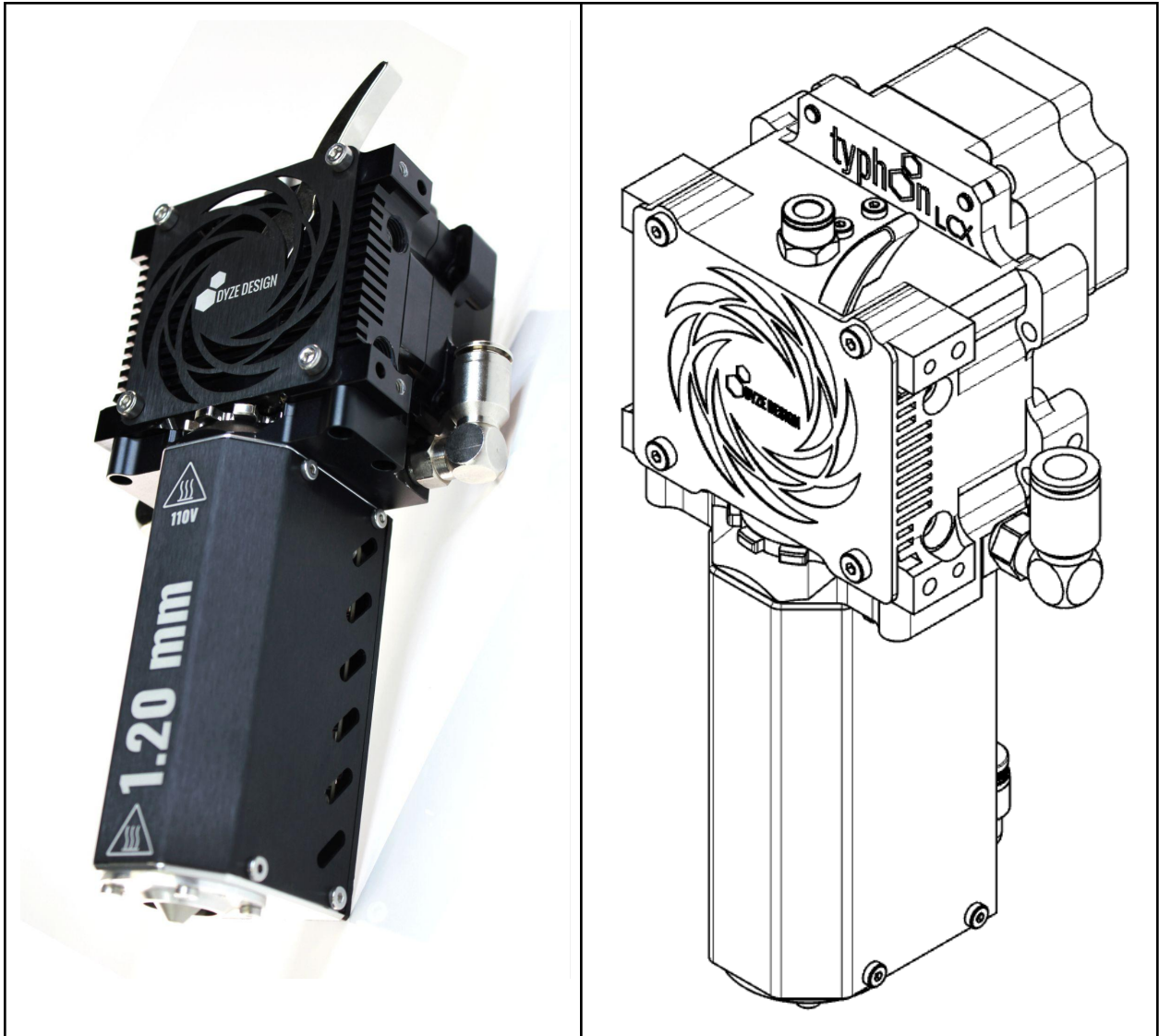
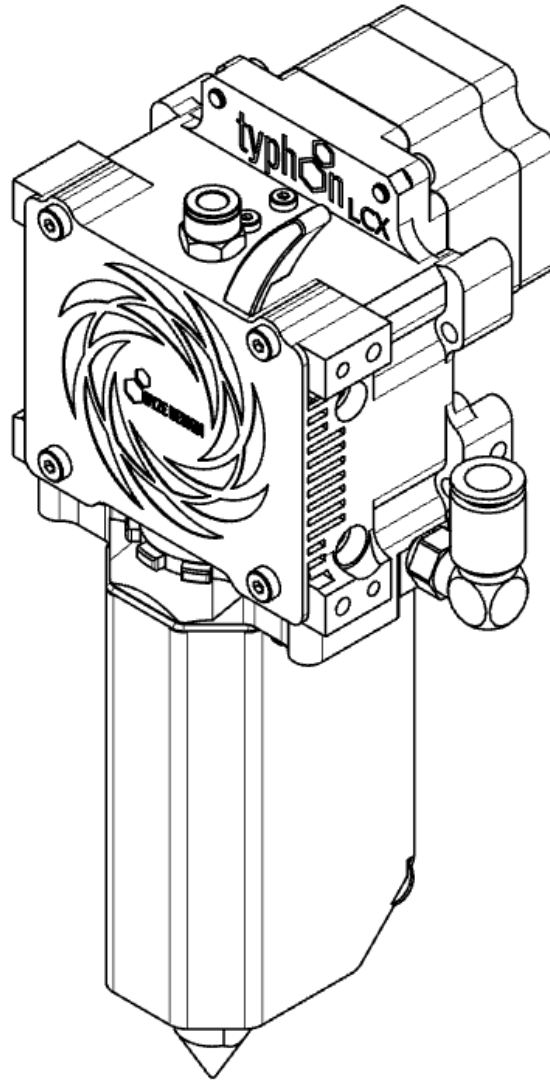


Typhoon™ LCX

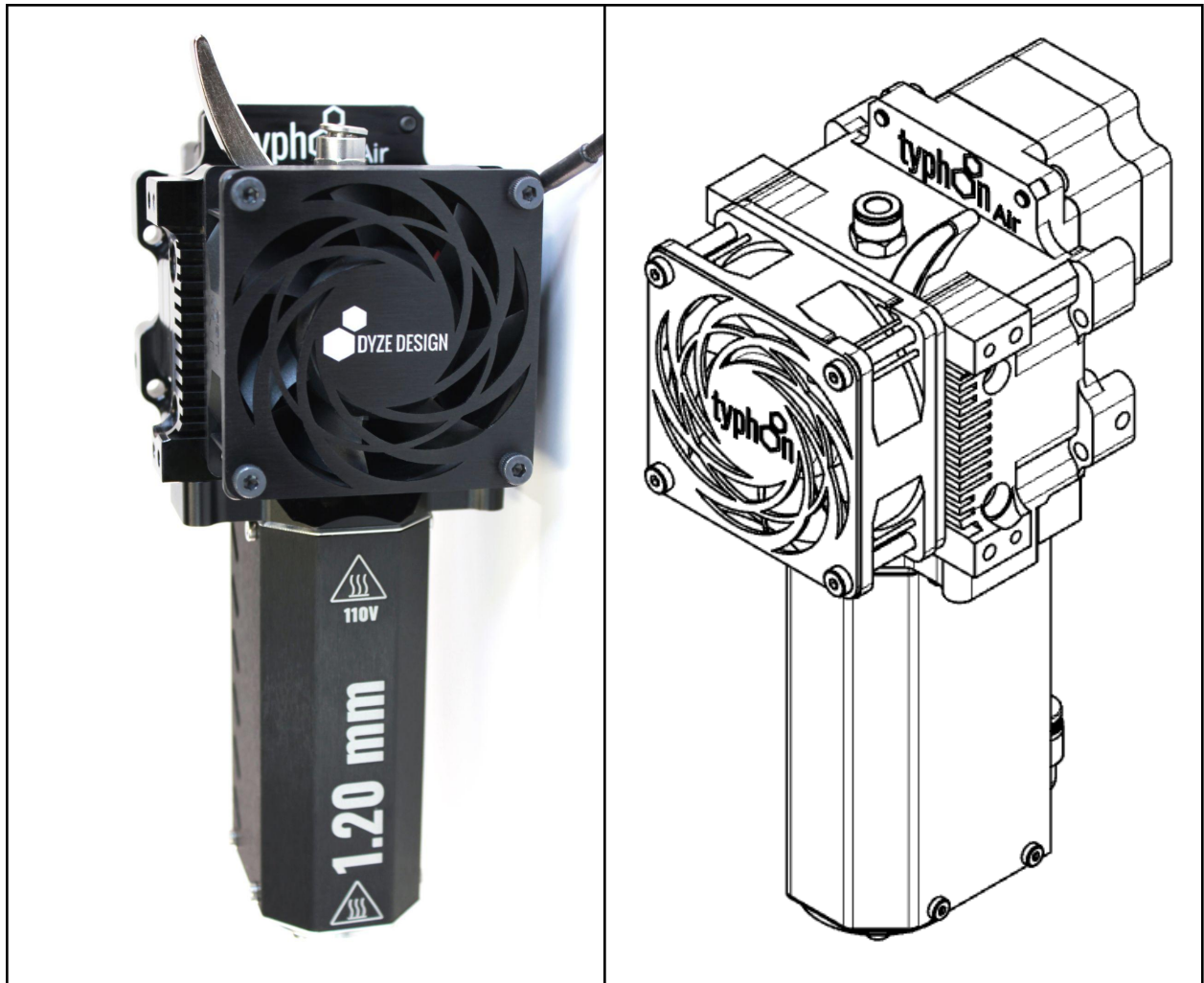


Typhoon™LCX Non-Planar

[Product Picture]

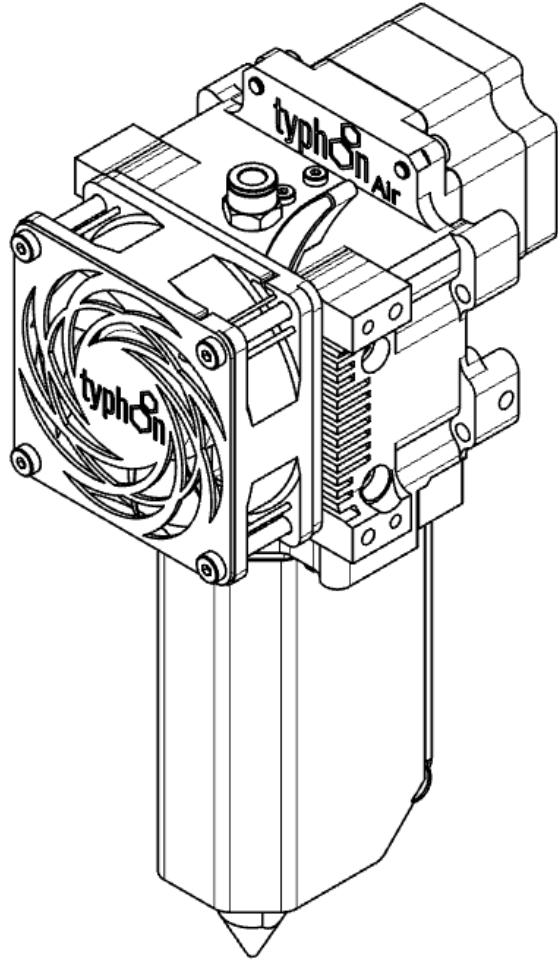


Typhoon™ Air



Typhoon Air™ Non-Planar

[Product Picture]



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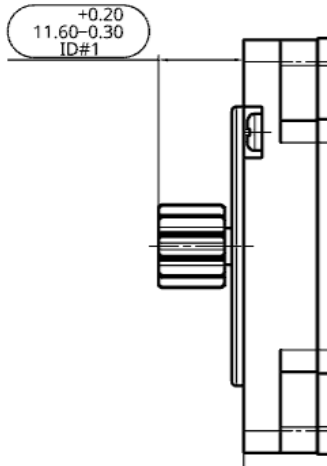
[Drawings](#)

General

Version	Typhoon™LCX	Typhoon™LCX NP	Typhoon™Air	Typhoon™Air NP
Envelope volume W x L X H (mm)	131 x 91 x 224	131 x 91 x 237	90 x 115 x 224	90 x 115 x 237
Weight (gr)	1690 g	1650 g	1750 g	1710 g

Electrical

Stepper Motor

Drive Voltage	24-48VDC
Motor Current	2.8A Recommended Current : 2.7A
Frame size	NEMA23
Motor Gear Specification 12T 0.80M 20° Profile Shift coefficient: 0.30 Outside Diameter: 11.19 Addendum :0.79 Whole Depth :1.79 Root Diameter :7.60 Backlash :0.04 Material: AISI 4140 or equivalent Hardness: 30 - 35 HRC	

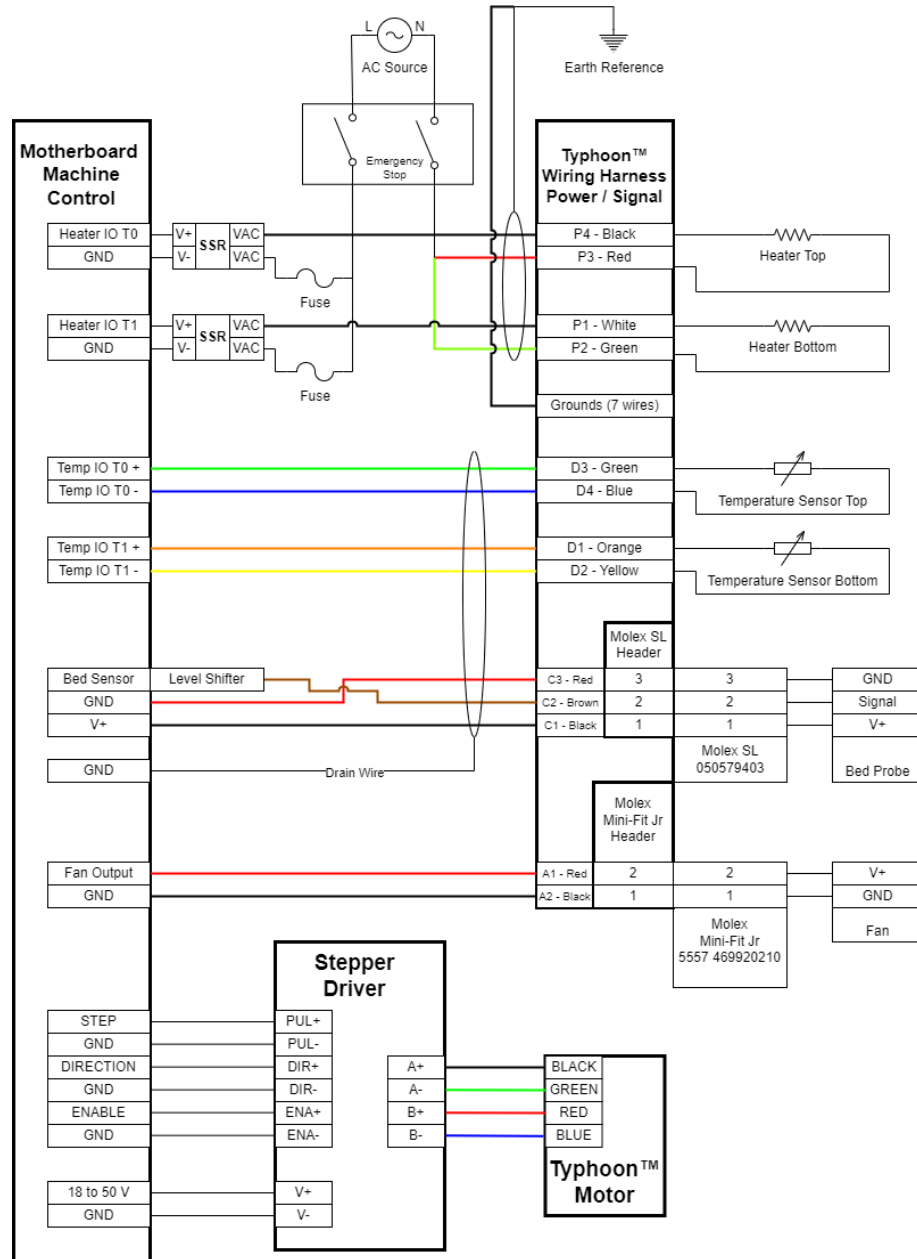
Heating

Maximum Heatcore Temperature	450°C
Number of heaters	2
Total heating power	400W
Heater operating voltage	110VAC / 220VAC
Heater 1: Top Heater	250W
Heater 2: Middle heater	150W
Sensor type available	PT100

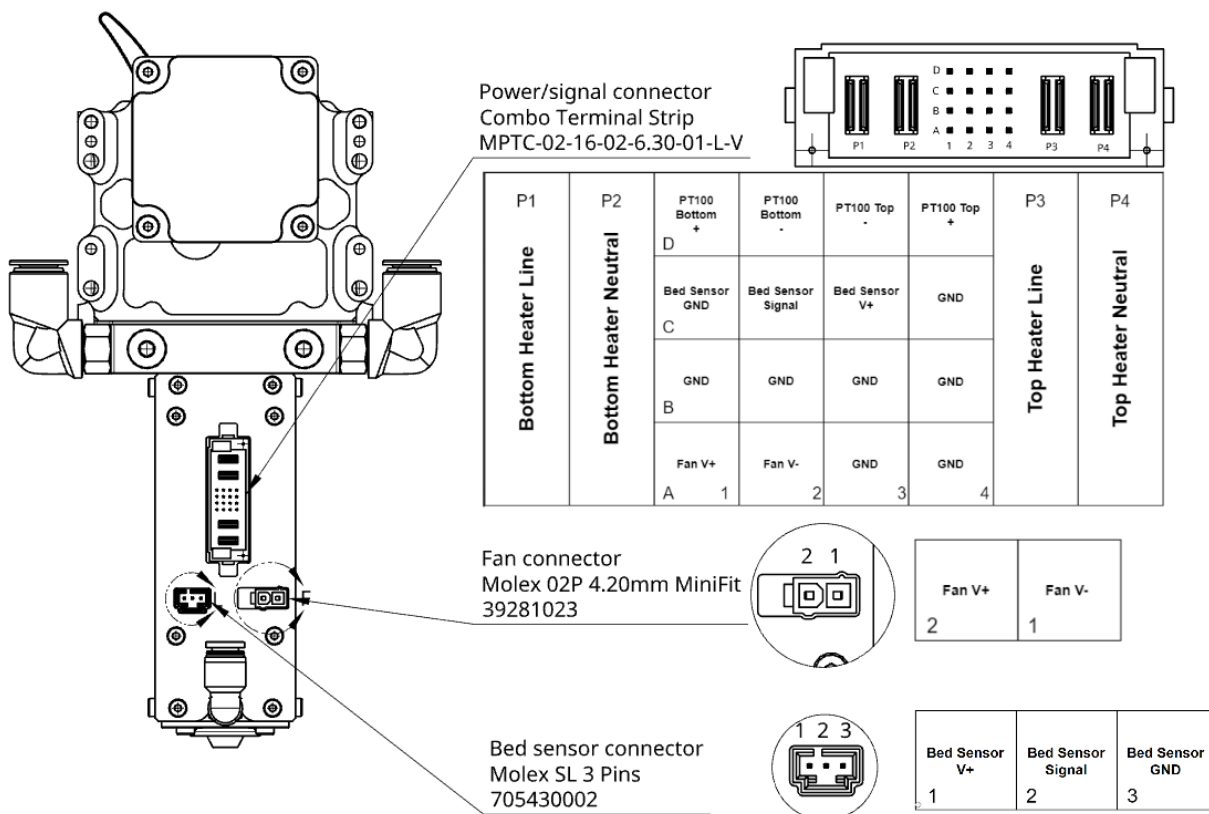
Connectors

Power & Signal	Samtec Combo Terminal Strip MPTC-02-16-02-6.30-01-L-V Power Current Limit : 30 A Signal Current Limit : 5 A
Bed probe	Molex SL 3 Pins 705430002 Current Limit : 3 A
Part Cooling Fan Connector	Molex 02P 4.20mm MiniFit 39281023 Current Limit : 5 A
Motor	JST S11B-XH-A-1 Current Limit : 3 A
Typhoon™ Air Cooling Fan	Molex SL 2 Pins 0050579402 Current Limit : 3 A

Wiring Diagram



Backplate Connector Pinout



Temperature

Typhoon™ Air Cooling

Working ambient temperature	0°C ~ 70°C
Extruder Cooling	Forced Air with provided 70mm fan
Fan Model	PMD2407PTB1-A.(2).GN
Rated Voltage	24 VDC
Rated Current	0.19 A
Rated Power	4.6 W
Speed	5100 RPM
Max Air Flow	1.37 m³/min
Acoustical Noise	46 dBA

Typhoon™ LCX Cooling

Working ambient temperature	0°C ~ 80°C
Liquid Cooling temperature	45°C (40L / h Liquid flow rate, 200°C Heating)
Minimum liquid cooling flow rate	40 L / h
Liquid Cooling medium	• Deionized water with corrosion inhibitor and biocide • Demineralised water with corrosion inhibitor and biocide • Car Engine Coolant

Mechanical

Mounting style	2x M4x0.70 2x 4mm dowels
Liquid cooling threads	4x M8x1.00

Drive Train

Gear ratio	4.58:1
Gear material	Hardened Alloy Steel (4100 serie)
Gear lubrication	Lithium grease
Distance travel per full motor rotation	11.68 mm

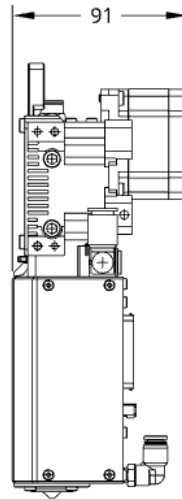
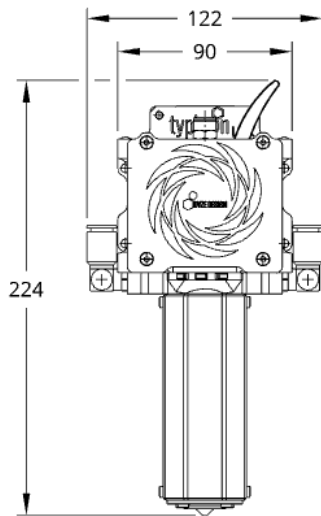
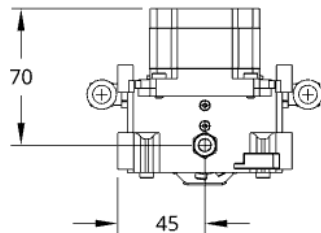
Extrusion

Compatible filament diameter	2.85 ±0.05
Heatcore size available Standard & Non Planar	• 0.60 mm • 0.90 mm • 1.20 mm • 1.80 mm • 2.50 mm
Maximum flow rate	See Performance Table
Part cooling	Built-in compressed air - A custom shroud can be built around the Heatcore™, please refer to the 3D files for more details

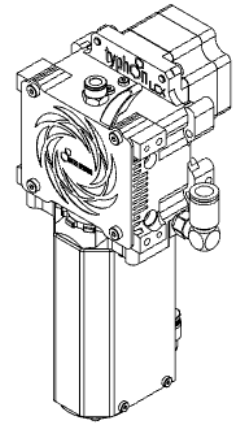
Performance

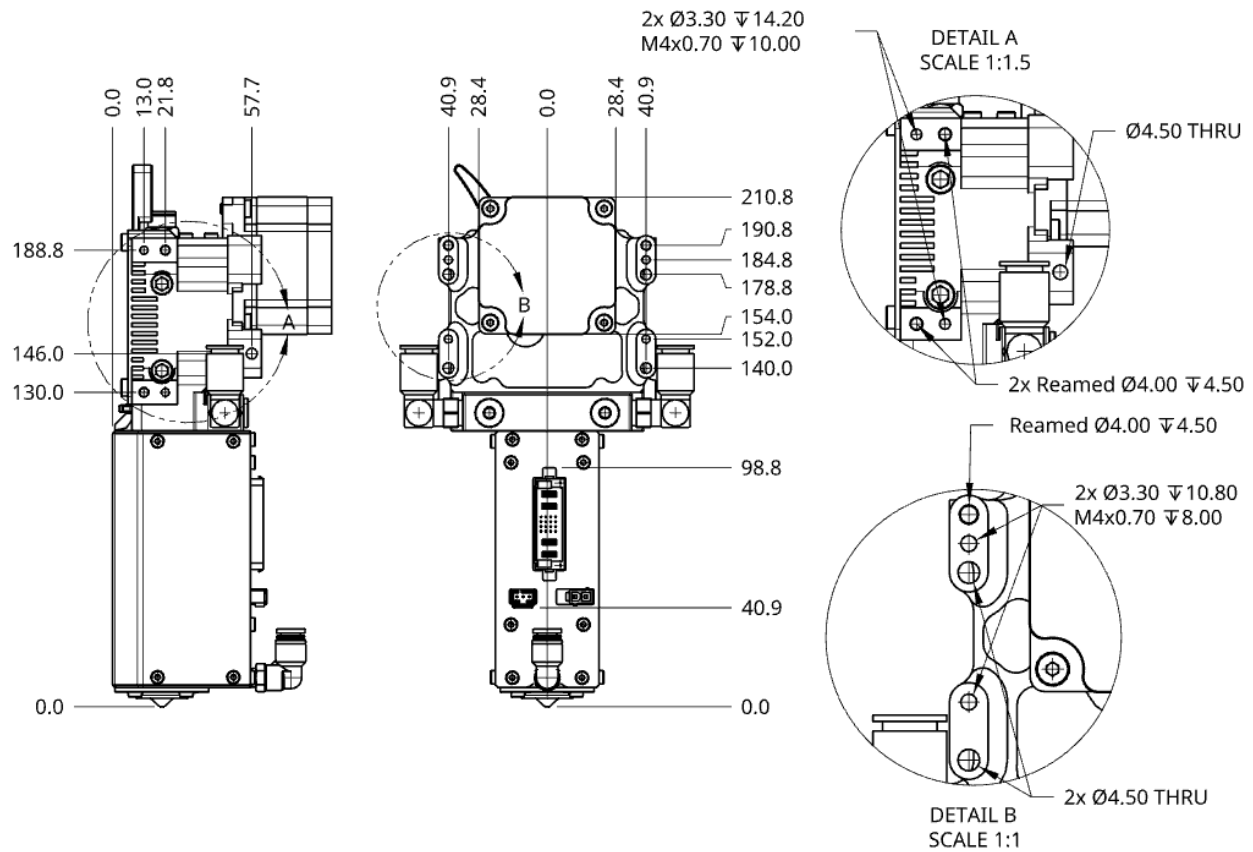
Polymer	Company	Test Temperature (C)	Recommended Flow (mm³/s)				
			2.50mm	1.80mm	1.20mm	0.90mm	0.60mm
PCL	Filaments.ca	140	74	47	31	25	21
PCL	Filaments.ca	140	78	50	34	29	24
LLDPE	Filaments.ca	200	142	112	86	71	55
PLA	Overture	210	128	104	79	67	51
PLA-N	3D Filkemp	215	113	94	70	55	35
NinjaFlex	TPU 3.00mm	230	30	25	20	18	15
ABS	Filaments.ca	230	145	125	86	70	60
TPU 91A	Filaments.ca	240	79	72	59	51	48
TPE 90A	Filaments.ca	240	79	68	53	45	33
TPE 85A	Filaments.ca	240	90	70	52	41	28
nGen	colorFabb	240	153	149	99	81	68
PP	FormFutura	240	200	178	142	130	92
PP	FormFutura	240	199	170	144	126	98
HIPS	Kodak	240	195	167	136	113	90
PA6	Kodak	250	95	85	77	70	65
D3 woodfill	Laywoo	250	216	203	180	164	138
PETG	Overture	250	137	127	101	81	72
ASA	Filaments.ca	250	182	158	114	86	72
PC CPE	Filaments.ca	260	139	120	107	90	82
Ultem PEI	Filaments.ca	330	75	73	68	63	59

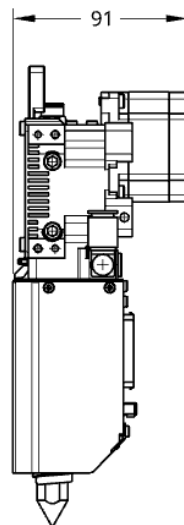
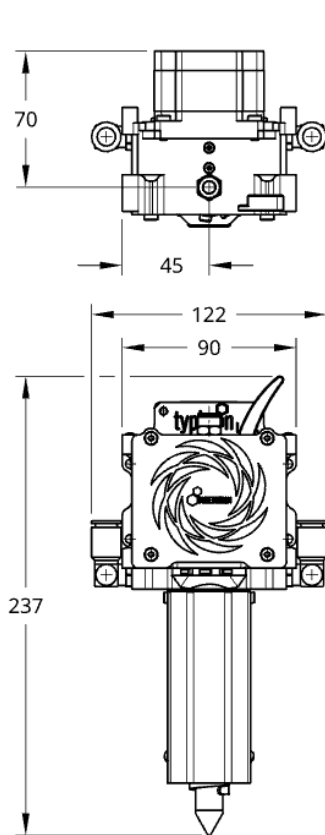
Drawings



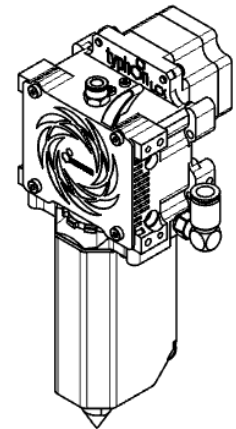
typhoon
LCX

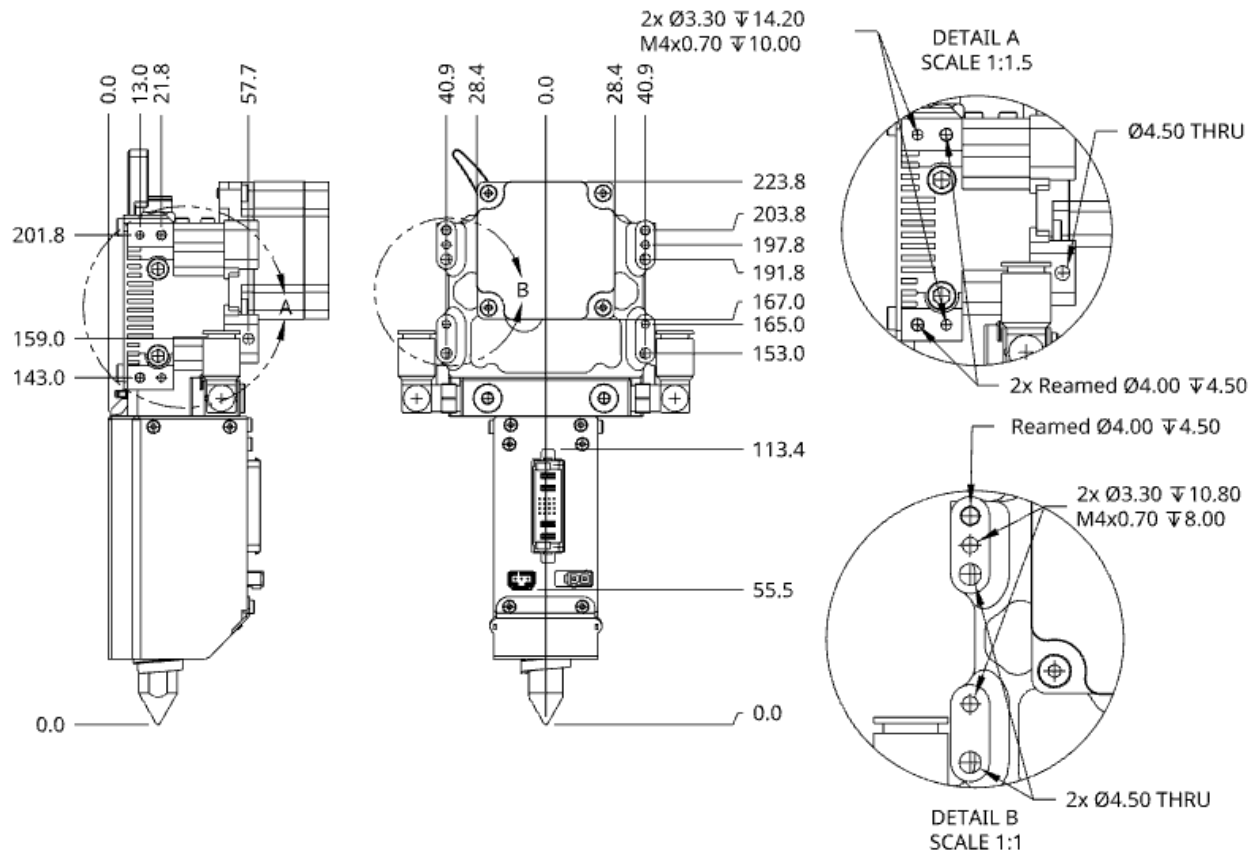


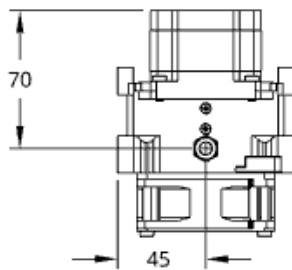




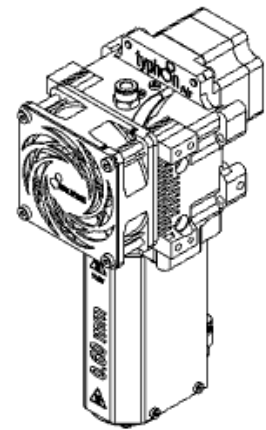
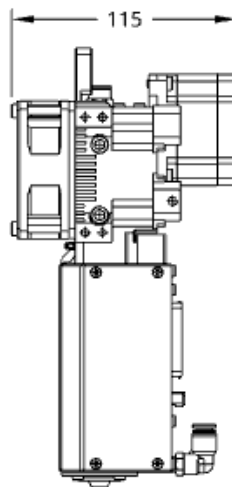
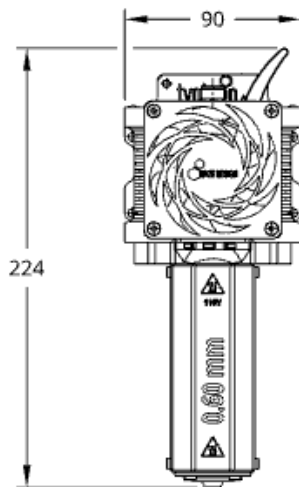
typhoon
LCX NP

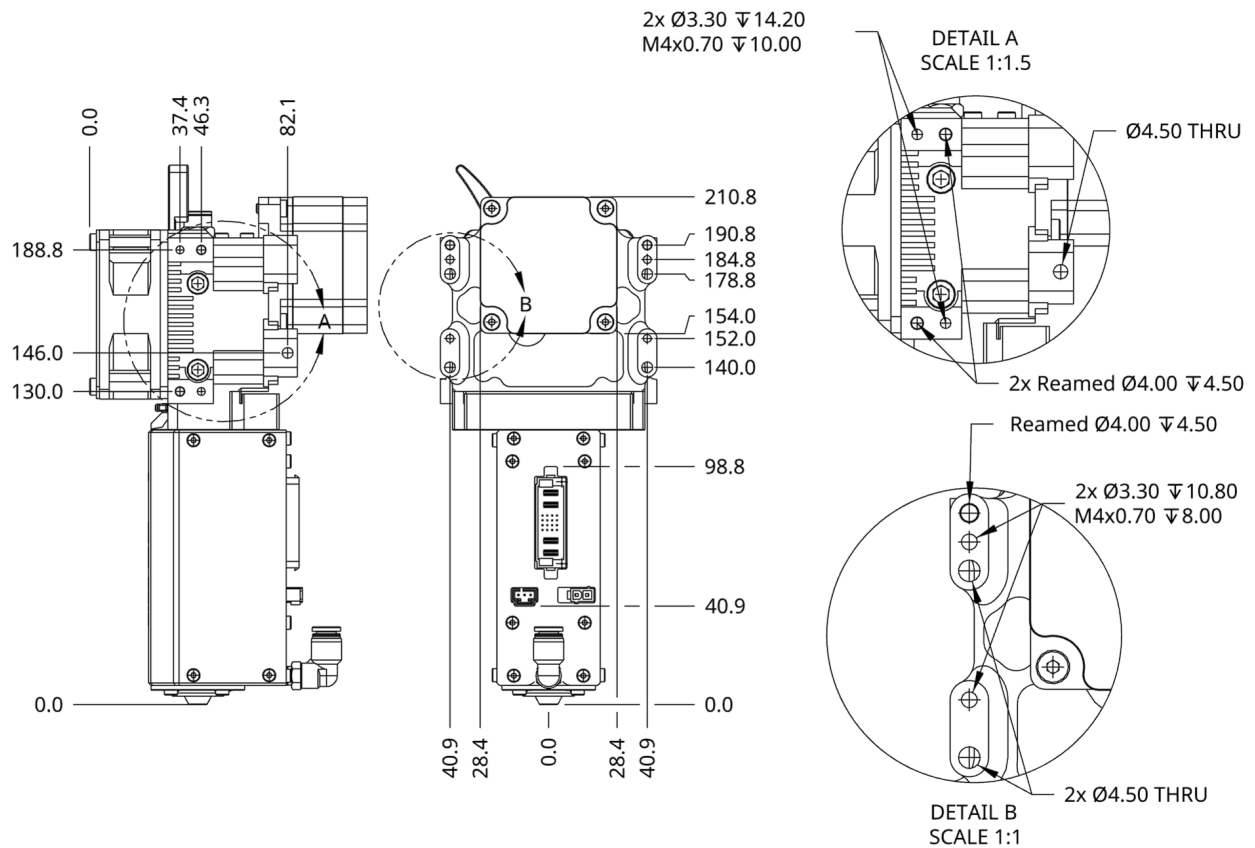


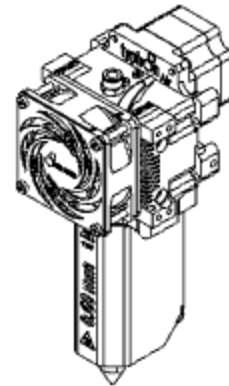
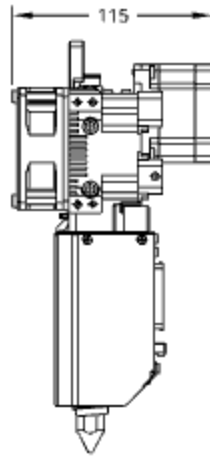
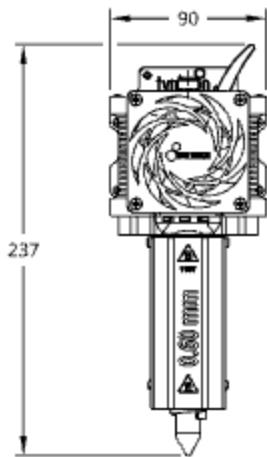
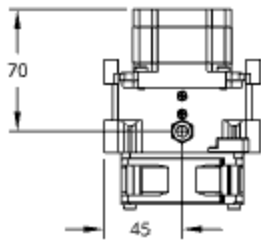




typhoon
AIR







typhoon
AIR NP

