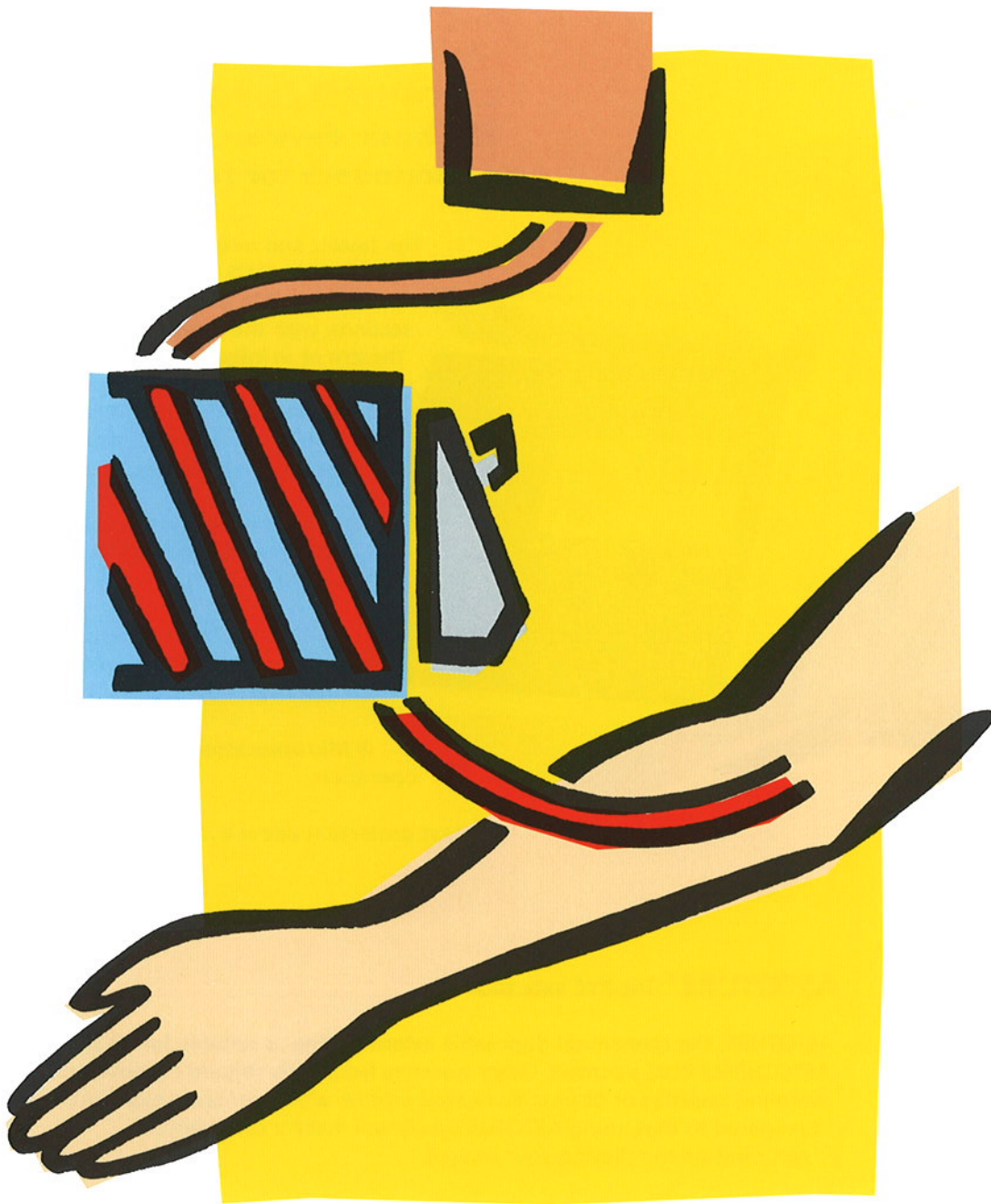


ASTOTHERM[®] plus

**Rapid, safe and highly efficient
warming of blood and infusions.**



STIHLER ELECTRONIC

ASTOTHERM[®] plus

This high-performance blood and infusion warmer is ideally equipped for every application.

Warm infusions and transfusions protect your patient from hypothermia in the operating theatre and in intensive care. ASTOTHERM PLUS warms all infusions and transfusions by the dry flow-heating method - efficiently, safely and absolutely economically in daily use. ASTOTHERM PLUS is ready for use at once. Warming close to the patient means that infusions and blood products no longer require warming in advance. Blood products can be kept in the refrigerator until they are really needed.

ASTOTHERM plus 220 The basic device - effective performance for rapid routine use

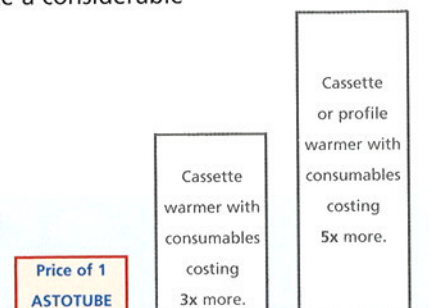
The fastest and most economical variant of the ASTOTHERM PLUS warmers is the AP220. ASTOTHERM PLUS 220 is ready for use in under 60 seconds, with the result that every patient in theatre or in intensive care really can be supplied rapidly with warm transfusions and infusions. ASTOTHERM PLUS 220 covers over 97 % of clinically-relevant transfusion and infusion rates.

- Temperature selection 39/41/43 °C and triple-independent overtemperature cut-out.
- Special groove for rapid insertion of the ASTOTUBE extension line and optimum heat transfer.
- Microprocessor-controlled for simple operation.
- Heat protection sleeve available as an option.

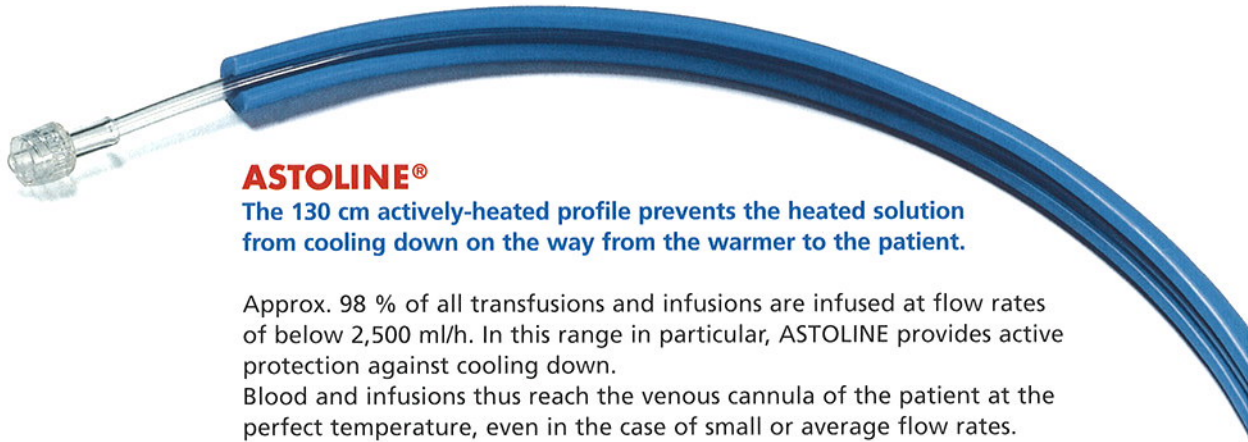
ASTOTUBE[®] The PVC extension line

ASTOTUBE, the economical disposable extension line, is suitable for all applications of ASTOTHERM PLUS warmers. Other warmers frequently require expensive disposable warming cassettes or disposable heated profiles which generate high costs long term. Compared to that, using ASTOTUBE daily will make a considerable contribution to relieving your budget.

The disposable warming cassettes or special water profiles of other devices frequently cost several times as much as ASTOTUBE. The more often the ASTOTHERM PLUS is used, the clearer the cost-saving effect compared to other infusion warmers.



This price difference for the consumables for different types of warmer accumulates over the years to give large sums.



ASTOLINE®

The 130 cm actively-heated profile prevents the heated solution from cooling down on the way from the warmer to the patient.

Approx. 98 % of all transfusions and infusions are infused at flow rates of below 2,500 ml/h. In this range in particular, ASTOLINE provides active protection against cooling down.

Blood and infusions thus reach the venous cannula of the patient at the perfect temperature, even in the case of small or average flow rates.

ASTOTHERM plus 220 S

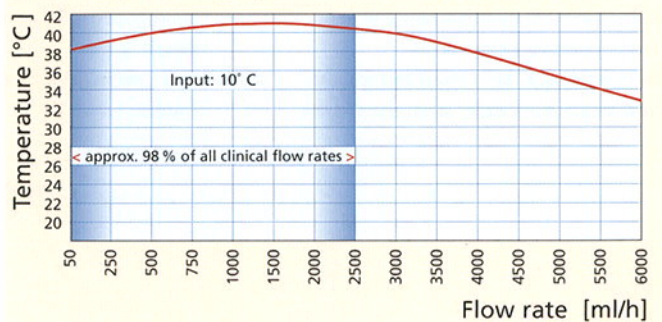
The universal device - high performance for optimum patient care

ASTOTHERM PLUS 220 S combines all the benefits of a blood and infusion warmer for routine use in a unique manner.

From very low to rapid flow rates, all fluids reach the patient at the optimum temperature, efficiently heated and additionally backed up by the warmed ASTOLINE heated profile. No other dry warmer provides this benefit.

- Temperature selection, safety cut-out and special groove as on the ASTOTHERM PLUS 220 model.
- ASTOLINE, the 130 cm heated profile from the warmer to the patient comes as standard on "S" models of the ASTOTHERM PLUS.
- Heat protection sleeve comes as standard.

Performance graph for ASTOTHERM PLUS



ASTOTHERM plus 260 / 260 S

The special device for the fastest flow rate

In contrast to the ASTOTHERM PLUS 220, the ASTOTHERM PLUS 260 takes thicker tubes with an external diameter of 6.8 mm but it is identical in terms of technology and potential applications.

It is designed for warming blood and other fluids in dialysis, haemofiltration, urology and for rinsing solutions of all kinds.





The special heat exchanger cylinder allows the ASTOTUBE to be inserted simply and ensures efficient flow heating close to the patient.

The universal attachment allows units to be attached both to infusion stands and to standard medical rails.



The heat protection sleeve protects infusions from the effects of external cold and prevents heat being given off into the room. On the ASTOTHERM PLUS 220, it is available as an optional accessory - on the other models, it comes within the standard scope of supply.

A summary of the components

ASTOTHERM PLUS 260

ASTOTHERM PLUS 220 S



ASTOTHERM PLUS 220



	ASTOTHERM PLUS 220	ASTOTHERM PLUS 220 S	ASTOTHERM PLUS 260	ASTOTHERM PLUS 260 S
Order no.	AP 220	AP 220 S	AP 260	AP 260 S
ASTOLINE active insulation	-	standard	-	standard
Temperature setting	selectable 39° C / 41° C / 43° C			
Power consumption	450 VA			
Diameter of line	4 mm		6,8 mm	
ASTOTUBE, PVC, order no.	IFT 30460		IFT 30410	
Heat protection sleeve	optional accessory		standard	
Heat protection sleeve order no.	WM 226			
ASTOLINE (spare) order no.	-	AL 222	-	AL 260

General technical data for all ASTOTHERM PLUS blood and infusion warmers

Voltage: 230/240 V (110/127 V)
 Preheat time: < 2 min.
 Safety switch off: triple independent
 Overtemperature safety cut-off
 Overtemperature alarm: visual and acoustic
 Undertemperature alarm: visual and acoustic

Temperature control: also for the reliable parallel infusion of two independent infusions
 Dimensions (L x H x D): 135 x 145 x 295 mm
 Weight: 2,9 kg
 Duty: continuous (24 hours a day)
 Protection class: I

Protection level: I B, defibrillation-protected
 Moisture protection: IPX 4
 Classification as per European Directive 93/42: II b
 Notified body: CE 0124
 Complies with: IEC 601-1
 We reserve the right to make technical modifications

Your local agency:

STIHLER ELECTRONIC

Stihler Electronic GmbH
 Julius-Hölder-Straße 36 · D- 70597 Stuttgart · Germany
 www.stihlerelectronic.de · info@stihlerelectronic.de
 national: Telefon 07 11- 72 06 70 · Telefax 07 11- 720 67 57
 international: Telefon ++ 49- 711- 72 06 70 · Telefax ++ 49- 711- 720 67 57