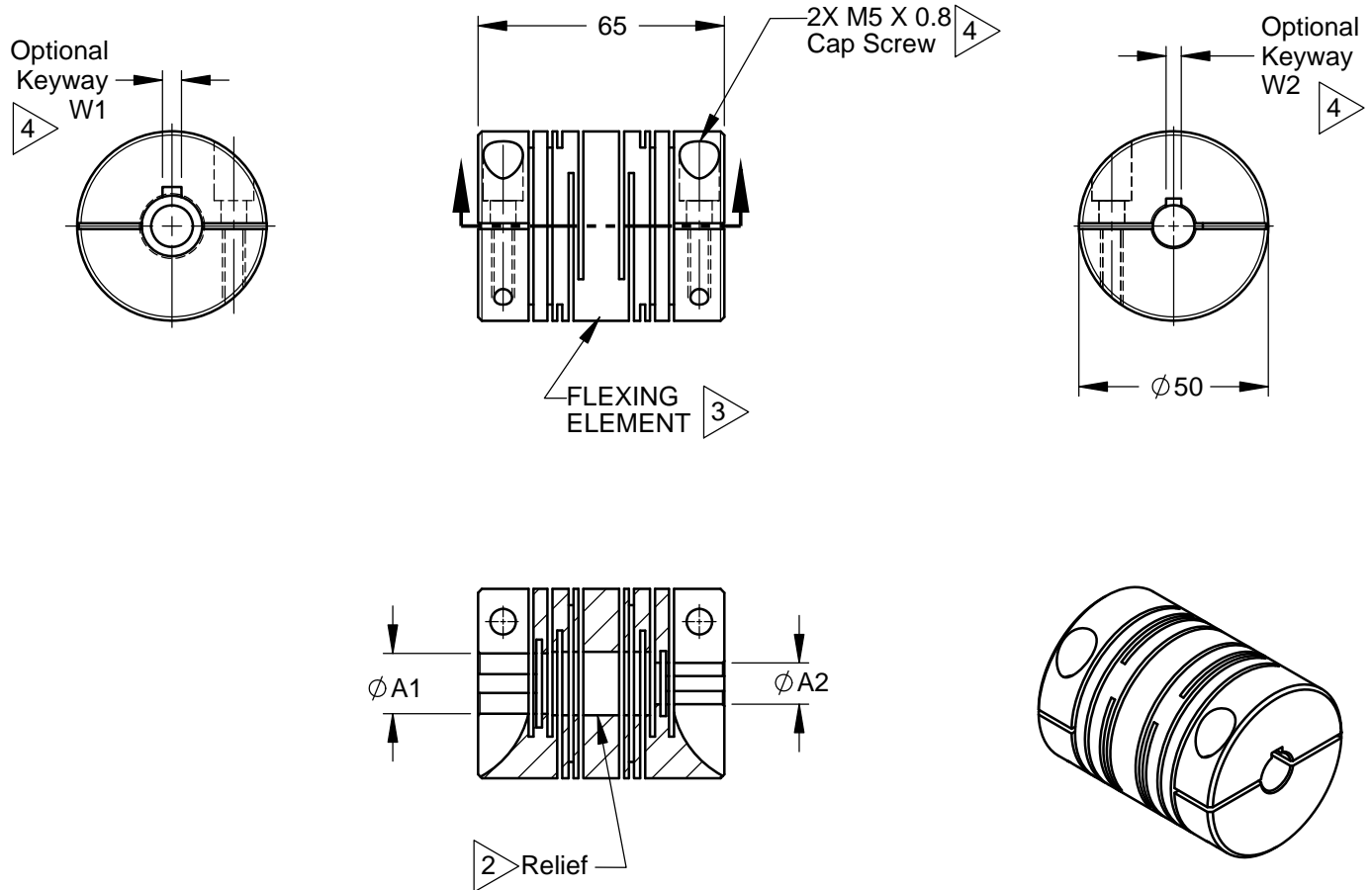


NOTES:

- 1 Refer to Secondary Sheet for Tabulated Data.
- 2 Relief permits component shafts to near butt.
- 3 Hubs and Flexing Element are made from a single piece of material.
- 4 Optional Keyway(s) with Integral Clamp attachment, hex. socket, ISO std., cap screw furnished: both hubs.
- 5 Backlash: None. No lubrication required.
- 6 Permitted axial motion from free length:  $\pm 0.25$
- 7 RPM: Up to 10,000, depending upon application.
- 8 Torsional Flexibility: .029 deg/Nm
- 9 Working torque rating: 10.0 Nm
- 10 Permissible shaft misalignment:  
Angular, up to  $3^\circ$   
Offset, up to 0.20 (FIM, 0.40)



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07-17-13	---	Redrawn in Solidworks	CL	JAJ EK
01-25-10	---	Added FLEXING ELEMENT; Finish was Chromic Acid Anodize, Type 1; Updated GD&T	JAJ	HG
DATE	LTR	REVISION	APVR	

Unless otherwise specified all tolerances and dimensions are in millimeters.

Inch	Metric
X/XX $\pm$ 1/64	X $\pm$ 0.5mm
.XX $\pm$ .01	X.X $\pm$ 0.25mm
.XXX $\pm$ .005	X.XX $\pm$ 0.15mm

Angles  $\pm 2^\circ$

Break sharp corners 0.25 MAX  
All surface finish 63 roughness  
Do Not Scale Drawing

 <b>HELICAL PRODUCTS COMPANY, INC.</b>		901 West McCoy Lane P.O. BOX 1069 SANTA MARIA, CA. 93456 U.S.A. PHONE (805) 928-3851 FSC13201	
		DRAWN BY BJM	DATE 12-08-99
CHECKED BY MC	DATE 12-13-99	MATL 7075-T6 Aluminum Alloy	
APPRVD BY DH	DATE 12-20-99	FINISH Anodize IAW HPS1000	
WEIGHT (calculated) TBD		DRAWING NUMBER <b>XCA50</b>	REV
SHEET 1 of 3			

# TABULATED DATA

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MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**XCA50**

REV

DO NOT SCALE DRAWING

SHT 2 of 3

ITEM DESCRIPTION (Part Number)	BORE SIZES		KEYWAY Width	
	TOLERANCE		TOLERANCE	
	$\phi$ A1	$\phi$ A2	W1	W2
XCA50-12mmQ4-12mmQ4	12.00mm	12.00mm	4.00mm	4.00mm
XCA50-12mm-12mm	12.00mm	12.00mm	---	---
XCA50-16K3-12mmQ4	.500in	12.00mm	.125in	4.00mm
XCA50-16K3-12mmQ5	.500in	12.00mm	.125in	5.00mm
XCA50-16-16	.500in	.500in	---	---
XCA50-14mm-12mm	14.00mm	12.00mm	---	---
XCA50-14mmQ5-12mm	14.00mm	12.00mm	5.00mm	---
XCA50-14mm-16	14.00mm	.500in	---	---
XCA50-14mm-14mm	14.00mm	14.00mm	---	---
XCA50-15mm-12mm	15.00mm	12.00mm	---	---
XCA50-15mm-14mm	15.00mm	14.00mm	---	---
XCA50-15mm-15mm	15.00mm	15.00mm	---	---
XCA50-20-14	.625in	.438in	---	---
XCA50-20-16	.625in	.500in	---	---
XCA50-20-20	.625in	.625in	---	---
XCA50-16mm-14mm	16.00mm	14.00mm	---	---
XCA50-16mm-15mm	16.00mm	15.00mm	---	---
XCA50-16mm-16mm	16.00mm	16.00mm	---	---
XCA50-16mmQ5-16mmQ5	16.00mm	16.00mm	5.00mm	5.00mm
XCA50-18mmK3-16K3	18.00mm	.500in	.125in	.125in
XCA50-18mmK3-16mmK3	18.00mm	16.00mm	.125in	.125in
XCA50-18mmQ6-18mmQ6	18.00mm	18.00mm	6.00mm	6.00mm
XCA50-19mm-12mm	19.00mm	12.00mm	---	---
XCA50-19mm-16	19.00mm	.500in	---	---
XCA50-19mmQ6-15mmQ5	19.00mm	15.00mm	6.00mm	5.00mm
XCA50-19mm-16mm	19.00mm	16.00mm	---	---
XCA50-19mm-18mm	19.00mm	18.00mm	---	---
XCA50-19mmQ6-19mmQ6	19.00mm	19.00mm	6.00mm	6.00mm
XCA50-19mm-19mm	19.00mm	19.00mm	---	---
XCA50-24K4-20K4	.750in	.625in	.188in	.188in
XCA50-24-20	.750in	.625in	---	---
XCA50-24K4-24K4	.750in	.750in	.188in	.188in
XCA50-24-24	.750in	.750in	---	---

# TABULATED DATA

Copyright HELICAL PRODUCTS CO INC

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**XCA50**

REV

DO NOT SCALE DRAWING

SHT 3 of 3

ITEM DESCRIPTION (Part Number)	BORE SIZES		KEYWAY Width	
	TOLERANCE		TOLERANCE	
	$\phi A1$	$\phi A2$	W1	W2
XCA50-20mmQ6-11mmQ4	20.00mm	11.00mm	6.00mm	4.00mm
XCA50-20mm-12mm	20.00mm	12.00mm	---	---
XCA50-20mm-16	20.00mm	.500in	---	---
XCA50-20mmQ6-14mmQ5	20.00mm	14.00mm	6.00mm	5.00mm
XCA50-20mmQ6-16mmQ5	20.00mm	16.00mm	6.00mm	5.00mm
XCA50-20mm-16mm	20.00mm	16.00mm	---	---
XCA50-20mmQ6-17mm	20.00mm	17.00mm	6.00mm	---
XCA50-20mmQ6-19mmQ6	20.00mm	19.00mm	6.00mm	6.00mm
XCA50-20mm-19mm	20.00mm	19.00mm	---	---
XCA50-20mmQ6-20mmQ6	20.00mm	20.00mm	6.00mm	6.00mm
XCA50-20mm-20mm	20.00mm	20.00mm	---	---
XCA50-21mm-14mm	21.00mm	14.00mm	---	---
XCA50-22mm-16	22.00mm	.500in	---	---
XCA50-22mm-14mm	22.00mm	14.00mm	---	---
XCA50-22mm-15mm	22.00mm	15.00mm	---	---
XCA50-22mm-16mm	22.00mm	16.00mm	---	---
XCA50-22mmQ6-17mmQ5	22.00mm	17.00mm	6.00mm	5.00mm
XCA50-22mmQ6-20mmQ6	22.00mm	20.00mm	6.00mm	6.00mm
XCA50-22mm-20mm	22.00mm	20.00mm	---	---
XCA50-22mm-22mm	22.00mm	22.00mm	---	---
XCA50-28-16	.875in	.500in	---	---
XCA50-28-20	.875in	.625in	---	---
XCA50-28-16mm	.875in	16.00mm	---	---
XCA50-28-24	.875in	.750in	---	---
XCA50-28-28	.875in	.875in	---	---
XCA50-BLANK	"WAB"	none	---	---