

# Locating Pins

## APS-R Large Head

3D CAD is available online.

Type	Coating	Material	Hardness
APS	Standard NAAMS None - Plain T - TiN	8620 Alloy Steel (JIS SNCM220)	Carburized 58-62 HRC min. (Depth 0.5-0.7 after Grinding)
APSRL	A Configurable P - Plain T - TiN		

Tolerance			
Dim.	Tol.	Finish (Ra)	Geometric
0.0	±0.3	6.0 μm	⊥ 0.015 T.I.R to Datum A & B
0.00	±0.03	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	

$$L \text{ ref.} = 48 + A + \sqrt{D \left( C - \frac{D}{4} \right)}$$

Standard NAAMS Pins															
Type	D Head Callout	A Lead Length										Retractable	Coating (Optional)	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	19 (18.85)	1	2	3	4	5	6	7	8	9	0	R - Retractable	None - Plain T - TiN	2.0	38.0
	25 (24.85)	1	2	3	4	5	6	7	8	9	0				50.0

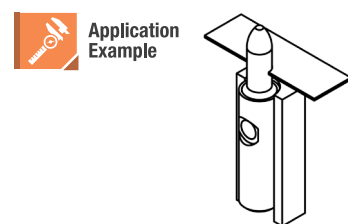
Standard NAAMS specifications are controlled by the NAAMS organization and the latest version of these products will be produced in compliance to: [www.naamsstandards.org](http://www.naamsstandards.org).

Configurable NAAMS (A Configurable)								
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
APSRL	P - Plain T - TiN	A B C	19 (18.85)	5-100	2.0	38.0	19.0	D/2
			25 (24.85)			50.0	25.0	

**Part Number Example**

Standard  
Part Number - D - A - Retractable - Coating  
APS - 19 - 4 - R - T

Configurable  
Part Number - Coating - Tip Shape - D - A  
APSRL - T - A - 19 - A42



# Respot Pins

## ARP-R Small Head

3D CAD is available online.

Type	Coating	Material	Hardness
ARP	Standard NAAMS None - Plain T - TiN	8620 Alloy Steel (JIS SNCM220)	Carburized 58-62 HRC min. (Depth 0.5-0.7 after Grinding)
ARPRS	A Configurable P - Plain T - TiN		

Tolerance			
Dim.	Tol.	Finish (Ra)	Geometric
0.0	±0.3	6.0 μm	⊥ 0.015 T.I.R to Datum A & B
0.00	±0.03	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	

$$L \text{ ref.} = 53 + A + \sqrt{D \left( C - \frac{D}{4} \right)}$$

Standard NAAMS Pins															
Type	D Head Dia. Callout (Actual)	A Lead Length										Retractable	Coating	B Rad	C Rad
		10 mm	15 mm	25 mm	35 mm	45 mm	55 mm	65 mm	75 mm	85 mm	95 mm				
ARP	06 (5.72)	1	2	3	4	5	6	-	-	-	-	R - Retractable	None - Plain T - TiN	1.0	18.0
	08 (7.72)	1	2	3	4	5	6	7	8	-	-				24.0
	10 (9.72)	1	2	3	4	5	6	7	8	9	0			2.0	30.0
	13 (12.72)	1	2	3	4	5	6	7	8	9	0				39.0
	16 (15.72)	1	2	3	4	5	6	7	8	9	0				48.0

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Configurable NAAMS (A Configurable)								
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
ARPRS	P - Plain T - TiN	A B C	06 (5.72)	5-55	1.0	18.0	9.0	D/2
			08 (7.72)			24.0	12.0	
			10 (9.72)	5-100	2.0	30.0	15.0	
			13 (12.72)			39.0	19.5	
			16 (15.72)			48.0	24.0	

**Part Number Example**

Standard  
Part Number - D - A - Retractable - Coating  
ARP - 08 - 4 - R - T

Configurable  
Part Number - Coating - Tip Shape - D - A  
ARPRS - T - A - 8 - A42

