

Threaded Lifting loop

Introduction

Threaded Lifting loops can be used with all sizes of threaded inserts. They are the most economic lifting loop and are suitable for most applications, particularly site operations. They are not suitable for turning/pitching. They may be reused subject to the inspection procedure, detailed below, but they are not recommended for severe re-use conditions.

Threaded Lifting loops should only be attached to the unit after the concrete strength has reached 15 N/mm². In some cases it may be economic and practical to leave the loops with the unit until final installation.

Description

Threaded Lifting loops are manufactured from high grade steel wire, swaged in a steel ferrule and finished with zinc plating. They are clearly marked with their SWL. The thread type is Rd/M, which is compatible with both metric and Rd inserts.

Threaded Lifting loops are suitable for use with inserts cast in flush with the face of the unit, or recessed using the recess formers shown opposite.

Testing/identification

All Halfen devices are proof loaded before dispatch and labelled with a unique code number. This number is recorded in the QA department at Halfen Ltd. If loops are kept in the stores and reused they must be inspected every six months and retested every year.

Method of use

Before use, check that the lifting loop is compatible with the socket/insert and labelled with the Halfen unique number.

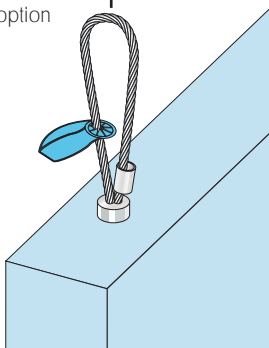
Check that the wires are in good condition. Discard if bent, crushed, kinked or if there is any loosening of the outer layer. Discard if corroded.

Check the angle of lift shown on the unit drawings and follow the procedure shown. Do not use Threaded Lifting loops for turning/pitching a unit. If β exceeds 45°, please consult Halfen Ltd.

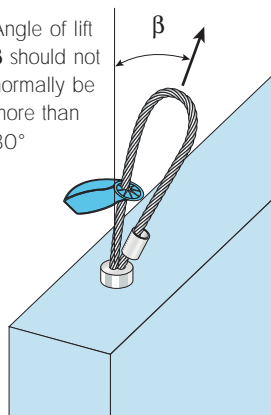
Ensure that the thread is fully bottomed out in the socket before lifting. It is permissible to back off one turn to ensure that the wire is correctly aligned for lifting.

Applications

Vertical lift preferred option

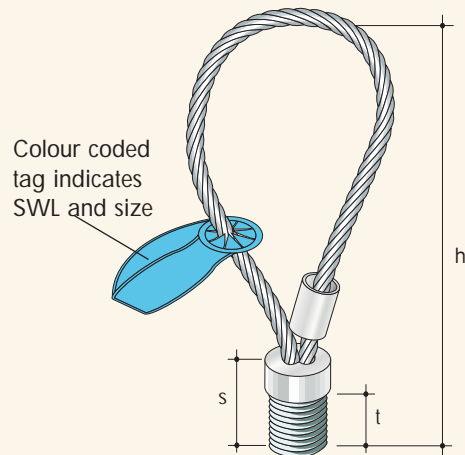


Angle of lift β should not normally be more than 30°



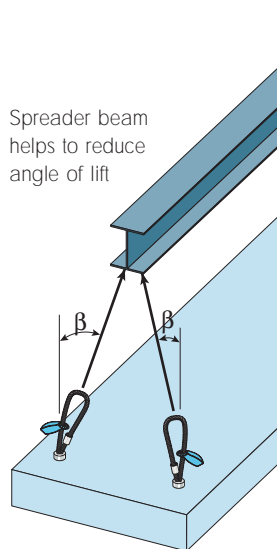
Size and availability

Threaded lifting loop – Code PX

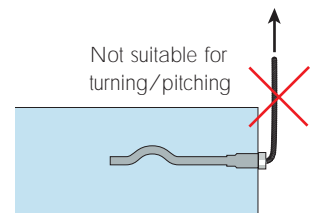


Size	Order code	Full SWL kg	Dimensions			Colour code
			t	h	s	
Rd/M12	PX12	500	22	155	27	Orange
Rd/M16	PX16	1200	27	155	36	Red
Rd/M20	PX20	2000	35	215	45	Light green
Rd/M24	PX24	2500	44	255	54	Charcoal
Rd/M30	PX30	4000	55	300	68	Dark green
Rd/M36	PX36	6300	68	360	81	Blue
Rd/M42	PX42	8000	75	425	95	Grey
Rd/M52	PX52	12,500	95	480	117	Yellow

Spreader beam helps to reduce angle of lift



Not suitable for turning/pitching



Check that the radius of the hook is at least the diameter of the rope



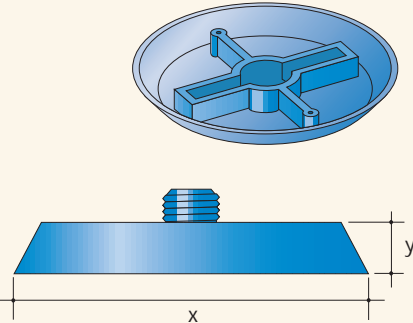
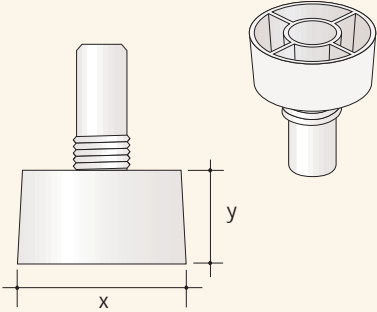
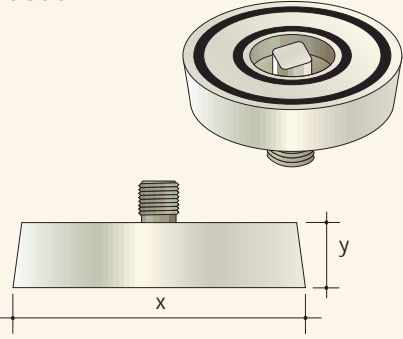
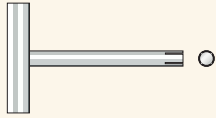
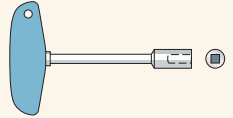
Recess formers for Threaded lifting inserts (for eventual use with Threaded lifting loops)

Introduction

Threaded inserts must be carefully fixed to formwork, ie, correctly located and held firmly. Halfen offer a range of fixing methods.

Any of the fixing methods shown below is suitable for use with the Threaded Lifting loop, but plastic nailing plates are the most economic and hence the most commonly used.

For improved corrosion protection of the socket after use, ie deeper recess, please use the small deep nailing plate, Code PXD.

Size and availability											
Plastic nailing plate Code PXNP 				Small deep nailing plate Code PXD 				Magnetic nailing plate Code PXMNP 			
<p>Most suitable choice if a minimal recess/cover is acceptable.</p> <p>This plastic nailing plate is suitable for both metric and Rd threads.</p> <p>The recess gives minimal cover, ie, it may not be deep enough to resist corrosion.</p> <p>Nail to formwork and screw on socket.</p> <p>After stripping, unscrew. Not normally reusable.</p>				<p>A plastic insert for use where greater cover to the socket is required. The recess gives 15mm cover.</p> <p>The small diameter means that any subsequent filler is less conspicuous.</p> <p>It is suitable for both metric and Rd threads.</p> <p>Nail to formwork and screw on socket.</p> <p>After stripping, unscrew. Not normally reusable.</p> <p>Removing tool PXDNP is available if required.</p> 				<p>A magnetic nailing plate for use on steel formwork.</p> <p>It is suitable for both metric and Rd threads.</p> <p>The recess gives 15mm cover.</p> <p>Place on steel formwork and screw on socket.</p> <p>Reusable – after stripping, unscrew, clean and store on a keep plate.</p> <p>Removing tool PXMNPK is available if required.</p> 			
Size	Order code	Width x (mm)	Depth y (mm)	Size	Order code	Width x (mm)	Depth y (mm)	Size	Order code	Width x (mm)	Depth y (mm)
Rd/M12	PXNP12	58	10	Rd/M12	PXDNP12	27	15	Rd/M12	PXMP12	68	15
Rd/M16	PXNP16	58	10	Rd/M16	PXDNP16	27	15	Rd/M16	PXMP16	68	15
Rd/M20	PXNP20	58	10	Rd/M20	PXDNP20	27	15	Rd/M20	PXMP20	68	15
Rd/M24	PXNP24	58	10	Rd/M24	PXDNP24	27	15	Rd/M24	PXMP24	68	15
Rd/M30	PXNP30	60	8	-	-	-	-	Rd/M30	PXMP30	68	15
Rd/M36	PXNP36	106	12	-	-	-	-	Rd/M36	PXMP36	68	15
Rd/M42	PXNP42	115	15	-	-	-	-	-	-	-	-
Rd/M52	PXNP52	135	15	-	-	-	-	-	-	-	-

Swivel Lifting Eye

Introduction

Swivel Lifting Eyes can be used with all sizes of threaded inserts and are specially designed to allow angled lifts, such as turning/pitching. They are more durable than wire lifting loops and may be used repeatedly, subject to inspection for damage.

They should only be attached to the unit after the concrete strength has reached 15 N/mm². They are usually unscrewed from the unit after each lifting operation.

Description

Swivel Lifting Eyes are manufactured from high grade steel in the sizes shown in the table. They have a paint finish, which is colour coded to clearly identify the SWL. The thread size is Rd/M, which is compatible with both metric and Rd inserts.

Swivel Lifting Eyes are suitable for use with threaded inserts cast in flush with the face of the unit, or recessed using the metal recess formers shown opposite. Ordinary plastic nailing plates are not suitable. If plastic nailing plates have been used in error, please consult Halfen Ltd.

The design incorporates a vacuum sealed bearing unit, which prevents the ingress of grit and dirt, providing smooth rotation and

increased life expectancy. The design ensures that as the chains take the load the eye rotates and aligns itself correctly.

The oval 'eye' incorporates a slot which can be located onto one of the three vertical pins on the base section of the lifting eye, so that the ring can be used to tighten or loosen the thread of the lifting eye in the insert.

Testing/identification

All Halfen devices are proof loaded before dispatch and labelled with a unique code number. This number is recorded in the QA department at Halfen Ltd.

Method of use

Before use, check that the lifting eye is compatible with the socket and labelled with the Halfen unique number.

Check that the swivel is free running and in good condition. Check the angle of lift shown on the unit drawings and follow the procedure shown.

Ensure that the thread is fully bottomed out in the socket before lifting.

Application examples – showing turning/pitching

Size and availability							
Swivel Lifting Eye – Code PW							
Size	Order code	Full SWL kg	a	b	t	h	Colour code
Rd/M12	PWM12	500	35	47	16	125	Orange
Rd/M16	PWM16	1200	35	58	21	151	Red
Rd/M20	PWM20	2000	60	70	26	158	Light green
Rd/M24	PWM24	2500	75	74	31	187	Black
Rd/M30	PWM30	4000	90	90	39	219	Dark green
Rd/M36	PWM36	6300	100	101	47	255	Blue
Rd/M42	PWM42	8000	100	110	55	256	Grey
Rd/M52	PWM52	12,500	140	130	68	344	Yellow

