

LOGSTOR PertFlextra



The FlexPipe PertFlextra - Contents

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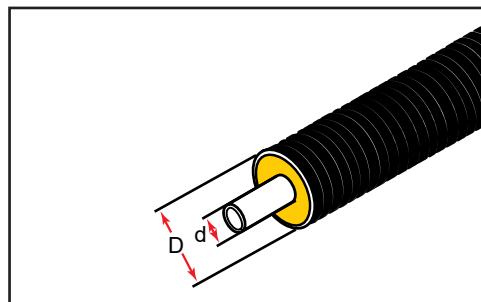
Protection layer remover for PE-RT pipes

The FlexPipe PertFlextra - General

Application	<p>The LOGSTOR flexible PE-RT system is used within District Heating for distribution and service pipelines.</p> <p>Due to the properties of the PE-RT service pipe, expansion must not be taken into consideration. The flexibility, low weight, and long lengths make the installation quicker and more inexpensive. PertFlextra is especially suitable for:</p> <ul style="list-style-type: none"> - distribution networks - branch pipes without joints - passage of vegetation and other obstacles - hilly areas <p>The pipe system complies with the requirements in prEN17878-1 and prEN17878-2 for a minimum design service life of 50 years at the following operational conditions:</p> <p>Operating temperature: 70°C for 49 years</p> <p>Maximum operating temperature: 80°C for 7760 hours</p> <p>Malfunction: 95°C for 100 hours</p> <p>Maximum operating pressure: 10 bar</p> <p>Other pressure and temperature profiles than the above are possible. Please contact LOGSTOR for a calculation of the estimated service life.</p> <p>If temperature profile is calculated like in EN15632-2, the service life will be 30 years with pressure 8 bar instead of 6 bar. Calculation according to Miner's rule EN13760.</p> <p>PertFlextra can be combined with the other LOGSTOR systems provided that the above temperatures and pressure are observed.</p> <p>To join PE-RT service pipes in buried systems press couplings are used. For jointing in buildings, chambers, and cabinets compression couplings can be used.</p>
Description	<p>The standard coil length is 100 m.</p> <p>Fixed lengths can be ordered to measure in lengths of min. 10 m and max. 90 m.</p> <p>Always delivered without free ends.</p> <p>The max coil width is 2.4 m.</p> <p>All pipes are produced in accordance with prEN17878-1 and prEN17878-2.</p>
Materials	<p>Service pipe: PE-RT type II SDR 7,4 with an aluminum diffusion barrier and a PE-RT protection layer.</p> <p>The aluminum diffusion barrier is a barrier for oxygen diffusing from the outside into the media, and for water vapor diffusing from the media out into the insulation. This ensures that the insulation stays dry over lifetime.</p> <p>Insulation: Polyurethane foam. Average thermal conductivity $\lambda_{50} = 0.022 \text{ W/mK}$</p> <p>Outer casing: Polyethylene, PE-HD with co-extruded EVOH diffusion barrier ensuring that the insulation gases stay in the PUR-foam during the service life.</p>

The FlexPipe PertFlextra - Corrugated casing

PertFlextra single pipe



Component overview/data

Component No. 2100

Single pipe

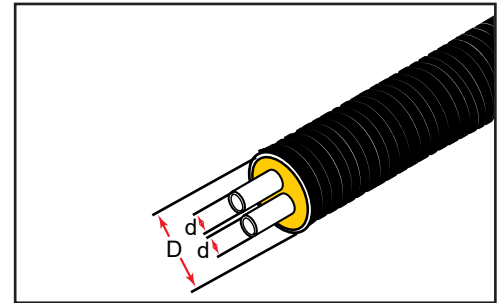
PE-RT service pipe		Volume	Series 2		
d mm	Wall thk mm	l/m	Outer casing		
			D mm	Wall thk mm	Weight kg/m
25	3.5	0.260	90	1.5	1.2
32	4.4	0.423	90	1.5	1.3
40	5.5	0.661	110	1.5	1.8
50	6.9	1.029	125	1.5	2.3
63	8.6	1.647	140	1.5	3.1

Can be delivered with 3dc surveillance cable on request

The FlexPipe

PertFlextra - Corrugated casing

PertFlextra TwinPipe



Component overview/data

Component No. 2190

TwinPipe

PE-RT service pipe		Volume l/m	Series 1			Series 2		
d mm	Wall thk mm		Outer casing			Outer casing		
			D mm	Wall thk mm	Weight kg/m	D mm	Wall thk mm	Weight kg/m
25/25	3.5	0.520				125	1.5	2.1
32/32	4.4	0.845				125	1.5	2.2
40/40	5.5	1.321				140	1.5	3.0
50/50	6.9	2.058				180	1.5	4.4
63/63	8.6	3.295	180	1.5	5.0			

Distance between service pipes: 12 mm

Can be delivered with 3dc surveillance cable on request

The FlexPipe

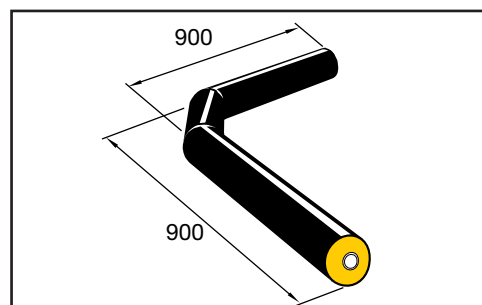
PertFlextra - Preinsulated fittings

General

For PertFlextra preinsulated fittings with service pipes in PE-RT can be used.

Preinsulated fittings with PE-RT service pipe are delivered without free pipe ends.
The service pipe must not be shortened.

90° bend, single pipe



Component overview/data

Component No. 2500

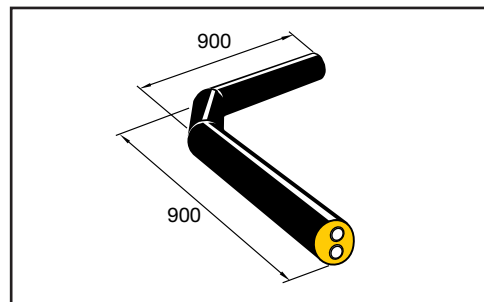
90° bend - single pipe

d mm	D mm Series 2
25	90
32	90
40	110
50	125
63	140

The FlexPipe

PertFlextra - Preinsulated fittings

90° bend, TwinPipe



**Component
overview/data**

Component No. 2590

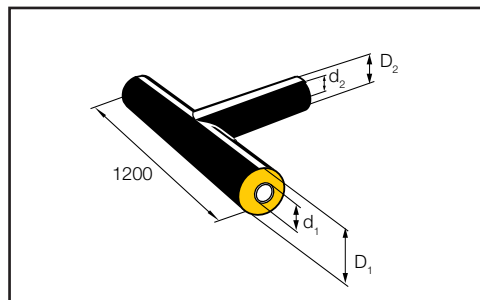
90° bend - TwinPipe

d mm	D mm	
	Series 1	Series 2
25/25		125
32/32		125
40/40		140
50/50		180
63/63	180	

The FlexPipe

PertFlextra - Preinsulated fittings

T-piece, straight,
single pipe



**Component
overview/data**

Component No. 3400

T-piece, straight - Single pipe

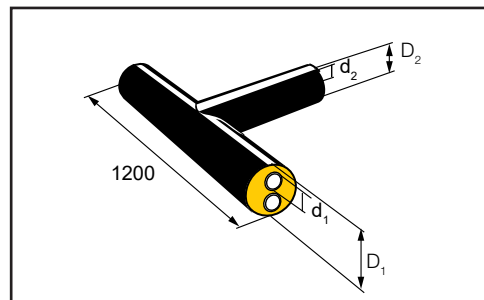
Main pipe, mm		Branch pipe, mm					
d1	D1	d2	25	32	40	50	63
		D2	90	90	110	125	140
25	90		x				
32	90		x	x			
40	110		x	x	x		
50	125		x	x	x	x	
63	140		x	x	x	x	x

T-pieces straight can be produced on request.

T-pieces with PE-RT service pipe are made with press couplings embedded in the insulation.

The FlexPipe PertFlextra - Preinsulated fittings

T-piece, straight,
TwinPipe



Component
overview/data

Component No. 3490

T-piece, straight - TwinPipe

Main pipe, mm		Branch pipe, mm					
d1	D1	d2	25x25	32x32	40x40	50x50	63x63
		D2	125	125	140	180	180
25x25	125		x				
32x32	125		x	x			
40x40	140		x	x	x		
50x50	180		x	x	x	x	
63x63	180		x	x	x	x	x

T-pieces straight can be produced on request.

T-pieces with PE-RT service pipe are made with press couplings embedded in the insulation.

The FlexPipe

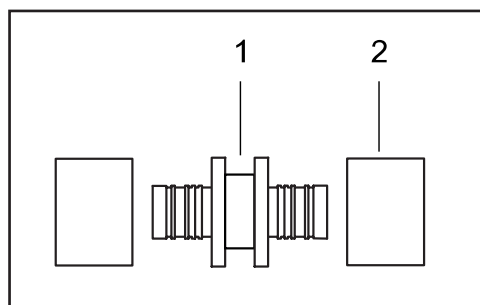
PertFlextra - Press coupling, type JT

Application Used to connect PE-RT service pipes.

Use special tools to install the press coupling, type JT (Jentro) see section "Tools for FlexPipe".

Press coupling, straight Press coupling for straight PE-RT - PE-RT connections:

1. Supporting bush
2. Press ring



Component overview/data

Component No. 6006

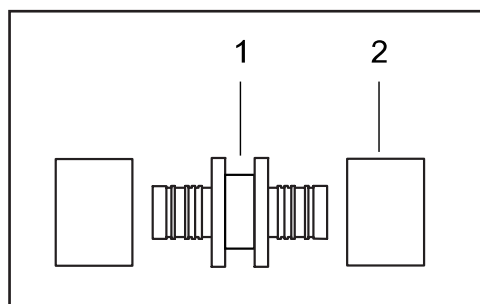
Press coupling, straight

Coupling end 1	Coupling end 2				
	25	32	40	50	63
25	x				
32	x	x			
40		x	x		
50		x	x	x	
63			x	x	x

Press coupling, straight, closed

Press coupling for straight PE-RT - PE-RT connections:

1. Supporting bush
2. Press ring



Component overview/data

Component No. 6006

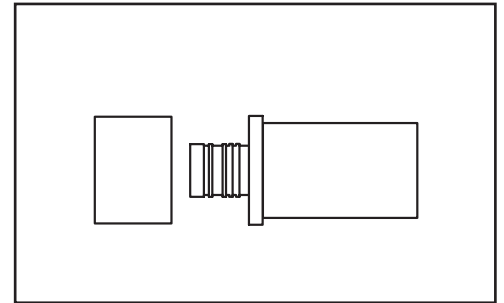
Press coupling, straight

Coupling end 1	Coupling end 2	
	25	32
25	x	
32		x

PertFlextra - Press coupling, type JT

Press coupling, weld

Press coupling with weld end for transition to steel pipe.



Component overview/data

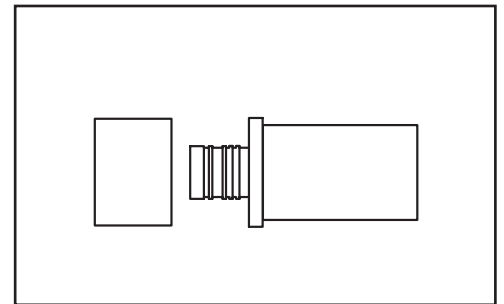
Component No. 6006

Press coupling, weld

Steel	PE-RT				
	25	32	40	50	63
26.9	x				
33.7	x	x			
42.4			x		
48.3				x	
60.3					x

Press coupling, weld, closed

Closed press coupling with weld end.



Component overview/data

Component No. 6006

Press coupling, weld

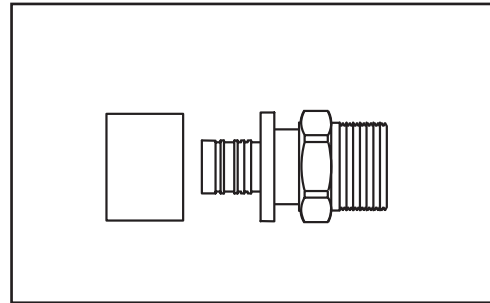
Steel	PE-RT	
	25	32
26.9	x	
33.7	x	x

The FlexPipe

PertFlextra - Press coupling, type JT

Press coupling, male

Press coupling with male thread for termination in a cabinet or a building.



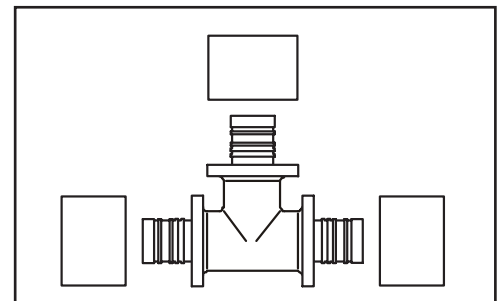
Component overview/data

Component No. 6006

Press coupling, male

Thread	PE-RT				
	25	32	40	50	63
3/4"	x				
1"		x			
1 1/4"			x	x	
1 1/2"				x	
2"					x

Press coupling, tee The base unit of the press coupling is made in one piece.



Component overview/data

Component No. 6066

Press coupling, tee

Main pipe d1-d3 mm	Branch d2 mm				
	25	32	40	50	63
25-25	x				
32-32	x	x			
40-40	x	x	x		
50-50	x	x	x	x	
63-63	x	x	x	x	x

Other combinations of dimensions, e.g reduction on the main pipe, can be delivered on request.

Materials

Press couplings are made of brass or red brass.

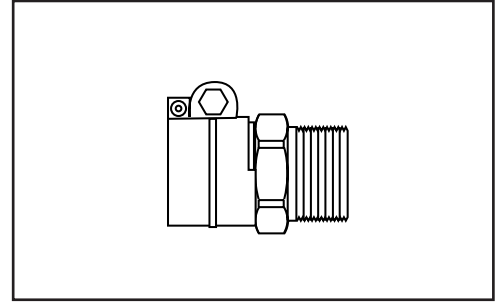
Weld ends for transition to steel is made of S235JR.

The FlexPipe PertFlextra - Compression coupling

Compression coupling, male

Compression coupling with male end for termination in a cabinet or a building.

Dimension 25-63 mm



Component overview/data

Component No. 6101

Compression coupling, male

Thread	PE-RT				
	25	32	40	50	63
3/4"	x				
1"		x			
1 1/4"			x		
1 1/2"				x	
2"					x

Materials

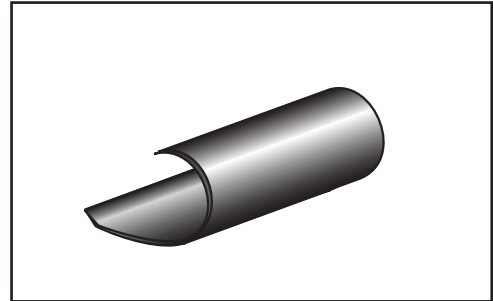
Compression couplings are made of brass.

The FlexPipe

PertFlextra - Diffusion barrier for couplings

Application

To be wrapped around the coupling where aluminum layer and protection layer are removed from the service pipe in connection with installation of the coupling.

**Diffusion barrier
alu wrap w/mastic****Component
overview/data**

Component No. 5500

170 x 585 mm

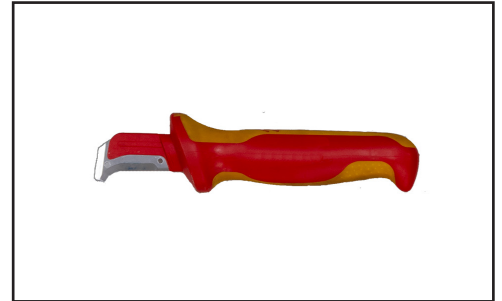
25 pcs. in a box

Material No. 5500 0000 585 025

PertFlextra - Protection layer remover for PE-RT pipes

Application

Tool for removal of the protection layer and the aluminum diffusion barrier, where couplings are installed.

**Protection layer
remover for PE-RT
pipes****Component
overview/data**

Component No. 9000

Material No. 9000 0000 007 005

Contact details

Denmark

LOGSTOR Denmark Holding ApS
Danmarksvej 11 | DK-9670 Løgstør

T: +45 99 66 10 00
E: logstor@kingspan.com



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