AN ISO 9001 : 2015
CERTIFIED COMPANY

BONNA-FLEX®

CURVED JAW COUPLINGS

TYPE - GR / BRRJ

CATALOGUE NO. C2-GR/BRRJ- NO 11

Manufacturer & Exporter :
HASMUKHLAL & BROTHERS

MAKE IN INDIA

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BONNA-FLEX™

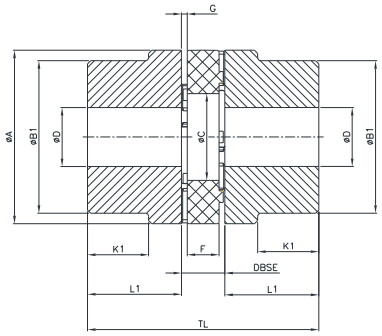
Features :

- Well balanced design
- Longer life-lesser maintenance
- Fail-Safe design

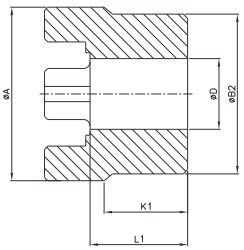
Technical Details

- Rated torque ranges from 18 Nm to 65 Nm
- Rated power from 0.18 kW to 0.65 kW
- Max Speed 10600 rpm to 14000 rpm

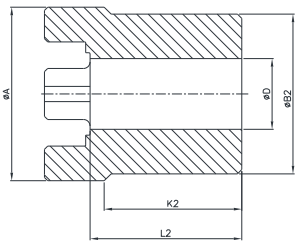
HUB TYPE I



HUB TYPE II



HUB TYPE III



TECHNICAL DATA

BRRJ - ALUMINIMUM (AL)*

Coupling Size	Coupling Type	kW @ 100 rpm		Torque Nm	Max. Speed RPM	Bore - Ø D			DIMENSIONS (mm)												# Assembly	
		Red	Yellow	Red		PB	Min.	Max.	ØA	ØB1	ØB2	ØC	DBSE min.	F	L1	L2	G	TL	K1	K2	Weight (Kg.)	M.I. ($Kg.m^2$)
19	I	0.18	0.1	18	14000	0	6	19	41	32	-	18	16	12	25	-	2	66	20	-	0.11	2.3×10^{-5}
	II						19	24		-	41										0.14	4.3×10^{-5}
24	I	0.65	0.35	62	10600		9		56	40	-	27	18	14	30	-	2	78	24	-	0.24	9×10^{-5}
	II						22	28		-	56										0.34	19×10^{-5}
28	I	1.75	0.95	167	8500		10		66	48	-	30	20	15	35	-	2.5	90	28	-	0.39	$20X 10^{-5}$
	II						28	38		-	66										0.54	42×10^{-5}
											BRRJ-CAST IRON (CI)*											
38	I	3.47	1.9	332	7100	10	12	40	80	66	-	38	24	18	45	-	3	114	37	-	2.00	1.85×10^{-3}
	II							48		-	78										2.40	2.45×10^{-3}
	III														-	70		164	-	62	3.60	3.72×10^{-3}
42	I	4.99	2.65	477	6000	12	14	45	95	75	-	46	26	20	50	-	3	126	40	-	3.20	4.1×10^{-3}
	II							55		-	94										3.80	5.9×10^{-3}
	III														-	75		176	-	65	5.50	8.54×10^{-3}
48	I	5.49	3.1	524	5600	13	15	52	105	85	-	51	28	21	56	-	3.5	140	45	-	4.96	7.4×10^{-3}
	II							62		-	104										5.45	9.9×10^{-3}
	III														-	80		188	-	69	7.51	13.6×10^{-3}
55	I	7.27	4.1	694	4750	18	20	60	120	98	-	60	30	22	65	-	4	160	52	-	6.60	12.3×10^{-3}
	II							74		-	118										7.50	17.3×10^{-3}
	III														-	90		210	-	77	10.20	$23.7X 10^{-3}$
65	I	10.19	6.25	973	4250	20	22	70	135	115	-	68	35	26	75	-	4.5	185	61	-	10.10	24.5×10^{-3}
	II							80		-	133										11.50	27.8×10^{-3}
	III														-	100		235	-	86	15.00	36.3×10^{-3}
75	I	20.73	12.8	1980	3550	28	30		160	135	-	80	40	30	85	-	5	210	69	-	16.00	54×10^{-3}
	II							95		-	158										18.20	61.4×10^{-3}
	III														-	110		260	-	84	21.20	71.5×10^{-3}
90	I	36.89	24	3523	2800	38	40	97	200	160	-	100	45	34	100	-	5.5	245	81	-	27.50	138×10^{-3}
	II							110		-	198										36.30	182×10^{-3}
	III														-	125		295	-	106	44.80	225×10^{-3}

Weight & Moment of Inertia (M.I.) of coupling assembly refer to maximum finish bore without keyway.

* Alternative hub material available on request - Steel (Sizes 19 to 90) , S. G. Iron (Sizes 38 to 90).

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Selection Procedure:

1. Determine Application Nominal Torque (Nm)
   Tnom (Nm) = (kw x 9550/rpm)

2. Calculate application service factor using following charts - Total service factor (SF) will be
SF = SF1 x SF2 x SF3

3. Calculate Application Maximum Torque (Tmax)
Tmax = Tnom X SF (Nm)

4. Select the proper spider showing Tnom greater than application nominal torque. Then select spider showing Tmax greater than application maximum torque. Select the higher of two.

5. Ensure that application rpm and max. bore requirements are less than or equal to selected coupling max. rpm and max. bore size otherwise select next size coupling.

For SF1, SF2, SF3 refer chart.

SF1 - Application Service Factor

Driven Machine / Example	Electric Motors	Prime Motor	
		4 Cylinder or more	Less than 4 Cylinder
a. Uniform operation, no shocks.	1.5	2.0	2.5
b. Irregular operation, light shocks.	2.0	2.5	3.0
C. Irregular operation, medium shocks.	2.5	3.0	3.5
D. Irregular operation, heavy shocks.	3.0	3.5	4.0

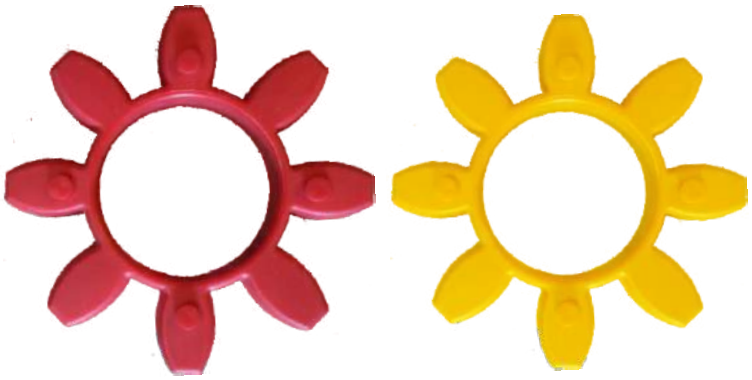
SF2 - Application Service Factor for Temperature

Temperature Range °C	< 30°C	30°C - 70°C	> 70°C
SF2	1.0	1.5	2.0

SF3 - Application Service Factor for starting frequency

Starting frequency cycles / hour	< 100	100 - 500	> 500
SF3	1.0	1.5	2.0

SPIDER



TECHNICAL DATA - Polyurethane Spiders

Spider Size	Red (Std.)		Yellow	
	T_{nom} (Nm)	T_{max} (Nm)	T_{nom} (Nm)	T_{max} (Nm)
19	17	34	10	20
24	60	120	35	70
28	160	320	95	190
38	325	650	190	380
42	450	900	265	530
48	525	1050	310	620
55	685	1370	410	820
65	940	1880	625	1250
75	1920	3840	1280	2560
90	3600	7200	2400	4800
Hardness	95 Shore A		92 Shore A	
Temperature	- 40°C to 90°C			

MISALIGNMENT DATA

Size	19	24	28	38	42	48	55	65	75	90
Maximum axial displacement (mm)	1.6	1.8	2.0	2.2	2.3	3.0	3.0	3.5	3.5	4.5
Maximum radial misalignment (mm)	0.15	0.20	0.20	0.25	0.30	0.35	0.35	0.40	0.45	0.50
Maximum angular misalignment (Deg.)	0.80	0.80	0.80	0.90	0.90	1.0	1.0	1.0	1.1	1.1

ORDER SEQUENCE	Coupling Size	Hub Type (Driver / Driven)	Finish Bore (Driver / Driven)	Spider Type	Hub Material
Example	RRJ-55	I / II	40 / 60	Red	CI

◆ All dimensions are in mm unless otherwise specified.

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