

DIETZEL
UNIVOLT

Cable Management Systems



Safety

first! 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 halogen-free 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 halogen-free
- 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

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.

UNIVOLT HFT® LSFOH 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 halogen-free cables. Distinctive to conventional plastics they are suitable for a wide range of applications due to their thermal, mechanical and chemical characteristics.

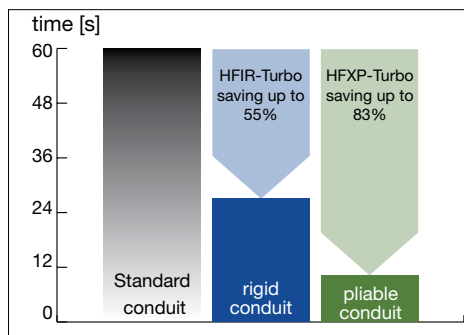
The LSF0H series is the most recent advancement of UNIVOLT's HFT® range and complies with the following relevant safety aspects, as approved by the relevant standards:

- **LS** (= **low smoke**): minimal generation of smoke, no release of corrosive gases
- **F** (= **flame retardant**): impedes the propagation of fires
- **OH** (= **zero halogen**): contains absolutely no halogens

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



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

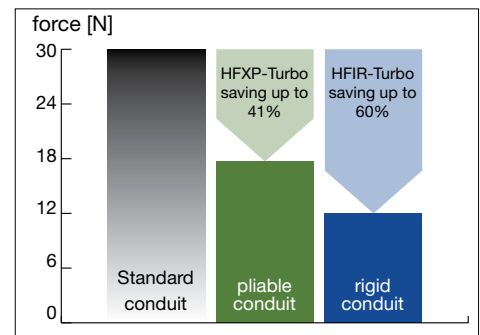
Less friction thanks to the Turbo effect:



sectional view:
conduit with cables

sectional
corrugation

Less effort



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.

Pliable HFT® Conduits

Light Gauge (320 N)

HFX Turbo WH, halogen-free pliable conduit light gauge, corrugated, with sectional corrugation, white (RAL 9010), in coils of 50m or 25m

Material							
PP-Blend	LSF0H	flame-retardant	23332	> 320 N	L1	-15 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFX Turbo 16 WH	16	10,5 mm	50 m	2700 m	102 309
HFX Turbo 20 WH	20	13,7 mm	50 m	2700 m	102 310
HFX Turbo 25 WH	25	17,9 mm	50 m	1600 m	102 311
HFX Turbo 32 WH	32	24,3 mm	25 m	675 m	102 312
HFX Turbo 40 WH	40	30 mm	25 m	500 m	102 313
HFX Turbo 50 WH	50	38,5 mm	25 m	300 m	102 314

HFX Turbo LG, halogen-free pliable conduit light gauge, corrugated, with sectional corrugation, light grey (RAL 7035), in coils of 50m or 25m

Material							
PP-Blend	LSF0H	flame-retardant	23332	> 320 N	L1	-15 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFX Turbo 16 LG	16	10,7 mm	50 m	2700 m	102 295
HFX Turbo 20 LG	20	14 mm	50 m	2700 m	102 296
HFX Turbo 25 LG	25	19 mm	50 m	1600 m	102 297
HFX Turbo 32 LG	32	24,2 mm	25 m	675 m	102 298
HFX Turbo 40 LG	40	30,6 mm	25 m	500 m	102 299
HFX Turbo 50 LG	50	38,8 mm	25 m	300 m	102 300

HFX Turbo BK, halogen-free pliable conduit light gauge, corrugated, with sectional corrugation, black (RAL 9005), in coils of 100 m, 50 m or 25 m

Material							
PP-Blend	LSF0H	flame-retardant	23332	> 320 N	L1	-15 bis +105 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFX Turbo 16 BK	16	10 mm	100 m	4000 m	102 302
HFX Turbo 32 BK	32	24 mm	50 m	1000 m	102 305
HFX Turbo 40 BK	40	30 mm	25 m	500 m	102 306
HFX Turbo 50 BK	50	39 mm	25 m	300 m	102 307

Pliable HFT® Conduits

HFX X BK, super-fast halogen-free pliable conduit light gauge, corrugated, with additional glide core, black (RAL 9005), in coils of 100m

Material							
PP-Blend	LSF0H	flame-retardant	23332	> 320 N	L1	-15 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754

Art.	dn	di	ps	pl	Art. no.
HFX X 20 BK	20	14 mm	100 m	4000 m	106 057
HFX X 25 BK	25	18 mm	100 m	2800 m	106 058



Medium Gauge (750 N)

HFXP Turbo Eco BK, halogen-free pliable, self recovering conduit medium gauge, corrugated, with sectional corrugation, black (similar to RAL 9005), in coils of 100m or 25m

Material							
PP-Blend	LSF0H	flame-retardant	33433	> 750N	L2	-25 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754

Art.	dn	di	ps	pl	Art. no.
HFXP Turbo Eco 16 BK	16	10 mm	100 m	4000 m	105 750
HFXP Turbo Eco 32 BK	32	23,5 mm	25 m	675 m	105 751
HFXP Turbo Eco 40 BK	40	30 mm	25 m	500 m	105 752
HFXP Turbo Eco 50 BK	50	38 mm	25 m	300 m	105 753



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

Material							
PP-Blend	LSF0H	flame-retardant	33432	> 750 N	L2	-25 °C/+105 °C	2J



In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754

Art.	dn	di	ps	pl	Art. no.
HFXP Turbo Pro 16 BK	16	9,9 mm	50 m	2700 m	087 169
HFXP Turbo Pro 32 BK	32	23,3 mm	25 m	675 m	087 172
HFXP Turbo Pro 40 BK	40	30 mm	25 m	500 m	087 173
HFXP Turbo Pro 50 BK	50	38,7 mm	25 m	300 m	087 174



Pliable HFT® Conduits

HFXP Xtreme BK, halogen-free pliable, self recovering conduit medium gauge, corrugated, with additional glide core, black (RAL 9005), in coils of 100m

Material							
PP-Blend	LSF0H	flame-retardant	33433	>750 N	L2	-25 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFXP X 20 BK	20	13,3 mm	100 m	4000 m	104 830
HFXP X 25 BK	25	17,5 mm	100 m	2800 m	104 831

HFXP X Pro BK, halogen-free pliable conduit medium gauge, corrugated, with sectional corrugation and additional glide core, black (RAL 9005), in coils of 50 or 100m








Material							
PP-Blend	LSF0H	flame-retardant	33432	> 750 N	L2	-25 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFXP X Pro 20 BK	20	13,3 mm	50 m	2700 m	104 836
HFXP X Pro 20 BK	20	13,3 mm	100 m	4000 m	104 838
HFXP X Pro 25 BK	25	17,5 mm	50 m	1600 m	104 837
HFXP X Pro 25 BK	25	17,5 mm	100 m	1400 m	104 839

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

Material							
PC-Blend	halogen-free	flame-retardant	33552	> 750 N	L1	-45 °C/+150 °C	2J

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFXP-HT 16 BK	16	9,9 mm	50 m	2700 m	011 301
HFXP-HT 20 BK	20	13,9 mm	50 m	2700 m	011 302
HFXP-HT 25 BK	25	18 mm	50 m	1600 m	011 303
HFXP-HT 32 BK	32	23,5 mm	25 m	675 m	011 304
HFXP-HT 40 BK	40	30 mm	25 m	500 m	013 254
HFXP-HT 50 BK	50	38,5 mm	25 m	300 m	013 255
HFXP-HT 63 BK	63	54 mm	25 m	175 m	019 897

Pliable HFT® Conduits

HFXS GR, halogen-free and highly flexible protective conduit light gauge, corrugated, halogen-free, grey (RAL 7001), in coils of 50m resp. 25m

Material							
PA-Blend	LSF0H	flame-retardant	22434	> 320 N	L1	-25 °C/+105 °C	1J

In accordance with: EN 61386-1, EN 61386-23 / halogen-free according to EN 50642, EN 60754

Art.	dn	di	ps	pl	Art. no.
HFXS 12 GR	12	9,2 mm	50 m	4500 m	015 902
HFXS 16 GR	16	10,7 mm	50 m	2700 m	012 903
HFXS 20 GR	20	14,1 mm	50 m	2700 m	012 904
HFXS 25 GR	25	18,3 mm	50 m	1600 m	012 905
HFXS 32 GR	32	24,3 mm	25 m	675 m	012 906
HFXS 40 GR	40	31 mm	25 m	500 m	012 907
HFXS 50 GR	50	38,3 mm	25 m	300 m	012 908
HFXS 63 GR	63	50,2 mm	25 m	175 m	025 054



HFXS BK, halogen-free and highly flexible protective conduit light gauge, corrugated, halogen-free, black (RAL 9005), in coils of 50m resp. 25m

Material							
PA-Blend	LSF0H	flame-retardant	22434	> 320 N	L2	-25 °C/+105 °C	1J

In accordance with: EN 61386-1, EN 61386-23 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFXS 12 BK	12	9,2 mm	50 m	4500 m	023 654
HFXS 16 BK	16	10,7 mm	50 m	2700 m	023 655
HFXS 20 BK	20	14,1 mm	50 m	2700 m	023 656
HFXS 25 BK	25	18,3 mm	50 m	1600 m	023 657
HFXS 32 BK	32	24,3 mm	25 m	675 m	023 658
HFXS 40 BK	40	31 mm	25 m	500 m	023 659
HFXS 50 BK	50	38,3 mm	25 m	300 m	023 660
HFXS 63 BK	63	50,2 mm	25 m	175 m	023 661



Rigid HFT® Conduits

Light Gauge (320 N)

HFIRM Turbo LG, halogen-free rigid conduit light gauge, with moulded-on coupler and sectional corrugation, light grey (RAL 7035), in 3m standard length

Material							
PP-Blend	LSF0H	flame-retardant	22431	> 320 N	L1	-25 °C/+105 °C	1J

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFIRM Turbo 16 LG	16	13 mm	111 m	6216 m	087 215
HFIRM Turbo 20 LG	20	16,9 mm	111 m	3996 m	087 216
HFIRM Turbo 25 LG	25	21,4 mm	57 m	2280 m	087 217
HFIRM Turbo 32 LG	32	28,2 mm	57 m	1368 m	087 218
HFIRM Turbo 40 LG	40	35,5 mm	21 m	966 m	102 952
HFIRM Turbo 50 LG	50	45,1 mm	21 m	630 m	102 953

HFIR Turbo WH, halogen-free rigid conduit light gauge, plain ends, with sectional corrugation, white (RAL 9010), in 3m standard length

Material							
PP-Blend	LSF0H	flame-retardant	22431	> 320 N	L1	-25 °C/+105 °C	1J








In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFIR Turbo 16 WH 3M	16	12,9 mm	102 m	6120 m	087 178
HFIR Turbo 20 WH 3M	20	16,2 mm	102 m	4080 m	087 179
HFIR Turbo 25 WH 3M	25	21 mm	60 m	2400 m	087 180
HFIR Turbo 32 WH 3M	32	28 mm	45 m	1350 m	087 181
HFIR Turbo 40 WH 3M	40	35 mm	30 m	1020 m	103 797
HFIR Turbo 50 WH 3M	50	45 mm	15 m	630 m	103 798

Medium Gauge (750 N)

HFPRM Turbo LG, halogen-free rigid conduit medium gauge, with moulded-on coupler and sectional corrugation, light grey (RAL 7035), in 3m standard length

Material							
PP-Blend	LSF0H	flame-retardant	33431	> 750 N	L2	-25 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754



Art.	dn	di	ps	pl	Art. no.
HFPRM Turbo 16 LG 3M	16	11,1 mm	111 m	6216 m	087 223
HFPRM Turbo 20 LG 3M	20	15 mm	111 m	3996 m	087 224
HFPRM Turbo 25 LG 3M	25	20 mm	57 m	2280 m	087 225
HFPRM Turbo 32 LG 3M	32	26,7 mm	57 m	1368 m	087 226
HFPRM Turbo 40 LG 3M	40	34 mm	21 m	966 m	098 784
HFPRM Turbo 50 LG 3M	50	43,5 mm	21 m	630 m	098 785
HFPRM Turbo 63 LG 3M	63	55,5 mm	21 m	378 m	098 786

Rigid HFT® Conduits

HFPRM Turbo BK, halogen-free rigid conduit medium gauge, with moulded-on coupler and sectional corrugation, black (RAL 9005, UV-stabilised), in 3m standard length

Material							
PP-Blend	LSF0H	flame-retardant	33431	> 750 N	L2	-25 °C/+105 °C	2J

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754

Art.	dn	di	ps	pl	Art. no.
HFPRM Turbo 16 BK 3M	16	12,2 mm	111 m	6216 m	087 219
HFPRM Turbo 20 BK 3M	20	15,4 mm	111 m	3996 m	087 220
HFPRM Turbo 25 BK 3M	25	19,8 mm	57 m	2280 m	087 221
HFPRM Turbo 32 BK 3M	32	26,7 mm	57 m	1368 m	087 222
HFPRM Turbo 40 BK 3M	40	34,1 mm	21 m	966 m	098 781
HFPRM Turbo 50 BK 3M	50	43,5 mm	21 m	630 m	098 782
HFPRM Turbo 63 BK 3M	63	56,5 mm	21 m	378 m	098 783



Heavy Gauge (1250 N)

HFBS Turbo BK, halogen-free rigid conduit heavy gauge, plain ends, with sectional corrugation, black (RAL 9005), in 3m standard length

Material							
PP-Blend	LSF0H	flame-retardant	44241	> 1250 N	L3	-5 °C/+120 °C	6J

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754

Art.	dn	di	ps	pl	Art. no.
HFBS Turbo 16 BK 3M	16	11,7 mm	111 m	6216 m	099 870
HFBS Turbo 20 BK 3M	20	15,2 mm	111 m	3996 m	099 871
HFBS Turbo 25 BK 3M	25	19,65 mm	57 m	2622 m	099 872
HFBS Turbo 32 BK 3M	32	26 mm	57 m	1368 m	099 873
HFBS Turbo 40 BK 3M	40	33,6 mm	21 m	966 m	099 874
HFBS Turbo 50 BK 3M	50	43,4 mm	21 m	504 m	099 875



Accessories

HFCL WH, clip, halogen-free, interlinkable, white (RAL 9010), for mounting with plug DSD or screws with Ø 4mm

Material	 HFT	 flame-retardant	 L2	 -25 °C/+90 °C
PC-Blend				
halogen-free according to EN 50642, EN 60754				



Art.	dn	ps	pl	Art. no.
HFCL 16 WH	16	100 pc	3200 pc	038 596
HFCL 20 WH	20	100 pc	2400 pc	037 041
HFCL 25 WH	25	100 pc	1600 pc	038 597
HFCL 32 WH	32	100 pc	1600 pc	038 598
HFCL 40 WH	40	50 pc	800 pc	038 599
HFCL 50 WH	50	50 pc	600 pc	038 600

HFCL LG, clip, halogen-free, interlinkable, light grey (RAL 7035), for mounting with plug DSD or screws with Ø 4mm

Material	 HFT	 flame-retardant	 L2	 -25 °C/+90 °C
PC-Blend				
halogen-free according to EN 50642, EN 60754				



Art.	dn	ps	pl	Art. no.
HFCL 16 LG	16	100 pc	3200 pc	041 428
HFCL 20 LG	20	100 pc	2400 pc	041 016
HFCL 25 LG	25	100 pc	1600 pc	041 429
HFCL 32 LG	32	100 pc	1600 pc	041 430
HFCL 40 LG	40	50 pc	800 pc	041 431
HFCL 50 LG	50	50 pc	600 pc	041 432
HFCL 63 LG	63	25 pc	300 pc	041 433

HFCL BK, clip, halogen-free, interlinkable, black (RAL 9005), for mounting with plug DSD or screws with Ø 4mm

Material	 HFT	 flame-retardant	 L2	 -25 °C/+90 °C
PC-Blend				
halogen-free according to EN 50642, EN 60754				



Art.	dn	ps	pl	Art. no.
HFCL 16 BK	16	100 pc	3200 pc	009 634
HFCL 20 BK	20	100 pc	2400 pc	009 635
HFCL 25 BK	25	100 pc	1600 pc	009 636
HFCL 32 BK	32	100 pc	1600 pc	009 637
HFCL 40 BK	40	50 pc	800 pc	009 638
HFCL 50 BK	50	50 pc	600 pc	009 639
HFCL 63 BK	63	25 pc	300 pc	021 168

Accessories

HFCLB LG, bracket, light grey (RAL 7035), for HFCL clips

Material    
 PC-Blend HFT flame-retardant L2 -25 °C/+90 °C
 halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFCLB 40 LG	40	250 pc	8000 pc	080 803
HFCLB 50 LG	50	200 pc	6400 pc	080 804
HFCLB 63 LG	63	150 pc	4800 pc	102 989



HFCLB BK, bracket, black (RAL 9005), for HFCL clips

Material    
 PC-Blend HFT flame-retardant L2 -25 °C/+90 °C
 halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFCLB 40 BK	40	250 pc	8000 pc	023 080
HFCLB 50 BK	50	200 pc	6400 pc	023 081
HFCLB 63 BK	63	150 pc	4800 pc	023 082



HFS WH, saddle, with two fixing holes, white (RAL 9010), for mounting with screws Ø 4mm

Material    
 PC-Blend HFT flame-retardant L2 -25 °C/+90 °C
 halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFS 16 WH	16	100 pc	3200 pc	041 831
HFS 20 WH	20	50 pc	1600 pc	041 832
HFS 25 WH	25	100 pc	1600 pc	041 833
HFS 32 WH	32	100 pc	800 pc	041 834
HFS 50 WH	50	50 pc	400 pc	041 836



HFS LG, saddle, with two fixing holes, light grey (RAL 7035), for mounting with screws Ø 4mm

Material    
 PC-Blend HFT flame-retardant L2 -25 °C/+90 °C
 halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFS 20 LG	20	50 pc	1600 pc	080 812
HFS 25 LG	25	100 pc	1600 pc	080 813
HFS 32 LG	32	100 pc	800 pc	080 814
HFS 40 LG	40	50 pc	400 pc	080 815
HFS 50 LG	50	50 pc	400 pc	080 816
HFS 63 LG	63	25 pc	200 pc	080 817



Accessories

HFS BK, saddle, with two fixing holes, black (RAL 9005), for mounting with screws Ø 4mm

Material
PC-Blend

 HFT

 flame-retardant

 L2

 -25 °C/+90 °C

halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFS 16 BK	16	100 pc	3200 pc	020 832
HFS 20 BK	20	50 pc	1600 pc	020 833
HFS 25 BK	25	100 pc	1600 pc	020 834
HFS 32 BK	32	100 pc	800 pc	020 835
HFS 40 BK	40	50 pc	400 pc	020 836
HFS 50 BK	50	50 pc	400 pc	020 837
HFS 63 BK	63	25 pc	200 pc	020 838

HFSBS WH, spacer bar saddle, white (RAL 9010)

Material
PC-Blend

 HFT

 flame-retardant

 L2

 -25 °C/+90 °C

halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFSBS 20 WH	20	50 pc	1200 pc	037 033
HFSBS 25 WH	25	50 pc	800 pc	041 621
HFSBS 32 WH	32	50 pc	600 pc	041 853
HFSBS 40 WH	40	25 pc	300 pc	041 854
HFSBS 50 WH	50	25 pc	200 pc	041 855

HFSBS BK, spacer bar saddle, black (RAL 9005)

Material
PC-Blend

 HFT

 flame-retardant

 L2

 -25 °C/+90 °C

halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFSBS 16 BK	16	100 pc	2400 pc	009 628
HFSBS 20 BK	20	50 pc	1200 pc	009 629
HFSBS 25 BK	25	50 pc	800 pc	009 630
HFSBS 32 BK	32	50 pc	600 pc	009 631
HFSBS 40 BK	40	25 pc	300 pc	009 632
HFSBS 50 BK	50	25 pc	200 pc	009 633

Accessories






DSD LG, plug, halogen-free, light grey (RAL 7035), for quick and efficient mounting of HFCL clips, required fixing hole size Ø 6mm (gas concrete Ø 5.5mm)

Material  
 PA-Blend halogen-free -25 °C/+90 °C
 halogen-free according to EN 60754

Art.	Length	ps	pl	Art. no.
DSD 35 LG	45 mm	500 pc	16000 pc	082 226



KM Turbo LG, grip type coupler, chlorine-free, for pliable conduits, light grey (RAL 7035), waterproof and tight conduit connector for use in concrete, IP 65


Material     
 PE chlorine-free flame-retardant IP 65 L1 -25 °C/+90 °C

In accordance with: EN 61386-1, EN 61386-22

Art.	dn	ps	pl	Art. no.
KM Turbo 16 LG	16	100 pc	1200 pc	085 725
KM Turbo 20 LG	20	100 pc	800 pc	083 837
KM Turbo 25 LG	25	50 pc	600 pc	083 839
KM Turbo 32 LG	32	25 pc	300 pc	085 924
KM Turbo 40 LG	40	25 pc	200 pc	102 331
KM Turbo 50 LG	50	15 pc	120 pc	102 332
KM Turbo 63 LG	63	8 pc	64 pc	102 333



KM Turbo GY, grip type coupler, chlorine-free, for pliable conduits, grey (RAL 7001), waterproof and tight conduit connector for use in concrete, IP 65

Material     
 PE chlorine-free flame retardant IP 65 L2 -25 °C/+90 °C






In accordance with: EN 61386-1, EN 61386-22

Art.	dn	ps	pl	Art. no.
KM Turbo 16 GY	16	100 pc	1200 pc	085 724
KM Turbo 20 GY	20	100 pc	800 pc	083 838
KM Turbo 25 GY	25	50 pc	600 pc	083 840
KM Turbo 32 GY	32	25 pc	300 pc	085 923
KM Turbo 40 GY	40	25 pc	200 pc	102 342
KM Turbo 50 GY	50	15 pc	120 pc	102 343
KM Turbo 63 GY	63	8 pc	64 pc	102 344



Accessories

KM Turbo BK, grip type coupler, chlorine-free, for pliable conduits, black (RAL 9005), waterproof and tight conduit connector for use in concrete, IP 65

Material	 HFT				
PE	chlorine-free	flame-retardant	IP 65	L2	-25 °C/+90 °C

In accordance with: EN 61386-1, EN 61386-22



Art.	dn	ps	pl	Art. no.
KM Turbo 16 BK	16	100 pc	1200 pc	085 726
KM Turbo 20 BK	20	100 pc	800 pc	084 051
KM Turbo 25 BK	25	50 pc	600 pc	084 052
KM Turbo 32 BK	32	25 pc	300 pc	085 926
KM Turbo 40 BK	40	25 pc	200 pc	102 335
KM Turbo 50 BK	50	15 pc	120 pc	102 336
KM Turbo 63 BK	63	8 pc	64 pc	102 337

KM Turbo OR, grip type coupler, halogen-free, for pliable conduits, orange (RAL 2004), waterproof and tight conduit connector for use in concrete, IP 65

Material	 HFT			
PE	halogen-free	IP 65	L1	-25 °C/+90 °C

In accordance with: EN 61386-1, EN 61386-22 / halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
KM Turbo 16 OR	16	100 pc	1200 pc	085 723
KM Turbo 20 OR	20	100 pc	800 pc	080 642
KM Turbo 25 OR	25	50 pc	600 pc	080 643
KM Turbo 32 OR	32	25 pc	300 pc	085 925
KM Turbo 40 OR	40	25 pc	200 pc	102 338
KM Turbo 50 OR	50	15 pc	120 pc	102 339
KM Turbo 63 OR	63	8 pc	64 pc	102 340

HFSM WH, slip type coupler, white (RAL 9010), for the connection of rigid or pliable conduits

Material	 HFT			
PC-Blend	HFT	flame-retardant	L2	-25 °C/+90 °C

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFSM 16 WH	16	100 pc	1200 pc	038 571
HFSM 20 WH	20	100 pc	800 pc	037 036
HFSM 25 WH	25	50 pc	600 pc	038 572
HFSM 32 WH	32	25 pc	300 pc	038 573
HFSM 40 WH	40	25 pc	200 pc	038 574
HFSM 50 WH	50	15 pc	120 pc	038 575

Accessories

HFSM LG, slip type coupler, light grey (RAL 7035), for the connection of rigid or pliable conduits

Material				
PC-Blend	HFT	flame-retardant	L2	-25 °C/+90 °C

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFSM 16 LG	16	100 pc	1200 pc	041 421
HFSM 20 LG	20	100 pc	800 pc	041 017
HFSM 25 LG	25	50 pc	600 pc	041 422
HFSM 32 LG	32	25 pc	300 pc	041 423
HFSM 40 LG	40	25 pc	200 pc	041 424
HFSM 50 LG	50	15 pc	120 pc	041 425
HFSM 63 LG	63	8 pc	64 pc	041 426



HFSM BK, slip type coupler, black (RAL 9005), for the connection of rigid or pliable conduits

Material				
PC-Blend	HFT	flame-retardant	L2	-25 °C/+90 °C

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFSM 16 BK	16	100 pc	1200 pc	020 556
HFSM 20 BK	20	100 pc	800 pc	020 557
HFSM 25 BK	25	50 pc	600 pc	020 558
HFSM 32 BK	32	25 pc	300 pc	020 559
HFSM 40 BK	40	25 pc	200 pc	020 652
HFSM 50 BK	50	15 pc	120 pc	020 653
HFSM 63 BK	63	8 pc	64 pc	020 654



HFSB WH, normal bend, slip type, white (RAL 9010), for the connection of rigid conduits in an angle of 90°

Material				
PP-Blend	LSF0H	flame-retardant	L2	-25 °C/+105 °C

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFSB 16 WH/N	16	50 pc	600 pc	106 172
HFSB 20 WH/N	20	25 pc	300 pc	106 173
HFSB 25 WH/N	25	25 pc	200 pc	106 174
HFSB 32 WH/N	32	15 pc	120 pc	106 175
HFSB 40 WH/N	40	50 pc	1750 pc	106 176
HFSB 50 WH/N	50	40 pc	960 pc	106 177
HFSB 63 WH/N	63	20 pc	480 pc	106 178



Accessories

HFSB LG, normal bend, slip type, light grey (RAL 7035), for the connection of rigid conduits in an angle of 90°

Material				
PP-Blend	LSF0H	flame-retardant	L2	-25 °C/+105 °C

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFSB 16 LG/N	16	50 pc	600 pc	106 158
HFSB 20 LG/N	20	25 pc	300 pc	106 159
HFSB 25 LG/N	25	25 pc	200 pc	106 160
HFSB 32 LG/N	32	15 pc	120 pc	106 161
HFSB 40 LG/N	40	50 pc	1750 pc	106 162
HFSB 50 LG/N	50	40 pc	960 pc	106 163
HFSB 63 LG/N	63	20 pc	480 pc	106 164

HFSB BK, normal bend, slip type, black (RAL 9005), for the connection of rigid conduits in an angle of 90°

Material				
PP-Blend	LSF0H	flame-retardant	L2	-25 °C/+105 °C

In accordance with: EN 61386-1, EN 61386-21 / halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFSB 16 BK/N	16	50 pc	600 pc	106 165
HFSB 20 BK/N	20	25 pc	300 pc	106 166
HFSB 25 BK/N	25	25 pc	200 pc	106 167
HFSB 32 BK/N	32	15 pc	120 pc	106 168
HFSB 40 BK/N	40	50 pc	1750 pc	106 169
HFSB 50 BK/N	50	40 pc	960 pc	106 170
HFSB 63 BK/N	63	20 pc	480 pc	106 171

HFIE BK, inspection elbow, black (RAL 9005), for rigid conduits

Material				
PC-Blend	HFT	flame-retardant	L2	-25 °C/+90 °C

halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFIE 20 BK	20	50 pc	400 pc	026 968
HFIE 25 BK	25	20 pc	240 pc	026 969
HFIE 32 BK	32	25 pc	200 pc	104 457

Accessories

HFIT BK, inspection tee, black (RAL 9005), for rigid conduits

Material    
 PC-Blend HFT flame-retardant L2 -25 °C/+90 °C
 halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFIT 20 BK	20	50 pc	400 pc	009 640
HFIT 25 BK	25	20 pc	160 pc	009 641
HFIT 32 BK	32	10 pc	80 pc	104 456



HFIT LG, inspection tee, light grey (RAL 7035), for rigid conduits

Material    
 PC-Blend HFT flame-retardant L2 -25 °C/+90 °C
 halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFIT 20 LG	20	50 pc	400 pc	082 561
HFIT 25 LG	25	20 pc	160 pc	082 562



HFAFT/MBS WH, adaptor with female thread and male bush, white (RAL 9010), for the connection of rigid or pliable conduits with distribution and enclosure boxes

Material    
 PC-Blend HFT flame-retardant L2 -25 °C/+90 °C
 halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
HFAFT/MBS 16 WH	16	100 pc	2400 pc	064 493
HFAFT/MBS 20 WH	20	100 pc	1200 pc	037 043
HFAFT/MBS 25 WH	25	50 pc	600 pc	041 465
HFAFT/MBS 32 WH	32	20 pc	480 pc	064 271



Accessories

HFAFT/MBS BK, adaptor with female thread and male bush, black (RAL 9005), for the connection of rigid or pliable conduits with distribution and enclosure boxes

Material
PC-Blend

 HFT
flame-retardant

 flame-retardant

 L2

 -25 °C/+90 °C

halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFAFT/MBS 16 BK	16	100 pc	2400 pc	009 673
HFAFT/MBS 20 BK	20	100 pc	1200 pc	009 674
HFAFT/MBS 25 BK	25	50 pc	600 pc	009 675
HFAFT/MBS 32 BK	32	20 pc	480 pc	009 676
HFAFT/MBS 40 BK	40	25 pc	300 pc	009 677
HFAFT/MBS 50 BK	50	10 pc	120 pc	009 678

HFAMT/LR BK, adaptor with male thread and lock ring, black (RAL 9005), for the connection of pliable conduits with distribution and enclosure boxes

Material
PC-Blend

 HFT
flame-retardant

 flame-retardant

 L2

 -25 bis +90 °C

halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFAMT/LR 20 black	20	100 pc	1200 pc	009 680
HFAMT/LR 25 black	25	50 pc	600 pc	009 681

HFAMT/LN BK, adaptor with male thread and lock nut, black (RAL 9005), for the connection of rigid or pliable conduits with distribution and enclosure boxes

Material
PC-Blend

 HFT
flame-retardant

 flame-retardant

 L2

 -25 bis +90 °C

halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
HFAMT/LN 20 black	20	100 pc	1200 pc	020 843
HFAMT/LN 25 black	25	50 pc	600 pc	020 844

Accessories

FPE LG, end cap, halogen-free, light grey (RAL 7035), for the protection of cables at conduit edges

Material  
PE halogen-free -25 °C/+60 °C

Art.	dn	ps	pl	Art. no.
FPE 16 LG	16	100 pc	4000 pc	061 664
FPE 20 LG	20	100 pc	2600 pc	064 849
FPE 25 LG	25	50 pc	1400 pc	064 850
FPE 32 LG	32	25 pc	800 pc	064 851
FPE 40 LG	40	25 pc	450 pc	064 852
FPE 50 LG	50	25 pc	200 pc	064 853
FPE 63 LG	63	20 pc	100 pc	064 854



FPE BK, end cap, halogen-free, black (RAL 9005), for the protection of cables at conduit edges

Material  
PE halogen-free -25 °C/+60 °C

Art.	dn	ps	pl	Art. no.
FPE 16 BK	16	100 pc	4000 pc	101 262
FPE 20 BK	20	100 pc	2600 pc	035 425
FPE 25 BK	25	50 pc	1400 pc	035 426
FPE 32 BK	32	25 pc	800 pc	035 427
FPE 40 BK	40	25 pc	450 pc	035 428
FPE 50 BK	50	25 pc	200 pc	035 429
FPE 63 BK	63	20 pc	100 pc	035 430



SGL GR, straight gland, halogen-free, grey (RAL 7001), patented plug-in system for quick-fit assembly, tight connection, with metric thread

Material    
PA-Blend HFT flame-retardant IP54 -25 °C/105 °C

In accordance with: EN 61386-1, EN 61386-23, EN 60423 / halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
SGL 1212 GR	12	100 pc	3200 pc	016 440
SGL 1616 GR	16	100 pc	1600 pc	012 699
SGL 2020 GR	20	50 pc	1200 pc	012 700
SGL 2525 GR	25	50 pc	600 pc	012 701
SGL 3232 GR	32	30 pc	360 pc	012 702
SGL 4040 GR	40	20 pc	240 pc	015 509
SGL 5050 GR	50	16 pc	128 pc	015 508
SGL 6363 GR	63	8 pc	64 pc	043 075



Accessories

SGL BK, straight gland, halogen-free, black (RAL 9005), patented plug-in system for quick-fit assembly, tight connection, with metric thread

Material				
PA-Blend	HFT	flame-retardant	IP54	-25 °C/105 °C

In accordance with: EN 61386-1, EN 61386-23, EN 60423 / halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
SGL 1212 BK	12	100 pc	3200 pc	027 797
SGL 1616 BK	16	100 pc	1600 pc	027 798
SGL 2020 BK	20	50 pc	1200 pc	027 799
SGL 2525 BK	25	50 pc	600 pc	027 800
SGL 3232 BK	32	30 pc	360 pc	027 801
SGL 4040 BK	40	20 pc	240 pc	027 802
SGL 5050 BK	50	16 pc	128 pc	027 803
SGL 6363 BK	63	8 pc	64 pc	027 804

SGL S GR, straight gland, halogen-free, grey (RAL 7001), patented plug-in system for quick-fit assembly, tight connection, with metric thread

Material				
PA-Blend	HFT	flame-retardant	IP 65	-25 °C/+105 °C

In accordance with: EN 61386-1, EN 61386-23, EN 60423 / halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
SGL 1212 S GR	12	100 pc	3200 pc	023 615
SGL 1616 S GR	16	100 pc	1600 pc	012 707
SGL 2020 S GR	20	50 pc	1200 pc	012 708
SGL 2525 S GR	25	50 pc	400 pc	012 709
SGL 3232 S GR	32	30 pc	360 pc	012 710
SGL 4040 S GR	40	20 pc	240 pc	015 914
SGL 5050 S GR	50	16 pc	128 pc	015 915
SGL 6363 S GR	63	8 pc	64 pc	043 076

SGL S BK, straight gland, halogen-free, black (RAL 9005), patented plug-in system for quick-fit assembly, tight connection, with metric thread

Material				
PA-Blend	HFT	flame-retardant	IP65	-25 °C/+105 °C

In accordance with: EN 61386-1, EN 61386-23, EN 60423 / halogen-free according to EN 50642, EN 60754



Art.	dn	ps	pl	Art. no.
SGL 1212 S BK	12	100 pc	3200 pc	043 067
SGL 1616 S BK	16	100 pc	1600 pc	043 068
SGL 2020 S BK	20	50 pc	1200 pc	043 069
SGL 2525 S BK	25	50 pc	400 pc	043 070
SGL 3232 S BK	32	30 pc	360 pc	043 071
SGL 4040 S BK	40	20 pc	240 pc	043 073
SGL 5050 S BK	50	16 pc	128 pc	043 074
SGL 6363 S BK	63	8 pc	64 pc	043 077

Accessories

SLN GR, lock nut, grey (RAL 7001), with metric thread

Material			
PA-Blend	HFT	flame-retardant	-25 °C/+105 °C

In accordance with: EN 61386-1, EN 61386-23, EN 60423 / halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
SLN 16 GR	16	200 pc	8000 pc	014 206
SLN 20 GR	20	200 pc	6400 pc	013 277
SLN 25 GR	25	100 pc	4000 pc	013 278
SLN 32 GR	32	100 pc	2400 pc	013 279
SLN 40 GR	40	30 pc	1200 pc	015 916
SLN 50 GR	50	25 pc	1000 pc	017 307
SLN 63 GR	63	20 pc	480 pc	027 589



SLN BK, lock nut, black (RAL 9005), with metric thread

Material			
PA-Blend	HFT	flame-retardant	-25 °C/+105 °C

In accordance with: EN 61386-1, EN 61386-23, EN 60423 / halogen-free according to EN 50642, EN 60754

Art.	dn	ps	pl	Art. no.
SLN 16 BK	16	200 pc	8000 pc	026 257
SLN 20 BK	20	200 pc	6400 pc	026 256
SLN 25 BK	25	100 pc	4000 pc	026 255
SLN 32 BK	32	100 pc	2400 pc	026 254
SLN 40 BK	40	30 pc	1200 pc	026 053
SLN 50 BK	50	25 pc	1000 pc	026 054
SLN 63 BK	63	20 pc	480 pc	027 590



PKGHW, enclosure box, surface type, halogen-free, white (RAL 9010), suitable for damp locations, jetting water tight, IP 65

Material				
PC-Blend	HFT	AC 690 V, IP 40	L2	-25 °C/+105 °C

In accordance with: EN 60670-1, EN 60670-22 / halogen-free according to EN 50642, EN 60754

Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
PKGHW 100 OP WH	105 x 105 x 64 mm	5 pc	50 pc	037 325
PKGHW 200 OP WH	200 x 150 x 85 mm	2 pc	12 pc	037 326
PKGHW 300 OP WH	300 x 200 x 125 mm	1 pc	4 pc	065 716



Accessories

PKG H LG, enclosure box, surface type, halogen-free, light grey (RAL 7035), suitable for damp locations, jetting water tight, IP 65

Material  HFT  AC 690 V, IP 40  L2  -25 °C/+105 °C

In accordance with: EN 60670-1, EN 60670-22 / halogen-free according to EN 50642, EN 60754



Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
PKG H 100 OP LG	105 x 105 x 64 mm	5 pc	50 pc	023 760
PKG H 200 OP LG	200 x 150 x 85 mm	2 pc	12 pc	023 761
PKG H 300 OP LG	300 x 200 x 125 mm	1 pc	4 pc	023 762

PKG H BK, enclosure box, surface type, halogen-free, black (RAL 9005), suitable for damp locations, jetting water tight, IP 65

Material  HFT  AC 690 V, IP 40  L2  -25 °C/+105 °C

In accordance with: EN 60670-1, EN 60670-22 / halogen-free according to EN 50642, EN 60754



Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
PKG H 100 OP BK	105 x 105 x 64 mm	5 pc	50 pc	528 528
PKG H 200 OP BK	200 x 150 x 85 mm	2 pc	12 pc	010 685
PKG H 300 OP BK	300 x 200 x 125 mm	1 pc	4 pc	013 019

J LG, junction box for surface mounting, halogen-free, light grey (RAL 7035), other colours available on request

Material  halogen-free  IP65/66  L3  -5 °C/+60 °C

In accordance with: EN 60670-1, EN60670-22, EN60695-2-10 / halogen-free according to EN 60754



Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
J80B	85 x 85 x 55 mm	5 pc	120 pc	105 641
J100B	100 x 100 x 60 mm	6 pc	90 pc	105 643
J160B	155 x 100 x 70 mm	1 pc	56 pc	105 851
J200B	200 x 155 x 85 mm	1 pc	20 pc	105 852

Accessories

HFCB BK, circular junction box, halogen-free, black (RAL 9005), with 2 mounting lugs, standard mounting screw spacing 50.8mm (2") for conduit diameters 16mm to 25mm resp. 65mm for conduit diameter 32mm, with brass inserts M 4, without lid

Material
 PC-Blend

 HFT

 IP30

 L2

 -25 °C/+90 °C

halogen-free according to EN 50642, EN 60754

Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/1 BK	65 x 32 mm	25 pc	200 pc	009 646
HFCB 25/1 BK	65 x 32 mm	25 pc	200 pc	009 647
HFCB 32/1 BK	80 x 40 mm	10 pc	80 pc	009 648



through box

Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/2 BK	65 x 32 mm	25 pc	200 pc	009 650
HFCB 25/2 BK	65 x 32 mm	25 pc	200 pc	009 651
HFCB 32/2 BK	80 x 40 mm	10 pc	80 pc	009 652



angle box

Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/A BK	65 x 32 mm	25 pc	200 pc	009 654
HFCB 25/A BK	65 x 32 mm	25 pc	200 pc	009 655
HFCB 32/A BK	80 x 40 mm	10 pc	80 pc	009 656



tee box

Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/3 BK	65 x 32 mm	25 pc	200 pc	009 658
HFCB 25/3 BK	65 x 32 mm	20 pc	160 pc	009 659
HFCB 32/3 BK	80 x 40 mm	10 pc	80 pc	009 660



circular junction box

Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/4 BK	65 x 32 mm	20 pc	160 pc	009 662
HFCB 25/4 BK	65 x 32 mm	10 pc	120 pc	009 663
HFCB 32/4 BK	80 x 40 mm	8 pc	64 pc	009 664



Accessories

circular junction box



Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/2-U M4 BK	65 x 32 mm	20 pc	160 pc	097 986
HFCB 25/2-U M4 BK	65 x 32 mm	20 pc	160 pc	097 988

circular junction box



Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/3-Y M4 BK	65 x 32 mm	20 pc	160 pc	097 987
HFCB 25/3-Y M4 BK	65 x 32 mm	20 pc	160 pc	097 989

circular junction box



Art.	Dimensions Ø/LxB x T	ps	pl	Art. no.
HFCB 20/4-H M4 BK	65 x 32 mm	20 pc	160 pc	097 991
HFCB 25/4-H M4 BK	65 x 32 mm	20 pc	160 pc	097 992

HFCBL BK, circular box lid, halogen-free, black (RAL 9005), for screw fixing

Material

PC-Blend



HFT



-25 °C/+90 °C

/halogen-free according to EN 50642, EN 60754



Art.	Dimensions box	ps	pl	Art. no.
HFCBL 16-25 BK	Ø 65 mm	100 pc	2400 pc	009 665
HFCBL 32 BK	Ø 80 mm	100 pc	1200 pc	009 666

DSL LG, plug, halogen-free, light grey (RAL 7035), for fixing cables with zipties.

Material

PP



halogen-free



-25 °C/+90 °C



Art.	Length	ps	pl	Art. no.
DSL 35 LG	35 mm	100 pc	12000 pc	104 550

KH LG, cable holder, light grey (RAL 7035), halogen-free, for the aligned installation of sheathed cables

Material

POM



halogen-free



L1



-5 °C/+60 °C



Art.	For number of cables	ps	pl	Art. no.
KH-1 LG	11	50 pc	1000 pc	103 496
KH-2 LG	22	25 pc	500 pc	103 497

Accessories

KSH GR, multi cable brackets, light grey (RAL 7035), halogen-free, for the fixing and holding of surface cables in walls and ceiling

Material   
 PP-Blend halogen-free L1 -25 °C/+90 °C

halogen-free according to EN 50642, EN 60754

Art.	For number of cables	ps	pl	Art. no.
KSH 15 GR	15	25 pc	250 pc	103 962
KSH 30 GR	30	15 pc	150 pc	103 963



Application:



DCX, for impact mounting ist suitable for fixation of pliable and rigid conduits on plasterboard and wooden chipboard walls.
 Tip: Use a hammer with a striking face of 25 x 25 mm.

Material
 Steel, galvanized

Art.	dn	ps	pl	Art. no.
DCX 16	16	100 pc	1000 pc	106 081
DCX 20	20	100 pc	1000 pc	106 082
DCX 25	25	100 pc	1000 pc	106 083
DCX 40	40	100 pc	1000 pc	106 084



Application:



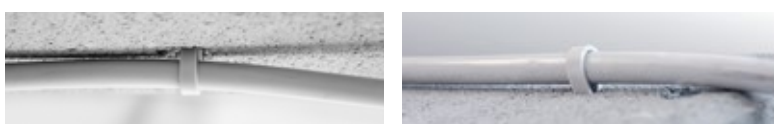
DSC 3-13 LG, dowel clamp for cables Ø 3–13 mm, light grey (RAL 7035), for fastening of cables and cable bundles in brick or concrete walls, required fixing hole size Ø 6mm

Material  
 PP halogen-free +25 °C/+90 °C

Art.	Diameter	ps	pl	Art. no.
DSC 3-13	3-13 mm	100 pc	15000 pc	106 791



Application:



HFT® Conduits Next Generation

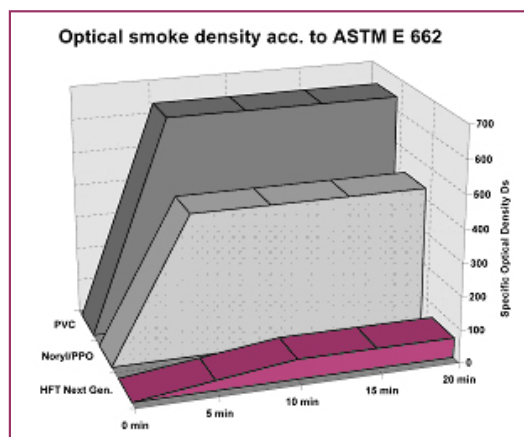
One of the most important arguments for the use of HFT conduits is their characteristic in emergency situations. Exposed to fire these special materials release 90 % less smoke compared to PVC and 80 % less compared to conventional halogen-free materials. By this safety is increased in two ways:

- **People's Safety:** in case of fires the orientation will not be affected by intense smoke release, this eases the evacuation of buildings considerably. Additionally, physical health is not threatened by toxic gases which reduces the risk of suffocation.
- **Asset Protection:** the gases released do not form chemical compounds with other substances.

Sensitive technologies, like IT systems, will not be damaged which guarantees that business operations can continue, especially in cases of smaller fires. Both results in much lower consequential costs related to business interruptions and repairs.

Details about HFT®

HFT® is a registered trademark and refers to installation systems with improved properties compared to conventional cable management. The halogen-free 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.



Lowest smoke density in plastic installation materials, flame retardant and insulating!

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 up to 90% compared to PVC
- UV-stabilised
- easy to install
- better than steel

Cable protection with HFT Univolt products

is not only a vital contribution to the safety of human lives, it also minimises conduction losses, ensures the smooth operation of sensitive technologies, prevents additional costs for repairs and complies with current international standards.

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



Hospital Godstrup, Denmark



Omantel Headquarter, Oman



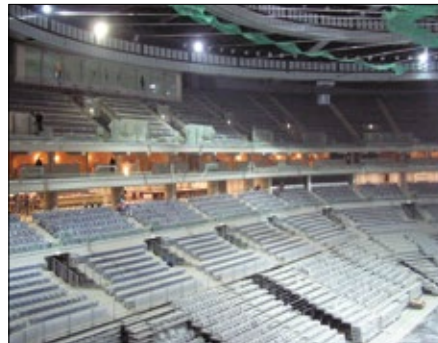
Four Seasons, Baku



Belgrade on Water, Serbia



Airports



Sports arenas



High-tech facilities



Railway stations



Oil rigs



Event centres

Classification Codes according to EN/IEC 61386: Conduit Systems

Codification Number	Digit of the Classification Code					
	1	2	3	4	5	6
	Compression resistance	Impact resistance	Minimum temperature resistance	Maximum temperature resistance	Resistance to bending	Electrical properties
0	none declared	none declared	none declared	none declared		none declared
1	125N	0,5J	+5°C	+60°C		
	very light	very light			rigid	conductive
2	320 N	1J	-5°C	+90°C		
	light	light			pliable	insulating
3	750 N	2J	-15°C	+105°C		
	medium	medium			pliable, self recovering	conductive and insulating
4	1250 N	6J	-25°C	+120°C		
	heavy	heavy			flexible	
5	4000 N	20,4J	-45°C	+150°C		
	very heavy	very heavy				
6				+250°C		
7				+400°C		

Example: HFXP EN 3343

The four digit code refers to the classification which can be found under each individual article in this catalogue. (see also explanation on the right).

Digit of the Classification Code							
7	8	9	10	11	12	13	
Resistance to ingress of solid objects	Protection against ingress of water	Corrosion resistance	Tensile strength	Resistance to flame propagation	Suspended load capacity	Fire effects	
	non-protected		non declared		none declared		under consideration
			100 N		20 N, 48h		
	dripping water	low inside and outside	very light	non-flame propagating	very light		
			250 N		30 N, 48h		
	dripping water tilted 15°	medium inside and outside	light	flame propagating	light		
>2,5 mm			500 N		150 N, 48h		
	spraying water	medium inside, high outside	medium		medium		
>1,0 mm			1000 N		450 N, 48h		
	splashing water	high inside and outside	heavy		heavy		
			2500 N		850 N, 48h		
dust protected	water jetting		very heavy		very heavy		
dust tight	powerful water jetting						
	temporary immersion effects						

Symbols: product properties



LSFOH
halogen-free
chlorine-free



classification



compression
resistance



UV-stability



temperature

Chemical Resistance of Plastic Materials

Chemical Substances	°C	Polyvinylchloride	Polyethylene/Polypropylene	Polycarbonate	Polyamide	Polyphenylenether/Polyphenyleneoxide	Chemical Substances	°C	Polyvinylchloride	Polyethylene/Polypropylene	Polycarbonate	Polyamide	Polyphenylenether/Polyphenyleneoxide
		PVC	PE/PP	PC	PA	PPE/PPO			PVC	PE/PP	PC	PA	PPE/PPO
Acetaldehyde, aqueous (40%)	40	!	✓	-	!	!	Glycerine, aqueous	60	✓	✓	!	✓	✓
Acetic acid (<10%)	40	✓	✓	✓	!	!	Hydrochloric acid (weak)	40	✓	✓	!	-	ü
Acetic acid (10% - 85%)	60	✓	✓	-	-	!	Hydrochloric acid (concentrated)	60	✓	✓	-	-	!
Acetic acid (85% - 95%)	40	✓	✓	-	-	!	Hydrofluorosilic acid, aqueous (<32.5%)	60	✓	✓	✓	-	!
Acetic acid (>95%)	20	✓	✓	-	-	-	Hydrofluoric acid, aqueous (<40%)	20	✓	ü	-	-	!
Acetone (traces)	20	-	ü	-	ü	-	Hydrogen (100%)	60	✓	✓	✓	✓	✓
Ammonia, aqueous (20%)	40	✓	✓	-	✓	!	Hydrogen peroxide (20%)	20	✓	✓	!	!	-
Ammonia, dry	60	✓	✓	-	ü	!	Hydrogen sulphide, dry or humid	60	✓	✓	!	!	!
Ammonium fluoride (2%)	20	✓	!	!	-	!	Hydrogen sulphide, aqueous	40	✓	✓	!	!	!
Aniline (saturated)	60	!	-	-	!	-	Ketone	-	-	-	-	ü	ü
Arsenic acid (<20%)	60	✓	✓	✓	!	-	Lactic acid, aqueous (1%)	40	✓	✓	✓	✓	✓
Beer	60	✓	✓	!	✓	✓	Methyl alcohol, aqueous (all)	40	✓	✓	-	ü	ü
Benzene	20	-	!	-	ü	-	Mineral oil	20	✓	✓	!	✓	!
Bleaching agent (13%)	40	✓	✓	!	!	✓	Nitric acid (<30%)	40	✓	✓	-	-	!
Borax, aqueous	60	✓	✓	!	!	!	Nitric acid (30% - 45%)	45	✓	✓	-	-	-
Bromic acid, aqueous (10)	20	✓	✓	-	-	!	Nitric acid (50% - 60%)	20	✓	!	-	-	-
Butane, gaseous		ü	-	✓	✓	!	Nitric gases, dry or humid (weak)	60	!	!	-	!	!
Carbonic acid, dry	40	✓	✓	✓	✓	!	Oils and Fats (vegetable and organic)	60	✓	✓	-	ü	-
Carbonic acid, dry or humid	40	ü	ü	!	✓	!	Oxalic acid, aqueous (10%)	40	✓	✓	✓	!	!
Carbon tetrachloride	20	-	-	-	ü	-	Oxalic acid, aqueous (concentrated)	60	✓	✓	-	-	!
Carbon disulphide	20	!	!	-	!	-	Oxygen	60	✓	✓	!	✓	✓
Caustic soda (<40%)	40	✓	ü	-	ü	ü	Ozone	20	✓	!	-	!	!
Caustic soda (40% - 60%)	60	ü	ü	-	ü	ü	Permanganate (<6%)	20	✓	✓	!	-	!
Cement, dry	20	ü	ü	ü	ü	ü	Petrol, Normal/Premium	60	✓	!	-	ü	-
Cement, mixed	20	✓	✓	-	ü	ü	Petroleum	20	✓	✓	!	✓	-
Chloric gas, dry or humid	20	!	!	-	-	-	Phenol, aqueous (<90%)	45	!	!	-	-	-
Chloric water	20	!	-	-	-	-	Phosphoric acid, aqueous (<30%)	40	✓	✓	-	-	!
Chlorinated hydrocarbons		-	-	-	ü	-	Phosphoric acid, aqueous (<30%)	60	✓	✓	-	-	!
Chlorosulfuric acid (100%)	20	!	!	-	-	-	Potash lye, aqueous (<40%)	40	ü	ü	-	ü	ü
Chromium acid, aqueous (<50%)	50	✓	✓	-	-	-	Potash lye (40% - 50%)	60	✓	✓	-	ü	ü
Chromium acid (20%)		!	!	✓	-	-	Potassium sodium lye (<40%)	40	✓	✓	-	ü	ü
Chromosulfuric acid (20%)		!	!	-	-	-	Potassium sodium lye (40% - 50%)	60	✓	✓	-	ü	ü
Citric acid (all)	60	✓	✓	✓	✓	!	Propane, liquid		ü	-	✓	✓	!
Cresol, aqueous (<90%)	45	!	!	-	-	-	Salt solution (all)	40	✓	✓	✓	✓	✓
Cupric sulfate (all)	60	✓	✓	✓	!	!	Seawater	40	✓	✓	!	✓	✓
Diesel oil	20	✓	✓	!	ü	-	Sulfur dioxide, aqueous (all)	40	✓	✓	!	!	!
Developer (photographic)	40	✓	✓	!	✓	!	Sulfuric acid, dry or humid (all)	60	✓	✓	!	!	!
Dextrine (18%)	20	✓	✓	!	✓	!	Sulfuric acid, aqueous (<40%)	40	✓	✓	!	-	ü
Ester		-	-	-	ü	ü	Sulfuric acid, aqueous (40% - 80%)	60	ü	ü	-	-	!
Ethyl alcohol, aqueous (<40%)	40	✓	✓	!	✓	✓	Sulfuric acid, aqueous (80% - 90%)	40	✓	✓	-	-	!
Ethyl ether	20	-	!	!	✓	-	Sulfuric acid, aqueous (90% - 96%)	20	✓	✓	-	-	!
Fatty acid	20	✓	!	!	✓	!	Sodium chloride solution (weak)	40	✓	✓	✓	✓	✓
Fixing bath	40	✓	✓	!	✓	!	Tartaric acid (10%)	60	✓	✓	✓	✓	!
Fluorochlorinated Hydrocarbons		✓	!	✓	✓	-	Urine	40	✓	✓	✓	✓	✓
Formaldehyde, aqueous (all)	30	✓	✓	!	✓	-	Water	60	✓	-	✓	✓	✓
Formic Acid (<30%)	40	✓	✓	!	-	!	Xylene (100%)	20	-	!	-	ü	-
Formic Acid (concentrated)	20	✓	✓	-	-	!	Zinc chloride, aqueous (all)	60	!	✓	!	-	!
							Zinc sulfate, aqueous (weak)	60	✓	✓	!	-	!

List of Symbols:

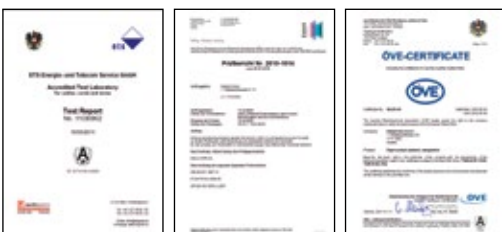
- ✓ The parts are resistant against chemical attack under conventional laying conditions
- ! The parts are partially resistant against chemical attack under conventional laying conditions. It is strongly advised to investigate the actual conditions very carefully, resp. to contact UNIVOLT for tests.
- The parts are not resistant against chemical attack.

Why use HFT®?



Safety matters:

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



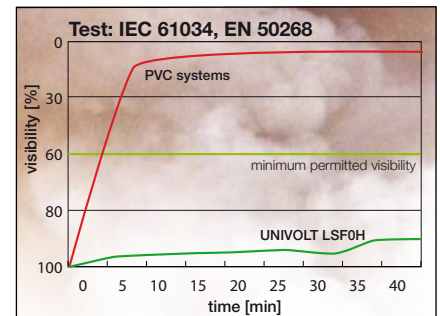
Comprehensive provision and protection:

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.

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.

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

Smoke emission, 3m Cube Test



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

If human lives are at risk, there is no second chance.



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