



DATA CENTRE CABLING PRODUCT OVERVIEW

Flexible and future-proof solutions for data centres

TRADITION ♦ INNOVATION ♦ PASSION



CONTENTS

	page
System solutions from a single source	3
Each solution has its own advantages	4
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Datwyler Data Centre Solution	
Future-proof cabling solutions for data centres	6
Channel configurations	6
Subracks & patch panels	8
Plug-in modules / cassettes & front panels	10
Patch & fanout cables	12
Plug-in modules / cassettes copper	15
FO cleaning tools	15
<hr/>	
Classic fibre-optic solutions	
Universal cables	17
Patch panels	19
Pigtails & patch cords	20
<hr/>	
Classic copper solutions	
Data cables	22
Modules	23
Patch panels	23
Patch cords	24
<hr/>	
Pre-assembled trunk cables	
Fibre optic trunks	26
Copper trunks	28
CU SwitchPort Solution	30

SYSTEM SOLUTIONS FROM A SINGLE SOURCE



SECURITY ZONE

DATA CENTRE CABLING

Cabling plays a key role in high-availability

The corner stones of a modern ICT cabling system in the data centre field are **flexibility and continuous application support** for existing and future technologies. The corresponding plug-and-play systems should also offer space-savings in the rack and operate at very high transmission rates, for example, up to 40 and 100 Gbit/sec.

You can essentially choose between **three different approaches** for the fail-safe high-speed data transmission solution in your data centre: classical cabling using copper and fibre-optic technology, a complete or partially pre-assembled solution with multiple cables (trunks), or a modular high-density fibre-optic solution, for example, the "Datwyler Data Centre Solution".

The **Datwyler Data Centre Solution** is a future-proof, pre-assembled plug-and-go fibre optic solution which has been specially developed for high-density requirements in data centres. It features very high quality cable and components and high-precision connector manufacture. Because of its excellent optical and geometric properties, this solution is not just suitable for all of today's high-speed applications, but also those of the future, such as 32GFC, 40/100G-Ethernet and 120G Infiniband. Modular components which can be configured in any required combination offer users the highest degree of design flexibility.

For a **classical solution** – which may be preferred due to on-site demands or integration with legacy hardware – Datwyler offers you a wide range of high-quality data and patch cables, connecting hardware, distribution boxes, racks and accessories. All conceivable application areas are covered by this solution: from the cabling of small server rooms to complex installations with high-speed requirements.









Pre-assembled systems with trunk cables – cut to length and labelled according to the customer's requirements, equipped with connectors or modules and pre-tested in the factory – offer you the advantage of much faster installation, simpler cable management and easier documentation. A solution like this requires more planning effort in advance but saves time and costs during the installation itself. The trunk cables, which are pre-assembled and capacity-determined in the laboratory, reduce not only the error rate but also the measuring expenditure on-site. With trunk cabling, adds and enhancements can also be quickly and easily implemented.


The data centre cabling provided by Datwyler not only complies with the **approved international standards** but also generally exceeds current standards and drafts by a **considerable margin** – and therefore guarantees higher future viability and design flexibility. The Datwyler solution portfolio covers **the whole topology**, from supply networks, through the main distribution area with core and switching racks to the horizontal or zone distribution area or to the server and central switch racks.

The selection of cables and connecting technology in data centres is determined by the network topology, IT components and selected cabling concept. There is a trend for new switching architectures and flat hierarchies (diverse data centre fabric models). But we also have a large number of typical architectures: top of rack switching, mainly used in high-density server environments, middle or end of row switching enabling the connection of several server cabinets, as well as integrated switching for blade server networks. In many cases we also realise a central distributor in a patched cross-connect environment. This architecture places significant demands on the quality of the cabling system components.

EACH SOLUTION HAS ITS OWN ADVANTAGES

The following two tables compare the three different approaches with Plus being the highest recommendation based on project requirement. Should you require any further information, Datwyler will be happy to assist.

Datwyler copper cabling solutions for data centres	Classic 	Trunk 	High Density Solution 
 Planning lead time	+ +	-	- -
 Assembly time	- -	+	+ +
 Required space in the rack	■	■	+ +
 Required space on cable ducts	■	■	+
 Fire load	■	■	+
 Flexibility (Moves, Adds, Changes)	- -	+	+ +
 Investment costs (first installation)	■	■	■
 Total Cost of Ownership (TCO)	■	+	+ +

Datwyler fibre-optic cabling solutions for data centres	Classic 	Trunk 	Data Centre Solution 
 Planning lead time	+ +	-	- -
 Assembly time	- -	+	+ +
 Required space in the rack	■	■	+ +
 Required space on cable ducts	■	■	+ +
 Fire load	■	■	+ +
 Flexibility (Moves, Adds, Changes)	- -	+	+ +
 Investment costs (first installation)	■	■	■
 Total Cost of Ownership (TCO)	■	+	+ +

+ = preferred	■ = suitable	- = not recommended
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DATWYLER DATA CENTRE SOLUTION

Future-proof cabling solutions for data centres

The requirements for data centre infrastructures are increasing as the rapid growth in worldwide IT usage continues. High-performance cabling systems, chiefly in fibre optic technology, already constitute the backbone of high-speed data transfer in data centres. The ever higher transmission rates not only call for high quality optical fibres, they also make increasing demands on the connecting components. Both these parameters are crucial to the efficient performance of transmission channels.

Flexibility is another core requirement for a cabling solution in today's data centre environment. New systems need to be planned, assembled and installed within a very short time. New technologies like blade systems or virtualisation, for example, mean that link performance standards are continually rising.

The Datwyler Data Centre Solution surpasses all the requirements for current cabling solutions, its excellent optical and geometric connector assembly values being the key differentiator.

The high-performance, carefully coordinated cables and components of Datwyler's Data Centre Solution can be combined as required and make it possible to implement an open infrastructure design decoupled from the user's equipment pool.

The system also allows simple and reliable migration to future applications.

DATWYLER DATA CENTRE SOLUTION

FUTURE-PROOF CABLING SOLUTIONS

for data centres

Benefits of the Datwyler Data Centre Solution

- Top quality guarantees top performance
- High packing densities hand in hand with good clear layout
- Fast and easy assembly (plug-and-go)
- Modifications/installations possible during ongoing operation, no need for outside companies (reducing OPEX)
- Pre-assembly: no stripping, splicing or connector termination work necessary
- Slimline cable design, so no disruption to cooling air flow and no redundant lengths of cable in rack
- Scaleable thanks to modular design
- Investment protection and future viability as migratable to 40/100G (MTP®)
- High spare capacity due to extremely low optical losses,
- Power budget protection thanks to bend-optimised MM fibres

The most important system components

- Pre-assembled fibre optic mini trunks (high-performance)
- Pre-assembled fibre optic plug-in modules (high-performance)
- Fibre optic fanout cables (high-performance)
- Fibre optic patch cables (high-performance)
- Modularly equipped 19-inch 1U, 3U and 4U panels / subracks
- Patch management trays and cable management accessories

In server rooms and data centres these system components provide high-performance modular cabling solutions tailored to customer requirements, the outstanding features of which are clear layout, flexibility, high packing densities and good handling during operation.

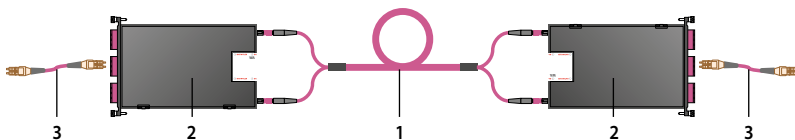
Optical values of the components

Criterion	Assembly Class	Insertion Loss IL [dB]		Return Loss RL [dB]	
		mean	maximum	mean	minimum
Connector type	IEC 61755-3-2				
Multi-fibre MTP Elite® 0° PC (Multimode)	Grade B	0.15	0.3	≥ 35	≥ 30
Multi-fibre MTP Elite 8° APC (Single-mode)	Grade B	0.1	0.3	≥ 70	≥ 65
Single-fibre LCD Uniboot 0° PC (Multimode)	Grade B	0.1	0.25	≥ 40	≥ 35
Single-fibre LCD Uniboot 8° APC (Single-mode)	Grade B	0.1	0.25	≥ 75	≥ 65

CHANNEL CONFIGURATIONS

The high-performance carefully coordinated cables and components of the Datwyler Data Centre Solution can be combined as required and make it possible to implement an open infrastructure design decoupled from the user's equipment pool. The system also allows simple migration to future applications. The graphics below show some typical configurations.

Module-to-module configuration



Two FO-DCS plug-in modules are interconnected by a thin mini-breakout cable MTP-MTP. For all known Ethernet and Fiber Channel duplex applications.

Part Level	Description	Remarks
1	High-performance Mini-breakout cable MTP-MTP, type A or type C	12, 24, 48, 72, 96 or 144 fibres
2	High-performance Plug-in module, 3U/7HP, 24F, 2x MTP on 12x LCD	24 fibres
3	High-performance LCD Uniboot patch cable	Polarity: A to A or A to B

These system components are available in multimode (OM3 or OM4) and single-mode (G.652.D) versions.

MTP® and MTP Elite® are registered brands of US Conec.

DATWYLER DATA CENTRE SOLUTION

Module-to-module configuration (spliced)

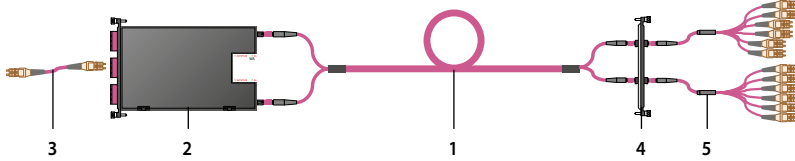


Two FO-DCS splice plug-in modules are interconnected by a thin FO Universal cable (for indoor and outdoor use). For all known Ethernet and Fiber Channel duplex applications.

Part	Level	Description	Remarks
1	High-performance	FO Universal U-DQ(ZN)BH cable	12, 24, 48, 72, 96 or 144 fibres
2	High-performance	Splice plug-in modules, 3U/7HP, 24F, 12x LCD	24 fibres
3	High-performance	LCD Uniboot patch cable	Polarity: A to A or A to B

These system components are available in multimode (OM3 or OM4) and single-mode (G.652.D) versions.

Module-to-fanout configuration

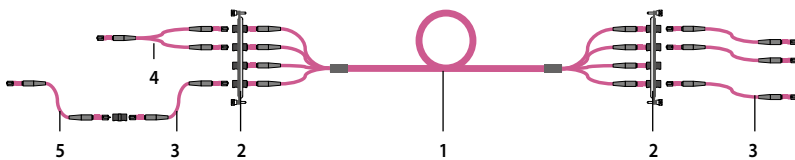


One FO-DCS plug-in module is connected to two fanout cables (MTP on LCD Uniboot) by a thin mini-breakout cable for a direct link between the active ports, for example, ports of a SAN switch. For all known Ethernet and Fiber Channel duplex applications.

Part	Level	Description	Remarks
1	High-performance	Mini-breakout cable MTP-MTP, type A or type C	12, 24, 48, 72, 96 or 144 fibres
2	High-performance	Plug-in module, 3U/7HP, 24F, 2x MTP on 12x LCD	24 fibres
3	High-performance	LCD Uniboot patch cable	Polarity: A to A or A to B
4		Front plate, 3U/7HP, 2x MTP adapter type A	also available with 4x or 8x MTP adapter
5	High-performance	Fanout cable, 1x MTP on 6x LCD Uniboot	Polarity: type A or type C

These system components are available in multimode (OM3 or OM4) and single-mode (G.652.D) versions.

Migration to 40/100G (parallel optics)



The FO-DCS plug-in modules (MTP-on-LCQ) in subracks are replaced by FO-DCS front plates with MTP adapters. The high-performance mini-breakout cables MTP-MTP can continue to be used. Datwyler supplies high-performance MTP patch cables for connection of the active IT equipment.

Part	Level	Description	Remarks
1	High-performance	Mini-breakout cable MTP-MTP, type A or type C	12, 24, 48, 72, 96 or 144 fibres
2		Front plate, 3U/7HP, 4x MTP adapter type A	also available with 2x or 8x MTP adapter
3	High-performance	MTP patch cable	Polarity: type A, B or C, 12 fibres
4	High-performance	Patch cable, Y patch cable (1x MTP 24F on 2x MTP 12F)	Polarity: type A, B or C, 24 fibres
5	High-performance	MTP jumper cable	Polarity: type A, B or C, 12 fibres

DATWYLER DATA CENTRE SOLUTION

SUBRACKS & PATCH PANELS

FO-DCS modular subrack, 19"/4U

Description

- Pre-assembled with horizontal 84HP guide rails, modularly equippable
- Takes a maximum of twelve 3U/7HP FO-DCS plug-in modules or FO-DCS front plates
- Capacity: up to 144 duplex ports (288 fibres), up to 96 MTP ports (1152 fibres)
- Any mixture of modules / front plates can be installed
- Extractable excess cable length tray (1U): with 2 big slots on one side and pre-cut holes on the other side, both of which can optionally be used as cable entry openings



Article No.	Description	Material / colour	PU
470540	FO-DCS modular subrack, 19"/3U, 84HP (without excess cable length tray)	Aluminium, anodised	1 pc.
470542	FO-DCS modular subrack, 19"/4U, 84HP	Aluminium, anodised	1 pc.
470642	FO-DCS modular subrack, 19"/4U, 84HP	Aluminium, black	1 pc.

FO-DCS modular panel, 19"/1U

Description

- Takes a maximum of three 3U/7HP FO-DCS plug-in modules or FO-DCS front plates
- Capacity: up to 36 duplex ports (72 fibres), up to 24 MTP ports (288 fibres)
- Any mixture of modules / front plates can be installed



Article No.	Description	Material / colour	PU
470543	FO-DCS modular panel, 19"/1U (delivery without plug-in modules/front panels)	Aluminium, anodised	1 pc.
470643	FO-DCS modular panel, 19"/1U (delivery without plug-in modules/front panels)	Aluminium, black	1 pc.

FO-DCS compact breakout panel, 19"/1U

Description

- Pre-assembled with 12 or 24 LC Quad adapters
- Capacity: 24 duplex ports (48 fibres) or 48 duplex ports (96 fibres)
- Sturdy aluminium housing



Article No.	Description	Material / colour	PU
470618	FO-DCS compact breakout panel, 19"/1U, 12x LCQ, OM3 turquoise	Aluminium, anodised	1 pc.
470619	FO-DCS compact breakout panel, 19"/1U, 12x LCQ, OM4 heather violet	Aluminium, anodised	1 pc.
470620	FO-DCS compact breakout panel, 19"/1U, 12x LCQ, OS2 blue	Aluminium, anodised	1 pc.
470621	FO-DCS compact breakout panel, 19"/1U, 12x LCQ, OS2 green	Aluminium, anodised	1 pc.
470622	FO-DCS compact breakout panel, 19"/1U, 24x LCQ, OM3 turquoise	Aluminium, anodised	1 pc.
470623	FO-DCS compact breakout panel, 19"/1U, 24x LCQ, OM4 heather violet	Aluminium, anodised	1 pc.
470624	FO-DCS compact breakout panel, 19"/1U, 24x LCQ, OS2 blue	Aluminium, anodised	1 pc.
470625	FO-DCS compact breakout panel, 19"/1U, 24x LCQ, OS2 green	Aluminium, anodised	1 pc.

Variants in Aluminium black available on request.

DATWYLER DATA CENTRE SOLUTION

FO-DCS compact panel, 19"/1U, with MTP-LCD pre-assembly

Description

- Pre-assembled with 4 or 8 MTP couplers (Type A: key-up/key-down) at rear side, MTP-on-LC fanouts and 12 or 24 LC Quad adapters at front side
- Capacity: 24 or 48 duplex ports (48 or 96 fibres)
- Top-quality assembly: ensures optimum values for optical performance (IL/RL)
- Sturdy aluminium housing



Article No.	Description	Material / colour	PU
470610	FO-DCS compact panel, 19"/1U, 4x MTP on 24x LCD, OS2 blue	Aluminium, anodised	1 pc.
470611	FO-DCS compact panel, 19"/1U, 4x MTP on 24x LCD-APC, OS2 green	Aluminium, anodised	1 pc.
470612	FO-DCS compact panel, 19"/1U, 4x MTP on 24x LCD, OM3 turquoise	Aluminium, anodised	1 pc.
470613	FO-DCS compact panel, 19"/1U, 4x MTP on 24x LCD, OM4 heather violet	Aluminium, anodised	1 pc.
470614	FO-DCS compact panel, 19"/1U, 8x MTP on 48x LCD, OS2 blue	Aluminium, anodised	1 pc.
470615	FO-DCS compact panel, 19"/1U, 8x MTP on 48x LCD-APC, OS2 green	Aluminium, anodised	1 pc.
470616	FO-DCS compact panel, 19"/1U, 8x MTP on 48x LCD, OM3 turquoise	Aluminium, anodised	1 pc.
470617	FO-DCS compact panel, 19"/1U, 8x MTP on 48x LCD, OM4 heather violet	Aluminium, anodised	1 pc.

Variants in Aluminium black available on request.

FO-DCS management panel, 19"/1U

Description

- For the proper routing of fibre optic patch cables in 19" IT racks and cabinets
- Equipped with 6 cable routing elements and detachable front plate



Article No.	Description	Material / colour	PU
470544	FO-DCS management panel, 19"/1U, left-side routing	Aluminium, anodised	1 pc.
470545	FO-DCS management panel, 19"/1U, right-side routing	Aluminium, anodised	1 pc.
470546	FO-DCS management panel, 19"/1U, left / right-side routing	Aluminium, anodised	1 pc.
470644	FO-DCS management panel, 19"/1U, left-side routing	Aluminium, black	1 pc.
470645	FO-DCS management panel, 19"/1U, right-side routing	Aluminium, black	1 pc.
470646	FO-DCS management panel, 19"/1U, left / right-side routing	Aluminium, black	1 pc.
470554	Labelling strip for FO-DCS management panel, 420 x 12 mm		1 pc.
4000140	Hook-and-loop tape, 19 mm (1 pc. = 10 m roll)		1 pc.

DATWYLER DATA CENTRE SOLUTION

PLUG-IN MODULES / CASSETTES

FO-DCS MTP plug-in module, 24F and 12F, 3U/7HP

Description

- Polycarbonate (PC) housing, press-fit side panels (sealed)
- Black PC or aluminium 3U/7HP front panel with 6x LCQ, 6x LCD or 6x LSH
- The rear MTP couplers are routed to the front couplers by way of an internal fanout
- Integrated fibre management
- Black PC front panels provide labelling strips



Article No. with black PC front panel	Article No. with anodised Alu front panel	Description	PU
571500	571600	FO-DCS 3U/7HP plug-in module, 2x MTP on 6x LCQ, OM3	1 pc.
571501	571601	FO-DCS 3U/7HP plug-in module, 2x MTP on 6x LCQ, OM4	1 pc.
571502	571602	FO-DCS 3U/7HP plug-in module, 2x MTP on 6x LCQ/PC, OS2 (G.652.D)	1 pc.
571503	571603	FO-DCS 3U/7HP plug-in module 2x MTP on 6x LCQ/APC, OS2 (G.652.D)	1 pc.
571599		Labelling sheet A4, perforated (blank)	10 pcs.



Article No. with black PC front panel	Article No. with anodised Alu front panel	Description	PU
571506	571606	FO-DCS 3U/7HP plug-in module, 1x MTP on 6x LCD, OM3	1 pc.
571507	571607	FO-DCS 3U/7HP plug-in module, 1x MTP on 6x LCD, OM4	1 pc.
571508	571608	FO-DCS 3U/7HP plug-in module, 1x MTP on 6x LCD/PC, OS2 (G.652.D)	1 pc.
571509	571609	FO-DCS 3U/7HP plug-in module, 1x MTP on 6x LCD/APC, OS2 (G.652.D)	1 pc.
571599		Labelling sheet A4, perforated (blank)	10 pcs.



Article No. with black PC front panel	Article No. with anodised Alu front panel	Description	PU
571505	571605	FO-DCS 3U/7HP plug-in module, 1x MTP on 6x LSH-C/APC, OS2 (G.652.D)	1 pc.
571599		Labelling sheet A4, perforated (blank)	10 pcs.

DATWYLER DATA CENTRE SOLUTION

FO-DCS splice plug-in module, 3U/7HP

Description

- Polycarbonate (PC) housing, press-fit side panels (sealed)
- Black PC or aluminium 3U/7HP front panel with 6x LCQ or 6x LCD
- Ready-to-splice pigtails (1.3 m) are neatly inserted
- Cassette has splice reserve on both sides (cable/pigtail), splice comb and strain relief
- Black PC front panels provide labelling strips

There is a separate distribution box available for multi-fibre loose tube cables or for storing the excess tube lengths (see our website for more information)



Article No. with black PC front panel	Article No. with anodised Alu front panel	Description	PU
571530	571630	FO-DCS 3U/7HP splice plug-in module, 6x LCQ, OM3	1 pc.
571531	571631	FO-DCS 3U/7HP splice plug-in module, 6x LCQ, OM4	1 pc.
571532	571632	FO-DCS 3U/7HP splice plug-in module, 6x LCQ/PC, OS2 (G.652.D)	1 pc.
571533	571633	FO-DCS 3U/7HP splice plug-in module, 6x LCQ/APC, OS2 (G.652.D)	1 pc.
571599		Labelling sheet A4, perforated (blank)	10 pcs.



Article No. with black PC front panel	Article No. with anodised Alu front panel	Description	PU
571536	571636	FO-DCS 3U/7HP splice plug-in module, 6x LCD, OM3	1 pc.
571537	571637	FO-DCS 3U/7HP splice plug-in module, 6x LCD, OM4	1 pc.
571538	571638	FO-DCS 3U/7HP splice plug-in module, 6x LCD/PC, OS2 (G.652.D)	1 pc.
571539	571639	FO-DCS 3U/7HP splice plug-in module, 6x LCD/APC, OS2 (G.652.D)	1 pc.
571599		Labelling sheet A4, perforated (blank)	10 pcs.

FRONT PANELS

FO-DCS MTP front panel, 3U/7HP

Description

- Polycarbonate (PC) or aluminium front panel with 2, 4 or 8 MTP adapters (with dust caps)
- Black PC front panels provide labelling strips on both sides



Article No. black PC	Article No. anodised alu	Description	PU
571550		FO-DCS front panel, 2x MTP, 3U/7HP 2x MTP type A turquoise	1 pc.
571551		FO-DCS front panel, 2x MTP, 3U/7HP 2x MTP type A magenta	1 pc.
571552		FO-DCS front panel, 2x MTP, 3U/7HP 2x MTP type A black	1 pc.
571556		FO-DCS front panel, 4x MTP, 3U/7HP 4x MTP type A turquoise	1 pc.
571557		FO-DCS front panel, 4x MTP, 3U/7HP 4x MTP type A magenta	1 pc.
571558	470550	FO-DCS front panel, 4x MTP, 3U/7HP 4x MTP type A black	1 pc.
571560		FO-DCS front panel, 8x MTP, 3U/7HP 8x MTP type A turquoise	1 pc.
571561		FO-DCS front panel, 8x MTP, 3U/7HP 8x MTP type A magenta	1 pc.
571562	470551	FO-DCS front panel, 8x MTP, 3U/7HP 8x MTP type A black	1 pc.
571599		Labelling sheet A4, perforated (blank)	10 pcs.

DATWYLER DATA CENTRE SOLUTION

PATCH & FANOUT CABLES

FO-DCS mini breakout cable MTP-MTP, 12-144 fibres



- Compact, metal-free cable construction with FR/LSOH cable sheath
- 12 to 144 OM3, OM4 or OS2 fibres
- For duplex and parallel optic signals
- Sticker labelling at both cable ends
- Project-specific leg lengths (maximum 4.0 m), fitted with protective sleeves
- Pre-terminated with MTP connectors (12-fibre Elite ferrules)
- Polarisation mode type A or C (other types on request)
- Comes with test reports

Article No. type A	Article No. type C	Description	Cable sheath colour	PU
470510	570510	FO-DCS mini breakout cable MTP-MTP, 12F, OM3	turquoise	by the metre
470534	570534	FO-DCS mini breakout cable MTP-MTP, 12F, OM4	heather violet	by the metre
470511	570511	FO-DCS mini breakout cable MTP-MTP, 12F, OS2 (G.652.D)	yellow	by the metre
470512	570512	FO-DCS mini breakout cable MTP-MTP, 2x 12F, OM3	turquoise	by the metre
470535	570535	FO-DCS mini breakout cable MTP-MTP, 2x 12F, OM4	heather violet	by the metre
470513	570513	FO-DCS mini breakout cable MTP-MTP, 2x 12F, OS2 (G.652.D)	yellow	by the metre
470525	570525	FO-DCS mini breakout cable MTP-MTP, 4x 12F, OM3	turquoise	by the metre
470536	570536	FO-DCS mini breakout cable MTP-MTP, 4x 12F, OM4	heather violet	by the metre
470526	570526	FO-DCS mini breakout cable MTP-MTP, 4x 12F, OS2 (G.652.D)	yellow	by the metre
470518	570518	FO-DCS mini breakout cable MTP-MTP, 6x 12F, OM3	turquoise	by the metre
470537	570537	FO-DCS mini breakout cable MTP-MTP, 6x 12F, OM4	heather violet	by the metre
470519	570519	FO-DCS mini breakout cable MTP-MTP, 6x 12F, OS2 (G.652.D)	yellow	by the metre
470520	570520	FO-DCS mini breakout cable MTP-MTP, 8x 12F, OM3	turquoise	by the metre
470538	570538	FO-DCS mini breakout cable MTP-MTP, 8x 12F, OM4	heather violet	by the metre
470521	570521	FO-DCS mini breakout cable MTP-MTP, 8x 12F, OS2 (G.652.D)	yellow	by the metre
470522	570522	FO-DCS mini breakout cable MTP-MTP, 12x 12F, OM3	turquoise	by the metre
470539	570539	FO-DCS mini breakout cable MTP-MTP, 12x 12F, OM4	heather violet	by the metre
470523	570523	FO-DCS mini breakout cable MTP-MTP, 12x 12F, OS2 (G.652.D)	yellow	by the metre

FO-DCS universal cable MTP-MTP, 12-48 fibres



- Sturdy cable with enhanced crush resistance and rodent protection
- Compact, metal-free cable construction with FR/LSOH cable sheath
- 12 to 48 OM3, OM4 or OS2 fibres
- For duplex and parallel optic signals
- Sticker labelling at both cable ends
- Project-specific leg lengths (maximum 4.0 m), divider housings, fitted with protective sleeves
- Pre-terminated with MTP connectors (12-fibre Elite ferrules)
- Polarisation mode type A or C (other types on request)
- Comes with test reports

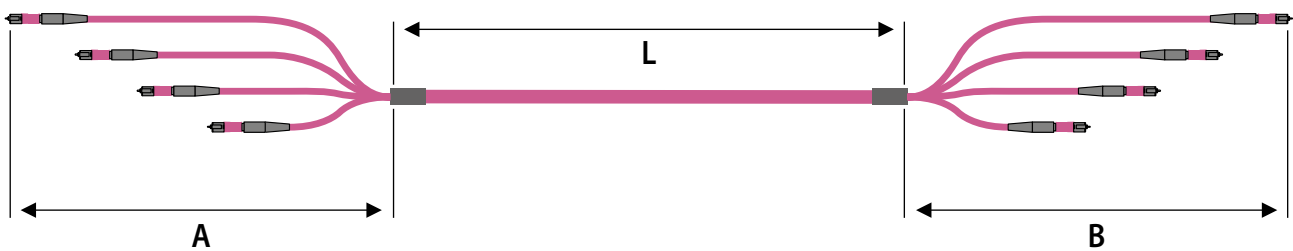
Article No. type A	Article No. type C	Description	Cable sheath colour	PU
570641	570644	FO-DCS universal cable MTP-MTP, 12F, OM3	turquoise	by the metre
570651	570654	FO-DCS universal cable MTP-MTP, 12F, OM4	heather violet	by the metre
570661	570664	FO-DCS universal cable MTP-MTP, 12F, OS2 (G.652.D)	yellow	by the metre
570642	570645	FO-DCS universal cable MTP-MTP, 2x 12F, OM3	turquoise	by the metre
570652	570655	FO-DCS universal cable MTP-MTP, 2x 12F, OM4	heather violet	by the metre
570662	570665	FO-DCS universal cable MTP-MTP, 2x 12F, OS2 (G.652.D)	yellow	by the metre
570643	570646	FO-DCS universal cable MTP-MTP, 4x 12F, OM3	turquoise	by the metre
570653	570656	FO-DCS universal cable MTP-MTP, 4x 12F, OM4	heather violet	by the metre
570663	570666	FO-DCS universal cable MTP-MTP, 4x 12F, OS2 (G.652.D)	yellow	by the metre

other versions on request

DATWYLER DATA CENTRE SOLUTION

Pre-assembled fibre optic cable variants

- Datwyler also supplies its ready-to-install FO cables in pre-assembled variants such as
- MTP-on-LCD
 - LCD-on-LCD
 - LCD-on-SCD
 - Tailor-made versions for all projects



- L = Length between dividers / fixing points (= purchase order length)
 A = Type of assembly side A: as required / depending on application, legs graded in length (see example image) or of equal length
 B = Type of assembly side B: as required / depending on application, legs graded in length (see example image) or of equal length

FO-DCS fanout cable MTP-LCD, 12 fibres

- Pre-terminated with 1 MTP connector and 6 LCD Uniboot connectors
- 12 OM3, OM4 or OS2 fibres
- For quick and space-saving cabling of active components (switches, servers, storage, etc.)
- The legs can be ordered graded in length or of equal length
- Project-specific assemblies are available on request
- Comes with test reports



Article No. type A	Article No. type C	Description	Cable sheath colour	Length [m]
571201	571211	FO-DCS fanout cable MTP/f-LCDU, 12F, OM3, graded	turquoise	2.5
571202	571212	FO-DCS fanout cable MTP/f-LCDU, 12F, OM3, equal	turquoise	2.5
571203	571213	FO-DCS fanout cable MTP/f-LCDU, 12F, OM4, graded	heather violet	2.5
571204	571214	FO-DCS fanout cable MTP/f-LCDU, 12F, OM4, equal	heather violet	2.5
571205	571215	FO-DCS fanout cable MTP/f-LCDU, 12F, OS2 (G.652.D), graded	yellow	2.5
571206	571216	FO-DCS fanout cable MTP/f-LCDU, 12F, OS2 (G.652.D), equal	yellow	2.5

DATWYLER DATA CENTRE SOLUTION

FO-DCS patch cable MTP-MTP, 12 fibres*

- Thin and very flexible cable design (round cable Ø 3.0 mm) with 12 OM3 or OM4 fibres
- Low fire load due to its halogen-free flame-retardant LSOH sheath
- Up to 5 m standard lengths (other lengths on request)
- Sticker labelling at both cable ends
- Pre-terminated with MTP connectors (female) at both ends
- Polarisation mode type A, B or C (other types on request)
- Comes with test reports



Article No. type A	Article No. type B	Article No. type C	Description	Cable sheath colour	Length [m]
570901	570911	570921	FO-DCS patch cable MTP, 12F, OM3	turquoise	1.0
570931	570941	570951	FO-DCS patch cable MTP, 12F, OM4	heather violet	1.0
570902	570912	570922	FO-DCS patch cable MTP, 12F, OM3	turquoise	2.0
570932	570942	570952	FO-DCS patch cable MTP, 12F, OM4	heather violet	2.0
570903	570913	570923	FO-DCS patch cable MTP, 12F, OM3	turquoise	3.0
570933	570943	570953	FO-DCS patch cable MTP, 12F, OM4	heather violet	3.0
570904	570914	570924	FO-DCS patch cable MTP, 12F, OM3	turquoise	4.0
570934	570944	570954	FO-DCS patch cable MTP, 12F, OM4	heather violet	4.0
570905	570915	570925	FO-DCS patch cable MTP, 12F, OM3	turquoise	5.0
570935	570945	570955	FO-DCS patch cable MTP, 12F, OM4	heather violet	5.0

*FO-DCS patch cables MTP-MTP with 24 fibres as well as Y patch cables (24 on 2x12 MPT) and converter patch cables (24 on 3x12 MTP) are available on request.

FO-DCS patch cable LCD-LCD, 2 fibres

- Compact cable design (round cable Ø 2.2 mm) with FR/LSOH cable sheath and 2 fibres OM3, OM4 oder OS2, standard: G.652.D (G.657.A1 or G.657.A2 on request)
- Up to 10 m standard lengths (other lengths on request)
- Sticker labelling at both cable ends
- Pre-terminated with LCD Uniboot connectors at both ends
- Supplied with straight polarity (A to A) or cross polarity (A to B)
- Comes with test reports



Description	Colour	Type	Length in m / Article No.									
			1	2	3	4	5	6	7	8	9	10
FO-DCS patch cable LCDU, PC, 2F, OM3	turquoise	A to A	570801	570802	570803	570804	570805	570806	570807	570808	570809	570810
FO-DCS patch cable LCDU, PC, 2F, OM3	turquoise	A to B	570821	570822	570823	570824	570825	570826	570827	570828	570829	570830
FO-DCS patch cable LCDU, PC, 2F, OM4	violet	A to A	570841	570842	570843	570844	570845	570846	570847	570848	570849	570850
FO-DCS patch cable LCDU, PC, 2F, OM4	violet	A to B	570861	570862	570863	570864	570865	570866	570867	570868	570869	570870
FO-DCS patch cable LCDU, PC, 2F, OS2	yellow	A to A	570721	570722	570723	570724	570725	570726	570727	570728	570729	570730
FO-DCS patch cable LCDU, PC, 2F, OS2	yellow	A to B	570741	570742	570743	570744	570745	570746	570747	570748	570749	570750
FO-DCS patch cable LCDU, APC, 2F, OS2	yellow	A to A	570761	570762	570763	570764	570765	570766	570767	570768	570769	570770
FO-DCS patch cable LCDU, APC, 2F, OS2	yellow	A to B	570781	570782	570783	570784	570785	570786	570787	570788	570789	570790
FO-DCS patch cable LCDU, APC/PC, 2F, OS2	yellow	A to A	570701	570702	570703	570704	570705	570706	570707	570708	570709	570710
FO-DCS patch cable LCDU, APC/PC, 2F, OS2	yellow	A to B	570711	570712	570713	570714	570715	570716	570717	570718	570719	570720

PLUG-IN MODULES / CASSETTES COPPER

CU-DCS plug-in module for 6 RJ45 Keystone modules

Description

- For the insertion of a maximum of 6 RJ45 modules
- Delivery without modules



Plug-in module for 6x RJ45 Keystone modules

Article No.	Description	Colour (similar to)	PU
185681	Plug-in module for 6x RJ45 module MS 1/8 or MS-C6A 1/8 (without modules)	aluminum, silver	1 pc.
440046	Plug-in module for 6x RJ45 module Keystone (without modules)	stainless steel, blank	1 pc.
440055	Plug-in module for 6x RJ45 module Keystone (without modules)	black	1 pc.

FO CLEANING TOOLS

Description

Connectors that are dirty, worn or scratched due to improper use will have a negative effect on optical performance because the Insertion Loss (IL) increases whilst the Return Loss (RL) falls.

This topic is so important that it has found its way into all FO-related cabling standards. The standards point out that professional cleaning tools are necessary to ensure successful acceptance tests and trouble-free patching.

For professional on-site cleaning of FO connectors (e.g. MPO/MTP) the equipment as featured in Datwyler's FO accessories portfolio (see below) is particularly suitable.



Article No.	Fig.	Description	Items cleaned / method	PU
1411400	1	Reel Cleaner	FO connector	1 pc.
1411401	-	Replacement reels for Reel Cleaner		6 pcs.
415627	2	FO connector cleaning device for MPO/MTP	FO connector and through adapter	1 pc.
415628	3	FO connector cleaning device for 2.5 mm	FO connector and through adapter	1 pc.
415629	-	FO connector cleaning device for 1.25 mm	FO connector and through adapter	1 pc.
1411404	4	Cleaning rod for 2.5 mm	Sleeve in connector	10 pcs.
1411405	-	Cleaning rod for 1.25 mm	Sleeve in connector	10 pcs.



CLASSIC FIBRE-OPTIC SOLUTIONS

Convincing fibre-optic systems for data centres

Datwyler, as an experienced and innovative cable manufacturer, supplies complete fibre-optic cabling solutions - including services and support in the areas of consultation, planning, engineering, design, development, training, installation and documentation, if requested.

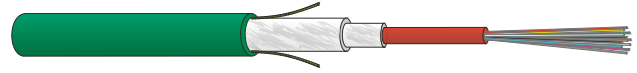
Datwyler has a comprehensive offering of fibre-optic cables and components for high-density, high-speed data centre solutions.

Our solutions are designed, overall and in detail, to fully meet the demands of the future. They are adapted to meet customer's needs and ensure a network infrastructure that will support future applications for a long time to come.

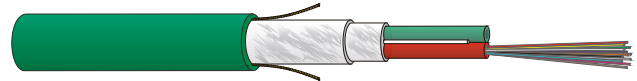
UNIVERSAL CABLES

FO Universal ZGGFR / U-DQ(ZN)BH for indoor and outdoor use, up to 24 fibres

metal-free, dry interstices,
rodent protection, flame retardant,
in accordance with IEC 60332.1 and IEC 60332.3 C



FO Universal U-DQ(ZN)BH ≤ 24 fibres



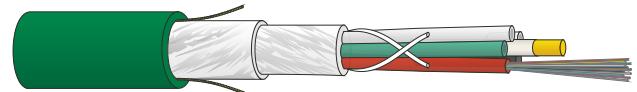
FO Universal U-DQ(ZN)BH ≤ 24 fibres

U-DQ(ZN)BH n x m	Fibres number	Article No. E9/125 G.657.A1	Article No. E9/125 G.652.D	Article No. G50/125 OM2	Article No. G50/125 OM3	Article No. G50/125 OM4	Article No. G62.5/125 OM1
FO Universal (1500 N) 1 x 4	4	–	190203	185938	185989	192712	185990
FO Universal (1500 N) 1 x 6	6	–	190204	186459	190112	193360	186355
FO Universal (1500 N) 1 x 8	8	–	190205	186300	185959	187363	185934
FO Universal (1500 N) 1 x 12	12	193314	190077	185935	186350	191251	186005
FO Universal (2800 N) 2 x 12	24	–	190071	186356	186432	191252	186487
FO-Universal (3000 N) 1 x 12	12	–	192970	192967	192968	192969	–
FO Universal (3000 N) 1 x 24	24	193337	187354	186595	191755	192713	191753
FO Universal-Hybrid (2800 N) 1x 12 E9 + 1x 12 G50*	24	–	–	190378	190137	190124	–

* 12 fibres E9 in the red loose tube, 12 fibres G50 in the green loose tube

FO Universal wbGGFR / U-DQ(ZN)BH for indoor and outdoor use, up to 144 fibres

metal-free, dry interstices,
rodent protection, flame retardant,
in accordance with IEC 60332.1 and IEC 60332.3 C



FO Universal U-DQ(ZN)BH 36-144 fibres

U-DQ(ZN)BH n x m	Fibres number	Article No. E9/125 G.652.D	Article No. G50/125 OM2	Article No. G50/125 OM3	Article No. G50/125 OM4	Article No. G62.5/125 OM1
FO Universal 3 x 12	36	190207	186434	auf Anfrage	192678	186488
FO Universal 4 x 12	48	190208	187291	186486	191278	187292
FO Universal 5 x 12	60	190209	190618	186642	on request	192170
FO Universal 6 x 12	72	190210	187344	186539	on request	on request
FO Universal 8 x 12	96	186747	on request	186540	192714	on request
FO Universal 10 x 12	120	190211	on request	186536	on request	on request
FO Universal 12 x 12	144	190212	186616	191710	192715	on request

CLASSIC FIBRE-OPTIC SOLUTIONS

UNIVERSAL CABLES

FO Universal ZGGFR Safety / U-DQ(ZN)BH Safety cable E30 for indoor and outdoor use, up to 12 Fasern

metal-free, water resistant, rodent protection,
in accordance with IEC 60332.1 and IEC 60332.3 C

30 minutes System Circuit Integrity according to DIN 4102-12



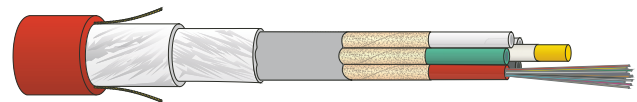
FO Universal ZGGFR Safety / U-DQ(ZN)BH ≤ 12 fibres

U-DQ(ZN)BH 1 x m		Fibres	Article No.	Article No.	Article No.	Article No.	Article No.
Description		number	E9/125 G.652.D	G50/125 OM2	G50/125 OM3	G50/125 OM4	G62,5/125 OM1
ZGGFR Safety	1 x 4	4	187288	186363	190604	193447	186638
ZGGFR Safety	1 x 6	6	191867	186639	191851	193448	190792
ZGGFR Safety	1 x 8	8	on request	190621	on request	193449	on request
ZGGFR Safety	1 x 12	12	190719	187293	191796	193450	187305

FO Universal wbGGFR Safety / U-DQ(ZN)BH Safety cable E30 for indoor and outdoor use, up to 60 Fasern

metal-free, water resistant, rodent protection,
in accordance with IEC 60332.1 and IEC 60332.3 C

30 minutes System Circuit Integrity according to DIN 4102-12



FO Universal wbGGFR Safety / U-DQ(ZN)BH 24-60 fibres

U-DQ(ZN)BH n x m		Fibres	Article No.	Article No.	Article No.	Article No.	Article No.
Description		number	E9/125 G.652.D	G50/125 OM2	G50/125 OM3	G50/125 OM4	G62,5/125 OM1
wbGGFR Safety	2 x 12	24	190223	187294	187360	193454	on request
wbGGFR Safety	3 x 12	36	190224	on request	on request	193455	on request
wbGGFR Safety	4 x 12	48	190225	192119	191191	193456	on request
wbGGFR Safety	5 x 12	60	190226	on request	190605	193457	on request

Accessories

You can find the necessary, E30-tested and certified fire safety system components in our catalogue "System Circuit Integrity" and on our website.

PATCH PANELS

FO patch panel OV-S, 19"/1U, loaded splice box with adapters and pigtails

Description

- For the termination of fibre optic cables - maximum of 96 fibres
- Loaded with FO adapters, ready for splicing, with prepared pigtails (per 2 m, colour code: IEC 60304)



Splice box OV-S, 19"/1U, extractable, configuration example with 24 SCD adapters and 48 pigtails

Article No.	Description	Loaded with	
415210	Splice box OV-S, extractable, 1U	6x LCD adapter, blue polymer housing	with ceramic sleeve and 12 LC pigtails 2m E09/125µm OS2
415211	Splice box OV-S, extractable, 1U	6x LCD adapter, beige polymer housing	with ceramic sleeve and 12 LC pigtails 2m G50/125µm OM2
415212	Splice box OV-S, extractable, 1U	6x LCD adapter, turquoise polymer housing	with ceramic sleeve and 12 LC pigtails 2m G50/125µm OM3
415213	Splice box OV-S, extractable, 1U	6x LCD adapter, violet polymer housing	with ceramic sleeve and 12 LC pigtails 2m G50/125µm OM4
415214	Splice box OV-S, extractable, 1U	12x LCD adapter, blue polymer housing	with ceramic sleeve and 24 LC pigtails 2m E09/125µm OS2
415215	Splice box OV-S, extractable, 1U	12x LCD adapter, beige polymer housing	with ceramic sleeve and 24 LC pigtails 2m G50/125µm OM2
415216	Splice box OV-S, extractable, 1U	12x LCD adapter, turquoise polymer housing	with ceramic sleeve and 24 LC pigtails 2m G50/125µm OM3
415217	Splice box OV-S, extractable, 1U	12x LCD adapter, violet polymer housing	with ceramic sleeve and 24 LC pigtails 2m G50/125µm OM4
415218	Splice box OV-S, extractable, 1U	24x LCD adapter, blue polymer housing	with ceramic sleeve and 48 LC pigtails 2m E09/125µm OS2
415219	Splice box OV-S, extractable, 1U	24x LCD adapter, beige polymer housing	with ceramic sleeve and 48 LC pigtails 2m G50/125µm OM2
415220	Splice box OV-S, extractable, 1U	24x LCD adapter, turquoise polymer housing	with ceramic sleeve and 48 LC pigtails 2m G50/125µm OM3
415221	Splice box OV-S, extractable, 1U	24x LCD adapter, violet polymer housing	with ceramic sleeve and 48 LC pigtails 2m G50/125µm OM4
415275	Splice box OV-S, extractable, 1U	24x LCQ adapter, blue polymer housing	with ceramic sleeve and 96 LC pigtails 2m E09/125µm OS2
415299	Splice box OV-S, extractable, 1U	24x LCQ adapter, beige polymer housing	with ceramic sleeve and 96 LC pigtails 2m G50/125µm OM2
415298	Splice box OV-S, extractable, 1U	24x LCQ adapter, turquoise polymer housing	with ceramic sleeve and 96 LC pigtails 2m G50/125µm OM3
415295	Splice box OV-S, extractable, 1U	24x LCQ adapter, violet polymer housing	with ceramic sleeve and 96 LC pigtails 2m G50/125µm OM4

FO patch panel OV-S, 19"/1U, loaded breakout box with adapters

Description

- For the termination of pre-assembled fibre optic cables - maximum of 96 fibres
- Loaded with a maximum of 12/24 FO adapters.



Breakout box OV-S, 19"/1U, extractable, configuration example with 6 SCD adapters

Article No.	Description	Loaded with	
415250	Breakout box OV-S, extractable, 1U	6x LCD SM adapter, blue polymer housing	with ceramic sleeve
415251	Breakout box OV-S, extractable, 1U	6x LCD MM adapter, beige polymer housing	with ceramic sleeve
415252	Breakout box OV-S, extractable, 1U	6x LCD MM adapter, turquoise polymer housing	with ceramic sleeve
415253	Breakout box OV-S, extractable, 1U	6x LCD MM adapter, violet polymer housing	with ceramic sleeve
415254	Breakout box OV-S, extractable, 1U	12x LCD SM adapter, blue polymer housing	with ceramic sleeve
415255	Breakout box OV-S, extractable, 1U	12x LCD MM adapter, beige polymer housing	with ceramic sleeve
415256	Breakout box OV-S, extractable, 1U	12x LCD MM adapter, turquoise polymer housing	with ceramic sleeve
415257	Breakout box OV-S, extractable, 1U	12x LCD MM adapter, violet polymer housing	with ceramic sleeve
415258	Breakout box OV-S, extractable, 1U	24x LCD SM adapter, blue polymer housing	with ceramic sleeve
415259	Breakout box OV-S, extractable, 1U	24x LCD MM adapter, beige polymer housing	with ceramic sleeve
415260	Breakout box OV-S, extractable, 1U	24x LCD OM3, turquoise polymer housing	with ceramic sleeve
415261	Breakout box OV-S, extractable, 1U	24x LCD OM4, violet polymer housing	with ceramic sleeve
415207	Breakout box OV-S, extractable, 1U	24x LCQ SM adapter, blue polymer housing	with ceramic sleeve
415278	Breakout box OV-S, extractable, 1U	24x LCQ MM adapter, beige polymer housing	with ceramic sleeve
415280	Breakout box OV-S, extractable, 1U	24x LCQ MM adapter, turquoise polymer housing	with ceramic sleeve
415296	Breakout box OV-S, extractable, 1U	24x LCQ MM adapter, violet polymer housing	with ceramic sleeve

CLASSIC FIBRE-OPTIC SOLUTIONS

PIGTAILS

Fibre pigtail



Connector type	Fibre type	Fibre pigtail 2 m	Set of 12 fibre pigtails 2 m*
SC/APC	E09/OS2	427721	427722
SC	E09/OS2	421121	421122
SC	G50/OM4	421144	421145
SC	G50/OM3	421141	421142
SC	G50/OM2	421161	421162
SC	G62,5/OM1	421181	421182
ST	E09/OS2	422221	422222
ST	G50/OM4	422244	422245
ST	G50/OM3	422241	422242
ST	G50/OM2	422261	422262
ST	G62,5/OM1	422281	422282

* Set has 12 fibre pigtails in 12 colours (according to IEC 60304)

PATCH CORDS

Fibre optic patch cords LCD ...



Connector type		Fibre type	Length in m / Article No.									
Side A	Side B		1	2	3	4	5	6	7	8	9	10
LCD	SC/APC	E09/OS2	423711	423712	423713	423714	423715	423716	423717	423718	423719	423720
LCD	SCD	E09/OS2	421311	421312	421313	421314	421315	421316	421317	421318	421319	421320
LCD	SCD	G50/OM4	431341	431342	431343	431344	431345	431346	431347	431348	431349	431350
LCD	SCD	G50/OM3	421331	421332	421333	421334	421335	421336	421337	421338	421339	421340
LCD	SCD	G50/OM2	421351	421352	421353	421354	421355	421356	421357	421358	421359	421360
LCD	SCD	G62,5/OM1	421371	421372	421373	421374	421375	421376	421377	421378	421379	421380
LCD	LCD	E09/OS2	423311	423312	423313	423314	423315	423316	423317	423318	423319	423320
LCD	LCD	G50/OM3	423331	423332	423333	423334	423335	423336	423337	423338	423339	423340
LCD	LCD	G50/OM2	423351	423352	423353	423354	423355	423356	423357	423358	423359	423360
LCD	LCD	G62,5/OM1	423371	423372	423373	423374	423375	423376	423377	423378	423379	423380



CLASSIC COPPER SOLUTIONS

High-grade copper systems for data centres

Datwyler develops, manufactures and distributes high-grade and future-proof network infrastructure solutions based on copper cabling technology for transmitting up to 10- and 40-gigabit Ethernet signals. These system solutions set standards for quality, reliability and performance.

With Datwyler copper cabling systems you can always keep up with the constantly increasing transfer rates and exploit the full potential of your networks. Thus, they also offer high investment security and reduced operating costs.

The comprehensive product range extends from single cables and components to complete end-to-end systems. The Datwyler modular solutions are suitable for all sizes and types of Local Area Networks (LANs) and for data centres.

CLASSIC COPPER SOLUTIONS

DATA CABLES

Category / Class 8.2/II (2000 MHz)



CU 8203 4P

Article No.	Type	Dimension n x n x mm (AWG)	Sheath	Sheath Ø mm	Weight kg/km	Cu weight kg/km	Fire load		PU
							kWh/m	MJ/m	
192009	CU 8203 4P	4 x 2 x 0.59 (AWG23)	FRNC/LSOH ¹⁾	8.1	67.3	33.2	0.18	0.649	1000 m drum

Category / Class 7_A/F_A (1000 MHz)



CU 7150 4P / 2x4P F8 Multimedia



CU 7120 4P / 2x4P F8



CU 7702 4P / 2x4P F8

Article No.	Type	Dimension n x n x mm (AWG)	Sheath	Sheath Ø mm	Weight kg/km	Cu weight kg/km	Fire load		PU
							kWh/m	MJ/m	
182925	CU 7150 4P Multimedia	4 x 2 x 0.64 (AWG22)	FRNC/LSOH ¹⁾	7.8	69.2	40.2	0.18	0.65	1000 m drum
182926	CU 7150 2x4P F8 Multimedia	2 x (4 x 2 x 0.64 (AWG22))	FRNC/LSOH ¹⁾	7.8 x 16.4	139.2	80.4	0.36	1.30	500 m drum
177400	CU 7702 4P	4 x 2 x 0.62 (AWG22)	FRNC/LSOH ¹⁾	7.8	65.1	34.9	0.18	0.65	1000 m drum
177390	CU 7702 2x4P F8	2 x (4 x 2 x 0.62 (AWG22))	FRNC/LSOH ¹⁾	7.8 x 16.4	131.0	69.8	0.36	1.30	500 m drum
191466	CU 7120 4P	4 x 2 x 0.59 (AWG23)	FRNC/LSOH ¹⁾	7.6	63.0	32.3	0.18	0.649	1000 m drum
191467	CU 7120 2x4P F8	2 x (4 x 2 x 0.59 (AWG23))	FRNC/LSOH ¹⁾	7.6 x 16.0	126.0	64.6	0.36	1.298	500 m drum

Category / Class 7/F (600 MHz)



CU 7080 4P / 2x4P F8



CU 7052 4P / 2x4P F8



CU 7002 4P / 2x4P F8

Article No.	Type	Dimension n x n x mm (AWG)	Sheath	Sheath Ø mm	Weight kg/km	Cu weight kg/km	Fire load		PU
							kWh/m	MJ/m	
182911	CU 7080 4P	4 x 2 x 0.57 (AWG23)	FRNC/LSOH ¹⁾	7.4	60	31.1	0.16	0.57	1000 m drum
182912	CU 7080 2x4P F8	2 x (4 x 2 x 0.57 (AWG23))	FRNC/LSOH ¹⁾	7.4 x 15.6	120	62.2	0.32	1.14	500 m drum
177388	CU 7002 4P	4 x 2 x 0.57 (AWG23)	FRNC/LSOH ¹⁾	7.4	60	31.1	0.16	0.57	1000 m drum
177398	CU 7002 2x4P F8	2 x (4 x 2 x 0.57 (AWG23))	FRNC/LSOH ¹⁾	7.4 x 15.6	120	62.2	0.32	1.14	500 m drum
188514	CU 7052 4P	4 x 2 x 0.57 (AWG23)	FRNC/LSOH ¹⁾	7.3	52	21.3	0.16	0.58	1000 m drum
188515	CU 7052 2x4P F8	2 x (4 x 2 x 0.57 (AWG23))	FRNC/LSOH ¹⁾	7.3 x 15.4	104	42.6	0.32	1.16	500 m drum

Category / Class 6_A/E_A (500 MHz)



CU 7060 4P / 2x4P F8



CU 6502 4P / 2x4P F8



CU 6552 4P / 2x4P F8

Article No.	Type	Dimension n x n x mm (AWG)	Sheath	Sheath Ø mm	Weight kg/km	Cu weight kg/km	Fire load		PU
							kWh/m	MJ/m	
182924	CU 7060 4P	4 x 2 x 0.55 (AWG23)	FRNC/LSOH ¹⁾	7.1	55.0	26.4	0.152	0.55	1000 m drum
182927	CU 7060 2x4P F8	2 x (4 x 2 x 0.55 (AWG23))	FRNC/LSOH ¹⁾	7.1 x 15	110.0	52.8	0.304	1.10	500 m drum
191454	CU 6552 4P	4 x 2 x 0.55 (AWG 23)	FRNC/LSOH ¹⁾	7.0	48.5	20.0	0.14	0.52	1000 m drum
191456	CU 6552 2x4P F8	2 x (4 x 2 x 0.55 (AWG 23))	FRNC/LSOH ¹⁾	7.0 x 14.3	97.0	40.0	0.28	1.04	500 m drum
191453	CU 6502 4P	4 x 2 x 0.55 (AWG 23)	FRNC/LSOH ¹⁾	7.0	47.8	20.0	0.15	0.55	1000 m drum
191455	CU 6502 2x4P F8	2 x (4 x 2 x 0.55 (AWG 23))	FRNC/LSOH ¹⁾	7.0 x 14.3	95.6	40.0	0.30	1.10	500 m drum

¹⁾ FRNC/LSOH = Flame Retardant Non Corrosive / Low Smoke Zero Halogen

MODULES

RJ45 module, shielded, Category 6_A (IEC)

Module KS-T Plus 1/8 tool-less Cat. 6_A (IEC)



Article No.	Description	Colour (similar to)	PU
418061	RJ45 module KS-T Plus 1/8 tool-less Cat. 6 _A (IEC) shielded, with dust shutter	black	10 pcs.
418062	Dust shutters for modules KS-T Cat. 6/E _A and KS-T Plus Cat. 6 _A (1 set = 10 pcs.)	white	1 set
418063	Dust shutters for modules KS-T Cat. 6/E _A and KS-T Plus Cat. 6 _A (1 set = 10 pcs.)	black	1 set
418064	Dust shutters for modules KS-T Cat. 6/E _A and KS-T Plus Cat. 6 _A (1 set = 10 pcs.)	yellow	1 set
418065	Dust shutters for modules KS-T Cat. 6/E _A and KS-T Plus Cat. 6 _A (1 set = 10 pcs.)	blue	1 set
418066	Dust shutters for modules KS-T Cat. 6/E _A and KS-T Plus Cat. 6 _A (1 set = 10 pcs.)	green	1 set
418067	Dust shutters for modules KS-T Cat. 6/E _A and KS-T Plus Cat. 6 _A (1 set = 10 pcs.)	red	1 set

RJ45 module, shielded, Category 6/E_A

Module KS-TS 1/8 tool-less slimline Cat. 6/E_A



Article No.	Description	Colour (similar to)	PU
418054	RJ45 module KS-TS 1/8 tool-less slimline Cat. 6/E _A shielded	metal	10 pcs.

RJ45 module, shielded, Category 6/E_A

Module KS-TA 1/8 Cat. 6/E_A, 45° angled

for Patch panel KS 24x-s



Patch panel KS 24x-s

Article No.	Description	Colour (similar to)	PU
418068 *	RJ45 module KS-TA 1/8 Cat. 6/E _A shielded, 45° degree angled	metal	10 pcs.
418023	Patch panel KS 24x-s, 19"/1U, shielded	black, RAL 9005	1 pc.

* Please contact local supplier for availability.

PATCH PANELS

Patch panel CSA Plus 24/8 and 48/8, shielded, Category 6_A (IEC)

with 24 and 48 RJ45 jacks

suitable for 10GBase-T



Patch panel CSA Plus 24/8 with 24 RJ45 jacks



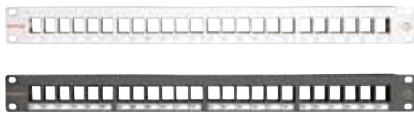
Patch panel CSA Plus 48/8 with 48 RJ45 jacks

Article No.	Description	Colour (similar to)	PU
417980	Patch panel CSA Plus 24/8 with 24x RJ45 jack Cat. 6 _A (IEC)	RAL 7035	1 pc.
417981	Patch panel CSA Plus 48/8 with 48x RJ45 jack Cat. 6 _A (IEC)	stainless steel	1 pc.

CLASSIC COPPER SOLUTIONS

PATCH PANELS

Patch panels for shielded Category 6_A/E_A RJ45 Modules



Patch panel KS 24x, black or grey



Patch panel KS 24x-a, angled



Patch panel KS 24x-s

Article No.	Description	Colour (similar to)	PU
418019	Patch panel KS 24x, 19"/1U, for 24x RJ45 Keystone module, FTP (delivery without modules)	black, RAL 9005	1 pc.
418020	Patch panel KS 24x, 19"/1U, for 24x RJ45 Keystone module, FTP (delivery without modules)	grey, RAL 7035	1 pc.
4000099	Patch panel KS 24x-a, angled, 19"/1U, for 24x RJ45 Keystone module, FTP (without modules)	black, RAL 9005	1 pc.
418023	Patch panel KS 24x-s, 19"/1U, shielded	black, RAL 9005	1 pc.

Article No.	Accessories/Description	Colour (similar to)	PU
418010	Blank cover for Keystone openings	white	10 pcs.
418011	Blank cover for Keystone openings	black	10 pcs.
400098	Top cover for patch panel KS 24x-a, angled, to separate the warm and cold airflow	galvanized steel	1 pc.

PATCH CORDS

RJ45 patch cords Cat. 6_A (IEC) 500 MHz

CU 7702 flex 4P shielded, wiring 1:1

suitable for 1000Base-T and 10GBase-T applications



Length	grey	green	yellow	red	blue	orange
1.0 m	653508	653558	653608	653658	653708	653758
1.5 m	653509	653559	653609	653659	653709	(653759)*
2.0 m	653510	653560	653610	653660	653710	653760
2.5 m	653511	653561	653611	653661	653711	(653761)*
3.0 m	653512	653562	653612	653662	653712	653762
4.0 m	653514	653564	653614	653664	653714	(653764)*
5.0 m	653516	653566	653616	653666	653716	653766

Note: Products marked with (*) and lengths up to 100 m are not on stock but can be delivered at short notice. Please do not hesitate to contact us.

1) FRNC/LS0H = Flame Retardant Non Corrosive / Low Smoke Zero Halogen

Please see our catalogue "ICT Networks" or www.cabling.datwyler.com for other Datwyler patch cords such as our new

Category 8.2 flexible data cable CU 8206 4P flex.





PRE-ASSEMBLED TRUNK CABLES

Faster, safer and more cost-effective

Ever shorter time frames for moves, adds and changes raise the question of how to carry out installations even more quickly, more safely and more cost-effectively. Installation often has to take place during current operation and needs to be executed without costly on-site work and disruption, and as far as possible without any outside contractors. Neither the quality of the solution (maximum availability requirements) nor its performance should be forfeited in the process.

Datwyler's modular trunk solutions provide the perfect answer.

Pre-assembled trunk cables are fabricated using high-performance cable products which are supplied in combination with different leg lengths and modules or connectors. The products are delivered in the lengths requested by the customer, with customized imprints on the single cables, and have already been tested and certified in accordance with the latest standards.

This provides installers and operators, particularly in data centers, with products which make it possible to install even extensive systems to the highest quality in a very short time.

PRE-ASSEMBLED TRUNK CABLES

FIBRE-OPTIC TRUNKS

Pre-assembly of loose-tube cables with all current FO connector types

Trunk termination

- Up to 144 fibres, with all current FO connectors
- After the divider (screwable) each single fibre is protected by aramide yarn and has its own sheath
- More than 48 fibres: comes with 3-step (cascaded) fibre distribution
- Single fibre termination graded in length (max. 2 m after divider)
- Comes in crush-resistant hose (IP67), optional with braided sleeving only
- Delivery with optical attenuation measurement report (with OTDR: optional at an extra charge)



Trunk termination (Article numbers are valid for FO connector termination on one side only)

Number of fibres	Multimode connector types				Single-mode connector types					
	ST	SC	LC	LSH	ST	SC	LC	LSH	SC/APC	LSH/APC
4	1406098	1406421	416601	417131	417218	1407244	415096	417219	415001	417222
6	1407718	1407658	415018	417213	1407719	1407778	415014	415010	417221	415006
8	1406758	1407777	415028	417214	1405818	1410923	417132	417220	415002	417223
12	1406403	1406794	415019	417215	1407720	1407035	415015	415011	415003	415007
24	1406780	1408597	415020	417216	1408529	1406242	415016	415012	415004	415008
48	1406091	1408725	415021	417217	1408723	1406768	415017	415013	415005	415009

Pre-assembly of breakout cables with all current FO connector types

Breakout assembly

- Termination of up to 48 single-fibre cables, with all current FO connectors
- Single fibre termination optionally graded in length
- Delivery with optical attenuation measurement report
- Comes in braided sleeving (optional at an extra charge: with cable gland and/or crush-resistant hose protection)



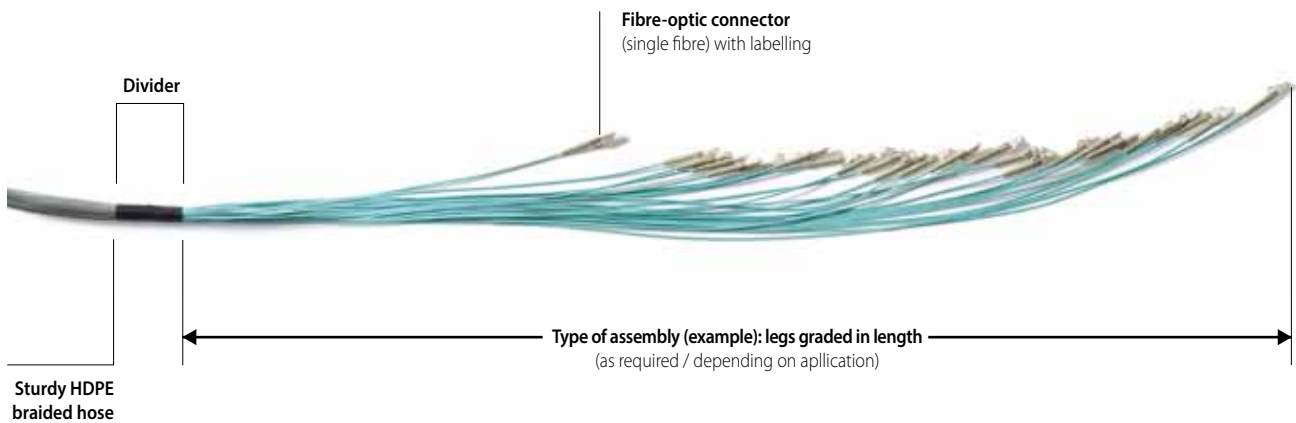
Breakout assembly (Article numbers are valid for FO connector termination on one side only)

Breakout assembly on one cable end	Connector type	Number of connectors	Multimode fibre Article No.	Single-mode fibre Article No.
	SC	4	1410596	415023
	SC	8	1410597	415024
	SC	12	1410598	415025
	SC	24	415083	415081
	SC	48	415084	415082
	LC	4	415085	415090
	LC	8	415086	415091
	LC	12	415087	415092
	LC	24	415088	415093
	LC	48	415089	415094

Attention: Please order the breakout cable separately - according to your individual needs!
When ordering a trunk cable please ensure that the specified length of the trunk cable is defined by the length of the longest single-fibre cable! This means: The total length of the trunk cable is the length of the cable between the two splits plus the additional lengths of the longest single-fibre cable on both sides. You can find the lengths of the single-fibre elements in the installation manual on the Datwyler website.

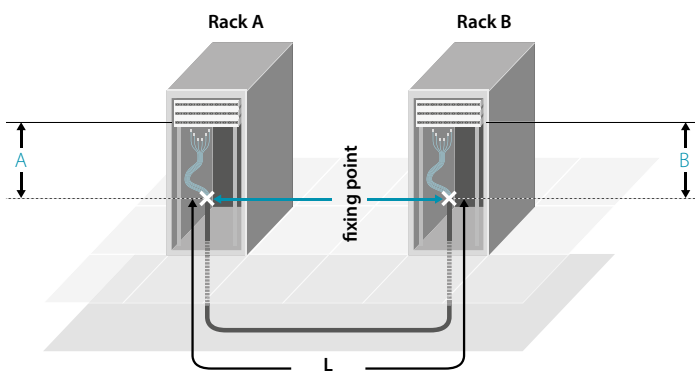
FLEXIBLE TRUNKS

Length determination & design of pre-assembled FO trunks



Description

A Datwyler FO flexible trunk consists of up to 24 single fibre cables (per 2.0 mm) that are combined in a sturdy HDPE braided hose and have pre-assembled connectors on both ends. FO flexible trunks come in customized lengths and gradations. This solution is suitable especially for data centre cabling, rack-to-rack connections and multiple patch links. Delivery with optical attenuation measurement report.



Length definition

The following criteria are decisive for all pre-assembled Datwyler FO trunks:

- L** = Length between dividers / fixing points (= purchase order length)
- A** = Type of assembly side A: as required / depending on application, legs graded in length or of equal length
- B** = Type of assembly side B: as required / depending on application, legs graded in length or of equal length

PRE-ASSEMBLED TRUNK CABLES

COPPER TRUNKS

Connectors & cable types

Pre-assembled trunk cables are fabricated using high-performance cable products which are supplied in combination with different performance levels of modules and connectors.

The products are delivered in the lengths requested by the customer and have already been tested and certified in accordance with the latest standards.

This provides installers and operators, particularly in data centers, with products which make it possible to install even extensive copper-based systems to the highest quality in a very short time.



Tailor-made pre-terminated copper trunk assemblies, in the requested lengths, with customized imprints on the single cables, with the requested modules or plugs, 100% pre-tested, with measurement reports!

Module and plugs for trunks

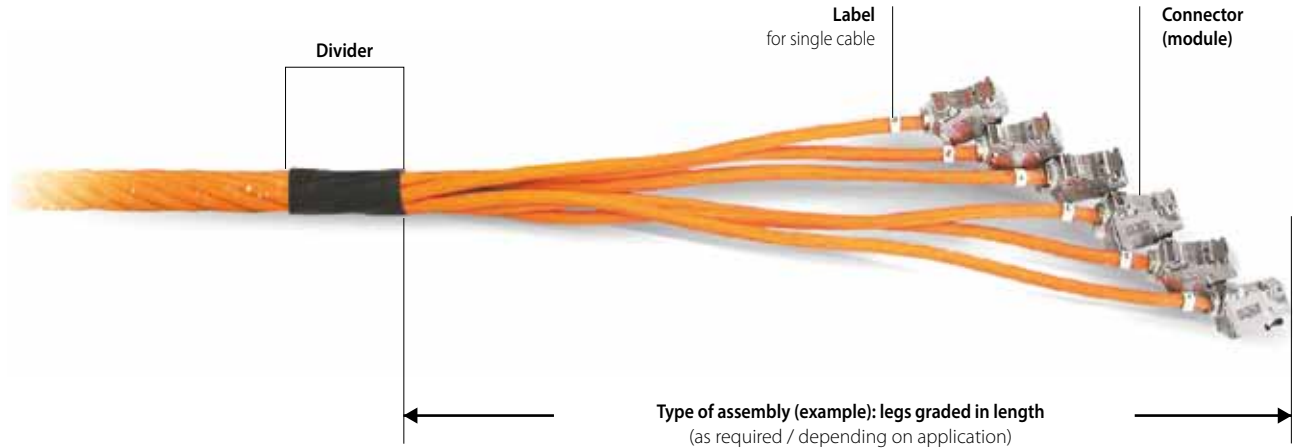
type	application	construction	compatible with cable
Modules Category 7_A / Class 7_A			
Module PS-GG45 7 _A 4P (Cat.7 _A)	min. 10Gbase-T	shielded	flex / solid
Module PS TERA 4P Cat. 7 _A	min. 10GBase-T	shielded	solid
Modules Category 6_A / Class E_A			
RJ45 module KS-T Plus 1/8 Cat. 6 _A (IEC)	up to 10GBase-T	shielded	flex / solid
RJ45 module MS-K Plus 1/8 Cat. 6 _A (IEC)	up to 10GBase-T	shielded	flex / solid
RJ45 module MS-C6 _A 1/8 Cat. 6 _A (IEC)	up to 10GBase-T	shielded	flex / solid
Plugs Category 6/6_A / Class E_A			
RJ45 plug 4P Cat. 6 _A	up to 10GBase-T	shielded	flex / solid
RJ45 plug 4P Cat. 6	up to 10GBase-T	shielded	flex / solid

Cable types for trunks

type	maximum Class	application	Ø [mm]	maximum length [m]	
Solid BOL (Breakout light) cables					
3-fold	CU 7002 3x4P	F	min. 10GBase-T	16.1	85
4-fold	CU 7002 4x4P	F	min. 10GBase-T	18	85
6-fold	CU 7002 6x4P	F	min. 10GBase-T	21.2	85
Flex BOL (Breakout light) cables					
6-fold	CU 7702 6x4P flex	F	min. 10GBase-T	17.6	60
12-fold	CU 7702 12x4P flex	F	min. 10GBase-T	22.2	60
Flex tube cables					
3-fold	CU 7702 3x4P flex	F	min. 10GBase-T	12	60
6-fold	CU 7702 6x4P flex	F	min. 10GBase-T	20	60
8-fold	CU 7702 8x4P flex	F	min. 10GBase-T	22	60
12-fold	CU 7702 12x4P flex	F	min. 10GBase-T	27	60
16-fold	CU 7702 16x4P flex	F	min. 10GBase-T	32	60
Single cables					
	CU 7702 4P flex	F	min. 10GBase-T	5.8	60
2-fold	CU 7702 4P flex	F	min. 10GBase-T	5.8 x 11.6	60
	CU 7120 4P	F _A	min. 10GBase-T	7.5	90
2-fold	CU 7120 2x4P F8	F _A	min. 10GBase-T	7.5 x 15.8	90

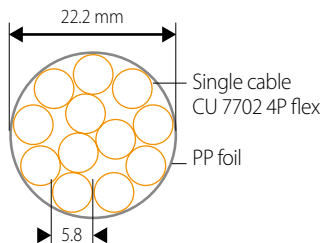
PRE-ASSEMBLED TRUNK CABLES

Length determination & design of pre-assembled copper trunks

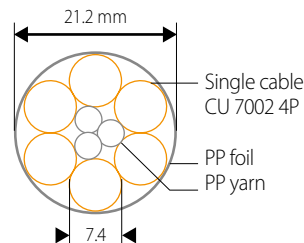


Dimensions

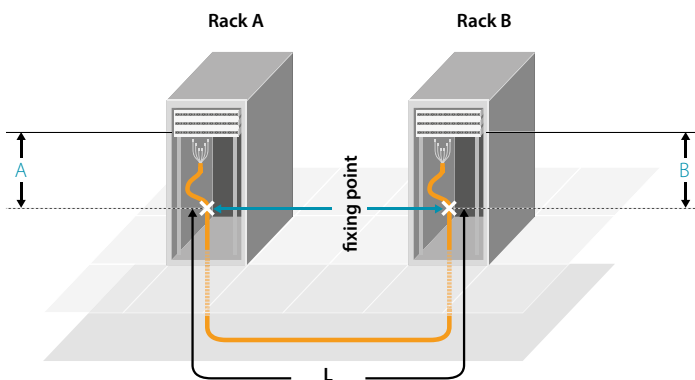
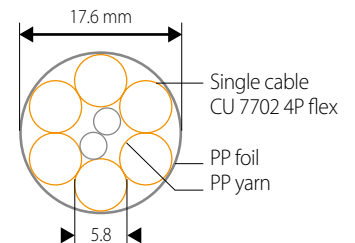
Flex BOL cable 12-fold
CU 7702 12x4P flex



Solid BOL cable 6-fold
CU 7002 6x4P



Flex BOL cable 6-fold
CU 7702 6x4P flex



Length definition

The following criteria are decisive for all pre-assembled Datwyler copper trunks:

- L** = Length between dividers / fixing points (= purchase order length)
- A** = Type of assembly side A: as required / depending on application, legs graded in length or of equal length
- B** = Type of assembly side B: as required / depending on application, legs graded in length or of equal length

PRE-ASSEMBLED TRUNK CABLES

CU SWITCHPORT SOLUTION

CU SwitchPort Trunks (plugs on one end only)

Datwyler's CU SwitchPort Solution facilitates easy, efficient and space-saving removal of all sorts of switch ports from rack.

This solution consists of flexible copper trunks (Flex BOL cables) which are pre-terminated at one end and can be routed to the switch ports in different ways.

Datwyler deploys 6-fold versions of its flexible copper trunks (Breakout light) which are supplied with shielded Category 6_A RJ45 plugs at one end, labelled and in the lengths requested, but without connectors at the other end. Category 6_A RJ45 modules will be installed at the other end on-site and mounted in the respective patch panels.



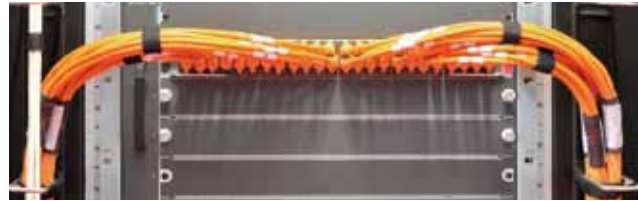
CU SwitchPort Trunks

Removal of data centre switch ports by pre-assembled flexible copper trunks

Installation example: 48-port Cisco Catalyst switch

The requested flexible copper trunks are connected to a 48-port Catalyst switch or a 48-port switching module as shown in this picture and in the table below.

Tailor-made trunk variants for other switch types (Nexus series, for example) are available on request.



Article No.	Side A (pre-terminated)		Cable insertion from the left	Cable insertion from the right	from port no.	up to port no.	Necessary for 48 ports
	Type of assembly	Length of shortest leg					
655159	BO	200 mm	x		1	12	2 pcs.
655161	BP	300 mm	x		13	24	2 pcs.
655162	BP	300 mm		x	25	36	2 pcs.
655160	BO	200 mm		x	37	48	2 pcs.
TOTAL							8 pcs.



IT RACKS AND ACCESSORIES

A well-chosen rack or cabinet will not only look good, but will add security, increase the lifespan of your devices and also make it easier to maintain the equipment inside, so saving you money and time.

The IT racks which we offer are as varied as the requirements of our customers. The designs cover standard racks in various sizes, as well as modular constructions which we can customise to your particular occupancy, cooling concept, cabling and/or security requirements.

Our wide range of rack accessories includes IP-based monitored and managed PDU's, IP-KVM's, circulating fans, lights, intelligent and configurable locking systems, grounding and equipotential bonding sets, cable management kits, shelves, blanking panels and much more.



Please see www.cabling.datwyler.com or our brochure

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Complete solutions for electrical and ICT infrastructures
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for cooling, containment, physical security and other data centre related solutions.



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