

WOOD SCREWS

Denomination: **Wood screws**

Codes: TPPOB, TPPOZ, TPTO, TPA2, TPBR, TRPO, ABA, TCLA, FS, TTPAD, TPTP, ATAPO.

Reference: **FT MAD-en**

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TPPO



TRPO



TPPOZ



ABA



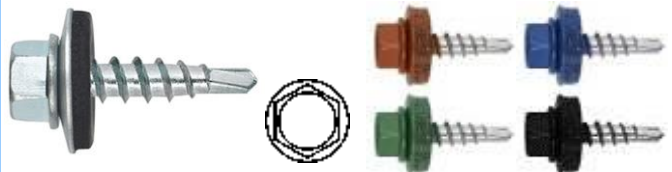
TPTO



TCLA



TPA2



FS (see FT BRO)



TPBR



TTPAD/TPTP/ATAPO

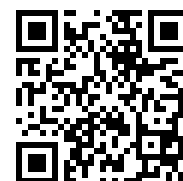
CHARACTERISTICS

- 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...

See technical data sheet:



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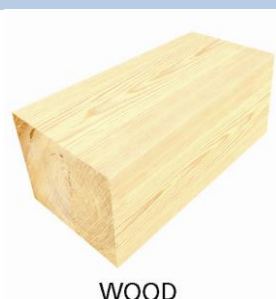
MATERIAL

ITEM	MATERIAL	COATING
TPPO, TPTO, TRPO	Special steel for heat treatment SAE J403 1022	Zinc plated yellow passivated $\geq 3 \mu\text{m}$ ISO 4042 A1L
TPPOZ, TPBR, TCLA, ABA, FS		Zinc plated $\geq 3 \mu\text{m}$ ISO 4042 A1J
TPA2	Stainless steel A2	---

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 dopbit, shields, etc.
ABA	Countersunk	Drill	Metal 60°	Ph	Zinc plated	Fixing wood >12 mm to a metallic profile
TCLA	Pan	Nail	Self tapping	Pz + slot	Zinc plated	Venetian-blind fastening.
FS	Hexagonal	Drill	Metal 60°	---	Zinc plated	Fixing metal plates to wood.

BASE MATERIAL



WOOD

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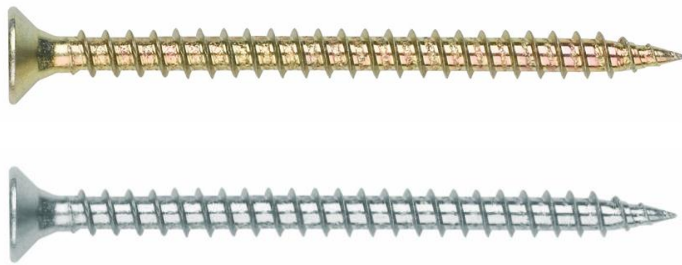
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1. TP-PO

Chipboard screw countersunk 90° head, thread 40°



Characteristics



Steel



Zinc plated yellow passivated



Zinc plated

Properties



Pz



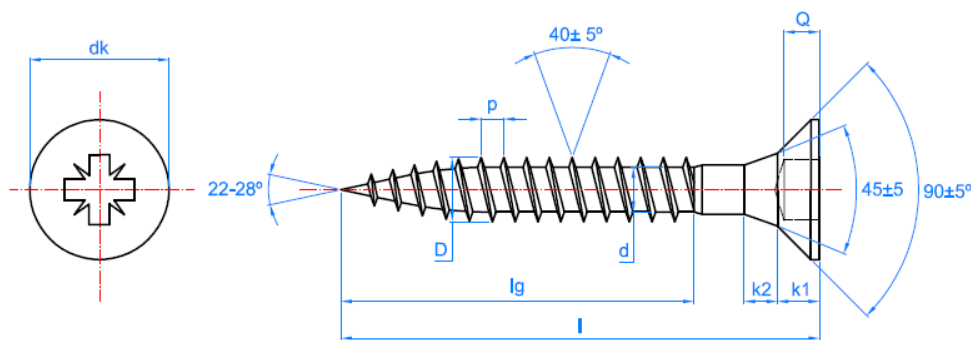
Countersunk head



S tip, pin

1.1. Data

Code		TPPO25	TPPO30	TPPO35	TPPO40	TPPO45	TPPO50	TPPO60
		TPPOZ25	TPPOZ30	TPPOZ35	TPPOZ40	TPPOZ45	TPPOZ50	TPPOZ60
dk: 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
lg: thread max length	[mm]	Full	Full	Full	60	60	60	60*
Pz recess		#1	#1	#2	#2	#2	#2	#3
Pz dopbit code		PUPOC01	PUPOC01	PUPOC02	PUPOC02	PUPOC02	PUPOC02	PUPOC03
		PUPOL01	PUPOL01	PUPOL02	PUPOL02	PUPOL02	PUPOL02	PUPOL03



*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.

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2. TP-TO

Chipboard screw 90° countersunk head, thread 40°

Characteristics



Steel



Zinc plated yellow passivated

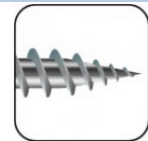
Properties



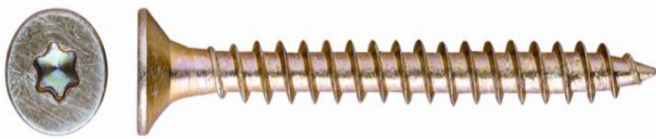
Hexalobular Tx



Countersunk head

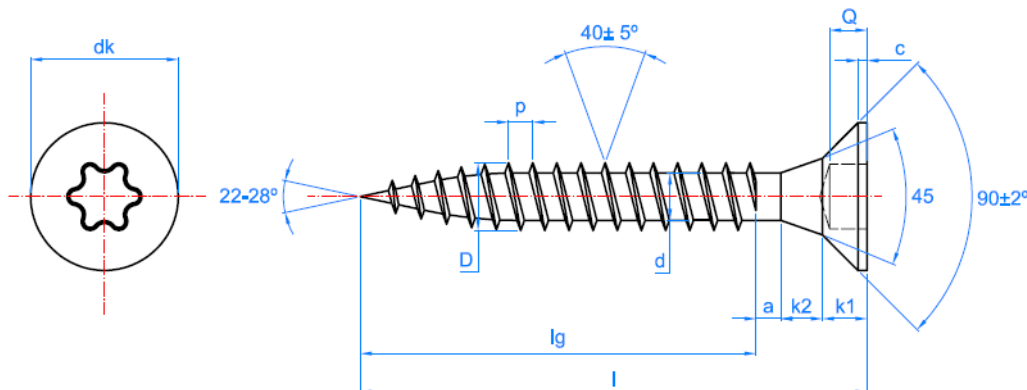


S tip, pin



2.1. Datos

Code		TPTO30	TPTO35	TPTO40	TPTO45	TPTO50	TPTO60
d_k : 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_g : thread max length	[mm]	Full	Full	60	60	60*	60**
Hexalobular Tx recess		#10	#15	#20	#20	#25	#30
Hexalobular Tx recess dopbit code		PUTO010	PUTO015	PUTO020	PUTO020	PUTO025	PUTO030



* 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.

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3. TP-A2

Chipboard screw countersunk 90° head, thread 40°

Characteristics



Stainless available

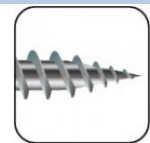
Properties



Pz



Countersunk head

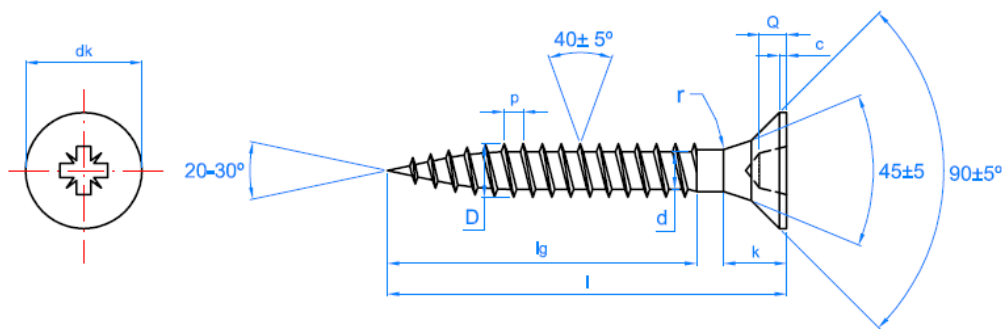


S tip, pin



3.1. Data

Code		TPA230	TPA235	TPA240	TPA245	TPA250
dk: 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
lg: thread max length	[mm]	Full	Full	Full	Full	50
Pz recess		#1	#2	#2	#2	#2
Pz dopbit code		PUPOC01 PUPOL01	PUPOC02 PUPOL02	PUPOC02 PUPOL02	PUPOC02 PUPOL02	PUPOC02 PUPOL02



- 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.

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4. TP-BR

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



Characteristics



Steel



Zinc plated

Properties



Pz



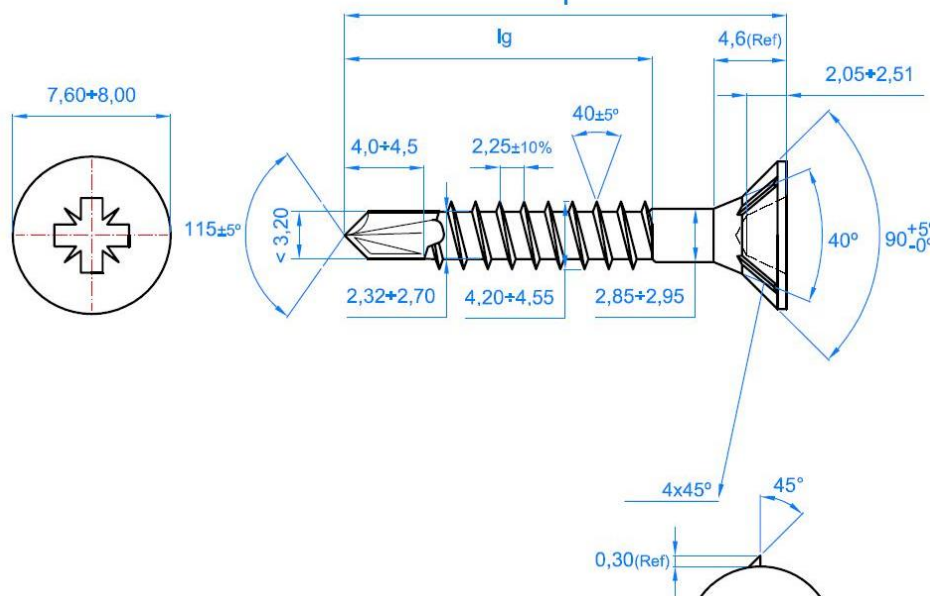
Countersunk head



Self drilling

4.1. Data

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



- 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:
 - o Fixing hard surface woods (melamine, etc.).
 - o Avoids damage in hard woods when drilling (American oak, etc.).
 - o Fixing metallic drilled connectors on wood near the edges.
 - o Fixing wood on wood near the edge.

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5. TR-PO

Chipboard screw panhead, thread 40°



Characteristics



Steel

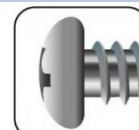


Zinc plated yellow passivated

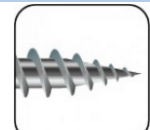
Properties



Pz



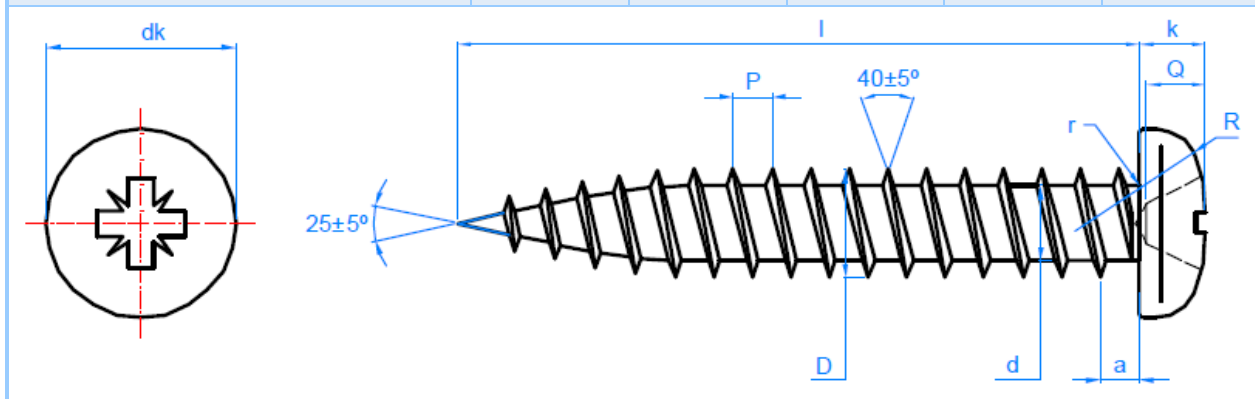
Panhead



S tip, pin

5.1. Data

Código		TRPO30	TRPO35	TRPO40	TRPO45	TRPO50
d_k : 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_g : 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



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

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6. ABA

Self drilling screw with wings, Ph countersunk head



Characteristics



Steel



Zinc plated



IPN wood

Properties



Ph



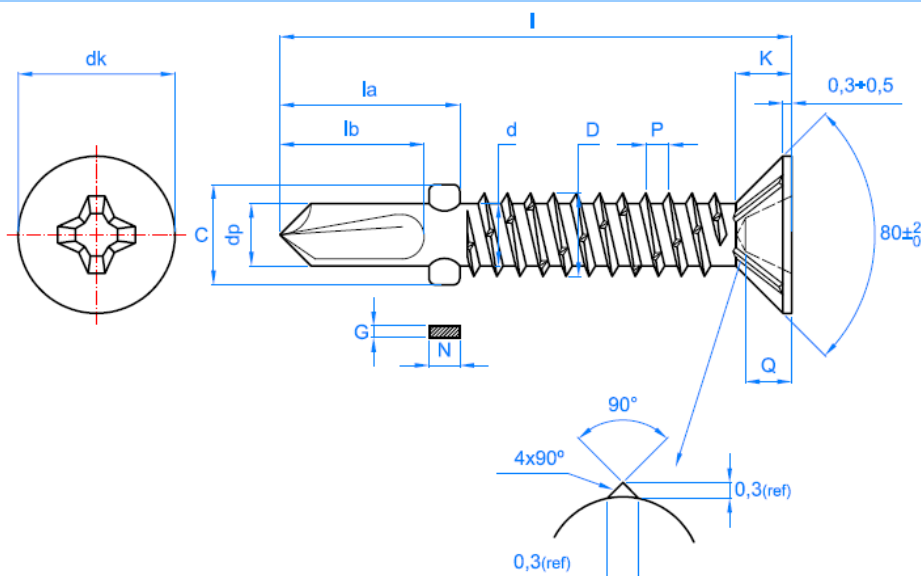
Countersunk head



Self drilling tip with wings

6.1. Data

Code		ST 4.8	ST 5.5	ST 6.3
d_k : head diameter	[mm]	9.50	10.80	12.40
k : head thickness	[mm]	3.15	4.27	4.81
Ph head		nº 2		
Countersunk angle	e	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
Ph dopbit code		PUPHC02 / PUPHL02		
Drill capacity	[mm]	1.75 - 4.00	1.75 - 5.00	2.50 - 6.00



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- 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.

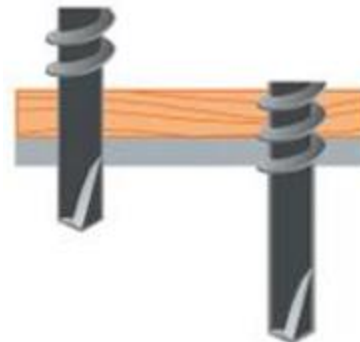
Take these precautions:

- 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.

- Drills the wood
- Wood ream + metal drill
- Threads in the metal plate.



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7. T-CLA

Nail screw for blinds



Characteristics



Steel



Zinc plated

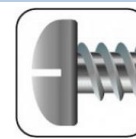


Hammer needed

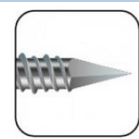
Properties



Pz with slot



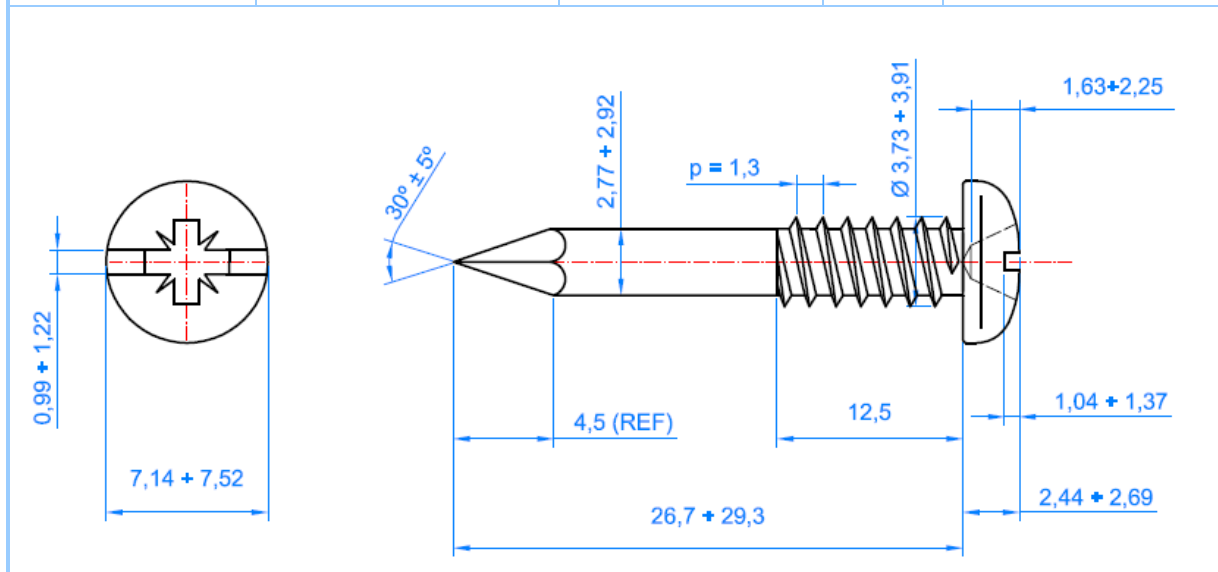
Panhead



Diamond tip

7.1. Data

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



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

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8. COLOURED CUPS FOR HEAD SCREWS

Available coloured cups to decorate head screws

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

- TPTPADBL: White
- TPTPADBE: Beige
- TPTPADGR: Grey
- TPTPADNE: Black
- TPTPADPI: Pine
- TPTPADRO: Oak
- TPTPADCA: Mahogany
- TPTPADNO: Walnut
- TPTPADHA: Beech
- TPTPADSA: Sapele
- TPTPADCE: Cherry wood



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

- TPTPBLA: White
- TPTPMAR: Brown



- **ATAPO:** Plastic cups for 8 and 10 mm. hexagonal heads

- ATAPOBO08/10: Oyster white
- ATAPOBP08/10: Pyrenees white
- ATAPOAR08/10: Sand
- ATAPOCB08/10: Bodasoa Crème
- ATAPOVN08/10: Navarre green
- ATAPOVC08/10: Light green
- ATAPOAL08/10: Lake blue
- ATAPORT08/10: Tile red
- ATAPORC08/10: Coral red



- **Application:**
Ornamental finish, avoiding the head of the screw to be seen when fixed on wood.