

## UNDERFLOOR HEATING IN THIN LAYERING

## ETHERMA DS – Dipole netted heating mat with only one electrical connection line



Extra-thin pipe coupling

## USE

The netted heating mat DS is a factory-made ready-to-use netted heating mat to temper the floor temperature, for heating rooms or sealing off the cold in walls. Due to the fact that it is only 2.7 mm thin it allows a low building height.

This netted heating mat DS is self-adhesive and because of the Dipole completion it can be easily installed in tile-adhesive layer.

The stitching technology guarantees a 100 % safe and easy installation as well as a high stability of the heating mat. The netted heating mat DS is available in three standard outputs either 130, 160 or 200 W/m<sup>2</sup>.

On demand we produce netted heating mats in your size, voltage, output and type as required.

**ATTENTION: Don't shorten the heating mat!**

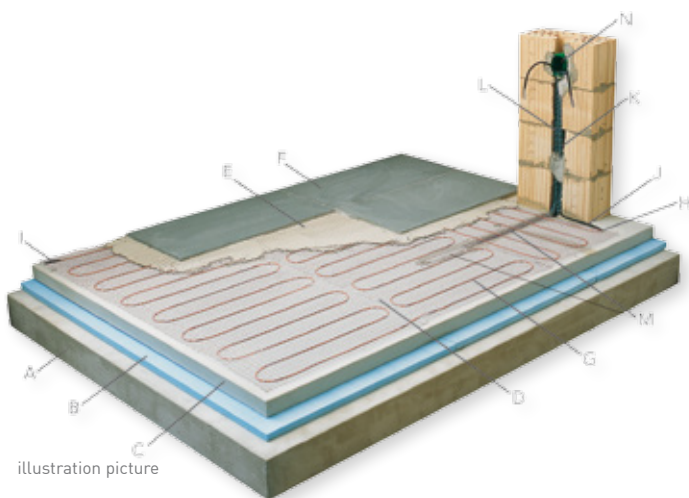


illustration picture

## EXAMPLE OF AN INSTALLATION

- |                         |                                  |   |
|-------------------------|----------------------------------|---|
| A Bare concrete         | F Floor layer                    | K Installation pipe for PTC thermistor                        |
| B Existing insulation   | G Heating conductor              | L Installation pipe for temperature sensor                    |
| C Existing floor screed | H Connecting component (element) | M Installation pipe and sensor protection tube made of copper |
| D Glass mat             | I End fitting                    | N Flush mounting socket for thermostat                        |
| E Flexible adhesive     | J PTC thermistor                 |   |

## TECHNICAL DATA



- > Voltage: 230 V
- > Output: 130, 160, 200 W/m<sup>2</sup>
- > Temperature-resistant: up to 90 °C
- > Thickness of heating conductor: 2.7 mm
- > Standard widths: 30, 50, 100 cm
- > Mesh: 12x12 mm, self-adhesive
- > Protection rating: IP X7
- > Cold lead: 4 m; 2 x 1.0 mm<sup>2</sup> + earth shield
- > Approval: VDE

## BENEFITS OF THIS PRODUCT

- + Only 2.7 mm thin
- + Also suitable for wall heating
- + Self-adhesive netted heating mat
- + Only one connection line
- + Very low magnetic field < 25 nT
- + Flat, torsion-free laying thanks to stitching technology
- + 3 standard widths: 30, 50, 100 cm
- + Custom-made special orders and sizes

## SELECTION GUIDE

DS-130 W/m<sup>2</sup>

Floor temperature control or central heating system in low energy housing.

DS-160 W/m<sup>2</sup>

As full heating system in kitchen, bathrooms and foyers with standard insulation.

DS-200 W/m<sup>2</sup>

Room heating in rooms without or with poor insulation; bathroom, sauna, wellness areas, winter gardens and wherever a short amount of time for heating is necessary.

The values given here are reference values.

Grid heating mat DS 130 W/m<sup>2</sup>, mat width 50 cm, 230 V, IP X7

RG: 003 | DT: ex stock

Type	Order no.	Output (W)	Dimensions (cm)		
			Length	Width	m <sup>2</sup>
132-DS5-220	34188	150	220	50	1.1
132-DS5-320	34189	210	320	50	1.6
132-DS5-490	34190	320	490	50	2.5
132-DS5-540	34191	350	540	50	2.7
132-DS5-660	34192	430	660	50	3.3
132-DS5-800	34193	520	800	50	4.0
132-DS5-940	34194	605	940	50	4.7
132-DS5-1120	34195	725	1120	50	5.6
132-DS5-1320	34196	860	1320	50	6.6
132-DS5-1650	34197	1070	1650	50	8.3
132-DS5-1860	34198	1214	1860	50	9.3
132-DS5-2000	34892	1300	2000	50	10.0
132-DS5-2400	34199	1560	2400	50	12.0
132-DS5-3000	34200	1950	3000	50	15.0

Grid heating mat DS 160 W/m<sup>2</sup>, mat width 30 cm, 230 V, IP X7

RG: 003 | DT: ex stock

Type	Order no.	Output (W)	Dimensions (cm)		
			Length	Width	m <sup>2</sup>
162-DS3-330	38113	160	330	30	1.0
162-DS3-490	38114	240	490	30	1.5
162-DS3-670	38115	320	670	30	2.0

Grid heating mat DS 160 W/m<sup>2</sup>, mat width 50 cm, 230 V, IP X7

RG: 003 | DT: ex stock

Type	Order no.	Output (W)	Dimensions (cm)		
			Length	Width	m <sup>2</sup>
162-DS5-100	35089	90	100	50	0.5
162-DS5-200	34175	160	200	50	1.0
162-DS5-300	34176	240	300	50	1.5
162-DS5-400	34177	320	400	50	2.0
162-DS5-500	34178	400	500	50	2.5
162-DS5-600	34179	480	600	50	3.0
162-DS5-700	34180	560	700	50	3.5
162-DS5-800	34181	640	800	50	4.0
162-DS5-1000	34182	800	1000	50	5.0
162-DS5-1200	34183	960	1200	50	6.0
162-DS5-1400	38872	1120	1400	50	7.0
162-DS5-1600	34185	1280	1600	50	8.0
162-DS5-1800	34890	1440	1800	50	9.0
162-DS5-2200	34186	1760	2200	50	11.0
162-DS5-2700	34187	2160	2700	50	13.5

Grid heating mat DS 160 W/m<sup>2</sup>, mat width 100 cm, 230 V, IP X7

RG: 003 | DT: ex stock

Type	Order no.	Output (W)	Dimensions (cm)		
			Length	Width	m <sup>2</sup>
162-DS1-800	38116	1280	800	100	8.0
162-DS1-900	38117	1440	900	100	9.0
162-DS1-1100	38118	1760	1100	100	11.0
162-DS1-1350	38119	2160	1350	100	13.5

Grid heating mat DS 200 W/m<sup>2</sup>, mat width 50 cm, 230 V, IP X7

RG: 003 | DT: ex stock

Type	Order no.	Output (W)	Dimensions (cm)		
			Length	Width	m <sup>2</sup>
202-DS5-145	34201	150	145	50	0.7
202-DS5-215	34202	210	215	50	1.1
202-DS5-320	34203	325	320	50	1.6
202-DS5-355	34204	355	355	50	1.8
202-DS5-435	34205	435	435	50	2.2
202-DS5-520	34206	525	520	50	2.6
202-DS5-615	34207	615	615	50	3.1
202-DS5-735	34208	735	735	50	3.7
202-DS5-870	34209	870	870	50	4.4
202-DS5-1090	34210	1080	1090	50	5.5
202-DS5-1230	34211	1230	1230	50	6.2
202-DS5-1330	34891	1340	1330	50	6.7
202-DS5-1585	34212	1580	1585	50	7.9
202-DS5-1945	34213	1940	1945	50	9.7

&gt; You will find further accessories on page 10 and thermostats on page 91ff.