

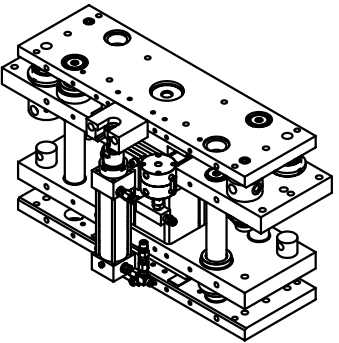
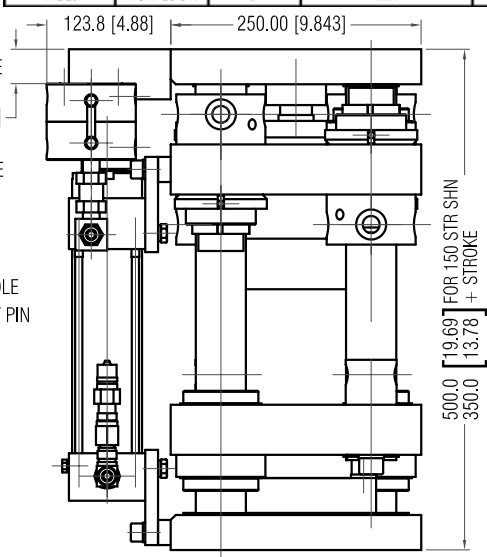
ORDERING INFORMATION: #SLM50-STROKE-{CYLINDER OPTION}
 100mm-1,000mm
 SEE CHART

SLM50 LIFTER IS A WELKER CLM50 LIFTER WITH SYNCHRONIZING ASSY. A SINGLE UNIT CONTAINS:
 (1) CLM50 LIFTER, (1) WELKER SYNCHRO CYLINDER, & (1) SRK SYNCHRO KIT(SHIPPED UNATTACHED).
 (2) OR MORE LIFTERS ARE REQUIRED IN A SYNCHRONIZING SYSTEM. SINGLE LIFTERS ARE ONLY SOLD AS
 REPLACEMENT PARTS FOR AN EXISTING SYSTEM.

ORDERING EXAMPLES:
 TO ORDER UNIT WITH WELKER 150mm BORE X 150mm STROKE LOCKING CYL W/ NPT PORTS, AS SHOWN, ORDER
 AS: #SLM50-150-WEL4
 NOTES: WELKER BRAKE CYL LOCKS IN BOTH DIRECTIONS.

CLM50 LIFTER HAS OPTIONAL 6" OR 8" BORE, IN TURN THE SLM50 HAS A 2½" OR 5" BORE SYNCHRO, RESPECTIVELY.
 THIS DRAWING ONLY REPRESENTS A 6" BORE CLM50 W/ 2½" BORE SYNCHRO CYLINDER. PLEASE CONSULT
 SLM50L02 DRAWING FILE FOR COMPLETE INFORMATION ON 8" BORE CLM50 W/ 5" BORE SYNCHRO.

CYL OPTION	CYL TYPE	CYL BORE	CYL BRAKE PORTS	MAIN CYL PORTS	FOR DIMENSIONAL INFO, USE DWG FILE:
-WEL1	NON-LOCK	6"	N/A	3/4 NPT	SLM 50L01
-WEL2	NON-LOCK	6"	N/A	#12 SAE	SLM 50L01
-WEL3	NON-LOCK	6"	N/A	3/4 G	SLM 50L01
-WEL4	LOCK	6"	1/4 NPT	3/4 NPT	SLM 50L01
-WEL5	LOCK	6"	#4 SAE	#12 SAE	SLM 50L01
-WEL6	LOCK	6"	1/4 G	3/4 G	SLM 50L01
-WEL7	NON-LOCK	8"	N/A	3/4 NPT	SLM 50L02
-WEL8	NON-LOCK	8"	N/A	#12 SAE	SLM 50L02
-WEL9	NON-LOCK	8"	N/A	3/4 G	SLM 50L02



FOR PLUMBING OF HYDRAULIC SYNCHRO ASSEMBLIES AND COMPLETE INSTALLATION INSTRUCTIONS, SEE FILE SLM40P01.

UNITS ARE MILLIMETERS
 (ie X.XXmm (X.XXX"))
 DO NOT SCALE DRAWING

EXCEPT AS NOTED
 DECIMAL TOL. SHALL BE:
 1 PLACE ±.200mm [.010"]
 2 PLACE ±.100mm [.005"]
 3 PLACE ±.0100mm [.0005"]
 ALL DIMEN. LOC. ±.0100mm [.0005"]
 BETWEEN HOLES

TITLE NAME 6" BORE AIR CYL W/ 2.5" BORE SYNCHRO CYL			
DRAWN BY	DATE	DESIGNED BY	DATE
CHKD	REVISED	ECN	DATE
SHEET	OF	FILE NAME	
SCALE	1/5		SLM50L01.DWG

Rev.	Date	Status	Description
1-	3/6/2002	Released	CREATED

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

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



METRIC LIFTERS & SYNCHROLIFT

CYLINDER OPTIONS FOR ALL METRIC LIFTERS

CYLINDER OPTION	CYLINDER TYPE	CYLINDER BORE	CYLINDER BRAKE PORTS	MAIN CYLINDER PORTS
CLM40	SLM40			
-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
CLM50	SLM50			
-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)