

# TOGE TID

The insulating anchor for cold-, heat- and fire-protection



### Fire protection

Fire protection up to fire resistance class R120.

### Maximum thickness

Screw lengths up to 300 mm enable the fastening of insulating panels up to a thickness of 260 mm.

### Cover cap

Optional cover caps with textured structure made of polyethylene in different colors for a coherent look of the entire surface.

### Corrosion resistance

The A2 stainless steel design provides optimum corrosion protection even in humid environments.

## Approval

### Approval

General technical approval Z-21.8.1970.




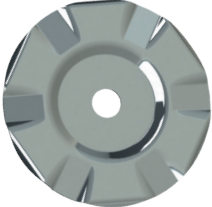
### Base Material

Approval for concrete strength classes from C20/25 bis C50/60.

Cracked and non-cracked concrete.



# Headshapes & Materials

		Steel, zinc plated	Steel, zinc flake-coated	Steel, stainless A2
	Insulating anchor	✓		✓
	Insulating anchor with pre-mounted large cap, white	✓		✓
	Cover caps in different colours, polyethylene			
	Additional disc without embossing Ø 80 mm	✓		
	Additional disc Ø 80 mm	✓		✓

## Application Examples



Underground garage and basement walls

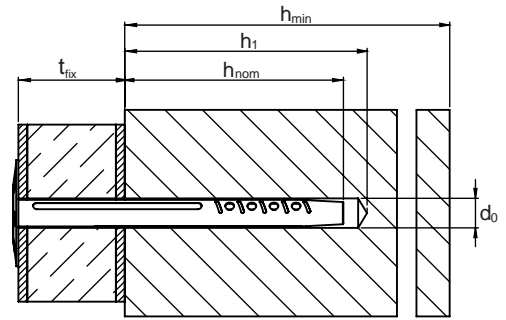


Underground parking and basement ceilings

# Product Overview

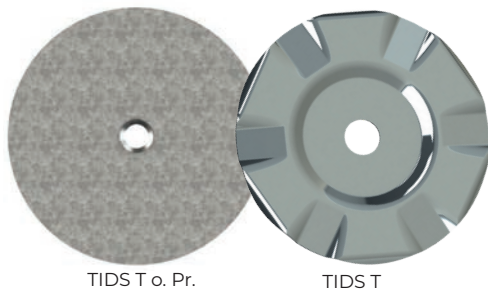
## Steel - zinc plated

Version without cover cap  
Head Ø35 mm



Item nr.	Designation	Depth of drill hole $h_0$	Embedment depth of anchor $h_{nom}$	Max. thickness of fixture $t_{fix}$	Packing Unit
031 061 050	TIDS 50	45 mm	40 mm	10 mm	500
031 061 080	TIDS 80	45 mm	40 mm	40 mm	250
031 061 110	TIDS 110	45 mm	40 mm	70 mm	250
031 061 120	TIDS 120	45 mm	40 mm	80 mm	250
031 061 140	TIDS 140	45 mm	40 mm	100 mm	250
031 061 170	TIDS 170	45 mm	40 mm	130 mm	250
031 061 200	TIDS 200	45 mm	40 mm	160 mm	250
031 061 250	TIDS 250	45 mm	40 mm	210 mm	200
031 061 300	TIDS 300	45 mm	40 mm	260 mm	200

### Additional Discs Ø80 mm



Item Nr.	Designation	Diameter	Packing Unit
030 156	TIDS T	80 mm	250
030 158	TIDS T o.Pr.	80 mm	250

### Cover caps Polyethylen, various colours\*

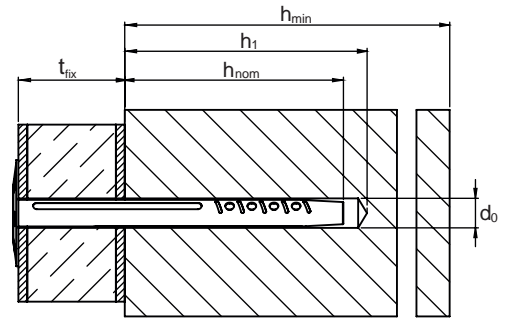


Item Nr.	Designation	Diameter	Packing Unit
042 000 000	TID-E beige	38 mm	250
042 000 100	TID-E white	38 mm	250
042 000 200	TID-E grey	38 mm	250

\* Other colours available upon request

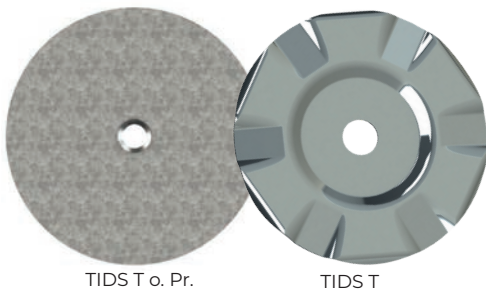
## Steel - zinc plated

Version with premounted large cover cap in Polyethylen, white  
Head Ø54 mm



Item nr.	Designation	Depth of drill hole $h_0$	Embedment depth of anchor $h_{nom}$	Max. thickness of fixture $t_{fix}$	Packing Unit
031 361 080	TIDS-K 80	45 mm	40 mm	40 mm	250
031 361 110	TIDS-K 110	45 mm	40 mm	70 mm	250
031 361 140	TIDS-K 140	45 mm	40 mm	100 mm	250
031 361 170	TIDS-K 170	45 mm	40 mm	130 mm	250
031 361 200	TIDS-K 200	45 mm	40 mm	160 mm	250
031 361 250	TIDS-K 250	45 mm	40 mm	210 mm	200

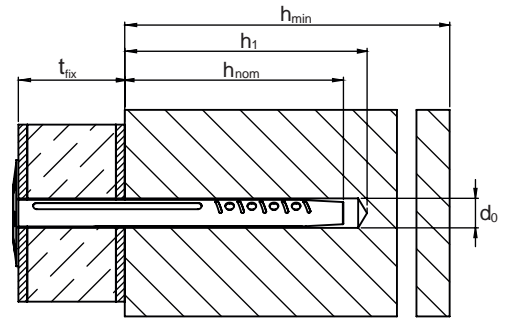
## Additional Discs Ø80 mm



Item Nr.	Designation	Diameter	Packing Unit
030 156	TIDS T	80 mm	250
030 158	TIDS T o.Pr.	80 mm	250

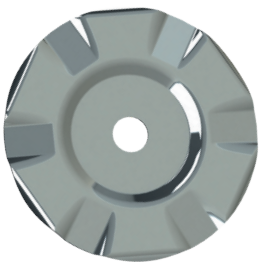
## Stainless steel - A2

Version without cover cap  
Head Ø35 mm



Item nr.	Designation	Depth of drill hole $h_0$	Embedment depth of anchor $h_{nom}$	Max. thickness of fixture $t_{fix}$	Packing Unit
031 063 050	TIDR 50	45 mm	40 mm	10 mm	250
031 063 080	TIDR 80	45 mm	40 mm	40 mm	250
031 063 110	TIDR 110	45 mm	40 mm	70 mm	250
031 063 120	TIDR 120	45 mm	40 mm	80 mm	250
031 063 140	TIDR 140	45 mm	40 mm	100 mm	250
031 063 170	TIDR 170	45 mm	40 mm	130 mm	250
031 063 200	TIDR 200	45 mm	40 mm	160 mm	250
031 063 250	TIDR 250	45 mm	40 mm	210 mm	200
031 063 300	TIDR 300	45 mm	40 mm	260 mm	200

Additional disc Ø80 mm



TIDR T

Item Nr.	Designation	Diameter	Packing Unit
030 157	TIDR T	80 mm	250

Cover caps Polyethylen, various colours\*

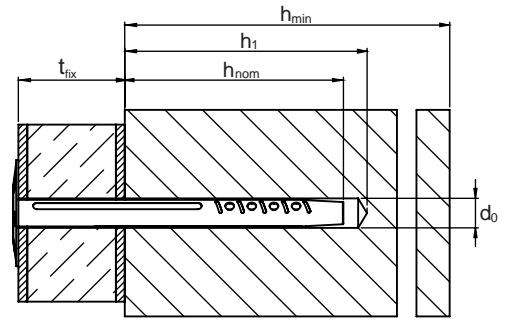


Item Nr.	Designation	Diameter	Packing Unit
042 000 000	TID-E beige	38 mm	250
042 000 100	TID-E white	38 mm	250
042 000 200	TID-E grey	38 mm	250

\* Other colours available upon request

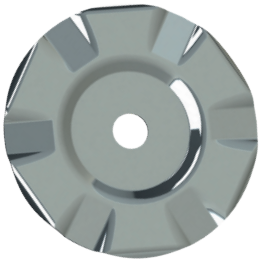
## Stainless steel - A2

Version with premounted large cover cap in Polyethylen, white  
Head Ø54 mm



Item nr.	Designation	Depth of drill hole $h_0$	Embedment depth of anchor $h_{nom}$	Max. thickness of fixture $t_{fix}$	Packing Unit
031 363 080	TIDR-K 80	45 mm	40 mm	40 mm	250
031 363 110	TIDR-K 110	45 mm	40 mm	70 mm	250
031 363 140	TIDR-K 140	45 mm	40 mm	100 mm	250
031 363 170	TIDR-K 170	45 mm	40 mm	130 mm	250
031 363 200	TIDR-K 200	45 mm	40 mm	160 mm	250
031 363 250	TIDR-K 250	45 mm	40 mm	210 mm	200

Additional disc Ø80 mm



TIDR T

Item Nr.	Designation	Diameter	Packing Unit
030 157	TIDR T	80 mm	250

## Technical Characteristics

### Without fire exposure for multiple fastening TID according Z-21.8-1970

Insulating anchor TID			
Nominal diameter of drill bit	$d_0$	[mm]	8
Depth of drill hole	$h_0 \geq$	[mm]	45
Effective anchorage depth	$h_{nom} \geq$	[mm]	40
Approved load in cracked and non-cracked concrete <sup>1)</sup>	$N_{zul}$	[kN]	0,07
Minimum edge distance	$C_{min}$	[mm]	60
Minimum spacing	$S_{min}$	[mm]	120
Minimum thickness of member	$h_{min}$	[mm]	80

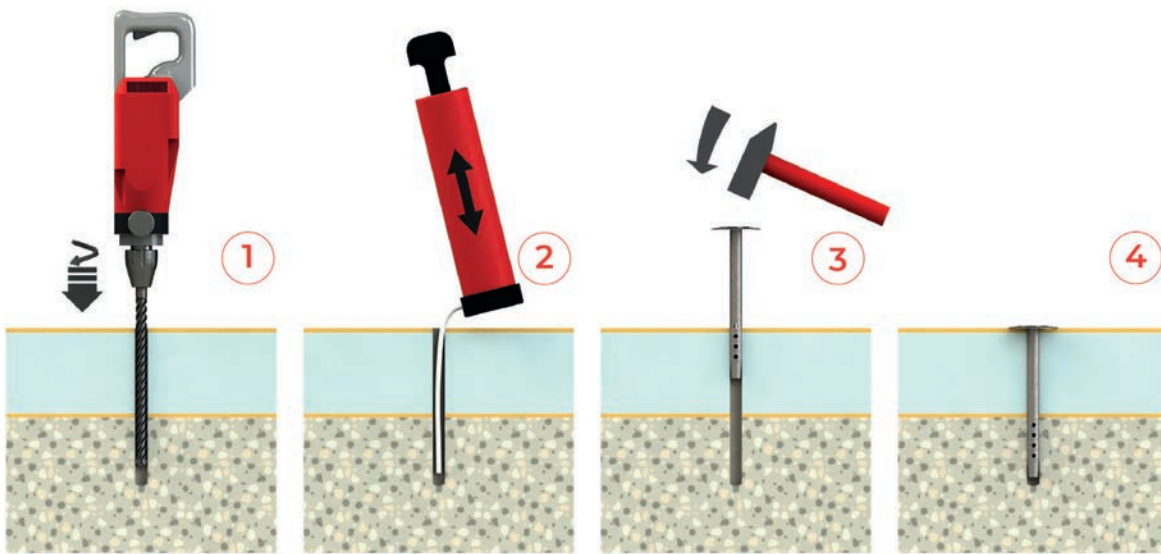
<sup>1)</sup> The partial safety factor for material resistance from the approval  $\gamma_M=1,5$  as well a partial safety factor for load actions  $\gamma_F=1,4$  were considered for determining the load.

### Under fire exposure for multiple fastening TID according Z-21.8-1970

Insulating anchor TID				
Approved load under tensile and shear use ( $F_{zul,fi} = N_{zul,fi} = V_{zul,fi}$ )				
Fire resistance class				
R 30	Approved load <sup>2)</sup>	$F_{zul,fi 30}$	[kN]	0,07
R 60		$F_{zul,fi 60}$	[kN]	0,07
R 90		$F_{zul,fi 90}$	[kN]	0,07
R 120		$F_{zul,fi 120}$	[kN]	0,06
Edge distance				
R 30 bis R 120	$C_{cr,fi}$	[mm]	80	
The edge distance must be at least 300 mm if the fire load attacks from more than one side.				
Spacing				
R 30 to R 120	$S_{cr,fi}$	[mm]	160	

<sup>2)</sup> The partial safety factor for material resistance from the approval  $\gamma_M=1,0$  as well a partial safety factor for load actions  $\gamma_F=1,0$  were considered for determining the load.

## Installation Instructions



- 1) Create borehole.
- 2) Clean the borehole thoroughly.
- 3) Drive the insulating anchor through the insulating plate with a hammer.
- 4) The dowel plate must rest completely on the attachment part.