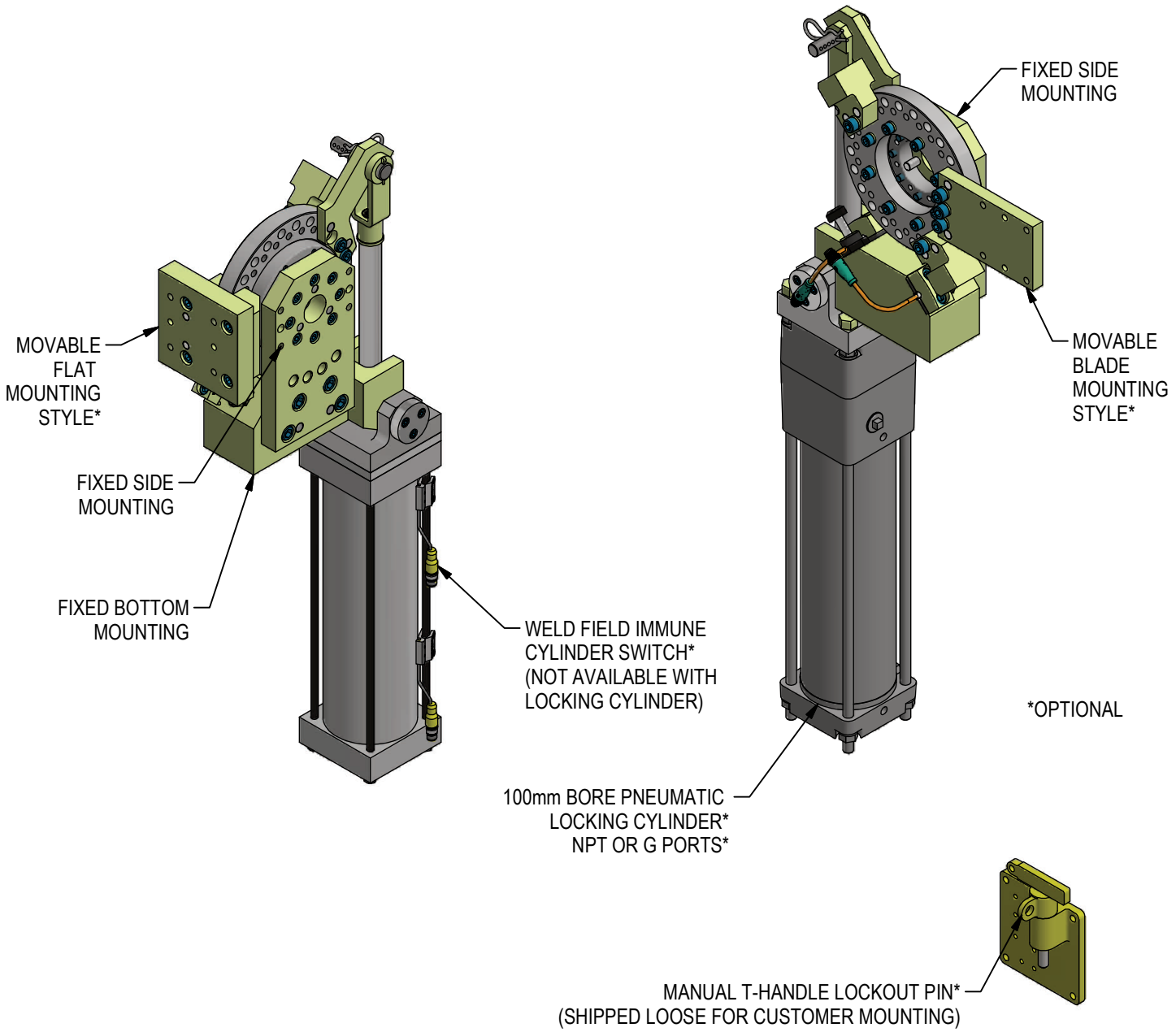
WELKER
ENGINEERED PRODUCTS
ISO 9001 REGISTERED

FLEX PIVOT
NWP



RELEASED 8/30/21

ORDERING INFORMATION

NOTE: ALL BOXES MUST BE FILLED IN FOR A COMPLETE PART NUMBER

NWP								0

Opening Angle
- **90** 15-90 degree in 15 degree increments

Actuator
- **01** 100mm Bore Air Cylinder w NPT ports
- **02** 100mm Bore Air Cylinder w G ports
- **03** 100mm Bore Locking Air Cyl w NPT ports
- **04** 100mm Bore Locking Air Cyl w G ports

Mounting Style
- **X** None
- **B** Blade
- **F** Flat

Mounting Angle
- **00** 00-90 degree in 15 degree increments

Port Location
- **A** Ports @ X1
- **B** Ports @ X2
- **C** Ports @ X3
- **D** Ports @ X4

Switch
- **00** No Switch
- **L3** Cylinder Switch ~ Not available with Actuators 03/04
- **P1** Welker Smart Stops

Manual Lockout
- **X** No Manual Lockout
- **M** Manual Lockout (Shipped loose for customer mounting)

CYLINDER SWITCH	Switch Option	Manufacturer's Part Number	Mfr.	Description
	L3	SWITCH L3S L3 switch is weld field immune*, comparable to World Switches. L3S is a single sensor, single connector switch: 2 switches installed with L3 option	Welker	4-Wire, 4-Pin, DC (PNP) M12 X 1 Quick Disconnect

*Note that some mid and low frequency DC resistance applications (i.e. aluminum resistance welding applications) may cause a fault. In these applications, it is recommended that the sensor be ignored/bypassed during the welding cycle.

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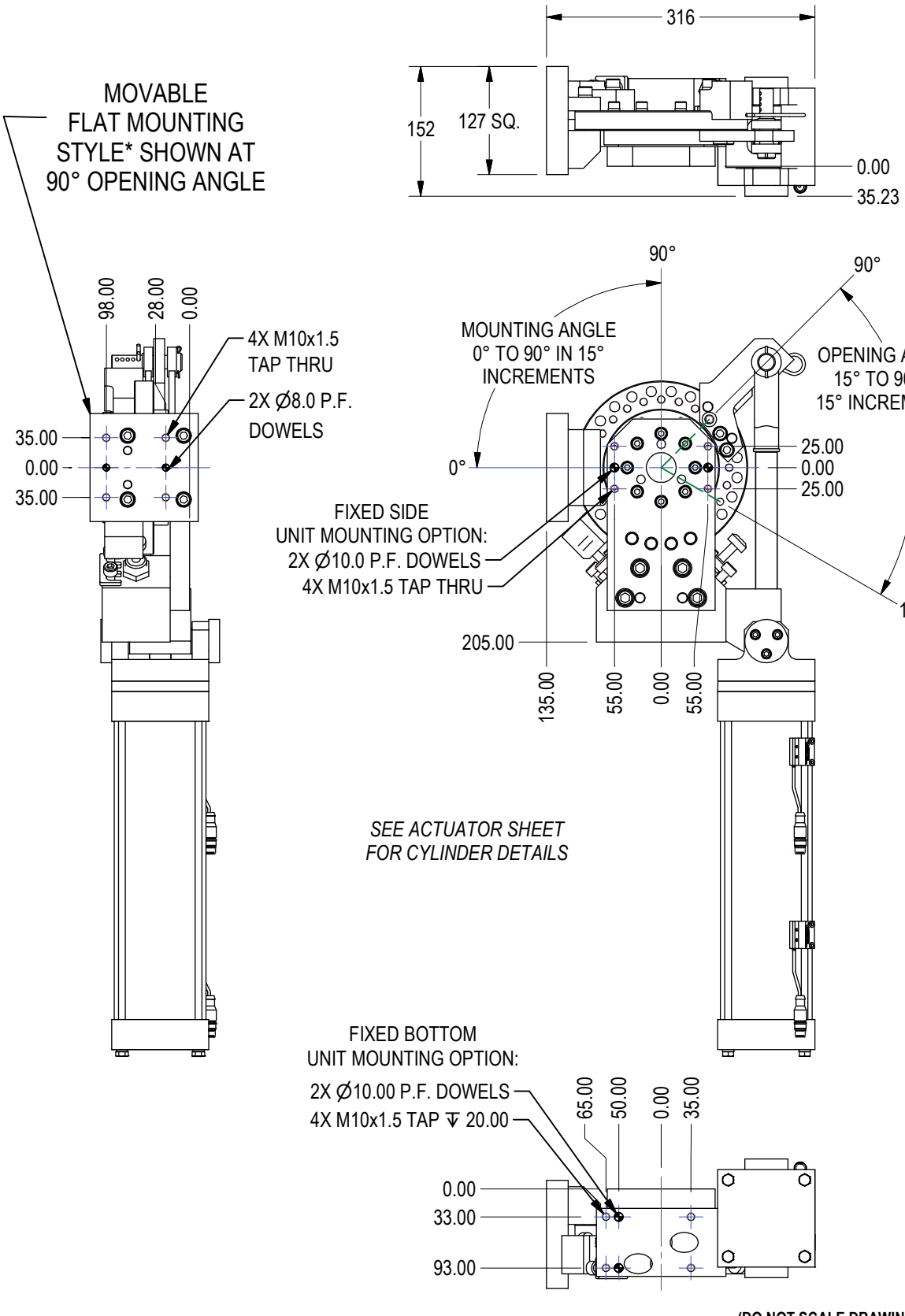
GENERAL DIMENSIONS



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*OPTIONAL

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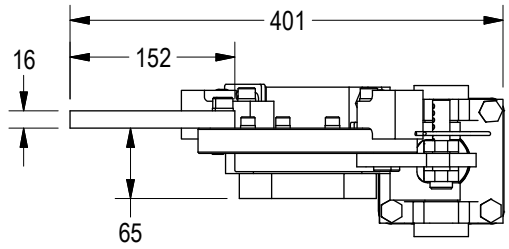
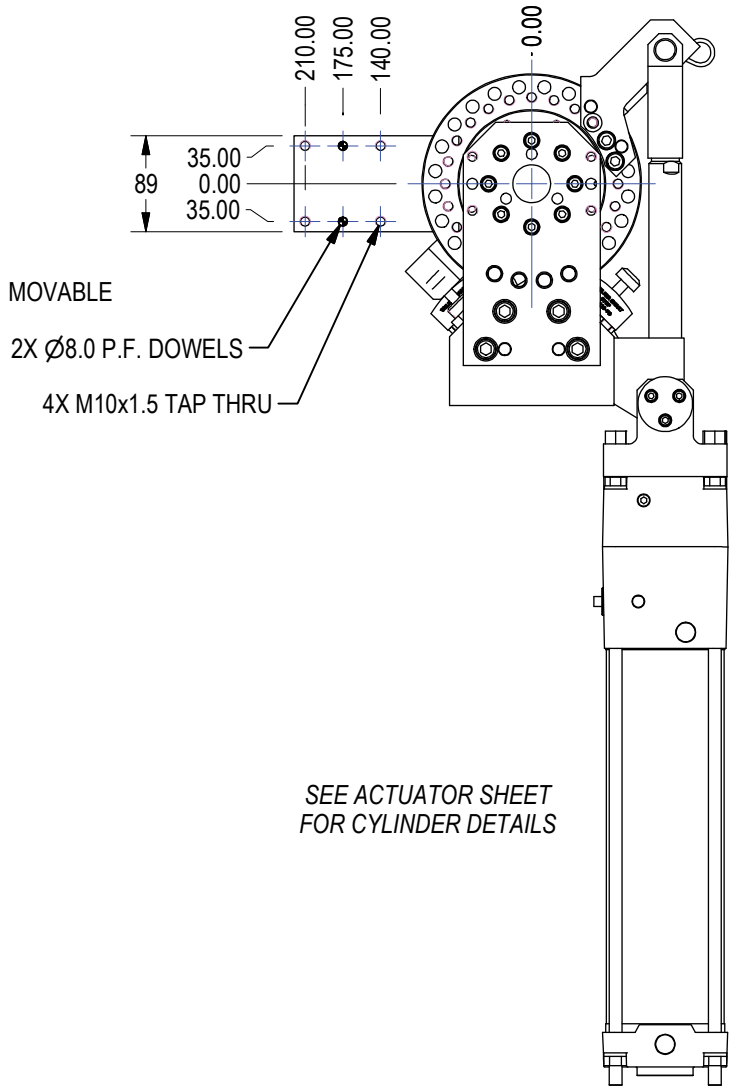
BLADE MOUNTING STYLE*

SHOWN AT 90° OPENING ANGLE





SEE ACTUATOR SHEET FOR CYLINDER DETAILS

*OPTIONAL

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ACTUATOR INFORMATION

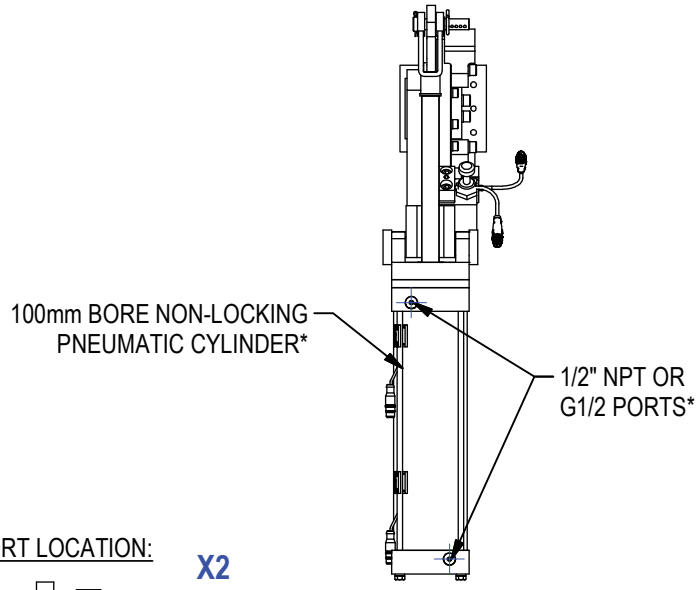
NWP	90	■■	X	00	■	L3	X	0

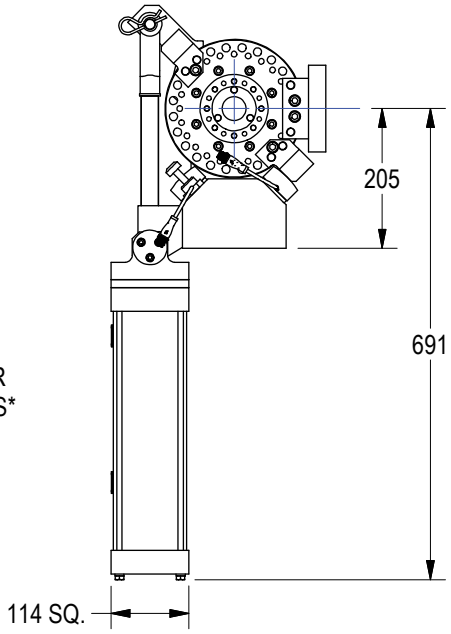
Actuator

01	100mm Bore Air Cylinder w NPT ports
02	100mm Bore Air Cylinder w G ports
03	100mm Bore Locking Air Cyl w NPT ports
04	100mm Bore Locking Air Cyl w G ports

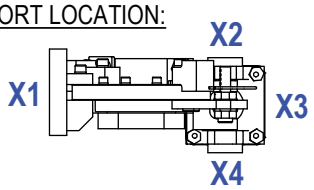
Port Location

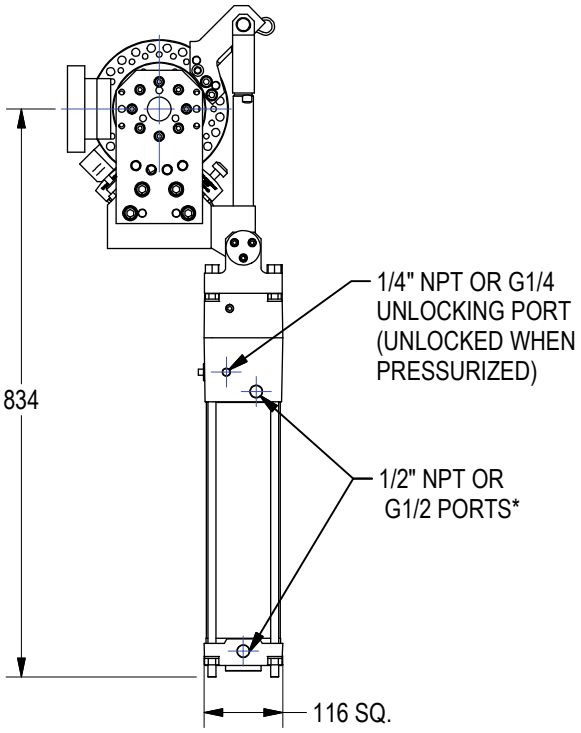
A	Ports @ X1
B	Ports @ X2
C	Ports @ X3
D	Ports @ X4

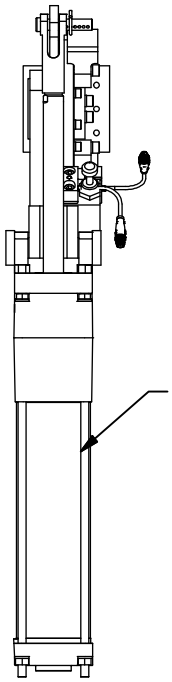




PORT LOCATION:







CUSTOMER-SUPPLIED CYLINDER
SWITCHES AVAILABLE FROM SMC

*OPTIONAL

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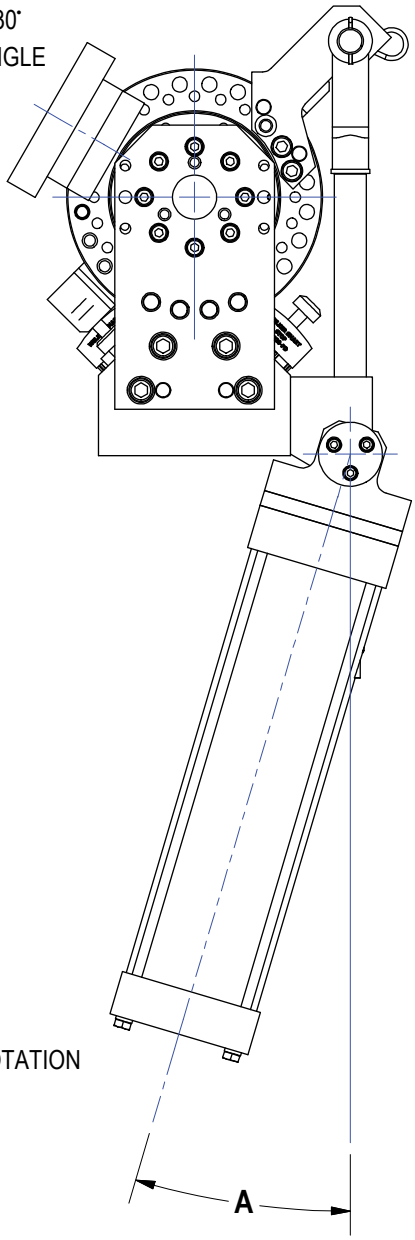
ACTUATOR INFORMATION

SHOWN AT 30˚
MOUNTING ANGLE



CYLINDER SWING CLEARANCE	
OPENING ANGLE	ANGLE A
15°	14°
30°	16.5°
45°	14.5°
60°	10.5°
75°	5.5°
90°	-16.5° - 0

MAX PIVOT ROTATION
AT 30˚

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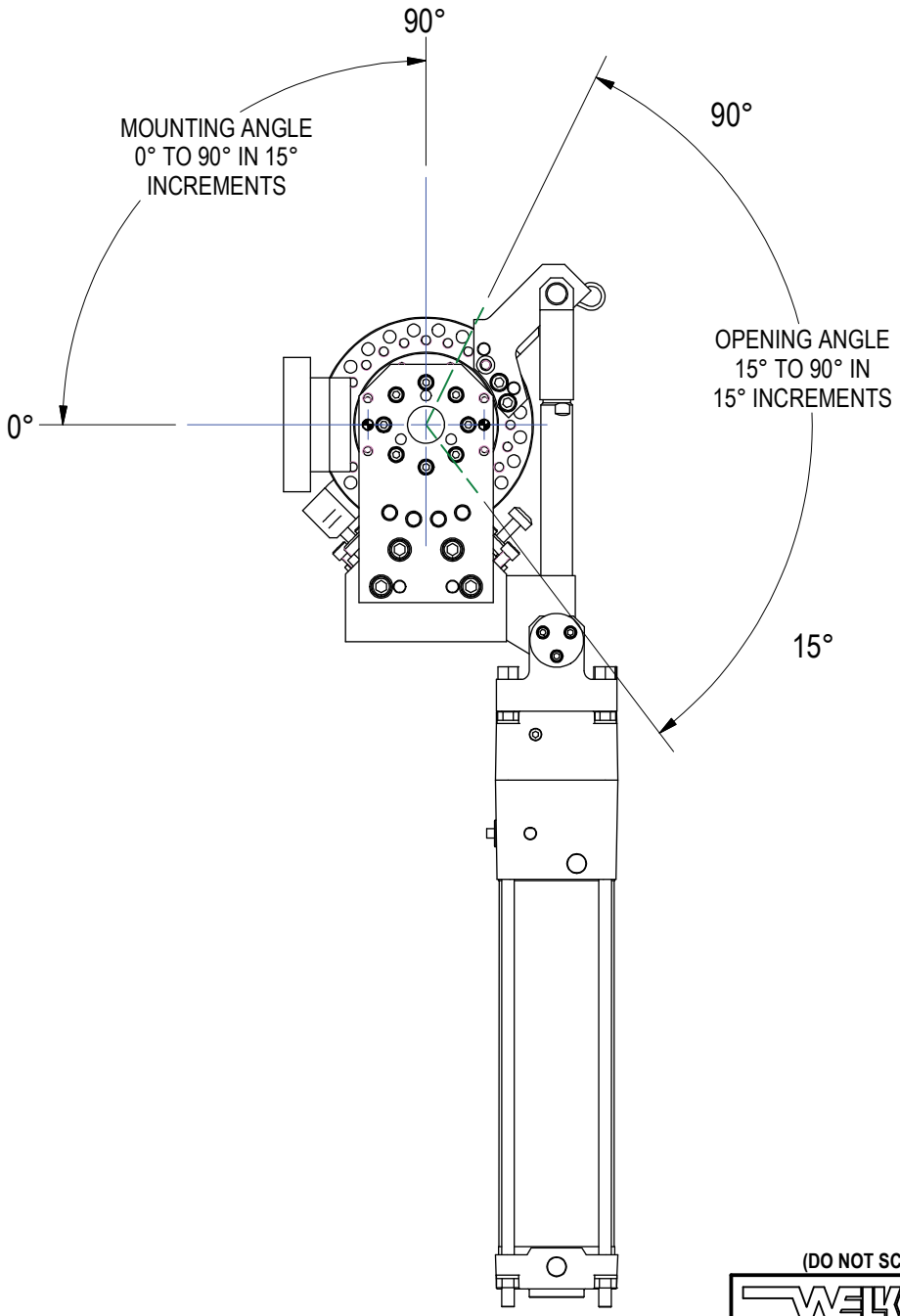
OPENING ANGLE & MOUNTING ANGLE INFORMATION

N	W	P			0	1	B			A	L	3	M	0

Opening Angle
90 15-90 degree in 15 degree increments

Mounting Angle
00 00-90 degree in 15 degree increments



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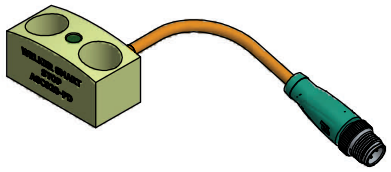
WELKER SMART STOP

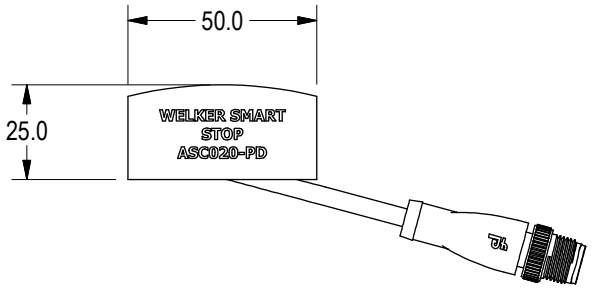
WELKER SMART STOP does all stopping & sensing functions in one part.
SMART STOP minimizes engineering, field set up and operater adjustment time.

WELKER SMART STOP eliminates:

- Need for seperate mounts, brackets & flags.
- Need for switch adjustments when shimming.
- Improper adjustment of outboard switches.
- Outboard switch vibrating loose in bracket.
- Protecting outboard proxes from being stepped on or bent in tools.



ASC020-PD
DC SWITCH



General Specifications

Switching function	Normally Open (NO)
Output type	PNP
Rated operating distance,sn	1.75mm
Output polarity	DC
Assured operating distance sa	0 - 1.42 mm
Output type	3-wire

Nominal Ratings

Operating voltage, U_B	5 - 30 V DC
Switching frequency, f	0 - 6000 Hz
Reverse polarity protection	Reverse polarity protected
Short-circuit protection	Pulsing
Voltage drop, U_d	≤ 1.5 V
Operating current, I_L	0 - 100 mA
Off-state current, I_r	0 - 0.2 mA
No-load supply current, I_0	≤ 15 mA

Indicators/Operating Means

Operating voltage indicator	LED green
Switching state indicator	LED yellow

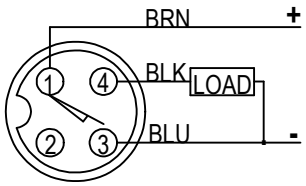
Ambient Conditions

Ambient temperature	-40 - 85 °C (-40 - 185 °F)
Storage temperature	-40 - 85 °C (-40 - 185 °F)

Mechanical Specifications

Connection type Connector plug	M12 x 1 , 4-pin
Cable length	255mm
Degree of protection	IP67
Cable material	Weld spatter resistant, robotic quality POC
Cable color	Orange

WIRING DIAGRAM (PNP)



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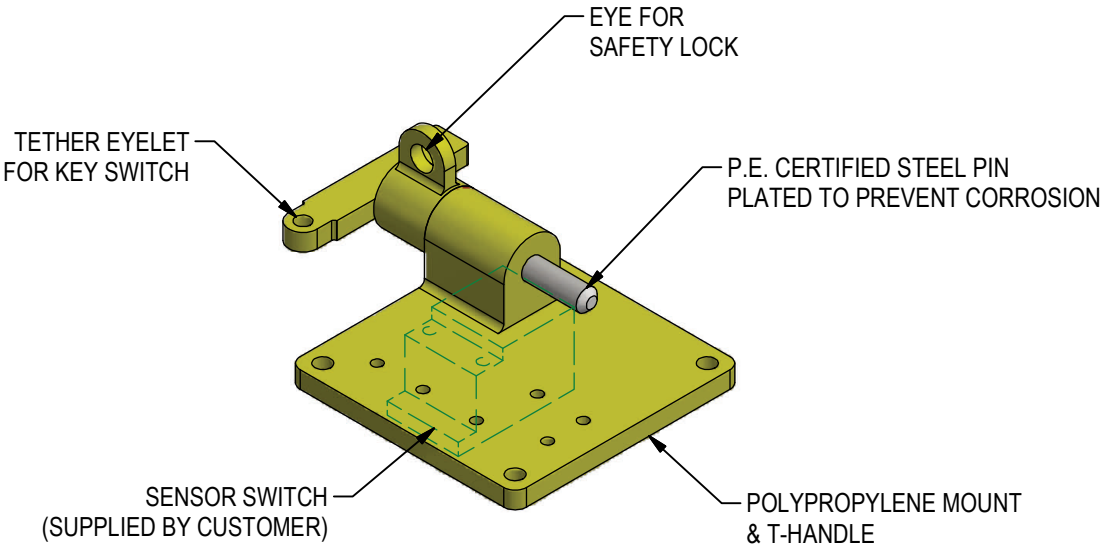
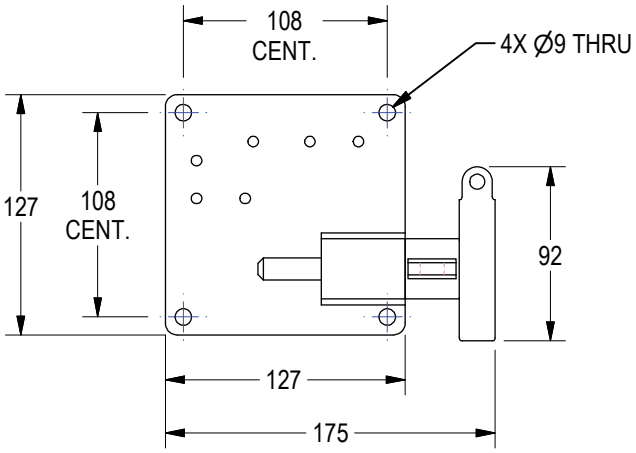
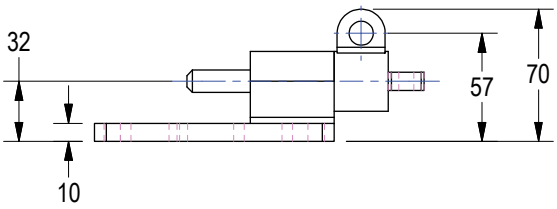
MANUAL T-HANDLE LOCKOUT PIN ~ P.E. CERTIFIED

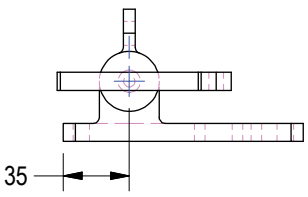
(SHIPPED LOOSE FOR CUSTOMER MOUNTING)





TRU-LOK-OUT
#SP12Y100-R00201





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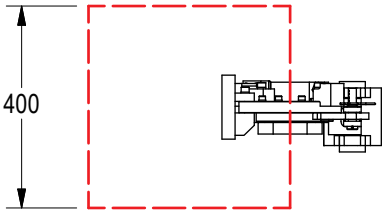
LOAD & WORKING ENVELOPE

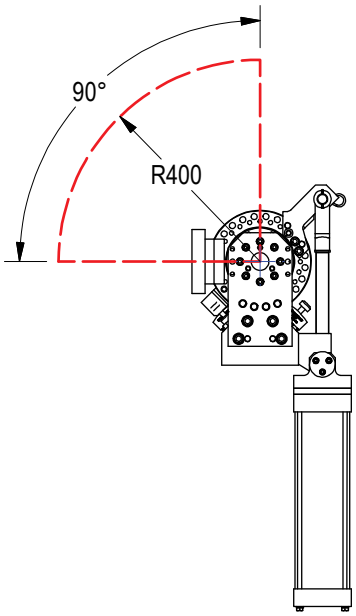
MOUNTED TOOLING CENTER OF GRAVITY MUST BE WITHIN WORKING ENVELOPE AS SHOWN

VERTICAL APPLICATIONS

LOAD CAPACITY:

MAX. 125 LBS @ 65 PSI
MAX. 150 LBS @ 80 PSI



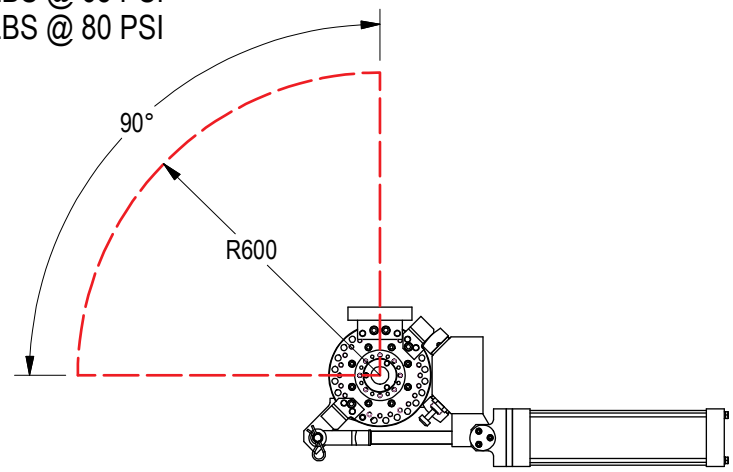


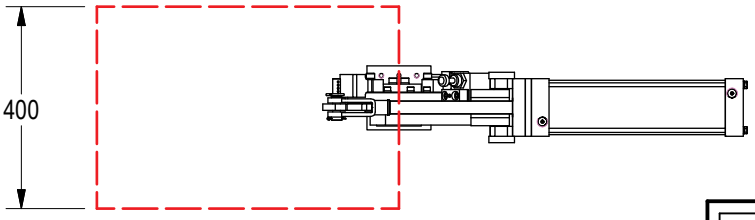
- ***FLOW CONTROLS ARE REQUIRED***
- ***UNIT IS DESIGNED TO OPERATE AT FULL LOAD CAPACITY AND CYCLE 90 DEGREES WITHIN 1.5 SECONDS***

HORIZONTAL APPLICATIONS

LOAD CAPACITY:

MAX. 100 LBS @ 65 PSI
MAX. 100 LBS @ 80 PSI





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