



GST NO.: 29AHZPU5620Q1ZZ

An ISO 9001:2015 Certified Company

# ROYAL INDUSTRIAL SUPPLIERS

QUALITY FASTENERS SPECIALIST



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## TECHNICAL DATA SHEET

### SELF CLINCHING STUD



MATERIAL- STAINLESS STEEL

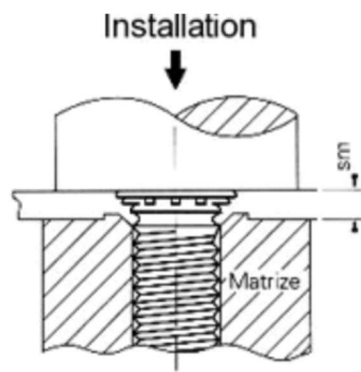
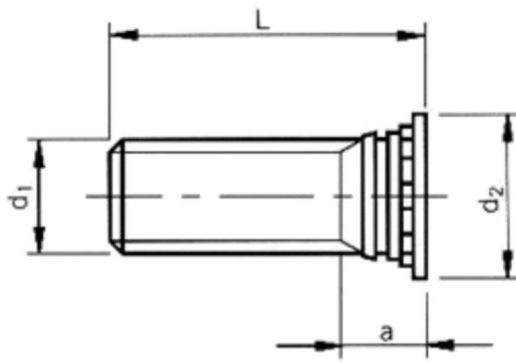
GRADE-SS304 (A2-70)

AS PER-NON-STANDARD

CATALOGUE NO. R4S18

### INSTALLATION GUIDE

- VERIFY THE STUD SIZE, THREAD TYPE, LENGTH, AND MATERIAL MATCH THE APPLICATION REQUIREMENT.
- ENSURE THE BASE MATERIAL IS DUCTILE AND SUITABLE FOR SELF CLINCHING INSTALLATION.
- PUNCH OR DRILL THE MOUNTING HOLE TO THE SPECIFIED DIAMETER AND TOLERANCE.
- CONFIRM THE HOLE IS ROUND, CLEAN, AND FREE FROM BURRS OR CONTAMINATION.
- INSERT THE SELF CLINCHING STUD INTO THE HOLE FROM THE CORRECT INSTALLATION SIDE.
- ENSURE THE STUD HEAD IS FULLY SEATED AGAINST THE BASE MATERIAL SURFACE.
- USE A FLAT, PARALLEL PRESS TOOL OR HYDRAULIC PRESS FOR INSTALLATION.
- APPLY STEADY, AXIAL PRESS FORCE WITHOUT ROTATION.
- ALLOW THE BASE MATERIAL TO FLOW INTO THE STUD'S UNDERCUT GROOVE.
- DO NOT HAMMER OR APPLY IMPACT FORCE DURING INSTALLATION.
- VERIFY THE STUD SHOULDER IS FLUSH WITH THE BASE MATERIAL SURFACE.
- CHECK THAT THE STUD DOES NOT SPIN OR PULL OUT AFTER INSTALLATION.
- AVOID OVER-PRESSING TO PREVENT PANEL DISTORTION OR STUD DAMAGE.
- ENSURE THREADS ARE CLEAN AND UNDAMAGED AFTER INSTALLATION.
- INSPECT THE FINAL ASSEMBLY FOR ALIGNMENT, HOLDING STRENGTH, AND SURFACE FLATNESS.



**NOTE: FOR USE IN STEEL SHEES (HRB MAX 70)**

Size →	M2x0.4	M2.5x0.45	M3x0.5	M3.5x0.6	M4x0.7	M5x0.8	M6x1.0	M8x1.25
a max	1.95	1.95	2.10	2.25	2.40	2.70	3.00	3.70
d2 ±0.4	3.50	4.10	4.60	5.30	5.90	6.50	8.20	9.60
Hole size in sheet +.08	2.00	2.50	3.00	3.50	4.00	5.00	6.00	8.00
Min sheet Thickness	1.00	1.00	1.00	1.00	1.00	1.00	1.60	2.40
Hole centre To edge min	5.20	5.40	5.60	6.40	7.20	7.20	7.90	9.60

Quote the PART NUMBER given below with your order/ inquiries:

All Dimensions in mm

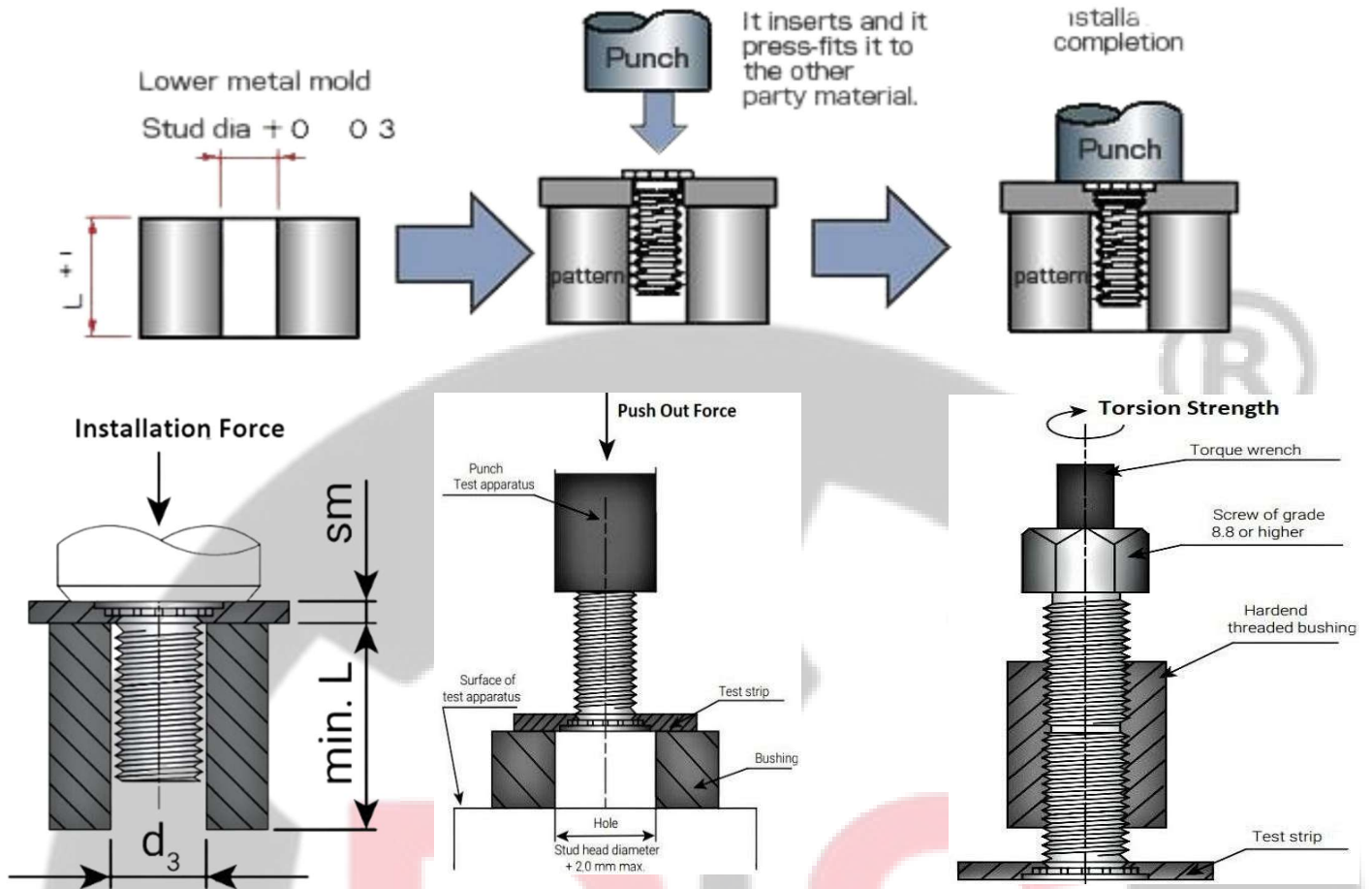
Length ± 0.4↓	M2x0.4	M2.5x0.45	M3x0.5	M3.5x0.6	M4x0.7	M5x0.8	M6x1.0	M8x1.25
4	R4S1802004	R4S1820504	R4S1803004	R4S1830504	R4S1804004	R4S1805004		
5	R4S1802005	R4S1820505	R4S1803005	R4S1830505	R4S1804005	R4S1805005		
6	R4S1802006	R4S1820506	R4S1803006	R4S1830506	R4S1804006	R4S1805006	R4S1806006	
8	R4S1802008	R4S1820508	R4S1803008	R4S1830508	R4S1804008	R4S1805008	R4S1806008	
10	R4S1802010	R4S1820510	R4S1803010	R4S1830510	R4S1804010	R4S1805010	R4S1806010	R4S1808010
12	R4S1802012	R4S1820512	R4S1803012	R4S1830512	R4S1804012	R4S1805012	R4S1806012	R4S1808012
15	R4S1802015	R4S1820515	R4S1803015	R4S1830515	R4S1804015	R4S1805015	R4S1806015	R4S1808015
18	R4S1802018	R4S1820518	R4S1803018	R4S1830518	R4S1804018	R4S1805018	R4S1806018	R4S1808018
20	R4S1802020	R4S1820520	R4S1803020	R4S1830520	R4S1804020	R4S1805020	R4S1806020	R4S1808020
22	R4S1802022	R4S1820522	R4S1803022	R4S1830522	R4S1804022	R4S1805022	R4S1806022	R4S1808022
25	R4S1802025	R4S1820525	R4S1803025	R4S1830525	R4S1804025	R4S1805025	R4S1806025	R4S1808025
30		R4S1820530	R4S1803030	R4S1830530	R4S1804030	R4S1805030	R4S1806030	R4S1808030
35			R4S1803035	R4S1830535	R4S1804035	R4S1805035	R4S1806035	R4S1808035
40			R4S1803040	R4S1830540	R4S1804040	R4S1805040	R4S1806040	R4S1808040
45						R4S1805045	R4S1806045	R4S1808045
50						R4S1805050	R4S1806050	R4S1808050

Sizes in BLUE are non-preferred. Availability is limited and MOQ is applied. *Data is strictly informative*

Note: All Austenitic Stainless-Steel Fasteners may exhibit some Magnetic Properties due to the Manufacturing Process.

Refer: ISO 3506-2 Annex F

# MECHANICAL PROPERTIES



Test Sheet Material	Test Sheet Thickness & Hardness	
AL - Aluminum	1.6 mm 29 HRB	2.4 mm 28 HRB
ST - Steel	1.5 mm 59 HRB	2.2 mm 46 HRB

Size →		M2x0.4	M2.5x0.45	M3x0.5	M3.5x0.6	M4x0.7	M5x0.8	M6x1.0	M8x1.25
		Nut tightening torque Max Nm		0.30	0.41	0.74	1.15	1.70	2.40
AL	Press-in Force (Installation) kN	6.10	11.60	12.90	15.60	22.30	24.50	28.90	29.80
ST		8.20	13.80	14.70	22.30	26.70	32.50	44.50	49.80
AL	Push-out Force N	360	460	590	785	960	1050	1640	1880
ST		480	730	810	1320	1760	1980	2540	2860
AL	Torsional Strength Nm	0.45	0.80	1.30	1.70	2.90	3.50	7.30	11.30
ST					2.00				
AL	Pull thru resistance N	1300	1820	2570	3440	4180	4760	9090	9540
ST				2440		4770	6000	10600	13630

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Refer: ISO 3506-2 Annex F