



VACUUM CASTING  
TECHNICAL PACK



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# VACUUM CASTING



## TECHNICAL SPECIFICATION

CAPACITY (MM)

300 X 400 X 350

820 X 600 X 600

820 X 1800 X 600

Quantity

Up to 20 parts per tool

Tolerances

+ / - 0.3% geometry dependent

Wall Thickness

Min. 1.5 mm  
(Due to resin flow.)

Letters & Logos

Width = 2x height min.

Gap between raised  
& recessed letters

Min. 1.27 mm

Materials

AME SG-95 | AME 8891 | AME 8051 |  
AME 8263 | AME PX234HT | AME 8060-1 | AME 3351



MATERIAL	AME SG-95	AME 8891	AME 8051	AME 8263	AME PX234HT	AME 8060-1	AME 3351
Description	Highly versatile all-round material.	Flexible rubber. Adjustable hardness.	Great for panels and enclosures.	UL94 SVA FAR 25 Compliant.	Suitable for prototypes & technical parts.	Suitable for prototypes & technical parts.	Waterclear UV stable. Excellent mechanical properties.
Available Colours	Transparent	White/ Translucent	White/ Opaque	White/ Translucent	Brown	Translucent/ Yellowish	Transparent
Flexible		x					
Rigid	x		x	x	x	x	x
High Temp.			x		x	x	
Low Temp.	x						x
Flame Retardant				x			
Shore Hardness	74 - 82D	20 - 90A	77 - 84D	83D	80D	80D	75 - 80D
Tensile Strength	58 MPa	2 - 17 MPa	63 MPa	68 MPa	61 MPa	47 MPa	60 - 64 MPa
Tensile Modulus	2,521 MPa	-	2,150 MPa	-	1,800 MPa	1,225 MPa	1,500 - 1,800 MPa
Flexural Strength	99 MPa	-	95 MPa	93 MPa	80 MPa	60 MPa	95 - 100 MPa
Flexural Modulus	2,400 MPa	-	2,200 MPa	2,200 MPa	1,850 MPa	1,310 MPa	2,150 - 2,450 MPa
Heat Deflection Temp.	72° C	-	92° C	80° C	195° C	105 - 175° C	51 - 90° C
Elongation Break	25%	270 - 330%	18%	15%	13%	43%	4.5 - 5.5%
Yield Strength	64.2 MPa	7 - 34 MPa (Tear Strength)	62 MPa	-	-	-	-
Thermal Conductivity (W / mk)	0.208	-	0.225	7	-	-	-



## AME SG-95



Vacuum Casting (VC)  
Material Datasheet



An all-round, ABS-like material. It can be spray painted in a wide variety of colours. Ideal for snap-fits and low temperature applications.

Measurement	Value
Shore Hardness	74 - 82D
Tensile Strength	58 MPa
Tensile Modulus	2,521 MPa
Flexural Strength	99 MPa
Flexural Modulus	2,400 MPa
Heat Deflection Temp.	72° C
Elongation Break	25%

Actual values may vary depending on build conditions.  
Our technical team can advise.



## AME 8891



Vacuum Casting (VC)  
Material Datasheet



A soft and flexible rubber-like material with a high elongation break and a variety of shore hardness choices.

Measurement	Value
Shore Hardness	20 - 90A
Tensile Strength	2 - 17 MPa
Tensile Modulus	-
Flexural Strength	-
Flexural Modulus	-
Heat Deflection Temp.	-
Elongation Break	270 - 330%
Tear Strength	7 - 34

Actual values may vary depending on build conditions.  
Our technical team can advise.

# AME 8051



Vacuum Casting (VC)  
Material Datasheet



An ABS-type resin suitable for panels and enclosures. High temperature resistance with flexing properties.

Measurement	Value
Shore Hardness	77 - 84D
Tensile Strength	63 MPa
Tensile Modulus	2,150 MPa
Flexural Strength	95 MPa
Flexural Modulus	2,200 MPa
Heat Deflection Temp.	92° C
Elongation Break	18%

Actual values may vary depending on build conditions.  
Our technical team can advise.

# Image TBC

## AME 8263



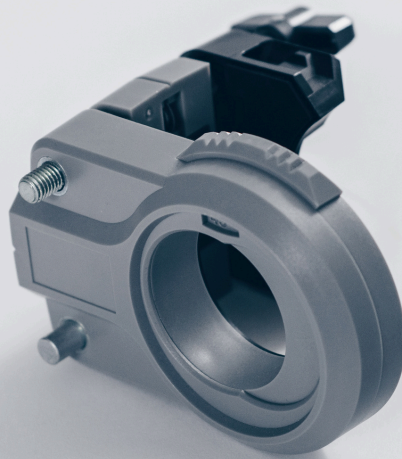
Vacuum Casting (VC)  
Material Datasheet



UL94 SVA FAR 25 Compliant.

Measurement	Value
Shore Hardness	83D
Tensile Strength	68 MPa
Tensile Modulus	-
Flexural Strength	93 MPa
Flexural Modulus	2,200 MPa
Heat Deflection Temp.	80° C
Elongation Break	15%

Actual values may vary depending on build conditions.  
Our technical team can advise.



## AME PX234HT



Vacuum Casting (VC)  
Material Datasheet



A polyurethane resin that is suitable for prototypes & technical parts.

Measurement	Value
Shore Hardness	80D
Tensile Strength	61 MPa
Tensile Modulus	1,800 MPa
Flexural Strength	80 MPa
Flexural Modulus	1,850 MPa
Heat Deflection Temp.	195° C
Elongation Break	13%

Actual values may vary depending on build conditions.  
Our technical team can advise.



# AME 8060-1



Vacuum Casting (VC)  
Material Datasheet



Similar to PP/PE. Suitable for prototypes and technical parts.

Measurement	Value
Shore Hardness	80D
Tensile Strength	47 MPa
Tensile Modulus	1,225 MPa
Flexural Strength	60 MPa
Flexural Modulus	1,310 MPa
Heat Deflection Temp.	105 - 175° C
Elongation Break	43%

Actual values may vary depending on build conditions.  
Our technical team can advise.

# AME 3351



Vacuum Casting (VC)  
Material Datasheet



UV-stable, water clear vacuum casting material. Has excellent mechanical properties and can simulate thermoplastics.

Measurement	Value
Shore Hardness	75 - 80D
Tensile Strength	60 - 64 MPa
Tensile Modulus	1,500 - 1,800 MPa
Flexural Strength	95 - 100 MPa
Flexural Modulus	2,150 - 2,450 MPa
Heat Deflection Temp.	51 - 90° C
Elongation Break	4.5% - 5.5%

Actual values may vary depending on build conditions. Our technical team can advise.