

3. MATERIAL PROPERTIES

- Guaranteed Pressure Value;

Ø 63 mm – Ø 160 mm: 16 Bar / 20 °C / Water

Ø 63 mm – Ø 160 mm: 10 Bar / 20 °C / Gas

- Long-lasting use,
- Does not contain harmful compounds that can change the smell and taste of water,
- Ideal welding time, HDPE 100 certified raw material,
- Electrofusion Fittings;

- EN 12201-3

- EN 1555-3

- ISO 4427-3

- ISO 4437-3 Standards are produced.

4. APPEARANCE

When viewed without the use of a magnifying glass, the internal and external surfaces of the inserts shall be smooth and clean, free from any flaking, pitting or other surface defects that would prevent their conformity to this International Standard.

No component of the insert shall show any signs of damage, scratches, pitting, swelling, blistering or cracking that would compromise the conformity of the part to the provisions of this International Standard.

5. PACKAGING

PE fittings are placed on the market in the specified quantity in boxes/bags so that they will not be damaged during transportation.

6. MARKING

On the electrofusion couplings offered to the market;

- Brand information (POELSAN),
- Design Pressure (PN),
- Nominal Diameter (mm),
- Body Material (PE100),
- Manufacturing Date
- Source barcode / source information

On the packaging;

- Name of the product, code,
- Size of the product,
- Standard number,
- Area of use,
- Quantity of the product,
- Company name, address and other information (brand etc.),

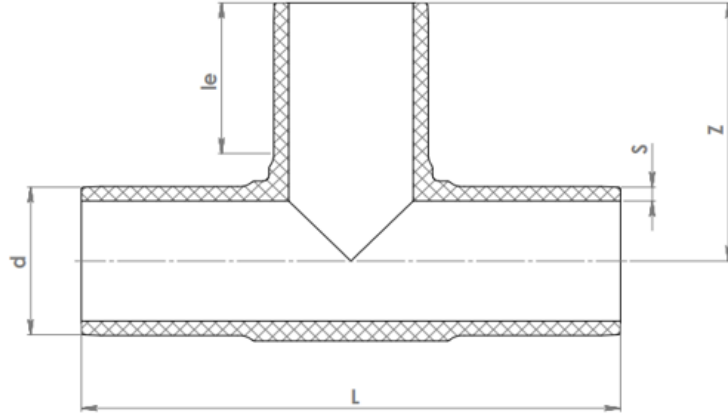
7. USAGE INFORMATION

- The temperature of the environment where butt welding is performed should be above +5°C. In rainy and cold weather, a covered area should be selected.
- Pipe ends should be closed to prevent rapid cooling due to air circulation during butt welding.
- Before butt welding in coiled pipes, the ovality formed during production should be removed.
- The butt welding area should be clean and undamaged.
- In order to obtain a quality butt weld, butt welding pressure, temperature and time parameters should be adjusted well.
- PE Pipe ends should be cut smoothly (at a right angle to the pipe axis).
- PE Pipe surfaces should be clean, (should be shaved with a rasp etc.)
- PE Pipe and Fittings should be cleaned with industrial cleaning wipes before welding.
- Ovality in pipes should not exceed 1.5% of their outer diameter. Otherwise, pipe clamps should be used. Pipe axis misalignments should be checked. Care must be taken to reset.
- In butt welding applications, Welding data (pressure-Force) should be in accordance with the machine instructions.

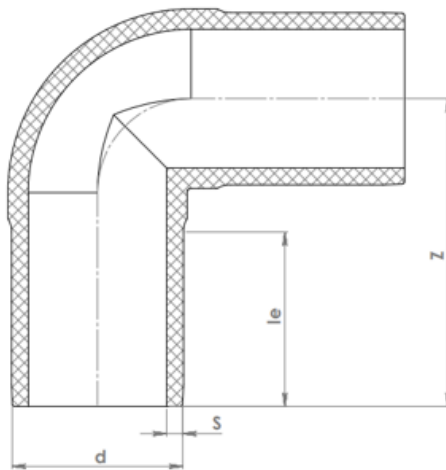
8. INSPECTION AND EXPERIMENTS

TEST DEFINITION	TEST CONDITIONS	METHOD	ACCEPTING CRITERIA	RAW MATERIAL TYPE	TEST DURATION
Hydrostatic strength at 20°C	20°C / 10 Mpa	TS EN ISO 1167-1 TS EN ISO 1167-4	There should be no leakage, cracking, etc.	PE80	100
	20°C / 12 Mpa		There should be no leakage, cracking, etc.	PE100	100
Hydrostatic strength at 80°C	80°C / 4,5 Mpa	TS EN ISO 1167-1 TS EN ISO 1167-4	There should be no leakage, cracking, etc.	PE80	165
	80°C / 5,4 Mpa		There should be no leakage, cracking, etc.	PE100	165
Hydrostatic strength at 80°C	80°C / 4,0 Mpa	TS EN ISO 1167-1 TS EN ISO 1167-4	There should be no leakage, cracking, etc.	PE80	1000
	80°C / 5,0 Mpa		There should be no leakage, cracking, etc.	PE100	1000
Cleavage strength for electric welded pipe end fittings	23°C	ISO 13954 or ISO 13955	Initial break length ≤ L2/3 break error	PE100	
Tensile strength for butt weld fittings - spigot end fitting	23°C	ISO 13953	Fracture test: -ductile: pass -brittle: do not pass	PE100	
In case of error at 80°C, repeating test	80°C / 4,5 Mpa	EN ISO 12201-3	There should be no leakage, cracking, etc.	PE80	165
	80°C / 5,4 Mpa		There should be no leakage, cracking, etc.	PE100	165
Pressure drop	Max. Diameter up to 63	ISO 4059:1978	Pressure drop declaration	PE100	
RAW MATERIAL TESTS					
Melt mass flow rate (MFR) for PE 80 and PE 100	5 kg / 190°C / 10 min.	TS EN ISO 1133-1	(+) Change in MFR with 20% processing 0.20 ≤ MFR ≤ 1.40	PE100	10 min.
Raw Material Density	0,95- 0,96 gr./cm ³	ISO 1872-2 ISO 1183		PE100	
Thermal Stability (Oxidation induction time)	Oxygen at 210°C (15 ±2) mg	ISO 11357-6	≥20 min.	PE100	

9. PRODUCT DIMENSIONS

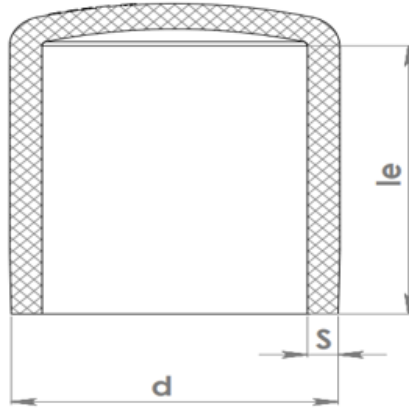


SPIGOT ELBOW DIMENSIONS						
CODE	EXPLANATION	d	S	le	L	Z
SP16020606	63 SPIGOT EQUAL TEE	63	5,8	64	221	111
SP16020707	75 SPIGOT EQUAL TEE	75	6,8	71	270	134
SP16020808	90 SPIGOT EQUAL TEE	90	8,2	80	300	150
SP16020909	110 SPIGOT EQUAL TEE	110	10	83	332	168
SP16021010	125 SPIGOT EQUAL TEE	125	11,4	88	364	182
SP16021111	140 SPIGOT EQUAL TEE	140	12,7	93	380	190
SP16021212	160 SPIGOT EQUAL TEE	160	14,6	99	430	215



SPIGOT ELBOW DIMENSIONS

CODE	EXPLANATION	d	S	le	Z
SP16040606	63 90° ELBOW	63	5,8	64	113
SP16040707	75 90° ELBOW	75	6,8	71	120
SP16040808	90 90° ELBOW	90	8,2	80	142
SP16040909	110 90° ELBOW	110	10	83	164
SP16041010	125 90° ELBOW	125	11,4	88	166
SP16041111	140 90° ELBOW	140	12,7	94	178
SP16041212	160 90° ELBOW	160	14,6	99	211



SPIGOT END CAP DIMENSIONS

CODE	EXPLANATION	d	S	le
SP16070606	63 SPIGOT END CAP	63	5,8	64
SP16070707	75 SPIGOT END CAP	75	6,8	73
SP16070808	90 SPIGOT END CAP	90	8,2	87
SP16070909	110 SPIGOT END CAP	110	10	87
SP16071010	125 SPIGOT END CAP	125	11,4	91
SP16071111	140 SPIGOT END CAP	140	12,7	95
SP16071212	160 SPIGOT END CAP	160	14,6	107