



Internally threaded anchor places no restrictions on fixture thickness

Displacement setting allows the anchor to remain in place without insertion of machine bolt or threaded rod

Shallow embedment reduces risk of striking rebar during hole drilling

## Description

The DynaSet™ Drop-In Anchor is an all steel, medium duty, displacement setting, expansion anchor designed to provide a permanent anchorage point in concrete. Its internal thread allows it to be used with both machine bolts and threaded rod, placing no restrictions on fixture thickness. The DynaSet™ requires the use of the correct setting tool to ensure full expansion of the anchor body. The setting tool also acts as visual check for correct setting of the anchor.

## Specification

Material	Carbon Steel, Stainless Steel 316 (A4)
Corrosion Protection	Zinc Plating
Head Style	-
Fixing Method	Fixture Aligned
Setting Method	Displacement
Anchoring Method	Expansion
Thread Sizes	M6, M8, M10, M12, M16, M20
Drilled Hole Diameters	8mm, 10mm, 12mm, 15mm, 16mm, 20mm, 25mm
Anchor Lengths	25mm, 30mm, 40mm, 50mm, 60mm, 65mm, 80mm
Maximum Fixture Thickness*	-
Indicative Working	Max Tensile 2.5kN - 15.8kN
Loads in 32MPa Concrete*	Max Shear 2.2kN - 13.1kN
Substrates	Concrete

\* Refer to load table

## Related Products

DynaDrill™  
Carbide Drill Bits  
Diamond Motor  
Diamond Core Drill Bits  
Hole Cleaning Brush

Hole Cleaning Pump  
Wet and Dry Vacuum  
DynaSet™ Setting Tool  
Safety Ring Anchor



## Features & Benefits

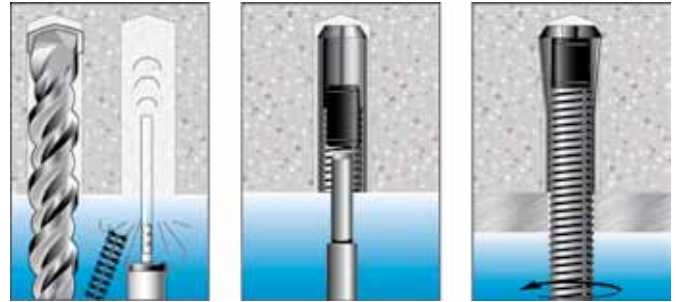
- The Dyna Set™ fits flush with, or just below, the surface of the substrate, leaving no protrusions when not in use and allowing for easy patch work.
- The anchor's internal thread facilitates the use of machine bolts and threaded studs of any length, removing restrictions on fixture thickness.
- The DynaSet™ requires only shallow embedment, which reduces the risk of drilling into rebar.
- The setting tool provides a visual expansion check for correct setting of the anchor.
- The flanged version (zinc plated only) has a retaining lip to keep the anchor flush with the surface of the substrate. This also allows for consistent threaded rod drop lengths.

## Trades & Applications

	Electrical Contractor	Mechanical Services Contractor	Ceiling & Partitioning Contractor
Electrical Service Suspension	✓		
Mechanical Service Suspension		✓	
Ceiling Suspension			✓

## Installation

1. Drill or core a hole to the recommended diameter and depth. Clean the hole thoroughly with a hole cleaning brush. Remove the debris with a hand pump, compressed air, or vacuum.
2. Insert the anchor into the hole. Using a hammer and the appropriate setting tool, drive the expansion plug into the anchor until the shoulder of the tool rests against the surface of the anchor.
3. Position the fixture, insert the bolt or threaded rod and tighten with a spanner.



Medium Duty Anchors



## DynaSet™ Drop-in Anchors - Zinc Plated - Standard

Part No	Thread Size	Thread Length (mm)	Overall Anchor Length (mm)	Drilled Hole Ø (mm)	Min Hole Depth (mm)	Setting Tool	Order Qty
DSM06	M6	11	25	8	28	SETDS1	100
DSM08	M8	13	30	10	33	SETDS2	100
DSM10	M10	16	40	12	43	SETDS3	50
DSM12	M12	21	50	16	53	SETDS4	50
DSM16	M16	28	65	20	68	SETDS5	25
DSM20	M20	35	80	25	83	SETDS6	25



## DynaSet™ Drop-in Anchors - Zinc Plated - Flanged

Part No	Thread Size	Thread Length (mm)	Overall Anchor Length (mm)	Drilled Hole Ø (mm)	Min Hole Depth (mm)	Setting Tool	Order Qty
DSF06	M6	11	25	8	28	SETDS1	100
RAP06*	M6	11	25	8	28	SETDS1	500
DSF10	M10	14	30	12	33	SETDF3	100
RAP01*	M10	14	30	12	43	SETDF3	500
DSF12	M12	21	50	16	53	SETDS4	50
RAP12*	M12	21	50	16	53	SETDS4	200

\* Rod Anchoring Pack (RAP) includes setting tool in a handy carry bucket



## DynaSet™ Drop-in Anchors - Stainless Steel AISI 316(A4)

Part No	Thread Size	Thread Length (mm)	Overall Anchor Length (mm)	Drilled Hole Ø (mm)	Min Hole Depth (mm)	Setting Tool	Order Qty
DSM06SS	M6	11	25	8	28	SETDS1	100
DSM08SS	M8	13	30	10	33	SETDS2	100
DSM10SS	M10	16	40	12	43	SETDS3	50
DSM12SS	M12	21	50	15	53	SETDS4*/SETDSA4	50
DSM16SS	M16	28	60	20	68	SETDS5	25

\* Not to be used with DSM12SS when installing Safety Ring Anchor

## DynaSet™ Drop-in Anchors - Indicative Working Loads in 32MPa Concrete

Thread Size	Embedment Depth (mm)	Tightening Torque (Nm)	Min Edge Distance (mm)	Min Anchor Spacing (mm)	Max Tensile Load, N <sub>a</sub> (kN)*	Max Shear Load, V <sub>a</sub> (kN)*
M6	23	6	80	60	2.5	2.2
M8	28	10	100	70	3.5	2.9
M10	38	20	135	95	5.4	3.5
M10 Flanged	28	12	100	70	3.4	2.9
M12	48	40	170	120	7.7	6.6
M16	63	95	220	160	11.5	10.4
M20	78	180	275	195	15.8	13.1

**\*The design engineer should ensure the structural element is capable of supporting these loads. Refer to Ramset™ Specifiers Resource Book for more information or explanation of technical data.**



## DynaSet™ Setting Tools

Part No	Description	Suits	Order Qty
SETDS1	M6 x 25 Setting Tool	DSM06/DSF06 / DSM06SS	1
SETDS2	M8 x 30 Setting Tool	DSM08 / DSM08SS	1
SETDS3	M10 x 40 Setting Tool	DSM10 / DSM10SS	1
SETDF3	M10 x 30 Setting Tool	DSF10	1
SETDS4*	M12 x 50 Setting Tool	DSM12 / DSF12 / DSM12SS	1
SETDSA4	M12 x 50 Setting Tool	DSM12SS	1
SETDS5	M16 x 65 Setting Tool	DSM16 / DSM16SS	1
SETDS6	M20 x 80 Setting Tool	DSM20	1

\* Not to be used with DSM12SS when installing Safety Ring Anchor



## Safety Ring Anchor System

Part No	Thread Size	Internal Ring Diameter (mm)	Overall Length (mm)	For use only with	Setting Tool	Order Qty
RSR12GM(Gal)	M12	16	138	DSM12SS	SETSA4	4
RSR12SS(AISI 316[A4])	M12	16	138	DSM12SS	SETSA4	4

Note: When installed in accordance with Ramset™ specifications, anchor performance is fully compliant with AS/NZS1891.4:2000 "Industrial fall-arrest systems and devices".

## Installation

1. Drill or core a  $\varnothing 15\text{mm}$  hole to depth of  $130\text{mm} \pm 2.5\text{mm}$ . Clean the hole thoroughly with a hole cleaning brush. Remove the debris with a hand pump, compressed air, or vacuum.
2. Check depth is correct, using the reverse end of the setting tool (SETSA4). The depth indicator groove MUST be level with the concrete surface.
3. Insert the DSM12SS into the hole by knocking it in, using the reverse end of the setting tool.
4. Using a hammer and the setting tool, drive the expansion plug into the anchor until the depth indication groove is level with the concrete surface. **If this cannot be achieved, an alternative anchor point location must be selected.**
5. Insert safety ring anchor and rubber seal. Tighten with a bar to the following Tightening Specification:
  - a. Using a bar not more than 100mm long (the bar should not bend during installation).
  - b. Using a 150mm long bar, not more than 10mm in diameter and of yield strength not exceeding 300MPa. R10 reinforcement bar is suitable for this purpose. When the bar starts to bend, the anchor ring should be returned back to the closest vertical orientation. **Ensure the anchor ring is left in a vertical position.** The DynaSet™ will remain in position if the safety ring anchor is removed.

