

Insulation Coupler/Reducer PU

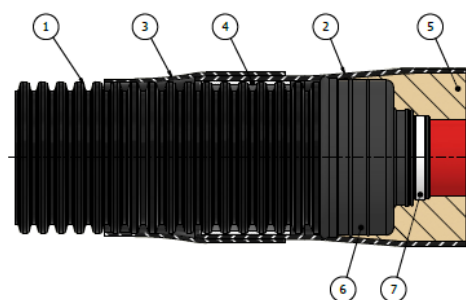
Insulation kit for insulating connections of all Flexalen® pre-insulated pipe systems on site



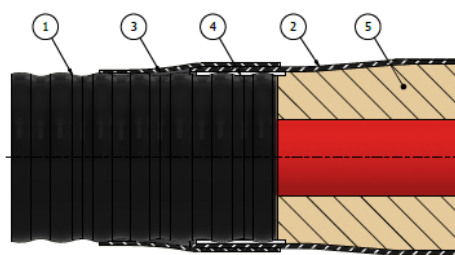
Product application

- The insulation coupler/ reducer PU is designed to create a perfect and strong joint in the connection areas of two Flexalen® pre-insulated pipes, and/or prefabricated fittings.

Construction



Flexalen® 600 Product range



Flexalen® PU Product range

- 1) Pre-insulated pipe (Flexalen® 600 and or Flexalen® PU)
- 2) Shrinkable casing joint
- 3) Heat-shrink sleeve
- 4) Integrated mastic
- 5) PU foam
- 6) Rubber endcap*
- 7) Cable-tie*

* (only for Flexalen® 600 Product range)

Material information

Shrinkable straight / reduction casing joint



- Shrinkable casing joint: High density polyethylene (material classification PE100)
- Integrated mastic: is a thermoplastic sealant with high surface tack, self-healing provides a good water and vapor tightness. The mastic is sealed with white protective foil.
- Bottle shaped reductions steps depending on the casing dimensions between the two Flexalen® pre-insulated pipes to be connected. (steps overview see table XXXXXX)
- All straight shrinkable casing joints have a pre-drilled hole of $\varnothing$ 25 mm in the center, and all bottle-shaped reductions on the biggest dimension, near the reduction.

Heat shrink-sleeve



Heat-shrink sleeve: TPSP-PE heat-shrinkable, tubular sleeve for joint sealing. Adhesive is a high strength, visco-elastic sealant with low preheat for easy application.

Backing is a radiation cross-linked, high density polyethylene with PCI (Permanent Change Indicator).



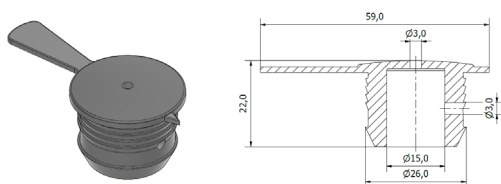
PU 2K foam pack



- Component A: Desmodur 44 v 20L, diphenylmethane-diisocyanate, isomers and homologues
- Component B: elastopor H 2101/20 Polyol component

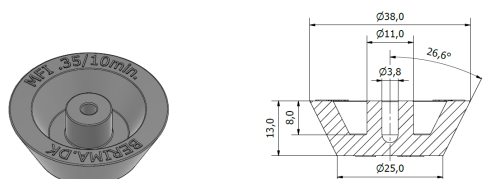
More detailed TDS/SDS PU 2K foam pack are available on request.

Ventilation plug



- Ventilation plug; High density polyethylene. For venting during the foaming process.

Welding plug



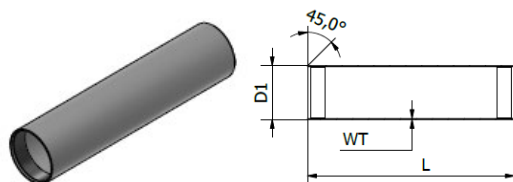
- Welding plug D25; High density polyethylene. PE with MFR 3.5g/10min.
For closing the filling opening after the foam process



Availability

The shrinkable straight casing joint set consist of the following items:

- 1x Shrinkable casing joint with integrated mastic (both casing ends)
- 3x Heat-shrinkable sleeves



Item code	Casing pipe D1 [mm]	L [mm]	Min ID before shrinking [mm]	WT* [mm]	Width/ thickness mastic [mm]	Heat-shrink sleeve data			Product size [mm]	Foam set size
						Max. OD [mm]	Min. OD [mm]	Width [mm]		
1748-090090-003	90	700±10	105	3	50/1	115	80	150	PE 90	1
1748-110110-003	110	700±10	122	3	50/1	155	100	150	PE 110/125	3
1748-125125-003	125	700±10	140	3	50/1	155	100	150	PE 110/125	4
1748-140140-003	140	700±10	155	3	50/1	170	110	150	PE 125/140	4
1748-160160-003	160	700±10	176	3	50/1	210	135	150	PE 160/180	6
1748-180180-003	180	700±10	197	3	50/1	225	145	150	PE 180/200	6.1
1748-200200-003	200	800±10	217	3,2	50/1	260	165	150	PE 200/225	8
1748-225225-003	225	800±10	243	3,4	50/1	290	185	150	PE 225/250	8.1
1748-250250-003	250	800±10	269	3,6	50/1	330	210	150	PE 250/280	9.1
1748-280280-003	280	800±10	299	3,9	50/1	330	210	150	PE 250/280	10.1
1748-315315-003	315	800±10	336	3,9	50/1	370	235	150	PE 280/315	11.1
1748-400400-003	400	800±10	420	5,3	50/1	450	295	225	PE 355/400	12
1748-450450-003	450	800±10	470	5,2	50/1	505	315	225	PE 400/450	12

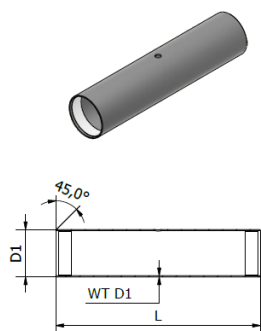
* WT concerns raw PE pipe material thicknesses before expansion

The shrinkable reduced casing joint set consists of the following items:

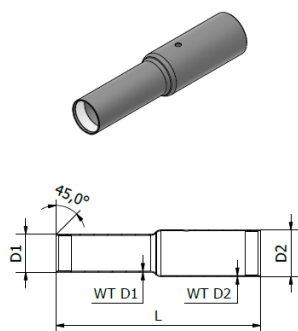
- 1x Shrinkable casing joint with integrated mastic (both casing ends)
- 3x Heat-shrinkable sleeves
 - For straight reducer 3 pcs for D1
 - For bottle reducer 1 pcs for D1 and 2 pcs for D2



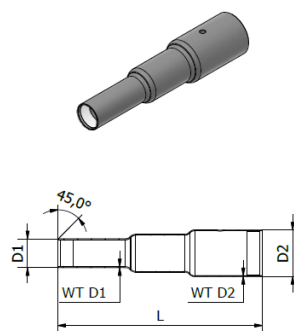
Straight reduction



Bottle 2-3 steps



Bottle 4-5 steps



Item code and shape indication	Casing pipe D1 [mm]	Casing pipe D2 [mm]	L [mm]	Min ID1 before shrinking [mm]	Min ID2 before shrinking [mm]	WT* D1 [mm]	WT* D2 [mm]	Heat-shrink sleeve data			Heat-shrink sleeve data			Product size D2 [mm] 2x	Foam set size
								Max. OD1 [mm]	Min. OD1 [mm]	Product size D1 [mm] 1x	Max. OD2 [mm]	Min. OD2 [mm]	Product size D1 [mm] 1x		
1750-110090-003 ¹	90	110	700±10	125	125	3		115	80	PE 90/110	155	100	PE 110/125	3	
1750-125090-003 ²	90	125	700±10	105	140	4	3	115	80	PE 90/110	170	100	PE 125/140	4	
1750-125110-003 ¹	110	125	700±10	140	140	3		170	100	PE 125/140	170	100	PE 125/140	4	
1750-140090-003 ²	90	140	700±10	105	155	4	3	115	80	PE 90/110	190	125	PE 140/160	4	
1750-140110-003 ²	110	140	700±10	125	155	3	3	155	100	PE 110/125	170	110	PE 125/140	4	
1750-140125-003 ¹	125	140	700±10	155	155	3		190	125	PE 140/160	190	125	PE 140/160	4	
1750-160090-003 ³	90	160	700±10	105	176	3,7	3	115	80	PE 90/110	210	135	PE 160/180	6	
1750-160110-003 ²	110	160	700±10	125	176	4	3	155	100	PE 110/125	210	135	PE 160/180	6	
1750-160125-003 ²	125	160	700±10	140	176	4,1	3	170	100	PE 125/140	210	135	PE 160/180	6	
1750-160140-003 ¹	140	160	700±10	176	176	3		210	135	PE 160/180	210	135	PE 160/180	6	
1750-180090-003 ³	90	180	700±10	105	197	3,7	3	115	80	PE 90/110	225	145	PE 180/200	6.1	
1750-180110-003 ³	110	180	700±10	125	197	4	3	155	100	PE 110/125	225	145	PE 180/200	6.1	
1750-180125-003 ²	125	180	700±10	140	197	4,1	3	170	100	PE 125/140	225	145	PE 180/200	6.1	
1750-180140-003 ²	140	180	700±10	155	197	4,5	3	170	110	PE 125/140	225	145	PE 180/200	6.1	
1750-180160-003 ¹	160	180	700±10	197	197	3		225	145	PE 180/200	225	145	PE 180/200	6.1	
1750-200090-003 ³	90	200	800±10	105	217	3,7	3	115	80	PE 90/110	260	165	PE 200/225	8	
1750-200110-003 ³	110	200	800±10	125	217	4	3	155	100	PE 110/125	260	165	PE 200/225	8	
1750-200125-003 ³	125	200	800±10	140	217	4,1	3	170	100	PE 125/140	260	165	PE 200/225	8	
1750-200140-003 ²	140	200	800±10	155	217	3	3	190	125	PE 140/160	260	165	PE 200/225	8	
1750-200160-003 ²	160	200	800±10	176	217	5	3,2	225	145	PE 180/200	260	165	PE 200/225	8	
1750-200180-003 ¹	180	200	800±10	217	217	3		260	165	PE 200/225	260	165	PE 200/225	8	

Width/thickness mastic [mm] for all products = 50/1

For all Heat-shrink sleeves, width [mm] = 150

Shape:

¹ Straight

² Bottle 2-3

³ Bottle 4-5

*WT concerns raw PE pipe material thicknesses before expansion



PU 2K foam pack

The 2K PU set consists of the following items:

- Two bottles (component A and B)
- 1x ventilation
- 1x weld plug

Item code	Casing pipe D1 [mm]	Foam set size	Weight package [kg]
1795-000330-001	90	PUR foam set size 1	0,33
1795-000500-001	110	PUR foam set size 3	0,50
1795-000650-001	125/140	PUR foam set size 4	0,65
1795-000900-001	160	PUR foam set size 6	0,90
1795-001100-001	180	PUR foam set size 6,1	1,10
1795-001500-001	200	PUR foam set size 8	1,50
1795-001650-001	225	PUR foam set size 8,1	1,65
1795-002000-001	250	PUR foam set size 9,1	2,00
1795-002450-001	280	PUR foam set size 10,1	2,45
1795-003250-001	315	PUR foam set size 11,1	3,25
1795-004400-001*	400/450	PUR foam set size 12	4,40

Storage:

Shrinkable casing joint straight and reduced:

- Store indoors and in plastic foil
- Store in a vertical position and on a flat surface
- Protect from direct sunlight
- Storage temperature between -10°C and +40°C, keep the maximum storage temperature under control to avoid the shrinking process starting (this can already start at +50°C).

PU 2K foam pack (additional storage information):

- Shelf lifetime up to 20 months from the specified production date, and when 2K PU foam is stored correctly between +15°C and +20°C and not exposed to direct sunlight!
- Keep the PU packed sealed unit for use.