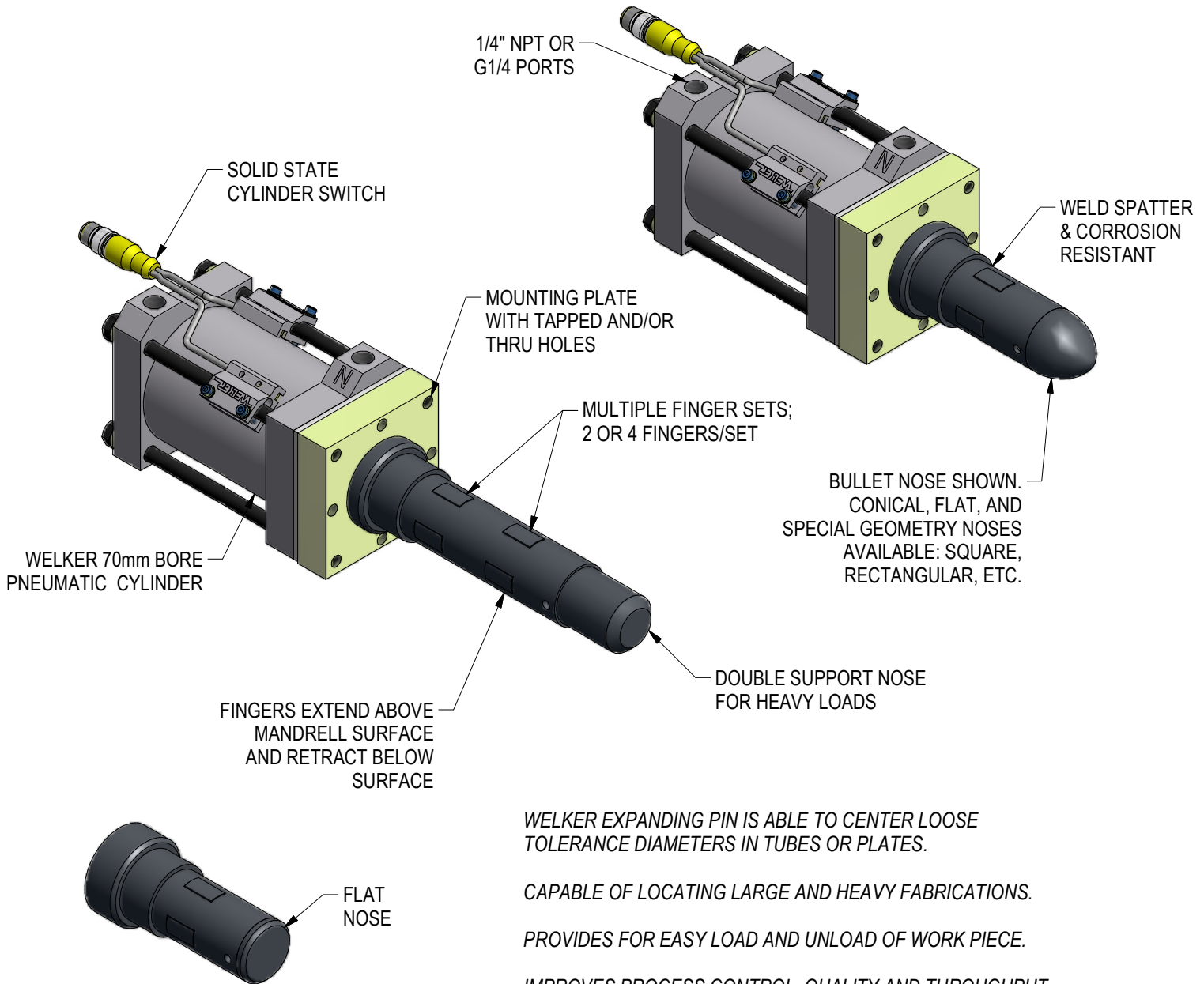


EXPANDING LOCATING PIN



WELKER EXPANDING PIN IS ABLE TO CENTER LOOSE TOLERANCE DIAMETERS IN TUBES OR PLATES.

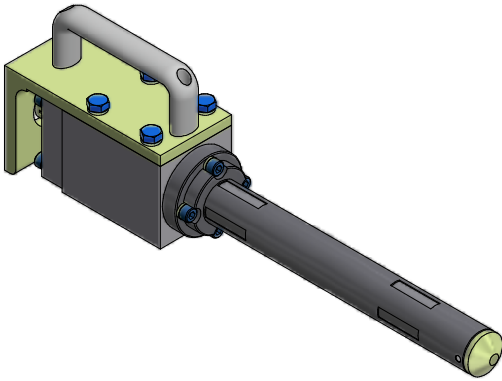
CAPABLE OF LOCATING LARGE AND HEAVY FABRICATIONS.

PROVIDES FOR EASY LOAD AND UNLOAD OF WORK PIECE.

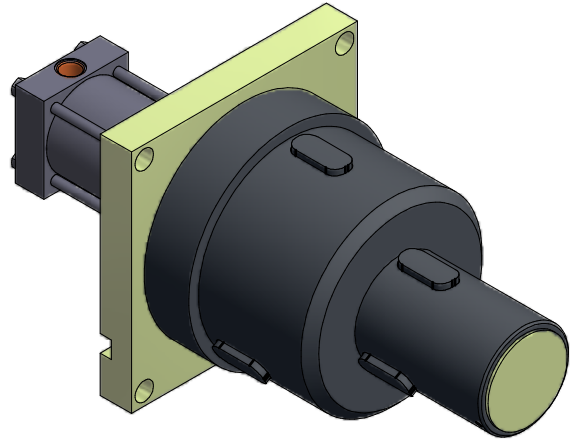
IMPROVES PROCESS CONTROL, QUALITY AND THROUGHPUT.

ENGINEERED TO SPECIFIC APPLICATION REQUIREMENTS.

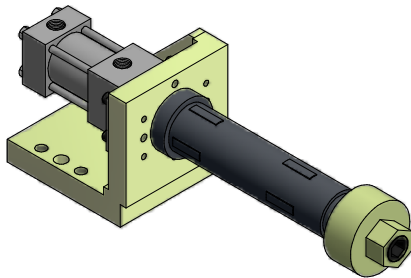
EXPANDING PIN DESIGN STYLES



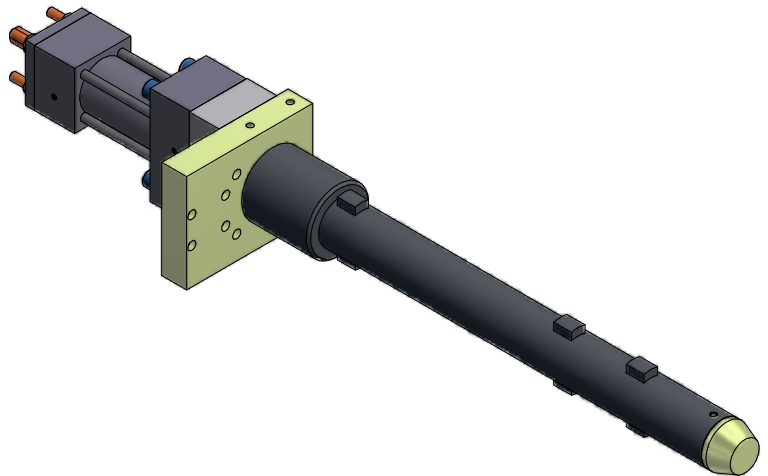
DOUBLE SET OF 4 FINGERS WITH HANDLE.
DRIVEN BY NUT RUNNER



DUAL DIAMETER WITH 3 FINGERS EACH DIA
& HYDRAULIC CYLINDER



DOUBLE SET OF 4 FINGERS
WITH THREAD ON CLAMP
AND HYDRAULIC CYLINDER



TRIPLE SET OF 2 FINGERS
WITH HYDRAULIC CYLINDER

(DO NOT SCALE DRAWING)

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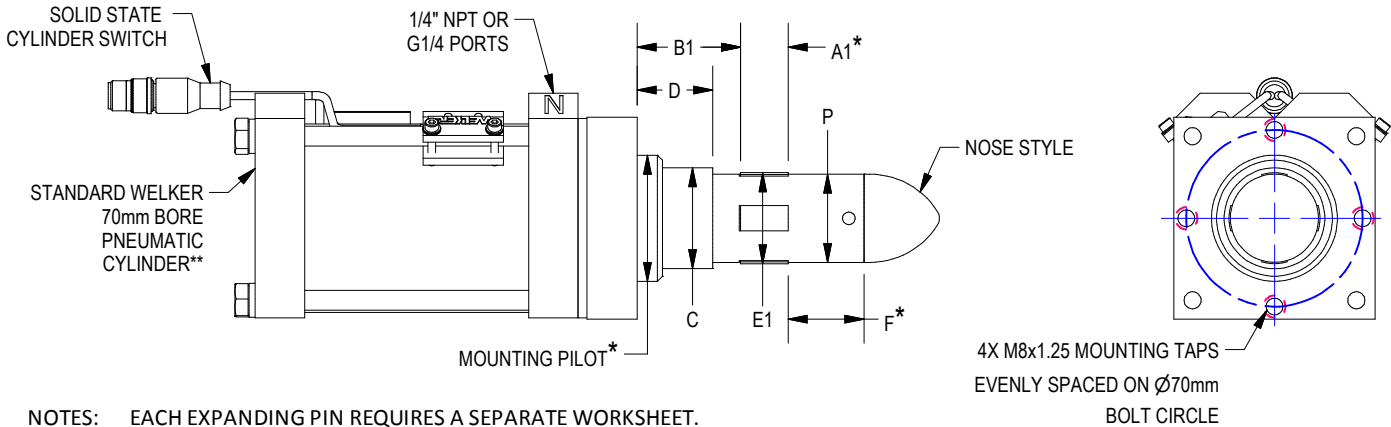
UNIT WITH SINGLE SET OF FINGERS

APPLICATION INFORMATION _____

 APPLICATION ORIENTATION _____

 MAXIMUM HOLE DIAMETER _____
 HOLE TOLERANCE _____
 BUSHING LENGTH _____

DATE _____
 CUSTOMER _____
 PROJECT _____
 STATION _____
 UNIT _____
 MODEL/PART NUMBER ON STATION _____



NOTES: EACH EXPANDING PIN REQUIRES A SEPARATE WORKSHEET.
 ORDER STANDARD EXPANDING PINS 1mm SMALLER THAN HOLE DIAMETER.
 EXAMPLE: 38mm HOLE, ORDER 37mm DIAMETER PIN

FINGER QUANTITY: _____ 2 OR 4
 A1: FINGER LENGTH _____ 20mm MINIMUM
 B1: FINGER LOCATION _____ 25mm MINIMUM
 C: HUB DIAMETER _____
 D: HUB LENGTH _____ (OPTIONAL)
 E1: FINGER EXTENSION _____ STD IS 1-2mm BEYOND PIN DIA.
 F*: PIN LENGTH PAST FINGERS VARIES WITH PIN DESIGN.
 P: PIN DIAMETER _____

NOSE STYLE: _____ FLAT NOSE _____ CONICAL NOSE _____ BULLET NOSE
 _____ DOUBLE SUPPORT NOSE (HEAVY LOADS)
 _____ OTHER:
 CYLINDER TYPE: _____ PNEUMATIC (AIR) _____ HYDRAULIC**
 PORT TYPE: _____ NPT _____ G _____ OTHER:
 SWITCH: _____ (SEE CHART BELOW)

* DIMENSION WILL VARY WITH PIN DIAMETER, FINGER LENGTH, FINGER EXTENSION

** HYDRAULIC CYLINDER AVAILABLE. MAX. PRESSURE 250 PSI CONTACT WELKER FOR INFORMATION

ADDITIONAL INFORMATION, SUCH AS SPECIAL ENVIRONMENTAL CONDITIONS, SPECIAL NOSE, HIGH LOAD/FORCE, ETC.

IS THIS A LONG CYCLE MIG OR EXTREME HEAT APPLICATION WHERE COOLING SHOULD BE CONSIDERED?

SELECT: YES / NO INTERNAL AIR COOLING OPTION? SELECT: YES / NO

Switch	Part Number	Mfr	Description
L3	SWITCH L3 L3 sw itch is w eld field immune, comparable to World Sw itches	Welker	4-Wire, 4-Pin, DC (PNP) M12 X 1 Quick Disconnect
L5	MK5113 (This is a single sensor sw itch: 2 sw itches are installed per cylinder)	ifm Efector	3-Wire, 4-Pin, DC (NPN) M12 X 1 Quick Disconnect

Standard Switch Option - All other options may affect price and delivery

(DO NOT SCALE DRAWING)



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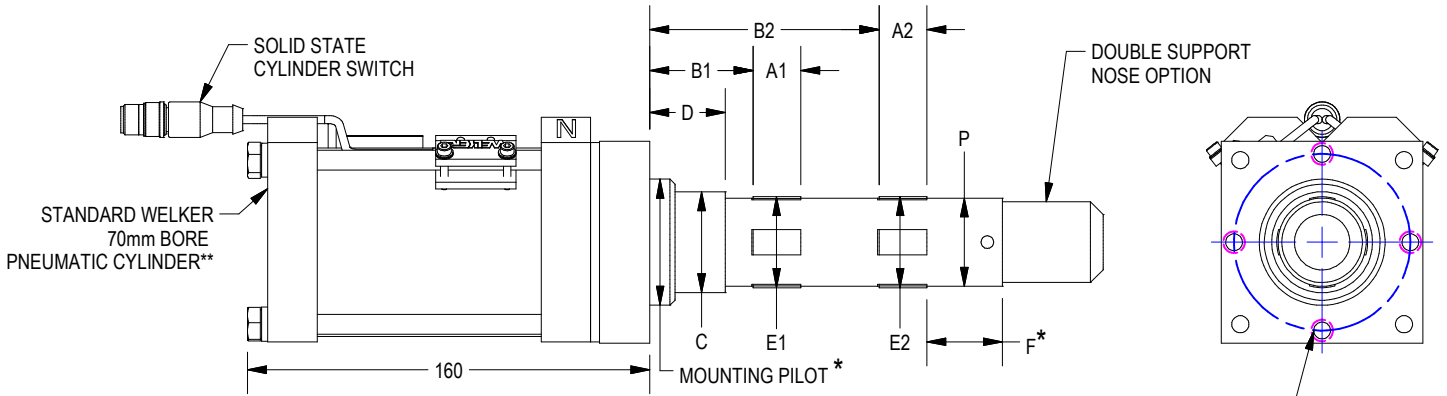
UNIT WITH DOUBLE SET OF FINGERS

APPLICATION INFORMATION _____

 APPLICATION ORIENTATION _____
 MAXIMUM HOLE DIAMETER _____
 HOLE TOLERANCE _____
 BUSHING LENGTH _____

DATE _____
 CUSTOMER _____
 PROJECT _____
 STATION _____
 UNIT _____
 MODEL/PART NUMBER ON STATION _____

CAD MODEL OR SCREENSHOT REQUIRED WITH WORKSHEET



NOTES: EACH EXPANDING PIN REQUIRES A SEPARATE WORKSHEET.
 ORDER STANDARD EXPANDING PINS 1mm SMALLER THAN HOLE DIAMETER.
 EXAMPLE: 38mm HOLE, ORDER 37mm DIAMETER PIN

4X M8x1.25 MOUNTING TAPS
 EVENLY SPACED ON Ø70mm
 BOLT CIRCLE

FINGER QUANTITY @ A1: _____ FINGER QUANTITY @ A2: _____
 A1: FINGER LENGTH _____ A2 LENGTH: _____ 20mm MINIMUM
 B1: FINGER LOCATION _____ B2 LOCATION: _____ 25mm MINIMUM
 C: HUB DIAMETER _____
 D: HUB LENGTH _____ (OPTIONAL)
 E1: FINGER EXTENSION _____ E2 EXTENSION: _____ STD IS 1-2mm
 F*: PIN LENGTH PAST FINGERS VARIES WITH PIN DESIGN. BEYOND PIN DIA.
 P: PIN DIAMETER _____
 NOSE STYLE: _____ FLAT NOSE _____ CONICAL NOSE _____ BULLET NOSE
 _____ DOUBLE SUPPORT NOSE (HEAVY LOADS)
 _____ OTHER:
 CYLINDER TYPE: _____ PNEUMATIC (AIR) _____ HYDRAULIC**
 PORT TYPE: _____ NPT _____ G _____ OTHER:
 SWITCH: _____ (SEE CHART BELOW)

* DIMENSION WILL VARY WITH
 PIN DIAMETER, FINGER
 LENGTH, FINGER EXTENSION

** HYDRAULIC CYLINDER
 AVAILABLE.
 MAX. PRESSURE 250 PSI
 CONTACT WELKER FOR
 INFORMATION

ADDITIONAL INFORMATION, SUCH AS SPECIAL ENVIRONMENTAL CONDITIONS, SPECIAL NOSE, HIGH LOAD/FORCE, ETC.

IS THIS A LONG CYCLE MIG OR EXTREME HEAT APPLICATION WHERE AIR COOLING SHOULD BE CONSIDERED?

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Standard Switch Option - All other options may affect price and delivery

(DO NOT SCALE DRAWING)



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