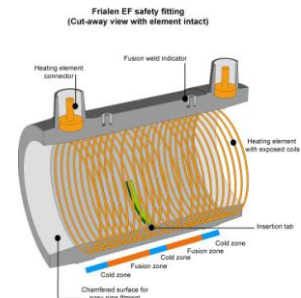


Frialen® Electro Fusion transitions, UL971 Listed

Product Description

Frialen® electro fusion transitions are safe and reliable proven electro fusion technology using open wire principles. Frialen® electro fusion transitions are the only fittings used in petroleum industry to also be tested and approved for use with natural gas and low pressure gas, thus providing unparalleled quality and protection. When used in conjunction with Petroplas® pipe and a Friamat® electro fusion welder, it provides a UL971 compliant fuel installation with a 30 year life span.

Frialen® electro fusion transitions are available in sizes from ½" to 2" nominal bore. Patented seal technology, permanently anchoring steel into the HDPE, therefore no elastomeric seal is needed.



Applications

- | | |
|--------------------------|---|
| ○ Service stations | ○ Refineries |
| ○ Marina's | ○ Harbors |
| ○ Fuel Terminals | ○ Airports |
| ○ Moist and marshy areas | ○ Non-Contaminated and Contaminated sites |

Specifications

- | | |
|----------------------------|--|
| ○ Fitting Type : | Matched electro fusion fittings are utilized throughout the pipeline system in order to join the various pieces. Deep sockets and 'safe' low voltage operation (42V), applied through dedicated ancillary equipment ensures maximum joint integrity. Fusion indicators monitor the joint melt pressure, while absolute security of the weld is ensured using the fittings bar code feature in conjunction with the fully automatic Friamat Control Box Unit. |
| ○ Electro Fusion Machine : | Friamat® electro fusion machine with memory, printing and error reporting |
| ○ Temperature range : | Fittings can be worked with at ambient temperatures between -24°F and 160°F. |
| ○ Pipe fusion range : | The fittings can be fused to pipe of SDR stages 17.6 to 7.4 in accordance with DIN 8074 (E), ISO 4437, pr EN 1555 and DIN EN 12201 (E). |
| ○ Operating pressures | 232 psi maximum |
| ○ Test pressure | 232 psi or 5 times operating pressures |
| ○ Approved Fuel Types : | All Petroleum Products (Motor Vehicle Fuels, High Blend Fuels, Concentrated Fuels, Aviation & Marine Fuels) E85 and Biodiesel. |

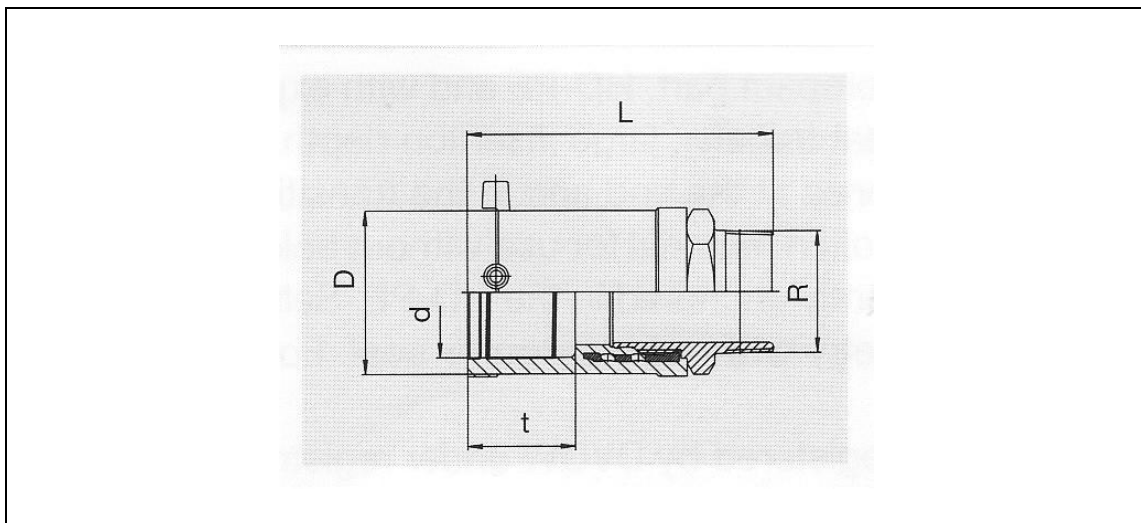
Installation

Installation, use, and maintenance of all Frialen® products shall be in accordance with the manufacturer's recommendations, State and county approvals. In event of conflicts, the stricter requirement shall govern. (IPP installation manual available directly from IPP, or at www.innovativepetroleum.com) All operators to be IPP certified on both the fittings and electro fusion machine

Certifications/Approvals

- | | |
|--------------------------------|---|
| ○ UL 971 approved, | File # MH45430 |
| ○ Institute of Petroleum | Cert # BC63/1010/98/001 And cert # BC63/0115/2000/001 |
| ○ Shell Int. Procurement Cert. | Cert # BC63/1010/98/002 |
| ○ State of Florida | EQ 683 and EQ 617 – and Derm Approval |
| ○ State of Michigan | MUSTR – Rule 9, subsections 280.20 (b) |
| ○ New York City Fire Dept. | CoA 5117 |
| ○ DOT 192 and 195 | On waiver letter per project |
| ○ DVGW Permit | VP 607, with decisions DV-8601AU2248, DV-8606AU2249 and DV-8611AU2250 |
| ○ Factory Permit | DIN EN 10 204-3.1 |
| ○ State of California | CARB, State Fire Marshall Cert # GVRC 005:060:001 |

Note : specifications subject to change without notice
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Diam. NB* inches	Diam OD** Metric	Part #	Dim D		Dim R		Dim L		Weigh Kg/each	Weigh Lbs/each
			mm	In.	mm	In.	mm	In.		
1/2"	20	612578	35	1.38"	13	1/2"	95	3.74"	0.15	0.33
3/4"	25	612711	40	1.57"	19	3/4"	99	3.90"	0.21	0.46
1"	32	612580	47	1.85"	25	1"	119	4.69"	0.33	0.73
1 1/4"	40	612582	58	2.28"	32	1 1/4"	131	5.16"	0.53	1.17
1 1/2"	50	612584	70	2.76"	38	1 1/2"	146	5.75"	0.70	1.54
2	63	612586	84	3.31"	50	2"	152	5.98"	1.05	2.31

(*) Nominal Bore

(**) Outside Diameter

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317 Vicki Towers Lane
St Augustine Florida, 32092

Tel : (904) 940 8863
Fax : (425) 955 8722
www.innovativepetroleum.com
sales@innovativepetroleum.com