

## DROP-IN TDA

### INTERNALLY THREADED SLEEVE ANCHOR

for use in concrete for redundant non structural applications



#### Features:

- Deformation controlled fixing
- Approved for use in cracked & non-cracked concrete
- Approved for structural applications in non-cracked concrete
- Lipped and smooth versions

#### Benefits:

- Quick and simple installation
- One anchor for concrete from C20/25 to C50/60
- Suitable for bolts and threaded rod
- Adjustable fixture thickness
- Bolt and stud can be removed for temporary structures

#### Base material:

Cracked & Non-cracked concrete  
from C20/25 to C50/60



TDA anchor designation			
Trutek Drop-in Anchor	Thread size d [mm]	Short version	Lipped version
<b>TDA</b>	<b>08</b>	<b>LS</b>	<b>L</b>

### Product Range

Product Code		Thread Diameter	Outside Diameter	Anchor Length	Internal Thread Length	Drill Hole Diameter	Drill Hole Depth	Fixture Clearance Hole	Installation Torque (Max)	Setting Punch
Smooth	Lipped	d	D	L	L <sub>th</sub>	d <sub>o</sub>	h <sub>nom</sub>	d <sub>f</sub>	T <sub>inst</sub>	Reference
TDA08	TDA08L	8	10	30	13	10	33	9	11	TDST08
TDA10S	TDA10LS	10	12	30	13	12	33	12	17	TDST10
TDA10	TDA10L	10	12	40	19	12	43	12	17	TDST10
TDA12	TDA12L	12	16	50	22	16	54	14	38	TDST12

### Installation Data

Thread Diameter			M08	M10S	M10	M12
<b>Non-cracked concrete</b>						
Effective Anchorage Depth	h <sub>ef</sub>	[mm]	30	30	40	50
Minimum Concrete Thickness	h <sub>min</sub>	[mm]	80	80	80	80
Characteristic Spacing	S <sub>cr,N</sub>	[mm]	200	200	200	250
Characteristic Edge Distance	C <sub>cr,V</sub>	[mm]	150	150	150	150

## Load Data

### Characteristics Resistance

Thread Diameter			M08	M10S	M10	M12
$N_{Rk}$	Tensile Resistance	[kN]	4.0	4.5	4.5	7.0

### Design Resistance

Thread Diameter			M08	M10S	M10	M12
$N_{Rd}$	Tensile Resistance	[kN]	1.9	2.1	2.5	3.9

### Recommended Resistance

Thread Diameter			M08	M10S	M10	M12D
$N_{rec}$	Tensile Resistance	[kN]	1.4	1.5	1.8	2.8

Includes Partial Safety Factor  $\gamma = 1.4$  in the absence of national regulations and type of loading Data is for Static and Quasi Static Loads for a single anchor

## Steel Limits

Thread Diameter			M08	M10S	M10	M12
Characteristic Shear - with lever arm						
Grade 4.8	$M_{Rk,s}^0$	[Nm]	15.0	30.0	30.0	52.4
Grade 5.8	$M_{Rk,s}^0$	[Nm]	18.8	37.0	37.0	65.6
Grade 8.8	$M_{Rk,s}^0$	[Nm]	30.0	60.0	60.0	104.9
Partial Safety Factor	$\gamma_{MsV}$	[-]	1.25			

## Fire Loads

### Characteristic Resistance for Fire Loads

(for threaded rod  $\geq 4.8$ )

Thread Diameter			M08	M10	M12	M12D
$N_{Rk,s,fi,30}$	R30	[kN]	0.89	0.89	1.13	1.75
$N_{Rk,s,fi,60}$	R60	[kN]	0.89	0.89	1.13	1.75
$N_{Rk,s,fi,90}$	R90	[kN]	0.89	0.89	1.13	1.75
$N_{Rk,s,fi,120}$	R120	[kN]	0.71	0.71	0.90	1.40

In the absence of other national regulations the partial safety for resistance under fire exposure = 1.0

Spacing	[mm]	$S_{cr,N,fi}$	$4 \times h_{ef}$
Edge Distance	[mm]	$C_{cr,N,fi}$	$2 \times h_{ef}$

The design method covers anchors with a fire attack from one side only. In the case of a fire attack from more than one side the edge distance shall be  $\geq 300$ mm

## TDA anchor installation

