PRODUCT DATASHEET
DSX™
SELF-REGULATING HEAT TRACING

APPLICATION
DSX is designed for freeze protection and temperature maintenance of small to medium diameter piping and other industrial process equipment.

EASY TO INSTALL
Parallel circuitry allows DSX to be cut to suit any length required in the field. Flexible materials and small cross-section provide an excellent bending radius for wrapping around complex geometries.

ENERGY EFFICIENT
The heat output of DSX varies along the length of the traced equipment or surface, providing the optimal heating for colder or warmer spots. As the temperature drops, heat output increases. Conversely, when the temperature increases, heat output decreases

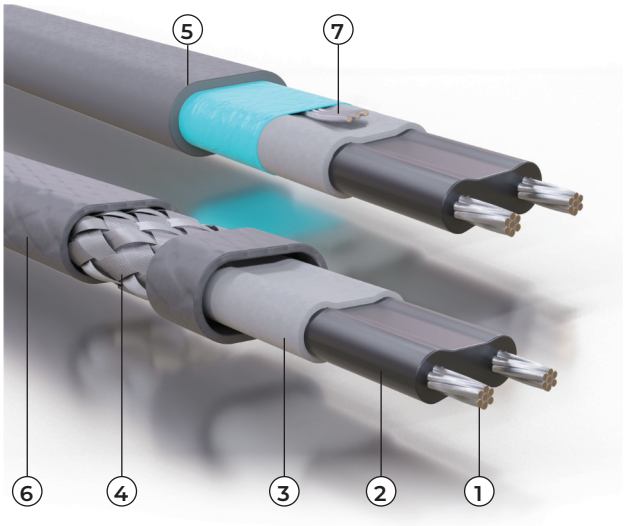
SAFE
DSX self-regulates to prevent overheating, even when overlapped. Trace heaters are marked for ordinary (non-classified) areas and in potentially explosive atmospheres in accordance with the ATEX Directive and the IECEx Scheme.

RELIABLE
Built with proven and proprietary compounding, extrusion, and cross-linking technology, DSX allows for continuous operation and extended life expectancy.

RATINGS
Available Watt densities ..... 9, 18 W/m at 10°C and 230 Vac
Nominal supply voltage range ..... 208–277 Vac
Maximum maintenance temperature ... 65°C (149°F)
Maximum continuous exposure temperature
Power-off ..... 85°C (185°F)
Minimum installation temperature ..... -60°C (-76°F)
Minimum bend radius
@ -15°C (59°F) ..... 10 mm (3/8")
@ -60°C (-76°F) ..... 32 mm (1-1/4")
T-Rating [1]
9, 18 W/m ..... T6/T85°C

BASIC ACCESSORIES
Thermon offers system accessories designed specifically for rapid, trouble-free installation of Thermon heat tracing.

All trace heaters require a connection kit to comply with approval requirements. Information on accessories to complete a heater circuit installation can be found in the "Heating Cable Systems Accessories" product specification sheet (Form TEP0010U).



CONSTRUCTION
1. Nickel-plated copper bus wires 0.6 mm² (20 AWG)
2. E-Beam cross-linked semiconductive heating matrix
3. E-Beam cross-linked dielectric insulation
4. Tinned copper braid
5. Polyolefin overjacket provides additional protection to core, insulation, and braid where exposure to aqueous inorganic chemicals is expected.

Options

6. FOJ Fluoropolymer overjacket over tinned copper braid provides additional protection to cable and braid where exposure to organic chemicals or corrosives is expected.
7. Foil and Drain wire configuration available with standard OJ as an economical alternative to braid.

Notes
1. T-rating per internationally recognized testing agency guidelines.
2. Circuit breaker sizing and earth-fault protection should be based on applicable local codes. Earth-fault protection of equipment should be provided for each branch circuit supplying electric heating equipment. Contact Thermon for assistance with circuit breaker sizing.

CERTIFICATIONS/APPROVALS
IEC IECEx CE 0344 Ex II 2 G D

FM23ATEX0016X
IECEx FMG 23.0008X
Ex 60079-30-1 IIC T6 Gb
Ex 60079-30-1 IIIC T85°C Db

Contact Thermon for additional approvals and specific information.

HOW TO SPECIFY
DSX–B–3–2–OJ

Metallic Covering
B = Braid
F = Foil (only available with OJ)

Power Output
3 = 9 W/m @ 230 Vac
6 = 18 W/m @ 230 Vac

Voltage Rating
2 = 208-277 Vac

Outerjacket
OJ = Polyolefin
FOJ = Fluoropolymer

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CIRCUIT BREAKER SIZING AND TYPE[1]

Maximum circuit lengths for various circuit breaker amperages are shown below. Circuit breaker sizing and earth-fault protection should be based on applicable local codes. For information on design and performance on other voltages, contact Thermon. Earth-fault protection of equipment should be provided for each branch circuit supplying electric heating equipment.

Type B & C Circuit Breakers				
230 Vac Service Voltage		Max. Circuit Length vs. Breaker Size meters		
Catalog Number	Start-Up Temperature °C	16 A	25 A	32 A
DSX 3-2	10	140	140	140
	0	124	124	124
	-20	123	124	124
	-40	105	116	116
DSX 6-2	10	102	102	102
	0	95	98	98
	-20	85	96	96
	-40	75	95	95

Notes:

1. Maximum circuit lengths shown are based on an instantaneous trip current characteristic per IEC 60898 at the referenced start-up temperature and a 10°C maintenance temperature. For maximum circuit lengths with other trip current characteristics contact Thermon.

2. While a heat tracing system is generally designed to keep the contents of a pipe at the desired maintain temperature, the cable may be energized at lower temperatures. For design data with lower start-up temperatures than represented above contact Thermon for design assistance.

3. The maximum circuit length is for one continuous length of cable, not the sum of segments of cable. Refer to CompuTrace® design software or contact Thermon for current loading of segments.

POWER OUTPUT CURVES

The power outputs shown apply to trace heater installed on insulated metallic pipe (using the procedures outlined in IEC/IEEE 60079-30-1 at the service voltages stated below. For use on other service voltages, contact Thermon.

Product Type 230 Vac Nominal	Power Output at 10°C (50°F) W/m
DSX 3-2	9
DSX 6-2	18