

# MSR

Self-regulating heating cable for the commercial and construction industries  
Freeze protection and medium temperature maintenance

**SOLCO.**  
Advanced Trace Heating Solutions



<b>Use</b>	Designed for versatility, these heating systems provide effective freeze protection for water pipelines and ensure reliable temperature maintenance in petrochemical and gas plants. They are also suitable for OEM heating applications and flexible medical heating devices, offering safe and efficient operation in non-hazardous locations.
<b>Specifications</b>	<p><b>Max. maintain temperature (Power-ON):</b> 80°C (176°F) <b>Max. withstand temperature (Power-OFF):</b> 100°C (212°F) <b>Rated voltage:</b> 100 - 240 Vac <b>Rated power output:</b> 16, 20, 30 &amp; 40 Watts/m @10°C <b>Dimension (nom.) :</b> 13.4mm ~ 5.4mm <b>Minimum bending Radius:</b> 25mm <b>Parallel conductors:</b> ASTM B355 Class 2 NPC, AWG 16(1.5mm<sup>2</sup>)</p> <p><b>Outer Jacket</b> <b>FR polyolefin (CP):</b> Exposure to aqueous inorganic chemicals <b>Fluoropolymer (CF):</b> Exposure to organic chemicals or corrosives</p>
<b>Features</b>	<ul style="list-style-type: none"><li>• Prevents overheating or burnout, even when overlapped</li><li>• Self-regulates thermal performance in response to ambient temperature</li><li>• Can be cut to any required length to accommodate various installation conditions</li><li>• Provides independent heat output control along the entire cable length</li><li>• Ensures smooth power ON/OFF transitions, reducing stress on the heating cable core to enhance energy efficiency and extend service life</li><li>• Allows for easy and reliable termination for power connection, end sealing, and splicing</li></ul>
<b>Selection Code</b>	<p>MSR    40    2    -    C    F   (a)    (b)    (c)             (d)</p> <p>(a) Model (b) Rated Output 16, 20 , 30, 40 Watts/m @10°C (c) Rated Voltage 1 : 100 - 120 Vac, 2 : 200 - 240 Vac (d) Outer Jacket P : FR Polyolefin, F : Fluoropolymer</p>
<b>Certification</b>	

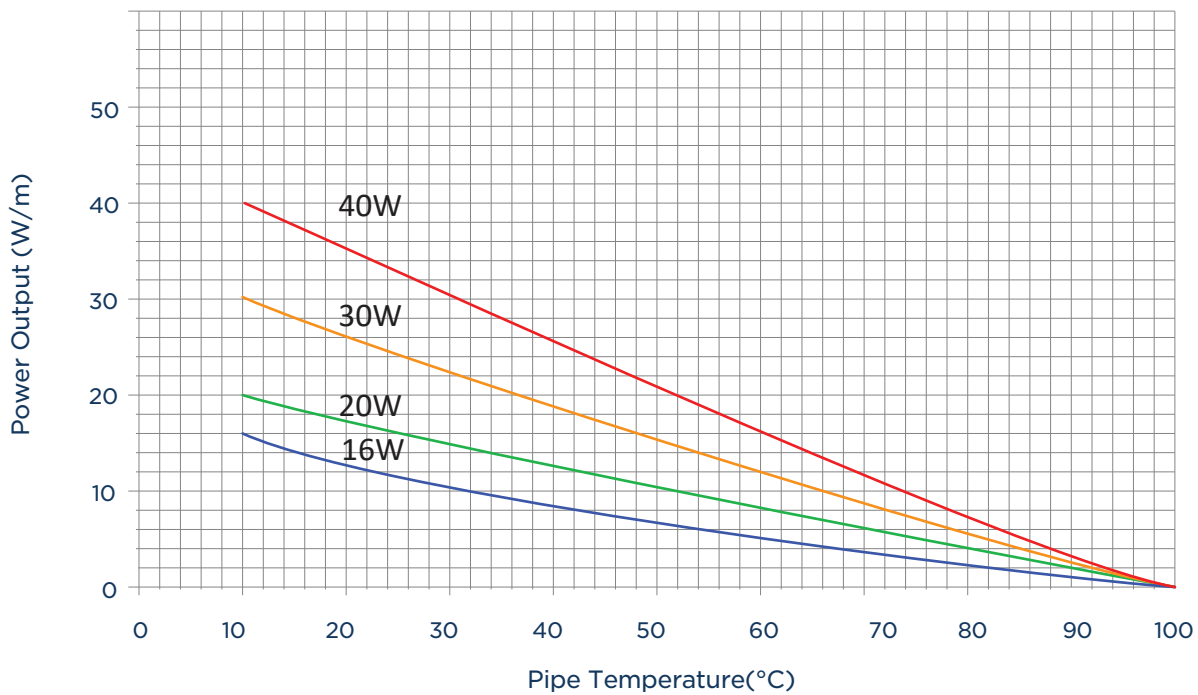
## Product Drawing



- Parallel Conductors: Nickel Plated Copper Wire
- Polymeric Heating Element: HDPE + C/B
- Primary Insulation: Polyolefin
- Earthing: Braided Tinned Copper Wire Nickel
- Outer Jacket: FR Polyolefin (-P)  
Fluoropolymer(-F)

## Power Output Graph

Thermal output ratings on insulated metal pipe



## Circuit Breaker Selection

Max. circuit length (m) at 230Vac based on starting temp. (°C) and typical Type C circuit breaker size (Amps).

Product code \ Breaker Size(A)	Start-up Temp. -20°C						Start-up Temp. 0°C						Start-up Temp. 10°C					
	10A	16A	20A	25A	32A	40A	10A	16A	20A	25A	32A	40A	10A	16A	20A	25A	32A	40A
MSR162-CP(F)	46	64	83	106	119	119	50	71	107	114	129	129	55	82	126	131	141	141
MSR202-CP(F)	36	58	73	91	108	108	38	61	77	96	120	120	43	68	85	106	126	126
MSR302-CP(F)	27	43	54	67	86	99	32	51	63	79	101	110	41	65	82	102	115	115
MSR402-CP(F)	20	32	40	50	64	80	23	38	47	59	75	94	30	48	61	76	97	101