



FRANK Puddle Flanges

The Original





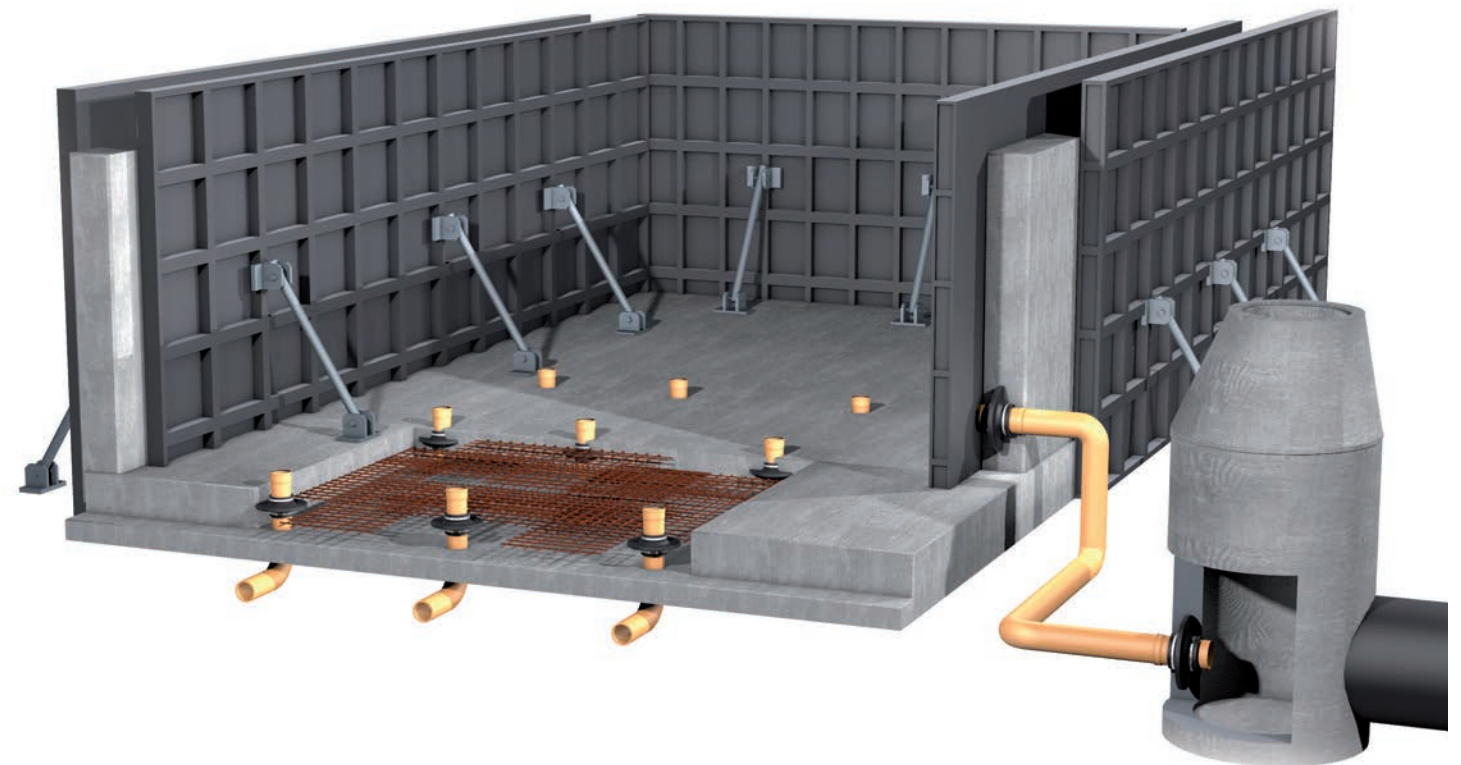
FRANK puddle flanges

The original

In the early 1980s, FRANK developed and patented the FRANK puddle flange, a sealing system in use today in millions of buildings and structures all over the world. The original.

With the FRANK puddle flange, all common pipe types made of steel, plastic, stoneware, concrete and cast iron from d 10 to d 3800 pressure-tight up to 10 bar can be lead through concrete walls, floor slabs and shafts or integrated into them. The system reliably seals against

pressing water or diffusing gases (e. g. radon) or hydrocarbon compounds (oil, gasoline). We also supply puddle flange variants that enable the integration of lightning protection strips and round conductors.



Installation

Quick and easy

Installing a FRANK puddle flange takes only a few steps:

The puddle flange is mounted by hand on the pipe and fastened with the supplied lightning straps as described in the installation instruction. The clamping system can be installed on puddle flanges up to d 500 by a screwdriver.



With Easy-Lock function

The puddle flange installation kits (d 20 up to d 500) come with the self-locking Easy-Lock function. Using this technique the puddle flange can be clamped many times faster. Use of a cordless screwdriver is possible (tightning torque 5 Nm).



Video: Puddle flange assembly
Instructions with
Easy-Lock-function



Video: Puddle flange assembly
Instructions with clamping tool



Protection against radioactive gas

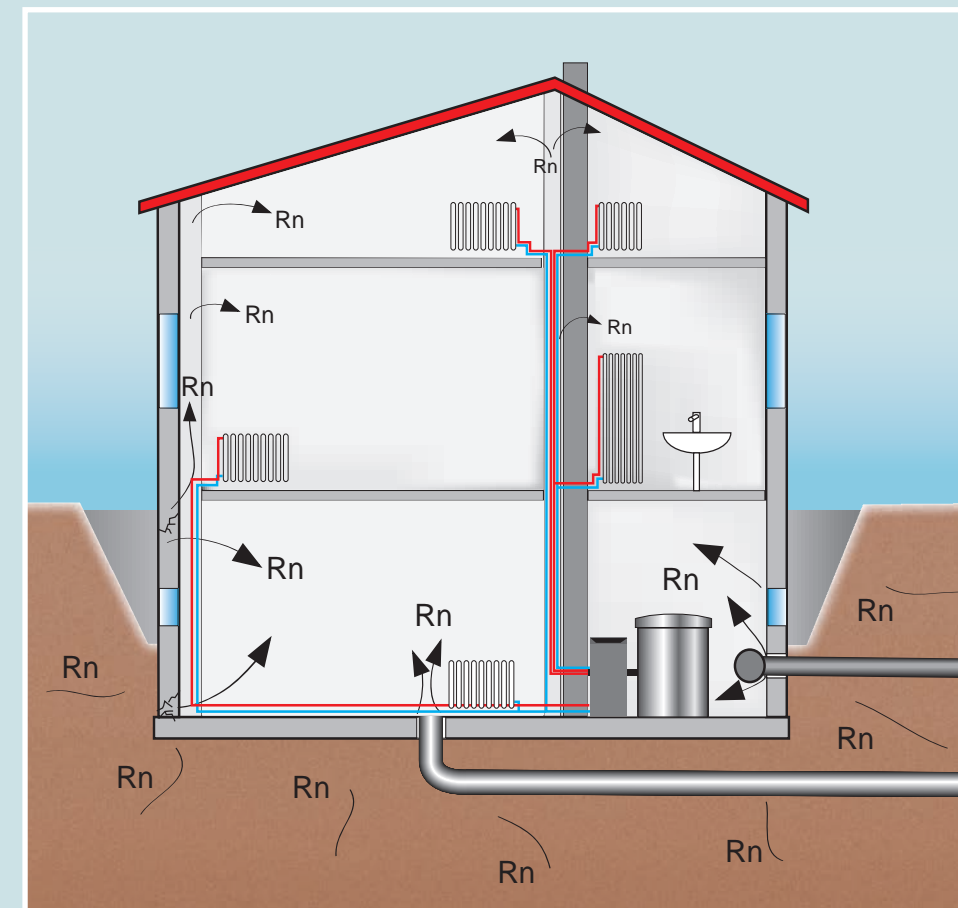
FRANK puddle flange in radon tight version

Slow decay of Uranium and Thorium, regionally abundant in different concentrations in the rock and soil, leads to the emergence of the invisible, smellless and tasteless radioactive noble gas radon. The noble gas radon is hardly reactive. The gas escapes through the upper layers of the soil into the atmosphere and is quickly diluted in the air, so that outside from buildings no health risk has been identified.

But if the gas does invade into the building through joints, cracks, leaky base plate into the cellar or first floor, leakages along cables and pipes it leads to increased concentration of radon which could result in exceeding the recommended limits of Federal Office for Radiation Protection. Tight foundations, massive building structures, and air ventilating measures help reduce the radon

concentrations in buildings.

Both the standard black puddle flange (EPDM) as well as the orange version (NBR), that one also resistant and proof towards hydrocarbon compounds, e.g. oil, gasoline, were successfully tested to be radon-proof.



FRANK puddle flange orange version.

Now also tested by SKZ for chemical resistance for liquid manure and slurry in accordance with DIBt guidelines.



Pressure-tight up to 10 bar!

Safe and versatile

Externally tested

The independent Material Testing Institute Leipzig tested the FRANK puddle flange for its sealing effect then confirming the FRANK puddle flange when professionally installed, embedded in and surrounded by at least 50 mm watertight-concrete – depending on diameter and design – a complete sealing effect at water pressures of 5 bar to 10 bar.

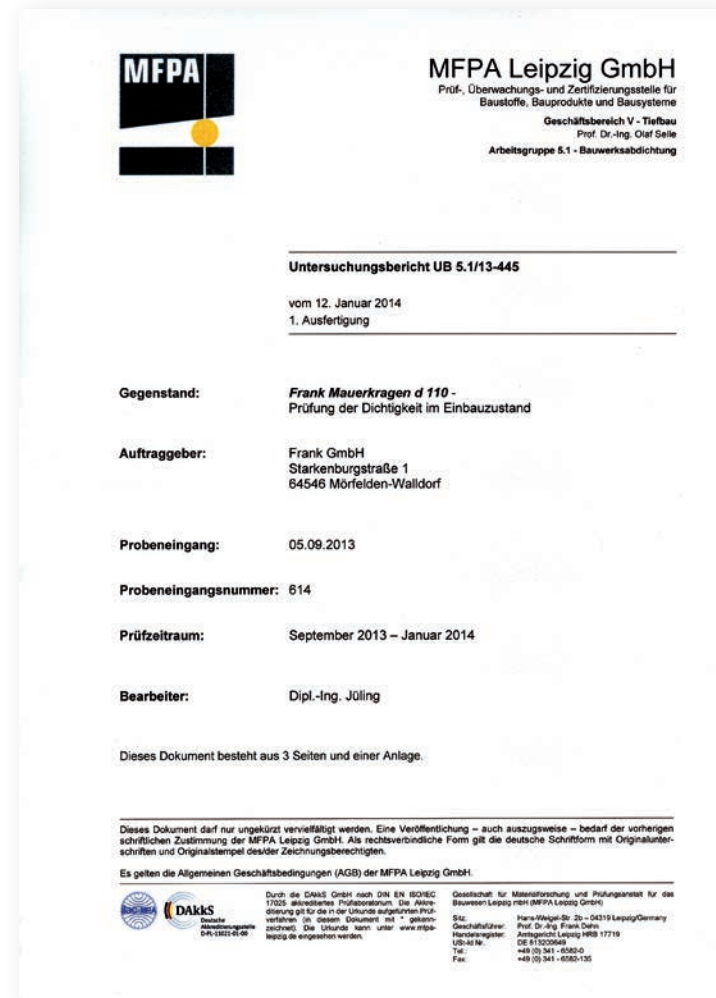
Characteristics

The EPDM material used is resistant to a great number of acids, alkalines and resistant to weathering and ozone. The FRANK puddle flange made of NBR is used for e. g. oil and gasoline as hazardous media.

Density	1,030 kg /m ³
Shore hardness	40° Sh ± 3
Tensile strength	10 N/mm ²
Elongation at fracture	750 %
Tear propagation strength	3.9 N/mm ²
Temperature resistance	-50...+140 °C
Deformation under pressure (72 h, 70 °C)	32 %

Choice of pipes

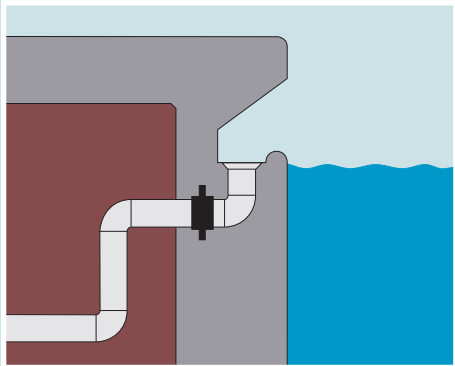
Due to its high flexibility the FRANK puddle flange is suitable for all pipelines made of plastic, steel, stone ware, concrete, cast iron, fibre cement, GFRP. The FRANK puddle flange is available for all commercially convenient outer diameters.



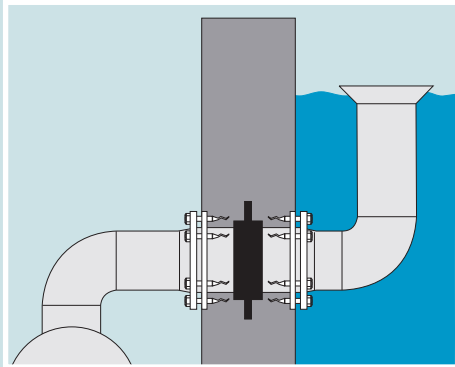
Successfully installed 1.5 million times throughout the world

Examples of applications

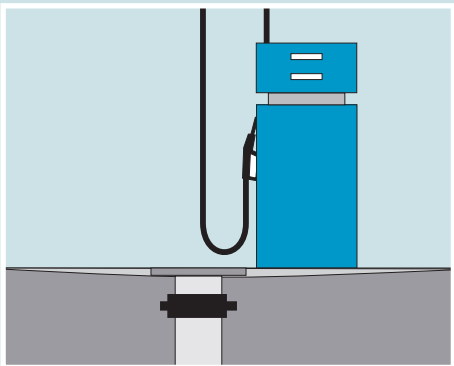
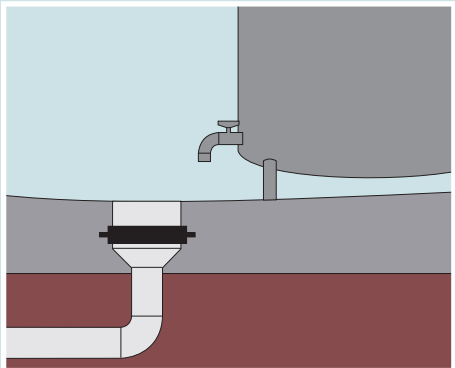
- Swimming pool drain pipes in walls and foundation plates



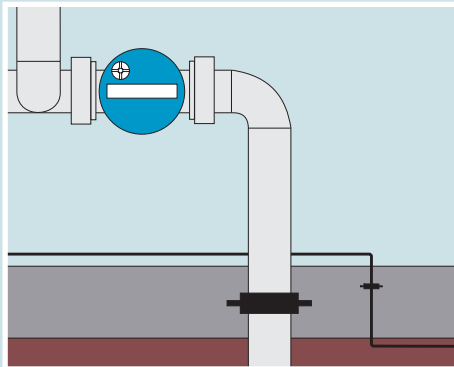
- Pre-fabricated wall lead-through with flange connectors on both sides for easy installation into formwork



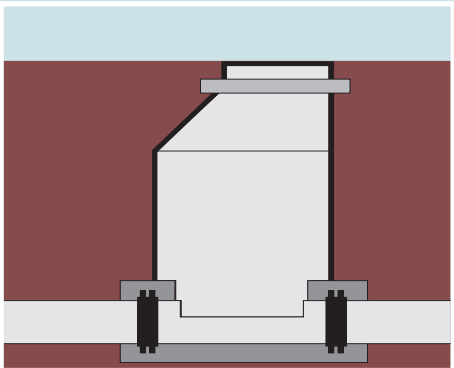
- Floor drain in industrial building



- FRANK puddle flange in oil- and gasoline resistant NBR for use at e. g. gas stations.



- House lead-ins for water supply and discharge pipes as well as for lightning protection earthing strips and ground wire.



- Integration of pipes of any outside diameter into concrete manholes

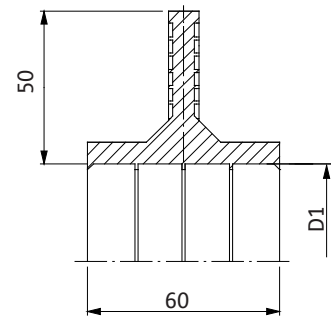
Product range

Puddle flange installation kit (d 20 to d 500)

Up to d 315 tight up to 100 m water column.
From d 355 up to d 500 tight up to 50 m water column:

Puddle flange installation kit consisting of:

- 1x puddle flange
- 2 resp. 3x stainless steel clamping bands (matching flange dimensions) with Easy-Lock-function



d _{pipe} [mm]	Ø range of installation kit [mm]	D ₁ [mm]	Weight [kg/unit]	Installation kit product no. 90 954 ...
20	18-24	16	0,20	0020 01
25	23-29	21	0,25	0025 01
32	31-37	29	0,16	0032 01
40	40-46	38	0,20	0040 01
50	50-56	48	0,24	0050 01
63	62-69	60	0,26	0063 01
75	73-82	71	0,30	0075 01
90	86-97	84	0,34	0090 01
100	98-109	95	0,36	0100 01
110 ¹⁾	108-121	105	0,40	0110 01
125 ¹⁾	123-136	120	0,46	0125 01
140	136-155	132	0,50	0145 01
160 ¹⁾	158-177	154	0,56	0160 01
180	177-197	173	0,60	0180 01
200 ¹⁾	199-224	195	0,70	0200 01
225	220-249	215	0,78	0225 01
250	250-279	245	0,84	0250 01
280	280-314	275	0,86	0280 01
315	315-354	310	1,06	0315 01

From d 355 the big puddle flange will be delivered with 3x stainless steel clamping bands

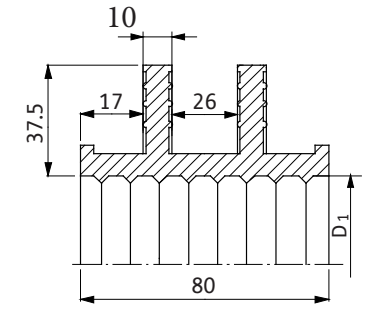
355	355-399	310	1,32	0355 01
400	400-449	353	1,66	0400 01
450	450-499	400	1,80	0450 01
500	500-559	448	2,15	0500 01

Other dimensions available on request.
All dimensions also available in NBR.
1) NBR version available in stock.

Puddle flange (from d 560)

Tight up to 80 m water column.
Puddle flange and clamping band as individual components

- Puddle flange (product no. 90 954 ...)
- Galvanized clamping band, 30 m roll (product no. 97 955 0031 00)
- Stainless steel fastener for clamping band (product no. 95 957 0000 00), 3 steel fasteners per puddle flange
- Clamping tool available for rent or purchase (product no. 95959 0000 00)



d _{pipe} [mm]	Ø range [mm]	D ₁ [mm]	Clamping band length per puddle flange L [m]	Weight [kg/unit]	Product no. 90 954 ...
560	560-629	505	12.3	2.30	0560 00
630	630-709	571	13.8	2.55	0630 00
710	710-799	648	16.2	2.64	0710 00
800	800-899	733	17.1	3.22	0800 00
900	900-999	828	18.0	3.60	0900 00
1000	1000-1150	923	19.8	3.88	1000 00
1200	1200-1350	1113	23.7	5.64	1200 00
1400	1400-1550	1303	28.0	6.44	1400 00
1600	1600-1750	1490	31.9	7.25	1600 00
1800	1800-1990	1680	38.0	8.20	1800 00

Other dimensions available on request.



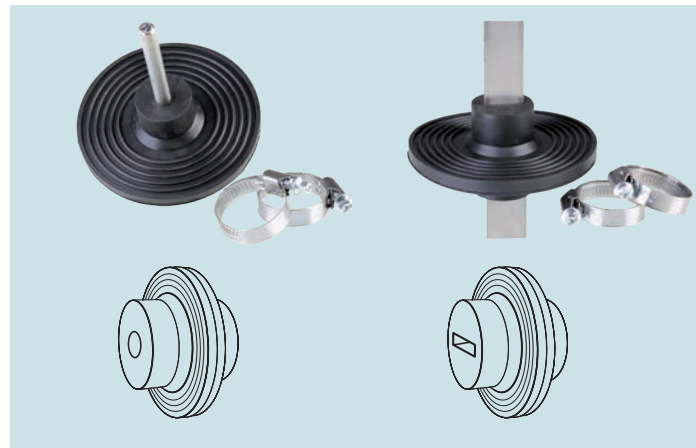
Product range

FRANK Puddle flange installation kit for lightning protection earthing strips and ground wire

Tight up to 60 m water column. For lightning protection earthing strips and ground wire. The puddle flange installation kit comes with two matching stainless steel clamping bands.

- 1x puddle flange
- 2x stainless steel clamping bands (matching flange dimensions)

[mm]	Product no. 90 954...
for round steel from d 8 to 10 mm	0010 01
for flat steel from 3 to 3,5 x 30 mm	0003 01

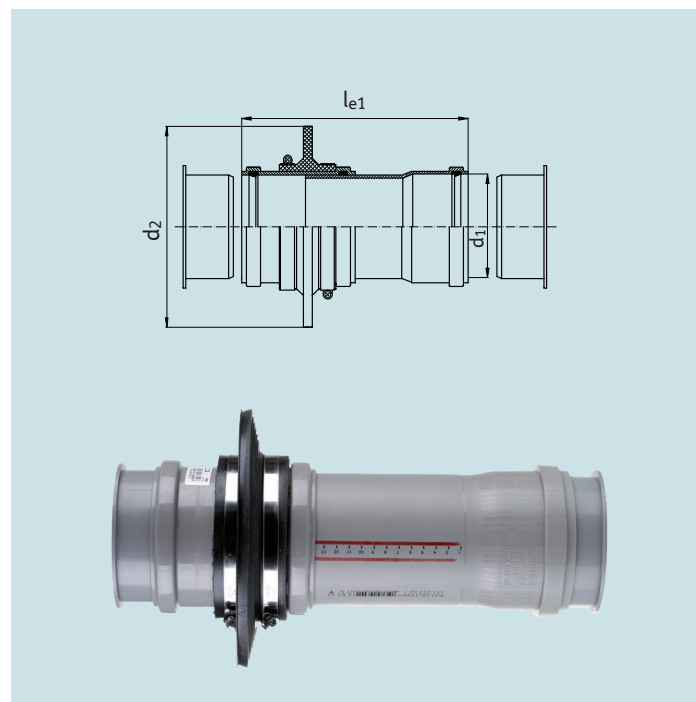


FRANK wall installation kit

The FRANK wall installation kit is designed for the installation of standard sewerage and HT pipes in concrete walls and floors. The wall installation kit is a pre-assembled unit for the flush integration into the shuttering for concrete walls. By shortening the centre section, the wall installation kit can be adjusted to match the wall thickness. For very thick walls, the kit can be extended with a standard sewerage/HT pipe section. The system is tight up to 100 m water column.

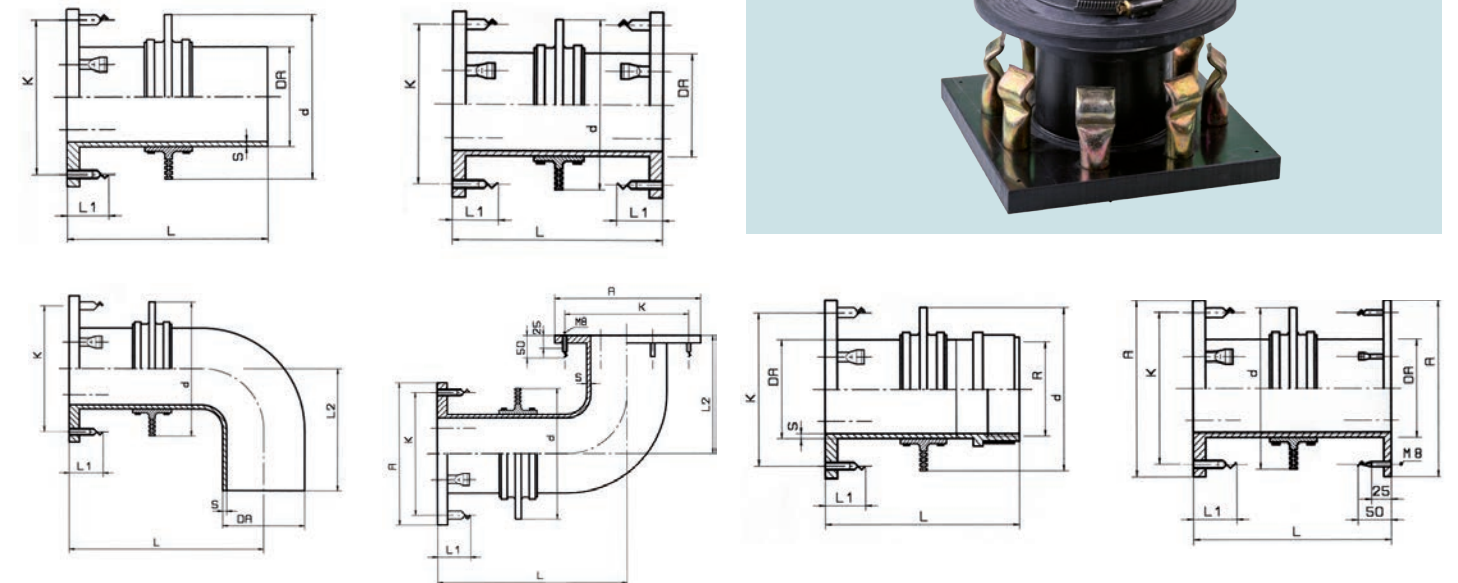
d ₁ [mm]	d ₂ [mm]	l _{e1} [cm]	Product no. 90 970 ...
110	216	21 - 30 cm	0110 00
160	268	26 - 33 cm	0160 00

Other dimensions available on request.
Other lengths available on request.



FRANK wall lead-through kit with flange connections

The FRANK wall lead-through kit is a tried and tested method for the safe and long-lasting installation of pipes through walls and floors. Made in PE or PP, they meet the requirements for swimming pools and industrial pipeline systems. The pre-assembled kit can be easily installed in the wall or foundation plate.

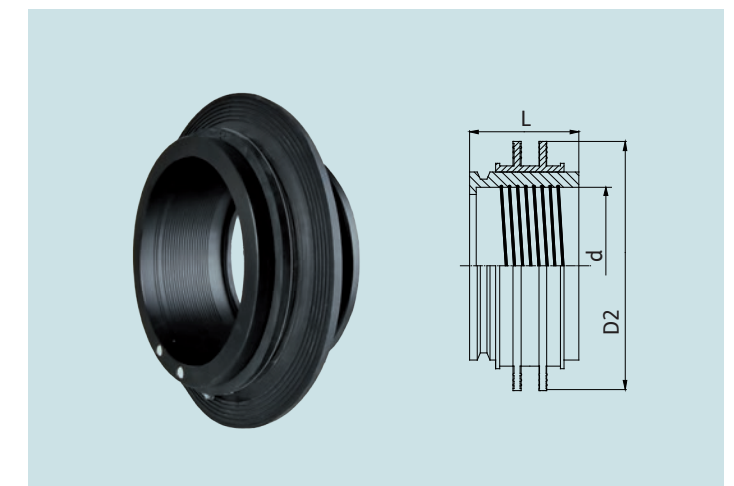


FRANK manhole connection socket SAM type 1

- Tight up to 100 m water column, depending on diameter
- For tight connections of PE pipes in concrete manholes
- With integrated electrofusion wire for the welding of SAM manhole connection socket to the PE pipe

d [mm]	DN [mm]	L [mm]	D ₂ [mm]	Tightness	Prod. no. 25 178
160	150	135	297	100 m water column	0160 17
225	200	135	372	100 m water column	0225 17
280	250	135	445	100 m water column	0280 17
355	300	135	515	80 m water column	0355 17
450	400	135	573	80 m water column	0450 17
560	500	135	699	80 m water column	0560 17

Other dimensions available on request.



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