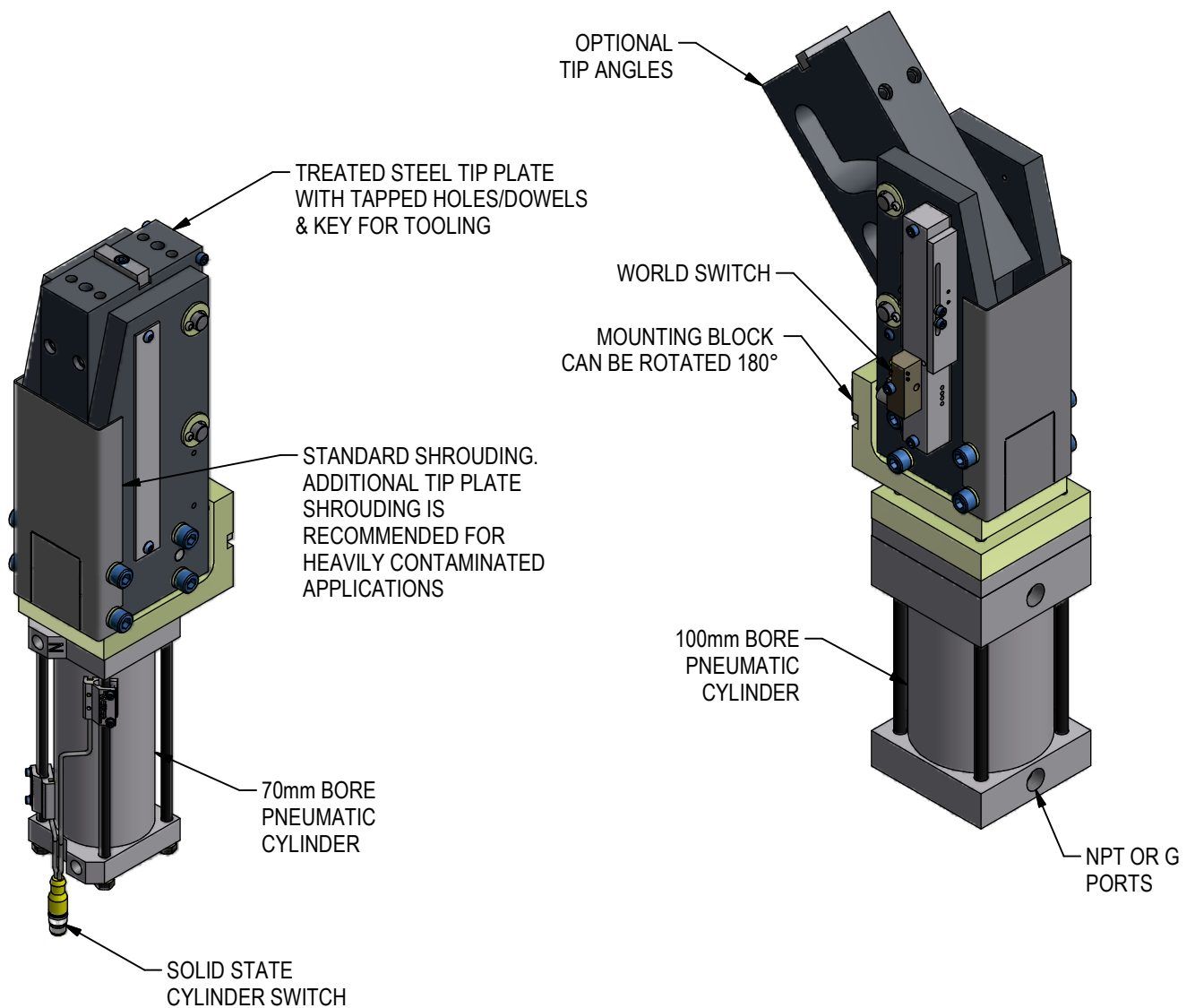


UPE/SPE SERIES PART EJECTOR

ONE ACTUATOR TO LIFT AND TIP TO EJECT



RELEASED 5/5/16

ORDERING INFORMATION

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

					A								0	0	0
--	--	--	--	--	---	--	--	--	--	--	--	--	---	---	---

Series

- UPE Long Stroke Part Ejector
- SPE Short Stroke Part Ejector

Angle (See Sheet 4)

- 045 Optional angles vary with series

Actuator (See Sheet 5)

- 01 Welker 70mm Bore w/ NPT Ports
- 02 Welker 70mm Bore w/ G Ports
- 05 Welker 100mm Bore w/ NPT Ports
- 06 Welker 100mm Bore w/ G Ports

Shroud (See Sheet 6)

- 0 Standard Shroud
- 1 Extra Tip Plate Shrouding*

Mount (See Sheet 7)

- A Mounting Base as Shown
- B Mounting Base Rotated 180 degrees

Switch Options (See Sheets 8, 9)

Switch Position (See Sheets 8, 9)

- 1 Switch @ Position 1
- 2 Switch @ Position 2
- 3 Switch @ Position 3
- 4 Switch @ Position 4

Port Position (See Sheet 5)

- A Port @ Position 1
- B Port @ Position 2
- C Port @ Position 3
- D Port @ Position 4

* Extra tip plate shrouding not available on SPE with world switch

SEE SHEET 10 FOR UNIT WEIGHTS

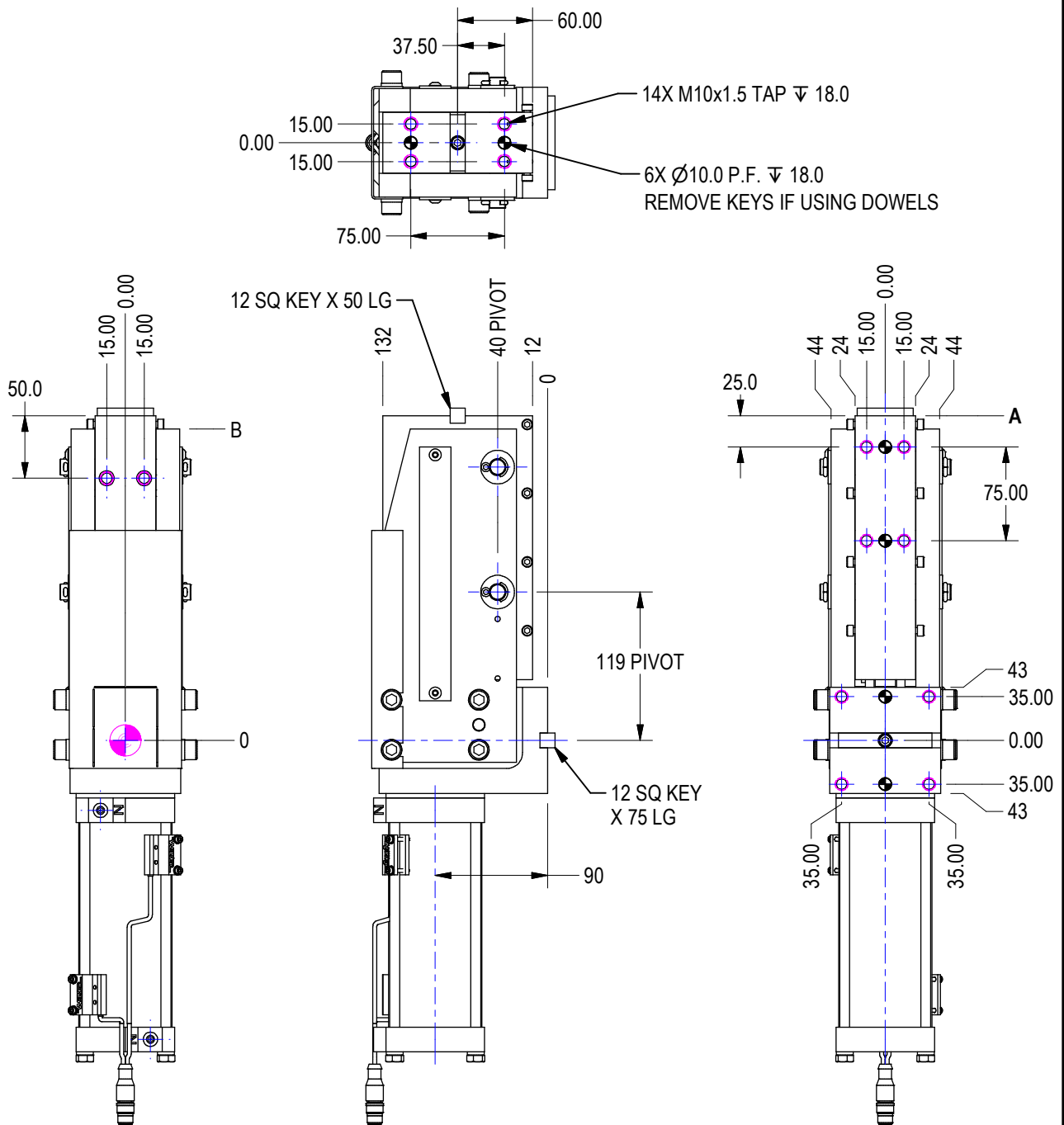
(DO NOT SCALE DRAWING)



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DIMENSIONS



SERIES	DIM. A	DIM. B
UPE	260	250
SPE	206	186

NOTE: DIMENSIONS SHOWN FOR REFERENCE ONLY.



WELKER PART EJECTORS
WEB PAGE

(DO NOT SCALE DRAWING)

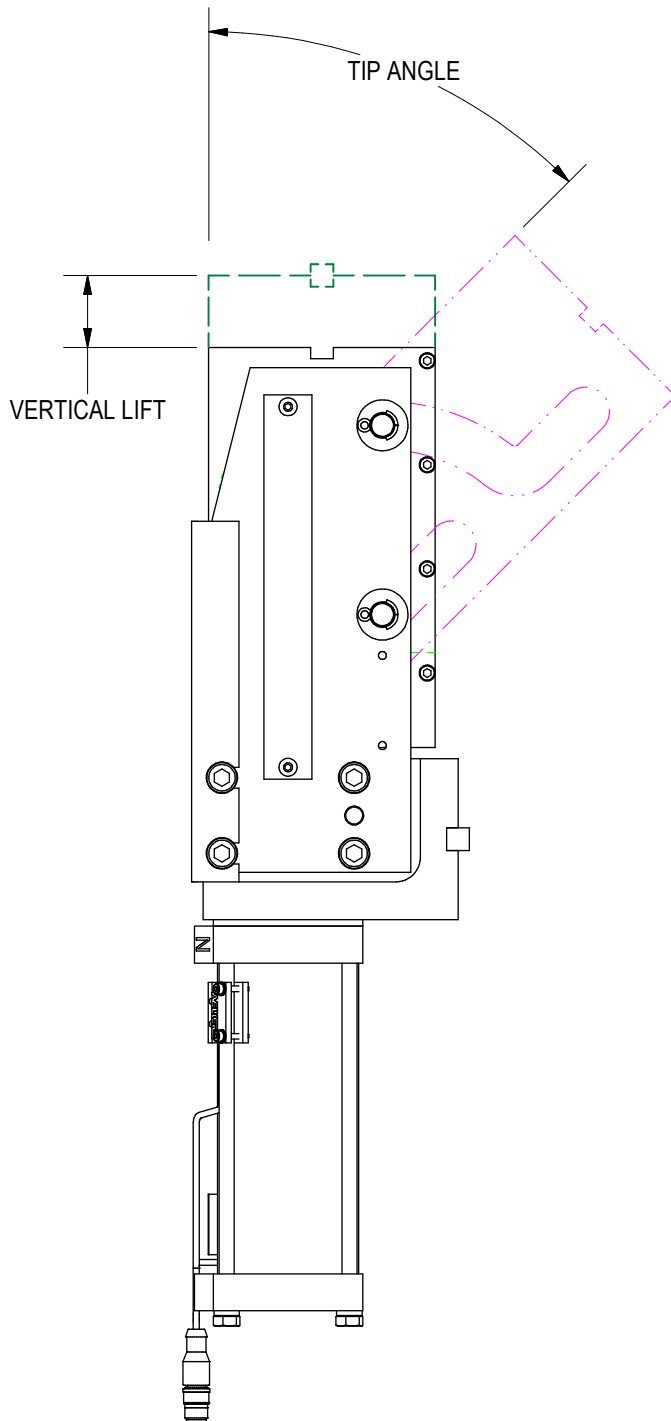
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TIP ANGLE INFORMATION

U
P
E
0
4
5
A
0
1
0
A
L
3
1
A
0
0
0

Angle
 UPE 11, 22, 31, 39 & 45
 SPE 30



UNIT'S TIP PLATE TRAVELS VERTICALLY THEN TIPS OUT TO SELECTED ANGLE.

SERIES	VERTICAL LIFT
UPE	38
SPE	24

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ACTUATOR INFORMATION

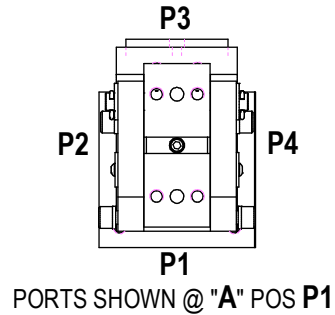
U
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0
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1
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A
L
3
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0
0

Actuator

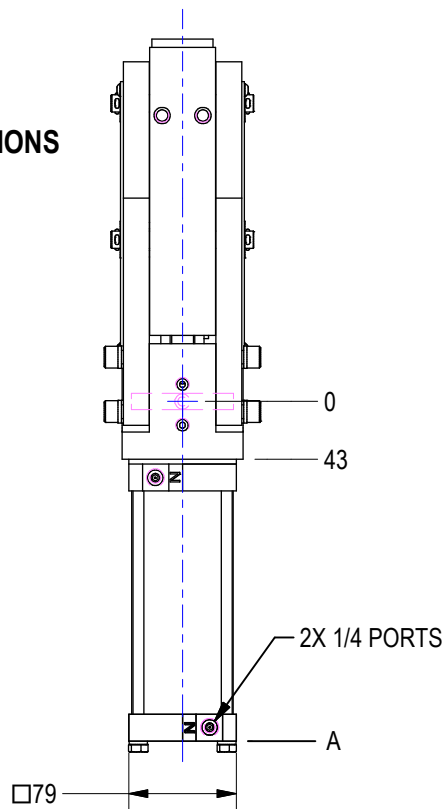
- 01 Welker 70mm Bore w/ NPT Ports
- 02 Welker 70mm Bore w/ G Ports
- 05 Welker 100mm Bore w/ NPT Ports
- 06 Welker 100mm Bore w/ G Ports

Port Position

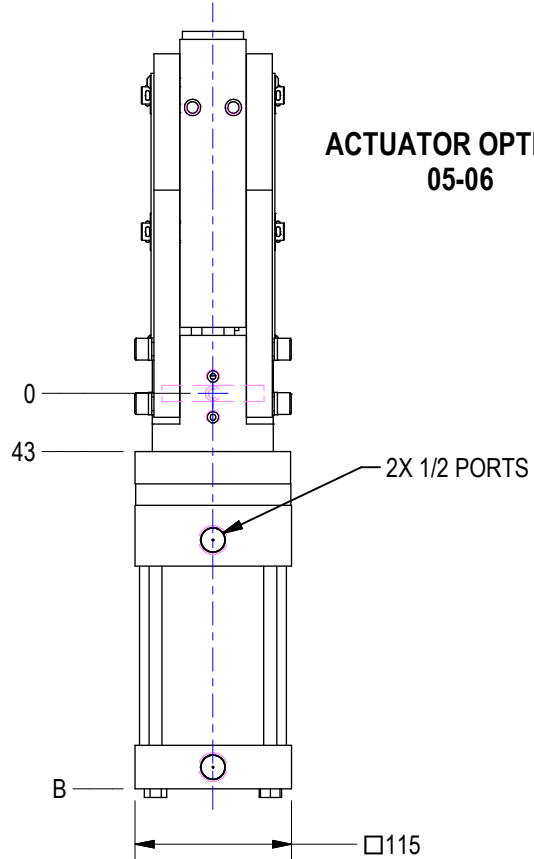
- A Port @ P1
- B Port @ P2
- C Port @ P3
- D Port @ P4



**ACTUATOR OPTIONS
01-02**



**ACTUATOR OPTIONS
05-06**



TIP ANGLE	A	B	CYLINDER STROKE
11° (UPE)	250	252	60
22° (UPE)	250	262	70
31° (UPE)	250	272	80
39° (UPE)	250	282	90
45° (UPE)	250	292	100
30° (SPE)	200	236	50

NOTE: DIMENSIONS SHOWN ARE mm

(DO NOT SCALE DRAWING)

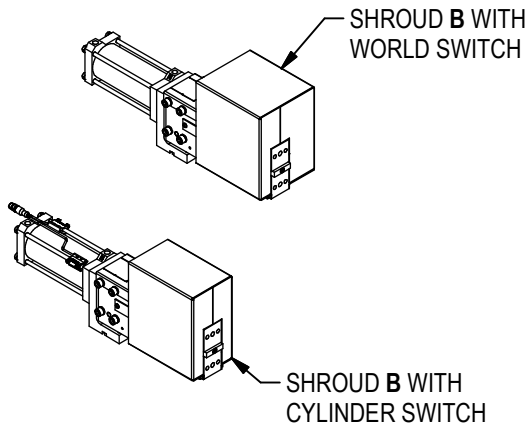
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SHROUD INFORMATION

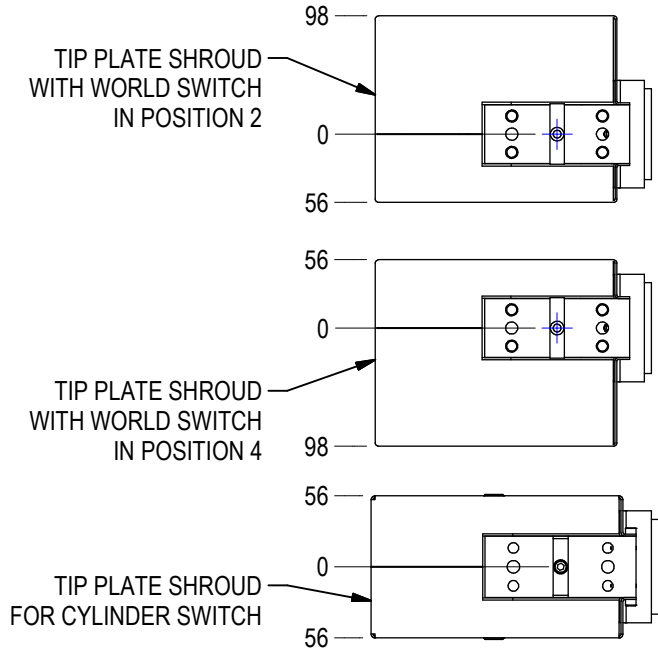
U
P
E
0
4
5
A
0
1
0
A
L
3
1
A
0
0
0

Shroud

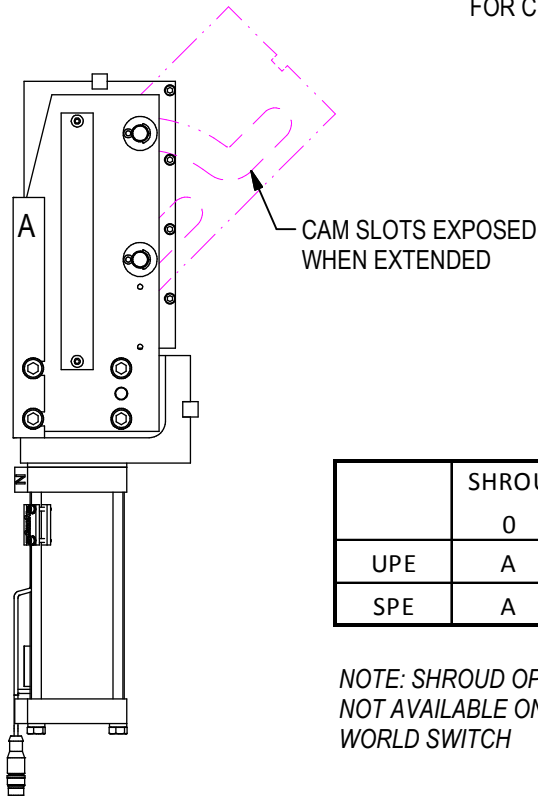
- 0 Base Shroud A
- 1 Tip Plate Shrouds A, B
(Recommended for heavily contaminated environments such as MIG and arc welding)



TIP PLATE SHROUDS OPTION "1"

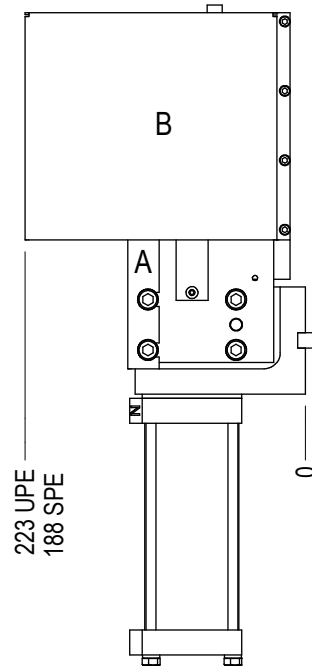


BASE SHROUD OPTION "0"



	SHROUD OPTION	
	0	1
UPE	A	A, B
SPE	A	A, B

NOTE: SHROUD OPTION "1" IS NOT AVAILABLE ON SPE WITH WORLD SWITCH



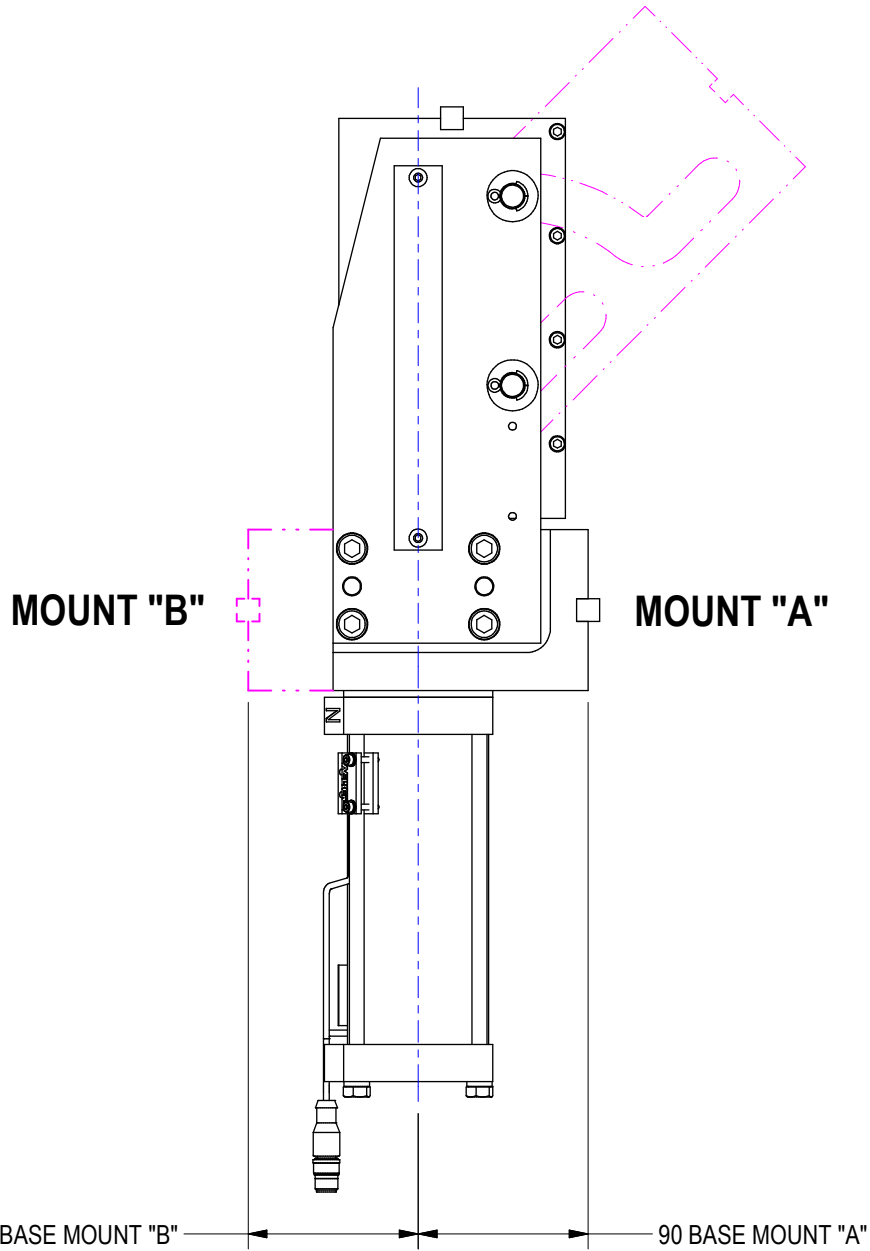
(DO NOT SCALE DRAWING)

MOUNT INFORMATION

U P E 0 4 5 A 0 1 0 A L 3 1 A 0 0 0

Mount

- A Base Mount @ 0
- B Base Mount @ 180



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WORLD SWITCH INFORMATION

U
P
E
0
4
5
A
0
1
0
A
A
E
2
A
0
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0

Switch Options _____

- L3** Solid State Cylinder Switch (See sheet 9)
- AE** World Switch (see chart below)

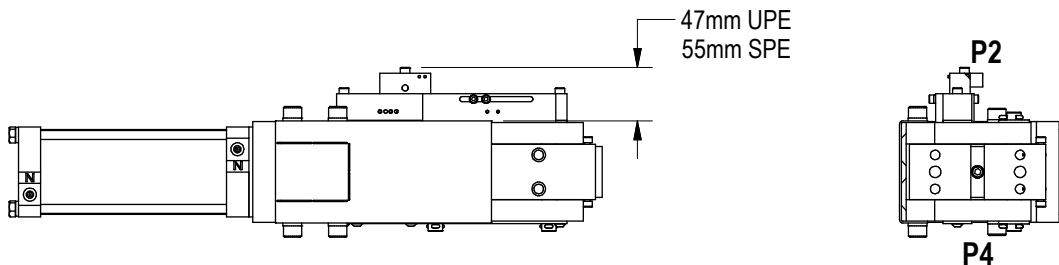
Switch Position _____

- 2** Switch @ Position 2
- 4** Switch @ Position 4

WORLD SWITCH CHART

Switch Option	S01 Sensor Position - "E"xtended "R"etracted	Manufacturer's Part Number	Mfr.	Description
A	E or R	Ni2-Q6.5-AP6-0.1-FS 4.4X3/S304	Turck	3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect
B	E or R	Ni2-Q6.5-ADZ32-0.1-FSB 5.4X4/S304	Turck	4-Wire, 5-Pin, AC/DC 1/2-20 (N.O.) Quick Disconnect
C	E or R	Ni2-Q6.5-AN6-0.1-FS 4.4X3/S304	Turck	3-Wire, 4-Pin, DC M12 X 1 (NPN) Quick Disconnect
D	E or R	NBN2-F581-100S6-E8-V1	Pepperl & Fuchs	3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect
E	E or R	BES-Z02KR2-PSC20F-P100-S04-V	Balluff	3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect
H	E or R	Ni2-Q6.5-0.1M-BDS-2AP6X3-H1 141/S34	Turck	3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect
J	E or R	IN5374	Efactor	4-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect

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



VIEW SHOWN WITH WORLD SWITCH
 WORLD SWITCHES ARE AVAILABLE **ONLY** WITH SWITCH POSITIONS 2 & 4.
 TIP PLATE SHROUD NOT AVAILABLE ON SPE WITH WORLD SWITCH.

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CYLINDER SWITCH INFORMATION

U
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A
L
3
1
A
0
0
0

Switch Options

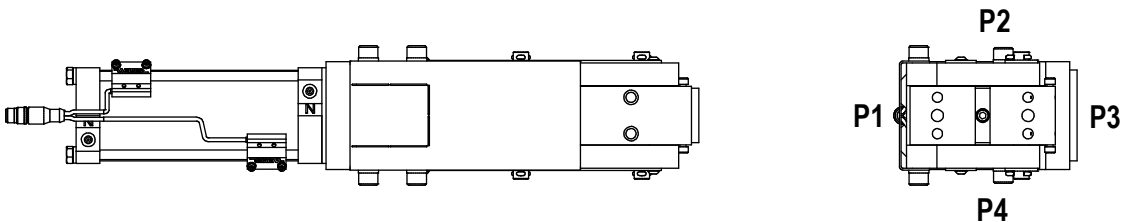
- L3 Solid State Cylinder Switch (see chart below)
- AE World Switch (see sheet 8)

Switch Position

- 1 Switch @ Position 1
- 2 Switch @ Position 2
- 3 Switch @ Position 3
- 4 Switch @ Position 4

	Switch Option	Part Number	Manufacturer	Description
Cylinder Switches	L3	SWITCH L3 L3 switch is weld field immune, comparable to World Switches	Welker	4-Wire, 4-Pin, DC (PNP) M12 X 1 Quick Disconnect
	L5	MK5113 (This is a single sensor switch: 2 switches 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



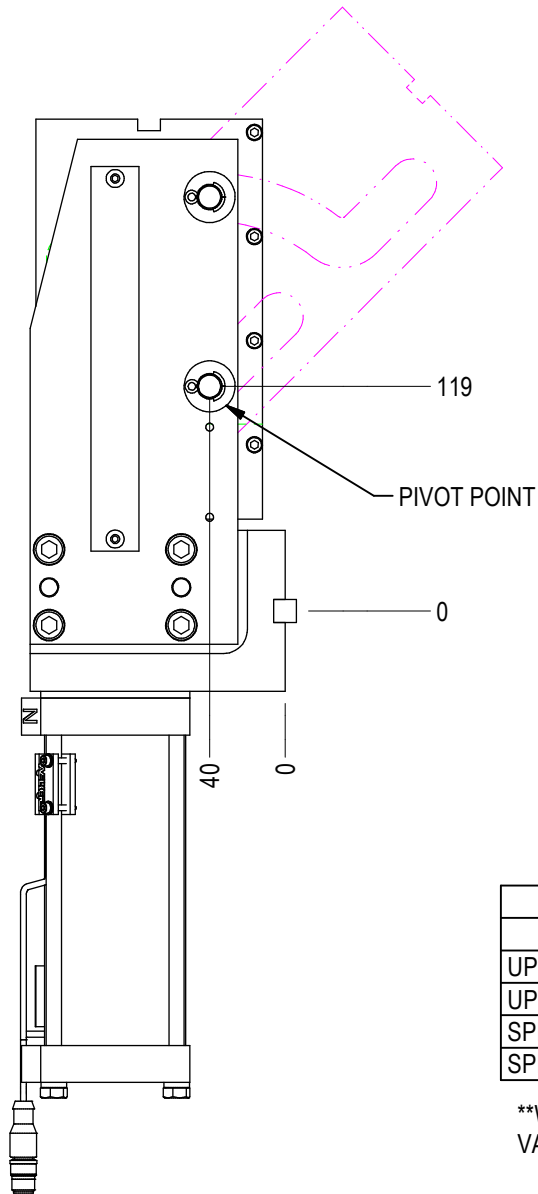
VIEW SHOWN WITH SOLID STATE CYLINDER SWITCH IN POSITION 1

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UNIT WEIGHTS



UNIT WEIGHTS**	
UNIT	WEIGHT (LBS)**
UPE 70mm BORE CYLINDER	53
UPE 100mm BORE CYLINDER	64
SPE 70mm BORE CYLINDER	44.5
SPE 100MM BORE CYLINDER	54.5

**WEIGHTS SHOWN ARE APPROXIMATE AND WILL VARY WITH OPTION SELECTION.

(DO NOT SCALE DRAWING)

WELKER

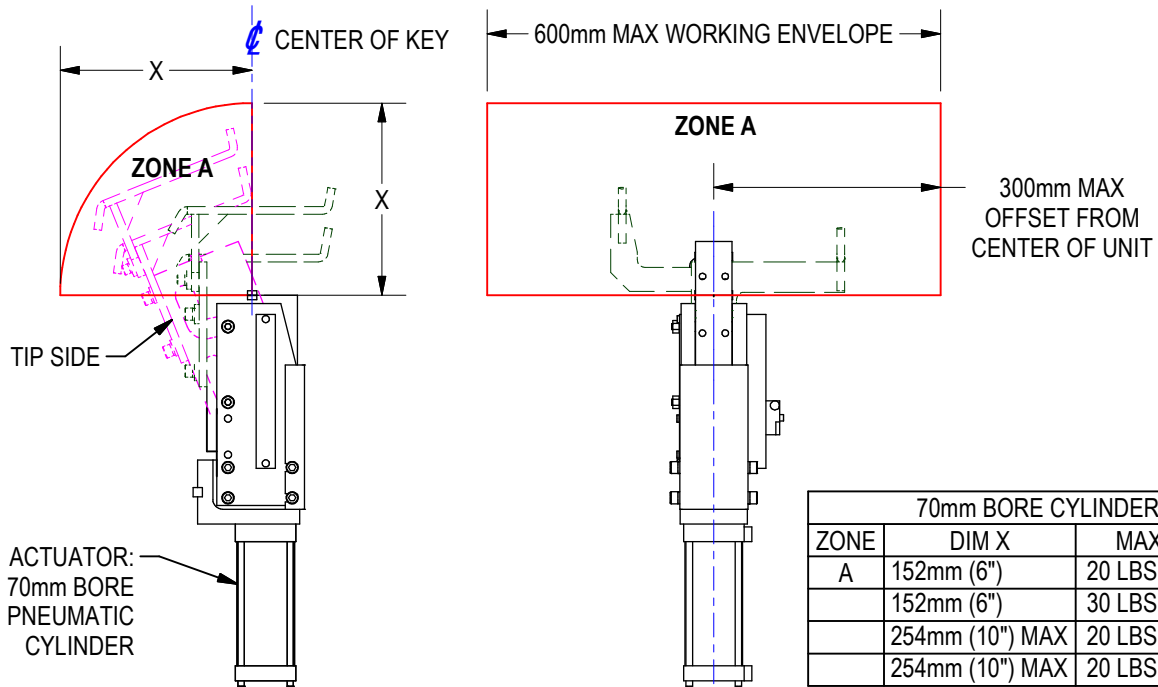
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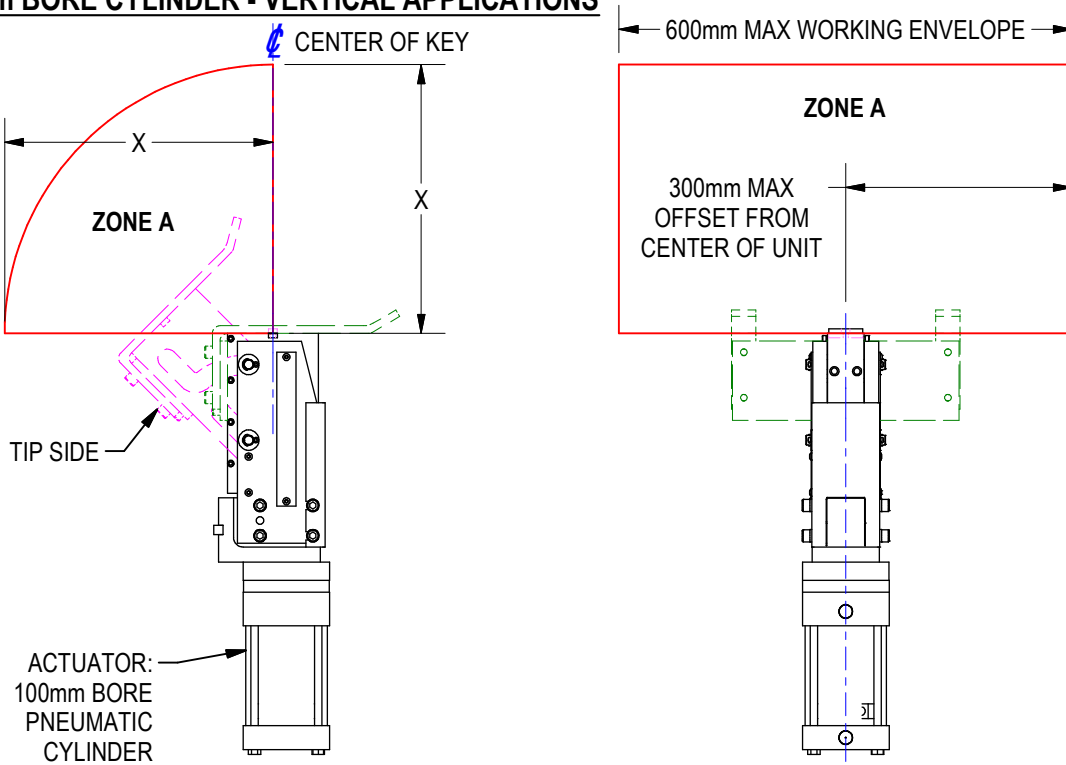
UPE/SPE PART EJECTOR APPLICATION DATA

70mm BORE CYLINDER - VERTICAL APPLICATIONS

NOTE: CENTER OF GRAVITY AND PART CONTACT TOOLING MUST BE WITHIN DESIGNATED ZONE MAXIMUMS.



100mm BORE CYLINDER - VERTICAL APPLICATIONS



100mm BORE CYLINDER		
ZONE	DIM X	MAX LOAD
A	355mm (14") MAX	30 LBS @ 60 PSI
	355mm (14") MAX	40 LBS @ 80 PSI

(DO NOT SCALE DRAWING)

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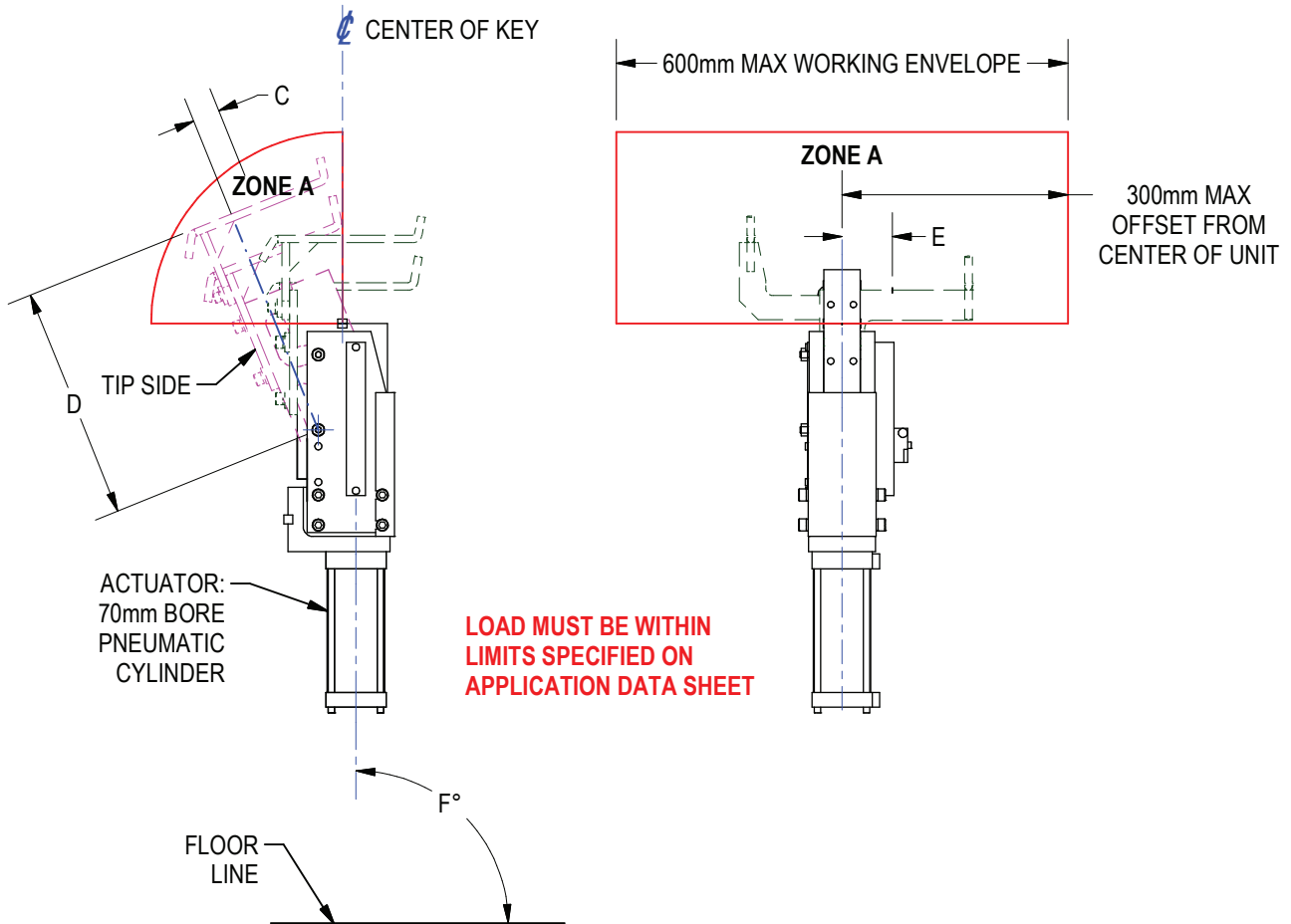
UPE/SPE PART EJECTOR: REQUIRED CRITERIA FOR APPLICATION APPROVAL

APPLICATION DATA MUST BE SUBMITTED FOR WELKER APPROVAL WITH THE FOLLOWING CRITERIA FOR ALL PART EJECTOR APPLICATIONS. PLEASE ATTACH THIS WORKSHEET TO YOUR BUY OFF AND INCLUDE A MINIMUM OF TWO SCREEN SHOTS OF YOUR APPLICATION WITH UNIT TIP PLATE IN EXTENDED POSITION.

FLOW CONTROLS ARE REQUIRED FOR ALL APPLICATIONS.

REF	DESCRIPTION	VALUE
	WELKER UNIT PART NUMBER	
	WEIGHT/MASS OF LOAD (TOOLING PLUS PARTS)	lbf
C	DISTANCE FROM PIVOT POINT TO LOAD CENTER OF GRAVITY	mm
D	DISTANCE FROM PIVOT POINT TO LOAD CENTER OF GRAVITY	
E	DISTANCE FROM CENTER OF UNIT TO LOAD CENTER OF GRAVITY	mm
F	ORIENTATION OF UNIT TO FLOOR	°

PLEASE SUBMIT VIEWS BELOW FOR APPROVAL



WELKER APPROVAL			
SUBMITTED BY		DATE	
PHONE NUMBER		EMAIL	
COMPANY NAME		PROGRAM	
WELKER APPROVAL BY		DATE	

ACTUATOR	EXTEND TORQUE	RETRACT TORQUE
70mm BORE CYLINDER	300in-lbf	225in-lbf
100mm BORE CYLINDER	600in-lbf	450in-lbf

(DO NOT SCALE DRAWING)

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