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NOTES (UNLESS SPECIFIED OTHERWISE):

1.0 DESCRIPTION AND APPLICATION:

1.1 INJECTION MOLDED OR CNC MACHINED PART TO BE USED IN A COMMERCIAL PRODUCT (INDOOR USE).

2.0 APPLICABLE DOCUMENTATION:

2.1 INTERPRET DRAWING PER ASME Y14.5-2009 DIMENSIONING AND TOLERANCING STANDARDS.

3.0 MECHANICAL REQUIREMENTS:

3.1 DIMENSIONS ARE IN MILLIMETERS (MAXIMUM MATERIAL CONDITION), UNLESS OTHERWISE SPECIFIED: (+) INDICATES "PLUS" DRAFT (DRAFT INCREASES THE SIZE OF FEATURE) (-) INDICATES "MINUS" DRAFT (DRAFT DECREASES THE SIZE OF FEATURE)

3.2 ALL DIMENSIONS SHOWN SHALL BE CHECKED DURING FIRST ARTICLE INSPECTION. FAI MUST BE APPROVED FOR THE SPECIFIC REVISION OF THIS PART PRIOR TO SHIPMENT OF PARTS.

3.3 FOR GEOMETRY NOT EXPLICITLY DESCRIBED IN DRAWING REFER TO 3D DATABASE.

3.4 DRAWING AND 3D DATABASE REPRESENT FINAL PART AFTER ALL POST PROCESSING, TRIMMING, MACHINING, AND FINISHING.

3.5 DIMENSIONS INDICATED BY (X.XXX) ARE PROCESS CONTROL/MONITORING DIMENSIONS.

3.6 DIMENSIONS IN PARENTHESIS "(X.XXX)" OR MARKED REFERENCE "X.XX REF" ARE DIMENSIONS WITHOUT TOLERANCE AND ARE FOR INFORMATION PURPOSE ONLY.

3.7 GENERAL TOLERANCES: FROM 0 TO 125 MM: +/-0.125 MM, PLUS +/-0.025 MM FOR EACH ADDITIONAL 25 MM.

3.8 TOLERANCE TO CENTER LINES +/- 0.125 MM.

3.9 REMOVE ALL BURRS AND BREAK SHARP EDGES.

3.10 PARTS MUST BE FREE OF ANY FOREIGN MATERIAL, INCLUDING BUT NOT LIMITED TO: MOLD RELEASE, DIRT, CHIPS, OIL, AND OTHER CONTAMINANTS.

3.11 WEIGHTS SHOWN ON BOM ARE FOR REFERENCE ONLY

3.12 ADDITIONAL MECHANICAL REQUIREMENTS FOR INJECTION MOLDING PROCESSES ONLY:

3.12.1 FILLETS AND RADII SHALL BE 0.175 MM UNLESS OTHERWISE SPECIFIED.

3.12.2 PARTING LINE MISMATCH NOT TO EXCEED 0.075 MM.

3.12.3 GATE REMNANT TO BE +0.00/-0.125 MM.

3.12.4 FLASH NOT TO EXCEED 0.075 MM ON ALL HOLES & SLOTS, NOT TO EXCEED 0.125 MM ELSEWHERE.

3.12.5 EJECTION PIN AND SLEEVE MARKS TO BE FLUSH WITH SURFACE OR RECESSED UP TO 0.25 MM.

3.12.6 ALL DIMENSIONS APPLY AFTER FINISHING AND PLATING.

3.12.7 PART MUST BE FREE OF DEFECTS, INCLUDING BUT NOT LIMITED TO: SINK, COLD FLOW MARKS, BURNS, GAS, SPLAY, SHORTS, BLACK SPECS AND/OR STREAKING, CONTAMINATION, AND OTHER OBJECTIONABLE DEFECTS.

3.13 INSTALL HARDWARE PER MANUFACTURER'S RECOMMENDATION. NO HARDWARE SUBSTITUTIONS PERMITTED WITHOUT PRIOR, WRITTEN APPROVAL FROM PUMP STUDIOS AND/OR VOTINGWORKS

4.0 TOOLING REQUIREMENTS:

4.1 TOOL/MOLD DESIGN, INCLUDING GATE AND EJECTOR PIN LOCATIONS, MUST BE APPROVED BY PUMP STUDIOS AND/OR VOTINGWORKS PRIOR TO CONSTRUCTION OF TOOL. COMPREHENSIVE TOOLING DRAWINGS WITH ALL MATERIAL SPECIFIED FOR EACH PART MUST BE SUBMITTED TO PUMP STUDIOS AND/OR VOTINGWORKS FOR APPROVAL.

4.2 FOR MULTI-CAVITY MOLDS, PARTS FROM EACH CAVITY MUST HAVE A DISTINGUISHING NUMBER.

4.3 TOOL/MOLD TO BE PROPERTY OF VOTINGWORKS AND TO BE PERMANENTLY MARKED WITH COMPANY NAME, PART NUMBER, PART NAME, CAVITY ID, MOLD SHRINKAGE, ASSET TAG, AND MOLD WEIGHT.

5.0 INSPECTION & SHIPPING REQUIREMENTS:

5.1 VERIFY PART SAMPLES CONFORM TO DESIGN REQUIREMENTS USING STANDARD TEST EQUIPMENT AND VISUAL INSPECTION TECHNIQUES.

5.2 PACKAGING FOR SHIPMENT: PART SHALL BE ADEQUATELY PROTECTED TO PREVENT DAMAGE IN TRANSIT AND HANDLING.

5.3 VENDOR TO SUPPLY WITH EACH SHIPMENT: MATERIAL CERTIFICATION, SHIPPER DOCUMENTS WITH PART NUMBER, PART NAME, REVISION, LOT NUMBER, QUANTITY AND P.O. NUMBER.

5.4 PACKAGING LABELS AND MATERIAL TRACEABILITY MUST CONFORM TO UL 746D.

6.0 MATERIAL REQUIREMENTS:

6.1 MATERIAL: MAKROLON 2405 POLYCARBONATE, OR EQUIVALENT. FINAL MATERIAL TO BE APPROVED BY PUMP STUDIOS AND/OR VOTINGWORKS.

6.2 COLOR: BLACK OR APPROVED EQUIVALENT.

6.3 VENDOR TO SUBMIT MSDS AND MATERIAL SPECIFICATIONS FOR APPROVAL BY PUMP STUDIOS AND/OR VOTINGWORKS PRIOR TO MANUFACTURING FIRST ARTICLE PARTS.

6.4 VENDOR TO SUBMIT COLOR SAMPLES TO PUMP STUDIOS AND/OR VOTINGWORKS FOR APPROVAL PRIOR TO TEXTURING/POLISHING THE MOLD(S).

6.5 NO CHANGES SHALL BE ALLOWED ON PRODUCTION MATERIAL, REGARDLESS OF WHETHER SUCH CHANGE AFFECTS CHARACTERISTICS, WITHOUT PRIOR EXPLICIT APPROVAL BY PUMP STUDIOS AND/OR VOTINGWORKS.

7.0 ADDITIONAL FINISH REQUIREMENTS FOR INJECTION MOLDING PROCESSES ONLY:

7.1 SURFACES IN GREY ARE NON-COSMETIC AND SHALL HAVE A SPI-C3 FINISH MINIMUM OR APPROVED EQUIVALENT.

7.2 VENDOR TO SUBMIT TEXTURED COLOR SAMPLES TO PUMP STUDIOS AND/OR VOTINGWORKS FOR APPROVAL PRIOR TO MOLDING PRODUCTION PARTS.

8.0 APPROVALS:

8.1 SUPPLIER IS RESPONSIBLE TO ENSURE THIS PART OR ASSEMBLY IS FULLY COMPLIANT WITH THE EUROPEAN UNION (EU) RESTRICTION OF HAZARDOUS SUBSTANCES (ROHS) DIRECTIVE 2002/95/EC, LATEST REVISION, AT TIME OF SHIPMENT.

8.2 SUPPLIER WILL ALSO FURNISH A CERTIFICATION OF COMPLIANCE (C OF C) WITH FIRST ARTICLES WHEN SPECIFICALLY REQUESTED.

REV. DESCRIPTION CR # DATE SUBMITTED BY

A INITIAL RELEASE - 10/02/2024 GJK

7.1

3.13

MFG: MCMaster-CARR
P/N: 94459A130
QTY: 2

MATERIAL
SEE NOTES

FINISH
SEE NOTES

COLOR
SEE NOTES

EST. WEIGHT
4.86

ENGINEER
DBC

RELEASE DATE
10/31/2024

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
DO NOT SCALE DRAWING

TOLERANCES: SEE NOTES

THIRD ANGLE
PROJECTION

APPROVED BY
PAK

APPROVED DATE
11/13/2024

CAD TYPE
SINGLE PART ASSEMBLY

DESCRIPTION
HINGE SPACER CLAMP

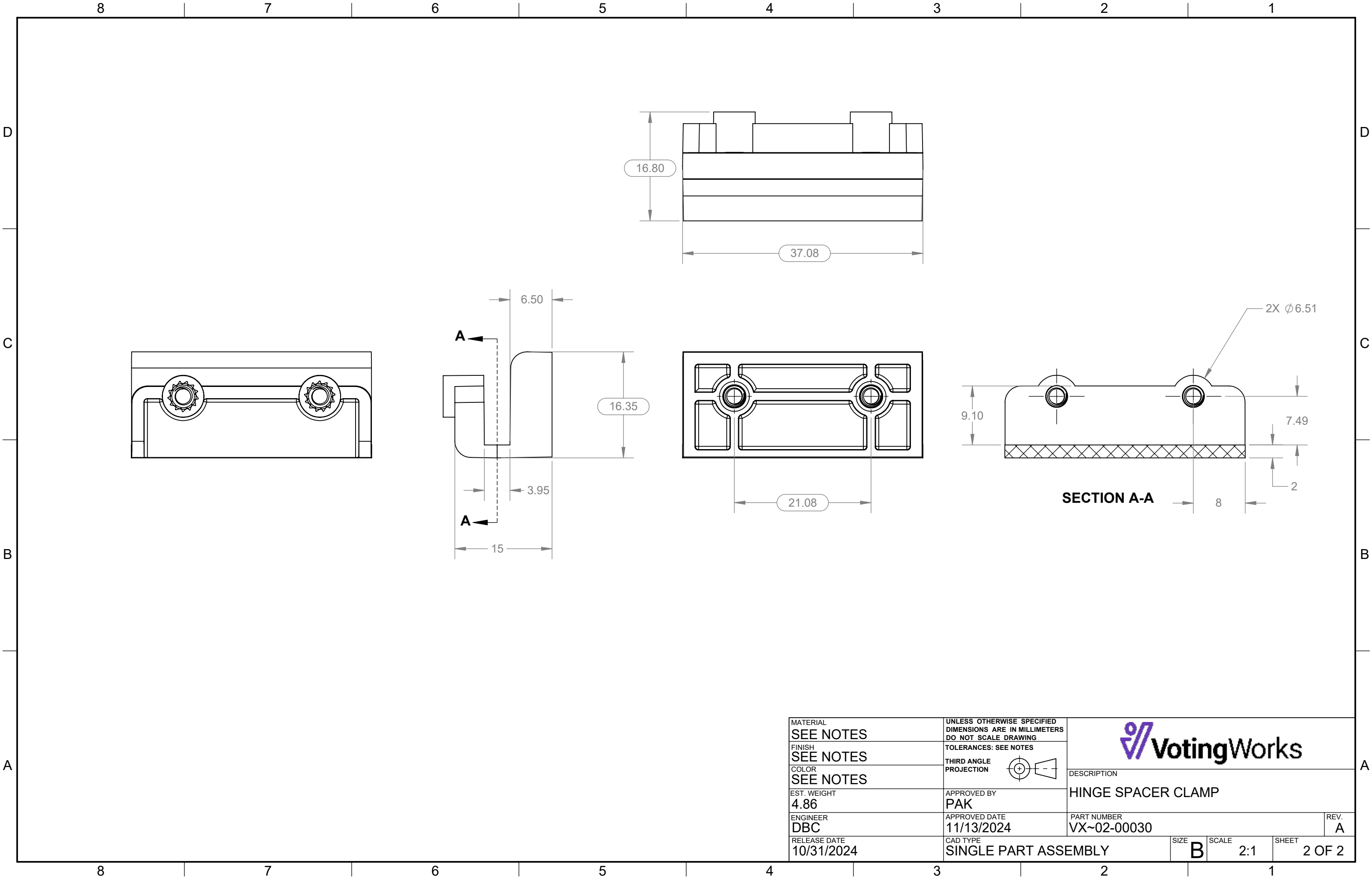
PART NUMBER
VX~02-00030


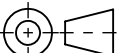
REV.
A

SIZE
B

SCALE
2:1

SHEET
1 OF 2



MATERIAL SEE NOTES	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS DO NOT SCALE DRAWING				
FINISH SEE NOTES	TOLERANCES: SEE NOTES				
COLOR SEE NOTES	THIRD ANGLE PROJECTION 	DESCRIPTION HINGE SPACER CLAMP			
EST. WEIGHT 4.86	APPROVED BY PAK				
ENGINEER DBC	APPROVED DATE 11/13/2024	PART NUMBER VX~02-00030			REV. A
RELEASE DATE 10/31/2024	CAD TYPE SINGLE PART ASSEMBLY	SIZE B	SCALE 2:1	SHEET 2 OF 2	