



TECHNOLOGY FOR LIFE

 **Dometic**



# TRANSPORT BOXES

**Biomedical Refrigeration | MT (Active & Passive)**

- Optimum insulation and protection for blood products in conformity with international agreements
- Complete temperature control with data loggers

[www.dometic.lu](http://www.dometic.lu)

## Transport Boxes (active & passive systems)



The model range MT consists of four passive transport systems supplemented efficiently by a fast freezer for cooling elements and six active transport boxes, working with the Peltier system or with a compressor.

The special transport boxes, made from rotationally moulded polypropylene or polyethylene (a literally indestructible synthetic), feature an extraordinarily sturdy casing that is almost impervious to external forces, e.g. caused by bumps and falls, whose sturdiness has been proven in drop tests. The transport systems are corrosion-resistant.

The polyurethane foam injected into the double walls of these transport systems is free of CFC and HCFC and ensures the optimum insulation and the protection of the quality of the transported goods, especially with longer transport times. Due to the outer casing's self-insulation against the environment, the Dometic transport systems maintain a stable temperature even at higher ambient temperatures. When configured correctly, the

transport system's passive design makes them completely impervious to operating errors and power failures under all environmental conditions. This makes Dometic transport systems ideal for intensive use with many transport applications, even under difficult climatic conditions. Most of the lids are equipped with a silicone seal. The clasps can be sealed or equipped with locks and are therefore protected against unauthorised access during transport. If necessary, the transport systems MT 8 B, MT 12 E and MT 25 E can safely be stacked one on top of the other. All transport systems can easily and thoroughly be cleaned and disinfected with conventional disinfectants. There are no inaccessible corners or areas inside the transport systems.

During transport, complete evidence of the observance of the cold chain during transport and the associated continuous monitoring with complete records and documentation of the values can be achieved using an optional Data Logger.

## Declaration of Conformity (in accordance with ADR / RID / IMDG / ICAO-TI / IATA-DGR)

- European agreement concerning the international carriage of dangerous goods by road (ADR) and by railway (RID), directive 2008 / 68 / EC.
- European agreement concerning the international carriage of dangerous goods by sea transport (IMDG), directive 2002 / 84 / EC.
- International agreement for air transport (ICAO-TI / IATA-DGR).

MT 4 B and MT 12 E may contain goods of packing groups I, II and III.

MT 8 B, MT 25 E and MT 42 P may contain goods of packing groups II and III.

### Basis:

**MT 4 B: Certificate Nr. SDR/sdr/G-11.060**

**MT 8 B: Certificate Nr. SDR/sdr/G-11.059H**

**MT 12 E: Certificate Nr. SDR/sdr/G-11.061**

**MT 25 E: Certificate Nr. SDR/sdr/G-11.062**

**MT 42 P: Certificate Nr. SDR/sdr/G-11.062**

Test reports of the accredited test laboratory IBE-BVI, Belgium.

## External validation of the passive systems MT 4 B, MT 8 B, MT 12 E and MT 25 E incl. Standard Operating Procedures (SOPs)

### Available SOPs:

- Process description and standards operating procedures for the transport of blood preparations using the transport systems mentioned above
- Conditioning of cooling elements
- Visual inspection
- Technical inspection
- Charging with cooling elements

### Externally validated ambient temperature ranges: +10°C and +32°C (over 24 hours)

As minimum or maximum limits, these temperature ranges cover more than 90% of the transport scenarios imaginable. The lower limits of the typical number of blood bags for the respective container sizes were chosen as charges. These low charge levels are more unstable and the resulting test readings are significantly more telling in respect to critical temperature ranges. With increasing charges the preparation's temperatures in the secondary (inner) container become increasingly stable.

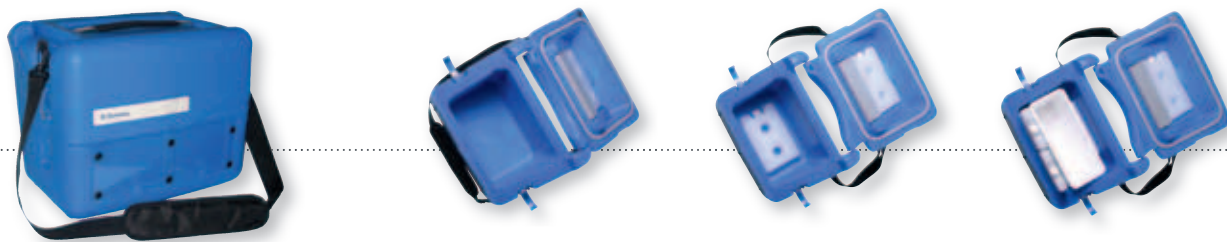
### External validation of "Maximum Cold Life" for the ambient temperature ranges of +32°C and +43°C

These ambient temperature ranges were chosen according to the validation parameters set by the WHO. As maximum limits including a safety margin, these temperature ranges cover all imaginable transport scenarios. Because it is the objective of the validation to determine the maximum operating time, so the upper limits of the typical number of blood bags for the respective container sizes were chosen as charges. With decreasing charges, the reliable operating time is slowly decreases.



Depending on the product  
 ADR RID (2008/68/EC) | IMDG (2002/84/EC) | ICAO-TI / IATA-DGR

# Transport Boxes I MT



## MT 4 B

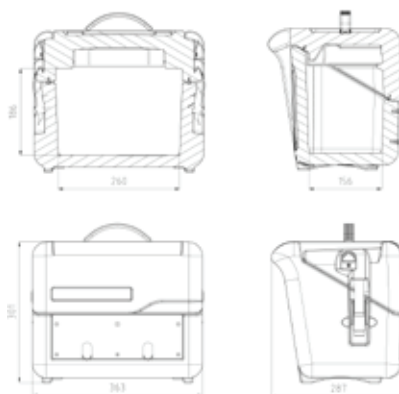
Cooling	Passive
Gross volume	8 l
Storage capacity, blood bags / approx.	4 at 450 ml each 6 at 270 ml each
External dimensions (H x W x D)	301 x 363 x 287 mm
Inner dimensions (H x W x D)	186 x 260 x 156 mm
Dimensions of interior container (H x W x D)	130 x 240 x 90 mm
Net weight (empty)	3.1 kg
Gross weight (fully stocked)	7.4 kg
Outer material / Interior material	Polyethylene
Material of interior container	Polystyrene
Color	RAL 5015
Insulation	Polyurethane
Insulation thickness	25 mm

Accessories (standard)	3 cooling elements at 0.3 l each 2 cooling elements at 0.6 l each 1 polystyrene interior container 2 document compartments (front) 1 document compartment (back) 1 Carrying strap (adjustable)
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Accessories (optional)	SU (40u.) cooling elements at 0.3 l SU (24u.) cooling elements at 0.6 l Polystyrene interior container Mini temperature data logger «Testo 174» Software & connection cable for RS 232 or USB Eutectic cooling system (tests available upon request)
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**Cold Life at +32°C  
up to 46 h**

**Cold Life at +43°C  
up to 32.5 h**



## MT 8 B

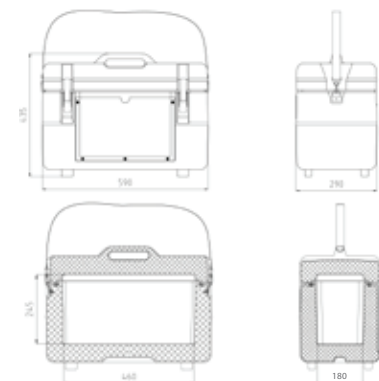
Cooling	Passive
Gross volume	20 l
Storage capacity, blood bags / approx.	8 at 450 ml each 14 at 270 ml each
External dimensions (H x W x D)	435 x 590 x 290 mm
Inner dimensions (H x W x D)	245 x 460 x 180 mm
Dimensions of interior container (H x W x D)	207 x 375 x 162 mm
Net weight (empty)	7 kg
Gross weight (fully stocked)	16 kg
Outer material / Interior material	Polyethylene
Material of interior container	Polystyrene
Color	RAL 5015
Insulation	Polyurethane
Insulation thickness	60 mm

Accessories (standard)	4 cooling elements at 0.6 l each 1 polystyrene interior container (with LID) 1 document compartment (front) 1 Carrying strap (adjustable)
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Accessories (optional)	SU (24u.) cooling elements at 0.6 l Polystyrene interior container (with LID) Mini temperature data logger «Testo 174» Software & connection cable for RS 232 or USB Eutectic cooling system (tests available upon request)
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**Cold Life at +32°C  
up to 57 h**

**Cold Life at +43°C  
up to 16.39 h**







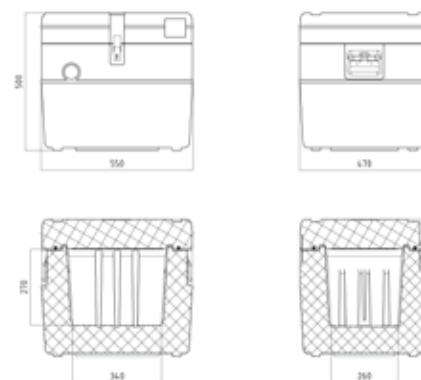
## MT 12 E

Cooling	Passive
Gross volume	24 l
Storage capacity, blood bags / approx.	15 at 450 ml each 25 at 270 ml each
External dimensions (H x W x D)	500 x 550 x 470 mm
Inner dimensions (H x W x D)	270 x 340 x 260 mm
Dimensions of interior container (H x W x D)	192 x 310 x 237 mm
Net weight (empty)	11.7 kg
Gross weight (fully stocked)	21 kg
Outer material / Interior material	Polyethylene
Material of interior container	Stainless steel
Color	RAL 5015
Insulation	Polyurethane
Insulation thickness	105 mm

Accessories (standard)	12 cooling elements at 0.6 l each 1 stainless steel interior container (with LID)
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Accessories (optional)	SU (24u.) cooling elements at 0.6 l Mini temperature data logger «Testo 174» Software & connection cable for RS 232 or USB Eutectic cooling system (tests available upon request)
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**Cold Life at +32°C  
up to 96.14 h**  
**Cold Life at +43°C  
up to 56.5 h**



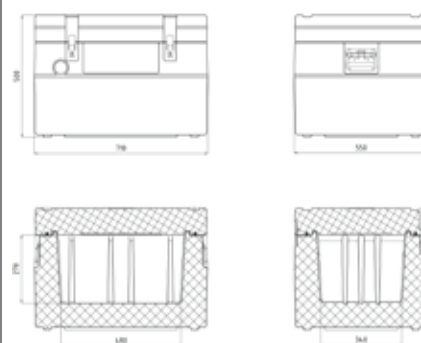
## MT 25 E

Cooling	Passive
Gross volume	44 l
Storage capacity, blood bags / approx.	26 at 450 ml each 40 at 270 ml each
External dimensions (H x W x D)	500 x 710 x 550 mm
Inner dimensions (H x W x D)	270 x 480 x 340 mm
Dimensions of interior container (H x W x D)	192 x 390 x 237 mm
Net weight (empty)	17 kg
Gross weight (fully stocked)	44 kg
Outer material / Interior material	Polyethylene
Material of interior container	Stainless steel
Color	RAL 5015
Insulation	Polyurethane
Insulation thickness	105 mm

Accessories (standard)	24 cooling elements at 0.6 l each 1 stainless steel interior container (with LID) Securing frame for interior container
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Accessories (optional)	SU (24u.) cooling elements at 0.6 l Mini temperature data logger «Testo 174» Software & connection cable for RS 232 or USB Eutectic cooling system (tests available upon request)
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**Cold Life at +32°C  
up to 109 h**  
**Cold Life at +43°C  
up to 74 h**



# Transport Boxes I MT



## MT 42 P (ThermoSTABILIZER)

Cooling	Active (Pelletier)
Gross volume	43 l
Operating temperature	+4°C ± -2°C
Storage capacity, blood bags / approx.	30 at 450 ml each 50 at 270 ml each
External dimensions (H x W x D)	500 x 840 x 550 mm
Inner dimensions (H x W x D)	240 x 460 x 335 mm
Net weight (empty)	29 kg
Gross weight (fully stocked)	44 kg
Outer material / Interior material	Polyethylene
Color	RAL 5015
Insulation	Polyurethane
Insulation thickness	100 mm
Application range (ambient temperature)	-32°C to +43°C
Hold over time / Cold life, without power supply	10h (at +32°C)
Power supply	AC / mains voltage: 90 V to 264 V (48Hz – 62 Hz) 115 V / 400 Hz
	DC / battery voltage: 11 V to 42 V

Accessories (standard)	2 plastic-coated wire baskets Fault indicator port AC connection cable DC connection cable Fault indicator connection cable 4 Akku NI-MH1100MAH 1.2V
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Accessories (optional)	Temperature Data Logger "177-T3" with additional external sensor ports Handheld rapid printer «Testo 575» Memory logger «Testo 580» Software & connection cable for RS 232 or USB
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### Numerous applications are possible:

Cars, HGVs, ships, helicopters and planes (with conditions). Integrated alarm system (visual/acoustic) with fault indicator port.

Long "Hold over time / Cold Life" times (10 h at ambient temperature of +32°C) even without power supply, due to optimum insulation capabilities. Depending on the temperature, the thermoelectric unit automatically switches from cooling to heating.



**Dometic's Transport Boxes ensure safety for blood samples during the whole blood transport periode: from donation to blood bank and to the healthcare centre where blood is stored till further use.**

**MT 100**

Cooling	Active - Compressor
Gross volume	90 l
Operating temperature	+4°C or +22°C
Storage capacity, blood bags / approx.	48 at 450 ml each
External dimensions (H x W x D)	1000 x 520 x 800 mm
Inner dimensions (H x W x D)	450 x 306 x 545 mm
Net weight (empty)	44 kg
Gross weight (fully stocked)	66 kg
Outer material / Interior material	Polyethylene
Color	RAL 5015
Insulation	Polyurethane
Insulation thickness	50 mm
Application range (ambient temperature)	-2°C to +43°C
Voltage AC (mains)	100 V to 240 V (50/60 Hz)
Voltage DC (battery)	12 V and 24 V
Power	100 W
Average running time at +4°C interior t° (ambient temperature)	28% at +25°C 60% at +43°C
Low voltage directive	2006 / 95 / EC
Electromagnetic Interference Directive	2004 / 108 / EC & 2009 / 19 / EC

**Quality features**

Castors	<input checked="" type="checkbox"/>
Digital temperature display (0.1 digit)	<input checked="" type="checkbox"/>
Automatic AC/DC power supply selection	<input checked="" type="checkbox"/>
Automatic cooling / heating operation	<input checked="" type="checkbox"/>
Temperature alarm	<input checked="" type="checkbox"/>
Power failure alarm	<input checked="" type="checkbox"/>
Contact remote alarm temperature	<input checked="" type="checkbox"/>
Car fixation kit (belts)	<input checked="" type="checkbox"/>

standard /  optional

**MT 900**

Gross volume	247 l
Net volume	228 l
External dimensions (H x W x D)	1805 x 595 x 720 mm
Inner dimensions (H x W x D)	1440 x 445 x 413 mm
Operating temperature	-18°C
Alarm	-13°C
Defrosting	Manual
Insulation (casing) polyurethane	75 - 80 mm
Insulation (door) polyurethane	70 mm
Hold over time	840 min (from -18°C to 0°C)
Refrigerant type	R134a
Climate class (ambient temperature range)	T (+16°C to +43°C)
Relative humidity	≤ 75%
Voltage	220-240V / 50-60Hz (10A)
Power	215 W
Energy consumption	5.77 kWh/24h
Heat emission	210 Kcal/ h
Compressor running time	48%
Noise level (at 1m height and 1m distance)	45 dB(A)
Safety class	I
EMV Directive	2004 / 108 / EEC
Low voltage directive	2006 / 95 / EEC
Material inner body	Styrene (SAN)
Material outer casing and door	Galvanized sheet steel (STO2Z-AZ150)
Color outer casing	White (similar to RAL9010)
Color contrasts	Blue (similar to RAL5002)

**Options**

Door hinge right	<input checked="" type="checkbox"/>
Door hinge left	<input type="checkbox"/>
Wooden packaging for ocean transport / export	<input checked="" type="checkbox"/>

standard /  optional

**Freezing capacity:** 60 cooling elements at 0.6 l each within 24 hrs at +43°C ambient temperature

**Storage capacity:** 179 cooling elements at 0.6 l each

The model MT 900 has been specifically developed for the freezing of cooling elements. The appliance can accommodate up to 179 cooling elements at 0.6 l each.

The model MT 900 can freeze up to 60 cooling elements within 24 hours at an ambient temperature of +43°C. Due to its low energy consumption, the use is very economical. Simple and intuitive operation is ensured by the user-friendly operation and control panel, which is equipped with a red alarm control light for the monitoring of the interior temperature. The appliance features a visual and an acoustic alarm signal. The interior is automatically illuminated when the front door is opened.

An integrated rapid freeze button allows the quick freezing of larger batches.

# Transport Boxes I MT



## MT 18

Cooling	Active - Compressor
Gross volume	18 l
Operating temperature	+4°C or +22°C
Storage capacity, blood bags / approx.	6 at 450 ml each 8 at 270 ml each
External dimensions (H x W x D)	414 x 465 x 300 mm
Dimensions of the inner basket (H x W x D)	140 x 270 x 165 mm
Net weight (empty)	12.6 kg
Gross weight (fully stocked)	15.6 kg
Packaging dimensions (H x W x D)	450 x 480 x 330 mm
Application range (ambient temperature)	+5°C to +32°C
Box material	Polypropylene
Lid material	Polyethylene
Color	Pale grey / dark grey
Insulation	Polyurethane
Insulation thickness	40 mm
Voltage DC (battery)	12 / 24 V
Power	35 W
Average running time at +4°C interior t° (ambient temperature)	25% at +25°C 30% at +32°C

Certification	GS / CE
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Accessories (standard)	DC connection cable Internal basket made of PP
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Accessories (optional)	Cable + AC/DC converter Temperature data logger "Testo 175-T1" and "Testo 177-T3" Handheld rapid printer "Testo 575" Memory logger «Testo 580» ComSoft 3 – CFR 21 Part 11 Insulating protective cover
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## MT 50

Cooling	Active – Compressor
Gross volume	49 l
Operating temperature	+4°C or +22°C
Storage capacity, blood bags / approx.	14 at 450 ml each 18 at 270 ml each
External dimensions (H x W x D)	480 x 630 x 360 mm
Dimensions of the inner basket (H x W x D)	318 x 260 x 200 mm
Net weight (empty)	19.2 kg
Gross weight (fully stocked)	26.2 kg
Packaging dimensions (H x W x D)	525 x 685 x 390 mm
Application range (ambient temperature)	+5°C to +32°C
Box material	Polypropylene
Material of inner container	Polyethylene
Innenbehältermaterial	Anodized aluminium
Color	Pale grey / dark grey
Insulation	Polyurethane
Insulation thickness	40 mm
Voltage DC (battery)	12 / 24 V
Power	45 W
Average running time at +4°C interior t° (ambient temperature)	22% at +25°C 30% at +32°C

Certification	GS / CE
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Accessories (standard)	DC connection cable Internal basket made of stainless steel
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Accessories (optional)	Cable + AC/DC converter Temperature data logger "Testo 175-T1" and "Testo 177-T3" Handheld rapid printer "Testo 575" Memory logger «Testo 580» ComSoft 3 – CFR 21 Part 11 Insulating protective cover Fridge slides Universal fixing kit
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**MT 80**

Cooling	Active - Compressor
Gross volume	80 l
Operating temperature	+4°C or +22°C
Storage capacity, blood bags / approx.	27 at 450 ml each 36 at 270 ml each
External dimensions (H x W x D)	455 x 790 x 500 mm
Dimensions of the inner basket (H x W x D)	288 x 395 x 328 mm
Net weight (empty)	29.8 kg
Gross weight (fully stocked)	43.3 kg
Packaging dimensions (H x W x D)	500 x 840 x 550 mm
Application range (ambient temperature)	+5°C to +32°C
Box material	Polypropylene
Lid material	Polyethylene
Material of the inner container	Anodized aluminium
Color	Pale grey / dark grey
Insulation	Polyurethane
Insulation thickness	48 mm
Voltage AC (mains)	100 V to 240 V (50/60 Hz)
Voltage DC (battery)	12 / 24 V
Power	65 W
Average running time at +4°C interior t° (ambient temperature)	18% at +25°C 27% at +32°C

Certification	GS / CE
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Accessories (standard)	AC / DC connection cable Internal basket made of stainless steel
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Accessories (optional)	Temperature data logger "Testo 175-T1" and "Testo 177-T3" Handheld rapid printer "Testo 575" Memory logger «Testo 580» ComSoft 3 - CFR 21 Part 11 Insulating protective cover Fridge slides
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**MT 110**

Cooling	Active - Compressor
Gross volume	106 l
Operating temperature	+4°C or +22°C
Storage capacity, blood bags / approx.	36 at 450 ml each 48 at 270 ml each
External dimensions (H x W x D)	555 x 790 x 500 mm
Dimensions of the inner basket (H x W x D)	383 x 395 x 328 mm
Net weight (empty)	33.1 kg
Gross weight (fully stocked)	51.1 kg
Packaging dimensions (H x W x D)	600 x 840 x 550 mm
Application range (ambient temperature)	+5°C to +32°C
Box material	Polypropylene
Lid material	Polyethylene
Material of inner container	Anodized aluminium
Color	Pale grey / dark grey
Insulation	Polyurethane
Insulation thickness	48 mm
Voltage AC (mains)	100 V to 240 V (50/60 Hz)
Voltage DC (battery)	12 / 24 V
Power	65 W
Average running time at +4°C interior t° (ambient temperature)	34% at +25°C 43% at +32°C

Certification	GS / CE
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Accessories (standard)	AC / DC connection cable Internal basket made of stainless steel
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Accessories (optional)	Temperature data logger "Testo 175-T1" and "Testo 177-T3" Handheld rapid printer "Testo 575" Memory logger «Testo 580» ComSoft 3 - CFR 21 Part 11 Insulating protective cover Fridge slides
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# Transport Boxes I MT

Model	Passive				Active					
	MT 4 B	MT 8 B	MT 12 E	MT 25 E	MT 42 P	MT 100	MT 18	MT 50	MT 80	MT 110
1. Mini temperature data logger "Testo 174"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Temperature data logger "Testo 175-T1"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Temperature data logger "Testo 177-T3"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Handheld rapid printer "Testo 575"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Memory logger «Testo 580»	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Software & connection cable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Data logger & software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8. Digital temperature readout	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9. Interior fan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10. Two factory preset temperatures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11. Eutectic cooling system	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Fridge slides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13. Insulating protective cover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14. Fixing kit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 1. Mini temperature data logger "Testo 174"

Data logger for continuous, tamperproof temperature recording.



## 2. Temperature data logger "Testo 175-T1"

Data logger for continuous, tamper-proof temperature recording.



## 3. Temperature data logger "Testo 177-T3"

Data logger for continuous, tamper-proof temperature recording.



## 4. Handheld rapid printer "Testo 575"

Attachable mini-printer for real time, on-site documentation.



## 5. Memory logger «Testo 580»



## 6. Software & connection cable

Data-cable with infra-red interface for logger programming and data storage on laptop or desktop PCs. Software included in the delivery kit.



## 7. Data logger & software

For continuous recording of the temperature. Removable USB stick with software for safe data storage on laptop or desktop PCs.



## 8. Digital temperature readout

Digital readout of the current temperature inside the box.



## 9. Interior fan

High-performance fan for fast cooling or heating and uniform air circulation in the box.



## 10. Two factory preset temperatures

The two preset temperatures are +4°C and +22°C. The key switch allows an easy change from one value to the other. Tolerance:  $\pm 2^{\circ}\text{C}$  (independent of the out-side temperature; closer tolerance upon request). Test log supplied as standard.

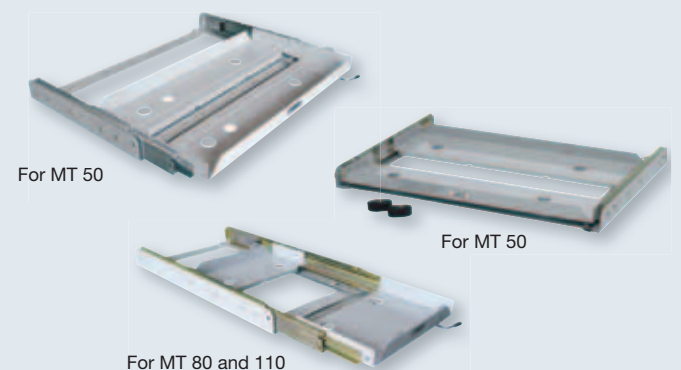
## 11. Eutectic cooling system

For long-term, temperature controlled transport without power supply, e.g transport by air or rail.



## 12. Fridge Slides

For fastening of Dometic coolers in vehicles and for convenient slide-out access.



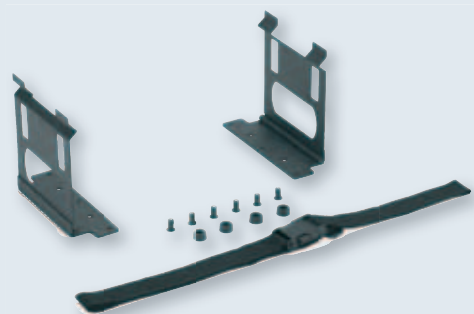
## 13. Insulating protective cover

Insulating protective cover with detachable lid and base. Outside pockets to store small items. Four fixing rings to lash the box safely down in the vehicle.



## 14. Fixing kit

For firm and secure hold of Dometic coolers in vehicles.



# Eutectic Cooling System

## For long-term, temperature controlled transport without power supply (e.g transport by air or rail)

Dometic's Eutectic Cooling Elements are heat accumulation elements, containing a so-called phase change material (PCM). The PCM stores latent heat at the required temperature at phase change (liquid / solid). The stored product will therefore remain at a near constant temperature for a specific period of time, without requiring active temperature control. The Eutectic Cooling Elements must be charged for the specified temperature prior to each use.

The phase change material (PCM) allow a safe transport during all seasons. From winter to summer, the PCM have the same "melting point" which is :

- 32°C: transport of plasma
- +4°C: transport of RBC
- +22°C: transport of unscreened blood
- +37°C: transport of whole blood

Dometic's Eutectic Cooling Elements are available in 2 sizes: 0.3 l and 0.6 l.



Storage element	Colour	Nominal	Application	Preconditioning temperature/ time
PCM+4	blue	+4°C	+2°C to +8°C	+4°C / > 24 h
PCM+22	green	+22°C	+15°C to +25°C	+22°C / > 24 h
PCM+37	yellow	+37	over +35°C	+37°C / > 24 h
PCM-32	orange	-32°C	under -30°C	-40°C / > 24 h

## Cold life of Dometic Transport Boxes with Eutectic Cooling System

	Configuration	Ambient temperature	Ambient temperature	Ambient temperature
		-10°C	+22°C	+43°C
<b>Dometic MT4-ET</b> (fully equipped with 4 eutectic cooling elements of 300 ml and 1 of 600 ml)	Dometic MT4-ET-32 (with 2 charged units)	> 24 h	12 h 33	5 h 30
	Dometic MT4-ET+4 (with 8 charged units)	11 h 18	18 h 36	7 h 33
	Dometic MT4-ET+37 (with 10 charged units)	2 h 33	-	4 h 09
	Dometic MT4-ET+37 (with 10 charged units)	2 h 08	15 h 02	0 h 46
<b>Dometic MT8-ET</b> (fully equipped with 12 eutectic cooling elements of 600 ml)	Dometic MT8-ET-32 (with 6 charged units)	> 24 h	> 24 h	> 24 h
	Dometic MT8-ET+4 (with 8 charged units)	21 h 45	> 24 h	13 h 34
	Dometic MT8-ET+22 (with 2 charged units)	2 h 05	-	5 h 03
	Dometic MT8-ET+37 (with 20 charged units)	5 h 43	> 24 h	5 h 58
<b>Dometic MT12-ET</b> (fully equipped with 14 eutectic cooling elements of 600 ml)	Dometic MT12-ET-32 (with 10 charged units)	> 24 h	> 24 h	> 24 h
	Dometic MT12-ET+4 (with 15 charged units)	> 24 h	> 24 h	> 24 h
	Dometic MT12-ET+22	-	-	-
	Dometic MT12-ET+37	-	-	-
<b>Dometic MT25-ET</b> (fully equipped with 18 eutectic cooling elements of 600 ml)	Dometic MT25-ET-32 (with 27 charged units)	> 24 h	> 24 h	> 24 h
	Dometic MT25-ET+4 (with 40 charged units)	> 24 h	> 24 h	> 24 h
	Dometic MT25-ET+22 (with 30 charged units)	7 h 42	-	14 h 03
	Dometic MT25-ET+37	-	-	-



Tested according to specifications of the European Commission/ «Guide to the preparation, use and quality assurance of blood components»

The above picture shows the MT 8 B with eutectic cooling elements and aluminium frame as an example. The elements are available separately as an option. It's also possible to order our passive models as ready-equipped eutectic versions. Please contact us for details.