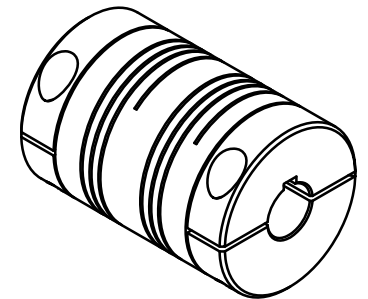
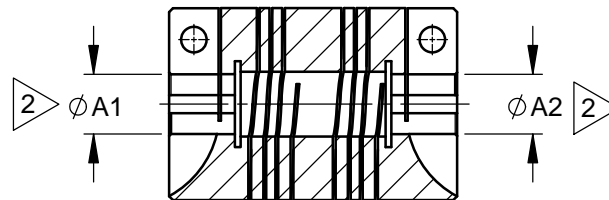
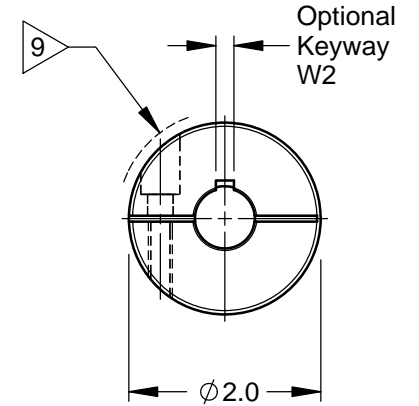
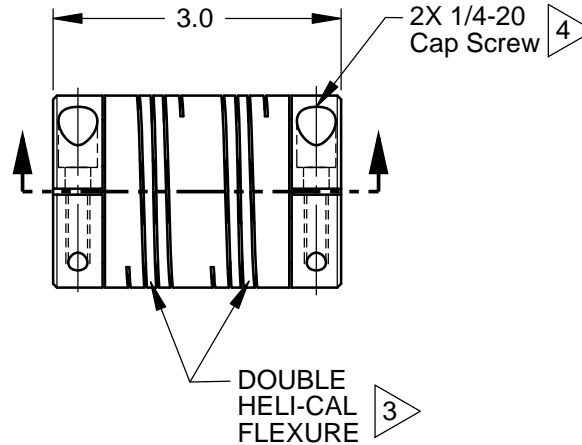
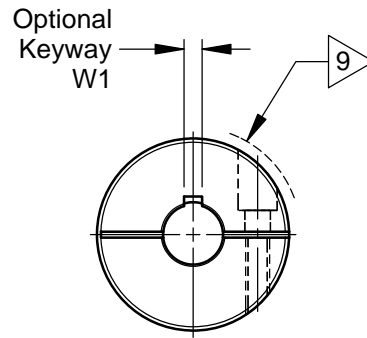


NOTES:

- 1 Refer to Secondary Sheet for Tabulated Data.
- 2  $\phi A1$  and  $\phi A2$  shafts may near butt except:  
 When any Bore  $> \phi .630$  the component shaft MAX penetration is .745  
 or  
 when both Bores  $> \phi .630$  the component shaft MAX penetration is .745 & the MIN shaft end to shaft end is 1.510.
- 3 Hubs and HELI-CAL FLEXURE are made from a single piece of material.
- 4 Integral Clamp attachment, hex, socket, cap screw furnished: both hubs.
- 5 Backlash: None. No lubrication required.
- 6 Permitted axial motion from free length:  $\pm .010$
- 7 Working torque ratings are based upon continuous duty with noted misalignments applied separately and may be increased with improved alignment. Refer to Tabulated Data
- 8 Permissible shaft misalignment:  
 Angular, up to  $5^\circ$   
 Offset, up to .030 (FIM, .060)
- 9 Part will have a  $\phi 2.242$  clearance on both ends when any Bore  $> \phi 1.024$  thru  $\phi 1.280$ .



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		---	Redrawn in Solidworks	JAJ
01-25-10	---	Revised IAW ECR#09121602	HG	JAJ
10-13-98	---	Clerical format update / No revision	BJM	MC
DATE	LTR	REVISION		APVR

Unless otherwise specified all tolerances and dimensions are in inches.

Inch	Metric
X/XX= $\pm 1/64$	X= $\pm 0.5\text{mm}$
.XX= $\pm .01$	X.X= $\pm 0.25\text{mm}$
.XXX= $\pm .005$	X.XX= $\pm 0.15\text{mm}$
Angles $\pm 2^\circ$	

Break sharp corners .010 MAX  
 All surface finish 63 roughness  
 Do Not Scale Drawing

		901 West McCoy Lane P.O. BOX 1069 SANTA MARIA, CA. 93456 U.S.A. PHONE (805) 928-3851 FSC13201	
		<b>HELICAL PRODUCTS COMPANY CO.</b>	
DRAWN BY	DATE	TITLE	
MC	12-12-80	HELICAL FLEXIBLE SHAFT COUPLING	
CHECKED BY	DATE	MATL	
MC	12-12-80	7075-T6 Aluminum Alloy	
APPRVD BY	DATE	FINISH	
APA	12-12-80	Anodize IAW HPS1000	
WEIGHT (calculated)		DRAWING NUMBER	
374g		MCAC200	
SHEET 1 of 7		REV	

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**MCAC200**

REV

DO NOT SCALE DRAWING

SHT 2 of 7

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			KEYWAY Width	
	TOLERANCE +.002in or +0.05mm -.000in or 0		Momentary Dynamic	Non- Reversing	Shock or Reversing	TOLERANCE +.002in or +0.05mm -.000in or 0	
	Ø A1	Ø A2				W1	W2
MCAC200-12-8	.375in	.250in	212	106	53	---	---
MCAC200-12-12	.375in	.375in	212	106	53	---	---
MCAC200-10mm-10mm	10.00mm	10.00mm	210	105	52	---	---
MCAC200-12mm-10mm	12.00mm	10.00mm	200	100	50	---	---
MCAC200-12mm-12mm	12.00mm	12.00mm	200	100	50	---	---
MCAC200-16-8	.500in	.250in	200	100	50	---	---
MCAC200-16-7mm	.500in	7.00mm	200	100	50	---	---
MCAC200-16-10	.500in	.313in	200	100	50	---	---
MCAC200-16-12	.500in	.375in	200	100	50	---	---
MCAC200-16-10mm	.500in	10.00mm	200	100	50	---	---
MCAC200-16-12mm	.500in	12.00mm	200	100	50	---	---
MCAC200-16-16	.500in	.500in	200	100	50	---	---
MCAC200-16K3-16K3	.500in	.500in	200	100	50	.125in	.125in
MCAC200-16-20 Superseded	.500in	.625in	---	---	---	---	---
MCAC200-13mm-8mm	13.00mm	8.00mm	193	96	48	---	---
MCAC200-14mm-12	14.00mm	.375in	184	92	46	---	---
MCAC200-14mm-14	14.00mm	.438in	184	92	46	---	---
MCAC200-14mm-12.5mm	14.00mm	12.50mm	184	92	46	---	---
MCAC200-14mm-16	14.00mm	.500in	184	92	46	---	---
MCAC200-14mmQ5-16K3	14.00mm	.500in	184	92	46	5.00mm	.125in
MCAC200-18-12	.563in	.375in	184	92	46	---	---
MCAC200-18-16	.563in	.500in	184	92	46	---	---
MCAC200-15mm-16	15.00mm	.500in	177	88	44	---	---
MCAC200-15mm-14mm	15.00mm	14.00mm	177	88	44	---	---

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**MCAC200**

REV

DO NOT SCALE DRAWING

SHT 3 of 7

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			KEYWAY Width	
	TOLERANCE		Momentary Dynamic	Non- Reversing	Shock or Reversing	TOLERANCE	
	$\phi A1$	$\phi A2$				W1	W2
MCAC200-20-6mm	.625in	6.00mm	170	85	42	---	---
MCAC200-20-8	.625in	.250in	170	85	42	---	---
MCAC200-20-10	.625in	.313in	170	85	42	---	---
MCAC200-20-10K1	.625in	.313in	170	85	42	---	.094in
MCAC200-20K4-10W02	.625in	.313in	170	85	42	.188in	.064in
MCAC200-20K4-8mmQ3	.625in	8.00mm	170	85	42	.188in	3.00mm
MCAC200-20-9mm	.625in	9.00mm	170	85	42	---	---
MCAC200-20-12	.625in	.375in	170	85	42	---	---
MCAC200-20K4-12	.625in	.375in	170	85	42	.188in	---
MCAC200-20K4-12K1	.625in	.375in	170	85	42	.188in	.094in
MCAC200-20-10mm	.625in	10.00mm	170	85	42	---	---
MCAC200-20K4-10mmQ3	.625in	10.00mm	170	85	42	.188in	3.00mm
MCAC200-20-13	.625in	.407in	170	85	42	---	---
MCAC200-20-14	.625in	.438in	170	85	42	---	---
MCAC200-20-12mm	.625in	12.00mm	170	85	42	---	---
MCAC200-20-16	.625in	.500in	170	85	42	---	---
MCAC200-20-16K3	.625in	.500in	170	85	42	---	.125in
MCAC200-20-16W04	.625in	.500in	170	85	42	---	.126in
MCAC200-20K3-16K3	.625in	.500in	170	85	42	.125in	.125in
MCAC200-20K4-16	.625in	.500in	170	85	42	.188in	---
MCAC200-20K4-16K3	.625in	.500in	170	85	42	.188in	.125in
MCAC200-20K4-16W04	.625in	.500in	170	85	42	.188in	.126in
MCAC200-20-14mm	.625in	14.00mm	170	85	42	---	---
MCAC200-20K4-14mm	.625in	14.00mm	170	85	42	.188in	---
MCAC200-20K4-14mmQ5	.625in	14.00mm	170	85	42	.188in	5.00mm
MCAC200-20-18	.625in	.563in	170	85	42	---	---
MCAC200-20K4-18K4	.625in	.563in	170	85	42	.188in	.188in
MCAC200-20-15mm	.625in	15.00mm	170	85	42	---	---
MCAC200-20-20	.625in	.625in	170	85	42	---	---
MCAC200-20K3-20K3	.625in	.625in	170	85	42	.125in	.125in
MCAC200-20K4-20	.625in	.625in	170	85	42	.188in	---
MCAC200-20K4-20K3	.625in	.625in	170	85	42	.188in	.125in
MCAC200-20K4-20K4	.625in	.625in	170	85	42	.188in	.188in
MCAC200-20K4-20W06	.625in	.625in	170	85	42	.188in	.189in
MCAC200-20Q4-20K4	.625in	.625in	170	85	42	4.00mm	.188in
MCAC200-15.92mm-20	15.92mm	.625in	170	85	42	---	---

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**MCAC200**

REV

DO NOT SCALE DRAWING

SHT 4 of 7

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			KEYWAY Width	
	TOLERANCE		Momentary Dynamic	Non- Reversing	Shock or Reversing	TOLERANCE	
	$\phi$ A1	$\phi$ A2				W1	W2
MCAC200-15.93mm-16	15.93mm	.500in	170	85	42	---	---
MCAC200-16mm-12	16.00mm	.375in	170	85	42	---	---
MCAC200-16mmQ5-16K3	16.00mm	.500in	170	85	42	5.00mm	.125in
MCAC200-16mm-15mm	16.00mm	15.00mm	170	85	42	---	---
MCAC200-16mm-20	16.00mm	.625in	170	85	42	---	---
MCAC200-16mmQ5-20K4	16.00mm	.625in	170	85	42	5.00mm	.188in
MCAC200-16mm-16mm	16.00mm	16.00mm	170	85	42	---	---
MCAC200-16mmQ5-16mmQ5	16.00mm	16.00mm	170	85	42	5.00mm	5.00mm
MCAC200-16.87mm-20K4	16.87mm	.625in	170	85	42	---	.188in
MCAC200-17mmK4-16K3	17.00mm	.500in	170	85	42	.188in	.125in
MCAC200-22-14mm	.688in	14.00mm	170	85	42	---	---
MCAC200-22-20	.688in	.625in	170	85	42	---	---
MCAC200-22K4-20K4	.688in	.625in	170	85	42	.188in	.188in
MCAC200-18mm-16	18.00mm	.500in	170	85	42	---	---
MCAC200-18mm-20	18.00mm	.625in	170	85	42	---	---
MCAC200-19mmQ6-12mmQ4	19.00mm	12.00mm	170	85	42	6.00mm	4.00mm
MCAC200-19mm-16	19.00mm	.500in	170	85	42	---	---
MCAC200-19mmQ6-16K3	19.00mm	.500in	170	85	42	6.00mm	.125in
MCAC200-19mmQ6-16	19.00mm	.500in	170	85	42	6.00mm	---
MCAC200-19mmQ5-20K4	19.00mm	.625in	170	85	42	5.00mm	.188in
MCAC200-19mmQ6-20K4	19.00mm	.625in	170	85	42	6.00mm	.188in
MCAC200-19mm-19mm	19.00mm	19.00mm	170	85	42	---	---

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**MCAC200**

REV

DO NOT SCALE DRAWING

SHT 5 of 7

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			KEYWAY Width	
	TOLERANCE		Momentary Dynamic	Non- Reversing	Shock or Reversing	TOLERANCE	
	$\phi A1$	$\phi A2$				$\phi W1$	$\phi W2$
MCAC200-24-8	.750in	.250in	170	85	42	---	---
MCAC200-24-8mm	.750in	8.00mm	170	85	42	---	---
MCAC200-24K4-8mmQ3	.750in	8.00mm	170	85	42	.188in	3.00mm
MCAC200-24-12	.750in	.375in	170	85	42	---	---
MCAC200-24K4-12K1	.750in	.375in	170	85	42	.188in	.094in
MCAC200-24-10mm	.750in	10.00mm	170	85	42	---	---
MCAC200-24K4-10mmQ3	.750in	10.00mm	170	85	42	.188in	3.00mm
MCAC200-24-11mm	.750in	11.00mm	170	85	42	---	---
MCAC200-24-12mm	.750in	12.00mm	170	85	42	---	---
MCAC200-24-16	.750in	.500in	170	85	42	---	---
MCAC200-24K3-16K3	.750in	.500in	170	85	42	.125in	.125in
MCAC200-24K4-16	.750in	.500in	170	85	42	.188in	---
MCAC200-24K4-16K1	.750in	.500in	170	85	42	.188in	.094in
MCAC200-24K4-16K3	.750in	.500in	170	85	42	.188in	.125in
MCAC200-24-15mm	.750in	15.00mm	170	85	42	---	---
MCAC200-24K4-15mmQ5	.750in	15.00mm	170	85	42	.188in	5.00mm
MCAC200-24K4-15mmW04	.750in	15.00mm	170	85	42	.188in	.126in
MCAC200-24-20	.750in	.625in	170	85	42	---	---
MCAC200-24-20K4	.750in	.625in	170	85	42	---	.188in
MCAC200-24K4-20K4	.750in	.625in	170	85	42	.188in	.188in
MCAC200-24K4-20W04	.750in	.625in	170	85	42	.188in	.126in
MCAC200-24-19mm	.750in	19.00mm	170	85	42	---	---
MCAC200-24K4-19mmQ6	.750in	19.00mm	170	85	42	.188in	6.00mm
MCAC200-24-24	.750in	.750in	170	85	42	---	---
MCAC200-24K4-24K4	.750in	.750in	170	85	42	.188in	.188in
MCAC200-20mm-12	20.00mm	.375in	170	85	42	---	---
MCAC200-20mmQ6-13K3	20.00mm	.407in	170	85	42	6.00mm	.125in
MCAC200-20mm-20	20.00mm	.625in	170	85	42	---	---
MCAC200-20mm-20K4	20.00mm	.625in	170	85	42	---	.188in
MCAC200-20mmQ4-20K4	20.00mm	.625in	170	85	42	4.00mm	.188in
MCAC200-20mm-20mm	20.00mm	20.00mm	170	85	42	---	---

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**MCAC200**

REV

DO NOT SCALE DRAWING

SHT 6 of 7

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			KEYWAY Width	
	TOLERANCE +0.002in or +0.05mm -0.000in or 0		Momentary Dynamic	Non- Reversing	Shock or Reversing	TOLERANCE +0.002in or +0.05mm -0.000in or 0	
	Ø A1	Ø A2				W1	W2
MCAC200-28-10	.875in	.313in	170	85	42	---	---
MCAC200-28-12	.875in	.375in	170	85	42	---	---
MCAC200-28-14	.875in	.438in	170	85	42	---	---
MCAC200-28-16	.875in	.500in	170	85	42	---	---
MCAC200-28K4-16K3	.875in	.500in	170	85	42	.188in	.125in
MCAC200-28-24	.875in	.750in	170	85	42	---	---
MCAC200-30-20	.938in	.625in	170	85	42	---	---
MCAC200-30-24	.938in	.750in	170	85	42	---	---
MCAC200-24mmQ8-9.27mmK3	24.00mm	9.27mm	170	85	42	8.00mm	.125in
MCAC200-24mm-12	24.00mm	.375in	170	85	42	---	---
MCAC200-24mm-20	24.00mm	.625in	170	85	42	---	---
MCAC200-24mmQ8-20K4	24.00mm	.625in	170	85	42	8.00mm	.188in
MCAC200-24mmQ8-16mmQ5	24.00mm	16.00mm	170	85	42	8.00mm	5.00mm
MCAC200-24mmQ8-22K4	24.00mm	.688in	170	85	42	8.00mm	.188in
MCAC200-25mm-8	25.00mm	.250in	170	85	42	---	---
MCAC200-25mm-12	25.00mm	.375in	170	85	42	---	---
MCAC200-25mm-16	25.00mm	.500in	170	85	42	---	---
MCAC200-25mm-20	25.00mm	.625in	170	85	42	---	---
MCAC200-25mmQ8-20K4	25.00mm	.625in	170	85	42	8.00mm	.188in
MCAC200-25mm-16mmQ5	25.00mm	16.00mm	170	85	42	---	5.00mm
MCAC200-32-7.13mm	1.000in	7.13mm	170	85	42	---	---
MCAC200-32-10	1.000in	.313in	170	85	42	---	---
MCAC200-32-12	1.000in	.375in	170	85	42	---	---
MCAC200-32-10mm	1.000in	10.00mm	170	85	42	---	---
MCAC200-32-12mm	1.000in	12.00mm	170	85	42	---	---
MCAC200-32-16	1.000in	.500in	170	85	42	---	---
MCAC200-32-20	1.000in	.625in	170	85	42	---	---
MCAC200-32K5-20K4	1.000in	.625in	170	85	42	.250in	.188in
MCAC200-32-24	1.000in	.750in	170	85	42	---	---
MCAC200-32-32	1.000in	1.000in	170	85	42	---	---
MCAC200-32K5-32K5	1.000in	1.000in	170	85	42	.250in	.250in

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**MCAC200**

REV

DO NOT SCALE DRAWING

SHT 7 of 7

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			KEYWAY Width	
	TOLERANCE +.002in or +0.05mm -.000in or 0		Momentary Dynamic	Non- Reversing	Shock or Reversing	TOLERANCE +.002in or +0.05mm -.000in or 0	
	Ø A1	Ø A2				W1	W2
MCAC200-36-12	1.125in	.375in	170	85	42	---	---
MCAC200-36-12K3	1.125in	.375in	170	85	42	---	.125in
MCAC200-36K5-14mmQ5	1.125in	14.00mm	170	85	42	.250in	5.00mm
MCAC200-36-20	1.125in	.625in	170	85	42	---	---
MCAC200-36-17mm	1.125in	17.00mm	170	85	42	---	---
MCAC200-36-32	1.125in	1.000in	170	85	42	---	---
MCAC200-36K5-32K5	1.125in	1.000in	170	85	42	.250in	.250in
MCAC200-40-16	1.250in	.500in	170	85	42	---	---
MCAC200-40-20	1.250in	.625in	170	85	42	---	---
MCAC200-40K5-20K4	1.250in	.625in	170	85	42	.250in	.188in
MCAC200-40-24	1.250in	.750in	170	85	42	---	---
MCAC200-40K5-24K4	1.250in	.750in	170	85	42	.250in	.188in
MCAC200-40K5-28K4	1.250in	.875in	170	85	42	.250in	.188in
MCAC200-40-40	1.250in	1.250in	170	85	42	---	---