

# PYROTENAX PYRO MI FIRE SURVIVAL CABLE

## INSTALLATION RECOMMENDATION FOR PYRO MI WIRING CABLES - STRAIGHT THROUGH JOINT

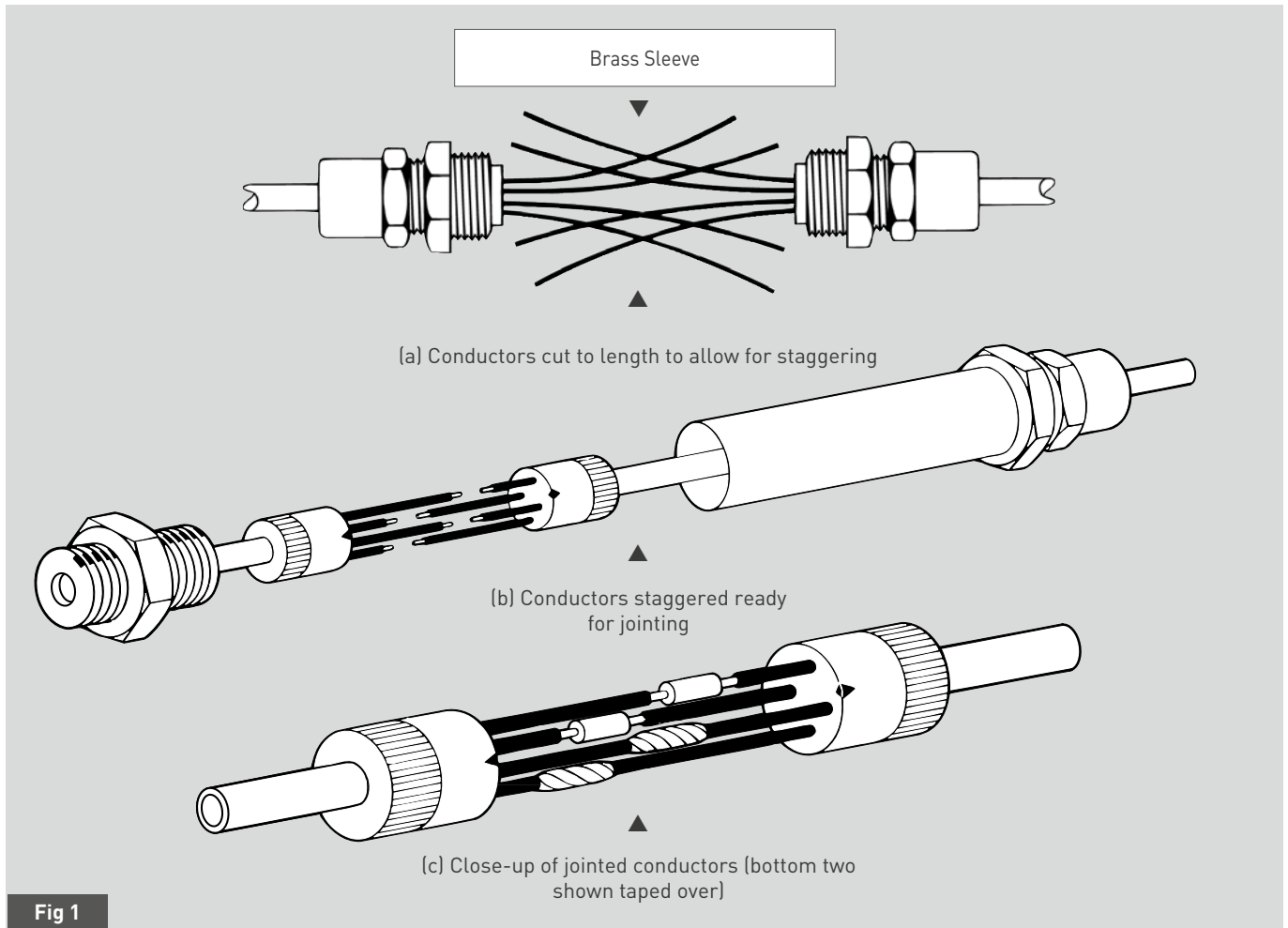


Fig 1

Where it is not possible to joint two lengths of Mi cable in the normal way, by fitting seals and glands and completing the joint inside a suitable box, straight through cable joints offer a space saving alternative joint. These are available for all Mi cable sizes and the methods of making these joints are covered in this Installation Recommendation.

The joint consists of an internally screwed brass sleeve, two standard 105°C seals, two compression type glands, and a connector for each conductor, these being of the appropriate size for the cable to be jointed. The two cable ends to be jointed are terminated in the usual manner, using screw on seals with compression glands. The amount of sheath to be removed for each size of sleeve is given in Table 1. It is recommended that the conductor joints for multicore cables are staggered. The brass sleeve is then slipped over the sheath of one of the cables. If the cable is plastic covered, then the covering must be carefully longitudinally split to allow this. The conductors should be cut to

length, cleaned, abraided and jointed together using one of the following methods, completing the least accessible joint first (see Figs. 1a, 1b and 1c).

For detailed terminating instructions refer to Installation Recommendation CDE-0923 Rev. 0-1/06.

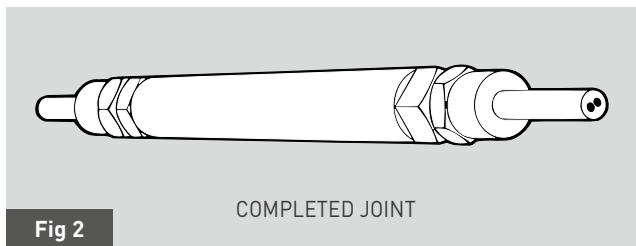
TABLE 1	
Joint Sleeve and Gland size	Length of sheath to be stripped back*
20mm	52mm
25mm	75mm
32mm	115mm
40mm	175mm

\* This allows for connectors to be centrally situated within the joint, for staggered conductor joints additional length must be allowed.

Slide the two conductors into the compression connector, ensuring that they push right up against the stop inside the connector. Crimp the connector onto each conductor in turn, using the Pirelli Cables Limited Components Division tool (Tel: +44 (0) 870 5133143) and so forming a compression butt joint.

### COMPLETING THE JOINT

Each conductor joint should then be insulated with several laps of black All Weather PVC tape. The brass sleeve should be brought over the joint and the gland bodies screwed into each end. The joint is completed by tightening the gland back nuts, thus locking the sleeve securely into position.



### JOINTS IN DAMP CONDITIONS

If the joint is to be buried underground or situated in a damp condition, the threads of the glands and the sleeve should be coated with a suitable thread sealant. Joints in cables having a corrosion protection covering should be taped with a layer of half lapped PIB tape overlapping 25mm on to the cable oversheath at each side of the joint. The whole should then be covered by 2 layers of half lap black All Weather PVC tape. A colour match to the oversheath can be obtained by adding one layer of coloured general purpose PVC Tape. This tape can also be used to repair the longitudinally split plastic covering.

Special conditions of safe use

The cables being jointed shall be operated within the 'Exposed to touch' ratings as given in BS 7671.

The IEE Wiring Regulations Table 4J1.

how to order

Ordering details for Pyrotenax Straight through Joints (see Table 2 and 3). Each joint consists of two RPS Seals, two RGM Glands and one RJMZ joint tube of the appropriate size.

Note The joint described in this Installation

Recommendation is for continuous operation up to 80°C

. For information regarding joints for higher operating temperatures please refer to Pentair Thermal Management UK Limited.

TABLE 2

Pyro Mi Light Duty Wiring Cables					Tooling Details		
Cable Size	Gland	Seal	Joint Tube	Conductor Connector*	Crimping Tool*	Crimping Die*	Number of Crimps
2L1	RGM2L1 20	RPS2L1 20	RJMZ 20	BT1CS	BMR6U3	-	1
2L1.5	RGM2L1.5 20	RPS2L1.5 20	RJMZ 20	BT2CS	BMR6U3	-	1
2L2.5	RGM2L2.5 20	RPS2L2.5 20	RJMZ 20	BT2CS	BMR6U3	-	1
2L4	RGM2L4 20	RPS2L4 20	RJMZ 20	BT6CS	BMR6U3	-	1
3L1	RGM3L1 20	RPS3L1 20	RJMZ 20	BT1CS	BMR6U3	-	1
3L1.5	RGM3L1.5 20	RPS3L1.5 20	RJMZ 20	BT2CS	BMR6U3	-	1
3L2.5	RGM3L2.5 20	RPS3L2.5 20	RJMZ 20	BT2CS	BMR6U3	-	1
4L1	RGM4L1 20	RPS4L1 20	RJMZ 20	BT1CS	BMR6U3	-	1
4L1.5	RGM4L1.5 20	RPS4L1.5 20	RJMZ 20	BT2CS	BMR6U3	-	1
4L2.5	RGM4L2.5 20	RPS4L2.5 20	RJMZ 20	BT2CS	BMR6U3	-	1
7L1	RGM7L1 25	RPS7L1 25	RJMZ 25	BT1CS	BMR6U3	-	1
7L1.5	RGM7L1.5 25	RPS7L1.5 25	RJMZ 25	BT2CS	BMR6U3	-	1
7L2.5	RGM7L2.5 25	RPS7L2.5 25	RJMZ 25	BT2CS	BMR6U3	-	1

**NOTE** Connectors and associated tooling can be obtained from your local wholesaler or from the following specialist suppliers:

Joining Technologies. Unit 19, Woking Business Park, Albert Drive, Woking, Surrey GU21 5JY Tel: 01483 747747

Also at Bristol, tel: 01454 322555 and Wolverhampton, tel: 01902 790777

ETS Cable Components. Units 4 & 5, Red Lion Business Park, Red Lion Road, Tolworth, Surrey KT6 7QD Tel: 0208 405 6789

**TABLE 3**

Pyro Mi Heavy Duty Cables					Tooling Details		
Cable Size	Gland	Seal	Joint Tube	Conductor Connector*	Crimping Tool	Crimping Die	Number of Crimps
1H10	RGM1H10 20	RPS1H10 20	RJMZ 20	BT10CS	BMR16U3		1
1H16	RGM1H16 20	RPS1H16 20	RJMZ 20	BT16CS	BMR16U3		1
1H25	RGM1H25 20	RPS1H25 20	RJMZ 20	BT25CS	G10	U863	1
1H35	RGM1H35 20	RPS1H35 20	RJMZ 20	BT25CS	G10	U864	1
1H50	RGN1H50 25	RPS1H50 25	RJMZ 25	BT35CS	G10	U865	1
1H70	RGM1H70 25	RPS1H70 25	RJMZ 25	BT70CS	G10	U866	1
1H95	RGM1H95 25	RPS1H95 25	RJMZ 25	BT70CS	G10	U867	1
1H120	RGM1H120 32	RPS1H120 32	RJMZ 32	BT70CS	G10	U868	1
1H150	RGM1H150 32	RPS1H150 32	RJMZ 32	BT150CS	G10	U120CHEX	1
1H185	RGM1H185 32	RPS1H185 32	RJMZ 32	BT185CS	G10	U150CHEX	2
1H240	RGM1H240 40	RPS1H240 40	RJMZ 40	BT240CS	G10	U185CHEX	2
2H1.5	RGM2H1.5 20	RPS2H1.5 20	RJMZ 20	BT2CS	BMR6U3		1
2H2.5	RGM2H2.5 20	RPS2H2.5 20	RJMZ 20	BT2CS	BMR6U3		1
2H4	RGM2H4 20	RPS2H4 20	RJMZ 20	BT6CS	BMR6U3		1
2H6	RGM2H6 20	RPS2H6 20	RJMZ 20	BT6CS	BMR16U3		1
2H10	RGM2H10 25	RPS2H10 25	RJMZ 25	BT10CS	BMR16U3		1
2H16	RGM2H16 25	RPS2H16 25	RJMZ 25	BT16CS	BMR16U3		1
2H25	RGM2H25 32	RPS2H25 32	RJMZ 32	BT25CS	G10	U863	1
3H1.5	RGM3H1.5 20	RPS3H1.5 20	RJMZ 20	BT2CS	BMR6U3		1
3H2.5	RGM3H2.5 20	RPS3H2.5 20	RJMZ 20	BT2CS	BMR6U3		1
3H4	RGM3H4 20	RPS3H4 20	RJMZ 20	BT6CS	BMR6U3		1
3H6	RGM3H6 25	RPS3H6 25	RJMZ 25	BT6CS	BMR16U3		1
3H10	RGM3H10 25	RPS3H10 25	RJMZ 25	BT10CS	BMR16U3		1
3H16	RGM3H16 25	RPS3H16 25	RJMZ 25	BT16CS	BMR16U3		1
3H25	RGM3H25 40	RPS3H25 40	RJMZ 40	BT25CS	G10	U863	1
4H1.5	RGM4H1.5 20	RPS4H1.5 20	RJMZ 20	BT2CS	BMR6U3		1
4H2.5	RGM4H2.5 20	RPS4H2.5 20	RJMZ 20	BT2CS	BMR6U3		1
4H4	RGM4H4 25	RPS4H4 25	RJMZ 25	BT6CS	BMR6U3		1
4H6	RGM4H6 25	RPS4H6 25	RJMZ 25	BT6CS	BMR16U3		1
4H10	RGM4H10 25	RPS4H10 25	RJMZ 25	BT10CS	BMR16U3		1
4H16	RGM4H16 32	RPS4H16 32	RJMZ 32	BT16CS	BMR16U3		1
4H25	RGM4H25 40	RPS4H25 40	RJMZ 40	BT25CS	G10	U863	1
7H1.5	RGM7H1.5 25	RPS7H1.5 25	RJMZ 25	BT2CS	BMR6U3		1
7H2.5	RGM7H2.5 25	RPS7H2.5 25	RJMZ 25	BT2CS	BMR6U3		1
12H1.5	RGM12H1.5 32	RPS12H1.5 32	RJMZ 32	BT2CS	BMR6U3		1
12H2.5	RGM12H2.5 32	RPS12H2.5 32	RJMZ 32	BT2CS	BMR6U3		1
19H1.5	RGM19H1.5 40	RPS19H1.5 40	RJMZ 40	BT2CS	BMR6U3		1

\* For Conductor Connectors Please Contact Pirelli Cables Limited Components Division (Tel: +44 (0) 151 430 7555)



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