4 cable entries max. cable Ø23mm
or duplex grommet: 8 cable entries max. cable Ø13mm*

SL-CLOSURE-OUT42/J

*outdoor joint version, single grommet: 2 cable entries max. cable Ø42mm
or duplex grommet: 4 cable entries, max. cable Ø23mm*

SL-CLOSURE-OUT42/D

*outdoor distribution version, single grommet: 4 cable entries max. cable Ø42mm
or duplex grommet: 8 cable entries max. cable Ø23mm*

SL-CLOSURE-OUT71/J

*outdoor joint version, single grommet: 2 cable entries max. cable Ø71mm
or duplex grommet: 4 cable entries, max. cable Ø36mm*

SL-CLOSURE-OUT71/D

*outdoor joint version, single grommet: 2 cable entries max. cable Ø71mm
+ 4 cable entries max. cable Ø42mm
or duplex grommet: 4 cable entries max. cable Ø36mm
+ 8 cable entries max. cable Ø23mm*

- *customized solutions available on request* -

DOME CLOSURES

APPLICATION

Fumo's closures are developed to avoid the problem of the earlier complicated and dangerous heat shrinking system. They are increasingly acknowledged and successful, due to exceeding the expectations of both, technology and economy. All closures are re-openable and -usable for in- and outdoor applications, and do match all common cable types.

PRODUCT RANGE

Cable entries	: up to 8 cables (also uncut cables)
Cable Ø	: up to 42mm
Cable types	: energy & multipair cables
Protection grade	: IP68 *(absolutely sealed)*
Resistance	: against chemicals, ultra-violet rays, acids
Installation	: direct burial, wall- / pole-mount, between aerial cables, man- / hand-holes
Materials	: body = Polypropylene, rubber caps = Polyolefine, screws = stainless steel Niro A2 - entirely non-corrosives

Dome Closures

PART-NUMBERS

SL-CLOSURE-DOME1   *outdoor dome version, 4 cable entries, cable Ø5mm up to 14mm*

SL-CLOSURE-DOME2   *outdoor dome version, 4 cable entries, cable Ø7mm up to 25mm*

SL-CLOSURE-DOME3   *outdoor dome version, 1 cable entry for cable Ø10mm up to 42mm*

+ 1 cable entry for cable Ø10mm up to 33mm

+ 6 cable entries for cable Ø8mm up to 26mm

- customized solutions available on request -

Copper Cables

SilverLink

CABLES

DATA CABLES

APPLICATION

All components of/and the final product are designed and tested to conform the requirements of the international structured cabling standards ISO/IEC 11801, EN 50/173 and EIA/TIA 568, as well as the specific norms of ISO/IEC, EN, EIA/TIA, ITU-T, Bellcore/Telcordia, ANSI, IEEE and the relevant national regulations.

PRODUCTION RANGE

Shieldings	:	unshielded *(UTP)* & shielded *(STP)*
Performance ranges	:	Cat5e, Cat6 & Cat.6$_A$
		Cat7 & Cat.7$_A$ *(shielded only)*
Sheathing materials	:	PVC, PE, PUR & LSZH-compounds
Packaging	:	305m box, 500m & 1000m drum

SilverLink

DATA CABLES
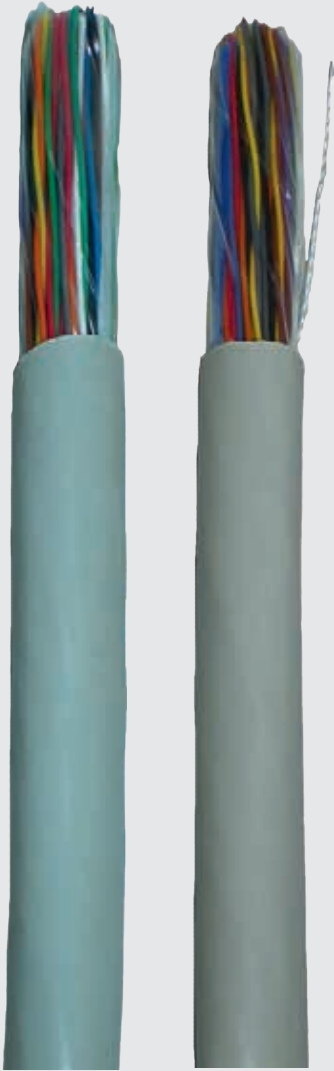
PART-NUMBER KEY

Example: **SL - CA-UTP4x2x23-C6-LSZH** — *unshielded, 4 twisted-pair cable, AWG23, cat.6, LSZH sheasth*
    [1]   [2]   [3]   [4] [5] [6] [7]

[1]   SilverLink - copper main product range

[2]   Cables

[3]   Shielding: UTP *(unshielded)*

         F/UTP, SF/UTP, U/FTP, S/FTP *(shielded versions)*

[4]   Number of pairs

[5]   Wire diameter AWG *(American Wire Gauge)*: 22 / 23 / 24 / 26 / 27 & 28

[6]   Performance range: C5e = 100MHz / C6 = 250MHz / $C6_a$ = 500MHz

         C7 = 600MHz / $C7_a$ = 1000MHz

         - dedicated frequencies are mentioned after no. of category; eg. C7/1200 -

[7]   Sheathing material: PVC / PE / PUR / LSZH & LSZHFR

TELECOM CABLES

APPLICATION

All components of/and the final product are designed and tested to conform the requirements of the international structured cabling standards ISO/IEC 11801, EN 50/173 and EIA/TIA 568, as well as the specific norms of ISO/IEC, EN, EIA/TIA, ITU-T, Bellcore/Telcordia, ANSI, IEEE and the relevant national regulations.

PRODUCTION RANGE

Shieldings	:	unshielded *(UTP)* & shielded *(STP)*
Performance ranges	:	up to 16MHz
Sheathing materials	:	PVC, PE, PUR & LSZH-compounds
Packaging	:	500m & 1000m drums

SilverLink

Telecom Cables

PART-NUMBER KEY

Example: **SL - CA-UTP50x2x0.6-C3-PVC** — *unshielded, 50 twisted-pairs, 0.6mm wireØ, cat.3, PVC*
        [1]   [2]   [3]   [4]   [5] [6]   [7]

[1]   SilverLink - copper main product range

[2]   Cables

[3]   TP = twisted pairs

    U = unshielded

    F = foil screen, S = braid screen, C = steel tape, A = aluminium tape

[4]   Number of pairs - cable construction

[5]   Wire diameter in milimeters

[6]   Performance range: C3 = up to 16MHz or without specification

    - dedicated frequencies are mentioned after no. of category, eg. C3/16 -

[7]   Sheathing material: PVC / PE / PUR / LSZH & LSZHFR

Industrial Cables

APPLICATION

Fumo offers industrial cable solutions for most extreme conditions, by granting superior electrical and mechanical properties. Many years of international experience in industrial projects are the profound base for reliability and flexibility when it comes to cable solutions in the industrial sector. The range of cables includes approved standardized types, as well as customized solutions for both in- and outdoor applications.

FEATURES

Insulation materials	: PVC, PE, XLPE, HDPE, PA *(nylon)*, FRNC / FRLS & silicon rubber
Armouring	: SWA, SWB, BCu TCu wire braids, corrugated steel *(CS)*, alu tapes, aramid- & glass yarns
Chemical protections	: extruded lead sheath and lead-free multilayer contructions
Screens	: individual as well as overall foil, metal tape and/or braids
Conductors	: single and triple aluminium or copper *(power)* solid, stranded or flexible cores
Cores	: thermo-couple extension and compensating
Cabling elements	: cores, pairs, triples and quads

SilverLink

Industrial Cables

Control cables

Earthing cables

Elevator cables

Energy cables

Fieldbus cables

Fire-control cables

Fire-resistant cables

Instrumentation cables

Pilot cables

Plant- and Petrochem cables

Power cables

Rubber cables

Signal cables

Thermo-couple cables

ENTIRELY CUSTOMIZED CABLES OF THE <u>SL-IND-</u>...-*SERIES* !

Ship-, Marine- & Offshore Cables

APPLICATION

The new generation of Fumo's marine cables is designed, manufactured, tested and approved for use in fixed applications on vessels and offshore plattforms. The construction of the different types is halogen-free, light-weight, highly flexible and flame-retardent. Fumo marine cables feature special characteristics enabling reliable, fast and easy installations, by granting proper long-term cable lifetime.

All marine cables are designed and produced according to international standards. The choice of materials and constructions ensures that the cables are resitant to vibrations, most chemicals and hydro-carbons, which are commonly used on-board of ships. All marine cables fully comply with the requirements specified in IEC 60092 series of standards.

Fumo also offers specific cables for marine applications such as:

- flexible cables class 5
- fiber optic cables
- coaxial cables
- industrial cables.

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Ship-, MArine- & Offshore Cables

APPROVALS

• American Bureau of Shipping *(ABS)*,

• Bureau Veritas *(BV)*,

• Det Norske Veritas *(DNV)*,

• Germanischer Lloyd *(GL)*,

• Lloyd Register of Shipping *(LRS)*

   - additional approvals available on request -

INTERNATIONAL STANDARDS

Fire performance:	IEC 60332-1, IEC 60332-3 Cat.A, IEC 60754-1, IEC 61034-2
Fire resistant cables:	IEC 60331
General standards:	IEC 60092-350, IEC 60092-351, IEC 60092-353, IEC 60092-354, IEC 60092-359,
	IEC 60092-375, IEC 60092-376, IEC 60332-1, IEC 60332-3-22, IEC 60754-1,
	IEC 61034-1, IEC 60811, IEC 60228, IEC 60331-11, IEC 60331-21

Part-Numbers

SL-CA/SHIP-..........	*(due to the fact, that these cables are highly customized, part numbers will be defined only individually)*
SL-CA/MARE-........	*(due to the fact, that these cables are highly customized, part numbers will be defined only individually)*
SL-CA/OFF-...........	*(due to the fact, that these cables are highly customized, part numbers will be defined only individually)*

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