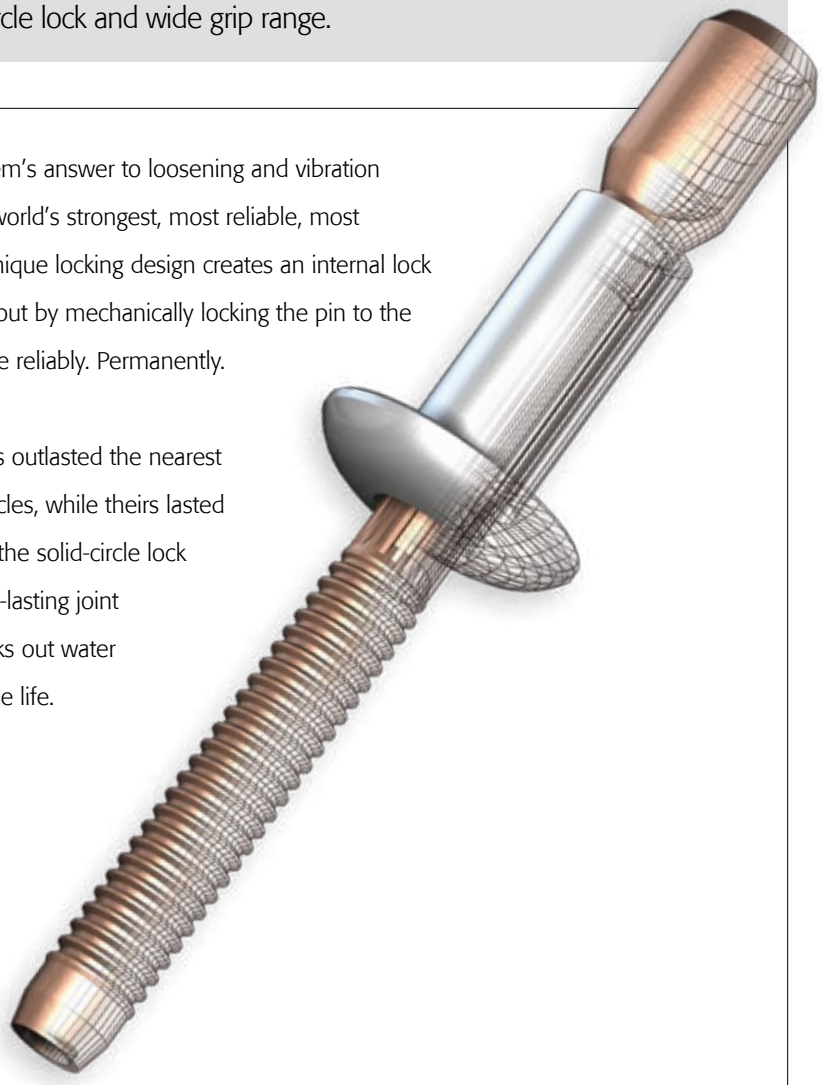
Magna-Lok®

The hole-filling fastener with mechanical circle lock and wide grip range.



The 360° solid-circle lock. It's Alcoa Fastening System's answer to loosening and vibration challenges. And it's the reason Magna-Lok® is the world's strongest, most reliable, most consistent blind fastening solution available. The unique locking design creates an internal lock during installation that virtually eliminates pin pushout by mechanically locking the pin to the sleeve. So Magna-Lok fasteners lock flush into place reliably. Permanently.

In lab shear fatigue tests, steel Magna-Lok fasteners outlasted the nearest competitor nearly 20 to 1. Ours lasted 2 million cycles, while theirs lasted only 100,000. In addition, this strength extends to the solid-circle lock design. The expanding sleeve creates a tough, long-lasting joint with a tight, weather-resistant seal. This shield blocks out water and salt, further ensuring the fastener's long, reliable life.

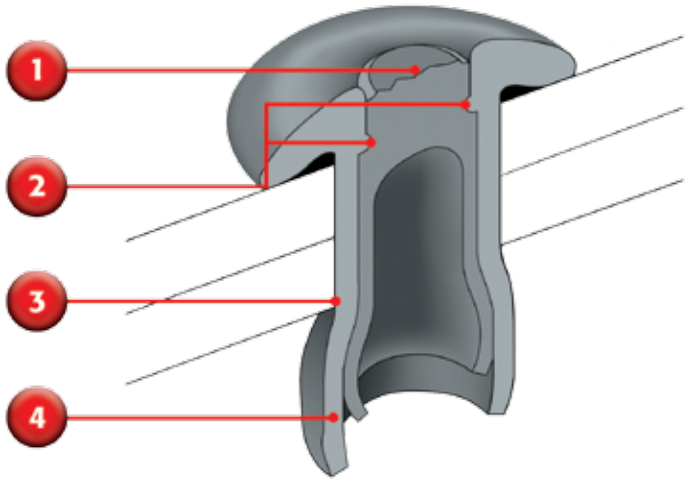
Available Sizes:
3/16", 1/4", 3/8", 1/2"

Materials:
Steel, Aluminum, Stainless Steel

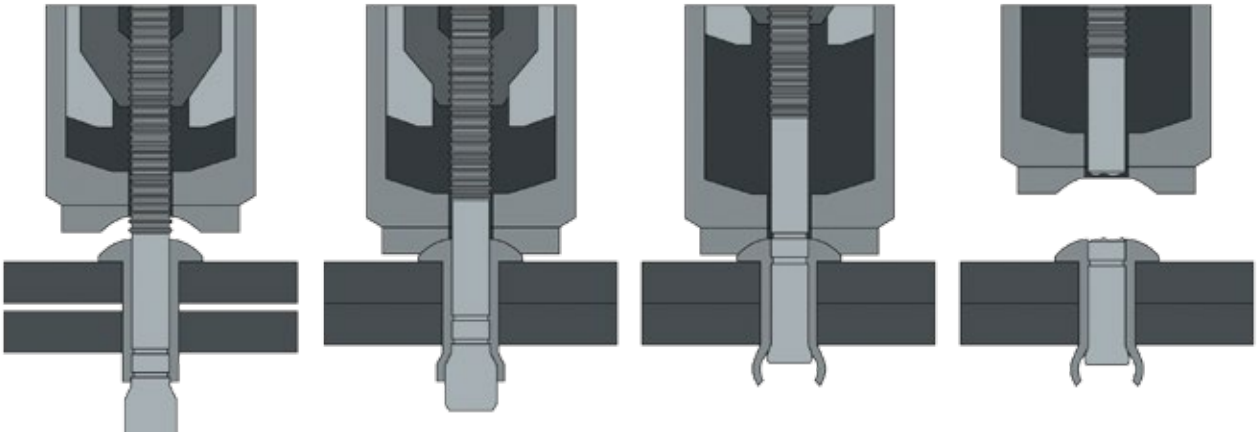
Headstyles:
Protruding, Truss, 100° Flush

Secure, Fast Installation

1. Flush pin break eliminates grinding and filling, leaving an even surface.
2. Unique, solid-circle lock ensures maximum strength and vibration resistance. The potential for pin push-out is virtually eliminated.
3. Excellent gap pull-out and high retained clamp.
4. Sleeve expands during installation to fill the hole and create a moisture-resistant joint.



Installation Sequence



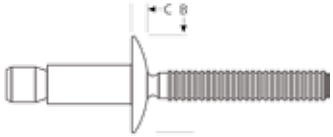
Insert the fastener into the hole and slip the installation tool over the pintail.

Press the trigger to initiate pulling action. As the tool pulls on the pintail, the pin (mandrel) expands the sleeve and begins drawing the work pieces together.

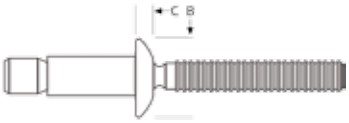
Continued pulling on the pintail draws the hollow pin head inside sleeve. The pin expands inside the sleeve and the work pieces, to completely fill the hole of the work pieces.

A solid circle lock between the pin and sleeve is formed just prior to the pin breaking flush with the sleeve head, completing the installation.

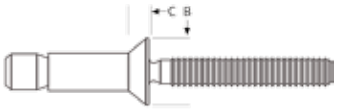
Magna-Lok Data & Dimensions



Truss Head



Protruding Head



100° Flush Head

Steel Rivet/Steel Mandrel

Diameter	Part No.	Grip Range	Max Hole Size	[B] Head Dia (max)	[C] Head Height (max)	Typical Shear (lbs)	Typical Tensile (lbs)
Protruding Head							
3/16"	MGLP-R6-4	.062-.270	.201	.392	.101	1450	1200
	MGLP-R6-7	.214-.437	.201	.392	.101	1450	1200
	MGLP-R6-10	.455-.665	.201	.392	.101	1450	1200
	MGLP-R6-E	.062-.437	.201	.392	.101	1450	1200
1/4"	MGLP-R8-6	.080-.375	.272	.530	.120	2750	2200
	MGLP-R8-7	.080-.437	.272	.530	.120	2750	2200
	MGLP-R8-10	.350-.625	.272	.530	.120	2750	2200
	MGLP-R8-14	.580-.875	.272	.530	.120	2750	2200
	MGLP-R8-22	1.080-1.375	.272	.530	.120	2570	2200
	MGLP-R8-E	.080-.625	.272	.530	.120	2750	2200
	MGLP-R8-E12.6*	.245-.790	.272	.530	.120	2750	2200
3/8"	MGLP-R12-12	.120-.625	.408	.793	.175	6300	5000
1/2"	MGLP-R16-12	.160-.750	.563	1.060	.240	11200	9400
Truss Head							
3/16"	MGLT-R6-4	.062-.270	.201	.530	.104	1450	1200
	MGLT-R6-E	.062-.437	.201	.530	.104	1450	1200
1/4"	MGLT-R8-6	.080-.375	.272	.592	.120	2750	2200
100° Flush Head							
3/16"	MGL100-R6-6	.125-.331	.201	.350	.080	1450	1200
	MGL100-R6-9	.305-.500	.201	.350	.080	1450	1200
1/4"	MGL100-R8-8	.160-.475	.272	.410	.090	2750	2200
	MGL100-R8-12	.415-.725	.272	.410	.090	2750	2200

** Also available in 400 Stainless Steel*

Aluminum Rivet/Aluminum Mandrel

Diameter	Part No.	Grip Range	Max Hole Size	[B] Head Dia (max)	[C] Head Height (max)	Typical Shear (lbs)	Typical Tensile (lbs)
Protruding Head							
3/16"	MGLP-B6-4	.062-.270	.201	.392	.101	700	580
	MGLP-B6-7	.214-.437	.201	.392	.101	700	580
	MGLP-B6-E	.062-.437	.201	.392	.101	700	580
1/4"	MGLP-B8-6	.080-.375	.272	.530	.120	1300	950
	MGLP-B8-10	.350-.625	.272	.530	.120	1300	950
	MGLP-B8-E	.080-.625	.272	.530	.120	1300	950
3/8"	MGLP-B12-12	.120-.625	.408	.793	.175	3000	2100
1/2"	MGLP-B16-12	.160-.750	.563	1.060	.240	5400	4100
Truss Head							
3/16"	MGLT-B6-4	.062-.270	.201	.530	.104	700	580
	MGLT-B6-7	.214-.437	.201	.530	.104	700	580
	MGLT-B6-E	.062-.437	.201	.530	.104	700	580
100° Flush Head							
3/16"	MGL100-B6-6	.125-.331	.201	.350	.080	700	580
	MGL100-B6-9	.305-.500	.201	.350	.080	700	580
	MGL100-B6-12	.080-.375	.201	.350	.080	700	580
	MGL100-B6-14	.080-.375	.201	.350	.080	700	580
1/4"	MGL100-B8-8	.160-.475	.272	.410	.090	1300	950
	MGL100-B8-12	.415-.725	.272	.410	.090	1300	950

NOTE: Part number listings reflect typical stock. Items not listed require a minimum order.

Stainless Sleeve/Stainless Mandrel

Diameter	Part No.	Grip Range	Max Hole Size	[B] Head Dia (max)	[C] Head Height (max)	Typical Shear (lbs)	Typical Tensile (lbs)
Protruding Head							
3/16"	MGLP-U6-4	.062-.270	.201	.392	.101	1400	1100
	MGLP-U6-7	.214-.437	.201	.392	.101	1400	1100
	MGLP-U6-E	.062-.437	.201	.392	.101	1400	1100
1/4"	MGLP-U8-6	.080-.375	.272	.530	.120	2500	1800
	MGLP-U8-7	.080-.375	.272	.530	.120	2500	1800
	MGLP-U8-10	.350-.625	.272	.530	.120	2500	1800
	MGLP-U8-E	.080-.625	.272	.530	.120	2500	1800
Flush Head							
3/16"	MGL100-U6-6	.125-.331	.201	.350	.080	1400	1100
	MGL100-U6-9	.305-.500	.201	.350	.080	1400	1100
1/4"	MGL100-U8-8	.160-.475	.272	.410	.090	2500	1800
	MGL100-U8-12	.415-.725	.272	.410	.090	2500	1800

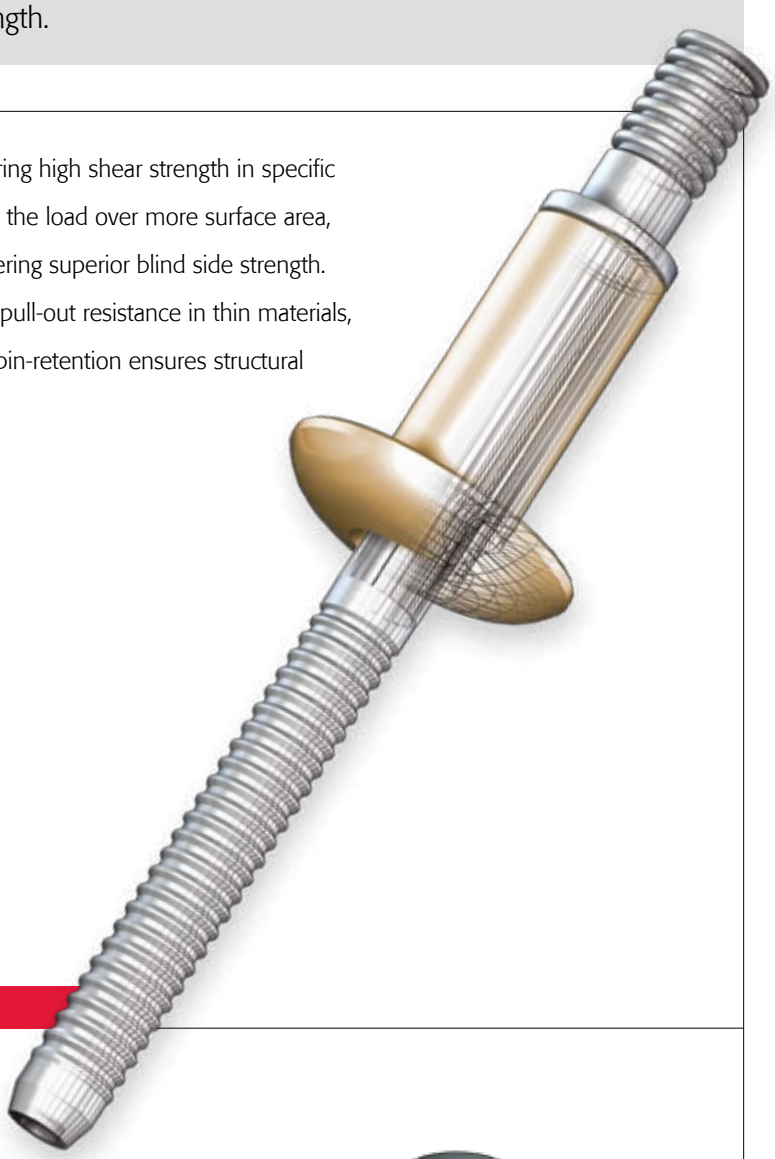
NOTE: Part number listings reflect typical stock. Items not listed require a minimum order.

Installation Tooling

Diameter	Installation Tool	Nose Assembly			Type
3/16"	2025	99-3300	99-3303		Pneudraulic
	2024	99-3303	99-3321-68		Pneudraulic
	2015	125154 (Insert, included with tool)			Pneudraulic
	AK175	120982			Pneudraulic
	HK250	202158			Hand Hydraulic
	2480	99-3300	99-3303	99-3321-68	Hydraulic
1/4"	2025	99-3301	99-3305		Pneudraulic
	2024	99-3301	99-3321-68	99-3305	Pneudraulic
	AK275	202142			Pneudraulic
	HK250	202158			Hand Hydraulic
	2480	99-3301	99-3305	99-3321-68	Hydraulic
3/8"	256	99-3318			Pneudraulic
	2580	99-3318			Hydraulic
1/2"	2503	99-3330	99-3331		Hydraulic

Magna-Bulb®

A unique bulbing fastener with high shear strength.



Huck Magna-Bulb® is a unique, clamp-type fastener offering high shear strength in specific applications. Its bulbing action during installation spreads the load over more surface area, supplying a stronger, longer-lasting connection, while offering superior blind side strength. This increased bearing area makes Magna-Bulb ideal for pull-out resistance in thin materials, and oversized or misaligned holes. Positive, mechanical pin-retention ensures structural integrity no matter what the application.

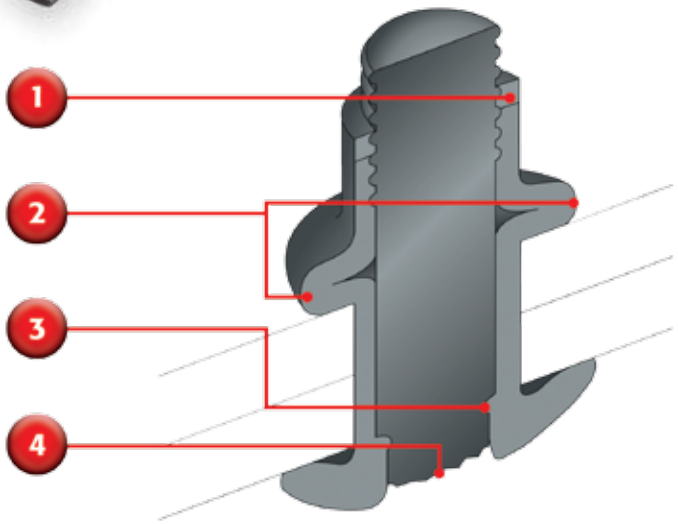
Available Sizes:
3/16", 1/4", 5/16"

Materials:
Steel

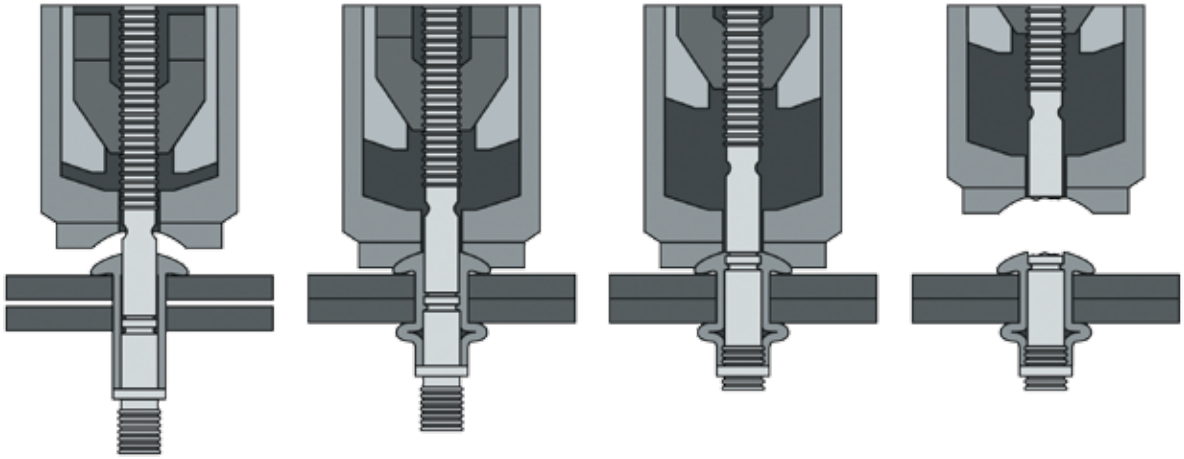
Headstyles:
Protruding, Truss, 100° Oval Flush

Secure, Fast Installation

1. Shear ring design promotes bulb formation and grip adjustment for flush break throughout the grip range.
2. The wide blind footprint (bulb) gives the fastener a broader bearing surface, spreading the load out for greater strength and high pull out resistance.
3. Unique solid circle lock ensures maximum strength and resistance to vibration.
4. Breaking flush throughout the entire grip range, the Magna-Bulb fastener eliminates costly cosmetic finish work and ensures "visually" that the fastener has been installed correctly.



Installation Sequence



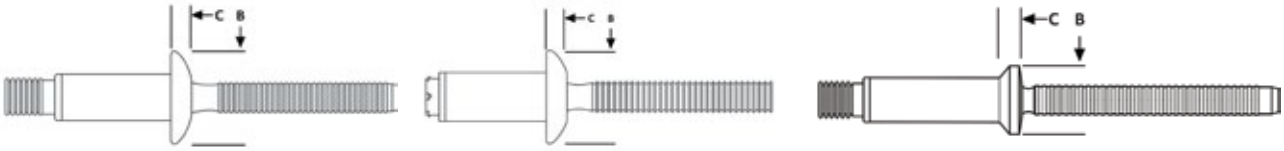
Insert the fastener into the hole and slip the installation tool over the pintail.

Press the trigger to initiate pulling action. As the tool pulls on the pintail, the pin (mandrel) expands the sleeve and begins drawing the work pieces together.

Continued pulling on the pintail expands the bulb to maximum allowable diameter. The shear ring then breaks and catches on the annular grooves as the pin continues to draw down inside the sleeve.

A solid circle lock between the pin and sleeve is formed just prior to the pin breaking flush with the sleeve head, completing the installation.

Magna-Bulb Data & Dimensions



Protruding

Clearance

Oval Flush

Steel Rivet/Steel Mandrel

Diameter	Part No.	Grip Range	Max Hole Size	[B] Head Dia (max)	[C] Head Height (max)	Typical Shear (lbs)	Typical Tensile (lbs)
Protruding Head							
3/16"	MBP-R6-M3	.087-.150	.201	.395	.101	1900	1050
	MBP-R6-M4	.126-.189	.201	.395	.101	1900	1050
	MBP-R6-M5	.165-.228	.201	.395	.101	1900	1050
	MBP-R6-M6	.205-.268	.201	.395	.101	1900	1050
	MBP-R6-M7	.244-.307	.201	.395	.101	1900	1050
	MBP-R6-M8	.283-.347	.201	.395	.101	1900	1050
	MBP-R6-M10	.362-.425	.201	.395	.101	1900	1050
1/4"	MBP-R8-M3	.110-.189	.272	.530	.125	2700	2000
	MBP-R8-M4	.150-.229	.272	.530	.125	2760	2000
	MBP-R8-M5	.189-.268	.272	.530	.125	3000	2000
	MBP-R8-M6	.229-.308	.272	.530	.125	3200	2000
	MBP-R8-M7	.268-.346	.272	.530	.125	3600	2000
	MBP-R8-M8	.308-.387	.272	.530	.125	3600	2000
	MBP-R8-M9	.346-.425	.272	.530	.125	3600	2000
	MBP-R8-M10	.387-.466	.272	.530	.125	3600	2000
	MBP-R8-M11	.425-.504	.272	.530	.125	3600	2000
	MBP-R8-M12	.466-.545	.272	.530	.125	3600	2000
	MBP-R8-M13	.504-.583	.272	.530	.125	3600	2000

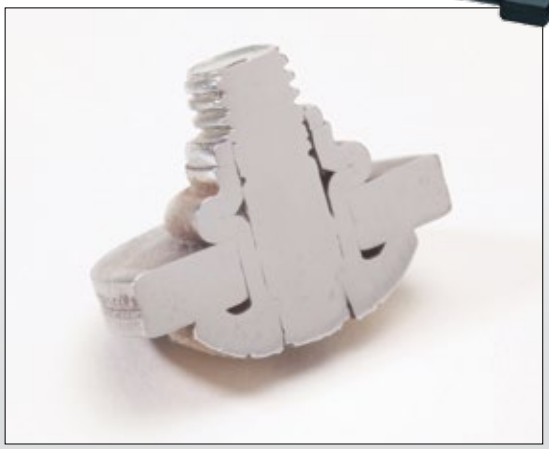
Steel Rivet/Steel Mandrel

Diameter	Part No.	Grip Range	Max Hole Size	[B] Head Dia (max)	[C] Head Height (max)	Typical Shear (lbs)	Typical Tensile (lbs)
Protruding Head							
5/16"	MBP-R10-3	.150-.250	.340	.655	.152	5000	3000
	MBP-R10-4	.200-.300	.340	.655	.152	5000	3000
	MBP-R10-5	.250-.350	.340	.655	.152	5000	3000
	MBP-R10-6	.300-.400	.340	.655	.152	5000	3000
	MBP-R10-7	.350-.450	.340	.655	.152	5000	3000
	MBP-R10-8	.400-.500	.340	.655	.152	5000	3000
	MBP-R10-10	.500-.600	.340	.655	.152	5000	3000
Clearance Version*							
1/4"	MBCP-R8-M3	.110-.189	.272	.525	.122	3000	3000
	MBCP-R8-M4	.189-.268	.272	.525	.122	3000	3000
	MBCP-R8-M5	.268-.346	.272	.525	.122	3000	3000
	MBCP-R8-M6	.229-.308	.272	.525	.122	3000	3000
	MBCP-R8-M7	.268-.346	.272	.525	.122	3000	3000
	MBCP-R8-M8	.308-.387	.272	.525	.122	3000	3000
	MBCP-R8-M9	.346-.425	.272	.525	.122	3000	3000
	MBCP-R8-M11	.425-.504	.272	.525	.122	3000	3000
	MBCP-R8-M13	.504-.583	.272	.525	.122	3000	3000
	MBCP-R8-M16	.622-.701	.272	.530	.125	3000	3000

** MBCP: Please refer to coordination drawings for specifications. NOTE: Part number listings reflect typical stock. Items not listed require a minimum order.*

Installation Tooling

Diameter	Installation Tool	Nose Assembly		Type
3/16"	AK250	-	-	Pneudraulic
	HK250	-	-	Manual
	2015	125154 (Insert, included with tool)		Pneudraulic
	202	99-3303	99-3300	Pneudraulic
	2025	99-3303	99-3303	Pneudraulic
	2480	99-3303	99-3303	Hydraulic
1/4"	AK275	-	-	Pneudraulic
	HK250	-	-	Manual
	2024	99-3301	99-3305	Pneudraulic
	2025	99-3301	99-3305	Pneudraulic
	2480	99-3301	99-3305	Hydraulic
5/16"	256	99-3307	-	Pneudraulic



Wide bulb provides broader bearing surface