

NAAMS Components

PRODUCT NAME Locating Pins – Standard / Configurable APS / ARP / APQ	PRODUCT NAME Locating Pins – Configurable APFL / APFS	PRODUCT NAME Locating Pins, 2 Flats – Standard / Configurable APE / ARE	PRODUCT NAME Locating Pins, 4 Flats – Configurable APFES / APFEL
PAGE NUMBERS 1847–1852	PAGE NUMBERS 1853–1854	PAGE NUMBERS 1855–1857	PAGE NUMBERS 1858–1859
PRODUCT NAME Locating Pins – Configurable, 2 Diameter APFSS / APFSL	PRODUCT NAME Pin Retainers – Standard / Configurable Side hole and Face hole APR	PRODUCT NAME Locating Pins – Retractable, Standard / Configurable APS / ARP / APQ	PRODUCT NAME Locating Pins, 2 Flats – Retractable, Standard / Configurable APE / ARE
PAGE NUMBERS 1860–1861	PAGE NUMBERS 1862–1872	PAGE NUMBERS 1873–1878	PAGE NUMBERS 1879–1882
PRODUCT NAME Locating Pins – Retractable, Configurable ARFS / ARFL	PRODUCT NAME Locating Pins, 4 Flats – Retractable, Configurable ARFERS / ARFESS / ARFERL / ARFESL	PRODUCT NAME L-Blocks – Standard / Configurable ALB	PRODUCT NAME Shims – Construction/ Metric Fitting ACH6/ ASH Series
PAGE NUMBERS 1883–1884	PAGE NUMBERS 1885–1886	PAGE NUMBERS 1887–1898	PAGE NUMBERS 1899–1907
PRODUCT NAME Spacers – Construction/ Metric Fitting / for Shock Bracket ACS3S / ACS6 ASP Series	PRODUCT NAME Risers – Standard AAB / ARA	PRODUCT NAME NC Blocks – Standard, I / L / Rectangular Blocks ANI, ANL, ANR	PRODUCT NAME Rough Locators – Standard, I / L Shape ARL
PAGE NUMBERS 1908–1919	PAGE NUMBERS 1920–1921	PAGE NUMBERS 1922–1930	PAGE NUMBERS 1931–1936
PRODUCT NAME Socket Head Screw – F01, F02, F02, F04 Series	PRODUCT NAME Hex Head Screw – F05 Series	PRODUCT NAME Socket Set Screw – F21, F22, F23 Series	PRODUCT NAME Hexagon Nut – F39, F42, F45, F46, F47 Series
PAGE NUMBERS 1938–1950	PAGE NUMBERS 1951–1955	PAGE NUMBERS 1956–1957	PAGE NUMBERS 1958–1959
PRODUCT NAME Hardened Washer – F62 Series	PRODUCT NAME Pull Dowel Pin – F91 Series	PRODUCT NAME Leveling Screws Assemblies – ABS100 / ABS150	
PAGE NUMBERS 1960	PAGE NUMBERS 1960–1961	PAGE NUMBERS 1962	

Locating Pins

APS Standard / A Configurable Small Head

Type	Coating	Material	Hardness
APS	Standard NAAMS None – Plain T – TiN	8620 Alloy Steel (JIS SNCM220)	Carburized 58 – 62HRC (Depth 0.5–0.7 after Grinding)
APSS	A Configurable P – Plain T – TiN R – Rainbow DLC		
M2APS	Standard NAAMS None – Plain D – Rainbow DLC	M2 Tool Steel (JIS SKH51)	Thru hardened 58–65 HRC (with drawn shank >35 HRC)
M2APSS	A Configurable P – Plain R – Rainbow DLC		

Tolerance				
Dim.	Tol.	Finish (Ra)	Geometric	
0.0	±0.03	6.0 µm	⊥	0.015 T.I.R to Datum A & B
0.00	±0.015	3.0 µm	∥	
0.000	±0.015	1.6 µm	⊙	0.03 T.I.R

Tip Shape Selection		
A Shape	Bullet	
B Shape	Half Bullet	
C Shape	Sphere	

$$L \text{ ref.} = 28 + A + B + \sqrt{(C - B)^2 - \left(C - \frac{D}{2}\right)^2}$$

Type	D Head Dia. Callout (Actual)	A Lead Length										Coating	B Rad	C Rad
		15 mm	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm	80 mm	90 mm	100 mm			
APS M2APS (Hole - 0.15)	06 (5.85)	1M	2M	3M	4M	5M	6M	—	—	—	—	None – Plain T – TiN (not available on M2 Pins) D – Rainbow DLC (Only for M2 Pins)	1.0	18.0
	08 (7.85)	1M	2M	3M	4M	5M	6M	7M	8M	—	—		1.0	24.0
	10 (9.85)	1M	2M	3M	4M	5M	6M	7M	8M	9M	0M		2.0	30.0
	12 (11.85)	1M	2M	3M	4M	5M	6M	7M	8M	9M	0M		2.0	36.0
	13 (12.85)	1M	2M	3M	4M	5M	6M	7M	8M	9M	0M		2.0	39.0
16 (15.85)	1M	2M	3M	4M	5M	6M	7M	8M	9M	0M	2.0	48.0		
19 (18.85)	1M	2M	3M	4M	5M	6M	7M	8M	9M	0M	2.0	38.0		

Standard NAAMS specifications are controlled by the NAAMS organization and the latest version of these products will be produced in compliance to: www.naamsstandards.org.

Type	Coating	Tip Shape	D Head Dia. Callout (Actual)	A Lead Length (1 mm Inc.)	B Rad	C Rad		
						Tip A	Tip B	Tip C
APSS M2APSS (Hole - 0.15)	P – Plain T – TiN R – Rainbow DLC	A B C	06 (5.85)	10–60	1.0	18.0	9.0	D/2
			08 (7.85)	10–80		24.0	12.0	
			10 (9.85)	10–100	30.0	15.0		
			12 (11.85)		36.0	18.0		
			13 (12.85)		39.0	19.5		
16 (15.85)	48.0	24.0						
19 (18.85)	38.0	19.0						

Part Number Example

Standard
Type - D - A - Coating
APS - 19 - 2M
APSS - 08 - 4M - T
M2APS - 08 - 4M
M2APSS - 08 - 4M - D

Configurable

Type - Coating - Tip Shape - D - A
APSS - P - B - 16 - A95
APSS - T - A - 08 - A25
M2APSS - P - C - 16 - A85
M2APSS - R - A - 08 - A30

