

DynaSet™

PERFORMANCE

MATERIAL

INSTALLATION RELATED

















Description

The DynaSet™ Drop-In Anchor is a medium duty, displacement setting expansion anchor.

Features & Benefits

- Fast installation: Shallow embedment and simple setting action.
- · Convenient: Threaded rod can be cut to equal lengths.
- Flanged version sits flush with surface in overdrilled holes
- · Ideal as reusable anchorage point:
- · Internal threaded design.
- · No protruding metal parts when bolt or rod is removed.
- Superior corrosion resistance:

Applications

- Suspended services, such as cable tray, ventilation ducts or plumbing fixtures
- Stadium seating
- Holding down machinery
- · Installing racking
- Suspended ceilings

Installation







- Drill hole at recommended diameter, to at least the anchor length in depth. Clean hole thoroughly with a brush. Remove debris by way of a vacuum pump, compressed air, hand pump etc.
- Insert anchor and push to required depth. Using the special setting tool, drive the expander plug down until shoulder of the setting punch meets top of the anchor.
- Position fixture then insert the bolt and tighten with spanner.
 The DynaSet Drop-In anchor remains set in position if the bolt is removed.





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Installation and Working Load Limit performance details

	Installation details			Minimum dimensions*		Working Load Limit (kN)			
Anchor	Drilled hole diameter, d _h (mm)	Anchor effective depth, h (mm)	Tightening torque, T, (Nm)	Edge distance, e _c (mm)	Anchor spacing, a _c (mm)	Shear, V _a	Tension, N _a		
size, db							Concrete compressive strength, f'c		
							20 MPa	32 MPa	40 MPa
M8	10	28	10	100	70	2.9	2.7	3.5	3.8
M10	12	38	20	135	95	3.5	4.3	5.4	6.0
M10 Flanged	12	28	12	100	70	2.9	2.7	3.4	3.8
M12	16**	48	40	170	120	6.6	6.0	7.7	8.6
M16	20	63	95	220	160	10.4	9.1	11.5	12.9

^{*} For shear loads acting towards an edge or where these minimum dimensions are not achievable, please use the simplified strength limit state design process to verify capacity.

Description and part numbers

Anchor	Anchor	Effective	Thread length, L _t (mm)	Part	Required	
size, d _b	length, L (mm)	depth, h (mm)		Zn	S/S	Setting tool
M8	30	28	13	DSM08	DSM08SS	SSETDS2
M10	40	38	16	DSM10	DSM10SS	SETDS3
M10 Flanged	30	28	14	DSF10	-	SETDF3
M12	50	48	21	DSM12	DSM12SS	SETDS4*
M16	65	63	28	DSM16	-	SETDS5

^{*} not to be used with DSM12SS when installing Safety Ring Anchor

Substrate thickness, b_m (mm) $b_m = 2 x h$

 $\begin{aligned} & \text{Drilled hole depth, h}_1 \text{ (mm)} \\ & \text{h}_1 = \text{L} + 3 \\ & \text{L} = \text{Anchor Length} \end{aligned}$

Engineering Properties

Anahan	A	Carboi	n Steel	Stainle	Section		
Anchor size, d _b	Anchor stress area, A _s	Yield strength, f _y (MPa)	UTS, f _u (MPa)	Yield strength, f _y (MPa)	UTS, f _u (MPa)	modulus, Z (mm³)	
M8	32.0	350	440	480	600	63.7	
M10	40.7	340	430	480	600	100.2	
M12	96.3	260	320	-	-	292.9	
M12 S/S	72.0	-	-	480	600	214.9	
M16	125.5	320	450	-	-	502.1	

For further information, please contact Ramset

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^{**} Hole diameter = 15 mm for M12SS