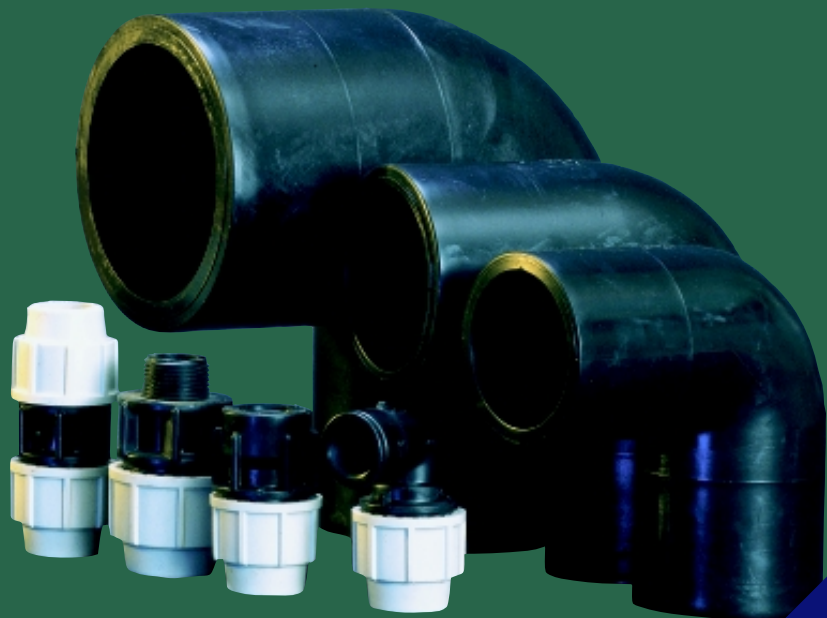


POLIETILENE (PE) PIPE SYSTEMS



PE PRESSURE PIPES

PE pressure pipes are made of PE80 and PE100 materials in dimensions specified in the catalogue, or at special order also with other SDR (diameter/wall thickness) parameters.

FIELD OF APPLICATION

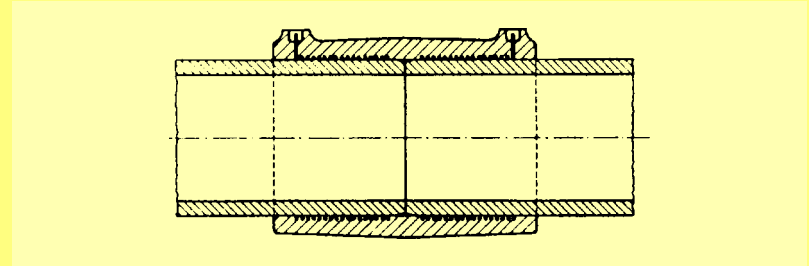
- Realization of underground gas pipes, by taking into consideration the working pressures specified in related standards.
- Realization of potable water pipes and general pipes, in areas where the transmission agent is under pressure, by taking into consideration the working pressures specified in related standards.

**Please keep all the installation
and operating procedure prescriptions!**

PE FITTINGS ASSEMBLED BY ELECTROFUSION

PE fittings assembled by electrofusion are made of PE material, in some dimensional proportions of SDR11. The dimensioning for working pressure complies with these parameters. Thanks to their external diameter, electrofusion fittings given in this catalogue, may be welded also with elements made of inferior MRS category materials.

Electrofusion welding is a joining procedure for pipes, which is carried out with a special fitting (*electrofitting*). The welding section is given in the figure below.



This technology maybe applied in a large area of dimensions ($\varnothing 20-400$ mm), for constructions and technical interventions. electrofusion welding is an automated process, where the „human factor“ is almost totally eliminated.

FIELD OF APPLICATION






- Realization of gas pressure pipes
- Realization of pressure pipes of potable water
- Realization of other general or under pressure PE systems.










ELECTROFUSION WELDING EQUIPMENT

		DIMENSION/CONNECTION Ø mm																					
		BAR	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	
	Cleaning cloth	D20-D63T	•	•	•	•	•	•	•														
		D90-D225T									•	•	•	•	•	•	•	•	•	•	•	•	•
	Pipe clamps	63-125						•	•	•	•	•											
		110-225									•	•	•	•	•	•	•	•					
		225-400																•	•	•	•	•	•
	Drilling wrench					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
	Pipes straightening piece	25-63		•	•	•	•	•															
		63-125							•	•	•	•	•										



LONG SPIGOT PE FITTINGS FOR BUTT-WELDING AND ELECTROFUSION WELDING

		BAR	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	
	Elbow 15°	PE80 SDR17									•			•									
		PE80 SDR11									•	•			•								
	Elbow 45°	PE80 SDR17								•	•	•		•	•	•	•	•	•	•			
		PE80 SDR11				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Elbow 90°	PE80 SDR17								•	•	•		•	•	•	•	•					
		PE80 SDR11	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•		
	T piece 90°	PE80 SDR17								•	•	•		•	•	•	•	•	•	•			
		PE80 SDR11	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•		
	T reducing piece 90°	PE80 SDR17						50	32 50 63	63 75	63 75 90	110		63 75 90 110	160		90 110 160 180						





LONG SPIGOT PE FITTINGS FOR BUTT-WELDING AND ELECTROFUSION WELDING

		DIMENSION/CONNECTION Ø mm																					
		BAR	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	
	T reducing piece 90°	PE80 SDR11						50	32 50 63	63 75 90	63 75 90			63 75 90 110	160		75 90 110 160 180						
	End cap	PE80 SDR17								•	•	•		•	•	•	•	•	•	•	•		
		PE80 SDR11	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Reducing piece	PE80 SDR17								63	63 90	63 90 110		90 110 125	125	160	160						
	Reducing piece	PE80 SDR11			20 25	20 25 32	25 32 40	32 40 50	50 63	63 75	63 90	63 75 90 110		90 110 125	125	160	160						
	Flange adaptor	PE80 SDR17								•	•	•		•	•	•	•	•	•	•	•		
		PE80 SDR11	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	PP loose flange		•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•
	Flange piece for connecting	PVC sliding gate valves and PE pipes						•	•	•	•	•		•	•								



FITTINGS FOR BUTT-WELDING

		BAR	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	
	Elbow 90° (short)	PE80 SDR17																	•		•	•	•
		PE80 SDR11																		•		•	•
	T piece 90° (short)	PE80 SDR17																	•		•	•	•
		PE80 SDR11																		•		•	•



FITTINGS FOR BUTT-WELDING

		DIMENSION/CONNECTION Ø mm																					
		BAR	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	
	Reducing piece Ø315-250 (short)	PE80 SDR17																			225		
		PE80 SDR11																				250	
	Eccentric reducing piece Ø355-250 (short)	PE80 SDR17																				250	
		PE80 SDR11																					280
	Flange adaptor (short)	PE80 SDR17																					
		PE80 SDR11																					
	PP loose flange																						

PIPE-CUTTERS











		BAR	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400		
	Pipe cutter	10-63	•	•	•	•	•	•																
		50-110						•	•	•	•	•												
		110-160										•	•	•	•									
	Rerounding tool						•	•	•	•	•	•		•	•	•	•	•						

GATE VALVES FOR GAS







		BAR	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400
	ERHARD	Casting gate valve for natural gas						•		•	•			•			•		•	•		
		Building unit							•		•	•			•			•		•	•	
	Manual wheel for cast iron gate valve							•		•	•			•			•		•	•		

POLIFUSION PE – FITTINGS



DIMENSION/CONNECTION Ø mm

		16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400
	Transition sleeved fitting		1/2" 3/4"	3/4"	3/4" 1"	1-1/4"		2"			3" 4"											
	Transition sleeved and threaded steel fitting		1/2" 3/4"		3/4" 1"																	
	Transition sleeved and threaded steel fitting, for water		1/2"	3/4"	3/4" 1"	1-1/4"		2"														
	Transition sleeved and threaded steel fitting, galvanized		3/4"	3/4"	3/4" 1"	1-1/4"		2"		3"												
	Sleeved coupler		•	•	•	•	•	•	•	•	•	•										
	Sleeved reducer fitting				20 25	20 32	25 32 40	32 40 50	40 50 63	63 75	63 75 90			110								
	Sleeved equal T piece		•	•	•	•	•	•	•	•	•											
	Sleeved T piece reduced			20	20 25	20 25 32	25 32 40	20 25 32 40 50	40 50 63	20 32 40 63	20 32 40 63 90											
	Sleeved pipe stopper		•	•	•	•	•	•	•	•	•	•										
	Saddle sleeved piece							20 25 32 40	20 32 40 50	20 25 32 40 50 63	20 25 32 40 50 63 90			20 25 32 40 50 63 90 110	20 25 32 40 50 63 90 110	20 25 32 40 50 63 90 110	20 25 32 40 50 63 90 110	20 25 32 40 50 63 90 110				

FITTINGS THAT MAY BE USED FOR VACUUM SEWAGE OR UNDER PRESSURE

		DIMENSION/CONNECTION Ø mm																					
		16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	
	Elbow formed by injection moulding 45° (sleeved)							•		•	•												
	Elbow of 45° (with butt-welding)											•		•		•							
	Elbow formed from segments of 90° (with butt-welding)											•		•		•							
	Branch pipe formed by injection moulding 45° (sleeved and butt-welded)									90	90 110	90 110											
	Branch pipe 45°, made of pipe (with butt-welding)											125		90 110 125 160		90 110 125 160 200							
	Branch pipe 90° made of pipe (with butt-welding)									90	90	90											

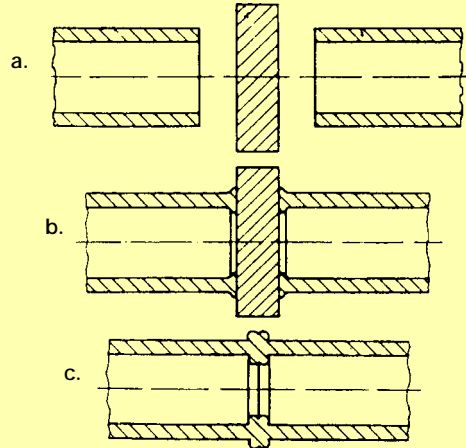
PE CABLE PROTECTION PIPES

		DIMENSION/CONNECTION Ø mm																					
		16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	
	Protection pipe for cable*				x2	x3	x3,5																
	Protection pipe for telecommunication systems*							x4,3			x6,3												

* PE pipes under Ø110 mm are delivered in coils, above this diameter in straight pieces.

PE FITTINGS WITH PLAIN END AND WITH BUTT-WELDING

Lengthened fittings with plain end may be joined both by electrofusion, or by butt-welding. Short pieces may be joined only by butt-welding. See the summarized butt-welding procedure presented in the figure below:



- a) straightening of pipe closings at 90°, through surfacing;
 b) the heating mirror will form a hog on the surface pressed on the pipe;
 c) by pressing the pipe closings each on the other, the molded, elasticized hogs will form a joint.

QUICK JOINING FITTINGS

Technical characteristics are similar to those of normal PE fittings, except gas industry applications.

FIELD OF APPLICATION

Quick joining fittings may be used in dimensions of Ø16-125 mm for the realization of:

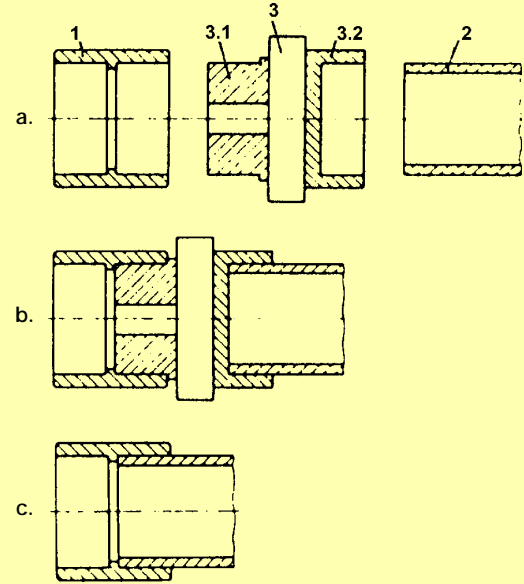
- joints for pipes for water and for general use;
- joints for protection pipes for telecommunication cables.

Warning! Do not use quick joining fittings for the construction of gas pipes!

The body and the securing screw of fittings are made of PP co-polymers, the securing ring is made of polyformaldehyde (POM), the „O” insulating ring of rubber nitrile (NBR). The use of these pieces is extremely simple, they do not damage in any way the pipe closing during installation, and may be reused very easy. For fittings having one of their sides threaded, the insulating may be carried out only with Teflon strip.

POLIFUSION OF SLEEVED PIECES

Polifusion welding is also a joint of pipes realized by sleeved connection and thermal treatment. In this procedure the temperature is transmitted by a metallic structure having a profile that matches the cylindrical surface from the inside casing, and the external surface of the pipe. See the simplified presentation of the procedure in the figure below:

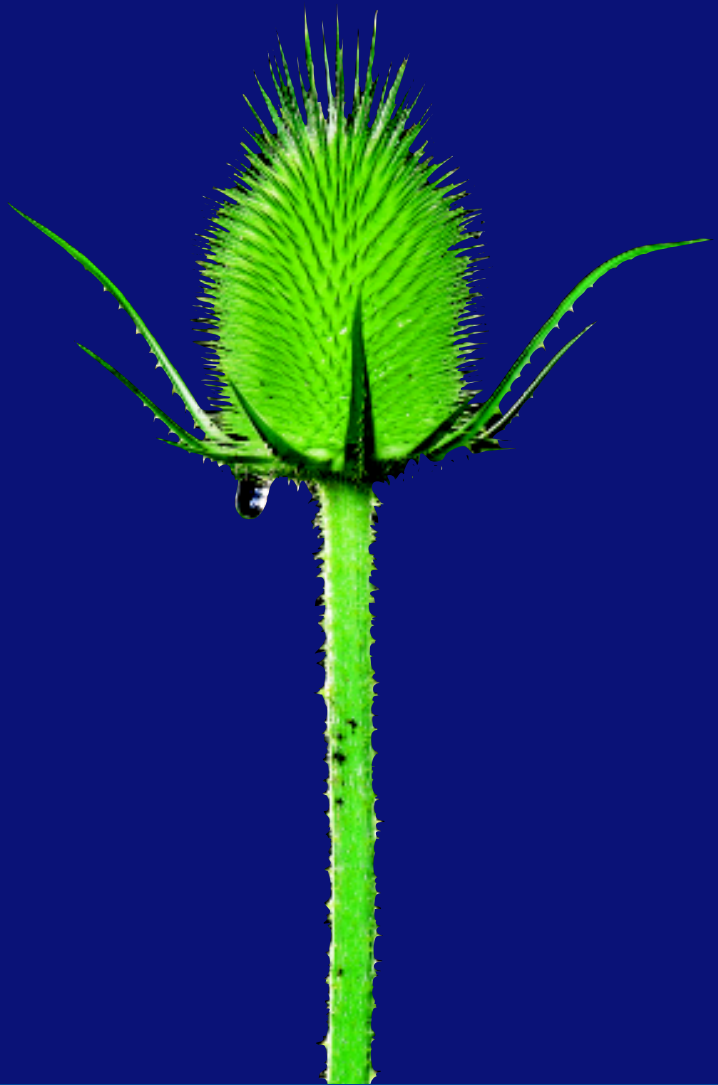


- a) Preparing of joining surfaces, heating of welding sections.
 (1. sleeved piece, 2. pipe, 3. element of heating, 3.1 section with profile 3.2. sleeved section)
 b) Heating and maintaining the joining KPE pipe and the casing surfaces on the given temperature.
 c) Matching, pressing the sleeved piece on the pipe.

Sleeved pieces – with polifusion – are made in diameters of Ø20-110. By polifusion procedure you may carry out saddle-shaped pieces and other branch pieces.

Because of lower investment costs this procedure is very common, in spite that the welding process is difficult to control, and cannot be automated.

YOUR DISTRIBUTOR



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