

# CATALOG CODE PHK-X.X-X-XX

TORQUE Nm
1.5
2.5
3.5
4.5
5.5

HIGH TORQUE DIRECTION
F - FORWARD
R - REVERSE

SHAFT END
01 - LEFT STRAIGHT
02 - RIGHT STRAIGHT
03 - DUAL STRAIGHT
04 - LEFT ELBOW
05 - RIGHT ELBOW
06 - DUAL ELBOW

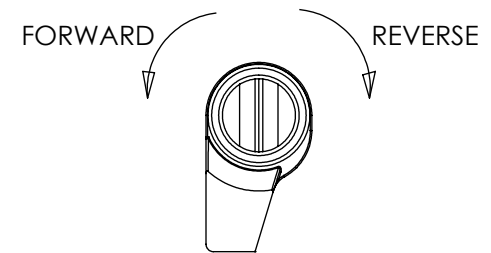
DYNAMIC TORQUE	
HIGH TORQUE DIRECTION	LOW TORQUE DIRECTION
1.5±0.3	1.0±0.3
2.5±0.5	1.6±0.5
3.5±0.7	2.3±0.7
4.5±0.9	2.9±0.9
5.5±1.1	3.6±1.1

PRODUCT TORQUE SPECIFICATION AT +20°C.

SPECIFICATION SUBJECT TO CHANGE

## NOTES:

1. USER MUST DETERMINE FITNESS FOR USE IN APPLICATION.
2. LIFE: 20,000 CYCLES WHEN DUTY CYCLE IS LESS THAN 10% AND ROTATIONAL SPEED IS LESS THAN 100 RPM. 30 SECONDS MAXIMUM CONTINUOUS ACTUATION.
3. DESIGNED TO ACCEPT M4 OR #8 SCREW OR EQUIVALENT.
- [4] HIGH TORQUE DIRECTION DETERMINED WITH BRACKET FIXED AND SHAFT ENDS ROTATED AS SHOWN.
5. MATERIAL:  
ZINC BRACKET  
ZINC ELBOW SHAFT END  
STEEL WITH ZINC PLATE STRAIGHT SHAFT END  
HARDENED STEEL SHAFT  
HARDENED STEEL TORQUE ELEMENT



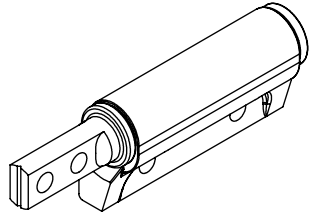
SEE NOTE [4]

	ECO NO: 04512	PART LIFECYCLE: RELEASED
	APPROVED BY: DERICK OFFOR	DEVELOPMENT CYCLE: PRODUCTION
	APPROVED DATE: 28FEB22	DESCRIPTION:
	PROJECT NO: 0	<b>SALES DRAWING</b>
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA	ENGINEER: TIM JENUM	PART NO: <b>PHK</b>
THIS PRINT IS THE CONFIDENTIAL PROPERTY OF REELL PRECISION MFG.	DRAWN BY: DERICK OFFOR	
INTERPRET PRINT PER ASME Y14.5M-2009	THIRD ANGLE PROJECTION 	REV: <b>L</b>
	DIMENSIONS: mm	SCALE: 1:1 DO NOT SCALE DRAWING

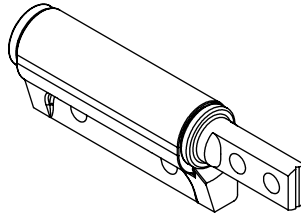
# DIMENSIONS FOR PHK-X.X-X-01 AND PHK-X.X-X-02

NOTES:

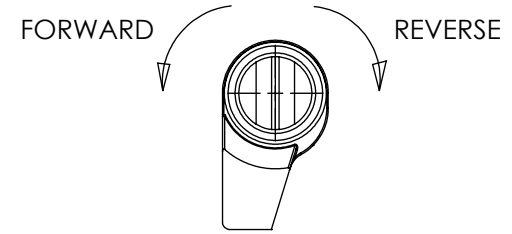
[6] FLATS TO BE ORIENTED  $\pm 5^\circ$  WITH RESPECT TO DATUM A AS SHOWN.



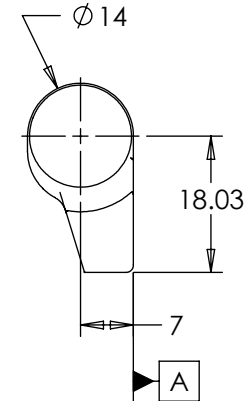
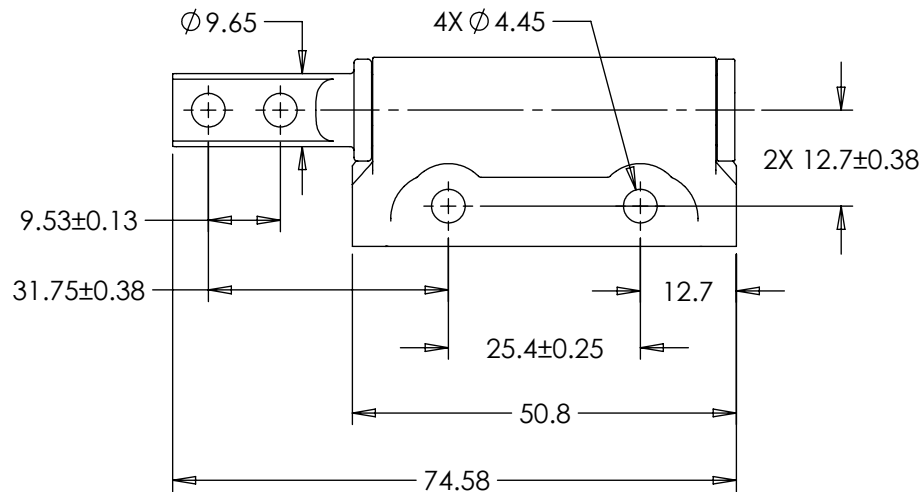
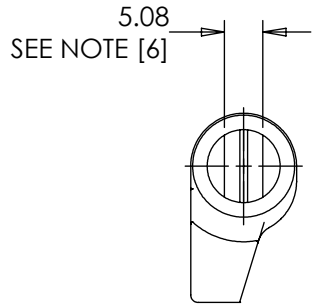
LEFT STRAIGHT



RIGHT STRAIGHT



SEE NOTE [4]



ALL DIMENSIONS REFERENCE  
SEE CAD MODEL FOR UNSPECIFIED FEATURES.

## PHK-X.X-X-01 SHOWN

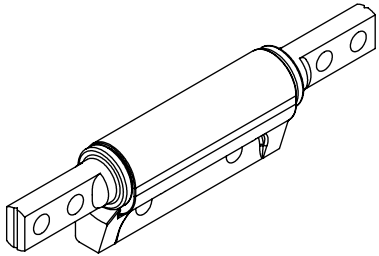
SPECIFICATION SUBJECT TO CHANGE

	ECO NO: 04512	PART LIFECYCLE: RELEASED			
	APPROVED BY: DERICK OFFOR	DEVELOPMENT CYCLE: PRODUCTION			
	APPROVED DATE: 28FEB22	DESCRIPTION:			
	PROJECT NO: 0	SALES DRAWING			
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA	ENGINEER: TIM JENUM	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">PART NO: PHK</td> <td style="width: 40%;">REV: L</td> </tr> </table>		PART NO: PHK	REV: L
PART NO: PHK	REV: L				
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INTERPRET PRINT PER ASME Y14.5M-2009	THIRD ANGLE PROJECTION 	SCALE: 1:1	DO NOT SCALE DRAWING		
	DIMENSIONS: mm	SHEET 2 OF 5			

8 7 6 5 4 3 2 1

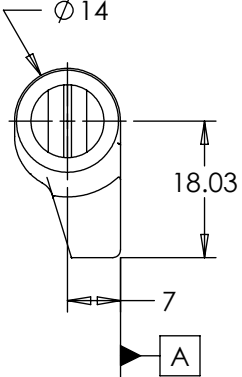
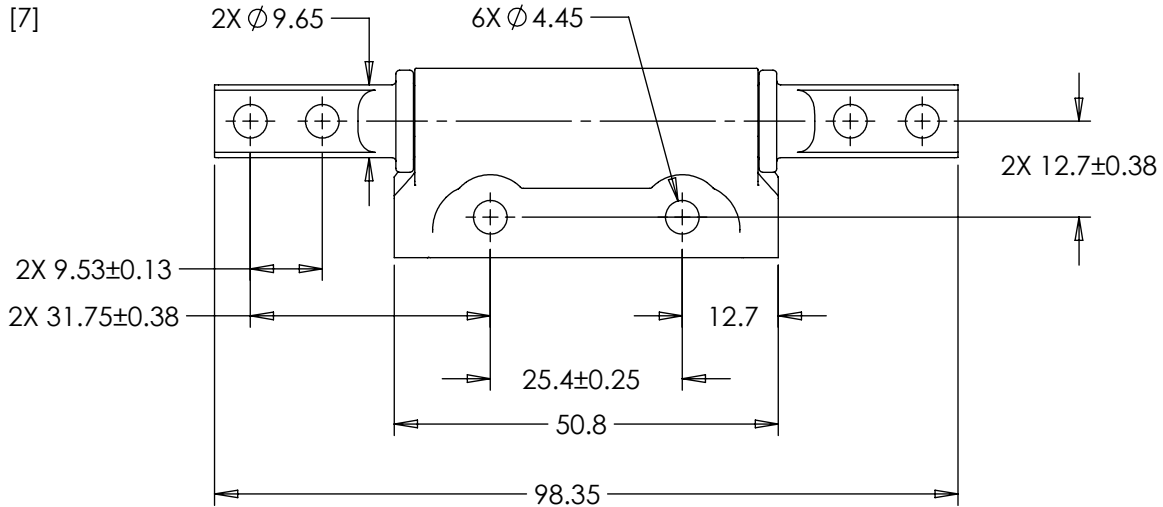
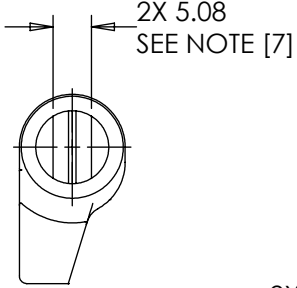
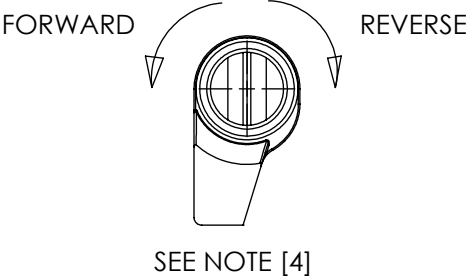
NOTES:

[7] FLATS TO BE ORIENTED  $\pm 5^\circ$  WITH RESPECT TO DATUM A AS SHOWN.



DUAL STRAIGHT

DIMENSIONS FOR PHK-X.X-X-03



ALL DIMENSIONS REFERENCE SEE CAD MODEL FOR UNSPECIFIED FEATURES.

SPECIFICATION SUBJECT TO CHANGE

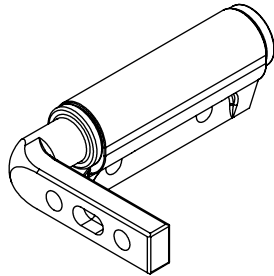
<p>REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA</p>	ECO NO: 04512	PART LIFECYCLE: RELEASED
	APPROVED BY: DERICK OFFOR	DEVELOPMENT CYCLE: PRODUCTION
	APPROVED DATE: 28FEB22	DESCRIPTION:
	PROJECT NO: 0	<b>SALES DRAWING</b>
<p>THIS PRINT IS THE CONFIDENTIAL PROPERTY OF REELL PRECISION MFG.</p> <p>INTERPRET PRINT PER ASME Y14.5M-2009</p>	<p>ENGINEER: TIM JENUM</p> <p>DRAWN BY: DERICK OFFOR</p> <p>THIRD ANGLE PROJECTION</p> <p>DIMENSIONS: mm</p>	<p>PART NO: PHK</p> <p>REV: L</p> <p>SCALE: 1:1</p> <p>DO NOT SCALE DRAWING</p> <p>SHEET 3 OF 5</p>

8 7 6 5 4 3 2 1

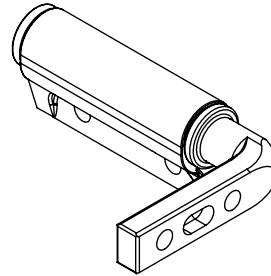
# DIMENSIONS FOR PHK-X.X-X-04 AND PHK-X.X-X-05

**NOTES:**

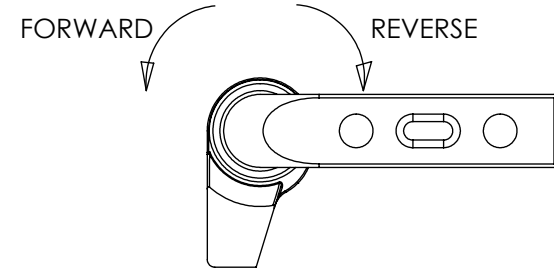
8. SHAFT END TO BE ORIENTED  $90^\circ \pm 5^\circ$  AS SHOWN WITH RESPECT TO DATUM A.



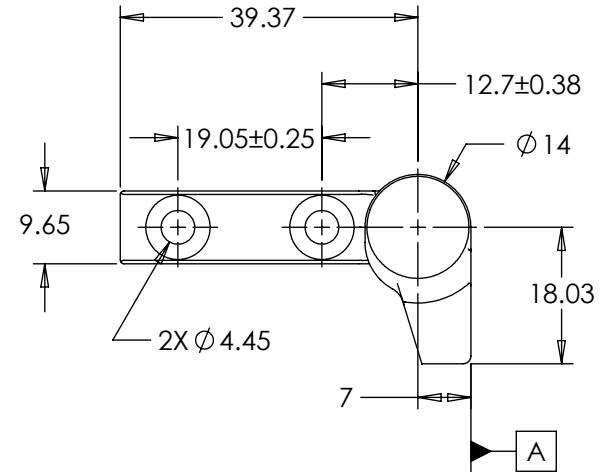
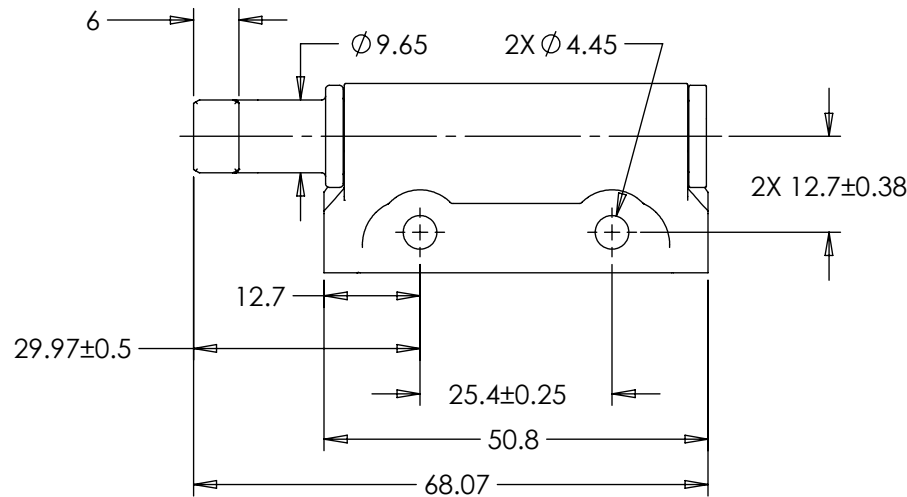
LEFT ELBOW



RIGHT ELBOW



SEE NOTE [4]



ALL DIMENSIONS REFERENCE  
SEE CAD MODEL FOR UNSPECIFIED FEATURES.

## PHK-X.X-X-04 SHOWN

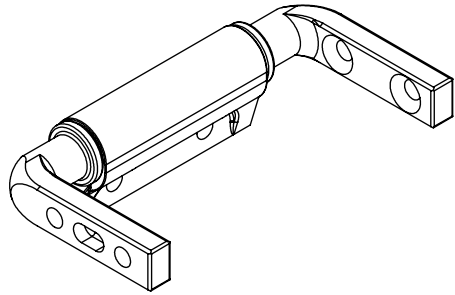
SPECIFICATION SUBJECT TO CHANGE

	ECO NO: 04512	PART LIFECYCLE: RELEASED			
	APPROVED BY: DERICK OFFOR	DEVELOPMENT CYCLE: PRODUCTION			
	APPROVED DATE: 28FEB22	DESCRIPTION:			
	PROJECT NO: 0	SALES DRAWING			
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA	ENGINEER: TIM JENUM	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">PART NO: PHK</td> <td style="width: 40%;">REV: L</td> </tr> </table>		PART NO: PHK	REV: L
PART NO: PHK	REV: L				
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INTERPRET PRINT PER ASME Y14.5M-2009	THIRD ANGLE PROJECTION 	SCALE: 1:1	DO NOT SCALE DRAWING		
	DIMENSIONS: mm	SHEET 4 OF 5			

8 7 6 5 4 3 2 1

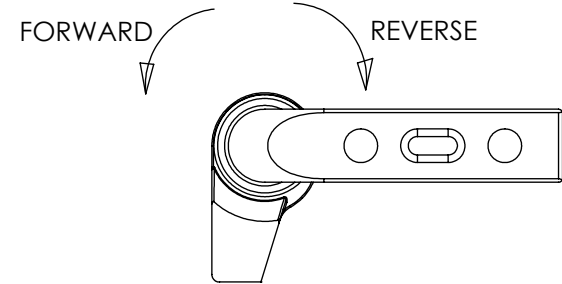
NOTES:

9. SHAFT END TO BE ORIENTED  $90^\circ \pm 5^\circ$  AS SHOWN WITH RESPECT TO DATUM A.

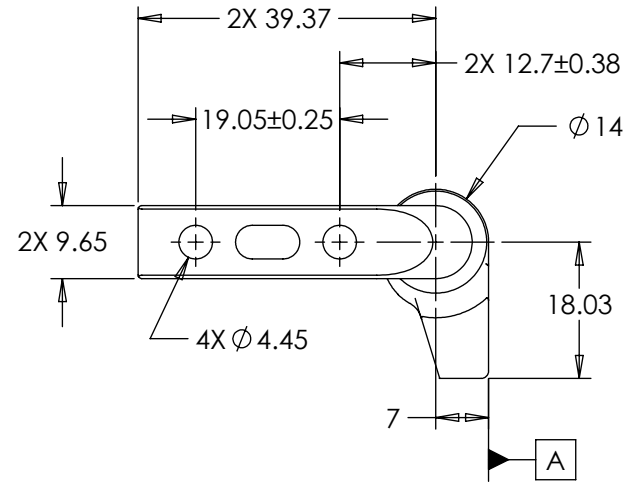
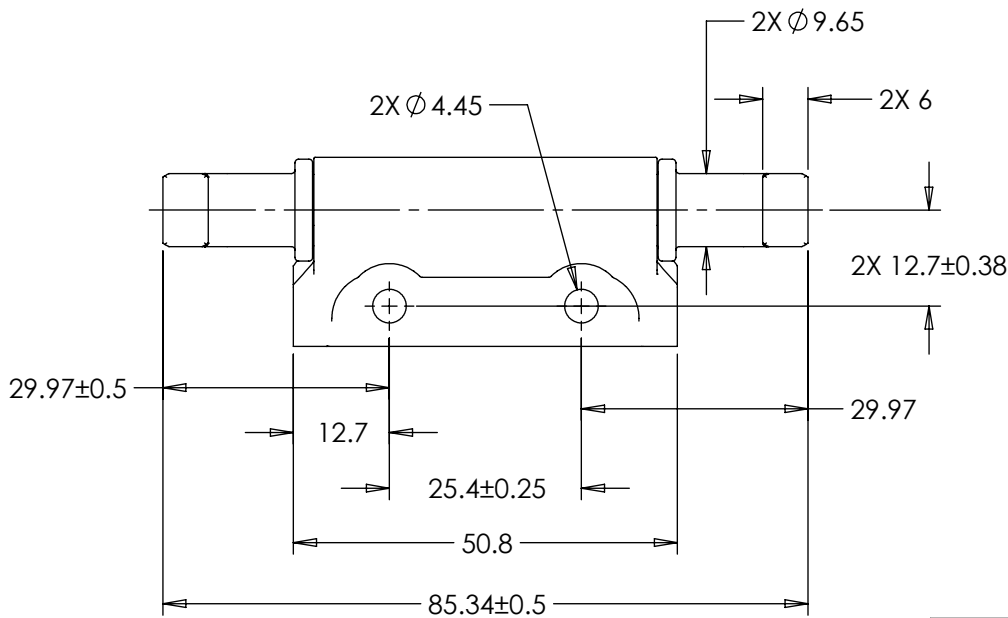


DUAL ELBOW

# DIMENSIONS FOR PHK-X.X-X-06


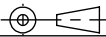


SEE NOTE [4]



ALL DIMENSIONS REFERENCE  
SEE CAD MODEL FOR UNSPECIFIED FEATURES.

SPECIFICATION SUBJECT TO CHANGE

	ECO NO: 04512	PART LIFECYCLE: RELEASED	
	APPROVED BY: DERICK OFFOR	DEVELOPMENT CYCLE: PRODUCTION	
	APPROVED DATE: 28FEB22	DESCRIPTION:	
	PROJECT NO: 0	<h2>SALES DRAWING</h2>	
ENGINEER: TIM JENUM			
REELL PRECISION MANUFACTURING 1259 WILLOW LAKE BOULEVARD SAINT PAUL, MINNESOTA 55110-5103, USA	DRAWN BY: DERICK OFFOR	PART NO: PHK	
THIS PRINT IS THE CONFIDENTIAL PROPERTY OF REELL PRECISION MFG.	THIRD ANGLE PROJECTION 	SCALE: 1:1	DO NOT SCALE DRAWING
INTERPRET PRINT PER ASME Y14.5M-2009	DIMENSIONS: mm	REVISION: L	SHEET 5 OF 5

8 7 6 5 4 3 2 1