

Characteristics at elevated temperatures

according to ISO 898 - part 1



Property class	Temperature				
	+20°C	+100°C	+200°C	+250°C	+300°C
	Lower yield stress, R_{eL} or stress at 0,2% non-proportional elongation $R_{p0,2}$ (N/mm ²)				
5.6	300	270	230	215	195
8.8	640	590	540	510	480
10.9	940	875	790	745	705
<u>10.9</u>	940	--	--	--	--
12.9	1100	1020	925	875	825

Continuous operating at elevated service temperature may result in significant stress relaxation. Typically 100 h service at 300°C will result in a permanent reduction in excess of 25% of the initial clamping load in the bolt due to decrease in yield stress.