Ball Lock Pins• single acting - complies with NASM / MS17986 EH 4212.

Product Description

Ball Lock Pins according to NASM (former norm: MS) are used for quick fastening, locking, adjusting, changing and securing. Quickly and easily unlockable for frequently repeated connections.
Ball Lock Pins (Quick Release Pins) are produced according to Aviation Norm NASM (former norm: MS) and tested to NAS 1332.

Material

Pin ①
- Stainless steel, precipitation-hardened, passivated

Press bolt ②
- Stainless steel, precipitation-hardened, passivated

Spring ③
- Stainless steel, passivated

Handle ④
- Aluminium, black anodised

Attaching ring ⑤
- Stainless steel, passivated

Ball ⑥
- Stainless steel, precipitation-hardened, passivated

Operation

The balls are unlocked by pressing the knob.

More information

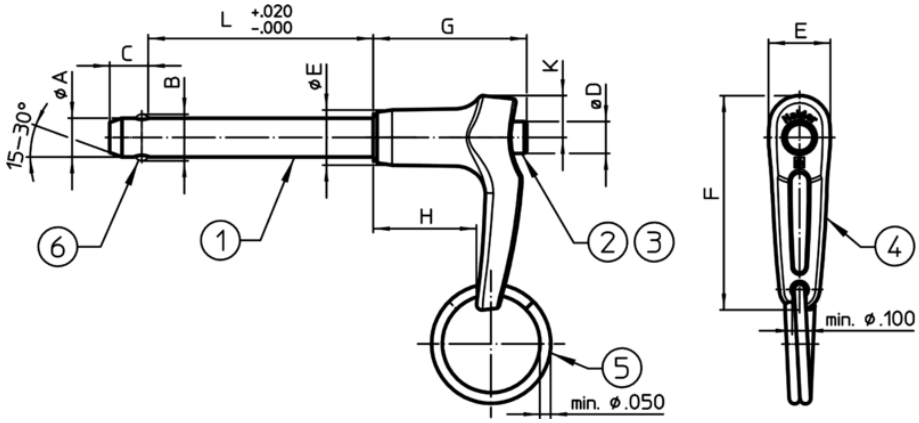
Notes

Special types on request.
All further dimensions are available on request.
- This product is manufactured in INCH dimensions.

References

A conversion table can be found in the technical data following these product information pages.

Drawing



Order information

Nominal diameter A	Clamping length L +0,02 0	Dimensions B ±0,005	C +0,1 -0,04	D max.	E max.	F max.	G max.	H min.	K max.	Location hole max.	Shearing resistance, double[1] min.	min.	max.		Art. No.
[inch]	[inch]	[inch]								[inch]	[lb]	[°F]		[g]	
3/16	**0,5**	0,220	0,260	0,310	0,500	1,80	1,27	0,76	0,34	0,1940	5,150	-65	200	25	4212.A05
3/16	**0,8**	0,220	0,260	0,310	0,500	1,80	1,27	0,76	0,34	0,1940	5,150	-65	200	26	4212.A08
3/16	**1,0**	0,220	0,260	0,310	0,500	1,80	1,27	0,76	0,34	0,1940	5,150	-65	200	27	4212.A10
3/16	**1,3**	0,220	0,260	0,310	0,500	1,80	1,27	0,76	0,34	0,1940	5,150	-65	200	28	4212.A13
3/16	**1,4**	0,220	0,260	0,310	0,500	1,80	1,27	0,76	0,34	0,1940	5,150	-65	200	31	4212.A14
3/16	**1,7**	0,220	0,260	0,310	0,500	1,80	1,27	0,76	0,34	0,1940	5,150	-65	200	27	4212.A17
1/4	**0,5**	0,289	0,290	0,310	0,500	1,80	1,27	0,76	0,34	0,2540	9,200	-65	200	27	4212.B05
1/4	**1,2**	0,289	0,290	0,310	0,500	1,80	1,27	0,76	0,34	0,2540	9,200	-65	200	31	4212.B12
1/4	**1,5**	0,289	0,290	0,310	0,500	1,80	1,27	0,76	0,34	0,2540	9,200	-65	200	33	4212.B15
1/4	**1,6**	0,289	0,290	0,310	0,500	1,80	1,27	0,76	0,34	0,2540	9,200	-65	200	33	4212.B16

[1] Shearing resistance similar to DIN 50141

Nominal diameter A	Clamping length L +0,02 0	Dimensions								Location hole max.	Shearing resistance, double[1] min.	min.	max.		Art. No.
		B ±0,005	C +0,1 -0,04	D max.	E max.	F max.	G max.	H min.	K max.						
[inch]	[inch]	[inch]								[inch]	[lb]	[°F]		[g]	
1/4	**1,7**	0,289	0,290	0,310	0,500	1,80	1,27	0,76	0,34	0,2540	9,200	-65	200	34	4212.B17
1/4	**2,0**	0,289	0,290	0,310	0,500	1,80	1,27	0,76	0,34	0,2540	9,200	-65	200	36	4212.B20
1/4	**2,1**	0,289	0,290	0,310	0,500	1,80	1,27	0,76	0,34	0,2540	9,200	-65	200	36	4212.B21
5/16	**0,4**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	29	4212.C04
5/16	**0,6**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	31	4212.C06
5/16	**1,0**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	34	4212.C10
5/16	**1,3**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	37	4212.C13
5/16	**1,6**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	39	4212.C16
5/16	**1,8**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	43	4212.C18
5/16	**2,0**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	41	4212.C20
5/16	**2,3**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	46	4212.C23
5/16	**2,9**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	54	4212.C29
5/16	**3,0**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	53	4212.C30
5/16	**3,3**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	57	4212.C33
5/16	**3,6**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	60	4212.C36
5/16	**4,0**	0,375	0,330	0,310	0,500	1,80	1,27	0,76	0,34	0,3165	14,400	-65	200	64	4212.C40
3/8	**1,0**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	49	4212.D10
3/8	**1,5**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	59	4212.D15
3/8	**1,8**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	61	4212.D18
3/8	**2,0**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	65	4212.D20
3/8	**2,4**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	71	4212.D24
3/8	**2,6**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	73	4212.D26
3/8	**3,0**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	78	4212.D30
3/8	**6,0**	0,440	0,365	0,390	0,625	2,03	1,45	0,85	0,39	0,3790	20,700	-65	200	122	4212.D60
7/16	**1,2**	0,509	0,380	0,390	0,625	2,03	1,47	0,85	0,39	0,4425	28,500	-65	200	61	4212.E12
7/16	**3,5**	0,509	0,380	0,390	0,625	2,03	1,47	0,85	0,39	0,4425	28,500	-65	200	104	4212.E35
7/16	**4,0**	0,509	0,380	0,390	0,625	2,03	1,47	0,85	0,39	0,4425	28,500	-65	200	113	4212.E40
7/16	**5,5**	0,509	0,380	0,390	0,625	2,03	1,47	0,85	0,39	0,4425	28,500	-65	200	146	4212.E55
1/2	**1,0**	0,594	0,460	0,565	0,800	2,36	1,60	0,85	0,50	0,5050	36,900	-65	200	83	4212.F10
1/2	**1,5**	0,594	0,460	0,565	0,800	2,36	1,60	0,85	0,50	0,5050	36,900	-65	200	96	4212.F15
1/2	**1,9**	0,594	0,460	0,565	0,800	2,36	1,60	0,85	0,50	0,5050	36,900	-65	200	103	4212.F19
1/2	**3,4**	0,594	0,460	0,565	0,800	2,36	1,60	0,85	0,50	0,5050	36,900	-65	200	143	4212.F34
1/2	**4,2**	0,594	0,460	0,565	0,800	2,36	1,60	0,85	0,50	0,5050	36,900	-65	200	166	4212.F42
1/2	**4,5**	0,594	0,460	0,565	0,800	2,36	1,60	0,85	0,50	0,5050	36,900	-65	200	172	4212.F45
9/16	**1,7**	0,666	0,510	0,565	0,800	2,36	1,60	0,85	0,50	0,5675	46,700	-65	200	116	4212.G17
9/16	**2,5**	0,666	0,510	0,565	0,800	2,36	1,60	0,85	0,50	0,5675	46,700	-65	200	140	4212.G25
9/16	**4,0**	0,666	0,510	0,565	0,800	2,36	1,60	0,85	0,50	0,5675	46,700	-65	200	189	4212.G40
9/16	**5,0**	0,666	0,510	0,565	0,800	2,36	1,60	0,85	0,50	0,5675	46,700	-65	200	219	4212.G50
9/16	**6,0**	0,666	0,510	0,565	0,800	2,36	1,60	0,85	0,50	0,5675	46,700	-65	200	249	4212.G60
9/16	**7,5**	0,666	0,510	0,565	0,800	2,36	1,60	0,85	0,50	0,5675	46,700	-65	200	298	4212.G75

[1] Shearing resistance similar to DIN 50141

Application example