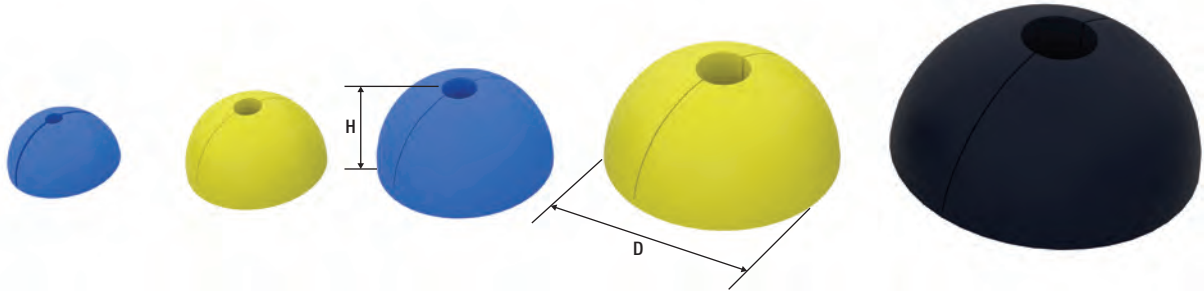


ALP® LIFTING PIN RUBBER RECESS MEMBERS

The ALP Lifting Pin Rubber Recess Members are designed to create a recess for the Lifting Eyes to engage the head of a Lifting Pin anchor.



Part #	Size	Color	D - Diameter	H - Height	Weight (lbs)
LPRM1T	1T	Blue	2-3/8"	1-3/16"	0.15
LPRM2T	2T	Yellow	3"	1-9/16"	0.30
LPRM4T	4T	Blue	3-3/4"	1-13/16"	0.55
LPRM8T	8T	Yellow	5"	2-5/16"	1.12
LPRM20T	20T	Black	6-1/2"	3"	2.24

• Petroleum based form release and coatings should not be used with rubber products, as they will degrade the rubber.

ALP® LIFTING PIN STUD PLATES AND WINGNUTS

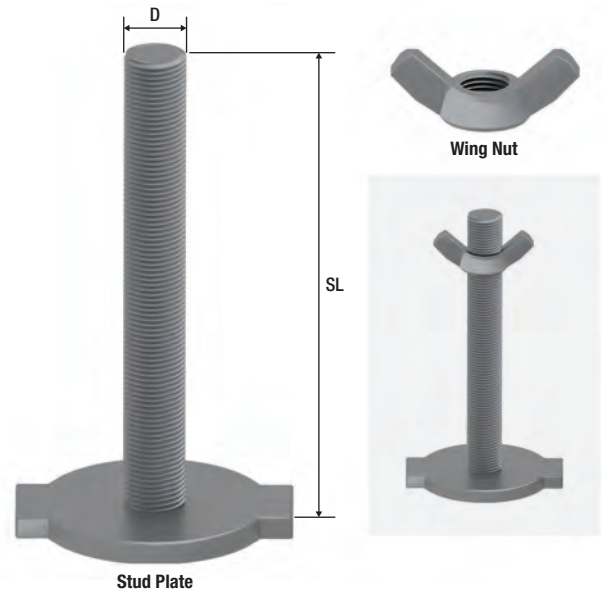
The Stud Plate and Wingnut combination is designed to attach the Lifting Pin Recess Member to the form.

WINGNUT INFORMATION

Part #	Description	Size	Weight (lbs)
LPWN1T	For 1T Stud Plate	8mm	0.03
LPWN248T	For 2T, 4T, 8T Stud Plates	12mm	0.04
LPWN20T	For 20T Stud Plate	18mm	0.13

STUD PLATE INFORMATION

Part #	Size	Stud Diameter	Stud Length	Weight (lbs)
LPSP1T	1T	8mm	3-3/16"	0.07
LPSP2T	2T	12mm	4"	0.20
LPSP4T	4T	12mm	4"	0.23
LPSP8T	8T	12mm	4"	0.28
LPSP20T	20T	18mm	4"	0.60



ALP® LIFTING PIN MAGNETIC PROFILE HOLDING PLATE (2-PIECE)

Part #	Size	Fits Recess Member
LPMHP1T	1T	LPRM1T
LPMHP2T	2T	LPRM2T
LPMHP4T	4T	LPRM4T
LPMHP8T	8T	LPRM8T
LPMHP20T	20T	LPRM20T



**Caution:** Vibration and placement of the concrete can cause the Magnetic Recess to move. It is recommended that the anchor is secured to the reinforcement before concrete placement.

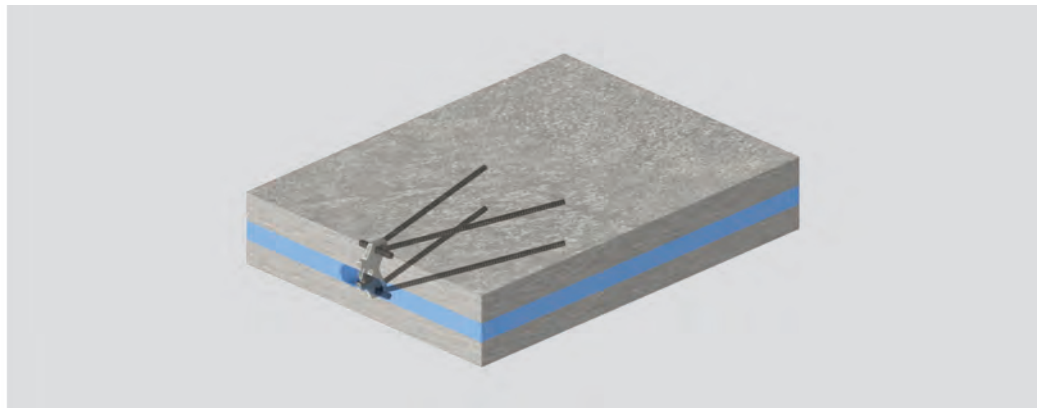
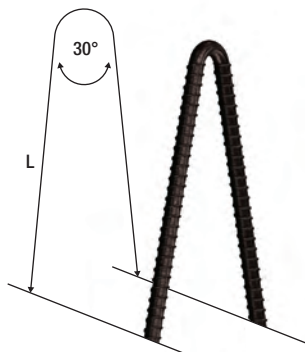
QUIKLIFT® FORGED INSULATED PANEL ANCHOR CAPACITY IN CONCRETE

				Anchor Capacity in Concrete				Required Reinforcement		
								Shear Rebar (Grade 60)	Tension Rebar (Grade 60)	
Part #	Ton	Concrete PSI	2.66:1 SWL* Shear Parallel to Panel Thickness (lbs)	4:1 SWL Shear Parallel to Panel Thickness (lbs)	4:1 SWL Shear Perpendicular to Panel Thickness (lbs)	4:1 SWL Reinforced Tension Load (lbs)	Size		L - Overall Length	
<p>8" insulated panel (2" x 4" x 2")</p>	QLFIP6T7G	6T	3,500	4,022	2,675	8,200	12,000	#5 x 6"	#4	41"
<p>8" insulated panel (3" x 2" x 3")</p>	QLFIP9T534G	9T	4,500	6,616	4,400	8,700	18,000	#6 x 6"	#5	44"
<p>9" insulated panel (3" x 3" x 3")</p>	QLFIP6T7G	6T	3,500	6,781	4,510	9,600	12,000	#5 X 6"	#4	41"
<p>9" insulated panel (3" x 3" x 3")</p>	QLFIP12T7G	12T	4,500	7,067	4,700	10,900	24,000	#7 x 6"	#6	49"
<p>10" insulated panel (3" x 4" x 3")</p>	QLFIP12T8G	12T	4,500	6,616	4,400	9,200	24,000	#7 x 6"	#6	49"

\* A shear safety factor of 2.66:1 can be used at the discretion of the engineer for one-time lifts.

- Above capacities are based upon mechanical testing and available industry data.
- Above rebar development length requirements based upon ACI-318 and concrete testing.
- Minimum of 1/2" cover required on top and bottom of anchor.

Bend Detail A



QUIKLIFT® PLATE ANCHORS

The Plate Anchors are designed for back-stripping of panels from the form. The Plate Anchors are designed with a plate welded to the bottom to provide anchorage in a low profile anchor. Rebar reinforcement should not be added over the base plate of this Plate Anchor system.

**Standard finish is hot-dipped galvanized. Impact resistant, even in freezing temperatures. Domestic available.**

1. Shear loads should be perpendicular to the face of the anchor and center line of recess.
2. **Warning:** Spalling may occur when pulling in shear parallel to the face of the anchor. This may also lead to overloading the anchor.

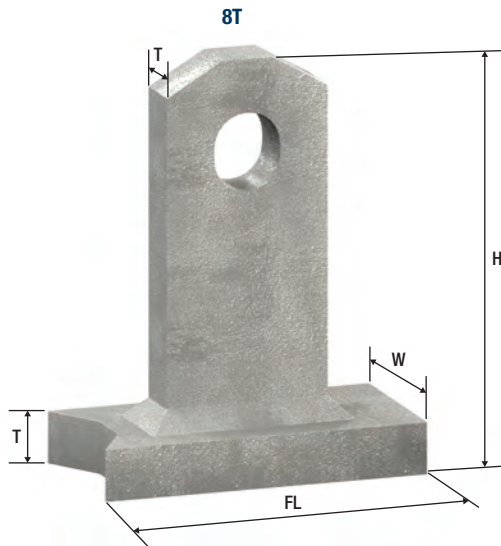


PLATE ANCHOR DIMENSIONS AND LOAD CHART

Anchor Capacity in Concrete 4:1 SWL

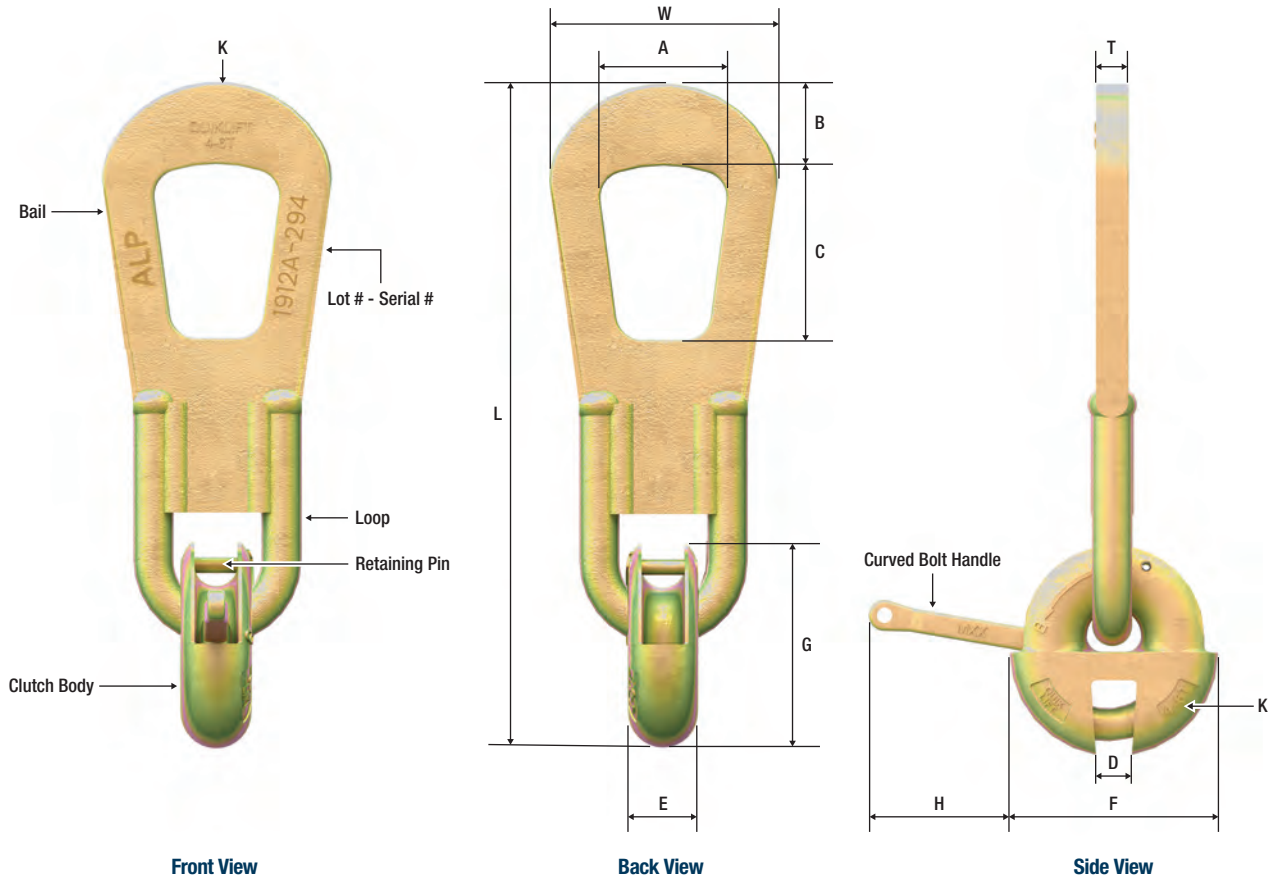
Part #	Ton	Ring Clutch System	W - Width	H - Height	T - Thickness	FL - Foot Length	Anchor Ultimate Mechanical Load in Tension (lbs)	Weight (lbs)	Shear Load (lbs)	Tension Load (lbs)
QL128G	2T	2T-3T (QL001)	1-1/4"	2-1/4"	3/8"	3-3/4"	16,000	0.74	950	950
QL846G	4T	4T-6T (QL002)	1-1/2"	3"	5/8"	3"	32,000	1.23	3,570	3,570
QL847G	4T	4T-6T (QL002)	1-1/2"	3-1/2"	5/8"	3"	32,000	1.43	4,700	4,700
QL044G	4T	4T-6T (QL002)	1-1/2"	4-3/8"	5/8"	3-7/8"	32,000	1.92	4,730	4,730
QL054G	8T	8T-12T (QL003)	2-1/2"	6-1/4"	3/4"	5"	64,000	5.45	6,350	6,350
QL042G	8T	8T-12T (QL003)	2-1/2"	7-1/8"	3/4"	5"	64,000	5.94	10,000	10,000

- Table is based on 3,500 psi and 145 PCF concrete.
- Above capacities are based upon mechanical testing, concrete testing, and available industry data.
- Minimum edge distance of  $(3 \times \text{anchor height} + \text{anchor width}) / 2$
- Typically 3/4" concrete cover is required below anchor

QUIKLIFT® RING CLUTCH

The QuikLift Ring Clutch assembly consists of a bail, clutch and curved bolt handle. To install, rotate the curved bolt to the opened position and insert the clutch into the recess. To lock onto the anchor, rotate the curved bolt handle until the handle contacts the panel surface.

See ALP Supply® website for Inspection and Maintenance Guidelines for routine inspection of lifting hardware.



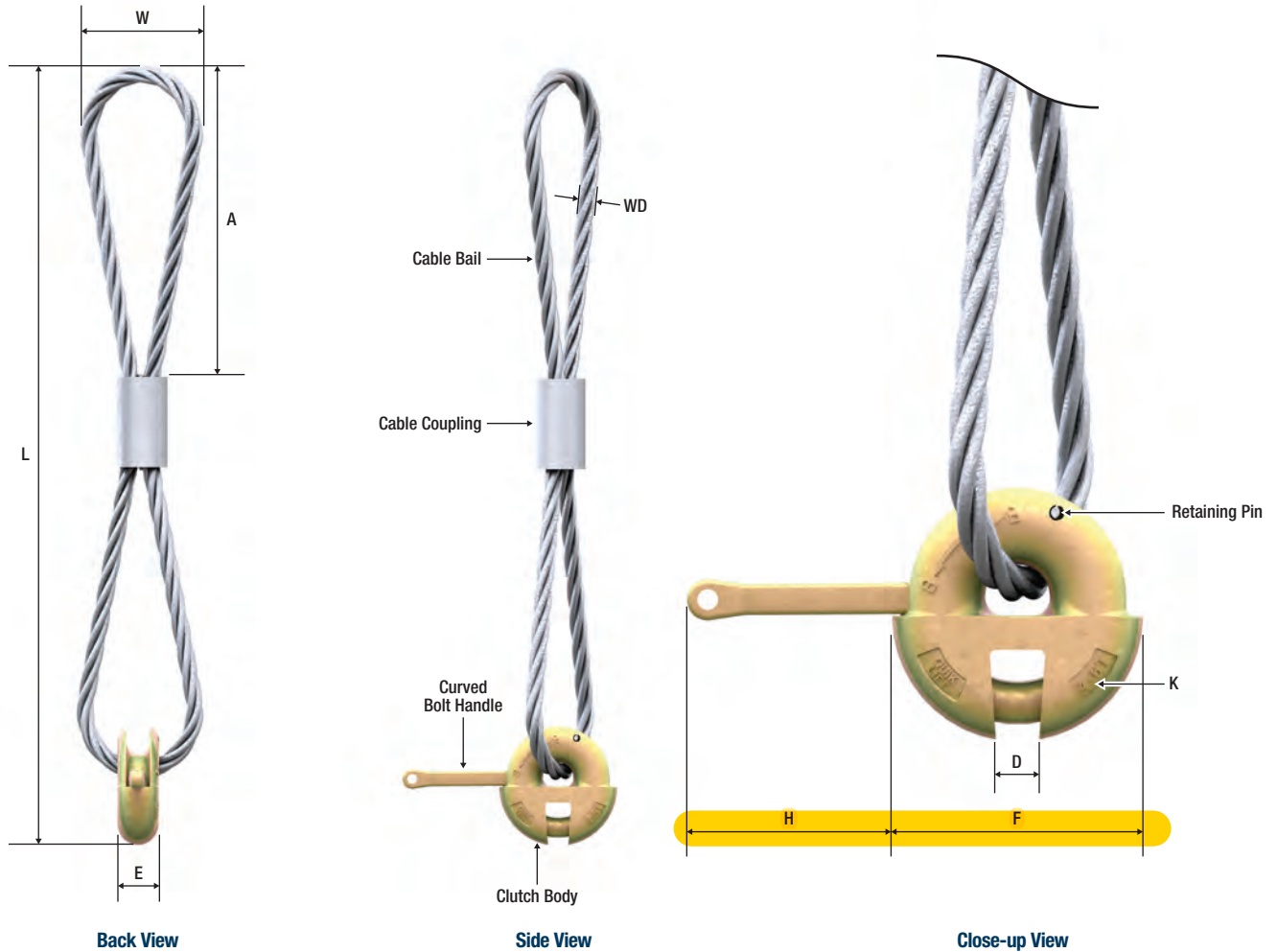
RING CLUTCH DIMENSIONS

Part #	K - Load Range (Tons)	L	W	T	A	B	C	D	E	F	G	H	Ultimate Capacity in Tension (lbs)	Weight (lbs)
QL001	2T-3T	10-5/16"	3-3/4"	1/2"	2-1/4"	1-3/16"	2-3/4"	1/2"	1-1/8"	3-1/8"	3"	2-1/2"	30,000	3.57
QL002	4T-6T	13-1/4"	4-7/16"	5/8"	2-5/8"	1-5/8"	3-7/16"	3/4"	1-7/16"	4-1/16"	4-1/8"	3"	60,000	8.04
QL003	8T-12T	16-1/2"	5-1/2"	1"	3"	1-13/16"	4-5/8"	15/16"	2"	5-15/16"	5-5/16"	3-3/8"	120,000	20.57
QL004	12.5-22T	24-1/8"	8-1/8"	1-3/8"	4-7/8"	2-5/8"	6-3/8"	1-3/8"	2-7/8"	8-1/2"	8-1/8"	3-5/8"	220,000	59.77

QUIKLIFT® CABLE RING CLUTCH

The QuikLift Cable Ring Clutch assembly consists of a cable, swage, clutch body and curved bolt handle. To install, rotate the curved bolt to the opened position and insert the clutch into the recess. To lock onto the anchor, rotate the curved bolt handle until the handle contacts the panel surface.

See ALP Supply® website for Inspection and Maintenance Guidelines for routine inspection of lifting hardware.



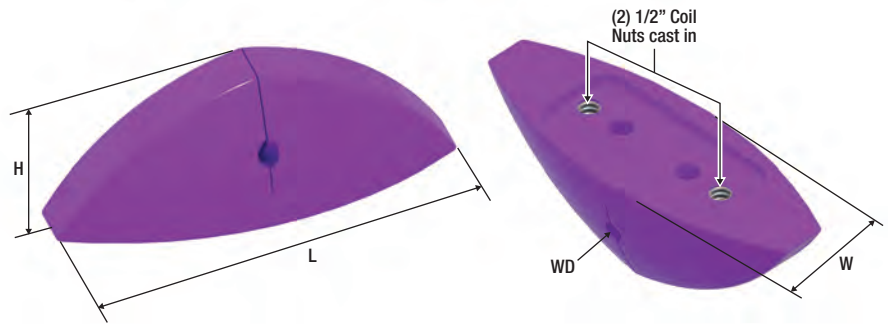
**CABLE RING CLUTCH DIMENSIONS**

Part #	K - Load Range (Tons)	L	W	A	D	E	WD	F	H	Ultimate Capacity in Tension (lbs)	Weight (lbs)
QL001CB	2T-3T	23-3/4"	4-7/8"	10-1/2"	1/2"	1-1/8"	1/2"	3-1/8"	2-1/2"	30,000	3.87
QL002CB	4T-6T	25-1/2"	5-5/8"	10-5/8"	3/4"	1-7/16"	3/4"	4-1/16"	3"	60,000	7.38
QL003CB	8T-12T	33-1/2"	6-3/8"	15-1/2"	15/16"	2"	1"	5-15/16"	3-3/8"	120,000	22.11
QL004CB	12.5T-22T	62"	8-7/8"	21"	1-3/8"	2-7/8"	1-1/4"	8-1/2"	3-5/8"	220,000	60.63

ALP® UTILITY LIFT™ RECESS MEMBERS - .444"/.671" DIAMETERS

**Urethane Recess Member**

- Flexible Material
- Reusable
- High Durability



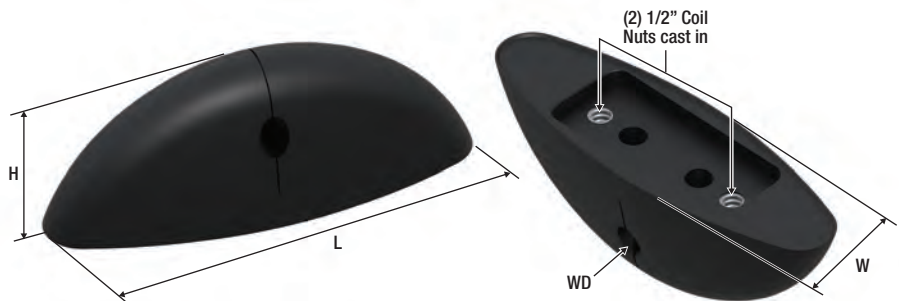
**URETHANE RECESS MEMBER DIMENSIONS**

Part #	WD - Wire Diameter	Color	L - Length	H - Height	W - Width	Weight (lbs)
TKURM449	.444"	Purple	9"	3-1/2"	3"	1.86
TKURM679	.671"	Purple	9"	3-1/2"	3"	1.76

- Petroleum based form release and coatings should not be used with urethane products, as they will degrade the urethane.
- Urethane products should not be used in temperatures exceeding 180°F.

**Rubber Recess Member**

- Flexible Material
- Reusable
- Economical



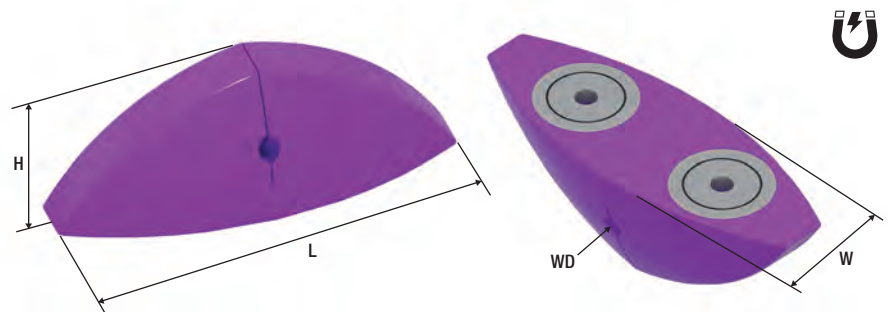
**RUBBER RECESS MEMBER DIMENSIONS**

Part #	WD - Wire Diameter	Color	L - Length	H - Height	W - Width	Weight (lbs)
LURM444	.444"	Black	9-3/4"	3-1/2"	3"	2.21
LURM671	.671"	Black	9-3/4"	3-1/2"	3"	2.15

- Petroleum based form release and coatings should not be used with rubber products, as they will degrade the rubber.

**Urethane Magnetic Recess Member**

- Embedded Magnets in Bottom
- Flexible Material
- Reusable
- High Durability



**URETHANE MAGNETIC RECESS MEMBER (1-PIECE)**

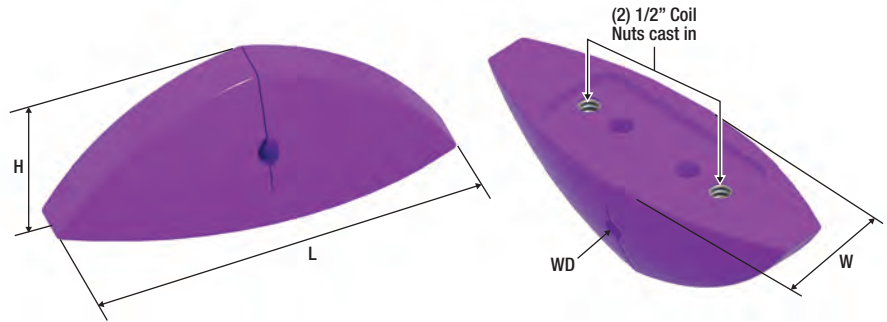
Part #	WD - Wire Diameter	Color	L - Length	H - Height	W - Width	Weight (lbs)
TKURM449M	.444"	Purple	9"	3-1/2"	3"	3.38
TKURM679M	.671"	Purple	9"	3-1/2"	3"	3.28

- Petroleum based form release and coatings should not be used with urethane products, as they will degrade the urethane.
- Urethane products should not be used in temperatures exceeding 180°F.

ALP® UTILITY LIFT™ RECESS MEMBERS - 14MM/18MM DIAMETERS

**Urethane Recess Member**

- Flexible Material
- Reusable
- High Durability



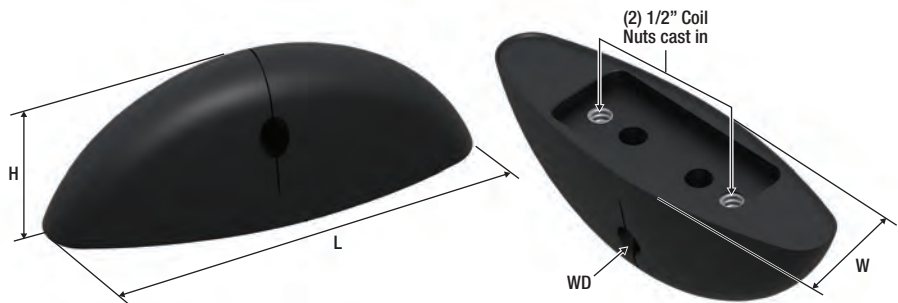
**URETHANE RECESS MEMBER DIMENSIONS**

Part #	WD - Wire Diameter	Color	L - Length	H - Height	W - Width	Weight (lbs)
TKURM149	14mm	Purple	9"	3-1/2"	3"	1.80
TKURM679	18mm	Purple	9"	3-1/2"	3"	1.76

- Petroleum based form release and coatings should not be used with urethane products, as they will degrade the urethane.
- Urethane products should not be used in temperatures exceeding 180°F.

**Rubber Recess Member**

- Flexible Material
- Reusable
- Economical



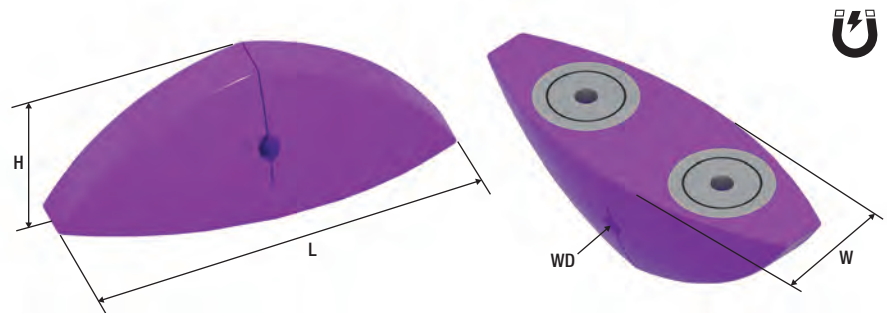
**RUBBER RECESS MEMBER DIMENSIONS**

Part #	WD - Wire Diameter	Color	L - Length	H - Height	W - Width	Weight (lbs)
LURM671	18mm	Black	9-3/4"	3-1/2"	3"	2.15

- Petroleum based form release and coatings should not be used with rubber products, as they will degrade the rubber.

**Urethane Magnetic Recess Member**

- Embedded Magnets in Bottom
- Flexible Material
- Reusable
- High Durability



**URETHANE MAGNETIC RECESS MEMBER (1-PIECE)**

Part #	WD - Wire Diameter	Color	L - Length	H - Height	W - Width	Weight (lbs)
TKURM149M	14mm	Purple	9"	3-1/2"	3"	3.50
TKURM679M	18mm	Purple	9"	3-1/2"	3"	3.28

- Petroleum based form release and coatings should not be used with urethane products, as they will degrade the urethane.
- Urethane products should not be used in temperatures exceeding 180°F.

COIL INSERT SAFETY INFORMATION AND BOLT SELECTION

Note: When using Coil Inserts for lifting and handling only 4 Strut Inserts should be used in 3/4" or larger diameters. The below images show 2 Strut Inserts for illustration purposes only. Although 2 Strut Inserts can be used, they require straight tension loading, no angled loading.

Coil bolts, nuts, rods and inserts should not be mixed from different suppliers as there is no industry standard for coil threads. Coil thread manufactured per ALP® specification.

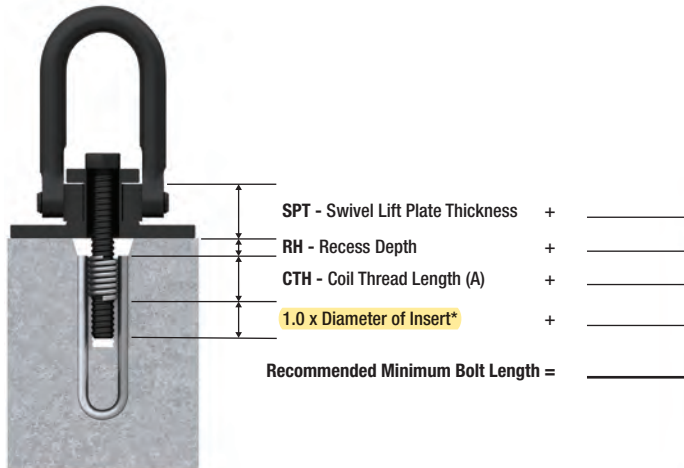


✓ 4 Strut Insert for lifting & handling

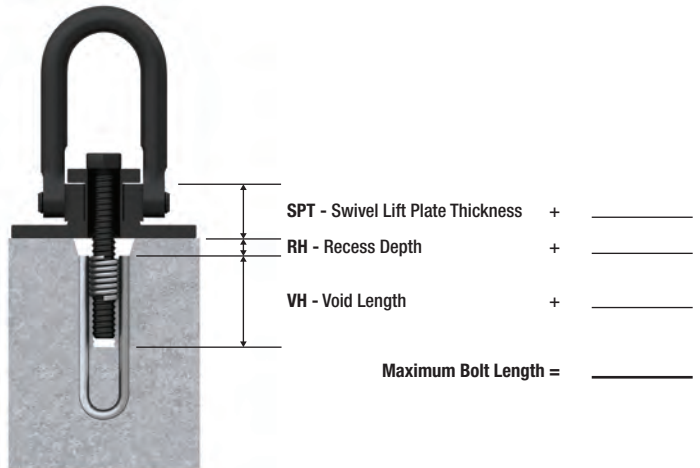


✗ 2 Strut Inserts are not typically recommended for lifting & handling (tension only)

Recommended Minimum Bolt Length



Maximum Bolt Length

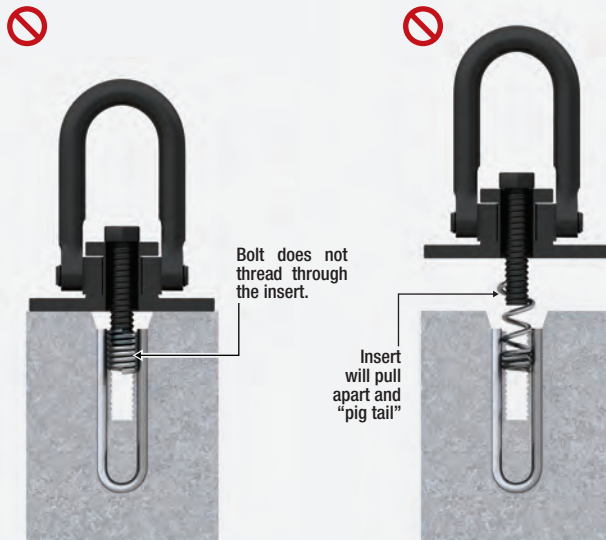


\*1.0 x bolt diameter is recommended to compensate for worn threads at the end of bolt.

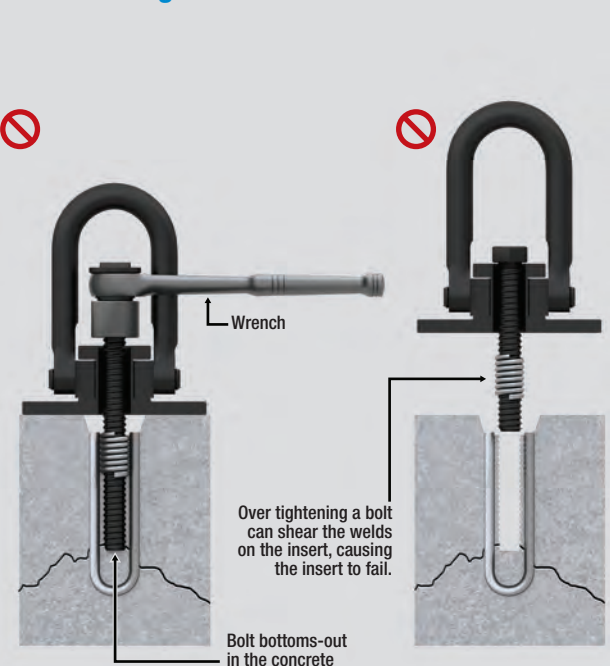
\*0.5 x bolt diameter may be used for new bolts or bolts that have been verified to have proper thread height.

Bolt too short or worn

When bolts are too short they will only engage part of the Coil threads, often leading to "pig tailing". Worn bolts typically wear down in a tapered orientation and can also cause the insert to "pig tail".

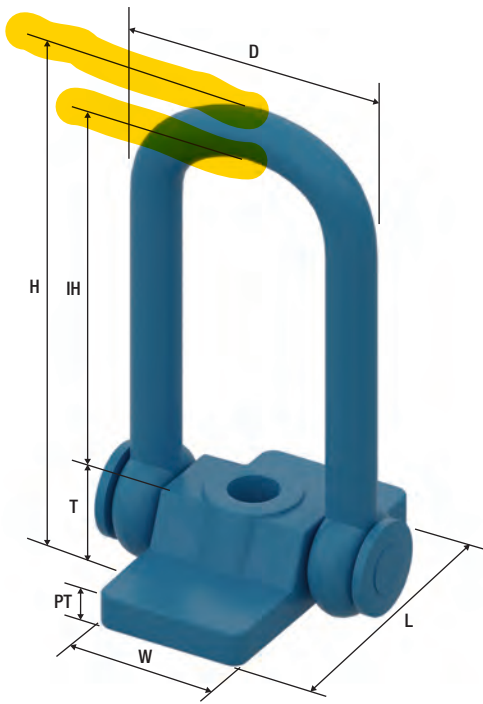


Bolt too long





CL-12 SINGLE SWIVEL LIFT PLATE



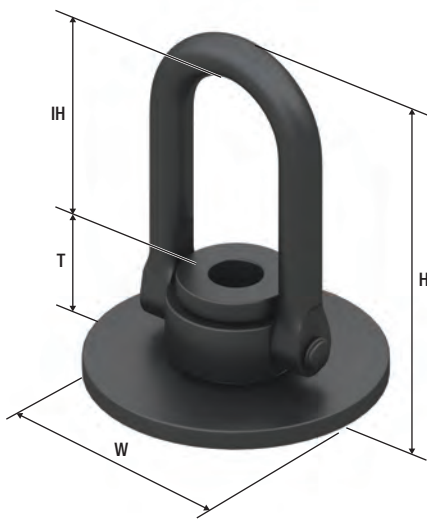
Manufactured from forged steel and designed for use with single lifting inserts for either face lifting or edge lifting applications. The SWL is achieved provided that it has full bearing on smooth, flat concrete, and a washer installed underneath the bolt head. Note that this Swivel Lifting Plate is designed for use only with 3/4" or 1" bolt diameters.

SINGLE SWIVEL LIFT PLATE DIMENSIONS AND LOAD CHART

Part #	Bolt Diameter	H - Overall Height	IH - Inside Height	L - Length	W - Width	D	T - Thickness	PT - Plate Thickness	Minimum Bolt Length	5:1 SWL (lbs)	Weight (lbs)
CL1234	3/4"	8-1/8"	5-7/8"	5"	2-1/2"	4-1/4"	1-1/2"	9/16"	5"	11,000	5.68
CL1201	1"	8-1/8"	5-7/8"	5"	2-1/2"	4-1/4"	1-1/2"	9/16"	6"	11,000	5.53

CL-26 DOUBLE SWIVEL LIFT PLATE

Lifting Plate will permit rotation of the bail in the direction of the applied load. The bail portion will rotate a full 360° in a horizontal plane and will swivel 180° in a vertical place. Designed for use only with 1", 1-1/4" and 1-1/2" coil bolts.



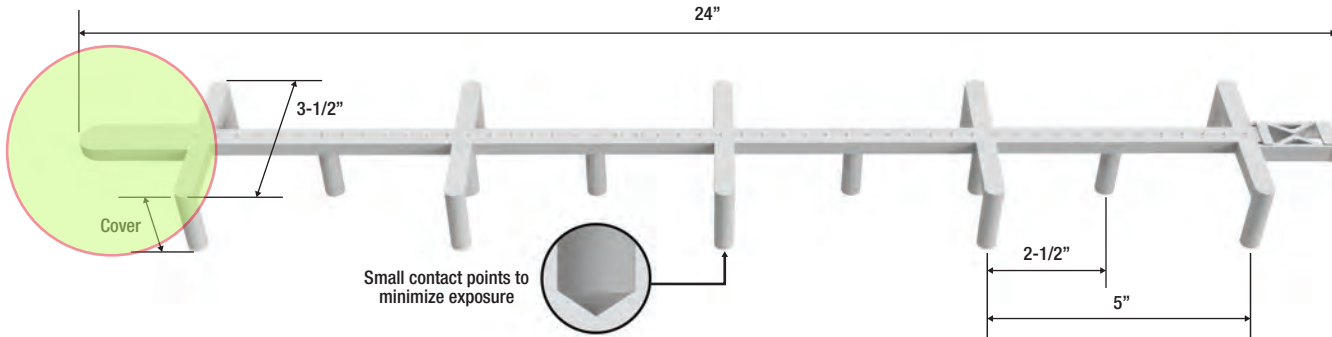
DOUBLE SWIVEL LIFT PLATE DIMENSIONS AND LOAD CHART

Part #	Bolt Diameter	H - Overall Height	IH - Inside Height	W - Width	T - Thickness	Min. Bolt Length	5:1 SWL (lbs)	Weight (lbs)
CL261	1"	8-1/2"	5-1/2"	5"	1-29/32"	6-1/2"	10,000	8.63
CL26114	1-1/4"	9"	5-1/2"	7"	2-3/8"	7"	15,000	16.94
CL26112	1-1/2"	9"	5-1/2"	7"	2-3/8"	7-1/2"	15,000*	16.79

\* Higher capacity swivel lift plate available upon request.

### STANDARD PLASTIC SLAB BOLSTER

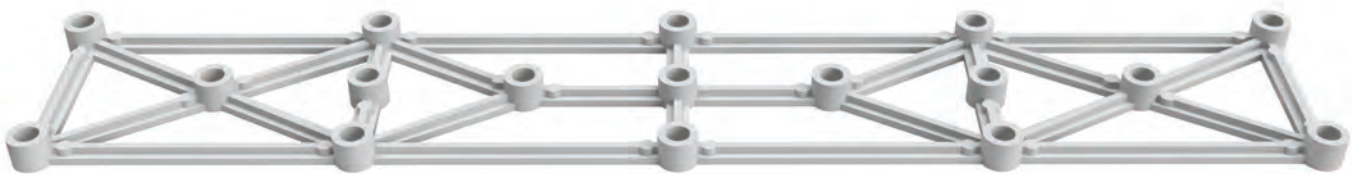
- 100% plastic for maximum strength and no corrosion
- Locking clip allows Slab Bolsters to be clipped together
- Bar stops on the top to help prevent bars from moving
- A wide T-back backbone beam for strength and stability
- Standard gray color, custom colors available



Part #	Cover/Size	Color	Feet /Ctn
PWSBS034	3/4"	Gray	356'
PWSBS1	1"	Gray	356'
PWSBS112	1-1/4"	Gray	300'
PWSBS114	1-1/2"	Gray	280'
PWSBS134	1-3/4"	Gray	248'
PWSBS2	2"	Gray	224'
PWSBS212	2-1/4"	Gray	180'
PWSBS3	2-1/2"	Gray	180'
PWSBS312	3"	Gray	148'
PWSBS4	3-1/2"	Gray	140'
PWSBS412	4"	Gray	130'
PWSBAPS412	4-1/2"	Gray	100'

### PLASTIC SLAB BOLSTER UPPER PLATE\*

All plastic construction keeps rust from forming on the surface of the concrete. Snaps onto Standard Slab Bolster to convert it into an Upper Slab Bolster. Standard length is 24".

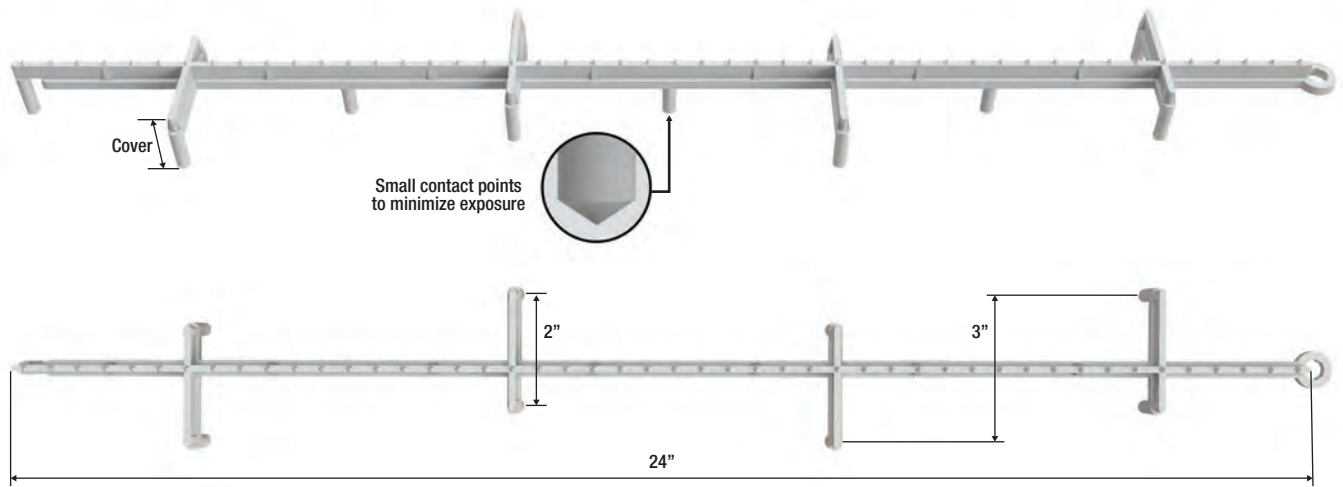


Part #	Color	Feet /Ctn
PWSBSUP	Gray	168'

\*Works with Standard Slab Bolster only

**LIGHT DUTY PLASTIC SLAB BOLSTER**

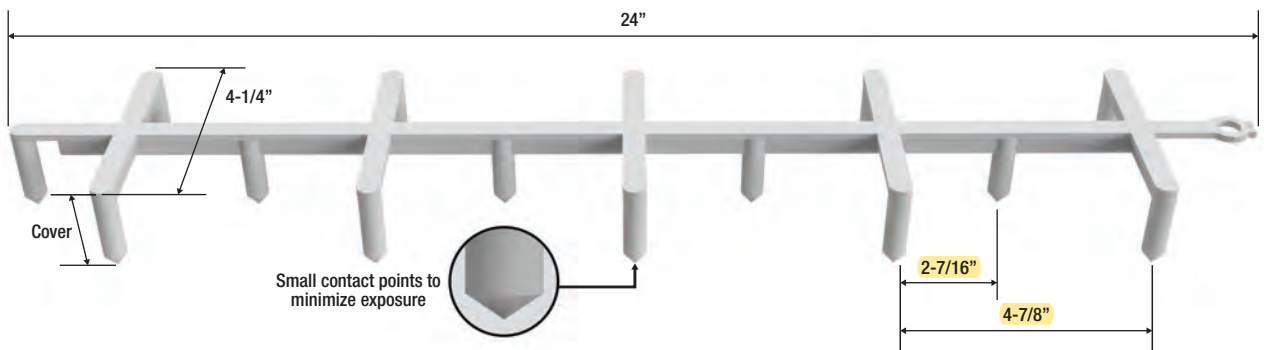
- Staggered legs to maximize stability
- Engineered design that reduces excess plastic and costs



Part #	Cover/Size	Color	Feet /Ctn
PWSBL1	1"	Gray	420'
PWSBL112	1-1/2"	Gray	360'
PWSBL2	2"	Gray	260'
PWSBL212	2-1/2"	Gray	216'
PWSBL3	3"	Gray	180'

**HEAVY DUTY PLASTIC SLAB BOLSTER**

Heavy Duty Slab Bolster is a high-strength version of the Standard Slab Bolster designed for more demanding applications.



Part #	Cover/Size	Color	Feet /Ctn
PWSBH112	1-1/2"	Gray	250'
PWSBH2	2"	Gray	200'
PWSBH212	2-1/2"	Gray	160'
PWSBH3	3"	Gray	150'
PWSBAP314	3-1/4"	Gray	110'