FLANGED HEX HEAD SCREWBOLTS E/GALVANISED
FOR CONCRETE AND BRICK ANCHORAGE

IKA - ANCHORS -

Product Information

HEX HEADSCREW BOLTS

PRODUCT CODE	BOLT DIAMETER	LENGTH (mm)	DRILL SIZE (mm)	HOLE DIAM. IN FIXTURE (mm)	MINIMUM HOLE DEPTH (mm)	MIN - MAX. FIXTURE THICKNESS (mm)	PACK SIZE
DPD-SB0675	M6	75	6	7	45	0 - 30	100
DPD-SB0860	M8	60	8	9	40	0 - 20	100
DPD-SB8100		100	8	9	60	0 - 50	50
DPD-SB1075	M10	75	10	11	45	0 - 25	50
DPD-SB10130		130	10	11	70	0 - 75	50
DPD-SB12100	M12	100	12	13	65	0 - 40	25
DPD-SB12150		150	12	13	80	0 - 85	25

DESCRIPTION

The Screwbolt is designed primarily for temporary anchorage applications and may be easily removed, but may be used to good effect for the majority of fixing needs by all trades for most applications.
The Screwbolt has very limited expansion force on any substrate so edge distance is less critical than expansion anchors.
While these anchors lend themselves to repeated use and they are designed to cut their own thread in the substrate, it must be understood that repeated use will blunt the cutting edge of their threads thus reducing their load capability with each installation. (Please note that typically bricks are more abrasive than concrete).

SUITABLE FOR USE IN: Concrete
Brick

Specification Data

DIAMETER (mm)		MINIMUM EMBEDMENT DEPTH MM	RECOMMENDED EMBEDMENT DEPTH MM	MAXIMUM RECOMMENDED TIGHTENING TORQUE Nm		RECOMMENDED LOADS (20/25Mpa) AT REDUCED/MINIMUM EMBEDMENT DEPTH		RECOMMENDED LOADS (20/25Mpa) AT RECOMMENDED EMBEDMENT DEPTH	
				CONCRETE	BRICK	TENSION kN	SHEAR kN	TENSION kN	SHEAR kN
M6		36	50	70	22	2.1	-	4.1	-
M8		45	55	70	22	2.4	-	4.3	4.6
M10		50	65	70	22	5.5	-	9.3	13.4
M12		65	90	70	22	7.9	-	12.4	17.2

No Specification is given on Brick due to variability - it is recommended that tests be done on the bricks on site.
For ultimate loads please multiply the recommended load by three.
Please add additional 20% to the embedment depth for correct drilling depth to allow for spoil, not dislodged from hole when cleaning hole.

Installation

a) Drill hole in the substrate, using drill of correct diameter.
(Always ensure hole's depth allows for required anchor embedment plus allowance to accommodate dust caused by threading action)
b) Remove all loose dust from hole.
c) Screw anchor into hole using full hexagon socket spanner, avoid excessive torque being applied.

This concept in fixing technology requires adherence to the following points, to obtain maximum benefit from the fixing system.

1 Use hammer drills for concrete and rotary drills for brick
2 Always ensure drill bit is sharp and not worn.
3 Drill holes perpendicular to the substrate surface.
4 By cutting a thread a fix is guaranteed without applying a retaining force. No high tightening force is required to create a fix, consult safety data chart for maximum recommended tightening torques.

EDGE DISTANCE REDUCTION FACTORS (CONCRETE C20/25)

DIAMETER (mm)	EDGE DISTANCE (mm)									
Tension	30	40	50	60	70	80	90	100	110	120
M6	0.69	0.87	1							
M8	0.54	0.70	0.88	1						
M10	0.67	0.82	0.91	1						
M12		0.55	0.63	0.76	0.89	1				

Shear

M6	0.52	0.63	0.69	0.88	1					
M8	0.5	0.68	0.75	0.83	0.91	1				
M10			0.39	0.45	0.63	0.82	1			
M12					0.38	0.53	0.62	0.72	0.86	1

SPACING (CONCRETE C20/25)

Tensile & Shear	CENTER SPACING (mm)										
	30	40	50	60	70	80	90	100	125	150	175
M6	0.5	0.55	0.65	0.72	0.83	0.92	1				
M8	0.51	0.58	0.66	0.71	0.78	0.85	0.94	1			
M10		0.78	0.8	0.84	0.88	0.88	0.91	0.94	1		
M12				0.65	0.69	0.69	0.71	0.71	0.73	0.85	1