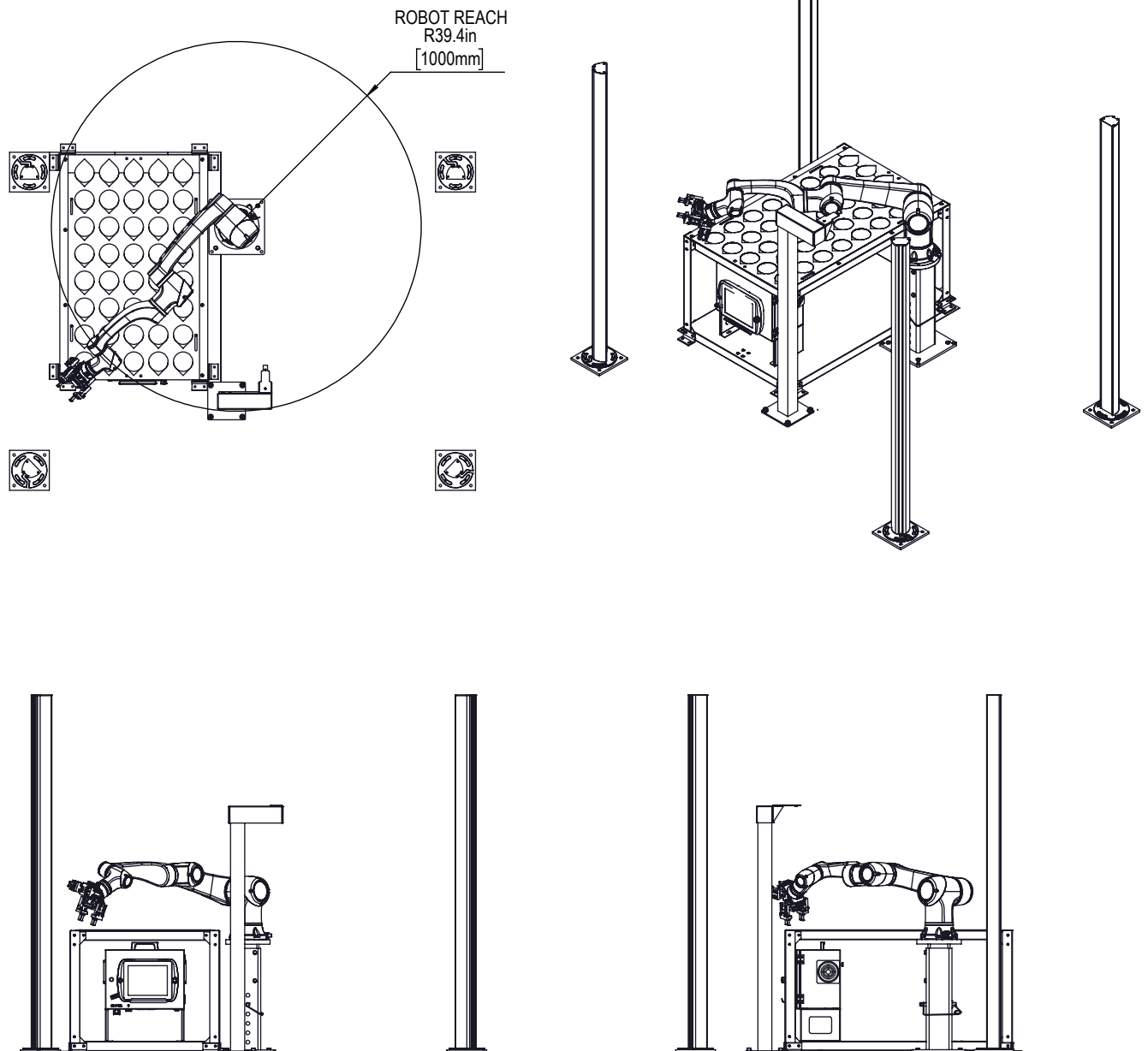


- TABLE, PEDESTAL, PART FLIP STATION AND LIGHT CURTAINS CAN BE MOUNTED ANYWHERE. LAYOUT DIMS PROVIDED IN THIS DOCUMENT ARE **FOR REFERENCE ONLY**
- USE THE PROVIDED 3D MODELS TO DETERMINE THE BEST LAYOUT FOR YOUR APPLICATION
- DECIDING WHERE TO MOUNT EACH PIECE MAY REQUIRE SOME EXPERIMENTATION
- **HAAS RECOMMENDS ANCHORING ALL COMPONENTS PERMANENTLY TO THE SHOP FLOOR**
- SEE THE INSTALLATION INSTRUCTIONS FOR A STEP BY STEP PROCEDURE

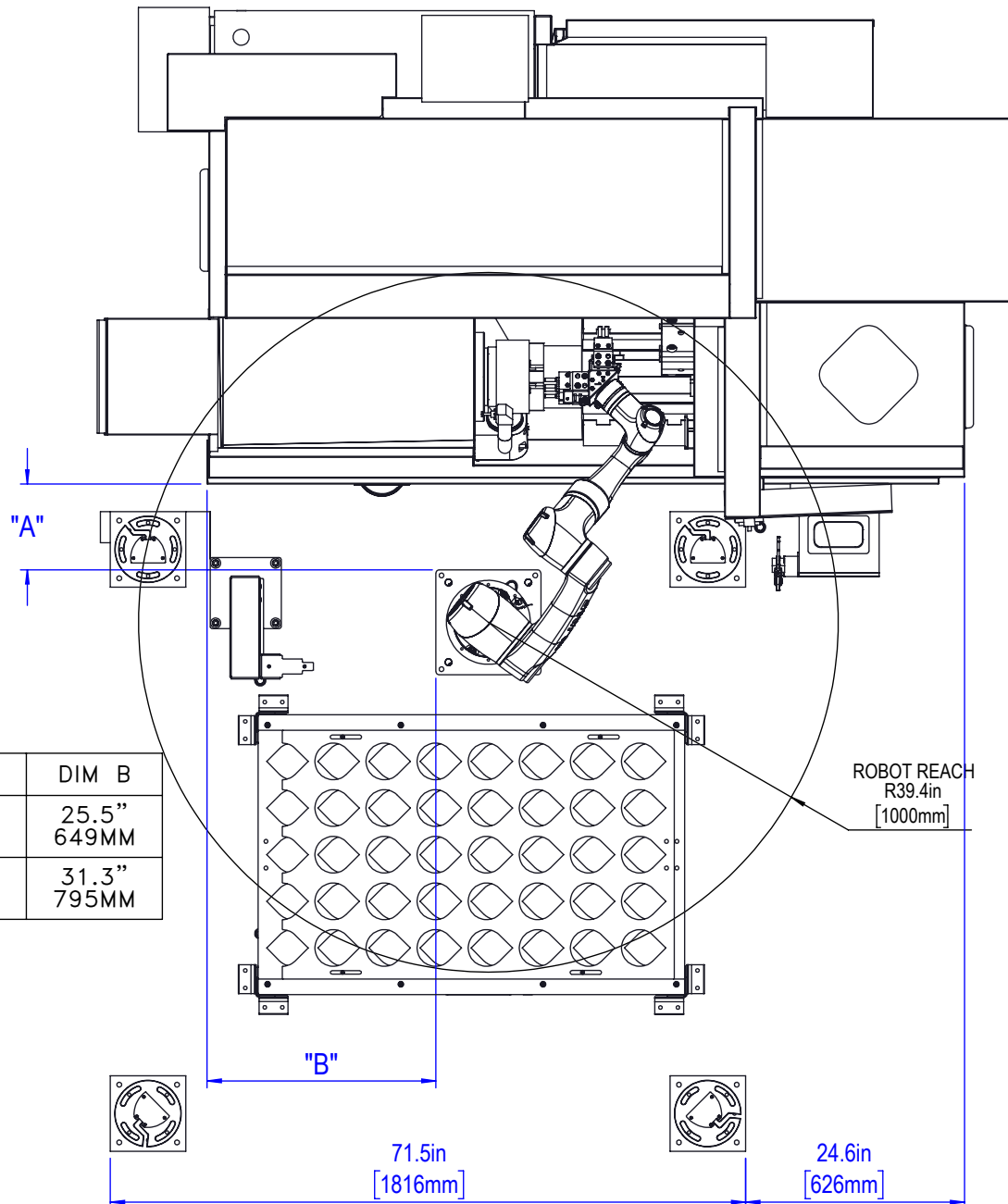




ST-10 SHOWN. ALL DIMS FOR REFERENCE ONLY.

COBOT PKG-10KG IS A MODULAR KIT. COMPONENT PLACEMENT WILL VARY BASED ON CUSTOMER APPLICATION AND RISK ASSESMENT. ENSURE THE FOLLOWING:

1. ROBOT IS CAPABLE OF REACHING THE CHUCK AND ALL OF PARTS TABLE
2. THE COBOT JOINTS MUST NOT BE IN LINE WITH EACH OTHER.
3. LIGHT CURTAIN PLACEMENT MUST NOT INTERFERE WITH CONTROLLER, OPERATOR MUST BE ABLE TO REACH CYCLE START OR RJH WITHOUT BREAKING LIGHT CURTAIN. RELOCATING THE RJH MAY BE NECESSARY. OPERATOR SHOULD NOT BE ABLE TO START ROBOT PROGRAM WHILE INSIDE LIGHT CURTAIN.
4. AUTO-DOOR AND HANDLE MUST CLEAR SETUP. NO PARTS CATCHER ALLOWED (INTERFERENCE)

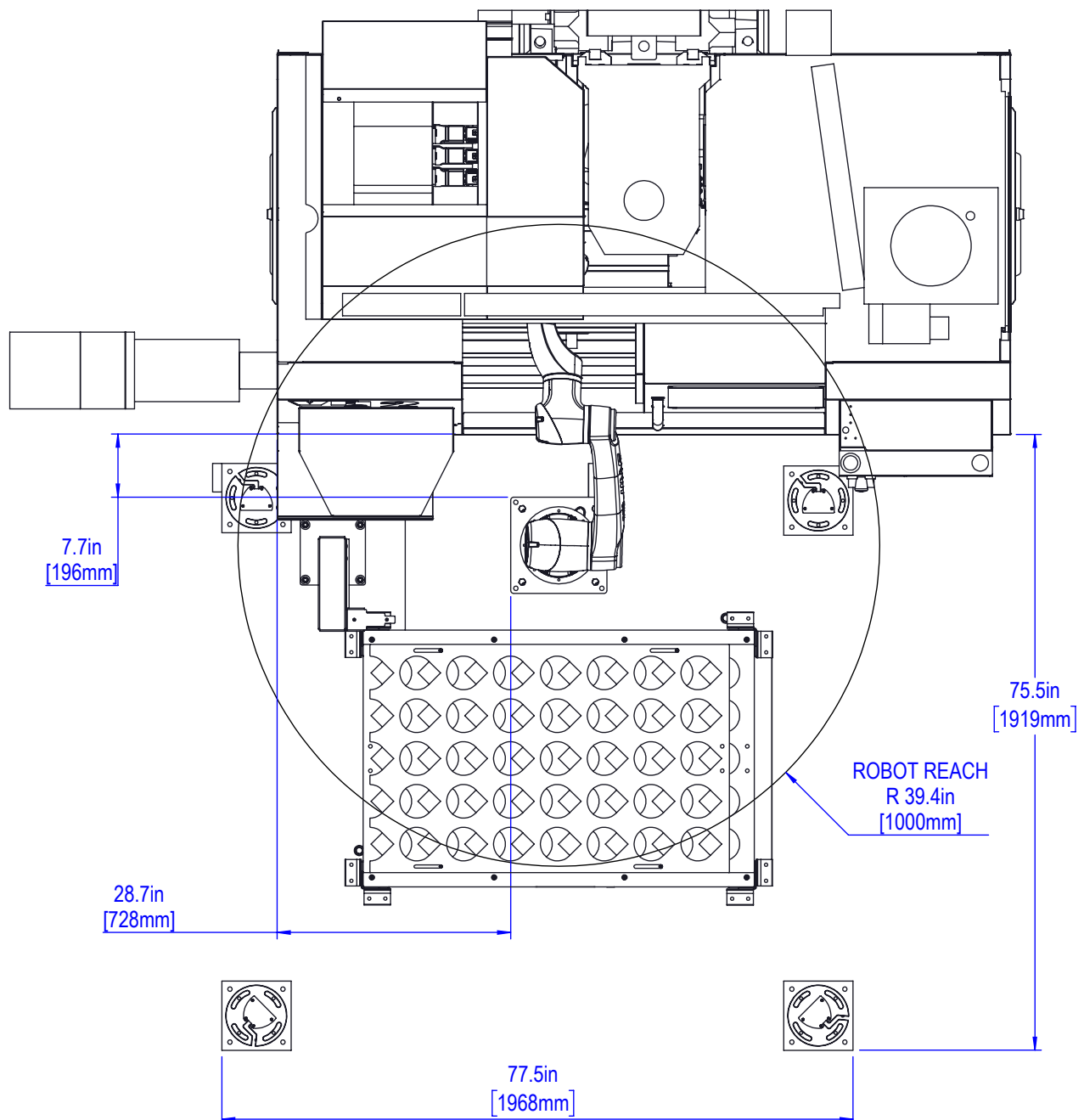


LATHE	DIM A	DIM B
ST-10/15	9.65" 245MM	25.5" 649MM
ST-20/25	8.18" 208MM	31.3" 795MM

VF-2 SHOWN. ALL DIMS FOR REFERENCE ONLY.

COBOT PKG-10KG IS A MODULAR KIT. COMPONENT PLACEMENT WILL VARY BASED ON CUSTOMER APPLICATION AND RISK ASSESMENT. ENSURE THE FOLLOWING:

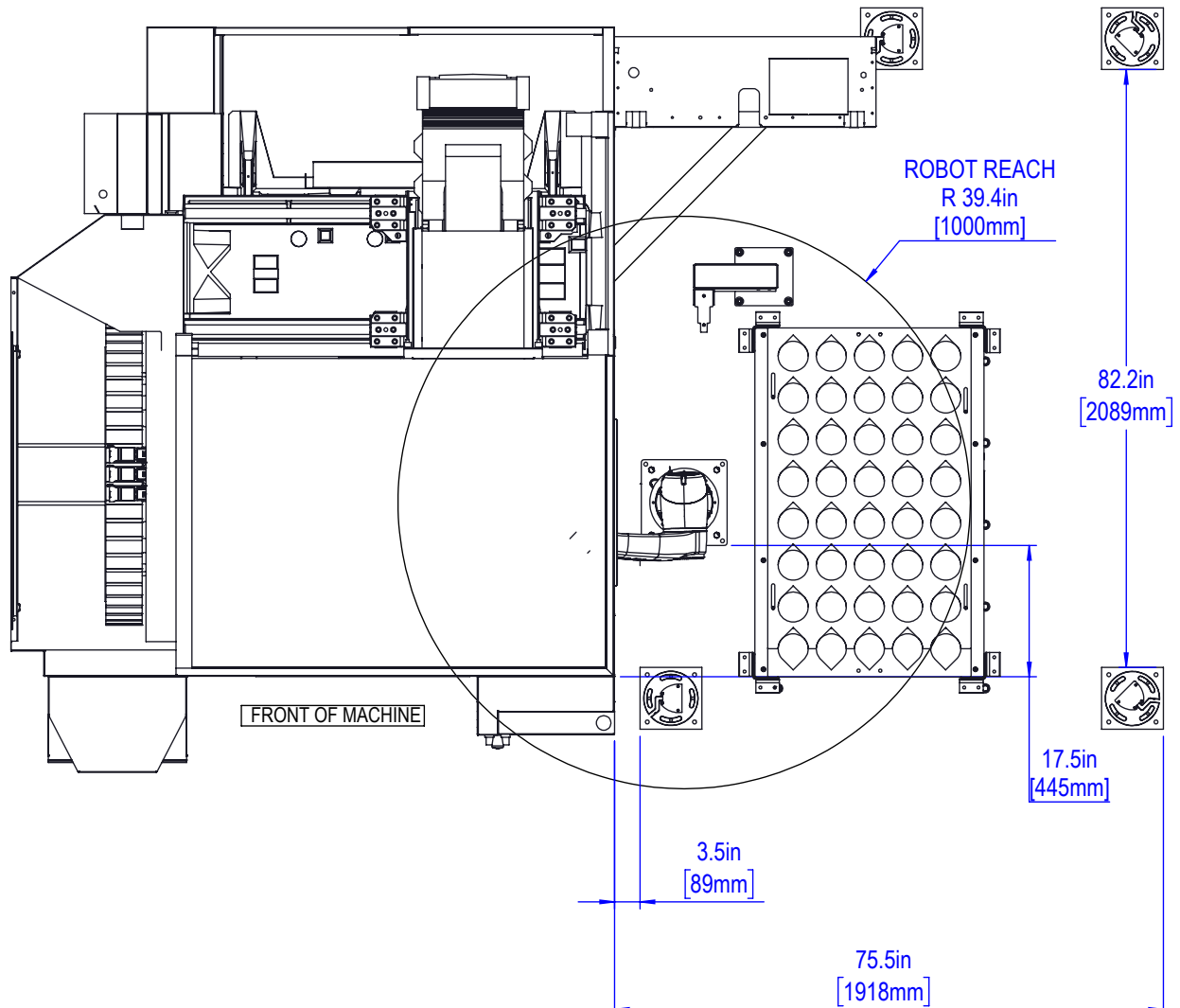
1. ROBOT IS CAPABLE OF REACHING MILL WORKHOLDING AND ALL OF PARTS TABLE
2. THE COBOT JOINTS MUST NOT BE IN LINE WITH EACH OTHER.
3. LIGHT CURTAIN PLACEMENT MUST NOT INTERFERE WITH CONTROLLER, OPERATOR MUST BE ABLE TO REACH CYCLE START OR RJH WITHOUT BREAKING LIGHT CURTAIN. RELOCATING THE RJH MAY BE NECESSARY. OPERATOR SHOULD NOT BE ABLE TO START ROBOT PROGRAM WHILE INSIDE LIGHT CURTAIN.
4. AUTO-DOOR AND HANDLE MUST CLEAR SETUP



UMC-500 SHOWN. ALL DIMS **FOR REFERENCE ONLY.**

COBOT PKG-10KG IS A MODULAR KIT. COMPONENT PLACEMENT WILL VARY BASED ON CUSTOMER APPLICATION AND RISK ASSESMENT. ENSURE THE FOLLOWING:

1. ROBOT IS CAPABLE OF REACHING MILL WORKHOLDING AND ALL OF PARTS TABLE
2. THE COBOT JOINTS MUST NOT BE IN LINE WITH EACH OTHER.
3. LIGHT CURTAIN PLACEMENT MUST NOT INTERFERE WITH CONTROLLER, OPERATOR MUST BE ABLE TO REACH CYCLE START OR RJH WITHOUT BREAKING LIGHT CURTAIN. RELOCATING THE RJH MAY BE NECESSARY. OPERATOR SHOULD NOT BE ABLE TO START ROBOT PROGRAM WHILE INSIDE LIGHT CURTAIN.
4. AUTO-WINDOW AND ELECTRICAL CABINET MUST CLEAR SETUP

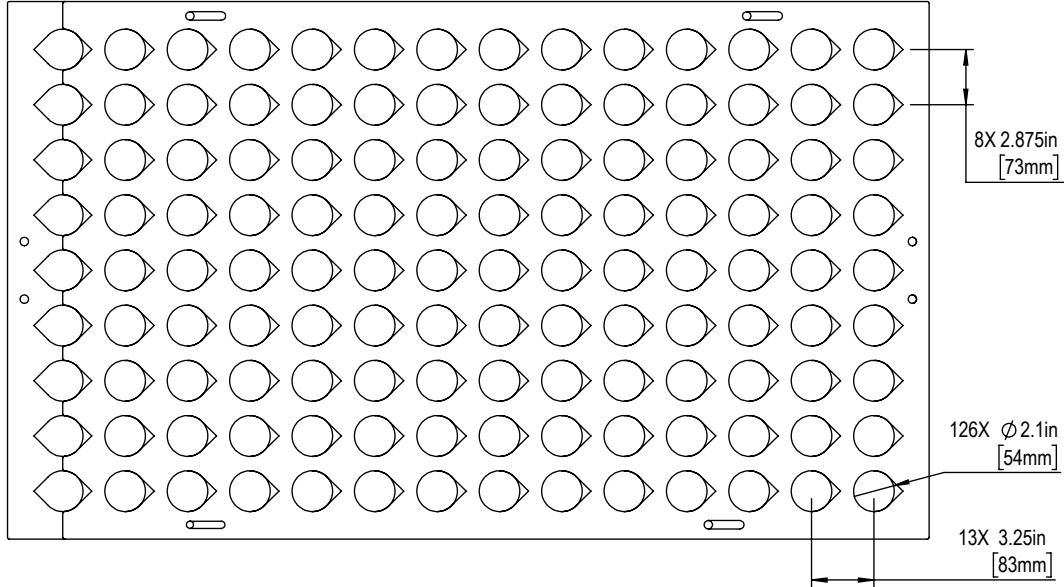




MAX ROUND

2.1in X 2.1in

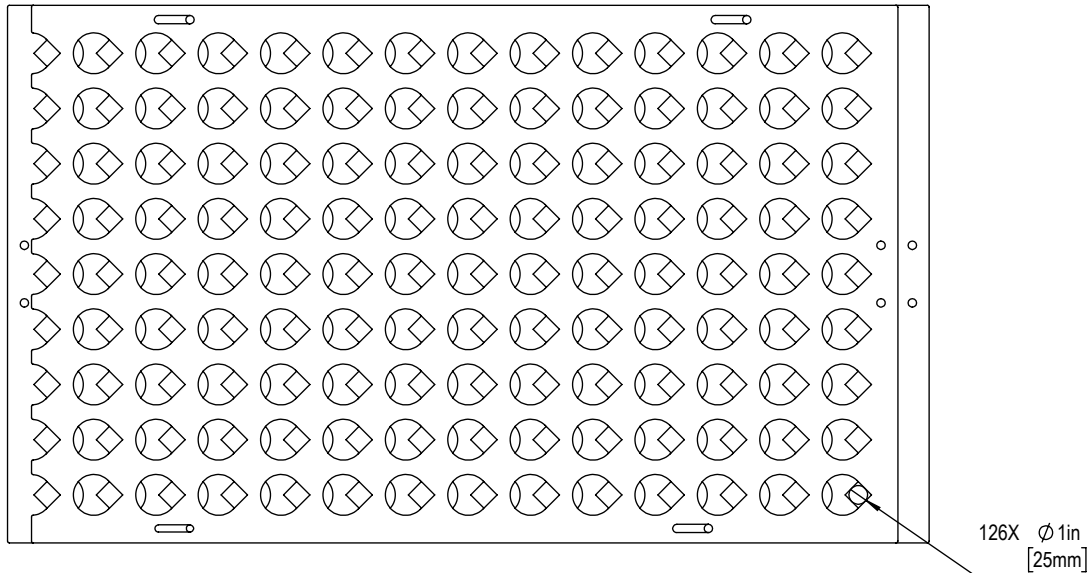
54mm X 54mm



MIN ROUND

1.0in X 1.0in

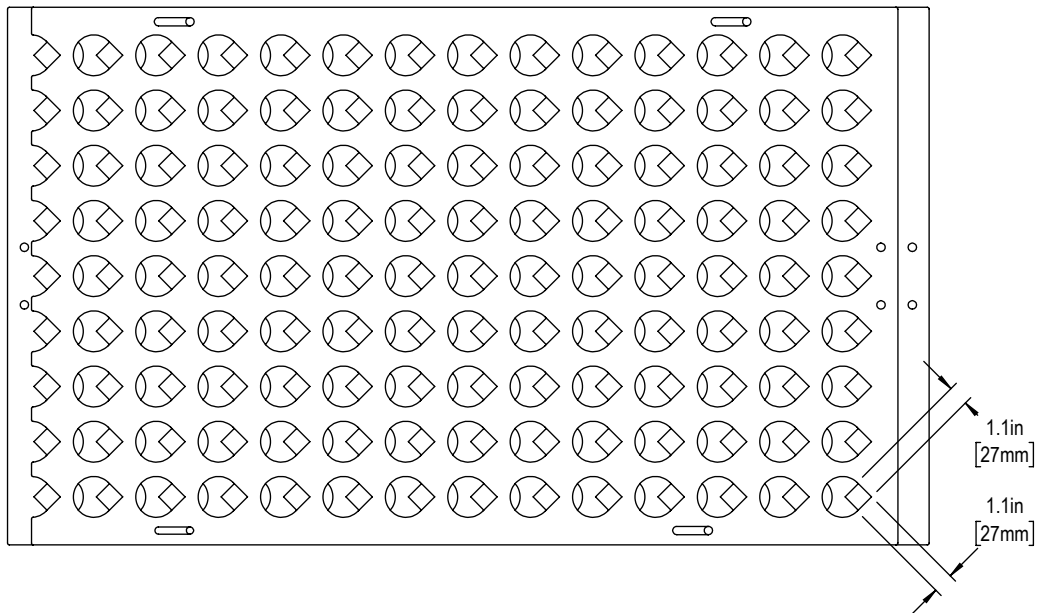
25mm X 25mm



MAX SQUARE

1.1in X 1.1in

27mm X 27mm

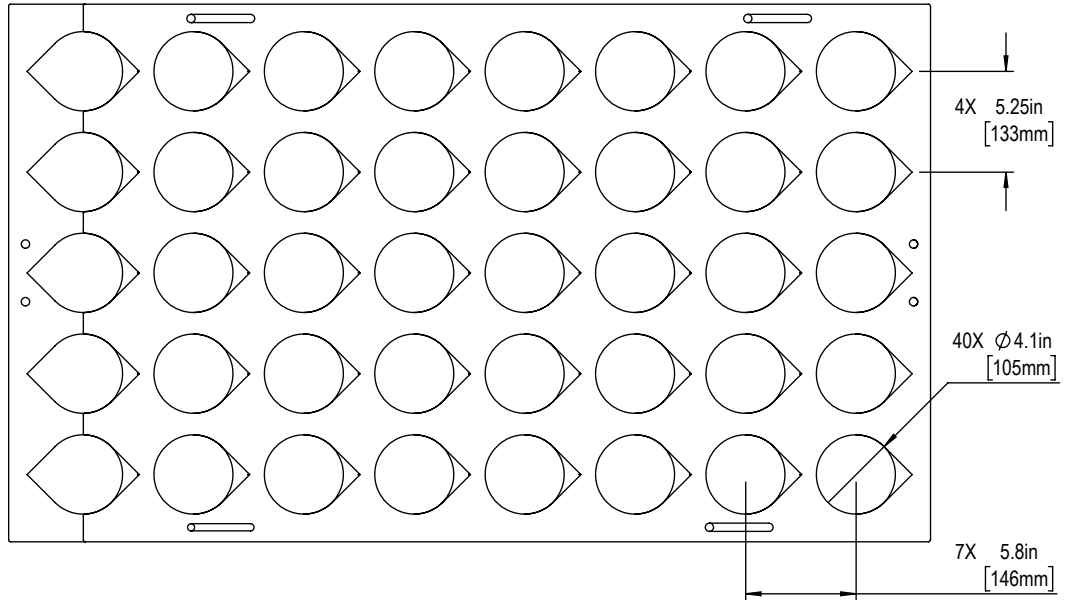




MAX ROUND

4.1in X 4.1in

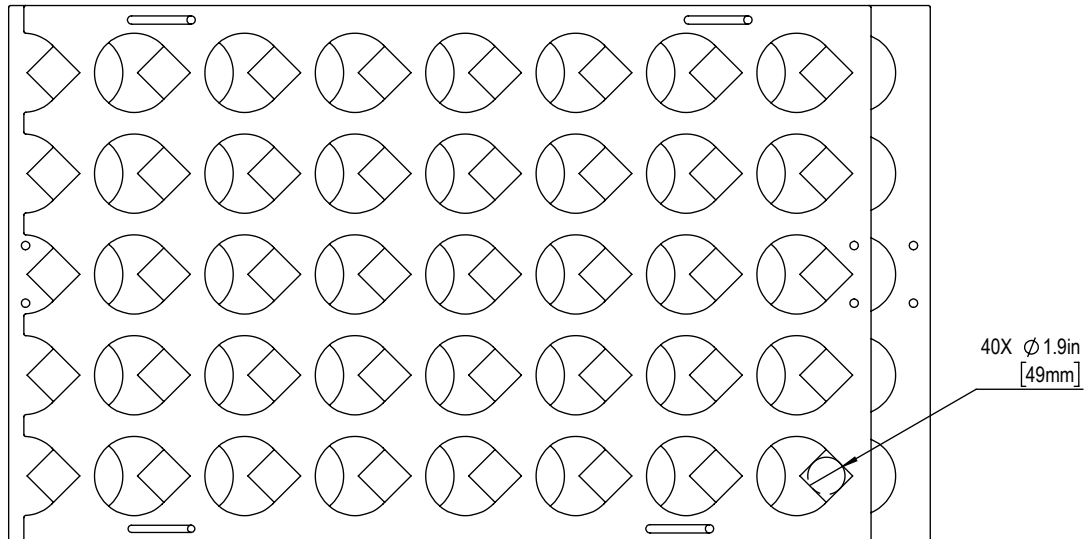
105mm X 105mm



MIN ROUND

1.9in X 1.9in

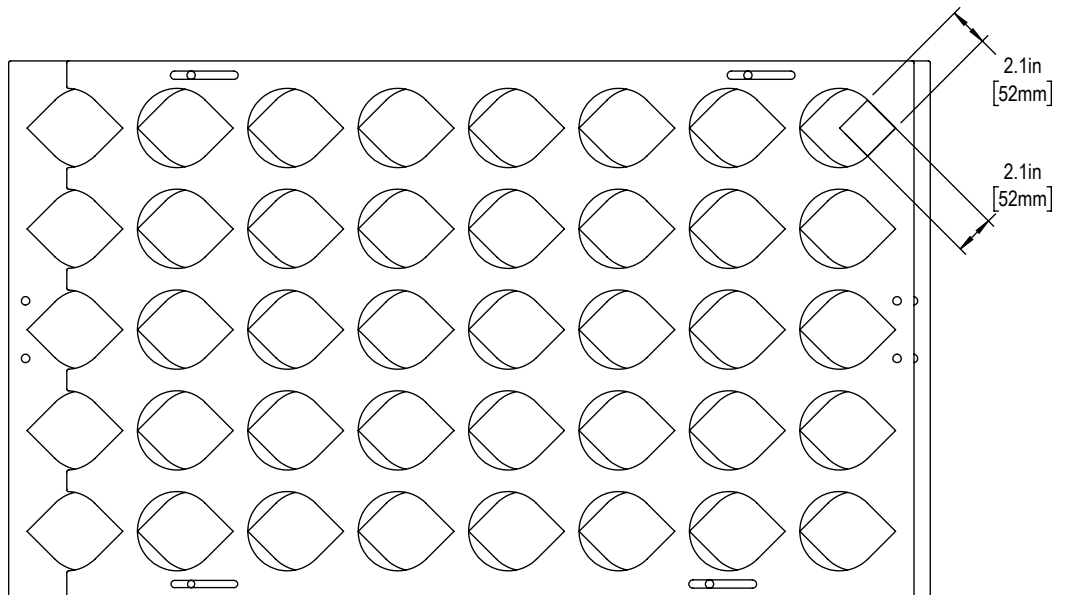
49mm X 49mm



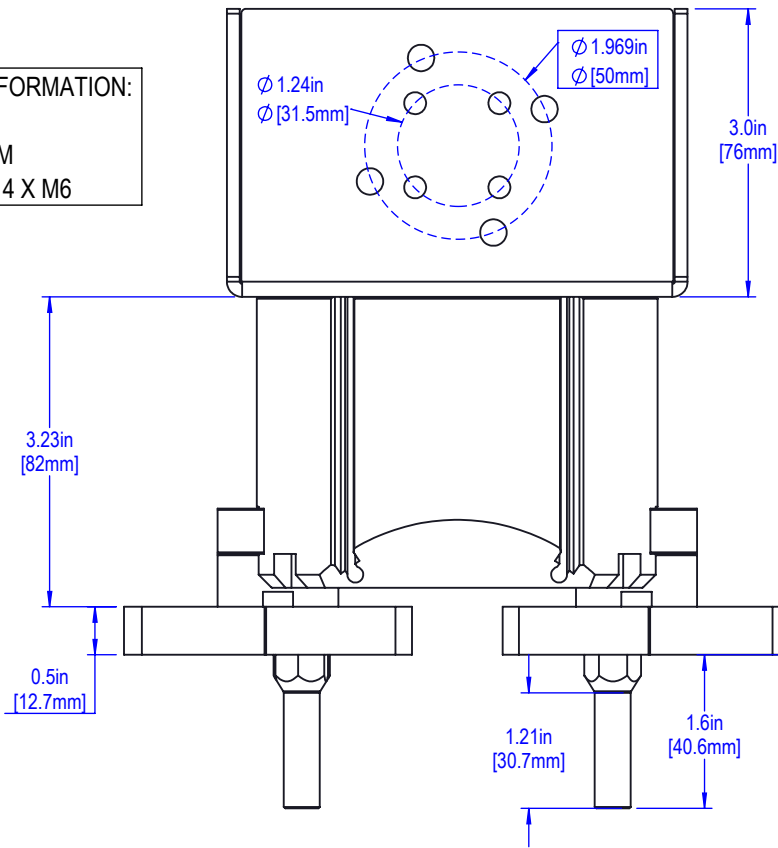
MAX SQUARE

2.1in X 2.1in

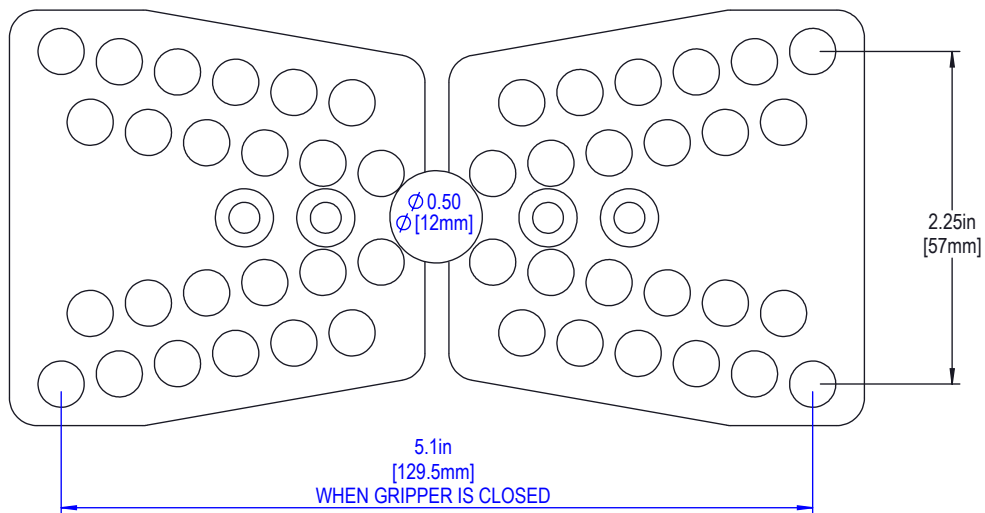
52mm X 52mm



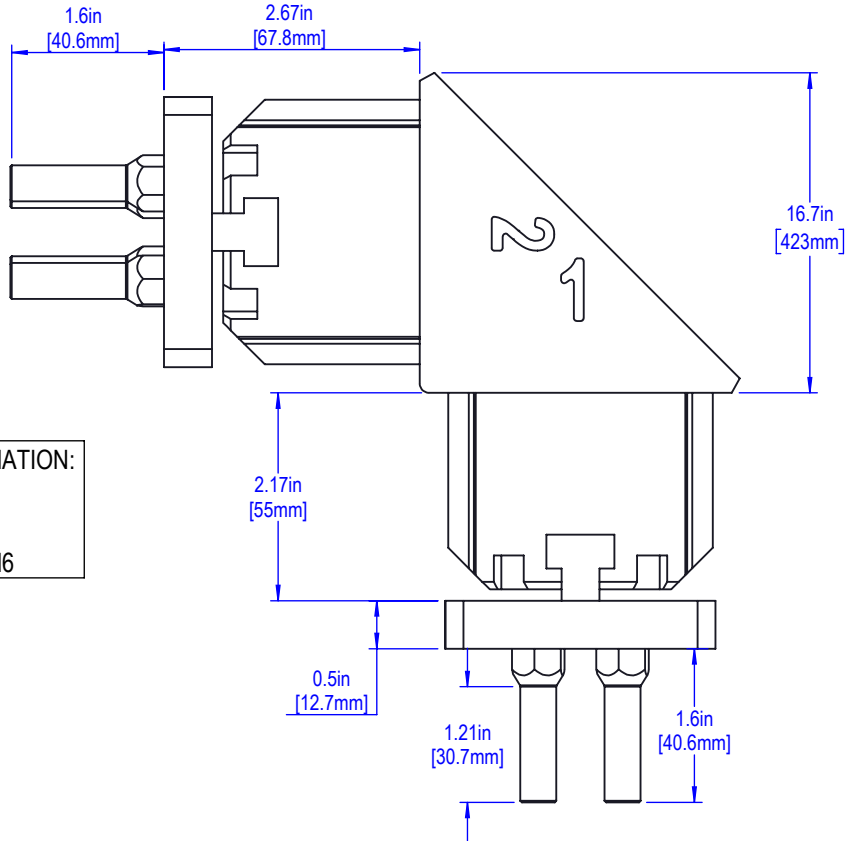
END EFFECTOR INFORMATION:
ISO 9409-1-50-4-M6
BOLT CIRCLE 50 MM
MOUNTING HOLES 4 X M6



TOTAL ASSEMBLY WEIGHT: 7.5lbs [3.5kg]
 MAXIMUM PART WEIGHT: 14.5lb [6.6kg]
 MINIMUM ROUND PART SIZE: 0.5in [12.7mm] MAXIMUM ROUND PART SIZE: 6in [152mm]
 MINIMUM SQUARE PART SIZE: 0.35in [8.9mm] MAXIMUM SQUARE PART SIZE: 6in [152mm]

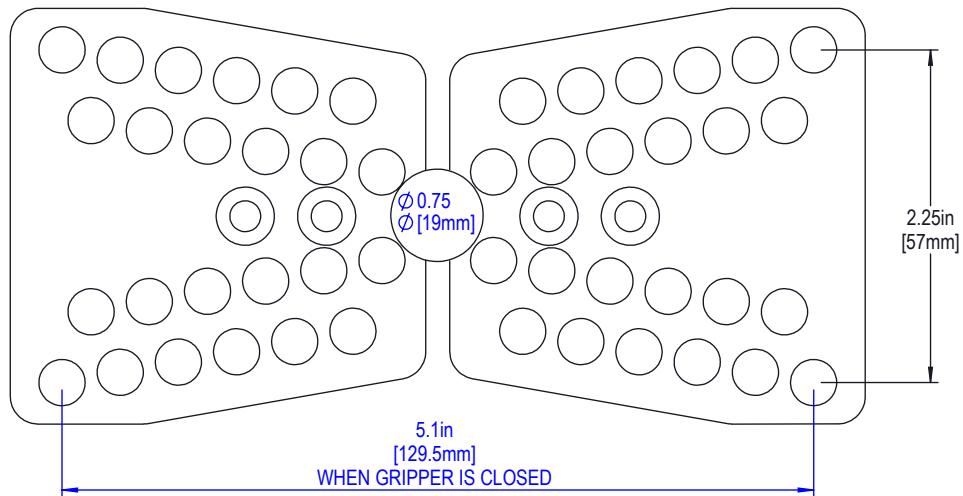


TOTAL GRIPPER STROKE: 20mm
 DOUBLE ACTING CYLINDER
 OPEN FORCE 890 N [200 lbf]
 CLOSED FORCE 803 N [180 lbf]

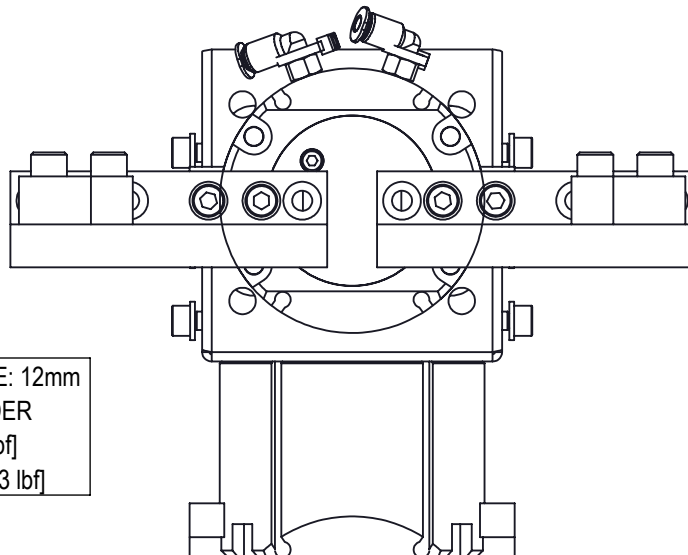
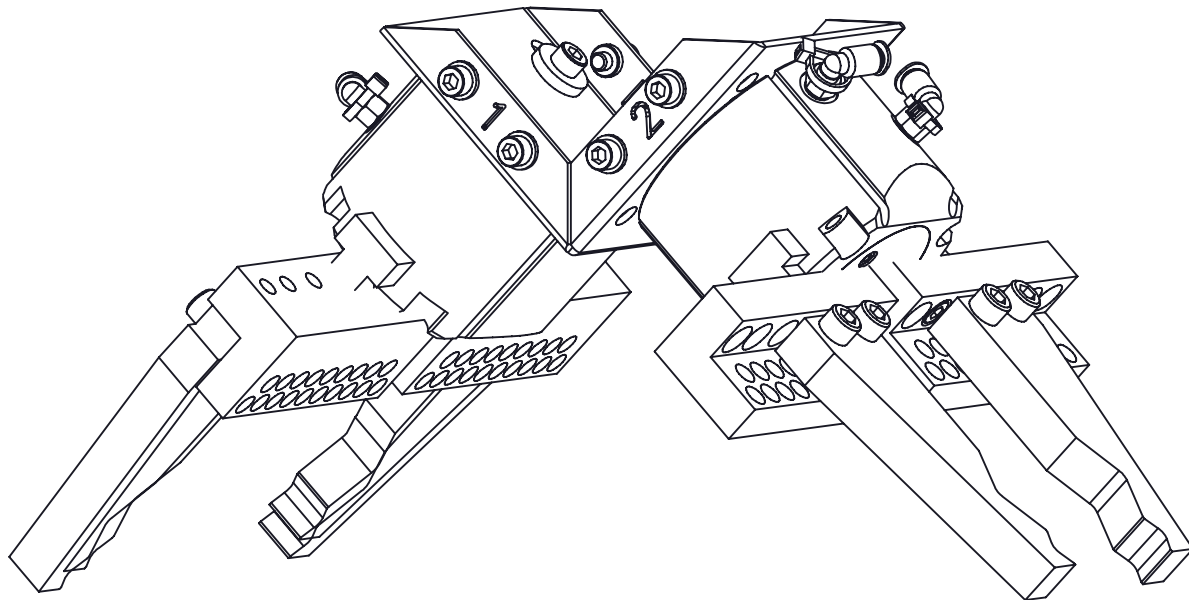


END EFFECTOR INFORMATION:
ISO 9409-1-50-4-M6
BOLT CIRCLE 50 MM
MOUNTING HOLES 4 X M6

TOTAL ASSEMBLY WEIGHT: 7.0lbs [3.2kg]
 MAXIMUM PART WEIGHT PER GRIPPER: 6.3lb [2.86kg]
 MINIMUM ROUND PART SIZE: 0.75in [19mm] MAXIMUM ROUND PART SIZE: 5in [127mm]
 MINIMUM SQUARE PART SIZE: 0.75in [19mm] MAXIMUM SQUARE PART SIZE: 5in [127mm]

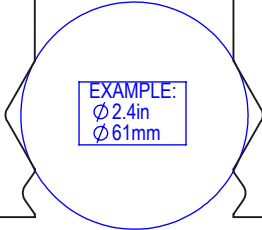


TOTAL GRIPPER STROKE: 12mm
 DOUBLE ACTING CYLINDER
 OPEN FORCE 280 N [63 lbf]
 CLOSED FORCE 280 N [63 lbf]



TOTAL GRIPPER STROKE: 12mm
DOUBLE ACTING CYLINDER
OPEN FORCE 280 N [63 lbf]
CLOSED FORCE 280 N [63 lbf]

FINGERS CAN BE MODIFIED
TO ACCOMODATE A RANGE
OF BAR DIAMETERS



EXAMPLE:
Ø 2.4in
Ø 61mm

THE SINGLE GRIPPER AND THE DUAL
GRIPPER INCLUDE FOUR BLANKS EACH

TOTAL ASSEMBLY WEIGHT: 7.0lbs [3.2kg]
MAXIMUM PART WEIGHT PER GRIPPER: 6.3lb [2.86kg]
MINIMUM ROUND PART SIZE: 0.75in [19mm] MAXIMUM ROUND PART SIZE: 5in [127mm]
MINIMUM SQUARE PART SIZE: 0.75in [19mm] MAXIMUM SQUARE PART SIZE: 5in [127mm]