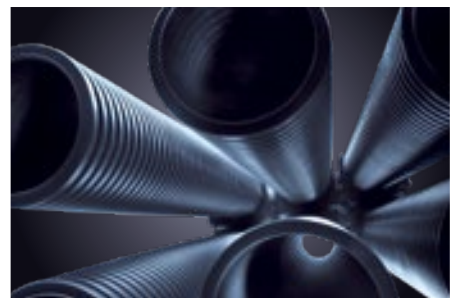
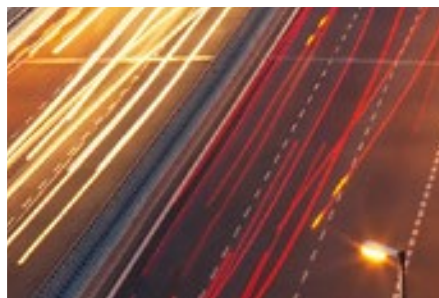
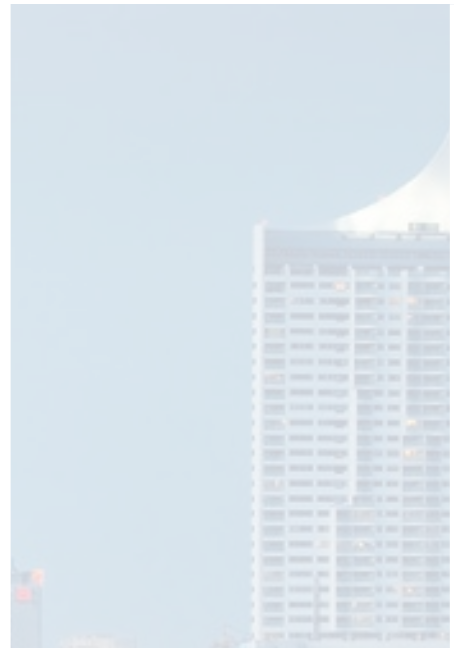


**Kabuflex®**

**Cable protection for underground cables keeps our engineered world running**



EN | Last modified: April 2018

- DRAINAGE SYSTEMS**
- ELECTRICAL SYSTEMS**
- BUILDING TECHNOLOGY**
- INDUSTRIAL PRODUCTS**



## Kabuflex® S, Kabuflex® R and Kabuflex® R-UV

### Kabuflex® S

**Kabuflex S** – the straight length cable conduit (corrugated outside, smooth inside) provides both high static stability and malleability.

The relatively low weight allows easy transport and renders unnecessary any special installation tools.

Kabuflex S complies with DIN EN 61386-24.

- flexible thanks to corrugations
- lightweight, pressure and impact-resistant thanks to structured-wall design and high-quality PE material (can also be installed in sub-zero temperatures)
- compressive strength class 450 (standard type) according to DIN EN 61386-24
- couplings – sandtight and watertight when an additional profile sealing ring is used



- smooth inner surface for easy insertion of wires and cables
- cable conduits can be easily cut to length on-site by using a fine-toothed saw or other suitable tools

### Kabuflex® R

**Kabuflex R** – the flexible cable conduit in coils (corrugated outside, smooth inside) is the perfect addition to the range of cable protection products.

The coil design and its flexibility allow for installation over long distances without the need for couplings and bends, and serve to branch off main lines to buildings or signal systems.

This allows easy retrofit of high-voltage, telecommunication and TV cables in secluded buildings.

Kabuflex R also complies with DIN EN 61386-24.

- structured-wall design provides both good stability and enormous flexibility
- compressive strength class 450 (standard type) according to DIN EN 61386-24
- easy on-site transportation and handling thanks to 50 m and 25 m coils
- ideal conduit cross-section in the bend area

- requires no couplings and bends and allows for quick installation
- pre-installed pulling string facilitates inserting the cable wire

### Kabuflex® R-UV

**Kabuflex R-UV** – the UV-resistant design for aboveground applications. UV-resistant for up to 10 years thanks to UV

stabilisers. Technical data correspond to Kabuflex R.



# Structured-wall PE conduits

Spacers allow installing several **Kabuflex S** cable conduits in bundles next to and on top of each other.

Use spacers to create the space required to place the backfill.

**Kabuflex R and Kabuflex R-UV** have been designed such that they also allow narrow installation radii; however, cable insertion and cable properties must be observed.

Their flexibility allows going around obstacles. **Kabuflex R and Kabuflex R-UV** are an economic solution thanks to their quick and efficient installation.



Kabuflex S – spacers indicating the direction make installations fast and safe



Kabuflex R and Kabuflex R-UV – provide advantages in inaccessible terrain and on uneven ground

## Specification according to DIN EN 61386-24

**Kabuflex S, Kabuflex R and Kabuflex R-UV comply with the requirements of compressive strength class 450 (standard type)**

Kabuflex cable conduits are manufactured according to DIN EN 61386-24 and continuously monitored to ensure constant quality. Kabuflex is produced applying structured-wall pipe extrusion technology pursuant to DIN 16961.

Observe relevant standards, guidelines and regulations for the installation of Kabuflex.

These include DIN EN 1610, DWA-A 139, ZTV A-StB 97 and excerpts from the installation manual A 535 published by the KRV (*Kunststoffrohrverband e.V.*). The latest version of the Kabuflex installation manual also applies.



**NB**

**Kabuflex made of PE is resistant to acids and bases according to DIN 8075, supplementary sheet 1.**

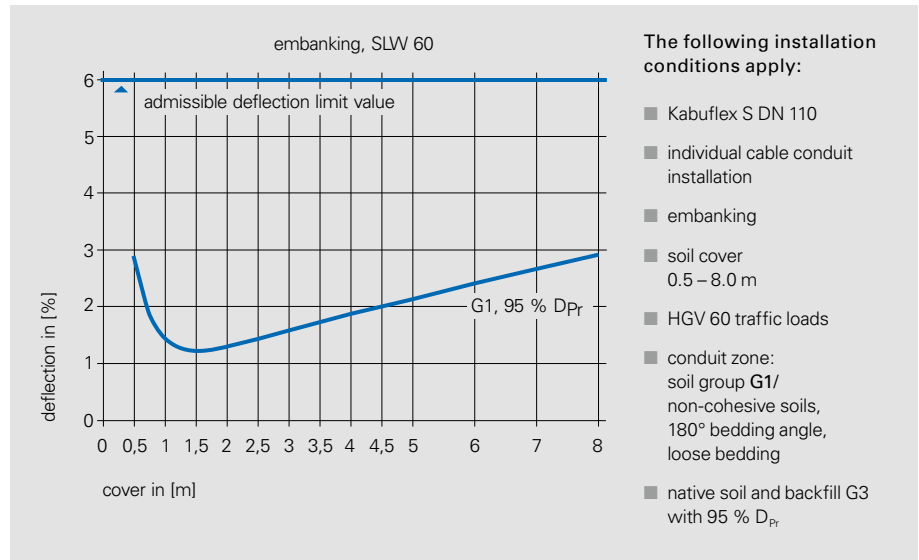
# Kabuflex® – the proven cable protection system

## High static load capacity

The diagram to the right shows the deflection of Kabuflex S DN 110 (individual cable conduit installation) with an increasing cover and takes into consideration the installation conditions next to the chart. For this purpose, a professional installation according to relevant provisions is assumed.

### NB

**The pipe stress analysis procedure according to ATV-DVWK-A 127 generally applies to individual cable conduits only! For cable conduit bundles, observe the information in our installation manual and A 535 by the KRV!**



## Kabuflex® sandtight (SD) – IP 54

Marking according to EN 60529

### Reference number:

5 = protected from limited dust ingress  
4 = protected from water spray from any direction

The SD coupling ensures absolutely reliable connections of Kabuflex.

It is used wherever it is sufficient to protect against soil particle ingress.

It is sandtight and can be installed quickly and easily.



SD = sandtight

## Kabuflex® watertight (WD) – IP 68

Marking according to EN 60529

### Reference number:

6 = protected from total dust ingress  
8 = protected from long term immersion up to a specified pressure

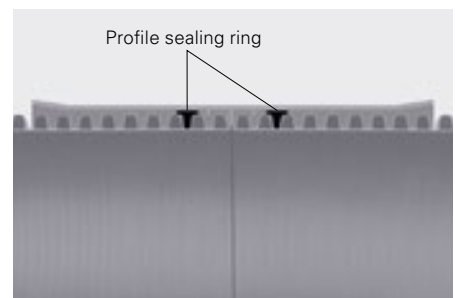
Certified leak tightness of 0.5 bar for Kabuflex with sealing ring following inspection specifications according to DIN EN 1610 for underground installations.

The coupling in connection with the profile sealing ring ensures watertight connections (WD).

Mount the profile sealing ring onto the second corrugation! The profile sealing ring is used when the conduit system must be sealed against water pressure of (0.5 bar) according to DIN EN 1610. The lubricant required for installation is available in tubes or buckets.

### NB

**Seek project-specific advice from FRÄNKISCHE regarding the installation conditions for special applications or constructive engineering (e. g. tunnel engineering).**



WD = watertight

# Product range overview



**NB**

Standard colour black; other colours available on request.

Product	Nominal diameter	D <sub>o</sub> [mm] <sup>1</sup>	D <sub>i</sub> [mm] <sup>1</sup>	L [m]	R <sub>min</sub> [m] <sup>2</sup>	Cat. no.
Kabuflex S	DN 75	76	62	6.0	2.0	<b>561.00.075</b>
	DN 110	111	93	6.0	2.8	<b>561.00.110</b>
	DN 120	118	99	6.0	3.0	<b>561.00.120</b>
	DN 125	126	107	6.0	3.2	<b>561.00.125</b>
	DN 145	146	125	6.0	3.6	<b>561.00.145</b>
	DN 160	161	138	6.0	4.0	<b>561.00.160</b>
	DN 175	174	148	6.0	4.5	<b>561.00.175</b>

<sup>1</sup> Production-related dimensional tolerances

<sup>2</sup> Minimum bend radius



**NB**

Standard colour black; other colours available on request.

Product	Nominal diameter	D <sub>o</sub> [mm] <sup>1</sup>	D <sub>i</sub> [mm] <sup>1</sup>	L [m]	R <sub>min</sub> [m] <sup>2</sup>	Cat. no.
Kabuflex R	DN 40	40	32	50	0.35	<b>562.10.040</b>
	DN 50	50	40	50	0.35	<b>562.10.050</b>
	DN 63	64	52	50	0.35	<b>562.10.063</b>
	DN 75	76	62	50	0.35	<b>562.10.075</b>
	DN 90	91	75	50	0.35	<b>562.10.090</b>
	DN 110	111	93	50	0.50	<b>562.10.110</b>
	DN 120	118	99	25	0.50	<b>562.00.120</b>
	DN 125	126	107	25	0.70	<b>562.00.125</b>
	DN 160	161	138	25	0.75	<b>562.00.160</b>
	DN 200	201	172	25	0.80	<b>562.00.200</b>

<sup>1</sup> Production-related dimensional tolerances

<sup>2</sup> Minimum bend radius



**NB**

Standard colour black

Product	Nominal diameter	D <sub>o</sub> [mm] <sup>1</sup>	D <sub>i</sub> [mm] <sup>1</sup>	L [m]	R <sub>min</sub> [m] <sup>2</sup>	Cat. no.
Kabuflex R-UV	DN 110	111	93	50	0.50	<b>562.09.111</b>

<sup>1</sup> Production-related dimensional tolerances

<sup>2</sup> Minimum bend radius

## A broad range of accessories ...



Product	Technical data	Cat. no.
<b>SD coupling</b>	DN 40	<b>566.10.040</b>
	DN 50	<b>566.10.050</b>
	DN 63	<b>566.10.063</b>
	DN 75	<b>566.10.075</b>
	DN 90	<b>566.10.090</b>
	DN 110	<b>566.10.110</b>
	DN 120	<b>566.10.120</b>
	DN 125	<b>566.10.125</b>
	DN 145	<b>566.10.145</b>
	DN 160	<b>566.10.160</b>
	DN 175	<b>566.10.175</b>

<b>SD coupling</b>	DN 200	<b>566.11.200</b>
<b>WD coupling</b>	DN 200	<b>566.11.201</b>



<b>WD profile sealing ring</b>	DN 40	<b>566.19.040</b>
	DN 50	<b>566.19.050</b>
	DN 63	<b>566.19.063</b>
	DN 75	<b>566.19.075</b>
	DN 90	<b>566.19.090</b>
	DN 110	<b>566.19.110</b>
	DN 120	<b>566.19.120</b>
	DN 125	<b>566.19.125</b>
	DN 145	<b>566.19.145</b>
	DN 160	<b>566.19.160</b>
	DN 175	<b>566.19.175</b>
		DN 200



<b>SD end plug</b> to permanently or temporarily seal unused cable conduits at the construction site (sandtight)	DN 40	<b>566.80.040</b>
	DN 50	<b>566.80.050</b>
	DN 63	<b>566.80.063</b>
	DN 75	<b>566.80.075</b>
	DN 90	<b>566.80.090</b>
	DN 110	<b>566.80.110</b>
	DN 120	<b>566.80.120</b>
	DN 125	<b>566.80.125</b>
	DN 145	<b>566.80.145</b>
	DN 160	<b>566.80.160</b>
	DN 175	<b>566.80.175</b>



<b>WD end plug *</b> to permanently or temporarily seal unused cable conduits at the construction site (watertight)	DN 110	<b>566.81.110</b>
	DN 120	<b>566.81.120</b>
	DN 125	<b>566.81.125</b>
	DN 160	<b>566.81.160</b>
	DN 175	<b>566.81.175</b>

\* incl. sealing ring; additional nominal diameters available on request



<b>Kabuflex adapter</b>	DN110/KG 100, spigot (push-fit KG coupling)	<b>566.63.110</b>
	DN160/KG 150, spigot (push-fit KG coupling)	<b>566.63.160</b>



<b>Kabu-Seal pressure sealing ring **</b> for building lead-through	DN 63	<b>566.88.063</b>
	DN 75	<b>566.88.075</b>
	DN 110	<b>566.88.110</b>
	DN 160	<b>566.88.160</b>

\*\* Each set includes an installation manual.

# ... completes the Kabuflex® system



Product	Nominal diameter	Degree	R [m]	L [m]	Cat. no.
<b>SD bend *</b> for small bend radii under tight installation conditions for Kabu- flex S straight length conduits	DN 75	45°	0.75	0.9	<b>566.21.075</b>
		90°	0.75	1.5	<b>566.20.075</b>
	DN 110	45°	0.9	1.0	<b>566.21.110</b>
		90°	0.9	1.8	<b>566.20.110</b>
	DN 120	45°	0.9	1.1	<b>566.21.120</b>
		90°	0.9	1.9	<b>566.20.120</b>
	DN 125	45°	1.0	1.1	<b>566.21.125</b>
		90°	1.0	1.9	<b>566.20.125</b>
	DN 145	45°	1.1	1.2	<b>566.21.145</b>
		90°	1.1	2.2	<b>566.20.145</b>
	DN 160	45°	1.1	1.2	<b>566.21.160</b>
		90°	1.1	2.2	<b>566.20.160</b>
	DN 175	45°	1.1	1.2	<b>566.21.175</b>
		90°	1.1	2.2	<b>566.20.175</b>

\* incl. coupling



Product	Nominal diameter	2 folds	4 folds	6 folds	8 folds	Cat. no.
<b>Spacer</b> for exact spacing during the installation of Kabu- flex conduit systems	DN 75	91...	92...	93...	94...	<b>566 ... 075</b>
	DN 90	91...	92...	93...	94...	<b>566 ... 090</b>
	DN 110	91...	92...	93...	94...	<b>566 ... 110</b>
	DN 120	91...	92...	93...	94...	<b>566 ... 120</b>
	DN 125	91...	92...	93...	94...	<b>566 ... 125</b>
	DN 160	91...	92...	93...	94...	<b>566 ... 160</b>



<b>Wall collar set</b> for completely tight wall lead-throughs	DN 40					<b>566.89.040</b>
	DN 50					<b>566.89.050</b>
	DN 63					<b>566.89.063</b>
	DN 75					<b>566.89.075</b>
	DN 90					<b>566.89.090</b>
	DN 110					<b>566.89.110</b>
	DN 120					<b>566.89.120</b>
	DN 125					<b>566.89.125</b>
	DN 160					<b>566.89.160</b>
	DN 175					<b>566.89.175</b>

Additional accessories available on request!

**NB**

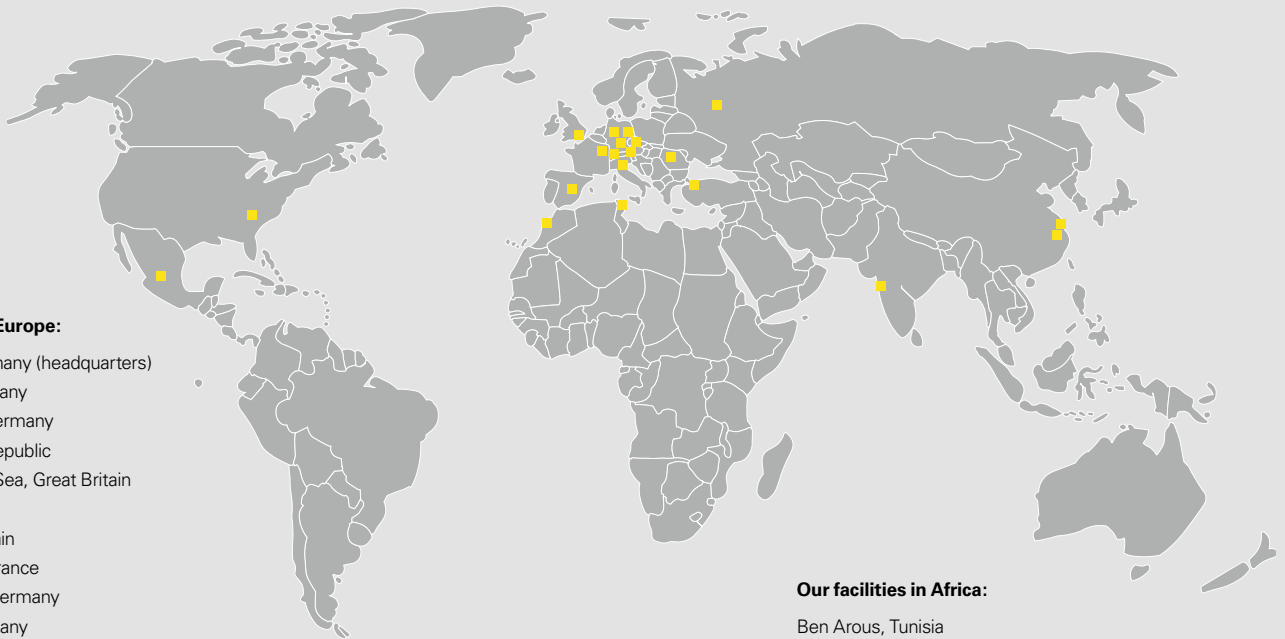
Refer to the relevant standards  
DIN EN 1610 and DWA-A 139 and  
the current version of our detailed  
installation manual for details  
regarding installation.



[www.fraenkische.com](http://www.fraenkische.com)

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FRÄNKISCHE is an innovative, growth-oriented, medium-sized family-owned enterprise and industry leader in the design, manufacturing and marketing of technically superior corrugated pipe systems for drainage, electrical, building technology and industrial applications.

We currently employ about 4,200 people worldwide. Both our many years of experience and expertise in plastics pro-

cessing, our consulting services and the large array of products are highly valued by our customers.

FRÄNKISCHE is a third generation family owned business that was established in 1906 and is now run by Otto Kirchner. Today, we are globally represented with production facilities and sales offices. The proximity to our customers enables us to develop products and solutions

that are perfectly tailored to our customers' needs. Our action and business philosophy focus on our customers and their needs and requirements for our products.

FRÄNKISCHE – Your partner for sophisticated and technologically advanced solutions.