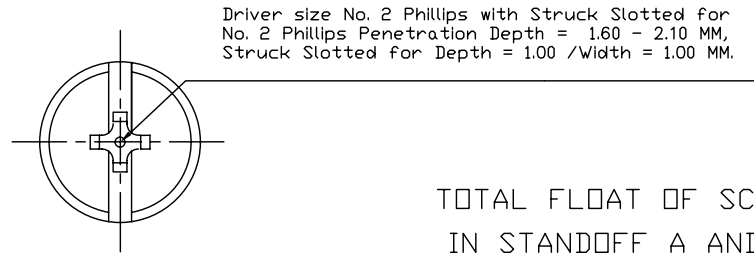


UNIT		MM		PART NO. = TENGL000082B				REVISIONS			
LTR	DESCRIPTION	DATE	APP.								



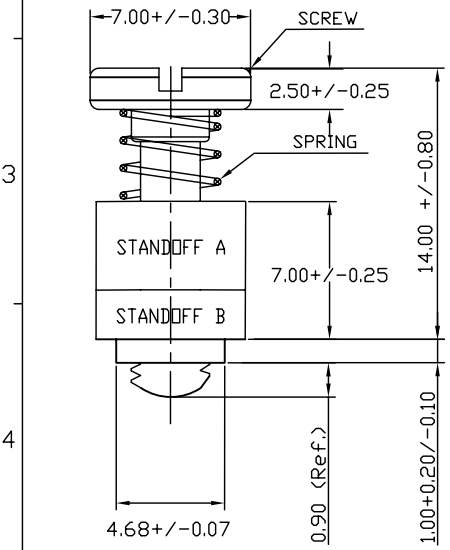
PANEL PREPARATION AND INSTALLATION

- NOTE :
- a) Spec.: 7.00x15.00 MM, W/D Knurled Head, Flare-In-Style, Captive-Fasteners.
 - b) Screw: C-1018 Carbon Steel, M3 x P.0.5 MM Thread + Hardened + Zinc CR 3+.
 - c) Spring : 304 Stainless Steel, Tinning.
 - d) A & B-Standoff : 6061 Aluminum, Plain.
 - e) Installation Force = 674 lbf (Ave.)
 - f) Pullout Force = 135 lbf (Ave.)
 - g) Recommended / Ultimate Tightening Screw Torque = 5.2 / 14 lbf-in.
 - h) Average Ultimate screw Tightening = 787 lbf (= 3500 N).
 - i) Sheet Hardness : HRB 55 (Max.), (For Cold-Rolled-Steel Used)
 - j) Panel Hole Diameter : 4.82 +/- 0.01 MM
 - k) Thickness Of Steel-Plate : 0.8/1.0 MM
 - l) Being Accompanied By European RoHS Latest Standard In 2,011.

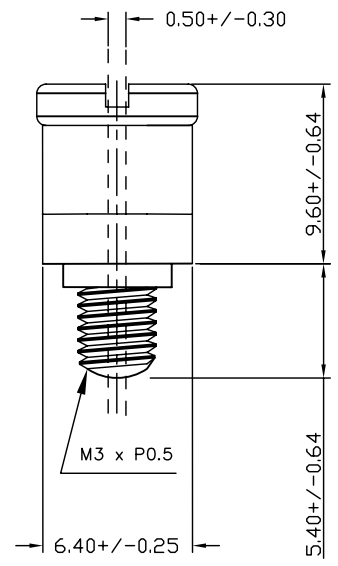
TOTAL FLOAT OF SCREW IN STANDOFF A AND B

SMOOTH FACE PUNCH

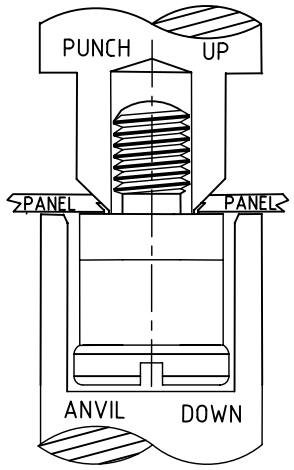
Clearance Hole = 3.12-3.20



UNFASTENED



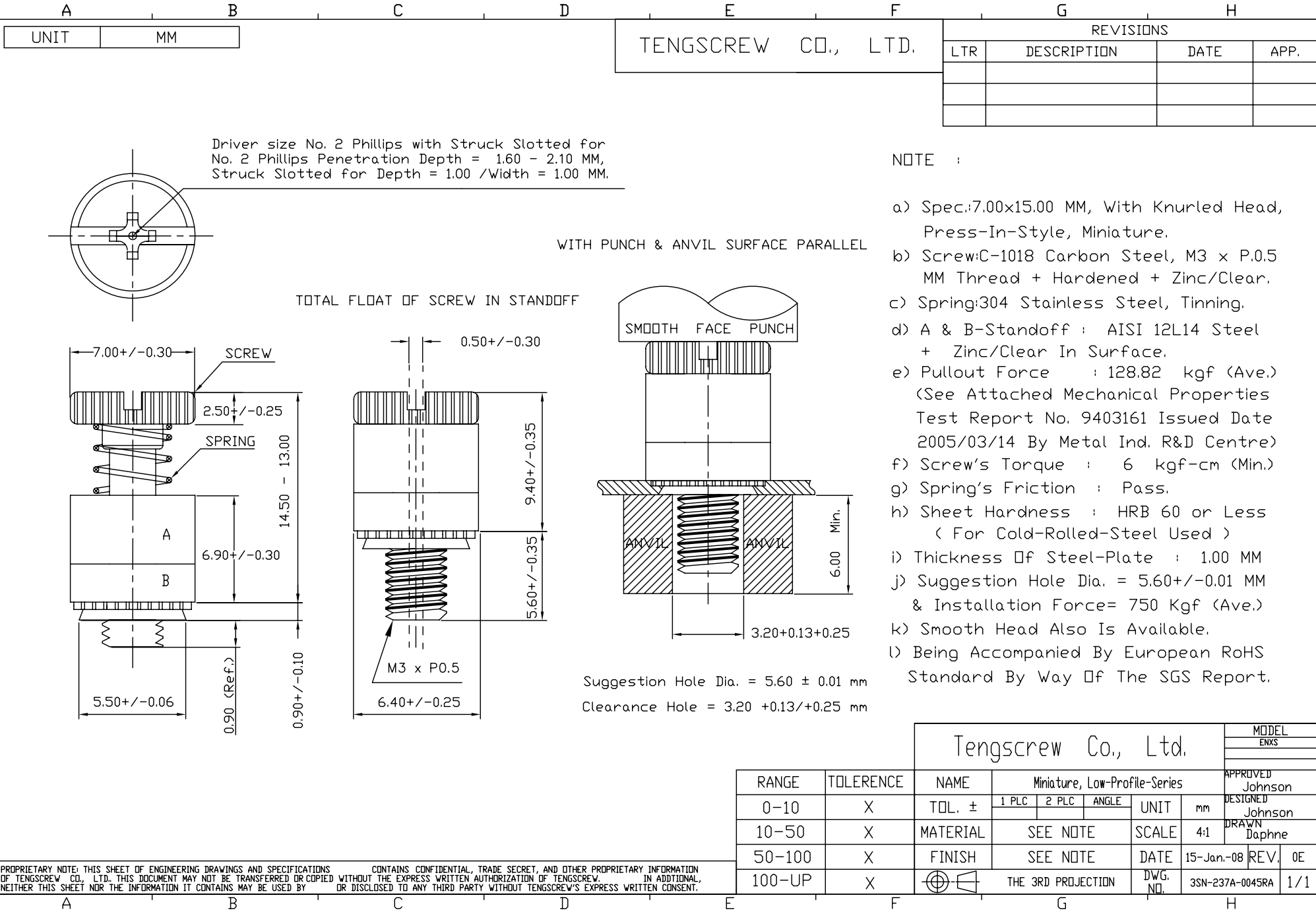
FASTENED



SOLID BACK-UP TOOL

Tengscrew Co., Ltd.						APPROVAL NO.	
						TAIPEI DATE	
NAME Flare-In-Style, Captive-Fasteners						APPROVED Johnson	
TOL. ±		1 PLC	2 PLC	ANGLE	UNIT mm	DESIGNED Tommy	
CLIENT				SCALE 4:1	DRAWN Tommy		
DWG. & P/N				DATE 21-MAY-2011	REV. 0C		
THE 3RD PROJECTION				DWG. NO. TENGL000082B	1/1		

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Driver size No. 2 Phillips with Struck Slotted for No. 2 Phillips Penetration Depth = 1.60 - 2.10 MM, Struck Slotted for Depth = 1.00 /Width = 1.00 MM.

WITH PUNCH & ANVIL SURFACE PARALLEL

TOTAL FLOAT OF SCREW IN STANDOFF

NOTE :

- a) Spec.:7.00x15.00 MM, With Knurled Head, Press-In-Style, Miniature.
- b) Screw:C-1018 Carbon Steel, M3 x P.0.5 MM Thread + Hardened + Zinc/Clear.
- c) Spring:304 Stainless Steel, Tinning.
- d) A & B-Standoff : AISI 12L14 Steel + Zinc/Clear In Surface.
- e) Pullout Force : 128.82 kgf (Ave.) (See Attached Mechanical Properties Test Report No. 9403161 Issued Date 2005/03/14 By Metal Ind. R&D Centre)
- f) Screw's Torque : 6 kgf-cm (Min.)
- g) Spring's Friction : Pass.
- h) Sheet Hardness : HRB 60 or Less (For Cold-Rolled-Steel Used)
- i) Thickness Of Steel-Plate : 1.00 MM
- j) Suggestion Hole Dia. = 5.60 +/- 0.01 MM & Installation Force= 750 Kgf (Ave.)
- k) Smooth Head Also Is Available.
- l) Being Accompanied By European RoHS Standard By Way Of The SGS Report.

Suggestion Hole Dia. = 5.60 ± 0.01 mm
Clearance Hole = 3.20 +0.13/+0.25 mm

Tengscrew Co., Ltd.

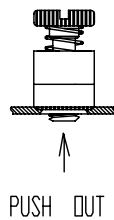
RANGE	TOLERANCE	NAME	Miniature, Low-Profile-Series			UNIT	mm	APPROVED	MODEL
0-10	X	TOL. ±	1 PLC	2 PLC	ANGLE		Johnson <td>ENXS</td>	ENXS	
10-50	X	MATERIAL	SEE NOTE			SCALE	4:1	DESIGNED	Johnson
50-100	X	FINISH	SEE NOTE			DATE	15-Jan-08	DRAWN	Daphne
100-UP	X	THE 3RD PROJECTION				DWG. NO.	3SN-237A-0045RA	REV.	0E

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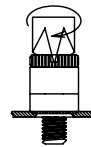
TENGSCREW & SOUTHCO PERFORMANCE GUIDELINES FOR COMPARISON LIST

THE PERFORMANCE GUIDELINES SHOWN ON THIS PAGE ARE SUPPLIED AS A GENERAL GUIDE ONLY. AS CONDITIONS VARY WITH EACH APPLICATION AND METHOD OF INSTALLATION. STRENGTH DATA GIVEN IS FOR FAILURE OF THE PRODUCT OR FOR SUFFICIENT DEFORMATION TO MAKE THE PRODUCT INOPERABLE. NO SAFETY FACTOR HAS BEEN APPLIED. IT IS RECOMMENDED THAT THE USER REQUEST A PRODUCT SAMPLE FOR TESTING TO DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE PURPOSE INTENDED AND USER'S PARTICULAR APPLICATION. (THIS COMPARISON LIST BETWEEN TENGSCREW & SOUTHCO ARE ONLY FOR YOUR INNER REFERENCES)

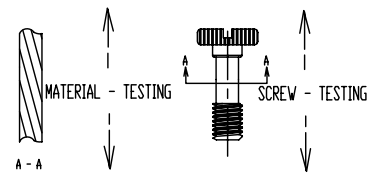
- a) ATTACHED RIGHT DRAWING BY PRESS-IN STYLE SHOWN
- b) SPEC. : MINIATURE, LOW PROFILE FASTENERS, 7.00 x 15.00 MM, WITH KNURLED HEAD, ZINC PLATED.
- c) PRESS-IN ASSEMBLIES WERE INSTALLED AND TESTED IN ABOVE THICK COLD ROLLED STEEL PANELS.
- d) FAILURE OCCURED IN SCREW PUSHING OUT OF THE ASSEMBLY OR FERRULE PUSHING OUT OF THE PANEL.
- e) FAILURE OCCURED IN BREAKING OF THE SCREW SHANK.
- f) FAILURE OCCURED IN SPRING'S RUN OUT AND TYING OVER FERRULE & SCREW'S HEAD & IN FERRULE HOLE.



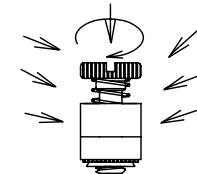
INCLUDING TIGHTENING TORQUE & FRICTION



TIGHTENING TORQUE



TENSILE FORCE



SALT SPRAY

UNECC ASSEMBLY PART NUMBER	SCREW SIZE PLATE THICKNESS (STEEL MAX. HRB 60)	AVERAGE INSTALLATION FORCE KGF	AVERAGE PUSH OUT FORCE KGF	RECOMMENDED TIGHTENING TORQUE KGF-CM	ULTIMATE TIGHTENING TORQUE KGF-CM	AVERAGE ULTIMATE TENSILE FORCE KGF	AVERAGE ULTIMATE SALT SPRAY KEEP ON 12 HOURS
				TIGHTENING FRICTION KGF	TIGHTENING FRICTION KGF		
TENGSCREW 3SN-237A-0045RA	M 3 x P. 0.50 MM	PUSH OUT TESTING PLEASE SEE TEST REPORT NO. 9403161		TIGHTENING TORQUE / FRICTION TESTING PLEASE SEE TEST REPORT NO. 9402142-1		TENSILE FORCE TESTING PLEASE SEE TEST REPORT NO. 9404278 & 9404273	
	1.00 MM	1,650	128.82	6.00	16.00	366 (SCREW)/292 (M'TLS)	
SOUTHCO 3SN-237A-0045RA	M 3 x P. 0.50 MM	PUSH OUT TESTING BY DRAWING NUMBER TD - 52 - 3 - J		TIGHTENING TORQUE ONLY TESTING BY DRAWING NUMBER TD - 52 - 3 - J		TENSILE FORCE TESTING BY DRAWING NUMBER TD - 52 - 3 - J	
	0.90 MM	1,022	102.30	6.00	15.96	358 (SCREW ONLY)	

REVISIONS			
LTR	DESCRIPTION	DATE	APP.

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Tengscrew Co., Ltd.										MODEL ENXS
RANGE	TOLERANCE	NAME	Miniature, Low-Profile-Fasteners				APPROVED Johnson			
0-10	X	TOL. ±	1 PLC	2 PLC	ANGLE	UNIT	mm	DESIGNED Johnson		
10-50	X	MATERIAL	SEE REPORT NO.		SCALE	2:1	DRAWN Daphne			
50-100	X	FINISH	ZINC PLATED		DATE	06-JUNE-06	REV. 0B			
100-UP	X		THE 3RD PROJECTION		DWG. NO.	3SN-237A-0045RA	1/1			