

# HSX<sup>®</sup> Self-Regulating Heating Cable

## Product Specifications

### Application: Hot Water Temperature Maintenance

HSX heating cables are specifically designed to maintain hot water supply piping at desired nominal maintenance temperatures. HSX heating cables provide hot water instantly at the point of use with major savings in installed costs.

### Easy to Design . . .

A WarmTrace system replaces the complex recirculation network of return pipes, circulating pumps and balancing valves. For each hot water supply line, simply match the hot water maintenance temperature with the corresponding color-coded cable and insulate, see the selection guide.

HSX self-regulating cable automatically maintains desired water temperatures. Changes in pipe diameters, flow rates and use patterns will not affect the design. Even variations in ambient or water temperature are compensated for as the cable adjusts its heat output along the entire length of a heat traced pipe.

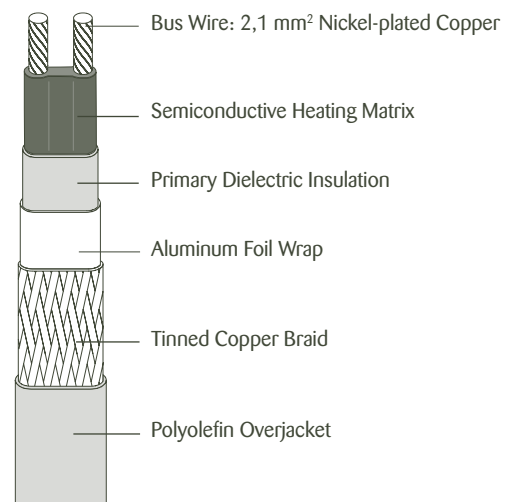
Contact Thermon for details regarding heat tracing systems for legionella prevention.

### Economical to Operate and Maintain . . .

A WarmTrace system replaces recirculation piping, it also eliminates the costs of continuously operating pumps, deliberately overheating the water and maintaining the recirculation system. Potential water savings can also be realized since the heat tracing can be installed up to the point of use; i.e., no waiting for hot water.

### Characteristics . . .

Minimum bend radius.....32 mm  
Supply voltage ..... 230 Vac  
Circuit protection.....30 mA ground-fault protection  
Max. exposure temperature..... 65°C



THERMON . . . The Heat Tracing Specialists<sup>®</sup>  
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### Circuit Breaker Sizing and Type . . .

230 Vac Service Voltage		Max. Circuit Length vs. Breaker Size Meters (B and C-Type Breakers)				
Product Type	Start-Up Temp.	10A	16A	20A	25A	32A
HSX 50-2	10° C	68	104	140	177	234
HSX 55-2	10° C	53	85	107	135	177
HSX 60-2	10° C	36	58	73	92	119

\* Multiply values by 0,85 for B-Type breakers.

### Certifications/Approvals . . .



No. 2043400

### DHB quick fitting components for cable connections within internal areas.



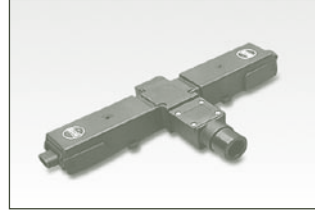
**DHB-100**...power connection fabrication kit is designed to terminate one self-regulating heating cable for connection to power.

Nominal voltage: 230 V  
Nominal current: 20A  
Temperature resistance: 110°C  
Type of protection: IP54



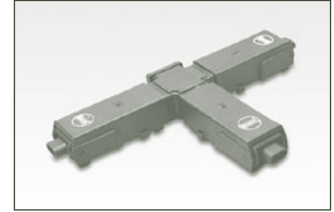
**DHB-101**...splice kit is designed to terminate two self-regulating heating cables.

Nominal voltage: 230 V  
Nominal current: 20A  
Temperature resistance: 110°C  
Type of protection: IP54



**DHB-102**...power connection fabrication kit is designed to terminate two self-regulating heating cable for connection to power.

Nominal voltage: 230 V  
Nominal current: 20A  
Temperature resistance: 110°C  
Type of protection: IP54



**DHB-103**...splice kit is designed to terminate three self-regulating heating cables.

Nominal voltage: 230 V  
Nominal current: 20A  
Temperature resistance: 110°C  
Type of protection: IP54



**DHB-104**...power connection fabrication kit is designed to terminate three self-regulating heating cable for connection to power.

Nominal voltage: 230 V  
Nominal current: 20A  
Temperature resistance: 110°C  
Type of protection: IP54



**ESC**...heating cable end connection. End connection made of plastic with enclosed silicone socket. The heating cable is clamped mechanically and the tensile strength is guaranteed.



**CL**...vinyl-based peel-and-stick caution labels are intended for direct exposure to harsh environments. Electrically heated pipelines should be clearly identified at frequent intervals along the pipeline. Caution labels should be placed at 3 to 6-m intervals or as required by code or specification. Additional languages are available; contact Thermon.



**FT-1L**...fixing tapes for circumferential banding cable to piping every 30 cm or as required by code or specification.

**AL-20L**...aluminium tapes for continuous (longitudinal) covering and/or circumferential banding cable to plastic piping and/or equipment.

Item Number	Max. Temp. (Exposure)	Min. Temp. (Installation)	Size (mm x m)
<b>FT-1L</b>	93°C	5°C	12 x 33
<b>AL-20L</b>	65°C	5°C	50 x 45

### Standard cable connections for external and internal areas.



**PETK-SXL-OJ-IND**...circuit fabrication kit terminates HSX heating cables in a JB-K-1 (or other) junction box. Kit includes an M25 tracer gland (with locknut), power boot, end cap, RTV adhesive, yellow/green earth wire sleeve, the necessary wire pins/lugs plus an insulation entry kit.

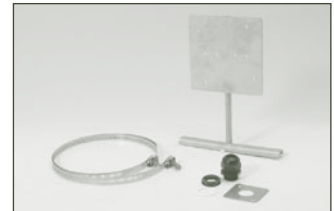


**JB-K-1, JB-K-2**...rugged, impact-resistant nonmetallic junction boxes for use in non-hazardous environments and have an IP65 degree of protection.

Item	Electrical	Size (mm)
<b>JB-K-1</b>	5-pt strip-34 Amps	98x98x58
<b>JB-K-2</b>	5-pt strip-43 Amps	139x119x70



**DHB-330**...power controller for HSX heating cables, 230 Vac, 13A. The DHB-330 is a single circuit proportional power controller which can be set to maintain a HSX system. It has the facility to; automatic periodic thermal desinfection of the pipework and switch off the system, e.g. weekend or night



**B-4, B-10, B-21**...stainless steel attachment bands for securing Thermon JB-K nonmetallic kits and XP-1-140X140 mounting brackets to pipes. For pipes up to 100 mm, 250 mm and 530 mm diameters, respectively.

**IEK-SXL**... insulation entry kit to protect and seal the heating cable when passing through the thermal insulation cladding.

**XP1 140x140**...stainless steel (type 304) mounting bracket designed for mounting Thermon junction boxes directly to the pipe-work. The bracket is easily secured to the pipe using B4, B-10 or B-21 attachments bands. The XP-1 is predrilled for use with JB-K-1 and JB-K-2, has plate dimensions of 140 x 140 mm and utilises a 110 mm standoff.

