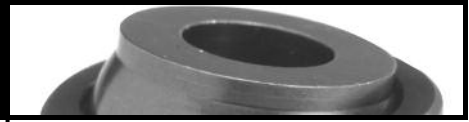


Ball Elements



Ball Elements

- Smooth or serrated faces
- Adjustable or precision heights (serrated heights are semi-precision)
- Ball element housings equipped with viton "O" ring (prevents penetration of chips and coolant)

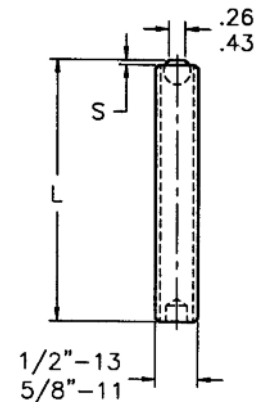
Size	400 Series	500 Series	600 Series	700 Series
ball diameter (in)	.315	.472	.945	1.575
face diameter (in) D	.26	.39	.71	1.36
load force (lbs)	1798	4496	11240	22480

Set Screws with Ball Elements

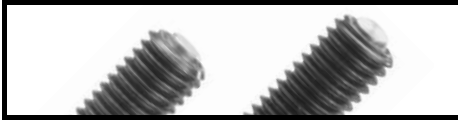


BALL ELEMENTS (400) - LOADING FORCE 1,798 LBS. MAXIMUM					
400 Series Ball		Thread	Length (in)	S (in)	Part # AMF-
Smooth	Serrated				
x		1/2"-13	2.00	0.05	87495
	x	1/2"-13	2.00	0.05	87412
x		1/2"-13	3.00	0.05	87496
	x	1/2"-13	3.00	0.05	87456

BALL ELEMENTS (500) - LOADING FORCE 4,496 LBS. MAXIMUM					
500 Series Ball		Thread	Length (in)	S (in)	Part # AMF-
Smooth	Serrated				
x		5/8"-11	2.50	0.06	87595
	x	5/8"-11	2.50	0.06	87597
x		5/8"-11	3.50	0.06	87596
	x	5/8"-11	3.50	0.06	87598



Note: Ball element up to 6° swivel.



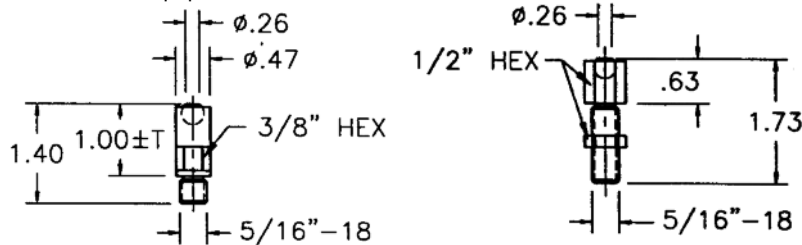
Ball Elements

400 Series

BALL ELEMENTS (400) - LOADING FORCE 1,798 LBS. MAXIMUM					
400 Series Ball		Support Height		Tolerance T (in) ±	Part # AMF-
Smooth	Serrated	Fixed	Adjustable		
x		x		.0005	87490
	x	x		.005	87491
x			x	—	87481
	x		x	—	87483



Note: On serrated ball element, 1.0" and .63" dimension is to top of serration. Ball element up to 6° swivel.



AMF-87490 Smooth
AMF-87491 Serrated

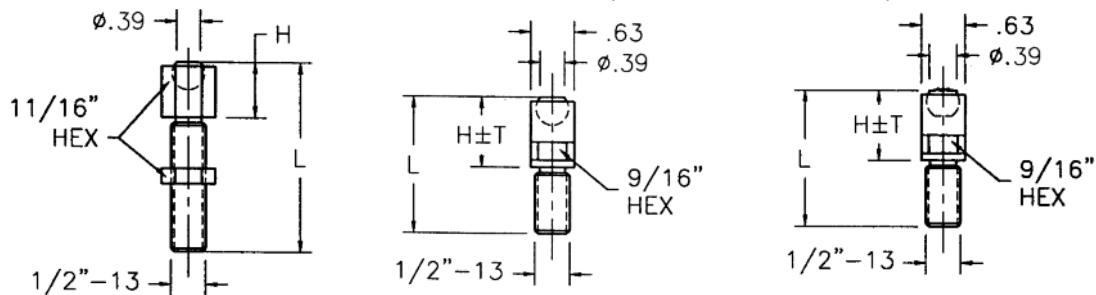
AMF-87481 Smooth
AMF-87483 Serrated

500 Series

BALL ELEMENTS (500) - LOADING FORCE 4,496 LBS. MAXIMUM							
500 Series Ball		Support Height		Height H (in)	Length L (in)	Tolerance T (in) ±	Part # AMF-
Smooth	Serrated	Fixed	Adjustable				
x		x		1.00	1.95	.0005	87582
	x	x		1.00	1.95	.005	87583
x		x		1.20	2.15	.0005	87589
	x	x		1.20	2.15	.005	87590
x		x		2.00	2.95	.0005	87589-01
	x	x		2.00	2.95	.005	87590-01
x			x	.81	2.75	—	87584
	x		x	.81	2.75	—	87594
x			x	.50	1.75	—	51067
	x		x	.50	1.75	—	54469



Note: On serrated ball element, "H" dimension is to top of serration. Ball element up to 6° swivel.



ADJUSTABLE

AMF-87584 Smooth
AMF-87594 Serrated
AMF-51067 Smooth
AMF-54469 Serrated

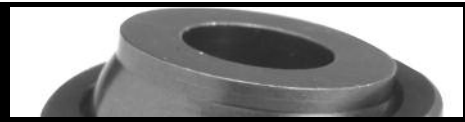
FIXED SMOOTH

AMF-87582
AMF-87589
AMF-87589-01

FIXED SERRATED

AMF-87583
AMF-87590
AMF-87590-01

Ball Elements

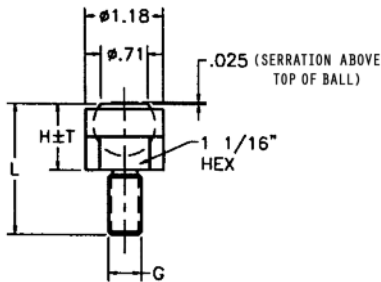


600 Series



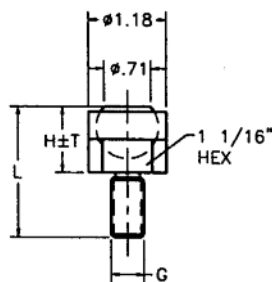
BALL ELEMENTS (600) - LOADING FORCE 11,240 LBS. MAXIMUM								
600 Series Ball		Support Height		Height H (in)	Length L (in)	Thread G	Tolerance T (in) ±	Part # AMF -
Smooth	Serrated	Fixed	Adjustable					
X		X		1.00	1.95	1/2"-13	.0005	87636
	X	X		1.00	1.95	1/2"-13	.005	87637
X		X		1.20	2.18	1/2"-13	.0005	87601
	X	X		1.20	2.18	1/2"-13	.005	87602
X		X		2.00	2.95	1/2"-13	.0005	87601-01
	X	X		2.00	2.95	1/2"-13	.005	87602-01
X		X		1.00	1.95	5/8"-11	.0005	87626
	X	X		1.00	1.95	5/8"-11	.005	87627
X		X		2.00	2.95	5/8"-11	.0005	87626-01
	X	X		2.00	2.95	5/8"-11	.005	87627-01
X			X	1.00	2.95	5/8"-11	—	87654
	X		X	1.00	2.95	5/8"-11	—	87655
X			X	1.00	2.95	3/4"-16	—	87641
	X		X	1.00	2.95	3/4"-16	—	87642

Note: On serrated ball element, "H" dimension is to top of serration. Ball element up to 6° swivel unless noted.



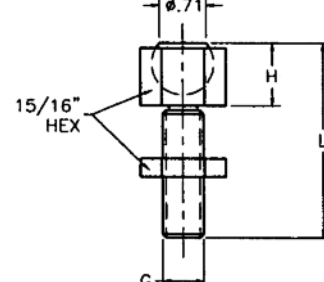
SERRATED

- AMF-87637
- AMF-87602
- AMF-87602-01
- AMF-87627
- AMF-87627-01



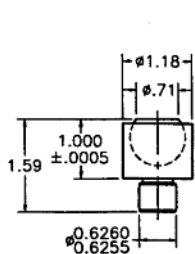
SMOOTH

- AMF-87636
- AMF-87601
- AMF-87601-01
- AMF-87626
- AMF-87626-01



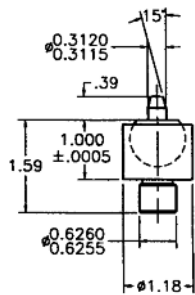
ADJUSTABLE

- AMF-87654 Smooth
- AMF-87655 Serrated
- AMF-87641 Smooth
- AMF-87642 Serrated



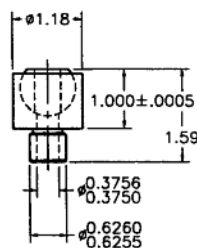
AMF-87620 Smooth AMF-87625 Serrated

Fixed support height and press-fit shank style, is offered with smooth or serrated ball element.



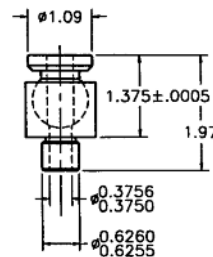
AMF-87621 Smooth

Fixed support height and press-fit shank style, is offered with locating pin ball element for positioning in the second and third plane.



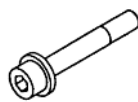
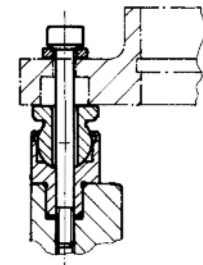
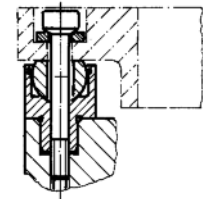
AMF-87624 Smooth

Ball elements with precision hole is used with precision spherical socket head cap screw (sold separately) for positioning in the second and third plane. (See below)
Ball element up to 4° swivel when precision screw is being used.

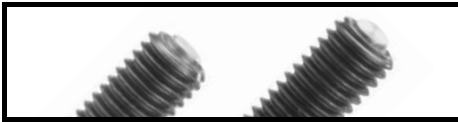


AMF-87673 Smooth

Ball elements with oversized rest pads are used for positioning in the first plane when larger supporting surface is required. This ball element may also be used with precision spherical socket head cap screws for positioning in the second and third plane. (See below)
Ball element up to 3° swivel when precision screw is being used.



Precision spherical socket head cap screws are used with AMF-87624 and AMF-87673 ball elements. See page 70 for chart of precision spherical socket head cap screws.



Ball Elements

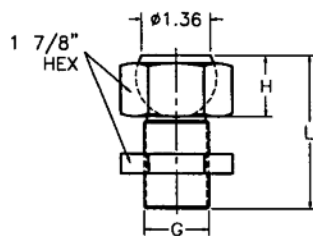
700 Series

BALL ELEMENTS (700) - LOADING FORCE 22,480 LBS. MAXIMUM								
700 Series Ball		Support Height		Height H (in)	Length L (in)	Thread G	Tolerance T (in) ±	Part # AMF -
Smooth	Serrated	Fixed	Adjustable					
x		x		1.25	2.48	1/2"-13	.0005	87717-01
	x	x		1.25	2.48	1/2"-13	.005	87718-01
x		x		1.25	2.48	5/8"-11	.0005	87717
	x	x		1.25	2.48	5/8"-11	.005	87718
x			x	1.25	2.95	1.25-12	—	54470-01
	x		x	1.25	2.95	1.25-12	—	54471-01
x			x	1.25	3.54	1.25-12	—	87741-02
	x		x	1.25	3.54	1.25-12	—	87742-02

Note: Ball element up to 6° swivel unless noted.

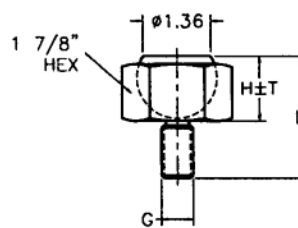


AMF-87717
(Shown above)



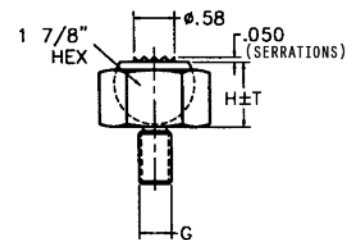
ADJUSTABLE

- AMF-54470 Smooth
- AMF-54471 Serrated
- AMF-87741 Smooth
- AMF-87742 Serrated



FIXED SMOOTH

- AMF-87717-01 1/2"
- AMF-87717 5/8"

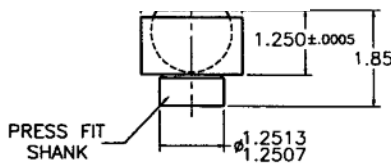


FIXED SERRATED

- AMF-87718-01 1/2"
- AMF-87718 5/8"

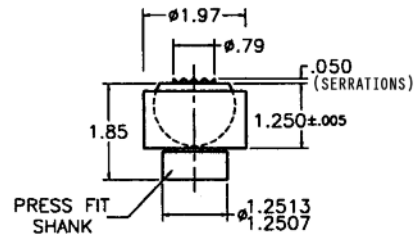


AMF-87742-02
(Shown above)



FIXED SMOOTH

AMF-87720

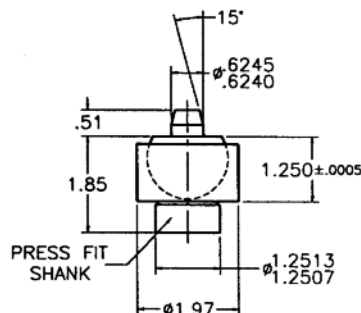


FIXED SERRATED

AMF-87725

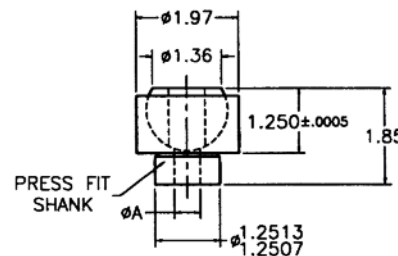


AMF-87724
(Shown above)



FIXED SMOOTH

AMF-87721



FIXED SMOOTH

- AMF-87724 (A=.5001/.5005 ID)
- AMF-87724-03 (A=.5007/.5013 ID)

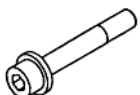
Swivel up to 10° for AMF-87724 and AMF-87724-03

AMF-87722 (A=.6251/.6255 ID)

AMF-87722-01 (A=.6257/.6263 ID)

Swivel up to 5° for AMF-87722 and AMF-87722-01

Fixed support height and press-fit shank style, is offered with locating pin ball element for positioning in the second and third plane.



Precision spherical socket head cap screws are used with AMF-87624 and AMF-87673 ball elements. See page 70 for chart of precision spherical socket head cap screws.

Ball element with precision hole is used with precision screw (sold separately) for positioning in the second and third plane.



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