## Curve-Flex Type RRJ - Jaw-Flex Couplings



Blue (RAL - 5015)
Hardness HTR 55 D
Temperature $-120^{\circ} \mathrm{C}$


Gray (RAL - 7000)
Hardness HTR 92 A
Temperature $-120^{\circ} \mathrm{C}$


Light Ivory (RAL - 1015)
Hardness HTR 65 D
Temperature $-120^{\circ} \mathrm{C}$

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) $\operatorname{Tmax}=$ 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. Selectthe 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.
SF1 - Application Service Factor

| Driven Machine / Example | Electric <br> Motors | 4 Cylinder <br> or more | Less than <br> 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 ${ }^{\circ} \mathrm{C}$ | $<30^{\circ} \mathrm{C}$ | $30^{\circ} \mathrm{C}-70^{\circ} \mathrm{C}$ | $>70^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: |
| SF 2 | 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 |

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 <br> Size | Hub Type <br> (Driver / Driven) | Finish Bore <br> (Driver / Driven) | Spider <br> Type | Hub <br> Material |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Example | RRJ-55 | I/II | $40 / 60$ | Spider Colour | $\mathbf{C l}$ |

Coupling with Blue Spider is supplied if not specified.
All dimensions are in mm unless otherwise specified.

POWER TRANSMISSIONS
INTERNATIONAL

## Curve-Flex Type RRJ - Jaw-Flex Couplings

- All over machining - Inherently balanced
- No Lubrication, Maintenance free - Long life
- Compact design, High power to weight ratio
- Fail safe - Will perform even if spider fails
- Vibrations Damping, torsionally flexible
- Axial plug-in, easy to assemble



HUB TYPE I


HUB TYPE II


HUB TYPE III

Technical Data
RRJ - ALUMINIMUM (AL)


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[^0]:    \# 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).

    All Dimensions are in mm.
    For vertical installation contact Rathi.
    Consult for Max Bore with Square Key.

