

# Extension cable

- Selector guide
- Standard length of 4m
- Other lengths on demand
- Other thermocouple type on demand



## PRODUCT SELECTOR

Length	<b>4m</b>	<b>040</b>
	6m	060
	10m	100

Product reference

1.

Connector	Free wire					
	Ferrules					
	LEMO 2p straight plug	C				
	LEMO 2p fixed socket <sup>1</sup>					
	LEMO 3p straight plug	E				
	LEMO 3p fixed socket					
	LEMO 7p straight plug	G				
	LEMO 7p fixed socket <sup>1</sup>					
	Miniature male <sup>1</sup>					
	Miniature female <sup>1</sup>					
	Standard male <sup>1</sup>					
	Standard female <sup>1</sup>					
	DSUB 9p female					
	Connectors	C+E+2B <sup>2</sup>	W			
E+2B <sup>2</sup>		X				
C+E <sup>2</sup>		Y				

Connector electronic side	A				
	B				
	C				
	D				
	E				
	F				
	G				
	H				
	J				
	K				
	L				
	M				
	R				
Y					

Connector sensor side	A	Fine heat flux	
	B	Standard heat flux	
	C	Type T	
	D	Type K	
	E	<b>Standard sensor</b>	
	F	Single wire	
	G	Type J	
	H	Double type J	
	J	6x Type T	
	K	Type K	
	L	RS232 type	
	M	<b>Active sensor, TC J or T</b>	


<sup>1</sup> On demand  
<sup>2</sup> Depend of module

## CONNECTOR

A	B	CEG	DFH	JK	LM
W	X	Y			

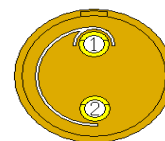
Technical data in product note n°TFX-002

### PIN CONFIGURATION

Technical data in product note n°TFX-002

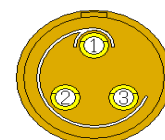
#### Heat flux connector (C+D)

Pin	Symbol	Parameter	Colour
1	HF+	Positive heat flux input	Red
2	HF-	Negative heat flux input	Green
Screen		Earth	
Insulation			White



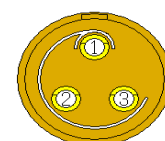
#### Thermocouple connector (E+F)

Pin	Symbol	Parameter	Colour Type K	Colour Type T
2	TC+	Positive thermocouple input	Green	Brown
3	TC-	Negative thermocouple input	White	White
Insulation			Green	-



#### Sensor connector (E+F)

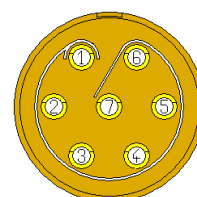
Pin	Symbol	Parameter	Colour
1	HF-	Negative heat flux input	Red
2	Common+	Common positive input	Brown
3	TC-	Negative thermocouple input	White
Screen		Earth	
Insulation			White



#### Active sensor connector (G+H)

Wire : M

Pin	Symbol	Parameter	Colour
1	CMD	NPN commad, to 0V	Yellow
2	HF+	Positive heat flux input	Blue
3	TC+	Positive thermocouple input	J Black T Brown
4	TC-	Negative thermocouple input	White
5	HF-	Negative heat flux input	Red
6	24V	Positive supply	Green
7	0V	Negative supply	J Brown T Black
Screen		Earth	
Insulation			White



#### DSUB 9 pins female (R)

Pin	Symbol	Parameter	Colour
2	RX	Data module to PC	Red
3	TX	Data PC to module	White
5	GND	Positive heat	Black
Case	Shield	Negative heat	

## CABLE PROPERTIES

Type	Description	Insulator	Temperature	Signals	Shield
A	Fine heat flux	PTFE	-75°C à +250°C	2 Cu	Yes
B	Standard heat flux	ETFE-X	-65°C à +150°C	2 Cu	Yes
C	Type T	PFA	-75°C à +250°C	1 Cu, 1 Cn	No
D	Type K	Silicone	-40°C à +180°C	1 K+, 1K-	No
E	Standard sensor	PFA	-55°C à +250°C	2 Cu, 1 Cn	Yes
F	Single wire	PTFE	-60°C à +200°C	1 Cu	No
G	Type J	Silicone			No
H	Double type J	TBD			TBD
J	6x Type T (Active)	PTFE	-75°C à +250°C	6x (Cu+Cn)	Yes
K	Type K	PFA	-75°C à +250°C	1 K+, 1K-	No
L	Type RS232	PVC	70°C	3 Cu	Yes
M	Active sensor	PFA	-55°C à +250°C	5 Cu, 1 Fe, 1 Cn	Yes

### A. Fine heat flux

Insulation PTFE  
 Temperature range -75°C to +250°C  
 Construction 2 x 0.034mm<sup>2</sup>, twisted, shielded  
 Outside diameter max 1.6mm

### B. Standard heat flux

Type MIL-W-22759/32  
 Insulation ETFE-X  
 Temperature range -65°C to +150°C  
 Construction 2 x 0.25mm<sup>2</sup>, twisted, shielded  
 Outside diameter max 3.0mm

### C. Type T

Type C-500-PFA  
 Insulation PFA  
 Temperature range -75°C to +250°C  
 Construction 2 x 0.22mm<sup>2</sup>, twisted  
 Outside diameter max 2.0mm  
 Tolerance IEC 584.3 Class 2

### D. Type K

Insulation Silicone  
 Temperature range -40°C to +180°C  
 Construction 2 x 0.24mm<sup>2</sup>  
 Outside diameter 4.2mm  
 Tolerance IEC 584.3 Class 2

### E. Standard sensor

Type 178.40.06b  
 Insulation PFA  
 Temperature range -55°C to +250°C  
 Construction 3 x 0.088mm<sup>2</sup>, twisted, shielded  
 Outside diameter 3.0mm  
 Tolerance IEC 584.3 Class 2

### F. Single wire

Type TFE UL1213  
 Insulation PTFE  
 Temperature range -60°C to +200°C  
 Construction 1 x AWG24 (0.25mm<sup>2</sup>)  
 Outside diameter 1.14mm  
 Standard UL AWM Style 1213 et MIL-W-16878E Type E

**G. Type J**

Insulation	Silicone
Temperature range	-40°C to +180°C
Construction	2 x 0.24mm <sup>2</sup>
Outside diameter	4.2mm
Tolerance	IEC 584.3 Class 2

**H. Double type J**

TDB

**J. 6x Type T**

Insulation	PTFE
Temperature range	-75°C to +250°C
Construction	6x (2 x 0.22mm <sup>2</sup> , twisted), shielded
Outside diameter	5.5mm
Tolerance	IEC 584.3 Class 2

**K. Type K**

Type	C-500-PFA
Insulation	PFA
Temperature range	-75°C to +250°C
Construction	2 x 0.22mm <sup>2</sup> , twisted
Outside diameter	max 2.0mm
Tolerance	IEC 584.3 Class 2

**L. Type RS232**

Type	TBD
Insulation	PVC
Temperature range	TBD
Construction	3 x TBD mm <sup>2</sup> , twisted shielded
Outside diameter	TBD

**M. Active sensor**

Type	206.30
Insulation	PFA
Temperature range	-55°C to +250°C
Construction	7 x 0.15mm <sup>2</sup> , twisted, shielded
Outside diameter	3.6mm
Tolerance	IEC 584.3 Class 2

TFX SA reserves the right to change the circuitry and specifications without notice at any time.