CSF-CR1 Gearheads

Harmonic Gearing with Integrated Cross Roller Bearing

Features

- Zero backlash
- Compact design
- High torque capacity
- High stiffness
- High positional accuracy
- Integrated cross roller bearing
- Optimized tooth profile
- Repeatability to ± 0.25 arc-sec
- Customizable
- Available in corrosion resistant stainless steel

Standard Specifications (high torque option available)

Size	Ratio	Rated Torque at 2000 RPM		Repeated Torque Limit		Momentary Peak Torque Limit		Max Input Speed RPM		Moment of Inertia		Weight	
		Nm	in-lb	Nm	in-lb	Nm	in-lb	Oil	Grease	$kgcm^2$	$lb\text{-}in^2$	kg	lb
17	50	16	142	34	301	70	620	10,000	4,000	.076	.026	.7	1.4
	80	22	195	34	301	70	620						
	100	24	212	54	478	86	761						
	120	24	212	54	478	78	690						
20	50	25	221	56	496	98	867	10,000	4,000	1.817	.02	.9	2.0
	80	34	301	74	655	127	1124						
	100	40	354	82	726	147	1301						
	120	40	354	87	770	147	1301						
	160	40	354	92	814	147	1301						
25	50	39	345	98	867	186	1646	7500	4,000	.463	.158	1.4	3.1
	80	67	593	137	1213	255	2257						
	100	67	593	157	1390	284	2514						
	120	67	593	167	1478	304	2691						
	160	67	593	178	1558	314	2779						
32	50	76	673	216	1912	382	3381	7,000	4,000	1.38	.472	3.0	6.6
	80	118	1044	304	2691	568	5027						
	100	137	1213	333	2947	647	5726						
	120	137	1213	353	3124	686	6072						
	160	137	1213	372	3292	686	6072						

Cross Roller Bearing Specifications

Size	Pitch	Basic Dynamic Load	Basic Static Load	Allowable Dynamic Axial Load	Allowable Static Axial Load	Maximum Radial Runout	Maximum Axial Runout	Precision Standard	Ambient Temp Range Intermittent / Continuous	
	mm	kN	kN	kN	kN	µm	µm		°C	°C
17	42.5	7.2	8.6	10.8	16.1	4	7	P5	–20 - 110	–20 - 100
20	50	8.5	10.1	12.75	20.2	4	7	P5		
25	62	10.5	14.7	15.75	29.4	4	8	P5		
32	80	15.6	22.6	31.2	45.2	4	8	P5		

Ordering Codes

CSF-AAA-BBB-CR1-CCCCC

Size: 017, 020, 025, 032

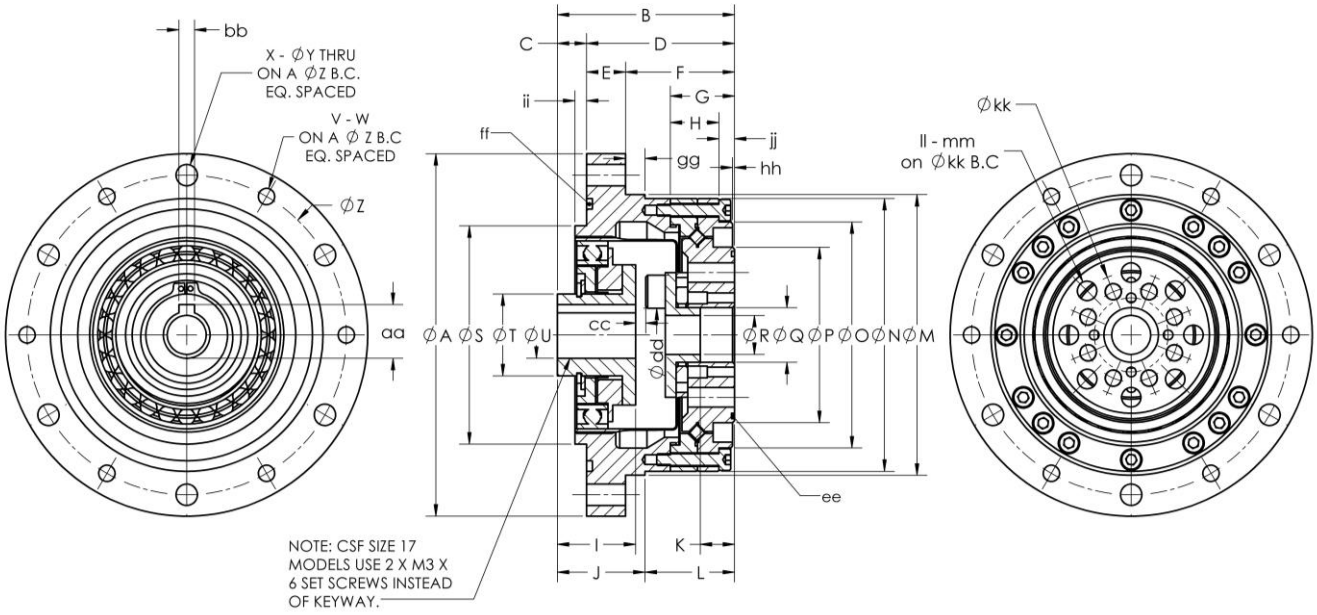
Ratio: 050,080,100,120,160

Special Designator: by factory for non-standard units

CONIC SYSTEMS

11 Rebel Lane, Port Jervis, NY 12771 USA
Toll-Free: 888-757-2547 • Phone: 845-856-4053
info@conicsystems.com • www.conicsystems.com

Dimensions



	Size			
	17	20	25	32
ΦA h7	79	93	107	138
B +0.0/-0.1	45	45.5	52	62
C	8	7.5	6	5
D	37	38	46	57
E	8	10	10	12
F	29	28	36	45
G	16.5	16.5	18.5	22.5
H	12	12.5	14	17
I +0.0/-0.1	19.5	20.1	20.2	22
J	20	22.5	21	22
K	9.5	8.8	12	15
L	25	23	31	40
ΦM h7	63	72	86	113
ΦN	62	70	85	112
ΦO	49.5	58	73	96
ΦP	38	45	58	78
ΦQ H7	10	14	20	26
ΦR	7	10	15	20
ΦS h7	48	56	67	90
ΦT	18	21	26	26
ΦU H7	8	12	14	14
V	6	6	8	12
W	M4	M5	M5	M6
X	6	6	8	12
ΦY	4.5	5.5	5.5	6.6
ΦZ	71	82	96	125
aa +0.1/-0.0	-	13.8	16.3	16.3
bb JS9	-	4	5	5
cc	4	2.6	2.6	2.8
Φdd	8.16	8.5	20.2	27
ee (O-Ring)	34 x 0.8	40.5 x 1.14	53.5 x 1	70 x 2
ff (O-Ring)	53 x 2	66 x 2	77 x 2	104 x 2
gg	4	5	5	5
hh	0.5	0.5	0.5	1
ii	2	3	3	3
jj	4.5	4	4.5	5.5
Φkk	27	32	42	55
ll	6	8	8	8
mm	M5 X 10	M6 X 9	M8 X 12	M10 X 15