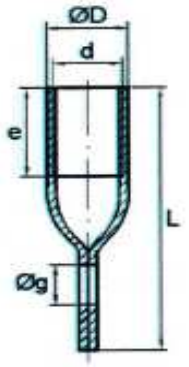
PCT - TECHNICAL DATA SHEET

TYPE: LIF - FLAT LIFTING INSERT (BZP & SS)

QUALITY & TESTING

Precast Construction Technology Ltd (PCT) lifting sockets are produced and tested in manufacturing plants that are certified to ISO 9001. On arrival at PCT we take samples from each batch which are forwarded to an independent UKAS registered test house for additional proof and destruction testing. All sockets are marked with a batch number to identify the year and month of production. Test certificates are supplied as standard with the delivery. Please call PCT for further information if required.

DIMENSIONS & S.W.L



Part Code	Load A Kg	Load S Kg	Thread d	Dimensions (mm) D	L	e	g
LIF12060	500	250	M12	15	60	22	10.3
LIF16080	1200	600	M16	21	80	27	13.3
LIF16095	1200	600	M16	21	95	27	13.3
LIF20095	2000	1000	M20	27.2	95	35	15.3
LIF24100	2500	1250	M24	31	100	43	17.3
LIF30135	4000	2000	M30	39.5	135	56	19.5

Loading A: Straight Axial Loading
Loading S: Transversal Shear Force

Loads based on a concrete strength of 15N/mm²

MATERIAL TYPES

High grade seamless precision tube finished in white zinc plated (BZP)
Stainless Steel Grade 304 (SS)

Also available to special order is Stainless Steel grade 316 (SS316)

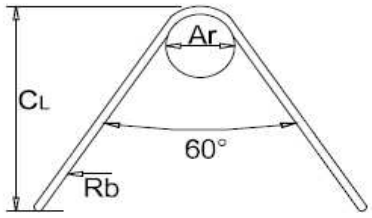
www.pct.uk.com Tel: 01773 121212 Fax: 01773 212121

REQUIRED REINFORCEMENT

PCT Type LIF inserts **MUST** be fitted with additional reinforcement which is to be fitted through the cross hole of the socket to ensure forces are transmitted into the concrete.

Care should be taken to firmly fix the reinforcement bar to the bottom of the cross hole.
To avoid damage to the concrete there should be no space between the bottom of the socket and the reinforcing bar

Part Code	Rb mm	Ar mm min
LIF12060	8	32
LIF16080	10	40
LIF16095	10	40
LIF20095	12	48
LIF24100	14	56
LIF30135	16	64



Concrete Strength N/mm²	CL - Reinforcing Tail Leg Length THREAD SIZE							
	M12	M16	M20	M24	M30			
10	270	350	490	520	730			
15	220	320	420	440	660			
25	170	250	340	370	520			

In addition to the reinforcement tail fitted to the socket it is also required for surface reinforcement to be fitted to the concrete unit, minimum reinforcement details are shown.

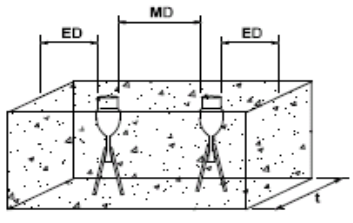
Socket Size	M12	M16	M20	M24	M30
Reinforcement mm² /m	131	131	188	188	211

If the socket is required to be used for shear or transversal pull then additional reinforcement is required. There is no further reinforcement requirement for axial loadings.

MINIMUM EDGE DISTANCES & PANEL THICKNESS

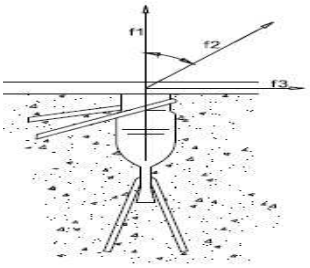
The SWL shown on page 1-01 are valid if the minimum edge distances along with panel thickness detailed below are observed.

Socket Size	Edge Distance ED (mm)	Socket Space MD (mm)	Min. Panel Thickness
M12	200	400	60
M16	250	500	70
M20	300	600	90
M24	350	700	100
M30	400	800	120



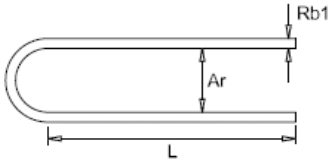
www.pct.uk.com Tel: 01773 121212 Fax: 01773 212121

REINFORCEMENT REQUIRED FOR PARALLEL SHEAR LOADING

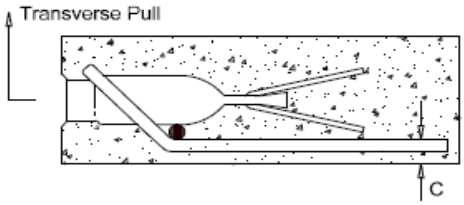


A lateral reinforcement bar is required for lifting angles in excess of 15°. The bar should be fitted in close contact with the socket in the opposite direction of the angle of the lifting force

Socket Size	Rb1 (mm)	L (mm)	Ar (mm)	Total Rebar Length
M12	8	100	18	230
M16	8	300	23	640
M20	10	400	28	840
M24	12	500	33	1050
M30	14	600	40	1260

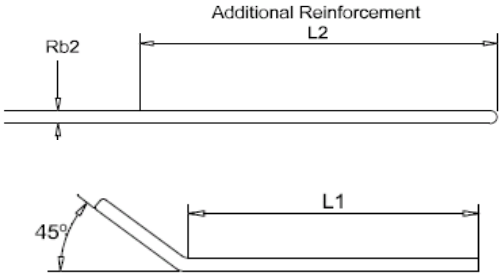


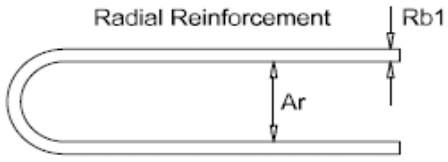
REINFORCEMENT REQUIRED FOR TRANSVERSAL SHEAR LOADING



The RE Lifting Eye (TYPE: LPR) or the Special Lifting Loop (TYPE: LPS) **MUST** be used for panels lifted from horizontal to vertical. Additional reinforcement should be added as indicated on the table below.

Socket Size	Cross Bar		Radial Bar				
	Rb2	L2	Rb1	L1	AR	Total Length	C
M12	8	500	8	150	32	460	20
M16	8	500	8	300	32	770	20
M20	10	500	10	300	40	840	20
M24	12	500	12	500	48	1270	20
M30	12	500	12	600	56	1510	20





www.pct.uk.com Tel: 01773 121212 Fax: 01773 212121