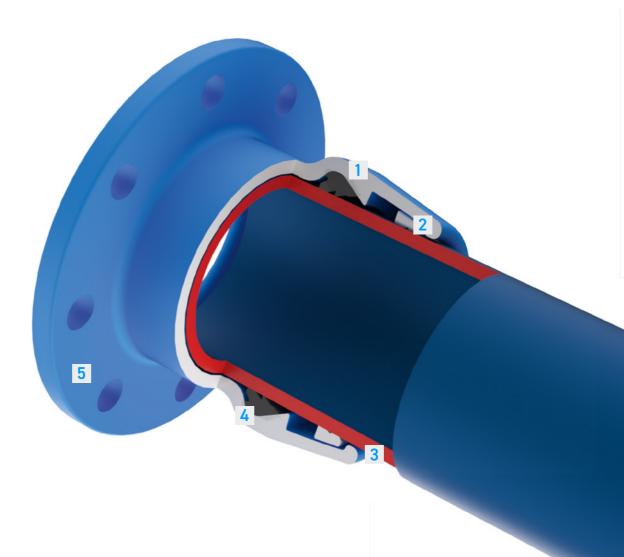


### A robust design ensures secure connections



## Best materials for junctions in the pipe network

- Body. Extremely robust out of ductile cast iron, the mechanically superior material for junctions in the pipe network.
- **3S-gasket** from the decadesproven Frischhut KS program. Separating the sealing function from the clamping ring increases the safety and reliability of the system.
- Clamping ring. For the simple, secure, and quick-to-assemble locking of the inserted pipe without removing the oxide layer or using special tools.
- Frischhut Epoxy. Superior protection and longer product service life based on GSK requirements. Frischhut was the first manufacturer to introduce an epoxy powder without BPA labeling requirements Resicoat R8, currently the highest standard for products in contact with drinking water.
- Pure opening without external rubber rings. To inspect the connection and to avoid unnecessary materials. This minimizes environmental impact. Furthermore, cast iron is also 100 % recyclable at the end of its service life.

# Customer benefits

# PEZ – for quick and easy PE pipe connections in all weather conditions



No special tools or equipment necessary



Installation in all weather conditions



Iron strong best mechanical properties



Fast assembly



#### Trust for over 30 years

In collaboration with drinking water suppliers, we developed PEZ around 30 years ago: a simple, secure, and quick-to-assemble push-in connection for PE piping systems.



#### Questions?

Our experts are happy to assist with planning and product selection.

sales@frischhut.de
www.frischhut.de/en/contact

#### **Ductile cast iron - proven quality**

We use ductile cast iron, the material with the best mechanical properties for junctions in the pipeline network. Cast iron can be fully recycled after its service life and be used to manufacture new high-quality products.

#### Secure connections - no tools, no stress.

The primary customer requirement is a screwless, self-locking system that can be installed without the need for special tools.

The mechanical connection can be made in any weather condition or with residual water in the pipe, even when welding is not an option.

# Assembly instructions

### **Assembly instructions**



Remove the protective cap, then visually inspect the fitting socket and pipe ends for contamination or damage. Important: The edge of the gasket and the clamping ring teeth must point toward the inside of the socket. Contaminated (dirty) components should be cleaned and damaged pipe ends must be cut back and chamfered at a 15° angle to a length of approximately 15 mm.



The required insertion depth [L] must be marked on the pipe end before installation (see table). Use drinking water-approved lubricants and apply a thin layer exclusively (!) on the gasket.



Pull back the pipe to activate the restraining mechanism [R]. This also serves as a quality check during assembly.



Insert the pipe fully into the socket until it stops.

Ø dn	63 mm	75 mm	90 mm	110 mm	125 mm	160 mm	180 mm	225 mm	250 mm
[L]	112 mm	117 mm	122 mm	137 mm	147 mm	165 mm	175 mm	178 mm	192 mm

Note: When using PE pipe class SDR 17, a liner should be used for reinforcement due to the low wall thickness!

# Product tests show the superior quality for critical junctions in the piping network



The mechanical advantages of the cast iron fittings are evident on the test bench where they can withstand testing pressures well beyond typical operating conditions.

Countless tests and user trials guarantee an operating pressure of 16 bar.

You will receive exceptionally strong products of highest quality for the critical junctions in your piping network.

# Available products

## **Available products**

### All common installations can be realized by a compact product range

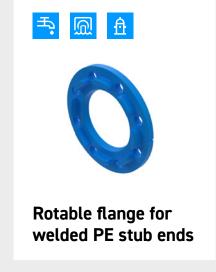




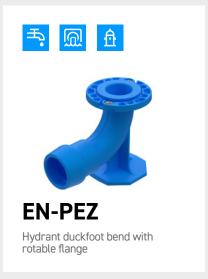












Some installation situations are so special that the PEZ program is not sufficient. For such situations we offer a wide range of KS fittings as an addition. Suitable for all common plastic pipes.

For details, visit our website at www.frischhut.de/en/products

### Find. Order. Connect.

The corresponding item numbers for each pipe diameter (dn) are listed in the overview. All technical details can be found in the online product catalog: For details, visit our website at www.frischhut.de/en/products

MMD-PEZ		MMK-PEZ 45°		E-PEZ			GPE-F   SDR 11			GPE-F   SDR 17				
									40/50	520	00007	70		
					50/63	5270	001593		50/63	520	00007	71		
									80/63	5200000787				
					65/75	5270	001594		65/75	520	00007	72		
90	B185900811	90	0 B189200811		80/90 52700		001595		80/90	5200000773				
110	B185901011	110	10 B189201011		100/110	00/110 527000		001596		5200000774		100/110	5200000781	
125	B185901021	125	25 B189201051		100/125 01060403		040308		100/125 52		5200000775			
160	B185901211	160	60 B189201211		150/160	/160 5270001598			150/160	5200000776		150/160	0 n.a.	
180	B185901221	180	80 B189201251		150/180				150/180	5200000778		150/18	0 5200000782	
225	B185901411	225	225 B189201411		200/225	52700 52700	5270001600 (PN 10) 5270001601 (PN 16)		200/225	5200000779 (PN 10) 5200000780 (PN 16)		200/22	5 5200000783	
			200/250 5270001602 (PN 10) 5270001603 (PN 16)											
									300/315	520	00007	'84 (PN 10)	300/31	5 5200000785
GPE-i			R	Rotable flange		MMA-		-PEZ		EN	I-PEZ DN 80	EN	I-PEZ DN 100	
80/6		37												
80/9	0 52000007	36	80/90	52000	000586		90/80		001604		90	5270001617	'	
100/	100/110 0106470030		100/110	5200000587		110/80 110/100				110	5270001621	110	5270001618	
100/	100/125 0106470031		100/125	52000	5200000588		125/80 125/100	5270001606 5270001608			125	5270001622	2 125	5270001619
125/160 0106470032		32									160	5270001624	4	
150/	150/160 0106080942		150/160	5200000589		160/80 160/100 160/150	100 5270001611							
150/	150/180 0106470034		150/180	52000	5200000590		180/80 180/100	5270001610 5270001612			180	5270001623	3 180	5270001620
			200/200	52000	00592 (PI	N 10)								
200/225 0106470035		35	200/225	52000 52000	00000591 (PN 10) 00000593 (PN 16)			5270001614 5270001615 5270001616 (PN10		110)				
200/	250 010647003	36	250/250		00594 (PN 000596 (PN									
			250/280	52000 52000	00595 (PN 00597 (PN	N 10) N 16)								
			300/315	52000 52000	)00598 (PN )00599 (PN	N 10) N 16)								i-PEZ
			350/355		00600 (PN 00601 (PN								2"/6 FB/6	3 B180200411 63 B180200420

# Pipe repairs

# Cracks in old plastic pipes can be repaired using U-KS pieces



Old plastic pipes often become brittle and may show longitudinal cracks or other defects. In such cases, it is recommended to replace an entire pipe section with a new one.

Frischhut offers a solution using U-KS fittings, as they can be fully slid onto the pipe and do not contain any built-in restraining mechanism.

#### Repair procedure step by step

- Carefully cut out the pipe section to be replaced.
- Prepare a new, suitable pipe section. For PVC pipe systems, this new section is often made out of a PE pipe. The Frischhut U-KS is approved for both materials.
- Clean all pipe ends and sealing rings thoroughly, chamfer generously if necessary, and lubricate well with a suitable lubricant or silicone spray approved for drinking water use.

Caution: Work particularly carefully here, as depending on the pipe, sliding the fittings may be very difficult. If sliding-on is not possible, the pipe can be reworked or a Frischhut pipe sealing clamp (RDS-12) without restraining mechanism can be used instead of the U-KS.

- 4 Slide the Frischhut U-KS fittings onto the old pipe ends.
- Insert the new, suitable pipe section and slide the U-KS fittings onto it.
- If necessary, secure with Frischhut restraining-clamps to ensure a restrained connection (option with screwed restraining-clamps in red or restraining clamps with wedges, type SL in blue).



#### The following 5 elements form the basis for Frischhut Epoxy



## Cast-iron products of very high quality

The best coating can only be applied to excellent castings. This is ensured by our foundry and coating experts.



#### Reliable process

Our robot-controlled fluidized bed sintering process (EWS) guarantees consistently high quality – precise and reliable at all times.



## Decades of experience

Our experts have decades of experience and know-how in manufacturing and further development.



#### Strict quality control

Our processes are not only monitored internally but also by an accredited testing institute. This ensures that you receive only the best.



#### **GSK** quality seal

Certified excellence: Our products meet the strict requirements of the Quality Assurance Association for Heavy-Duty Corrosion Protection (GSK) and exceed them. For years, we have used the Resicoat R8 powder without BPA labeling requirement – the highest standard for products in contact with drinking water.

## \*FRISCHHUT