

Print settings - Desktop Filament Extruder MK1 by ARTME 3D

Version 27.06.2022

Printer size and amount of material:

Part EL15 and EL16 require a printer with at least 203mm wide print area.

In a pinch, these parts can be printed standing on end, but this requires a lot of support structure.

All other parts are printable with a print bed size below 180x180 mm.

Total amount of material required 1100g (Can be divided into 900g PETG and 220g PLA. See material recommendation).

Nozzle size and Layer height:

The settings are for printing with a 0.4mm nozzle. The printed line width corresponds to the basic setting in Prusaslicer, or 0.4mm.

Material recommendation:

ED02-hopper Part 1: PETG (since thermally very loaded)

IN02-cover body: PETG (since thermally very loaded)

IN03-cover top left: PETG (since thermally very loaded)

IN04-cover top right: PETG (since thermally very loaded)

EL16-Arduino case top: PLA (because of strong warping when printing with PETG due to the body shape)

EL15-control Box bottom: PLA (because of strong warping when printing with PETG due to the body shape)

All other parts: PETG or PLA

Color:

The part SO04_sensor shutter must be printed in white to perform the function.

For all other parts, you are free to choose the color. However, since the recognition value of the extruder is greatest in white and one part must be printed in white anyway, it would be nice if you print all parts in white.

Other:

The SO04_sensor shutter part must be printed as solid as possible (without air in the filling). The part must be printed in white color as said before.

SD08.1 to SD08.11: Select the adapter according to the inner diameter of the filament spool used.

Print settings for all parts (as a guide, no obligation to print this way):

Number	Quantity	Name	need	wall lines	top/bottom layers	infill	support	adhesion
Extruder Barrel								
EB07	1	barrel sign template	needed	3	3	30	no	Skirt
EB08	1	melt filter Punching tool	needed	5	5	100	no	Skirt
EB09	1	melt filter drawing template	needed	3	3	30	no	Skirt
Extruder Drive								
ED01	1	coupling	needed	6	6	80	no	Skirt
ED02	1	hopper part1	needed	3	3	30	no	Brim 6mm
ED03	1	hopper part2	needed	3	3	30	no	Brim 6mm
ED04	1	hopper part3	needed	3	3	30	no	Brim 6mm

Spool drive								
SD01	1	Spool holder bracket	needed	6	6	80	no	Skirt
SD02	1	Spacer	needed	3	3	100	no	Brim 6mm
SD03	1	Spool holder disc	needed	6	6	80	only buildplate	Skirt
SD04	1	Spool holder disc lid 1	needed	6	6	100	no	Skirt
SD05	1	Motor mount	needed	6	6	80	no	Skirt
SD06	1	Motor mount lid	needed	6	6	30	no	Skirt
SD07	1	Belt tensioner	needed	6	6	30	no	Brim 6mm
SD08.1	1	Spool adapter 50mm (option)	option	3	3	30	no	Skirt
SD08.2	1	Spool adapter 51mm (option)	option	3	3	30	no	Skirt
SD08.3	1	Spool adapter 52mm(option)	option	3	3	30	no	Skirt
SD08.4	1	Spool adapter 53mm (option)	option	3	3	30	no	Skirt
SD08.5	1	Spool adapter 54mm (option)	option	3	3	30	no	Skirt
SD08.6	1	Spool adapter 55mm (option)	option	3	3	30	no	Skirt
SD08.7	1	Spool adapter 56mm (option)	option	3	3	30	no	Skirt
SD08.8	1	Spool adapter 57mm (option)	option	3	3	30	no	Skirt
SD08.9	1	Spool adapter 58mm (option)	option	3	3	30	no	Skirt
SD08.10	1	Spool adapter 59mm (option)	option	3	3	30	no	Skirt
SD08.11	1	Spool adapter 60mm (option)	option	3	3	30	no	Skirt
SD09	1	Spool holder disc lid 2	needed	6	6	100	no	Skirt
Filament Guide								
FG01	1	hook left	needed	3	3	100	no	Brim 6mm
FG02	1	hook rechts	needed	3	3	100	no	Brim 6mm
FG03.1	1	swing for 0.7 bis 1.0kg spools	needed	3	3	100	no	Skirt
FG03.2	1	swing for 2.5kg spools (option)	option	3	3	100	no	Skirt
FG04	1	crossbrace 1	needed	3	3	100	no	Skirt
FG05	1	crossbrace 2	needed	3	3	100	no	Skirt
FG06	1	lifter	needed	3	3	30	no	Skirt
FG07	2	Rails	needed	3	3	100	no	Brim 6mm
FG08	1	sledge part1	needed	6	6	50	no	Skirt
FG09	1	sledge part2	needed	6	6	50	no	Skirt
FG10.1	1	Spiral axis for 1,75mm Part1	needed	3	3	30	no	Skirt
FG10.2	1	Spiral axis for 1,75mm Part2	needed	3	3	30	no	Skirt
FG10.3	1	Spiral axis for 2,85mm Part1	option	3	3	30	no	Skirt
FG10.4	1	Spiral axis for 2,85mm Part2	option	3	3	30	no	Skirt
FG11	1	axis holder right	needed	3	3	30	no	Skirt
FG12	1	snap part 1	needed	3	3	100	no	Skirt

FG13	1	snap part 2	needed	3	3	100	no	Skirt
FG14	1	plow	needed	3	3	100	all	Brim 6mm
FG15	1	axis holder left	needed	3	3	30	no	Skirt
FG16	2	stopper	needed	3	3	30	no	Skirt
Filament Puller								
FP01	1	motor mount Part 1	needed	3	3	30	no	Skirt
FP02	1	motor mount Part 2	needed	3	3	30	no	Skirt
FP03	1	motor mount Part 3	needed	3	3	30	no	Skirt
FP04	1	lever	needed	3	3	30	no	Skirt
FP05	1	disc	needed	3	3	30	no	Skirt
FP06	1	filament guide	needed	3	3	30	no	Skirt
Electronics								
EL15	1	control box bottom	needed	3	3	30	no	Skirt
EL16	1	control box lid	needed	3	3	30	no	Skirt
EL17	1	terminal block holder	needed	3	3	30	no	Skirt
EL18	2	connection housing body	needed	3	3	30	no	Skirt
EL19	2	connection housing cover	needed	3	3	30	no	Skirt
EL20	2	fan holder	needed	3	3	30	no	Skirt
EL21	3	profile clip	needed	3	3	30	no	Skirt
Sensor optical								
SO01	1	sensor holder part 1	needed	3	3	30	no	Skirt
SO02	1	sensor holder part 2	needed	3	3	30	no	Skirt
SO03	1	sensor body	needed	3	3	30	no	Skirt
SO04	1	sensor arm	needed	3	3	100	no	Skirt
SO05	1	sensor shutter	needed	3	3	100	no	Brim 6mm
SO06	1	bending aid	needed	3	3	30	no	Skirt
Insulation								
IN02	1	cover body	needed	3	3	30	no	Skirt
IN03	1	cover top left	needed	3	3	30	no	Skirt
IN04	1	cover top right	needed	3	3	30	no	Skirt