

Better than steel.

HFT[®] Cable Management



Enduring safety

Prevention pays off in the long run.

Proper planning begins with making provisions for the protection of human lives and valuable assets. With halogenfree cable management systems from Dietzel Univolt you are always on the safer side.

Your advantages:

- 1 minimum smoke release in case of fire
- 2 absolutely halogenfree
- 3 flame retardant
- 4 chemically resistant
- 5 temperature resistant
- 6 maintenance free
- 7 easy to install
- 8 insulating



HFT® - the Novelties in Brief

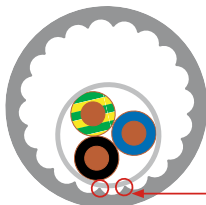


PVC



LSF0H

Less friction thanks to the Turbo effect:



sectional view:
conduit with cables

turbo

sectional
corrugation

LSF0H versus PVC

LSF0H refers to an internationally recognised description of product properties that comply with increased safety requirements. Concerning conduit systems for electrical installations this means specific precaution against fires and consequential damages. Effectively this leads to higher safety for human lives, better protection of valuable assets and safeguarding the continuity of operations.

The Turbo Effect

The Turbo effect is an innovative and patented conduit design developed by Dietzel Univolt that simplifies and enhances installation work. Inserting cables becomes faster and less strenuous without compromising the characteristics of standard conduits. The sectional corrugation reduces the friction between cable and conduit and helps installers to save time and cost - an explicit customer benefit.

UNIVOLT HFT® LSF0H Series

Safety in case of fires

Safety in case of fires is also a matter of proper planning. When exposed to fire, plastic materials like PVC release corrosive gases which are not only extremely toxic for human lives, but also attack building stock. Univolt's HFT® branded installation systems are the result of almost 30 years of permanent development. Their improved properties regarding safety and durability comply with the most advanced requirements in modern constructions. HFT® conduit systems are indispensable as a complement to halogenfree cables. Distinctive to conventional plastics they are suitable for a wide range of applications due to their thermal, mechanical and chemical characteristics.

The LSF0H series is the most recent advancement of UNIVOLT's HFT® range and complies with the following relevant safety aspects, as approved by the relevant standards:

- **LS** (= **low smoke**): minimal generation of smoke, no release of corrosive gases
- **F** (= **flame retardant**): impedes the propagation of fires, applicable for temperatures from -25°C to +105°C or beyond
- **OH** (= **zero halogen**): contains absolutely no halogens

Comparison to steel

Our LSF0H conduits offer the same **mechanical resistance** against compression and impact forces like steel systems. Additionally, they have several advantages compared to metal cable management systems

100m of protective conduit (Ø 20mm), with same mechanical properties (compression resistance 1250 N).



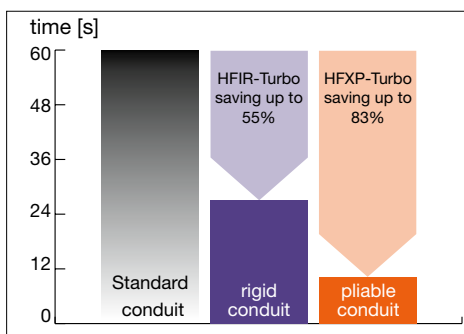
per 100m of protective conduit

- 1 weight saving
- 2 rust proof and maintenance free for life-time
- 3 easy to install
- 4 selfinsulating
- 5 flame retardant
- 6 UV stabilised
- 7 chemically resistant
- 8 seawater-proof
- 9 low smoke release
- 10 temperature resistant

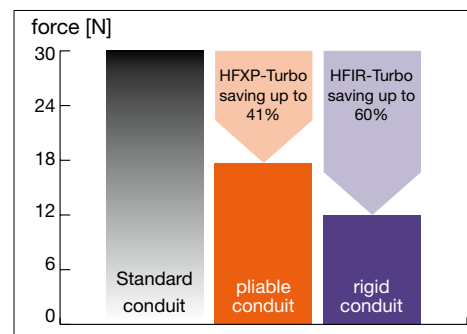
UNIVOLT Turbo Technology

The Turbo design is a patented feature of installation conduits and has become most favoured by installers. Now it is also available for UNIVOLT's LSF0H series and helps users to save time, effort and money. Compared with conventional conduits the Turbo products lead to lower frictional forces, hence shorter installation times for cabling work.

Less time



Less effort



Light Gauge (320N)

HFIRM-Turbo, halogenfree rigid conduit light gauge, with moulded-on coupler and sectional corrugation

(dim 26-32); light grey (RAL 7035), in 3m standard length

In accordance with: IEC/EN 61386-21 (replaces IEC 60614-2-2, BS 6099), IEC 60423, LSF0H

Ordering Note: also available in white colour with plain ends (HFIR).



Material	Code	Mechan.	UV stabil.	Temp.	LSF0H
PP-Blend	EN 2243	> 320 N	△	-25°C/+105°C	☑
art	dn	di	ps [m]	pl [m]	
HFIRM-Turbo 16	16,0	12,9	111	6216	
HFIRM-Turbo 20	20,0	16,2	111	3996	
HFIRM-Turbo 25	25,0	21,0	57	2280	
HFIRM-Turbo 32	32,0	28,0	57	1368	
HFIRM 40	40,0	36,0	21	966	
HFIRM 50	50,0	45,0	21	630	

Medium Gauge (750N)

HFPRM-Turbo, halogenfree rigid conduit medium gauge, with moulded-on coupler and sectional corrugation;

light grey (RAL 7035) or black (RAL 9005, UV-stabilised), in 3m standard length

In accordance with: IEC/EN 61386-21 (replaces IEC 60614-2-2, BS 6099), IEC 60423, LSF0H

Ordering Note: also available in white colour with plain ends (HFPR).



Material	Code	Mechan.	UV stabil.	Temp.	LSF0H
PP-Blend	EN 3343	> 750 N	△	-25°C/+105°C	☑
art	dn	di	ps [m]	pl [m]	
HFPRM-Turbo 16	16,0	11,0	111	6216	
HFPRM-Turbo 20	20,0	15,0	111	3996	
HFPRM-Turbo 25	25,0	20,0	57	2280	
HFPRM-Turbo 32	32,0	27,0	57	1368	
HFPRM-Turbo 40	40,0	34,0	21	966	
HFPRM-Turbo 50	50,0	44,0	21	630	
HFPRM-Turbo 63	63,0	55,5	21	378	

Heavy Gauge (1250N)

HFBS-Turbo, halogenfree rigid conduit heavy gauge, plain ends; black (RAL 9005), in 3m standard length

In accordance with: IEC/EN 61386-21 (replaces IEC 60614-2-2, BS 6099), IEC 60423, LSF0H

Ordering Note: white version available upon request.



Material	Code	Mechan.	UV stabil.	Temp.	LSF0H
PP-Blend	EN 4454	> 1250 N	☑	-45°C/+120°C	☑
art	dn	di	ps [m]	pl [m]	
HFBS-Turbo 16	16,0	11,0	111	6216	
HFBS-Turbo 20	20,0	14,1	111	3996	
HFBS-Turbo 25	25,0	19,0	57	2280	
HFBS-Turbo 32	32,0	24,2	57	1368	
HFBS-Turbo 40	40,0	31,9	21	966	
HFBS-Turbo 50	50,0	43,2	21	630	

NEW!

Light Gauge (320N)

HFX, halogenfree pliable conduit light gauge, corrugated; light grey (RAL 7035) or white (RAL 9010), in coils of 50m resp. 25m

In accordance with: IEC/EN 61386-23 (replaces IEC 60614-2-3, BS 6099), IEC 60423, LSF0H



Material	Code	Mechan.	UV stabil.	Temp.	LSF0H
PP-Blend	EN 2243	> 320 N	-	-25°C/+105°C	<input checked="" type="checkbox"/>

art	dn	di	ps [m]	pl [m]
HFX 16	16,0	11,4	50	2700
HFX 20	20,0	13,5	50	2700
HFX 25	25,0	17,5	50	1600
HFX 32	32,0	24,3	25	675
HFX 40	40,0	30,0	25	500
HFX 50	50,0	38,5	25	300
HFX 63	63,0	54,1	25	175

Medium Gauge (750N)

HFXP-Turbo, halogenfree pliable conduit medium gauge, corrugated, with sectional corrugation; black (RAL 9005), in coils of 50m resp. 25m

In accordance with: IEC/EN 61386-24 (replaces IEC 60614-2-3, BS 6099), IEC 60423, LSF0H



Material	Code	Mechan.	UV stabil.	Temp.	LSF0H
PP-Blend	EN 3343	> 750 N	<input checked="" type="checkbox"/>	-25°C/+105°C	<input checked="" type="checkbox"/>

art	dn	di	ps [m]	pl [m]
HFXP-Turbo 16	16,0	10,0	50	2700
HFXP-Turbo 20	20,0	13,5	50	2700
HFXP-Turbo 25	25,0	17,5	50	1600
HFXP-Turbo 32	32,0	24,3	25	675
HFXP-Turbo 40	40,0	30,0	25	500
HFXP-Turbo 50	50,0	38,5	25	300

Medium Gauge (750N), High Temperature

HFXP-HT, halogenfree and high temperature resistant pliable conduit medium gauge, corrugated; black (RAL 9005), in coils of 50m resp. 25m

In accordance with: IEC/EN 61386-22 (replaces IEC 60614-2-3, BS 6099), IEC 60423



Material	Code	Mechan.	UV stabil.	Temp.	LSF0H
PC-Blend	EN 3355	> 750 N	<input checked="" type="checkbox"/>	-45°C/+150°C	-

art	dn	di	ps [m]	pl [m]
HFXP-HT 12	13,0	9,0	50	4500
HFXP-HT 16	16,0	10,7	50	2700
HFXP-HT 20	20,0	14,1	50	2700
HFXP-HT 25	25,0	18,3	50	1600
HFXP-HT 32	32,0	24,3	25	675
HFXP-HT 40	40,0	30,0	25	500
HFXP-HT 50	50,0	38,5	25	300
HFXP-HT 63	63,0	50,0	25	175

Light Gauge (320N), Highly Flexible

HFXS, halogenfree and highly flexible protective conduit light gauge, corrugated, halogenfree; black (RAL 9005, UV stabilised) or grey (RAL 7001), in coils of 50m resp. 25m

In accordance with: IEC/EN 61386-23 (replaces IEC 60614-2-5, BS 6099), IEC 60423, LSF0H



Material	Code	Mechan.	UV stabil.	Temp.	LSF0H
PA	EN 2243	> 320 N	-	-25°C/+105°C	<input checked="" type="checkbox"/>

art	dn	di	ps [m]	pl [m]
HFXS 12	13,0	8,9	50	4500
HFXS 16	16,0	11,1	50	2700
HFXS 20	20,0	13,5	50	2700
HFXS 25	25,0	17,7	50	1600
HFXS 32	32,0	24,3	25	675
HFXS 40	40,0	30,2	25	500
HFXS 50	50,0	40,1	25	300
HFXS 63	63,0	50,5	25	175

Available accessories and fittings for HFT® conduits



- couplers, saddles
- clips, bends
- enclosure and distribution boxes etc.

Details about HFT®

HFT® is a registered trademark and refers to installation systems with improved properties compared to conventional cable management. The halogenfree materials used for the production do not contain toxic or corrosive substances thus meeting the increased safety requirements of modern applications. Sourcing and processing the most appropriate and advanced raw materials are a key competence of our technical team.

Further benefits of UNIVOLT's LSF0H conduits

The new LSF0H series offers considerable improvements in addition to the existing advantages of our conduits:

- absolute resistance against oils, fats, acids, lyes, etc.
- especially suitable for installations in concrete
- bendable in cold condition
- smoke density reduced by up to 90% compared to PVC
- UV-stabilised
- yet easy to install
- better than steel

Projects

HFT® installation systems worldwide

Areas of application

HFT® systems are ideally suited for installations with an emphasis on the protection of human lives and valuable assets:

- high technology industrial plants, water treatment plants
- power plants, oil refineries and oil rigs, laboratories
- railway and underground systems, tunnels, parking houses
- elevators and emergency plants, transmitting stations
- hospitals, schools, hotels, shopping centres
- sports stadiums, conference and event centres
- museums, theatres, libraries, cultural monuments
- computing and telecommunication centres
- airports, railway stations
- automotives, ships, aircrafts, trains
- air sampling systems
- robotic systems and sensitive machinery



High-tech facilities



Rolling stock



Airports



Sports arenas



Oil rigs



Railway stations



Event centres



Safety matters:

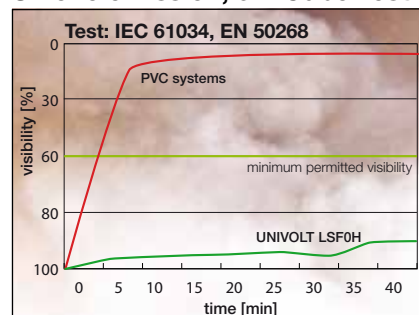
- ⇒ higher safety for human lives
- ⇒ better protection of valuable assets
- ⇒ safeguarding continuity of operations



Comprehensive provision and protection:

Safety for human lives deserves the highest priority in fire protection matters. Generating less gases and fumes, LSF0H conduits improve orientation and evacuation in case of fires. Additionally, this minimises the danger of intoxication or suffocation which accounts for most casualties.

Smoke emission, 3m Cube Test



Protection of valuable assets is crucial for the prosperity of modern business. Using LSF0H systems reduces the risk of negative impacts on building stock, sensitive technologies and information systems caused by toxic and corrosive gases.

Dramatically less smoke formation: UNIVOLT LSF0H conduits top IEC 61034 tests with excellent results.

Continuity of operations is an underestimated cost factor. Even minor fires can lead to shutdowns or significant disturbances, which usually result in substantial costs beyond quantification. Meanwhile, several industries recognised the importance of this issue and apply LSF0H criteria for their installations.

When human lives are at risk, there are no second chances.

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