



**TPPO**



**TPPOZ**



**TPTO**



**TPA2**



**TPBR**



**FS**



**TRPO**



**ABA**



**ATA**



**TCLA**



**TRE-Z / TRE-PV**



**TPTPAD / TPTP**

## CHARACTERISTICS

- Zinc plated, zinc yellow passivated and stainless steel.
- Self drilling versions, inviolate, with hole for cup, different heads and slots: assembling flexibility.












## APPLICATIONS

- Use in all type of assemblies of wood carpentry.
- Applications: union of metallic wood connectors to wood, woods assembly, iron reinforcements to wood....

## BASE MATERIAL



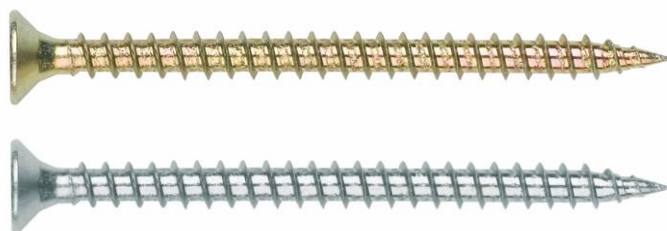
## 1. SELECTION CHART

SCREW	HEAD	TIP	THREAD	SLOT	SURFACE TREATMENT	APPLICATION
TPPO 	Countersunk 90°	S	Wood 40°	Pz	Zinc plated yellow passivated	Fixing metallic connectors on wood Wood to wood fixings
TPPOZ 	Countersunk 90°	S	Wood 40°	Pz	Zinc plated	Fixing metallic connectors on wood Wood to wood fixings
TPTO 	Countersunk 90°	S	Wood 40°	Tx	Zinc plated yellow passivated	Fixing metallic connectors on wood Wood to wood fixings
TPA2 	Countersunk 90°	S	Wood 40°	Pz	Stainless steel A2	Fixing metallic connectors on wood Wood to wood fixings
TPBR 	Countersunk 90°	Drill	Wood 40°	Pz	Zinc plated	Hard surface wood. Hard wood
TRPO 	Round	S	Wood 40°	Pz	Zinc plated yellow passivated	Fixing handles, power dophit, shields, etc.
ABA 	Countersunk	Drill	Metal 60°	Ph	Zinc plated	Fixing wood >12 mm to a metallic profile
ATA 	Countersunk	Drill	Metal 60°	Tx	Zinc plated	Fixing wood >12 mm to a metallic profile
TCLA 	Pan	Nail	Self tapping	Ph + ranura	Zinc plated	Venetian-blind fastening
TREZ/ TREPv 	Pan	Straight	Wood 40°	Allen	Zinc plated / Black oxidation	Chipboard fixings
FS 	Countersunk 90°	Drill	Metal 60°	---	Zinc plated	Fixing metal plates to wood

## 2. INSTALLATION DATA

### 2.1 TP-PO

### Chipboard screw countersunk 90° head, thread 40°



#### Characteristics



Steel



Zinc plated



Zinc plated yellow  
passivated

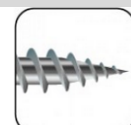
#### Properties



Pz



Countersunk head

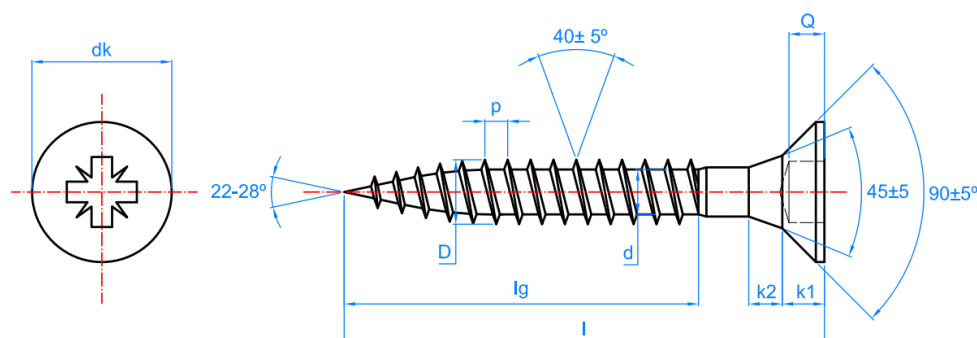


S tip, pin

#### Installation Data

CODE		TPPO25 TPPOZ25	TPPO30 TPPOZ30	TPPO35 TPPOZ35	TPPO40 TPPOZ40	TPPO45 TPPOZ45	TPPO50 TPPOZ50	TPPO60 TPPOZ60
d <sub>k</sub> : head diameter	[mm]	5.0	6.0	7.0	8.0	9.0	10.0	12.1
D: outer thread diameter	[mm]	2.5	3.0	3.5	4.0	4.5	5.0	6.0
d: inner thread diameter	[mm]	1.6	1.9	2.2	2.5	2.7	3.0	3.6
p: pitch	[mm]	1.10	1.35	1.60	1.80	2.00	2.20	2.60
l: screw length	[mm]	10 - 25	12 - 40	16 - 50	16 - 70	20 - 80	20 - 120	40 - 220
l <sub>g</sub> : thread max length	[mm]	Completa	Completa	Completa	60	60	60	60*
Pz recess		#1	#1	#2	#2	#2	#2	#3
Pz dopbit code			PUPOC01 PUPOL01	PUPOC01 PUPOL01	PUPOC02 PUPOL02	PUPOC02 PUPOL02	PUPOC02 PUPOL02	PUPOC02 PUPOL02

#### PLAN



\*TPPOZ up to 110

\*\* 75 mm thread length from TPPO60120

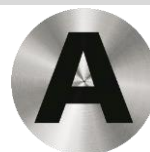
- Zinc plated yellow passivated.
- 90° countersunk head, 40° wood thread, Pz recess.
- S tip allows wood straight drill.
- Applications:
  - Fixing metallic drilled connectors on wood.
  - Fixing metallic drilled reinforcements on wood.
  - Fixing hard wood on wood.

## 2.2 TP-TO

### Chipboard screw 90° countersunk head, thread 40°



#### Characteristics



Steel



Zinc plated yellow passivated

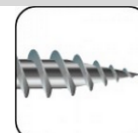
#### Properties



Hexalobular Tx



Countersunk head

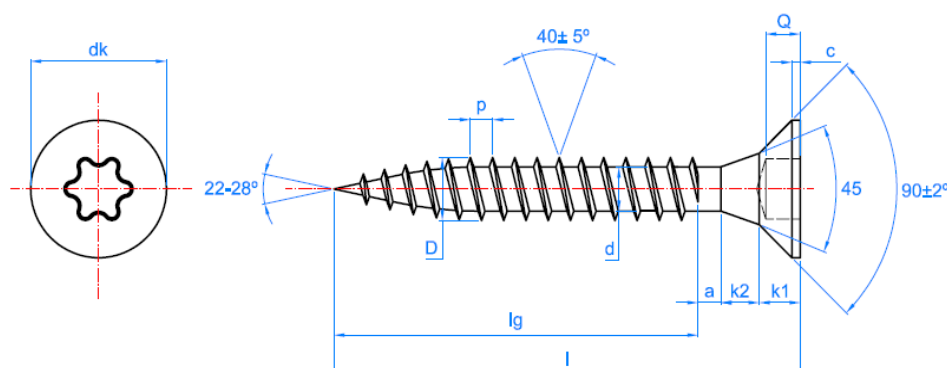


S tip, pin

#### Installation Data

CODE		TPTO30	TPTO35	TPTO40	TPTO45	TPTO50	TPTO60
d <sub>k</sub> : head diameter	[mm]	6.0	7.0	8.0	9.0	10.0	12.0
D: outer thread diameter	[mm]	3.0	3.5	4.0	4.5	5.0	6.0
d: inner thread diameter	[mm]	1.9	2.2	2.5	2.7	3.0	3.6
p: pitch	[mm]	1.35	1.60	1.80	2.00	2.20	2.60
l: screw length	[mm]	15 - 30	15 - 50	15 - 70	30 - 70	30 - 120	60 - 300
l <sub>g</sub> : thread max length	[mm]	Completa	Completa	60	60	60*	60**
Hexalobular Tx recess		#10	#15	#20	#20	#25	#30
Hexalobular Tx recess dopbit code		PUTO010	PUTO015	PUTO020	PUTO020	PUTO025	PUTO030

#### PLANO



\* 72 mm thread length for TPTO50120

\*\* 72 mm thread length from TPTO60110

- Zinc plated yellow passivated.
- 90° countersunk head, 40° wood thread, S tip allows wood straight drill.
- Hexalobular ISO 10664 (Tx) recess allows higher torque than Pz.
- Applications:
  - Fixing metallic drilled connectors on wood.
  - Fixing metallic drilled reinforcements on wood.
  - Fixing wood on wood.

## 2.3 TP-A2

### Chipboard screw countersunk 90° head, thread 40°



#### Characteristics

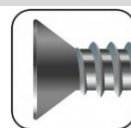


Stainless available

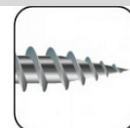
#### Properties



Pz



Countersunk head

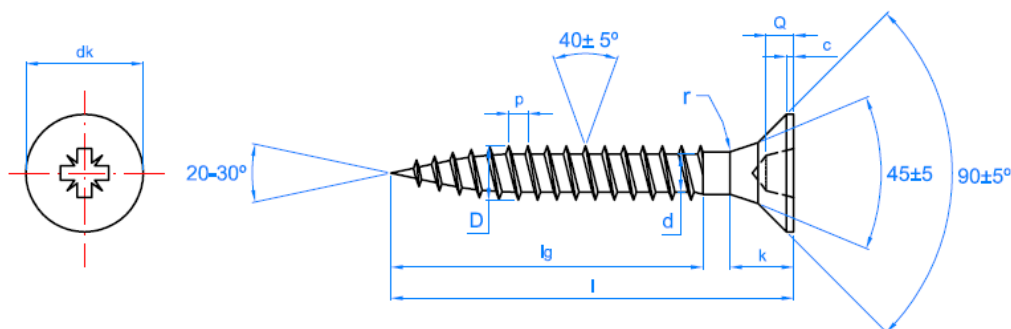



S tip, pin

#### Installation Data

CODE		TPA230	TPA235	TPA240	TPA245	TPA250
d <sub>k</sub> : head diameter	[mm]	6.0	7.0	8.0	9.0	10.0
D: outer thread diameter	[mm]	3.0	3.5	4.0	4.5	5.0
d: inner thread diameter	[mm]	1.9	2.2	2.5	2.7	3.0
p: pitch	[mm]	1.35	1.60	1.80	2.00	2.20
l: screw length	[mm]	16 - 25	20 - 40	30 - 50	30 - 50	50 - 70
l <sub>g</sub> : thread max length	[mm]	Full	Full	Full	Full	50
Pz recess		#1	#2	#2	#2	#2
Pz dopbit code		PUTO010	PUPOC01 PUPOL01	PUPOC02 PUPOL02	PUPOC02 PUPOL02	PUPOC02 PUPOL02

#### PLAN



- A2 stainless steel (AISI 304). 
- 90° countersunk head, 40° wood thread, Pz recess..
- S tip allows wood straight drill.
- Applications:
  - Fixing metallic drilled connectors on wood.
  - Fixing metallic drilled reinforcements on wood.
  - Fixing hard wood on wood.

## 2.4 TP-BR

Chipboard screw 90° countersunk head, self-drilling, wider thread pitch



### Characteristics



Steel



Zinc plated

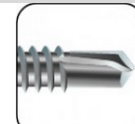
### Properties



Pz



Countersunk head

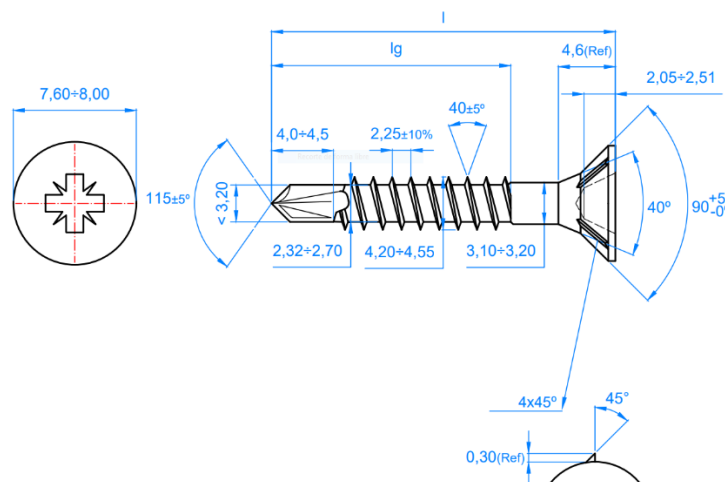


Self drilling

### Installation Data

CODE		TPBR4325	TPBR4330	TPBR4335	TPBR4340	TPBR4345	TPBR4350	TPBR4360	TPBR4370
l: screw length	[mm]	25	30	35	40	45	50	60	70
l <sub>g</sub> : thread max length	[mm]	Completa	20	23.3	26.7	30.0	33.3	40.0	46.7
Pz recess		#2							
Pz dopbit code		PUPOC02 / PUPOL02							

### PLAN



- Zinc plated; Thread diameter: 4.3 mm; Lengths: 25 – 70 mm.
- 90° countersunk head. 40° wood thread, wide pitch, Pz #2 recess.
- Self drilling screw, able to drill hard woods (oak, etc.) with no damage, and covered woods (melamine, etc.).
- With ribs under the head for straight wood and coating countersink..
- Applications:
  - Fixing hard surface woods (melamine, etc.).
  - Avoids damage in hard woods when drilling (American oak, etc.).
  - Fixing metallic drilled connectors on wood near the edges.
  - Fixing wood on wood near the edge.

## 2.5 TR-PO

### Chipboard screw panhead, thread 40°



#### Characteristics



Steel



Zinc plated yellow passivated

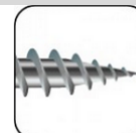
#### Properties



Pz



Panhead

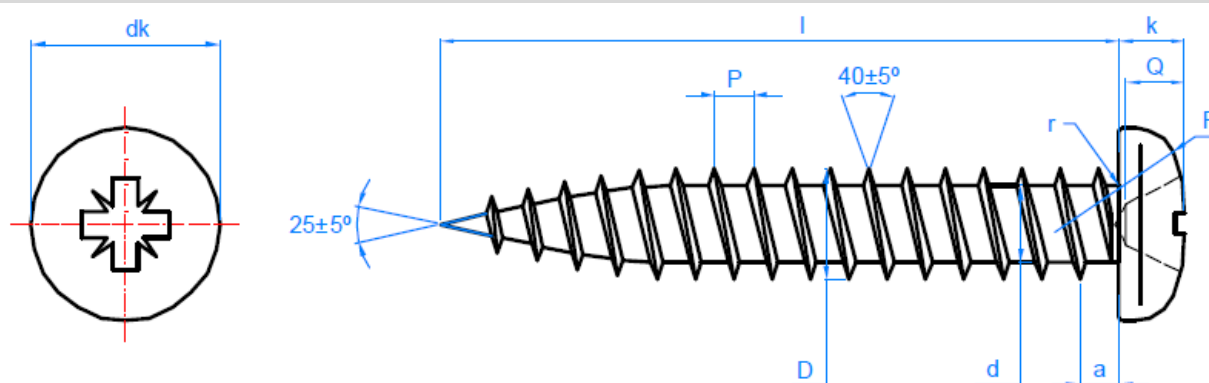


S tip, pin

#### Installation Data

CODIGO		TRPO30	TRPO35	TRPO40	TRPO45	TRPO50
d <sub>k</sub> : head diameter	[mm]	6.0	7.0	8.0	9.0	10.0
D: outer thread diameter	[mm]	3.0	3.5	4.0	4.5	5.0
d: inner thread diameter	[mm]	1.9	2.2	2.5	2.7	3.0
p: pitch	[mm]	1.35	1.60	1.80	2.00	2.20
k: head thickness	[mm]	2.2	2.6	2.8	3.0	3.2
R: head radius	[mm]	5.0	6.5	7.9	9.2	9.5
l: screw length	[mm]	16 - 20	16 - 35	16 - 50	16 - 45	20 - 50
l <sub>g</sub> : thread maximum length	[mm]	Full	Full	Full	Full	Full
Pz recess		#1	#2	#2	#2	#2
Pz dopbit code		PUPOC01 PUPOL01	PUPOC02 PUPOL02	PUPOC02 PUPOL02	PUPOC02 PUPOL02	PUPOC02 PUPOL02

#### PLAN



- Zinc plated yellow passivated.
- Panhead, 40° wood thread, S tip allows direct drill on wood.
- Empleo:
  - Fixing handles, power dopbit, shields, etc

## 2.6

## ABA

### Self drilling screw with wings, Ph countersunk head



#### Characteristics



Steel



Zinc plated



IPN Wood

#### Properties



Ph



Countersunk head

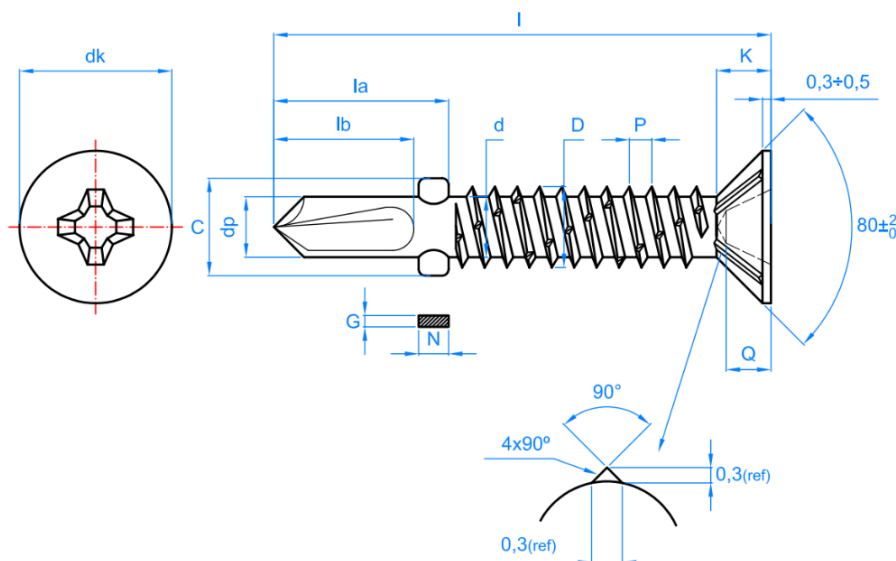


Self drilling tip with wings

#### Installation Data

CODIGO		ST 4.8	ST 5.5	ST 6.3
dk: head diameter	[mm]	9.50	10.80	12.40
k: head thickness	[mm]	3.15	4.27	4.81
Tx head		nº 2	nº 2	nº 3
Countersunk angle	°	80	80	80
Drill length	[mm]	10	12	13
D: outer thread diameter	[mm]	4.80	5.46	6.25
d: inner thread diameter	[mm]	3.58	4.17	4.88
p: pitch	[mm]	1.6	1.8	1.8
L: screw length	[mm]	32 - 50	38 - 65	60 - 85
Tx dopbit code		PUPHC02 / PUPHL02	PUPHC02 / PUPHL02	PUPHC03 / PUPHL03
Drill capacity	[mm]	1.75 - 4.00	1.75 - 5.00	2.50 - 6.00
Fixture thickness	[mm]	L - 18	L - 21	L - 22

#### PLAN





### Self drilling screw with wings, Tx countersunk head

## Characteristics

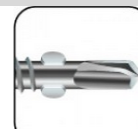
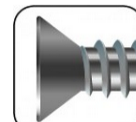


Steel

Zinc plated

IPN wood

## Properties



Tx

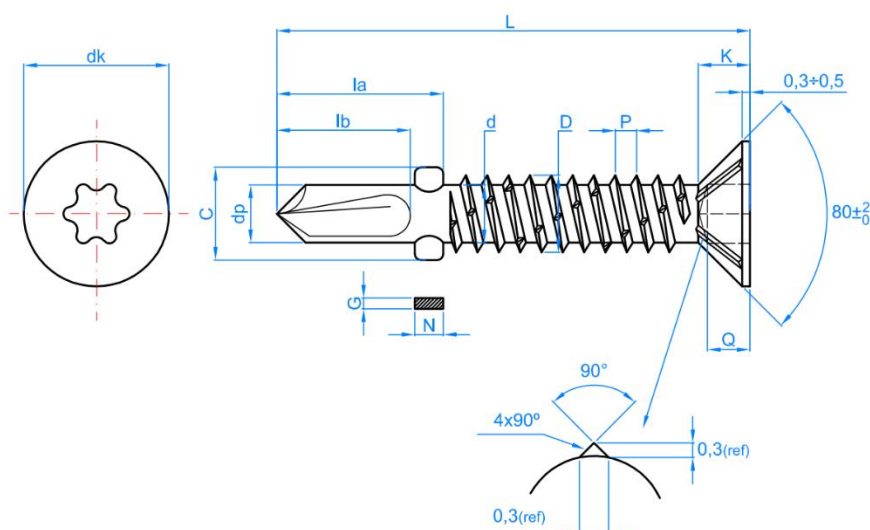
Countersunk head

Self drilling tip with wings

## Installation Data

CODIGO		ST 4.8	ST 5.5	ST 6.3
d <sub>k</sub> : head diameter	[mm]	9.50	10.80	12.40
k: head thickness	[mm]	3.15	4.27	4.81
Tx head		nº 2		
Countersunk angle	°	80	80	80
Drill length	[mm]	10	12	13
D: outer thread diameter	[mm]	4.80	5.46	6.25
d: inner thread diameter	[mm]	3.58	4.17	4.88
p: pitch	[mm]	1.6	1.8	1.8
L: screw length	[mm]	32 - 50	38 - 65	60 - 85
Tx dopbit code		PUTO025	PUTO025	PUTO030
Drill capacity	[mm]	1.75 - 4.00	1.75 - 5.00	2.50 - 6.00
Fixture thickness	[mm]	L – 18	L – 21	L – 22

## PLAN



## CHARACTERISTICS AND BENEFITS ABA/ATA

- Zinc plated.
- For fixing wood on metal (metal thickness > 1.75 mm).
- Both wings avoid the wood to be damaged by drilling a pilot hole.  
With ribs under the head that countersunk the wood straight away, also melamine and other materials.

For assembling wood on metal, a hole in the wood is required with some space to avoid threading the wood before the drill in the strip is finished. Otherwise the drill tip could be burned, the wood broken or the fixing wood-strip unglued.

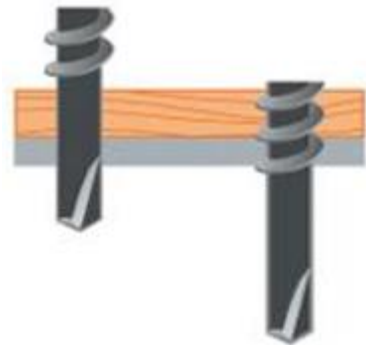
Take these precautions:

- Drill previously a hole bigger than thread's diameter.
- Use an extra-large self drilling screw (non commercial).
- Use a self drilling screw with two wings: the reamer created on the wood has a bigger diameter than thread so that this does not touch the wood. Wings and thread will break in contact with metal.

Standard drilling screw. The wood breaks.



Extra large drilling bit crew. Not standard.



2 wings self drilling screw.

- a) Drills the wood.
- b) Wood ream + metal drill.
- c) Threads in the metal plate.



## 2.8 T-CLA

### Nail screw for blinds



#### Characteristics



Steel



Zinc plated

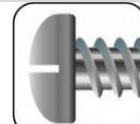


Hammer needed

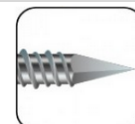
#### Properties



Pz with slot



Panhead

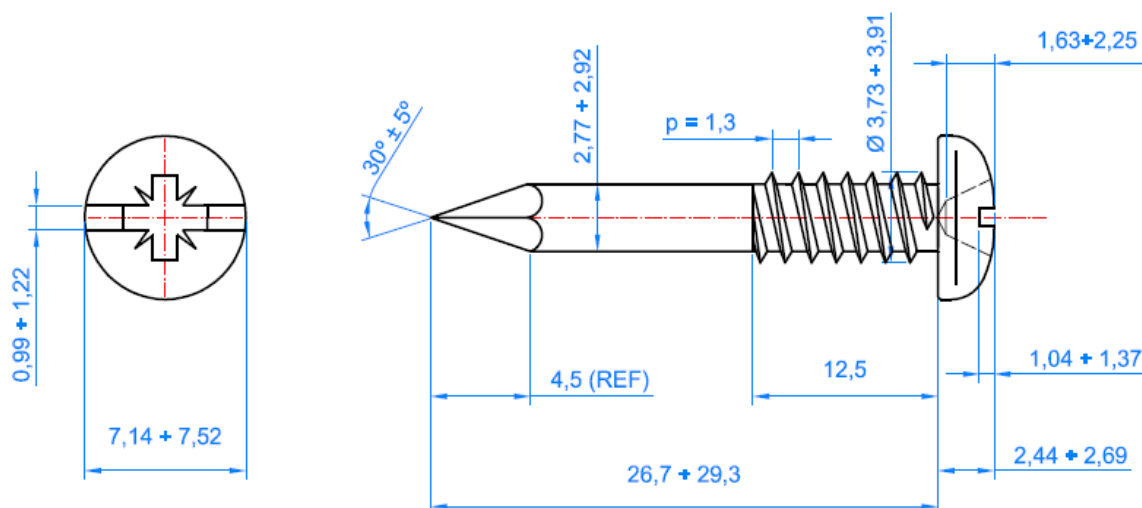


Diamond tip

#### Installation Data

Code	Screw diameter [mm]	Screw length [mm]	Recess	Pz dopbit code
TCLA3928	3.9	28	PZ2	PUPOC02 / PUPOL02

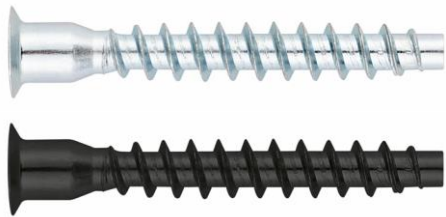
#### PLAN



- Zinc plated.
- Pz #2 recess with slot.
- Pz dopbit PUPOC02, PUPOL02.
- Self tapping thread 60°.
- Nail tip.
- Application:
  - Venetian-blind fastening

2.9 TRE-Z / TRE-PV

Assembly Screw



Characteristics



Steel



Zinc plated

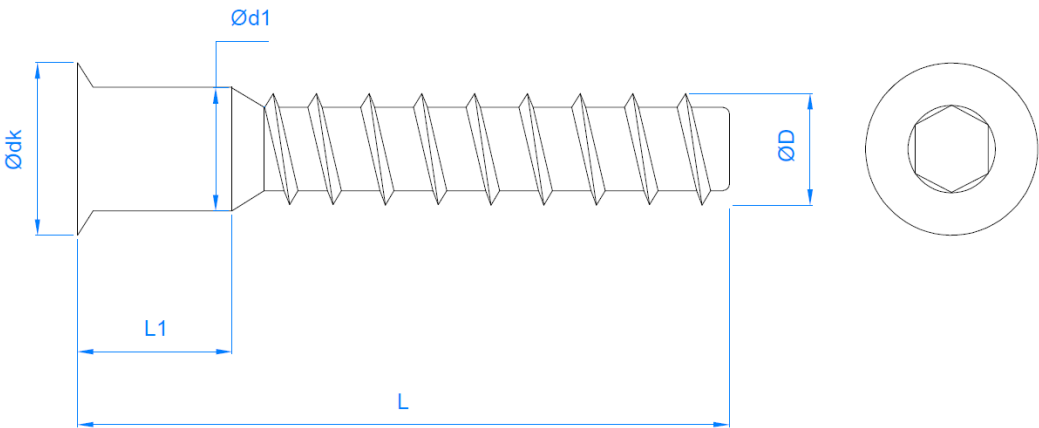


Black oxidation

Installation Data

CODE	SIZE	ØD	L	L1	Ødk	Ød1	Installation Tool
TREZ05050	5 x 50	5.0	50,0	7,0	7,5	4,8	Allen 3
TREPV05050	5 x 50	5.0					
TREZ07050	7 x 50	7.0			10,0	6,8	Allen 4
TREPV07050	7 x 50	7.0					

PLAN



## 2.10 FS

### Metal-wood roofing screw

#### Properties



Steel



Zinc-plated coating



Available in different colours

#### Base material

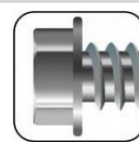


Metal plate - Wood

#### Properties



Hexagonal with embossed washer



Hexagonal with embossed washer

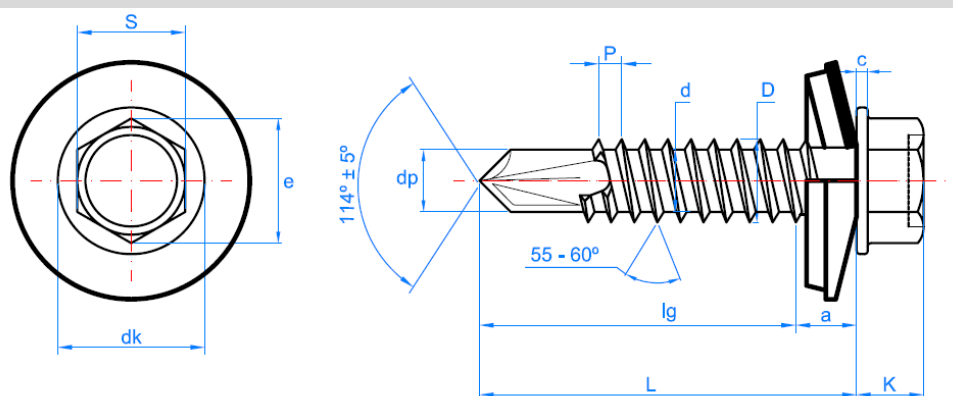


Reduced screw point

#### Installation data

CODE		ST 4.8
$d_k$ : washer head diameter	[mm]	10
k: head thickness	[mm]	4.9
c: washer thickness	[mm]	1.1
s: spanner	[mm]	8
D: exterior thread diameter		4.80
d: interior thread diameter	[mm]	3.30
p: thread	[mm]	2.1
l: lengths	[mm]	19 – 35
$l_g$ : maximum thread length	[mm]	Completa
Installation bit code (hexagonal magnetic bit)		BOCA008
Drill capacity	[mm]	1.50 máx

#### DRAWING



- Zinc-plated finish with lacquered head and washer.
- For use in metal-wood fixings.



## 2.11 COLOURED CUPS FOR HEAD SCREWS

Available coloured cups to decorate head screws:

- **TTPAD:** Adherent cups 14 mm. diameter for thin head screws:

- TTPADBL: White
- TTPADBE: Beige
- TTPADGR: Grey
- TTPADNE: Black
- TTPADPI: Pine
- TTPADRO: Oak
- TTPADCA: Mahogany
- TTPADNO: Walnut
- TTPADHA: Beech
- TTPADSA: Sapele
- TTPADCE: Cherry wood



- **TTP:** Plastic cups for Pz recess #2, diameter 12.5 mm:

- TTPBLA: White
- TTPMAR: Brown

