

# XCN/SC

## Technical Data

Max. Process Temp.	energised 250°C
Max. withstand Temp.	de-energised 400°C
Min. Installation Temp.	minus 60°C
Cable Diameters	3.2mm to 5.9mm nominal
Cable Sheath	Cupro-Nickel
Min. Bending Radius	Dia. x 6
Power Connection Cables	1.3 metres long, 2.5mm copper sheathed terminated with M20 Brass compression glands

## Installation Guide

- Install a straight line trace for pipework heating if practical
- Apply cable to the underside of the pipework
- Never allow loops or adjacent cable runs to touch or cross over each other - this will eliminate localised hotspots
- Form a sufficient loop into an 'S' configuration at valves
- Provide a suitable loop bend when crossing over flanges and in-line connections
- Ensure brazed joints are not applied directly onto surfaces in excess of 500°C
- Locate copper lead-in cables away from temperatures in excess of 250°C

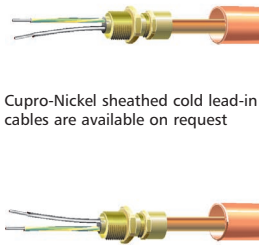
Heating Cable Reference	XCN/1.6	XCN/1.0	XCN/0.63	XCN/0.4	XCN/0.25	XCN/0.16		
Cable Diameter (mm)	3.2	3.4	3.7	4	4.4	4.9		
Resistance (ohms/metre)	1.6	1.0	0.63	0.4	0.25	0.16		
Production Coil Length (Mtrs)	800	700	600	500	400	300		
Weight 1000 Metres (Kg)	38	44	54	65	82	105		
Sheath Area per metre (sq cm)	100.48	106.70	116.30	125.70	138.20	154.00		
Recommended maximum power output at given surface temperatures	SURFACE TEMPERATURES	25 Deg.C	100	107	116	125	138	154
		50 Deg.C	80	85	92	100	110	123
		100 Deg.C	65	70	75	80	90	100
		150 Deg.C	35	37	40	43	48	54
		200 Deg.C	20	21	23	25	27	30
		250 Deg.C	5	5	6	6	7	7

Recommended maximum power output at given surface temperatures in watts per metre of cable is based on a sheath operating temperature of approx 350°C

The majority of mineral insulated heating units are designed to dissipate approximately 100 watts per metre of cable to ensure longevity of service. With high watts/metre output of cable the M.T.B.F is reduced

### Cold Lead-In Cable

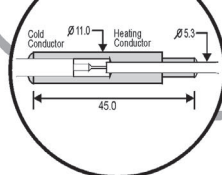
A mineral insulated power cable with a brass compression gland termination



Cupro-Nickel sheathed cold lead-in cables are available on request

### Hot to Cold Joint

A mechanical and electrical connection joint between heating element and cold lead-in cable



## Extended Range of Cupro-Nickel Sheathed Cables for very long circuits

Cable Ref:	Ohms/Metre	Cable Dia.
XCN/063	0.063	3.2
XCN/040	0.040	3.4
XCN/025	0.025	3.7
XCN/017	0.017	4.6
XCN/011	0.011	4.9
XCN/007	0.007	5.3
XCN/004	0.004	5.9

## Securement / Fixings

### PIPEWORK

- ≤ 150mm n.b. - Stainless Steel Tie wire
- > 150mm n.b. - Stainless Steel Banding

### VESSELS AND TANKS

- Circular  
Pre-punched fixing or stainless steel band
- Rectangular & Flat Surfaces  
Weldmesh grids or pre-punched fixing band



## CROSS ELECTRICAL (NOTTINGHAM) LTD

Trace Works, Debdale Lane, Keyworth, Nottingham, NG12 5HN

Tel: +44 (0)115 937 5121 Fax: +44 (0)115 937 5116

E-mail: [heat@cross-electrical.co.uk](mailto:heat@cross-electrical.co.uk) Website: [www.cross-electrical.co.uk](http://www.cross-electrical.co.uk)

