

Thermotube TT-3008-EX for Dynamic Applications

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1. Introduction

A regulated temperature of the spraying material - the prerequisite for optimum painting

The **APSON Thermotube-3008-EX** is a bending, flexible, temperable hose for transport of liquids and/or gases, which, for optimum application, must be heated or be cooled - used especially in Hazard Zones in the coatings industry, the chemical industry or the food industry. Wherever stationary transport systems pass over into moving systems (e.g. robots), the **APSON Thermotube TT-3008-EX** is the right solution.



APSON Thermotube TT-3008-EX as well as APSON Thermotube Interface TTI-3008

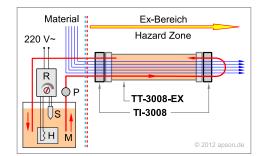
2. Features

- Explosion-proof properties due to passive, external temperature control.
- Robust, wear resistant, large temperature range.
- Fittings made of stainless steel or according to customer requirements.
- Environmentally friendly, low solvent losses (very good internal flushability).
- For gaseous and/or liquid (solvent or water-based) paint materials.
- Smooth outer surfaces, easy to clean, resistant to solvents.
- Usable as heating and/or cooling hose.

3. Structure and Function

The **APSON Thermotube TT-3008-EX** consists of a flexible, wear-resistant, solvent-resistant, temperature-resistant and form-resistant jacket hose enclosing solvent-resistant transport hoses for the liquids and/or gases which are to be transported (see the following figure). The jacket hose and transport hoses are connected at the ends by means of a pressure-tight connection fittings. The tempering of the application materials occurs by pump **P** circulating a tempering medium **M** from and to a tempering source regulated by means of a temperature regulator **R**.

The flowback of the tempering medium \mathbf{M} occurs directly through the jacket hose. For optimal heat transfer as well as optimal kinematics the transport hoses in the jacket hose are laid spirally (for simplification, this is not shown in the figure).



APSON Thermotube TT-3008-EX — Functioning Scheme

APSON Thermotube Interfaces TTI-3008 are provided with screws, and thus easy to install and dismantle. Special hose connectors ensure a reliable tightness, even after many disconnections of the parts.

4. Technical Data

Designation:	APSON Thermotube TT-3008-EX *
Working materials:	Lacquers, hardeners, alkalis, solvents, gases, a.o.
Tempering medium:	Water, glycol mixture, a.o.
Operating pressure of working materials:	Max. 10 bar
Operating pressure of tempering medium:	Max. 4 bar
Minimal bending radius:	Min. 30 cm
Temperature range of tempering medium:	0 – 120 °C
Casing materials:	Plastics, Teflon TM , stainless steel, light metal
Seals:	Viton TM
Connectors for working mterials (5):	For hoses, 3 times (6x8) mm and 2 times (4x6) mm
Connectors for tempering medium (2):	For hoses, 2 times (6x8) mm (flow and flowback)
Interface diameter:	Approx. Ø 100 mm, robot interface

* Almost all technical data are also available according to customer's request.

5. Ordering Data

Designation	Ordering-Number
APSON Thermotube TT-3008-EX (3500 mm = 2500 mm + 2 x 500 mm) *	010A057
APSON Thermotube TT-3008-EX (2400 mm = 1400 mm + 2 x 500 mm) *	010A058
APSON Thermotube TT-3008-EX (2900 mm = 1900 mm + 2 x 500 mm) *	010A059
APSON Thermotube TT-3008-EX (11000 mm = 10000 mm + 2 x 500 mm) *	010A060

APSON Thermotube TT-3008-EX (2220 mm = 1220 mm + 2 x 500 mm) *	010A061
APSON Thermotube TT-3008-EX (please specify the required lengths) *	#######

* The two **Interfaces TTI-3008** belonging to the respective thermotube are additionally equipped with TeflonTM single-hoses. The lengths of these hoses default to 500 mm.

Options: Other hose lengths are available according to customer specifications.

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