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355nm □□□□ □□□□□ □□□

Model	PSH14-H	PSH20-H	PSH30-H
Water cool/sealed scan head	yes	yes	yes
Aperture (mm)	14	20	30
Effective Scan Angle	±10°	±10°	±10°
Tracking Error	0.19 ms	0.28ms	0.45ms
Step Response Time(1% of full scale)	≤ 0.4 ms	≤ 0.6 ms	≤ 0.9 ms
<b>Typical Speed</b>			
Positioning / jump	< 15 m/s	< 12 m/s	< 9 m/s
Line scanning/raster scanning	< 10 m/s	< 7 m/s	< 4 m/s
Typical vector scanning	< 4 m/s	< 3 m/s	< 2 m/s
Good Writing quality	700 cps	450 cps	260 cps
High writing quality	550 cps	320 cps	180 cps
<b>Precision</b>			
Linearity	99.9%	99.9%	99.9%
Resolution	≤ 1 urad	≤ 1 urad	≤ 1 urad
Repeatability	≤ 2 urad	≤ 2 urad	≤ 2 urad
<b>Temperature Drift</b>			
Offset Drift	≤ 3 urad/°C	≤ 3 urad/°C	≤ 3 urad/°C
Over 8hours Long-Term Offset Drift ( After 15min warn-up )	≤ 30 urad	≤ 30 urad	≤ 30 urad
Operating Temperature Range	25°C±10°C	25°C±10°C	25°C±10°C
Signal Interface	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol
Input Power Requirement (DC)	±15V@ 4A Max RMS	±15V@ 4A Max RMS	±15V@ 4A Max RMS

355nm □□-□□□□ □□□□

Part Description	Focal Length (mm)	Scan Field (mm)	Max Entrance Pupil (mm)	Working Distance(mm)	Mounting Thread
SL-355-360-580	580	360x360	16	660	M85x1
SL-355-520-750	750	520x520	10	824.4	M85x1
SL-355-610-840-(15CA)	840	610x610	15	910	M85x1
SL-355-800-1090-(18CA)	1090	800x800	18	1193	M85x1

**355nm** □□□ □□□□□□□□

Part Description	Expansion Ratio	Input CA (mm)	Output CA (mm)	Housing Dia(mm)	Housing Length(mm)	Mounting Thread
BE3-355-D30:84.5-3x-A(M30*1-M43*0.5)	3X	10	33	46	84.5	M30*1-M43*0.5
BE3-355-D33:84.5-5x-A(M30*1-M43*0.5)	5X	10	33	46	84.5	M30*1-M43*0.5
BE3-355-D33:80.3-7x-A(M30*1-M43*0.5)	7X	10	33	46	80.3	M30*1-M43*0.5
BE3-355-D30:90-8x-A(M30*1-M43*0.5)	8X	10	33	46	90.0	M30*1-M43*0.5
BE3-355-D30:72-10x-A(M30*1-M43*0.5)	10X	10	33	46	72.0	M30*1-M43*0.5

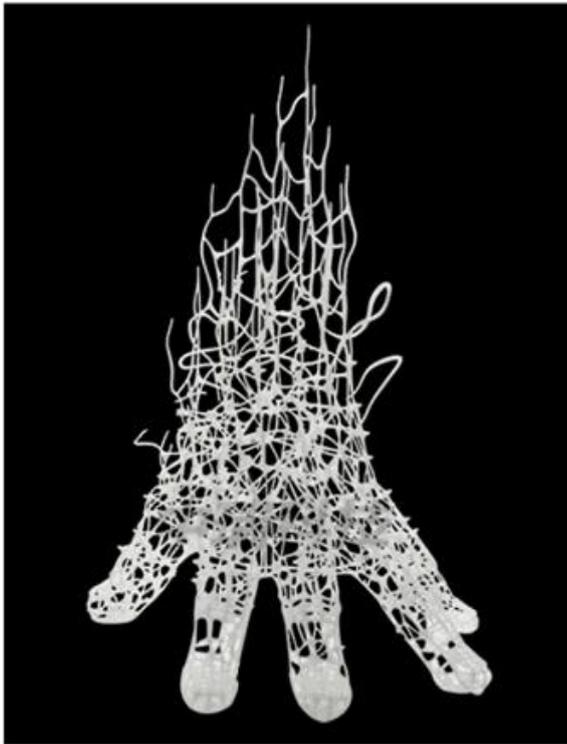
**355nm** □□□□

□□□ □□□□□	Diameter (□□□□)	□□□□□ (□□□□)	□□□□
355 □□□□	30	3	□□□□ □□□□□□ @ 355nm, 45 ° AOI
355 □□□□	20	5	□□□□ □□□□□□ @ 355nm, 45 °AOI
355 □□□□	30	5	□□□□ □□□□□□ @ 355nm, 45 °AOI

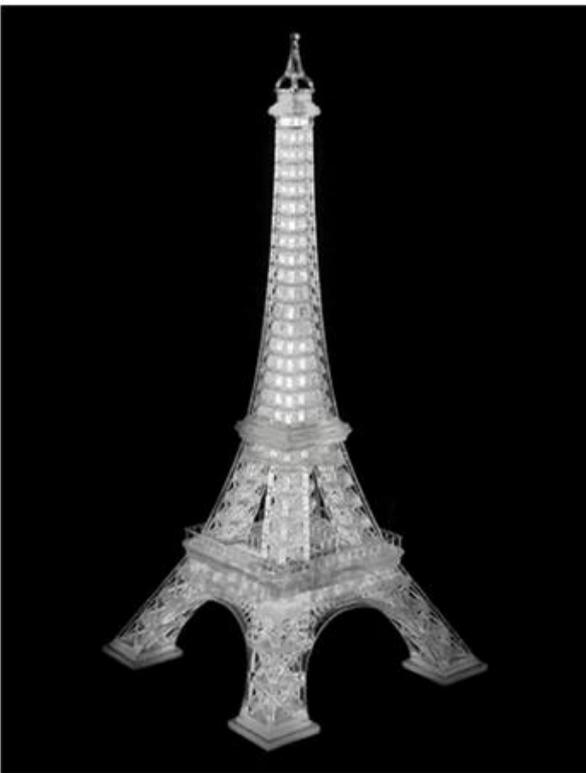
**3** □□ □□□□□□ □□□□ □□□□□□□□ □□□□



<b>PHYSICAL CHARACTERISTICS</b> ( LIQUID STATE )	Appearance: White liquid
	Density: 1.10 g/cm <sup>3</sup> @25°C
<b>MOLDING PERFORMANCE A</b> MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure	Viscosity: 450 CPS @25°C
	Dp: ≥0.16 mm
	Ec: 8.5 mJ/cm <sup>2</sup>
	Bending Modulus: 1500~1700 MPa
<b>MOLDING PERFORMANCE B</b> MOLDING PERFORMANCE @90min UV post-cure	Bending Strength: 55~60 MPa
	Notched Impact Strength: 60~68 J/m
	1.2mm Bend Angle: 140~170°
	Bending Modulus: 2688~2790 MPa
	Bending Strength: 66~73 MPa
	Notched Impact Strength: 60~68 J/m
	Hardness: 88
	Elongation at break: 10~15%
HDT Heat deflection temperature: 52 °C	
Tg Glass transition temperature: 62 °C	
CTE Coefficient of thermal expansion: 93°E-6	



<b>PHYSICAL CHARACTERISTICS</b> ( LIQUID STATE )	Appearance: White liquid Density: 1.10 g/cm <sup>3</sup> @25°C Viscosity: 400 CPS @25°C Dp: ≥0.16 mm Ec: 7.9 mJ/cm <sup>2</sup>
	<b>MOLDING PERFORMANCE A</b> MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure
<b>MOLDING PERFORMANCE B</b> MOLDING PERFORMANCE @90min UV post-cure	Bending Modulus: 2813~3520 MPa Bending Strength: 83~90 MPa Notched Impact Strength: 42~50 J/m Hardness: 87~92 Elongation at break: 13~20% HDT Heat deflection temperature: 52 °C Tg Glass transition temperature: 62 °C CTE Coefficient of thermal expansion: 93*E-6



<b>PHYSICAL CHARACTERISTICS</b> ( LIQUID STATE )	Appearance: Transparent liquid Pale Purple Density: 1.10 g/cm <sup>3</sup> @25°C Viscosity: 190 CPS @25°C Dp: ≥0.18 mm Ec: 6.9 mJ/cm <sup>2</sup>
	<b>MOLDING PERFORMANCE A</b> MOLDING PERFORMANCE @355nm point laser @150mW power @5.0m/s scanning @No UV post-cure
<b>MOLDING PERFORMANCE B</b> MOLDING PERFORMANCE @90min UV post-cure	Bending Modulus: 1890~2340 MPa Bending Strength: 55~62 MPa Notched Impact Strength: 40~55 J/m Hardness: 79 Elongation at break: 10~15% HDT Heat deflection temperature: 52 °C Tg Glass transition temperature: 62 °C CTE Coefficient of thermal expansion: 93*E-6

## Real ABS ( ABS Like )



<p><b>PHYSICAL CHARACTERISTICS</b> ( LIQUID STATE )</p>	<p>Appearance: Bright yellow liquid Density: 1.10 g/cm<sup>3</sup> @25°C Viscosity: 400 CPS @25°C Dp: ≥0.16 mm Ec: 7.9 mJ/cm<sup>2</sup></p>
<p><b>MOLDING PERFORMANCE A</b> MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure</p>	<p>Bending Modulus: 2000~2300 MPa Bending Strength: 75~85 MPa Notched Impact Strength: 35~45 J/m 1.2mm Bend Angle: ≥170~180°</p>
<p><b>MOLDING PERFORMANCE B</b> MOLDING PERFORMANCE @90min UV post-cure</p>	<p>Bending Modulus: 2813~3520 MPa Bending Strength: 83~90 MPa Notched Impact Strength: 42~50 J/m Hardness: 87~92 Elongation at break: 13~20% HDT Heat deflection temperature: 52 °C Tg Glass transition temperature: 62 °C CTE Coefficient of thermal expansion: 93*E-6</p>

## Red Wood ( Tooling Board Like )



<p><b>PHYSICAL CHARACTERISTICS</b> ( LIQUID STATE )</p>	<p>Appearance: Epoxy Tooling Board Like (Pink) liquid Density: 1.10 g/cm<sup>3</sup> @25°C Viscosity: 400 CPS @25°C Dp: ≥0.16 mm Ec: 7.9 mJ/cm<sup>2</sup></p>
<p><b>MOLDING PERFORMANCE A</b> MOLDING PERFORMANCE @355nm point laser @330mW power @5.0m/s scanning @No UV post-cure</p>	<p>Bending Modulus: 2000~2300 MPa Bending Strength: 75~85 MPa Notched Impact Strength: 35~45 J/m 1.2mm Bend Angle: ≥170~180°</p>
<p><b>MOLDING PERFORMANCE B</b> MOLDING PERFORMANCE @90min UV post-cure</p>	<p>Bending Modulus: 2813~3520 MPa Bending Strength: 83~90 MPa Notched Impact Strength: 42~50 J/m Hardness: 87~92 Elongation at break: 13~20% HDT Heat deflection temperature: 52 °C Tg Glass transition temperature: 62 °C CTE Coefficient of thermal expansion: 93*E-6</p>



Desktop FDM

Industrial FDM

Desktop SLA

Industrial SLA

Industrial SLS

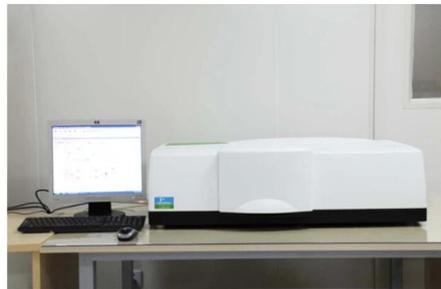








**TRIOPTICS OptiSpheric 2000 AF**  
---Testing EFL, R, Centering Error, Wedge Angle, BFL, MTF



**PerkinElmer Lambda 950**---Testing Transmission and Reflectivity



**Carmanhaas Coating Machine**







