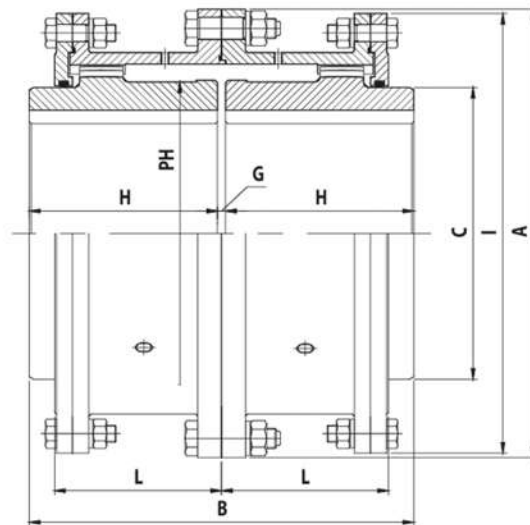
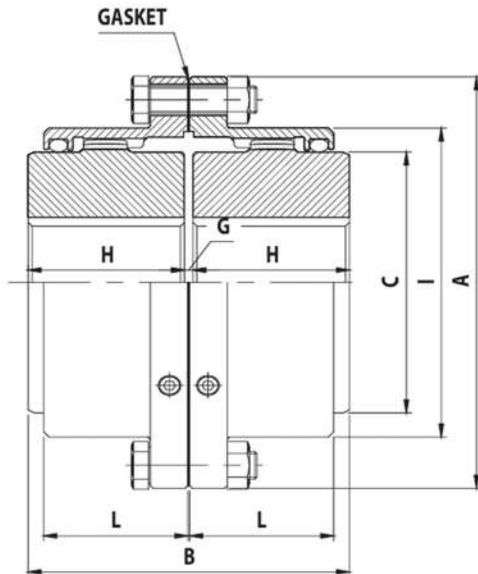


# Gear Coupling

**WCC**

## AGMA STANDARD

- PG20/PGL20(G20 Type)



| SIZE     | MAX<br>SPEED<br>(RPM) | BASIC<br>TORQUE<br>(Nm) | BORE DIA<br>(mm) |     | DIMENSIONS<br>(mm) |       |     |     |       |     |     | CPLG<br>Weight<br>(Kg) | LUBE<br>WT<br>(Kg) |
|----------|-----------------------|-------------------------|------------------|-----|--------------------|-------|-----|-----|-------|-----|-----|------------------------|--------------------|
|          |                       |                         | MAX              | MIN | A                  | B     | C   | H   | I     | L   | G   |                        |                    |
| 1010PG20 | 8,000                 | 859                     | 48               | 13  | 115.9              | 89    | 69  | 43  | 83.8  | 39  | 3   | 4.5                    | 0.04               |
| 1015PG20 | 6,500                 | 1,918                   | 60               | 19  | 152.4              | 101   | 86  | 49  | 105.2 | 48  | 3   | 9.1                    | 0.07               |
| 1020PG20 | 5,600                 | 4,187                   | 73               | 25  | 177.8              | 127   | 105 | 62  | 126.5 | 59  | 3   | 15.9                   | 0.11               |
| 1025PG20 | 5,000                 | 6,450                   | 92               | 32  | 212.7              | 159   | 131 | 77  | 154.9 | 72  | 5   | 29.5                   | 0.23               |
| 1030PG20 | 4,400                 | 12,825                  | 105              | 38  | 239.7              | 187   | 152 | 91  | 180.3 | 84  | 5   | 43.1                   | 0.36               |
| 1035PG20 | 3,900                 | 16,684                  | 124              | 51  | 279.4              | 218   | 178 | 106 | 211.3 | 98  | 6   | 68.0                   | 0.54               |
| 1040PG20 | 3,600                 | 31,146                  | 146              | 64  | 317.5              | 248   | 210 | 121 | 245.4 | 111 | 6   | 97.5                   | 0.91               |
| 1045PG20 | 3,200                 | 34,140                  | 165              | 76  | 346.1              | 278   | 235 | 135 | 274.1 | 123 | 8   | 136.1                  | 1.04               |
| 1050PG20 | 2,900                 | 46,060                  | 178              | 89  | 388.9              | 314   | 254 | 153 | 305.8 | 141 | 8   | 190.5                  | 1.77               |
| 1055PG20 | 2,650                 | 60,352                  | 197              | 102 | 425.4              | 344   | 279 | 168 | 334.3 | 158 | 8   | 249.5                  | 2.22               |
| 1060PG20 | 2,450                 | 77,516                  | 222              | 114 | 457.2              | 384   | 305 | 188 | 366.0 | 169 | 8   | 306.2                  | 3.18               |
| 1070PG20 | 2,150                 | 114,509                 | 254              | 89  | 527.0              | 451.5 | 343 | 221 | 424.9 | 196 | 9.5 | 485.4                  | 4.35               |

| SIZE      | MAX   | BASIC   | BORE DIA |     | DIMENSIONS |       |     |     |       |     |     |     | CPLG   | LUBE  |
|-----------|-------|---------|----------|-----|------------|-------|-----|-----|-------|-----|-----|-----|--------|-------|
|           | SPEED | TORQUE  | (mm)     |     | (mm)       |       |     |     |       |     |     |     | Weight | WT    |
|           | (RPM) | (Nm)    | MAX      | MIN | A          | B     | C   | H   | I     | L   | PH  | G   | (Kg)   | (Kg)  |
| 1080PGL20 | 1,750 | 149,033 | 279      | 102 | 590.6      | 507.5 | 356 | 249 | 571.5 | 243 | 368 | 9.5 | 703.1  | 9.53  |
| 1090PGL20 | 1,550 | 201,469 | 305      | 114 | 660.4      | 565   | 394 | 276 | 641.4 | 265 | 419 | 13  | 984.3  | 12.25 |
| 1000PGL20 | 1,450 | 281,749 | 343      | 127 | 711.2      | 623   | 445 | 305 | 698.5 | 294 | 470 | 13  | 1302.0 | 14.97 |
| 1100PGL20 | 1,330 | 386,957 | 387      | 140 | 774.7      | 679   | 495 | 333 | 749.3 | 322 | 521 | 13  | 1678.3 | 17.69 |
| 1200PGL20 | 1,200 | 493,773 | 425      | 152 | 838.2      | 719   | 546 | 353 | 825.5 | 341 | 572 | 13  | 2113.8 | 20.87 |

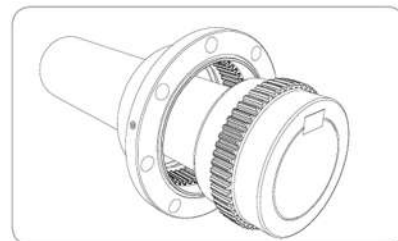
## I Installation

The operation and life of PTC GEAR Coupling may be highly influenced by how it is installed and used. To successfully operate and use it without trouble, it must be installed and used in accordance with the provided manual.

### Mounting procedure (PGD60 or smaller)

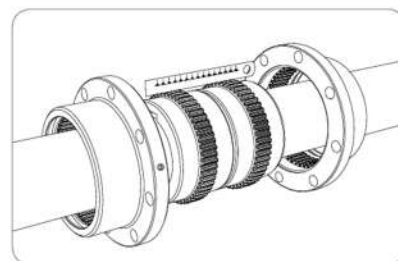
- 1 Select how to mount crown hub after machining the inner diameter correctly. (shrinkage fitting/key fitting)

Clean all components, apply grease on the teeth and O-ring, and then install the O-ring.



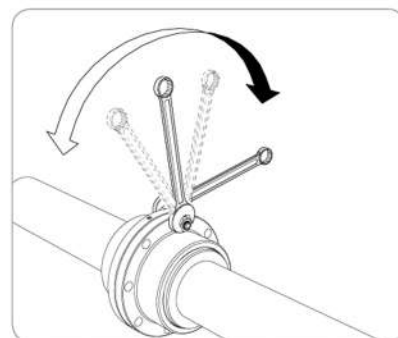
- 2 Insert the internal sleeve into the shafts, and assemble the crown hub on the both shafts.

Adjust allowable gap and the angular error.

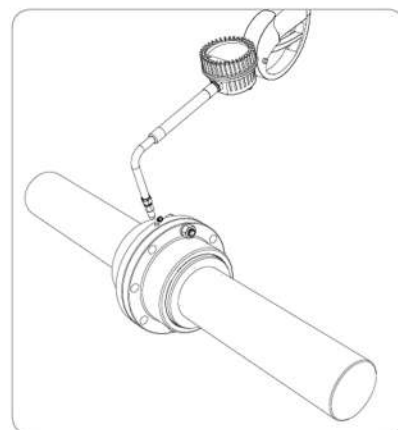


- 3 As shown in the figure, adjust the parallel error every 90 degrees in circumference using a straight edge ruler so that it does not exceed the error limit specified in the catalog. Then, set the shaft center correctly using the dial gauge.

Insert the O-ring between the internal sleeve and apply grease on crown gear. Then, fasten the bolt to ensure the inlet locates at 90 degrees.

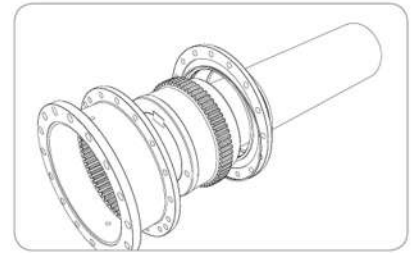


- 4 Open the lubrication inlet, put grease using a lubrication gun until it overflows, and then fasten the inlet.

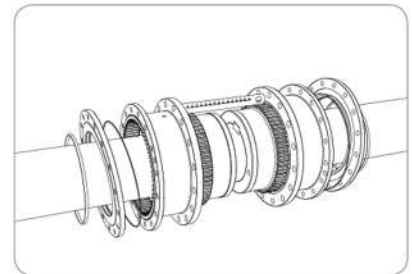


## Mounting procedure (PGDL70 or larger)

- 1 Select how to mount crown hub after machining the inner diameter correctly. (shrinkage fitting/key fitting)  
  
Clean all components, apply grease on the teeth and O-ring, and then install the O-ring.

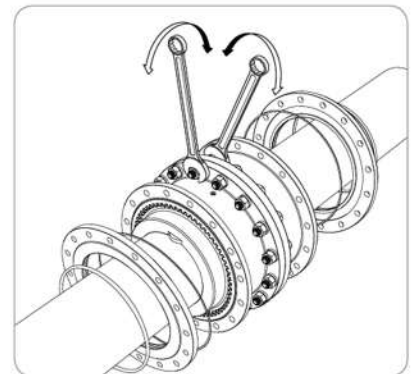


- 2 Insert the side cover into the shafts, assemble the crown hub, and then assemble the O-ring and internal sleeve.  
  
Adjust allowable gap and the angular error.

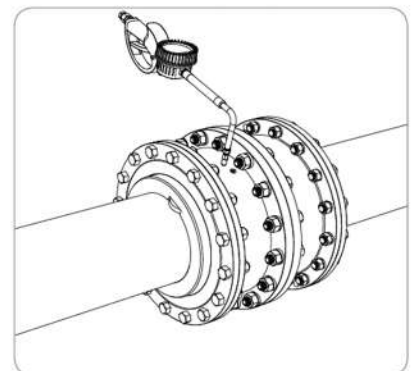


- 3 As shown in the figure, adjust the parallel error every 90 degrees in circumference using a straight edge ruler so that it does not exceed the error limit specified in the catalog. Then, set the shaft center correctly using the dial gauge.

Ensure the lubricating oil inlet in internal sleeve locates at 90 degrees and fasten the bolt evenly as shown in the figure. The lubricating oil inlet in side cover must perpendicular to the lubricating oil inlet in internal sleeve when assembling the side cover.



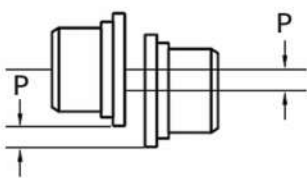
- 4 Open the lubrication inlet, put grease using a lubrication gun until it overflows, and then fasten the inlet.



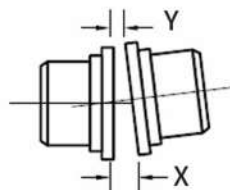
## Alignment information

Accurate alignment enables couplings and the associated machineries to maximize the life and to minimize the maintenance. In particular, the life of the couplings is influenced by the power load, the speed at which it is operated, and the injection of lubricating oil. The values listed in the following table can be an indicator for maximizing the life of the couplings, and these values can be applied when they are based on the allowable RPM for each size, keep the specified clearance, use genuine parts, and assemble properly. Each value is also related to the installation of the couplings and the environment.

### Parallel Misalignment



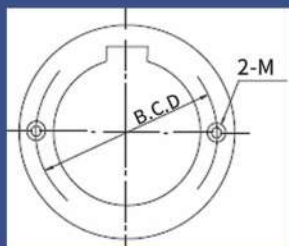
### Angular Misalignment



## Misalignment Capacity

| SIZE    | Recommended Installation  |                        | Operating                 |                        | Fastener Tightening Torque values(Nm) |
|---------|---------------------------|------------------------|---------------------------|------------------------|---------------------------------------|
|         | Parallel Offset-P Max(mm) | Angular (X-Y) Max (mm) | Parallel Offset-P Max(mm) | Angular (X-Y) Max (mm) |                                       |
| 1010PGD | 0.05                      | 0.15                   | 0.66                      | 1.80                   | 12                                    |
| 1015PGD | 0.08                      | 0.18                   | 0.86                      | 2.26                   | 42                                    |
| 1020PGD | 0.08                      | 0.23                   | 1.02                      | 2.74                   | 102                                   |
| 1025PGD | 0.10                      | 0.28                   | 1.27                      | 3.43                   | 203                                   |
| 1030PGD | 0.13                      | 0.33                   | 1.52                      | 3.99                   | 203                                   |
| 1035PGD | 0.15                      | 0.38                   | 1.83                      | 4.65                   | 339                                   |
| 1040PGD | 0.18                      | 0.46                   | 2.13                      | 5.49                   | 339                                   |
| 1045PGD | 0.20                      | 0.51                   | 2.39                      | 6.15                   | 339                                   |
| 1050PGD | 0.23                      | 0.56                   | 2.72                      | 6.65                   | 339                                   |
| 1055PGD | 0.28                      | 0.61                   | 3.12                      | 7.32                   | 339                                   |
| 1060PGD | 0.28                      | 0.66                   | 3.35                      | 9.98                   | 339                                   |
| 1070PGD | 0.33                      | 0.79                   | 3.94                      | 9.32                   | 339                                   |
| 1080PGD | 0.41                      | 0.81                   | 2.46                      | 4.83                   | -                                     |
| 1090PGD | 0.43                      | 0.91                   | 2.64                      | 5.49                   | -                                     |
| 1100PGD | 0.48                      | 1.02                   | 2.97                      | 6.15                   | -                                     |
| 1110PGD | 0.56                      | 1.14                   | 3.30                      | 6.81                   | -                                     |
| 1120PGD | 0.58                      | 1.24                   | 3.51                      | 7.49                   | -                                     |

## Puller Holes



| SIZE    | B.C.D (mm) | Tap Size |
|---------|------------|----------|
| 20 PGDL | 89         | M8       |
| 25 PGDL | 112        | M10      |
| 30 PGDL | 128        | M10      |
| 35 PGDL | 152        | M12      |
| 40 PGDL | 181        | M16      |
| 45 PGDL | 200        | M16      |
| 50 PGDL | 216        | M20      |

| SIZE     | B.C.D (mm) | Tap Size |
|----------|------------|----------|
| 55 PGDL  | 238        | M20      |
| 60 PGDL  | 268        | M20      |
| 70 PGDL  | 305        | M24      |
| 80 PGDL  | 318        | M24      |
| 90 PGDL  | 356        | M30      |
| 100 PGDL | 394        | M30      |
| 110 PGDL | 426        | M30      |
| 120 PGDL | 498        | M30      |