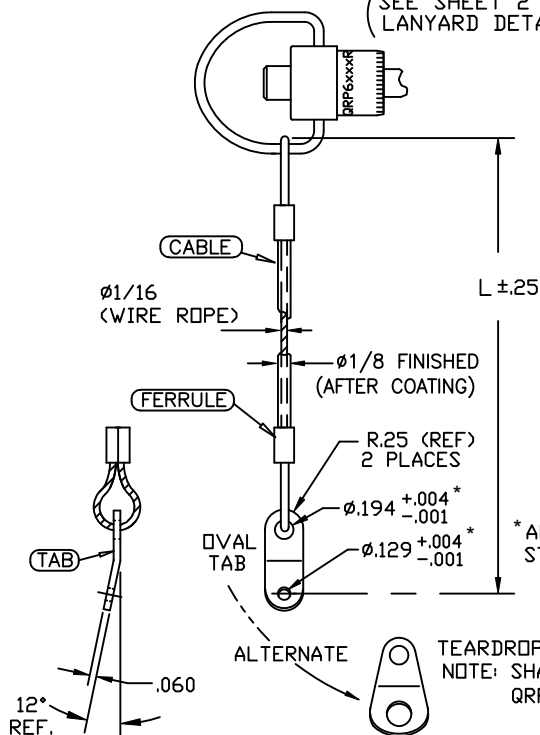


STANDARD QRP6XXXR W/ OPTIONAL LANYARD
(ATTACHED DIRECTLY TO HANDLE)

(SEE SHEET 2 FOR
LANYARD DETAILS)

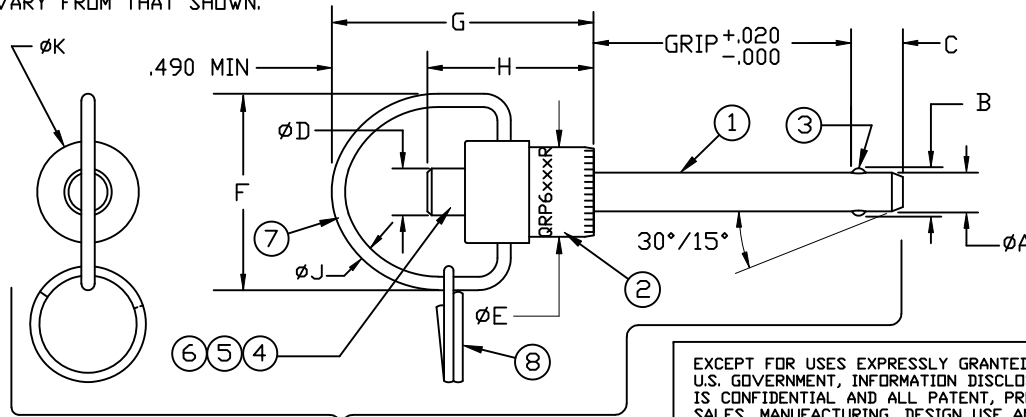


* APPLIES TO
STANDARD LANYARD OPTION
SEE SHEET 2 FOR
LANYARD DETAILS

ALTERNATE
TEARDROP TAB
NOTE: SHAPE SUPPLIED AT
QRP'S OPTION.

CORROSION RESISTANT ***

(WHEN REQUIRED) IDENTIFICATION MARKINGS
SHALL BE PLACED ON HANDLE. LOCATION,
FORMAT, AND CONTENT MAY
VARY FROM THAT SHOWN.



STANDARD QRP6XXXR (W/O LANYARD)

EXCEPT FOR USES EXPRESSLY GRANTED TO THE
U.S. GOVERNMENT, INFORMATION DISCLOSED HEREON
IS CONFIDENTIAL AND ALL PATENT, PROPRIETARY,
SALES, MANUFACTURING, DESIGN USE AND REPRO-
DUCTION RIGHTS ARE RESERVED BY QRP INC.,
2307 MERCANTILE DR. N.E.
LELAND, NORTH CAROLINA 28451
TEL: (910) 371-0700 OR, www.qrp-inc.com

REV	DESCRIPTION	BY	DATE
B	SEE ECO 12553	JJB	3JUN2004

8	ATTACHING RING	CRES, 302; CRES, 17-7PH	ASTM A313 /AMS 5768
7	HANDLE RING	CRES, 302; CRES, 17-7PH	ASTM A313 /AMS 5768
6	BUTTON	CRES, 303 /AL. ALLOY 2011, 2017, 2024; ALUM. ALLOY 6061-T6	ASTM A484, A582, A582 / AMS-QQ-A-225/3, AMS-QQ- -A-225/5, AMS-QQ-A-225/6 AMS-QQ-A-200/8, AMS-QQ- A-225/8 OR ASTM B221
5	SPRING	CRES, 302 CLASS 1; CRES, 17-7PH	ASTM A313; AMS 5678
4	SPINDLE	CRES, 17-4PH	AMS 5643
3	BALLS	CRES, 440C	AMS-QQ-S-763
2	HEAD	CRES, 303	ASTM A484, ASTM A581, ASTM A582, ASTM A240
1	SHANK	CRES, 17-4PH	AMS 5643

*** PINS MADE EXCLUSIVELY FROM CRES 316 ARE AVAILABLE.
ASK YOUR SALES REPRESENTATIVE FOR DETAILS.

ALLOY STEEL

8	ATTACHING RING	MUSIC WIRE /CRES, 302 , CRES, 17-7PH	ASTM A228 /ASTM A313 / AMS 5768
7	HANDLE RING	MUSIC WIRE /CRES, 302 , CRES, 17-7PH	ASTM A228 /ASTM A313 / AMS 5768
6	BUTTON	AL. ALLOY 2011, AL. ALLOY 2017, AL. ALLOY 2024 ; ALUM. ALLOY 6061-T6; CARBON STL	AMS-QQ-A-225/3, AMS- QQ-A-225/5, AMS-QQ- A-225/6; AMS-QQ-A-200/8, AMS- QQ-A-225/8, ASTM B221; ASTM A108
5	SPRING	MUSIC WIRE /CRES, 302 CLASS 1	ASTM A228 /ASTM A313
4	SPINDLE	ALLOY STL, 4130	AMS-S-6758
3	BALLS	CRES, 440-C	AMS-QQ-S-763
2	HEAD	CARBON STEEL	ASTM A108
1	SHANK	ALLOY STL, 4130	AMS-S-6758

TOLERANCES UNLESS
OTHERWISE SPECIFIED
DECIMALS ANGLES
XX ±.03 ±2°
XXX ±.010

FINISH:
AS NOTED

SHEET 1 OF 3



QRP, Incorporated

2307 Mercantile Drive N.E.
Leland, North Carolina 28451

PIN, GROUND HANDLE, "R"

DRAWN	BC	DATE	1/3/89	SCALE:	DNS	REV
CHECKED		DATE		CAD FILE:	QRP6R5	
APPROVED		DATE		BLOCK:	SAPP	B
IDENTIFICATION (CAGE) CODE:				DRAWING NO.	QRP6XXXR	

09094

EXCEPT FOR USES EXPRESSLY GRANTED TO THE U.S. GOVERNMENT, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL PATENT, PROPRIETARY, SALES, MANUFACTURING, DESIGN USE AND REPRODUCTION RIGHTS ARE RESERVED BY QRP, INCORPORATED, 2307 MERCANTILE DR. N.E., LELAND, NORTH CAROLINA 28451. TEL: (910) 371-0700 . DR, www.qrp-inc.com .

QRP6XXXR [B]

REV	DESCRIPTION	BY	DATE
B	SEE ECO 12553	JJB	3JUN2004

PART NO. CALLOUT IS AS FOLLOWS:

SAMPLE PART NO. CALLOUT → **QRP6 C 10 R 35 C .85 F / L8A14**

(SEE TRAVELER FOR ACTUAL PART NO.)

BASIC PART NO. →

SHANK MATERIAL →

C = CRES, 17-4PH

S = ALLOY STEEL, 4130

SHANK DIA. (X 1/16") →

HANDLE STYLE - "R" (RING) →

GRIP LENGTH (X .1") →

"F" DENOTES 4-BALL OPTION (6)

FOR "C" DIMENSIONS OTHER THAN LISTED ADD "C" + REQUIRED DIMENSION IN WHOLE TENTHS OF AN INCH. (ACTUAL DECIMAL VALUE USED IF REQUIREMENT IS NOT IN WHOLE TENTHS OF AN INCH)

LANYARD (OPTIONAL) →

LANYARD CALLOUT AS FOLLOWS: (SAMPLE ONLY)

L 8 A 14 (7)

LANYARD LENGTH →

TAB MATERIAL →

HOLE DIA. →

+004
-001

-4 = .129 -10 = .318
-6 = .194 -12 = .377
-7 = .255 -14 = .406
-8 = .281 -16 = TBD

A = ALUM. ALLOY PER AMS-QQ-A-250/11
C = CRES PER ASTM A240, ASTM A666, OR ASTM A693

Ø1/16, 7X7 CRES WIRE ROPE, VINYL COATED TO Ø1/8. TERMINALS ARE ZINC COATED COPPER. (NICO PRESS 28-1C OR EQUIVALENT). STD TAB SUPPLIED IS CRES Ø.129 OPEN HOLE. TAB SHAPE MAY BE OVAL OR TEARDROP DEPENDING ON HOLE REQUIRED.

SHANK DIA	NDM DIA	AØ		B ±.005	C +.000 -.030	DØ		EØ		F MIN	G MAX	H MIN	JØ MIN	KØ MAX	CALCULATED DOUBLE SHEAR STRENGTH		MS CROSS REFERENCE
		MAX	MIN			MAX	MIN	MAX	MIN						STEEL	CRES	
03	3/16	.1885	.1870	.220	.260	.310	.250	.530	.310	1.060	1.450	.730	.080	.750	4,600	5,150	17987X3XX
04	1/4	.2485	.2470	.289	.290	.310	.250	.530	.310	1.060	1.500	.780	.080	.750	8,200	9,200	17987X4XX
05	5/16	.3110	.3095	.375	.330	.310	.250	.590	.410	1.060	1.650	.830	.080	.750	12,800	14,400	17987X5XX
06	3/8	.3735	.3720	.440	.365	.390	.300	.650	.450	1.060	1.650	.940	.080	.750	18,400	20,700	17987X6XX
07	7/16	.4360	.4345	.509	.380	.390	.300	.710	.550	1.090	1.850	.980	.080	.750	25,000	28,500	17987X7XX
08	1/2	.4985	.4970	.594	.460	.565	.435	.800	.600	1.160	1.850	1.140	.080	.950	32,800	36,900	17987X8XX
09	9/16	.5610	.5595	.666	.510	.565	.435	.840	.680	1.160	2.030	1.140	.080	.950	41,600	46,700	17987X9XX
10	5/8	.6235	.6220	.750	.580	.580	.450	.905	.750	1.240	2.250	1.400	.120	1.150	51,400	57,800	17987X10XX
12	3/4	.7485	.7470	.887	.670	.700	.570	1.045	.865	1.640	2.650	1.625	.120	1.150	74,000	83,200	17987X12XX
14	7/8	.8735	.8720	1.046	.760	.840	.700	1.235	.980	1.640	3.000	1.875	.120	1.750	100,000	112,500	17987X14XX
16	1.00	.9985	.9970	1.219	.890	.950	.750	1.330	1.175	1.640	3.100	2.000	.120	1.875	131,000	147,200	17987X16XX


→ ADDITIONAL SIZES ARE ON SHEET 3.

NOTES

- HEAT TREATMENT: 17-4 PH CRES; 180 KSI PER AMS-H-6875. 4130 ALLOY STEEL; 160/180 KSI PER AMS-H-6875.
- FINISH: CRES. PASSIVATE PER AMS-QQ-P-35. CARBON AND ALLOY STEEL; CAD PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2. ALUMINUM ALLOY; ANODIZE PER MIL-A-8625 OR CHEMICAL FILM PER MIL-C-5541.
- BALL HARDNESS: RC 58-62. (BALLS MAY BE ROTATED OTHER THAN SHOWN.)
- ALL PINS FURNISHED WITH ATTACHING RING, SIZE AT QRP'S OPTION.
- FOR "C" DIMENSIONS OTHER THAN LISTED ADD C+ REQUIRED DIMENSION TO END OF PIN CALLOUT.
- FOR HIGHER TENSILE STRENGTH APPLICATIONS, ADD "F" TO END OF PIN CALLOUT FOR FOUR BALLS INSTEAD OF STANDARD TWO BALLS.
- QRP'S STANDARD LANYARD INCLUDES A CRES TAB WITH A "-4" (Ø.129) HOLE.

NOTES: (CONTINUED)

- ...THEREFORE, IF ORDERING THE STANDARD LANYARD, THE TAB MATERIAL AND DASH NUMBER PART OF THE CALLOUT MAY BE OMITTED. (EX. "L8" = STD LANYARD 8" LONG.)

TOLERANCES UNLESS OTHERWISE SPECIFIED DECIMALS ANGLES XX ±.03 ±2° XXX ±.010	 QRP, Incorporated 2307 Mercantile Drive N.E. Leland, North Carolina 28451		SAPP	
			PIN, GROUND HANDLE, "R"	
	DRAWN BC	DATE 1/4/89	SCALE: DNS	REV B
	CHECKED	DATE	CAD FILE: QRP6RS	
	APPROVED	DATE	BLOCK: SAPP ST2	DRAWING NO. QRP6XXXR
IDENTIFICATION (CAGE) CODE:	09094			

EXCEPT FOR USES EXPRESSLY GRANTED TO THE U.S. GOVERNMENT, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL PATENT, PROPRIETARY, SALES, MANUFACTURING, DESIGN USE AND REPRODUCTION RIGHTS ARE RESERVED BY QRP, INCORPORATED, 2307 MERCANTILE DR. N.E., LELAND, NORTH CAROLINA 28451. TEL: (910) 371-0700 . DR, www.qrp-inc.com .

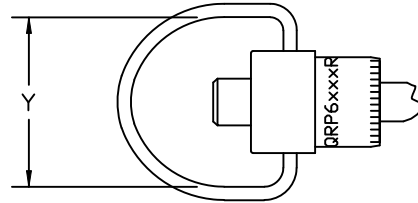
QRP6XXR [B]


REV	DESCRIPTION	BY	DATE
B	SEE ECO 12553	JJB	3JUN2004

SHANK DIA	NOM DIA *	A ϕ		B $\pm .005$	C MAX {1}	D ϕ MIN {2}	E ϕ MAX {3}	G MAX	H MAX {4}	J ϕ MIN	K ϕ MAX	Y MIN	CALCULATED DOUBLE SHEAR STRENGTH	
		MAX	MIN										STEEL	CRES
		18	1 1/8										1.122	1.119
20	1 1/4	1.247	1.244	1.500	1.250	.750	1.565	4.520	3.25	.120	1.750	2.375	205,000	230,500
22	1 3/8	1.372	1.369	1.625	1.250	1.000	1.650	4.750	3.50	.120	1.875	2.500	248,000	279,000
24	1 1/2	1.497	1.494	1.750	1.250	1.000	1.765	5.000	3.75	.120	2.000	2.625	295,000	332,000
26	1 5/8	1.622	1.619	1.937	1.562	1.000	1.890	5.250	3.90	.150	2.130	2.818	346,100	389,500
28	1 3/4	1.747	1.744	2.062	1.562	1.000	2.030	5.250	3.90	.150	2.265	2.953	401,200	452,100
30	1 7/8	1.872	1.869	2.187	1.562	1.000	2.130	5.250	3.90	.150	2.380	3.068	461,000	519,000
32	2.00	1.997	1.994	2.312	1.562	1.000	2.265	5.250	3.90	.150	2.550	3.238	524,000	590,000

* FOR PINS OF NOMINAL DIAMETER IN EXCESS OF 1.00 INCHES, THE FOLLOWING APPLY:

- {1} THE "C" DIMENSION IS A "MAX" VALUE.
- {2} THE "D" DIMENSION IS A "MIN" VALUE ONLY.
- {3} THE "E" DIMENSION IS A "MAX" VALUE ONLY.
- {4} THE "H" DIMENSION IS A "MAX" VALUE.



TOLERANCES UNLESS OTHERWISE SPECIFIED DECIMALS ANGLES XX $\pm .03$ $\pm 2^\circ$ XXX $\pm .010$ FINISH: AS NOTED SHEET 3 OF 3	 QRP, Incorporated 2307 Mercantile Drive N.E. Leland, North Carolina 28451		SAPP	
	PIN, GROUND HANDLE, "R"			
	DRAWN BC	DATE 1/4/89	SCALE: DNS	REV B
	CHECKED	DATE	CAD FILE: QRP6RS	
	APPROVED	DATE	BLOCK: SAPP ST3	DRAWING NO. QRP6XXR
IDENTIFICATION (CAGE) CODE:	09094			