

USER ACTIVITIES:
NAVY - AS, YD

REVIEWER ACTIVITIES:
ARMY - AT, AV, EA, MI
AIR FORCE - 82
DLA - IS

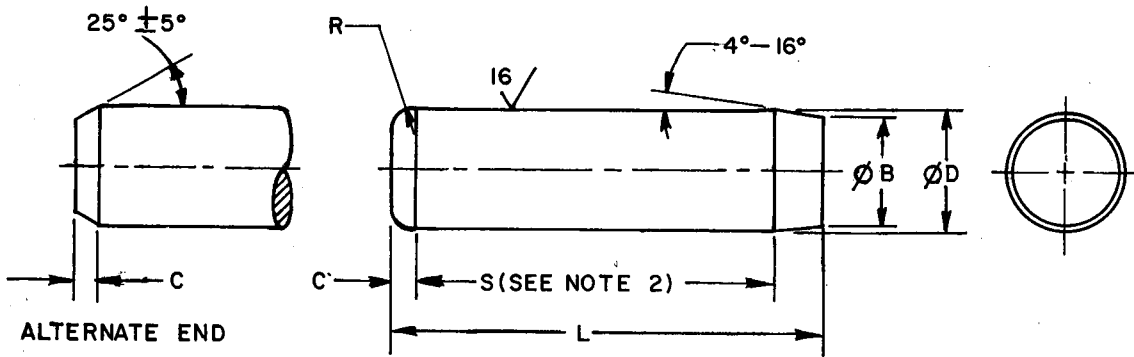


TABLE I. CONFIGURATION DIMENSIONS.

NOMINAL SIZE	Ø D		Ø B POINT		C & R CROWN HEIGHT AND RADIUS		DOUBLE SHEAR STRENGTH LBS - MIN	
	MAX	MIN	MAX	MIN	MAX	MIN	CARBON OR ALLOY STEEL	CRES
.0625	.0628	.0626	.058	.042	.020	.008	800	610
.0781 ^{1/}	.0784	.0782	.074	.058	.026	.010	1,240	700
.0938	.0941	.0939	.090	.074	.031	.012	1,800	1,000
.1250	.1253	.1251	.121	.105	.041	.016	3,200	1,800
.1562 ^{1/}	.1565	.1563	.152	.136	.052	.020	5,000	2,800
.1875	.1878	.1876	.183	.167	.062	.023	7,200	4,000
.2500	.2503	.2501	.246	.230	.083	.031	12,800	7,200
.3125	.3128	.3126	.309	.293	.104	.039	20,000	11,000
.3750	.3753	.3751	.371	.355	.125	.047	28,000	16,000
.4375	.4378	.4376	.433	.417	.146	.055	38,000	22,000
.5000	.5003	.5001	.496	.480	.167	.063	50,000	29,000
.6250	.6253	.6251	.621	.605	.208	.078	78,000	45,000
.750	.7503	.7501	.746	.730	.250	.094	114,000	65,000
.875	.8753	.8751	.871	.855	.293	.109	156,000	88,000
1.000	1.0003	1.0001	.996	.980	.333	.125	204,000	110,000

^{1/} INACTIVE - SEE PAGES 2 AND 3.

© ENTIRE STANDARD REVISED

P. A. AR Other Cust OS 99	INTERNATIONAL INTEREST	TITLE PIN, STRAIGHT, HEADLESS (DOWEL) (.0002 OVER NOMINAL SIZE)	MILITARY STANDARD MS 16555
PROCUREMENT SPECIFICATION MIL-P-21143	SUPERSEDES:	PAGE 1	OF 3

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.
This military standard is approved for use by all Departments and Agencies of the Department of Defense.
Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

APPROVED 27 DEC 57 REVISED © 19 AUG 85

TABLE II. DASH NUMBERS AND DIMENSIONS.

L LENGTH ±.010	CARBON OR ALLOY STEEL - PLAIN														
	NOMINAL SIZE														
	.0625	.0781	.0938	.125	.1562	.1875	.250	.3125	.375	.4375	.500	.625	.750	.875	1.000
	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO
.188	1		145												
.250	2	9													
.312	3	10	17												
.375	4	11	18	25											
.438	5	12	19	26											
.500	6	13	20	27	34										
.625	7	14	21	28	35	40									
.750	8	15	22	29	36	41	46								
.875		16	23	30	37	42	47								
1.000			24	31	38	43	48	53							
1.250				32	39	44	49	54	60						
1.500				33		45	50	55	61	68	77				
1.750							51	56	62	69	78				
2.000							52	57	63	70	79	88			
2.250								58	64	71	80	89	101		
2.500								59	65	72	81	90	102		
2.750									66	73	82	91	103	117	
3.000									67	74	83	92	104	118	132
3.250											84	93	105	119	133
3.500											85	94	106	120	134
3.750											86	95	107	121	135
4.000											87	96	108	122	136
4.500												98	110	124	138
5.000												100	112	126	140
6.000													116	130	144

1/ INACTIVE FOR NEW DESIGN AFTER 8 APR 1975.

TABLE III. DASH NUMBERS AND DIMENSIONS.

L LENGTH ±.010	CARBON OR ALLOY STEEL - PHOSPHATE COATED														
	NOMINAL SIZE														
	.0625	.0781	.0938	.125	.1562	.1875	.250	.3125	.375	.4375	.500	.625	.750	.875	1.000
	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO
.188	301														
.250	302	309													
.312	303	310	317												
.375	304	311	318	325											
.438	305	312	319	326											
.500	306	313	320	327	334										
.625	307	314	321	328	335	340									
.750	308	315	322	329	336	341	346								
.875		316	323	330	337	342	347								
1.000			324	331	338	343	348	353							
1.250				332	339	344	349	354	360						
1.500				333		345	350	355	361	368	377				
1.750							351	356	362	369	378				
2.000							352	357	363	370	379	388			
2.250								358	364	371	380	389	401		
2.500								359	365	372	381	390	402		
2.750									366	373	382	391	403	417	
3.000									367	374	383	392	404	418	432
3.250											384	393	405	419	433
3.500											385	394	406	420	434
3.750											386	395	407	421	435
4.000											387	396	408	422	436
4.500												398	410	424	438
5.000												400	412	426	440
6.000													416	430	444

1/ INACTIVE FOR NEW DESIGN AFTER 8 APR 1975.

P. A.	AR	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust	OS		PIN, STRAIGHT, HEADLESS (DOWEL)	
	99		(.0002 OVER NOMINAL SIZE)	MS 16555
PROCUREMENT SPECIFICATION	SUPERSEDES:		PAGE	2 OF 3
MIL-P-21143				

APPROVED 27 DEC 57 REVISED © FOR CHANGES SEE PAGES 1, 2, AND 3

USER ACTIVITIES:
NAVY - AS, YD

REVIEWER ACTIVITIES:
ARMY - AT, AV, EA, MI
AIR FORCE - 82
DLA - IS

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

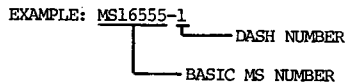
TABLE IV. DASH NUMBERS AND DIMENSIONS.

L LENGTH ±.010	CORROSION RESISTANT STEEL														
	NOMINAL SIZE														
	.0625	.0781	.0938	.125	.1562	.1875	.250	.3125	.375	.4375	.500	.625	.750	.875	1.000
DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO
.188	601														
.250	602	609													
.312	603	610	617												
.375	604	611	618	625											
.438	605	612	619	626											
.500	606	613	620	627	634										
.625	607	614	621	628	635	640									
.750	608	615	622	629	636	641	646								
.875		616	623	630	637	642	647								
1.000			624	631	638	643	648	653							
1.250				632	639	644	649	654	660						
1.500				633		645	650	655	661	668					
1.750							651	656	662	669	677				
2.000							652	657	663	670	679	688			
2.250								658	664	671	680	689	701		
2.500								659	665	672	681	690	702		
2.750									666	673	682	691	703	717	
3.000									667	674	683	692	704	718	732
3.250											684	693	705	719	733
3.500											685	694	706	720	734
3.750											686	695	707	721	735
4.000											687	696	708	722	736
4.500												698	710	724	738
5.000												700	712	726	740
6.000													716	730	744

1/ INACTIVE FOR NEW DESIGN AFTER 8 APR 1975.

REQUIREMENTS:

- MATERIAL:** CARBON OR ALLOY STEEL IN ACCORDANCE WITH ASTM A29/A29M-83. THE MAXIMUM SULFUR AND PHOSPHORUS CONTENT SHALL NOT EXCEED .04 AND .05 PERCENT. CORROSION RESISTANT STEEL, TYPE 416(UNS S41600) OR TYPE 410 (UNS S41000) AS SPECIFIED IN ASTM A582-80 AND ASTM A483-82.
- HARDNESS:** CARBON OR ALLOY STEEL PINS SHALL HAVE A CORE HARDNESS OF 47-58 HRC, AND A CASE HARDNESS OF 60 HRC MINIMUM. THE CORE HARDNESS OF THE PINS SHALL NOT IN ANY INSTANCE EXCEED THE CASE HARDNESS. MINIMUM PENETRATION FOR THE CASE HARDNESS SHALL NOT BE LESS THAN .020 INCH. PINS 1/16 INCH AND LESS IN DIAMETER MAY HAVE A HARDNESS OF 58-64 HRC THROUGHOUT. CORROSION RESISTANT STEEL PINS, TYPE 416 (UNS S41600) OR TYPE 410 (UNS S41000) SHALL HAVE A HARDNESS OF 36-42 HRC.
- PROTECTIVE COATING AND SURFACE TREATMENT:** CARBON OR ALLOY STEEL-PLAIN, MAY BE FURNISHED WITH BLACK OXIDE COATING IN ACCORDANCE WITH MIL-C-13924, CLASS 1. CARBON OR ALLOY STEEL PHOSPHATE COATED IN ACCORDANCE WITH DOD-P-16232, TYPE 2, CLASS 2. CORROSION RESISTANT STEEL SHALL BE CLEANED, DESCALED AND PASSIVATED IN ACCORDANCE WITH ASTM A380-78.
- SURFACE ROUGHNESS:** PRIOR TO COATING SURFACE ROUGHNESS SHALL BE 16/ FOR "S" LENGTH AND 125/ FOR ALL OTHER SURFACES IN ACCORDANCE WITH ANSI B46.1-78.
- PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER, FOLLOWED BY A DASH NUMBER FROM TABLE II, III, AND IV.



MS16555-1 INDICATES - PIN, STRAIGHT, HEADLESS (DOWEL) (.0002 OVER NOMINAL SIZE); LENGTH .188; NOMINAL SIZE .0625; CARBON OR ALLOY STEEL-PLAIN.

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- EFFECTIVE LENGTH "S" SHALL BE A MINIMUM OF 75 PERCENT OF TOTAL PIN LENGTH "L".
- IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.
- REFERENCED GOVERNMENT (OR NONGOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.

P. A. Other Cust	AR	INTERNATIONAL INTEREST	TITLE PIN, STRAIGHT, HEADLESS (DOWEL) (.0002 OVER NOMINAL SIZE)	MILITARY STANDARD
	OS 99			MS 16555
PROCUREMENT SPECIFICATION MIL-P-21143		SUPERSEDES:		PAGE 3 OF 3

USER ACTIVITIES:
NAVY - AS,YD

REVIEWER ACTIVITIES:
ARMY - AT,AV,EA,MI
AIR FORCE - 82
DLA - IS

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document when applicable.

APPROVED 27 DEC 57 REVISED (C) FOR CHANGES SEE PAGES 1,2, AND 3