

RT - XXX - XX - XX

**FRAME SIZE**  
 - 050  
 - 070  
 - 100  
 - 120

**TORQUE IN-LBS**

**SHAFT END TYPE**  
 01- FLAG  
 02- STRAIGHT  
 03- KNURLED SHAFT END  
 04- DUAL FLAG  
 05- DUAL STRAIGHT  
 06- DUAL KNURLED SHAFT END

050  
 - 01  
 - 02  
 - 03

070  
 - 03  
 - 04  
 - 05  
 - 06  
 - 07  
 - 08

100  
 - 08  
 - 12  
 - 16  
 - 20

120  
 - 20  
 - 30  
 - 40  
 - 50

PRODUCT TORQUE SPECIFICATION AT +20°C.

PRODUCT	NOMINAL TORQUE (IN-LBS)	TOLERANCE
RT-050	01, 02	±30%
RT-050	03	±25%
RT-070	ALL TORQUES	±20%
RT-100	ALL TORQUES	±20%
RT-120	ALL TORQUES	±20%

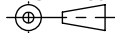
NOTES:

- APPLICATION CONDITIONS REFERENCE (USER MUST DETERMINE FITNESS FOR USE IN APPLICATION).
- ENVIRONMENTAL CONDITIONS: -20° TO +80°C. UP TO 10% OF LIFE CYCLES AT HOT AND COLD CONDITIONS.
- LIFE: 50,000 CYCLES. ONE CYCLE CONSISTS OF 90° CW AND 90° CCW AT 10% DUTY CYCLE FOR SPEEDS LESS THAN 100RPM.
- HINGE DESIGNED TO SUPPORT A MINIMAL AXIAL FORCE IN DIRECTION SHOWN, NOT DESIGNED TO SUPPORT AXIAL FORCE IN THE OPPOSITE DIRECTION.
- MATERIALS:  
 ZINC DIE CAST HOUSINGS & FLAG SHAFT ENDS  
 STEEL STRAIGHT SHAFT ENDS  
 HARDENED STEEL SHAFT  
 HARDENED STEEL TORQUE CLIPS  
 MINERAL OIL BASED LUBRICANT
- FINISH:  
 NON-COSMETIC PLAIN.  
 CLEAR CHROMATE RUST PREVENTATIVE COATING ON THE STRAIGHT SHAFT.
- SHIP ANGLE 0° ±5° BETWEEN HOUSINGS.
- TOLERANCE UNLESS SPECIFIED IS ±0.15.
- SEE PAGE 8 FOR RECOMMENDED MATING HOLE GEOMETRY FOR KNURLED SHAFT END.
- DESIGNED TO ACCEPT M2 & #2 for RT-050, M3, #4 OR #5 SCREW FOR RT-070 & M4 OR #8 FOR RT-100 & RT-120 OR EQUIVALENT. (RT-070 USE LOW HEAD VERSION IF HEAD MUST BE SUBFLUSH.)

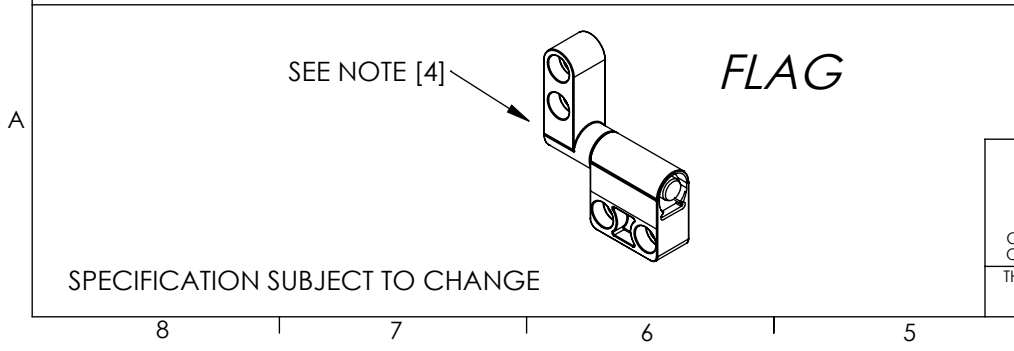
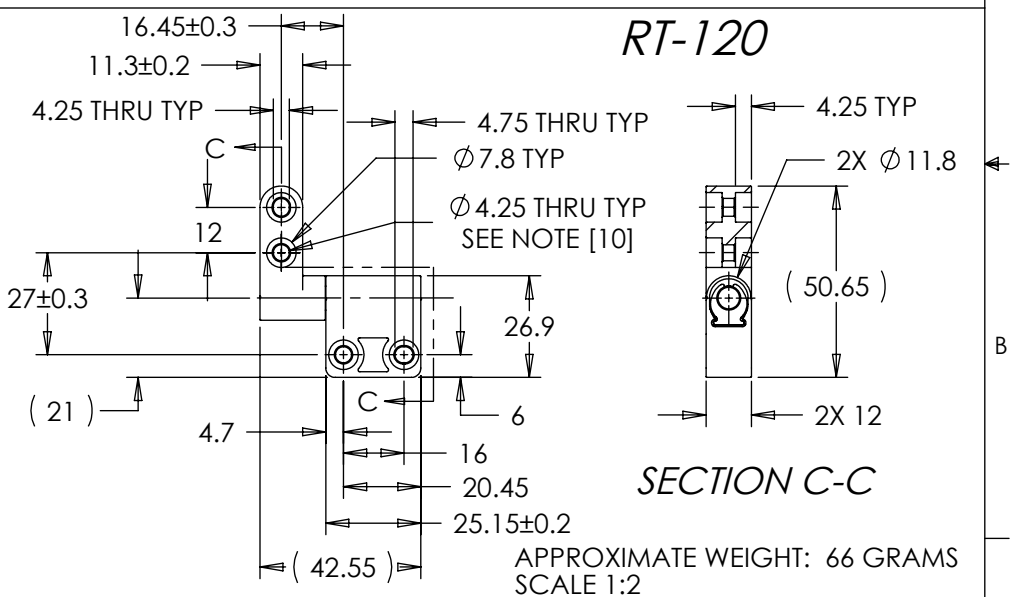
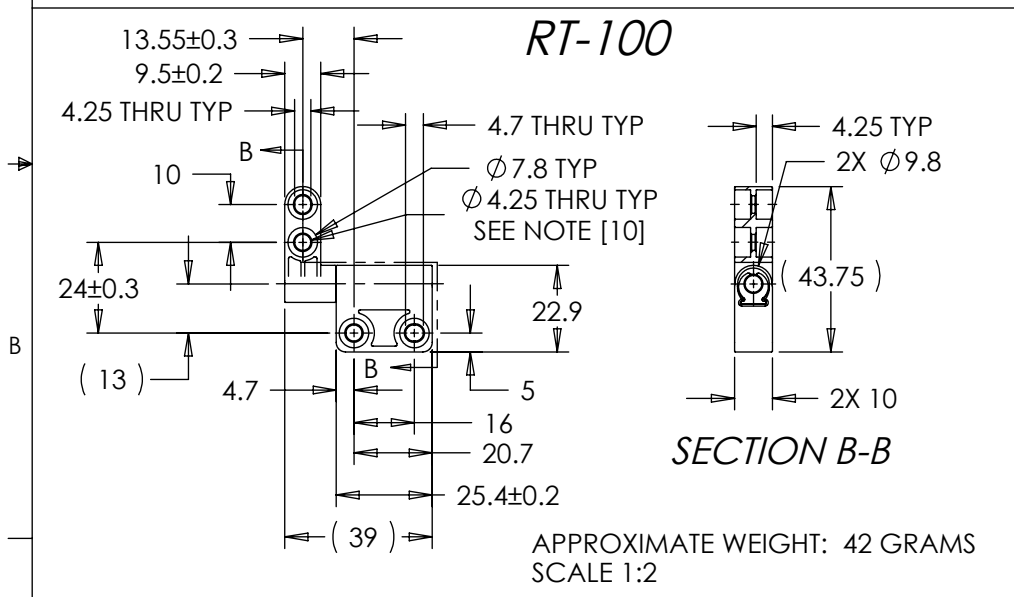
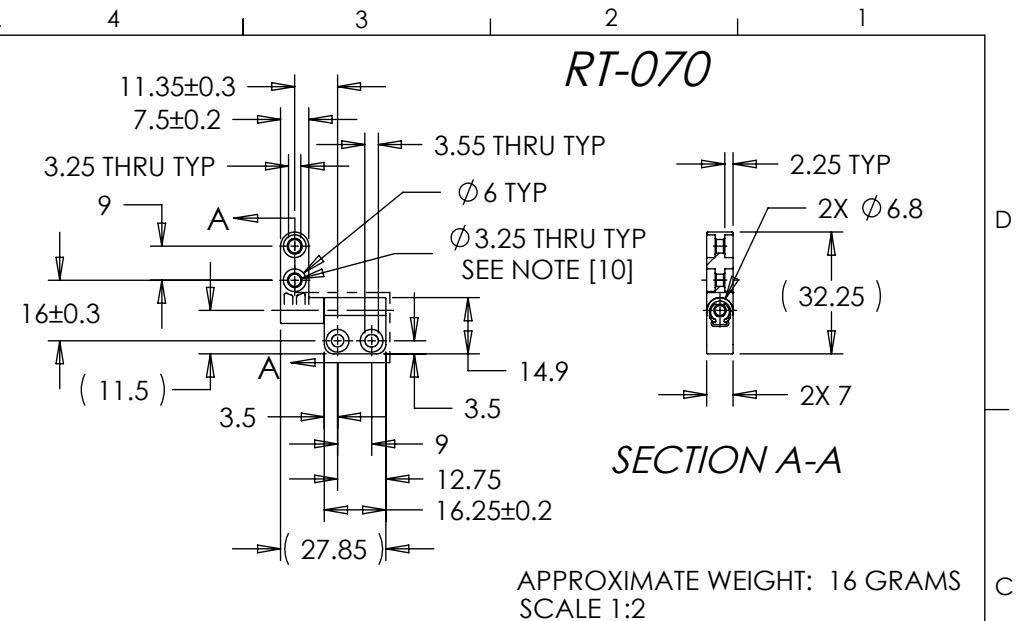
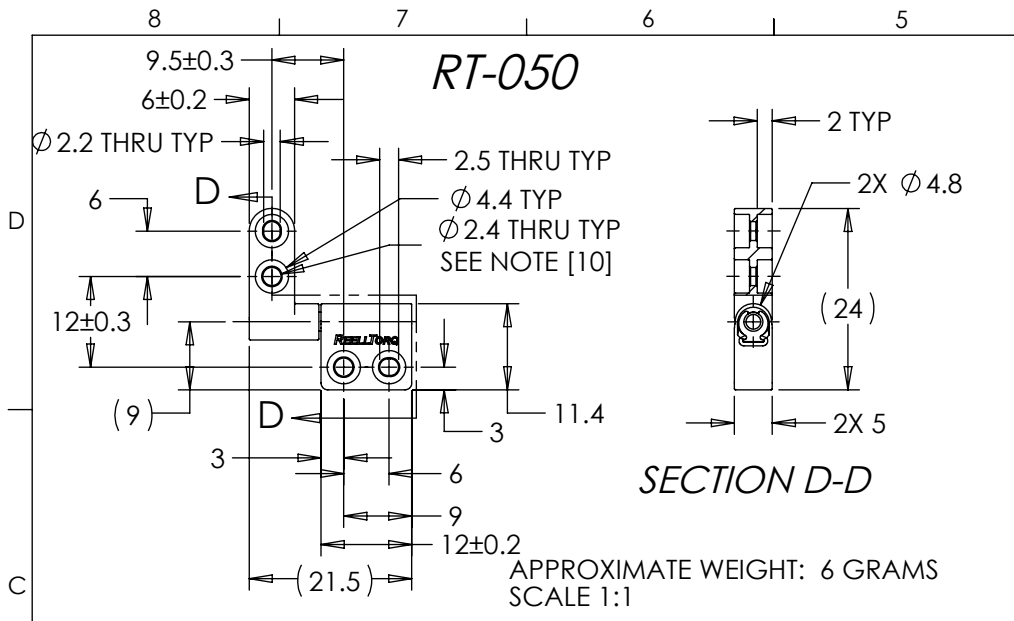
SPECIFICATION SUBJECT TO CHANGE

UNLESS SPECIFIED TOLERANCE ±0.15 INTERPRET PRINT PER ASME Y14.5M-1994 THIS PRINT IS THE CONFIDENTIAL PROPERTY OF REELL PRECISION MFG.

THIRD ANGLE PROJECTION

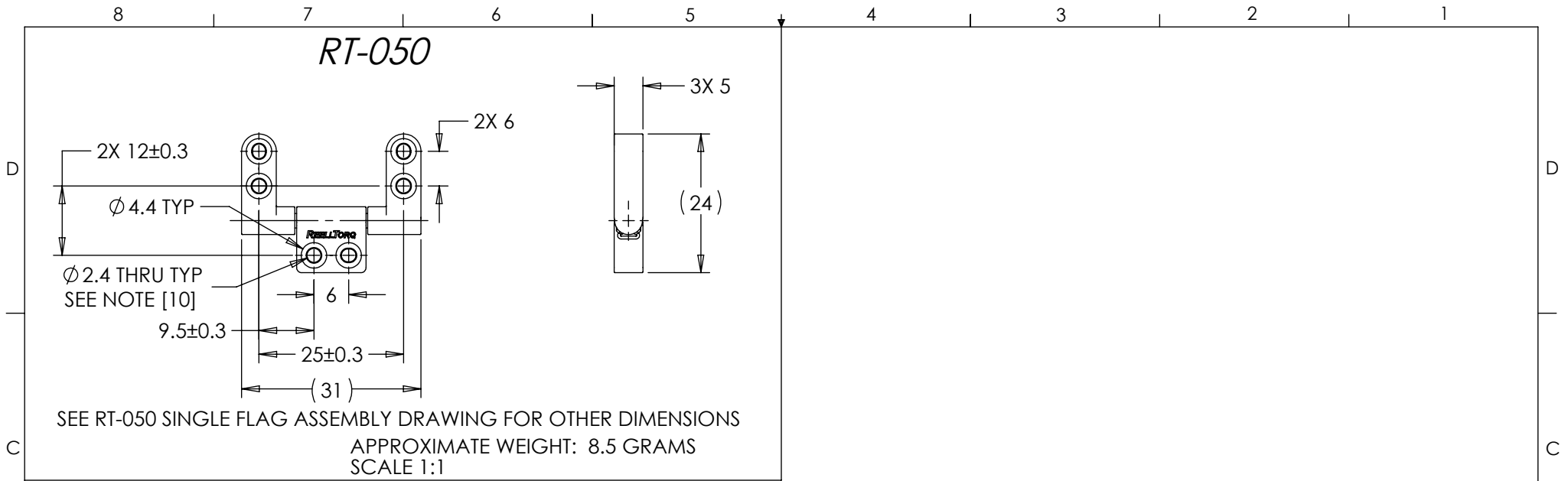


LEVEL	DESCRIPTION		DRAWN	DATE	APPROVED
DRAWN:	TLS	DATE: 23JUN11	REFERENCE: 83100-XXX, 84130-XXX		
CHECKED:	BLJ	DATE: 12DEC11	TITLE: SALES DRAWING RT HINGE ASSEMBLY		
APPROVED:	BLJ	DATE: 12DEC11	PART NO: RT-SERIES		
REVISED:	28OCT16	DIMS: mm	REV: F		
		REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA		SCALE: 1:2	DO NOT SCALE DRAWING
					SHEET 1 OF 8

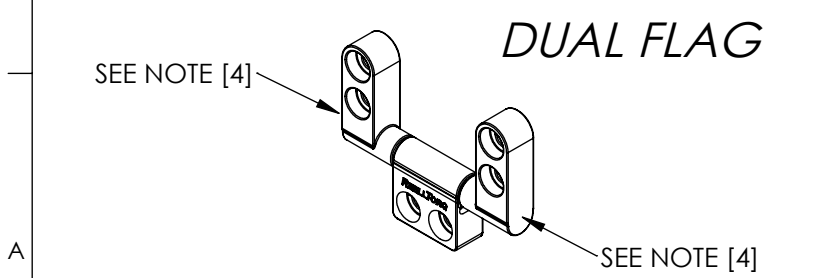


LEVEL	DESCRIPTION	DRAWN	DATE	APPROVED
DRAWN: TLS	DATE: 23JUN11	REFERENCE: 83100-XXX, 84130-XXX		
CHECKED: BLJ	DATE: 12DEC11	TITLE: SALES DRAWING RT HINGE ASSEMBLY		
APPROVED: BLJ	DATE: 12DEC11	PART NO: RT-SERIES		
REVISED: 28OCT16	DIMS: mm	REV: F		
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA		SCALE: 1:2	DO NOT SCALE DRAWING	SHEET 2 OF 8

UNLESS SPECIFIED TOLERANCE ±0.15  
INTERPRET PRINT PER ASME Y14.5M-1994  
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THIRD ANGLE PROJECTION



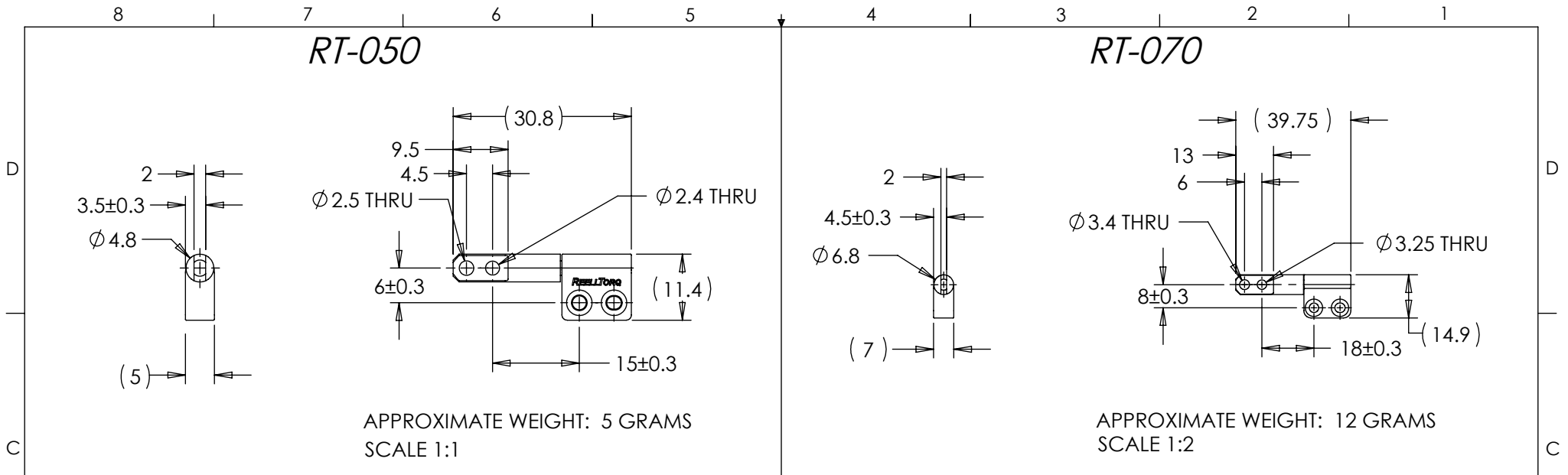
*CURRENTLY AVAILABLE  
IN RT-050 FRAME SIZE ONLY*



SPECIFICATION SUBJECT TO CHANGE

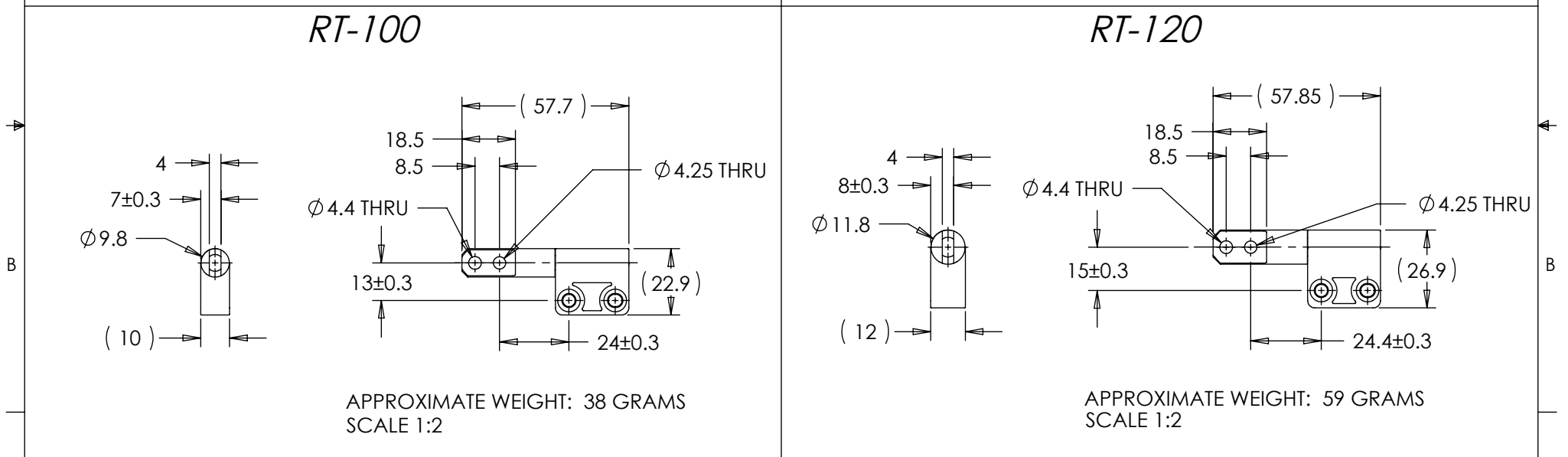
UNLESS SPECIFIED  
TOLERANCE ±0.15  
INTERPRET PRINT PER  
ASME Y14.5M-1994  
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THIRD ANGLE PROJECTION

LEVEL	DESCRIPTION		DRAWN	DATE	APPROVED
DRAWN:	TLS	DATE: 23JUN11	REFERENCE: 83100-XXX, 84130-XXX		
CHECKED:	BLJ	DATE: 12DEC11	TITLE: SALES DRAWING RT HINGE ASSEMBLY		
APPROVED:	BLJ	DATE: 12DEC11	PART NO: RT-SERIES		
REVISED:	28OCT16	DIMS: mm	REV: F		
			SCALE: 1:2 DO NOT SCALE DRAWING SHEET 3 OF 8		
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA					



APPROXIMATE WEIGHT: 5 GRAMS  
SCALE 1:1

APPROXIMATE WEIGHT: 12 GRAMS  
SCALE 1:2



APPROXIMATE WEIGHT: 38 GRAMS  
SCALE 1:2

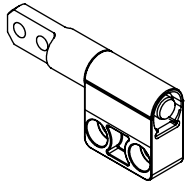
APPROXIMATE WEIGHT: 59 GRAMS  
SCALE 1:2

SEE NOTE [4]

**STRAIGHT**

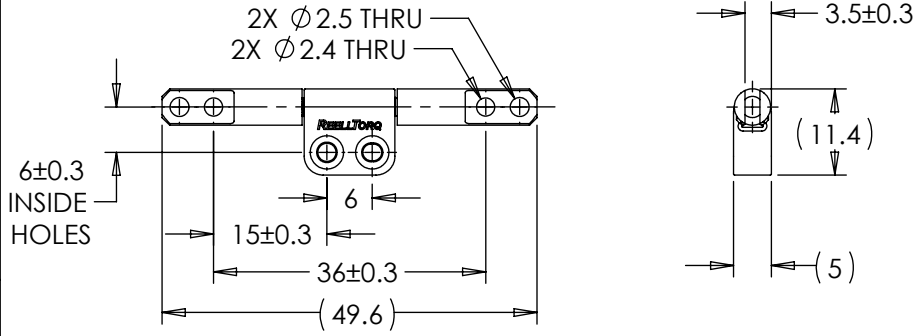
SEE SINGLE FLAG ASSEMBLY DRAWING FOR UNSPECIFIED BRACKET DIMENSIONS

SPECIFICATION SUBJECT TO CHANGE



LEVEL	DESCRIPTION		DRAWN	DATE	APPROVED
DRAWN:	TLS	DATE: 23JUN11	REFERENCE: 83100-XXX, 84130-XXX		
CHECKED:	BLJ	DATE: 12DEC11	TITLE: SALES DRAWING RT HINGE ASSEMBLY		
APPROVED:	BLJ	DATE: 12DEC11	PART NO: RT-SERIES		
REVISED:	28OCT16	DIMS: mm	REV: F		
UNLESS SPECIFIED TOLERANCE ±0.15 INTERPRET PRINT PER ASME Y14.5M-1994 THIS PRINT IS THE CONFIDENTIAL PROPERTY OF REELL PRECISION MFG. THIRD ANGLE PROJECTION				REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA	
SCALE: 1:2		DO NOT SCALE DRAWING		SHEET 4 OF 8	

# RT-050

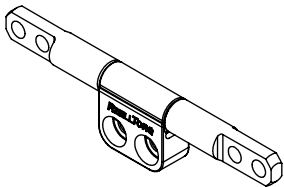


SEE RT-050 SINGLE FLAG ASSEMBLY DRAWING FOR UNSPECIFIED BRACKET DIMENSIONS  
 SEE RT-050 STRAIGHT ASSEMBLY DRAWING FOR OTHER DIMENSIONS

APPROXIMATE WEIGHT: 6.7 GRAMS  
 SCALE 1:1

*CURRENTLY AVAILABLE  
 IN RT-050 FRAME SIZE ONLY*

SEE NOTE [4]



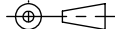
## DUAL STRAIGHT

SEE NOTE [4]

SPECIFICATION SUBJECT TO CHANGE

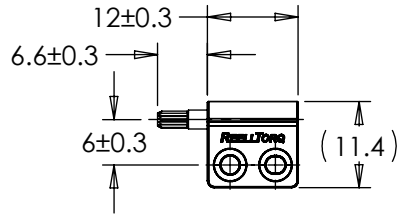
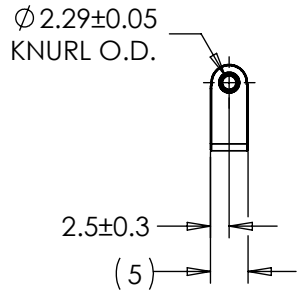
UNLESS SPECIFIED  
 TOLERANCE ±0.15  
 INTERPRET PRINT PER  
 ASME Y14.5M-1994  
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THIRD ANGLE PROJECTION



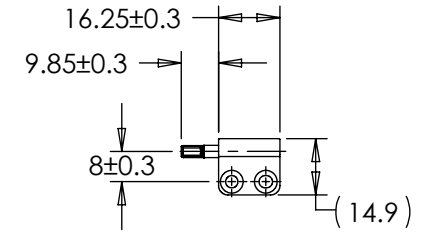
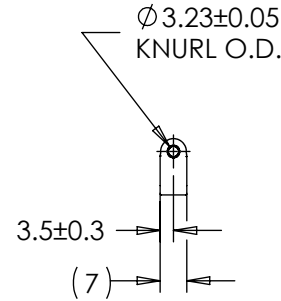
LEVEL	DESCRIPTION		DRAWN	DATE	APPROVED
DRAWN:	TLS	DATE: 23JUN11	REFERENCE: 83100-XXX, 84130-XXX		
CHECKED:	BLJ	DATE: 12DEC11	TITLE: SALES DRAWING RT HINGE ASSEMBLY		
APPROVED:	BLJ	DATE: 12DEC11	PART NO: RT-SERIES		
REVISED:	28OCT16	DIMS: mm	REV: F		
			SCALE: 1:2 DO NOT SCALE DRAWING SHEET 5 OF 8		
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA					

### RT-050



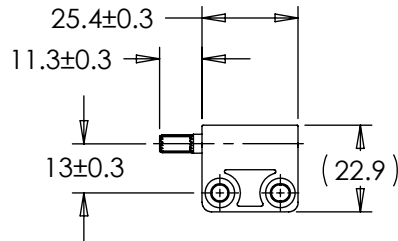
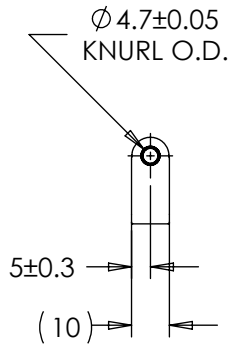
APPROXIMATE WEIGHT: 4 GRAMS  
SCALE 1:1

### RT-070



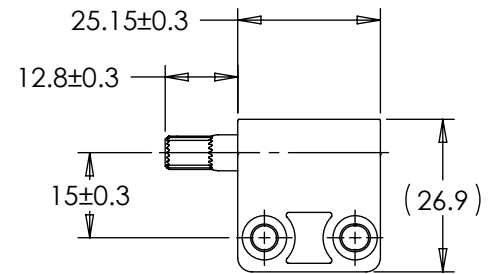
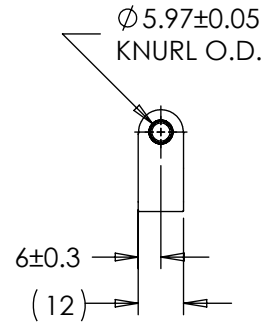
APPROXIMATE WEIGHT: 9 GRAMS  
SCALE 1:2

### RT-100



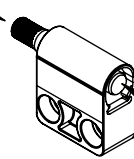
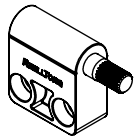
APPROXIMATE WEIGHT: 27 GRAMS  
SCALE 1:2

### RT-120



APPROXIMATE WEIGHT: 43 GRAMS  
SCALE 1:2

SEE NOTE [4]



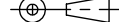
### KNURLED SHAFT END

SUPPORT ON  
END OF SHAFT  
WHEN INSTALLING  
PART ONTO KNURL

SEE SINGLE FLAG ASSEMBLY DRAWING  
FOR UNSPECIFIED BRACKET DIMENSIONS  
SPECIFICATION SUBJECT TO CHANGE

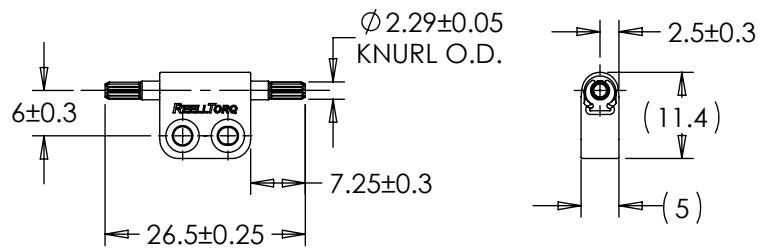
UNLESS SPECIFIED  
TOLERANCE  $\pm 0.15$   
INTERPRET PRINT PER  
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THIRD ANGLE PROJECTION



LEVEL	DESCRIPTION	DRAWN	DATE	APPROVED
DRAWN: TLS	DATE: 23JUN11	REFERENCE: 83100-XXX, 84130-XXX		
CHECKED: BLJ	DATE: 12DEC11	TITLE: SALES DRAWING RT HINGE ASSEMBLY		
APPROVED: BLJ	DATE: 12DEC11	PART NO: RT-SERIES		
REVISED: 28OCT16	DIMS: mm	REV: F		
		REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA		
SCALE: 1:2		DO NOT SCALE DRAWING		SHEET 6 OF 8

# RT-050



SEE RT-050 SINGLE FLAG ASSEMBLY DRAWING FOR UNSPECIFIED BRACKET DIMENSIONS

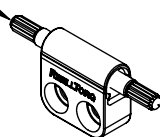
SEE RT-050 KNURLED SHAFT END ASSEMBLY DRAWING FOR OTHER DIMENSIONS

APPROXIMATE WEIGHT: 3.6 GRAMS  
SCALE 1:1

*CURRENTLY AVAILABLE  
IN RT-050 FRAME SIZE ONLY*

## DUAL KNURLED SHAFT END

SEE NOTE [4]

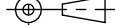


SUPPORT ON  
END OF SHAFT  
WHEN INSTALLING  
PART ONTO KNURL

SPECIFICATION SUBJECT TO CHANGE

UNLESS SPECIFIED  
TOLERANCE ±0.15  
INTERPRET PRINT PER  
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THIRD ANGLE PROJECTION



LEVEL	DESCRIPTION		DRAWN	DATE	APPROVED
DRAWN:	TLS	DATE: 23JUN11	REFERENCE:		
CHECKED:	BLJ	DATE: 12DEC11	83100-XXX, 84130-XXX		
APPROVED:	BLJ	DATE: 12DEC11	TITLE:		
REVISED:	28OCT16	DIMS: mm	SALES DRAWING RT HINGE ASSEMBLY		
			PART NO:		REV:
			RT-SERIES		F
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA		SCALE: 1:2	DO NOT SCALE DRAWING		SHEET 7 OF 8

RT-050

MATERIAL	D1	D2	L1	L2	OD	WALL	GAP
DIE CAST ZINC	2.44+/-0.03	2.04+/-0.03	3.5 +/-0.15	7 MIN	4 MIN	1 MIN	0.1 nominal
DIE CAST ALUMINUM	2.44+/-0.03	2.04+/-0.03	3.5 +/-0.15	7 MIN	4 MIN	1 MIN	0.1 nominal
MILD STEEL	2.55+/-0.03	2.06+/-0.015	3.5 +/-0.15	7 MIN	4 MIN	1 MIN	0.1 nominal
WROUGHT ALUMINUM	2.55+/-0.03	2.06+/-0.015	3.5 +/-0.15	7 MIN	4 MIN	1 MIN	0.1 nominal

RT-070

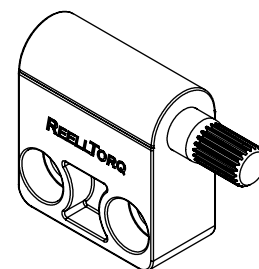
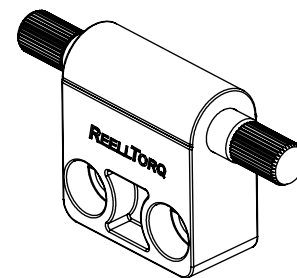
MATERIAL	D1	D2	L1	L2	OD	WALL	GAP
DIE CAST ZINC	3.18+/-0.03	3.03+/-0.03	4.25 +/-0.15	10.1 MIN	6 MIN	1 MIN	0.1 nominal
DIE CAST ALUMINUM	3.18+/-0.03	3.03+/-0.03	4.25 +/-0.15	10.1 MIN	6 MIN	1 MIN	0.1 nominal
MILD STEEL	3.28+/-0.05	3.115+/-0.015	4.25 +/-0.15	10.1 MIN	6 MIN	1 MIN	0.1 nominal
WROUGHT ALUMINUM	3.28+/-0.05	3.115+/-0.015	4.25 +/-0.15	10.1 MIN	6 MIN	1 MIN	0.1 nominal

RT-100

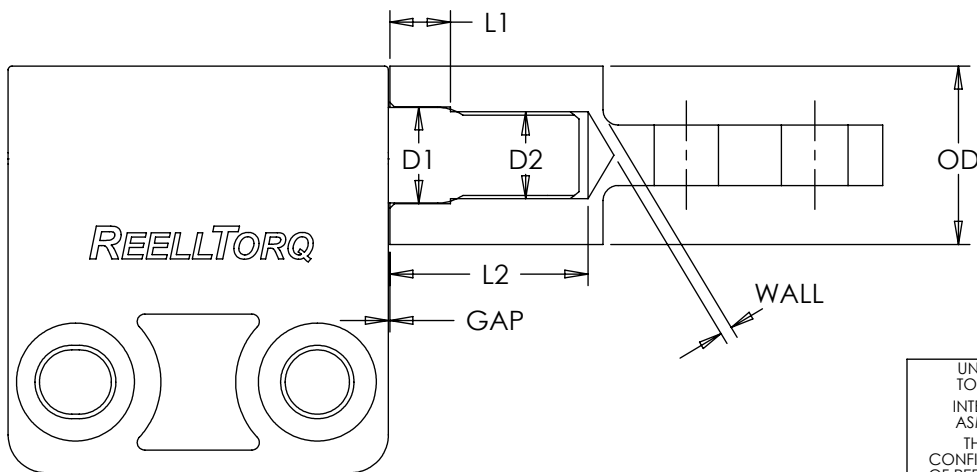
MATERIAL	D1	D2	L1	L2	OD	WALL	GAP
DIE CAST ZINC	4.93+/-0.03	4.5+/-0.03	2.5 +/-0.1	11.5 MIN	8 MIN	1 MIN	0.1 nominal
DIE CAST ALUMINUM	4.93+/-0.03	4.5+/-0.03	2.5 +/-0.1	11.5 MIN	8 MIN	1 MIN	0.1 nominal
MILD STEEL	5.05+/-0.05	4.495+/-0.015	2.5 +/-0.1	11.5 MIN	8 MIN	1 MIN	0.1 nominal
WROUGHT ALUMINUM	5.05+/-0.05	4.495+/-0.015	2.5 +/-0.1	11.5 MIN	8 MIN	1 MIN	0.1 nominal

RT-120

MATERIAL	D1	D2	L1	L2	OD	WALL	GAP
DIE CAST ZINC	6.23+/-0.03	5.7+/-0.03	4.5 +/-0.1	13.25 MIN	10 MIN	1 MIN	0.1 nominal
DIE CAST ALUMINUM	6.23+/-0.03	5.7+/-0.03	4.5 +/-0.1	13.25 MIN	10 MIN	1 MIN	0.1 nominal
MILD STEEL	6.4+/-0.05	5.745+/-0.015	4.5 +/-0.1	13.25 MIN	10 MIN	1 MIN	0.1 nominal
WROUGHT ALUMINUM	6.4+/-0.05	5.745+/-0.015	4.5 +/-0.1	13.25 MIN	10 MIN	1 MIN	0.1 nominal



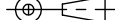
**RECOMMENDED  
MATING GEOMETRY  
FOR KNURLED  
SHAFT END**



SPECIFICATION SUBJECT TO CHANGE

UNLESS SPECIFIED  
TOLERANCE ±0.15  
INTERPRET PRINT PER  
ASME Y14.5M-1994  
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THIRD ANGLE PROJECTION



LEVEL	DESCRIPTION	DRAWN	DATE	APPROVED
DRAWN: TLS	DATE: 23JUN11	REFERENCE: 83100-XXX, 84130-XXX		
CHECKED: BLJ	DATE: 12DEC11	TITLE: SALES DRAWING RT HINGE ASSEMBLY		
APPROVED: BLJ	DATE: 12DEC11	PART NO: RT-SERIES		
REVISED: 28OCT16	DIMS: mm	REV: F		
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA		SCALE: 1:2	DO NOT SCALE DRAWING	SHEET 8 OF 8

