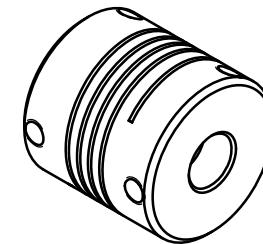
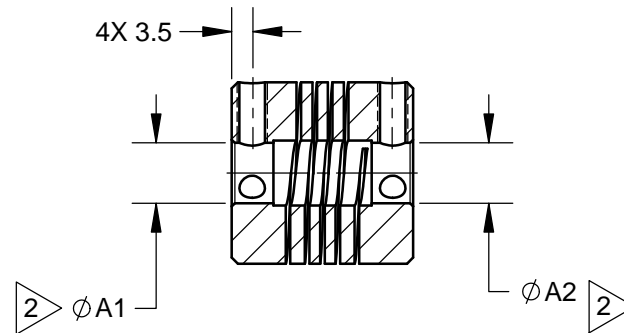
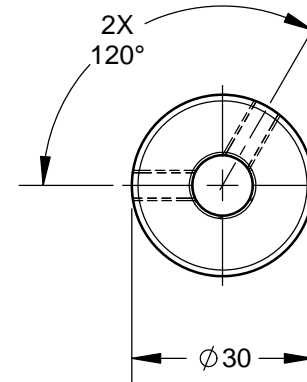
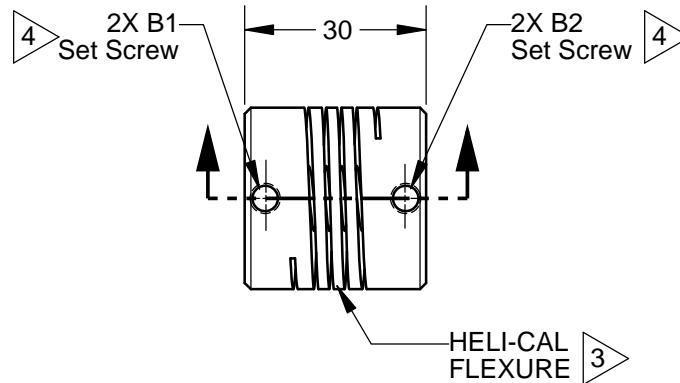


NOTES:

- 1 Refer to Secondary Sheet for Tabulated Data.
- 2  $\phi$ A1 and  $\phi$ A2 shafts may near butt except:  
  
When any Bore  $> \phi$  12.70 the component shaft MAX penetration is 6.88  
or  
when both Bores  $> \phi$  12.70 the component shaft MAX penetration is 6.88 & the MIN shaft end to shaft end is 16.24
- 3 Hubs and HELI-CAL FLEXURE are made from a single piece of material.
- 4 Set Screw attachment, hex. socket, ISO std. cup point set 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 Working torque ratings are based upon continuous duty with noted misalignments applied separately and may be increased with improved alignment:  
Refer to Tabulated Data
- 9 Permissible shaft misalignment:  
Angular, up to  $5^\circ$   
Offset, up to 0.25 (FIM, 0.50)
- 10 Weight based on WA30-10mm-10mm



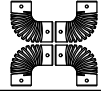
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11-25-14	---	ECR#14102000 Added calc. weight	DCE	EK
08-14-13	---	Redrawn in Solidworks	CL	JAJ/EK
01-25-10	---	Finish was Chromic Acid Anodize; Updated GD&T	JAJ	HG
09-14-98	---	Clerical Format Update/ No Revision	BJM	MC
DATE	LTR	REVISION	APVR	

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



# HELICAL

PRODUCTS COMPANY

901 West McCoy Lane  
SANTA MARIA, CA. 93456 U.S.A.  
PHONE (805) 928-3851 FSC13201

DRAWN BY MM	DATE 08-10-78	TITLE HELICAL FLEXIBLE SHAFT COUPLING
CHECKED BY GLB	DATE 08-10-78	MATL 7075-T6 Aluminum Alloy
APPRVD BY APA	DATE 08-10-78	FINISH Anodize IAW HPS1000
WEIGHT (calculated) 44 g		DRAWING NUMBER <b>WA30</b>
SHEET 1 of 3		REV

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**WA30**

REV

DO NOT SCALE DRAWING

SHT 2 of 3

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			SET SCREW THREAD	
	TOLERANCE +0.002in or +0.05mm -0.000in 0		Momentary Dynamic	Non- Reversing	Shock or Reversing	B1	B2
	Ø A1	Ø A2					
WA30-6mm-6mm Superseded	6.00mm	---	---	---	---	---	---
WA30-8-8 Superseded	.250in	---	---	---	---	---	---
WA30-8mm-8mm Superseded	8.00mm	---	---	---	---	---	---
WA30-9mm-6mm	9.00mm	6.00mm	4.9	2.5	1.20	M5 X 0.8	M5 X 0.8
WA30-9mm-8mm	9.00mm	8.00mm	4.9	2.5	1.20	M5 X 0.8	M5 X 0.8
WA30-9mm-9mm	9.00mm	9.00mm	4.9	2.5	1.20	M5 X 0.8	M5 X 0.8
WA30-12-6mm	.375in	6.00mm	4.8	2.4	1.20	M5 X 0.8	M5 X 0.8
WA30-12-8mm	.375in	8.00mm	4.8	2.4	1.20	M5 X 0.8	M5 X 0.8
WA30-12-9mm	.375in	9.00mm	4.8	2.4	1.20	M5 X 0.8	M5 X 0.8
WA30-12-12	.375in	.375in	4.8	2.4	1.20	M5 X 0.8	M5 X 0.8
WA30-10mm-4mm	10.00mm	4.00mm	4.6	2.3	1.20	M5 X 0.8	M3 X 0.6
WA30-10mm-6mm	10.00mm	6.00mm	4.6	2.3	1.20	M5 X 0.8	M5 X 0.8
WA30-10mm-8mm	10.00mm	8.00mm	4.6	2.3	1.20	M5 X 0.8	M5 X 0.8
WA30-10mm-9mm	10.00mm	9.00mm	4.6	2.3	1.20	M5 X 0.8	M5 X 0.8
WA30-10mm-12	10.00mm	.375in	4.6	2.3	1.20	M5 X 0.8	M5 X 0.8
WA30-10mm-10mm	10.00mm	10.00mm	4.6	2.3	1.20	M5 X 0.8	M5 X 0.8
WA30-11mm-7mm	11.00mm	7.00mm	4.3	2.3	1.10	M5 X 0.8	M5 X 0.8
WA30-11mm-8mm	11.00mm	8.00mm	4.3	2.3	1.10	M5 X 0.8	M5 X 0.8
WA30-11mm-9mm	11.00mm	9.00mm	4.3	2.3	1.10	M5 X 0.8	M5 X 0.8
WA30-11mm-12	11.00mm	.375in	4.3	2.3	1.10	M5 X 0.8	M5 X 0.8
WA30-11mm-10mm	11.00mm	10.00mm	4.3	2.3	1.10	M5 X 0.8	M5 X 0.8
WA30-11mm-11mm	11.00mm	11.00mm	4.3	2.3	1.10	M5 X 0.8	M5 X 0.8
WA30-15-12	.469in	.375in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-5mm	12.00mm	5.00mm	4.0	2.0	1.00	M5 X 0.8	M4 X 0.7
WA30-12mm-6mm	12.00mm	6.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-7mm	12.00mm	7.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-10	12.00mm	.313in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-8mm	12.00mm	8.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-9mm	12.00mm	9.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-9.5mm	12.00mm	9.50mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-12	12.00mm	.375in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-10mm	12.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-11mm	12.00mm	11.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-12mm-12mm	12.00mm	12.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-16-6mm	.500in	6.00mm	3.7	1.9	.93	M5 X 0.8	M5 X 0.8
WA30-16-8	.500in	.250in	3.7	1.9	.93	M5 X 0.8	M5 X 0.8
WA30-16-8mm	.500in	8.00mm	3.7	1.9	.93	M5 X 0.8	M5 X 0.8
WA30-16-12	.500in	.375in	3.7	1.9	.93	M5 X 0.8	M5 X 0.8
WA30-16-16	.500in	.500in	3.7	1.9	.93	M5 X 0.8	M5 X 0.8

# TABULATED DATA

Copyright HELICAL PRODUCTS CO

MATERIAL: 7075-T6 Aluminum Alloy

FINISH: Anodize IAW HPS1000

Drawing Number

**WA30**

REV

DO NOT SCALE DRAWING

SHT 3 of 3

ITEM DESCRIPTION (Part Number)	BORE SIZES		TORQUES (lbin)			SET SCREW THREAD	
	TOLERANCE +0.002in -0.00in or +0.05mm 0		Momentary Dynamic	Non- Reversing	Shock or Reversing	B1	B2
	Ø A1	Ø A2					
WA30-13mm-9mm	13.00mm	9.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-13mm-10mm	13.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-6mm	14.00mm	6.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-8	14.00mm	.250in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-7mm	14.00mm	7.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-8mm	14.00mm	8.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-12	14.00mm	.375in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-10mm	14.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-11mm	14.00mm	11.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-12mm	14.00mm	12.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14mm-14mm	14.00mm	14.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-14.6mm-5mm	14.60mm	5.00mm	4.0	2.0	1.00	M5 X 0.8	M4 X 0.7
WA30-15mm-6mm	15.00mm	6.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-15mm-8mm	15.00mm	8.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-15mm-10mm	15.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-15mm-12mm	15.00mm	12.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-15mm-15mm	15.00mm	15.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20-11mm	.625in	11.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20-12mm	.625in	12.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-16mm-8mm	16.00mm	8.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-16mm-10mm	16.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-16mm-12mm	16.00mm	12.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-16mm-15mm	16.00mm	15.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-18mm-8mm	18.00mm	8.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-18mm-10mm	18.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-18mm-18mm	18.00mm	18.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-19mm-12	19.00mm	.375in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-19mm-10mm	19.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-19mm-12mm	19.00mm	12.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-19mm-19mm	19.00mm	19.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-24-8	.750in	.250in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-5mm	20.00mm	5.00mm	4.0	2.0	1.00	M5 X 0.8	M4 X 0.7
WA30-20mm-12	20.00mm	.375in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-10mm	20.00mm	10.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-12mm	20.00mm	12.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-16	20.00mm	.500in	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-13mm	20.00mm	13.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-14mm	20.00mm	14.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-17mm	20.00mm	17.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8
WA30-20mm-20mm	20.00mm	20.00mm	4.0	2.0	1.00	M5 X 0.8	M5 X 0.8