

Respot Pins

ARP Standard / A Configurable Large Head

Type	Coating	Material	Hardness
ARP	None - Plain T - TiN	8620 Alloy Steel (JIS SNCM220)	Carburized 58 - 62HRC (Depth 0.5-0.7 after Grinding)
ARPL	P - Plain T - TiN R - Rainbow DLC		
M2ARP	None - Plain D - Rainbow DLC	M2 Tool Steel (JIS SKH51)	Thru hardened 58-65 HRC (with drawn shank >35 HRC)
M2ARPL	P - Plain R - Rainbow DLC		

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

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

3D CAD is available online.

Standard NAAMS														
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			
ARP M2ARP (Hole - 0.28)	25 (24.72)	1M	2M	3M	4M	5M	6M	7M	8M	9M	0M	None - Plain T - TiN (not available on M2 Pins) D - Rainbow DLC (Only for M2 Pins)	2.0	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.

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
ARPL M2ARPL (Hole - 0.28)	P - Plain T - TiN (not available on M2 Pins) R - Rainbow DLC	A B C	25 (24.72)	10-100	2.0	50.0	25.0	D/2

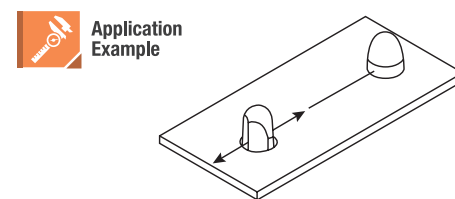
Part Number Example

Standard

Type	D	A	Coating
ARP	25	6M	
ARP	25	4M	T
M2ARP	25	6M	
M2ARP	25	8M	D

Configurable

Type	Coating	Tip Shape	D Callout	A
ARPL	P	A	25	A42
ARPL	T	B	25	A79
M2ARPL	P	A	25	A76
M2ARPL	R	B	25	A54



Locating Pins

APQ Standard / A Configurable Small Head

Type	Coating	Material	Hardness
APQ	None - Plain T - TiN	8620 Alloy Steel (JIS SNCM220)	Carburized 58 - 62HRC (Depth 0.5-0.7 after Grinding)
APQS	P - Plain T - TiN R - Rainbow DLC		
M2APQ	None - Plain D - Rainbow DLC	M2 Tool Steel (JIS SKH51)	Thru hardened 58-65 HRC (with drawn shank >35 HRC)
M2APQS	P - Plain R - Rainbow DLC		

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

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

3D CAD is available online.

Standard NAAMS												
Type	D Head Dia.	A Lead Length								Coating	B Rad	C Rad
		15 mm	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm	80 mm			
APQ M2APQ	08	1	2	3	4	5	6	—	—	None - Plain T - TiN (not available on M2 Pins) D - Rainbow DLC (Only for M2 Pins)	1.0	24.0
	10	1	2	3	4	5	6	7	8		1.0	30.0
	13	1	2	3	4	5	6	7	8		2.0	30.0
	16	1	2	3	4	5	6	7	8		2.0	48.0
	18	1	2	3	4	5	6	7	8		2.0	38.0
20	1	2	3	4	5	6	7	8	2.0	38.0		

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Configurable NAAMS (A Configurable)								
Type	Coating	Tip Shape	D Head Dia.	A Lead Length (1 mm Inc.)	B Rad	C Rad		
						Tip A	Tip B	Tip C
APQS M2APQS	P - Plain T - TiN (not available on M2 Pins) R - Rainbow DLC	A B C	08	10-80	1.0	24.0	12.0	D/2
			10			30.0	15.0	
			13			30.0	15.0	
			16			48.0	24.0	
			18			38.0	19.0	
20	38.0	19.0						

Part Number Example

Standard

Type	D	A	Coating
APQ	18	2	
APQ	08	4	T
M2APQ	06	4	
M2APQ	08	6	D

Configurable

Type	Coating	Tip Shape	D	A
APQS	P	B	16	A42
APQS	T	A	20	A75
M2APQS	P	C	16	A65
M2APQS	R	A	8	A30

