

40CrMoV4-6 All

General Information

Similar designations

ASTM A 193 B16

Chemical composition

Variant	Cast		C %	Si %	Mn %	P %	S %	Cr %	Mo %	V %	Al %
6098	CC	Mn	0.36	0.15	0.45	-	-	0.80	0.50	0.250	-
		Max	0.44	0.35	0.70	0.025	0.025	1.15	0.65	0.350	0.020

Mechanical Properties

Variant	Condition	Format	Dimension [mm]	Yield strength min [MPa]	Tensile strength [MPa]	Elongation A ₅ [%]	Reduction of area Z _{min} [%]	Hardness	Impact (ISO-V) strength _{min}
6098	+AR	Round bar	25 < 160	-	-	-	-	< 330 HB	-
	+A		25 < 160	-	-	-	-	< 255 HB	-
	+QT	Round bar	25 < 65	725	860-1000	14	50	250-300 HB	20 °C 30 J (long)
			65 < 100	700	850-1000	14	45	250-300 HB	20 °C 30 J (long)
		Round bar	100 < 160	640	850-1000	14	45	250-300 HB	20 °C 25 J (long)

*R_{p0.2} * R_{eh}, ** R_{el}*

Transformation temperatures

	Temperature °C
MS	323
AC1	739
AC3	804

Other properties (typical values)

Youngs module (GPa)	Poisson's ratio (-)	Shear module (GPa)	Density (kg/m ³)
210	0.3	80	7800
Average CTE 20-300°C (µm/m°K)	Specific heat capacity 50/100°C (J/kg°K)	Thermal conductivity Ambient temperature (W/m°K)	Electrical resistivity Ambient temperature (µΩm)
12	460 - 480	40 - 45	0.20 - 0.25

Contact us

Would you like to know more about our offers? Don't hesitate to contact us:

Via e-mail: info@ovako.com

Via telephone: +46 8 622 1300

For more detailed information please visit <http://www.ovako.com/en/Contact-Ovako/>

Disclaimer

The information in this document is for illustrative purposes only. The data and examples are only general recommendations and not a warranty or a guarantee. The suitability of a product for a specific application can be confirmed only by Ovako once given the actual conditions. The purchaser of an Ovako product has the responsibility to ascertain and control the applicability of the products before using them. Continuous development may necessitate changes in technical data without notice. This document is only valid for Ovako material. Other material, covering the same international specifications, does not necessarily comply with the properties presented in this document.