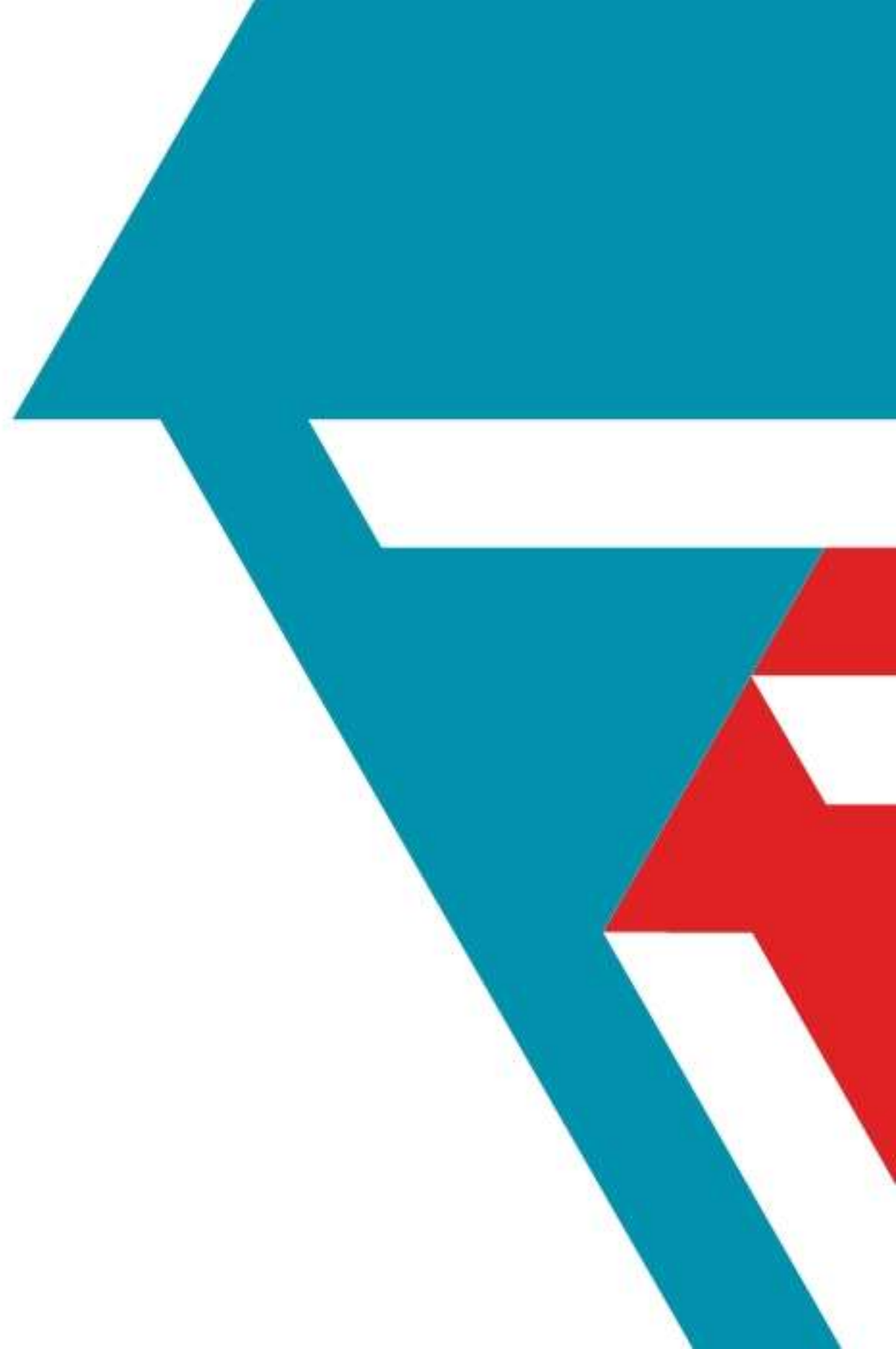




ELEVATOR CABLING SYSTEMS

Power and data for modern elevators



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DELIVERING EXCELLENCE – EVERY TIME, EVERYWHERE

The "lifeblood" of a modern public or commercial building is the functionality and reliability of the system solutions for communications, building automation, power supply, safety and elevator. This is true of any such construction, irrespective of whether it is an office block, hotel, sports stadium, television studio or a tunnel. Choose a reliable system partner right from the start: choose Datwyler!



Hotels, hospitals



Office blocks



Government buildings, universities



Shopping centres



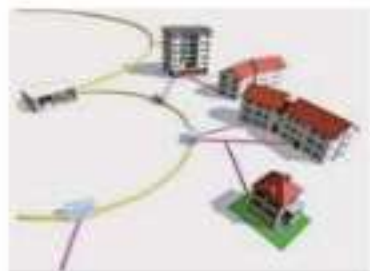
Data centres



Tunnels



Event arenas



FTTx projects

Datwyler Cabling Solutions is a leading provider of total solutions for the electrical and communications infrastructure of public and commercial buildings and of data centres as well as for Fibre to the frame (FTTF) networks.

Being a solid, reliable company about to celebrate its 100th year of operation, Datwyler leads the way in innovations for applications such as ICT networks, power supply, fire safety, building automation and elevators.

Datwyler is a one-stop source of customised solutions for all your specific applications - with all the necessary test certificates, authorisations and approvals and with long-term warranties.

Datwyler has successfully acted not only as a supplier of innovative products and system solutions but also as the lead or main contractor who, working in close cooperation with local partners, covers the whole value chain: from site surveys, conception and system engineering through installation, logistics and turnkey supply to documentation and system maintenance.

TURNKEY INSTALLATIONS

Datwyler Cabling Solutions does not only supply integrated system solutions, but has positioned itself successfully as a turnkey partner: for all manner of purpose-built constructions including multi-site projects, for data centres and for FTTx projects. Our successful processing of turnkey projects derives from our high-level skills in developing and manufacturing the required products and solutions, our comprehensive applications expertise, our international presence and our globally established partner network.



Our international presence and our worldwide, actively managed and certified partner network have also proved invaluable in the multi-site projects of major clients. National and international companies rely on Datwyler on-the-spot site audits. Using the site surveys as a base, our engineering experts work out customised solutions with uniform standards for all the sites concerned. Our total solutions package is rounded off by the implementation and assurance of regular operations. While operations are running, we provide servicing and maintenance work to optimise your infrastructure solution. These MAC (move, add, change) services increase the performance and working life of your equipment.

High-quality solutions for all your applications

Year on year, Datwyler invests in even better materials and process technologies, production resources and test methods. This is why our system solutions always keep ahead of the current norms and repeatedly set new standards. The important functions which our solutions must deliver in practice demand the highest possible level of safety and reliability. This is why we measure each product against string-

ent quality standards before it leaves the company. Of course, all our processes are ISO 9001:2008 / ISO 14001:2004 certified.

Our sustainable solutions provide you with high-level operational reliability coupled with low operating costs. The proof that Datwyler systems can deliver these benefits has been evident for many years in thousands of installations around the world. In addition, we have a particularly keen eye for consistent, intelligent solutions that simplify planning, sourcing and installation and shorten your construction times.

We have the solutions for all your applications, whatever they are – high-speed communications networks, modern energy distribution, monitoring and control services, fire alarm systems or lift cabling.

Or you may want to integrate new systems, interconnect and automate existing systems or simply ensure a reliable power supply. All this is possible with our carefully thought out, pre-assembled and prefabricated subsystems.

Just tell us how, when and where

Besides quality and product price, the logistics performance capability of suppliers is a decisive factor in the successful handling of construction projects. This is particularly true of major projects. With its years of experience and high logistics competences, Datwyler can handle even time-critical major projects smoothly and to the complete satisfaction of customers. Just-in-time deliveries at the right place are all in a day's work for us and our partners.

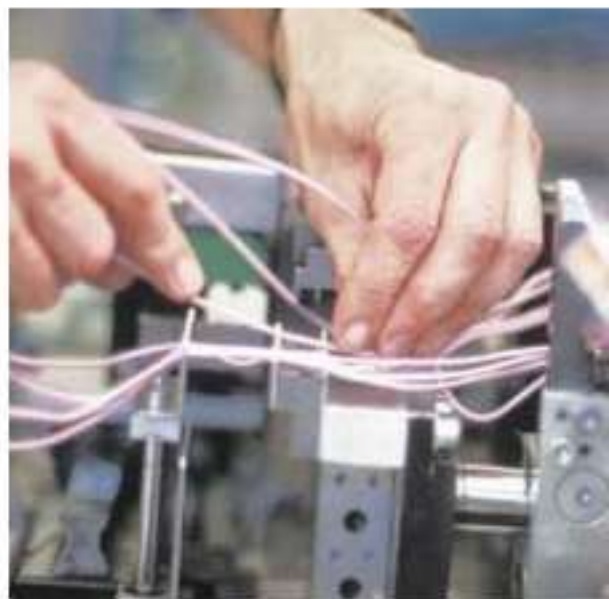


Besides delivering straight to the construction site, we also offer additional logistics services (time slots, pre-fitted and pre-assembled products etc.). Many customers and suppliers have a direct link to our IT system for rapid and flexible order processing.

As regards cable pre-assembly, Datwyler also has wide-ranging expertise, the product of decades of experience. In our modern cable cutting centre, the engineering department passes the cutting orders electronically without any media discontinuity straight to the production area. Our efficient order communication system with all our customers is due to years of experience with R2B interfaces.

In many countries Datwyler works in close co-operation with independent distribution partners. Thus, our customers can rely on the consistently high quality standard of all Datwyler products and solutions whilst benefiting from local contacts and logistics services.

We support you in realising your infrastructure project – reliably, capably, complete and with the highest quality!



ELEVATOR CABLING SYSTEMS



Unnoticed by elevator passengers, elevator cables from Datwyler Cabling Solutions do their job around the world every day. They reliably transfer power and data between the elevator cabin and the control system. Withstanding great mechanical stress, they provide faultless operation round the clock. No wonder Datwyler elevator cables are installed in the fastest elevators and the highest buildings in the world.

Space in cities is limited. High-rises are being erected around the globe. Elevators with ever greater performance are providing rapid access to the upper floors of these tall buildings. And so the requirements for the materials used are becoming increasingly tougher. As a leading manufacturer of elevator cable systems, Datwyler knows the needs. Not only international standards must be met, but knowledge of customers' specific needs is essential. Our reliable elevator cable systems are known for smooth operation that adds significant comfort to the ride.

Leading know-how

Using various test methods, some of which were developed by Datwyler, we produce elevator cables for service under the toughest conditions. Our specialists define materials and designs that even under permanent dynamic loading show no signs of fatigue. We also offer halogen-free materials for special fire safety concepts.



Spinnaker Tower Portsmouth

Selected reference projects

Shanghai Oriental Pearl Tower	Shanghai	Post Tower, German Post headquarters	Bonn
Canary Wharf	London	Torre Mayor	Mexico City
Capital Towers	Dubai	Spinnaker Tower	Portsmouth
New World Trade Center	New York		

Diverse applications

Datwyler elevator cable systems meet every requirement for electrical connections to the elevator cabin. Aside from power cables, high-quality data cables are being increasingly requested. Integral fibre optic cable can easily handle large volumes of data. These modern system solutions connect the elevator cabin to the controls and to the local data network – so passengers can enjoy television and video services in the elevator.

Customer value in focus

Datwyler has developed innovative solutions for all current needs. Comprehensive harnessing and logistics services with modern B2B connectivity round off the service offering.

PRODUCT OVERVIEW



Suspension devices
for Cabylet FL, FM, FH



Installation tools
for simple installation of
FL, FM and FH cabinets



Shaft lighting system





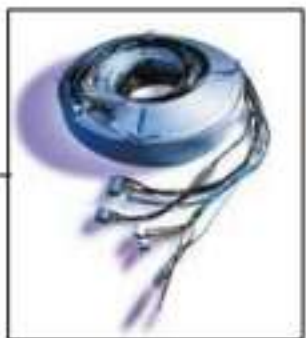
Pre-assembled machine room cabling (MRC)
ready for installation



Flat cable
FL, FM, FM and module concept, PVC and Low Fire Rated



Pre-assembled hoistway cables/wires (HW)
ready for connection



Pre-assembled travelling cables (TC)
for all travelling heights

QUALITY FROM FIRST TO LAST MILLIMETER

Datwyler flat elevator cable - a pioneering achievement



Buildings are reaching up to the sky all around the globe. More and more people and goods must be transported faster, more comfortably and more safely in elevators. The "electronic revolution" during the past 30 years has also set entirely new standards in elevator construction. Video cameras monitor the elevator cars. Telephones provide connection with the building service and passengers are accompanied by music on their ascent or descent. What was once futuristic is now reality.

Consequently, modern elevators throughout the world are inconceivable today without well-devised electronic control systems, combined with an absolutely reliable and fault-free signal transmission and energy supply. Datwyler began addressing these requirements many years ago, and since then has clearly signalled the intention to lead the way.

It was always the aim to produce a cable which - with respect to mobility, safety, durability and silent running - was superior to any round cable and satisfied the high technical demands of elevator manufacturers. This has been achieved by the elevator cable specialists at Datwyler in close collaboration with leading elevator manufacturers. A range of flat elevator cables suitable for these applications has meanwhile been produced and proven in practice, backed by pioneering spirit, ambition and intensive research.

More security thanks to Datwyler flat cables

The unique cable design, the careful choice of high-grade raw materials, the absolutely precise workmanship with the latest production systems and the strict internal quality control guarantee Datwyler flat cable a long and trouble-free service life. This also applies to the appropriate suspension devices, fixing material and accessories. Datwyler is therefore making a decisive contribution towards the security of the entire elevator system, both in PVC as well as in zero-halogen designs.

Complete cable systems for all elevator shaft heights

Whether simple standard cables or cables with integral data, telephone and video components, Datwyler flat cables are just as versatile and efficient in elevator shafts up to 80 m high as in those up to 150 m or 400 m. In addition, all cable types can be installed very easily and quickly with the appropriate suspension devices, fixing material and accessories. The decisive factors for installation are primarily the type of cable, height of elevator shaft and free suspension length.

Cable type	Shaft height	Free suspension length	Speed
FL	up to 80 m	maximum 45 m	4 %
FM	up to 150 m	maximum 80 m	6.3 %
FH	up to 400 m	maximum 220 m	12 %

In parallel with the development and manufacturing of elevator cables, Datwyler has also played an active role in other fields of cable production: from power supply and safety cables to data cables (copper and fibre optic). In other words, know-how which will certainly benefit you as an elevator manufacturer, particularly where the total electrical package in the elevator shaft is concerned.

We ourselves demand the highest quality

Quality cannot be dictated. Quality can only be achieved by the commitment of employees with a sense of responsibility. Datwyler has done its utmost for many years to encourage this commitment. Because the important function to be fulfilled by Datwyler in practice calls for a high degree of reliability. Every Datwyler product is therefore tested according to strict quality standards before it leaves the factory.



ISO 9001/ EN 29001

All production processes at Datwyler are integrated in the comprehensive, internationally recognised ISO 9001/ EN 29001 quality assurance system: development, planning, raw material, goods received, computer-controlled manufacture, functional checks and installation instructions.

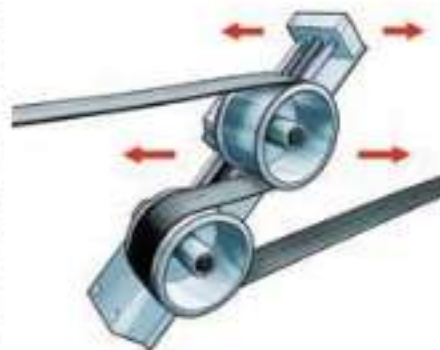
All measures, methods, responsibilities and directives for quality assurance are compiled in a manual, which is considered a 'pièce de résistance' by Datwyler. In addition to general quality assurance Datwyler flat cables are subjected to additional test procedures specific to the application. For these testing procedures Datwyler has developed a whole series of high precision testing systems with the support of qualified specialists which make an exhaustive check of every type of cable. In this way we can ensure that our products comply with the high demands of our customers, with no 'ifs and buts'.

ISO 14001 – protecting the environment

Datwyler provides solutions which do not only satisfy the most stringent requirements of technology but are also environmentally friendly and sustainable. The award of the ISO 14001 stamp of quality does not mean an end to our efforts, rather the challenge to continue along the same path and transmit the acquired knowledge, both to our customers and our suppliers.

Check of dimensions in accordance with EN 60811

This test checks adherence to the wall thicknesses and external dimensions of the cable sheath required by the standard. Measurement is made on the basis of digital picture processing. The sheath profile of flat cables is identified, analysed and measured.



Alternating flexing test in accordance with EN 50214, HD 21.2

This test checks the flexibility of the elevator cable. The cable is moved back and forth over two metal pulleys within a section of one metre. The transmission capability of the conductors is tested electronically throughout the entire duration of the test.

PRODUCT FEATURES

The following pictograms show the essential features of our products and give an easy reference to their performance in case of fire.

They are allocated to the articles on the data sheets and provide you with a quick overview



Zero halogen, non corrosive gases

Cables are halogen free and reduce possible damage to health or material to a minimum

IEC 60754-1 and IEC 60754-2, EN 50267-2-1, EN 50267-2-2, EN 50267-2-3, VDE 0482-267 part 2-1, 2-2 and 2-3



Flame propagation

Cables use a high-performance, flame retardant material that is self-extinguishing.

IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2



Flame spread

Cables are flame resistant and prevent the propagation of a fire from one location to another

IEC 60332-3-22 to 25 cat. A-D, EN 60332-3-22 bis 25 cat. A-D, VDE 0482-332-3-22 to 25 cat. A-D



Smoke density

Cables emit minimum smoke in the event of fire. Exit routes and fire brigade access are not restricted

IEC 61034-1 and IEC 61034-2, EN 61034-1 and EN 61034-2, VDE 0482-1034 part 1 and 2

Environmentally-friendly materials

The insulation and sheathing material of Datwyler low fire hazard elevator cables contain no PVC and can therefore be disposed of safely. In this way Datwyler Cabling Solutions makes a significant contribution towards a cleaner and safer environment.

THE MOST IMPORTANT TEST PROCEDURES AND THEIR FUNCTIONS



Test on gases evolved during combustion

This test procedure provides information if the insulation material of the cable sheath creates corrosive gases in the event of fire.

Halogen parts or other material in small quantities can be easily identified with this test due to the strong change of pH and conductivity. The conductivity is $< 10 \text{ mS/mm}$.

Standards

- IEC 60754-1 and IEC 60754-2
- EN 50267-2-1, EN 50267-2-2
- EN 50267-3-3
- VDE 0483-267 part 2-1, 2-2 and 2-3



Test for vertical flame propagation (single insulated wire or cable)

This test method tests a cable sample (length: 60 cm) for burning behaviour.

The flame must extinguish itself, and the burn damage must not reach the upper end of the cable sample.

Standards

- IEC 60332-1-2
- EN 60332-1-2
- VDE 0483-332-1-2

Test for vertical flame spread (bunched wires or cables)

This test method tests a cable bundle (length: 360 cm) with regard to fire propagation.

The flames must extinguish themselves, and burn damage must not exceed a defined height.

Standards

- IEC 60332-3-22 up to 25 Cat. A-D
- EN 60332-3-22 up to 25 Cat. A-D
- VDE 0483-332-3-22 up to 25 Cat. A-D



Measurement of smoke density

This test checks smoke development when burning the cable or the impairment of the visibility by burning cables.

The reduction in light transparency is measured in a standard chamber.

Standards

- IEC 61034-1 and IEC 61034-2
- EN 61034-1 and EN 61034-2
- VDE 0483-1034 part 1 and 2

Product overview and selection criteria for Datwyler elevator cables

Control core:		Data correct (see page 16/17)										Standards																																																																																																																																																																																																																																																								
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Article no.	Type	Nominal weight					Nominal weight					Standards																																																																																																																																																																																																																																																								
		0,75	1,00	1,50	2,00	2,50	4x 2x 16/6.36	7/52 16x 4F	7/54 10 F	7/54 8 F	8/55 8 F		8/55 12 F	7/62 12 F *	7/64 12 F	8/65 12 F	8/65 16 F	8/65 20 F	8/65 24 F	8/65 28 F	8/65 32 F	8/65 36 F	8/65 40 F	8/65 44 F	8/65 48 F	8/65 52 F	8/65 56 F	8/65 60 F	8/65 64 F	8/65 68 F	8/65 72 F	8/65 76 F	8/65 80 F	8/65 84 F	8/65 88 F	8/65 92 F	8/65 96 F	8/65 100 F	8/65 104 F	8/65 108 F	8/65 112 F	8/65 116 F	8/65 120 F	8/65 124 F	8/65 128 F	8/65 132 F	8/65 136 F	8/65 140 F	8/65 144 F	8/65 148 F	8/65 152 F	8/65 156 F	8/65 160 F	8/65 164 F	8/65 168 F	8/65 172 F	8/65 176 F	8/65 180 F	8/65 184 F	8/65 188 F	8/65 192 F	8/65 196 F	8/65 200 F	8/65 204 F	8/65 208 F	8/65 212 F	8/65 216 F	8/65 220 F	8/65 224 F	8/65 228 F	8/65 232 F	8/65 236 F	8/65 240 F	8/65 244 F	8/65 248 F	8/65 252 F	8/65 256 F	8/65 260 F	8/65 264 F	8/65 268 F	8/65 272 F	8/65 276 F	8/65 280 F	8/65 284 F	8/65 288 F	8/65 292 F	8/65 296 F	8/65 300 F	8/65 304 F	8/65 308 F	8/65 312 F	8/65 316 F	8/65 320 F	8/65 324 F	8/65 328 F	8/65 332 F	8/65 336 F	8/65 340 F	8/65 344 F	8/65 348 F	8/65 352 F	8/65 356 F	8/65 360 F	8/65 364 F	8/65 368 F	8/65 372 F	8/65 376 F	8/65 380 F	8/65 384 F	8/65 388 F	8/65 392 F	8/65 396 F	8/65 400 F	8/65 404 F	8/65 408 F	8/65 412 F	8/65 416 F	8/65 420 F	8/65 424 F	8/65 428 F	8/65 432 F	8/65 436 F	8/65 440 F	8/65 444 F	8/65 448 F	8/65 452 F	8/65 456 F	8/65 460 F	8/65 464 F	8/65 468 F	8/65 472 F	8/65 476 F	8/65 480 F	8/65 484 F	8/65 488 F	8/65 492 F	8/65 496 F	8/65 500 F	8/65 504 F	8/65 508 F	8/65 512 F	8/65 516 F	8/65 520 F	8/65 524 F	8/65 528 F	8/65 532 F	8/65 536 F	8/65 540 F	8/65 544 F	8/65 548 F	8/65 552 F	8/65 556 F	8/65 560 F	8/65 564 F	8/65 568 F	8/65 572 F	8/65 576 F	8/65 580 F	8/65 584 F	8/65 588 F	8/65 592 F	8/65 596 F	8/65 600 F	8/65 604 F	8/65 608 F	8/65 612 F	8/65 616 F	8/65 620 F	8/65 624 F	8/65 628 F	8/65 632 F	8/65 636 F	8/65 640 F	8/65 644 F	8/65 648 F	8/65 652 F	8/65 656 F	8/65 660 F	8/65 664 F	8/65 668 F	8/65 672 F	8/65 676 F	8/65 680 F	8/65 684 F	8/65 688 F	8/65 692 F	8/65 696 F	8/65 700 F	8/65 704 F	8/65 708 F	8/65 712 F	8/65 716 F	8/65 720 F	8/65 724 F	8/65 728 F	8/65 732 F	8/65 736 F	8/65 740 F	8/65 744 F	8/65 748 F	8/65 752 F	8/65 756 F	8/65 760 F	8/65 764 F	8/65 768 F	8/65 772 F	8/65 776 F	8/65 780 F	8/65 784 F	8/65 788 F	8/65 792 F	8/65 796 F	8/65 800 F	8/65 804 F	8/65 808 F	8/65 812 F	8/65 816 F	8/65 820 F	8/65 824 F	8/65 828 F	8/65 832 F	8/65 836 F	8/65 840 F	8/65 844 F	8/65 848 F	8/65 852 F	8/65 856 F	8/65 860 F	8/65 864 F	8/65 868 F	8/65 872 F	8/65 876 F	8/65 880 F	8/65 884 F	8/65 888 F	8/65 892 F	8/65 896 F	8/65 900 F	8/65 904 F	8/65 908 F	8/65 912 F	8/65 916 F	8/65 920 F	8/65 924 F	8/65 928 F	8/65 932 F	8/65 936 F	8/65 940 F	8/65 944 F	8/65 948 F	8/65 952 F	8/65 956 F	8/65 960 F	8/65 964 F	8/65 968 F	8/65 972 F	8/65 976 F	8/65 980 F	8/65 984 F	8/65 988 F
FL - PVC flat cable - low rise - unsupported - up to 80 m shaft height												page 18/19																																																																																																																																																																																																																																																								
FL - PVC flat cable - low rise - unsupported - up to 80 m shaft height												page 20/21																																																																																																																																																																																																																																																								
FM - PVC flat cable - mid rise - supported - up to 110 m shaft height												page 22/23																																																																																																																																																																																																																																																								

* unshielded



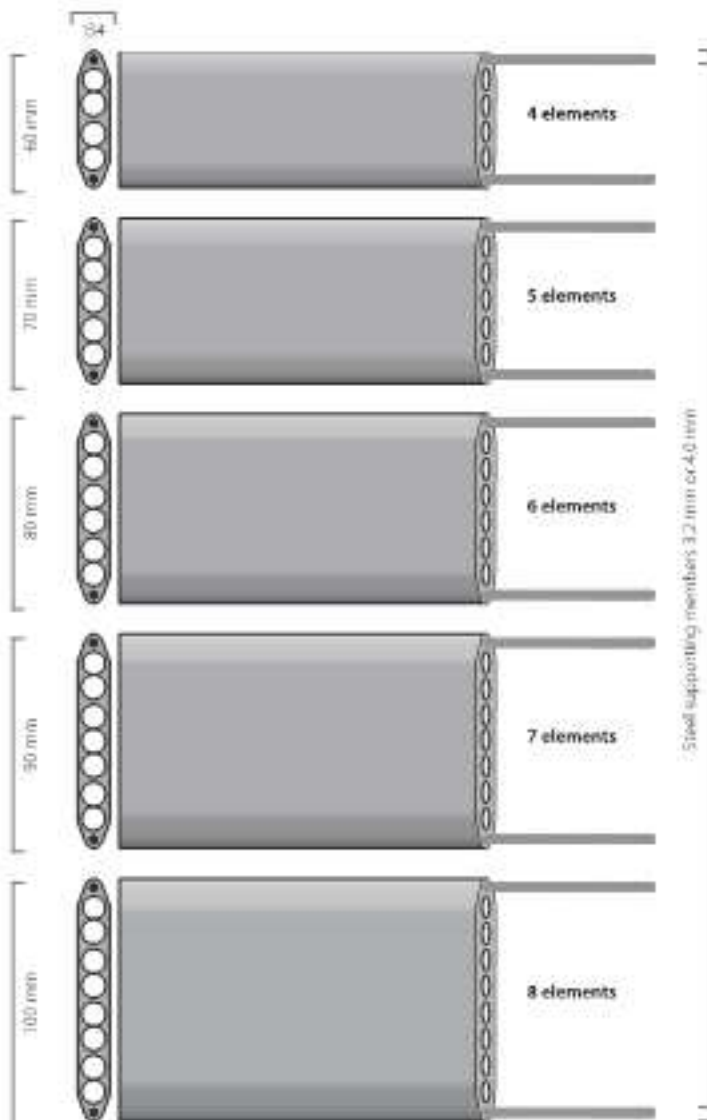
Datwyler FH Module Concept

Innovative Datwyler module concept

for the simplest, safest and best choice of cable for shaft heights up to 400 metres

Datwyler offers the best conditions for a choice of a functionally suitable cable with the new and unique module concept: quick, individual and economical.

Datwyler basic modules (4 to 8 bundle elements)



Module concept

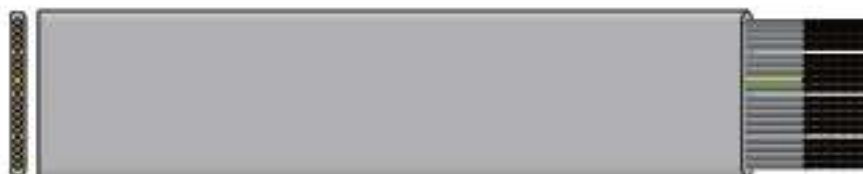
PVC or LFH
(Safety - Low Fire Hazard)For a range of active constructions
see page 26/27 and 34/35

Advantages:

- Only one or maximum two cables are required even for the most complex functions
- Shorter installation times
- Less logistics expenditure
- Customized solutions

Module type		Possible elements (international)	Dimensions	Weight (approx.)
M1		CH-N65V-F 6248-F CH-N65Z-F 8578-F	12 x 0.75 mm ²	
M2		CH-N65V-F 6248-F CH-N65Z-F 8578-F	10 x 1.00 mm ²	
M3		CH-N67V-F 6248-F CH-N67Z-F 8578-F	7 x 1.50 mm ²	
M4		CH-N67V-F 6248-F CH-N67Z-F 8578-F	6 x 2.0 mm ²	
M5		CH-N67V-F 6248-F CH-N67Z-F 8578-F	5 x 2.50 mm ²	
M6		CH-N63EC4-F 86629-F	3 x 4 x 0.34 mm ²	800g 170
M7		CH-N63EC7-F 86629-F	3 x 4 x 0.50 mm ²	800g 170
M8		CH-N63EA7-F 86629-F	7 x 2 x 0.50 mm ²	800g 170
M9		CH-N63EA7-F 86629-F	4 x 2 x 0.75 mm ²	800g 170
M10		CH-N65V-Z 8811-Z CH-N65Z-Z 88312-Z	8 x 1.00 mm ² + 2 x optical fibre	920g 190g
M11		CH-N65V-Z 8811-Z CH-N65Z-Z 88312-Z	6 x 1.00 mm ² + 4 x optical fibre	920g 190g
M12		CH-N65V-Z 8811-Z CH-N65Z-Z 88312-Z	6 x 0.75 mm ² + 6 x optical fibre	920g 190g
M13		CH-N63EA7-F 86629-F	4 x 2 x 0.50 mm ²	800g 170
M14		CH-N63EC7Z1-F 8878-F	3 x 4 x 0.50 mm ²	800g 170
M15		CH-N63EA7Z1-F 8878-F	7 x 2 x 0.50 mm ²	800g 170

Note: This is a selection of possible module elements. Please refer to manufacturer to verify feasibility of your requested combination of elements.



Drawing according to article number 148729 – type 6777F

PRODUCT INFORMATION

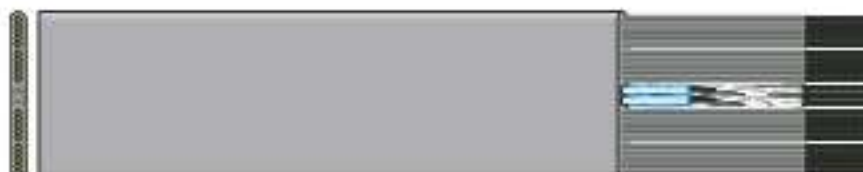


APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible:	class 5
	Core insulation:	PVC
	Data elements:	none
	Supporting members:	none
	Outer sheath:	PVC
ELECTRICAL PROPERTIES	Rated voltage U _{0/U}	according to table
MECHANICAL PROPERTIES	Free suspension length:	maximum 43 m
	Travelling height:	maximum 80 m
	Running speed:	maximum 4 m/s
	Acceleration:	< 0.8 m/s ²
	Operating temperature:	-15 to +70 °C
	Recommended loop diameter:	according to table, tolerance -50/+100 mm
COLOUR CODE	Core:	black, white numbered, G = with green-yellow core(s), IF compliant types with different colours
	Outer sheath:	grey
STANDARD	 EN 50214	
	 JIS C 3408	

Article no.	Type	Cross sectional area (x x mm)	Rated voltage U ₀ /U (V)	Overall dimensions approx. (w x h) (mm approx.)	Data elements	Weight approx. (kg/100m)	Copper content (kg/100m)	Supporting members	Loop (mm)	Suspension device	Standards
148725	6777-1	4.0 x 0.75	300/500	11.0 x 4.5	none	4.9	20	none	300	L2 1000	
148726	6777-2	6.0 x 0.75	300/500	16.2 x 4.5	none	13.0	43	none	300	L2 1000	
148727	6777-3	12.0 x 0.75	300/500	24.0 x 4.5	none	25.0	87	none	300	L2 1000	
15412	6777-1	16.0 x 0.75	300/500	24.7 x 4.5	none	34.2	115	none	300	L2 1000	
148729	6777-1	18.0 x 0.75	180/500	26.3 x 4.5	none	38.0	130	none	300	L2 1000	
148760	6777-2	18.0 x 0.75	300/500	33.2 x 4.5	none	42.0	144	none	300	L2 1000	
148824	6777-4	24.0 x 0.75	300/500	46.5 x 4.5	none	50.0	175	none	300	L2 1000	
178898	6535-1	24.0 x 0.75	300/500	55.2 x 4.4	none	41.0	175	none	300	L2 1000	
181227	6188-1	16.0 x 0.75	300/500	37.2 x 9.1	none	91.0	300	none	450	L2 1000	
181232	6436-1	16.0 x 0.75	300/500	39.9 x 13.3	none	145.7	446	none	500	L2 1213	
15415	6777-1	7.0 x 1.00	300/500	20.2 x 4.7	none	15.0	47	none	300	L2 1000	
148781	6777-1	9.0 x 1.00	300/500	27.8 x 4.4	none	22.0	66	none	300	L2 1000	
148794	6777-1	12.0 x 1.00	300/500	35.3 x 4.4	none	29.2	85	none	300	L2 1000	
154025	6777-1	18.0 x 1.00	300/500	51.3 x 4.4	none	42.2	125	none	300	L2 1000	
148785	6777-1	18.0 x 1.00	300/500	57.5 x 4.4	none	43.0	130	none	300	L2 1000	
148814	6777-1	24.0 x 1.00	300/500	66.3 x 4.4	none	57.0	170	none	300	L2 1000	

*Bundled construction U = with green yellow cover

Further dimensions on request



Drawing according to article number 167046 - Type 8326-F

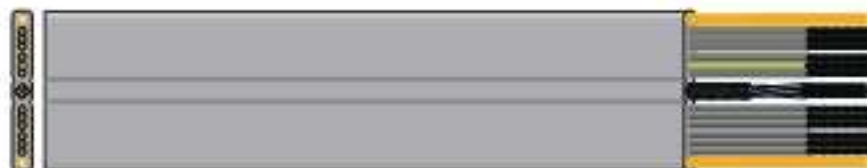
PRODUCT INFORMATION



APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible:	class 5
	Core insulation:	PVC
	Data elements:	details according to page 36/37
	Supporting members:	none
	Outer sheath:	PVC
ELECTRICAL PROPERTIES	Rated voltage U _{0/U}	according to table
MECHANICAL PROPERTIES	Free suspension length:	maximum 43 m
	Travelling height:	maximum 80 m
	Running speed:	maximum 4 m/s
	Acceleration:	< 0.8 m/s ²
	Operating temperature:	-15 to +70 °C
	Recommended loop diameter:	according to table, tolerance -50/+100 mm
COLOUR CODE	Core:	black, white numbered, G = with green-yellow line(s), JIS compliant types with different colours
	Pair/quadr:	various colours or black with white numbers
	Cable:	grey
	Outer sheath:	grey
STANDARD	 EN 50214	
	 JIS C 3408	

Article no.	Type	Gross sectional area (mm²)	Rated voltage kV(U _N)	Overall dimensions approx. (w x h) (mm)	Data elements	Weight approx. (kg/100m)	Copper content (kg/6m)	Supporting members	Loop (mm)	Suspension device	Standards
18100	8180-F	10 x 1.50 + 9 x 0.75	450/750 300/500								EN
18100	8180-F	+ 9 x 2 x 0.50 13 x 0.75	300/300 300/500	48.5 x 3.1	8851-F	44.3	143	none	350	L2 1000	EN
155434	7740-F	+ 1 x CX 75.0 4 x 1.00	300/500 300/500	41.3 x 6.5	H5-2122-F	41.8	111	none	400	L2 1000	EN
		+ 16 x 0.75 + 2 x 4 x 0.25	300/500 250/250		786703-F						
		+ 1 x 2 x 0.25 30 x 0.75	750/750 300/300	67.3 x 3.8	795621-F	58.2	187	none	350	L2 1000	EN
18703	8120-F	+ 7 x 1 x 0.50 14 x 0.75	300/300 300/500	51.2 x 5.3	6451-F	44.9	189	none	350	L2 1000	EN
18478	8187-F	+ 3 x 4 x 0.25 24 x 0.75	300/500 300/500	73.8 x 5.5	785421-F	68.7	218	none	350	L2 1000	EN
18479	8788-F	+ 1 x CX 75.0 4 x 1.50	300/500 400/750	71.3 x 6.8	H5-2122-F	71.8	197	none	450	L2 1000	EN
18757	8186-F	+ 2 x 4 x 0.50 4 x 2.50	300/500 450/750	38.5 x 7.4	85080-F	41.4	140	none	350	L2 1000	EN
18298	8821-F	+ 1 x 1 x 1.00 + 2 x 1 x 0.50	300/500 300/300		7346-F						
		+ 1 x CX 75.0 13 x 1.00	300/500 300/500	61.7 x 6.5	H5-2122-F	77.8	258	none	450	L2 1000	EN
18120	8184-F	+ 2 x 1 x 0.50 13 x 2 x 0.75	300/300 450/750	46 x 5.4	6451-F	42.2	180	none	350	L2 1000	EN
18102	8880-F	+ 16 x 1.00 + 4 x 2 x 0.34	300/500 300/300	72.0 x 5.7	7948-F	72.8	244	none	350	L2 1000	EN
17504	8145-F	4 x 1.50 + 2 x 4 x 0.50	450/750 300/300		8584-F						
		+ 1 x CX 75.0 1 x 1.50	300/500 450/750	32.4 x 7.1	H5-2122-F	41.1	136	none	400	L2 1000	EN
18705	8129-F	18 x 1.00 + 18 x 2 x 0.50	450/750 300/300		8851-F						
		+ 1 x CX 75.0	300/300	48.3 x 7.6	H5-2122-F	58.3	180	none	400	L2 1000	EN
18787	8447-F	18 x 2 x 0.75	300/300	46.2 x 6.4	8851-F	43.8	171	none	400	L2 1000	EN
17809	8181-F	13 x 2 x 0.75	300/300	51.8 x 6.5	6451-F	50.4	305	none	400	L2 1000	EN
18103	8887-F	4 x 4 x 1 x 0.6626	400/300	79.4 x 8.4	770219x49	31.5	71	none	500	L2 1000	EN
		5 - with green/yellow core(s)									

Further dimensions on request



Drawing according to article number 177690 - Type 8666-F

PRODUCT INFORMATION



APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible:	class 5
	Core insulation:	PVC
	Data elements:	details according to page 36/37
	Supporting members:	HTF = High tensile fibre, ST = Steel, diameter in [mm]
	Outer sheath:	PVC
ELECTRICAL PROPERTIES	Rated voltage Uo/U:	according to table
MECHANICAL PROPERTIES	Free suspension length:	maximum 80 m
	Travelling height:	maximum 150 m
	Running speed:	maximum 6.3 m/s
	Acceleration:	< 1.2 m/s ²
	Operating temperature:	-15 to +70 °C
	Recommended loop diameter:	according to table, tolerance -50/+100 mm
COLOUR CODE	Core:	black, white numbered, G = with green-yellow core(s)
	Pair/quid:	various colours or black with white numbers
	Cable:	grey
	Outer sheath:	grey
STANDARD	 EN 50214	

Article no.	Type	Cross sectional area (mm ²)	Rated voltage U ₀ /U (V)	Overall dimensions approx. (w x h)	Data elements	Weight approx. (kg/100m)	Copper content (kg/ton)	Supporting members	Long (mm)	Suspension device	Standards
155342	5099-F	20 G 075	300/500	62.8 x 4.3	none	46.3	144	HTP	300	L2 1009	
155344	5099-F	20 G 075	300/500	73.1 x 4.3	none	54.9	171	HTP	300	L2 1009	
154879	7739-F	24 G 075	300/500	71.2 x 4.3	none	56.0	175	ST Ø 2.5	400	L2 1009	
156534	5099-F	18 G 100	300/500	55.5 x 4.4	none	47.3	125	HTP	300	L2 1009	
156535	5099-F	24 G 100	300/500	75.4 x 4.4	none	63.0	200	HTP	300	L2 1009	
155425	7737-F	4 G 1.00 + 18 x 0.75 + 2 x 1 x 0.25 + 1 x 2 x 0.25	300/500 300/500 250/500 250/500		70.8 x 5.8 79542-F	55.9	187	ST Ø 2.5	400	L2 1009	
156877	5099-F	6 G 1.50 + 6 x 1.00	300/500 300/500								
156878	7580-F	+ 1 x 4 x 0.50 12 G 1.00	300/500 300/500	53.0 x 6.4	69473-F	59.6	175	HTP	400	L2 1009	
177061	5099-F	+ 1 x 0X.75 (1)	300/500	50.9 x 6.4	HT-2122-F	53.0	159	HTP	400	L2 1009	
167084	7737-F	12 G 1.00 + 1 x 6 x 0.34	300/500 300/500	50.9 x 6.4	8607-F	52.5	147	HTP	400	L2 1009	
167084	7737-F	4 G 1.50 + 18 x 1.00 + 2 x 2 x 0.50 + 1 x 2 x 0.50	450/750 300/500 300/500 300/500								
168190	5423-F	4 G 1.50 + 18 x 1.00	450/750 300/500	76.5 x 5.8	79542-F	84.9	240	ST Ø 2.5	400	L2 1009	
167084	7737-F	+ 18 x 1.00 + 3 x 2 x 0.50 2 x 1.50	300/500 300/500 450/750	79.7 x 6.1	79542-F	89.6	275	ST Ø 2.5	400	L2 1009	
167084	7737-F	+ 1 x 0X.75 (1) + 8 x 2 x 0.50	300/500 300/500	54.3 x 7.1	8651-F	58.0	149	HTP	400	L2 1009	
168191	5423-F	4 x 1.50 + 2 x 0X.75 (1) + 8 x 2 x 0.50	450/750 300/500 300/500								
162062	5023-F	4 x 1.50 + 2 x 0X.75 (1) + 8 x 2 x 0.50	450/750 300/500 300/500	54.3 x 7.2	8651-F	71.6	201	HTP	400	L2 1009	
162062	5023-F	4 x 1.50 + 2 x 0X.75 (1) + 8 x 2 x 0.50	450/750 300/500 300/500								
162717	5423-F	4 x 1.50 + 4 x 0X.75 (1) + 8 x 2 x 0.50	450/750 300/500 300/500	54.3 x 7.2	8651-F	74.5	201	ST Ø 2.5	300	L2 1009	
168125	5023-F	4 x 1.50 + 2 x 0X.75 (1) + 8 x 2 x 0.50	450/750 300/500 300/500								
162560	3954/3-F	4 x 2 x 0.50	300/500	28.0 x 8.8	8651/3-F	11.1	56	ST Ø 2.5	450	L2 1009	
161081	3512-F	5 G 2.50 + 14 x 1.00	450/750 300/500								
167451	5024-F	3 x 0.75 + 4 x 0X.75 (1) S - with green-yellow core	300/500 300/500	46.8 x 4.1	GT-7514	38.1	58	ST Ø 7.5	400	L2 1009	



Drawing according to article number 161448 - Type 8292-F

PRODUCT INFORMATION



APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible:	class 5
	Core insulation:	PVC
	Data elements:	details according page 36/37
	Supporting members:	ST = Steel (diameter in [mm])
	Outer sheath:	PVC
ELECTRICAL PROPERTIES	Rated voltage U _{0/U}	according to table
MECHANICAL PROPERTIES	Free suspension length:	maximum 220 m
	Travelling height:	maximum 400 m
	Running speed:	maximum 1.2 m/s
	Acceleration:	< 1.2 m/s ²
	Operating temperature:	-15 to +70 °C
	Recommended loop diameter:	according to table, tolerance -50/+100 mm
COLOUR CODE	Core:	black, white numbered, G = with green-yellow core(s)
	Pay/quad:	various colours or black with white numbers.
	Coax:	grey
	Outer sheath:	grey
STANDARD	 EN 50214	

Article no.	Type	Cross-sectional area (a x mm)	Rated voltage U ₀ /U (V)	Overall dimensions approx. (w x h)	Data elements	Weight approx. (kg/100m)	Copper content (kg/100m)	Supporting members	Loop (mm)	Suspension device	Standards
157234	7877-1	48 x 0.75	300/500	89.5 x 94	none	1114	309	57-0.75	550	L2-4001	EN
185284	7877-2	60 x 0.75	300/500	99.5 x 10.5	none	1610	446	57-0.75	550	L2-4001	EN
181448	8292-1	48 x 0.75	300/500		6347/3-F						EN
		+2 x 4 x 0.50	300/500		6347/3-F						EN
176845	8490-1	38 x 1.08	300/500	81.5 x 94	H5-2122-F	1381	420	57-0.75	550	L2-4001	EN
		+ 1 x CX75-D			H5-2122-F	1113	332	57-0.75	550	L2-4001	EN
184645	8845-1	38 x 1.08	300/500	64.8 x 98	H5-2122-F	1017	340	57-0.75	550	L2-4001	EN
		+ 2 x 2 x 0.75	300/500	64.5 x 98	6851/3-F	1017	340	57-0.75	550	L2-4001	EN
182538	8893-1	12 x 0.75	300/500		6851/3-F						EN
		+ 20 x 1 x 0.75	300/500		6851/3-F						EN
		1 x CX75-D		86.6 x 114	H4-2122-F	1449	462	57-0.40	550	L2-4001	EN
		C = 40 (green-yellow cores)									

Further dimensions on request



Drawing according to article number 185372 - Type 8847-F

PRODUCT INFORMATION



APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible: Core insulation: Data elements: Supporting members: Outer sheath:	class 5 PVC details according to page 36/37 ST = Steel (diameter in [mm]) EVC
ELECTRICAL PROPERTIES	Rated voltage U _{0/U} :	according to table
MECHANICAL PROPERTIES	Free suspension length: Travelling height: Running speed: Acceleration: Operating temperature: Recommended loop diameter:	maximum 220 m maximum 400 m maximum 1.2 m/s < 1.2 m/s ² -15 to +70 °C approx. 600 mm, Tolerance -50/+150 mm
SUSPENSION DEVICE	LZ 4001	
COLOUR CODE	Core: Pair/quad: Coax: Optical fibre: Outer sheath:	black, white numbered, G = with green-yellow core(s) various colours or black with white numbers grey orange 50 µm, grey 62.5 µm grey
STANDARD	 EN 50214	

Article no.	Type	Cross sectional area (in mm ²)	Rated voltage (U ₀ /U _m)	Bundle type p. 17	No. of elements	Data elements	Overall dimensions approx. (w x h) (mm x mm)	Supporting members	Weight approx. (kg/100m)	Copper content (kg/100m)	Standards
18905	8847-F	5 G 2.50 + 7 x 1.50 + 16 x 1.00 + 4 x 2 x 0.75 + 2 x 70 G 50/125	450/750	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	5	665/2-F GF-2114	703 x 114	ST 048	152.5	448	EN
18532	8847-F	10 G 2.50 + 18 x 1.20 + 12 x 2 x 0.75 + 2 x 70 G 50/125	450/750	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	7	665/2-F GF-2114	903 x 114	ST 048	198.7	635	EN
17780	8847-F	40 G 1.00 + 1 x 2 x 0.50 + 1 x 4 x 0.24	300/500	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	7	665/2-F GF-2114	663 x 114	ST 032	170.0	578	EN
18712	8847-F	5 G 2.50 + 7 x 1.50 + 16 x 1.00 + 4 x 2 x 0.75 + 2 x 70 G 50/125	450/750	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	5	665/2-F GF-2114	703 x 114	ST 048	152.4	448	EN
18576	8858-F	12 G 2.00 + 18 x 1.20 + 7 x 2 x 0.50 + 1 x 4 x 0.24	450/750	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	7	665/2-F GF-2114	857 x 114	ST 048	196.4	608	EN
18762	8847-F	5 G 2.50 + 15 G 1.00 + 8 x 2 x 0.75 + 1 x 4 x 0.24	450/750	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	7	665/2-F GF-2114	873 x 114	ST 048	198.0	635	EN
18837	8860-F	10 G 2.50 + 20 x 1.00 + 4 x 2 x 0.75	450/750	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	5	665/2-F GF-2114	703 x 114	ST 048	155.7	448	EN
18527	8862-F	20 G 2.50 + 6 x 1.00 + 24 x 0.75 + 4 x 50 G 50/125	450/750	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15	7	GF-2114	903 x 114	ST 048	199.2	716	EN

Further dimensions on request.

FL – Low Fire Hazard – unsupported

Low rise - travelling height maximum 80 m



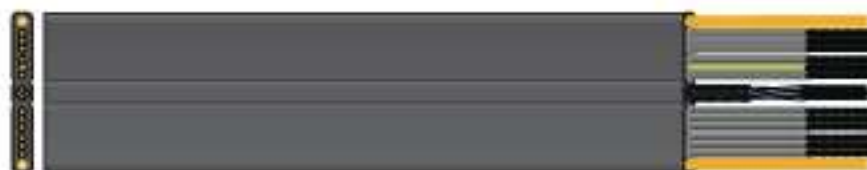
Drawing according to article number 191 113 - Type 85B2-F

PRODUCT INFORMATION

APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible: Core insulation: Data elements: Supporting members: Outer sheath:	class 5 low fire hazard details according to page 36/37 none low fire hazard
ELECTRICAL PROPERTIES	Rated voltage U _{0/U} :	according to table
MECHANICAL PROPERTIES	Free suspension length: Travelling height: Running speed: Acceleration: Operating temperature: Recommended loop diameter:	maximum 43 m maximum 80 m maximum 4 m/s < 0.8 m/s ² -15 to +70 °C according to table, tolerance -50/+100 mm
COLOUR CODE	Core: Pair/quad: Cable: Outer sheath:	black, white numbered, G = with green-yellow core(s) various colours or black with white numbers. black black
STANDARD	 EN 50214	

Article no.	Type	Cross sectional area (x x mm)	Rated voltage U _{0/U} (V)	Overall dimensions approx. (w x h) (mm approx.)	Data elements	Weight approx. (kg/100m)	Copper content (kg/100m)	Supporting members	Loop (mm)	Suspension device	Standards
18110	8511-1	12 G 0.75	300/500	34.3 x 4.4		28.0	87	none	300	L2 1089	EN 12920
18112	8511-2	18 G 0.75	300/500	46.4 x 4.4		18.4	130	none	300	L2 1089	EN 12920
18112	8511-2	24 G 0.75	300/500	66.7 x 4.4		31.4	173	none	300	L2 1089	EN 12920
18111	8640-1	12 G 0.75	300/500								EN 12920
		+ 3 x 2 x 8.0	300/500	41.4 x 3.4	7631-F	41.7	123	none	400	L2 1089	EN 12920
18288	8827-1	J.C. 150	450/550								EN 12920
		+ 14 x 1.00	300/500								EN 12920
		+ 4 x 2 x 8.54	300/500	72.3 x 5.4	7340-F	35.4	344	none	400	L2 1089	EN 12920
18113	8540	24 G 1.00	320/500								EN 12920
		+ 5 x 2 x 0.75	300/500		6831-F						EN 12920
		+ 1 x CX 75-D		87.2 x 6.5	45-2120-F	37.4	336	none	400	L2 1089	EN 12920
18481	8540	2 x 1.50	450/550								EN 12920
		+ 8 x 2 x 8.50	300/500		6831-F						EN 12920
		+ 1 x CX 75-D		47.8 x 7.1	HF-2125-F	54.0	149	none	450	L2 1089	EN 12920
		D = length from yellow cord)									

For the dimensions on request









Drawing according to article number 185124 - Type 8696-F

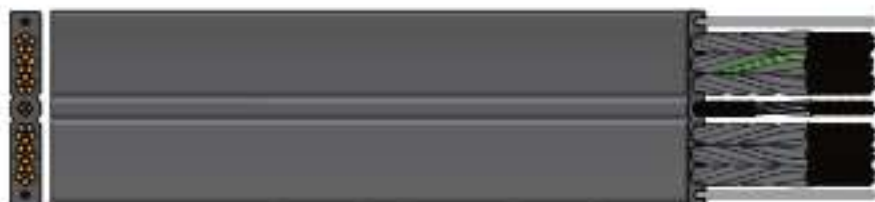
PRODUCT INFORMATION



APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible: Core insulation: Data elements: Supporting members: Outer sheath:	class 5 low fire hazard details according to page 36/37 HTF = High tensile fibre low fire hazard
ELECTRICAL PROPERTIES	Rated voltage U _{0/U}	according to table
MECHANICAL PROPERTIES	Free suspension length: Travelling height: Running speed: Acceleration: Operating temperature: Recommended loop diameter:	maximum 80 m maximum 150 m maximum 6.3 m/s < 1.2 m/s ² -15 to +70 °C according to table, tolerance -50/+100 mm
COLOUR CODE	Core: Pair/quad: Cable: Outer sheath:	black, white numbered, G = with green-yellow core(s) various colours or black with white numbers. black black
STANDARD	 EN 50214	

Article no.	Type	Cross-sectional area [m ² mm ²]	Rated voltage U ₀ /U [kV]	Overall dimensions approx. [w x h] [mm x mm]	Data elements	Weight approx. [kg/100m]	Copper content [kg/m]	Supporting members	Loop [mm]	Suspension device	Standards
185127	8822 F	12 G 1/8	300/300								
		+ 3 x CR 25 G		48.4 x 6.6	HT-21.23-F	40.8	139	HTT	400	L2 1000	
185124	8896 F	12 G 1/8	300/300								
		+ 1 x 4 x 8.34	300/300	48.8 x 6.7	660NF	55.1	142	HTT	400	L2 1000	
184624	8849 F	12 x 2 x 6.50	300/300	55.8 x 5.8	6451-F	47.0	116	HTF	400	L2 1000	
181084	8870 F	11 G 2/0	400/300								
		+ 14 x 1.00	300/300								
		+ 4 x 2 x 8.50	300/300	79.0 x 5.7	6851-F	81.8	232	HTT	400	L2 1000	
		G = 147h, green-yellow copper									

Further dimensions on request



Drawing according to article number 185126 - Type 8585-F

PRODUCT INFORMATION



APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible: Core insulation: Data elements: Supporting members: Outer sheath:	class 5 low fire hazard details according to page 36/37 ST = Steel (diameter in [mm]) low fire hazard
ELECTRICAL PROPERTIES	Rated voltage U _{0/U} :	according to table
MECHANICAL PROPERTIES	Free suspension length: Travelling height: Running speed: Acceleration: Operating temperature: Recommended loop diameter:	maximum 220 m maximum 400 m maximum 1.2 m/s < 1.2 m/s ² -15 to +70 °C according to table, tolerance -50/+100 mm
COLOUR CODE	Core: Pair/quad: Outer sheath:	black, white numbered, G = with green-yellow core(s) various colours or black with white numbers black
STANDARD	 EN 50214	

Article no.	Type	Cross-sectional area [m ² mm ²]	Rated voltage U ₀ /U _i [kV]	Overall dimensions approx. [w x h] [mm x mm]	Data elements	Weight approx. [kg/100m]	Copper content [kg/m]	Supporting members	Loop [mm]	Suspension device	Standards
18212A	0505 F	30 x 1.00	300/500								EN
		+ 3 x 4 + 2.34	300/500	61.8 x 9.7	88277	106.8	430	ST 0.25	156	LZ 4001	EN
18212Z	0805 F	12.5 x 0.5	300/500								EN
		+ 26 x 2 + 0.75	300/500		66512 F						
		+ 7 x CK 25 G		96.5 x 14.5	HS-N 29 F	188.0	532	ST 0.40	156	LZ 4001	
		G = left green, yellow, green									

Further dimensions on request



Drawing according to article number 191114 - Type 8819-F

PRODUCT INFORMATION













APPLICATION	Elevator suspension cable for indoor and panoramic elevators.	
INSTALLATION	To comply with the correct installation procedures please refer to the Datwyler installation manual which is available separately.	
CONSTRUCTION	Core flexible: Core insulation: Data elements: Supporting members: Outer sheath:	class 5 low fire hazard details according to page 36/37 ST = Steel (diameter in [mm]) low fire hazard
ELECTRICAL PROPERTIES	Rated voltage U _{0/U}	according to table
MECHANICAL PROPERTIES	Free suspension length: Travelling height: Running speed: Acceleration: Operating temperature: Recommended loop diameter:	maximum 220 m maximum 400 m maximum 1.2 m/s < 1.2 m/s ² -15 to +70 °C approx. 650 mm, tolerance -30/+150 mm
SUSPENSION DEVICE	LZ 4001	
COLOUR CODE	Core: Pair/quad: Coax: Optical fibres: Outer sheath:	black, white numbered, G = with green-yellow core(s) various colours or black with white numbers, bundle with black sheath black orange 50 µm, grey 62.5 µm black
STANDARD	 EN 50214	











Article no.	Type	Cross sectional area (in mm ²)	Rated voltage (in V)	Bundle type p. 17	No. of elements	Data elements	Overall dimensions approx. (w x h) (in mm x mm)	Supporting members	Weight approx. (kg/100m)	Copper content (kg/100m)	Standards
181134	8850-F	120-200 + 33 x 1.50 + 7 x 2 x 0.50 + 7 x 4 x 0.50	450/750	M4 M2, M3 M2, M4	2	805/2-F	907 x 148	ST 0 x 8	199.8	298	EN
181483	8860-F	100-230 + 7 x 1.50 + 6 x 1.00 + 12 x 2 x 0.75 + 4 x 20-010/125	450/750	M5 M5, M8 M5, M8 M11, M9	7	805/2-F	94.8 x 148	ST 0 x 8	215.5	318	EN
182134	8821-F	300-250 + 6 x 1.00 + 24 x 0.75 + 4 x 20-010/125	450/750	M5, M5 M1, M1 M1, M1 M5	7	05-2134	1618 x 114	ST 0 x 8	201.8	210	EN
182234	8829-F	350-250	450/750	M5, M5, M5 M5, M5, M5 M5	7		908 x 134	ST 0 x 8	214.5	298	EN
182342	8860-F	80-0-275 + 17 x 1 x 0.75 + 6 x 20-010/125 G = with steel-wire-core	300/500	M1, M1 M5, M8, M8 M12, M1	7	805/2-F	905 x 148	ST 0 x 8	170.7	202	EN

Further dimensions on request

Data elements for
Datwyler travelling cables

	Data elements	Cross section	Colour code	Construction
1	 7702 flex 4P	4 x 2 x AWG26 UTP	white/blue, red/orange, black/green, yellow/brown	FE cores AMPETP foil per pair Overall tinned Cu wire braid PVC sheath
2	 7954/2-F	2 x 0.25 STP	white/blue	FE cores PE filler (2x) PETP tape Tinned Cu wire spiral PETP tape
3	 7545-F	2 x 0.34 FTP	various colours	FE cores PP filler (2x) PETP tape Tinned Cu drain wire AMPETP foil
4	 7067/2-F (unshielded)	2 x 0.50 UTP	various colours	FE cores PP filler (2x) PETP tape
5	 6651-F	2 x 0.50 FTP	various colours	FE cores Tinned Cu drain wire with PP centre PP filler AMPETP foil
6	 6651/2-F	2 x 0.50 FTP	black, white numbered	FE cores Tinned Cu drain wire with PP centre PP filler AMPETP foil PP tape
7	 6651/3-F	2 x 0.50 FTP	black, white numbered	FE cores Tinned Cu drain wire with PP centre PP filler AMPETP foil PP tape
8	 7954/2-F	2 x 0.50 STP	various colours	FE cores PE filler (2x) PETP tape Tinned Cu wire spiral PETP tape
9	 6651-F	2 x 0.75 FTP	various colours	FE cores Tinned Cu drain wire with PP centre PP filler AMPETP foil
10	 6651/2-F, 6651/3-F	2 x 0.75 FTP	black, white numbered	FE cores Tinned Cu drain wire with PP centre PP filler AMPETP foil PP tape

Note: All data elements on page 36/37 are semi-finished products and not available for individual sale.

Data elements	Cross section	Colour code	Construction
 7067/2-F (unshielded)	4 x 0.25 STQ	various colours	PP centre PE cores PETP tape
 7954/2-F	4 x 0.25 STQ	various colours	PP centre PE cores PETP tape Tinned Cu wire spiral PETP tape (2x)
 8607-F	4 x 0.34 STQ	various colours	PE cores PP foam tape Tinned Cu wire braid PP tape
 6347/2-F	4 x 0.50 STQ	various colours	PE cores PP tape Tinned Cu wire spiral PP tape
 6347/3-F	4 x 0.50 STQ	various colours	PE cores PP tape Tinned Cu wire spiral PP tape (2x)
 8504-F	STQ	various colours	PE core PETP tape Tinned Cu wire spiral PETP tape PVC sheath
 HF-2122-F (Coaxial cable 75 Ω)	n/a	grey	Bare Cu strand PE dielectric Al/PETP foil Tinned Cu wire braid PVC sheath
 HF-2123-F (Coaxial cable 75 Ω)	n/a	black	Bare Cu strand PE dielectric Al/PETP foil Tinned Cu wire braid Low fire hazard sheath
 GF-2314 (G50/125)	n/a	orange	Multimode fibre G50/125 µm OM2 Tight buffer Aramid yarn Low fire hazard sheath
 GF-2314 (G62.5/125)	n/a	grey	Multimode fibre G62.5/125 µm OM3 Tight buffer Aramid yarn Low fire hazard sheath

ACCESSORIES

Suspension devices for FL and FM cables



Figure 1
Suspension device LZ 1006



Figure 2
Suspension device LZ 1009



Figure 3
Suspension device LZ 1010

PRODUCT INFORMATION

APPLICATION

Suspension devices for Dätwyler FL and FM elevator travelling cables.

The cable width, number of cables (cable combinations) to be mounted and travelling height determine the selection of the correct cable suspension device(s).

To this end, please note the maximum clamping thickness of the individual suspension parts.

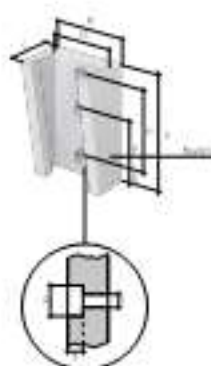
MATERIAL

Nylon PA6
Aluminium

LZ 1006 / LZ 1009
LZ 1010

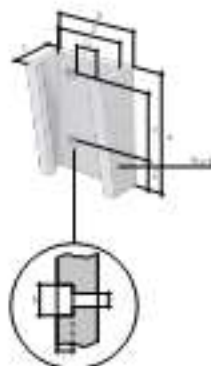
grey
blue anodised

DIMENSIONS



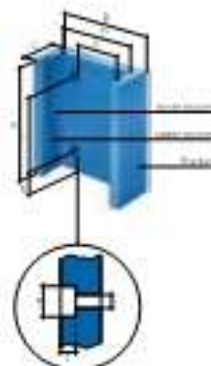
LZ 1006

A = 100 mm
B = 65 mm
C = 47 mm
D = 53 mm
E = 133 mm
F = 43 mm
G = 75 mm
H = $\varnothing 11.9$ mm
I = $\varnothing 6.45$ mm
T = 5.2 mm



LZ 1009

A = 120 mm
B = 92 mm
C = 51.5 mm
D = 79 mm
E = 27 mm
F = 71 mm
G = 40 mm
H = $\varnothing 15.9$ mm
I = $\varnothing 6.45$ mm
T = 5.2 mm



LZ 1010

A = 143 mm
B = 130 mm
C = 52 mm
D = 100 mm
E = 22 mm
F = 98 mm
G = 60 mm
H = $\varnothing 13.2$ mm
I = $\varnothing 6.6$ mm
T = 6.0 mm

Article no.	Type	Colour	Cable clamping range maximum (mm)	Width of cable s [mm]	Screw holes	Figure
179213	LZ 1006	grey	1 - 12 mm	s 25 mm	3	1
179214	LZ 1009	grey	1 - 15 mm	s 35 - 79 mm	4	2
183124	LZ 1010	blue	1 - 22 mm	s 20 - 100 mm	4	3

Installation of suspension devices / FL and FM elevator travelling cables

- 1 Maximum clamping thickness of suspension device**
 Maximum 3 cables

LZ 1006 (grey)

Clamping range A = 3 - 12 mm
 Width of cable ≤ 55 mm

LZ 1009 (grey)

Clamping range A = 3 - 15 mm
 Width of cable ≤ 56 - 79 mm

LZ 1010 (blue)

Clamping range A = 3 - 22 mm
 Width of cable ≤ 80 - 100 mm



- 2 Cable combination for FL**
 Maximum 3 cables
 Different cable widths are possible



- 3 Cable combination for FM**
 Maximum 3 cables
 Combinations only with equal cable widths



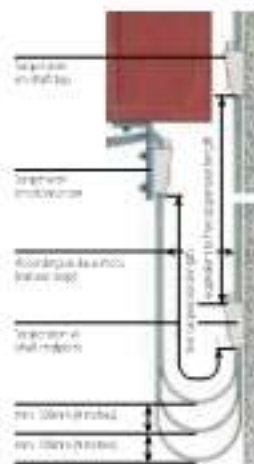
- 4 Fixing several adjacent suspension devices**
 Spacing A = minimum 50 mm



- 5 Installation positions of suspension devices for FL and FM cables**

	FL	FM
Maximum travelling height	80 m (260 feet)	150 m (490 feet)
Maximum free suspension length (m)	45 m (150 feet)	80 m (260 feet)

A third suspension device is required at shaft midpoint if the actual **travelling height** is higher than the **free suspension length**



- 6 Minimum loop spacing for cable combination**
 Distance between loops min. 100 mm (4 inches)
 thickest cable on bottom, thinnest cable on top

- 7 Installation below machine room**
 Only one cable per suspension device
 Diameter for fixed loop = minimum 14x cable thickness
 Loop cable back on itself



Minimum loop spacing



ACCESSORIES

Suspension device for FH cables



Figure 1:
Suspension device LZ 4001
for FH cables



Figure 2:
Screw set M12x40
for car/counter weight



Figure 3:
HIT-HSL-3 MB/20
for shaft wall

PRODUCT INFORMATION

APPLICATION

Steel suspension device for a maximum of two Datwyler FH-elevator travelling cables

INSTALLATION

The following installation screw sets are available for LZ 4001:

Elevator car or counter weight	4 bolts M12x40 including spring-washer, washer and nut (see Figure 2), bolt: property class 8.8/8 (nut)
Shaft wall	4 HIT-HSL-3 MB/20 (see Figure 3), (minimum concrete strength required: $b_{c,req} = 30 \text{ N/mm}^2$)

DIMENSIONS



LZ 4001

A =	220 mm
B =	170 mm
C =	30 mm
D =	160 mm
E =	25 mm
F =	410 mm
G =	120 mm
H =	120 mm
Thickness of ground plate = 5 mm	

CRIMPING SLEEVE

For recommended crimping sleeves see "Installation Tools" (page 42).

Suspension device LZ 4001 for FH cables

Article no.	Type	Figure
184661	LZ 4001	1

Installation kits

Article no.	Type	Application	Figure	PU
185274	Screw set M12x40	for fixing to elevator car or counter weight	2	2 (pc)
185275	HIT-HSL-3 MB/20	for fixing to shaft wall	3	2 (pc)

Installation of suspension device / FH elevator travelling cables

1 Forming a loop

Draw other end of steel wire rope through second sleeve.
 Use tape for parallel fixation.



Alternative to crimping sleeves:
 3x Crosby clips G-450 each side
 or cable grip according to DIN 1142

Compress sleeve according table:

Ø Steel wire (mm)	Sleeve article no.	Type	Sleeves per loop	Crimps per crimping	Section of tool (inch)
25	180600	SL 2-3	1+1	2	3/32
30	180609	SL 2-4	1+1	2	1/8
32	180609	SL 2-4	1+1	2	1/8
40	182059	SL 2-5	2+2	4	5/32
50	182060	SL 2-6	2+2	3	3/16
60	182061	SL 2-7	2+2	3	3/16

2 Preparation for cable installation

A1 / A2 = Spacing distance between steel wire ropes:



A1 ≤ 50 mm ⇒ L min. 500 mm
 A2 ≥ 50 mm ⇒ L min. 300 mm



3 Combination with different cable widths

Cable with bigger dimension should be outside



4 Installation of multiple suspension devices side by side

Spacing A = minimum 160 mm
 (concrete strength required
 bw = 30 N/mm²)



5 Installation position of suspension device for FH cables

Maximum traveling height = 400 m (1312 feet)

Maximum free suspension length = 220 m (722 feet)

A third suspension device is required at shaft midpoint if the actual **travelling height** is higher than the **free suspension length**



6 Installation below machine room

Add a distance filler between LZ 4001 and shaft wall.
 Cable from below behind the LZ 4001

Cable must be looped back on itself and free of tension.
 Diameter for fixed loop = minimum 14x cable thickness t



Fixing to shaft wall



Fig. 1. AV 150



Fig. 2. AV 400



Fig. 3. FH tool box (Fig. 2-1) contents



PRODUCT INFORMATION

DESCRIPTION

AV 150 and AV 400 installation aid

Datwyler flat cables are most easily and quickly drawn in using the AV installation aid. The AV 150 is suitable for elevator shaft heights up to 150 m. The AV 400 is suitable for elevator shaft heights up to 400 m. The AV 400 indispensable component is also part of the FH tool box (article no. 179278) which contains all the tools and accessories necessary for installing Datwyler FH cables.

Professional FH tool box

with indispensable tools and accessories for installation of FH cables

Contents:	4. Wire rope cutter big	cuts steel wire ropes up to diameter of 8 mm
	5. Wire rope cutter small	cuts steel wire ropes up to diameter of 4 mm
	6. Stripping knife	special knife to commence the removal of the cable jacket
	7. Crimping tool	tool for splicing of steel wire ropes
	8. Crimping sleeves small	for rope diameters of 2.5 mm, set of 10 pieces
	8. Crimping sleeves large	for rope diameters of 3.2 mm, set of 10 pieces
	2x auxiliary device AV 400	for elevator shaft heights up to 400 m
	9. Cutter	
	10. Universal scissors	
	11. Steel wire	

Cutters, crimping tool, crimping sleeves, etc.

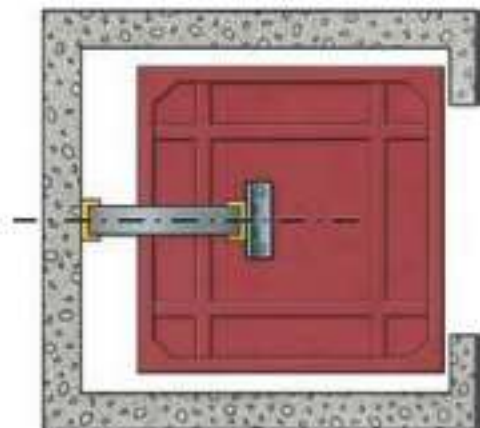
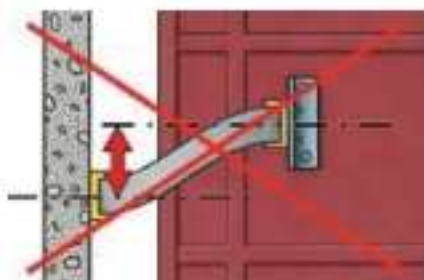
The above mentioned accessories are also available separately.

Article no.	Figure	Type	Description
178812	1	AV 150	for elevator shaft heights up to 150 m
178811	2	AV 400	for elevator shaft heights up to 400 m
179278	3	FH tool box	
184571	4	Wire rope cutter big	cuts steel wire ropes up to diameter of 8 mm
184570	5	Wire rope cutter small	cuts steel wire ropes up to diameter of 4 mm
184551	6	Stripping knife	special knife to commence the removal of the cable jacket
184567	7	Crimping tool	tool for splicing of steel wire ropes
184568	8	Crimping sleeves S 2-3	for rope diameter of 2.5 mm
184569	8	Crimping sleeves S 2-4	for rope diameter of 3.2 mm
184569	8	Crimping sleeves S 2-4	for rope diameter of 3.2 mm
184569	8	Crimping sleeves S 2-5	for rope diameter of 4.0 mm
182061	8	Crimping sleeves S 2-6	for rope diameter of 5.0 mm
182061	8	Crimping sleeves S 2-7	for rope diameter of 6.0 mm
179471	9	Cutter	
179472	10	Universal scissors	

Installation instructions for all travelling heights

1 Installation position on shaft and car floor

Positions must be aligned.



2 Paying out of cables into the shaft

Direction of the cable
parallel to drum flanges
No twisting
Cable printing > to shaft wall

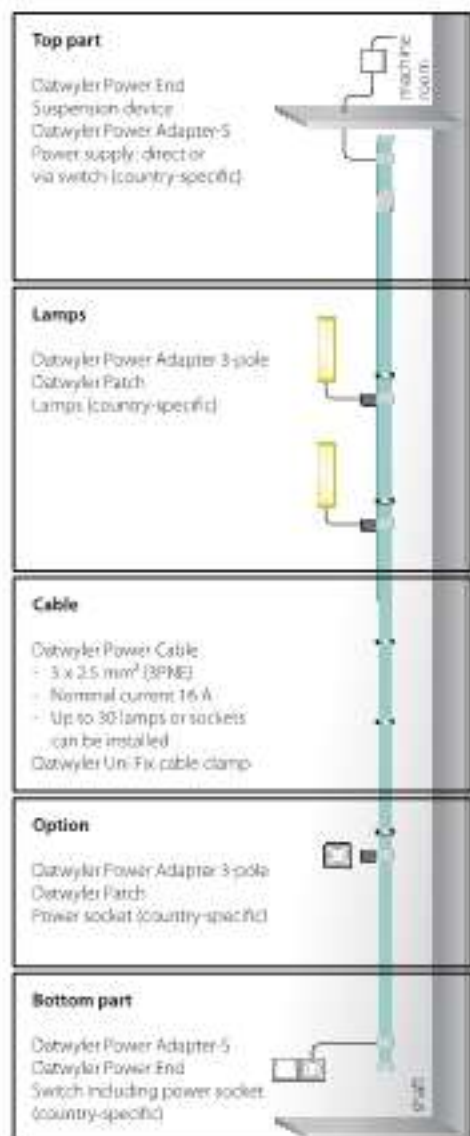
Use of guiding outlets
Minimum Ø 26x cable thickness t



Elevator shaft lighting system with reference to EN 81 and Annex I of Directive 90/37/EC and 95/16/EC of the European Parliament.

Features and advantages:

- Fast and easy installation
- Flexible in mounting of lamps, adapter and switch elements
- Order per commission
- 2.5 mm² wires, low voltage drop on serial-connectors
- Low total costs



Shaft lighting system

Components

Cable plus	Description	Article no.
	Datwyler Power Cable 5x2.5mm ²	18/048
	Datwyler Uni-Fix cable clamp	1300390
	Suspension device LZ 1006	179013
Option	Description	Article no.
	Datwyler Patch 3x1.5 MC (L = 1 m)	1300511
	Datwyler Combi Tool cable stripper	1300349
	Datwyler Power Adapter-5 (250V)	1301206
	Datwyler Power Adapter 3-pole (250V)	1300972
	Datwyler Power End	1300875

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We provide the following services:

- **Harnessing**
- **Logistics**
- **Consulting and engineering**



Harnessing

**Solutions for elevator manufacturers
(100% tested, ready for plug and play):**

- Paper-free CIM production
- Shaft wiring/cabling
- Machine room/drive cables
- Cabin terminal boxes
- Traveling cables
- Shaft lighting system
- Additional components:
door cables, bells, horns, position tracking systems

Solutions for industry:

Paper-free CIM production,
single cables, cable groups, complex cabling

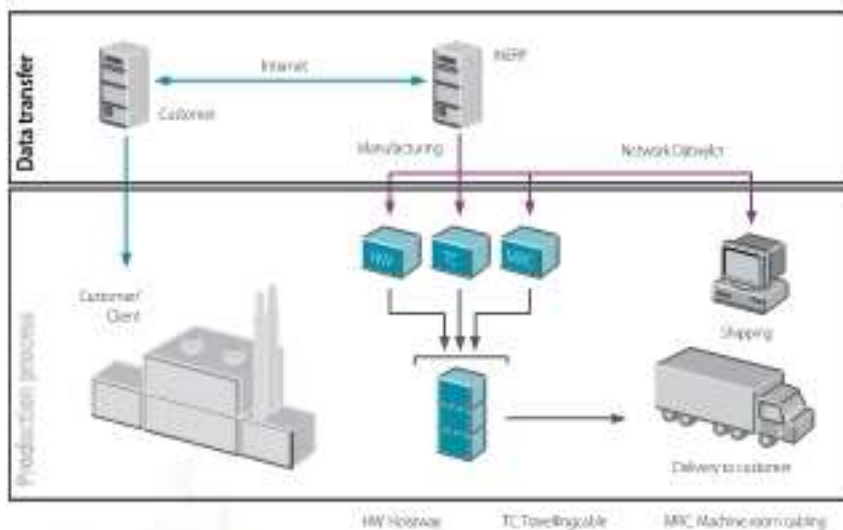
We can provide a suitable system solution for most applications. With harnessing plants in different locations we are in the position to offer small, medium and large production runs at very competitive prices.

Logistics

Communication

Order transmission and order confirmation by B2B via Internet.

Example of elevator B2B process



Our services include

- Comprehensive consulting and engineering in harnessing
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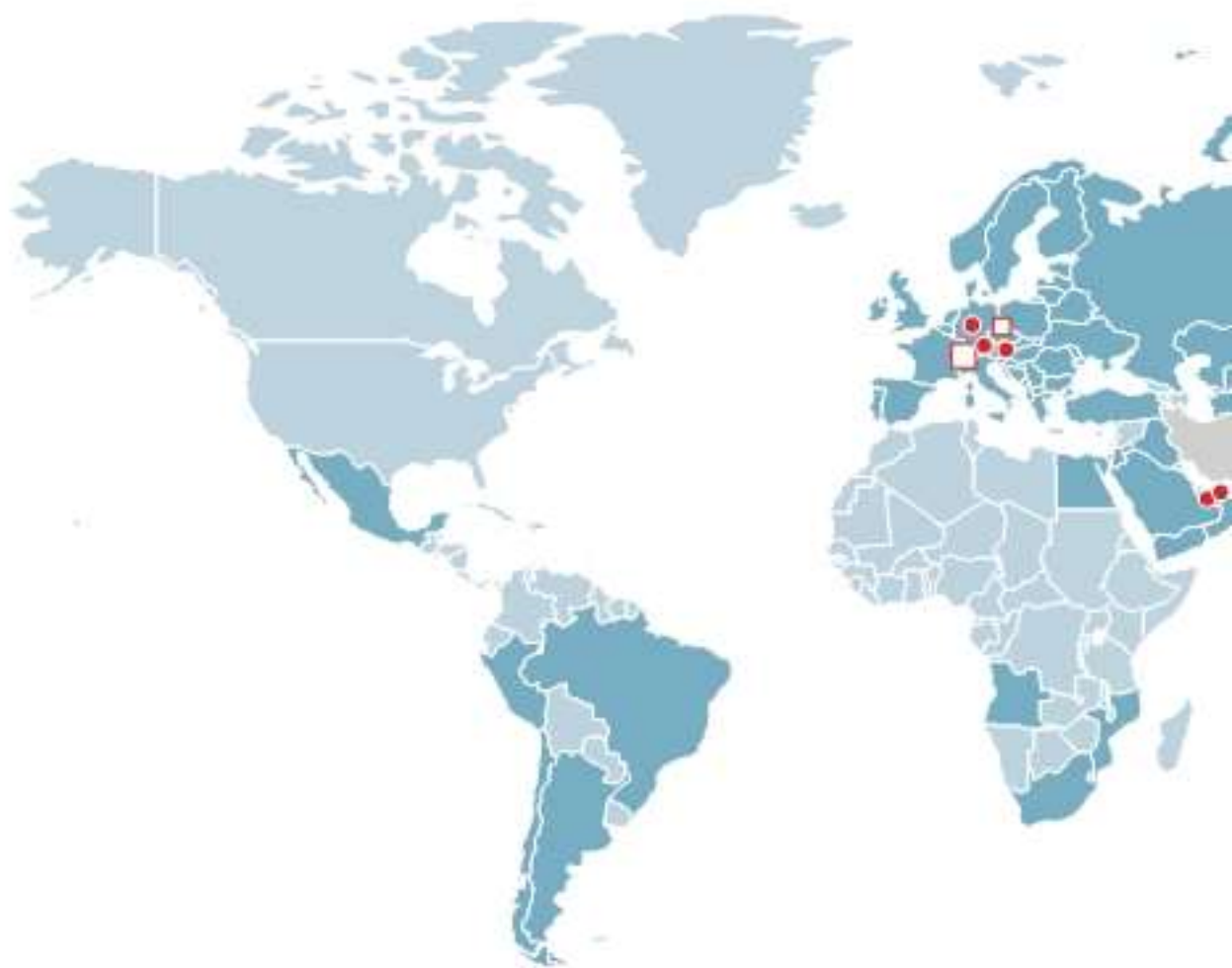
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-  Datwyler Headquarters and Manufacturing Plant
-  Datwyler Manufacturing Plants
-  Datwyler Offices
-  Active Market Presence by Datwyler and its Distribution Partners

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