

## Lifting Points

Lifting Points information	3:2
Rotating Eye Lifting Point RELP	3:4
Rotating Lifting Point RLP	3:5
Decentered Lifting Point DLP	3:6
Ball-bearing Lifting Point BLP	3:7
Master Link D	3:8
Weldable Lifting Point WLP	3:8
Screw-on Lifting Point SLP	3:8
Eye Lifting Point ELP	3:8
Spare Parts	3:9 - 3:10

## Technical Information

Instructions for safe use	3:11 - 3:12
Working Load Limits	3:13

# The lifting point family

Gunnebo Industries offer a full range of CE-marked lifting points that will fit most lifting and lashing applications.

Choosing the right lifting point for your operation can be a challenge since most lifting points can be used for several purposes. In order to give some guidance, and to share what we consider to be best practice, we have created a cross-chart that provide indications to which lifting point that might be best suited for your specific purpose.

## Rotating eye lifting point RELP

The RELP is a compact and robust lifting point, ideal for top-mounting and when it is important to have quick and easy on-hooking. The lifting point is easy to assemble/disassemble with a standard allen key. On the bolt itself working load limit, mounting torque and manufacturing ID is stamped, so it is always available for the operator.

The RELP will automatically adjust to the loading direction which decreases the risk to load it incorrectly and endangering the lifting operation. For sensitive load surfaces the RELP is ideal, as the connecting sling hook will be positioned mainly parallel to the load surface, thus completely avoiding the hook causing damage on impact on the load.



## Rotating lifting point RLP

The RLP has an easily dismantlable D-ring to enable assembly of wiresling, master link or hook directly onto the lifting point.

RLP has a hexagon bolt (RFID prepared) to make it easy to disassemble/assemble with a wrench. The bolt is also clearly marked with working load limit, mounting torque and manufacturer ID so it is always available to the operator. The RLP rotates 360° and pivots 180°, making it strong, flexible and reliable.



## De-centered lifting point DLP

The design of the DLP allows the link to be folded over the housing when idle, allowing the lifting point to be almost completely stowed away when not in use.

The closed, oblong link is also equipped with a "stay-up"-function for easy on-hooking, (sizes up to M24) especially when there is limited space. This saves both the load from damage due to impacts from the hook, as well as making rigging fast and easy. The DLP is ideal in narrow spaces, such as corners or edge position, as the housing has a compact design. DLP has a hexagon bolt (RFID prepared) to make it easy to disassemble/assemble with a wrench. The bolt is also clearly marked with working load limit, mounting torque and manufacturer ID so it is always available to the operator.



## Ball-bearing lifting point BLP

The BLP is a very versatile lifting point and can safely be used for most applications. The ball-bearings in the BLP allow the load to be rotated during the lift, which is especially good when maintenance is needed on heavy tools and other types of equipment.

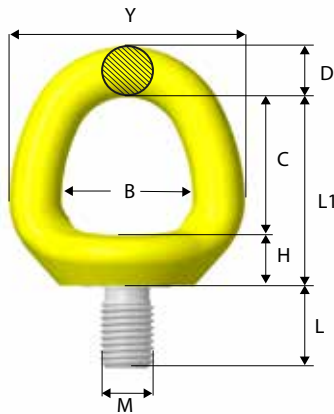
If the load surface is sensitive to impacts or scratches, the BLP is a good choice as it builds out from the load which makes it less likely that the lifting equipment will come in contact with it causing damage. The housing (RFID prepared) of the BLP is in-house drop-forged for increased strength and has a hexagon shape for easy mounting and dismounting. The housing is also clearly marked with working load limit, mounting torque and manufacturer ID so it is always available to the operator.





	RELP	RLP	DLP	BLP
Tight space	✓		✓	✓
Limited height (effective length)	✓	✓		
Vertical lift	✓	✓		✓
Angular lift		✓	✓	✓
Vertical rotation under load				✓
Tilting under load		✓	✓	✓
Sensitive load surface				✓
Single part lift	✓	✓		✓
Multiple part lift		✓	✓	✓
Integrated combination (hook or link)		✓		
RFID prepared		✓	✓	✓

*This chart is intended to give guidance in choosing the right lifting point for your operation and is not rules for usage. For further advice contact your closest Gunnebo Industries dealer.*



## Rotating eye lifting point RELP



Art. no.	Code	Dimensions in mm										Weight kg
		B	C	D	E	H	L	L1	M	Y	Z	
Z102408	RELPM8 x 1.25	28	28	11	40	14	15	42	8	50	29	0.2
Z102410	RELPM10 x 1.5	28	28	11	40	14	15	42	10	50	29	0.2
Z102412	RELPM12 x 1.75	32	33	13	46	13	20	47	12	58	38	0.3
Z102416	RELPM16 x 2	39	41	15	53	16	24	57	16	70	40	0.5
Z102420	RELPM20 x 2.5	42	43	16	60	18	30	60	20	78	46	0.7
Z102424	RELPM24 x 3	50	51	19	68	20	36	71	24	88	44	1.1
Z102430	RELPM30 x 3.5	60	62	26	85	28	45	90	30	112	64	2.4
Z102436	RELPM36 x 4	72	72	32	97	32	54	104	36	136	74	4.1
Z102442	RELPM42 x 4.5	82	82	38	120	37	63	119	42	158	91	6.7
Z102448	RELPM48 x 5	94	96	43	142	39	72	135	48	180	102	9.9

Bolt according to: ISO 898-1 Class 10.9



## RELPM with UNC thread

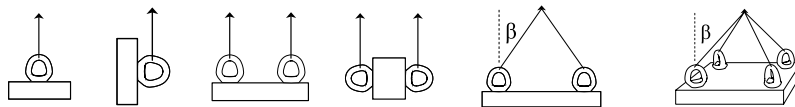


Art. no.	Code	Dimensions in mm										M inch	Weight kg
		B	C	D	E	H	L	L1	Y	Z			
Z102508	RELPM 5/16"-18 UNC	28	28	11	40	14	15	42	50	29	5/16"	0.2	
Z102510	RELPM 3/8"-16 UNC	28	28	11	40	14	15	42	50	29	3/8"	0.2	
Z102512	RELPM 1/2"-13 UNC	32	33	13	46	13	20	47	58	38	1/2"	0.3	
Z102516	RELPM 5/8"-11 UNC	39	41	15	53	16	24	57	70	40	5/8"	0.5	
Z102520	RELPM 3/4"-10 UNC	42	43	16	60	18	30	60	78	46	3/4"	0.7	
Z102521	RELPM 7/8"-9 UNC	42	43	16	60	18	30	60	78	46	7/8"	0.7	
Z102524	RELPM 1"-8 UNC	50	51	19	68	20	36	71	88	44	1"	1.1	
Z102530	RELPM 1 1/4"-7 UNC	60	62	26	85	28	45	90	112	64	1 1/4"	2.4	
Z102536	RELPM 1 1/2"-6 UNC	72	72	32	97	32	54	104	136	74	1 1/2"	4.1	
Z102542	RELPM 1 3/4"-5 UNC	82	82	38	120	37	63	119	158	91	1 3/4"	6.8	
Z102548	RELPM 2"-4.5 UNC	94	96	43	142	39	72	135	180	102	2"	10.0	

Bolt according to: ISO 898-1 Class 10.9

## Working Load Limits\* RELPM

Symmetric load (tonnes)



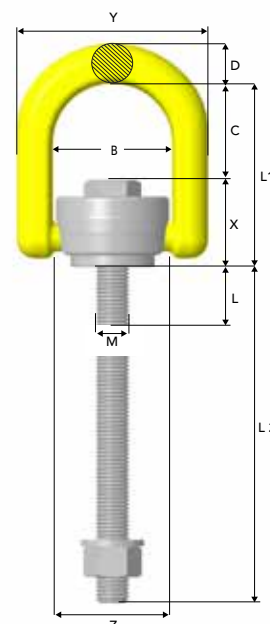
No. of legs	1		2		2 symmetric		3 & 4 symmetric		Tightening torque	Allen key
	Angle $\beta$	0°	90°	0°	90°	0-45°	45-60°	0-45°		
RELPM -M8 x 1.25	0.7	0.3	1.4	0.6	0.4	0.3	0.6	0.4	10 Nm	8 mm
RELPM 5/16"-18 UNC	0.7	0.3	1.4	0.6	0.4	0.3	0.6	0.4	7 Ft.Lbs	5/16"
RELPM -M10 x 1.5	1.2	0.5	2.4	1.0	0.7	0.5	1.0	0.7	15 Nm	8 mm
RELPM 3/8"-16 UNC	1.2	0.5	2.4	1.0	0.7	0.5	1.0	0.7	11 Ft.Lbs	5/16"
RELPM -M12 x 1.75	2.0	0.8	4.0	1.6	1.1	0.8	1.6	1.2	27 Nm	8 mm
RELPM 1/2"-13 UNC	2.0	0.8	4.0	1.6	1.1	0.8	1.6	1.2	20 Ft.Lbs	5/16"
RELPM -M16 x 2	3.5	1.5	7.0	3.0	2.1	1.5	3.1	2.2	60 Nm	8 mm
RELPM 5/8"-11 UNC	3.5	1.5	7.0	3.0	2.1	1.5	3.1	2.2	44 Ft.Lbs	5/16"
RELPM -M20 x 2.5	6.1	2.4	12.2	4.8	3.3	2.4	5.0	3.6	90 Nm	8 mm
RELPM 3/4"-10 UNC	5.0	2.3	10.0	4.6	3.1	2.3	4.8	3.4	66 Ft.Lbs	5/16"
RELPM 7/8"-9 UNC	6.1	2.9	12.2	5.8	4.1	2.9	6.1	4.3	66 Ft.Lbs	5/16"
RELPM -M24 x 3	8.1	3.3	16.2	6.6	4.6	3.3	6.9	4.9	135 Nm	19 mm
RELPM 1"-8 UNC	8.1	3.3	16.2	6.6	4.6	3.3	6.9	4.9	100 Ft.Lbs	3/4"
RELPM -M30 x 3.5	12.1	4.6	24.2	9.2	6.4	4.6	9.6	6.9	270 Nm	19 mm
RELPM 1 1/4"-7 UNC	12.1	4.6	24.2	9.2	6.4	4.6	9.6	6.9	200 Ft.Lbs	3/4"
RELPM -M36 x 4	16.1	7.1	32.2	14.2	9.9	7.1	14.9	10.6	320 Nm	19 mm
RELPM 1 1/2"-6 UNC	16.1	7.1	32.2	14.2	9.9	7.1	14.9	10.6	236 Ft.Lbs	3/4"
RELPM -M42 x 4.5	24	9.1	48	18.2	12.7	9.1	19.1	13.6	600 Nm	19 mm
RELPM 1 3/4"-5 UNC	24	9.1	48	18.2	12.7	9.1	19.1	13.6	440 Ft.Lbs	3/4"
RELPM -M48 x 5	32	12.1	64	24.2	16.9	12.1	25.4	18.1	800 Nm	19 mm
RELPM 2"-4.5 UNC	32	12.1	64	24.2	16.9	12.1	25.4	18.1	590 Ft.Lbs	3/4"

## Rotating lifting point RLP



Art. no. Standard bolt length	L	Art.no. Long bolt length**	L2	Code	Dimensions in mm								Weight kg***
					B	C	D	L1	M	X	Y	Z	
Z101708	16	Z1017080L	101	RLP-M8 x 1.25	42	35	12	62	8	27	64	Ø40	0.3
Z101710	16	Z1017100L	101	RLP -M10 x 1.5	42	35	12	62	10	27	64	Ø40	0.3
Z101712	25	Z1017120L	120	RLP -M12 x 1.75	57	46	19	88	12	42	91	Ø54	1.0
Z101716	25	Z1017160L	160	RLP-M16 x 2	57	46	19	88	16	42	91	Ø54	1.0
Z101720	36	Z1017200L	200	RLP-M20 x 2.5	83	55	28	110	20	55	133	Ø80	2.9
Z101724	36	Z1017240L	240	RLP-M24 x 3	83	55	28	110	24	55	133	Ø80	2.9
Z101730	58	Z1017300L	300	RLP-M30 x 3.5	114	70	34	148	30	78	182	Ø111	7.1
Z101736	58	Z1017360L	300	RLP-M36 x 4	114	70	34	148	36	78	182	Ø111	7.3
Z101742	81	Z1017420L	301	RLP-M42 x 4.5	149	91	40	190	42	99	229	Ø142	14.3
Z101748	81	Z1017480L	301	RLP-M48 x 5	149	91	40	190	48	99	229	Ø142	14.5

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9



## RLP with UNC thread



Art. no. Standard bolt length	L	Art.no. long bolt length**	L2	Code	Dimensions in mm								M inch	Weight kg***
					B	C	D	L1	X	Y	Z			
Z101808	16	Z1018080L	101	RLP-5/16"-18 UNC	42	35	12	62	27	64	Ø40	5/16"	0.3	
Z101810	16	Z1018100L	101	RLP-3/8"-16 UNC	42	35	12	62	27	64	Ø40	3/8"	0.3	
Z101812	25	Z1018120L	120	RLP-1/2"-13 UNC	57	46	19	88	42	91	Ø54	1/2"	1.0	
Z101816	25	Z1018160L	160	RLP-5/8"-11 UNC	57	46	19	88	42	91	Ø54	5/8"	1.0	
Z101820	36	Z1018200L	200	RLP-3/4"-10 UNC	83	55	28	110	55	133	Ø80	3/4"	2.9	
Z101821	36	Z1018210L	200	RLP-7/8"-9 UNC	83	55	28	110	55	133	Ø80	7/8"	2.9	
Z101824	36	Z1018240L	240	RLP 1"-8 UNC	83	55	28	110	55	133	Ø80	1"	2.9	
Z101830	58	Z1018300L	300	RLP 1 1/4"-7 UNC	114	70	34	148	78	182	Ø111	1 1/4"	7.1	
Z101836	58	Z1018360L	300	RLP 1 1/2"-6 UNC	114	70	34	148	78	182	Ø111	1 1/2"	7.3	
Z101842	81	Z1018420L	301	RLP 1 3/4"-5 UNC	149	91	40	190	99	229	Ø142	1 3/4"	14.4	
Z101848	81	Z1018480L	301	RLP 2"-4.5 UNC	149	91	40	190	99	229	Ø142	2"	14.7	

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9

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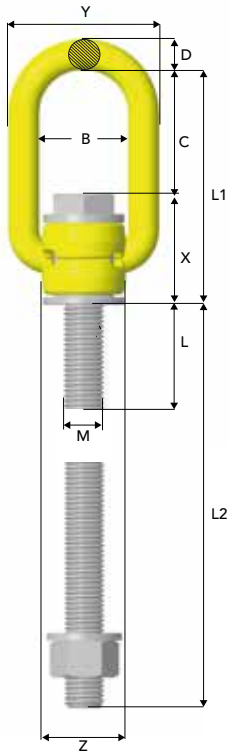
## Working Load Limits\* RLP

Symmetric load (tonnes)									Tightening torque	Spanner size
	No. of legs	1	1	2	2	2 symmetric	3 & 4 symmetric			
Angle $\beta$	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°		
RLP - M8 x 1.25	0.8	0.4	1.6	0.8	0.5	0.4	0.8	0.6	10 Nm	13 mm
RLP 5/16"-18 UNC	0.8	0.4	1.6	0.8	0.5	0.4	0.8	0.6	7 Ft.Lbs	1/2"
RLP - M10 x 1.5	1.2	0.7	2.4	1.4	0.9	0.7	1.4	1.0	15 Nm	13 mm
RLP 3/8"-16 UNC	1.2	0.65	2.4	1.3	0.9	0.6	1.3	0.9	11 Ft.Lbs	1/2"
RLP - M12 x 1.75	2.0	1.2	4.0	2.4	1.6	1.2	2.5	1.8	27 Nm	24 mm
RLP 1/2"-13 UNC	2.0	1.2	4.0	2.4	1.6	1.2	2.5	1.8	20 Ft.Lbs	15/16"
RLP - M16 x 2	3.2	2.0	6.4	4.0	2.8	2.0	4.2	3.0	60 Nm	24 mm
RLP 5/8"-11 UNC	3.2	2.0	6.4	4.0	2.8	2.0	4.2	3.0	44 Ft.Lbs	15/16"
RLP - M20 x 2.5	5.6	2.8	11.2	5.6	3.9	2.8	5.8	4.2	90 Nm	32 mm
RLP 3/4"-10 UNC	5.0	2.5	10.0	5.0	3.5	2.5	5.2	3.7	66 Ft.Lbs	1 5/16"
RLP 7/8"-9 UNC	5.6	2.8	11.2	5.6	3.9	2.8	5.8	4.2	66 Ft.Lbs	1 5/16"
RLP - M24 x 3	8.0	4.6	16.0	9.2	6.4	4.6	9.6	6.9	135 Nm	32 mm
RLP 1"-8 UNC	8.0	4.6	16.0	9.2	6.4	4.6	9.6	6.9	100 Ft.Lbs	1 5/16"
RLP - M30 x 3.5	12.0	6.0	24.0	12.0	8.4	6.0	12.6	9.0	270 Nm	55 mm
RLP 1 1/4"-7 UNC	12.0	6.0	24.0	12.0	8.4	6.0	12.6	9.0	200 Ft.Lbs	2 1/4"
RLP - M36 x 4	14.0	8.0	28.0	16.0	11.2	8.0	16.8	12.0	320 Nm	55 mm
RLP 1 1/2"-6 UNC	14.0	8.0	28.0	16.0	11.2	8.0	16.8	12.0	236 Ft.Lbs	2 1/4"
RLP - M42 x 4.5	16.0	14.0	32.0	28.0	19.6	14.0	29.4	21.0	600 Nm	75 mm
RLP 1 3/4"-5 UNC	16.0	14.0	32.0	28.0	19.6	14.0	29.4	21.0	440 Ft.Lbs	3"
RLP - M48 x 5	20.0	16.0	40.0	32.0	22.4	16.0	33.6	24.0	800 Nm	75 mm
RLP 2"-4.5 UNC	20.0	16.0	40.0	32.0	22.4	16.0	33.6	24.0	590 Ft.Lbs	3"



Disassembly of the RLP is easily done by just folding the D-ring forward and push down.

## De-centered lifting point DLP



Art. no. Standard bolt length	L	Art.no. Long bolt length**	L2	Code	Dimensions in mm											Weight Kg***
					B	C	D	E	F	G	L1	M	X	Y	Z	
Z102208	13	Z1022080L	97.5	DLP-M8 x 1.25	35	48	10	39	14	10	78	8	30	55	26	0.3
Z102210	13	Z1022100L	97.5	DLP-M10 x 1.5	35	48	10	39	14	10	78	10	30	55	26	0.3
Z102212	23	Z1022120L	118	DLP-M12 x 1.75	35	48	12	51	20	14	91	12	44	59	32	0.5
Z102216	23	Z1022160L	158	DLP-M16 x 2	35	48	12	51	20	14	91	16	44	59	32	0.5
Z102220	34	Z1022200L	198	DLP-M20 x 2.5	54	88	18	71	28	18	145	20	58	90	48	1.6
Z102224	34	Z1022240L	238	DLP-M24 x 3	54	88	18	71	28	18	145	24	58	90	48	1.7
Z102230	53	Z1022300L	295	DLP-M30 x 3.5	82	94	26	104	39	27	182	30	88	122	75	5.0
Z102236	53	Z1022360L	295	DLP-M36 x 4	82	94	26	104	39	27	182	36	88	122	75	5.2
Z102242	73	Z1022420L	293	DLP-M42 x 4.5	100	104	36	136	54	34	216	42	113	156	110	11.6
Z102248	73	Z1022480L	293	DLP-M48 x 5	100	103	36	136	54	34	216	48	113	156	110	11.9

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9

## DLP with UNC thread

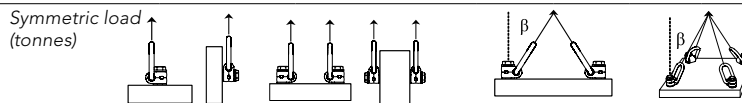


Art. no. Standard bolt length	L	Art.no. Long bolt length**	L2	Code	Dimensions in mm											M inch	Weight kg***
					B	C	D	E	F	G	L1	X	Y	Z			
Z102308	13	Z1023080L	97.5	DLP-5/16"-18 UNC	35	48	10	39	14	10	78	30	55	26	5/16"	0.3	
Z102310	13	Z1023100L	97.5	DLP-3/8"-16 UNC	35	48	10	39	14	10	78	30	55	26	3/8"	0.3	
Z102312	23	Z1023120L	118	DLP-1/2"-13 UNC	35	48	12	51	20	14	91	44	59	32	1/2"	0.5	
Z102316	23	Z1023160L	158	DLP-5/8"-11 UNC	35	48	12	51	20	14	91	44	59	32	5/8"	0.5	
Z102320	34	Z1023200L	198	DLP-3/4"-10 UNC	54	88	18	71	28	18	145	58	90	48	3/4"	1.6	
Z102321	34	Z1023210L	198	DLP-7/8"-9 UNC	54	88	18	71	28	18	145	58	90	48	7/8"	1.6	
Z102324	34	Z1023240L	238	DLP-1"-8 UNC	54	88	18	71	28	18	145	58	90	48	1"	1.7	
Z102330	53	Z1023300L	295	DLP-1 1/4"-7 UNC	82	94	26	104	39	27	182	88	122	75	1 1/4"	5.5	
Z102336	53	Z1023360L	295	DLP-1 1/2"-6 UNC	82	94	26	104	39	27	182	88	122	75	1 1/2"	5.7	
Z102342	73	Z1023420L	293	DLP-1 3/4"-5 UNC	100	103	36	136	54	34	216	113	156	110	1 3/4"	11.7	
Z102348	73	Z1023480L	293	DLP-2"-4.5 UNC	100	103	36	136	54	34	216	113	156	110	2"	12.1	

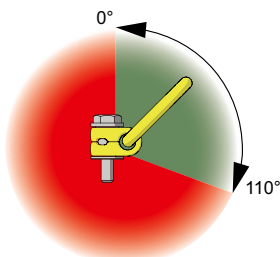
\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9



## Working Load Limits\* DLP



No. of legs	1		2		2 symmetric		3 & 4 symmetric		Tightening torque	Spanner size
	Angle $\beta$	$0^\circ < \beta < 90^\circ$	$0^\circ < \beta < 90^\circ$	$0-45^\circ$	$45-60^\circ$	$0-45^\circ$	$45-60^\circ$			
DLP -M8 x 1.25		0.35	0.70	0.5	0.35	0.7	0.5	10 Nm	13 mm	
DLP 5/16"-18 UNC		0.35	0.70	0.5	0.35	0.7	0.5	7 Ft.Lbs	1/2"	
DLP -M10 x 1.5		0.65	1.30	0.9	0.65	1.4	1.0	15 Nm	13 mm	
DLP 3/8"-16 UNC		0.60	1.20	0.8	0.60	1.3	1.0	11 Ft.Lbs	1/2"	
DLP -M12 x 1.75		1.0	2.0	1.4	1.0	2.1	1.5	27 Nm	24 mm	
DLP 1/2"-13 UNC		1.0	2.0	1.4	1.0	2.1	1.5	20 Ft.Lbs	15/16"	
DLP -M16 x 2		1.8	3.6	2.5	1.8	3.7	2.7	60 Nm	24 mm	
DLP 5/8"-11 UNC		1.6	3.2	2.2	1.6	3.3	2.4	44 Ft.Lbs	15/16"	
DLP -M20 x 2.5		2.6	5.2	3.5	2.6	5.4	3.9	90 Nm	32 mm	
DLP -3/4"-10 UNC		2.2	4.4	3.0	2.2	4.6	3.3	66 Ft.Lbs	1 5/16"	
DLP -7/8"-9 UNC		2.6	5.2	3.5	2.6	5.4	3.9	66 Ft.Lbs	1 5/16"	
DLP -M24 x 3		4.1	8.2	5.7	4.1	8.6	6.1	135 Nm	32 mm	
DLP -1"-8 UNC		4.1	8.2	5.7	4.1	8.6	6.1	100 Ft.Lbs	1 5/16"	
DLP -M30 x 3.5		5.0	10.0	7.0	5.0	10.5	7.5	270 Nm	55 mm	
DLP -1 1/4"-7 UNC		5.0	10.0	7.0	5.0	10.5	7.5	200 Ft.Lbs	2 1/4"	
DLP -M36 x 4		7.0	14.0	9.8	7.0	14.7	10.5	320 Nm	55 mm	
DLP -1 1/2"-6 UNC		7.0	14.0	9.8	7.0	14.7	10.5	236 Ft.Lbs	2 1/4"	
DLP -M42 x 4.5		15.0	30.0	21.0	15.0	31.5	22.5	600 Nm	75 mm	
DLP -1 3/4"-5 UNC		15.0	30.0	21.0	15.0	31.5	22.5	440 Ft.Lbs	3"	
DLP -M48 x 5		20.0	40.0	28.0	20.0	42.0	30.0	800 Nm	75 mm	
DLP -2"-4.5 UNC		20.0	40.0	28.0	20.0	42.0	30.0	590 Ft.Lbs	3"	

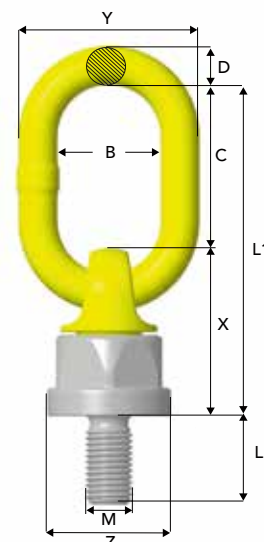


- The DLP can only be loaded from  $0^\circ$  to  $110^\circ$  degrees.
- Rotation around screw axis when loaded at  $0^\circ$ - $15^\circ$  is not allowed.

## Ball-bearing lifting point BLP



Art. no.	Code	Dimensions in mm										Weight kg
		B	C	D	L	L1	M	X	Y	Z		
Z102008	BLP-M8 x 1.25	35	55	13	16	112	8	57	62	Ø42	0.6	
Z102010	BLP -M10 x 1.5	35	55	13	20	112	10	57	61	Ø42	0.6	
Z102012	BLP -M12 x 1.75	35	55	13	24	112	12	57	61	Ø42	0.6	
Z102016	BLP-M16 x 2	35	55	13	30	112	16	57	61	Ø42	0.6	
Z102020	BLP-M20 x 2.5	34	57	17	30	132	20	75	67	Ø59	1.3	
Z102024	BLP-M24 x 3	50	70	17	36	145	24	75	84	Ø59	1.5	
Z102030	BLP-M30 x 3.5	54	96	22	45	102	30	106	99	Ø74	3.4	
Z102036	BLP-M36 x 4	54	96	22	54	102	36	106	99	Ø74	3.5	
Z102042	BLP-M42 x 4.5	70	120	28	63	242	42	122	127	Ø93	6.5	
Z102048	BLP-M48 x 5	70	120	28	72	242	48	122	127	Ø93	6.8	



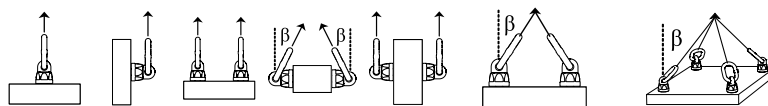
## BLP with UNC thread



Art. no.	Code	Dimensions in mm										M inch	Weight kg
		B	C	D	L	L1	X	Y	Z				
Z102108	BLP-5/16"-18 UNC	35	55	13	16	112	57	61	Ø42	5/16"	0.6		
Z102110	BLP-3/8"-16 UNC	35	55	13	20	112	57	61	Ø42	3/8"	0.6		
Z102112	BLP-1/2"-13 UNC	35	55	13	24	112	57	61	Ø42	1/2"	0.6		
Z102116	BLP-5/8"-11 UNC	35	55	13	30	112	57	61	Ø42	5/8"	0.6		
Z102120	BLP-3/4"-10 UNC	34	57	17	30	132	75	67	Ø59	3/4"	1.3		
Z102121	BLP-7/8"-9 UNC	34	57	17	30	132	75	67	Ø59	7/8"	1.3		
Z102124	BLP-1"-8 UNC	50	70	17	38	145	75	84	Ø59	1"	1.5		
Z102130	BLP-1 1/4"-7 UNC	54	96	22	48	202	106	99	Ø74	1 1/4"	3.4		
Z102136	BLP-1 1/2"-6 UNC	54	96	22	57	202	106	99	Ø74	1 1/2"	3.6		
Z102142	BLP-1 3/4"-5 UNC	70	120	28	67	242	122	127	Ø93	1 3/4"	6.6		
Z102148	BLP-2"-4.5 UNC	70	120	28	76	242	122	127	Ø93	2"	7.0		

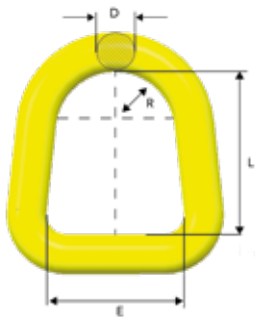
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## Working Load Limits\* BLP



No. of legs	1		2		2 symmetric		3 & 4 symmetric		Tightening torque	Spanner size	
Angle $\beta$	0°	90°	0°	0-45°	90°	0-45°	45-60°	0-45°			45-60°
BLP -M8 x 1.25	0.6	0.3	1.2	0.4	0.6	0.4	0.3	0.6	0.45	10 Nm	36 mm
BLP -5/16"-18 UNC	0.6	0.3	1.2	0.4	0.6	0.4	0.3	0.6	0.45	7 Ft.Lbs	1 1/2"
BLP -M10 x 1.5	1.0	0.5	2.0	0.7	1.0	0.7	0.5	1.3	0.75	15 Nm	36 mm
BLP -3/8"-16 UNC	0.8	0.4	1.6	0.5	0.8	0.5	0.4	0.8	0.6	11 Ft.Lbs	1 1/2"
BLP -M12 x 1.75	1.5	0.75	3.0	1.1	1.5	1.1	0.75	1.5	1.1	27 Nm	36 mm
BLP -1/2"-13 UNC	1.5	0.75	3.0	1.1	1.5	1.0	0.75	1.5	1.1	20 Ft.Lbs	1 1/2"
BLP -M16 x 2	3.0	1.5	6.0	2.1	3.0	2.1	1.5	3.1	2.2	60 Nm	36 mm
BLP -5/8"-11 UNC	3.0	1.5	6.0	2.1	3.0	2.1	1.5	3.1	2.2	44 Ft.Lbs	1 1/2"
BLP -M20 x 2.5	5.0	2.5	10.0	3.5	5.0	3.5	2.5	5.2	3.7	90 Nm	50mm
BLP -3/4"-10 UNC	4.5	2.25	9.0	3.1	4.5	3.1	2.25	4.7	3.3	66 Ft.Lbs	2"
BLP -7/8"-9 UNC	6.0	3.0	12.0	4.2	6.0	4.2	3.0	6.3	4.5	66 Ft.Lbs	2"
BLP -M24 x 3	7.0	4.0	14.0	5.6	8.0	5.6	4.0	8.4	6.0	135 Nm	50mm
BLP -1"-8 UNC	7.0	4.0	14.0	5.6	8.0	5.6	4.0	8.4	6.0	100 Ft.Lbs	2"
BLP -M30 x 3.5	12.0	6.0	24.0	8.4	12.0	8.4	6.0	12.6	9.0	270 Nm	65 mm
BLP -1 1/4"-7 UNC	12.0	6.0	24.0	8.4	12.0	8.4	6.0	12.6	9.0	200 Ft.Lbs	2 5/8"
BLP -M36 x 4	14.0	8.0	28.0	11.2	16.0	11.2	8.0	16.8	12.0	320 Nm	65 mm
BLP -1 1/2"-6 UNC	14.0	8.0	28.0	11.2	16.0	11.2	8.0	16.8	12.0	236 Ft.Lbs	2 5/8"
BLP -M42 x 4.5	16.0	10.0	32.0	14.0	20.0	14.0	10.0	21.0	15.0	600 Nm	85 mm
BLP -1 3/4"-5 UNC	16.0	10.0	32.0	14.0	20.0	14.0	10.0	21.0	15.0	440 Ft.Lbs	3 1/8"
BLP -M48 x 5	18.0	13.0	36.0	18.2	26.0	18.2	13.0	27.3	19.5	800 Nm	85 mm
BLP -2"-4.5 UNC	18.0	13.0	36.0	18.2	26.0	18.2	13.0	27.3	19.5	590 Ft.Lbs	3 1/8"

\*Safety factor 4:1

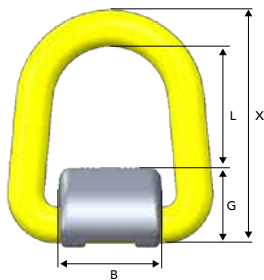


## Master link D

CE

Art. no.	Code	WLL tonnes*	E	D	L	R	Weight kg
Z7008771	D-14-10	2.5	55	14	65	24	0.4
Z7008781	D-17-10	4.0	64	17	62	29	0.5
Z7008801	D-22-10	7.0	76	22	90	33	1.0
Z7008791	D-27-10	10.0	85	27	98	38	1.9
Z7008792	D-32-10	16.0	114	32	139	50	3.5

The load bearing width must be at least 0.5 x E.

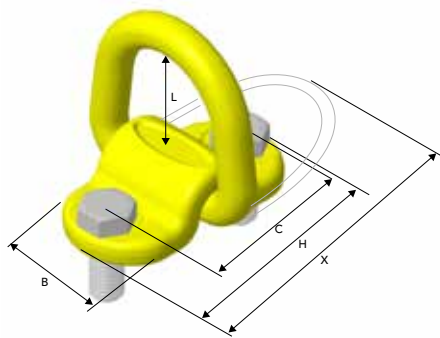


## Weldable lifting point WLP

CE

Art. no.	Code	WLL tonnes*	B	G	L	X	Weight kg
Z7009001	WLP-2.5T	2.5	50	27	53	95	0.5
Z7009011	WLP-4T	4.0	58	34	48	97	0.8
Z7009021	WLP-7T	7.0	64	41	73	135	1.8
Z7009031	WLP-10T	10.0	65	52	73	152	3.4
Z7009041	WLP-16T	16.0	90	66	105	203	6.7

Supplied with spring for stay up function.  
Master Link measurements, see Master Link D above.  
Working Load Limits on page 3:13.

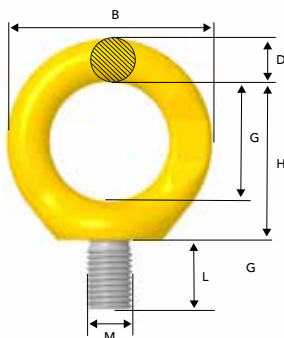


## Screw-on lifting point SLP

CE

Art. no.	Code	WLL tonnes*	B	C	H	L	M	X	Bolt protrusion	Weight kg
Z7009881	SLP-1T	1.0	50	72	98	54	M14	139	25	0.8
Z7009871	SLP-3T	3.0	58	84	114	49	M16	144	28	1.3
Z7009861	SLP-5T	5.0	64	116	160	71	M20	203	34	2.6

Supplied with bolt and spring for stay up function.  
Bolt according to: ISO 898-1 Class 10.9.  
Master Link measurements, see Master Link D above.  
Working Load Limits on page 3:13.



## Eye lifting point ELP

Art. no.	Code	WLL tonnes*	B	D	G	H	L	M	Weight kg
Z100434	ELP-16-8	1.0**	72	16	42	55	24	M16	0.4
Z100435	ELP-20-8	1.5**	72	16	42	58	30	M20	0.4
Z100436	ELP-24-8	2.0**	88	19	48	69	36	M24	0.9
Z100437	ELP-30-8	3.0**	106	22	60	84	45	M30	1.4

\*\* In case of 1-leg application where loading is limited to straight loading in the direction of thread (no bending force) it is possible to use ELP with four times higher WLL. Note! Threaded depths need to be at least 1xM for steel, 1,25xM for cast iron and 2xM for aluminum alloy.  
Working Load Limits on page 3:13.



# Spare parts

Standard length bolt and long bolt for RLP and DLP are available as spare parts.

## RDRLP Metric

Standard length bolt incl. locking ring

Art. no.	Code
Z1017081	RDRLP-M8x1,25
Z1017101	RDRLP-M10x1,5
Z1017121	RDRLP-M12x1,75
Z1017161	RDRLP-M16x2
Z1017201	RDRLP-M20x2,5
Z1017241	RDRLP-M24x3
Z1017301	RDRLP-M30x3,5
Z1017361	RDRLP-M36x4
Z1017421	RDRLP-M42x4,5
Z1017481	RDRLP-M48x5



## RDRLP Metric

Long bolt incl. nut, locking ring and washer

Art. no.	Code
Z10170801L	RDRLP-M8x1.25 LB
Z10171001L	RDRLP-M10x1.5 LB
Z10171201L	RDRLP-M12x1.75 LB
Z10171601L	RDRLP-M16x2 LB
Z10172001L	RDRLP-M20x2.5 LB
Z10172401L	RDRLP-M24x3 LB
Z10173001L	RDRLP-M30x3.5 LB
Z10173601L	RDRLP-M36x4 LB
Z10174201L	RDRLP-M42x4.5 LB
Z10174801L	RDRLP-M48x5 LB



3

## RDRLP UNC

Standard length bolt incl. locking ring

Art. no.	Code
Z1018081	RDRLP-UNC 5/16"-18
Z1018101	RDRLP-UNC 3/8"-16
Z1018121	RDRLP-UNC 1/2"-13
Z1018161	RDRLP-UNC 5/8"-11
Z1018201	RDRLP-UNC 3/4"-10
Z1018211	RDRLP-UNC 7/8"-9
Z1018241	RDRLP-UNC 1"-8
Z1018301	RDRLP-UNC 1 1/4"-7
Z1018361	RDRLP-UNC 1 1/2"-6
Z1018421	RDRLP-UNC 1 3/4"-5
Z1018481	RDRLP-UNC 2"-4.5



## RDRLP UNC

Long bolt incl. nut, locking ring and washer

Art. no.	Code
Z10180801L	RDRLP-UNC 5/16"-18 LB
Z10181001L	RDRLP-UNC 3/8"-16 LB
Z10181201L	RDRLP-UNC 1/2"-13 LB
Z10181601L	RDRLP-UNC 5/8"-11 LB
Z10182001L	RDRLP-UNC 3/4"-10 LB
Z10182101L	RDRLP-UNC 7/8"-9 LB
Z10182401L	RDRLP-UNC 1"-8 LB
Z10183001L	RDRLP-UNC 1 1/4"-7 LB
Z10183601L	RDRLP-UNC 1 1/2"-6 LB
Z10184201L	RDRLP-UNC 1 3/4"-5 LB
Z10184801L	RDRLP-UNC 2"-4.5 LB



## RDDL P Metric

Standard length bolt incl. locking ring

Art. no.	Code
Z1022081	RDDL P-M8x1.25
Z1022101	RDDL P-M10x1.5
Z1022121	RDDL P-M12x1.75
Z1022161	RDDL P-M16x2
Z1022201	RDDL P-M20x2.5
Z1022241	RDDL P-M24x3
Z1022301	RDDL P-M30x3.5
Z1022361	RDDL P-M36x4
Z1022421	RDDL P-M42x4.5
Z1022481	RDDL P-M48x5



## RDDL P Metric

Long bolt incl. nut, locking ring and washer

Art. no.	Code
Z10220801L	RDDL P M8x1.25 LB
Z10221001L	RDDL P M10x1.5 LB
Z10221201L	RDDL P M12x1.75 LB
Z10221601L	RDDL P M16x2 LB
Z10222001L	RDDL P M20x2.5 LB
Z10222401L	RDDL P M24x3 LB
Z10223001L	RDDL P M30x3.5 LB
Z10223601L	RDDL P M36x4 LB
Z10224201L	RDDL P M42x4.5 LB
Z10224801L	RDDL P M48x5 LB



## RDDL - UNC

Standard length bolt incl. locking ring

Art. no.	Code
Z1023081	RDDL UNC 5/16"-18
Z1023101	RDDL UNC 3/8"-16
Z1023121	RDDL UNC 1/2"-13
Z1023161	RDDL -UNC 5/8"-11
Z1023201	RDDL -UNC 3/4"-10
Z1023211	RDDL -UNC 7/8"-9
Z1023241	RDDL -UNC 1"-8
Z1023301	RDDL -UNC 1 1/4"-7
Z1023361	RDDL UNC 1 1/2"-6
Z1023421	RDDL -UNC 1 3/4"-5
Z1023481	RDDL -UNC 2"-4.5



## RDDL - UNC

Long bolt incl. nut, locking ring and washer

Art. no.	Code
Z10230801L	RDDL UNC 5/16"-18 LB
Z10231001L	RDDL UNC 3/8"-16 LB
Z10231201L	RDDL UNC 1/2"-13 LB
Z10231601L	RDDL UNC 5/8"-11 LB
Z10232001L	RDDL UNC 3/4"-10 LB
Z10232101L	RDDL UNC 7/8"-9 LB
Z10232401L	RDDL UNC 1"-8 LB
Z10233001L	RDDL UNC 1 1/4"-7 LB
Z10233601L	RDDL UNC 1 1/2"-6 LB
Z10234201L	RDDL UNC 1 3/4"-5 LB
Z10234801L	RDDL UNC 2"-4.5 LB



# Technical information

The following information aims to give advice and explain the most common questions in order to ensure safe and proper use of lifting points. Always refer to the user instructions of the specific model of lifting point before use. It is of the most importance that this information is known to the user and in accordance with the Machinery Directive 2006/42/EC this information must be delivered to the customer.

## General advice

Reference should be made to relevant standards and other statutory regulations. Inspections must be carried out only by people who possess sufficient knowledge.

Before installation and before every use, visually inspect the lifting points, paying particular attention to any evidence of corrosion, wear, weld cracks or deformations. Please ensure compatibility of bolt thread and tapped hole.

The material construction, to which the lifting point will be attached, should be of adequate strength to withstand forces during lifting without deformation.

Ensure minimum thread depth, see table (d refers to bolt diameter).

## RLP, RELP, BLP, DLP

Thread depth	Yield limit of base material
1 x d	For steel, yield limit >200 MPa
1,25 x d	For cast iron, yield limit >200MPa
2,5 x d	Aluminum
	For other metal alloys or base materials consult your Gunnebo Industries distributor.

- If the bolt length needs to be adjusted the bolt should be cut in al cold saw or lathe and temperature kept as low as possible during cutting. After cutting check the shape of the threads nearest the cut with an appropriately sized die (there must not be any burrs).
- The surface facing around the thread hole shall be flat (plane), clear of dirt and smooth to ensure perfect contact with the shoulder surface of the Lifting Point.

## Nut and washer

The nut and washer must be the original equipment supplied from Gunnebo Industries to ensure the correct mechanical properties. No warranty, insurance or liability will be accepted if bolts not supplied by Gunnebo Industries have been used.

## Extreme environments

The in-service temperature affects the WLL as follows:

### RLP

Temperature (°C)	Reduction of WLL
-40 to +200 °C	0 %
+200 to +300 °C	10 %
+300 to +400 °C	25 %
Temperatures below -40°C or above 400 °C are not allowed.	

### RELP

Temperature (°C)	Reduction of WLL
-40 to +100 °C	0 %
+100 to +200 °C	15 %
+200 to +250 °C	20%
+250 to +350 °C	25 %
Temperatures above 350 °C are not allowed.	

### BLP / DLP

Temperature (°C)	Reduction of WLL
-40 to +200 °C	0 %
Temperatures below -40° C or above 200° C are not allowed.	

## Severe environments

Lifting points must not be used in alkaline (> pH10) or in acidic condition (< pH6). Comprehensive and regular examination must be carried out when used in severe or corrosive environments. In uncertain situations consult your Gunnebo Industries distributor.

## Surface treatment

- Hot dip galvanizing or plating is not allowed outside the control of the manufacturer.
- Acid or Alkaline cleaning is not allowed.

## Protect yourself and others

- Before each use the Lifting Point should be checked for obvious damage or deterioration.
- Know the weight of the load and its center of gravity.
- Ensure the load is ready to move and that no obstacles will obstruct the lifting.
- Check the conformity of the load with the Working Load Limit.
- Prepare the landing site.
- Never overload and avoid shock loading.
- Never use an improper configuration.
- Never use a worn or damaged Lifting Point.
- Do not ever ride on the load.
- Do not ever walk or stand under a suspended load.
- Take into consideration that the load may swing or rotate.
- Watch your feet and fingers while loading/unloading.

## Inspection

Periodic thorough examination must be carried out at least every 12 months or more frequently according to local statutory regulations, type of use and past experience.

- Ensure correct bolt and nut size, quality and length.
- Ensure compatibility of bolt thread and tapped hole – control of the torque.
- The lifting point should be complete.
- The working load limit and manufacturers stamp should be clearly visible.
- Check for deformation of the component parts such as body, load ring and bolt.
- Check for mechanical damage, such as notches, particularly in high stress areas.
- Wear should be no more than 10 % of cross sectional diameter.
- Evidence of corrosion.
- Evidence of cracks.
- Damage to the bolt, nut and/or thread.
- The body of the lifting point must be free to rotate.

## Symmetric loading conditions

- For three and four leg lifts, the lifting points should be arranged symmetrically around the center of gravity and in the same plane if possible.
- The WLL for Gunnebo Industries lifting points is based on symmetrical loading.
- The lifting point must be positioned on the load in such way that movement is avoided during lifting.
- For single leg lifts, the lifting point should be vertically above the center of gravity of the load.
- For two leg lifts, the lifting points must be equidistant to or above the center of gravity of the load.

## Asymmetric loading conditions

- For unequally loaded lifts we recommend that the WLL is determined as follows:
- 2-leg slings are calculated as the corresponding 1-leg sling.
- 3 and 4-leg slings are calculated as the as the corresponding 1-leg sling\*

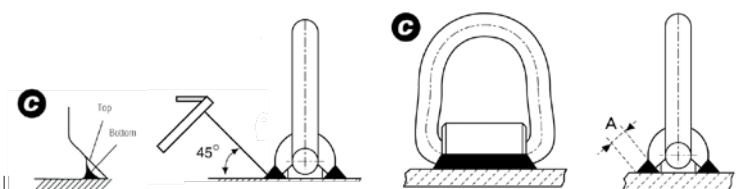
\* (If 2-legs with full certainty are carrying the major part of the load, the WLL can be calculated as for the corresponding 2-leg sling).

## WLP - Welding

Preheat the structure if the temperature is below 0°C; otherwise follow AS 1554 or other suitable national standard.

- Ensure that the WLP cannot move during welding by welding the corners of the welding block.
- Continue the weld around the welding block without interruption in a single operation.
- The nozzle or electrode should be at 45° (see Fig. C), so that the required penetration is obtained. The minimum throat (A) should be maintained.

Product	Min. plate gauge (Rm-1250 N/mm <sup>2</sup> ) t <sub>min</sub> (mm)	Min. throat thickness (mm)
WLP 2.5 T	11	11
WLP 4 T	19	13
WLP 7 T	24	16
WLP 10 T	30	18
WLP 16 T	40	20



- The weld should not contain cracks or pores.
- Do not cool the weld with water. It should be left cool natural

### Working Load Limits\* WLP

		1-leg	2-leg		3- and 4-leg	
Typ	WLL tonnes*		$\alpha$ 0-90° $\beta$ 0-45°	$\alpha$ 90-120° $\beta$ 45-60°	$\alpha$ 0-90° $\beta$ 0-45°	$\alpha$ 90-120° $\beta$ 45-60°
WLP-2.5T	2.5		3.5	2.5	5.2	3.7
WLP-4T	4.0		5.6	4.0	8.4	6.0
WLP-7T	7.0		9.8	7.0	14.8	10.5
WLP-10T	10.0		14.1	10.0	21.2	15.0
WLP-16T	16.0		22.5	16.0	33.6	24.0

### Working Load Limits\* SLP

		1-leg	2-leg		3- and 4-leg	
Typ	WLL tonnes*		$\alpha$ 0-90° $\beta$ 0-45°	$\alpha$ 90-120° $\beta$ 45-60°	$\alpha$ 0-90° $\beta$ 0-45°	$\alpha$ 90-120° $\beta$ 45-60°
SLP-1T	1.0		1.4	1.0	2.1	1.5
SLP-3T	3.0		4.2	3.0	6.3	4.5
SLP-5T	5.0		7.0	5.0	10.6	7.5

### Working Load Limits\* ELP

		1-leg	2-leg		3- and 4-leg	
Typ	WLL tonnes*		$\alpha$ 0-90° $\beta$ 0-45°	$\alpha$ 90-120° $\beta$ 45-60°	$\alpha$ 0-90° $\beta$ 0-45°	$\alpha$ 90-120° $\beta$ 45-60°
ELP-16-8	1.0**		1.4	1.0	2.1	1.5
ELP-20-8	1.5**		2.1	1.5	3.1	2.3
ELP-24-8	2.0**		2.8	2.0	4.2	3.0
ELP-30-8	3.0**		4.2	3.0	6.3	4.5

Note! The above loads apply to normal usage and equally loaded legs. For asymmetric loaded chain slings, the following is recommended:

- A two-legged system is rated as a single-legged system.
- A three- or four-legged system is rated as a two-legged system.

\*\* In case of 1-leg application where loading is limited to straight loading in the direction of thread (no bending force) it is possible to use ELP with four times higher WLL. Note! Threaded depths need to be at least 1xM for steel, 1,25xM for cast iron and 2xM for aluminum alloy.

# Shackles & Rigging Screws

- Dee and Bow
- Arctic
- Aquaculture
- ROV
- Stainless Steel



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