

POWERED SLIDES



AVAILABLE WITH **WELKER SMART STOP**

FEATURES

Modular Construction

Easily Serviceable Cylinder

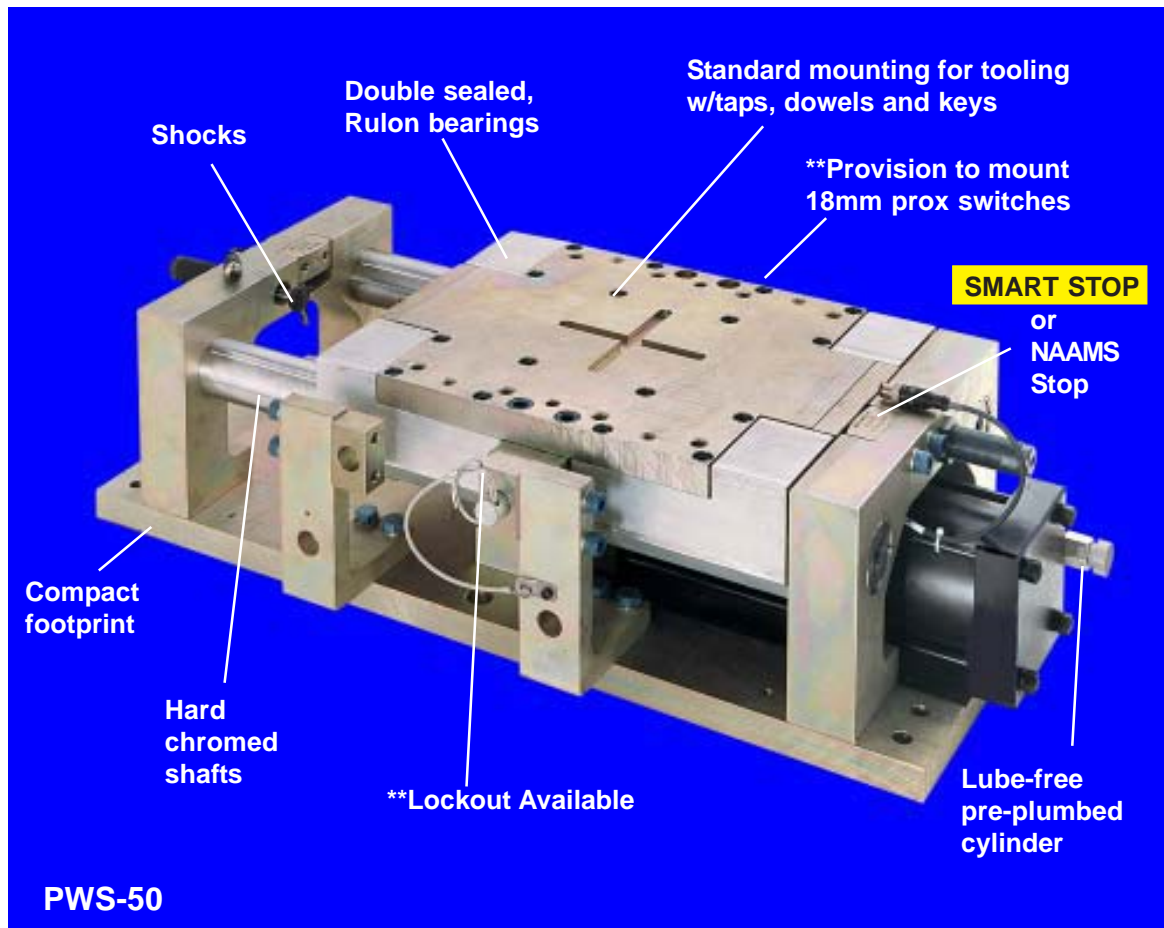
Mounts in any orientation

Pre-engineered unit saves engineering time and reduces cost

Plated steel components

**** Plus****

POWERED SLIDES PWS50,75 & HDS 75



WELKER POWERED SLIDES are commercially available slides that provide all the desired features that engineers and designers need. The compact, yet robust powered slides have been designed to provide symmetry and flexibility of installation. PWS Slides are available in three sizes and capabilities. They can be mounted in any orientation and are designed to operate successfully in harsh environments.

Available pneumatic cylinders types are non-locking, duplex, locking and programmable. Hydraulic and electric powered slides are also available. Minimum stroke for powered slides is 50mm.

**The manual lockout brackets and proximity switch mounts are reversible and can be relocated in the field or called out in the part number. 5mm grind spacers are available for the NAAMS stops on both ends of the slide. Add "SP5" suffix when ordering. Spacers will also be added to manual lockout when this option is specified.

Note: Using the "SP5" option reduces the stroke of the slide by 10mm.

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

WELKER SMART STOP eliminates:

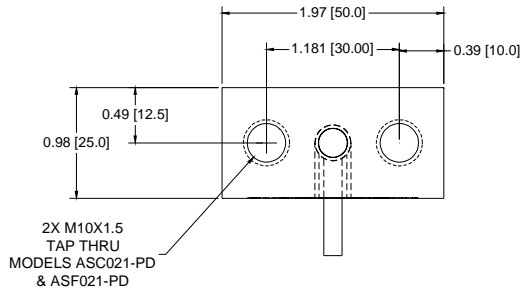
- Need for separate mounts, brackets and flags
- Need for switch adjustment when shimming
- Improper adjustment of outboard switches
- Outboard switch vibrating loose in bracket
- Protecting outboard proxies from being stepped on or bent in tools



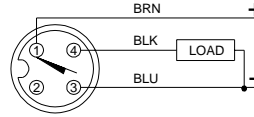
WELKER SMART STOP

MODEL NO:

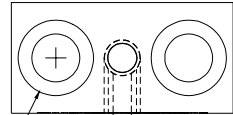
ASC020-PD FOR CROWNED, DRILL & C'BORE FOR M10 SHCS + DC SWITCH
 ASC021-PD FOR CROWNED, M10X1.5 TAP + DC SWITCH
 ASF020-PD FOR FLAT, DRILL & C'BORE FOR M10 SHCS + DC SWITCH
 ASF021-PD FOR FLAT, M10X1.5 TAP + DC SWITCH



WIRING DIAGRAM (PNP)

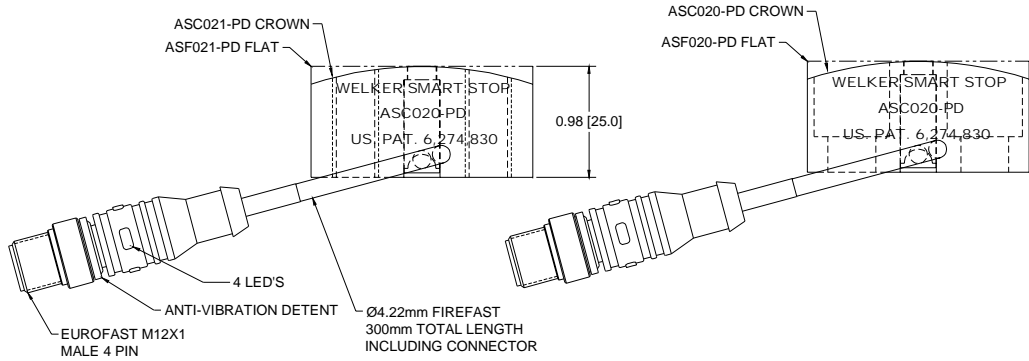


SHORT-CIRCUIT PROTECTED



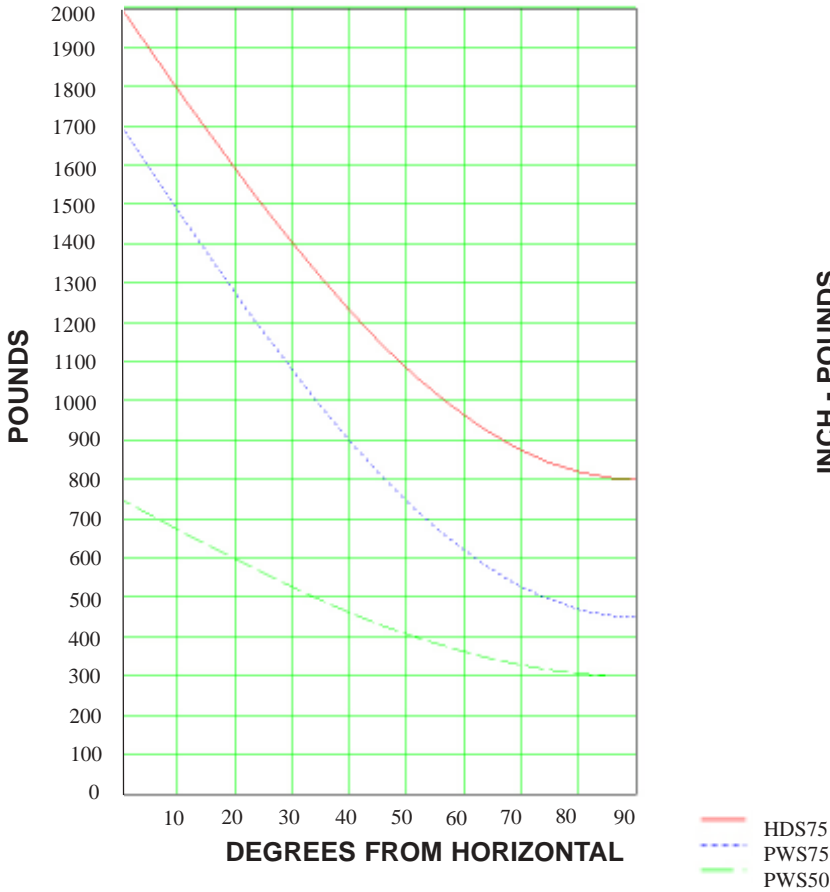
SPECIFICATIONS

CONTACT CARRIER MATERIAL (RSE)	PUR
MOLDED HEAD MATERIAL/COLOR (RSE)	THERMOPLASTIC PUR/BLACK
CONTACT MATERIAL/PLATING (RSE)	GOLD-PLATED BRASS
COUPLING NUT MATERIAL/PLATING (RSE)	NICKEL-PLATED BRASS
RATED OPERATING DISTANCE	2mm = .079" (NOMINAL)
MOUNTING MODE	FLUSH
HYSTERESIS (DIFFERENTIAL TRAVEL)	3-15%
MAX. RELATIVE TEMPERATURE DRIFT	Ω#±10%
MIN. REPEAT ACCURACY	Ω#±2%
OPERATING TEMPERATURE	-25 to 70°C (-13 to 158°F)
RATED OPERATIONAL VOLTAGE (DC)	10-30 VDC
MAX. RIPPLE	Ω#10%
RATED OPERATIONAL CURRENT	Ω#150 mA
NO-LOAD CURRENT	Ω#15 mA
MAX. OFF-STATE CURRENT	Ω#0.1 mA
MAX. SWITCHING FREQUENCY	Ω#8 kHz
RATED INSULATION VOLTAGE	0.5 kV
OUTPUT FUNCTION	3-WIRE, NORMALLY OPEN, PNP
SHORT-CIRCUIT PROTECTION	YES
MAX. VOLTAGE DROP	Ω#1.8 V
WIRE BREAKAGE/REVERSE POLARITY PROTECT	YES
DEGREE OF PROTECTION	IP 67
HOUSING MATERIAL	SST, V2A 1.4301
ACTIVE FACE	PLASTIC, PA12-GF30
OUTER CABLE JACKET (SENSOR)	3mm PUR
VIBRATION RESISTANCE	55 Hz (1mm)
SHOCK RESISTANCE	30 x g (11 ms)
PIG-TAIL LED COLOR	GREEN=POWER, YELLOW=OUTPUT

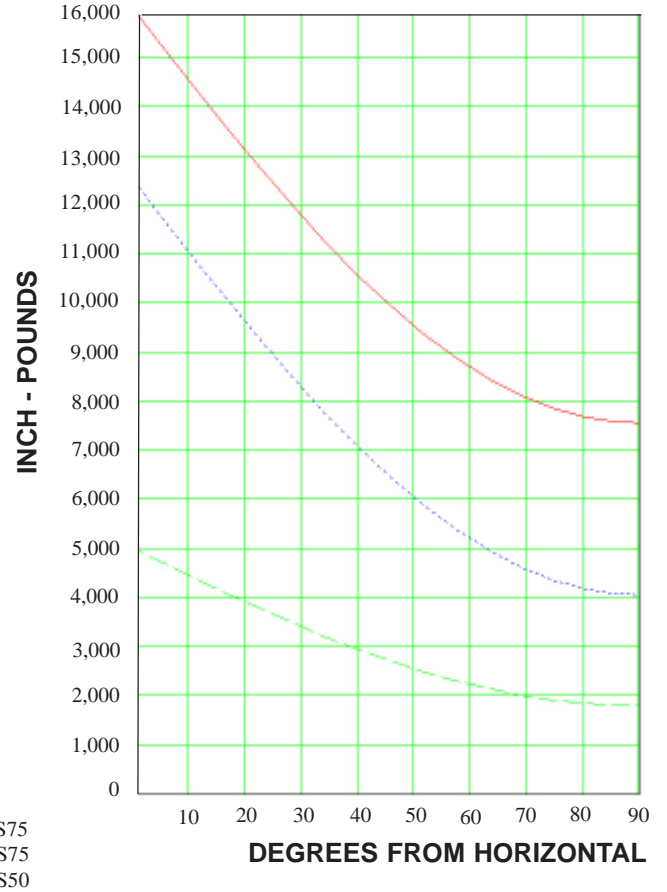


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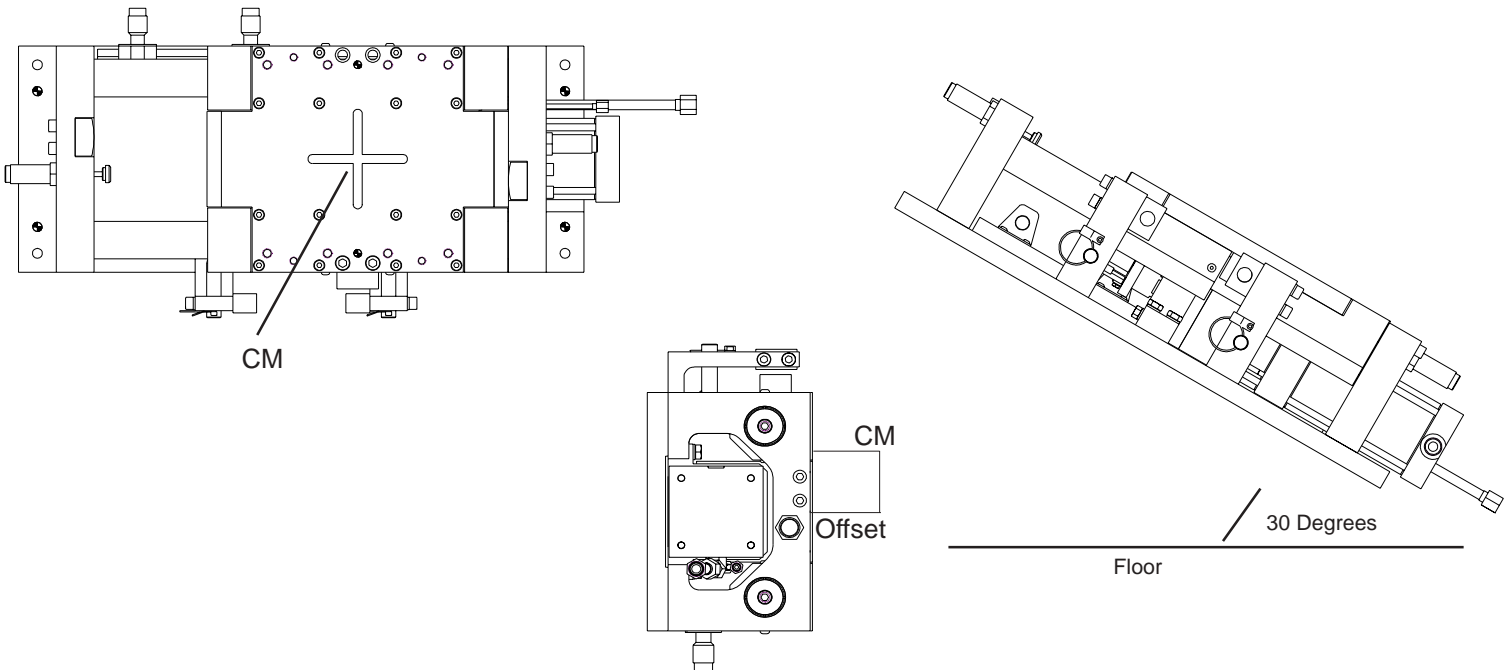
PAYLOAD CAPACITY



MOMENT LOAD CAPACITY

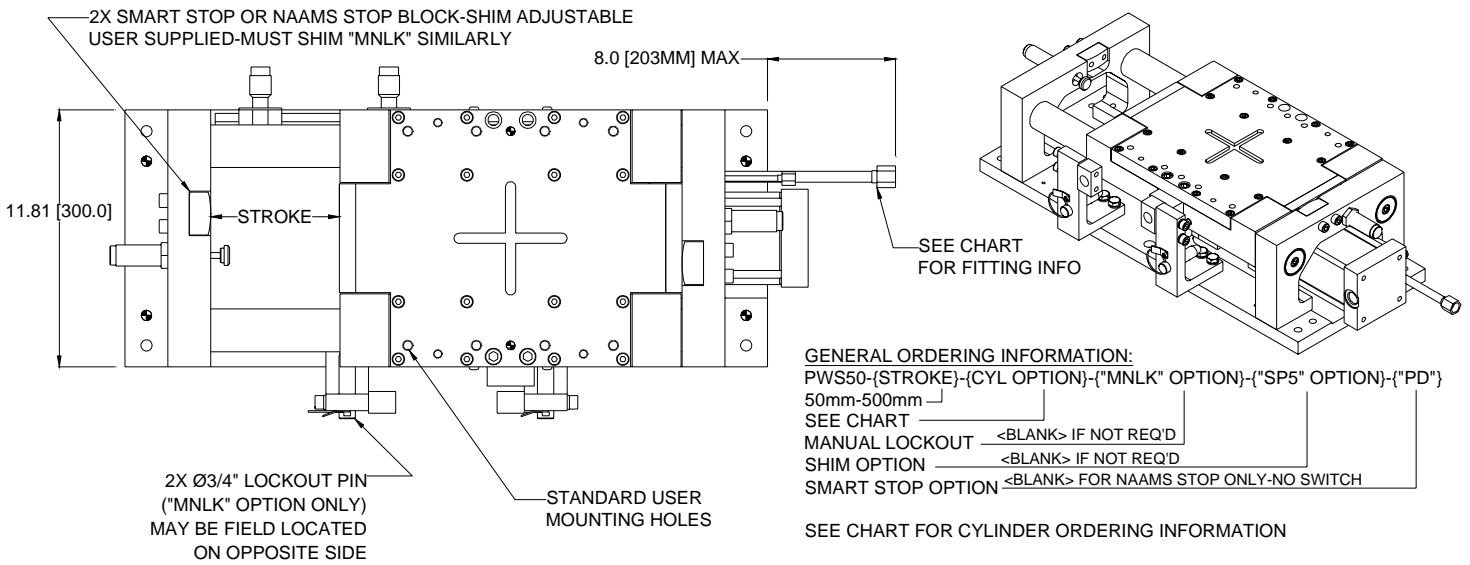


Applications are evaluated in two separate calculations: payload and moment load. An approvable application meets both criteria. For applications outside either graph safety zone, contact Welker.



Loading Example: PWS-50

An application with 400 lbf. load, offset 6 inches and operating at a 30 degree incline has an applied moment load of 240 in*lb. with a 30 degree incline, the allowable payload is 500 lb. The allowable moment load is 3400 in*lb. Note that the offset, in inches, is the same regardless of the slide orientation to the floor. Round shafting makes calculations the same for all slide orientations.

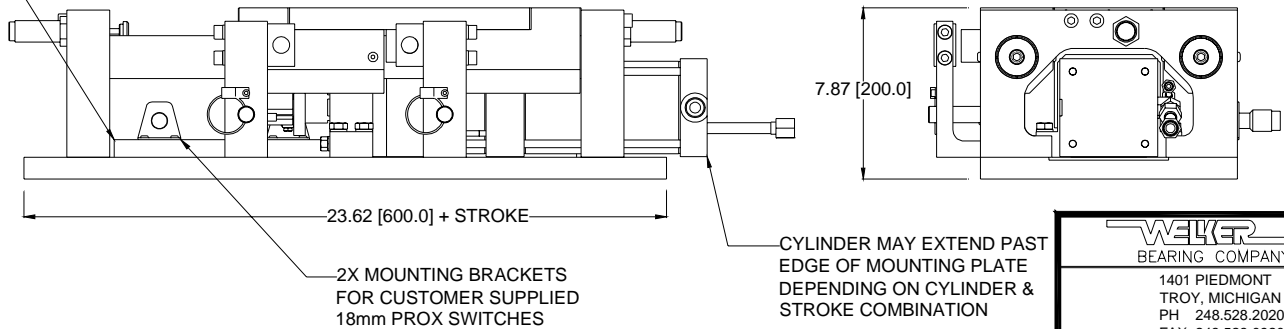


GENERAL ORDERING INFORMATION:
 PWS50-{STROKE}-{CYL OPTION}-{“MNLK” OPTION}-{“SP5” OPTION}-{“PD”}
 50mm-500mm
 SEE CHART
 MANUAL LOCKOUT <BLANK> IF NOT REQ'D
 SHIM OPTION <BLANK> IF NOT REQ'D
 SMART STOP OPTION <BLANK> FOR NAAMS STOP ONLY-NO SWITCH

SEE CHART FOR CYLINDER ORDERING INFORMATION

UNIT WGT: 250 lb [1112 N] + 10.0 lb [44.5N]/25mm STROKE
 STROKES TO BE IN 25mm INCREMENTS
 CYLINDER IS A 100mm BORE PNEUMATIC
 FOR DIMENSIONAL INFORMATION CONTACT WELKER BEARING

SWITCH TRACK EXTENDS FULL LENGTH FOR ADJUSTABILITY.
 THE ADDITION OF BRACKETS ARE FOR MULTIPLE POSITION SENSING.
 MAY BE FIELD LOCATED ON OPPOSITE SIDE. SWITCH ASSY &
 “MNLK” OPTION CANNOT BE LOCATED ON SAME SIDE OF UNIT.



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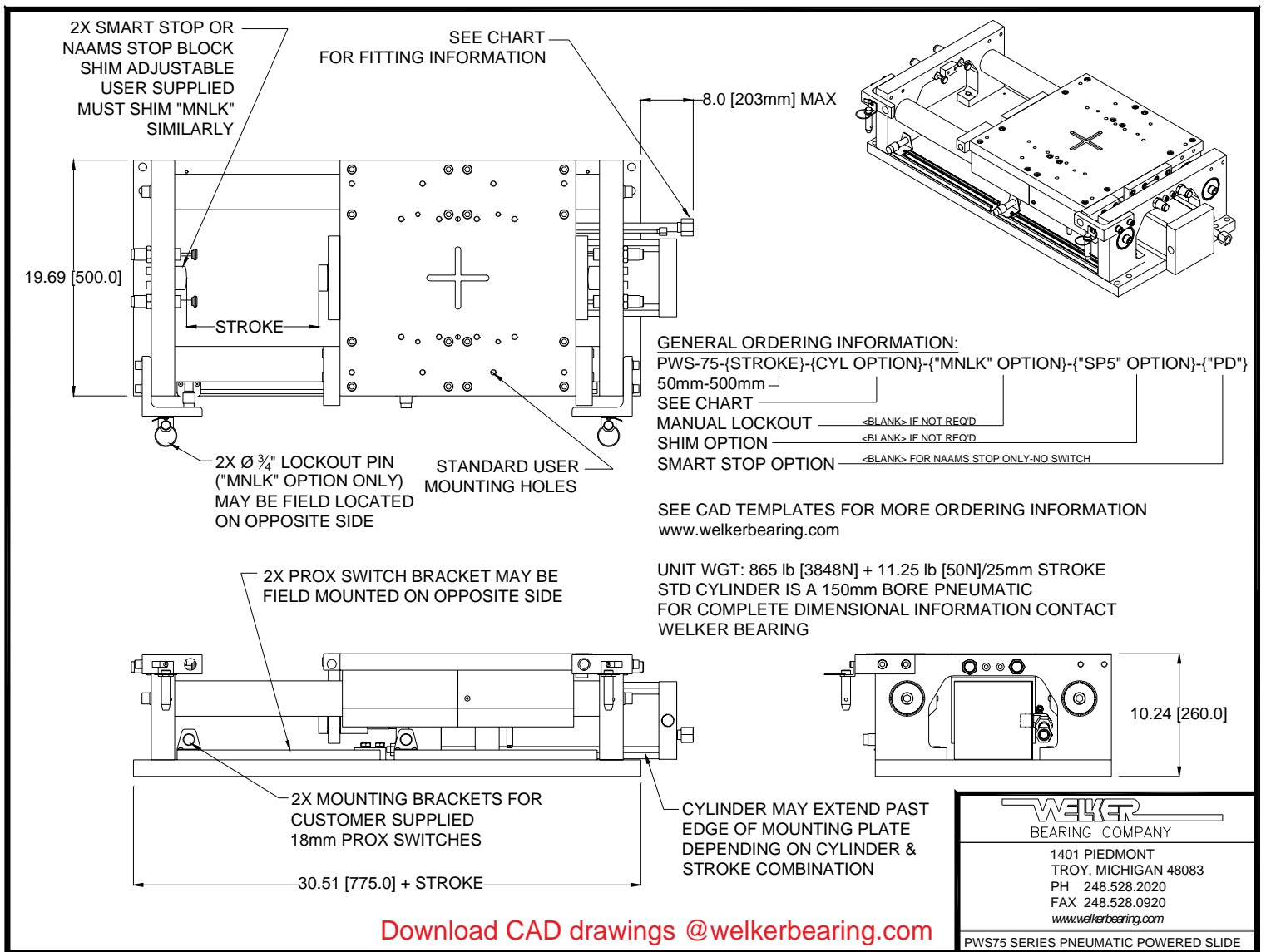
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 TROY, MICHIGAN 48083
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 FAX 248.528.0920
www.welkerbearing.com
 50 SERIES PNEUMATIC POWERED SLIDE

PWS50 CHART

CYL OPTION	CYL TYPE	CYL BRAKE PORTS	MAIN CYL PORTS
-WEL1	NON-LOCK	N/A	1/2 NPT
-WEL2	NON-LOCK	N/A	#10 SAE
-WEL3	NON-LOCK	N/A	1/2 G
-WEL4	LOCK	1/4 NPT	1/2 NPT
-WEL5	LOCK	#4 SAE	#10 SAE
-WEL6	LOCK	1/4 G	1/2 G
-WEL7	NON-LOCK DUPLEX	N/A	1/2 NPT
-WEL8	NON-LOCK DUPLEX	N/A	#10 SAE
-WEL9	NON-LOCK DUPLEX	N/A	1/2 G
-WEL10	LOCKING DUPLEX	1/4 NPT	1/2 NPT
-WEL11	LOCKING DUPLEX	#4 SAE	#10 SAE
-WEL12	LOCKING DUPLEX	1/4 G	1/2 G
-WEL13	DOUBLE FORCE	N/A	1/2 NPT
-WEL14	DOUBLE FORCE	N/A	#10 SAE
-WEL15	DOUBLE FORCE	N/A	1/2 G

Fitting Notes:

Brake port and any cylinder ports inside of slide end plate will be hard piped out the back of slide with 1/2" O.D. tubing with #8 female, 37 degree flare fitting, for cylinder ports, and 1/4" O.D. tubing with #4 female, 37 degree flare fitting, for brake port.



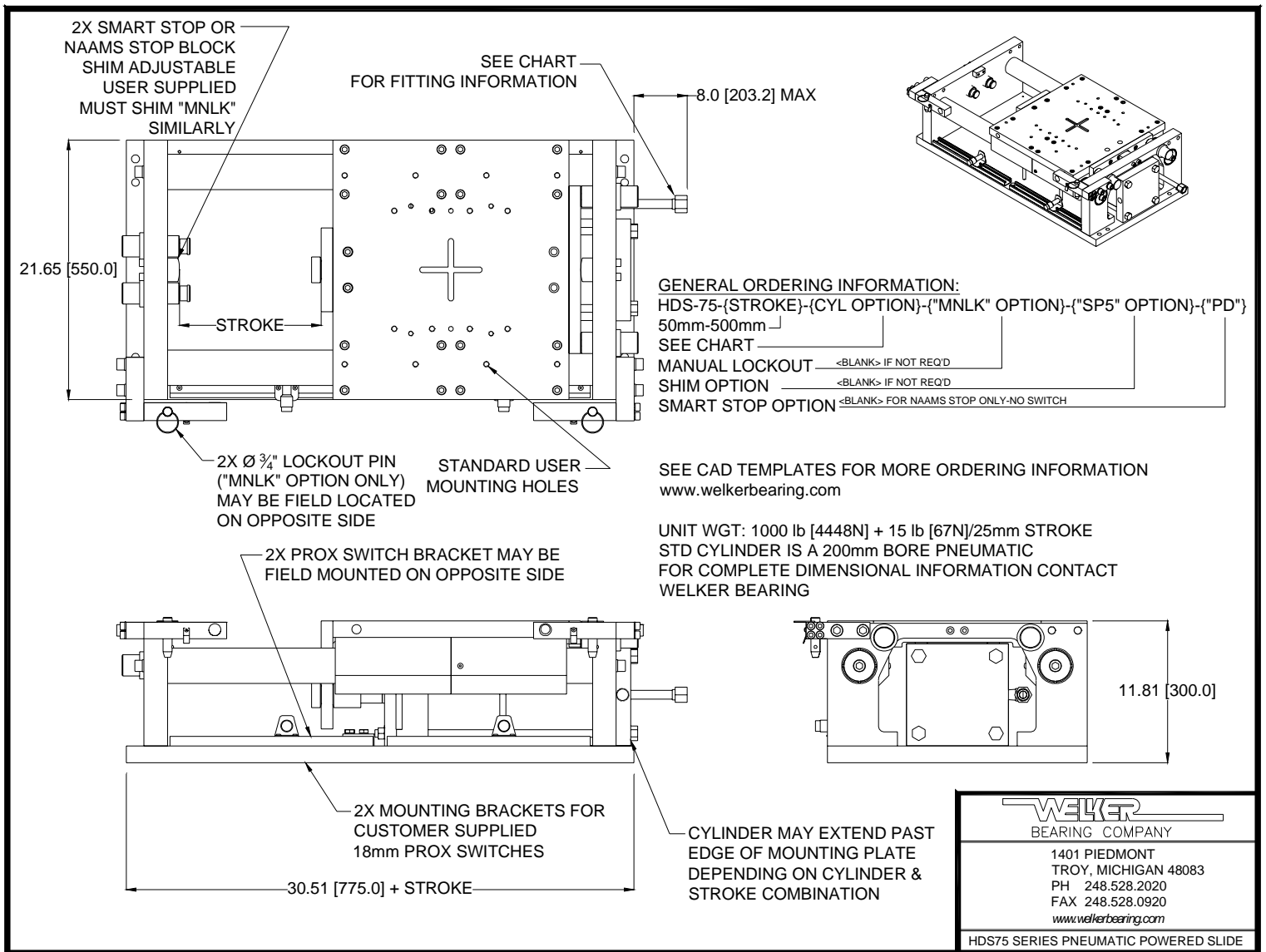
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PWS75 CHART

CYL OPTION	CYL TYPE	CYL BRAKE PORTS	MAIN CYL PORTS
-WEL1	NON-LOCK	N/A	3/4 NPT
-WEL2	NON-LOCK	N/A	#12 SAE
-WEL3	NON-LOCK	N/A	3/4 G
-WEL4	LOCK	1/4 NPT	3/4 NPT
-WEL5	LOCK	#4 SAE	#12 SAE
-WEL6	LOCK	1/4 G	3/4 G
-WEL7	NON-LOCK DUPLEX	N/A	3/4 NPT
-WEL8	NON-LOCK DUPLEX	N/A	#12 SAE
-WEL9	NON-LOCK DUPLEX	N/A	3/4 G
-WEL10	LOCKING DUPLEX	1/4 NPT	3/4 NPT
-WEL11	LOCKING DUPLEX	#4 SAE	#12 SAE
-WEL12	LOCKING DUPLEX	1/4 G	3/4 G
-WEL13	DOUBLE FORCE	N/A	3/4 NPT
-WEL14	DOUBLE FORCE	N/A	#12 SAE
-WEL15	DOUBLE FORCE	N/A	3/4 G

Fitting Notes:

Brake port and any cylinder ports inside of slide end plate will be hard piped out the back of the slide with 3/4" O.D. tubing with #12 female 37 degree flare fitting, for cylinder ports, and 1/4" O.D. tubing with #4 female 37 degree flare fitting, for brake port.



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HDS75 CHART

CYL OPTION	CYL TYPE	CYL BRAKE PORTS	MAIN CYL PORTS
-WEL1	NON-LOCK	N/A	3/4 NPT
-WEL2	NON-LOCK	N/A	#12 SAE
-WEL3	NON-LOCK	N/A	3/4 G
-WEL7	NON-LOCK DUPLEX	N/A	3/4 NPT
-WEL8	NON-LOCK DUPLEX	N/A	#12 SAE
-WEL9	NON-LOCK DUPLEX	N/A	3/4 G

Fitting Notes:

Brake port and any cylinder ports inside of slide end plate will be hard piped out the back of the slide with 3/4" O.D. tubing with #12 female 37 degree flare fitting, for cylinder ports, and 3/8" O.D. tubing with #6 female 37 degree flare fitting, for brake port.



PRODUCTS

Lubrication-Free Linear Slides & Gibs

Lubrication-Free Shot Pin Packages

Lubrication-Free Lock-Out Pin Packages

Lubrication-Free Gapless Locating Pin Clamp Packages

Welker Compact Lifters

Rulon® Bearings

CIP Composite Bearings

Sintered & Cast Bronze Bearings

Welker Friction Rollers & Sintered Miter Gears

Pacific™ Bearing Systems

Call your Welker representative for specific application information. (800) 229-0890

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