

# Grade 8 Multi-Directional Lifting Point Instructions for Use





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### Multi Directional Lifting Point (MDLP)

#### Instructions for Use

#### WARNING

## Failure to follow these instructions may result in incorrect installation allowing the load to become detached and fall.

The MDLP lifting points should always be inspected before installation, checking for evidence of corrosion, deformation, wear, cracking, mechanical or heat damage. Always ensure that the thread of the MDLP and the tapped hole are compatible.

#### Weights and Dimensions



Multi Directional Lifting Point MDLP											
Dimensions											
Part Code	Thread Dia mm	Weight Kg	WLL (t)		A	В	С	D	E	F	G
			0°	90 <sup>°</sup>							
MDLP-M8	8	0.11	0.8	0.3	38	26	45	12	25	8	23
MDLP-M10	10	0.12	1	0.4	38	26	45	14	25	8	23
MDLP-M12	12	0.2	2	0.75	44	32	54	17	33	10	27
MDLP-M16	16	0.35	4	1.5	52	38	64	24	36	14	31
MDLP-M20	20	0.66	6	2.3	63	45	79	30	48	21	40
MDLP-M24	24	1.1	8	3.2	74	52	92	35	53	20	47
MDLP-M30	30	2.07	12	4.5	92	65	118	45	68	24	58
MDLP-M36	36	4	16	7	105	76	136	57	82	30	64
All dimensions subject to normal forging tolerances											

#### **Mounting Instructions**

#### Note: After installation, the MDLP body must always be free to rotate

- The MDLP lifting point must be fitted to a smooth machined surface, the holes must be drilled deep enough to guarantee that the bolt can be fully tightened.
- If the MDLP is being used for a single lift the bolt may be manually tightened using the key provided until the flange is tight to the load surface.
- For a multiple lift install the MDLP to the recommended torque with a torque wrench ensuring that the flange meets the load surface.
- When installing the MDLP as a permanent fixture the bolt should be tightened to the recommended torque and the thread secured with a proprietary thread locking compound, this will also guard against the MDLP becoming loose due to shock loading or vibration.
- Never replace the included screw with any other item.
- For a single leg lift the MDLP should be mounted above the load centre of gravity unless using the MDLP to turn a load.
- For a two leg lift the MDLPs should be positioned equidistant from the centre of gravity with the hoist above the centre of gravity.
- For a three or four leg lift the MDLPs should be positioned symmetrically around the centre of gravity lifting directly above the centre of gravity.
- **Do not** use the MDLP as a swivel or allow the load to rotate.
- **Do not** use the MDLP in contact with strong acids, alkalis or their vapours.
- Keep the hoisting area clear and do not lift loads above people.

Part No	Diameter	Depth (D)	Pitch	Tapping Drill Size	Torque	
		Nm				
MDLP-M8	8	12	1.25	6.65	10	
MDLP-M10	10	14	1.5	8.38	10	
MDLP-M12	12	17	1.75	10.11	10	
MDLP-M16	16	24	2	13.84	30	
MDLP-M20	20	30	2.5	17.29	70	
MDLP-M24	24	35	3	20.75	150	
MDLP-M30	30	45	3.5	26.21	350	
MDLP-M36	36	57	4	31.67	410	

#### **Installation Torque and Thread Details**

Threads are in accordance with DIN 13-1 1999 (ISO965) flank angle  $60^{\circ}$ 

The MDLP can be used in a temperature range from -40C to +400C, for temperatures from +200C to +300C the WLL should be reduced by 10%, for temperatures from +300C to +400C the WLL should be reduced by 25%.

#### Use of the Multi Directional Lifting Point (MDLP)

Any lifting operation must be carried out by a suitably trained and experienced operator. The MDLP should always be allowed to rotate, align with the lifting leg and must be loaded in the plane of the eye, loading perpendicular to the plane of the eye will cause premature failure.

#### Load Chart

	1 Leg		2 Legs		2 Legs		3 - 4 Legs		
Do at Number	Angle to Vertical								
Part Number	0 <sup>°</sup>	90 <sup>°</sup>	0 <sup>°</sup>	90 <sup>°</sup>	0-45 <sup>°</sup>	45-60 <sup>°</sup>	0-45 <sup>°</sup>	45-60 <sup>°</sup>	
	WLL(t)								
MDLP-M8	0.8	0.3	1.6	0.6	0.34	0.24	0.51	0.36	
MDLP-M10	1	0.4	2	0.8	0.56	0.4	0.8	0.6	
MDLP-M12	2	0.75	4	1.5	1	0.75	1.5	1.1	
MDLP-M16	4	1.5	8	3	2.1	1.5	3.1	2.2	
MDLP-M20	6	2.3	12	4.6	3.2	2.3	4.8	3.4	
MDLP-M24	8	3.2	16	6.4	4.5	3.2	6.7	4.8	
MDLP-M30	12	4.5	24	9	6.3	4.5	9.4	6.7	
MDLP-M36	16	7	32	14	9.8	7	14.7	10.5	

#### **Inspection and Maintenance**

Regular inspections should be carried out by a competent person in accordance with applicable national standards or at least annually. Before inspection the MDLP should be clean and free from oil dirt and rust which may hide defects.

If used in aggressive environments or frequently under full load the period of inspection should be shortened as determined by a competent person.

If in any doubt remove the MDLP from service and refer to a suitably qualified person for advice.