

STANDARD PIN RETAINERS

I Series

I-3 Facehole

I-3 Sidehole

I-4 Sidehole

L Series

L-3 Facehole

L-3 Sidehole

L-4 Facehole

L-4 Sidehole

32-34

32

33

34

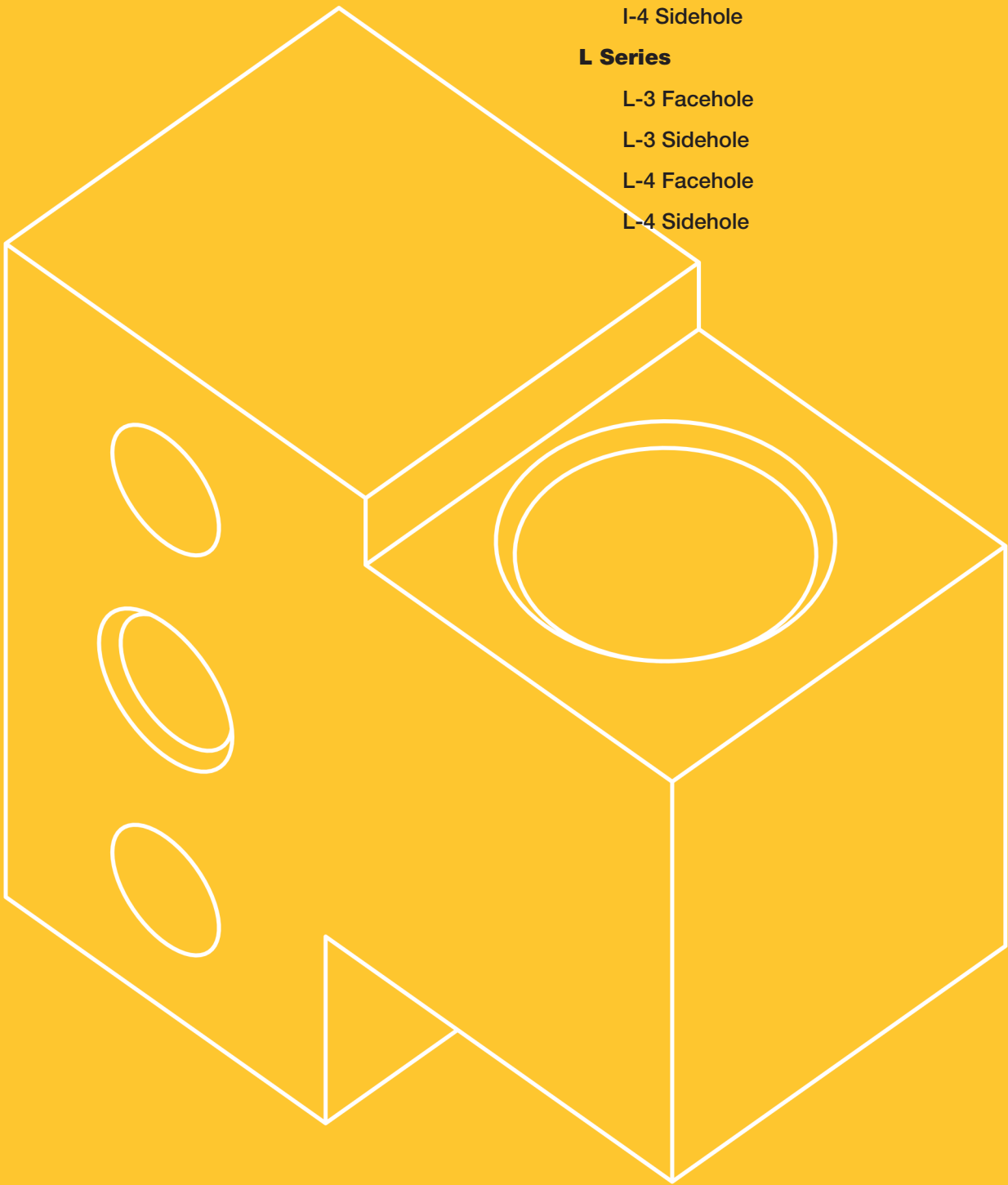
35-38

35

36

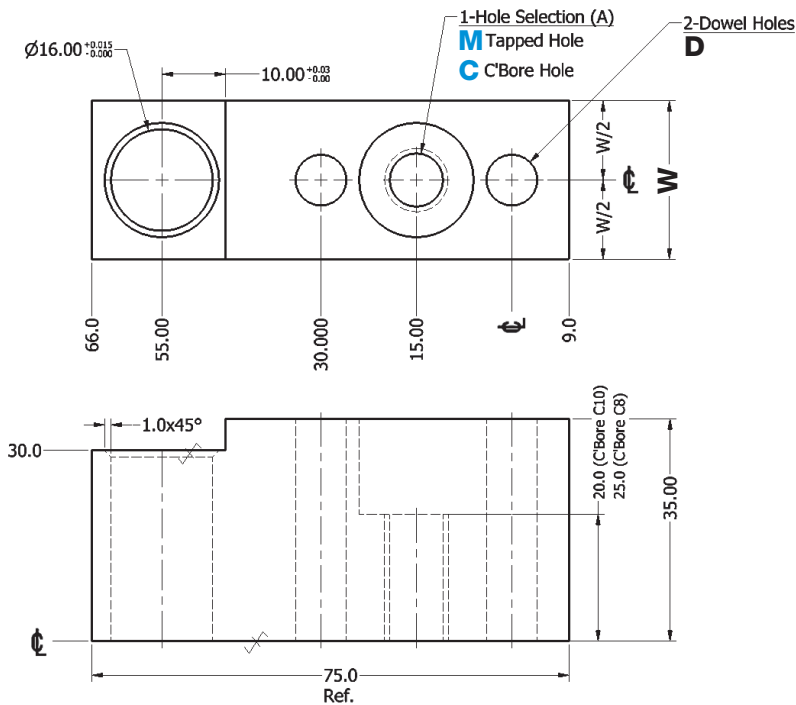
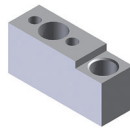
37

38



Pin Retainers

I-3 FACEHOLE



3D CAD is available online.

Type	Material	Finish
APR	A-36 Steel	Black Oxide
	304 Stainless Steel	-

P/N Example (Standard NAAMS):

Part Number	
Type	Specification
APR	282M

Tolerance					
Dimension	Tol.	Finish (Ra)	Geometric		
0.0	± 0.3	6.0 μm			0.015 T.I.R.
0.00	± 0.03	3.0 μm			
0.000	± 0.020	1.6 μm			

Standard NAAMS (25 mm Series Pin Retainers)

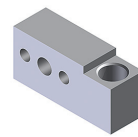
Type	Hole Selection (A) / Material				W	D Dowel Hole	
	M10		C10			8 H6	Tolerance
	A-36	304	A-36	304			
APR	060M	061M	062M	063M	25.0	8 H6	+0.000/+0.009

M10 (M10x1.5 Tapped Hole), **C10** (C'Bore for M10 SHCS). 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.

Standard NAAMS (20 mm Series Pin Retainers)

Type	Hole Selection (A) / Material				W	D Dowel Hole	
	M8		C8			8 F7	Tolerance
	A-36	304	A-36	304			
APR	265M	266M	267M	268M	30.0	8 F7	+0.013/+0.028
	280M	281M	282M	283M	25.0	8 F7	+0.013/+0.028

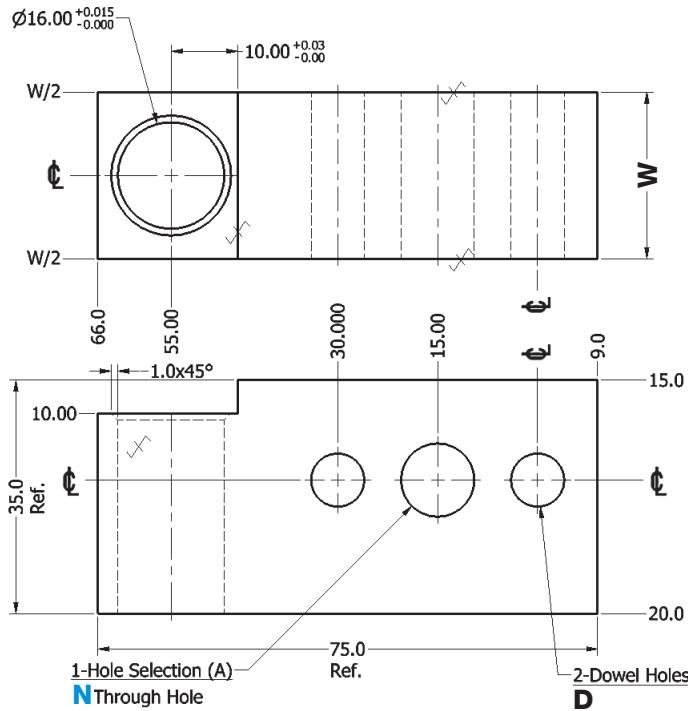
M8 (M8x1.25 Tapped Hole), **C8** (C'Bore for M8 SHCS). Standard NAAMS specifications are controlled by the NAAMS organization and the latest version of these products will be produced in compliance to: www.naamsstandards.org.



Pin Retainers

I-3 SIDEHOLE

3D CAD is available online.



Type	Material	Finish
APR	A-36 Steel	Black Oxide
	304 Stainless Steel	-

P/N Example (Standard NAAMS):	
Part Number	
Type	Specification
APR	260M

Tolerance					
Dimension	Tol.	Finish (Ra)	Geometric		
0.0	± 0.3	6.0 µm		 Surfaces	0.015 T.I.R.
0.00	± 0.03	3.0 µm			
0.000	± 0.020	1.6 µm			

Standard NAAMS (25 mm Series Pin Retainers)					
Type	Hole Selection (A) / Material		W	D Dowel Hole	
	N11			Tolerance	
	A-36	304			
APR	050M	051M	25.0	8 H6	+0.000/+0.009

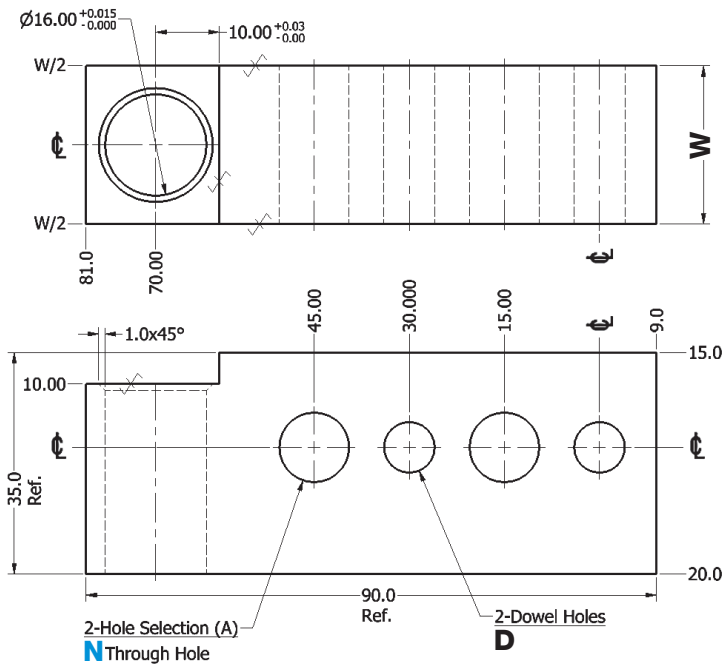
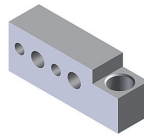
N11 (Ø11.0 Through Hole). Standard NAAMS specifications are controlled by the NAAMS organization and the latest version of these products will be produced in compliance to: www.naamsstandards.org.

Standard NAAMS (20 mm Series Pin Retainers)					
Type	Hole Selection (A) / Material		W	D Dowel Hole	
	N9				Tolerance
	A-36	304			
APR	260M	261M	30	8 F7	+0.013/+0.028
	276M	277M	25		

N9 (Ø9.0 Through Hole). 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.

Pin Retainers

I-4 SIDEHOLE



3D CAD is available online.

Type	Material	Finish
APR	A-36 Steel	Black Oxide
	304 Stainless Steel	-

P/N Example (Standard NAAMS):	
Part Number	
Type	Specification
APR	242M

Tolerance					
Dimension	Tol.	Finish (Ra)		Geometric	
0.0	± 0.3	6.0 µm			0.015 T.I.R.
0.00	± 0.03	3.0 µm			
0.000	± 0.020	1.6 µm			

Standard NAAMS (25 mm Series Pin Retainers)					
Type	Hole Selection (A) / Material		W	D Dowel Hole	
	N11			8 H6	Tolerance
	A-36	304			
APR	070M	071M	25.0	8 H6	+0.000 / +0.009

N11 (Ø11.0 Through Hole). 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.

Standard NAAMS (20 mm Series Pin Retainers)					
Type	Hole Selection (A) / Material		W	D Dowel Hole	
	N9				Tolerance
	A-36	304			
APR	075M	076M	30.0	6 F7	+0.010 / +0.022
	077M	078M	25.0	6 F7	+0.010 / +0.022
	221M	222M	30.0	8 F7	+0.013 / +0.028
	241M	242M	25.0	8 F7	+0.013 / +0.028

N9 (Ø9.0 Through Hole). 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.

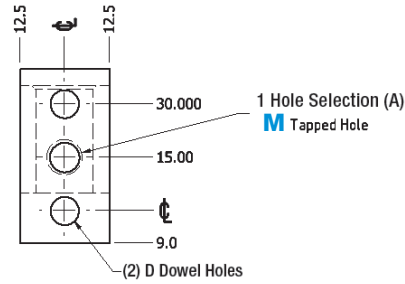
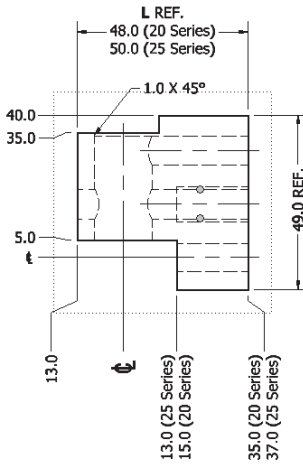
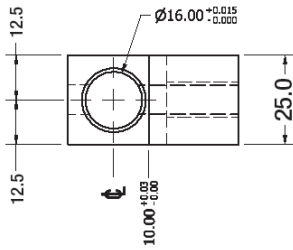


Pin Retainers

L-3 FACEHOLE

3D CAD is available online.

Standard Pin Retainers



Type	Material	Finish
APR	A-36 Steel	Black Oxide
	304 Stainless Steel	-

P/N Example (Standard NAAMS):	
Part Number	
Type	Specification
APR	020M

Tolerance					
Dimension	Tol.	Finish (Ra)	Geometric		
0.0	± 0.3	6.0 µm			0.015 T.I.R.
0.00	± 0.03	3.0 µm			
0.000	± 0.020	1.6 µm			

Standard NAAMS (25 mm Series Pin Retainers)					
Type	Hole Selection (A) / Material		W	D Dowel Hole	
	M10				Tolerance
	A-36	304			
APR	020M	021M	25	8 H6	+0.000/+0.009

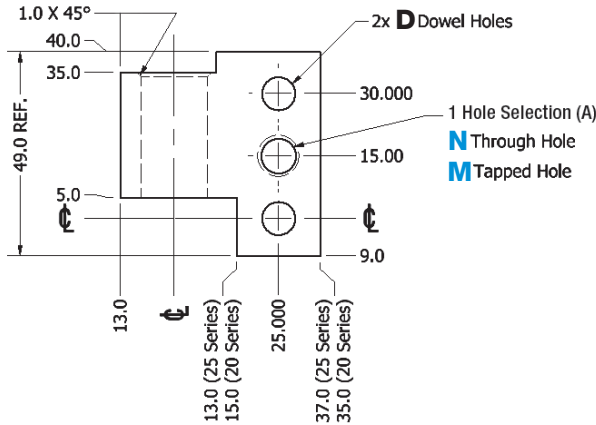
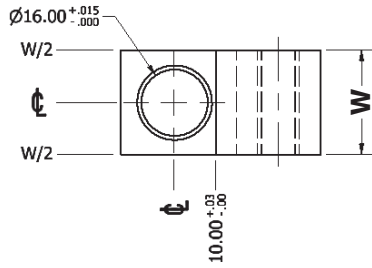
M10 (M10x1.5 Tapped Hole). Standard NAAMS specifications are controlled by the NAAMS organization and the latest version of these products will be produced in compliance to: www.naamsstandards.org.

Standard NAAMS (20 mm Series Pin Retainers)					
Type	Hole Selection (A) / Material		W	D Dowel Hole	
	M8				Tolerance
	A-36	304			
APR	255M	256M	20	8 F7	+0.013/+0.028

M8 (M8x1.25 Tapped Hole). 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.

Pin Retainers

L-3 SIDEHOLE



3D CAD is available online.

Type	Material	Finish
APR	A-36 Steel	Black Oxide
	304 Stainless Steel	-

P/N Example (Standard NAAMS):	
Part Number	
Type	Specification
APR	271M

Tolerance					
Dimension	Tol.	Finish (Ra)	Geometric		
0.0	± 0.3	6.0 μm		 Surfaces	0.015 T.I.R.
0.00	± 0.03	3.0 μm			
0.000	± 0.020	1.6 μm			

Standard NAAMS (25 mm Series Pin Retainers)							
Type	Hole Selection (A) / Material				W	D Dowel Hole	
	M10		N11			8 H6	Tolerance
	A-36	304	A-36	304			
APR	010M	011M	012M	013M	25	8 H6	+0.000 / +0.009

M10 (M10x1.5 Tapped Hole), **N11** ($\varnothing 11.0$ Through Hole). 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.

Standard NAAMS (20 mm Series Pin Retainers)							
Type	Hole Selection (A) / Material				W	D Dowel Hole	
	M8		N9			8 F7	Tolerance
	A-36	304	A-36	304			
APR	271M	272M	273M	274M	25	8 F7	+0.013/+0.028
	250M	251M	252M	253M	30		

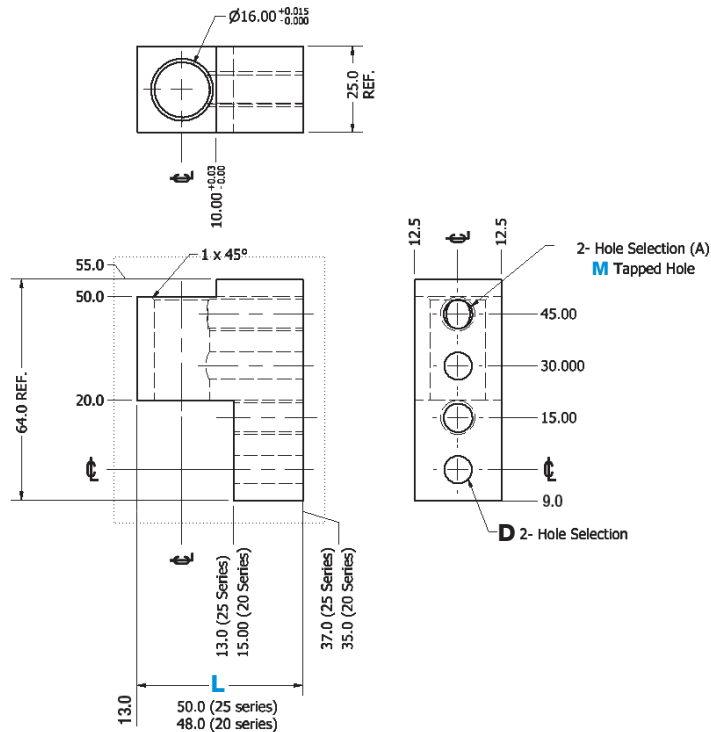
M8 (M8x1.25 Tapped Hole), **N9** ($\varnothing 9.0$ Through Hole). Standard NAAMS specifications are controlled by the NAAMS organization and the latest version of these products will be produced in compliance to: www.naamsstandards.org.



Pin Retainers

L-4 FACEHOLE

3D CAD is available online.



Type	Material	Finish
APR	A-36 Steel	Black Oxide
	304 Stainless Steel	-

P/N Example (Standard NAAMS):

Part Number	
Type	Specification
APR	045M

Tolerance					
Dimension	Tol.	Finish (Ra)	Geometric		
0.0	± 0.3	6.0 μm		 Surfaces	0.015 T.I.R.
0.00	± 0.03	3.0 μm			
0.000	± 0.020	1.6 μm			

Standard NAAMS (25 mm Series Pin Retainers)

Type	Hole Selection (A) / Material		D Dowel Hole	
	M10			
	A-36	304	Tolerance	
APR	040M	041M	8 H6	+0.000 / +0.009

M10 (M10x1.5 Tapped Hole). 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.

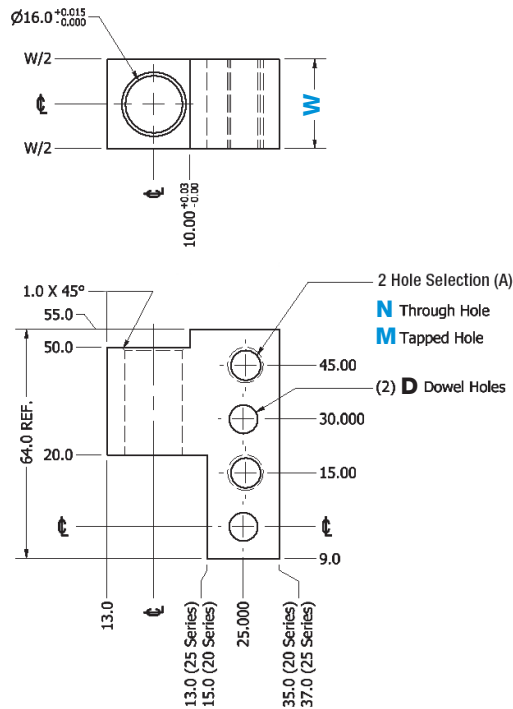
Standard NAAMS (20 mm Series Pin Retainers)

Type	Hole Selection (A) / Material		D Dowel Hole	
	M8			
	A-36	304		Tolerance
APR	045M	046M	6 F7	+0.010 / +0.022
	211M	212M	8 F7	+0.013 / +0.028

M8 (M8x1.25 Tapped Hole). 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.

Pin Retainers

L-4 SIDEHOLE



3D CAD is available online.

Type	Material	Finish
APR	A-36 Steel	Black Oxide
	304 Stainless Steel	-

P/N Example (Standard NAAMS):

Part Number	
Type	Specification
APR	337M

Tolerance					
Dimension	Tol.	Finish (Ra)	Geometric		
0.0	± 0.3	6.0 µm			0.015 T.I.R.
0.00	± 0.03	3.0 µm			
0.000	± 0.020	1.6 µm			

Standard NAAMS (25 mm Series Pin Retainers)

Type	Hole Selection (A) / Material				W	D Dowel Hole	
	M10		N11			8 H6	Tolerance
	A-36	304	A-36	304			
APR	030M	031M	032M	033M	25	8 H6	+0.000 / +0.009

M10 (M10x1.5 Tapped Hole), **N11** (Ø11.0 Through Hole). 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.

Standard NAAMS (20 mm Series Pin Retainers)

Type	Hole Selection (A) / Material				W	D Dowel Hole	
	M8		N9				Tolerance
	A-36	304	A-36	304			
APR	336M	337M	338M	339M	25	6 F7	+0.010 / +0.022
	231M	232M	233M	234M		8 F7	+0.013 / +0.028
	330M	331M	332M	333M	30	6 F7	+0.010 / +0.022
	201M	202M	203M	204M		8 F7	+0.013 / +0.028

M8 (M8x1.25 Tapped Hole), **N9** (Ø9.0 Through Hole). 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.