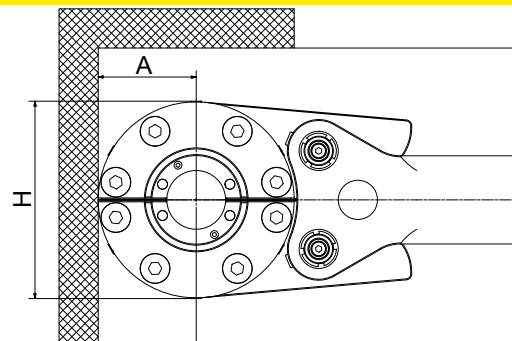




## isosteelpress



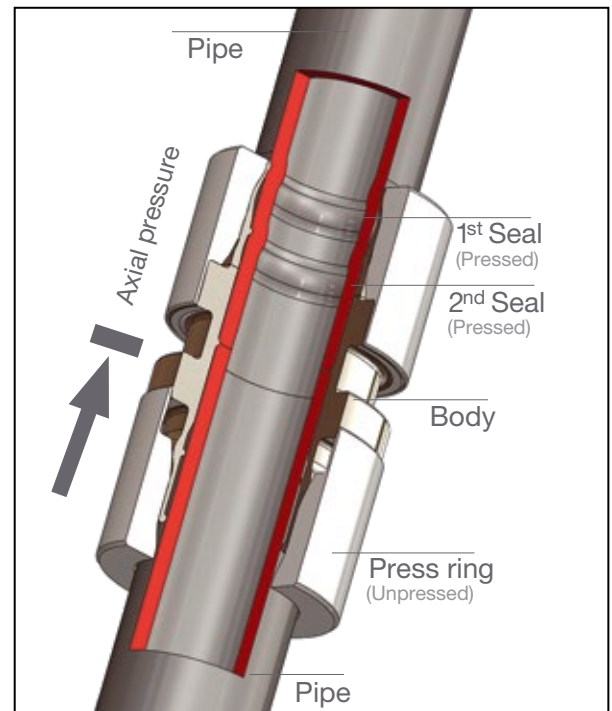
# System

The isosteelpress system provides pure metal to metal sealing onto the tubing, utilizing a unique wedge design.

This unique pipe connection system without gaskets ensures completely hermetic sealing for steel pipe dimensions from Ø 20 up to Ø 114.3 mm.

Reliability and quality is incorporated into the isosteelpress system's unique design. These features are paired with an unparalleled ease of installation.

The isosteelpress is the perfect fit for many different materials, and can provide the appropriate fitting for every job.



## Installation Benefits

- ⇒ Works in small, difficult to access spaces
- ⇒ No inspection by X-ray needed
- ⇒ Installation is secure and can be done under any circumstances or weather conditions
- ⇒ Significantly faster than welding
- ⇒ Installation can be done without certified welder, which makes project planning easier.
- ⇒ Reliable seal quality

## Real Cost Benefits

- ⇒ Faster installation, thus a real cost advantage
- ⇒ No need for certified, experienced labour
- ⇒ Reduces the overall costs of your installation
- ⇒ Works equally well for both welded as well as seamless pipes
- ⇒ No expensive test equipment needed

## HSEQ

- ⇒ No hot works; fire or explosion risks are eliminated
- ⇒ No sparks, no safety issues
- ⇒ Purely metallic seal without any further material - no rubber seals
- ⇒ Pressed permanently sealed
- ⇒ No ageing

# Specifications

## Technical Specifications

The isosteelpress connection system offers a wide range of diameters, temperatures and pressures.

The temperature range corresponds to the specifications for the isoplus pipe system.

Nominal pressure up to 25 bar (pressure test at 37.5 bar). At higher pressure, contact isoplus.

Usable for seamless and welded pipes with dimensions in accordance with EN ISO 1127, EN 10220 D3/T3, ASTM A213 and ASTM A269.

Pipe diameters from Ø 20 to Ø 60.3 mm. Larger dimensions up to Ø 114.3 mm upon request.

For applications other than steel, contact isoplus.

**For buried systems isosteelpress fittings may only be used on projects where  $\Delta T$  does not exceed 70°C** (difference between installation temperature and maximum operating temperature).

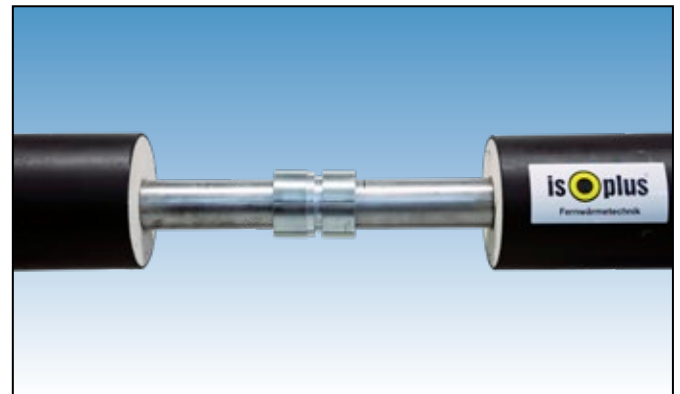
Max. internal pressure 25 bar (acc. to EN 13941)

Permitted pipe tolerances:  
EN 10217-2

Outside diameter:  
EN253

Wall thickness:  
EN253

Hardness:  
 $\leq 90$  HRB



Outside pipe diameter  
in accordance with EN 15632-4 and EN 253

DN	Size	d outside diameter	d <sub>max</sub> max. outside diameter	s <sub>min</sub>	s <sub>max</sub>
-	-	20	20,2	1,5	3
-	-	25	25,2	1,5	3
-	-	28	28,3	1,5	3
20	¾"	26,9	27,2	2,1	3,91
25	1"	33,7	34,0	2,6	4,55
32	1¼"	42,4	42,7	2,6	5,08
40	1½"	48,3	48,9	2,6	5,08
50	2"	60,3	60,8	2,6	5,54

# Fittings

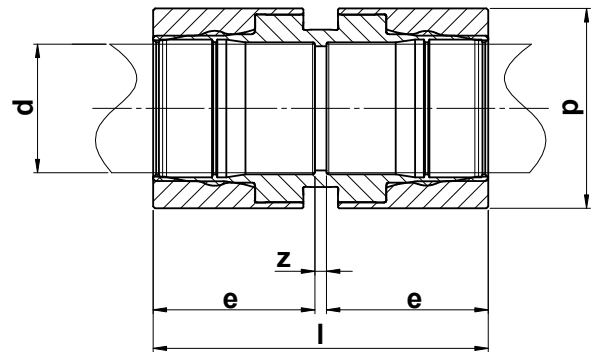
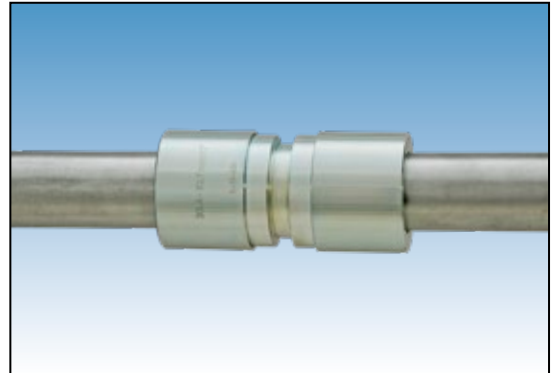
## Fittings - Straight connection for carbon steel pipes

According to EN 10216-2, EN10217-1, -2 and EN 10305-1 and -7

Pipe fitting materials:

Body: Carbon steel 1.0570, galvanized

Press ring: Carbon steel 1.0570, galvanized



## Straight Fittings

Outside pipe diameter

d outside diameter	p	l	e	z	Weight (g)
20	32	52	25	2	180
25	37	52	25	2	210
28	40	52	25	2	229
26,9	39	52	25	2	223
33,7	52	87	42	3	770
42,4	61	87	42	3	941
48,3	68	87	42	3	1108
60,3	82	87	42	3	1445

All dimensions in millimetres, except specially marked.  
Subject to errors and technical modifications.

# Fittings

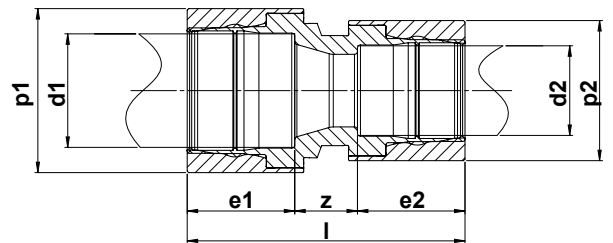
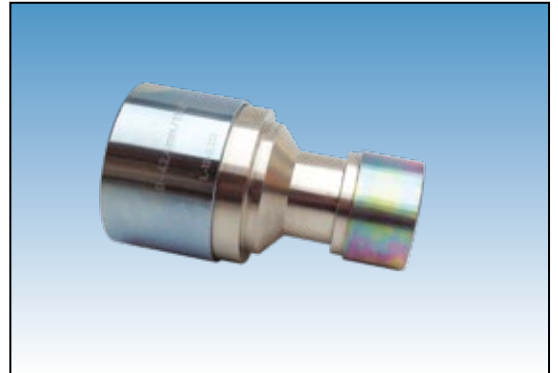
## Fittings – Reducer for carbon steel pipes

according to EN 10216-2, EN 10217-1, -2 and EN 10305-1 and -7

Pipe fitting materials:

Body: Carbon steel 1.0570, galvanized

Press ring: Carbon steel 1.0570, galvanized



### Reducer

Outside pipe diameter

d1	d2	p <sub>1</sub>	e <sub>1</sub>	p <sub>2</sub>	e <sub>2</sub>	l	z	Weight (g)
33,7	28	52	42	40	25	75	8	770
33,7	26,9	52	42	39	25	75	8	770
42,4	33,7	61	42	52	42	100	16	941
42,4	26,9	61	42	39	25	75	8	941
48,3	42,4	68	42	61	42	100	16	1108
48,3	33,7	68	42	52	42	100	16	1108
48,3	26,9	68	42	39	25	75	8	1108
60,3	48,3	82	42	68	42	100	16	1444
60,3	42,4	82	42	62	42	100	16	1444
60,3	33,7	82	42	52	42	100	16	1444

All dimensions in millimetres, except specially marked.  
Subject to errors and technical modifications



# Fittings

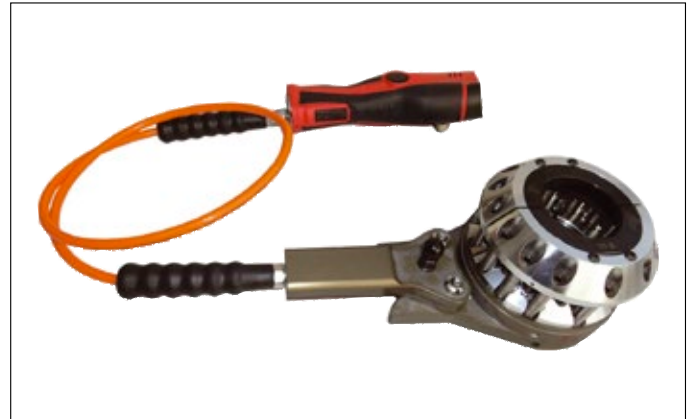
## Tools

### Press Tools

The isosteelpress fittings can be installed in a few simple steps using the hydraulic installation. The press tools exert an axial force on the connector, which compresses the press ring in the centre of the connector body.

The axial displacement of the press ring creates a radial compression of the body, at which point the two metallic sealing ribs are pressed into the pipe.

The press ring is expanded by the compression operation within the fitting's elasticity range, which ensures a proper seal during the entire lifetime of the fitting.

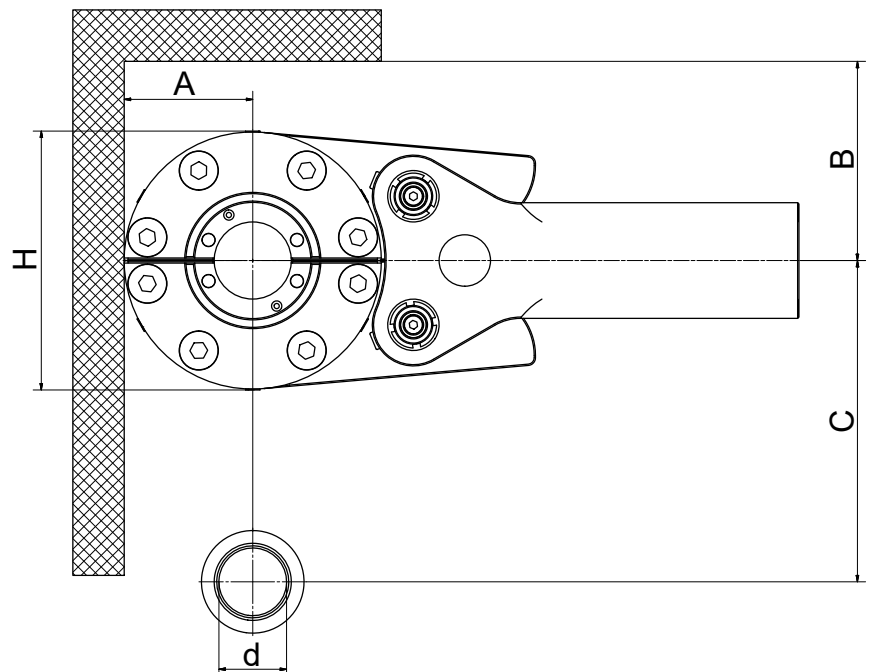


## Dimensions

Type	d outside diameter	A	B*	C**	H	Weight (g)	Press time (Ø, sec)
PT 1228	20	67	100	119	134	6800	13
	28	67	100	124	134		15
PT 3060	33,7	80	110	142	160	8000	16
	60,3	80	110	150	160		20

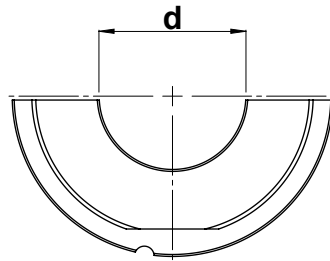
B\* Minimum distance centre-line pipe to wall

C\*\* Minimum distance centre-line pipe to center-line pipe



# Installation

## Inlays for Press tool



## Dimensions

Press tool	Inlay for pipe diameter d
PT1228	20
PT1228	25
PT1228	28
PT1228	26,9
PT3060	33,7
PT3060	42,4
PT3060	48,3
PT3060	60,3

An inlay set consists of four components that can easily be attached into the corresponding press tool. If not used, it can be stored safely in its corresponding place in the transport case.

## Press Tool Set

The press tool set comes in a rugged transport case, including an attached hydraulic unit, two battery packs and a charger.

For every outer pipe diameter, there are matching inlays, consisting of 4 half-shells - see picture at the top right.

Set includes:

Press tool, hydraulic unit, two battery packs with charger, inlays and transport case.



# isosteelpress



isoplus Piping Systems Ltd.

Plumtree Industrial Estate  
Plumtree Road  
Doncaster – DN11 8EW  
United Kingdom  
Tel.: +44 1302 276976  
e-mail: sales@isoplus.co.uk



isoplus Fjernvarmeteknik A/S

Korsholm Alle 20  
5500 Middelfart  
Denmark  
Tel.: +45 64 41 61 09  
e-mail: iso@isoplus.dk



isoplus Fjärrvärmeteknik A/S

Korsholm Alle 20  
5500 Middelfart  
Denmark  
Tel.: +46 019 101 666  
e-mail: iso@isoplus.se



isoplus Fjernvarmeteknik A/S

Korsholm Alle 20  
5500 Middelfart  
Denmark  
Tel.: +45 64 41 61 09  
e-mail: iso@isoplus.dk

