PRODUCT DATA

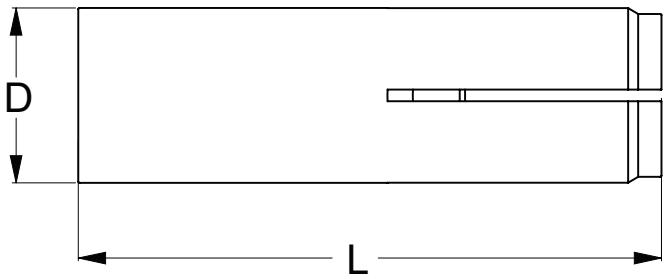
Drop-In Anchor - Zinc Yellow Passivate

Drop-In Anchor is a versatile medium duty anchor that delivers ample load bearing performance at shallow embedments. An expansion wedge inside the anchor is pushed towards the bottom end, thus producing expansion forces. The generated expansion force produces frictional resistance during anchor loading.

Applications	Trades
• Hand rail fastening • Form-work support fastening • Mechanical, electrical and pipe bracket fastening • Hanger systems for pipes, cable trays, ducts and ceiling fans. • Reusable anchor point	• Installation of mechanical services • Plumbers • Electricians • HVAC Installers • Ceiling and partitioning contractors

Material	CS Carbon Steel
Finish	ZYP Zinc Yellow Passivate

Part	QFind	Internal Thread Size	Length	Drill Diameter Size	Pack Qty
			L (mm)	D (mm)	
MDIMSYCM060025	**MDI105**	M6	25	8	100
MDIMSYCM080030	**MDI106**	M8	30	10	100
MDIMSYCM100040	**MDI107**	M10	40	12	50
MDIMSYCM120050	**MDI108**	M12	50	15	50
MDIMSYCM160065	**MDI109**	M16	65	20	25
MDIMSYCM200080	**MDI110**	M20	80	25	25



Features

- Suitable for light to medium duty loads
- Setting tool provides visual check for correct installation
- Quick and easy to install
- Immediate loading once correctly installed

Recommended Installation Tools

Drop-In Setting Tool

Part	QFind	Suit Anchor Size
MATMSZM060175	**MAT102**	M6
MATMSZM080178	**MAT103**	M8
MATMSZM100185	**MAT105**	M10
MATMSZM120190	**MAT106**	M12
MATMSZM160200	**MAT107**	M16
MATMSZM200212	**MAT108**	M20

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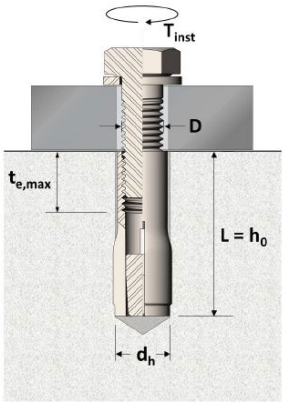
Installation Guide

Size	Thread Size	Hole Diameter	Anchor Length	Max. Thread Engagement	Guide Torque	Min. Concrete Thickness	Min. Edge Concrete	Min. Anchor Spacing
	D	d_h (mm)	L=h_0 (mm)	$t_{e,max}$ (mm)	T_{inst} (N-m)	h_{min} (mm)	c_{min} (mm)	S_{min} (mm)
M6 x 25	M6	8	25	10	4	100	95	55
M8 x 30	M8	10	30	12	8	100	95	60
M10 x 40	M10	12	40	15	15	120	135	100
M12 x 50	M12	15	50	20	35	130	165	120
M16 x 65	M16	20	65	25	60	160	200	150
M20 x 80	M20	25	80	30	120	200	260	160



Basic Load Performance in 32 MPa non-cracked concrete

[1] *Design Resistance* is the governing minimum load resistance obtained by comparing relevant concrete and steel resistances. Strength reduction of ϕ = 0.60 for concrete and ϕ =0.80 for steel are already included.

[2] *Working Load* is the governing minimum allowed load obtained by comparing relevant concrete and steel working loads. Factor of safety FOS = 2.5 for steel and FOS = 3.0 concrete are already included.

Size	Depth	Design Tensile Resistance[1]	Working Load in Tension[2]
	h_e (mm)	ϕN_d (kN)	N_{WLL} (kN)
M6 x 25	25	4.1	2.3
M8 x 30	30	5.4	3.0
M10 x 40	40	8.4	4.6
M12 x 50	50	11.7	6.5
M16 x 65	65	17.4	9.6
M20 x 80	80	23.8	13.2

Size	Depth	Edge Distance	Design Shear Resistance[1]	Working Load in Shear[2]
	h_e (mm)	c_1 (mm)	ϕV_d (kN)	V_{WLL} (kN)
M6 x 25	25	95	8.6	4.7
		110	10.7	5.9
		125	12.9	7.2
M8 x 30	30	95	9.7	5.4
		120	13.8	7.6
		150	19.2	10.7
M10 x 40	40	135	19.7	10.9
		150	23.0	12.8
		175	29.0	16.1
M12 x 50	50	165	30.3	16.8
		180	34.5	19.2
		200	40.5	22.5
M16 x 65	65	200	42.6	23.7
		220	49.2	27.3
		250	59.6	33.1
M20 x 80	80	260	70.5	39.1
		280	78.8	43.7
		300	87.4	48.5

Installation