GF Piping Systems

Technical Catalogue

PRIMOFIT

Compression Fittings and Repair Systems


GF Piping Systems
+GF+
PRIMOFIT
Quick and easy assembly!

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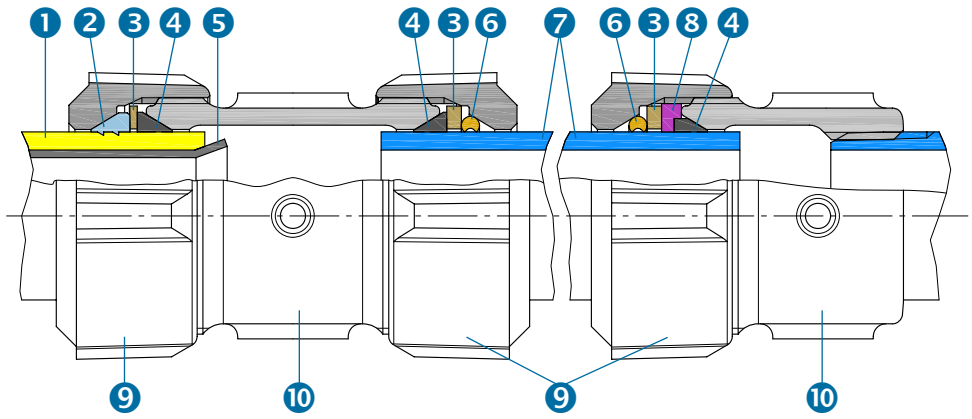
+GF+

1 The PRIMOFIT System

1.1 Features

- PRIMOFIT compression fittings are preassembled and ready for installation, no disassembly required
- Minimal pipe end machining
- Shear proof and pull out resistant connection, fixing of the pipe is not necessary
- Made of malleable cast iron, with hot-dip galvanized and/or black finish
- Low assembly costs
- No special tools required
- Malleable cast iron body sustainably manufactured from 100% recycled metal. More than 35% of the production energy are ecologically from our own hydropower and photovoltaic power plants. Green Energy shares are being steadily expanded.
- The angular deflection of the pipe in a PRIMOFIT connection is up to 3°. This results in a permissible maximum axial deviation of 6° for two pipes connected by a PRIMOFIT compression coupling.
- Detachable compression connection
- Compact design - minimum space required
- Outer contours make shrink tubing possible
- Longitudinally electrically conductive, suitable for cathodic corrosion protection and equipotential bonding

1.2 Design



G1
PRIMOFIT system

1. PE pipe
2. Locking ring for PE pipe
3. Washer
4. Rubber gasket
5. Stiffener
6. Locking ring for steel pipe
7. Steel pipe
8. Graphite ring
9. Nut
10. Fitting body

1.3 Limits of use

T1 **Limits of use**

	Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket	Surface / Material PRIMOFIT
Steel pipe	Fuel gases (incl. H_2)[2]	10[3]	70	Yellow	NBR	black & galvanised
	System water[4]	16	80			
	Compressed air	16	80			
	Oil	16	80			
	Drinking water (cold <25°C)	16	25	Blue	EPDM	galvanised
	Drinking water (heated >25°C)	16	95			stainless steel[9]
	System water[4]	16	95			
	Compressed air	16	95			galvanised
	Heating water / steam	10	150	Green	FKM	black
	Water - Glycol[5]	10	150			
	Compressed air	16	150			galvanised
	Fuels[6]	10	40			
	Fuel gases (incl. H_2)[2]	5	60	Red	NBR+Graphite[7]	galvanised
PE / PE-Xa pipe	Fuel gases (incl. H_2)[2]	10[8]	40	Yellow	NBR	black & galvanised
	System water[4]	16	40			
	Drinking water (cold <25°C)	16	25	Blue	EPDM	galvanised
	Drinking water (heated >25°C)	16	40			stainless steel[9]

1 The colour coding on the packaging indicates the gasket material.
2 Natural gas NPG| Liquefied Petroleum Gas LPG | Hydrogen up to 20% vol.
In Germany, only NBR+Graphite (FIREJOINT) is permitted inside buildings.
3 Max. 5 bar for threaded connection
4 PRIMOFIT **FKM** in black version must be used for heating systems.
5 includes water in ventilation and air conditioning systems. Especially when using antifreeze containing glycol, the use of black fittings with FKM gasket is recommended.
6 Diesel and leaded as well as unleaded petrol.
7 **FIREJOINT (NBR+Graphite)** is the fire resistant version, approved for gas applications inside buildings.
8 10 bar for PE100 / 8 bar for PE-Xa / 5 bar for threaded connection
9 For new installations. In the case of repairs and extensions of galvanised piping, which had no corrosive or hygienic problems in the past, the galvanised version is suitable.

1.4 Overview - compatible pipe diameters

T2 **Relation of compression fitting dimension and outer pipe diameter DA for compression fittings and smallest internal diameter**

Nominal width DN PRIMOFIT dimension	10 ⅜	15 ½	20 ¾	25 1	32 1¼	40 1½	50 2	65 2½	80 3	100 4
Steel pipe D [mm]	17,2	21,3	26,9	33,7	42,4	48,3	60,3	76,1	88,9	114,3
Tolerance range [mm]	16,7 ... 17,5	21,0 ... 21,8	26,5 ... 27,3	33,3 ... 34,2	42,0 ... 42,9	47,9 ... 48,8	59,7 ... 60,8	75,3 ... 76,6	88,0 ... 89,5	113,1 ... 115,0
Butt weld steel tubes for pressure purposes[1] D [mm] (incl. ±tolerance) [mm]	-	20,0 ±0,5	25,0 ±0,5	31,8 ±0,5	38,0 ±0,5	44,5 ±0,5	51,0 ±0,5 57,0 ±0,5 63,5 ±0,6	70,0 ±0,7	-	-
PE / PE-Xa-pipe Da [mm]	-	20	25	32	40	50	63	-	-	-
Tolerance range [mm]		20,0 ... 20,3	25,0 ... 25,3	32,0 ... 32,3	40,0 ... 40,4	50,0 ... 50,4	63,0 ... 63,4			
Lead pipe [mm]	-	18,3 ... 21,9	23,9 ... 27,4	27,3 ... 30,9 30,9 ... 34,4	36,5 ... 37,6 39,6 ... 43,1	45,8 ... 46,9 47,5 ... 50,7	53,1 ... 55,4 56,5 ... 57,5 60,4 ... 63,8	-	-	-
Min. bore[2] [mm]	7,9	11,6	16,6	22,7	30,9	36,3	46,8	61,5	72,2	95,3
Thread size [inch]	⅜	½	¾	1	1¼	1½	2	2½	3	4

1 Only available as gasket spare pack. When using spare packs for butt weld steel tubes, with D=63.5 mm, a special compression body is needed, that is to say, the tube **cannot** be combined with standard compression fitting dimension 2!
2 corresponds to the smallest internal diameter of the male adaptor. For all other compression fitting types, the smallest internal diameter is the internal diameter of the pipe.

1.5 Terms and abbreviations

T3
Terms and abbreviations

Term	Explanation
Steel	for connection to steel pipes
PE/PE-Xa	for connection to PE/PE-Xa pipes
Lead	for connection to lead pipes
Dim. PE	Dimension polyethylen pipe
Dim. St	Dimension steel pipe
Dim. Pb	Dimension lead pipe
Dim. Rp	Dimension parallel female thread acc. to EN 10226-1 and/or ISO 7-1
Dim. R	Dimension taper male thread acc. to EN 10226-1 and/or ISO 7-1
Code	Georg Fischer item code
GP	Quantity per carton
Weight	Piece weight in kg
NBR	Nitrile butadiene rubber
EPDM	Ethylene propylene diene monomer rubber
FKM	Fluorinated propylene monomer rubber (fluoro elastomer)
PE-Xa	Peroxide cross-linked polyethylene
POM	Polyoxymethylene
SDR	Pipe diameter / wall thickness ratio (Standard Dimension Ratio)
S	Pipe series
D	Biggest fitting diameter
L	Overall length (face-to-face dimension)
x	Insertion depth of the pipe

1.6 Comments to the product range section

Technical data and remarks are given at the beginning of each product range section.
Please consider working conditions.

The technical data given in this publication are for general information purpose only.
They imply no warranty of whatever kind. Subject to modifications.
Please consult our general terms and conditions of supply.

2 PRIMOFIT, galvanised, for steel pipe

The PRIMOFIT is a compression fitting with full end-load capability. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression fitting. This compression fitting according to EN 10344 is used to connect hot-dip galvanised steel pipes according to EN 10255 and EN 10220 with the standardised outside diameters according to ISO 65.

Spare packs (sealing kits)
Spare packs are available for some dimensions of butt weld steel tubes for pressure purposes of series 2 and 3.
➨ Chapter. [5] ‚PRIMOFIT spare packs for threaded- and butt weld tubes‘

PRIMOFIT Stainless Steel
The PRIMOFIT stainless steel compression fitting is designed for hot water pipes that are made of hot-dip galvanised steel. All media-contacting materials (body and elastomer gasket) comply with the current valid drinking water regulations.
➨ Chapter [7] ‚PRIMOFIT Stainless Steel for steel- and PE/PE-Xa pipe‘

2.1 Pipe specification

T4
Pipe specification
Steel/EN 10255
Steel/EN 10220-S1

Steel/EN 10255 Steel/EN 10220-S1		
Dimension [inch]	D [mm]	Tolerance range [mm]
⅜	17,2	16,7 – 17,5
½	21,3	21,0 – 21,8
¾	26,9	26,5 – 27,3
1	33,7	33,3 – 34,2
1¼	42,4	42,0 – 42,9
1½	48,3	47,9 – 48,8
2	60,3	59,7 – 60,8
2½	76,1	75,3 – 76,6
3	88,9	88,0 – 89,5
4	114,3	113,1 – 115,0

D Nominal outside diameter of steel pipe

2.2 Material

Body: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➨ Tab. [T5].
Corrosion protection by hot dip galvanising: according to EN 10344.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➨ Chapter [14-17] ‘General product information’

2.3 Application PRIMOFIT steel pipe, galvanised

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

T5
Limits of use

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Fuel gases (incl. H_2)[2]	10[3]	70	Yellow	NBR
System water[4]	16	80		
Compressed air	16	80		
Oil	16	80		
Compressed air	16	150	Green	FKM[5]
Fuels[6]	10	40		

1 The colour coding on the packaging indicates the gasket material.
2 Natural gas NPG| Liquefied Petroleum Gas LPG | Hydrogen up to 20% vol.
In Germany, only NBR+graphite (FIREJOINT) is permitted inside buildings.
3 Max. 5 bar for threaded connection
4 PRIMOFIT **FKM** in black version must be used for heating systems.
5 FKM gaskets **are not** useable for drinking water installations and fuel gases!
6 Diesel and leaded as well as unleaded petrol.

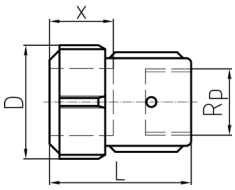
Important information
When installed under ground (compression joint is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).

2.4 Certificates PRIMOFIT steel pipe, galvanised

T6
Certificates PRIMOFIT steel pipe, galvanised

Country	Institute		Application	Certificate
AT	ÖVGW	ÖVGW GEPRÜFT	Gas steel pipe	G 2.515
DE	DVGW	DVGW CERT	Gas steel pipe	DG-4502CN0373
			Gas steel- & PE/PE-Xa pipe	DG-7521BP5519
CH	SVGW	SVGW SSIGE	Gas steel- & PE/PE-Xa pipe	05-045-6
NL	KIWA GASTEC	GASTEC Qa	Gas steel pipe	AR 91 Q 96/086, Nr. 56585
			Gas PE/PE-Xa Pipe	AR 70 Q 96/086, Nr. 56584
	KIWA GASTEC H2		Hydrogen ready steel pipe	AR 214 Q96/086, Nr. 107696
			Hydrogen ready PE/PE-Xa pipe	AR 214 Q96/086, Nr. 107695
UK	BSI KITEMARK		Gas PL3	KM 539621 (PL3)
IT	KIWA UNI	kiwa UNI	Gas & drinking water steel pipe	KIP102154

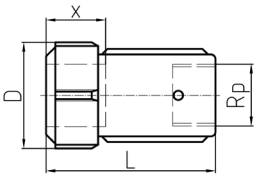
* Dim. 4



PRIMOFIT Female Adaptor galvanised for steel pipe

Internal thread Rp according to EN 10226-1
* Flange design

	Dim. St (inch)	Dim. Rp (inch)	NBR Code	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	⅜	⅜	**775 212 050**		30	0.227	45	56	30 - 34
	½	½	**775 212 051**	**775 218 051**	30	0.227	45	60	30 - 34
	¾	¾	**775 212 052**	**775 218 052**	25	0.302	51	63	30 - 34
	1	1	**775 212 053**	**775 218 053**	15	0.369	59	68	30 - 34
	1 ¼	1 ¼	**775 212 054**	**775 218 054**	10	0.520	68	72	30 - 36
	1 ½	1 ½	**775 212 055**	**775 218 055**	10	0.600	75	74	32 - 38
	2	2	**775 212 056**	**775 218 056**	5	1.120	96	83	36 - 42
	2 ½	2 ½	**775 212 057**	**775 218 057**	3	2.560	119	138	65 - 75
	3	3	**775 212 058**	**775 218 058**	2	3.000	132	148	65 - 75
*	4	4	**775 212 059**		1	5.300	178	200	65 - 75

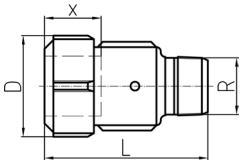


PRIMOFIT Female Adaptor long galvanised for steel pipe

The long Female Adaptor enables the insertion or sliding over of two pipe thread lengths. This allows the installation between two fixed points.
Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
½	½	**775 212 951**	30	0.227	45	80	30 - 34
¾	¾	**775 212 952**	25	0.350	51	78	30 - 34
1	1	**775 212 953**	15	0.370	59	88	30 - 34
1 ¼	1 ¼	**775 212 954**	10	0.520	68	99	30 - 36

* Dim. 4

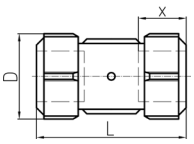


PRIMOFIT Male Adaptor galvanised for steel pipe

External thread R according to EN 10226-1
* Flange design

	Dim. St (inch)	Dim. R (inch)	NBR Code	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	⅜	⅜	**775 202 050**		25	0.230	45	70	30 - 34
	½	½	**775 202 051**	**775 208 051**	25	0.234	45	74	30 - 34
	¾	¾	**775 202 052**	**775 208 052**	20	0.308	51	81	30 - 34
	1	1	**775 202 053**	**775 208 053**	10	0.421	59	90	30 - 34
	1 ¼	1 ¼	**775 202 054**	**775 208 054**	10	0.554	68	94	30 - 36
	1 ½	1 ½	**775 202 055**	**775 208 055**	5	0.648	75	94	32 - 38
	2	2	**775 202 056**	**775 208 056**	5	1.120	96	106	36 - 42
	2 ½	2 ½	**775 202 057**	**775 208 057**	3	2.720	119	173	65 - 75
	3	3	**775 202 058**	**775 208 058**	2	3.560	132	186	65 - 75
*	4	4	**775 202 059**		1	5.500	178	212	65 - 75

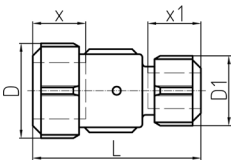
* Dim. 4



PRIMOFIT Coupling short galvanised equal for steel pipe

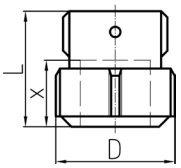
* Flange design

	Dim. (inch)	NBR Code	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	⅜	**775 102 050**		25	0.373	45	85	30 - 34
	½	**775 102 051**	**775 108 051**	25	0.346	45	85	30 - 34
	¾	**775 102 052**	**775 108 052**	20	0.436	51	90	30 - 34
	1	**775 102 053**	**775 108 053**	15	0.588	59	96	30 - 34
	1 ¼	**775 102 054**	**775 108 054**	10	0.688	68	96	30 - 36
	1 ½	**775 102 055**	**775 108 055**	5	0.840	75	100	32 - 38
	2	**775 102 056**	**775 108 056**	5	1.603	96	112	36 - 42
	2 ½	**775 102 057**	**775 108 057**	2	3.650	119	185	65 - 75
	3	**775 102 058**	**775 108 058**	2	4.480	132	191	65 - 75
*	4	**775 102 059**		1	6.600	178	216	65 - 75



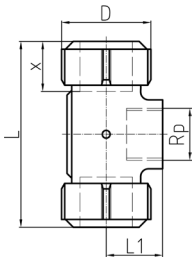
PRIMOFIT Coupling short galvanised reducing for steel pipe

Dim. (inch)	NBR Code	GP	Weight (kg)	D (mm)	D1 (mm)	L (mm)	x (mm)	x1 (mm)
¾ - ½	**775 102 061**	20	0.340	51	45	90	30 - 34	30 - 34
1 - ½	**775 102 062**	15	0.520	59	45	97	30 - 34	30 - 34
1 - ¾	**775 102 063**	15	0.552	59	51	97	30 - 34	30 - 34
1 ¼ - ¾	**775 102 065**	10	0.460	68	51	99	30 - 36	30 - 34
1 ¼ - 1	**775 102 066**	10	0.692	68	59	97	30 - 36	30 - 34
1 ½ - 1	**775 102 069**	5	0.800	75	59	99	32 - 38	30 - 34
1 ½ - 1 ¼	**775 102 070**	5	0.780	75	68	97	32 - 38	30 - 36
2 - 1 ¼	**775 102 074**	5	1.280	96	68	109	36 - 42	30 - 36
2 - 1 ½	**775 102 075**	5	1.360	96	75	110	36 - 42	32 - 38



PRIMOFIT Cap galvanised for steel pipe

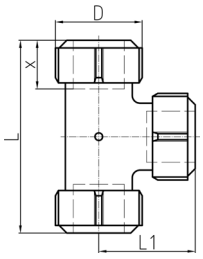
Dim. (inch)	NBR Code	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	**775 452 050**		30	0.201	45	48	30 - 34
½	**775 452 051**	**775 458 051**	30	0.207	45	48	30 - 34
¾	**775 452 052**	**775 458 052**	30	0.240	51	50	30 - 34
1	**775 452 053**	**775 458 053**	25	0.347	59	53	30 - 34
1 ¼	**775 452 054**	**775 458 054**	10	0.450	68	54	30 - 36
1 ½	**775 452 055**	**775 458 055**	10	0.520	75	55	32 - 38
2	**775 452 056**	**775 458 056**	10	0.940	96	60	36 - 42



PRIMOFIT Threaded Outlet Tee galvanised for steel pipe

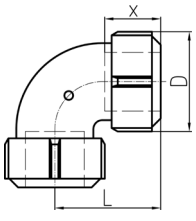
Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	NBR Code	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
⅜	½	**775 312 050**		15	0.403	45	101	27	30 - 34
½	½	**775 312 051**	**775 318 051**	15	0.380	45	101	27	30 - 34
¾	¾	**775 312 052**	**775 318 052**	10	0.543	51	107	32	30 - 34
1	1	**775 312 053**	**775 318 053**	5	0.661	59	114	38	30 - 34
1 ¼	1 ¼	**775 312 054**	**775 318 054**	5	0.884	68	121	45	30 - 36
1 ½	1 ½	**775 312 055**	**775 318 055**	6	1.140	75	133	48	32 - 38
2	2	**775 312 056**	**775 318 056**	4	2.000	96	156	62	36 - 42



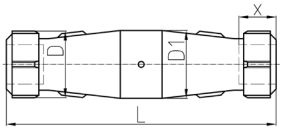
PRIMOFIT Tee galvanised for steel pipe

Dim. (inch)	NBR Code	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
⅜	**775 302 050**		5	0.450	45	110	55	30 - 34
½	**775 302 051**	**775 308 051**	5	0.520	45	110	55	30 - 34
¾	**775 302 052**	**775 308 052**	5	0.660	51	115	58	30 - 34
1	**775 302 053**	**775 308 053**	5	0.880	59	121	61	30 - 34
1 ¼	**775 302 054**	**775 308 054**	5	1.260	68	130	65	30 - 36
1 ½	**775 302 055**	**775 308 055**	5	1.400	75	144	72	32 - 38
2	**775 302 056**	**775 308 056**	3	2.720	96	166	83	36 - 42



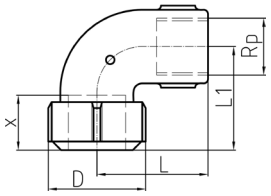
PRIMOFIT Elbow galvanised for steel pipe

Dim. (inch)	NBR Code	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	**775 402 050**		15	0.375	45	58	30 - 34
½	**775 402 051**	**775 408 051**	15	0.397	45	58	30 - 34
¾	**775 402 052**	**775 408 052**	10	0.494	51	60	30 - 34
1	**775 402 053**	**775 408 053**	10	0.674	59	60	30 - 34
1 ¼	**775 402 054**	**775 408 054**	5	0.820	68	60	30 - 36
1 ½	**775 402 055**	**775 408 055**	5	1.000	75	76	32 - 38
2	**775 402 056**	**775 408 056**	4	1.860	96	88	36 - 42



PRIMOFIT Coupling long galvanised for steel pipe

Dim. (inch)	NBR Code	GP	Weight (kg)	D (mm)	D1 (mm)	L (mm)	x (mm)
1	**775 152 053**	5	1.280	59	65	226	30 - 34
1 ¼	**775 152 054**	5	1.420	68	74	229	30 - 36
1 ½	**775 152 055**	5	2.420	75	80	230	32 - 38
2	**775 152 056**	4	2.160	96	94	234	36 - 42



PRIMOFIT Female Adaptor Elbow galvanised for steel pipe

Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
¾	¾	**775 432 052**	10	0.410	51	62	65	30 - 34
1	1	**775 432 053**	10	0.544	59	64	65	30 - 34
1	¾	**775 432 063**	10	0.601	59	65	65	30 - 34
¾	1	**775 432 081**	10	0.780	51	61	65	30 - 34

3 PRIMOFIT, galvanised for steel pipe with EPDM gasket, for drinking water

The PRIMOFIT is a compression fitting with full end-load capability. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression fitting. This compression fitting according to EN 10344 is used to connect hot-dip galvanised steel pipes according to EN 10255 and EN 10220 with the standardised outside diameters according to ISO 65.

For applications with heated drinking water (>25°C) we recommend using PRIMOFIT in stainless steel design.

The PRIMOFIT stainless steel compression fitting is intended for galvanised hot water pipes made of hot-dip galvanised ferrous materials. All materials in contact with the medium (body and elastomer gasket) comply with the currently valid drinking water regulations. ➠ Chapter [7] ‚PRIMOFIT Stainless Steel for steel- and PE/PE-Xa pipe‘

3.1 Pipe specification

T7
Pipe specification
Steel/EN 10255
Steel/EN 10220-S1

Steel/EN 10255 Steel/EN 10220-S1		
Dimension [Inch]	D [mm]	Tolerance range [mm]
⅜	17,2	16,7 – 17,5
½	21,3	21,0 – 21,8
¾	26,9	26,5 – 27,3
1	33,7	33,3 – 34,2
1¼	42,4	42,0 – 42,9
1½	48,3	47,9 – 48,8
2	60,3	59,7 – 60,8
2½	76,1	75,3 – 76,6
3	88,9	88,0 – 89,5
4	114,3	113,1 – 115,0

D Nominal outside diameter of steel pipe

3.2 Material

Body: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➠ Tab. [T8].
Corrosion protection by hot dip galvanising: according to EN 10344.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➠ Chapter [14-17] ‘General product information’

3.3 Application PRIMOFIT galvanised for steel pipe with EPDM gasket, for drinking water

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

T8
Limits of use

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Drinking water (cold <25°C)	16	25	Blue	EPDM
System water[2]	16	95		
Compressed air	16	95		

1 The colour coding on the packaging indicates the gasket material.
2 PRIMOFIT **FKM** in black version must be used for heating systems.

Important information

In the field of drinking water, only PRIMOFIT compression fittings with EPDM gasket shall be used. When installed under ground (compression fitting is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).

Drinking water installation

When planning and designing drinking water installations, compliance with the regulations of EN 806-2 is mandatory. Essential information on corrosion prevention for hot-dip galvanised ferrous materials can be found in EN 12502-3. With regard to the compliance with drinking water hygiene in Germany, the requirements of DIN 50930-6, together with the German UBA Evaluation Criteria for Metallic Materials in its currently valid version apply and is adopted by the European 4MS - Initiative. It approves the use of hot-dip galvanised iron materials for cold drinking water with a base capacity of KB8.2 ≤0.2 mmoL/L and neutral salt ratios S1 <1. The UBA Evaluation Criteria for Metallic Materials also regulates the requirements for the composition of the zinc coating, compliance with which is demonstrated by GF by the associated DVGW certificate. In the case of a repair or additions to an existing cold and hot water installation on a small scale, according to the UBA Evaluation Criteria for Metallic Materials, based on the experience in the previous operation of the system and the results of a drinking water hygiene analysis, the exceptional use of hot dip galvanized iron materials is possible.

For applications with heated drinking water (>25°C) we recommend using PRIMOFIT made of stainless steel.

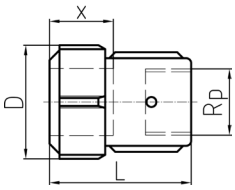
➡ Chapter [7] ‚PRIMOFIT Stainless Steel for steel- and PE/PE-Xa pipe‘

3.4 Certificates PRIMOFIT galvanised for steel pipe with EPDM gasket, for drinking water

T9
Certificates PRIMOFIT galvanised for steel pipe and drinking water applications (EPDM)

Country	Institute		Application	Certificate
AT	ÖVGW		Drinking water steel pipe & PE/PE-Xa pipe	W 1.602
	ÜA		Drinking water steel pipe & PE/PE-Xa pipe EPDM	R-15.2.3-20-17032
DE	DVGW		Drinking water steel pipe	DW-8511BL0157
			Drinking water steel pipe & PE/PE-Xa pipe	DW-7611BT0591
CH	SVGW		Drinking water steel pipe	8704-1985
FR	ACS	ACS	Drinking water steel pipe & PE/PE-Xa pipe EPDM	19 ACC LY 715

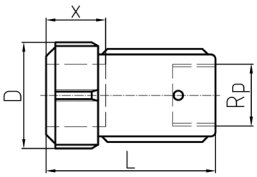
* Dim. 4



PRIMOFIT Female Adaptor galvanised for steel pipe

Internal thread Rp according to EN 10226-1
* Flange design

	Dim. St (inch)	Dim. Rp (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	⅜	⅜	**775 216 050**	30	0.247	45	56	30 - 34
	½	½	**775 216 051**	30	0.219	45	60	30 - 34
	¾	¾	**775 216 052**	25	0.289	51	63	30 - 34
	1	1	**775 216 053**	15	0.309	59	68	30 - 34
	1 ¼	1 ¼	**775 216 054**	15	0.486	68	72	30 - 36
	1 ½	1 ½	**775 216 055**	10	0.625	75	74	32 - 38
	2	2	**775 216 056**	5	1.150	96	83	36 - 42
	2 ½	2 ½	**775 216 057**	3	2.660	119	138	65 - 75
	3	3	**775 216 058**	2	3.074	132	148	65 - 75
*	4	4	**775 216 059**	1	5.300	178	200	65 - 75

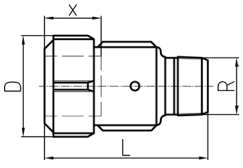


PRIMOFIT Female Adaptor long galvanised for steel pipe

The long Female Adaptor enables the insertion or sliding over of two pipe thread lengths. This allows the installation between two fixed points.
Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
½	½	**775 216 951**	30	0.226	45	80	30 - 34
¾	¾	**775 216 952**	25	0.353	51	78	30 - 34
1	1	**775 216 953**	15	0.369	59	88	30 - 34
1 ¼	1 ¼	**775 216 954**	10	0.520	68	99	30 - 36

* Dim. 4

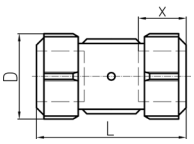


PRIMOFIT Male Adaptor galvanised for steel pipe

External thread R according to EN 10226-1
* Flange design

	Dim. St (inch)	Dim. R (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	⅜	⅜	**775 206 050**	25	0.240	45	70	30 - 34
	½	½	**775 206 051**	25	0.236	45	74	30 - 34
	¾	¾	**775 206 052**	20	0.310	51	81	30 - 34
	1	1	**775 206 053**	10	0.430	59	90	30 - 34
	1 ¼	1 ¼	**775 206 054**	10	0.560	68	94	30 - 36
	1 ½	1 ½	**775 206 055**	5	0.630	75	94	32 - 38
	2	2	**775 206 056**	5	1.184	96	106	36 - 42
	2 ½	2 ½	**775 206 057**	3	2.720	119	173	65 - 75
	3	3	**775 206 058**	2	3.220	132	186	65 - 75
*	4	4	**775 206 059**	1	5.500	178	212	65 - 75

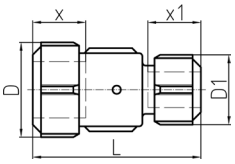
* Dim. 4



PRIMOFIT Coupling short galvanised equal for steel pipe

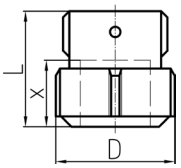
* Flange design

	Dim. (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	⅜	**775 106 050**	25	0.385	45	85	30 - 34
	½	**775 106 051**	25	0.357	45	85	30 - 34
	¾	**775 106 052**	20	0.452	51	90	30 - 34
	1	**775 106 053**	15	0.563	59	96	30 - 34
	1 ¼	**775 106 054**	10	0.688	68	96	30 - 36
	1 ½	**775 106 055**	5	0.860	75	100	32 - 38
	2	**775 106 056**	5	1.520	96	112	36 - 42
	2 ½	**775 106 057**	2	3.712	119	185	65 - 75
	3	**775 106 058**	2	4.110	132	191	65 - 75
*	4	**775 106 059**	1	6.600	178	216	65 - 75



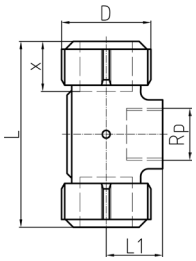
PRIMOFIT Coupling short galvanised reducing for steel pipe

Dim. (inch)	EPDM Code	GP	Weight (kg)	D (mm)	D1 (mm)	L (mm)	x (mm)	x1 (mm)
¾ - ½	**775 106 061**	20	0.340	51	45	90	30 - 34	30 - 34
1 - ½	**775 106 062**	15	0.520	59	45	97	30 - 34	30 - 34
1 - ¾	**775 106 063**	15	0.552	59	51	97	30 - 34	30 - 34
1 ¼ - ¾	**775 106 065**	10	0.460	68	51	99	30 - 36	30 - 34
1 ¼ - 1	**775 106 066**	10	0.691	68	59	97	30 - 36	30 - 34
1 ½ - 1	**775 106 069**	5	0.800	75	59	99	32 - 38	30 - 34
1 ½ - 1 ¼	**775 106 070**	5	0.780	75	68	97	32 - 38	30 - 36
2 - 1 ¼	**775 106 074**	5	1.280	96	68	109	36 - 42	30 - 36
2 - 1 ½	**775 106 075**	5	1.360	96	75	110	36 - 42	32 - 38



PRIMOFIT Cap galvanised for steel pipe

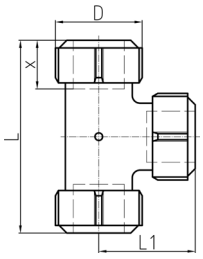
Dim. (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	**775 456 050**	30	0.221	45	48	30 - 34
½	**775 456 051**	30	0.209	45	48	30 - 34
¾	**775 456 052**	30	0.240	51	50	30 - 34
1	**775 456 053**	25	0.296	59	53	30 - 34
1 ¼	**775 456 054**	10	0.330	68	54	30 - 36
1 ½	**775 456 055**	10	0.460	75	55	32 - 38
2	**775 456 056**	10	0.935	96	60	36 - 42



PRIMOFIT Threaded Outlet Tee galvanised for steel pipe

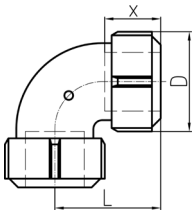
Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
⅜	½	**775 316 050**	15	0.402	45	101	27	30 - 34
½	½	**775 316 051**	15	0.318	45	101	27	30 - 34
¾	¾	**775 316 052**	10	0.550	51	107	32	30 - 34
1	1	**775 316 053**	5	0.610	59	114	38	30 - 34
1 ¼	1 ¼	**775 316 054**	5	0.818	68	121	45	30 - 36
1 ½	1 ½	**775 316 055**	6	1.120	75	133	48	32 - 38
2	2	**775 316 056**	4	2.200	96	156	62	36 - 42



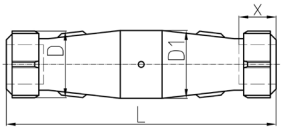
PRIMOFIT Tee galvanised for steel pipe

Dim. (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
⅜	**775 306 050**	5	0.450	45	110	55	30 - 34
½	**775 306 051**	5	0.520	45	110	55	30 - 34
¾	**775 306 052**	5	0.660	51	115	58	30 - 34
1	**775 306 053**	5	0.880	59	121	61	30 - 34
1 ¼	**775 306 054**	5	1.260	68	130	65	30 - 36
1 ½	**775 306 055**	5	1.400	75	144	72	32 - 38
2	**775 306 056**	3	2.720	96	166	83	36 - 42



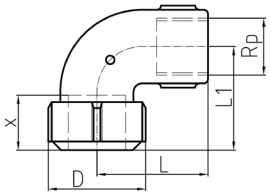
PRIMOFIT Elbow galvanised for steel pipe

Dim. (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	**775 406 050**	15	0.434	45	58	30 - 34
½	**775 406 051**	15	0.317	45	58	30 - 34
¾	**775 406 052**	10	0.359	51	60	30 - 34
1	**775 406 053**	10	0.668	59	60	30 - 34
1 ¼	**775 406 054**	5	0.840	68	60	30 - 36
1 ½	**775 406 055**	5	1.018	75	76	32 - 38
2	**775 406 056**	5	1.460	96	88	36 - 42



PRIMOFIT Coupling long galvanised for steel pipe

Dim. (inch)	EPDM Code	GP	Weight (kg)	D (mm)	D1 (mm)	L (mm)	x (mm)
1	**775 156 053**	5	1.280	59	65	226	30 - 34
1 ¼	**775 156 054**	5	1.420	68	74	229	30 - 36
1 ½	**775 156 055**	5	2.420	75	80	230	32 - 38
2	**775 156 056**	4	2.586	96	94	234	36 - 42



PRIMOFIT Female Adaptor Elbow galvanised for steel pipe

Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
¾	¾	**775 436 052**	10	0.482	51	62	65	30 - 34
1	1	**775 436 053**	10	0.544	59	64	65	30 - 34
1	¾	**775 436 063**	10	0.601	59	65	65	30 - 34
¾	1	**775 436 081**	10	0.780	51	61	65	30 - 34

4 PRIMOFIT, black, for steel pipe

The PRIMOFIT is a compression fitting with full end-load capability. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression joint.
This compression fitting according to EN 10344 is used to connect black steel pipes according to EN 10255 and EN 10220 with the standardised outside diameters according to ISO 65.

Spare packs (Sealing kits)
Spare packs are available for some dimensions of welded steel tubes for pressure purposes of series 2 and 3.
➨ Chapter. [5] ‚PRIMOFIT spare packs for threaded- and butt weld tubes‘

4.1 Pipe specification

T10
Pipe specification
Steel/EN 10255
Steel/EN 10220-S1

Steel/EN 10255 Steel/EN 10220-S1		
Dimension [inch]	D [mm]	Tolerance range [mm]
⅜	17,2	16,7 – 17,5
½	21,3	21,0 – 21,8
¾	26,9	26,5 – 27,3
1	33,7	33,3 – 34,2
1¼	42,4	42,0 – 42,9
1½	48,3	47,9 – 48,8
2	60,3	59,7 – 60,8
2½	76,1	75,3 – 76,6
3	88,9	88,0 – 89,5
4	114,3	113,1 – 115,0

D Nominal outside diameter of steel pipe

4.2 Material

Body: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➨ Tab. [T11].
Corrosion protection: the installer is responsible for any corrosion protection that may be required.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➨ Chapter [14-17] ‘General product information’

4.3 Application PRIMOFIT black, for steel pipe

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

Important information

PRIMOFIT compression fittings can be converted for other media, applications and pipe types at any time by using optional spare packs (sealing kits). In this way, PRIMOFIT in black design can also be combined with NBR seals. ➨ Chapter. [5] ‚PRIMOFIT spare packs for threaded- and butt weld tubes‘‘

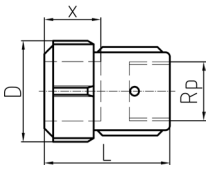
T11
Limits of use

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Heating water / steam	10	150	Green	FKM[2]
Water - Glycol[3]	10	150		
Compressed air	16	150		
Fuels[4]	10	40		

1 The colour coding on the packaging indicates the gasket material.
2 FKM seals **are not** useable for drinking water installations and fuel gases!
3 includes water in ventilation and air conditioning systems. Especially when using antifreeze containing glycol, the use of black fittings with FKM gaskets is recommended.
4 Diesel and leaded as well as unleaded petrol.

Important information

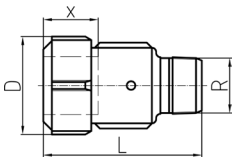
When installed under ground (compression joint is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).



PRIMOFIT Female Adaptor black for steel pipe

Internal thread Rp according to EN 10226-1

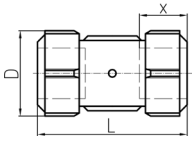
Dim. St (inch)	Dim. Rp (inch)	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	⅜	**775 217 050**	30	0.227	45	56	30 - 34
½	½	**775 217 051**	30	0.215	45	60	30 - 34
¾	¾	**775 217 052**	25	0.292	51	63	30 - 34
1	1	**775 217 053**	15	0.309	59	68	30 - 34
1 ¼	1 ¼	**775 217 054**	10	0.482	68	72	30 - 36
1 ½	1 ½	**775 217 055**	10	0.595	75	74	32 - 38
2	2	**775 217 056**	5	1.108	96	83	36 - 42
2 ½	2 ½	**775 217 057**	3	2.600	119	138	65 - 75
3	3	**775 217 058**	2	3.100	132	148	65 - 75



PRIMOFIT Male Adaptor black for steel pipe

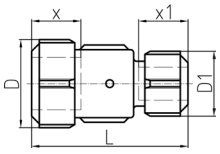
External thread R according to EN 10226-1

Dim. St (inch)	Dim. R (inch)	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	⅜	**775 207 050**	25	0.230	45	70	30 - 34
½	½	**775 207 051**	25	0.200	45	74	30 - 34
¾	¾	**775 207 052**	20	0.252	51	81	30 - 34
1	1	**775 207 053**	10	0.430	59	90	30 - 34
1 ¼	1 ¼	**775 207 054**	10	0.547	68	94	30 - 36
1 ½	1 ½	**775 207 055**	5	0.600	75	94	32 - 38
2	2	**775 207 056**	5	1.180	96	106	36 - 42
2 ½	2 ½	**775 207 057**	3	2.800	119	173	65 - 75
3	3	**775 207 058**	2	3.400	132	186	65 - 75



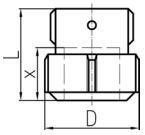
PRIMOFIT Coupling short black equal for steel pipe

Dim. (inch)	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	**775 107 050**	30	0.323	45	85	30 - 34
½	**775 107 051**	30	0.346	45	85	30 - 34
¾	**775 107 052**	20	0.446	51	90	30 - 34
1	**775 107 053**	15	0.527	59	96	30 - 34
1 ¼	**775 107 054**	10	0.700	68	96	30 - 36
1 ½	**775 107 055**	5	0.856	75	100	32 - 38
2	**775 107 056**	5	1.560	96	112	36 - 42
2 ½	**775 107 057**	2	3.500	119	185	65 - 75
3	**775 107 058**	2	4.332	132	191	65 - 75



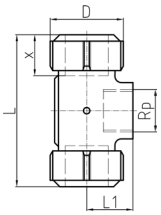
PRIMOFIT Coupling short black reducing for steel pipe

Dim. (inch)	FKM Code	GP	Weight (kg)	D (mm)	D1 (mm)	L (mm)	x (mm)	x1 (mm)
¾ - ½	**775 107 061**	20	0.298	51	45	90	30 - 34	30 - 34
1 - ½	**775 107 062**	15	0.363	59	45	97	30 - 34	30 - 34
1 - ¾	**775 107 063**	15	0.399	59	51	97	30 - 34	30 - 34
1 ¼ - 1	**775 107 066**	10	0.523	68	59	97	30 - 36	30 - 34
1 ½ - 1 ¼	**775 107 070**	5	0.655	75	68	97	32 - 38	30 - 36
2 - 1 ½	**775 107 075**	5	0.816	96	75	110	36 - 42	32 - 38



PRIMOFIT Cap black for steel pipe

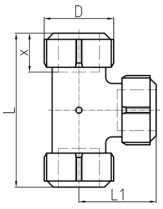
Dim. (inch)	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	**775 457 050**	25	0.229	45	48	30 - 34
½	**775 457 051**	30	0.150	45	48	30 - 34
¾	**775 457 052**	30	0.247	51	50	30 - 34
1	**775 457 053**	30	0.345	59	53	30 - 34
1 ¼	**775 457 054**	10	0.330	68	54	30 - 36
1 ½	**775 457 055**	10	0.510	75	55	32 - 38
2	**775 457 056**	10	0.954	96	60	36 - 42



PRIMOFIT Threaded Outlet Tee black for steel pipe

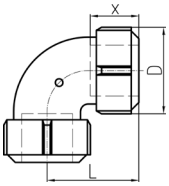
Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
⅜	½	**775 317 050**	15	0.318	45	101	27	30 - 34
½	½	**775 317 051**	15	0.318	45	101	27	30 - 34
¾	¾	**775 317 052**	10	0.429	51	107	32	30 - 34
1	1	**775 317 053**	5	0.711	59	114	38	30 - 34
1 ¼	1 ¼	**775 317 054**	5	0.818	68	121	45	30 - 36
1 ½	1 ½	**775 317 055**	6	1.121	75	133	48	32 - 38
2	2	**775 317 056**	3	1.519	96	156	62	36 - 42



PRIMOFIT Tee black for steel pipe

Dim. (inch)	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
⅜	**775 307 050**	5	0.450	45	110	55	30 - 34
½	**775 307 051**	5	0.417	45	110	55	30 - 34
¾	**775 307 052**	5	0.580	51	115	58	30 - 34
1	**775 307 053**	5	1.199	59	121	61	30 - 34
1 ¼	**775 307 054**	5	1.505	68	130	65	30 - 36
1 ½	**775 307 055**	5	1.871	75	144	72	32 - 38
2	**775 307 056**	3	2.240	96	166	83	36 - 42



PRIMOFIT Elbow black for steel pipe

Dim. (inch)	FKM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
⅜	**775 407 050**	30	0.323	45	58	30 - 34
½	**775 407 051**	15	0.357	45	58	30 - 34
¾	**775 407 052**	10	0.448	51	60	30 - 34
1	**775 407 053**	15	0.510	59	60	30 - 34
1 ¼	**775 407 054**	5	0.670	68	60	30 - 36
1 ½	**775 407 055**	5	0.853	75	76	32 - 38
2	**775 407 056**	5	1.896	96	88	36 - 42

5 PRIMOFIT Spare packs (sealing kits) for steel pipe threaded and butt weld tube

PRIMOFIT is a modular system and offers maximum application flexibility through the possibility of individual combinations of body geometries and spare packs (sealing kits), depending on the application. This eliminates the need for a significant amount of storage. For example, stocked NBR PRIMOFIT can be easily converted to a drinking water-approved EPDM gasket at any time, even on site. Just as PRIMOFIT for steel pipe can be converted for butt weld tubes or even for the use with PE and PE-Xa pipe.

Important information
PRIMOFIT compression fittings can be converted for other media, applications and pipe types at any time by using optional spare packs (sealing kits).
PRIMOFIT can be reused by replacing the sealing kit!
By replacing the sealing kits, PRIMOFIT can be reused and thus make a significant contribution to sustainable environmental protection.

5.1 Pipe specification

T12
Pipe specification Steel/EN 10255 Steel/EN 10220-S1 Steel/EN 10220-S2/3 (Butt weld tubes)

Steel/EN 10255 Steel/EN 10220-S1			Steel/EN 10220-S2/3 * (Butt weld tubes)	
Dimension [inch]	D [mm]	Tolerance range [mm]	D [mm]	Tolerance range [mm]
⅜	17,2	16,7 – 17,5	–	–
½	21,3	21,0 – 21,8	20,0	19,5 – 20,5
¾	26,9	26,5 – 27,3	25,0	24,5 – 25,5
1	33,7	33,3 – 34,2	31,8	31,3 – 32,3
1¼	42,4	42,0 – 42,9	38,0	37,5 – 38,5
1½	48,3	47,9 – 48,8	44,5	44,0 – 45,0
2	60,3	59,7 – 60,8	51,0	50,5 – 51,5
			57,0	56,4 – 57,6
			63,5	62,9 – 64,1
2½	76,1	75,3 – 76,6	70,0	69,3 – 70,7
3	88,9	88,0 – 89,5	–	–
4	114,3	113,1 – 115,0	–	–

D Nominal outside diameter of steel pipe
* Spare packs (sealing kits) for pipe outer diameters of series 2 and 3 are available.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➨ Chapter [14-17] ‘General product information’

5.2 Application PRIMOFIT spare packs for steel pipes threaded and butt weld tube

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

T13 **Limits of use**

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket	Surface / Material PRIMOFIT
Fuel gases (incl. H_2)[2]	10[3]	70	Yellow	NBR	black & galvanised
System water[4]	16	80			
Compressed air	16	80			
Oil	16	80			
Drinking water (cold <25°C)	16	25	Blue	EPDM	galvanised
Drinking water (heated >25°C)	16	95			stainless steel[8]
System water[4]	16	95			
Compressed air	16	95			galvanised
Heating water / steam	10	150	Green	FKM[6]	black
Water - Glycol[5]	10	150			
Compressed air	16	150			galvanised
Fuels[7]	10	40			

1 The colour coding on the packaging indicates the gasket material.
2 Natural gas NPG| Liquefied Petroleum Gas LPG | Hydrogen up to 20% vol.
In Germany, only NBR+graphite (FIREJOINT) is permitted inside buildings.
3 Max. 5 bar for threaded connection
4 PRIMOFIT **FKM** in black version must be used for heating systems.
5 includes water in ventilation and air conditioning systems. Especially when using antifreeze containing glycol, the use of black fittings with FKM gasket is recommended.
6 FKM seals **are not** useable for drinking water installations and fuel gases!
7 Diesel and leaded as well as unleaded petrol.
8 For new installations. In the case of repairs and extensions of galvanised piping, which have had no corrosive or hygienic problems in the past, the galvanised version is suitable.

PRIMOFIT Spare Packs
for steel pipe EN 10255 and butt weld tube EN 10220-S1

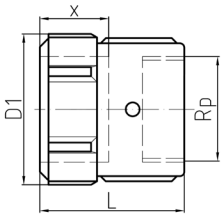
Dim. St refers to the fitting sizes, which need to be combined with the Spare Packs.
D shows the range of the outside diameter of the steel pipe.

Dim. St (inch)	D (mm)	EN 10220	NBR Code	EPDM Code	FKM Code	GP	Weight (kg)
⅜	17.2	Series 1	**775 958 950**	**775 959 950**	**775 967 960**	50	0.020
½	21.3	Series 1	**775 958 951**	**775 959 951**	**775 967 961**	50	0.020
¾	26.9	Series 1	**775 958 952**	**775 959 952**	**775 967 962**	50	0.028
1	33.7	Series 1	**775 958 953**	**775 959 953**	**775 967 963**	50	0.033
1 ¼	42.4	Series 1	**775 958 954**	**775 959 954**	**775 967 964**	50	0.040
1 ½	48.3	Series 1	**775 958 955**	**775 959 955**	**775 967 965**	50	0.040
2	60.3	Series 1	**775 958 956**	**775 959 956**	**775 967 966**	50	0.078
2 ½	76.1	Series 1	**775 958 917**	**775 959 957**	**775 967 967**	10	0.140
3	88.9	Series 1	**775 958 918**	**775 959 958**	**775 967 968**	10	0.160
4	114.3	Series 1	**775 958 919**	**775 959 959**	**775 967 969**	10	0.204

PRIMOFIT Spare Packs FKM
for butt weld tube EN 10220-S2/S3

D shows the range of the outside diameter of the Butt weld tube ("Siederohr").
Dim. St refers to the fitting sizes, which need to be combined with the Spare Packs.
* use standard compression fitting dim. 1/2 or spare pack 775 967 961
** use standard compression fitting dim. 1 or spare pack 775 967 963

	D (mm)	Dim. St (inch)	EN 10220	FKM Code	GP	Weight (kg)
*	20.0	½	Series 2			
	25.0	¾	Series 2	**775 958 925**	20	0.120
**	31.8	1	Series 2			
	38.0	1 ¼	Series 2	**775 958 958**	15	0.060
	44.5	1 ½	Series 3	**775 958 959**	25	0.100
	51.0	2	Series 2	**775 958 960**	20	0.130
	57.0	2	Series 2	**775 958 957**	20	0.129
	70.0	2 ½	Series 2	**775 958 970**	20	0.320



PRIMOFIT Female Adaptor Set 63.5
for butt weld tube EN 10220 D=63.5mm
includes a special Female Adaptor galvanised

Note:
Special dimension for fitting body and nut. Not exchangeable with standard components for 2", only suitable for Butt weld tube D=63.5mm.

D shows the range of the outside diameter of the Butt weld tube ("Siederohr").

Dim. St (inch)	Dim. Rp (inch)	D (mm)	EN 10220	FKM Code	GP	Weight (kg)	D1 (mm)	L (mm)	x (mm)
2	2	63.5	Series 2	**775 964 963**	5	1.120	96	83	36 - 42

PRIMOFIT Seals EPDM
for steel pipe EN 10255 and butt weld tube EN 10220-S1

Dim. St refers to the fitting sizes, which need to be combined with the Spare Packs.
D shows the range of the outside diameter of the steel pipe.

Dim. St (inch)	D (mm)	EN 10220	Code	GP	Weight (kg)
⅜	17.2	Series 1	**775 967 970**	20	0.011
½	21.3	Series 1	**775 967 971**	20	0.012
¾	26.9	Series 1	**775 967 972**	20	0.012
1	33.7	Series 1	**775 967 973**	20	0.013
1 ¼	42.4	Series 1	**775 967 974**	20	0.015
1 ½	48.3	Series 1	**775 967 975**	20	0.015
2	60.3	Series 1	**775 967 976**	20	0.017
2 ½	76.1	Series 1	**775 967 977**	10	0.043
3	88.9	Series 1	**775 967 978**	6	0.042
4	114.3	Series 1	**775 967 979**	4	0.042

PRIMOFIT Seals FKM
for steel pipe EN 10255 and butt weld tube EN 10220-S1

Dim. St refers to the fitting sizes, which need to be combined with the Spare Packs.
D shows the range of the outside diameter of the steel pipe.

Dim. St (inch)	D (mm)	EN 10220	FKM Code	GP	Weight (kg)
⅜	17.2	Series 1	**775 967 950**	50	0.020
½	21.3	Series 1	**775 967 951**	50	0.020
¾	26.9	Series 1	**775 967 952**	50	0.030
1	33.7	Series 1	**775 967 953**	50	0.080
1 ¼	42.4	Series 1	**775 967 954**	50	0.095
1 ½	48.3	Series 1	**775 967 955**	50	0.016
2	60.3	Series 1	**775 967 956**	50	0.120
2 ½	76.1	Series 1	**775 967 957**	25	0.077
3	88.9	Series 1	**775 967 958**	25	0.078
4	114.3	Series 1	**775 967 959**	25	0.099

PRIMOFIT Spare Pack 3/8
for steel pipe EN 10255

to adapt 1/2" fittings to 3/8", including nut: NBR = galvanised finish, FKM = black finish.
D shows the range of the outside diameter of the steel pipe.

Dim. St (inch)	D (mm)	NBR Code	FKM Code	GP	Weight (kg)
⅜	17.2	**775 961 950**	**775 963 950**	25	0.120

6 PRIMOFIT FIREJOINT, galvanised, fire resistant version for steel pipe

The PRIMOFIT FIREJOINT is a compression fitting which offers full end-load capability, and resistance against fire impact from outside, for indoor gas line installations 650°C according to German DVGW and 850°C according to British Gas test procedures. An additional graphite ring maintains the tension- and shear-resistant connection, as well as the tightness during a fire. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression fitting.

This compression joint according to EN 10344 is used to connect hot-dip galvanised or black steel pipes according to EN 10255 and EN 10220 Series 1 with the standardised outside diameters according to ISO 65. The PRIMOFIT FIREJOINT is available with a yellow passivated FIREJOINT nut for visual differentiation from other PRIMOFIT compression joints.

Important information

All PRIMOFIT compression fittings can be converted into FIREJOINT compression fittings by the use of optional FIREJOINT spare packs (sealing kits). FIREJOINT spare packs also include a yellow passivated FIREJOINT nut for differentiation.

6.1 Pipe specification

T14
Pipe specification
Steel/EN 10255
Steel/EN 10220-S1

Steel/EN 10255 Seel/EN 10220-S1		
Dimension [inch]	D [mm]	Tolerance range [mm]
½	21,3	21,0 – 21,8
¾	26,9	26,5 – 27,3
1	33,7	33,3 – 34,2
1¼	42,4	42,0 – 42,9
1½	48,3	47,9 – 48,8
2	60,3	59,7 – 60,8

D Nominal outside diameter of steel pipe

6.2 Material

Body: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➠ Tab. [T15].
Corrosion protection by hot dip galvanising: Corrosion protection by hot-dip galvanising according to EN 10344. FIREJOINT nut additionally galvanised and yellow passivated for colour differentiation.

More details

Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➠ Chapter [14-17] ‘General product information’

6.3 Application PRIMOFIT FIREJOINT, galvanised, fire resistant version for steel pipe

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.
FIREJOINT specifically complies with the DVGW TRGI and DIN 3387-1 regulations and has a DVGW certificate for gas applications inside buildings as well as GIS-PL3 certification for UK.

T15
Limits of use

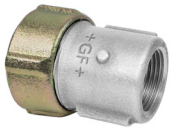
Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Fuel gases (incl. H_2)[2]	5	60	Red	NBR+Graphite[3]

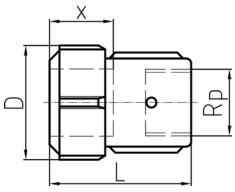
1 The colour coding on the packaging indicates the gasket material.
2 Natural gas NPG| Liquefied Petroleum Gas LPG | Hydrogen up to 20% vol.
In Germany, only NBR+graphite (FIREJOINT) is permitted inside buildings.
3 **FIREJOINT (NBR+Graphite)** is the fire resistant version, approved for gas applications inside buildings.

6.4 Certificates PRIMOFIT FIREJOINT, galvanised, fire resistant version for steel pipe

T16
Certificates PRIMOFIT FIREJOINT

Country	Institute		Application	Certificate
DE	DVGW		FIREJOINT (fire resistant version) steel pipe for fuel gases	DG-4502CN0374
BE	ARGB - KVBG		FIREJOINT (fire resistant version) steel pipe for fuel gases	C-11-3552-A
UK	BSI KITEMARK		GIS / PL3 - FIREJOINT (fire resistant version) steel pipe for fuel gases	KM 539621 (PL3)

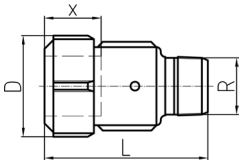




PRIMOFIT FIREJOINT Female Adaptor galvanised for steel pipe

Internal thread Rp according to EN 10226-1

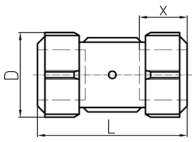
Dim. St (inch)	Dim. Rp (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
½	½	**775 214 051**	30	0.205	45	59	30 - 34
¾	¾	**775 214 052**	20	0.289	51	61	30 - 34
1	1	**775 214 053**	15	0.393	59	67	30 - 34
1 ¼	1 ¼	**775 214 054**	10	0.480	68	70	30 - 36
1 ½	1 ½	**775 214 055**	5	0.620	75	73	32 - 38
2	2	**775 214 056**	5	1.120	96	81	36 - 42



PRIMOFIT FIREJOINT Male Adaptor galvanised for steel pipe

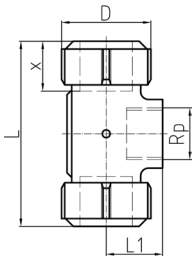
External thread R according to EN 10226-1

Dim. St (inch)	Dim. R (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
½	½	**775 204 051**	25	0.240	45	73	30 - 34
¾	¾	**775 204 052**	20	0.305	51	78	30 - 34
1	1	**775 204 053**	10	0.420	59	88	30 - 34
1 ¼	1 ¼	**775 204 054**	10	0.554	68	92	30 - 36
1 ½	1 ½	**775 204 055**	5	0.640	75	94	32 - 38
2	2	**775 204 056**	5	1.180	96	104	36 - 42



PRIMOFIT FIREJOINT Coupling short galvanised equal for steel pipe

Dim. (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
½	**775 104 051**	30	0.320	45	83	30 - 34
¾	**775 104 052**	20	0.410	51	85	30 - 34
1	**775 104 053**	15	0.560	59	91	30 - 34
1 ¼	**775 104 054**	10	0.700	68	93	30 - 36
1 ½	**775 104 055**	5	0.820	75	99	32 - 38
2	**775 104 056**	5	1.480	96	108	36 - 42



PRIMOFIT FIREJOINT Threaded Outlet Tee galvanised for steel pipe

Internal thread Rp according to EN 10226-1

Dim. St (inch)	Dim. Rp (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
½	½	**775 314 051**	15	0.393	45	99	27	30 - 34
¾	¾	**775 314 052**	10	0.500	51	102	32	30 - 34
1	1	**775 314 053**	5	0.700	59	111	38	30 - 34
1 ¼	1 ¼	**775 314 054**	5	0.920	68	117	45	30 - 36
1 ½	1 ½	**775 314 055**	6	1.140	75	132	48	32 - 38
2	2	**775 314 056**	3	2.000	96	152	62	36 - 42

PRIMOFIT FIREJOINT Spare Packs

Remark:

- PRIMOFIT is set up as a modular system, each standard PRIMOFIT can be used as FIREJOINT PRIMOFIT by using a FIREJOINT Spare Pack. For example: to convert a standard PRIMOFIT cap 1" (775 452 053) to FIREJOINTapplication use a FIREJOINT Spare Pack (775 958 973).

FIREJOINT Spare Pack includes a golden color coded nut.

Dim. (inch)	D (mm)	NBR Code	GP	Weight (kg)
½	21.3	**775 958 971**	20	0.120
¾	26.9	**775 958 972**	15	0.140
1	33.7	**775 958 973**	20	0.180
1 ¼	42.4	**775 958 974**	10	0.200
1 ½	48.3	**775 958 975**	10	0.260
2	60.3	**775 958 996**	10	0.460

7 PRIMOFIT Stainless Steel for steel- and PE/PE-Xa pipe

The PRIMOFIT Stainless Steel is a compression fitting which offers full end-load capability and is characterised by low assembly costs and assembly without special tools. In addition, up to 3° angular deviation between pipe and compression fitting can be accommodated per connection. 316/V4A stainless steel in contact with the medium according to the German UBA positive list combined with a DVGW (Germany) drinking water certified EPDM gasket ensures unrestricted use in the cold (<25°C) and heated (>25°C) drinking water sector. PRIMOFIT stainless steel is the first choice alternative to galvanised compression fittings and brass connectors.

Important information

This PRIMOFIT Stainless Steel version is used to connect hot-dip galvanised steel pipes according to EN 10255 and EN 10220 with the standardised outside diameters according to ISO 65. **The connection of stainless steel pipes is not permitted.**

7.1 Pipe specification

T17
Pipe specification
Steel/EN 10255
Steel/EN 10220-S1
PE/PE-Xa EN 12201-2
PE/PE-Xa DIN 16892/93 & ISO 15875-2

Steel/EN 10255 Steel/EN 10220-S1		PE EN 12201-2/water				PE-Xa DIN 16892/93 and EN ISO 15875-2
– –		SDR S	7,4 3,2	11 5	17,6 (17) 8,3 (8)	11 5
Dimension [Zoll]	D [mm]	Da [mm]	s [mm]	s [mm]	s [mm]	s [mm]
½	21,3	20	3,0	2,0	–	1,9
¾	26,9	25	3,5	2,3	2,0 (2,0)	2,3
1	33,7	32	4,4	3,0	2,0 (2,0)	2,9
1¼	42,4	40	5,5	3,7	2,3 (2,4)	3,7
1½	48,3	50	6,9	4,6	2,9 (3,0)	4,6
2	60,3	63	8,6	5,8	3,6 (3,8)	5,8

Da/s Nominal outside diameters/wall thicknesses of PE/PE-Xa pipes
D Nominal outside diameter of steel pipe

Important information

PRIMOFIT stainless steel for PE/PE-Xa pipes can also be used for other plastic pipe systems such as GF INSTAFLEX (PB) pipe systems after technical clarification regarding application limits.

7.2 Material

Body: Stainless steeel 316 (V4A)
Nut: Stainless steel 316 (V4A)
Gasket material: ➠ Tab. [T18].
Corrosion protection: Corrosion-free stainless steel.

Material combinations

Questions about material combinations? We will be happy to advise you!
Please contact your responsible technical advisory service.

In general, single fittings made of noble materials such as stainless steel are not problematic in less noble steel pipe systems due to the large surface differences.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➨ Chapter [14-17] 'General product information'

7.3 Application PRIMOFIT Stainless Steel for steel- and PE/PE-Xa pipe

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

Existing galvanised hot water installations without hygienic problems are present in large numbers in buildings. Based on Section 1 of the German UBA Evaluation Criteria, repairs to pipes made of hot-dip galvanised iron materials are permitted under certain conditions. If these requirements are not fulfilled, the PRIMOFIT stainless steel compression fitting can be used as an alternative. All materials coming in contact with drinking water (body and elastomer gasket) comply with the UBA regulations.

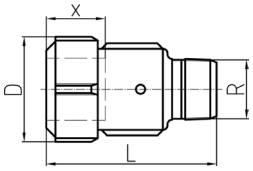
Important information
PRIMOFIT compression fittings can be converted for other media, applications and pipe types at any time by using optional spare packs (sealing kits).

T18
Limits of use

	Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Steel pipe	Drinking water (cold & heated)	16	95	Blue	EPDM
	System water[2]	16	95		
	Compressed air	16	95		
	Heating water / steam	10	150	Green	FKM[3]
	Water - Glycol	10	150		
	Compressed air	16	150		
	Fuels[6]	10	40		
	System water[2]	16	80	Yellow	NBR[4]
	Compressed air	16	80		
	Oil	16	80		
PE / PE-Xa pipe	Drinking water (cold & heated)	16	40	Blue	EPDM[5]
	System water[2]	16	40	Yellow	NBR[5]

1 The colour coding on the packaging indicates the gasket material.
2 For heating systems, use PRIMOFIT stainless steel with FKM gaskets.
3 For steel pipes optional FKM gasket spare packs (sealing kits) are available.
4 For steel pipes optional NBR gasket spare packs (sealing kits) are available. PRIMOFIT stainless steel NBR is currently not approved for fuel gases.
5 For PE/PE-Xa pipes optional spare packs (sealing kits) are available.
6 Diesel and leaded as well as unleaded petrol.

Important information
In the field of drinking water, only PRIMOFIT compression fittings with EPDM seal shall be used. When installed under ground (compression fitting is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).



PRIMOFIT Stainless Steel Male Adaptor for steel pipe

External thread R according to EN 10226-1

Dim. St (inch)	Dim. R (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
½	½	**775 200 051**	25	0.200	45	73	30 - 34
¾	¾	**775 200 052**	20	0.270	51	78	30 - 34
1	1	**775 200 053**	10	0.380	59	88	30 - 34
1 ¼	1 ¼	**775 200 054**	10	0.480	68	92	30 - 36
1 ½	1 ½	**775 200 055**	5	0.600	75	94	32 - 38
2	2	**775 200 056**	5	1.060	96	104	36 - 42

PRIMOFIT Spare Packs for steel pipe EN 10255 and butt weld tube EN 10220-S1

Dim. St refers to the fitting sizes, which need to be combined with the Spare Packs.
D shows the range of the outside diameter of the steel pipe.

Dim. St (inch)	D (mm)	EN 10220	NBR Code	FKM Code	GP	Weight (kg)
½	21.3	Series 1	**775 958 951**	**775 967 961**	50	0.020
¾	26.9	Series 1	**775 958 952**	**775 967 962**	50	0.028
1	33.7	Series 1	**775 958 953**	**775 967 963**	50	0.033
1 ¼	42.4	Series 1	**775 958 954**	**775 967 964**	50	0.040
1 ½	48.3	Series 1	**775 958 955**	**775 967 965**	50	0.040
2	60.3	Series 1	**775 958 956**	**775 967 966**	50	0.078

PRIMOFIT Spare Packs + Insert Stiffeners for PE/PE-Xa pipe

SDR	Dim. PE (mm)	NBR Code	EPDM Code	GP	Weight (kg)	Stiffener material	Colour
11	20 x 2,0	**775 958 201**	**775 959 201**	25	0.035	plastic (POM)	white
11	25 x 2,3	**775 958 202**	**775 959 202**	25	0.050	plastic (POM)	white
11	32 x 3,0	**775 958 203**	**775 959 203**	25	0.062	plastic (POM)	white
11	40 x 3,7	**775 958 204**	**775 959 204**	25	0.110	plastic (POM)	white
11	50 x 4,6	**775 958 205**	**775 959 205**	20	0.140	plastic (POM)	white
11	63 x 5,8	**775 958 206**	**775 959 206**	10	0.170	plastic (POM)	white

8 PRIMOFIT, galvanised, transition from steel- to PE/PE-Xa pipe

The PRIMOFIT is a compression fitting with full end-load capability. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression fitting. This compression fitting according to EN 10284 is used to connect hot-dip galvanised steel pipes according to EN 10255 and EN 10220-S1 with the standardised outside diameters according to ISO 65 with polyethylene pipes according to EN 1555-2 with material PE 100 or PE 80, as well as with cross-linked polyethylene pipes PE-Xa according to DIN 16892/93.

☑ Please note the different wall thicknesses of the PE/PE-Xa pipes (SDR series).

8.1 Pipe specification

T19
Pipe specification
PE EN 1555-2
PE-Xa DIN 16892/93
Steel/EN 10255
Steel/EN 10220-S1

	PE EN 1555-2/Gas		PE-Xa DIN 16892/93	Steel/EN 10255 Steel/EN 10220-S1	
SDR	11	17,6	11	–	
S	5	8,3	5	–	
Da [mm]	s [mm]	s [mm]	s [mm]	Dimension [inch]	D [mm]
20	3,0	2,3	1,9	½	21,3
25	3,0	2,3	2,3	¾	26,9
32	3,0	2,3	2,9	1	33,7
40	3,7	2,3	3,7	1¼	42,4
50	4,6	2,9	4,6	1½	48,3
63	5,8	3,6	5,8	2	60,3

Da/s Nominal outside diameters/wall thicknesses of PE/PE-Xa pipes
D Nominal outside diameter of steel pipe

Important information to the scope of delivery
The scope of delivery includes also stiffener(s). **The use of stiffeners is manadatory.**
☑ For the correct selection of the compression fitting, please pay attention to the different wall thicknesses of the PE/PE-Xa pipe (SDR series), which are indicated in the range table together with the pipe diameters.

8.2 Material

Body: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➠ Tab. [T20].
Corrosion protection by hot dip galvanising: according to EN 10284.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➠ Chapter [14-17] 'General product information'

8.3 Application PRIMOFIT, galvanised, transition from steel to PE/PE-Xa pipe

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

The max. permissible operating pressure in the specific application depends on the pipe specification and local regulations!

T20
Limits of use

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Fuel gases (incl. H_2)[2]	10[3]	40	Yellow	NBR
System water	16	40		

1 The colour coding on the packaging indicates the gasket material.
2 Natural gas NPG| Liquefied Petroleum Gas LPG | Hydrogen up to 20% vol.
In some countries Steel-PE connections in general are not permitted for gas installations in buildings, please check your local regulations!
3 Max. 10 bar for PE100 / 8 bar for PE-Xa / 5 bar for threaded connection.

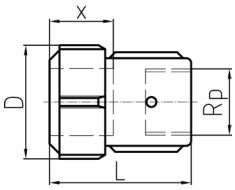
Important information
When installed under ground (compression fitting is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).

8.4 Certificates PRIMOFIT, galvanised, transition from steel- to PE/PE-Xa pipe

T21
Certificates PRIMOFIT, galvanised, transition steel- to PE/PE-Xa pipe

Country	Institute		Application	Certificate
DE	DVGW		Gas steel pipe & PE/PE-Xa pipe	DG-7521BP5519
CH	SVGW		Gas steel pipe & PE/PE-Xa pipe	05-045-6
NL	KIWA GASTEC KIWA GASTEC H2		Gas steel pipe Gas PE/PE-Xa pipe Hydrogen ready steel pipe Hydrogen ready PE/PE-Xa pipe	AR 91 Q 96/086, Nr. 56585 AR 70 Q 96/086, Nr. 56584 AR 214 Q96/086, Nr. 107696 AR 214 Q96/086, Nr. 107695
UK	BSI KITEMARK		Gas GIS/ PL3	KM 539621 (PL3)
IT	KIWA UNI		Gas & drinking water steel pipe Gas & drinking water PE/PE-Xa pipe	KIP102154 KIP102153

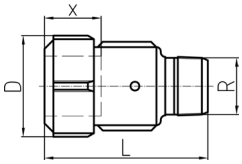
For transitions to PE pipes no ÖVGW gas certificate is available.



PRIMOFIT Female Adaptor galvanised for PE/PE-Xa pipe

Internal thread Rp according to EN 10226-1
including insert stiffener
*** according to EN 1555-2

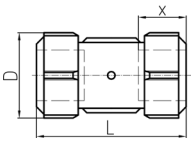
	SDR	Dim. PE (mm)	Dim. Rp (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	11	20 x 2,0	½	**775 212 201**	30	0.227	45	58	31 - 33
	11	25 x 2,3	¾	**775 212 202**	20	0.300	51	62	31 - 33
***	11	25 x 3,0	¾	**775 212 442**	20	0.300	51	62	31 - 33
	11	32 x 3,0	1	**775 212 203**	10	0.400	59	68	31 - 33
	11	40 x 3,7	1 ¼	**775 212 204**	5	0.560	68	70	32 - 38
	11	50 x 4,6	1 ½	**775 212 205**	5	0.700	75	75	35 - 43
	11	63 x 5,8	2	**775 212 206**	5	1.308	96	83	39 - 47
***	17.6	25 x 2,3	¾	**775 212 452**	20	0.300	51	63	30 - 34
***	17.6	32 x 2,3	1	**775 212 453**	10	0.400	59	68	30 - 34
***	17.6	40 x 2,3	1 ¼	**775 212 454**	5	0.560	68	70	32 - 38
***	17.6	50 x 2,9	1 ½	**775 212 455**	5	0.700	75	75	35 - 43
***	17.6	63 x 3,6	2	**775 212 456**	5	1.308	96	83	39 - 47



PRIMOFIT Male Adaptor galvanised for PE/PE-Xa pipe

External thread R according to EN 10226-1
including insert stiffener
*** according to EN 1555-2

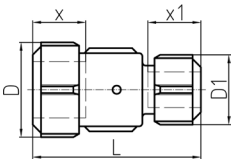
	SDR	Dim. PE (mm)	Dim. R (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	11	20 x 2,0	½	**775 202 201**	20	0.239	45	73	31 - 33
	11	25 x 2,3	¾	**775 202 202**	20	0.316	51	79	31 - 33
***	11	25 x 3,0	¾	**775 202 442**	20	0.300	51	79	31 - 33
	11	32 x 3,0	1	**775 202 203**	10	0.422	59	89	31 - 33
	11	40 x 3,7	1 ¼	**775 202 204**	5	0.600	68	92	32 - 38
	11	50 x 4,6	1 ½	**775 202 205**	5	0.760	75	96	35 - 43
	11	63 x 5,8	2	**775 202 206**	5	1.343	96	106	39 - 47
	17.6	25 x 2,0	¾	**775 202 602**	20	0.295	51	79	31 - 33
***	17.6	25 x 2,3	¾	**775 202 452**	20	0.295	51	79	31 - 33
	17.6	32 x 2,0	1	**775 202 603**	10	0.460	59	89	31 - 33
***	17.6	32 x 2,3	1	**775 202 453**	10	0.460	59	89	31 - 33
***	17.6	40 x 2,3	1 ¼	**775 202 454**	5	0.600	68	92	32 - 38
***	17.6	50 x 2,9	1 ½	**775 202 455**	5	0.760	75	96	35 - 43
***	17.6	63 x 3,6	2	**775 202 456**	5	1.343	96	106	39 - 47



PRIMOFIT Coupling short galvanised equal for PE/PE-Xa pipe to steel pipe

including insert stiffener
*** according to EN 1555-2

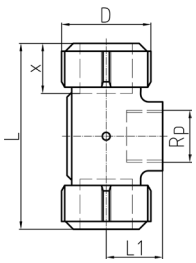
	SDR	Dim. PE (mm)	Dim. St (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x PE (mm)	x St (mm)
	7.4	20 x 3,0	½	**775 102 701**	20	0.378	45	85	31 - 33	30 - 34
	7.4	25 x 3,5	¾	**775 102 702**	5	0.403	51	89	31 - 33	30 - 34
	7.4	32 x 4,4	1	**775 102 703**	15	0.632	59	95	31 - 33	30 - 34
	7.4	40 x 5,5	1 ¼	**775 102 704**	10	0.760	68	96	32 - 38	30 - 36
	7.4	50 x 6,9	1 ½	**775 102 705**	5	0.900	75	103	35 - 43	32 - 38
	7.4	63 x 8,6	2	**775 102 706**	5	1.680	96	113	39 - 47	36 - 42
	11	20 x 2,0	½	**775 102 501**	20	0.363	45	85	31 - 33	30 - 34
	11	25 x 2,3	¾	**775 102 502**	20	0.408	51	89	31 - 33	30 - 34
***	11	25 x 3,0	¾	**775 102 442**	20	0.408	51	89	31 - 33	30 - 34
	11	32 x 3,0	1	**775 102 503**	15	0.595	59	95	31 - 33	30 - 34
	11	40 x 3,7	1 ¼	**775 102 504**	10	0.760	68	96	32 - 38	30 - 36
	11	50 x 4,6	1 ½	**775 102 505**	5	0.920	75	103	35 - 43	32 - 38
	11	63 x 5,8	2	**775 102 506**	5	1.700	96	113	39 - 47	36 - 42
	17.6	25 x 2,0	¾	**775 102 602**	20	0.462	51	89	31 - 33	30 - 34
***	17.6	25 x 2,3	¾	**775 102 452**	20	0.462	51	89	31 - 33	30 - 34
	17.6	32 x 2,0	1	**775 102 603**	15	0.644	59	95	31 - 33	30 - 34
***	17.6	32 x 2,3	1	**775 102 453**	15	0.644	59	95	31 - 33	30 - 34
	17.6	40 x 2,3	1 ¼	**775 102 604**	10	0.770	68	96	32 - 38	30 - 36
	17.6	50 x 2,9	1 ½	**775 102 605**	5	0.900	75	103	35 - 43	32 - 38
	17.6	63 x 3,6	2	**775 102 606**	5	1.836	96	113	39 - 47	36 - 42



PRIMOFIT Coupling short galvanised reducing for PE/PE-Xa pipe to steel pipe

including insert stiffener

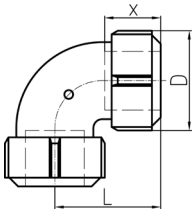
SDR	Dim. PE (mm)	Dim. St (inch)	NBR Code	GP	Weight (kg)	D (mm)	D1 (mm)	L (mm)	x PE (mm)	x St (mm)
11	20 x 2,0	¾	**775 102 511**	20	0.328	51	45	90	31 - 33	30 - 34
11	25 x 2,3	½	**775 102 526**	20	0.435	45	51	90	31 - 33	30 - 34
11	25 x 2,3	1	**775 102 513**	10	0.540	59	51	97	31 - 33	30 - 34
11	25 x 2,3	1 ¼	**775 102 515**	11	0.700	68	51	98	31 - 33	30 - 36
11	32 x 3,0	¾	**775 102 531**	10	0.540	51	59	97	31 - 33	30 - 34
11	32 x 3,0	1 ¼	**775 102 516**	11	0.700	68	59	98	31 - 33	30 - 36
11	32 x 3,0	1 ½	**775 102 519**	5	0.860	75	59	98	31 - 33	32 - 38
11	40 x 3,7	1	**775 102 535**	5	0.740	59	68	97	32 - 38	30 - 34
11	40 x 3,7	1 ½	**775 102 520**	5	0.860	75	68	97	32 - 38	32 - 38
11	40 x 3,7	2	**775 102 524**	5	1.440	96	98	109	32 - 38	36 - 42
11	50 x 4,6	1 ¼	**775 102 538**	5	0.757	68	75	100	35 - 43	30 - 36
11	50 x 4,6	2	**775 102 525**	5	1.440	96	75	112	35 - 43	36 - 42
11	63 x 5,8	1 ½	**775 102 540**	5	1.540	75	96	112	39 - 47	32 - 38



PRIMOFIT Threaded Outlet Tee galvanised for PE/PE-Xa pipe

Internal thread Rp according to EN 10226-1
including insert stiffeners

SDR	Dim. PE (mm)	Dim. Rp (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	L1 (mm)	x (mm)
11	32 x 3,0	1	**775 312 203**	5	0.718	59	112	38	31 - 33
11	63 x 5,8	2	**775 312 206**	3	2.250	96	155	62	39 - 47



PRIMOFIT Elbow galvanised for PE/PE-Xa pipe

including insert stiffener
*** according to EN 1555-2

	SDR	Dim. PE (mm)	Dim. St (inch)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x PE (mm)	x St (mm)
	11	20 x 2,0	½	**775 402 501**	20	0.390	45	58	31 - 33	30 - 34
	11	25 x 2,3	¾	**775 402 502**	10	0.460	51	59	31 - 33	30 - 34
***	11	25 x 3,0	¾	**775 402 442**	10	0.460	51	59	31 - 33	30 - 34
	11	32 x 3,0	1	**775 402 503**	10	0.660	59	59	31 - 33	30 - 34
	11	40 x 3,7	1 ¼	**775 402 504**	5	0.889	68	59	32 - 38	30 - 36
	11	50 x 4,6	1 ½	**775 402 505**	5	1.140	75	78	35 - 43	32 - 38
	11	63 x 5,8	2	**775 402 506**	4	2.060	96	88	39 - 47	36 - 42
***	17.6	32 x 2,3	1	**775 402 453**	10	0.660	59	59	31 - 33	30 - 34
***	17.6	40 x 2,3	1 ¼	**775 402 454**	5	0.889	68	59	32 - 38	30 - 36
***	17.6	50 x 2,9	1 ½	**775 402 455**	5	1.140	75	78	35 - 43	32 - 38
***	17.6	63 x 3,6	2	**775 402 456**	4	1.952	96	88	39 - 47	36 - 42

9 PRIMOFIT, galvanised, transition from steel- to PE/PE-Xa with EPDM gasket for drinking water

The PRIMOFIT is a compression fitting with full end-load capability. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression fitting. This compression fitting according to EN 10284 is used to connect hot-dip galvanised steel pipes according to EN 10255 and EN 10220-S1 with the standardised outside diameters according to ISO 65 with polyethylene pipes according to EN 12201-2 with material PE 100 or PE 80, as well as with cross-linked polyethylene pipes PE-Xa according to DIN 16892/93.

9.1 Pipe specification

	PE EN 12201-2/water			PE-Xa EN ISO 15875-2	Steel/EN 10255 Steel/EN 10220-S1	
SDR	7,4	11	17,6 (17)	11	–	
S	3,2	5	8,3 (8)	5	–	
Da [mm]	s [mm]	s [mm]	s [mm]	s [mm]	Dimension [Inch]	D [mm]
20	3,0	2,0	–	1,9	½	21,3
25	3,5	2,3	2,0 (2,0)	2,3	¾	26,9
32	4,4	3,0	2,0 (2,0)	2,9	1	33,7
40	5,5	3,7	2,3 (2,4)	3,7	1¼	42,4
50	6,9	4,6	2,9 (3,0)	4,6	1½	48,3
63	8,6	5,8	3,6 (3,8)	5,8	2	60,3

Da/s Nominal outside diameters/wall thicknesses of PE/PE-Xa pipe
D Nominal outside diameter of steel pipe

T22
Pipe specification
PE EN 12201-2
PE-Xa EN ISO 15875-2
Steel/EN 10255
Steel/EN 10220-S1

Important information
The scope of delivery includes also stiffener(s). **The use of stiffeners is manadatory.**
☑ For the correct selection of the compression fitting, please pay attention to the different wall thicknesses of the PE/PE-Xa pipe (SDR series), which are indicated in the range table together with the pipe diameters.

Important information to the scope of delivery
PRIMOFIT stainless steel for PE/PE-Xa pipes can also be used for other plastic pipe systems such as GF INSTAFLEX (PB) pipe systems after technical clarification regarding application limits.

9.2 Material

Body: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➨ Tab. [T23].
Corrosion protection by hot dip galvanising: according to EN 10284.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➨ Chapter [14-17] 'General product information'

9.3 Application PRIMOFIT, galvanised, transition steel- to PE/PE-Xa with EPDM gasket for drinking water

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

The max. permissible operating pressure in the specific application depends on the pipe specification and local regulations!

Important information - In the field of drinking water, only PRIMOFIT compression fittings with EPDM seal shall be used. When installed under ground (compression fitting is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).

T23
Limits of use

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Drinking water (cold <25°C)	16	25	Blue	EPDM

1 The colour coding on the packaging indicates the gasket material.

Drinking water installation

When planning and designing drinking water installations, compliance with the regulations of EN 806-2 is mandatory. Essential information on corrosion prevention for hot-dip galvanised ferrous materials can be found in EN 12502-3. With regard to the compliance with drinking water hygiene in Germany, the requirements of DIN 50930-6, together with the German UBA Evaluation Criteria for Metallic Materials in its currently valid version apply and is adopted by the European 4MS - Initiative. It approves the use of hot-dip galvanised iron materials for cold drinking water with a base capacity of KB8.2 ≤0.2 mmoL/L and neutral salt ratios S1 <1. The UBA Evaluation Criteria for Metallic Materials also regulates the requirements for the composition of the zinc coating, compliance with which is demonstrated by GF by the associated DVGW certificate. In the case of a repair or additions to an existing cold and hot water installation on a small scale, according to the UBA Evaluation Criteria for Metallic Materials, based on the experience in the previous operation of the system and the results of a drinking water hygiene analysis, the exceptional use of hot dip galvanized iron materials is possible.

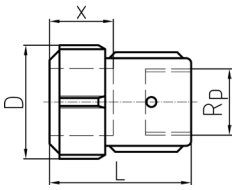
For applications with heated drinking water (>25°C) we recommend using PRIMOFIT made of stainless steel.

Chapter [7] ‚PRIMOFIT Stainless Steel for steel- and PE/PE-Xa pipe‘

9.4 Certificates PRIMOFIT, galvanised, transition steel to PE/PE-Xa with EPDM gasket for drinking water

T24
Certificates PRIMOFIT transition steel to PE/PE-Xa for drinking water (EPDM)

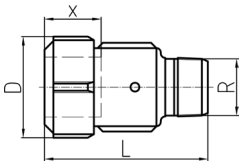
Country	Institute		Application	Certificate
AT	ÖVGW	ÖVGW GEPRÜFT	Drinking water steel pipe & PE/PE-Xa pipe	W 1.602
	ÜA		Drinking water steel pipe & PE/PE-Xa pipe EPDM	R-15.2.3-20-17032
DE	DVGW	DVGW CERT	Drinking water steel pipe	DW-8511BL0157
			Drinking water steel pipe & PE/PE-Xa pipe	DW-7611BT0591
CH	SVGW	SVGW SSIGE	Drinking water steel pipe	8704-1985
FR	ACS	ACS	Drinking water steel pipe & PE/PE-Xa pipe EPDM	19 ACC LY 715



PRIMOFIT Female Adaptor galvanised for PE/PE-Xa pipe

Internal thread Rp according to EN 10226-1
including insert stiffener

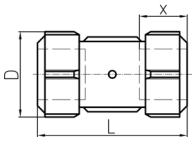
SDR	Dim. PE (mm)	Dim. Rp (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
11	20 x 2,0	½	**775 216 201**	30	0.235	45	58	31 - 33
11	25 x 2,3	¾	**775 216 202**	20	0.315	51	62	31 - 33
11	32 x 3,0	1	**775 216 203**	10	0.414	59	68	31 - 33
11	40 x 3,7	1 ¼	**775 216 204**	5	0.560	68	70	32 - 38
11	50 x 4,6	1 ½	**775 216 205**	5	0.700	75	75	35 - 43
11	63 x 5,8	2	**775 216 206**	5	1.216	96	83	39 - 47



PRIMOFIT Male Adaptor galvanised for PE/PE-Xa pipe

External thread R according to EN 10226-1
including insert stiffener

SDR	Dim. PE (mm)	Dim. R (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
11	20 x 2,0	½	**775 206 201**	20	0.239	45	73	31 - 33
11	25 x 2,3	¾	**775 206 202**	20	0.316	51	79	31 - 33
11	32 x 3,0	1	**775 206 203**	15	0.422	59	89	31 - 33
11	40 x 3,7	1 ¼	**775 206 204**	5	0.600	68	92	32 - 38
11	50 x 4,6	1 ½	**775 206 205**	5	0.664	75	96	35 - 43
11	63 x 5,8	2	**775 206 206**	5	1.204	96	106	39 - 47



PRIMOFIT Coupling short galvanised equal for PE/PE-Xa pipe to steel pipe

including insert stiffener

SDR	Dim. PE (mm)	Dim. St (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x PE (mm)	x St (mm)
11	20 x 2,0	½	**775 106 501**	20	0.363	45	85	31 - 33	30 - 34
11	25 x 2,3	¾	**775 106 502**	20	0.450	51	89	31 - 33	30 - 34
11	32 x 3,0	1	**775 106 503**	15	0.533	59	95	31 - 33	30 - 34
11	40 x 3,7	1 ¼	**775 106 504**	10	0.760	68	96	32 - 38	30 - 36
11	50 x 4,6	1 ½	**775 106 505**	5	0.920	75	103	35 - 43	32 - 38
11	63 x 5,8	2	**775 106 506**	5	1.700	96	113	39 - 47	36 - 42

10 PRIMOFIT, galvanised, for PE/PE-Xa pipe

The PRIMOFIT is a compression fitting with full end-load capability. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression joint. This compression joint acc. to EN 10284 is used to connect polyethylene pipes acc. to EN 1555-2 with material PE 100 or PE 80 and cross-linked polyethylene pipes PE-Xa and DIN 16892/93.

10.1 Pipe specification

T25
Pipe specification
PE EN 1555-2
PE-Xa DIN 16892/93

	PE EN 1555-2/Gas		PE-Xa DIN 16892/93
SDR	11	17,6	11
S	5	8,3	5
Da [mm]	s [mm]	s [mm]	s [mm]
20	3,0	2,3	1,9
25	3,0	2,3	2,3
32	3,0	2,3	2,9
40	3,7	2,3	3,7
50	4,6	2,9	4,6
63	5,8	3,6	5,8

Da/s Nominal outside diameters/wall thicknesses of PE/PE-Xa pipe

Important information
The scope of delivery includes also stiffener(s). **The use of stiffeners is manadatory.**
☑ For the correct selection of the compression fitting, please pay attention to the different wall thicknesses of the PE/PE-Xa pipe (SDR series), which are indicated in the range table together with the pipe diameters.

Important information to the scope of delivery
PRIMOFIT stainless steel for PE/PE-Xa pipes can also be used for other plastic pipe systems such as GF INSTAFLEX (PB) pipe systems after technical clarification regarding application limits.

10.2 Material

Body and nut: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➨ Tab. [T26].
Corrosion protection by hot dip galvanising: according to EN 10284.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➨ Chapter [14-17] 'General product information'

10.3 Applications PRIMOFIT, galvanised, for PE/PE-Xa pipe

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

The max. permissible operating pressure in the specific application depends on the pipe specification and local regulations!

T26
Limits of use

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Fuel gases (incl. H_2)[2]	10[3]	40	Yellow	NBR
System water[4]	16	40		

1 The colour coding on the packaging indicates the gasket material.
2 Natural gas NPG| Liquefied Petroleum Gas LPG | Hydrogen up to 20% vol.
In some countries Steel-PE connections in general are not permitted for gas installations in buildings, please check your local regulations!
3 Max. 10 bar for PE100 / 8 bar for PE-Xa / 5 bar for threaded connection.

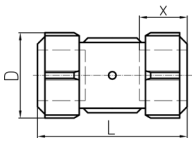
Important information
When installed under ground (compression joint is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).

10.4 Certifikates PRIMOFIT, galvanised, for PE/PE-Xa pipe

T27
Certificates PRIMOFIT, galvanised, for PE/PE-Xa pipe

Country	Institute		Application	Certificate
DE	DVGW		Gas steel pipe & PE/PE-Xa pipe	DG-7521BP5519
CH	SVGW		Gas steel pipe & PE/PE-Xa pipe	05-045-6
NL	KIWA GASTEC		Gas PE/PE-Xa Pipe	AR 70 Q 96/086, Nr. 56584
	KIWA GASTEC H_2		Hydrogen ready PE/PE-Xa Pipe	AR 214 Q96/086, Nr. 107695
UK	BSI KITEMARK		Gas GIS/ PL3	KM 539621 (PL3)
IT	KIWA UNI		Gas & drinking water steel pipe	KIP102154
			Gas & drinking water PE/PE-Xa pipe	KIP102153

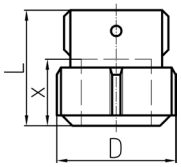
For transitions to PE pipes no ÖVGW gas certificate is available.



PRIMOFIT Coupling short galvanised equal for PE/PE-Xa pipe

including insert stiffeners
*** according to EN 1555-2

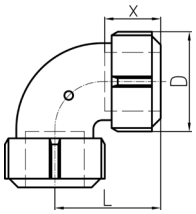
	SDR	Dim. PE (mm)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	11	20 x 2,0	**775 102 201**	20	0.358	45	82	31 - 33
	11	25 x 2,3	**775 102 202**	10	0.468	51	86	31 - 33
***	11	25 x 3,0	**775 102 252**	10	0.448	51	86	31 - 33
	11	32 x 3,0	**775 102 203**	10	0.549	59	93	31 - 33
	11	40 x 3,7	**775 102 204**	10	0.763	68	94	32 - 38
	11	50 x 4,6	**775 102 205**	5	1.068	75	103	35 - 43
	11	63 x 5,8	**775 102 206**	4	1.920	96	111	39 - 47



PRIMOFIT Cap galvanised for PE/PE-Xa pipe

including insert stiffener
*** according to EN 1555-2

	SDR	Dim. PE (mm)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	11	20 x 2,0	**775 452 201**	30	0.200	45	46	31 - 33
	11	25 x 2,3	**775 452 202**	30	0.240	51	48	31 - 33
***	11	25 x 3,0	**775 452 442**	30	0.240	51	48	31 - 33
	11	32 x 3,0	**775 452 203**	15	0.329	59	52	31 - 33
	11	40 x 3,7	**775 452 204**	10	0.492	68	53	32 - 38
	11	50 x 4,6	**775 452 205**	10	0.620	75	57	35 - 43
	11	63 x 5,8	**775 452 206**	5	1.140	96	60	39 - 47



PRIMOFIT Elbow galvanised for PE/PE-Xa pipe

including insert stiffeners
*** according to EN 1555-2

	SDR	Dim. PE (mm)	NBR Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
	11	20 x 2,0	**775 402 201**	20	0.339	45	58	31 - 33
	11	25 x 2,3	**775 402 202**	10	0.508	51	59	31 - 33
***	11	25 x 3,0	**775 402 252**	10	0.508	51	59	31 - 33
	11	32 x 3,0	**775 402 203**	10	0.664	59	59	31 - 33
	11	40 x 3,7	**775 402 204**	5	0.729	68	59	32 - 38
	11	50 x 4,6	**775 402 205**	5	1.068	75	78	35 - 43
	11	63 x 5,8	**775 402 206**	4	2.236	96	88	39 - 47

11 PRIMOFIT, Spare packs (sealing kits), for PE/PE-Xa pipe

PRIMOFIT is a modular system and offers maximum application flexibility through the possibility of individual combinations of body geometries and spare packs (sealing kits), depending on the application. This eliminates the need for a significant amount of storage. For example, stocked NBR PRIMOFIT can be easily converted to a drinking water-approved EPDM gasket at any time, even on site. Just as PRIMOFIT for steel pipe can be converted for butt weld tubes or even for the use with PE and PE-Xa pipe.

Important information
PRIMOFIT compression fittings can be converted for other media, applications and pipe types at any time by using optional spare packs (sealing kits).
PRIMOFIT can be reused by replacing the sealing kit!
Thus make a significant contribution to sustainable environmental protection.

11.1 Pipe specification

T28
Pipe specification
PE EN 12201-2
PE EN 1555-2
PE-Xa DIN 16892/93 & EN ISO 15875-2

	PE EN 12201-2/Water			PE EN 1555-2/Gas		PE-Xa DIN 16892/93 and EN ISO 15875-2
SDR	7,4	11	17,6 (17)	11	17,6	11
S	3,2	5	8,3 (8)	5	8,3	5
Da [mm]	s [mm]	s [mm]	s [mm]	s [mm]	s [mm]	s [mm]
20	3,0	2,0	–	3,0	2,3	1,9
25	3,5	2,3	2,0 (2,0)	3,0	2,3	2,3
32	4,4	3,0	2,0 (2,0)	3,0	2,3	2,9
40	5,5	3,7	2,3 (2,4)	3,7	2,3	3,7
50	6,9	4,6	2,9 (3,0)	4,6	2,9	4,6
63	8,6	5,8	3,6 (3,8)	5,8	3,6	5,8

Da/s Nominal outside diameters/wall thicknesses of PE/PE-Xa pipe

Important information to the scope of delivery
The scope of delivery includes also stiffener(s). **The use of stiffeners is manadatory.**
☑ For the correct selection of the compression fitting, please pay attention to the different wall thicknesses of the PE/PE-Xa pipe (SDR series), which are indicated in the range table together with the pipe diameters.

11.2 Application PRIMOFIT spare packs (sealing kits) for PE/PE-Xa Pipe

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

The max. permissible operating pressure in the specific application depends on the pipe specification and local regulations!

T29 **Limits of use**

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket	Surface / Material PRIMOFIT
Fuel gases (incl. H_2)[2]	10[3]	40	Yellow	NBR	black & galvanised
System water	16	40			
Drinking water (cold <25°C)	16	25	Blue	EPDM	galvanised
Drinking water (heated >25°C)	16	40			stainless steel[4]

1 The colour coding on the packaging indicates the gasket material.
2 Natural gas NPG| Liquefied Petroleum Gas LPG | Hydrogen up to 20% vol.
In some countries Steel-PE connections in general are not permitted for gas installations in buildings, please check your local regulations!
3 Max. 10 bar for PE100 / 8 bar for PE-Xa / 5 bar for threaded connection.
4 For new installations. Regarding reparations and small extensions also glavanised versions are suitable.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➨ Chapter [14-17] 'General product information'

PRIMOFIT Spare Packs + Insert Stiffeners for PE/PE-Xa pipe

*** according to EN 1555-2

	SDR	Dim. PE (mm)	NBR Code	EPDM Code	GP	Weight (kg)	Stiffener material	Colour
	11	20 x 2,0	**775 958 201**	**775 959 201**	25	0.035	plastic (POM)	white
	11	25 x 2,3	**775 958 202**	**775 959 202**	25	0.050	plastic (POM)	white
***	11	25 x 3,0	**775 958 442**		25	0.053	plastic (POM)	yellow
	11	32 x 3,0	**775 958 203**	**775 959 203**	25	0.062	plastic (POM)	white
	11	40 x 3,7	**775 958 204**	**775 959 204**	25	0.110	plastic (POM)	white
	11	50 x 4,6	**775 958 205**	**775 959 205**	20	0.140	plastic (POM)	white
	11	63 x 5,8	**775 958 206**	**775 959 206**	10	0.170	plastic (POM)	white

PRIMOFIT Spare Packs for PE/PE-Xa all SDR/S (without Insert Stiffeners)

Dim. PE (mm)	NBR Code	GP	Weight (kg)
20	**775 958 961**	50	0.020
25	**775 958 962**	50	0.030
32	**775 958 963**	50	0.040
40	**775 958 964**	50	0.050
50	**775 958 965**	50	0.050
63	**775 958 966**	50	0.060

PRIMOFIT Insert Stiffeners for PE/PE-Xa pipe

*** according to EN 1555-2

	SDR	Dim. PE (mm)	Code	GP	Weight (kg)	Stiffener material	Colour marking
	7.4	20 x 3,0	**775 950 701**	50	0.020	Steel, galvanised	red
	7.4	25 x 3,5	**775 950 702**	50	0.050	Steel, galvanised	red
	7.4	32 x 4,4	**775 950 703**	50	0.050	Steel, galvanised	red
	7.4	40 x 5,5	**775 950 704**	25	0.120	Steel, galvanised	red
	7.4	50 x 6,9	**775 950 705**	25	0.099	Steel, galvanised	red
	7.4	63 x 8,6	**775 950 706**	15	0.180	Steel, galvanised	red
	11	20 x 2,0	**775 950 201**	50	0.020	plastic (POM)	white
	11	25 x 2,3	**775 950 202**	50	0.016	plastic (POM)	white
***	11	25 x 3,0	**780 881 125**	40	0.020	plastic (POM)	yellow
	11	32 x 3,0	**775 950 203**	50	0.018	plastic (POM)	white
	11	40 x 3,7	**775 950 204**	25	0.070	plastic (POM)	white
	11	50 x 4,6	**775 950 205**	25	0.107	plastic (POM)	white
	11	63 x 5,8	**775 950 206**	15	0.209	plastic (POM)	white
***	17.6	25 x 2,3	**780 888 925**	30	0.040	plastic (POM)	white
***	17.6	32 x 2,3	**780 925 551**	30	0.053	plastic (POM)	yellow
	17.6	40 x 2,3	**775 950 354**	25	0.044	plastic (POM)	green
	17.6	50 x 2,9	**775 950 255**	25	0.061	plastic (POM)	green
	17.6	63 x 3,6	**775 950 256**	14	0.094	plastic (POM)	green

12 PRIMOFIT, galvanised, for lead pipe

The PRIMOFIT is a compression fitting with full end-load capability. In addition, each connection can accommodate an angle deviation up to 3° between pipe and compression fitting.

This compression fitting is based on EN 10344 and is used to connect pressure-bearing lead pipes with outside diameters: ➠ Tab. [T30].

12.1 Pipe specification (lead pipe)

T30
Pipe specification lead pipe

Dimension [inch]	D [mm]
½	18,3 – 21,9
¾	23,9 – 27,4
1	27,3 – 30,9
1	30,9 – 34,4
1¼	36,5 – 37,6
1¼	39,6 – 43,1
1½	45,8 – 46,9
1½	47,5 – 50,7
2	53,1 – 55,5
2	56,5 – 57,5
2	60,4 – 63,8

D Nominal outer diameter range of the lead pipe

12.2 Material

Body and nut: white malleable cast iron **EN-GJMW-400-5** according to EN 1562.
Gasket material: ➠ Tab. [T31].
Corrosion protection by hot dip galvanising: according to EN 10344.

More details
Details on general product information, jointing and application methods as well as pipe specifications can be found in: ➠ Chapter [14-17] 'General product information'

12.3 Applications PRIMOFIT, galvanised, for lead pipe

In addition to our manufacturer's specifications, the international, European or national application-related regulations (standards, guidelines,...) must also be observed.

T31
Limits of use

Medium	max. operating pressure [bar]	max. operating temperature [°C]	Colour code[1]	Gasket
Drinking water (cold <25°C)	10	25	Blue	EPDM

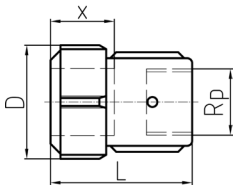
1 The colour coding on the packaging indicates the gasket material.

Important information

In compliance with the **Directive EU 2020/2184 ("Quality of water intended for human consumption"), existing lead pipes must be removed from the drinking water installations.** PRIMOFIT compression fittings are used exclusively for repairs or additions (transitions to other systems) of existing lead pipes and allow temporary operation until the final removal of the lead pipe installation.

Compliance with installation instructions is mandatory.
➠ Chapter [15.5] 'Jointing of lead pipes'

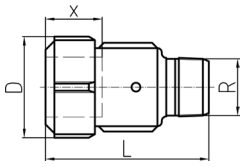
When installed under ground (compression fitting is exposed directly to earth, sand, etc.), the installer must apply additional corrosion protection methods (e.g. tape).



PRIMOFIT Female Adaptor galvanised for lead pipe

Internal thread Rp according to EN 10226-1
Dim. Pb shows the range of the outside diameter of the lead pipe.

Dim. Pb (mm)	Dim. Rp (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
23,9 - 27,4	¾	**775 212 802**	10	0.332	51	62	31 - 33
27,3 - 30,9	1	**775 212 813**	10	0.440	59	68	31 - 33
30,9 - 34,4	1	**775 212 803**	10	0.382	59	68	31 - 33
36,5 - 37,6	1 ¼	**775 212 814**	5	0.671	68	70	32 - 38
45,8 - 46,9	1 ½	**775 212 815**	5	0.776	75	75	35 - 43
53,1 - 55,4	2	**775 212 816**	5	0.900	96	83	36 - 42
56,5 - 57,5	2	**775 212 817**	5	0.900	96	83	36 - 42



PRIMOFIT Male Adaptor galvanised for lead pipe

External thread R according to EN 10226-1
Dim. Pb shows the range of the outside diameter of the lead pipe.

Dim. Pb (mm)	Dim. R (inch)	EPDM Code	GP	Weight (kg)	D (mm)	L (mm)	x (mm)
18,3 - 21,9	½	**775 202 801**	25	0.246	45	73	31 - 33
23,9 - 27,4	¾	**775 202 802**	10	0.300	51	79	31 - 33
27,3 - 30,9	1	**775 202 813**	10	0.440	59	89	31 - 33
30,9 - 34,4	1	**775 202 803**	10	0.420	59	89	31 - 33
36,5 - 37,6	1 ¼	**775 202 814**	5	0.671	68	92	32 - 38
39,6 - 43,1	1 ¼	**775 202 804**	5	0.671	68	92	32 - 38
45,8 - 46,9	1 ½	**775 202 815**	5	0.776	75	96	35 - 43
47,5 - 50,7	1 ½	**775 202 805**	5	0.776	75	96	35 - 43
53,1 - 55,4	2	**775 202 816**	5	0.900	96	106	36 - 42
56,5 - 57,5	2	**775 202 817**	5	0.900	96	106	36 - 42

PRIMOFIT Spare Packs for lead pipe

Dim. Pb shows the range of the outside diameter of the lead pipe.
Dim. St refers to the fitting sizes, which need to be combined with the Spare Packs.

Dim. Pb (mm)	Dim. St (inch)	EPDM Code	GP	Weight (kg)
18,3 - 21,9	½	**775 958 841**	50	0.020
23,9 - 27,4	¾	**775 958 842**	50	0.020
27,3 - 30,9	1	**775 958 813**	50	0.040
30,9 - 34,4	1	**775 958 843**	50	0.020
36,5 - 37,6	1 ¼	**775 958 814**	50	0.035
39,6 - 43,1	1 ¼	**775 958 844**	50	0.040
45,8 - 46,9	1 ½	**775 958 815**	50	0.034
47,5 - 50,7	1 ½	**775 958 845**	50	0.060
53,1 - 55,4	2	**775 958 816**	25	0.107
56,5 - 57,5	2	**775 958 817**	25	0.142
60,4 - 63,8	2	**775 958 846**	50	0.060

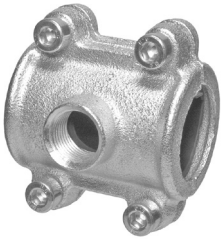
13 PRIMOFIT Repair Systems

13.1 PRIMOFIT Repair and tapping clamps

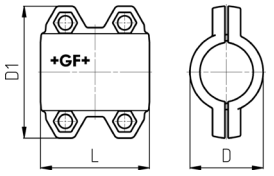
Used for temporary sealing of locally limited damage of pipes. Made of proven, highest quality white malleable cast iron **EN-GJMW-400-5** from GF with drinking water approved EPDM gasket.

Features

- Easy and quick assembly - gaskets and nuts are fixed in the half-shells. No separate handling, no slipping of the gasket, nuts do not get lost.
- Installation even where space is limited - hold the clamp in position with one hand, insert and tighten bolts with the other. No counter-holding of nuts required.
- Hexagon socket screws advantageous - in tight installation situations, a slim hexagon socket screw wrench offers advantages. Alternatively, a cordless screw-driver can be used.
- Secure positioning - half shells interlock with «serrations». This means that the screw always hits the corresponding nut.
- Can be reused many times - screws, nuts and gasket are designed to be exchangeable.
- Excellent sealing effect - the new GF design results in optimum force transmission to the sealing surfaces.

	Application notes
Repair clamps 	**Application:** for temporary sealing of locally limited damage to pipes caused by pores or small longitudinal fissures. (other applications on request). **Pipe material:** for steel pipes according to EN 10255 and EN 10220 - Series 1 with measurements according to ISO 65 (other pipes on request). **Applications:** Drinking water, System water and compressed air. **Maximum working pressure:** 16 bar **Maximum working temperature:** EPDM 95°C Other pipe materials and media on request.
Tapping clamps 	**Application:** for extension and change of existing pipe systems (other applications on request). **Pipe material:** for steel pipes according to EN 10255 and EN 10220 - Series 1 with measurements according to ISO 65 (other pipes on request). **Applications:** Drinking water, System water und compressed air. **Maximum working pressure:** 16 bar. **Maximum working temperature:** EPDM 95°C Other pipe materials and media on request.

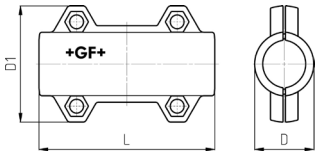
T32
Application notes for Repair and tapping clamps



PRIMOFIT Repair clamp short galvanised for steel pipe

* suitable for pipe outer diameter d

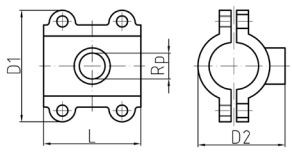
Dim. St (inch)	d* (mm)	EPDM Code	GP	Weight (kg)	L (mm)	D (mm)	D1 (mm)
½	21.3	**775 722 051**	20	0.159	70	38	72
¾	26.9	**775 722 052**	20	0.177	70	44	77
1	33.7	**775 722 053**	20	0.200	70	51	84
1 ¼	42.4	**775 722 054**	16	0.264	80	61	93
1 ½	48.3	**775 722 055**	11	0.367	100	67	101
2	60.3	**775 722 056**	8	0.472	100	80	115



PRIMOFIT Repair clamp long galvanised for steel pipe

* suitable for pipe outer diameter d

Dim. St (inch)	d* (mm)	EPDM Code	GP	Weight (kg)	L (mm)	D (mm)	D1 (mm)
½	21.3	**775 712 051**	17	0.340	140	38	80
¾	26.9	**775 712 052**	13	0.373	140	44	85
1	33.7	**775 712 053**	11	0.417	140	51	92
1 ¼	42.4	**775 712 054**	9	0.488	140	61	101
1 ½	48.3	**775 712 055**	5	0.542	140	67	107
2	60.3	**775 712 056**	5	0.684	140	80	120
2 ½	76.1	**775 712 057**	4	2.180	140	105	138
3	88.9	**775 712 058**	2	2.760	160	117	152
4	114.3	**775 712 059**	1	3.320	160	144	176



PRIMOFIT Tapping clamp galvanised for steel pipe

Internal thread Rp according to EN 10226-1
* suitable for pipe outer diameter d

Dim. St (inch)	d* (mm)	Dim. Rp (inch)	EPDM Code	GP	Weight (kg)	L (mm)	D1 (mm)	D2 (mm)
½	21.3	½	**775 732 051**	25	0.423	70	67	43
¾	26.9	½	**775 732 061**	30	0.440	70	73	49
1	33.7	½	**775 732 062**	23	0.489	70	80	57
1 ¼	42.4	¾	**775 732 065**	14	0.639	80	94	68
1 ½	48.3	¾	**775 732 068**	10	0.865	100	99	73
2	60.3	1	**775 732 073**	8	1.042	100	114	89

13.2 PRIMOFIT Brass repair clamp

Application: for temporary repair of leaking pipes caused by pores or small longitudinal fissures (other applications on request).

Pipe material: for copper pipes according to EN 1057 and for stainless steel tubes whose outer tube diameters correspond to those of the copper tube. (other pipes on request).

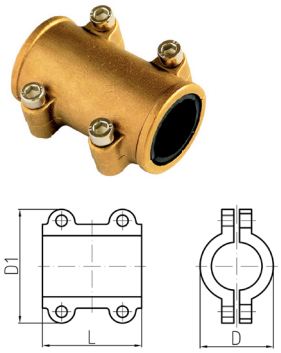
Media: Drinking water and System water.

Maximum operating pressure: 10 bar.

Maximum operating temperature: EPDM 95°C.

Other pipe materials and media on request.

"Dim." represents the nominal diameter of the copper pipe.



PRIMOFIT Brass repair clamp

Dim. (mm)	EPDM Code	GP	Weight (kg)	L (mm)	D (mm)	D1 (mm)
10	**775 723 050**	100	0.080	45	18	31
12	**775 723 051**	40	0.080	45	20	32
15	**775 723 052**	50	0.120	50	22	42
18	**775 723 053**	35	0.160	50	26	45
22	**775 723 054**	50	0.200	60	31	50
28	**775 723 055**	30	0.300	70	39	57
35	**775 723 056**	20	0.400	70	45	69
42	**775 723 057**	20	0.540	80	55	78
54	**775 723 058**	10	0.900	100	65	92

13.3 PRIMOFIT Snap clamp

Application: for temporary repair of leaking pipes caused by pores or small longitudinal fissures (other applications on request).

Pipe material: for pipes made out of steel, copper, grey cast iron or ductile iron. (other pipes on request).

Media: Water and compressed air.

Maximum operating pressure: diameter 21-111mm 16 bar, diameter 112-117mm 10 bar,

Maximum operating temperature: NBR 80°C.

Other pipe materials and media on request.

"Dim." represents the outer diameter of the pipe.

PRIMOFIT Snap clamp

Dim. (inch)	Diameter range (mm)	Length (mm)	PN (bar)	NBR Code	GP	Weight (kg)
½	21 - 25	75	16	**724 856 400**	10	0.260
¾	26 - 30	75	16	**724 856 401**	10	0.260
1	33 - 37	75	16	**724 856 402**	10	0.300
1 ¼	42 - 45	75	16	**724 856 403**	5	0.320
1 ½	48 - 51	75	16	**724 856 404**	10	0.320
1 ½	50 - 54	75	16	**724 856 405**	10	0.340
2	60 - 64	75	16	**724 856 406**	5	0.360
2	69 - 73	75	16	**724 856 407**	5	0.460
2 ½	71 - 76	75	16	**724 856 408**	5	0.500
2 ½	74 - 80	75	16	**724 856 438**	5	0.500
3	87 - 93	75	16	**724 856 409**	5	0.500
3	105 - 111	75	16	**724 856 412**	5	0.520
4	112 - 117	75	10	**724 856 413**	5	0.520

14 General product information

14.1 Material

The body and coupling nut of the PRIMOFIT compression fittings are made acc. to EN 10284 and EN 10344. The material used is white malleable iron **EN-GJMW-400-5** acc. to EN 1562 and complies with the material symbol A.

T33
Material

Material symbol	Material grade acc. to EN 1562 approved acc. to EN 10284 / EN 10344
A	EN-GJMW-400-5
	EN-GJMB-350-10

PRIMOFIT compression fittings are available in black or hot-dip galvanised design, additionally protected with a preservation fluid to prevent flash rust. Hot-dip galvanizing meets the requirements of EN 10284 and EN 10344 or DIN 50930-6 as well as the Evaluation Criteria for Metallic Materials in its currently valid version and published by the UBA (the German Environment Agency).

The PRIMOFIT compression fittings made of 316 stainless steel (V4A) are deviating from these standards. This version also complies to the Evaluation Criteria for Metallic Materials by the German UBA.

Gasket material

The gasket materials NBR, EPDM, NBR + graphite (FIREJOINT) and FKM are offered to cover a wide range of applications. In order to distinguish between these materials, NBR gaskets are black and FKM gaskets are green. EPDM gaskets are also black, but bear a blue dot as a distinguishing feature to the NBR gasket. The EPDM gasket complies with the requirements of the German UBA Elastomer Guideline and is therefore approved for drinking water applications.

All PRIMOFIT compression joints are individually packed in PE bags together with an assembly instructions with integrated insertion depth gauge. The colour coding of the packaging indicates the gasket material.

T34
Gasket materials

Gasket materials	Colour coding
NBR	Yellow
EPDM	Blue
FKM	Green
NBR+Graphite (FIREJOINT)	Red

14.2 Application

14.2.1 Use of PRIMOFIT compression fittings under ground

If PRIMOFIT compression fittings are installed in the ground, they must be permanently protected against external corrosion by the installer. The corrosion protection must comply with the requirements of EN 12068 ("Cathodic protection – External organic coatings for the corrosion protection of buried or immersed steel pipelines used in conjunction with cathodic protection - Tapes and shrinkable materials"), as well as national standards and generally applicable rules or guidelines. In addition, compliance with the specifications of the responsible water or gas network or engineering office is mandatory.

The corrosion protection products used must be tested in accordance with the above mentioned regulations.

14.2.2 Use of PRIMOFIT compression fittings in masonry (flush-mounted)

If PRIMOFIT compression fittings are installed in masonry, they must be permanently protected against corrosion by the installer. The corrosion protection must comply with the requirements of the national standards and the generally applicable regulations or pipe installation guidelines. In addition, compliance with the specifications of the responsible water or gas network or engineering office is mandatory.

14.2.3 Reuse of PRIMOFIT compression fittings

When reusing the PRIMOFIT compression fittings, the gasket, washer and locking ring must be replaced. For this purpose spare packs (sealing kits) are available separately.

If mechanical damage, wear or corrosion is not visible on the body and nut, these fittings components can be used again.

14.3 Installation video

Please watch our installation video to see the use of PRIMOFIT compression joints first hand. In addition to various product requirements, the assembly process is also explained. Moreover, different application examples can also be viewed.

Installation video
Find the video at: https://www.fittings.at

14.4 Limits of use

The PRIMOFIT is a compression fitting with full end-load capability. Each connection can accommodate an angle deviation up to 3° between pipe and compression fitting. Due to the modular design of the PRIMOFIT, the replacement of the sealing kits (locking ring, washer and seal) by spare packs can also be used by the customer to convert to other types of pipe.

For the use of the PRIMOFIT compression fitting in the respective application areas, consulting the relevant international, European and national regulations (e.g. standards, directives, regulations of the local utilities, etc.) is mandatory.

The selection of the appropriate gasket material (NBR, EPDM, FKM or NBR + Graphite) and the matching fittingsmaterial/surface finish (black or hot-dip galvanised) is carried out according to the "limits of use" table and is decisive for the suitability of the product in a specific application. ➨ Chapter [1.3] ‘Limits of use’

14.5 Pressure Equipment Directive 2014/68/EU

PRIMOFIT compression fittings are not pressure equipment in the sense of the Pressure Equipment Directive and are therefore not intended for CE marking in connection with this EU Directive. PRIMOFIT compression fittings are pressure equipment components in compliance with EN 10284 or EN 10344 and the Pressure Equipment Directive – within the operating limits specified in EN 10284 and EN 10344. The material fulfills the requirement of the PED by compliance with the requirements of EN1562.

PRIMOFIT must only be used for media for which the material malleable cast iron, surface finish and the selected gasket material are suitable. If required, GF will gladly provide test report 2.2, together with a manufacturer's declaration.

15 Jointing technology

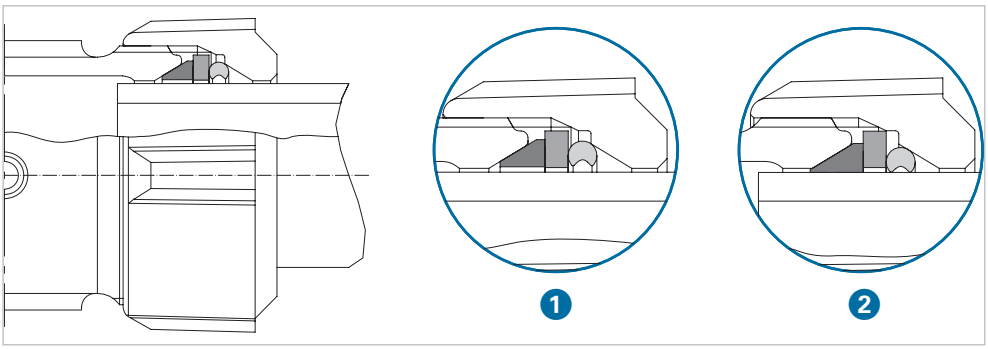
15.1 Jointing technology for steel pipes

This assortment range of compression fittings acc. to EN 10344 is used—depending on the field of application—to connect black or hot-dip galvanised steel pipes according to EN 10255 and EN 10220 Series 1 with outside diameters according to ISO 65. Spare packs (sealing kits) are available for some dimensions of welded steel tubes for pressure purposes of EN 10220 Series 2 and 3.

In the ready-to-install, preassembled state of the PRIMOFIT compression fitting, the internal diameters of the seal, washer and locking ring are larger than the largest permissible outside diameter of the pipe. This guarantees that the pipe can be inserted without disassembly. Tightening the nut has two functions:

- First, the seal is pressed against the jointing faces of the tapered seal chamber and the pipe's surface.
- Subsequently, the locking action of the locking ring in order to ensure push and pull out resistance of the compression fitting.

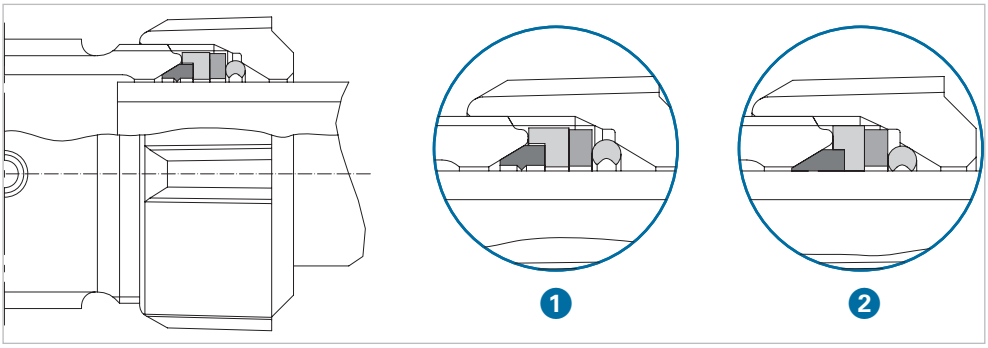
Other than using a nut when tightening a pipe joint, the compression fitting 4 inch uses screws on a flange system to achieve the same effect. However, the principle of sealing and clamping shown here is the same as for smaller dimensions.



G2
Connection for steel pipe
1. Loose connection
2. Tightened connection

15.2 FIREJOINT-Jointing for steel pipes (fire resistant version)

The PRIMOFIT FIREJOINT compression joint is the fire-resistant version, which is mandatory for gas pipes installed inside buildings according to DVGW. The compression joint is also used to connect black or hot dip galvanised steel pipes acc. to EN 10255 and EN 10220 Series 1 with an outside diameter acc. to ISO 65. The yellow passivated coupling nut makes it easy to recognise the PRIMOFIT FIREJOINT. This design is identical with the pipe connection for steel pipes, except for its different sealing kit (with additional graphite ring). This fitting has been specially designed for gas installations and meets the requirements for higher fire resistance, as defined by standardised test methods. An additional graphite ring maintains the end-load-resistance and the tightness during a fire. For sealing purposes in normal operation, an NBR gasket is embedded in the graphite ring.



G3
Connection for steel pipe (HTL version)
1. Loose connection
2. Tightened connection

15.3 Jointing of PRIMOFIT compression fittings, stainless steel, for steel pipe

The development of the PRIMOFIT stainless steel version was based on the proven advantages of the PRIMOFIT compression fittings made of malleable cast iron. PRIMOFIT stainless steel compression fittings are also preassembled and ready for installation, no disassembly is required before assembly. Minimal pipe end machining is required.
Well known PRIMOFIT tightness and high tensile strength of the connection.

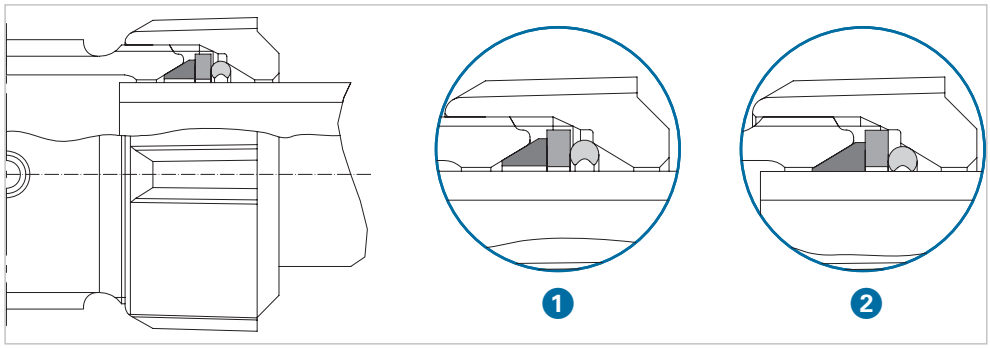
PRIMOFIT stainless steel fittings are characterised by low assembly costs and assembly without special tools. In addition, up to 3° angular deviation between pipe and compression fitting can be accommodated per connection. Stainless steel 316/V4A in contact with the medium in accordance with the UBA positive list (Germany) combined with a DVGW drinking water certified EPDM gasket ensures unrestricted application in the area of cold (<25°C) and heated (>25°C) drinking water. The alternative to galvanised and brass compression fittings for unfavourable water conditions.

The principle of the connection corresponds to that of the steel pipe connection.
➥ Chapter [15.1] 'Jointing technology for steel pipes.'

In the ready-to-install, preassembled state of the PRIMOFIT compression fitting, the internal diameters of the gasket, washer and locking ring are larger than the largest permissible outside diameter of the pipe. This guarantees that the pipe can be inserted without disassembly. Tightening the coupling nut has two functions:

- First, the gasket is pressed against the jointing faces of the tapered seal chamber and the pipe's surface.
- Subsequently, the locking action of the locking ring in order to ensure highest pull out resistance of the compression fitting.

Other than using a nut when tightening a pipe joint, the compression fitting 4 inch uses screws on a flange system to achieve the same effect. However, the principle of sealing and clamping shown here is the same as for smaller dimensions.



G4
Connection for steel pipe
1 Loose connection
2 Tightened connection

15.4 Jointing of PE- und PE-Xa pipes

Transition fittings from the above-specified steel pipes to PE/PE-Xa pipes as well as joints from PE/PE-Xa to PE/PE-Xa pipes are offered. These compression fittings are made acc. to EN 10284 and are suitable for PE-Pipee acc. to EN 12201-2 (water) and EN 1555-2 (gases), as well as crosslinked polyethylene pipes PE-Xa acc. to DIN 16892/93 and EN ISO 15875-2.

The following pipe materials are permitted to use: PE 80 (PE-MD), PE 100 (PE-HD) and PE-Xa.

Important information
Each PE/PE-Xa connection includes a stiffener. The use of stiffeners is manadatory.

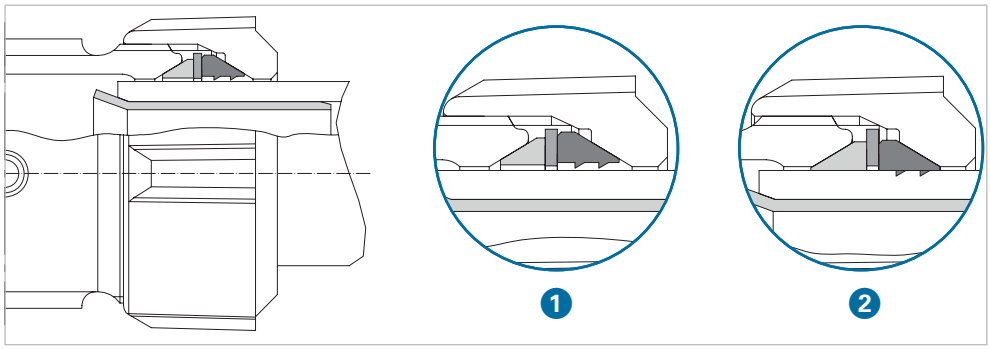
When using a stiffener with the PRIMOFIT PE/PE-Xa connection, the wall thicknesses (SDR series) specified in the assortment section of the catalogue under "Dimension PE" must be taken into account when selecting the compression joint.

Important information

PRIMOFIT stainless steel compression fittings made of stainless steel can also be used to connect PE, PE-Xa pipes and lead pipes by using suitable spare packs (sealing kits).
➡ Chapter [7] ‚PRIMOFIT Stainless steel for steel- and PE/PE-Xa pipe‘

The principle of the jointing method corresponds to that of the steel pipe connection. In contrast, a stiffener matching the pipe's internal diameter is required. This stiffener increases the resistance of the PE/PE-Xa pipe against the radial forces.

Gasket, washer and locking ring are matched to the pipe material and pipe diameter. Please pay attention to the special shape of the locking ring for PE/PE-Xa pipes. This rigidity of this joint is limited and tolerates a +/- 3° deflection of the pipe when tightened.



G5
Connection for PE- und PE-Xa-pipe
1. Loose Connection
2. Tightened connection

15.5 Jointing of lead pipes

Important information

In compliance with the **directive EU 2020/2184 „Quality of water intended for human consumption“, existing lead pipes must be removed from the drinking water installations.** PRIMOFIT compression fittings are used exclusively for repairs or additions (transitions to other systems) of existing lead pipes and allow temporary operation until the final removal of the lead pipe installation.

Since lead pipes can have different consistencies depending on the installation situation, the following instructions must be observed when installing PRIMOFIT compression fittings on lead pipes:

- The surface of the lead pipe must not be damaged and dirt in the insertion area must be removed.
- The outside diameter of the lead pipe must be within the tolerances indicated on the packaging label. This diameter may also be found in the dimension chart for lead pipes
  ➡ See Table [30 or 37]
- The out-of-roundness of the lead pipe must not exceed 1 mm (= difference between minimum and maximum outside diameter)
- The insertion depth of the lead pipe and the number of revolutions required to tighten the coupling nut can be found in the assembly instructions. For lead pipes, the values of the corresponding PE pipe sizes shall be used. Example: Lead pipe 30 mm, use the values for PE 32 mm: Insertion depth 32 mm ±1 mm
- After the installation, a pressure test must be carried out in accordance with national guidelines and attention must be paid to possible leaks. However, the test pressure should be at least 1.5 times the nominal pressure (1.5 × PN) or min. 10 bar (higher value should be used).

Important information

Gasket, washer and locking ring are matched to the pipe's material and diameter.
☑ The shape of the locking ring for lead pipes require special attention.

15.6 Jointing threads

The PRIMOFIT range includes fittings such as adaptors with internal threads (female adaptors), adaptors with external threads (male adaptors), Tees and elbows with jointing threads.

Jointing threads are pipe threads where pressure tight joints are made on the threads acc. to EN 10226-1 or ISO 7-1. The valid national edition of EN 10226 replaced by DIN 2999, BS 21, etc.

When using jointing threads acc. to EN 10226-1, the internal thread designated with the letters Rp is cylindrical. However, the external thread designated with the letter R is tapered.

15.6.1 Design and function of jointing threads (sealing inside the thread)

The standard EN 10226-1 (ISO 7-1) defines thread profile, dimensions, tolerances and designations based on the thread size. The major dimensions of these jointing threads, the weight and data of the medium- and heavy-duty threaded pipes are shown in the table [T35]. The thread profile with its most important features is illustrated in Fig. [G6].

Tapered external thread

When using **tapered external thread, [G7]** some details must be considered. As the name indicates, it is cut at a taper (cone-shaped), at a taper ratio of 1:16 [G8].

The entire pipe thread length consists of 3 sections [G7]:

- The **gauge length a** is defined and the tolerance is applied so that even the smallest possible internal thread diameter allows for easy mating. The external thread can be easily screwed in and the sparingly applied sealant is properly drawn into the connection.
- The **fitting allowence b** is the relevant threaded part that determines the sealing effect. The threaded length — with fully cut thread roots behind the gauge plane — is selected so that even the largest possible internal thread diameter allows for sufficient lenght of engagement when using a tool. Since the thread's cone ratio is 1:16, a strong pressure between the threads leads to a permanently reliable seal.
- The **washout thread**, which is not fully cut out at the root, should remain visible. If the thread is engaged too far, there is a risk that the internal thread might leak or crack on the side of the fitting (or on the valve). In order to avoid a leak path between the peaks of the male thread and the root of the internal thread in the finished joint, the thread crests on the male thread should be fully formed towards the whole useful thread length.

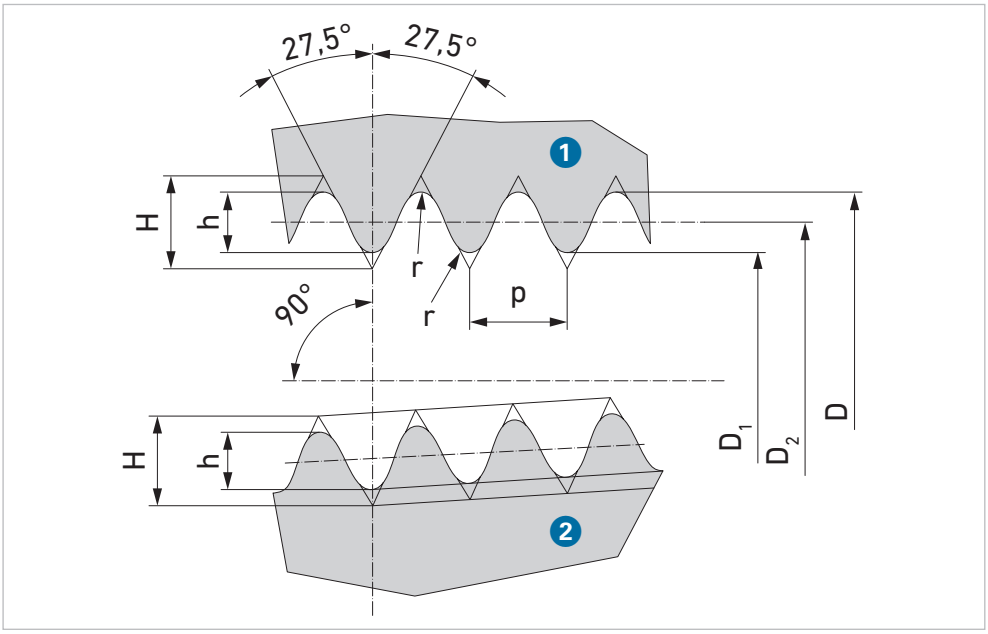
Parallel internal thread

When using the **parallel internal thread** [G9], it must be ensured that the useful thread length allows complete mating of the external thread until the sealing effect is achieved. This must also be ensured for the largest permissible gauge length of the external thread.

The different stages of a **threaded connection** that is tightened manually and subsequently tightened with a tool are shown in Fig. [G10] (for example: 1").

- In case of a manually threaded connection ([G10] ❶), 2¾ threads will still be available, allowing the use of a tool for the final tightening of the thread (➨ Tab. [T35]).
- The threaded connection tightended acc. to standard is shown in Fig. ([G10] ❷).

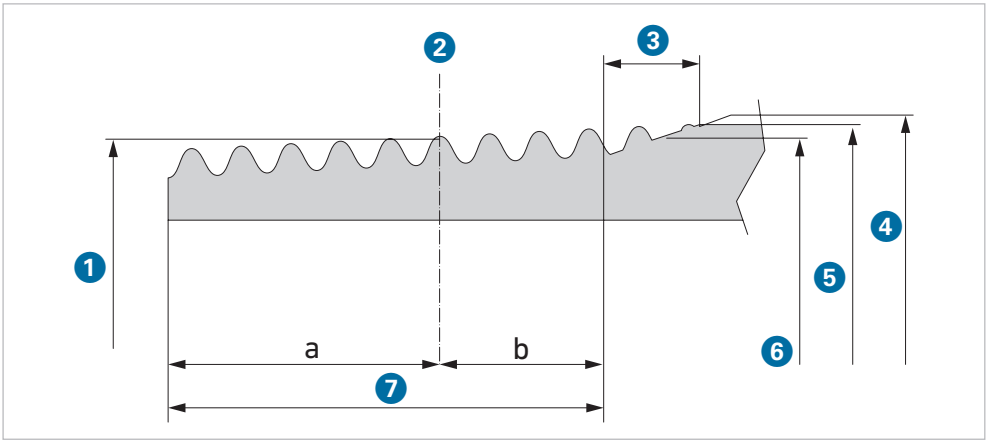
In order to compensate for the outlet direction of the fitting (or the lengths of the fully assembled pipeline), the threads can be screwed in a little less or a little more. Nevertheless, the connection is perfectly tight.



G6
Thread profile

1. Internal thread
2. External thread

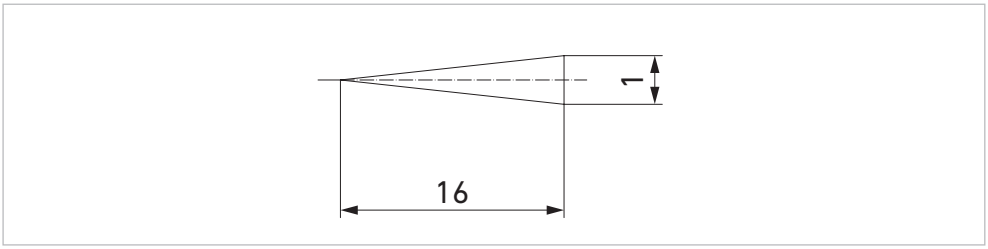
p Pitch
H 0,960491 · p
h 0,640327 · p
r 0,137329 · p
D Mayor diameter
D₁ Minor diameter
D₂ Pitch diameter



G7
Tapered external thread R

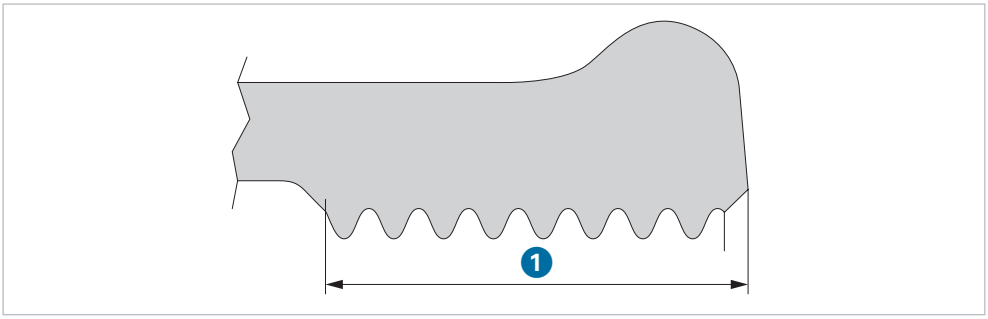
1. Thread diameter
2. Gauge plane
3. Washout thread
4. Pipe diameter max.
5. Pipe diameter nom.
6. Pipe diameter min.
7. Useful threads length

a (Gauge length) ± tolerance
b Fitting allowence



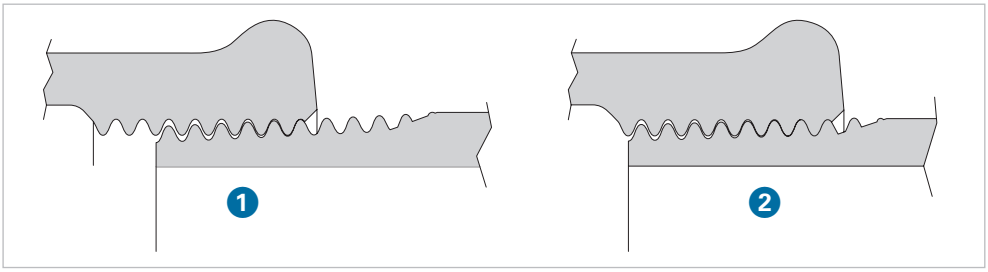
G8
Taper of an external thread

The thread profile is perpendicular to the pipe's axis.



G9
Parallel internal thread Rp

1. Useful threads length



G10
Thread connection

1. Tightened manually
2. Tightened with a tool

Sealing effect and sealant

The **sealing effect** in the thread is largely achieved by the fact that the internal and external threads (flank diameter) touch each other at the moment of run-up and are compressed when using a tool.

Consequently, in a cylindrical/tapered connection, the only task of a **sealant** is to fill in unavoidable deviations from the theoretical profile of the threads and roughnesses of the threaded surfaces. Therefore, only a little amount of sealant, suitable for its purpose should be used.

Tensile load, compression or bending stress of the connection are absorbed by the metal-to-metal contact.

Ensuring the sealing effect

In order to ensure that the desired sealing effect of the cylindrical/tapered connection occurs, compliance with the following instructions is mandatory:

- The **thread cutting tool** must be set so that the fitting can be screwed onto the unpacked thread manually. Leaving enough remaining threads to be screwed in using an appropriate tool. This ensures that the necessary sealing pressure is obtained even in the largest permissible internal thread diameters.
- The end of the useful external thread ([G7], length a + b) should not be inserted deeper with the tool than the first formed thread of the internal thread ([G10] ❷). Otherwise, the sealing pressure can be jeopardised by the incomplete thread root of the washout.

The most important dimensions of the pipe thread acc. to EN 10226-1 (ISO 7-1)

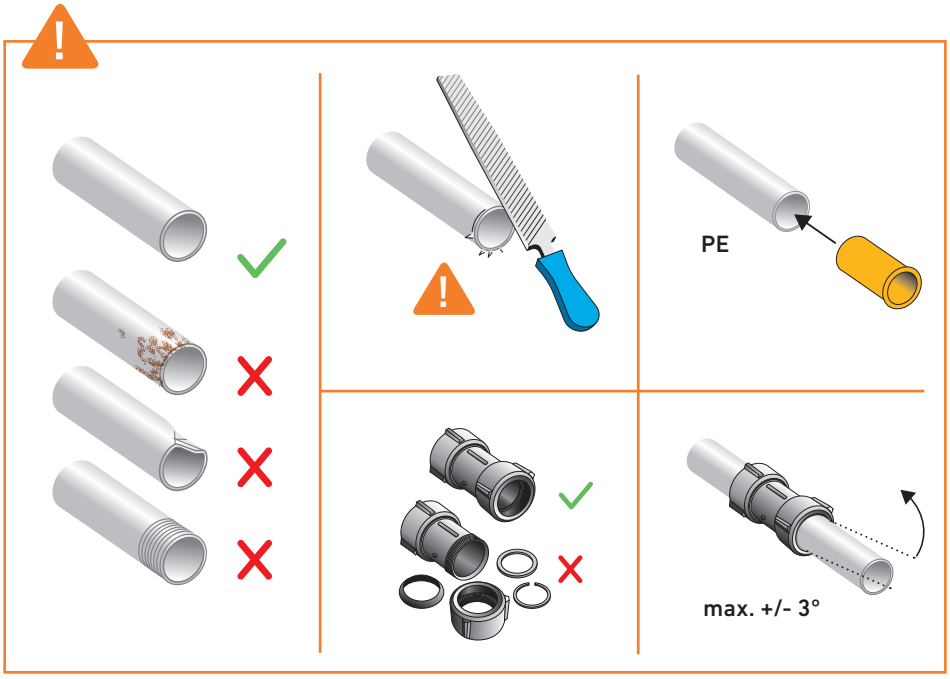
T35 **Pipe threads – dimensions**

Thread size **Nominal width DN**	⅜ 10	½ 15	¾ 20	1 25	1¼ 32	1½ 40	2 50	2½ 65	3 80	4 100
Pipe threads										
Gauge diameter (Thread major diameter in the gauge plane) [mm]	16,662	20,955	26,441	33,249	41,910	47,803	59,614	75,184	87,884	113,030
Pitch [mm]	1,337	1,814	1,814	2,309	2,309	2,309	2,309	2,309	2,309	2,309
Number of threads per inch (25.4 mm)	19	14	14	11	11	11	11	11	11	11
Gauge length “a” of the tapered external thread [mm]	6,4	8,2	9,5	10,4	12,7	12,7	15,9	17,5	20,6	25,4
Tolerance for “a”	±1,3	±1,8	±1,8	±2,3	±2,3	±2,3	±2,3	±3,5	±3,5	±3,5
fitting allowence "b" [mm]	3,7	5,0	5,0	6,4	6,4	6,4	7,5	9,2	9,2	10,4
number of threads	2¾	2¾	2¾	2¾	2¾	2¾	3¼	4	4	4½
Medium thread engagement length [approx. mm]	10,0	13,0	15,0	17,0	19,0	19,0	24,0	27,0	30,0	36,0

Details ➡ applicable standards

15.7 Assembly instruction for Steel- and PE/PE-Xa pipe

Each PRIMOFIT compression fitting comes with its own assembly instruction.



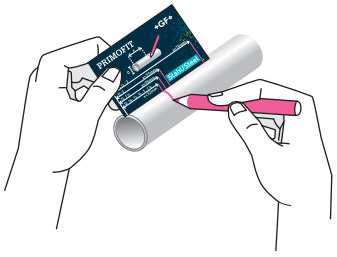
For PRIMOFIT 4" flange version, FIREJOINT, lead and welded steel tubes for pressure purposes, separate assembly instructions are enclosed with the products.

Assembly videos:

Stahl / Steel

PE/PE-Xa

1



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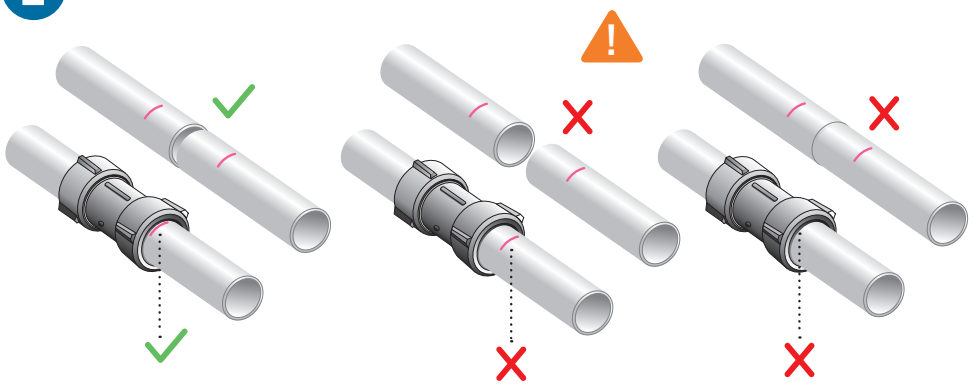

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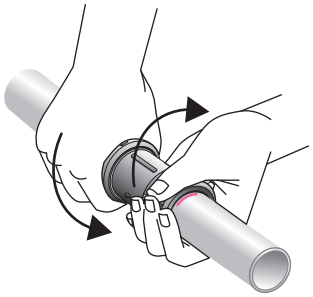

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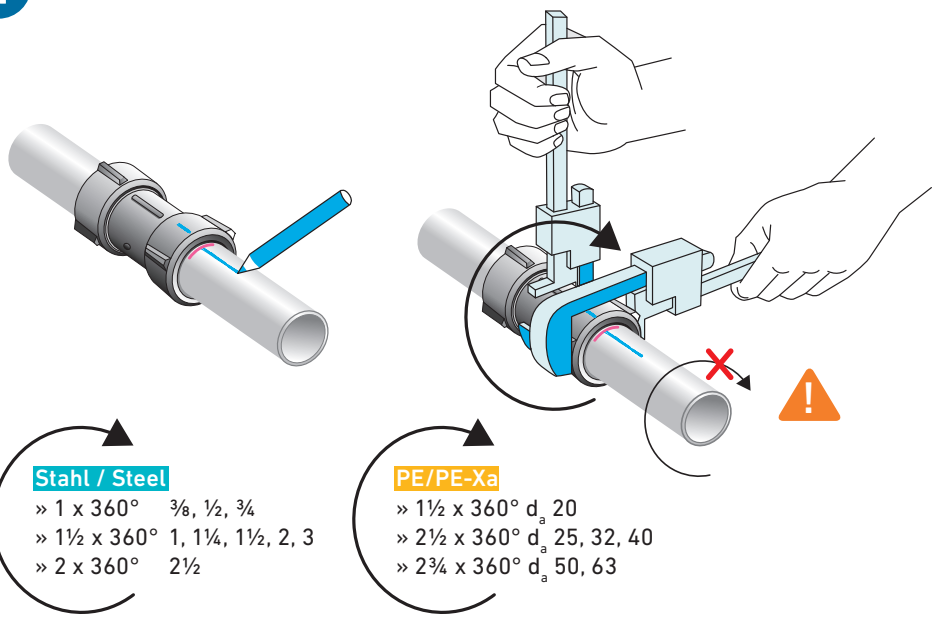

Stahl / Steel
» 1 x 360° ⅜, ½, ¾
» 1½ x 360° 1, 1¼, 1½, 2, 3
» 2 x 360° 2½

PE/PE-Xa
» 1½ x 360° d_a 20
» 2½ x 360° d_a 25, 32, 40
» 2¾ x 360° d_a 50, 63

16 Product approvals, certifications

GF operates an integrated management system, which is certified acc. to EN ISO 9001, EN ISO 14001 and EN ISO 45001.

Current certificates
Do not hesitate to contact us if any certificates are needed, we will send it to you as a PDF file for your use: primofit.ps@georgfischer.com

The suitability of PRIMOFIT malleable cast iron compression fittings for gas and drinking water installations is proven by the following certificates. ➨ take a look at table T36

T36 **Product approvals and certifications PRIMOFIT**

Country	Institute	Application	Certificate
AT	ÖVGW	Gas steel pipe	G 2.515
		Drinking water steel- & PE/PE-Xa pipe	W 1.602
	ÜA	Drinking water steel- & PE/PE-Xa pipe EPDM	R-15.2.3-20-17032
DE	DVGW	Drinking water steel pipe	DW-8511BL0157
		Drinking water steel- & PE/PE-Xa pipe	DW-7611BT0591
		Gas steel pipe	DG-4502CN0373
		Gas steel- & PE/PE-Xa pipe	DG-7521BP5519
		FIREJOINT (HTL version) steel pipe	DG-4502CN0374
CH	SVGW	Gas steel- & PE/PE-Xa pipe	05-045-6
		Drinking water steel pipe	8704-1985
NL	KIWA GASTEC	Gas steel pipe	AR 91 Q 96/086, Nr. 56585
		Gas PE/PE-Xa pipe	AR 70 Q 96/086, Nr. 56584
		Hydrogen ready steel pipe	AR 214 Q96/086, Nr. 107696
	KIWA GASTEC H2	Hydrogen ready PE/PE-Xa pipe	AR 214 Q96/086, Nr. 107695/01
FR	ACS	Drinking water steel- & PE/PE-Xa pipe EPDM	19 ACC LY 715
UK	BSI KITEMARK	GIS/ PL3 incl. PRIMOFIT FIREJOINT (HTL version) steel pipe for gas	KM 539621 (PL3)
BE	ARGB - KVBG	FIREJOINT (HTL version) steel pipe for gas	C-11-3552-A
IT	KIWA UNI	Gas & drinking water steel pipe	KIP102154
		Gas & drinking water PE/PE-Xa pipe	KIP102153

17 Pipe specification

The pipes to be used must comply with the tables below.

Summary table – Relation of compression fitting dimension and outer pipe diameter (for equal compression fittings) and smallest internal diameter

T37 **Overview – PRIMOFIT dimension, outer pipe diameter, internal diameter**

Nominal Ø DN	10	15	20	25	32	40	50	65	80	100
PRIMOFIT dimension	⅜	½	¾	1	1¼	1½	2	2½	3	4
Steel pipe Tolerance range [mm]	17,2 16,7 – 17,5	21,3 21,0 – 21,8	26,9 26,5 – 27,3	33,7 33,3 – 34,2	42,4 42,0 – 42,9	48,3 47,9 – 48,8	60,3 59,7 – 60,8	76,1 75,3 – 76,6	88,9 88,0 – 89,5	114,3 113,1 – 115,0
Welded steel tubes for pressure purposes* (incl. ± tolerance) [mm]	-	20,0 ±0,5	25,0 ±0,5	31,8 ±0,5	38,0 ±0,5	44,5 ±0,5	51,0 ±0,5 57,0 ±0,5 63,5 ±0,6	70,0 ±0,7	-	-
PE- u. PE-Xa pipe Tolerance range [mm]	-	20 20,0 – 20,3	25 25,0 – 25,3	32 32,0 – 32,3	40 40,0 – 40,4	50 50,0 – 50,4	63 63,0 – 63,4	-	-	-
Lead pipe [mm]	-	18,3 – 21,9	23,9 – 27,4	27,3 – 30,9 30,9 – 34,4	36,5 – 37,6 39,6 – 43,1	45,8 – 46,9 47,5 – 50,7	53,1 – 55,4 56,5 – 57,5 60,4 – 63,8	-	-	-
Min. internal diameter** [mm]	7,9	11,6	16,6	22,7	30,9	36,3	46,8	61,5	72,2	95,3
Thread size [inch]	⅜	½	¾	1	1¼	1½	2	2½	3	4

* only available as a spare pack (sealing kit);
if using spare packs (sealing kits) for welded steel tubes for pressure purposes, measuring 63.5 mm, a special compression joint body is required, that is to say, the latter **cannot** be combined with standard compression joints of dimension 2!

** corresponds to the smallest internal diameter of the transition piece with external thread. For all other compression fitting types, the smallest internal diameter is the inside diameter of the pipe.

Steel pipes: Threaded pipes acc. to EN 10255 (formerly DIN 2440, DIN 2441), welded steel tubes for pressure purpose acc. to EN 10220 Series 1 (formerly DIN 2448/2458 Series 1)

Information on out-of-roundness shape
Limiting deviations of the out-of-roundness margins are included in the diameter limits. By contrast, maximum out-of-roundness shape of 0.5 mm apply to FIREJOINT.

T38 **Steel pipes – Threaded pipes**

Thread size **Nominal width DN**	⅜ 10	½ 15	¾ 20	1 25	1¼ 32	1½ 40	2 50	2½ 65	3 80	4 100
Threaded pipes EN 10255										
Nominal outside diameter [mm]	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3
Surface of the smooth pipe [approx. m^2/m]	0.054	0.067	0.085	0.106	0.133	0.152	0.189	0.239	0.279	0.359
Light-weight pipe type (L2)										
Wall thickness [approx. mm]	1.8	2.0	2.3	2.6	2.6	2.9	2.9	3.2	3.2	3.6
Internal diameter [approx. mm]	13.6	17.3	22.3	28.5	37.2	42.5	54.5	69.7	82.5	107.1
Internal cross-section [approx. cm^2]	1.45	2.35	3.91	6.38	10.87	14.19	23.33	38.16	53.46	90.09
Volume [approx. L/m]	0.145	0.235	0.391	0.638	1.087	1.419	2.333	3.816	5.346	9.009
Pipe weight, of the smooth pipe, not galvanised [approx. kg/m]	0.670	0.947	1.380	1.980	2.540	3.230	4.080	5.710	6.720	9.750
Medium heavy series (M)										
Wall thickness [approx. mm]	2.3	2.6	2.6	3.2	3.2	3.2	3.6	3.6	4.0	4.5
Internal diameter [approx. mm]	12.6	16.1	21.7	27.3	36	41.9	53.1	68.9	80.9	105.3
Internal cross-section [approx. cm^2]	1.25	2.04	3.7	5.85	10.18	13.79	22.15	37.28	51.4	87.09
Volume [approx. L/m]	0.125	0.204	0.37	0.585	1.018	1.379	2.215	3.728	5.140	8.709
Pipe weight, of the smooth pipe, not galvanised [approx. kg/m]	0.839	1.210	1.560	2.410	3.100	3.560	5.030	6.420	8.360	12.200
Heavy-duty series (H)										
Wall thickness [approx. mm]	2.9	3.2	3.2	4.0	4.0	4.0	4.5	4.5	5.0	5.4
Internal diameter [approx. mm]	11.4	14.9	20.5	25.7	34.4	40.3	51.3	67.1	78.9	103.5
Internal cross-section [approx. cm^2]	1.02	1.74	3.3	5.19	9.29	12.76	20.67	35.36	48.89	84.13
Volume [approx. L/m]	0.102	0.174	0.330	0.519	0.929	1.276	2.067	3.536	4.889	8.413
Pipe weight, of the smooth pipe, not galvanised [approx. kg/m]	1.020	1.440	1.870	2.930	3.790	4.370	6.190	7.930	10.300	14.500
Welded steel tubes for pressure purposes EN 10220 Series 1*										
Outside diameter [mm]	17.2	21.3	26.9	33.7	42.4	48.3	60.3	76.1	88.9	114.3
Wall thickness [approx. mm]	1.8	2.0	2.3	2.6	2.6	2.6	2.9	2.9	3.2	3.6
Internal diameter [approx. mm]	13.6	17.3	22.3	28.5	37.2	43.1	54.5	70.3	82.5	107.1
Internal cross-section [approx. cm^2]	1.45	2.35	3.91	6.38	10.87	14.59	23.33	38.82	53.46	90.09
Volume [approx. L/m]	0.145	0.235	0.391	0.683	1.087	1.459	2.333	3.882	5.346	9.009
Pipe weight, of the smooth pipe, not galvanised [approx. kg/m]	0.684	0.952	1.4	1.99	2.55	2.93	4.11	5.24	6.76	9.83

* In addition to Series 1, there are special spare packs (sealing kits) for the lower pipe diameters 20, 25, 31.8, 38, 44.5, 51, 57, 63.5 and 70 mm.

Maximum operating pressure of the PE/PE-Xa pipes

T39
Maximum operating pressures

Pressure level, bar	EN 12201-2		DIN 8047*		EN ISO 15875-2**
Pipe specification	PE 80	PE 100	PE 80	PE 100	PE-Xa
SDR 7.4/S 3.2	20	25	16	25	-
SDR 11/S 5	12.5	16	10	16	12.5
SDR 17/S 8	8	10	6.2	10	-
SDR 17.6/S 8.3	-	-	6.0	9.6	-

* SF=1,6 , 50 years , TB=20 °C
** SF=1,5 , 100 years, TB=50 °C

Common PE/PE-Xa pipe series acc. to EN 1555-2, EN 12201-2, DIN 8074 and EN ISO 15875-2

T40
PE-/PE-Xa pipes series

Nominal outside diameter, D_a	20	25	32	40	50	63
SDR 7.4/S 3.2 acc. to EN 12201-2/water						
Wall thickness [approx. mm]	3.0	3.5	4.4	5.5	6.9	8.6
Internal diameter [approx. mm]	14	18	23.2	29	36.2	45.8
Internal cross-section [approx. cm^2]	1.54	2.54	4.23	6.61	10.29	16.47
Volume [approx. L/m]	0.154	0.254	0.423	0.661	1.029	1.647
Pipe weight [approx. kg/m]	0.160	0.238	0.383	0.596	0.930	1.464
SDR 7.4/S 3.2 acc. to DIN 8074						
Wall thickness [approx. mm]	2.8	3.5	4.4	5.5	6.9	8.6
Internal diameter [approx. mm]	14.4	18	23.2	29	36.2	45.8
Internal cross-section [approx. cm^2]	1.63	2.54	4.23	6.61	10.29	16.47
Volume [approx. L/m]	0.163	0.254	0.423	0.661	1.029	1.647
Pipe weight [approx. kg/m]	0.154	0.238	0.383	0.596	0.930	1.464
SDR 11/S 5 acc. to EN 1555-2/Gas						
Wall thickness [approx. mm]	3.0	3.0	3.0	3.7	4.6	5.8
Internal diameter [approx. mm]	14	19	26	32.6	40.8	51.4
Internal cross-section [approx. cm^2]	1.54	2.84	5.31	8.35	13.07	20.75
Volume [approx. L/m]	0.154	0.284	0.531	0.835	1.307	2.075
Pipe weight [approx. kg/m]	0.160	0.208	0.275	0.425	0.660	1.043
SDR 11/S 5 acc. to EN 12201-2/Water						
Wall thickness [approx. mm]	2.0	2.3	3.0	3.7	4.6	5.8
Internal diameter [approx. mm]	16	20.4	26	32.6	40.8	51.4
Internal cross-section [approx. cm^2]	2.01	3.27	5.31	8.35	13.07	20.75
Volume [approx. L/m]	0.201	0.327	0.531	0.835	1.307	2.075
Pipe weight [approx. kg/m]	0.115	0.168	0.275	0.425	0.660	1.043

Nominal outside diameter, D_a*	20	25	32	40	50	63
SDR 11/S 5 acc. to DIN 8074 / EN ISO 15875-2						
Wall thickness [approx. mm]	1.9	2.3	2.9	3.7	4.6	5.8
Internal diameter [approx. mm]	16.2	20.4	26.2	32.6	40.8	51.4
Internal cross-section [approx. cm^2]	2.06	3.27	5.39	8.35	13.07	20.75
Volume [approx. L/m]	0.206	0.327	0.539	0.835	1.307	2.075
Pipe weight [approx. kg/m]	0.112	0.171	0.272	0.425	0.660	1.043
SDR 17/S 8 acc. to EN 12201-2 /water						
Wall thickness [approx. mm]	–	–	2.0	2.4	3.0	3.8
Internal diameter [approx. mm]	–	–	28	35.2	44	55.4
Internal cross-section [approx. cm^2]	–	–	6.16	9.73	15.21	24.11
Volume [approx. L/m]	–	–	0.616	0.973	1.521	2.411
Pipe weight [approx. kg/m]	–	–	0.192	0.29	0.447	0.713
SDR 17/S 8 acc. to DIN 8074						
Wall thickness [approx. mm]	–	1.8	1.9	2.4	3.0	3.8
Internal diameter [approx. mm]	–	21.4	28.2	35.2	44	55.4
Internal cross-section [approx. cm^2]	–	3.6	6.25	9.73	15.21	24.11
Volume [approx. L/m]	–	0.360	0.625	0.973	1.521	2.411
Pipe weight [approx. kg/m]	–	0.137	0.187	0.290	0.447	0.713
SDR 17.6/S 8.3 acc. to EN 1555-2 / Gas						
Wall thickness [approx. mm]	2.3	2.3	2.3	2.3	2.9	3.6
Internal diameter [approx. mm]	15.4	20.4	27.4	35.4	44.2	55.8
Internal cross-section [approx. cm^2]	1.86	3.27	5.9	9.84	15.34	24.45
Volume [approx. L/m]	0.186	0.327	0.590	0.984	1.534	2.445
Pipe weight [approx. kg/m]	0.131	0.168	0.220	0.280	0.434	0.680
SDR 17.6/S 8.3 acc. to EN 12201-2 /water						
Wall thickness [approx. mm]	–	–	2.0	2.3	2.9	3.6
Internal diameter [approx. mm]	–	–	28	35.4	44.2	55.8
Internal cross-section [approx. cm^2]	–	–	6.16	9.84	15.34	24.45
Volume [approx. L/m]	–	–	0.616	0.984	1.534	2.445
Pipe weight [approx. kg/m]	–	–	0.192	0.28	0.434	0.68
SDR 17.6/S 8.3 acc. to DIN 8074						
Wall thickness [approx. mm]	–	–	1.8	2.3	2.9	3.6
Internal diameter [approx. mm]	–	–	28.4	35.4	44.2	55.8
Internal cross-section [approx. cm^2]	–	–	6.33	9.84	15.34	24.45
Volume [approx. L/m]	–	–	0.633	0.984	1.534	2.445
Pipe weight [approx. kg/m]	–	–	0.179	0.280	0.434	0.680

* Permitted for nominal outside diameter (D_a) 25 and 32 s = 2.0 mm if existing pipe installations <0.1 bar.

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General terms and conditions of Georg Fischer Fittings GmbH, Traisen

according to 01/2023

1 General

1.1. These general terms and conditions of sale (hereinafter referred to as "**General Terms and Conditions**") shall apply to all products supplied and services performed by Georg Fischer Fittings GmbH, A-3160 Traisen (hereinafter referred to as "**GF**") towards the Purchaser (hereinafter referred to as "**Products**"). They shall also apply to all future sale of goods similar to the Products and all other business even when no express reference is made to these General Terms and Conditions.

1.2. Any legal transactions (one-, two-, as well as multi-sided legal transactions, e.g. conclusion, disputing, contesting etc.) on the part of GF and Purchaser must be in writing in order to be valid.
Provisions deviating or supplementing these General Terms and Conditions, especially Purchaser's general terms and conditions of purchase and verbal agreements shall only be applicable if accepted in writing by GF or if they favor GF.
The written form shall be deemed complied with all forms of transmission, evidenced in the form of text, e-mail, etc. Excluded thereof shall be the transmission by fax.

1.3. Offers shall only be binding if they contain a specifically stated period for acceptance.

2 Scope of supplies

2.1. GF's product range is subject to change without prior notice.

2.2. The order confirmation shall govern the scope and execution of the contract.

2.3. GF shall be entitled to hire subcontractors.

3 Local Laws and Regulations, Export Controls

3.1. The Purchaser shall bring to the attention of GF all local laws and regulations at the place of destination which bear connection with the execution of the contract and the adherence to relevant safety regulations and approval procedures.

3.2. Unless otherwise agreed in accordance with Clause 3.1, the supplies shall comply with the regulations and standards at GF's registered office.

3.3. In case of re-exports, the Purchaser shall be responsible for compliance with pertinent export control regulations.

4 Price

4.1. Unless agreed otherwise, the prices shall be deemed to be in EUR, net, EXW (Incoterms 2020 of the ICC, or latest version) at the production site of GF, including standard packing.

4.2. If contrary to EXW (Incoterms 2020 of the ICC, or latest version), at the production site of GF, costs of any kind, in particular all supplementary costs, such as the cost of carriage, freight, insurance, export, transit and import licenses etc. as well as all types of taxes, fees, duties, etc. connected with the contract., shall be borne by GF, GF reserves the right to adjust the prices accordingly in the event of a change in costs.

4.3. If the Products are provided with additional packaging over and above the standard packaging, such packaging shall be charged additionally.

5 Terms of Payment

5.1. The Purchaser shall make payments at the place of GF within thirty (30) days of receipt of invoice without any deductions, such as discounts, costs, taxes or dues.

5.2. The Purchaser shall only have a right of set-off against counterclaims that are either undisputed by GF or legally established to the Purchaser by a court of competent jurisdiction.
The Purchaser shall have no right to withhold payments due if unessential parts of the delivery are still pending provided that the use of the delivery is not rendered unusable as a result.

5.3. If the advance payment or the contractually agreed securities have not been made on time, GF shall be entitled to adhere to or to rescind the contract and shall in both cases be entitled to claim damages.

5.4. If the Purchaser, for any reason, is in delay with a payment, or if GF is seriously concerned that GF will not receive payments in total or in due time because of circumstances having taken place since entering into the contract, GF, without being limited in its rights provided for by law, shall be entitled to refuse the further performance of the contract and to retain the Products ready for dispatch until new terms of payment and delivery will have been agreed and until GF will have received satisfactory securities. If such an agreement cannot be reached within a reasonable time, or if GF does not receive adequate securities, GF shall be entitled to rescind the contract and to claim damages.

5.5. If the Purchaser does not adhere to the agreed terms of payment, the Purchaser shall be liable without reminder, for default interest to the amount of five (5) percent of the contract price with effect from the agreed date on which the payment was due. The right to claim further damages is reserved.

6 Reservation of Title

6.1. As far as acknowledged by the jurisdiction in the respective country of destination of the goods, the further provisions of this Clause 6 shall apply.
In any case, they shall be considered separable from each other in terms of content and linguistics and shall apply to themselves.

6.2. **Simple reservation**
GF retains title to all goods delivered by GF until full payment of the respective claims of GF.

6.3. Processing or transformation of the goods supplied by GF by the Purchaser is always carried out for GF. If the goods supplied are processed or inseparably combined or mixed with objects not belonging to GF, co-ownership of the new object shall be acquired in proportion to the value of the goods supplied by GF to the other processed objects at the time of processing or in proportion to the value of the goods supplied by GF to the other combined or mixed objects at the time of combination or mixing. If the goods are combined or mixed by the Purchaser with other objects to form a single object and if the other object is to be regarded as the main object, the Purchaser is obliged to transfer co-ownership to GF on a pro rata basis insofar as the main object belongs to the Purchaser. The Purchaser shall detain the sole ownership or co-ownership on behalf of GF.

6.4. During the period of reservation of title, the Purchaser shall at his own cost maintain the supplies and insure them for the benefit of GF against theft, breakdown, fire, water and other risks. The Purchaser shall further take all measures to ensure that GF's title is in no way compromised or rescinded.

6.5. **Extended reservation of title**
Should the Purchaser resell Products to which title is reserved, in the ordinary course of business, the Purchaser shall hereby be deemed to have tacitly assigned to GF the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by GF have been settled.
The Purchaser is authorized to collect the assigned receivables, as long as the Purchaser fulfills his payment obligation towards GF in accordance with the contract.

6.6. **Overall reservation of title**
The requirements to be met from Clause 6.2 extends to all current and future demands of GF towards the Purchaser.
The assignment is only valid insofar as the value of the Products subject to retention of title together with the granted securities exceeds GF's claims against the Purchaser by more than 20%.

7 Terms of Delivery

7.1. Unless otherwise agreed (see Clause 4), the Products shall be delivered EXW (Incoterms 2020 of the ICC, or latest version) production site of GF.

7.2. The term of delivery shall commence as soon as the contract has been entered into, all official formalities, such as import and payment permits have been obtained and all essential technical issues have been settled.
The term of delivery and the delivery dates shall be deemed duly observed when, upon its expiry or on the day of the delivery date, the Products are ready for dispatch.

7.3. Part shipments to a reasonable extent shall be allowed and GF shall be entitled to invoice for such partial deliveries.

7.4. Delivery is subject to the following conditions, i.e. the delivery time shall be reasonably extended, respectively the delivery date postponed,

7.4.a. if the information of the Customer required by GF for the performance of the contract is not received in time, or if the Customer subsequently changes it, thereby causing a delay in the delivery of the supplies;

7.4.b. if GF is prevented from performing the contract by force majeure. In particular, force majeure shall be deemed to be any unforeseeable event beyond GF's control which renders GF's performance commercially unreasonable or impossible, such as delayed or defective supplies from subcontractors, labor disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in GF's works, such as the total or partial destruction of plant and equipment or the breakdown of essential facilities, serious disruptions in transport facilities, e.g. impassable roads. Should the effect of force majeure exceed a period of six (6) months, either party may terminate the contract effective forthwith.
In no event, GF shall be liable for any damage or loss of any kind whatsoever arising out of or caused by such an event of force majeure.

7.4.c. if the Purchaser is in delay with the fulfillment of his obligations under the contract, in particular, if the Purchaser does not adhere to the agreed conditions of payment or if he has failed to timely provide the agreed securities.

7.5. If for reasons attributable to GF the agreed term of delivery or a reasonable extension thereof is exceeded, GF shall not be deemed in default until the Purchaser has granted to GF in writing a reasonable extension thereof of not less than two (2) weeks which is equally not met.
The Purchaser shall then be entitled to the remedies provided at law, it being however understood that, subject to limitations of Clause 10, damage claims shall be limited to max. ten (10) percent of the price of the delayed delivery.

7.6. If the Purchaser fails to take delivery within a reasonable time of Products notified as ready for dispatch, GF shall be entitled to store the Products at the Purchaser's expense and risk and to invoice them as delivered. If the Purchaser fails to effect payment pursuant to the terms of payment, GF shall be entitled to dispose of the Products.
GF undertakes to inform the Purchaser of the consequences of his actions or omission.

7.7. In the event of damage or loss of the Products during carriage, the Purchaser shall mark the delivery documents accordingly and immediately have the damage ascertained by the carrier.
Not readily ascertainable damages sustained during carriage shall be notified by the Purchaser to the carrier within six (6) days after receipt of the Products.

7.8. If, contrary to the agreed terms of delivery, GF or the Purchaser take on tasks (e.g. transport, loading or unloading of the deliverables, insurance, etc.) which are not their responsibility but the contracting party's, these tasks shall be deemed to have been performed on behalf of and for the account of the respectively contracting party responsible.
In this sense, the person executing the order acts as a vicarious agent for the responsible contracting party.

7.9. Should the Purchaser cancel an order without justification and should GF not insist on the performance of the contract, GF shall be entitled to a contractual penalty amounting to ten (10) percent of the contract price.
The right to claim damages remains unaffected.

8 Inspection, Notification of Defect and Damages

8.1. The Products will be subject to normal inspection by GF during manufacture.
Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.

8.2. It shall be a condition of GF's obligation under the warranties stated hereinafter that GF is notified in writing by the Purchaser of any purported defect immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given within thirty (30) days from receipt of the Products, notice of other defects immediately latest within seven (7) working days after discovery, in any event within the warranty period.

8.3. The Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at GF's disposal.

8.4. At its request, GF shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either by itself or by a third party.

9 Warranty, liability for defects

9.1. Warranty

9.1.a. The warranty is, unless otherwise explicitly agreed, not transferable and limited to the country in which the representative of GF is located with whom the contract was concluded. Warranty claims must be made in the country in which the product in question was purchased.

9.1.b. The warranty or damage claims become time-barred twelve (12) month from receipt of the Products by the end user but at the latest within eighteen (18) months of the Products being dispatched by GF.

9.1.c. For spare or repaired parts, the warranty period is limited to the initial warranty period of the replaced or repaired part.

9.1.d. For Products manufactured to specifications, drawings or patterns supplied by the Purchaser, GF's warranty shall be restricted to proper materials and workmanship.

9.1.e. This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, overstressing or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or modifications / alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond GF's control.

9.1.f. Claims for deficiency of title becomes time-barred twelve (12) month from receipt of the Products by end user.

9.2. Liability for defects

9.2.a. At the written request of the Purchaser, GF undertakes to repair or replace at its discretion, as quickly as possible and free of charge, all Products supplied which demonstrably suffer from faulty design, materials or workmanship, from faulty operating or installation instructions or which became defective or unusable due to faulty advice.
Replaced parts shall be handed over to GF and become property of GF, unless GF waives this right.
In order to protect employees from toxic or radioactive substances which may have been transported in the Products concerned, defective parts returned to GF or its sales organizations, must be accompanied by a Material Safety disclosure Form. The form may be obtained from GF's local sales company.

9.2.b. The Purchaser shall be entitled to rescind the contract or to demand a reduction of the contract price if
- the repair or replacement of the defective Product is impossible,
- the defective Product is not repaired or replaced within a reasonable period, or
- if GF refuses the repair or replacement of the defective Product or if for reasons attributable to GF the repair or replacement is delayed.

9.3. In case of Products for use in domestic installations or in utilities
- GF will assume, in deviation to Clause 10.3, the dismantling and installation costs for the restoration of the original condition of the defective Product up to a maximum amount of EUR 1'000'000 per occurrence and in case of serial damages to a maximum amount of EUR 2'000'000.
- warranty and damage claims - contrary to Clause 9.1.b — shall become time-barred five (5) years from the date of installation or seven (7) years from the production date, whichever is earlier.

10 Limitation of Liability

10.1. The rights and remedies of the Purchaser shall be exclusively governed by these General Terms and Conditions. All further claims such as damages, reduction of the purchase price, termination or rescission of the contract are excluded.

10.2. In no case, whatsoever, shall the Purchaser be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit, third party recovery claims and other direct or indirect or consequential damages.

10.3. In the event that claims of the Purchaser in relation to or in connection with the contract or the breach thereof should exist, the total amount of such claims is restricted to the purchase price of respective delivery.

10.4. This limitation of liability equally applies to the extent GF is liable for acts or omissions of auxiliary persons such as its employees or third parties engaged for the performance of its obligations. It does not apply in case of unlawful intent or gross negligence on the part of GF and in case of GF's mandatory statutory liability, in particular under applicable product liability laws.

11 Data and Documents

11.1. Technical documents, such as drawings, descriptions, illustrations and data on dimensions, performance and weight as well as the reference to standards are for information purposes only. They are not warranted characteristics and are subject to change.

11.2. All technical documents shall remain the exclusive property of GF and may only be used for the purposes agreed between the parties or as GF may consent.

12 Confidentiality, Protection of Personal Data

12.1. Each party shall keep in strict confidence all commercial or technical information relating to the business of the other party, of which it has gained knowledge in the course of its dealing with the other party. Such information shall neither be disclosed to third parties nor used for other purposes than the agreed.

12.2. Personal data will only be processed by GF in accordance with the relevant laws and exclusively based on a separate contract submitted by GF.

13 Severability

Should any term or clause of these General Terms and Conditions in whole or in part be found to be unenforceable or void, all other provisions shall remain in full force and effect. The unenforceable or void provision shall be replaced by a valid provision, which comes closest to the original intention of the unenforceable or invalid provision.

14 Place of Performance, Applicable Law and Jurisdiction

14.1. Place of performance shall be the GF works from which the Products are dispatched.

14.2. The contract shall be governed by Austrian law to the exclusion of any conflict of law provisions and the United Nations Convention on Contracts for the International Sale of Goods (CISG) provisions.

14.3. Exclusive place of jurisdiction for any dispute, controversy or claim arising out of or in relation to this contract, including the validity, invalidity, breach or termination thereof, shall be the ordinary courts in St. Pölten, Austria.
However, GF reserves the right to file actions in any court having jurisdiction.

We support you

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