

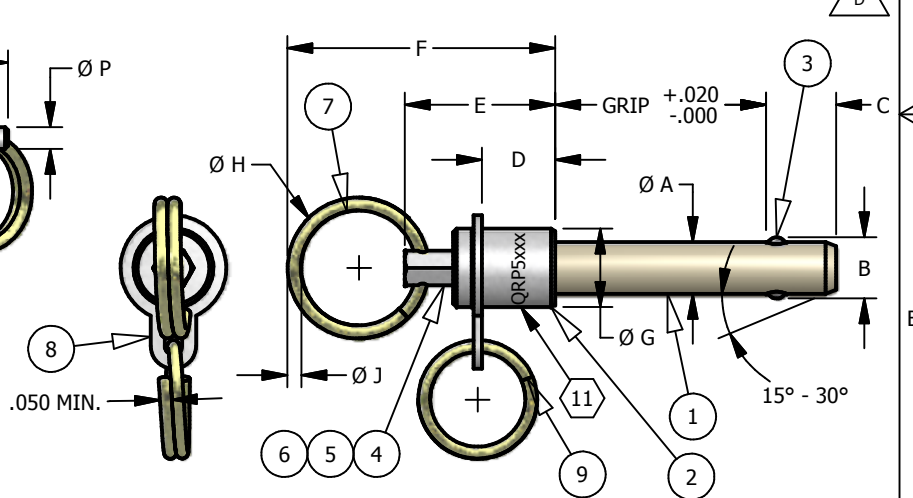
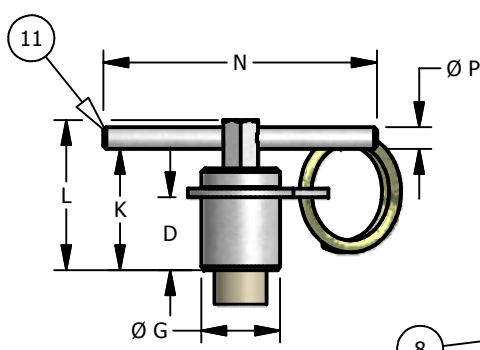
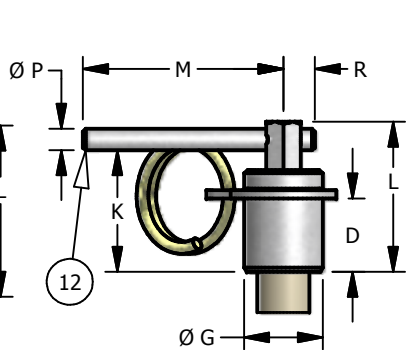
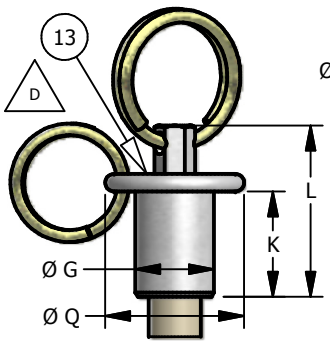
SHANK DIA	NOM DIA	A Ø		B	C	D		E	F	G		H		J Ø	K	L	M		N		P Ø	Q Ø	R	S	T	CALCULATED DOUBLE SHEAR STRENGTH	
		MAX	MIN	±.005	MAX	MAX	MIN	MIN	MAX	MAX	MIN	MAX	MIN	MIN	MIN	MAX	MAX	MIN	MAX	MIN	MIN	MAX	MAX	MAX	MAX	ALLOY STEEL	CRES, 17-4 ph
		03	3/16	.1885	.1870	.220	.410	.480	.415	.935	1.945	.450	.360	1.125	1.000	.080	.780	1.030	1.300	1.200	1.750	1.375	.105	1.200	.275	.500	.640
04	1/4	.2485	.2470	.289	.410	.480	.415	.935	1.945	.450	.360	1.125	1.000	.080	.780	1.030	1.300	1.200	1.750	1.375	.105	1.200	.275	.500	.640	8,200	9,200
05	5/16	.3110	.3095	.375	.440	.480	.415	.935	1.945	.505	.390	1.125	1.000	.080	.780	1.030	1.300	1.200	1.750	1.375	.105	1.200	.300	.550	.680	12,800	14,400
06	3/8	.3735	.3720	.440	.510	.540	.445	1.000	2.025	.630	.510	1.125	1.000	.080	.830	1.090	1.500	1.375	2.000	1.875	.134	1.200	.363	.640	.790	18,400	20,700
07	7/16	.4360	.4345	.509	.510	.540	.445	1.000	2.025	.630	.510	1.125	1.000	.080	.830	1.090	1.500	1.375	2.000	1.875	.134	1.390	.363	.640	.790	25,000	28,500
08	1/2	.4985	.4970	.594	.590	.540	.445	1.070	2.200	.755	.640	1.125	1.000	.080	.880	1.270	1.655	1.530	2.250	2.125	.200	1.390	.425	.780	.920	32,800	36,900
09	9/16	.5610	.5595	.666	.660	.540	.445	1.070	2.200	.755	.640	1.125	1.000	.080	.880	1.270	1.655	1.530	2.250	2.125	.200	1.390	.425	.820	1.020	41,600	46,700
10	5/8	.6235	.6220	.750	.750	.575	.510	1.250	2.690	.870	.805	1.500	1.312	.120	1.000	1.465	1.810	1.685	2.500	2.375	.231	1.450	.485	.930	1.150	51,400	57,800
12	3/4	.7485	.7470	.887	.790	.595	.530	1.250	2.690	.960	.890	1.500	1.312	.120	1.000	1.465	1.810	1.685	2.500	2.375	.231	1.580	.530	1.000	1.190	74,000	83,200
14	7/8	.8735	.8720	1.046	.950	.730	.665	1.500	2.860	1.150	1.070	1.500	1.312	.120	1.180	1.640	2.250	2.125	2.875	2.750	.231	1.920	.625	1.180	1.440	100,000	112,500
16	1	.9985	.9970	1.219	1.100	.865	.800	1.700	3.010	1.280	1.200	1.500	1.312	.120	1.320	1.830	2.250	2.125	2.875	2.750	.231	2.060	.690	1.360	1.650	131,000	147,200

B- BUTTON STYLE

L- "L" HANDLE STYLE

T- "T" HANDLE STYLE

R- RING HANDLE STYLE



SAMPLE PART NO. CALLOUT: **QRP5 C 10 R 35 F D W C.65 / L8A14 U**

BASIC PART NUMBER

MATERIAL CODE:
C- CRES, 17-4 PH
S- ALLOY STEEL

SHANK DIAMETER (X 1/16")

GRIP LENGTH (X .1")

HANDLE STYLE:
B - BUTTON
R - RING
L - "L" STYLE
T - "T" STYLE

F - 4 BALL OPTION
D - DRIVE OUT OPTION
W - ATTACHING BAND AND ATTACHING RING NOT REQUIRED
C - IF LANYARD ATTACHED TO RING - OMIT IF LANYARD ATTACHED TO ATTACHING BAND (see sheet 2 for details)
OMIT FOR STANDARD FOR NON STANDARD ADD C+
L - LANYARD CALLOUT (see sheet 2 for details)
OMIT FOR 2 NO LANYARD

OMIT FOR STANDARD
FOR NON STANDARD ADD C+

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE AS FOLLOWS:
DECIMALS XX ± .03
 XXX ± .010
ANGLES ± 2°
SURFACE FINISH: ✓
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ACTUAL SIGNATURES & APPROVAL DATES ON FILE

TITLE PIN, POSITIVE LOCK, DOUBLE ACTING

SIZE A **DWG NO.** QRP5 **REV** D

SCALE DNS **TYPE** SAPP **CAGE CODE** 09094 **SHEET 1 OF 3**

SAMPLE PART NO. CALLOUT: QRP5C10R35 **L8 A 14 U**

/ - IF LANYARD ATTACHED TO RING
 OMIT IF LANYARD ATTACHED TO ATTACHING BAND (as shown)

LANYARD LENGTH (X 1.00) Example: 8 inches

OMIT IF QRP STANDARD STANDARD: **C4** (C TAB AND #4 HOLE SIZE)

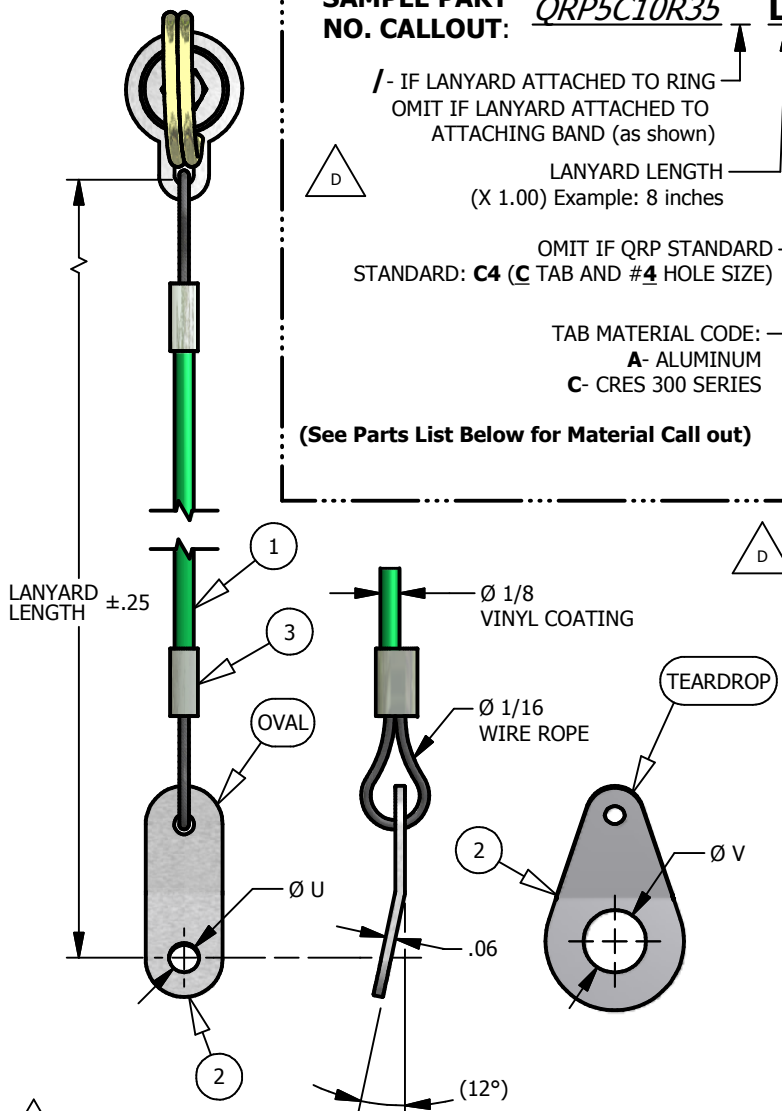
TAB MATERIAL CODE:
A- ALUMINUM
C- CRES 300 SERIES

TAB HOLE SIZE & STYLE:
Ø U (OVAL)-
 4 = Ø.129
 6 = Ø.195
 7 = Ø.255
Ø V (TEARDROP)-
 8 = Ø.281
 10 = Ø.318
 12 = Ø.377
 14 = Ø.406
 16 = Ø TBD
 (tab shape may be oval or teardrop depending on hole required)

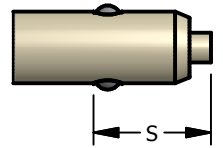
(See Parts List Below for Material Call out)

WEIGHT CHART- DOUBLE ACTING QUICK RELEASE PINS
 (Based on 2 locking elements/balls and no lanyard attachment)

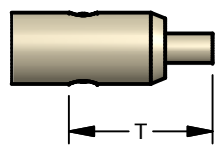
SHANK DIA	NOM DIA	WEIGHT PER 1.00 in. GRIP LENGTH (oz.)	WEIGHT OF COMPLETE PIN LESS GRIP LENGTH			
			BUTTON STYLE (oz.)	"L" STYLE (oz.)	RING STYLE (oz.)	"T" STYLE (oz.)
03	3/16	.112	1.136	0.720	0.816	0.736
04	1/4	.208	1.136	0.720	0.816	0.736
05	5/16	.320	1.200	0.800	0.896	0.816
06	3/8	.496	1.664	1.248	1.264	1.280
07	7/16	.656	TBD	1.328	1.344	1.360
08	1/2	.848	2.848	2.400	2.240	2.464
09	9/16	1.136	TBD	2.688	2.528	2.752
10	5/8	1.360	TBD	3.328	3.088	3.408
12	3/4	1.952	TBD	4.480	4.240	4.560
14	7/8	2.720	TBD	7.008	6.944	7.072
16	1	3.520	TBD	9.856	9.696	9.904



DRIVE-OUT FEATURE (LOCK POSITION)



DRIVE-OUT FEATURE (UNLOCK POSITION)



WEIGHT CHART EXAMPLE:

QRP5 RING STYLE PIN = (MATERIAL WEIGHT PER 1.00 GRIP LENGTH x GRIP LENGTH DESIRED) + MATERIAL WEIGHT OF COMPLETE PIN LESS GRIP

QRP5C04R12= (.208 x 1.2) + .816 oz.
QRP5C04R12= 1.066 oz. TOTAL WEIGHT

NOTE	ITEM	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
	3	1	FERRULE	Zinc Coated Copper	MS51844 (or Equivalent)
	5	2	TAB	Aluminum Alloy 6061 Cres 300 Series	AMS-QQ-A-200/11 ASTM A240, ASTM A666 or ASTM A693
	1	1	LANYARD	Wire Rope- 7x7 Cres Vinyl Coated Green	Commercial Grade

PARTS LIST - LANYARD ASSEMBLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS, ARE IN INCHES AND TOLERANCES ARE AS FOLLOWS:

DECIMALS **ANGLES**
XX ± .03 **± 2'**
XXX ± .01

SURFACE FINISH: ✓

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 4/21/2010
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ACTUAL SIGNATURES & APPROVAL DATES ON FILE

TITLE
 PIN, POSITIVE LOCK, DOUBLE ACTING

SIZE A **DWG NO.** QRP5

SCALE DNS **TYPE** SAPP **CAGE CODE** 09094 **SHEET 2 OF 3**

NOTES:


1. AGE HARDEN 17-4 PH IAW AMS 2759, 180/210 KSI.
2. HEAT TREAT 4130 ALLOY STEEL IAW AMS 2759, 160/180 KSI.
3. PASSIVATE STAINLESS STEEL (CRES) PARTS IAW AMS 2700 (METHOD I OR METHOD II), ASTM A380, OR ASTM A967.
4. CAD PLATE ALLOY STEEL OR MUSIC WIRE IAW AMS-QQ-P-416, TYPE II, CLASS 2.
5. ANODIZE ALUMINUM ALLOY (TAB) IAW MIL-A-8625, TYPE II, CLASS 1, COLOR CLEAR.
6. BALLS: 440C STAINLESS HARDNESS - Rc 58-62. BALLS MAY BE ROTATED OTHER THAN SHOWN.
7. SPRING MATERIAL 17-7 PH STAINLESS STEEL TEMPER IAW AMS 2759, CONDITION CH900.
8. ALL PINS FURNISHED WITH ATTACHING RING, SIZE AT QRP'S OPTION.
9. IF OTHER THAN STANDARD "C" DIMENSION IS REQUIRED ADD "C" + REQUIRED DIMENSION TO END OF PIN CALLOUT.
(EXAMPLE: QRP5C04R10C2.25 - C= 2.25 INCHES) TOLERANCE SHALL BE AS NOTED IN COLUMN C.
10. FOR HIGHER TENSILE STRENGTH USE FOUR BALL APPLICATION. ADD F TO END OF PIN CALLOUT.
11. IDENTIFICATION SHALL BE PLACED ON HEAD. LOCATION, FORMAT AND CONTENT MAY VARY FROM THAT SHOWN.
12. SEE SHEET 2 FOR WEIGHT CHART.

NOTE ID	ITEM	QT	DESCRIPTION	MATERIAL	SPECIFICATION	
	4	12	1	BUTTON HEAD	Carbon Steel ASTM A108	
	3	11	1	L HANDLE	Stainless Steel, 303 or Carbon Steel ASTM A484/A582/A484M/A582M or ASTM A108	
	3	10	1	T HANDLE	Stainless Steel, 303 or Carbon Steel ASTM A484/A582/A484M/A582M or ASTM A108	
	3	9	1	RING	Stainless Steel, 302, 17-7 ph or Music Wire ASTM A313/A313M / AMS 5768 ASTM A228	
	3	8	1	ATTACHING BAND	Stainless Steel, 302, 303, 304 or Carbon Steel ASTM A240 / AMS 5513 ASTM A1008/A1008M	
	3	7	1	RING	Stainless Steel, 302, 17-7 ph or Music Wire ASTM A313/A313M / AMS 5768 ASTM A228	
	3	6	1	SPRING	Stainless Steel, 302 Class1, 17-7 ph or Music Wire ASTM A313/A313M / AMS 5768 ASTM A228	
	3	5	1	BUTTON	Stainless Steel, 303 or Carbon Steel, 4130 Alloy ASTM A484/A582/A484M/A582M or ASTM A108 / AMS-S-6758	
	1, 3	2, 4	4	1	SPINDLE	Stainless Steel, 17-4 ph or Alloy Steel, 4130 AMS 5643 AMS-S-6758
	3, 6	3	2	BALL	Stainless Steel, 440C ASTM F2215-05	
	4	2	1	HEAD	Carbon Steel or 4130 Alloy ASTM A108 / AMS-S-6758	
	2, 4	1	1	SHANK	Alloy Steel, 4130 AMS-S-6758	

PARTS LIST - "S" MATERIAL CODE

NOTE ID	ITEM	QT	DESCRIPTION	MATERIAL	SPECIFICATION
	3	12	1	BUTTON HEAD	Stainless Steel, 303 ASTM A484/A582/A484M/A582M
	3	11	1	"L" HANDLE	Stainless Steel, 303 ASTM A484/A582/A484M/A582M
	3	10	1	"T" HANDLE	Stainless Steel, 303 ASTM A484/A582/A484M/A582M
	3	9	1	RING	Stainless Steel, 302 or 17-7 ph ASTM A313/A313M / AMS 5678
	3	8	1	ATTACHING BAND	Stainless Steel, 302, 303, 304 ASTM A240/A240M, AMS 5513
	3	7	1	RING	Stainless Steel, 302 or 17-7 ph ASTM A313/A313M / AMS 5678
	3, 7	6	1	SPRING	Stainless Steel, 302 Class 1 or 17-7 ph ASTM A313/A313M / AMS 5678
	3	5	1	BUTTON	Stainless Steel, 303 ASTM A484/A582/A484M/A582M
	1, 3	4	1	SPINDLE	Stainless Steel, 17-4 ph AMS 5643
	3, 6	3	2	BALL	Stainless Steel, 440C ASTM F2215-05
	3	2	1	HEAD	Stainless Steel, 303 ASTM A484/A582/A484M/A582M
	1, 3	1	1	SHANK	Stainless Steel, 17-4 ph AMS 5643

PARTS LIST - "C" MATERIAL CODE

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	MFG K. WINKLER MATL MNGR	ACTUAL SIGNATURES & APPROVAL DATES ON FILE			SIZE DWG NO. A QRP5	REV D
	QA V. BLISS SALES				SCALE TYPE SAPP CAGE CODE SHEET 3 OF 3 DNS SAPP 09094	
	ENG APPROVED J. BUSALACHI					