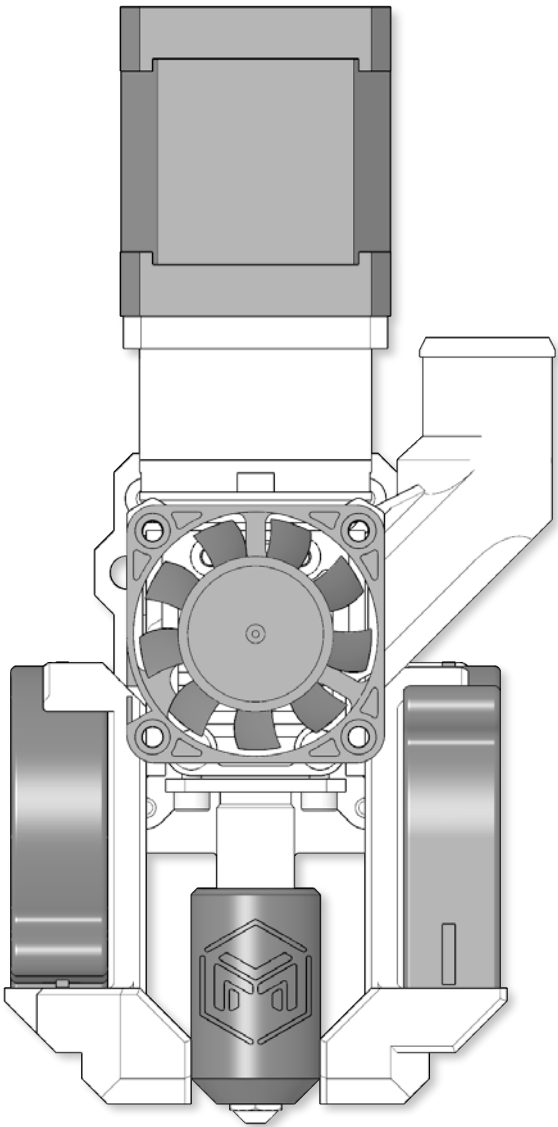
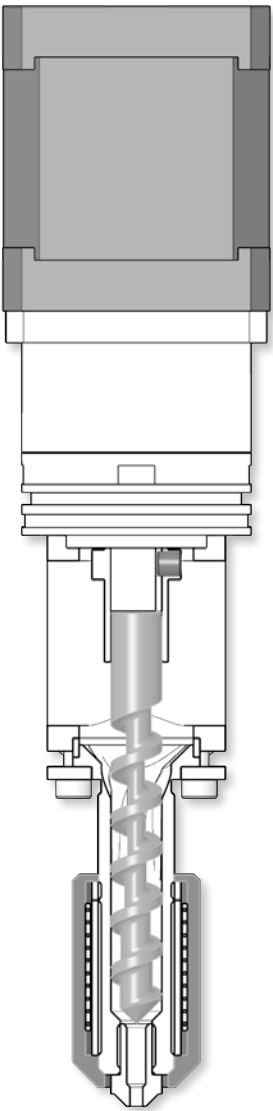
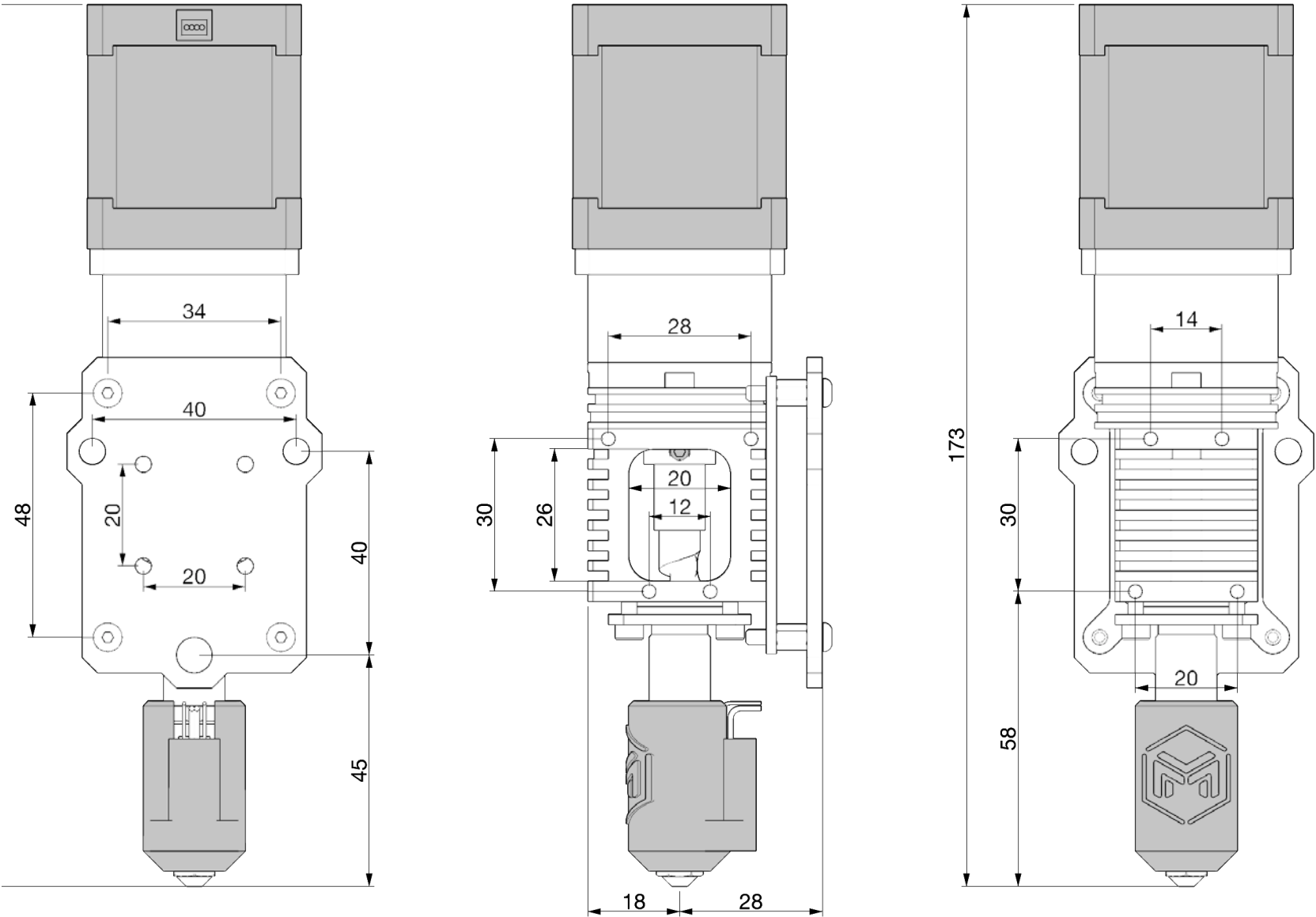


Product specifications		
Reference	V5-M8-HF-PG5	
Consumable	Pellet / Flakes	
	Diameter range	Ø1-4 mm
Screw	Material	Hardened steel
	Diameter	Ø8 mm
	Compression ratio	2:1
Barrel	Material	Brass
	Nozzle thread	M6
Nozzle	RepRap / E3D V6	0.8 mm
	Min-max	0.4-2 mm
Heating	CHC 24v 80w	6,5Ω ±10%
Thermistor	Ø3x15 mm	NTC 100k
Cooling Fan	Axial 4010	24v
Layer Fan	2x Blower 5015	24v
Motor	Ref:	17HS19-1684S-PG5
	Power	1.68 amps
	Ratio	5: 1
Flow	15-25 mm3/s	
Measurements	175 mm x 42 mm x 42 mm	
Weight	≈ 750g	



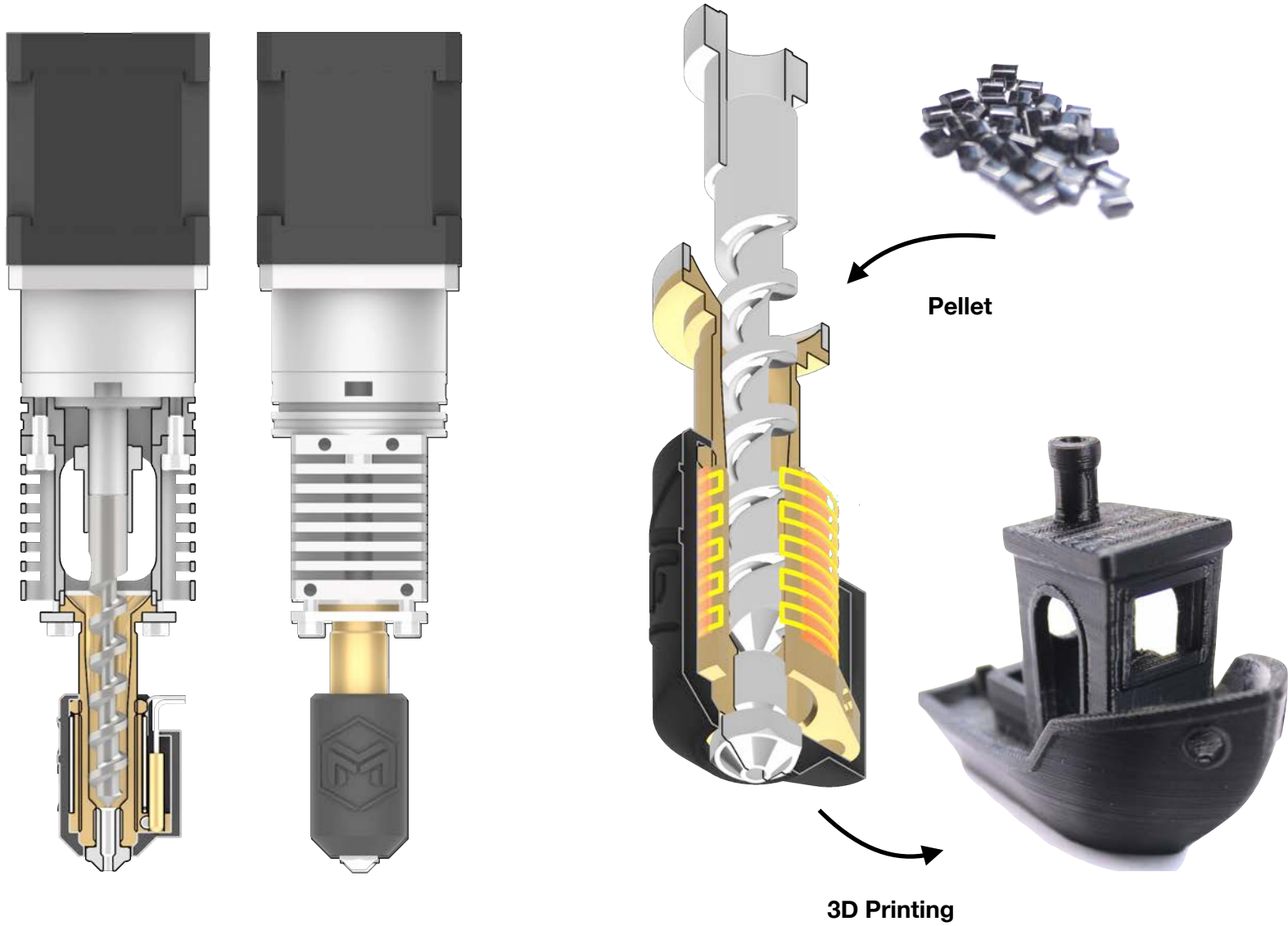
Dimensions



V5 Pellet Extruder

CHC Ceramic Heating Core

IAMTECH

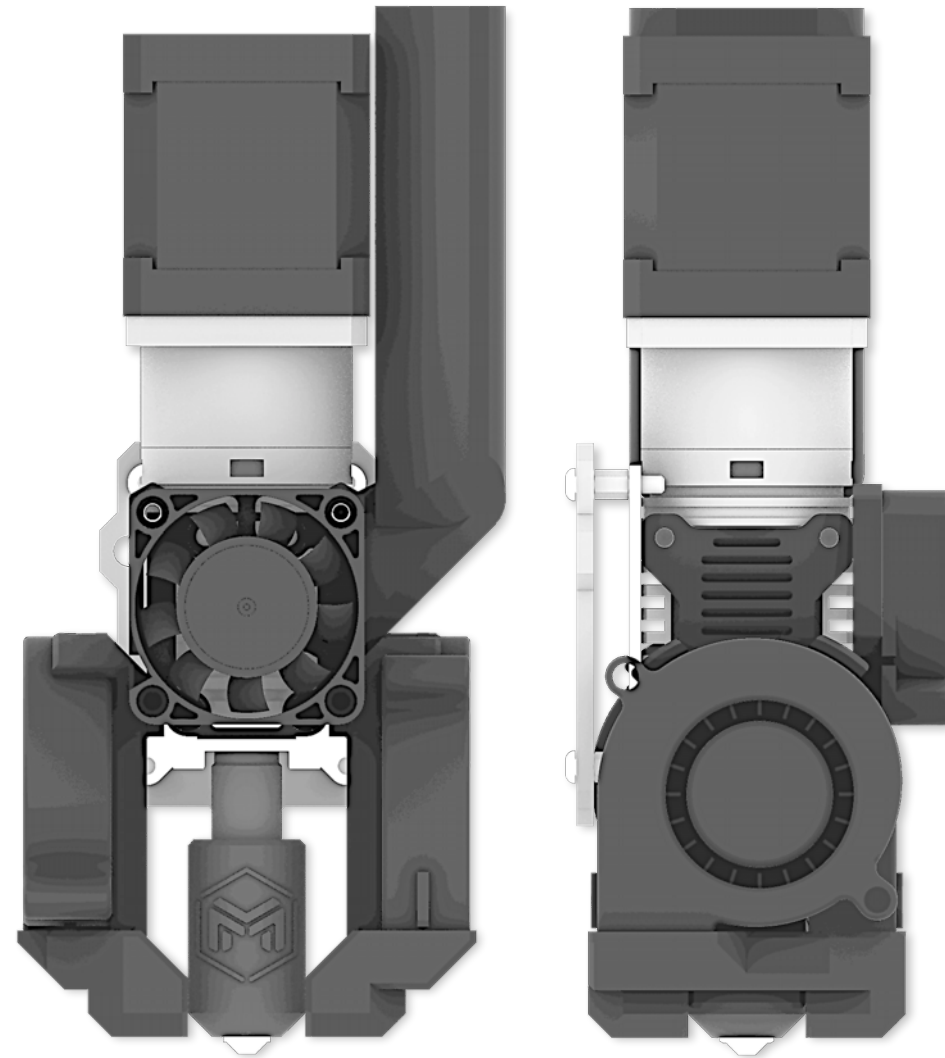
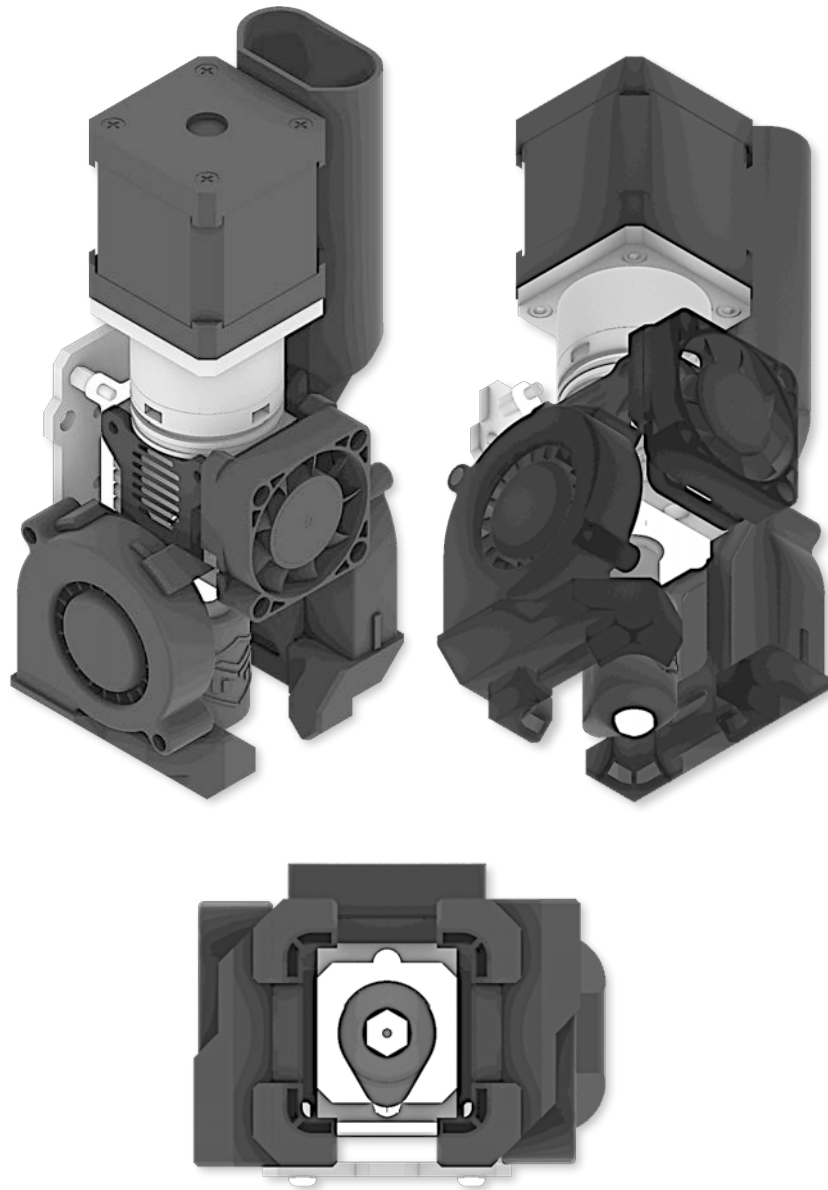


MAHOR·XYZ

V5 Pellet Extruder

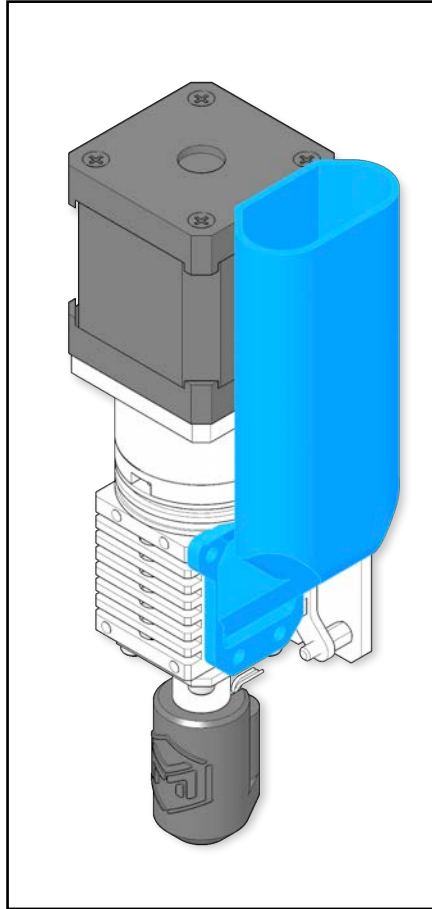
Over view

IAMTECH

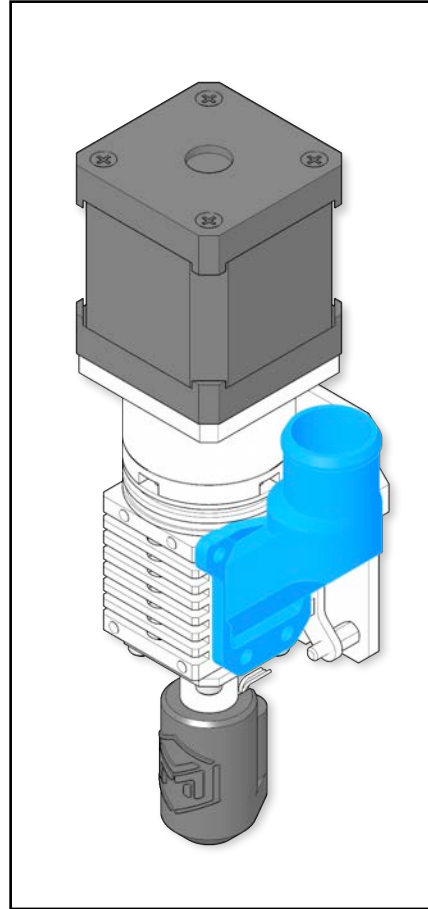


MAHOR·XYZ

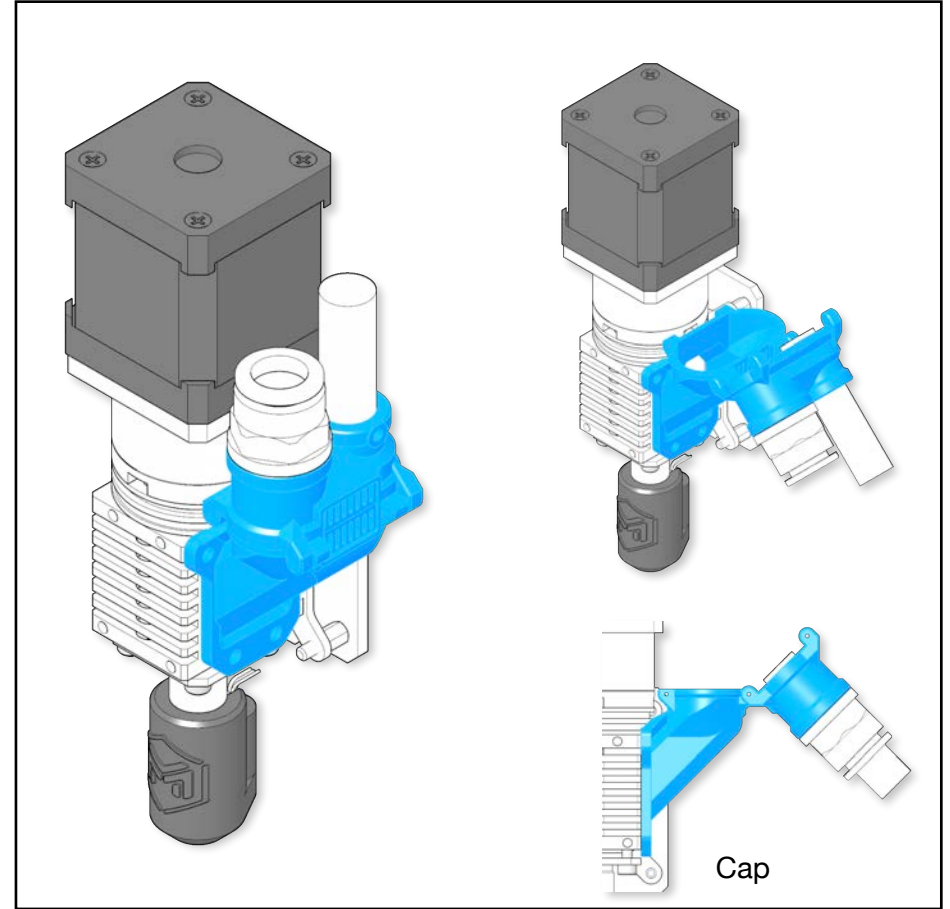
Feeding



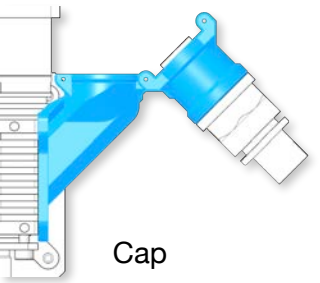
Direct



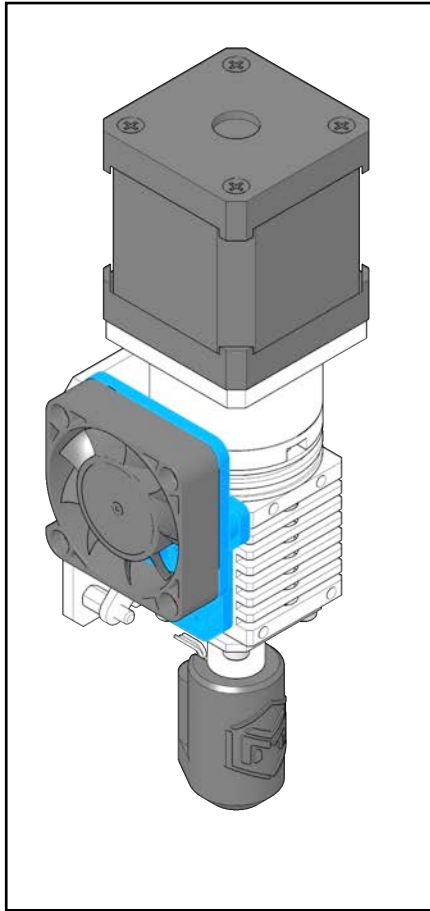
Ø20mm Tube connector



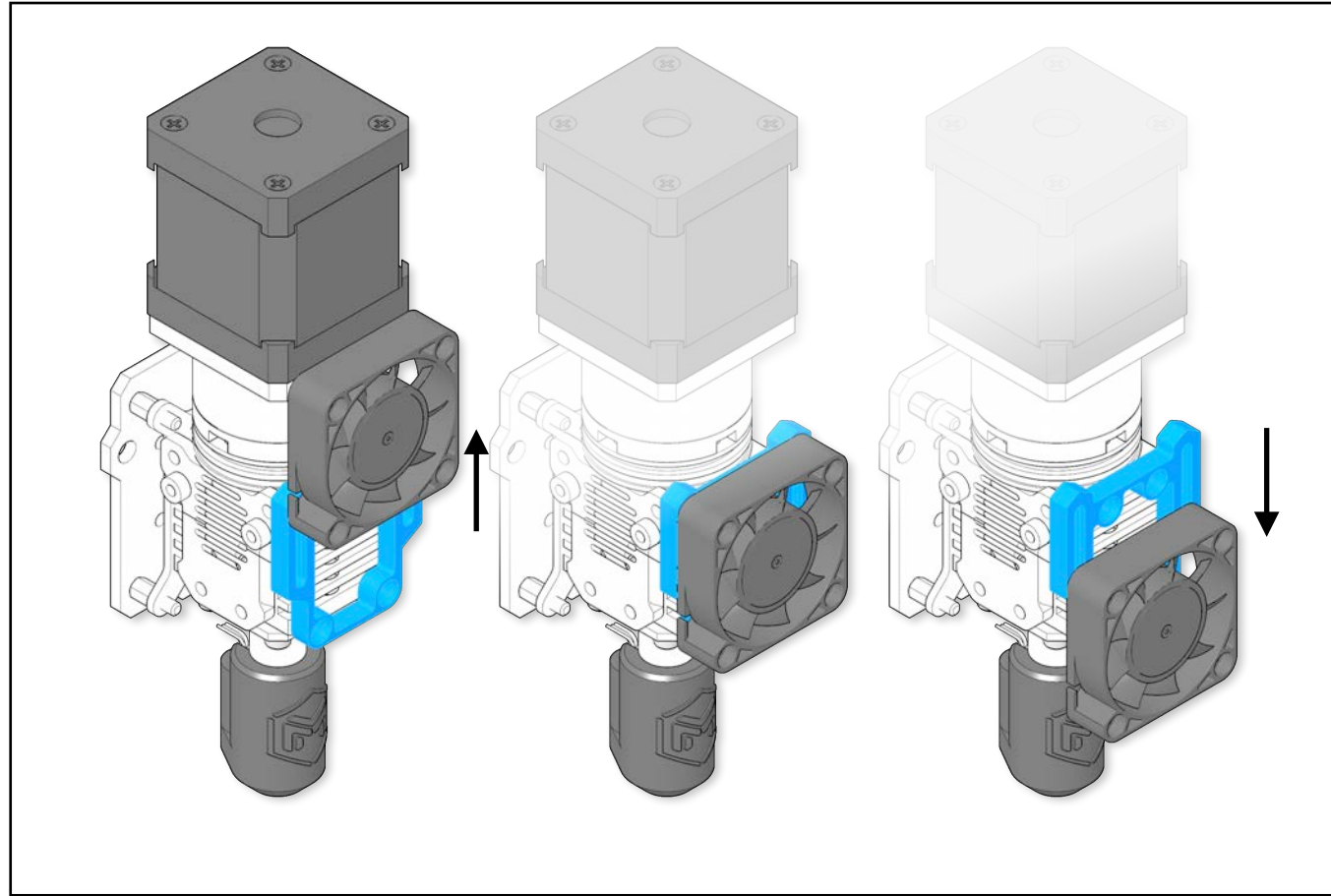
Automatic feeding



Cooling fan

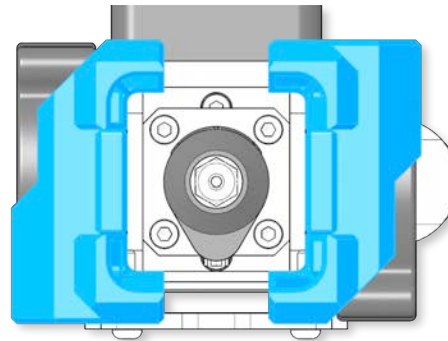
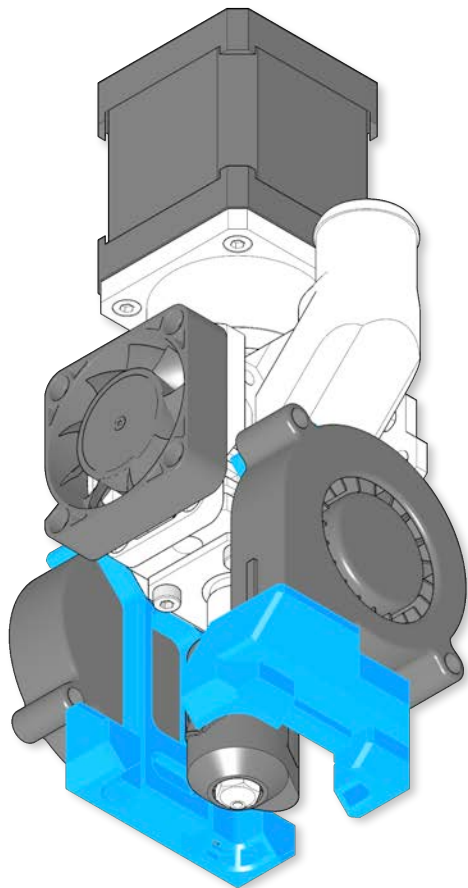


Direct 4010 fan

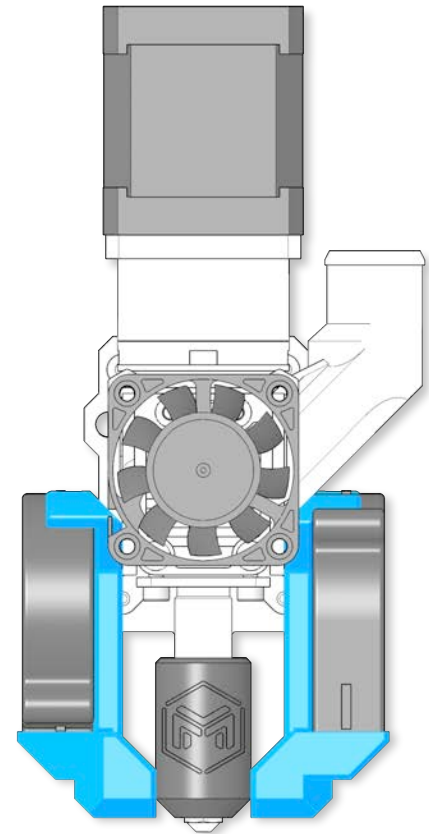
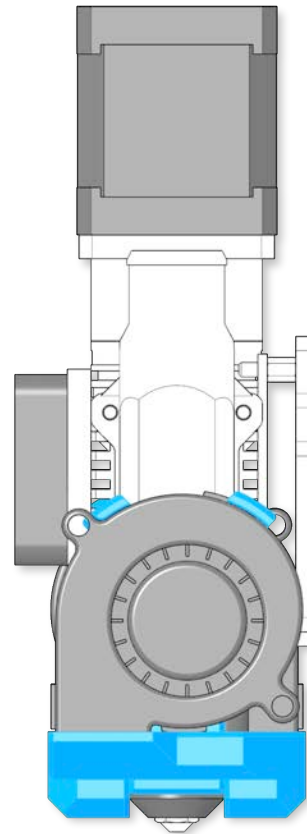
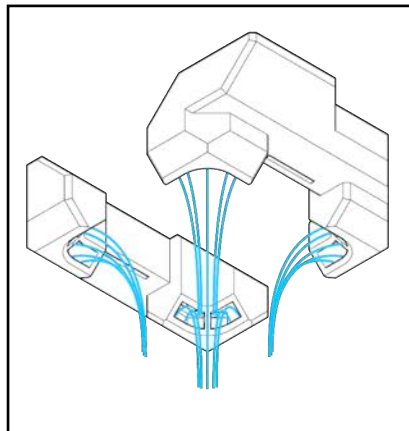


Adjustable indirect 4010 fan

Layer fan

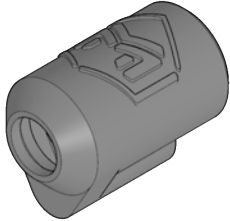


360° cooling

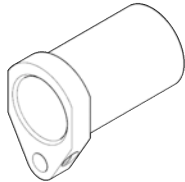


Extruder parts

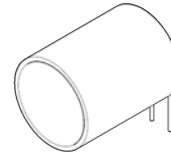
**Silicon sock
1420**



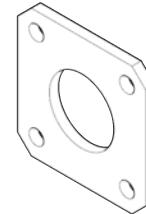
**Heating core
2014**



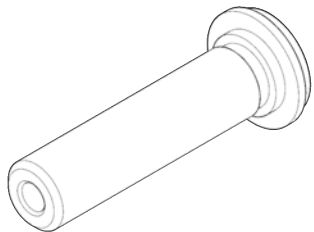
**Ceramic heater
1620**



**Barrel flange
282802**



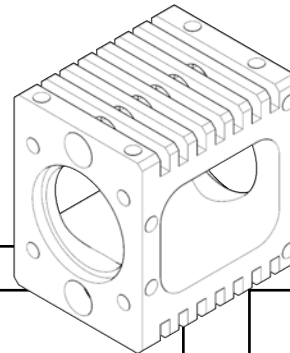
**Barrel
0852**



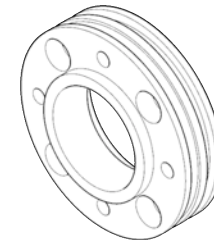
**Heatbreak ring
0320**



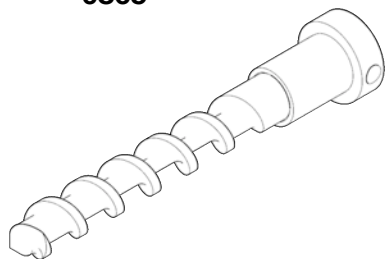
**Heatsink body
342836**



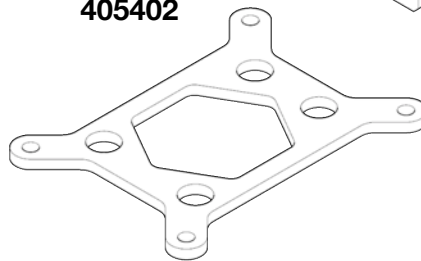
**Motor flange
3610**



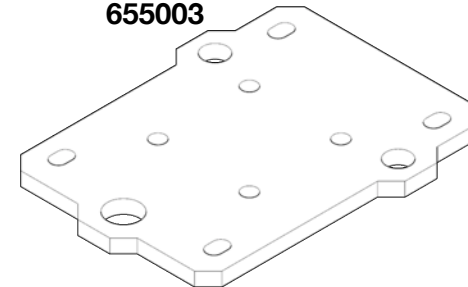
**Compression screw
0865**



**Side plate
405402**

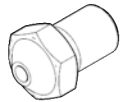


**Carriage plate
655003**



Standard parts

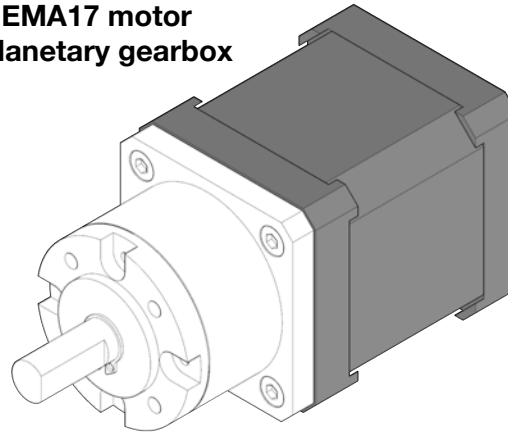
**E3D v6 /MK8
nozzle**



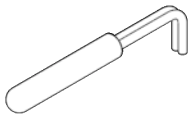
**Counter nut
M12x1**



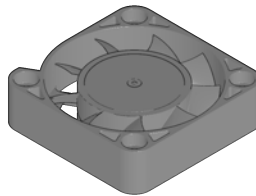
**NEMA17 motor
planetary gearbox**



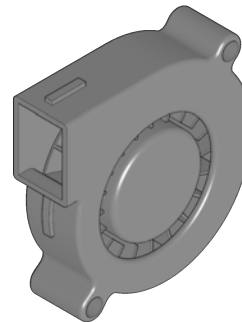
**Encapsulate thermistor
D3 L10-20**



4010 Fan

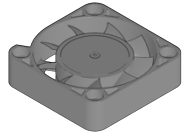


5015 Blower

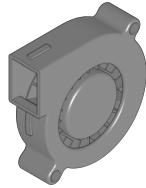


Exploded view

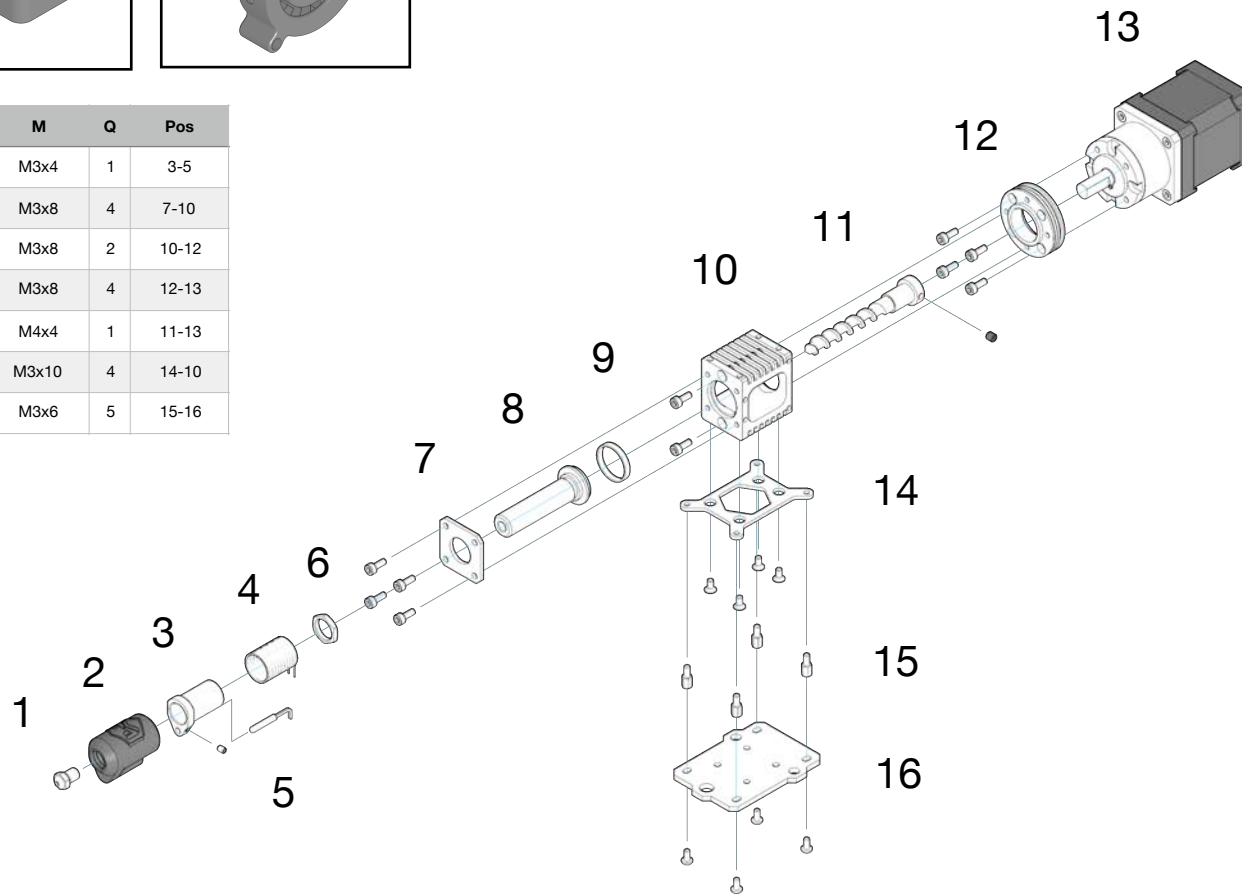
17



18



DIN / ISO	M	Q	Pos
DIN-913	M3x4	1	3-5
DIN-912	M3x8	4	7-10
DIN-912	M3x8	2	10-12
DIN-912	M3x8	4	12-13
DIN-913	M4x4	1	11-13
DIN-7991	M3x10	4	14-10
DIN-912	M3x6	5	15-16

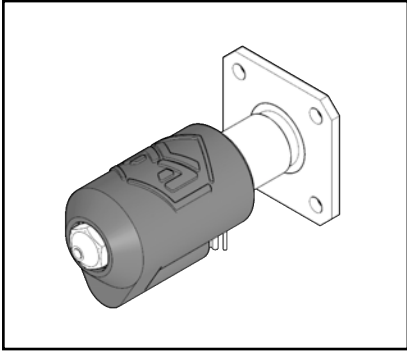
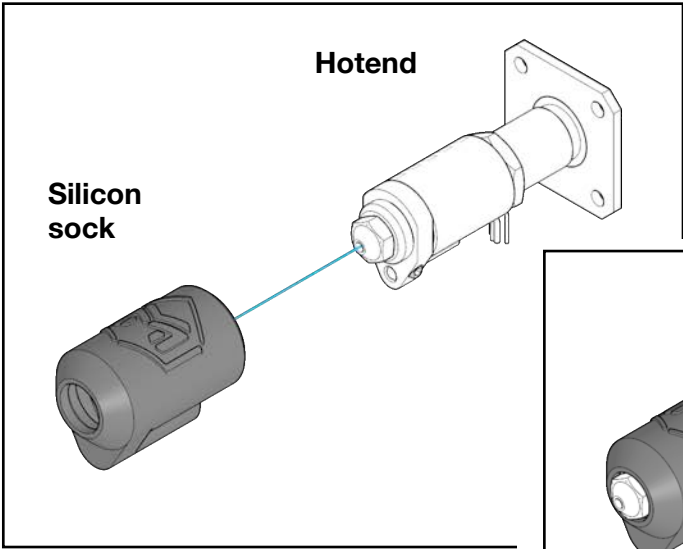
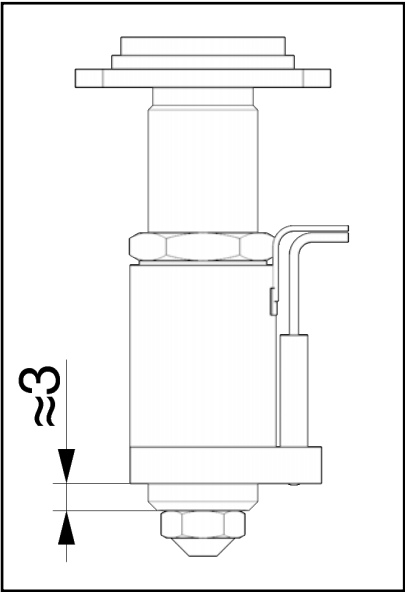
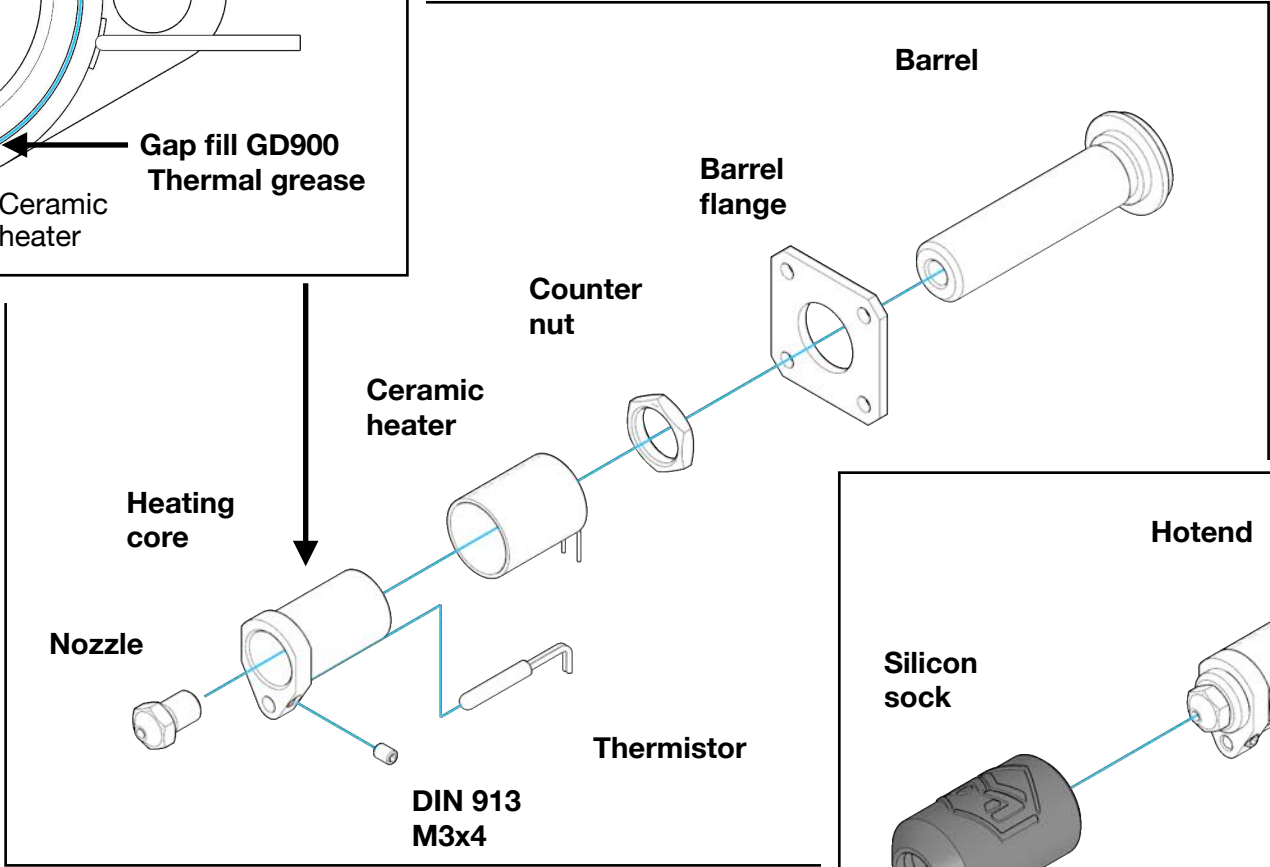
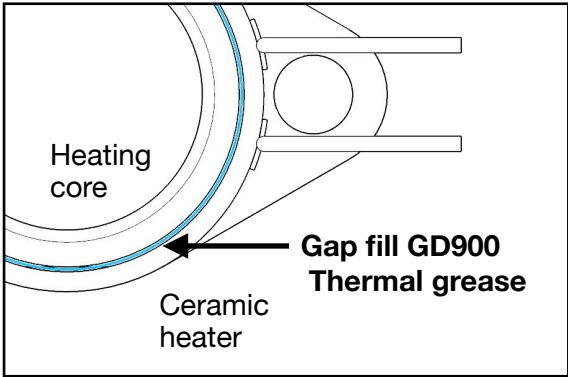


N°	NAME	REF
1	Nozzle	E3D v6 / Mk8
2	Silicon sock	1420
3	Heating core	2014
4	Ceramic heater	1620
5	Thermistor	NTC 100k
6	Counter nut	M12x1
7	Barrel flange	282802
8	Barrel	0852
9	Heatbreak ring	0320
10	Heatsink body	342836
11	Compression screw	0865
12	Motor flange	3610
13	Motor planetary gearbox	NEMA17-PG5
14	Side plate	405402
15	Male-female standoff	M3x6
16	Carriage plate	655003
17	Cooling Fan	4010
18	Layer fan	5015

V5 Pellet Extruder

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Extruder assembly

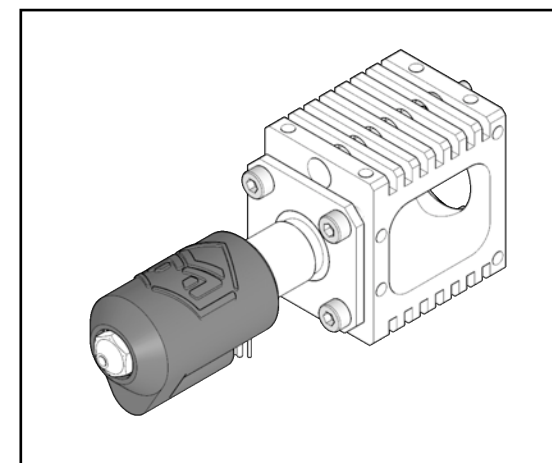
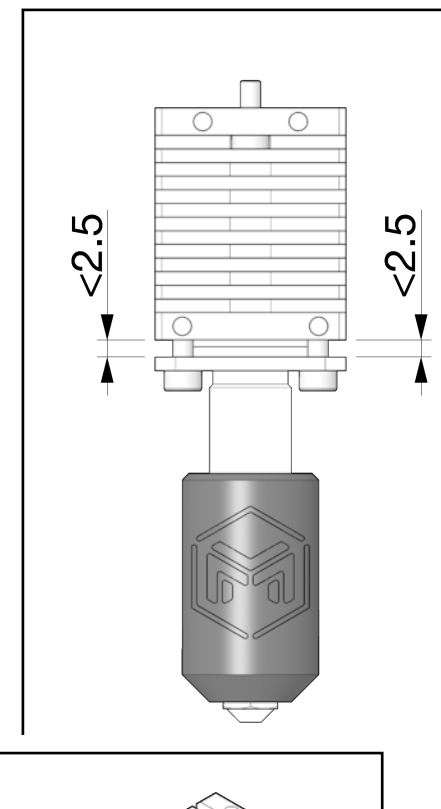
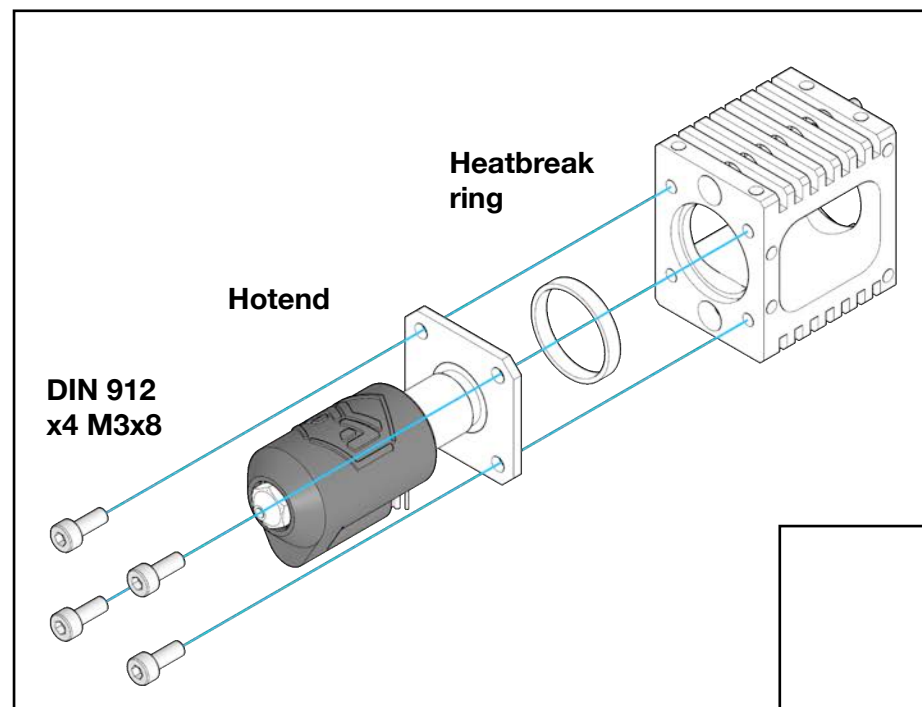
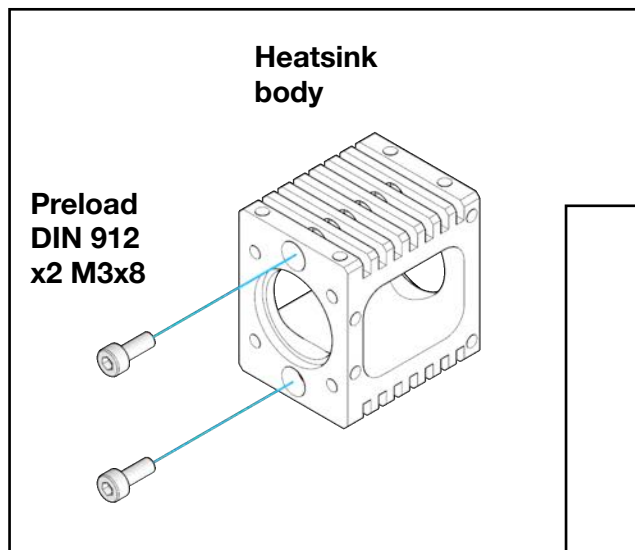


MAHOR·XYZ

V5 Pellet Extruder

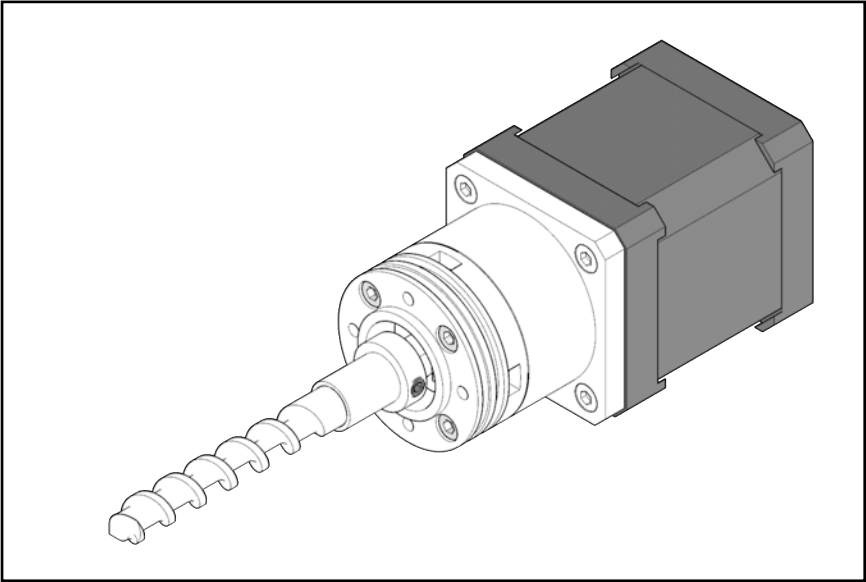
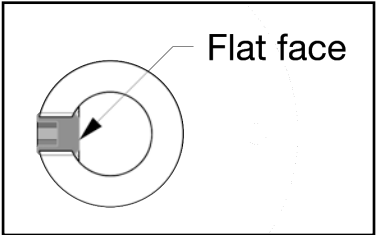
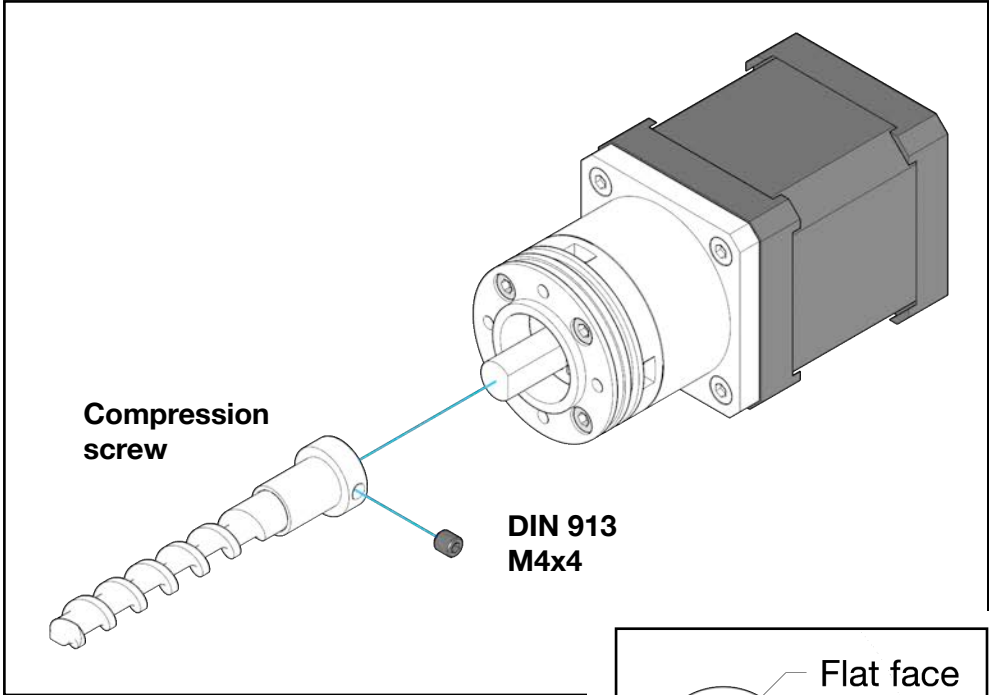
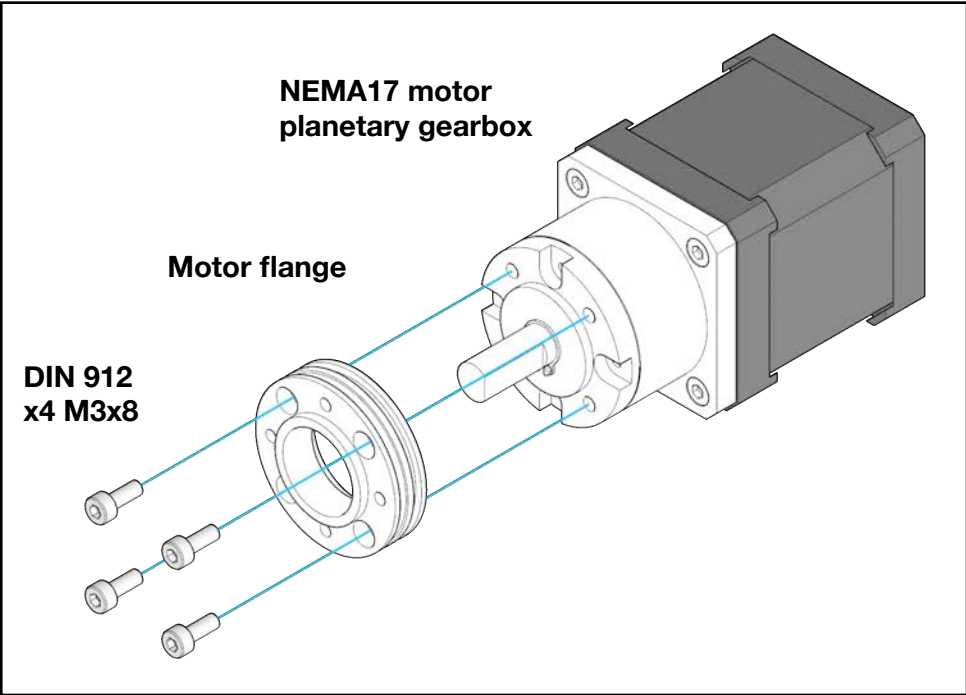
IAMTECH

Extruder assembly

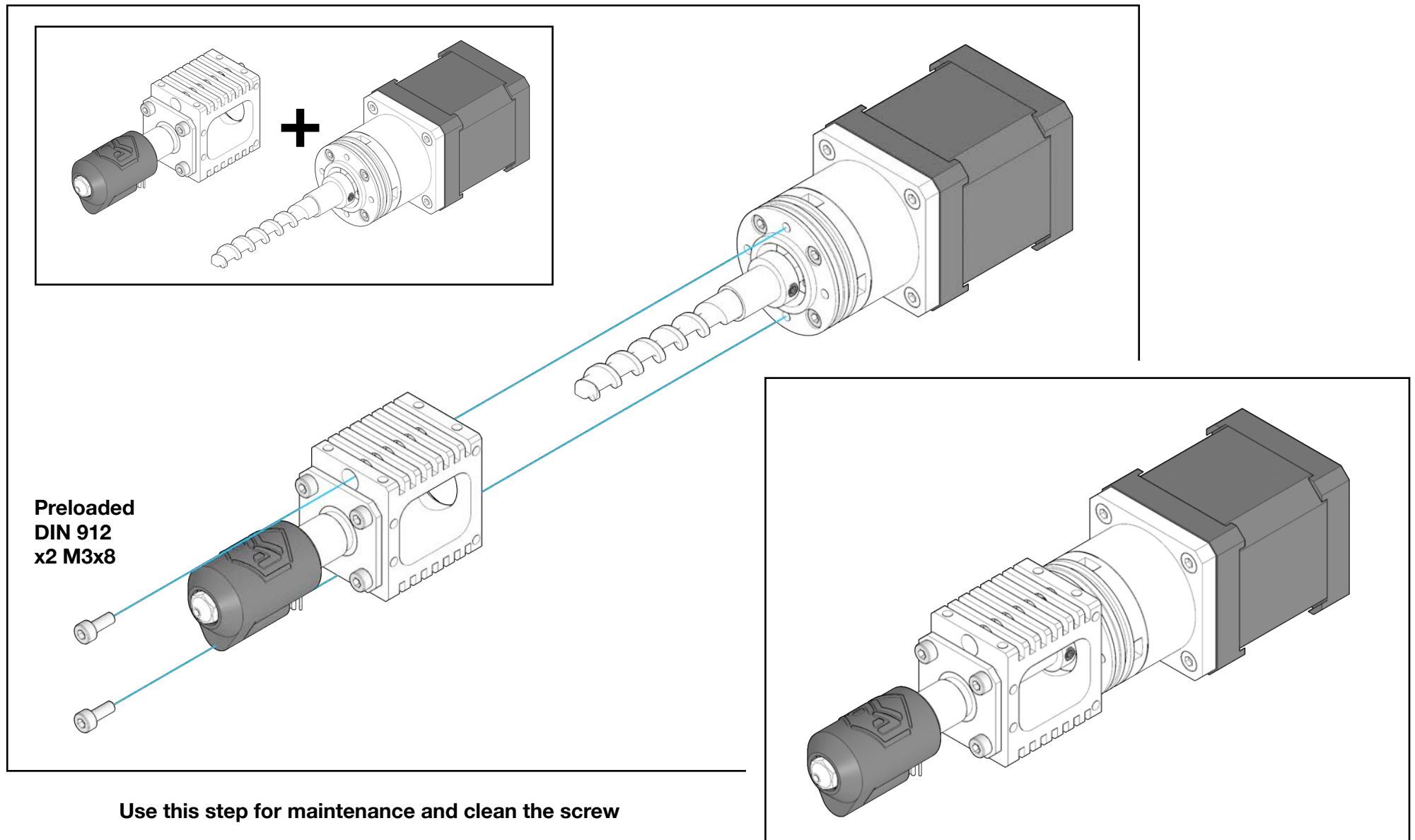


MAHOR·XYZ

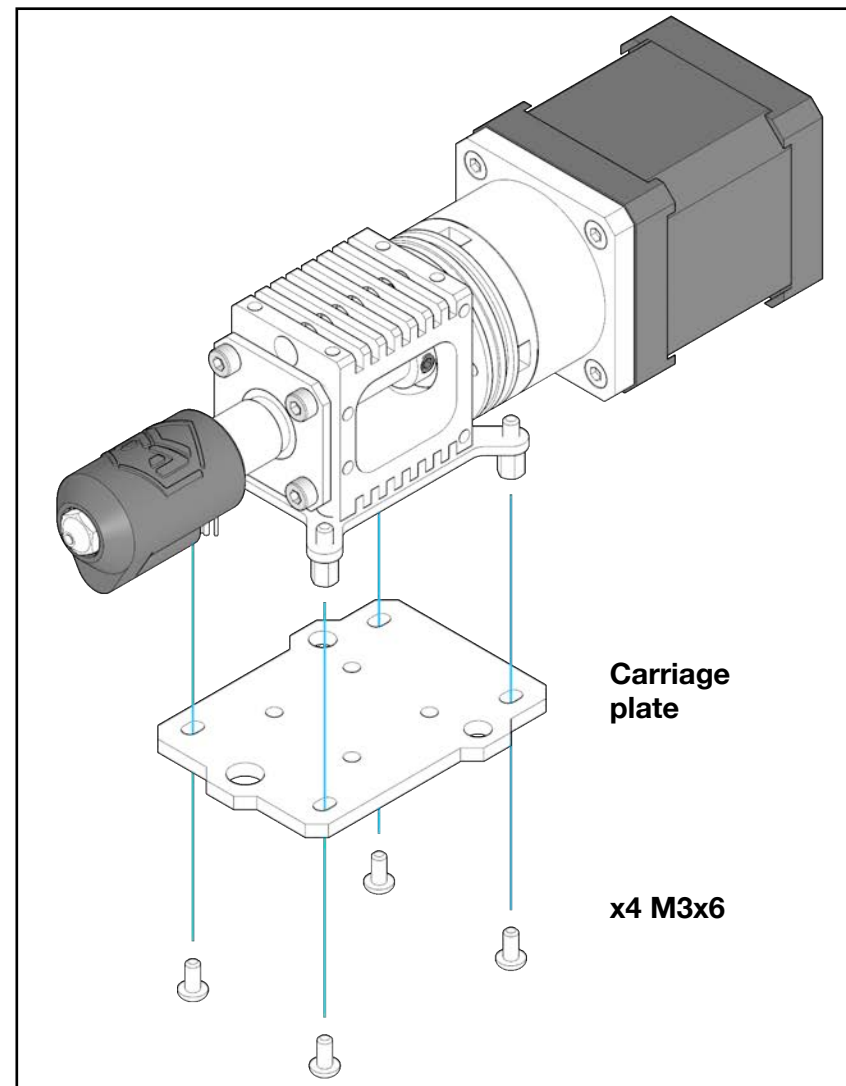
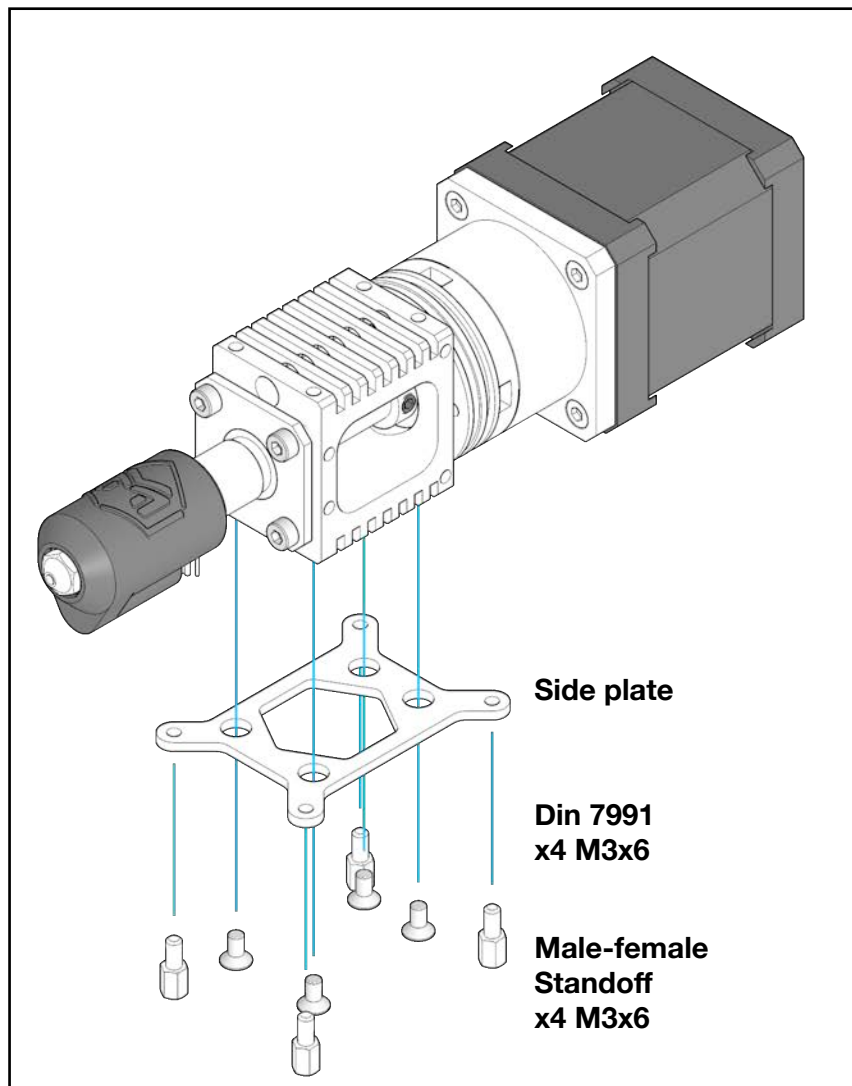
Extruder assembly



Extruder assembly

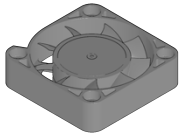


Extruder assembly

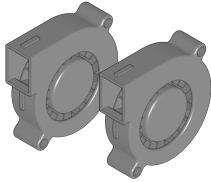


PACK

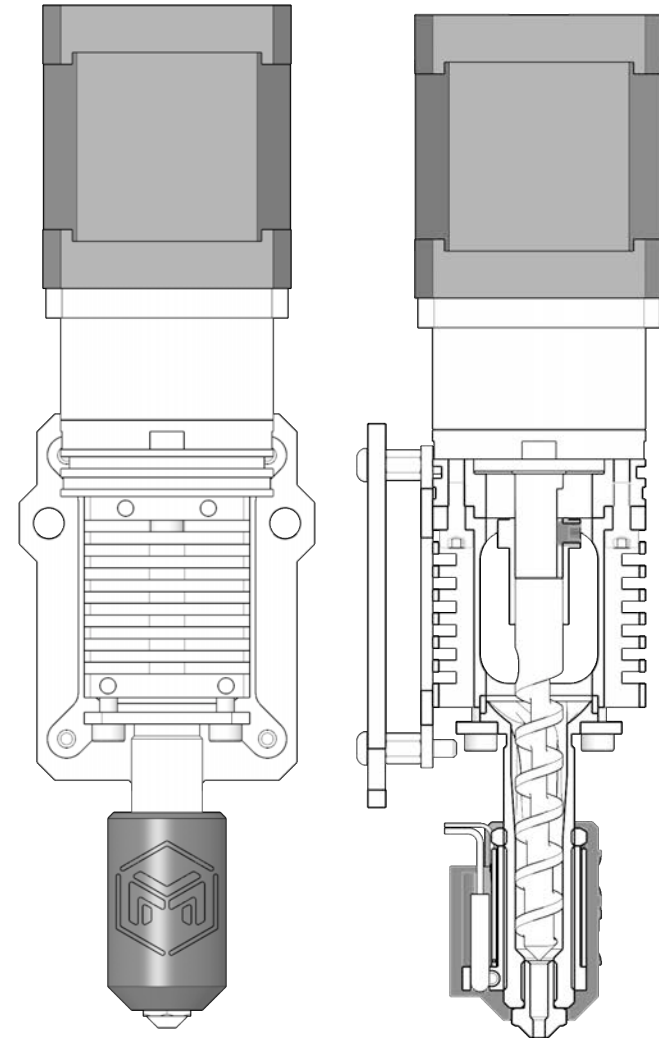
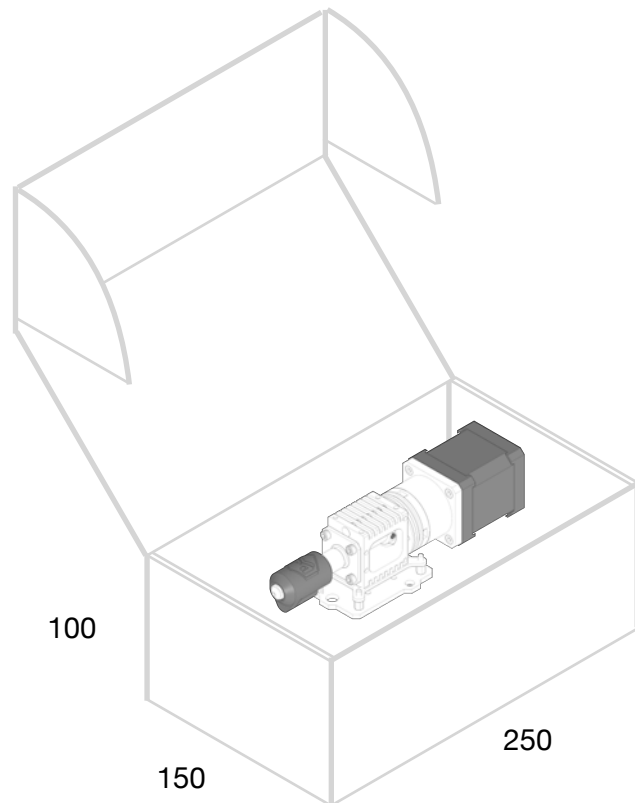
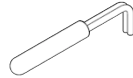
4010 Fan



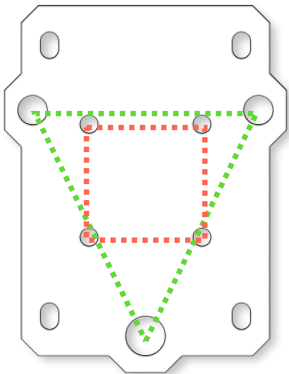
5015 Blower



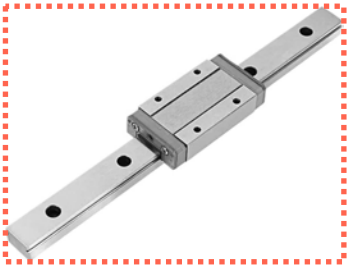
NTC 100K



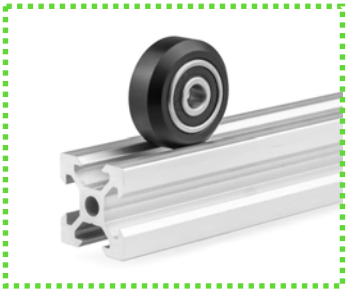
Printer installation



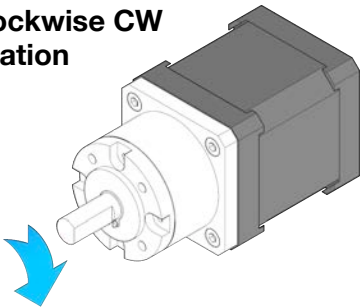
MGN12H



2020 V-slot



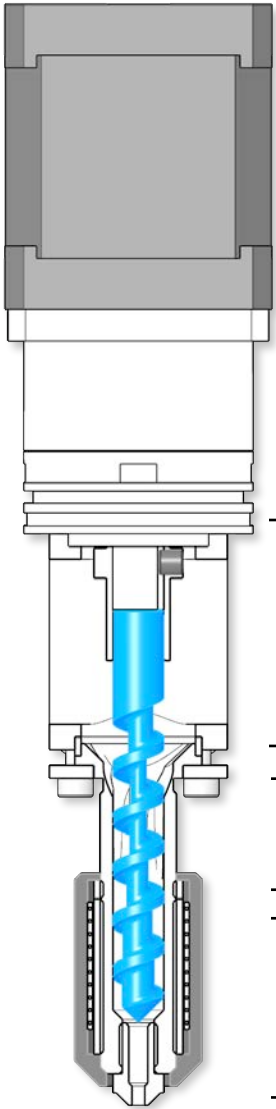
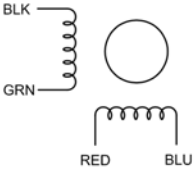
Clockwise CW
rotation



TYPE OF CONNECTION (EXTERN)		MOTOR	
PIN NO	BIPOLAR	LEADS	WINDING
1	A+ —	BLK	A+ A-
2	A- —	GRN	
3	B+ —	RED	B+ B-
4	B- —	BLU	

FULL STEP 2 PHASE-Ex. ,
WHEN FACING MOUNTING END (X)

STEP	A+	B+	A-	B-		CCW	
1	+	+	-	-			
2	-	+	+	-	↓		↑
3	-	-	+	+			
4	+	-	-	+		CW	



Ambient cooling

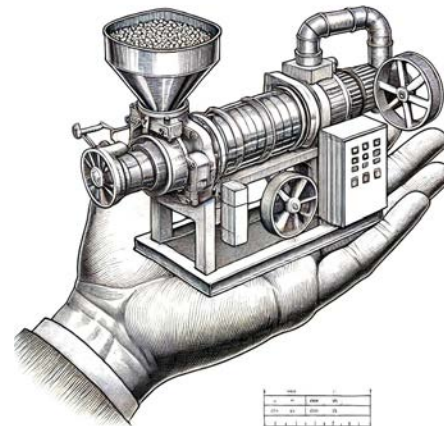
Glass transition (T_g)

Melting (T_m)

<https://mahor.xyz/>

<https://mahor.xyz/downloads/>

<https://mahor.xyz/producto/feedstock-lite/>



3D pellet extruder is a concept of miniaturisation and precision in **additive manufacturing**.

It represents the evolution toward **compact, efficient, and automated systems** that optimise resources and enhance control.

By integrating advanced engineering and automation, it enables **precise material processing, improving sustainability and adaptability** in modern production.