

Material	AlSi12CuMgNi		AlSi18CuMgNi		AlSi25CuMgNi
	eutectic		Hyper-eutectic		
Si-percentage, %	11-13		17-19		23-26
Density, g/cm <sup>3</sup>	2.7		2.68		2.65
Method					
K – die-casting	K	P	K	P	K
P – pressed					
$\sigma_{zB,20\text{ °C}}$ , N/mm <sup>2</sup>	200	300	180	230	170
	:	:	:	:	:
	250	370	220	300	210
$\sigma_{zB,250\text{ °C}}$ , N/mm <sup>2</sup>	100	110	100	100	100
	:	:	:	:	:
	150	170	140	160	140
$\lambda_{20\text{ °C}}$ , W/mK	155	158	143	157	135
$\lambda_{250\text{ °C}}$ , W/mK	159	166	150	163	141
$\alpha_L$ a), 10 <sup>-6</sup> /K	21.0	21.4	19.9	20.3	19.3
$E_{250\text{ °C}}$ , N/mm <sup>2</sup>	72500	74000	75000	76000	81000

a) average linear thermal expansion at temperatures ranging from 20 °C - 200 °C