



 **PLASSON**[®]

Plasson ElectroFusion Geothermal System



We Care for the Environment



Global Presence - Local Commitment

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We Care For The Environment

While temperatures above ground change a lot from day to day and season to season, temperatures in the earth's surface below the "frost line" (usually about one meter deep) hold nearly constant between 8-13OC all year round.

For most areas, this means that soil temperatures are usually warmer than the air in winter and cooler than the air in summer. Geothermal Systems use the earth's constant temperatures to heat and cool buildings.

They transfer heat from the ground into buildings using heat pumps in winter and reverse the process in the summer.

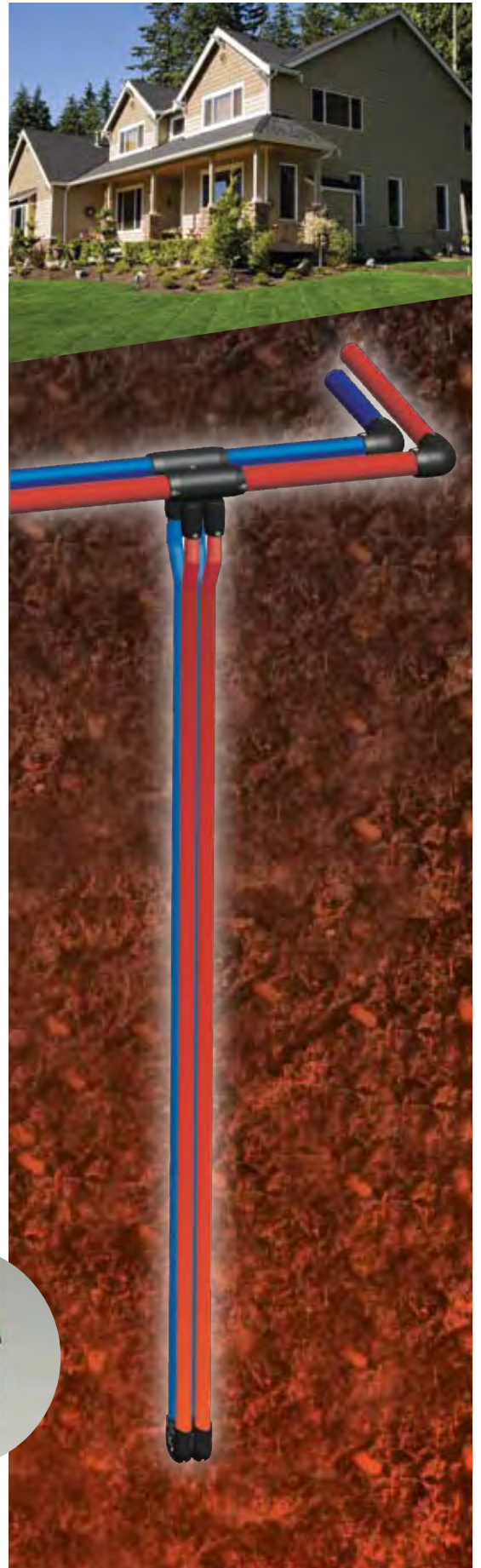
The transfer of heat is accomplished with the help of the flow of relatively cold fluid (water + antifreeze) into the ground and the return of this fluid, after its temperature has risen by a few degrees by means of heat transfer.

The heat pump removes the heat from the fluid in the earth connection, concentrates it, and then transfers it to the building.

The water that "lost" its heat is returned to the ground (closed circuit) to begin the process again.

According to environmental protection bodies, Geothermal Heat Systems are the most energy-efficient, environmentally clean, and cost-effective systems for temperature control.

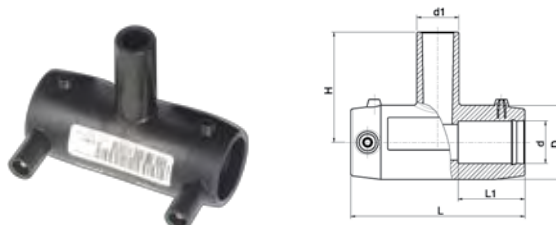
Since the transport part of the Geothermal System is constructed of polyethylene pipes, Plasson's proven ElectroFusion technology provides not only the long term seal, but also offers fully computerized control and monitoring during the system construction.



Reducing Tee

491404

The Plasson Reducing Tee family provides the required connection between the main fluid distribution lines and the loop in the borehole. A variety of main pipe sizes to loop sizes are available in order to enable simple installation.



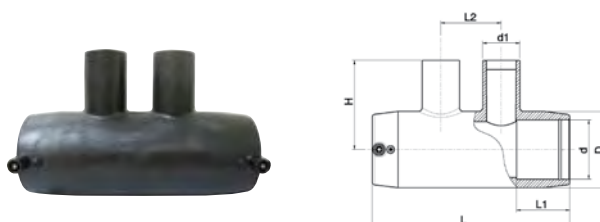
Cat. No.	Size d x d1 x d	L	L1	D	H	A*	W	P
491404032025	32 x 25 x 32	104	39	44	66	43	90	144
491404040025	40 x 25 x 40	121	43	55	72	47	150	96
491404040032	40 x 32 x 40	121	43	55	75	47	150	96
491404050025	50 x 25 x 50	139	48	68	78	52	230	64
491404050032	50 x 32 x 50	139	48	68	86	52	250	64
491404050040	50 x 40 x 50	139	48	68	90	52	250	64
491404063032	63 x 32 x 63	166	58	82	93	58	370	32
491404063040	63 x 40 x 63	166	58	82	104	58	384	32

* Height of shroud from center line

Two Outlets Reducing Tee

492404

The Plasson Two Outlet Tee provides the ideal solution for the connection of multiple borehole systems. The double outlet feature provides a single fitting to connect in parallel two ingoing and two outgoing pipes from each of the broeholes.

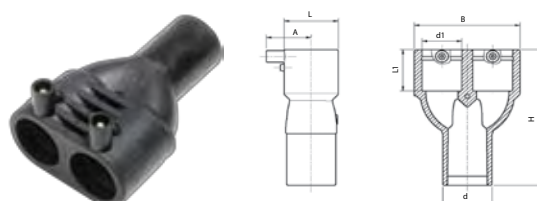


Cat. No.	Size d x d1 x d	L	L1	L2	D	H	A*	W	UC
492404032025	40 x 25 - 25 x 40	176	46	57	56	72	46	230	-
492404040025	40 x 32 - 32 x 40	176	46	57	56	76	46	240	-
492404040025	50 x 25 - 25 x 50	195	49	65	68	79	51	330	-
492404050025	50 x 32 - 32 x 50	195	49	65	68	83	51	340	-
492404050032	50 x 40 - 40 x 50	195	49	65	68	89	51	350	-
492404050040	60 x 25 - 25 x 60	213	58	65	82	86	57	450	-
492404063032	63 x 32 - 32 x 63	213	58	65	82	90	57	460	-
492404063040	63 x 40 - 40 x 63	213	58	65	82	96	57	470	-

* Height of shroud from center line

Y Reducer

491904

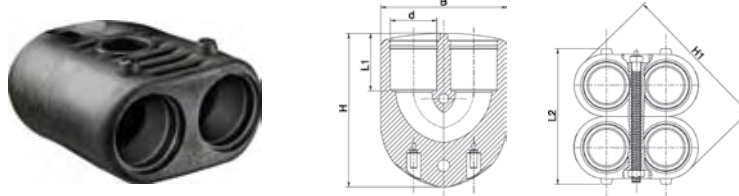


Size d x d1 x d1	L	L1	B	A	H	W	UC
32 x 25 x 25	36	40	70	38	119	93	-
40 x 32 x 32	45	43	88	42	133	151	-
50 x 40 x 40	56	46	109	46	151	242	-

Elbow 180°

490904

The Plasson Geothermal Elbow 180° is designed to function as the system loop end. The ElectroFusion Elbow provides for a reliable, integral and interference free flow of the fluid in the system. A range of diameters is available to provide for the probe diameters existing in the market.



Cat.No.	Size d	B	L	L1	L2	H	H1	W	P
490904025	25	74	38	38	85	99	90	144	216
490904032	32	90	45	41	99	108	110	211	144
490904040	40	107	54	48	117	123	130	310	80

Geothermal Elbow Connecting Bolt Kit

4909K4

Often, more than one geothermal loop is inserted into the same borehole. In order to accommodate this, Plasson Geothermal Elbows are available in pairs with the relevant connecting bolt kit.

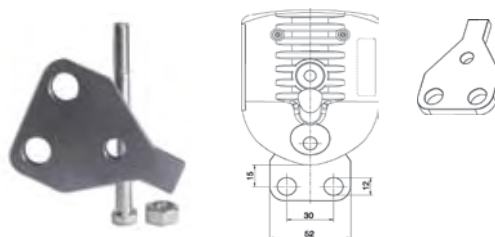


Kit No. (Bolt + Nut)	Product Diameter	Bolt Type	W	P
4909K4025	25	M6 x 70	300	108
4909K4032	32	M6 x 90	430	72
4909K4040	40	M6 x 100	630	40

Probe Head Weight Connection Kit

316578

The lowering of two loops into the borehole is normally assisted by connection of a weight. Plasson's Weight Connecting Adaptor provides a rigid connection with two holes. The kit includes the bolt, nut and a weight connecting adaptor.

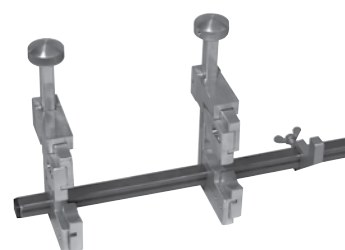


Kit No. (Bolt + Nut + Weight Connecting Adaptor)	Product Diameter	Bolt Type	Weight Connecting Adaptor
3165789160 Kit	25	M8 x 70	30000060
3165789161 Kit	32	M8 x 90	30000061
3165789162 Kit	40	M8 x 100	30000062

180° Elbow Clamp

29301764

The welding of ElectroFusion products is performed using a clamping system to ensure a high quality weld. A dedicated clamping device has been designed to provide for this application.



Modular Manifold

The Modular Manifold consists of two main components, the Modular Tee, and a 90° Elbow with Threaded Male Offtake. For applications where multiple outlets are required, the required number of Modular Tees and an Elbow can be assembled together quickly and without any special tools.

The polypropylene parts combined with the modular design give the advantage of full system flexibility and provide integration with standard Plasson compression fittings.



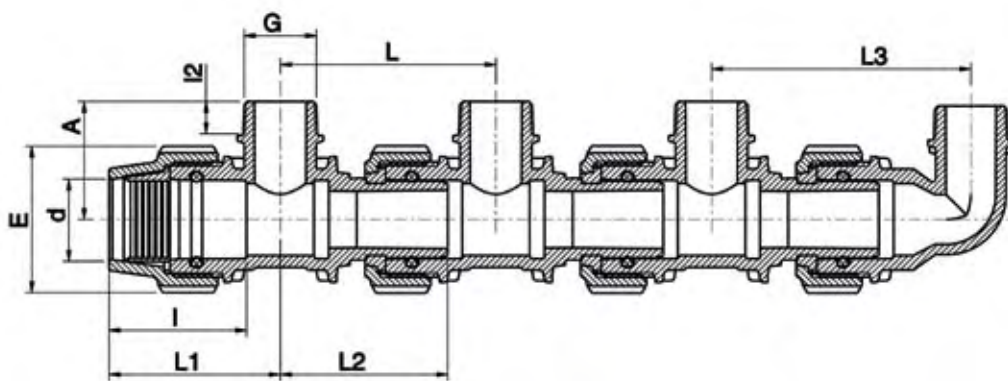
Remove nut and split ring from Manifold End Component, and assemble to the thread of first Manifold Base component.



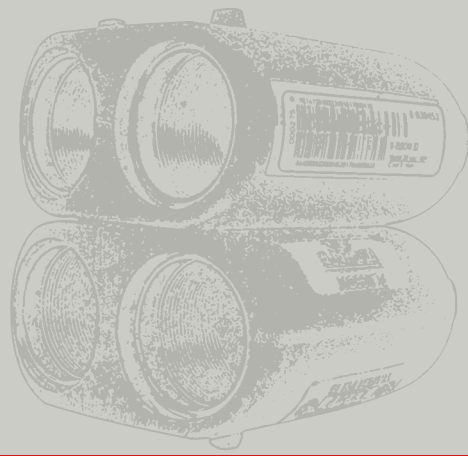
Manifold Base Component



Manifold End Component



d x G	Manifold Base Component Catalog No	Manifold End Component Catalog No	E	I	I2	L	L1	L2	L3	A
32 x 1"	0784L0032010	078500032010	64	66	20	114	87	90	131	58
40 x 1.1/4"	0784L0040013	078500040013	82	80	22	132	100	105	150	70.5
40 x 1.1/2"	0784L0040015	078500040015	82	80	22	132	100	105	150	69.5
50 x 1.1/4"	0784L0050013	078500050013	96	93	21	142	121	112	169	77
50 x 1.1/2"	0784L0050015	078500050015	96	93	21	142	121	112	169	77
63 x 1.1/4"	0784L0063013	078500063013	113	110	22	167	145	127	196	79
63 x 1.1/2"	0784L0063015	078500063015	113	110	22	167	145	127	196	83
63 x 2"	0784L0063020	078500063020	113	110	26	167	145	127	196	92



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