



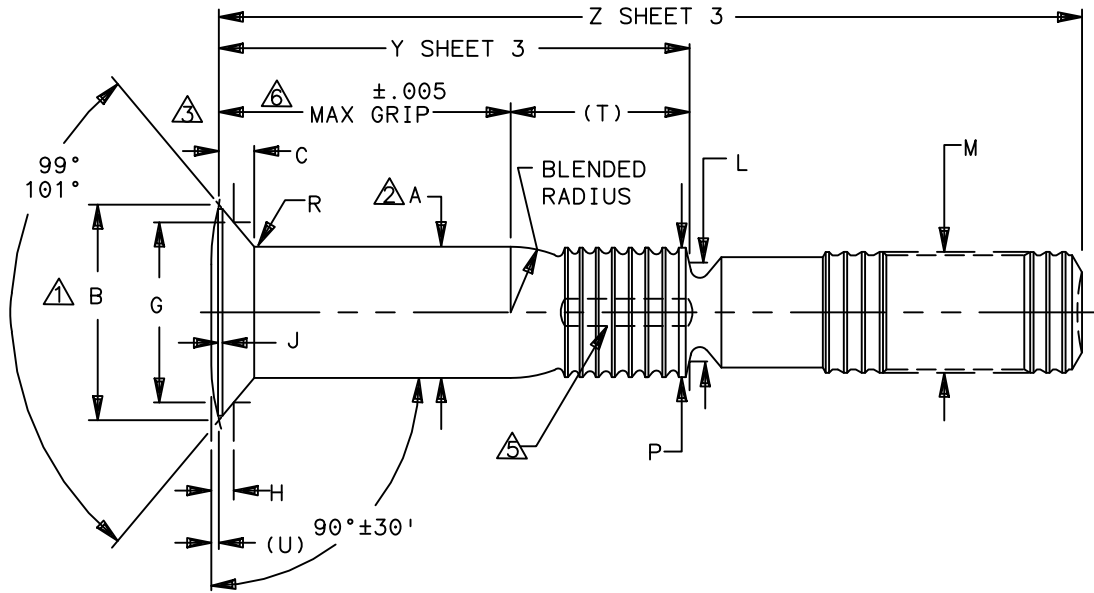
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GP™

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.



GP FAMILY NUMBER	NOM SIZE	A SHANK DIA ±.0005	B THEO INTER DIA NOM	C HEAD HEIGHT NOM	G GAGE DIA ±.0001	H GAGE HEIGHT		J MAX	L DIA REF	M DIA MAX	P DIA MAX	R RAD ±.005	S Δ	(T) REF	(U) REF
						MAX	MIN								
GPL3SC-DT05-()	.164	.1630	.2556	.0388	.2027	.0316	.0286	.011	.126	.156	.156	.020	.0045	.241	.0079
GPL3SC-DT06-()	.190	.1890	.2974	.0455	.2440	.0283	.0251	.013	.164	.184	.184	.025	.0045	.279	.0043
GPL3SC-DT08-()	.250	.2490	.3908	.0595	.3314	.0320	.0282	.017	.224	.244	.244	.025	.0045	.324	.0052
GPL3SC-DT10-()	.312	.3115	.4695	.0663	.4046	.0352	.0310	.020	.268	.306	.306	.035	.0045	.407	.0059
GPL3SC-DT12-()	.375	.3740	.5557	.0760	.4853	.0393	.0343	.023	.339	.368	.370	.035	.0060	.442	.0075

- Δ CONCENTRICITY: CONICAL SURFACE OF COUNTERSUNK HEAD TO "A" DIAMETER TO BE WITHIN .005 TIR.
- Δ SHANK STRAIGHTNESS: WITHIN "S" VALUES TIR PER INCH OF SHANK LENGTH.
- Δ DIMENSIONS "C", "U", "Y" & "Z" ARE LOCATED FROM THEORETICAL INTERSECTION OF THE CROWN AND HEAD ANGLE.
- 4 DIMENSION B AND C FOR ENGINEERING REFERENCE ONLY, NOT FOR INSPECTION PURPOSES
- Δ SEALANT ESCAPE GROOVE (SEE SHEET 2).
- Δ GRIP LENGTH IS MEASURED FROM THE THEORETICAL INTERSECTION OF THE CROWN AND HEAD ANGLE TO THE END OF THE FULL CYLINDRICAL PORTION OF THE SHANK.

MATERIAL: 8740 ALLOY STEEL.
 MINIMUM SHEAR STRENGTH: 95 KSI.

SURFACE TEXTURE: Ra MAX PER ANSI-B46.1 BEFORE COATING. CONICAL SURFACE OF HEAD, HEAD TO SHANK FILLET RADIUS, SHANK AND TRANSITION RADIUS, -32, OTHER SURFACES -125.

DIMENSIONS IN INCHES

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DRAWN BY	DH
CHECKED BY	MM

C3	REVISED COMPANY LOGO & UPDATED TRADEMARK INFORMATION. (REF. ECR2923)		PIN, GROOVE PROPORTIONED GP™ PULL TYPE, SWAGE LOCKING, SHEAR 100° FLUSH HEAD 8740 ALLOY STEEL. (95 KSI SHEAR)	GPL3SC-DT()-() SK12032
	ISSUED	09/01/78		
	REVISED	03/31/22		
	PAGE	1 OF 3		

C3



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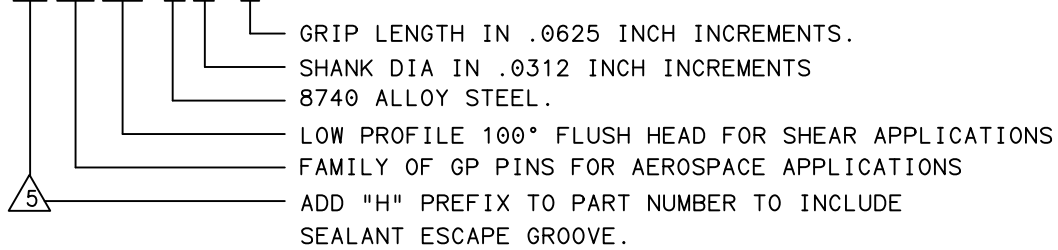
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FINISH: CADMIUM PLATED PER QQ-P-416 TYPE, TYPE II, CLASS 2
 WITH (CHLORINE FREE) CETYL ALCOHOL.

HEAD MARKING: HEAD SHALL BE MARKED WITH THE MANUFACTURER'S SYMBOL, BASIC NUMBER (GP3), DEPRESSED .010 MAX, ARRANGEMENT OPTIONAL. FOR PIN WITH SEALANT ESCAPE GROOVE ADD DOT, DEPRESSED .010 MAX. ARRANGEMENT OPTIONAL.

CODING: THE FIRST SET OF LETTERS DESIGNATE THE FAMILY OF GROOVE PROPORTIONED PINS FOR AEROSPACE APPLICATIONS (GPL).
 THE SECOND SET OF LETTERS & NUMBER 3SC DESIGNATE HEAD SIZE, STYLE, AND LOAD APPLICATION.
 THE NEXT LETTER "DT", IS THE MATERIAL DESIGNATOR FOR 8740 ALLOY STEEL
 MIN SHEAR STRENGTH: 95 KSI.
 THE NUMBERS FOLLOWING THE MATERIAL DESIGNATE THE NOMINAL PIN SHANK DIAMETER IN .0312 INCH INCREMENTS.
 THE FINAL NUMBER(S) DESIGNATES THE GRIP LENGTH NUMBER OR THE NOMINAL PIN SHANK LENGTH IN .0625 INCH INCREMENTS.
 SEE FINISH CODE FOR SUFFIX INFORMATION.

EXAMPLE: (H)GPL3SC-DT08-06



MECHANICAL PROPERTIES					
GP PIN PART NUMBER	PIN NOM. SIZE	MINIMUM DOUBLE SHEAR POUNDS	COLLAR PART NUMBER	MIN ULTIMATE TENSILE LBS. WITH LISTED COLLARS	PIN POSITION SWAGE GAGE
GPL3SC-DT05-()	.164	4010	2SCC-3C05 2SC-3C05	1400	HG104-05
GPL3SC-DT06-()	.190	5380	2SCC-3C06 2SC-3C06	1600	HG104-06
GPL3SC-DT08-()	.250	9300	2SCC-3C08 2SC-3C08	3000	HG104-08
GPL3SC-DT10-()	.312	14600	2SCC-3C10 2SC-3C10	5000	HG104-10
GPL3SC-DT12-()	.375	21000	2SCC-3C12 2SC-3C12	7000	HG104-12

DIMENSIONS IN INCHES

C₃

REVISED COMPANY LOGO & UPDATED TRADEMARK INFORMATION. (REF. ECR2923)

ISSUED	09/01/78	PIN, GROOVE PROPORTIONED GP™ PULL TYPE, SWAGE LOCKING, SHEAR 100° FLUSH HEAD 8740 ALLOY STEEL. (95 KSI SHEAR)	GPL3SC-DT()-()
REVISED	03/31/22		
PAGE	2 OF 3		SK12032

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AEROSPACE**

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GRIP DASH NO.	MINIMUM PERMIS- SIBLE GRIP OVERLAP	DESIGN GRIP RANGE		MAXIMUM PERMIS- SIBLE GRIP OVERLAP	05		06		08		10		12	
		MIN.	MAX.		Y ±.010	Z +.060 -.000	Y ±.010	Z +.060 -.000	Y ±.010	Z +.060 -.000	Y ±.010	Z +.060 -.000	Y ±.010	Z +.060 -.000
02		△	.125	.141	.366	1.37	.404	1.38	.449	1.44	—	—	—	—
03	.109	.126	.188	.203	.429	1.43	.467	1.44	.512	1.50	.595	1.80	—	—
04	.172	.189	.250	.266	.491	1.49	.529	1.50	.574	1.56	.657	1.86	.692	2.05
05	.234	.251	.312	.328	.553	1.55	.591	1.56	.636	1.63	.719	1.92	.754	2.11
06	.297	.313	.375	.391	.616	1.62	.654	1.63	.699	1.69	.782	1.99	.817	2.17
07	.359	.376	.438	.453	.679	1.68	.717	1.69	.762	1.75	.845	2.05	.880	2.24
08	.422	.439	.500	.516	.741	1.74	.779	1.75	.824	1.81	.907	2.11	.942	2.30
09	.484	.501	.562	.578	.803	1.80	.841	1.81	.886	1.88	.969	2.17	1.004	2.36
10	.547	.563	.625	.641	.866	1.87	.904	1.88	.949	1.94	1.032	2.24	1.067	2.42
11	.609	.626	.688	.703	.929	1.93	.967	1.94	1.012	2.00	1.095	2.30	1.130	2.49
12	.672	.689	.750	.766	.991	1.99	1.029	2.00	1.074	2.06	1.157	2.36	1.192	2.55
13	.734	.751	.812	.828	1.053	2.05	1.091	2.06	1.136	2.13	1.219	2.42	1.254	2.61
14	.797	.813	.875	.891	1.116	2.12	1.154	2.13	1.199	2.19	1.282	2.49	1.317	2.67
15	.859	.876	.938	.953	1.179	2.18	1.217	2.19	1.262	2.25	1.345	2.55	1.380	2.74
16	.922	.939	1.000	1.016	1.241	2.24	1.279	2.25	1.324	2.31	1.407	2.61	1.442	2.80
17	.984	1.001	1.062	1.078	1.303	2.30	1.341	2.31	1.386	2.38	1.469	2.67	1.504	2.86
18	1.047	1.063	1.125	1.141	1.366	2.37	1.404	2.38	1.449	2.44	1.532	2.74	1.567	2.92
19	1.109	1.126	1.188	1.203	1.429	2.43	1.467	2.44	1.512	2.50	1.595	2.80	1.630	2.99
20	1.172	1.189	1.250	1.266	1.491	2.49	1.529	2.50	1.574	2.56	1.657	2.86	1.692	3.05
21	1.234	1.251	1.312	1.328	1.553	2.55	1.591	2.56	1.636	2.63	1.719	2.92	1.754	3.11
22	1.297	1.313	1.375	1.391	1.616	2.62	1.654	2.63	1.699	2.69	1.782	2.99	1.817	3.17
23	1.359	1.376	1.438	1.453	1.679	2.68	1.717	2.69	1.762	2.75	1.845	3.05	1.880	3.24
24	1.422	1.439	1.500	1.516	1.741	2.74	1.779	2.75	1.824	2.81	1.907	3.11	1.942	3.30
25	1.484	1.501	1.562	1.578	1.803	2.80	1.841	2.81	1.886	2.88	1.969	3.17	2.004	3.36
26	1.547	1.563	1.625	1.641	1.866	2.87	1.904	2.88	1.949	2.94	2.032	3.24	2.067	3.42
27	1.609	1.626	1.688	1.703	1.929	2.93	1.967	2.94	2.012	3.00	2.095	3.30	2.130	3.49
28	1.672	1.689	1.750	1.766	1.991	2.99	2.029	3.00	2.074	3.06	2.157	3.36	2.192	3.55
29	1.734	1.751	1.812	1.828	2.053	3.05	2.091	3.06	2.136	3.13	2.219	3.42	2.254	3.61
30	1.797	1.813	1.875	1.891	2.116	3.12	2.154	3.13	2.199	3.19	2.282	3.49	2.317	3.67
31	1.859	1.876	1.938	1.953	2.179	3.18	2.217	3.19	2.262	3.25	2.345	3.55	2.380	3.74
32	1.922	1.939	2.000	2.016	2.241	3.24	2.279	3.25	2.324	3.31	2.407	3.61	2.442	3.80

△ .080 MINIMUM SHEET THICKNESS RECOMMENDED.

DIMENSIONS IN INCHES

C₃

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PIN, GROOVE PROPORTIONED GP™
PULL TYPE, SWAGE LOCKING,
SHEAR 100° FLUSH HEAD
8740 ALLOY STEEL. (95 KSI SHEAR)

GPL3SC-DT()-()
SK12032