## INSTALLATION, OPERATING \& MAINTENANCE MANUAL



Anand - Sojitra Road, VALLABH VIDYANAGAR - 388 120, Gujarat, INDIA. Tel.: +91 2692238701 / 238 702, Fax : +91 2692227484

E-mail : infogearßelecon.com
Website : www.elecon.com | CIN : L29100GJ1960PLC001082

## INSTALLATION \& MAINTENANCE ELIGN GEAR COUPLING



## 1. ASSEMBLING

1.1 Ensure all parts are clean.
1.2 Apply a light coat of grease to the O-Rings A and insert O-Rings into grooves $J$ of sleeves $B$.
1.3 Place sleeves B over shaft ends. Care should be taken not to damage ORings A.
1.4 Install hubs $C$ on their respective shafts with the longest hub end towards shaft end or towards machine bearing depending on the type (see page 5). If needed, uniformly heat hub C (max $120^{\circ} \mathrm{C}$ ) to install them easily on the shaft, in this case, avoid any contact between the hub C and O-Ring A. Hub faces have to be flush with shaft end. In case of doubt, please consult us.
1.5 Install units to be connected in place and check the spacing N between hubs. See the tabulation (page 3) or approved drawing for correct hub spacing N , according to coupling type. In case of doubt, pl. consult us.
1.6 Align the two shafts, check alignment using a precise tools \& measuring instruments I alignometer. Alignment precision depends on running speed (see page 6).
1.7 Coat hub \& sleeve gearing with grease (see tabulation page 5) and slide sleeves B over hubs.
1.8 Insert gasket $F$ and bolt sleeves together. Tighten bolts uniformly See tabulation (page 4) for correct tightening torque (T Nm). Make sure that sleeve is freely sliding above hubs by axially displacing it to a value equal to N .
1.9 For the type ED, ES \& ER remove both lube plugs $H$ of one sleeve $B$ and add grease in sufficient amount to overflow with lubricant holes in horizontal position. For the types ET \& EV repeat this operation for the second sleeve. For quantity \& quality of grease, see tabulation (page 5). Re-install the 2 plugs H. For type EV consult us.

## 2. MAINTENANCE

2.1 Every 3,000 hours. Check that sleeves are freely moving axially: follow instructions as indicated in 1.8. Fill up grease level: Proceed as mentioned under 1.9.
2.2 Every 8,000 hours or every 2 years.
2.2.1 Remove bolts and gasket $F$.
2.2.2 Control gearing and sealing.
2.2.3 Control alignment.

| Type | $\mathrm{N}(\mathrm{mm})$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ED | ES | ER | EV |  |
| $\mathbf{1 3 0}$ | 3 | -- | 5 | 8 |  |
| $\mathbf{2 8 0}$ | 3 | -- | 5 | 5 |  |
| $\mathbf{5 0 0}$ | 3 | -- | 5 | 12.5 |  |
| $\mathbf{1 0 0 0}$ | 5 | -- | 6 | 11 |  |
| $\mathbf{1 6 0 0}$ | 5 | 5 | 6 | 13 |  |
| $\mathbf{2 2 0 0}$ | 6 | 6 | 6.5 | 14 |  |
| $\mathbf{3 2 0 0}$ | 6 | 6 | 6.5 | 15 |  |
| $\mathbf{4 5 0 0}$ | 8 | 8 | 8 | 17 |  |
| $\mathbf{6 2 0 0}$ | 8 | 8 | 8 | 20 |  |
| $\mathbf{8 4 0 0}$ | 8 | 8 | 8 | 27 |  |
| $\mathbf{1 1 5 0 0}$ | 8 | 8 | 10 | 34 |  |
| $\mathbf{1 7 4 0 0}$ | 10 | 10 | 13 | 28 |  |


| Type | ED, ET, ER, EV |  | ED, ES, ET, ER, EV |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Exposed Metric Bolts |  | Pipe Plug |  |
|  | Tightening Torque | Socket Size | Plug Size | Key Size |
|  | $\mathbf{T}(\mathbf{N m})$ | (mm) | (inch) | (mm) |
| $\mathbf{1 3 0}$ | 33.5 | 10 | $1 / 8^{\prime \prime}$ BSP | 5 |
| $\mathbf{2 8 0}$ | 66 | 12 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{5 0 0}$ | 112 | 14 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{1 0 0 0}$ | 277 | 19 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{1 6 0 0}$ | 277 | 19 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{2 2 0 0}$ | 537 | 24 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{3 2 0 0}$ | 537 | 24 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{4 5 0 0}$ | 537 | 24 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{6 2 0 0}$ | 537 | 24 | $1 / 8^{\prime \prime} \mathrm{BSP}$ | 5 |
| $\mathbf{8 4 0 0}$ | 537 | 24 | $3 / 8^{\prime \prime} \mathrm{BSP}$ | 8 |
| $\mathbf{1 1 5 0 0}$ | 795 | 30 | $3 / 8^{\prime \prime} \mathrm{BSP}$ | 8 |
| $\mathbf{1 7 4 0 0}$ | 795 | 30 | $3 / 8^{\prime \prime} \mathrm{BSP}$ | 8 |

TYPES OF ELIGN GEAR COUPLINGS | EV |
| :---: |
| $2 \times 0.021$ |
| $2 \times 0.037$ |
| $2 \times 0.057$ |
| $2 \times 0.104$ |
| $2 \times 0.164$ |
| $2 \times 0.254$ |
| $2 \times 0.387$ |
| $2 \times 0.514$ |
| $2 \times 0.741$ |
| $2 \times 0.940$ |
| $2 \times 1.120$ |
| $2 \times 1.690$ |




\footnotetext{
RECOMMENDED LUBRICANTS \& QUANTITY
GREASE:
HP LITHON EP-2 OF HINDUSTAN PETROLEUM MAKE OR EQUI. GRADE.

## QTY. (dm ${ }^{3}$ )

$\frac{\text { ET }}{2 \times 0.025}$
 $2 \times 0.105$ 0
$\cdots$
$\vdots$
$\vdots$
$\times$
$\sim$
$\sim$ $2 \times 0.260$ $2 \times 0.490$

 $2 \times 1.010$ $2 \times 1.210$ | ER |
| :---: |
| 0.025 |
| 0.037 |
| 0.065 |
| 0.105 |
| 0.180 |
| 0.260 |
| 0.400 |
| 0.490 |
| 0.760 |
| 1.010 |
| 1.210 |
| 1.640 |

 $\underbrace{-000000-5}$

LUBRICANTS
QUANTITY
 Q

## 

GREASE :



| TypesD, ES, ET,ER, EV | SPEED (rpm) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-250 |  | 250-500 |  | 500-1000 |  | 1000-2000 |  | 2000-4000 |  |
|  | $\underset{(\mathrm{mm})}{\mathrm{X} \max }$ | $\begin{aligned} & (\mathrm{Y}-\mathrm{Z}) \\ & (\mathrm{mm}) \end{aligned}$ | $\underset{(\mathrm{mm})}{\mathrm{X}_{\max }}$ | $\begin{aligned} & (\mathrm{Y}-\mathrm{Z}) \\ & (\mathrm{mm}) \end{aligned}$ | $\underset{(\mathrm{mm})}{\mathrm{X}_{\max }}$ | $\begin{aligned} & (\mathrm{Y}-\mathrm{Z}) \\ & (\mathrm{mm}) \end{aligned}$ | $\begin{gathered} \mathrm{X} \max \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & (\mathrm{Y}-\mathrm{Z}) \\ & (\mathrm{mm}) \end{aligned}$ | $\underset{(\mathrm{mm})}{\mathrm{X} \text { max }}$ | $\begin{aligned} & (\mathrm{Y}-\mathrm{Z}) \\ & (\mathrm{mm}) \end{aligned}$ |
| 130-1000 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.15 | 0.20 | 0.08 | 0.10 |
| 1600-6200 | 0.50 | 0.60 | 0.50 | 0.60 | 0.25 | 0.35 | 0.15 | 0.20 | 0.08 | 0.10 |
| 8400-17400 | 0.90 | 1.00 | 0.50 | 0.75 | 0.25 | 0.35 | 0.15 | 0.20 | -- | -- |

## NATIONAL NETWORK



## Domestic Branches :

## AHMEDABAD

Tel: +91-79 26406683
Email: infogear@elecon.com

## ASANSOL

H.O. Tel: +91-2692-238 702 / 238701 / 236469

Email: infogear@elecon.com

## BANGALORE

Tel: +91-80-25250219/25251834
Email: infogear@elecon.com

## BILASPUR

H.O. Tel: +91-2692-238 702 / 238 701 / 236469

Email: infogear@elecon.com

## CHENNAI

Tel: +91-44 24349237/24349521
Email: infogear@elecon.com

## DHANBAD

H.O. Tel: +91-2692-238 702 / 238701 / 236469

Email: infogear@elecon.com

## HYDRABAD

H.O. Tel: +91-2692-238 702 / 238701 / 236469

Email: infogear@elecon.com

## KOLKATA

Tel: +91-33 2476 1861/2476 0904
Email: infogear@elecon.com

## MUMBAI

H.O. Tel: +91-2692-238 702 / 238701 / 236469

Email: infogear@elecon.com

## NAGPUR

H.O. Tel: +91-2692-238 702 / 238701 / 236469

Email: infogear@elecon.com

NEW DELHI
Tel: +91-011-23414634
Email: infogear@elecon.com

## PUNE

H.O. Tel: +91-2692-238 702 / 238701 / 236469

Email: infogear@elecon.com

## RAIPUR

H.O. Tel: +91-2692-238 702 / 238701 / 236469

Email: infogear@elecon.com

## VADODARA

Tel: +91-265-2312972
Email: infogear@elecon.com

## Service Center:

ELECON ENGG. CO. LTD.
Refurbishment Center-Gear
Anand-Sojitra Road,
Vallabh Vidyanagar - 388120 (Guj.)
Tel.: +91 2692227544
Email: bkgajjar@elecon.com

