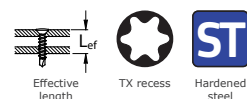
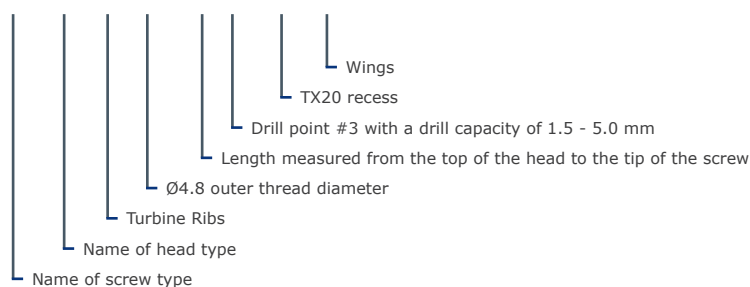


## WING DRILL SCREW

VBS CSH-TR 4.8 X L #3 TX20 W

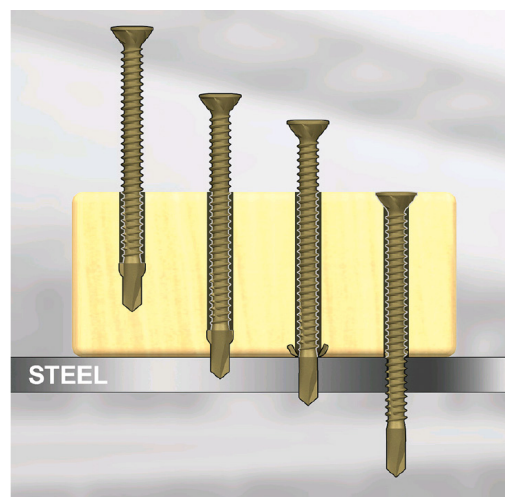


### PRODUCT RANGE

Art.no.	Item name	Thread [mm]	Length L [mm]	Effective length $L_{ef}$ [mm]	Drill point	Drill capacity [mm]	Head [mm]	Unit
285493	VINGBORRSKRUV 4.8X38 E-COAT BRK=100	Ø4.8	38	22.0	#3	1.5 - 5.0	Ø8.9 TX20	250
285494	VINGBORRSKRUV 4.8X50 E-COAT BRK=100		50	34.0				250
285495	VINGBORRSKRUV 4.8X65 E-COAT BRK=100		65	49.0				250

### ADVANTAGES

- **Horizon Curve™ Head** - A slight curvature of the head for elegant, professional results. The Finish Ring underneath the head also provides a better finish by cutting the top fibres in the wood for an extra step in countersinking.
- **Turbine Ribs™** - The Turbine Ribs cut quickly into the wood, leaving a professional, clean finish with maximum wood contact. The cup shaped countersinking head provides increased holding power and reduced risk of splitting.
- **Unique Wing Design** - The unique wing design is engineered to mill an oversize hole in the wood without breaking. As soon as the wings reach the steel, they easily break off, allowing the threads to tap into the steel base.
- **Superior Drill Point** - The drill point has been specifically engineered to penetrate the steel as fast as possible. The angle and shape of the point makes it possible to remove steel chips fast and efficiently to enhance penetration.



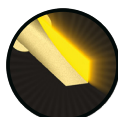
HORIZON CURVE™



TURBINE RIBS™



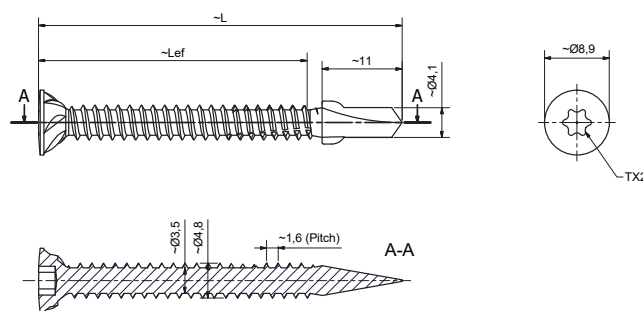
UNIQUE WING DESIGN



SUPERIOR DRILL POINT

## PRODUCT DATA

Technical data	
Head:	Ø8.9 mm countersunk head with Turbine Ribs and TX20 recess
Diameter:	Ø4.8 mm
Effective length:	$L_{ef} = L - 16.0$ mm
Drill point:	#3
Drill capacity:	1.5 - 5.0 mm (Steel S280GD)
Material:	Hardened steel
Surface treatment:	ZYTEC™ GX-Gold
Corrosivity category:	C3 according to EN ISO 12944-2



## DESIGN RESISTANCE

The design resistance of the screw is determined in accordance with EN 1993-1-3:2006 + AC:2009 and EN 1995-1-1:2004 + AC:2006 + A1:2008 + A2:2014.

The resistance when loaded in tension,  $N_{Rd}$ , appears from the table on the right and is the minimum value of the pull-out resistance of the supporting object, the pull-through resistance of the fixed object, and the tension resistance of the screw.

The theoretical values must be considered indicative since the conditions of the construction site may vary. Practical tests of the specific application are recommended for verification of the listed values.

### Assumptions:

Fixed object: Structural wood, C24

Density,  $\rho_k = 350$  kg/m<sup>3</sup>

Supporting object: Steel S280GD - EN 10346

$t_f$  = Thickness of the fixed object [mm]

$t_{II}$  = Thickness of the supporting object [mm]

All resistances are stated in kN (1 kN  $\approx$  100 kg)

Safety factor:  $\gamma_M = 1.35$ ,  $k_{mod} = 0.90$

Design resistance when loaded in tension, $N_{Rd}$ [kN]							
$t_f$ \ $t_{II}$	1.50	2.00	2.50	3.00	3.50	4.00	5.00
20	0.55	0.55	0.55	0.55	0.55	0.55	0.55
30	0.55	0.55	0.55	0.55	0.55	0.55	0.55
40	0.55	0.55	0.55	0.55	0.55	0.55	0.55