



Howmet Fastening Systems  
 Carson Operations  
 900 E. Watson Center Road  
 Carson, California 90745 U.S.A.

Phone (310) 830-8200  
 HFS\_Carson\_Engineering@howmet.com

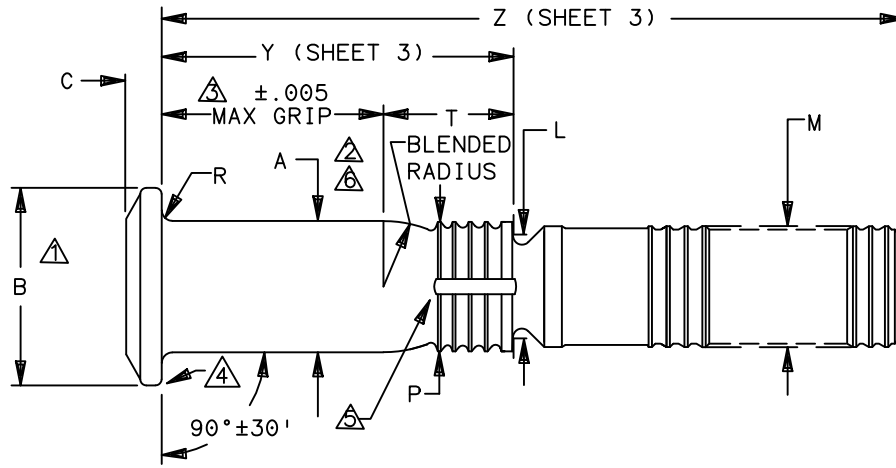
Howmet Fastening Systems  
 Us Operations  
 Clos D' Asseville BP 30004  
 95450 Us Par Vigny France

Phone +33-1-30.27.95.00  
 Fax +33-1-34.66.06.00

LGP®

ENGINEERING  
 STANDARD

THIS DRAWING, THE STRUCTURAL DESIGN DISCLOSED THEREIN AND THE TECHNICAL DATA AND ENGINEERING SERVICE REPRESENTED THEREBY ARE THE EXCLUSIVE PROPERTY OF HUCK INTERNATIONAL INCORPORATED.



LGP PIN FAMILY NUMBER	NOM SIZE	A SHANK DIA	B HEAD DIA ±.005	C HEAD HEIGHT		L REF	M MAX	P DIA MAX	R RAD ±.005	S $\Delta$	T REF
				MAX	MIN						
(H)LGPL2SPEB05()	.1640	.1635 .1630	.250	.048	.038	.126	.156	.156	.020	.0045	.170
(H)LGPL2SPEB06()	.1900	.1895 .1890	.294	.057	.047	.150	.184	.184	.020	.0045	.172
(H)LGPL2SPEB07()	.2187	.2182 .2177	.335	.064	.054	.173	.213	.213	.020	.0045	.230
(H)LGPL2SPEB08()	.2500	.2495 .2490	.376	.071	.061	.187	.244	.244	.020	.0045	.230

- $\Delta$  CONCENTRICITY: CONICAL SURFACE OF PROTRUDING HEAD TO "A" DIAMETER TO BE WITHIN .005 TIR.
- $\Delta$  SHANK STRAIGHTNESS: WITHIN "S" VALUES TIR PER INCH OF SHANK LENGTH.
- $\Delta$  MAX GRIP IS MEASURED FROM THE UNDERSIDE OF THE HEAD TO THE END OF THE FULL CYLINDRICAL PORTION OF THE SHANK.
- $\Delta$  PERMISSIBLE NATURAL FLOW OF MATERIAL. MUST BE FREE FROM SHARP CORNERS.
- $\Delta$  "V" OR "U" SHAPED SEALANT ESCAPE GROOVE MAY BE FORMED BY ROLLING, MILLING OR SAW FULL CUTTING. THE GROOVE MAY BE STRAIGHT (MILLED OR CUT) OR ON ANGLE (ROLLED) MANUFACTURER'S OPTION.
- $\Delta$  UNDERFILL PERMISSIBLE, MUST BE WITHIN "A" DIAMETER WHEN MEASURED WITH A STANDARD 1/4" (6,35 MM) DIAMETER MICROMETER.

MATERIAL: 7050-T73 ALUMINUM ALLOY PER QQ-A-430.

SHEAR STRENGTH: 41 TO 47 KSI.

SURFACE TEXTURE: Ra MAX PER ANSI-46.1 BEFORE COATING. BEARING SURFACE OF HEAD, HEAD TO SHANK FILLET RADIUS, SHANK AND TRANSITION RADIUS, -32, OTHER SURFACES -125.

DIMENSIONS IN INCHES

PROCUREMENT SPECIFICATION: C2027

©1991-2021 HUCK INTERNATIONAL, INC., ALL RIGHTS RESERVED.

LGP IS A TRADEMARK OF HUCK INTERNATIONAL, INC. AND ITS SUBSIDIARIES.

DRAWN BY	DLH	FSCM (Cage Code) 17446 - Carson FSCM (Cage Code) F6167 - France
CHECKED BY	MM	

C11 REVISED COMPANY LOGO & UPDATED TRADEMARK INFORMATION. (REF. ECR2779)

ISSUED	04/04/91	PIN, LIGHTWEIGHT GROOVE PROPORTIONED SHEAR PROTRUDING HEAD, SWAGE LOCKING, 7050-T73 ALUMINUM ALLOY. (41/47 KSI SHEAR)	(H)LGPL2SPEB()()()
REVISED	08/12/21		
PAGE	1 OF 3		SK12567

C11



Howmet Fastening Systems  
 Carson Operations  
 900 E. Watson Center Road  
 Carson, California 90745 U.S.A.

Phone (310) 830-8200  
 HFS\_Carson\_Engineering@howmet.com

Howmet Fastening Systems  
 Us Operations  
 Clos D' Asseville BP 30004  
 95450 Us Par Vigny France

Phone +33-1-30.27.95.00  
 Fax +33-1-34.66.06.00

LGP®

ENGINEERING  
 STANDARD

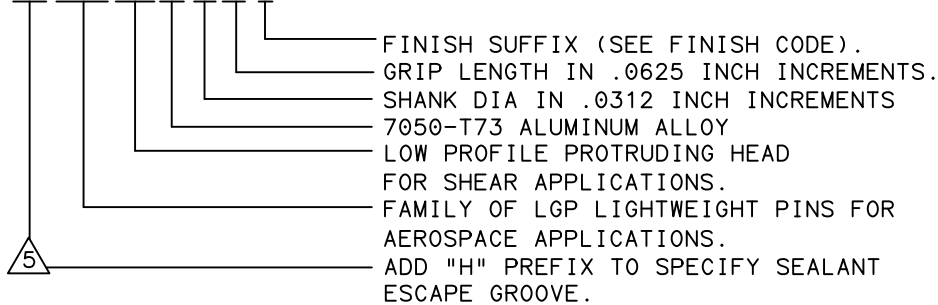
FINISH: NO LETTER = CHEMICAL FILM PER MIL-C-5541 "GOLD" PLUS CETYL ALCOHOL LUBRICATION PER MIL-L-87132.  
 SUFFIX AE = CHEMICAL FILM PER MIL-C-5541 "GOLD" UNLUBRICATED.  
 SUFFIX AN = ANODIZE PER MIL-A-8625 "CLEAR" PLUS CETYL ALCOHOL LUBRICATION PER MIL-L-87132.  
 SUFFIX BS = ANODIZE PER MIL-A-8625 "CLEAR" PLUS DRIFILM LUBRICATION PER AS5272. (DIMENSIONS APPLY PRIOR TO LUBRICATION)

HEAD MARKING: HEADS SHALL BE MARKED WITH THE MANUFACTURER'S SYMBOL, THE BASIC NUMBER (LGP), AND (EB) DEPRESSED .006 MAX DEPTH ARRANGEMENT OPTIONAL. FOR PINS REQUIRING A SEALANT ESCAPE GROOVE, AN "H" WILL BE INCLUDED ON THE HEAD IDENTIFICATION CALLOUT.

CODING: THE FIRST SET OF LETTERS DESIGNATE THE FAMILY OF LIGHTWEIGHT GP PINS FOR SHEAR APPLICATION (LGPL).  
 THE SECOND SET OF LETTERS & NUMBER (2SP) DESIGNATE HEAD SIZE, STYLE, AND LOAD APPLICATION.  
 THE NEXT LETTER (EB) IS THE MATERIAL DESIGNATOR FOR 7050-T73 ALUMINUM ALLOY, SHEAR STRENGTH: 41 TO 47 KSI.  
 THE NUMBERS FOLLOWING THE MATERIAL DESIGNATE THE NOMINAL PIN SHANK DIAMETER IN .0312 INCH INCREMENTS.  
 THE FINAL NUMBERS DESIGNATE THE GRIP LENGTH NUMBER OR THE NOMINAL PIN SHANK LENGTH IN .0625 INCH INCREMENTS.  
 SEE FINISH CODE FOR SUFFIX INFORMATION.

PART NO.

EXAMPLE: (H)LGPL2SPEB0606()



MECHANICAL PROPERTIES

LGP PIN PART NUMBER	PIN NOM SIZE	SHEAR POUNDS		COLLAR PART NUMBER	MIN ULTIMATE TENSILE LBS WITH LISTED COLLAR	PIN POSITION SWAGE GAGE
		SINGLE	DOUBLE			
(H)LGPL2SPEB05()	.1640	856 987	1712 1974	3SLC-G05	495	HG171-05
(H)LGPL2SPEB06()	.1900	1150 1326	2300 2652	3SLC-F06	750	HG171-06
(H)LGPL2SPEB07()	.2187	1526 1758	3052 3516	3SLC-F07	1236	HG171-07
(H)LGPL2SPEB08()	.2500	1997 2298	3994 4596	3SLC-F08	1500	HG171-08

DIMENSIONS IN INCHES

C11 REVISED COMPANY LOGO & UPDATED TRADEMARK INFORMATION. (REF. ECR2779)

ISSUED	04/04/91	PIN, LIGHTWEIGHT GROOVE PROPORTIONED, SHEAR PROTRUDING HEAD, SWAGE LOCKING, 7050-T73 ALUMINUM ALLOY. (41/47 KSI SHEAR)	(H)LGPL2SPEB()()()
REVISED	08/12/21		
PAGE	2 OF 3		

THIS DRAWING, THE STRUCTURAL DESIGN DISCLOSED THEREIN AND THE TECHNICAL DATA AND ENGINEERING SERVICE REPRESENTED THEREBY ARE THE EXCLUSIVE PROPERTY OF HUCK INTERNATIONAL INCORPORATED.



Howmet Fastening Systems  
 Carson Operations  
 900 E. Watson Center Road  
 Carson, California 90745 U.S.A.

Phone (310) 830-8200  
 HFS\_Carson\_Engineering@howmet.com

Howmet Fastening Systems  
 Us Operations  
 Clos D' Asseville BP 30004  
 95450 Us Par Vigny France

Phone +33-1-30.27.95.00  
 Fax +33-1-34.66.06.00

LGP®

ENGINEERING  
 STANDARD

THIS DRAWING, THE STRUCTURAL DESIGN DISCLOSED THEREIN AND THE TECHNICAL DATA AND ENGINEERING SERVICE REPRESENTED THEREBY ARE THE EXCLUSIVE PROPERTY OF HUCK INTERNATIONAL INCORPORATED.

GRIP NUMBER TABULATION										
 GRIP DASH NO.	DESIGN GRIP RANGE		05		06		07		08	
	MIN	MAX	Y	Z	Y	Z	Y	Z	Y	Z
			±.010	+ .060 - .000	±.010	+ .060 - .000	±.010	+ .060 - .000	±.010	+ .060 - .000
02	.063	.125	.295	.972	.297	1.045	—	—	—	—
03	.126	.188	.358	1.035	.360	1.128	.418	1.210	.418	1.210
04	.189	.250	.420	1.160	.422	1.253	.480	1.335	.480	1.335
05	.251	.312	.482	1.285	.484	1.378	.542	1.460	.542	1.460
06	.313	.375	.545	1.410	.547	1.503	.605	1.585	.605	1.585
07	.376	.438	.608	1.535	.610	1.628	.668	1.710	.668	1.710
08	.439	.500	.670	1.660	.672	1.753	.730	1.835	.730	1.835
09	.501	.562	.732	1.785	.734	1.878	.792	1.960	.792	1.960
10	.563	.625	.795	1.910	.797	2.003	.855	2.085	.855	2.085
11	.626	.688	—	—	—	—	—	—	.918	2.210

DIMENSIONS IN INCHES

C11 REVISED COMPANY LOGO & UPDATED TRADEMARK INFORMATION. (REF. ECR2779)

ISSUED	04/04/91
REVISED	08/12/21
PAGE	3 OF 3

PIN, LIGHTWEIGHT GROOVE PROPORTIONED  
 SHEAR PROTRUDING HEAD, SWAGE LOCKING,  
 7050-T73 ALUMINUM ALLOY (41/47 KSI SHEAR)

(H) LGPL2SPEB( ) ( ) ( )

SK12567