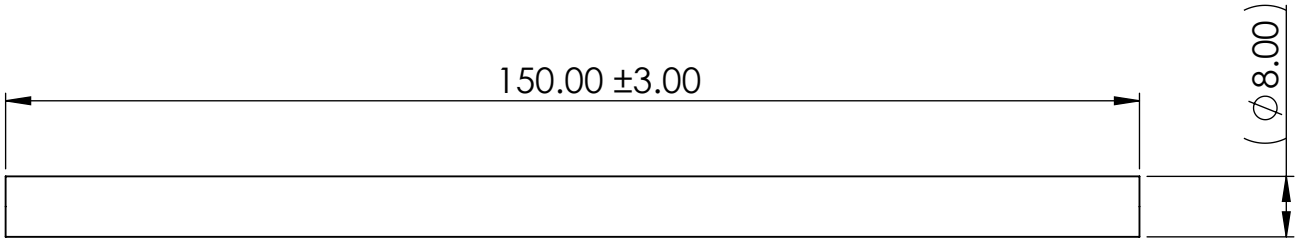


NOTE:
1. MATERIAL: POLISHED 52100 ALLOY STEEL SHAFT, MCMASTER-CARR P/N: 5033N132.
2. PROTECT SHAFT FROM SCRATCHES, NICKS, BURRS OR ANY OTHER DAMAGE.

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED:

BREAK ALL SHARP EDGES
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±
INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL
52100 Alloy Steel

FINISH
No

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

COMMENTS:

Vladimir Tyrkin

veres.pcb@gmail.com

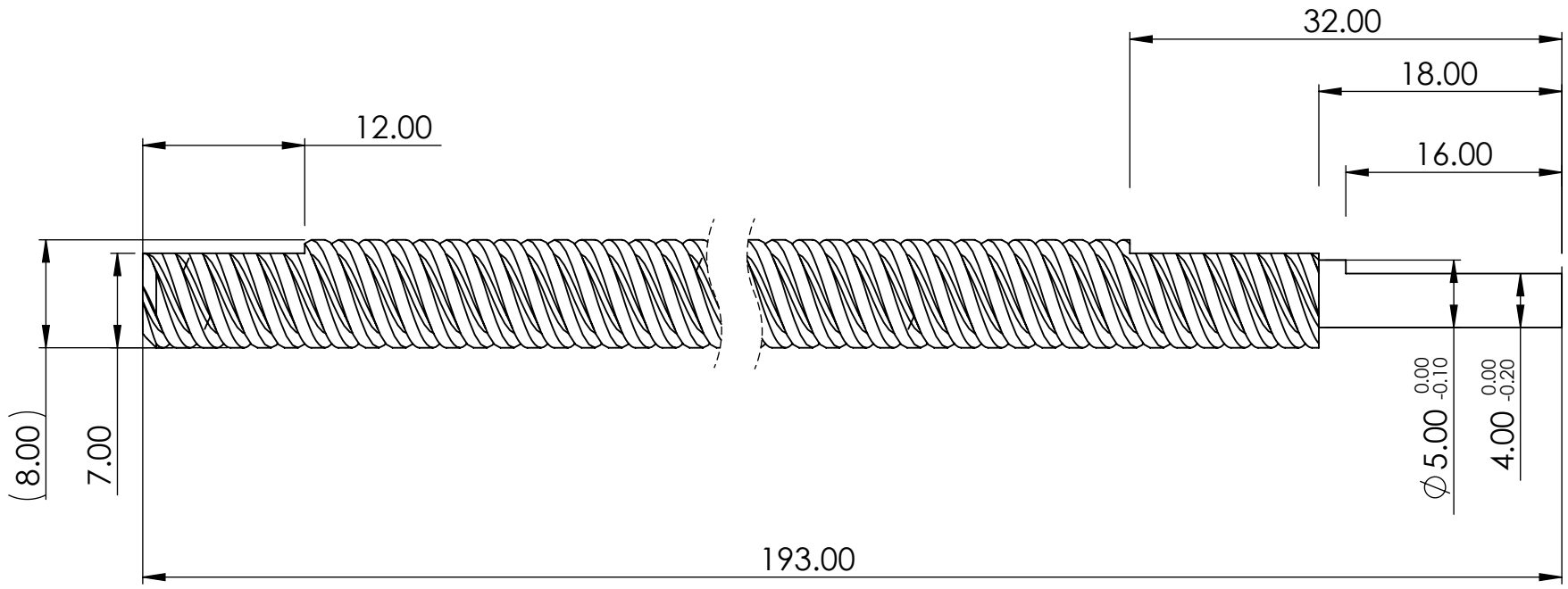
VR

TITLE:

Linear Motion Shaft

SIZE	DWG. NO.	REV
A	001	

SCALE: 1:1 | WEIGHT: 58.89 | SHEET 1 OF 1



NOTE:

1. GENERAL TOLERANCE DIN ISO 2768-m.
2. ALL EDGES 0.1..0.3MM MAX RADIUS OR CHAMFER.
3. AREAS WHERE MATERIAL HAS BEEN REMOVED SHALL HAVE SMOOTH TRANSITIONS AND BE FREE OF SCRATCHES, GRIND MARKS, AND BURRS. SCRATCHES AND DENTS ARE NOT ACCEPTABLE AT THE THREAD.
4. FOR MATERIALS AND MANUFACTURING LINKS REFER TO CNC_MILLING_CARRIAGE_BOM.PDF

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED:

BREAK ALL SHARP EDGES
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±
INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL
AISI 1020

FINISH

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

COMMENTS:

Vladimir Tyrkin
veres.pcb@gmail.com

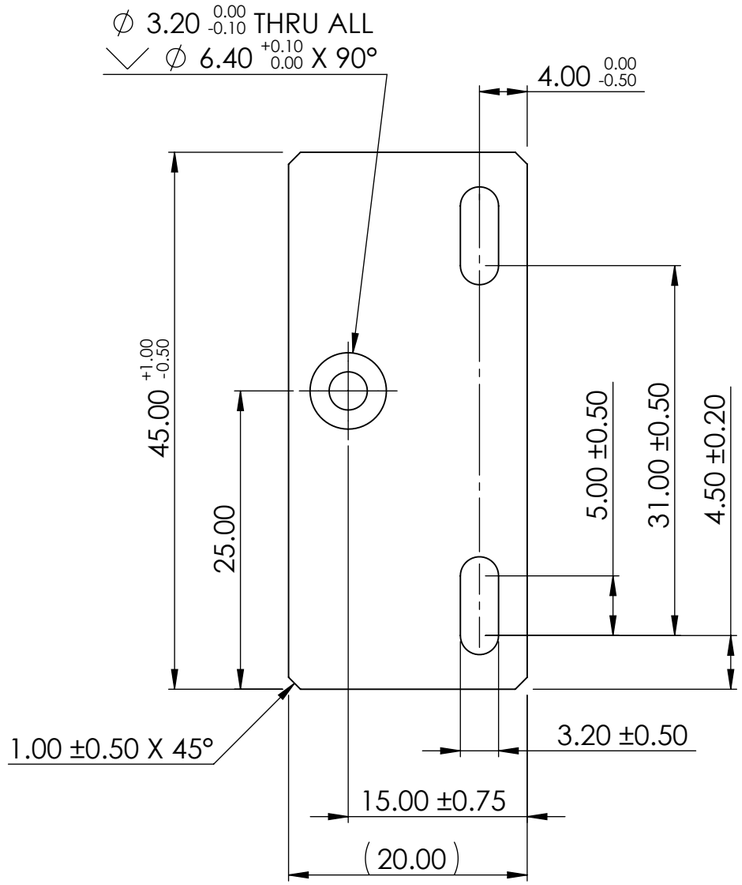
VR

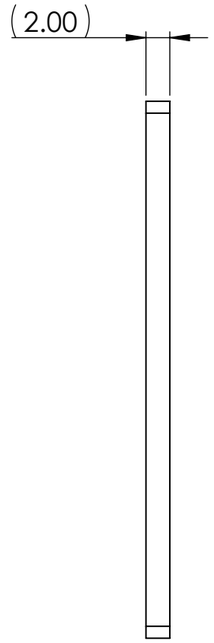
TITLE:

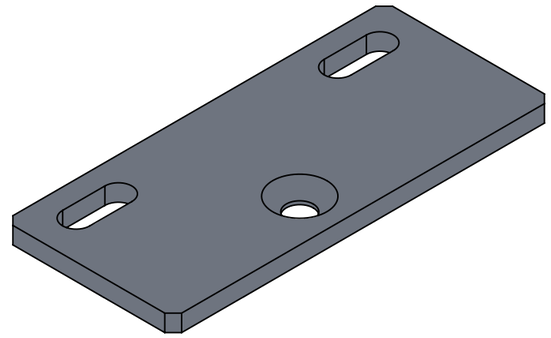
Lead Screw

SIZE	DWG. NO.	REV
A	002	

SCALE: 2:1 | WEIGHT: 60.10 | SHEET 1 OF 1







NOTE:
1. GENERAL TOLERANCE DIN ISO 2768-m.
2. FOR MORE INFORMATION SEE CAD FILE: TensionerBasePlate.SLDPRT.
3. MATERIAL ALUMINUM BAR MCMASTER-CARR P/N:9146T14.

NEXT ASSY	USED ON	
APPLICATION		

UNLESS OTHERWISE SPECIFIED:

BREAK ALL SHARP EDGES
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL
6061 Alloy

FINISH
As machined

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

COMMENTS:

Vladimir Tyrkin

veres.pcb@gmail.com

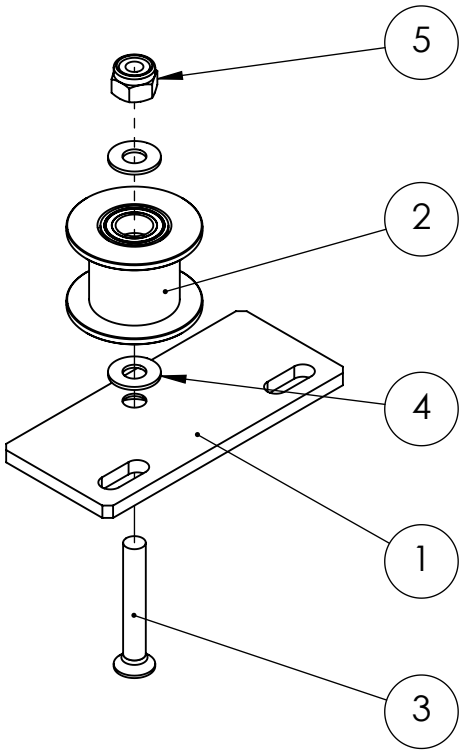
VR

TITLE:

Tensioner Base Plate

SIZE	DWG. NO.	REV
B	031	

SCALE: 2:1 | WEIGHT: 4.50 | SHEET 1 OF 1



ITEM NO.	PART NUMBER	DWG. NO.	QTY.
1	TensionerBasePlate	031	1
2	GT2 Idler Pulley, Configurable		1
3	ISO 7046-1 - M3 x 20 - Z - 20N		1
4	Washer DIN 125 - A 3.2		2
5	M3 NYLOC DIN 985	No	1

NOTE:

1. FOR MATERIALS AND MANUFACTURING LINKS REFER TO CNC_MILLING_CARRIAGE_BOM.PDF.
2. TIGHTEN THE SCREW TO A TORQUE OF 1.1 TO 1.4 Nm.

NEXT ASSY	USED ON	
APPLICATION		DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED:

BREAK ALL SHARP EDGES
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±
INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL
Multimaterial

FINISH
None

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

COMMENTS:

Vladimir Tyrkin

veres.pcb@gmail.com

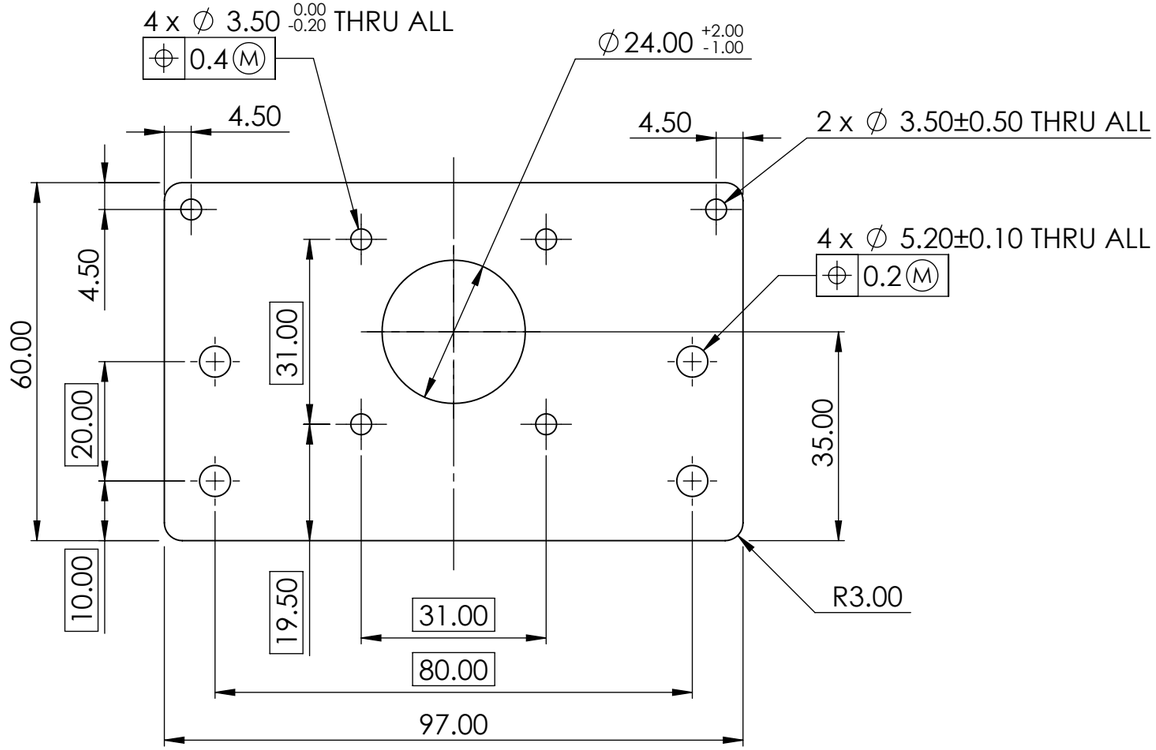
VR

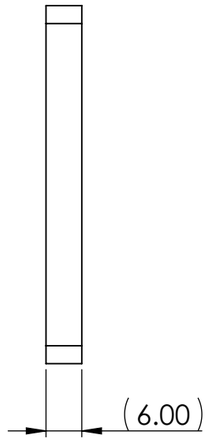
TITLE:

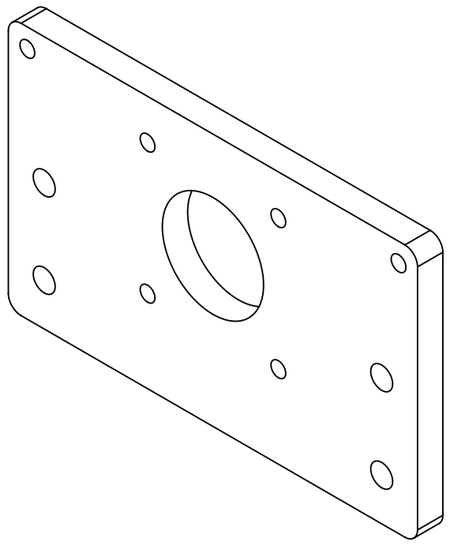
Tensioner

SIZE	DWG. NO.	REV
A	030	

SCALE: 1:1 | WEIGHT: 9.60 | SHEET 1 OF 1







NOTE:
1. MATERIAL: POLYCARBONATE PLASTIC SHEET. MCMASTER-CARR P/N: 8574K281.
2. GENERAL TOLERANCE DIN ISO 2768-mK.
3. FOR MORE INFORMATION SEE CAD FILE: Stepper Base.SLDPRT.

NEXT ASSY	USED ON	
APPLICATION		

UNLESS OTHERWISE SPECIFIED:
BREAK ALL SHARP EDGES
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±
INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL: Polycarbonate (PC)
FINISH: No
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

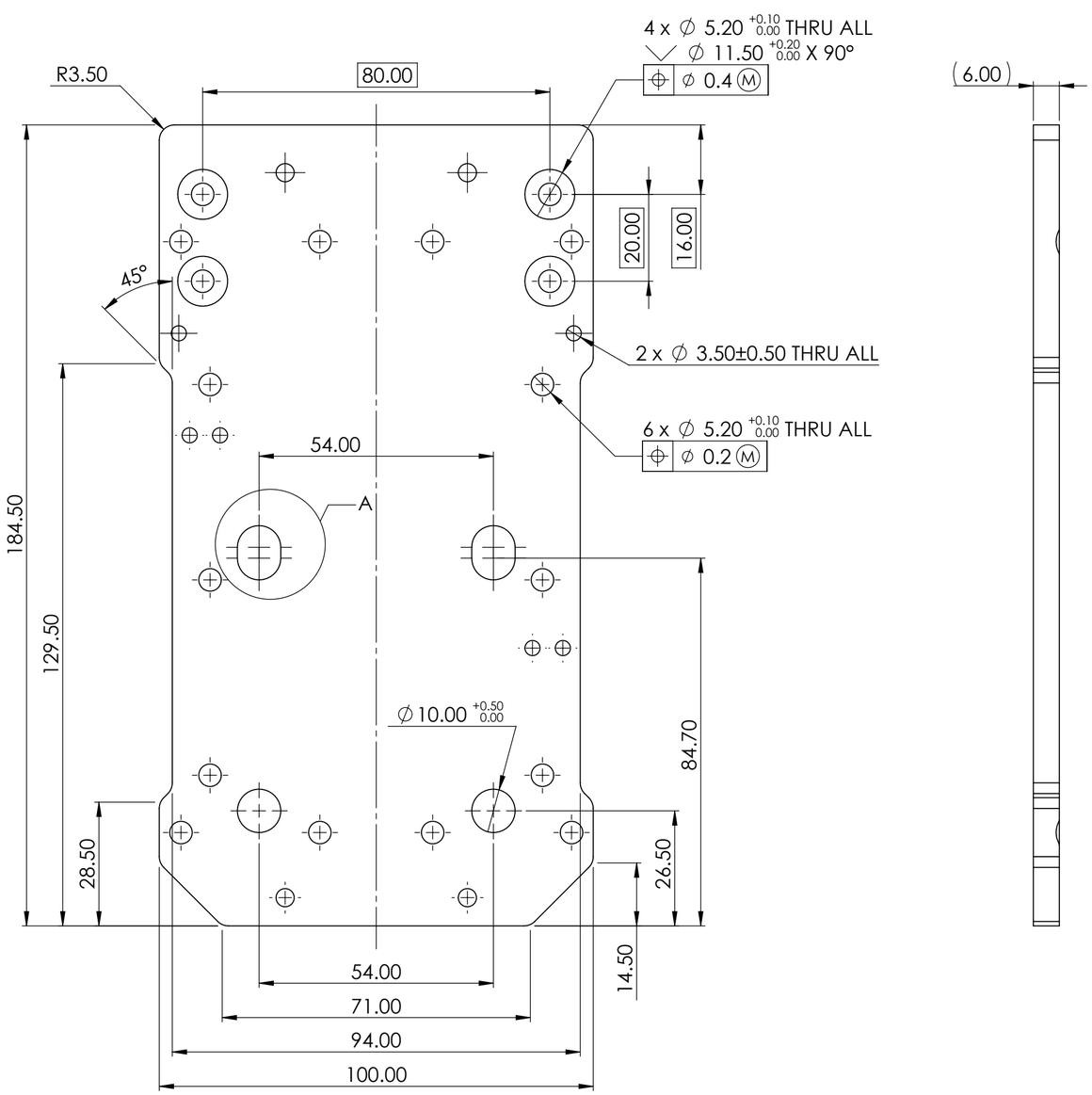
COMMENTS:

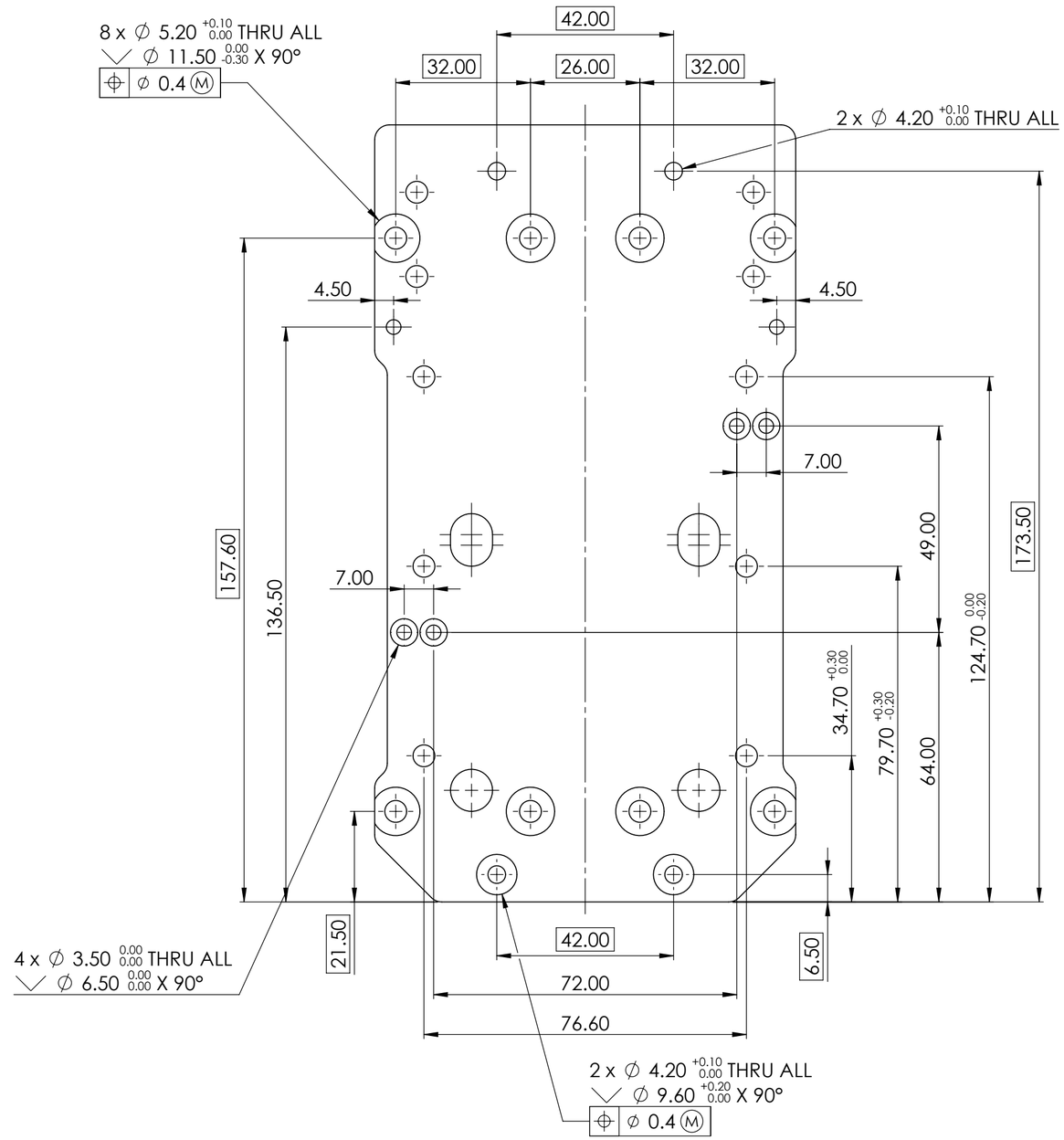
Vladimir Tyrkin
veres.pcb@gmail.com

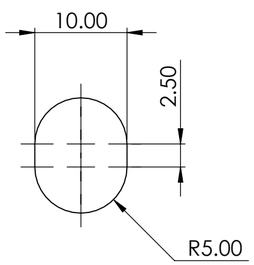
VR

TITLE:
Stepper Base

SIZE	DWG. NO.	REV
B	011	
SCALE: 1:1	WEIGHT: 37.88	SHEET 1 OF 1







DETAIL A
SCALE 2 : 1
2 PLACES

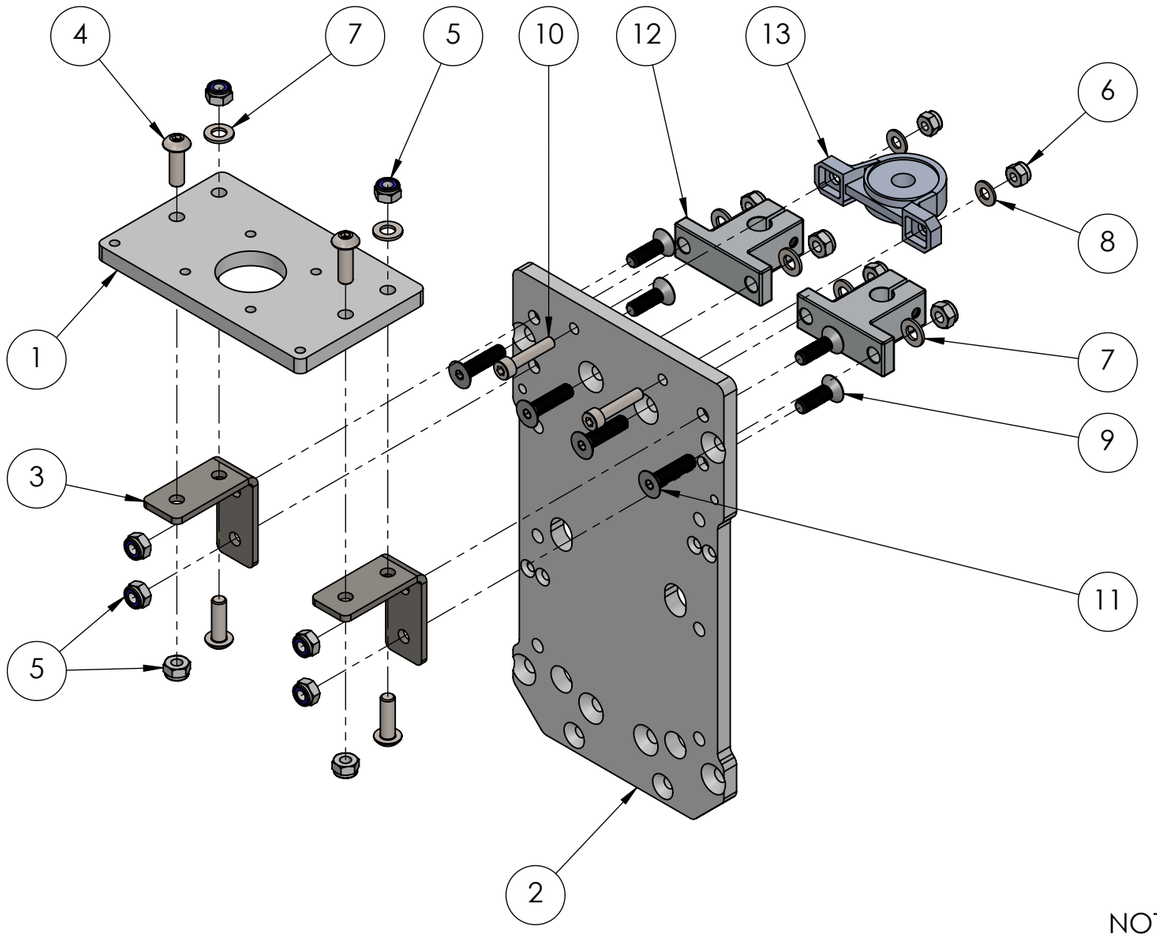
NOTE:
1. MATERIAL: POLYCARBONATE PLASTIC SHEET. MCMASTER-CARR P/N: 8574K282.
2. GENERAL TOLERANCE DIN ISO 2768-mK.
3. FOR MORE INFORMATION SEE CAD FILE: Vertical Plate.SLDPRT.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN MILLIMETRES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN		
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL Polycarbonate (PC)	COMMENTS:		
NEXT ASSY	USED ON	FINISH As machined	Vladimir Tyrkin veres.pcb@gmail.com		
APPLICATION		DO NOT SCALE DRAWING			

VR

TITLE:
Vertical Plate

SIZE	DWG. NO.	REV
C	012	
SCALE: 1:1	WEIGHT: 119.97	SHEET 1 OF 1



ITEM NO.	PART NUMBER	DWG. NO.	QTY.
1	Stepper Base	011	1
2	Vertical Plate	012	1
3	Corner Bracket 40x40L	No	2
4	ISO 7380 - M5 x 16 - 16N		4
5	M5 NYLOC DIN 985	No	12
6	M4 NYLOC DIN 985	No	2
7	Washer DIN 125 - A 5.3		6
8	Washer DIN 125 - A 4.3		2
9	M5x16 DIN 7991, ISO 10642	No	4
10	ISO 4762 M4 x 20 - 20N		2
11	M5x20 DIN 7991, ISO 10642	No	1
12	SK8 SC8UU LINEAR RAIL ORIGINAL	No	2
13	Pillow Block	No	1

NOTE:
1. ASSEMBLE PILLOW BLOCK 13 AND ASSOCIATED COMPONENTS FIRST.
2. PRE-ASSEMBLE ITEMS 1, 3, 4, 5 & 7 BEFORE ASSEMBLY.
3. SET SCREWS 9 & 11 AT HOLES AT ITEM 2 AND ASSEMBLY THE REST COMPONENTS.
4. FOR MANUFACTURING LINKS REFER TO CNC_MILLING_CARRIAGE_BOM.PDF.

NEXT ASSY	USED ON	
APPLICATION		

UNLESS OTHERWISE SPECIFIED:

BREAK ALL SHARP EDGES
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL: Multimaterial

FINISH: No

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

COMMENTS:

Vladimir Tyrkin

veres.pcb@gmail.com

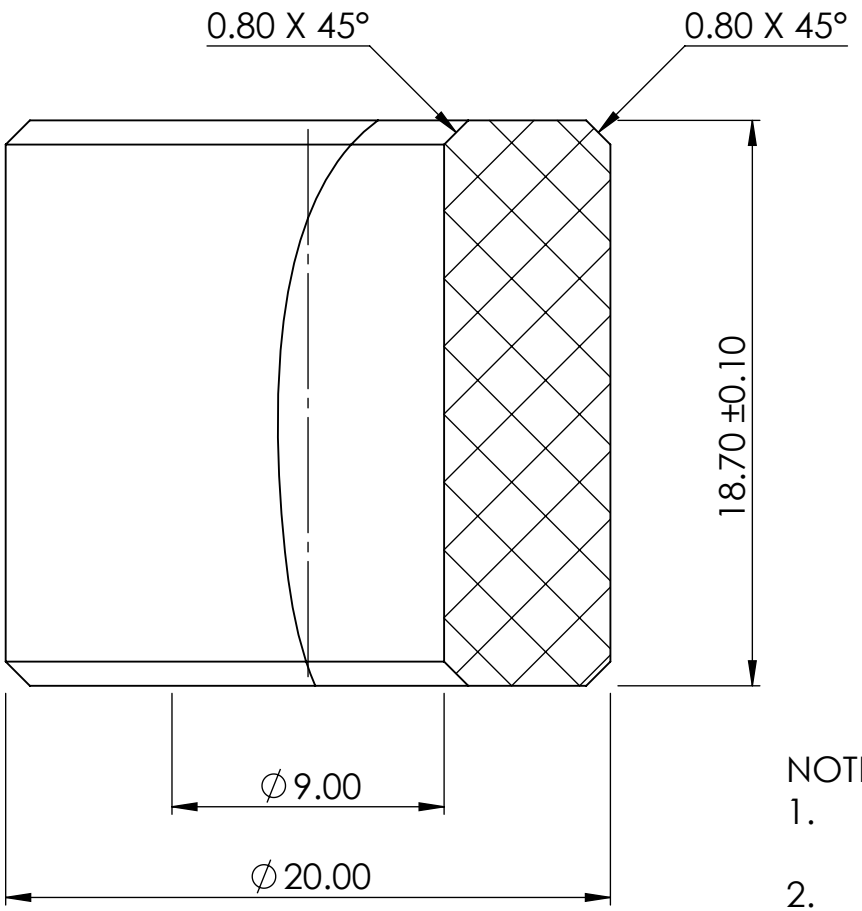
VR

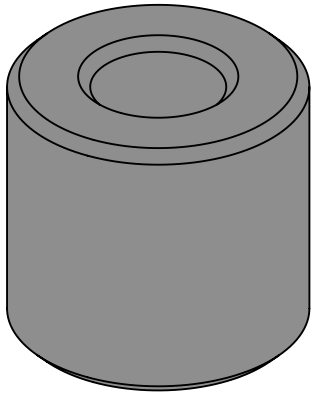
TITLE:

Carriage Base

SIZE	DWG. NO.	REV
B	010	

SCALE: 1:2 | WEIGHT: 368.70 | SHEET 1 OF 1





NOTES:

1. MATERIAL: PETG 3D PRINTER FILAMENT MCMASTER-CARR P/N: 3462N1.
2. GENERAL TOLERANCE DIN ISO 2768-c.
3. FOR MATERIALS AND MANUFACTURING LINKS REFER TO CNC_MILLING_CARRIAGE_BOM.PDF

NEXT ASSY	USED ON	
APPLICATION		

UNLESS OTHERWISE SPECIFIED:

BREAK ALL SHARP EDGES
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±
INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL
PET-G

FINISH
As machined

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

COMMENTS:

Vladimir Tyrkin
veres.pcb@gmail.com

VR

TITLE:

Spacer for lineare bearings

SIZE	DWG. NO.	REV
A	024	

SCALE: 4:1 | WEIGHT: 5.97 | SHEET 1 OF 1