

# RF ROUND FERRULE LIFTING SOCKET



## FEATURES

- Economical solution for cast-in placement anchor.
- Ideal for shallow embedment depth.
- Very high load when tied to reinforcing to ensure integral part of structure.
- Highly suitable for lifting of concrete panels.
- Excellent product replacement to cast-in channel for curtain wall fixings.
- Anchoring point at post tensioning or pre-stressing slab.

## APPLICATIONS

- Tilt up panel construction at precast yard.
- General casting-in anchoring point for thin panel.
- Structural connection to steel structures.
- Bracket positioning for façade and curtain wall fixings.

## RANGE OF CONCRETE QUALITY

C20/25 ~ C50/60

## RANGE OF LOADING

6.4 kN ~ 96.9 kN (SWL)



Heavy loads

## MATERIAL SPECIFICATIONS

- Carbon steel zinc galvanised to min. 5µm.
- Carbon steel hot dipped galvanised to min. 40µm.
- Stainless steel 304 (A2) and 316 (A4).



## BASE MATERIALS



Concrete

## ► ORDERING DETAILS

### RF ROUND FERRULE LIFTING SOCKET - ZINC GALVANISED

ANCHOR SIZE	THREAD LENGTH (mm)	OUTER DIAMETER (mm)	PACKING CONTENT (PCs.)	PRODUCT PART NO.
M10 x 45	20	16	Bulk	RF1045
M12 x 55	25	17	Bulk	RF1255
M12 x 70	35	17	Bulk	RF1270
M16 x 70	35	22	Bulk	RF1670
M16 x 95	40	22	Bulk	RF1695
M20 x 70	35	28	Bulk	RF2070
M20 x 95	40	28	Bulk	RF2095
M24 x 95	50	32	Bulk	RF2495
M24 x 120	75	32	Bulk	RF24120



### RF ROUND FERRULE LIFTING SOCKET - HOT DIPPED GALVANISED

ANCHOR SIZE	THREAD LENGTH (mm)	OUTER DIAMETER (mm)	PACKING CONTENT (PCs.)	PRODUCT PART NO.
M10 x 45	20	16	Bulk	RF1045GH
M12 x 55	25	17	Bulk	RF1255GH
M12 x 70	35	17	Bulk	RF1270GH
M16 x 70	35	22	Bulk	RF1670GH
M16 x 95	40	22	Bulk	RF1695GH
M20 x 70	35	28	Bulk	RF2070GH
M20 x 95	40	28	Bulk	RF2095GH
M24 x 95	50	32	Bulk	RF2495GH
M24 x 120	75	32	Bulk	RF24120GH



### RF ROUND FERRULE LIFTING SOCKET - STAINLESS STEEL 304 (A2)

ANCHOR SIZE	THREAD LENGTH (mm)	OUTER DIAMETER (mm)	PACKING CONTENT (PCs.)	PRODUCT PART NO.
M10 x 45	20	16	Bulk	RF1045S
M12 x 55	25	17	Bulk	RF1255S
M12 x 70	35	17	Bulk	RF1270S
M16 x 70	35	22	Bulk	RF1670S
M16 x 95	40	22	Bulk	RF1695S
M20 x 70	35	28	Bulk	RF2070S
M20 x 95	40	28	Bulk	RF2095S
M24 x 95	50	32	Bulk	RF2495S
M24 x 120	75	32	Bulk	RF24120S



### RF ROUND FERRULE LIFTING SOCKET - STAINLESS STEEL 316 (A4)

ANCHOR SIZE	THREAD LENGTH (mm)	OUTER DIAMETER (mm)	PACKING CONTENT (PCs.)	PRODUCT PART NO.
M10 x 45	20	16	Bulk	RF1045SS
M12 x 55	25	17	Bulk	RF1255SS
M12 x 70	35	17	Bulk	RF1270SS
M16 x 70	35	22	Bulk	RF1670SS
M16 x 95	40	22	Bulk	RF1695SS
M20 x 70	35	28	Bulk	RF2070SS
M20 x 95	40	28	Bulk	RF2095SS
M24 x 95	50	32	Bulk	RF2495SS
M24 x 120	75	32	Bulk	RF24120SS



## ► INSTALLATION PERIMETER & LOADING DATA

### RF ROUND FERRULE LIFTING SOCKET - ZINC GALVANISED & HOT DIPPED GALVANISED

ANCHOR SIZE	ANCHOR LENGTH (mm)	EMBEDMENT DEPTH (mm)	CROSS HOLE BAR SIZE (mm)	TIGHTENING TORQUE (Nm)	RECOMMENDED SPACING & EDGE DISTANCE TO FULL LOADS (mm)		ABSOLUTE MINIMUM SPACING & EDGE DISTANCE (mm)		RECOMMENDED LOAD (KN)	
					TENSION	SHEAR	TENSION	SHEAR	TENSION <sup>1)</sup>	SHEAR <sup>2)</sup>
M10 x 45	45	50	R8	17	99	50	33	33	6.4	15.9
M12 x 55	55	60	R8	30	120	60	40	40	8.6	23.1
M12 x 70	70	75	R8	30	165	83	55	55	12.4	23.1
M16 x 70	70	75	R10	75	150	75	50	50	15.4	43.1
M16 x 95	95	100	R10	75	225	113	75	75	24.3	43.1
M20 x 70	70	75	R10	144	150	75	50	50	16.7	67.2
M20 x 95	95	100	R10	144	225	113	75	75	26.4	67.2
M24 x 95	95	100	Y12	250	210	105	70	70	33.1	96.9
M24 x 120	120	125	Y12	250	285	143	95	95	43.8	96.9

<sup>1)</sup> Loading based on standard embedment depth and non-cracked concrete,  $f_{ck,cube} = 25 \text{ N/mm}^2$  (C20/25)

<sup>2)</sup> Shear load based on high tensile steel class 8.8. Loading will be reduced if lower carbon steel grade is used.

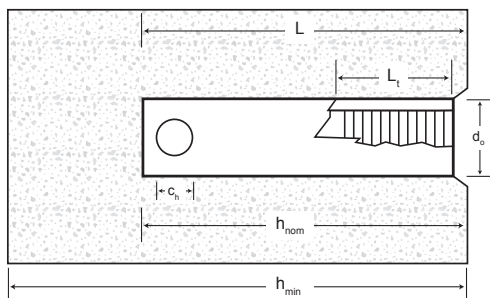
### RF ROUND FERRULE LIFTING SOCKET - STAINLESS STEEL 304 (A2) & 316 (A4)

ANCHOR SIZE	ANCHOR LENGTH (mm)	EMBEDMENT DEPTH (mm)	CROSS HOLE BAR SIZE (mm)	TIGHTENING TORQUE (Nm)	RECOMMENDED SPACING & EDGE DISTANCE TO FULL LOADS (mm)		ABSOLUTE MINIMUM SPACING & EDGE DISTANCE (mm)		RECOMMENDED LOAD (KN)	
					TENSION	SHEAR	TENSION	SHEAR	TENSION <sup>1)</sup>	SHEAR <sup>2)</sup>
M10 x 45	45	50	R8	17	99	50	33	33	6.4	11.2
M12 x 55	55	60	R8	30	120	60	40	40	8.6	16.2
M12 x 70	70	75	R8	30	165	83	55	55	12.4	16.2
M16 x 70	70	75	R10	75	150	75	50	50	15.4	30.2
M16 x 95	95	100	R10	75	225	113	75	75	24.3	30.2
M20 x 70	70	75	R10	144	150	75	50	50	16.7	47.1
M20 x 95	95	100	R10	144	225	113	75	75	26.4	47.1
M24 x 95	95	100	Y12	250	210	105	70	70	33.1	67.9
M24 x 120	120	125	Y12	250	285	143	95	95	43.8	67.9

<sup>1)</sup> Loading based on standard embedment depth and non-cracked concrete,  $f_{ck,cube} = 25 \text{ N/mm}^2$  (C20/25)

<sup>2)</sup> Shear load based on stainless steel 304 or 316.

## ► SETTING DIAGRAM



## ► INSTALLATION PROCEDURE

