

GRAFSTAR™ **CS88 Graphite**

Technical Data Sheet 6055

Product Overview

GRAFSTAR™ CS88 graphite is a significantly enhanced version of CS graphite offering excellent properties. With a higher density, increased strength and very low permeability, CS88 graphite is ideally suited for the most challenging of application environments.

Applications

- Casting & melting crucibles
- High pressure rams and dies
- · Chemical process equipment

Sizes*

Shape	Measurement	Unit	Size	Unit	Size	
Round	Diameter	in	3 - 30 x 72	mm	76 - 762 x 1830	
Rectangle	Length	in	17 x 17 x 72	mm	432 x 432 x 1830	
Rectangle	Length	in	17 x 17 x 88	mm	432 x 432 x 2235	
Rectangle	Length	in	19 x 19 x 72	mm	480 x 480 x 1830	
Rectangle	Length	in	24 x 24 x 72	mm	610 x 610 x 1830	

Typical Properties at Room Temperature**

Characteristic	Unit	WG	AG	Unit	WG	AG
Density	lbs/ft³	112		g/cm³	1.80	
Maximum Particle Size	inches	0.03		mm	0.76	
Specific Resistance	10 ⁻⁴ Ωin	2.9	3.9	μΩm	7.3	9.9
Flexural Strength	psi	4200	2780	MPa	29	19
Young's Modulus	10 ⁶ psi	2.21	1.43	GPa	13	9
Tensile Strength	psi	2610	2030	MPa	17	13
Compressive Strength	psi	7540	7400	MPa	51	50
Permeability	Darcy	0.004	0.002	Darcy	0.004	0.002
C.T.E. (to 100°C)	10 ⁻⁶ /°F	1.5	2.0	10 ⁻⁶ /°C	2.5	3.5

Notes:



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^{*} Other sizes available upon request

^{**} Properties listed are typical and cannot be used as accept/reject specifications