

PRODUCT DATASHEET

A5/A81 BI-METAL™ TEK SCREWS®



TEK 3

TEK 5

PRODUCT DETAILS

Purpose:	Fastening of various non-structural elements in extremely corrosive environments
Head style and drive:	5/16" (8mm) hexagonal (male) socket w/ flange
Thread form:	TEK 3 = Coarse w/ 1.81 mm pitch (14 TPI) TEK 5 = Fine w/ 1.06 mm pitch (24 TPI)
Materials:	Drilling point and lead thread = SCM 435 (hardened) Shank and head = EN 1.4529/ EN 1.45392 2
Coating:	≥ 5µm electrodeposited zinc
Washer:	Compression disc = 1.2mm stainless steel (SAE 316/ EN 1.4401) Sealing gasket = 3.0mm EPDM (inc. carbon for conductivity)
Installation RPM:	≥ 900 ≤ 1,800

GENERAL PHYSICAL CHARACTERISTICS

SKU	Nominal Dimensions, $d_{nom} \times L_{nom}$ (mm)	Effective Thread Length, L_{thread} (mm)	Drilling Point	Drilling Capacity, H_{cap} (mm)
A5BMBW5.5-38-3	5.5 x 38.0	24.0	TEK 3	1.2 - 4.0
A5BMBW5.5-50-3	5.5 x 50.0	36.0	TEK 3	1.2 - 4.0
A5BMBW5.5-38-5	5.5 x 38.0	12.0	TEK 5	4.0 - 12.5

TECHNICAL INFORMATION

Characteristic Withdrawal Resistance,
 N_{Rk} , from S355JR Steel (N)

Nominal Substrate Thickness, t_{nom} (mm)	TEK Point 3	TEK Point 5
1.2	1,700	N/A
1.6	2,100	N/A
2.0	2,500	N/A
2.5	3,200	N/A
3.0	4,300	N/A
4.0	5,500	6,300
5.0	N/A	7,800
6.0	N/A	9,600
8.0	N/A	9,600
10.0	N/A	9,600
12.5	N/A	9,600

Characteristic Lap-Shearing Resistance,
 V_{Rk} , in S355JR Steel (N)

Nominal Substrate Thickness, t_{nom} (mm)	TEK Point 3	TEK Point 5
1.2	1,500	N/A
1.6	1,800	N/A
2.0	2,400	N/A
2.5	3,000	N/A
3.0	3,600	N/A
4.0	4,900	4,400
5.0	N/A	5,500
6.0	N/A	7,500
8.0	N/A	7,500
10.0	N/A	7,500
12.5	N/A	7,500

GENERAL MECHANICAL PROPERTIES

Property	Drilling Point	
	TEK 3	TEK 5
Characteristic tensile capacity, $F_{ult,Rk}$ (N)	8,200	9,600
Characteristic shear capacity, $V_{ult,Rk}$ (N)	5,330	6,330
Characteristic torsional capacity, $\tau_{ult,Rk}$ (Nm)	9.80	9.20

NOTE: The results expressed in this document are determined from empirical testing. Specifiers, end-users and other third parties should make their own decision(s) on what safety factors to use relevant to their design(s)/ application(s). This document is provided, strictly: without prejudice, without recourse, without liability, non-assumptit, no assured value, errors and omissions excepted, subject to change without notice and all rights reserved.
 ©Evolution Fasteners UK Ltd, 2021.