## tesla evo



The first electromagnetic hot melt application head in end-of-line packaging. Directly controlled via your PLC. Efficient, durable and reliable — for Baumer hhs systems







# **tesla evo** — innovative, electromagnetic hot melt application head. Direct operation via the machine controller (PLC) for the first time.

The tesla evo is a world first and revolutionises hot melt application. The electromagnetic hot melt application head replaces the electropneumatic hot melt application heads commonly found on the market to date — by simply switching the heads on existing machines. The numerous benefits of tesla evo can easily be integrated in the regular production process without making any major investments.

### **Cutting costs**

The use of tesla evo leads to a marked reduction in production costs: in the short term by eliminating the need for extremely expensive compressed air, and in the medium

term through its longer service life with up to 1 billion switching operations and the associated savings on servicing costs. In addition to which, the plug-in connection means that the modules are easily detached.

### Improving health and safety

Elimination of the compressed-air supply greatly improves industrial safety. The noise level on the machine is dramatically reduced in comparison with an electro-pneumatic hot melt application head. The compact design of tesla evo means there are no projecting contours, and tiresome compressed-air lines are no longer needed. The head is very largely insulated, minimi-sing the risk

of staff burning themselves. The integrated temperature switch auto-matically shuts off the head at unacceptably high temperatures, switching it back on when the permissible temperature is reached. That improves the safety of the operators and reliability of the machine and your components.

### **Revolutionary technology**

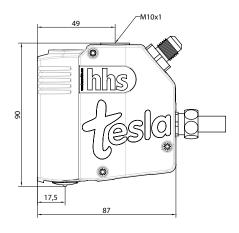
for time-proven quality tesla evo is a synthesis of time-proven Baumer hhs quality in the high-end segment and innovative engineering, tailored to the special demands in end-of-line packaging.

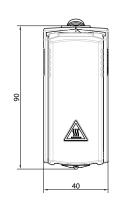


### Your benefits with tesla evo

- Electromagnetic hot melt application head for glue beads and dots
- Up to 10 times longer service life, compared to electropneumatic hot melt application heads
- Reduction of operating noise by 30 dB

   compared to electropneumatic hot melt application heads – to 65 dB
- Cost savings through elimination of the compressed-air supply
- Suitable for use on systems with a commercially available PLC
- Plug-in module
- · Compact design
- Thermal insulation
- Integrated overtemperature cut-out
- Design acc. to DIN EN 415-10
- IP54 design
- Optional IP65 version available
- Less adhesive is required for dot application







tesla evo with open module insulation

#### **Technical Data**

| Model     | Temperature<br>range | Operating<br>voltage, head | Operating<br>voltage, heating | Temperature<br>monitor | Switching<br>frequency | Connection   | Hose<br>connections | Adhesive<br>pressure | Adhesive<br>viscosity | Noise<br>emission | Mounting  |
|-----------|----------------------|----------------------------|-------------------------------|------------------------|------------------------|--------------|---------------------|----------------------|-----------------------|-------------------|---|
| tesla evo | 0200 °C              | 24VDC (25W)                | 230 V                         | Pt 100                 | 135 Hz                 | 15 pole plug | 1/2" UNF            | 80 bar               | max. 5.000<br>m Pa.s  | 65 dB             | Top cover plate<br>with M10x1 thread<br>* Optionally with<br>clamp-type bracket |

### The system components

### for hotmelt application



Hose with integrated overtemperature cut-out and IP54 protection

### **Heated hot melt hoses**

The highly flexible Xmelt hot melt hoses transport liquid hot melt to the application head at the right temperature and under pressure. In conjunction with Baumer hhs hot melt units and application heads, Xmelt hoses can control the temperature of the adhesive at various levels from the tank to the application head. At no point is the adhesive overheated, ruling out the risk of carbonisation. Special Baumer hhs electronics enable Xmelt application heads and Xmelt hoses to communicate with the central Xmelt hot melt unit. The seamless integration of the hose into the system means that the adhesive is transported gently, at the ideal pressure and the perfect temperature.

### **Technical Data**

| Operating voltage      | Temperature<br>sensor | Max. operating temperature | Max. operating pressure | Hose insulation | Outer protection | Outside diameter | Ambient<br>temperature | Relative humidity       |
|------------------------|-----------------------|----------------------------|-------------------------|-----------------|------------------|------------------|------------------------|-------------------------|
| 1N~230 ±10%<br>50/60Hz | Pt100                 | 200°C                      | 80 bar                  | Silicone foam   | Polyamide fabric | 45 mm            | 0+50°C                 | <90%,<br>non-condensing |

The following hose lengths can be supplied as standard (special lengths upon request): Ø 45 mm: 600 mm, 1800 mm, 2400 mm, 3000 mm, 4000 mm, 5000 mm, 6000 mm Ø 1.77": 23.6; 47.24"; 70.86"; 94.48"; 118.1"; 157.4"; 196.8"; 236.2"



### Xmelt for a secure future

The system grows with you and your future production requirements — be it in terms of new products, production workflows or capacities.



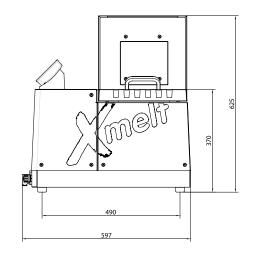
### Flexible operating unit

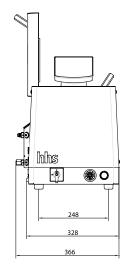
Tilt it, turn it, take it with you. Send messages to the computer. Adapt the hot melt unit to perfectly suit your ergonomic needs.

### **Technical Data**

| Technical Data                     |  |              |              |  |  |  |
|------------------------------------|--|--------------|--------------|--|--|--|
| Model <sup>1</sup>                 | XM-04-2  | XM-04-4      | XM-04-6      |  |  |  |
| Melting capacity <sup>2</sup>      | 8 kg/h   | 8 kg/h       | 8 kg/h       |  |  |  |
| m (kg)                             | 28 kg  | 28 kg        | 28 kg        |  |  |  |
| PN (KW)*                           | 04. Mai  | 7,4          | 10,3         |  |  |  |
| IN (A)*                            | 7  | 11           | 13           |  |  |  |
| Electrical connection <sup>3</sup> | 3/PE AC 200-230V ±10% 50/60Hz, 2/PE AC 200-230V ±10% 50/60Hz, 1/N/PE AC 200-230V ±10% 50/60Hz, 3/N/PE AC 400V ±10% 50/60Hz |              |              |  |  |  |
| Supply pressure                    | 6 bar  | 6 bar        | 6 bar        |  |  |  |
| Temperature range                  | 20-200°C   | 20-200°C     | 20-200°C     |  |  |  |
| Control accuracy                   | ±0,5°C   | ±0,5°C       | ±0,5°C       |  |  |  |
| Max. operating pressure            | 80 bar   | 80 bar       | 80 bar       |  |  |  |
| Ambient temperature                | 1040°C   | 1040°C       | 1040°C       |  |  |  |
| Electrical inputs                  | 8  | 8            | 8            |  |  |  |
| Electrical inputs                  | 4 (floating)   | 4 (floating) | 4 (floating) |  |  |  |

¹Model designation supplemented by tank size and number of hoses; ²Dependent on adhesive; ³Other voltages with matching Baumer hhs transformer set, \*Including the power of the hoses and application heads





### **Xmelt granule feeder**



Delivery unit with adhesive granules

Attention in industrial hot melt applications is increasingly focusing on process interruptions, cleaning times and maintenance intervals. Baumer hhs has consistently improved its Xmelt Series to meet the growing demands of users. The integrated filling system automatically maintains a constant adhesive level in the hot melt unit. That leaves you with your hands free for more important things. A maintenance-free, capacitive sensor automatically detects the adhesive level and starts renewed filling with granules from the adjacent container. An empty tank or overfilling is now impossible. Impurities can no longer get into the tank. The system is quickly and easily retrofitted on existing hot melt units.

- Uses the standard hot melt unit to feed from a large container
- Saves time for the operator
- Time-proven Xmelt technology
- Melting area always covered by adhesive
- Greater protection against vapours and burns



Granul feeder

### **Technical Data**

| Vacuum hose | Suitable for          | Level measurement       | Delivery rate  | Line length                  |
|-------------|-----------------------|-------------------------|--|------------------------------|
| Length 6 m  | XM-04 / XM-08 / XM-12 | Capacitive, non-contact | >50 kg/h depending on hose length,<br>granule size, air pressure | 6 m horizontal, 3 m vertical |

