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Installation instructions for
CRJ / CRJM
Self Limiting Frost Protection Heating Cable



Please read and follow these instructions carefully to ensure an efficient and safe installation.

The CRJ heating cable is intended for use in non hazardous areas and should only be used on pipes containing water for the prevention of the pipe contents from freezing.

It should not be used if the pipe is likely to be heated above 65°C internally e.g. internal steam cleaning etc. Never use the cable whilst still in a coil.

Protect the cable from the likelihood of mechanical damage or such things as being chewed by animals. Only use the approved termination and jointing kits, the use of any other components will void the warranty.

Installation

Before applying the cable ensure the area and pipe work is clean and free of any sharp surfaces and combustible materials.

Secure the cable to the pipe with PF-T insulating tape at intervals of no more than 200mm, with the cable run straight along the pipe or evenly spiralled.

The cable should also be wrapped around flanges, valves or vulnerable pumps to compensate for the extra heat loss, the cable may be allowed to touch or cross if necessary.

The system, when complete, should be fully insulated and protected from the weather and any mechanical damage. Warning labels should be placed on the outside of the insulation.

Where the circuit is to start, sufficient cable should be left outside of the insulation (approximately 300mm) to facilitate connection to a suitable junction box using the Cable gland supplied in the CRJ-T1 - Termination Kit.

All terminations and connections must be completed by a qualified electrician and carried out in accordance with current regulations.

Pipe Diameter (mm)	INSULATION THICKNESS (mm)			Allowance for increased cable length		
	12	25	50	Pair of flanges	Valve	Support
12	CRJM-11 Straight	CRJM-11 Straight	CRJM-11 Straight	0.23	0.10	0.10
25	CRJM-17 Straight	CRJM-11 Straight	CRJM-11 Straight	0.28	0.15	0.10
50	CRJM-17 1.6m Cable per 1m pipe OR CRJ-25 Straight	CRJM-11 Straight	CRJM-11 Straight	0.30	0.30	0.15
75	-----	CRJM-11 Straight	CRJM-11 Straight	0.45	0.40	0.15
100	-----	CRJM-17 Straight	CRJM-11 Straight	0.60	0.50	0.20
150	-----	CRJM-17 1.6m Cable per 1m pipe OR CRJ-25 Straight	CRJM-17 Straight	0.80	0.60	0.25

Maximum circuit lengths - CRJM-11: 128 meters, CRJM-17: 102 meters, CRJ-25: 126 meters.

Circuit Breaker selection for CRJ / CRJM Self Regulating Cable

Circuit Breaker	Cable Length (m)		
	CRJM-11	CRJM-17	CRJ-25
10A	1 to 80	1 to 60	1 to 45
16A	80 to 128	60 to 90	45 to 60
20A	-----	90 to 102	60 to 75
32A	-----	-----	75 to 126

- Use type C Circuit Breaker
- Circuit Breakers quoted for start-up temperature minimum -15°C
- For start-up temperatures below -15°C contact our technical department

Cable Joining Kits

CRJ-T1 - Termination Kit:- This kit includes all the parts required to terminate both ends of a single piece of cable.

CRJ-S - Splice / T Joint Kit:- This kit includes all the parts required to create either one splice (cable join) or one T Joint plus cover for the bare end.

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