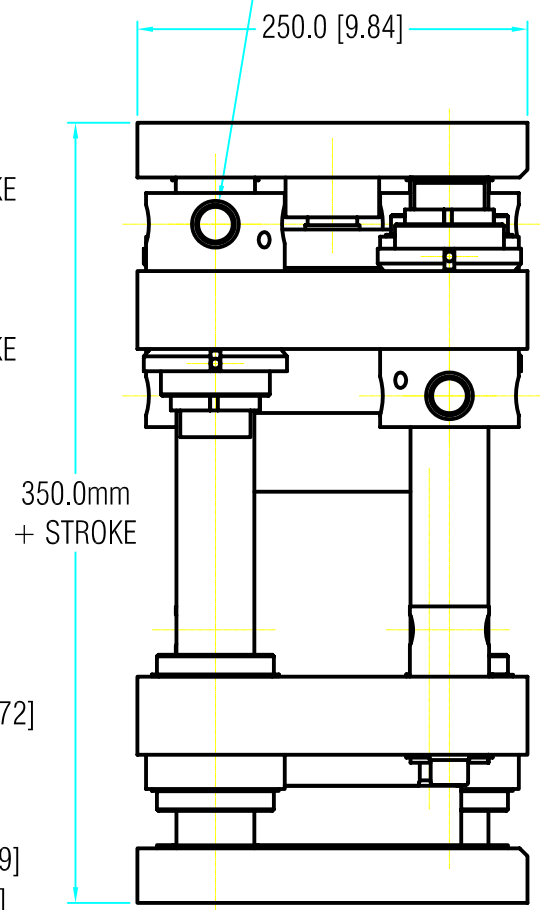
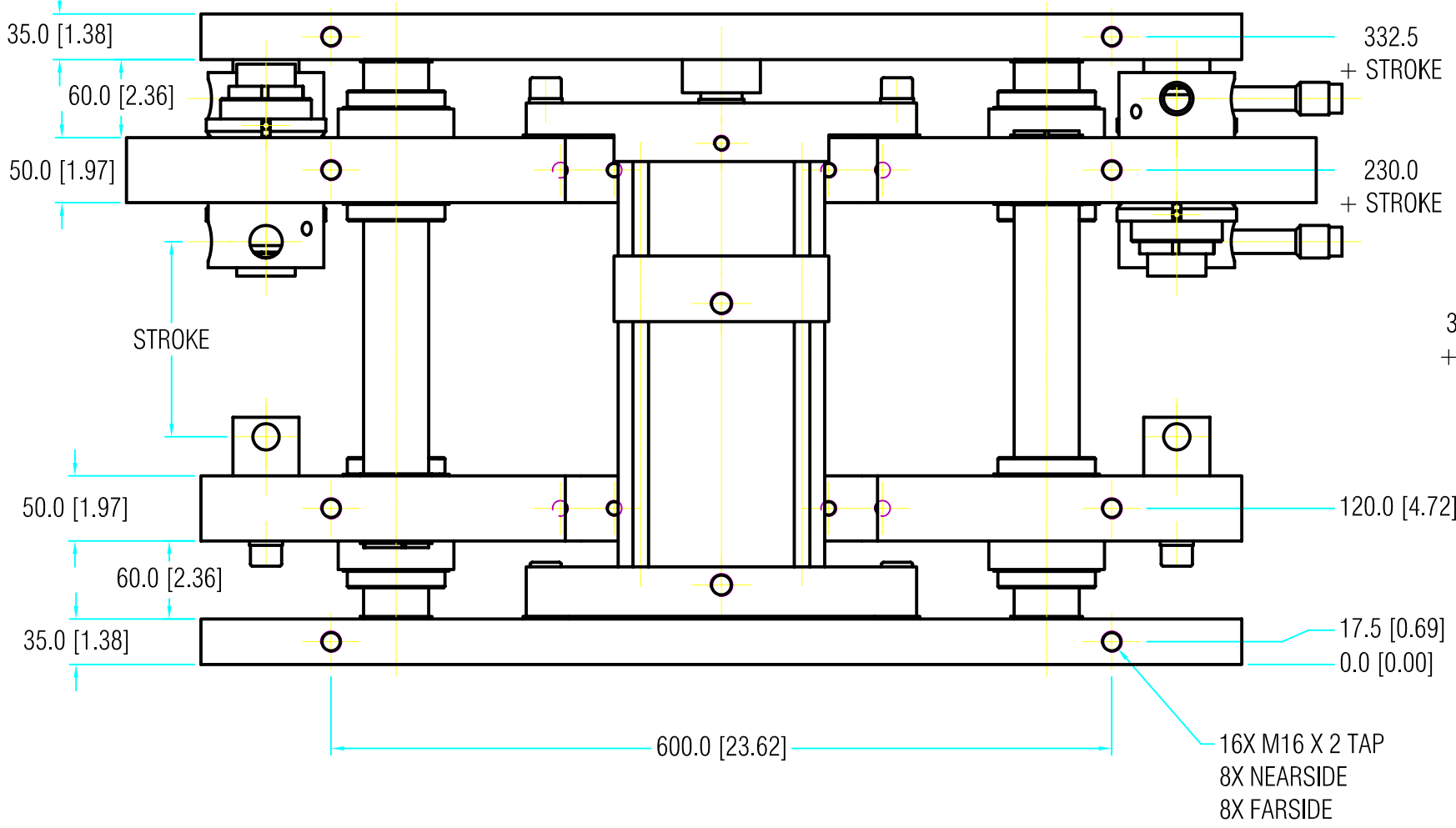


4X UNIT HAS M18 X 1 TAP THRU FOR 18mm PROX AND CROSS  
DRILLED WITH Ø20mm THRU FOR STANDARD Ø¾" LOCKOUT PIN.  
UNIT CAN BE FIELD ROTATED TO ANY USER POSITION.



ORDERING INFORMATION: CLM50-STROKE-{CYLINDER OPTION}  
STROKE IS 100mm-1,000mm  
SEE CHART

ORDERING EXAMPLE: TO ORDER A UNIT WITH A 150mm BORE X 150mm  
STROKE WELKER LOCKING CYLINDER W/ NPT PORTS, AS SHOWN, ORDER AS:  
#CLM50-150-WEL4  
2X M10 SHCS @ LOCATION "C" SHOULD BE LEFT CLEAR IF SHIMMING IN THE  
RETRACTED POSITION IS REQUIRED.

CYL OPTION	CYL TYPE	CYL BORE	CYL BRAKE PORTS	MAIN CYL PORTS
-WEL1	NON-LOCK	6"	N/A	3/4 NPT
-WEL2	NON-LOCK	6"	N/A	#12 SAE
-WEL3	NON-LOCK	6"	N/A	3/4 G
-WEL4	LOCK	6"	1/4 NPT	3/4 NPT
-WEL5	LOCK	6"	#4 SAE	#12 SAE
-WEL6	LOCK	6"	1/4 G	3/4 G
-WEL7	NON-LOCK	8"	N/A	3/4 NPT
-WEL8	NON-LOCK	8"	N/A	#12 SAE
-WEL9	NON-LOCK	8"	N/A	3/4 G

UNITS ARE MILLIMETERS  
(ie X.XXmm [X.XXX"])



DATE		STATUS		SCALE		FILE NAME	
11/5/2002	Released	1/2	CLM50L01.DWG				

Model 4/6/2005 8:13: 7 AM, dhol

# WELKER

ISO 9001:2000  
CERTIFIED

## COMPACT METRIC LIFTERS



including

# Synchrolift™

U.S. Patent Numbers 5,690,315 - 6,408,736 - 6,408,740



## SAFETY FEATURES

- Welker Locking cylinder stops load in mid-stroke in both directions upon air loss.
- Spiral retaining ring construction won't come apart if fasteners loosen.
- Manual lockouts standard
- 18mm Prox bosses and targets standard.
- Welker MRP Spring Extend Lock-out Pin can be added.

## DESIGN FEATURES

- Compact closed height (no protruding shafts).
- Strokes up to 40" / 1000mm.
- Slim footprint
- Mounting from base or side.
- 4",6",8" bore cylinders available with appropriate shaft sizes (English and Metric)
- Extremely rigid in extended position = High repeatability.
- Symmetrically reversible.
- Can lift overhung loads.
- Synchrolift synchronizes remotely mounted units.

U.S. Patent Numbers 5,690,315 - 6,408,736 - 6,408,740

## MAINTENANCE

- Lube free cylinder.
- Lube free bearings and seals.
- Easy bearing replacement.
- Shafts can be individually removed.
- One side open for easy cylinder replacement.

## DURABILITY

- Bearing spread in two directions.
- Hard chromed shafts standard.
- Lubrication free linear bearings with integrated seals.
- Floating cylinder rod coupling.
- Dual shocks in both directions.
- Dual hard stops in both directions.

DOWNLOAD PRINTS @  
[WWW.WELKERBEARING.COM](http://WWW.WELKERBEARING.COM)

PHONE:(248) 528-2020  
FAX: (248) 528-0920

# WELKER

## SYNCHROLIFT™

Lifters may be covered under one or more of the following or other patents: U.S. Patent No. 5,690,315  
U.S. Patent No. 6,408,736 or U.S. Patent No.6,408,740

## METRIC LIFTER

Part Number:  
**SLM40-STROKE-CYLINDER OPTION**

Examples:  
SLM40-300-WEL1  
(300mm Stroke, NON-LOCK)

SLM40-500-WEL4  
(500mm Stroke, LOCK)

SLM40-275-800-WEL8  
(275mm Midpoint - 800mm Total  
Stroke, NON-LOCK, 3 POS.)



Part Number:  
**CLM40-STROKE-CYLINDER OPTION**

Examples:  
CLM40-300-WEL1  
(300mm Stroke, NON-LOCK)

CLM40-500-WEL4  
(500mm Stroke, LOCK)

CLM40-275-800-WEL8  
(275mm Midpoint - 800mm Total  
Stroke, NON-LOCK, 3 POS.)

Lifts in tandem within 5mm tolerance  
Patented "Synchro Cylinder"  
Presently synchronized up to 4 lifters  
Connection leaves center of tool open



**SSL  
SHORT STROKE  
METRIC LIFTER**

See Page 6 for print  
& specifications



## METRIC LIFTER PART SPECIFICATIONS

PART NUMBER	CLM40	CLM40	CLM50	CLM50	CLM50
	Nonlock *	Lock *	Nonlock*	Lock *	Lrg. Bore-NL*
Stroke Increment	5mm	5mm	5mm	5mm	5mm
Maximum Stroke	1000mm	1000mm	1000mm	1000mm	1000mm
Extend Capacity	375	375	850	850	1510
Retract Capacity	330	330	805	805	1465
Recommended Max. Overhung Load lbf-ft.	150 lbf-ft.	150 lbf-ft.	300 lbf-ft.	300 lbf-ft.	300
Recommended Max. CG Offset	36"	36"	36"	36"	36"
Cylinder Options	See Cylinder Chart				
Weight	215 lbs. +2.71 lbf./ 25mm stroke	230 lbs.	450 lbs.	475 lbs.	475 lbf. +3.88 lbf./ 25mm stroke

\* Welker Cylinder

DOWNLOAD CAD DRAWINGS FROM WEB SITE [www.welkerbearing.com](http://www.welkerbearing.com)



# METRIC LIFTERS & SYNCHROLIFT

## CYLINDER OPTIONS FOR ALL METRIC LIFTERS

CYLINDER OPTION	CYLINDER TYPE	CYLINDER BORE	CYLINDER BRAKE PORTS	MAIN CYLINDER PORTS
<b>CLM40</b>	<b>SLM40</b>			
-VEL 1	NON-LOCK	4"	N/A	1/2 NPT
-VEL 2	NON-LOCK	4"	N/A	# 10 SAE
-VEL 3	NON-LOCK	4"	N/A	1/2 ISO G
-VEL 4	LOCK	4"	1/4 NPT	1/2 NPT
-VEL 5	LOCK	4"	# 4 SAE	# 10 SAE
-VEL 6	LOCK	4"	1/4 ISO G	1/2 ISO G
-VEL 7	NL 3 POS	4"	N/A	1/2 NPT
-VEL 8	NL 3 POS	4"	N/A	# 10 SAE
-VEL 9	NL 3 POS	4"	N/A	1/2 ISO G
-VEL 10	LOCK 3 POS	4"	1/4 NPT	1/2 NPT
-VEL 11	LOCK 3 POS	4"	# 4 SAE	# 10 SAE
-VEL 12	LOCK 3 POS	4"	1/4 ISO G	1/2 ISO G
<b>CLM50</b>	<b>SLM50</b>			
-VEL 1	NON-LOCK	6"	N/A	3/4 NPT
-VEL 2	NON-LOCK	6"	N/A	# 12 SAE
-VEL 3	NON-LOCK	6"	N/A	3/4 G
-VEL 4	LOCK	6"	1/4 NPT	3/4 NPT
-VEL 5	LOCK	6"	# 4 SAE	# 12 SAE
-VEL 6	LOCK	6"	1/4 G	3/4 G
-VEL 7	NON-LOCK	8"	N/A	3/4 NPT
-VEL 8	NON-LOCK	8"	N/A	# 12 SAE
-VEL 9	NON-LOCK	8"	N/A	3/4 G

3 Position cylinder provides a hard & repeatable midpoint (Patent Pending)