



# DILAVEST™

thermostat waxes

Expanding to the point!

waxes | adhesives | dispersions

 **paramelt**

experience. performance.

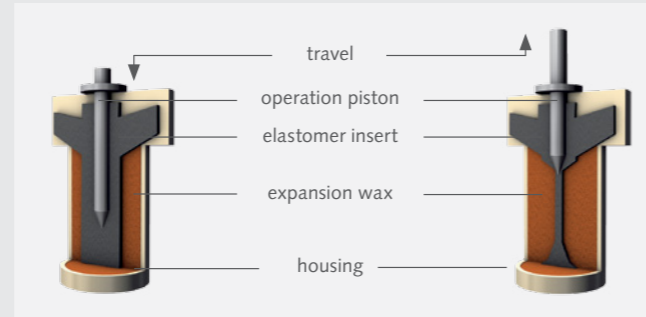
# DILAVEST™ as an expansion wax in mechanical pressure and temperature controllers



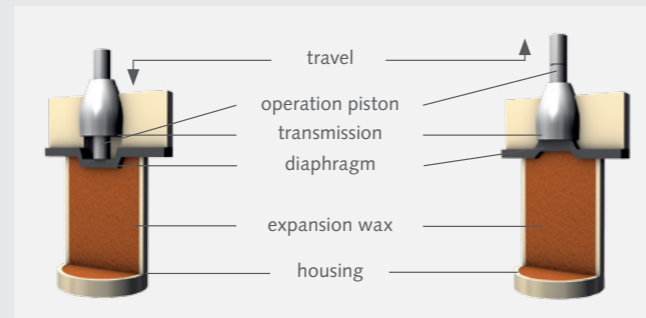
DILAVEST™ is the product name of Paramelt thermostat waxes or expansion waxes. These waxes are used in control valves which operate on the piston stroke principle (see illustrations). Valves of that kind are mainly used in the automotive industry (DILAVEST™ P-grades) and for the heating & ventilation sector, e.g. in radiator valves (DILAVEST™ L-grades).

## Advantages of DILAVEST™ expansion wax technology

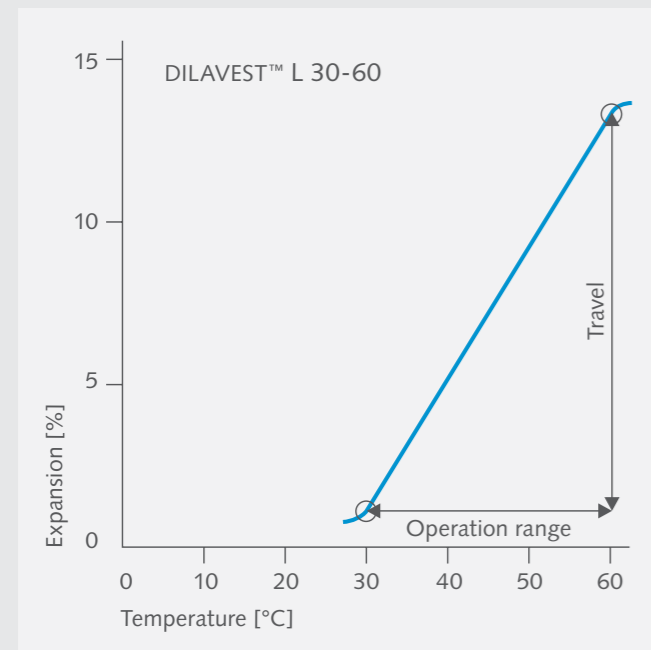
- small dimensions
- high driving forces
- large adjusting distance
- great control accuracy
- insensitive to mechanical vibrations
- maintenance-free
- long service life



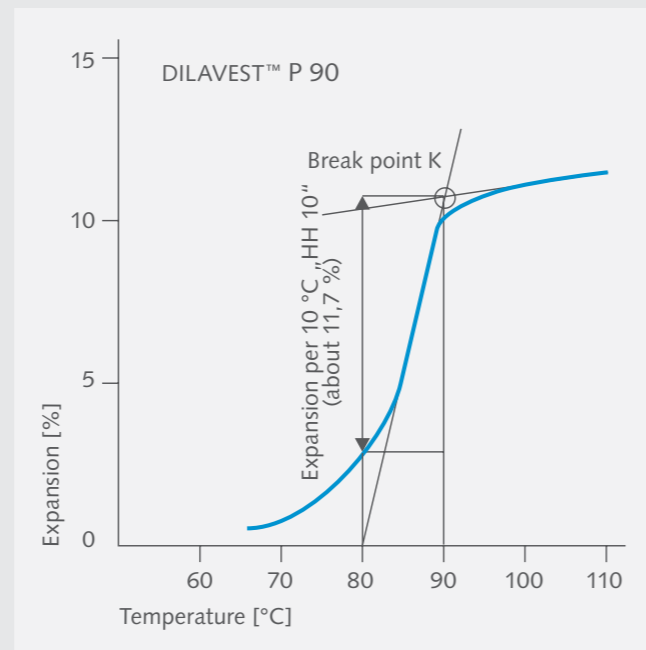
Mechanism of the wax controller with elastomer insert



Mechanism of the wax controller with diaphragm



Dilavest™ L 30-60: A linear grade expansion wax – expands over a temperature range from 30°C to 60°C. Between these temperatures it can adjust, for example a hot water valve, that is to say it varies the valve opening continuously.



Paramelt classifies the control point expansion waxes – here Dilavest™ P 90 – on the basis of the so-called break point, K (K is the temperature at which the opening operation has been completed). The travel (HH 10) describes the expansion in percentage by volume within a temperature range of 10°C. HH 10 results from the difference between the expansion at the break point K and at 10°C below K.

Application	Thermostat wax	n-Alkanes DILAVEST C	Linear grades DILAVEST L	Control point grades DILAVEST P
<b>Automotive industry</b>				
Control of air intake (e.g. carburator, fuel injection) with n-alkanes in the temperature range from -16°C to + 40°C		•		
Adjustment of radiator cooling water with control point standard expansion waxes in the temperature range from 70°C to 98°C				•
Adjustment of radiator fan with control point standard expansion waxes in the temperature range from 80°C to 120°C				•
Adjustment of the oil system with control point standard expansion waxes and special grades in the temperature range from 80°C to 140°C				•
<b>Aviation industry</b>				
Control of the flow of lubricating and hydraulic oils in the cooling system				•
<b>Heating &amp; ventilation sector</b>				
Regulation of radiator valves			•	
Regulation of heated water for domestic use			•	
Regulation of boilers				•
Control of radiant (underfloor) heating				•
The DILAVEST range offers tailor-made expansion waxes for all types of applications.	DILAVEST C 10 DILAVEST C 11 ↓ DILAVEST C 17 DILAVEST C 18	DILAVEST L 0-30 DILAVEST L 30-60  And other grades produced to customers requirements	DILAVEST P 45 DILAVEST P 47 ↓ DILAVEST P 119 DILAVEST P 120  Control point grade waxes below 45°C or above 120°C can be developed and produced on request	
	<b>Expansion reducer</b>			
DILAVEST PM: For various temperature ranges				



#### **Paramelt Europe**

Costerstraat 18, 1704 RJ Heerhugowaard  
The Netherlands  
t +31 72 57 50 600

#### **Paramelt Asia**

109 Sutong Road, Suzhou Industrial Park  
Suzhou, Jiangsu 215021, China  
t +86 512 6761 6618

#### **Paramelt USA**

2817 McCracken Street, Muskegon, MI 49441  
United States of America  
t +1 231 759 7304

[www.paramelt.com](http://www.paramelt.com)

Founded in 1898, Paramelt has over 100 years of experience and today is a global producer of wax blends, adhesives and specialty dispersions. Operating from production sites in The Netherlands, the USA and China we work together in a team of about 400 employees around the world. In most of our core applications Paramelt is the acknowledged market leader.

#### **DILAVEST™ is a registered trademark of Paramelt**

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