

## D. Survey of Thermostats and Testing Instructions

Testing instructions for the thermostat are essentially the same as described for Model 190. When testing the wax thermostat with by-pass control the by-pass line must be closed when the amount of flow is being checked.

Model	Part No.	Type	Opens - at °C	Working stroke of valve		Flow when closed liters/mm	Diameter of connection branch from engine to radiator in mm	Diameter of connection branch for by-pass line in mm
				in mm	at C°			
180 180 D (1 <sup>st</sup> vers.)	181 203 00 75 181 203 01 75	Steam-pressure thermostat	71—74 77—80 <sup>1)</sup>	8	80—81 87—88	0.7—1.2	28	13
180 D (2 <sup>nd</sup> vers.)	000 203 97 75 optional 000 203 98 75	Wax thermostat without by-pass control	78—79	8—9	91—94			
180 Db	001 203 19 75 optional 001 203 20 75	Wax thermostat with by-pass control		7.5—8			28	
220 a, 219, 220 S 180 (in case of replacement) 180 a 190 (1 <sup>st</sup> version)	000 203 65 75 optional 000 203 75 75	Wax thermostat without by-pass control		8—9			32	13
190 SL	000 203 64 75	Wax thermostat element (in cooling water outlet connection)	—	—	—			
180 b 190 b 190 D and 190 Db, 220 SE (1 <sup>st</sup> version)	001 203 08 75 optional 001 203 23 75	Wax thermostat with by-pass control	74—76	7.5—8	94		32	32
220 SE (2 <sup>nd</sup> vers.)	001 203 21 75							

<sup>1)</sup> winter driving

## E. Removal and Installation of Thermostat

### I. Models 180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 220 a, 219, 220 S, and 220 SE

The removal and installation procedures are the same as for Model 190.

## II. Model 190 SL

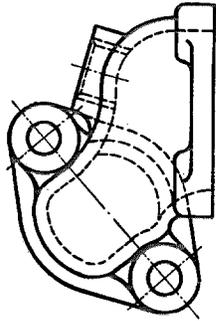
### Removal:

1. Drain off part of the cooling water, collecting additives if present.
2. Unfasten the hose clamp on the cooling water outlet connection and remove the hose.
3. Unscrew the four hexagon socket screws fastening the cover of the outlet connection and remove the cover, the gaskets, and the thermostat element.
4. Check the thermostat.

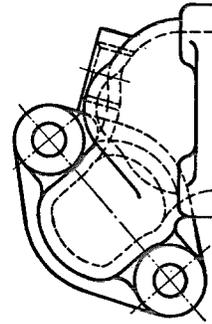
5. If the element has to be replaced, please note that on cars with Engine End No. up to 45 01 020 the cooling water outlet connection has to be replaced as well. This is necessary because the new cooling water outlet connection increases the range of the thermostat.

### Installation:

Installation is the reverse of the removal procedure. The thermostat element must be installed in the outlet connection in such a way that the vent corrugation is situated at the top. Replace the gaskets between the outlet connection, the thermostat element and the cover.



1st version



2nd version

Fig. 50-6/5

Cooling water outlet connection