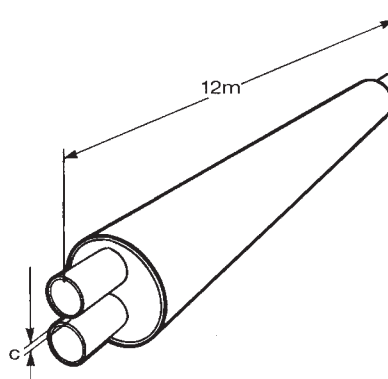


DOUBLE PIPES

4:101

Straight pipes

The pipe consists of two parallel steel service pipes housed vertically in one jacket pipe. The flow pipe shall be installed below the return pipe.



STRAIGHT PIPES DOUBLE STANDARD 1503

Transmission capacity
 $\Delta T = 50^{\circ}\text{C}$

Article No.	DN	Service pipe(2pce) Dy x s [mm]	Jacket pipe DY [mm]	Weight [kg/m]	C-C [mm]	[m/s]	[kW]
L = 12 m							
1503-020	20	26,9 x 2,3	140	4,8	19	0,8	65
1503-025	25	33,7 x 2,6	140	7,1	19	0,8	100
1503-032	32	42,4 x 2,6	160	9,1	19	0,8	180
1503-040	40	48,3 x 2,6	160	9,6	19	0,9	230
1503-050	50	60,3 x 2,9	200	13,1	20	0,9	370
1503-065	65	76,1 x 2,9	225	16,5	20	1,0	700
1503-080	80	88,9 x 3,2	250	20,7	25	1,0	1.000
1503-100	100	114,3 x 3,6	315	30,7	25	1,1	1.800
1503-125	125	139,7 x 3,6	400	41,5	30	1,3	3.300
1503-150	150	168,3 x 4,0	450	51,0	40	1,4	5.000
1503-200	200	219,1 x 4,5	560	76,0	45	1,6	10.000

STRAIGHT PIPES DOUBLE STANDARD 1504

Transmission capacity
 $\Delta T = 50^{\circ}\text{C}$

Article No.	DN	Service pipe(2pce) Dy x s [mm]	Jacket pipe DY [mm]	Weight [kg/m]	C-C [mm]	[m/s]	[kW]
L = 16 m							
1504-100	100	114,3 x 3,6	315	30,7	25	1,1	1.800
1504-125	125	139,7 x 3,6	400	41,5	30	1,3	3.300
1504-150	150	168,3 x 4,0	450	51,0	40	1,4	5.000
1504-200	200	219,1 x 4,5	560	76,0	45	1,6	10.000

STRAIGHT PIPES DOUBLE+ 1603

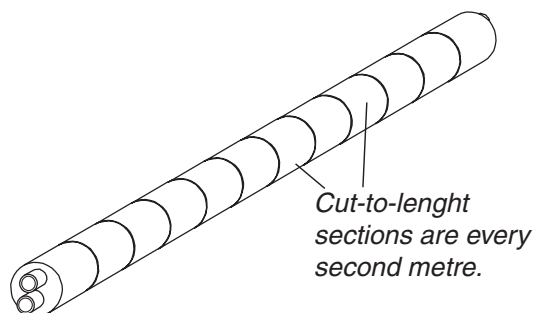
Transmission capacity
 $\Delta T = 50^{\circ}\text{C}$

Article No.	DN	Service pipe(2pce) Dy x s [mm]	Jacket pipe DY [mm]	Weight [kg/m]	C-C [mm]	[m/s]	[kW]
L = 12 m							
1603-025	25	33,7 x 2,6	160	7,7	19	0,8	100
1603-032	32	42,4 x 2,6	180	9,8	19	0,8	180
1603-040	40	48,3 x 2,6	180	10,4	19	0,9	230
1603-050	50	60,3 x 2,9	225	14,3	20	0,9	370
1603-065	65	76,1 x 2,9	250	17,9	20	1,0	700
1603-080	80	88,9 x 3,2	280	22,9	25	1,0	1.000

DOUBLE PIPES

4:102

Straight pipes for cut-to-length



Cut-to-length pipes are manufactured in all dimensions, as given in section 4:101. In these pipes the steel service pipe is covered by a plastic foil every second metre along the entire pipe length. This arrangement allows easy removal of the foam from the steel in the sections. These sections of the pipe are indicated on the outside casing pipe. Whole lengths or parts of pipes cut-to-length can be installed at any place in a district heating distribution system. For technical data, we refer you to section 4:101.

CUT-TO-LENGTH PIPE 1513

L = 12 m

Article No.

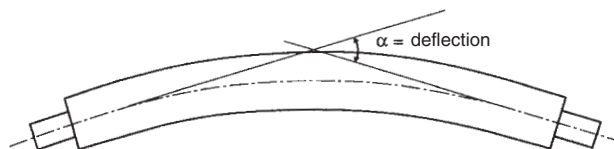
1513-DN-000-000 (Standard)

1613-DN-000-000 (Double+)

An example of how to order:

Cut- to-length pipe Doule pipe Standard DN 2*100, has Article No., 1513-100-000-000.

Curved pipes



CURVED PIPE 1523, 1623

Double pipe DN	Max. deflection L = 12 m	Anm.
2 x 25 - 65	35°	To be bent at installation site
2 x 50 - 150	35°	Bent at Powerpipe works
2 x 200	25°	Bent at Powerpipe works

Accuracy of manufacture DN 2 x 80 - 2*200 +/- 2°

Steel service pipe In the manufacturing of curved pipes either seamless steel pipes or longitudinally welded steel pipes are used

Calibration Checking of deflection can be made using a special tool which can be ordered from Powerpipe.

Article No.

1523-DN-000-000 (Standard)

1623-DN-000-000 (Double+)

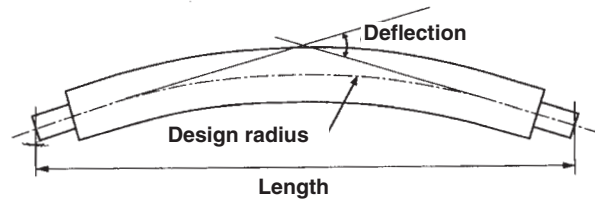
An example of how to order:

Curved Double pipe L = 12m med dim DN 2*100, standard, has Article No. 1523-100-000-000.

Deflection shall be stated in a separate line of text.

Curved pipes

Deflection versus design radius



CORRELATION BETWEEN DEFLECTION AND DESIGN RADIUS

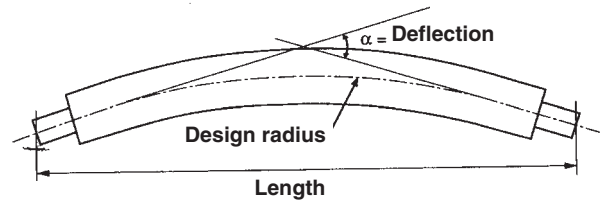
Deflection	Design radius L = 12 m	Deflection	Design radius L = 12 m
1°	690	21°	33,0
2°	345	22°	31,0
3°	230	23°	30,0
4°	170	24°	29,0
5°	140	25°	28,0
6°	115	26°	27,0
7°	98	27°	26,0
8°	86	28°	25,0
9°	76	29°	24,0
10°	69	30°	23,2
11°	62	31°	22,5
12°	57	32°	21,8
13°	53	33°	21,1
14°	49	34°	20,5
15°	46	35°	20,0
16°	43	36°	19,4
17°	40	37°	18,9
18°	38	38°	18,4
19°	36	39°	18,0
20°	34	40°	17,5

Double pipes can be curved both longitudinally and vertically.

Pipe trench: A pre-insulated pipe $DN \geq 250$ cannot be bent along its entire length. At each pipe end a straight part will remain, which shall be approximately 2 meters in length. This deviation from an ideal curved pipe radius is to be compensated when installing the pipe by making the pipe trench approximately 150 mm wider. The widening should be ~200 mm at deviation $< 10^\circ$
The widening should be ~500 mm at deviation $> 10^\circ$

Curved pipes

Elastic radius



ELASTIC RADIUS

Dimension	Elastic radius m	Deflection/ 12 m
25	15	45°
40	21	31°
50	27	25°
65	34	20°
80	40	17°
100	52	13°
125	63	11°
150	76	9°
200	98	7°

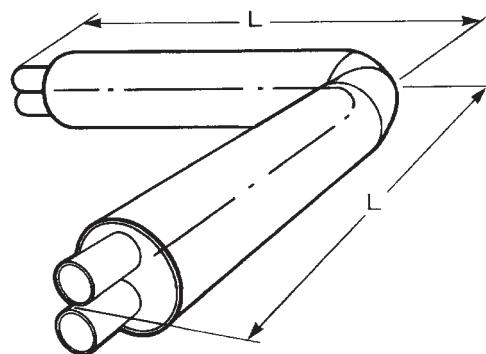
The above table shows the elastic radius which is the maximum radius or deflection that can be allowed without permanent deformation in the steel pipe.

DOUBLE PIPES

4:201

Bend

Powerpipe pre-insulated bends are manufactured using a special foam with high compressive strength. This design will normally allow installation of Powerpipe bends without the use of foam pads around the jacket pipe of the bend



BEND 2500, 2600

DN	Service Pipe Dy x s [mm]	STANDARD 2500	DOUBLE+ 2600	L [mm]
		Jacket pipe DY [mm]	Jacket pipe DY [mm]	
25	33,7 x 2,3	140	160	1000
32	42,4 x 2,6	160	180	1000
40	48,3 x 2,6	160	180	1000
50	60,3 x 2,9	200	225	1000
65	76,1 x 2,9	225	250	1000
80	88,9 x 3,2	250	280	1000
100	114,3 x 3,6	315		1000
125	139,7 x 3,6	400		1000
150	168,3 x 4,0	450		1000
200	219,1 x 4,5	560		1000

Bends are, as standard, available as 90° and 45°. Bends having other degrees such as 75°, 60°, 30° and 15° and bends having leg lengths other than specified in the above table can be delivered on special request.

Article No.

2500-DN-degree of bend -000

An example of how to order:

Bend Double pipe Standard dim DN 2*80, 90° has Article No. 2500-080-090-000.

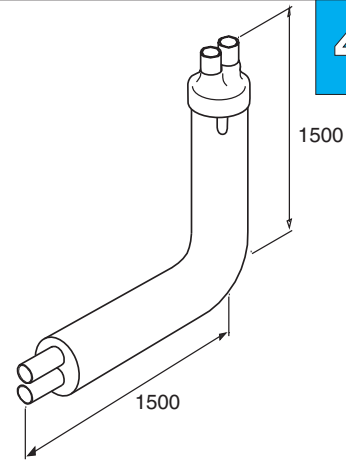
DOUBLE PIPES

4:202

Termination bend, 90°

The termination bend has a special PDPE sealing at one pipe end. This seal will efficiently prevent water from penetrating into the foam when installing the bend. The built in alarm wires are linked outside the sealing.

The built in alarmwires are linked outside the sealing.



TERMINATION BEND 2510, 2610

STANDARD 2510

DOUBLE+ 2610

DN	Service pipe Dy x s [mm]	Jacket pipe Dy [mm]	Jacket pipe Dy [mm]
25	33,7 x 2,3	140	160
32	42,4 x 2,6	160	180
40	48,3 x 2,6	160	180
50	60,3 x 2,9	200	225
65	76,1 x 2,9	225	250
80	88,9 x 3,2	250	280
100	114,3 x 3,6	315	
125	139,7 x 3,6	400	
150	168,3 x 4,0	450	

The termination bend can be delivered in three different designs. Please see principle sketch below.

Article No.

2510-DN-000-000 (Standard)

2610-DN-000-000 (Double+)

Pipe under - right prefix 031

Pipe under - left prefix 032

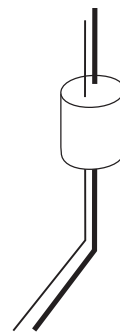
An example of how to order:

Termination bend Double Standard pipe with dim
DN 2*50.

Pipe under - right

has Article No. 2510-050-000-031.

Please observe: Do not refill
above the sealing.
The sealing shall not be
below water table continuously.



-000



-031
pipe under-
right

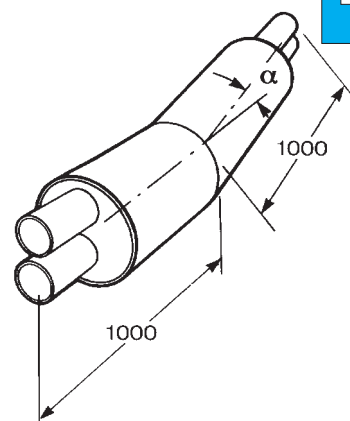


-032
pipe under-
left

DOUBLE PIPES

4:203

Profile bend, 10°



PROFILE BEND 2520, 2620

DN	Service pipe Dy x s [mm]	STANDARD	DOUBLE+
		2510 Jacket pipe Dy [mm]	2610 Jacket pipe Dy [mm]
25	33,7 x 2,3	140	160
32	42,4 x 2,6	160	180
40	48,3 x 2,6	160	180
50	60,3 x 2,9	200	225
65	76,1 x 2,9	225	250
80	88,9 x 3,2	250	280
100	114,3 x 3,6	315	
125	139,7 x 3,6	400	
150	168,3 x 4,0	450	
200	219,1 x 4,5	560	

Standard deflection is 10°
The bend can be selected at any deflection.

Article No.

2520-DN-000-000 (Standard)

2630-DN-000-000 (Double+)

An example of how to order:

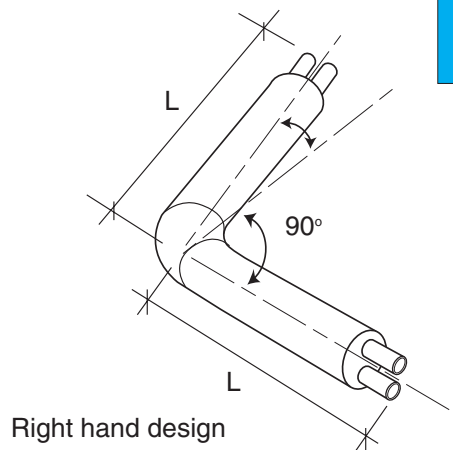
Profile bend Double pipe dim DN 2*80, standard
has Article No. 2520-080-000-000.

Angle of deflection outside standard has to be written in a separate text line.

DOUBLE PIPES

4:204

Bend with horizontal deflection



BEND WITH HORIZONTAL DEFLECTION 2510, 2610

Art.nr.	DN	Service pipe Dy x s [mm]	Jacket pipe DY [mm]	L [mm]
2500-025	25	33,7 x 2,3	140	1000
2500-032	32	42,4 x 2,6	160	1000
2500-040	40	48,3 x 2,6	160	1000
2500-050	50	60,3 x 2,9	200	1000
2500-065	65	76,1 x 2,9	225	1000
2500-080	80	88,9 x 3,2	250	1000
2500-100	100	114,3 x 3,6	315	1000
2500-125	125	139,7 x 3,6	400	1200
2500-150	150	168,3 x 4,0	450	1200
2500-200	200	219,1 x 4,5	560	1200

The bend can be selected at any deflection.

Article No.

2510-DN-000-031	right hand design (Standard)
2510-DN-000-032	left hand design (Standard)
2610-DN-000-031	right hand design (Double+)
2610-DN-000-032	left hand design (Double+)

An example of how to order:

Bend Double pipe dim DN 2*80, 90°, standard, right hand design has Article No. 2500-080-000-031.

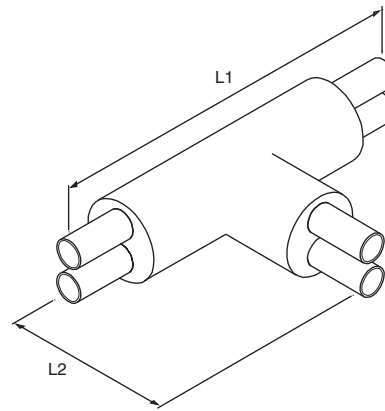
Angle of deflection has to be written in a separate text line.

DOUBLE PIPES

4:301

T-piece

Powerpipe T-pieces are as standard delivered in a reinforced design. This means that the thickness of the main steel service pipe is locally increased in order to compensate for the area reduction caused by the branch steel service pipe



T-PIECE 3510, 3610

Main pipe DN	Branch pipe DN	L1 [mm]	L2 [mm]	DN [mm]	STANDARD 3510	DOUBLE+ 3610
					Jacket pipe Dy [mm]	Jacket pipe Dy [mm]
25-200	25-100	1200	700	25	140	160
125-200	125-150	1500	700	32	160	180
200	200	1500	800	40	160	180
				50	200	225
				65	225	250
				80	250	280
				100	315	
				125	400	
				150	450	
			200	560		

The branch pipe cannot be designed in dimensions bigger than the main pipe.

Article No.

3510-DN main pipe -DN branch pipe-000 (Standard)

3610-DN main pipe -DN branch pipe-000 (Double+)

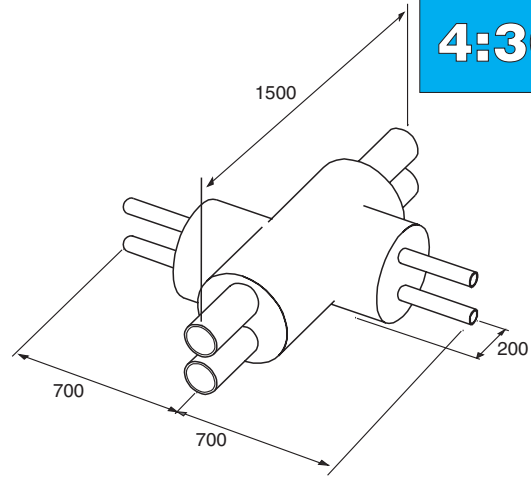
An example of how to order:

T-piece Double pipe with main pipe DN 2*100, standard, and branch pipe DN 2*50, has Article No. 3510-100-050-000.

DOUBLE PIPES

4:302

Intersection unit



INTERSECTION UNIT, 3570, 3670

Main pipe DN	Branch pipe DN	DN [mm]	STANDARD 3570 Jacket pipe Dy [mm]	DOUBLE+ 3670 Jacket pipe Dy [mm]
25-150	20-65	25	140	160
		32	160	180
		40	160	180
		50	200	225
		65	225	250
		80	250	280
		100	315	
		125	400	
		150	450	

The branch pipe cannot be designed in dimensions larger than the main pipe. Powerpipe can on request deliver T-pieces in a non reinforced design.

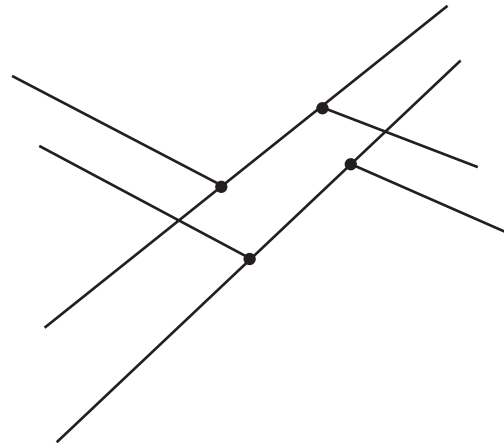
Article No.

3570-DN main pipe -DN branch pipe-000 (Standard)

3670-DN main pipe -DN branch pipe-000 (Double+)

An example of how to order:

Intersection unit with main pipe DN 2*65, standard, and branch pipe DN 2*32 has Article No. 3570-065-032-000.

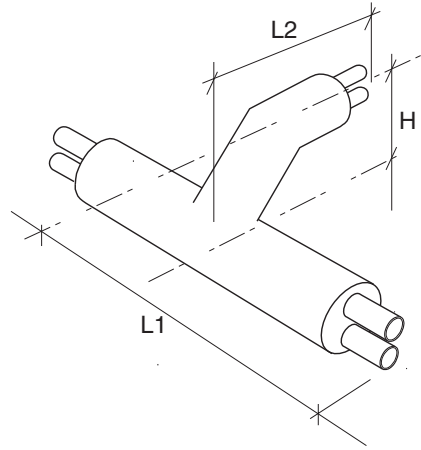


DOUBLE PIPES

4:303

T-piece with horizontal deflection

Powerpipe T-pieces are as standard delivered in a reinforced design. This means that the thickness of the main steel service pipe is locally increased in order to compensate for the area reduction caused by the branch steel service pipe



T-PIECE WITH HORIZONTAL DEFLECTION 3510, 3610

STANDARD
3510

DOUBLE+
3610

Main pipe DN	Branch pipe DN	L1 [mm]	L2 [mm]	DN [mm]	Jacket pipe Dy [mm]	Jacket pipe Dy [mm]
25-100	25-40	1200	1000	25	140	160
25-100	50-100	1500	1000	32	160	180
125-200	25-40	1200	1200	40	160	180
125-200	50-100	1500	1200	50	200	225
125-200	125-200	1800	1500	65	225	250
				80	250	280
				100	315	
				125	400	
				150	450	
				200	560	

H= Dy main pipe + 50 mm.

The branch pipe cannot be designed in dimensions bigger than the main pipe.

Article No.

3510-DN main pipe-DN branch pipe-238 (Standard)

3610-DN main pipe-DN branch pipe-238 (Double+)

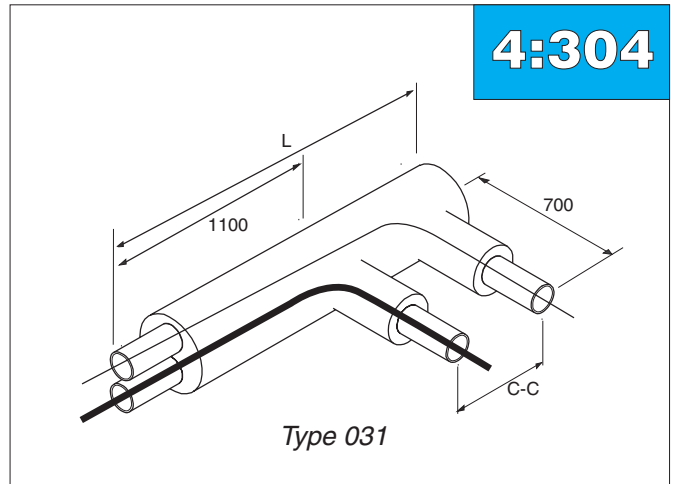
An example of how to order:

T-piece Double pipe
with main pipe DN 2*100, standard, and branch pipe DN 2*50,
has Article No. 3510-100-050-238.

DOUBLE PIPES

4:304

Transition unit single-double pipe, knee type



TRANSITION UNIT SINGLE-DOUBLE PIPE, KNEE TYPE 1580, 1680

Dim DN	C-C [mm]	L [mm]
25	310	1410
32	330	1430
40	330	1430
50	340	1440
65	360	1460
80	380	1480
100	430	1530
125	450	1550
150	480	1580
200	605	1630

Please observe: This solution is not designed to absorb axial forces or movements from single pipes. Branches for single pipes are delivered in Series 2.

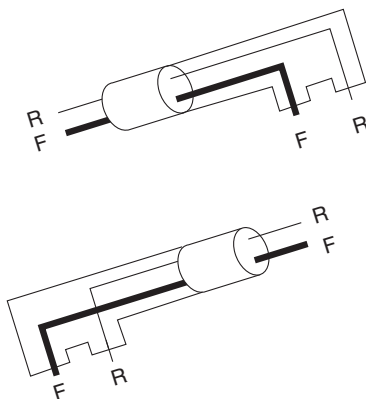
F = Flow (marked with a white dot on the steel pipe).

R = Return

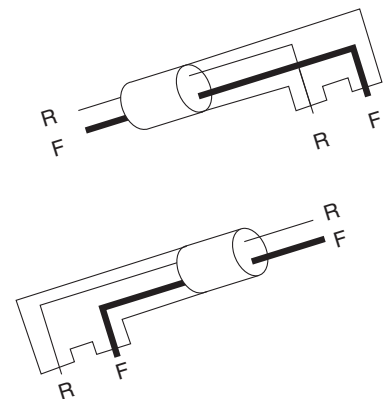
Article No.

- 1580-DN-000-031 (Standard)
- 1580-DN-000-032 (Standard)
- 1680-DN-000-031 (Double+)
- 1680-DN-000-032 (Double+)

An example of how to order:
Transition unit DN 50, standard, right hand flow has Article No. 1580-050-000-032.



Left hand flow
with flowpipe under
031



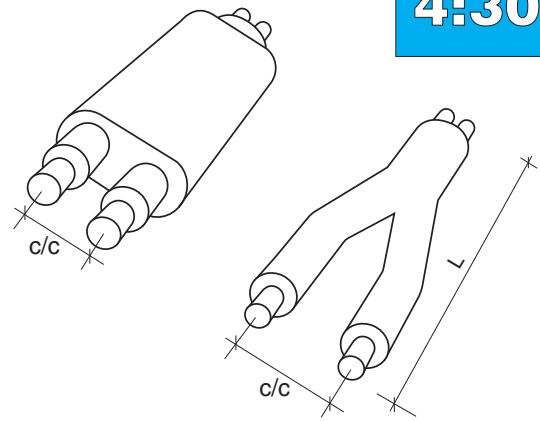
Right hand flow
with flowpipe under
032

DOUBLE PIPES

4:305

Transition unit single - double pipe, straight type

Can be used between single and double pipes at big expansion forces.



TRANSITION UNIT SINGLE – DOUBLE PIPE, STRAIGHT TYPE, 1590, 1690

DN	C-C [mm]	L [mm]
25	310	1400
32	330	1400
40	330	1400
50	340	1500
65	360	1500
80	380	1600
100	475	1700
125	500	1800
150	530	1900
200	600	2100

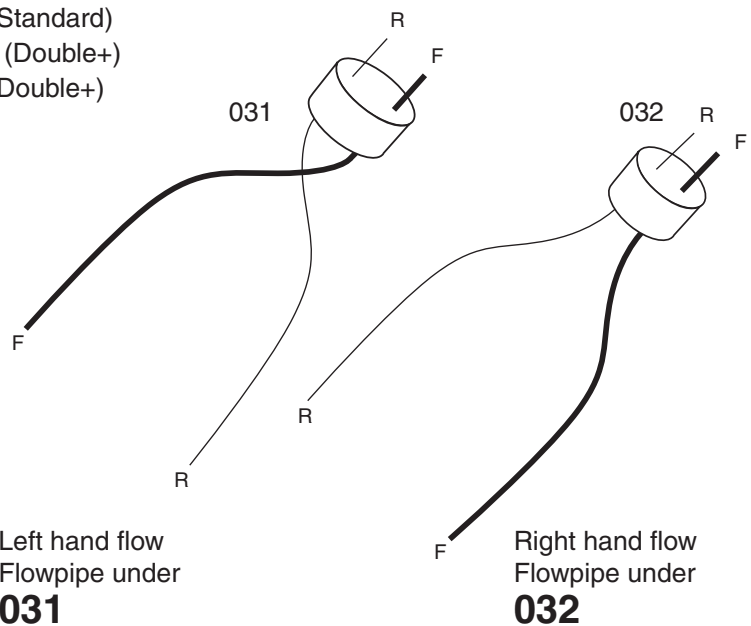
Branches for single pipe are delivered in Series 2.

Article No.

- 1590 DN main pipe-000-032 right hand flow, (Standard)
- 1590 DN main pipe-000-031 left hand flow, (Standard)
- 1690 DN main pipe-000-032 right hand flow, (Double+)
- 1690 DN main pipe-000-031 left hand flow, (Double+)

An example of how to order:

Transition unit single-double pipe, straight ,
DN 50, standard, left hand flow has
Article No. 1590-050-000-029.



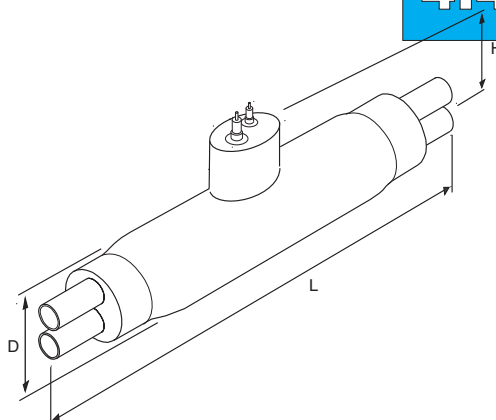
DOUBLE PIPES

4:401

Preinsulated valves

The unit consists of a maintenance free ball valve in a fully welded housing together with a corrosion free ball. All valves according to EN448 are supplied to stand the yield strength as the pipe line.

The alarmwire are linked outside the sealing.



PRE-INSULATED VALVE, 4500, 4600

DN	Standard 4500 Jacket pipe Dy [mm]	Double+ 4600 Jacket pipe DY [mm]	L [mm]	H [mm]	D [mm]	Wrench size [mm]
25	140	160	1800	409	160	19
32	160	180	1800	422	180	19
40	160	180	1800	435	180	19
50	200	225	1800	451	225	19
65	225	250	1800	463	250	19
80	250	280	2200	483	315	19
100	315		2200	519	400	27
125	400		2600	540	500	27
150	450		2600	578	630	27
200	560		2600	652	710	50

The valve is protected by a hut as a standard. Please see 8:102

Article No.

4500-DN-000-000 (Standard)

4600-DN-000-000 (Double+)

An example of how to order:

Preinsulated valve for main pipe dim DN 2*100, standard has Article No. 4500-100-000-000.

Please observe: the included ball valve has to be operated at least twice/year in order to ensure a good function.

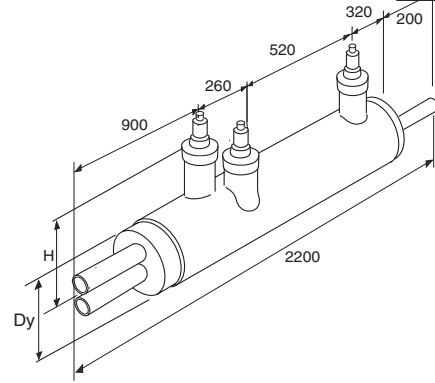
Please observe: Do not refill above the sealing. The sealing shall not be below water table ontinously.

DOUBLE PIPES

4:402

Preinsulated valve unit, straight

The unit can be used as drainage or air release unit.



PRE-INSULATED VALVE UNIT, STRAIGHT 4550, 4650

DN	Service pipes 2 st Dy x s [mm]	Jacket pipe DY [mm]		H [mm]	Wrech size [mm]
		STANDARD 4550	DOUBLE+ 4650		
25	33,7 x 2,3	140	160	409	19
32	42,4 x 2,6	160	180	422	19
40	48,3 x 2,6	160	180	435	19
50	60,3 x 2,9	200	225	451	19
65	76,1 x 2,9	225	250	463	19
80	88,9 x 3,2	250	280	483	19

The drainage pipe is manufactured in stainless steel.

The valve is protected by a hut as a standard. Please see 8:102

Article No.

4550-DN-000-000 (Standard)

4650-DN-000-000 (Double+)

An example of how to order:

Preinsulated valve unit for main pipe, straight dim DN 2*50, standard has Article No. 4550-050-000-000.

Please observe: the included ball valve has to be operated at least twice/year in order to ensure a good function.

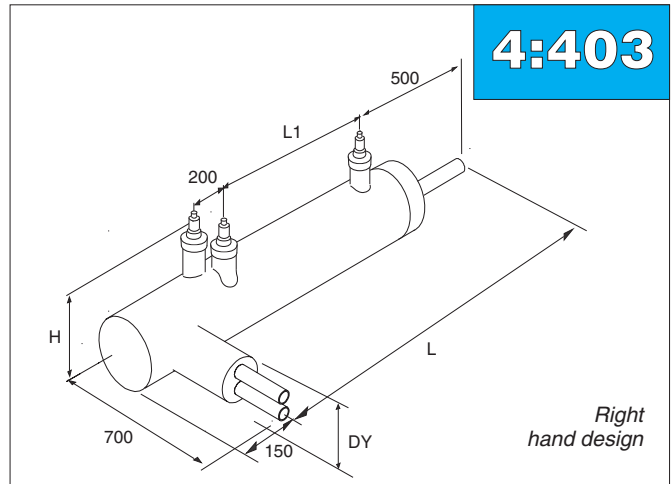
Please observe: Do not refill above the sealing. The sealing shall not be below water table ontinously.

DOUBLE PIPES

4:403

Preinsulated valve unit, angle

The unit can be used as drainage or air release unit



Right hand design

PRE-INSULATED VALVE UNIT, ANGLE 4550, 4650

DN	Service pipes 2 st Dy x s [mm]	STANDARD	DOUBLE+	L [mm]	L1 [mm]	Wrench size [mm]	H [mm]
		4550 Jacket pipe DY [mm]	4650 Jacket pipe DY [mm]				
25	33,7 x 2,3	140	160	1250	340	19	409
32	42,4 x 2,6	160	180	1350	400	19	422
40	48,3 x 2,6	160	180	1350	400	19	435
50	60,3 x 2,9	200	225	1450	460	19	451
65	76,1 x 2,9	225	250	1500	490	19	463
80	88,9 x 3,2	250	280	1550	520	19	483

The unit is delivered in right or left hand designs

The valve is protected by a hut as a standard. Please see 8:102

Article No.

- 4550-DN-000-031 right hand design (Standard)
- 4550-DN-000-032 left hand design (Standard)
- 4650-DN-000-031 right hand design (Double+)
- 4650-DN-000-032 left hand design (Double+)

An example of how to order:

Preinsulated valve unit in left hand design for drainage of a main pipe dim DN 2*50, standard has Article No. 4550-050-000-032.

Please observe: the included ball valve has to be operated at least twice/year in order to ensure a good function.

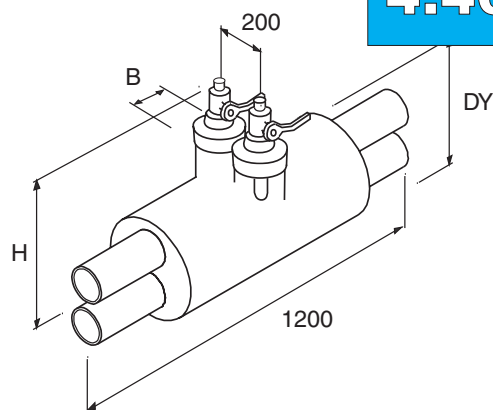
Please observe: Do not refill above the sealing. The sealing shall not be below water table continuously.

DOUBLE PIPES

4:404

Air release/ drainage

The alarmwires are linked outside the sealing.



AIR RELEASE/ DRAINAGE UNIT 3540, 3640		STANDARD 3540	DUBBEL+ 3640			
Main pipe DN	Service pipe(2pcs) Dy x s [mm]	Jacket pipe DY [mm]	Jacket pipe DY [mm]	H [mm]	Air release/ drainage DN	B-measure [mm]
25	33,7 x 2,3	140	160	437	25	125
32	42,4 x 2,6	160	180	445	40	125
40	48,3 x 2,6	160	180	451	50	140
50	60,3 x 2,9	200	225	463		
65	76,1 x 2,9	225	250	479		
80	88,9 x 3,2	250	280	495		
100	114,3 x 3,6	315		520		
125	139,7 x 3,6	400		548		
150	168,3 x 4,0	450		581		
200	219,1 x 4,5	560		634		

Air release/ drainage units manufactured in dimensions dim. DN 25, DN 40 and DN 50.

Air release/ drainage units are delivered with a screwed on plug.

The valve is protected by a hut as a standard. Please see 8:102

Article No.

3540-DN main pipe-DN air release/ drainage unit-000 (Standard)

3640-DN main pipe-DN air release/ drainage unit-000 (Double+)

An example of how to order:

Air release unit for main pipe dim DN 2*100, standard and air release unit DN 25, has Article No. 3540-100-025-000.

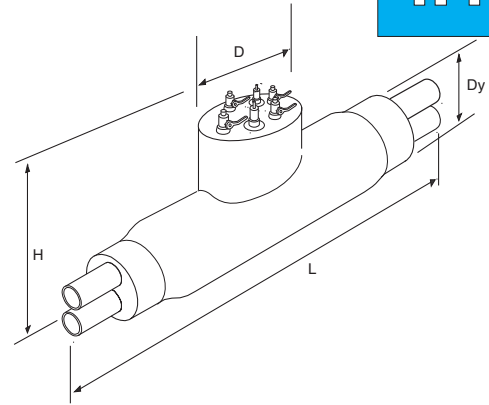
Please observe: the included ball valve has to be operated at least twice/year in order to ensure a good function.

Please observe: Do not refill above the sealing. The sealing shall not be below water table continuously.

DOUBLE PIPES

4:405

Valve unit with air release on one or both sides



VALVE UNIT WITH AIR RELEASE ON ONE OR BOTH SIDES 4541, 4542, 4641, 4642

DN	STANDARD 4541, 4542	DOUBLE+ 4641, 4642	L [mm]	H [mm]	D [mm]	Wrench size [mm]
	Jacket pipe Dy [mm]	Jacket pipe Dy [mm]				
40	160	200	1.700	435	230	19
50	200	225	1.700	451	230	19
65	225	250	1.700	463	230	19
80	250	280	1.900	483	230	19
100	315		2.145	519	230	27
125	400		2.215	540	230	27
150	450		2.570	578	230	27

Air release is delivered in DN 25

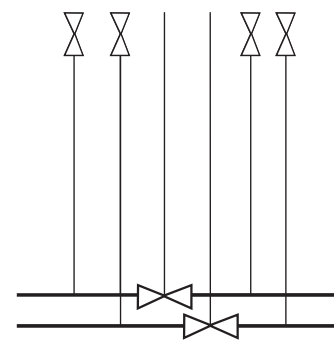
Air release on one side has Article no 4541
Air release on both sides has Article no 4542

Article No.

4541-DN-000-000 with one air release, (Standard)
4542-DN-000-000 with two air releases, (Standard)
4641-DN-000-000 with one air release, (Double+)
4642-DN-000-000 with two air releases, (Double+)

An example of how to order:

Valve unit with air release on both sides DN 2*80, standard
has Article No. 4542-080-000-000.



principle sketch

Please observe: the included ball valve has to be operated at least twice/year in order to ensure a good function.

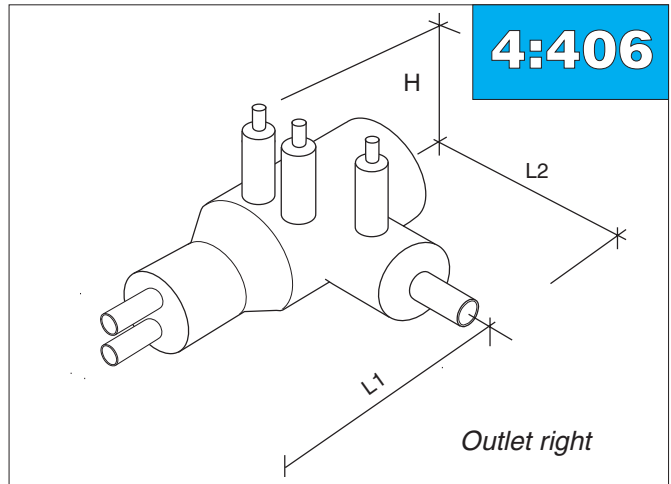
Please observe: Do not refill above the sealing. The sealing shall not be below water table continuously.

DOUBLE PIPES

4:406

Valve unit, compact

The compact valve unit can be used as drainage or air release equipment for double pipes.



VALVE UNIT, COMPAKT 4570, 4670

DN	C-C	H Standard [mm]	H Min [mm]	B [mm]	L1 [mm]	L2 [mm]
25	310	480	190	400	800	500
40	330	495	200	450	800	500
50	340	500	210	450	850	500

The drainage pipe is made of stainless steel

Article No.

4570-DN-000-000 (Standard)

4670-DN-000-000 (Double+)

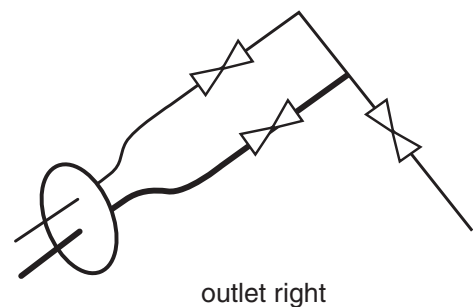
Outlet right has prefix 031

Outlet left has prefix 032.

Stemheight outside Standard has to be written in a separate text line.

An example of how to order:

Valve unit, compact, outlet right DN 2*50, standard has Article No. 4570-050-000-031.



Please observe: the included ball valve has to be operated at least twice/year in order to ensure a good function.

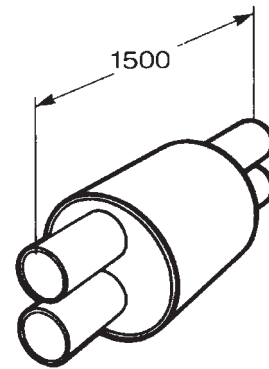
Please observe: Do not refill above the sealing. The sealing shall not be below water table ontinously.

DOUBLE PIPES

4:501

Fixed pipe section

Pipe lines installed with double pipes which are not terminated by a bend, transition unit, valve or T-piece shall be completed with a fixed pipe section before pre-heating/ commissioning of the pipe line.



FIXED PIPE SECTION 1520, 1620

DN	STANDARD 1520	DOUBLE+ 1620
	Jacket pipe Dy [mm]	Jacket pipe Dy [mm]
25	140	160
32	160	180
40	160	180
50	200	225
65	225	250
80	250	280
100	315	
125	400	
150	450	

Article No.

1520-DN-000-000 (Standard)

1620-DN-000-000 (Double+)

An example of how to order:

Fixed pipe section for a main Double pipe DN 2 x 50, standard has Article No. 1520-050-000-000.

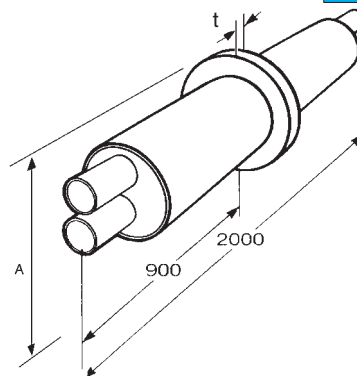
DOUBLE PIPES

4:502

Anchor unit

The anchor unit is designed for casting into concrete.

Dimensioning pressure force in concrete 5 MN/ m² (50 kg/ cm²), standard value in ground 0,15 MN/ m² (1,5 kg/ cm²), standard value.



ANCHOR UNIT, 5500, 5600

DN1	Max load (kn) $\Delta T = 60^{\circ}\text{C}$	A [mm]	t [mm]	Pressure area [cm ²]
DN2				
25	63	250	20	337
32	82	300	20	505
40	93	300	20	505
50	130	300	20	390
65	167	350	30	565
80	215	400	30	765
100	315	450	30	810
125	385	550	35	1120
150	515	650	40	1720
200	750	750	40	1950

ΔT is the deviation from the average operating temperature of the pre-insulated pipe line

$$\frac{(T_f \times T_r)}{2}$$

T_f = flow line temperature

T_r = return line temperature

Article No.

5500-DN-000-000 (Standard)

5600-DN-000-000 (Double+)

An example of how to order:

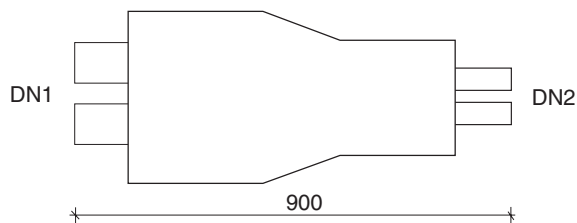
Anchor unit for DN 2*50, standard, has Article No.5500-050-000-000.

DOUBLE PIPES

4:503

Reduction unit

The detail is used at change of dimension



REDUCTION UNIT 1575, 1675

DN1 \ DN2	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
25	x	x							
32		x	x						
40			x	x					
50				x	x				
65					x	x			
80						x	x		
100							x	x	
125								x	x
150									x

The table shows standard reduction unit

Article No.

1575-DN1-DN2-000 (Standard)

1675-DN1-DN2-000 (Double+)

An example of how to order:

Reduction unit for pipes DN 2*50 to DN 2*40 has Article No. 1575-050-040-000.