# SKF Couplings

SKF coupling range nomenclature has a defined prefix of PHE. The coupling range is covered by limited standards, AGMA is the main standard to cover interchangeability for couplings, and spacers are covered by ANSI or ISO for lengths.

# Couplings

The coupling range designation format has the following example to indicate set up.

**SKF Designation prefix** — PHE F90 HTB FLG

**Coupling size and type**
Example:
F90 - Flex coupling size 90
1070TG – taper grid coupling size 1070

**Supplementary**
Many different supplementary designations, examples
HTB- taper bushing type H
NR – insert type Nitrile
HCOVER – cover type H, horizontal

**Note**
See SKF product training for full supplementary notations

**Supplementary**
Many different supplementary designations, example
FLG – flange hub only for Flex coupling

C

# Couplings (PHE Product Group)

SKF Flex-, Chain-, FRC, Jaw couplings and Universal joints are manufactured according to established market standards and as complete couplings are interchangeable with other brands:

- Metric bore keyway machined according to BS 4231:Part 1 and DIN 6885;
- British imperial bore keyway machined according to BS 46:Part 1; and
- American imperial bore keyway machined according to ASME B17.1.

SKF Grid, Gear and Rigid couplings are manufactured according to established industrial standard, which is acceptable throughout the world. SKF Gear couplings are interchangeable, half to half, to industries standard using AGMA bolt pattern. Every coupling is protected by a specific treatment, which depends on the material or type of packaging: (1) phosphate coating, (2) blackening, (3) spray painting or (4) anti-corrosion oil.

**Main materials used in couplings**

| | |
|---|---|
| SKF Flex coupling | Flange in grey cast iron HT250 or equivalent; tyre available in nitrile or chloroprene (FRAS); rubber and spacer in grey cast Iron HT250 or equivalent. |
| Chain coupling | Flange in premium carbon steel no. 45 and cover available in aluminium and plastic. |
| FRC coupling | Flange in grey cast iron HT250 or equivalent and elements available in nitrile or chloroprene (FRAS) rubber. |
| Jaw coupling | Flange in grey cast iron HT250 or equivalent; spacer in aluminium and insert available in nitrile, urethane and Hytrel®. |
| Gear coupling | Hub in steel SM45C equivalent to AISI 1045; grid member ain spring steel SW-C; horizontal split cover in aluminium. |
| Gear coupling | Sleeve and hub in steel SM45C equivalent to AISI 1045. |
| Universal Joint | Premium carbon steel. |

In high output (kW) and high torque applications where vibration, shock loads and misalignment occur, SKF grid couplings are an excellent choice.

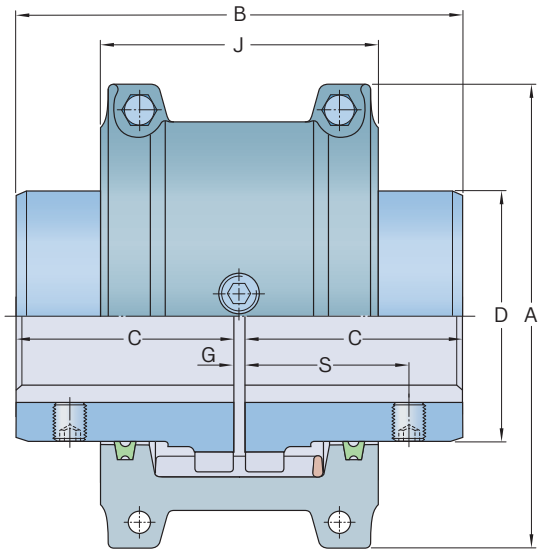
The unique design of the grid and hub teeth enable these couplings to accommodate movement and stresses from all three planes, thereby reducing vibration levels by as much as 30%.

The tapered grid element is manufactured from a high strength alloy steel. The grid, which is the primary wear component of the coupling, is designed for quick and easy replacement. Unlike other couplings, the hubs and other components are not disturbed. This makes realignment unnecessary and further reduces downtime and maintenance costs.

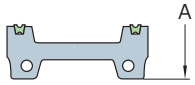
## Order data

| Coupling type | Hubs | | | | | Cover | | Grid | | Spacer hub set | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| – | Solid bore | Qty | | Bored to size | Qty | – | Qty | – | Qty | (... = DBSE dimension) | Qty |
| **Horizontal split cover** | PHE 1050TGRSB | 2 | or | PHE 1050TG...MM | 2 | PHE 1050TGHCOVER | 1 | PHE 1050TGGRID | 1 | – | – |
| **Vertical split cover** | PHE 1050TGRSB | 2 | or | PHE 1050TG...MM | 2 | PHE 1050TGVCOVER | 1 | PHE 1050TGGRID | 1 | – | – |
| **Full spacer** | PHE 1050TGS-SHRSB | 2 | or | PHE 1050TGS-SH...MM | 2 | PHE 1050TGHCOVER | 1 | PHE 1050TGGRID | 1 | PHE 1050TGFS-SPACERX...MM | 1 |
| **Half spacer** | PHE 1050TGRSB | 1 | or | – | – | PHE 1050TGHCOVER | 1 | PHE 1050TGGRID | 1 | PHE 1050TGHS-SPACERX...MM | 1 |
| | PHE 1050TGS-SHRSB | 1 | | PHE 1050TGS-SH...MM | 1 | – | – | | – | – | – |

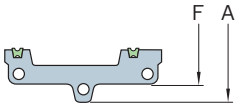
Each complete full or half spacer coupling consists of: 2 hubs, 1 grid, 1 cover and 1 spacer hub set.
Each complete horizontal or vertical split cover coupling consists of: 2 hubs, 1 grid and 1 cover.
For bored to size designations, add bore size. For example, PHE 1050TG25MM



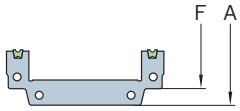

Cover profiles




Sizes 1020–1140




Sizes 1150–1200

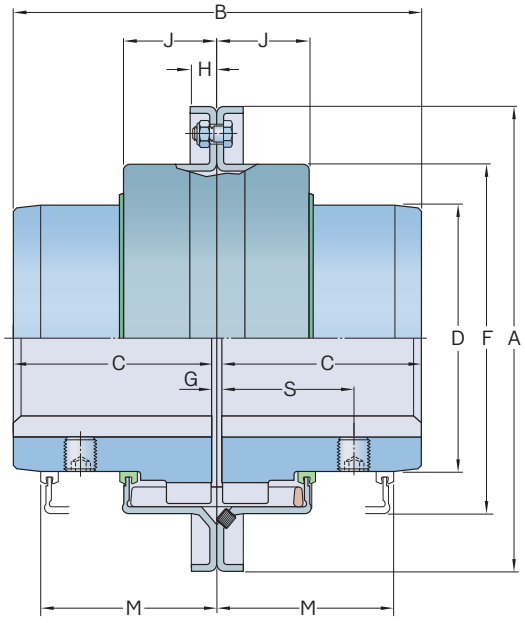


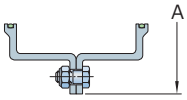

Sizes 1210–1260

C

| Size | Power per 100 r/min | Rated torque | Speed | Bore diameter | | Dimensions | | | | | | | Gap | | | Lubricant mass | Coupling mass without bore |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Max. | Min. | Max. | A | B | C | D | J | F | S | G Min. | Normal | Max. | | |
| – | kW | Nm | r/min | mm | | mm | | | | | | | | | | kg | |
| **1020 TGH** | 0.54 | 52 | 4 500 | 13 | 28 | 101.6 | 98.2 | 47.5 | 39.7 | 66 | – | 39.1 | 1.5 | 3 | 4.5 | 0.027 | 1.9 |
| **1030 TGH** | 1.6 | 149 | 4 500 | 13 | 25 | 110 | 98.2 | 47.5 | 49.2 | 68.3 | – | 39.1 | 1.5 | 3 | 4.5 | 0.04 | 2.6 |
| **1040 TGH** | 2.6 | 249 | 4 500 | 13 | 43 | 117.5 | 104.6 | 50.8 | 57.2 | 70 | – | 40.1 | 1.5 | 3 | 4.5 | 0.054 | 3.4 |
| **1050 TGH** | 4.6 | 435 | 4 500 | 13 | 50 | 138 | 123.6 | 60.3 | 66.7 | 79.5 | – | 44.7 | 1.5 | 3 | 4.5 | 0.068 | 5.4 |
| **1060 TGH** | 7.2 | 684 | 4 500 | 20 | 56 | 150.5 | 130 | 63.5 | 76.2 | 92 | – | 52.3 | 1.5 | 3 | 4.5 | 0.086 | 7.3 |
| **1070 TGH** | 10.4 | 994 | 4 125 | 20 | 67 | 161.9 | 155.4 | 76.2 | 87.3 | 95 | – | 53.8 | 1.5 | 3 | 4.5 | 0.113 | 10 |
| **1080 TGH** | 21.5 | 2 050 | 3 600 | 27 | 80 | 194 | 180.8 | 88.9 | 104.8 | 116 | – | 64.5 | 1.5 | 3 | 6 | 0.172 | 18 |
| **1090 TGH** | 39 | 3 730 | 3 600 | 27 | 95 | 213 | 199.8 | 98.4 | 123.8 | 122 | – | 71.6 | 1.5 | 3 | 6 | 0.254 | 25 |
| **1100 TGH** | 65.7 | 6 280 | 2 440 | 42 | 110 | 250 | 246.2 | 120.6 | 142.1 | 155.5 | – | – | 1.5 | 5 | 9.5 | 0.426 | 42 |
| **1110 TGH** | 97.6 | 9 320 | 2 250 | 42 | 120 | 270 | 259 | 127 | 160.3 | 161.5 | – | – | 1.5 | 5 | 9.5 | 0.508 | 54 |
| **1120 TGH** | 143 | 13 700 | 2 025 | 61 | 140 | 308 | 304.4 | 149.2 | 179.4 | 191.5 | – | – | 1.5 | 6 | 13 | 0.735 | 81 |
| **1130 TGH** | 208 | 19 900 | 1 800 | 67 | 170 | 346 | 329.8 | 161.9 | 217.5 | 195 | – | – | 1.5 | 6 | 13 | 0.907 | 121 |
| **1140 TGH** | 299 | 28 600 | 1 650 | 67 | 200 | 384 | 374.4 | 184.2 | 254 | 201 | – | – | 1.5 | 6 | 13 | 1.13 | 178 |
| **1150 TGH** | 416 | 39 800 | 1 500 | 108 | 215 | 453.1 | 371.8 | 182.9 | 269.2 | 271.3 | 391.2 | – | 1.5 | 6 | 13 | 1.95 | 234 |
| **1160 TGH** | 586 | 55 900 | 1 350 | 121 | 240 | 501.4 | 402.2 | 198.1 | 304.8 | 278.9 | 436.9 | – | 1.5 | 6 | 13 | 2.81 | 317 |
| **1170 TGH** | 781 | 74 600 | 1 225 | 134 | 280 | 566.4 | 437.8 | 215.9 | 355.6 | 304.3 | 487.2 | – | 1.5 | 6 | 13 | 3.49 | 448 |
| **1180 TGH** | 1 080.0 | 103 000 | 1 100 | 153 | 300 | 629.9 | 483.6 | 238.8 | 393.7 | 321.1 | 554.7 | – | 1.5 | 6 | 13 | 3.76 | 619 |
| **1190 TGH** | 1 430.0 | 137 000 | 1 050 | 153 | 335 | 675.6 | 524.2 | 259.1 | 436.9 | 325.1 | 607.8 | – | 1.5 | 6 | 13 | 4.4 | 776 |
| **1200 TGH** | 1 950.0 | 186 000 | 900 | 178 | 360 | 756.9 | 564.8 | 279.4 | 497.8 | 355.6 | 660.4 | – | 1.5 | 6 | 13 | 5.62 | 1 057 |
| **1210 TGH** | 2 611.0 | 249 000 | 820 | 178 | 390 | 844.5 | 622.3 | 304.8 | 533.4 | 431.8 | 750.8 | – | 1.5 | 13 | 19 | 10.5 | 1 425 |
| **1220 TGH** | 3 523.0 | 336 000 | 730 | 203 | 420 | 920.7 | 662.9 | 325.1 | 571.5 | 490.2 | 822.2 | – | 1.5 | 13 | 1 | 16.1 | 1 785 |
| **1230 TGH** | 4 555.0 | 435 000 | 680 | 203 | 450 | 1 003.3 | 703.8 | 345.4 | 609.6 | 546.1 | – | – | 3 | 13 | 22 | 24 | 2 265 |
| **1240 TGH** | 5 853.0 | 559 000 | 630 | 254 | 480 | 1 087.1 | 749.6 | 368.3 | 647.7 | 647.7 | – | – | 3 | 13 | 22 | 33.8 | 2 950 |
| **1250 TGH** | 7 812.0 | 746 000 | 580 | – [1] | – [1] | 1 181.1 | 815.5 | 401.3 | 711.2 | 698.5 | – | – | 3 | 13 | 22 | 50.1 | 3 835 |
| **1260 TGH** | 9 759.0 | 932 000 | 540 | – [1] | – [1] | 1 260.9 | 876.5 | 431.8 | 762 | 762 | – | – | 3 | 13 | 25 | 67.2 | 4 680 |

Horizontal split cover couplings are high performance, general purpose and easy to maintain.
The grid is designed to be replaced without disturbing any other component in the drive.
[1] Contact SKF for bore dimensions of these coupling sizes

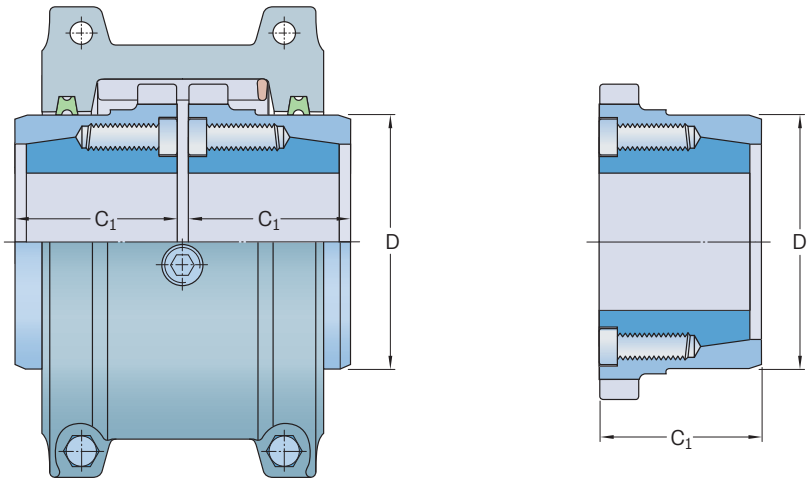



Sizes 1150–1200

| Size | Power per 100 r/min | Rated torque | Speed | Bore diameter | | Dimensions | | | | | | | | | Gap | | | Lubricant weight | Coupling mass without bore |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Max. | Min. | Max. | A | B | C | D | F | H | J | M | S | G Min. | Normal | Max. | | |
| – | kW | Nm | r/min | mm | | mm | | | | | | | | | mm | | | kg | |
| **1020 TGV** | 0.54 | 52 | 6 000 | 12 | 30 | 111.1 | 98.0 | 47.5 | 39.7 | 64.3 | 9.7 | 24.2 | 47.8 | 39.1 | 1.5 | 3 | 4.5 | 0.027 | 2.0 |
| **1030 TGV** | 1.60 | 149 | 6 000 | 12 | 36 | 120.7 | 98.0 | 47.5 | 49.2 | 73.8 | 9.7 | 25.0 | 47.8 | 39.1 | 1.5 | 3 | 4.5 | 0.040 | 2.6 |
| **1040 TGV** | 2.60 | 249 | 6 000 | 12 | 44 | 128.5 | 104.6 | 50.8 | 57.2 | 81.8 | 9.7 | 25.7 | 50.8 | 40.1 | 1.5 | 3 | 4.5 | 0.054 | 3.4 |
| **1050 TGV** | 4.60 | 435 | 6 000 | 12 | 50 | 147.6 | 123.6 | 60.3 | 66.7 | 97.6 | 11.9 | 31.2 | 60.5 | 44.7 | 1.5 | 3 | 4.5 | 0.068 | 5.4 |
| **1060 TGV** | 7.20 | 684 | 6 000 | 19 | 57 | 162.0 | 130.0 | 63.5 | 76.2 | 111.1 | 12.7 | 32.2 | 63.5 | 52.3 | 1.5 | 3 | 4.5 | 0.086 | 7.3 |
| **1070 TGV** | 10.40 | 994 | 5 500 | 19 | 65 | 173.0 | 155.4 | 76.2 | 87.3 | 122.3 | 12.7 | 33.7 | 66.5 | 53.8 | 1.5 | 3 | 4.5 | 0.113 | 10.0 |
| **1080 TGV** | 21.50 | 2 050 | 4 750 | 27 | 79 | 200.0 | 180.8 | 88.9 | 104.8 | 149.2 | 12.7 | 44.2 | 88.9 | 64.5 | 1.5 | 3 | 6.0 | 0.172 | 18.0 |
| **1090 TGV** | 39.00 | 3 730 | 4 000 | 27 | 95 | 231.8 | 199.8 | 98.4 | 123.8 | 168.3 | 12.7 | 47.7 | 95.2 | 71.6 | 1.5 | 3 | 6.0 | 0.254 | 25.0 |
| **1100 TGV** | 65.70 | 6 280 | 3 250 | 41 | 107 | 266.7 | 245.7 | 120.6 | 142.1 | 198.0 | 15.7 | 60.0 | 120.7 | – | 1.5 | 5 | 9.5 | 0.426 | 42.0 |
| **1110 TGV** | 97.60 | 9 320 | 3 000 | 41 | 117 | 285.8 | 258.5 | 127.0 | 160.3 | 216.3 | 16.0 | 64.2 | 124.0 | – | 1.5 | 5 | 9.5 | 0.508 | 54.0 |
| **1120 TGV** | 143.00 | 13 700 | 2 700 | 60 | 136 | 319.0 | 304.4 | 149.2 | 179.4 | 245.5 | 17.5 | 73.4 | 142.7 | – | 1.5 | 6 | 12.5 | 0.735 | 81.0 |
| **1130 TGV** | 208.00 | 19 900 | 2 400 | 66 | 165 | 377.8 | 329.8 | 161.9 | 217.5 | 283.8 | 20.6 | 75.1 | 146.0 | – | 1.5 | 6 | 12.5 | 0.907 | 122.0 |
| **1140 TGV** | 299.00 | 28 600 | 2 200 | 66 | 184 | 416.0 | 371.6 | 184.2 | 254.0 | 321.9 | 20.6 | 78.2 | 155.4 | – | 1.5 | 6 | 12.5 | 1.130 | 180.0 |
| **1150 TGV** | 416.00 | 39 800 | 2 000 | 108 | 203 | 476.3 | 371.8 | 182.9 | 269.2 | 374.4 | 19.3 | 106.9 | 203.2 | – | 1.5 | 6 | 12.5 | 1.950 | 230.0 |
| **1160 TGV** | 586.00 | 55 900 | 1 750 | 120 | 228 | 533.4 | 402.2 | 198.1 | 304.8 | 423.9 | 30.0 | 114.3 | 215.9 | – | 1.5 | 6 | 12.5 | 2.810 | 321.0 |
| **1170 TGV** | 781.00 | 74 600 | 1 600 | 133 | 279 | 584.2 | 437.8 | 215.9 | 355.6 | 474.7 | 30.0 | 119.4 | 226.1 | – | 1.5 | 6 | 12.5 | 3.490 | 448.0 |
| **1180 TGV** | 1 080.00 | 103 000 | 1 400 | 152 | 311 | 630.0 | 483.6 | 238.8 | 393.7 | – | – | 130.0 | 265.0 | – | 1.5 | 6 | 12.5 | 3.760 | 591.0 |
| **1190 TGV** | 1 430.00 | 137 000 | 1 300 | 152 | 339 | 685.0 | 524.2 | 259.1 | 436.9 | – | – | 135.0 | 275.0 | – | 1.5 | 6 | 12.5 | 4.400 | 761.0 |
| **1200 TGV** | 1 950.00 | 186 000 | 1 100 | 177 | 361 | 737.0 | 564.8 | 279.4 | 497.8 | – | – | 145.0 | 295.0 | – | 1.5 | 6 | 12.5 | 5.620 | 1 021.0 |

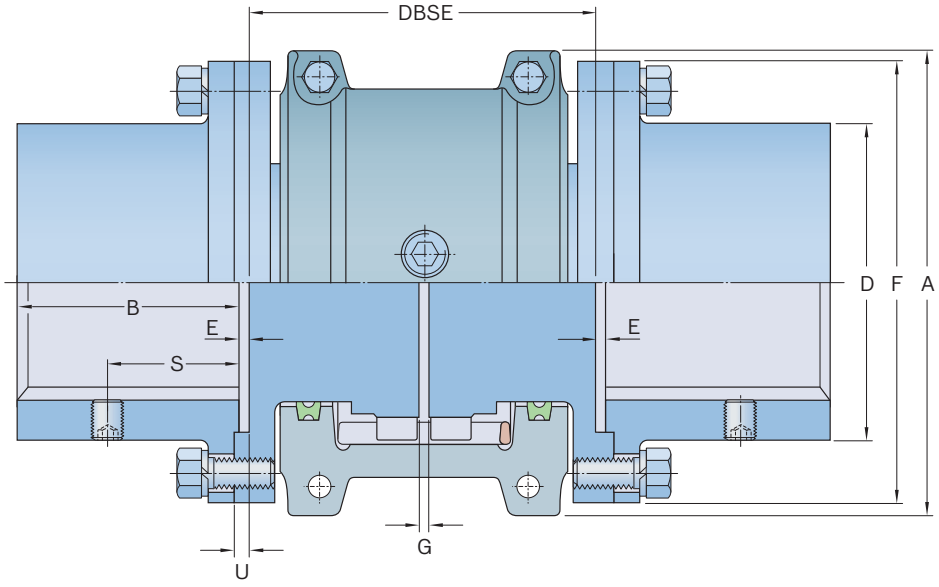
Vertical split cover couplings are high performance, general purpose and easy to maintain.
The grid is designed to be replaced without disturbing any other component in the drive. The vertical cover allows for higher running speeds.





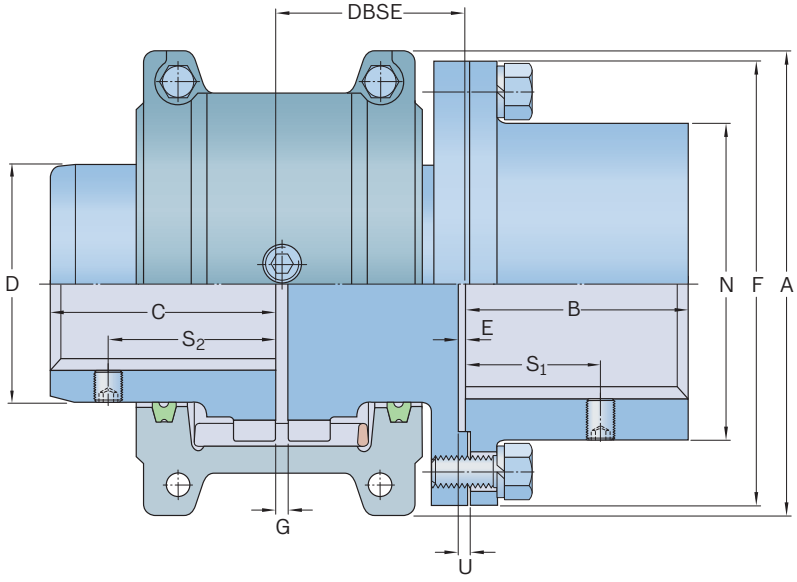

| Size | Taper bushing designation | Bushing torque capacity[1] | Bore diameter range[1] | | Reduced hub length | Hub length reduction | Hub diameter |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max.. | Max. | C1 | D |
| | | Nm | mm | | mm | mm | |
| 1 020 | Not available | – | – | – | – | – | – |
| 1 030 | PHF TB1108 | 147 | 13 | 25 | 45 | 2.5 | 49.2 |
| 1 040 | PHF TB 1108 | 147 | 13 | 25 | 45 | 5.8 | 57.2 |
| 1 050 | PHF TB 1215 | 405 | 13 | 32 | 50 | 10.3 | 66.7 |
| 1 060 | PHF TB 1615 | 485 | 13 | 42 | 55 | 8.5 | 76.2 |
| 1 070 | PHF TB 2012 | 810 | 13 | 50 | 55 | 21.2 | 87.3 |
| 1 080 | PHF TB 2525 | 1 275 | 25 | 65 | 70 | 18.9 | 104.8 |
| 1 090 | PHF TB 3030 | 2 710 | 24 | 80 | 83 | 15.4 | 123.8 |
| 1 100 | PHF TB 3030 | 2 710 | 24 | 80 | 90 | 30.6 | 142.1 |
| 1 110 | PHF TB 3535 | 5 060 | 32 | 91 | 95 | 32 | 160.3 |
| 1 120 | PHF TB 4040 | 8 727 | 37 | 103 | 115 | 34.2 | 179.4 |

[1] Bore capacities are based on standard ISO keyway dimensions to ISO773 (DIN6885/1) unless otherwise stated.
[2] The limitations in the couplings' torque capacity with when fitted with a taper bushing, is based on the maximum recommended torque for the relevant taper bushing with a standard keyway. For this reason it becomes impractical, and uneconomical, to offer the larger sizes with a taper bushing option.
Different bushing type options, such as FX and QD, are also available for certain sizes. Please contact SKF.




| Size | Power per 100 r/min | Rated torque | Speed | Bore diameter | | Dimensions | | | | | | | | | Gap | | Flange bolts | Lubricant weight | Coupling weight without bore and min. BE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | A | B | DBSE | | D | E | F | S | U | G | | | | |
| | | | Max. | Min. | Max. | | | Min. | Max. | | | | | | Min. | Nor-mal | Qty | | |
| – | kW | Nm | r/min | mm | | mm | | | | | | | | | mm | | | kg | |
| **1020 TGFS** | 0.54 | 52 | 3 600 | 12 | 35 | 101.6 | 35 | 89 | 203 | 52 | 0.8 | 86 | 27.4 | 1.8 | 1.5 | 5.0 | 4 | 0.027 | 3.9 |
| **1030 TGFS** | 1.60 | 149 | 3 600 | 12 | 43 | 110.0 | 41 | 89 | 216 | 59 | 0.8 | 94 | 31.5 | 1.8 | 1.5 | 5.0 | 8 | 0.040 | 5.2 |
| **1040 TGFS** | 2.60 | 249 | 3 600 | 12 | 56 | 117.5 | 54 | 89 | 216 | 78 | 0.8 | 113 | 27.4 | 1.8 | 1.5 | 5.0 | 8 | 0.054 | 8.4 |
| **1050 TGFS** | 4.60 | 435 | 3 600 | 12 | 67 | 138.0 | 60 | 112 | 216 | 87 | 0.8 | 126 | 40.6 | 1.8 | 1.5 | 5.0 | 8 | 0.068 | 12.8 |
| **1060 TGFS** | 7.20 | 684 | 3 600 | 19 | 80 | 150.5 | 73 | 127 | 330 | 103 | 1.8 | 145 | 43.2 | 2.8 | 1.5 | 5.0 | 8 | 0.086 | 20.5 |
| **1070 TGFS** | 10.40 | 994 | 3 600 | 19 | 85 | 161.9 | 79 | 127 | 330 | 109 | 1.8 | 153 | 46.7 | 2.8 | 1.5 | 5.0 | 12 | 0.113 | 24.8 |
| **1080 TGFS** | 21.50 | 2 050 | 3 600 | 27 | 95 | 194.0 | 89 | 184 | 406 | 122 | 1.8 | 178 | 49.8 | 2.8 | 1.5 | 5.0 | 12 | 0.172 | 40.0 |
| **1090 TGFS** | 39.00 | 3 730 | 3 600 | 27 | 110 | 213.0 | 102 | 184 | 406 | 142 | 1.8 | 210 | 56.9 | 2.8 | 1.5 | 5.0 | 12 | 0.254 | 60.0 |
| **1100 TGFS** | 65.70 | 6 280 | 2 440 | 41 | 130 | 250.0 | 90 | 203 | 406 | 171 | 1.6 | 251 | – | 3.2 | 1.5 | 6.5 | 12 | 0.426 | 90.2 |
| **1110 TGFS** | 97.60 | 9 320 | 2 250 | 41 | 150 | 270.0 | 104 | 210 | 406 | 196 | 1.6 | 277 | – | 3.2 | 1.5 | 6.5 | 12 | 0.508 | 119.0 |
| **1120 TGFS** | 143.00 | 13 700 | 2 025 | 60 | 170 | 308.0 | 119 | 246 | 406 | 225 | 1.6 | 319 | – | 4.0 | 1.5 | 9.5 | 12 | 0.735 | 178.0 |
| **1130 TGFS** | 208.00 | 19 900 | 1 800 | 66 | 190 | 346.0 | 135 | 257 | 406 | 238 | 1.6 | 346 | – | 4.0 | 1.5 | 9.5 | 12 | 0.907 | 237.0 |
| **1140 TGFS** | 299.00 | 28 600 | 1 650 | 66 | 210 | 384.0 | 152 | 267 | 406 | 266 | 1.6 | 386 | – | 4.0 | 1.5 | 9.5 | 12 | 1.130 | 327.0 |
| **1150 TGFS** | 416.00 | 39 800 | 1 500 | 108 | 270 | 453.1 | 173 | 345 | 371 | 334 | 5.1 | 425 | – | – | 1.5 | 9.5 | 14 | 1.950 | 462.0 |
| **1160 TGFS** | 586.00 | 55 900 | 1 350 | 120 | 290 | 501.4 | 186 | 356 | 406 | 366 | 6.6 | 457 | – | – | 1.5 | 9.5 | 14 | 2.810 | 566.0 |
| **1170 TGFS** | 781.00 | 74 600 | 1 225 | 133 | 340 | 566.4 | 220 | 384 | 445 | 425 | 8.4 | 527 | – | – | 1.5 | 9.5 | 16 | 3.490 | 856.0 |
| **1180 TGFS** | 1 080.00 | 103 000 | 1 100 | 133 | 340 | 629.9 | 249 | 400 | 490 | 451 | 5.1 | 591 | – | 8.1 | 1.5 | 9.5 | 16 | 3.760 | 1 135.0 |
| **1190 TGFS** | 1 430.00 | 137 000 | 1 050 | 152 | 380 | 675.6 | 276 | 411 | 530 | 508 | 5.1 | 660 | – | 8.1 | 1.5 | 9.5 | 18 | 4.400 | 1 525.0 |
| **1200 TGFS** | 1 950.00 | 186 000 | 900 | 177 | 400 | 756.9 | 305 | 445 | 575 | 530 | 6.1 | 711 | – | 9.1 | 1.5 | 9.5 | 18 | 5.620 | 1 910.0 |

Horizontal split cover full spacer couplings are designed to accommodate long distances between the shafts that are to be connected.
This coupling gives you the added advantage of being able to drop out the entire centre section of the coupling for easy service. This coupling is an ideal choice for pumps.




| Size | Power per 100 r/min | Rated torque | Speed | Bore diameter | | | Dimensions | | | | | | | | | | | | Gap | | Flange bolts | Lubricant weight | Coupling weight without bore and min. BE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Shaft hub | A | B | C | D | DBSE | | N | E | F | Shaft hub S | T hub S | U | G | | | | |
| | | | Max. | Min. | Max. | Max. | | | | | Min | Max. | | | | | | | Min. | Normal | Qty | | |
| – | kW | Nm | r/min | mm | | | mm | | | | | | | | | | | | mm | | | kg | |
| **1020 TGHS** | 0.54 | 52 | 3 600 | 12 | 30 | 35 | 101.6 | 35 | 47.5 | 39.7 | 45 | 102 | 52 | 0.8 | 86 | 27.4 | 39.1 | 1.8 | 1.5 | 3 | 4 | 0.027 | 2.9 |
| **1030 TGHS** | 1.60 | 149 | 3 600 | 12 | 36 | 43 | 110.0 | 41 | 47.5 | 49.2 | 45 | 109 | 59 | 0.8 | 94 | 31.5 | 39.1 | 1.8 | 1.5 | 3 | 8 | 0.040 | 3.9 |
| **1040 TGHS** | 2.60 | 249 | 3 600 | 12 | 44 | 56 | 117.5 | 54 | 50.8 | 57.2 | 45 | 109 | 78 | 0.8 | 113 | 27.4 | 40.1 | 1.8 | 1.5 | 3 | 8 | 0.054 | 5.9 |
| **1050 TGHS** | 4.60 | 435 | 3 600 | 12 | 50 | 67 | 138.0 | 60 | 60.3 | 66.7 | 57 | 109 | 87 | 0.8 | 126 | 40.6 | 44.7 | 1.8 | 1.5 | 3 | 8 | 0.068 | 9.1 |
| **1060 TGHS** | 7.20 | 684 | 3 600 | 19 | 57 | 80 | 150.5 | 73 | 63.5 | 76.2 | 64 | 166 | 103 | 1.8 | 145 | 43.2 | 52.3 | 2.8 | 1.5 | 3 | 8 | 0.086 | 14.0 |
| **1070 TGHS** | 10.40 | 994 | 3 600 | 19 | 65 | 85 | 161.9 | 79 | 76.2 | 87.3 | 64 | 166 | 109 | 1.8 | 153 | 46.7 | 53.8 | 2.8 | 1.5 | 3 | 12 | 0.113 | 17.6 |
| **1080 TGHS** | 21.50 | 2 050 | 3 600 | 27 | 79 | 95 | 194.0 | 89 | 88.9 | 104.8 | 93 | 204 | 122 | 1.8 | 178 | 49.8 | 64.5 | 2.8 | 1.5 | 3 | 12 | 0.172 | 29.0 |
| **1090 TGHS** | 39.00 | 3 730 | 3 600 | 27 | 95 | 110 | 213.0 | 102 | 98.4 | 123.8 | 93 | 204 | 142 | 1.8 | 210 | 56.9 | 71.6 | 2.8 | 1.5 | 3 | 12 | 0.254 | 42.8 |
| **1100 TGHS** | 65.70 | 6 280 | 2 440 | 41 | 107 | 130 | 250.0 | 90 | 120.6 | 142.1 | 103 | 205 | 171 | 1.6 | 251 | – | – | 3.2 | 1.5 | 5 | 12 | 0.426 | 66.0 |
| **1110 TGHS** | 97.60 | 9 320 | 2 250 | 41 | 117 | 150 | 270.0 | 104 | 127.0 | 160.3 | 106 | 205 | 196 | 1.6 | 277 | – | – | 3.2 | 1.5 | 5 | 12 | 0.508 | 84.5 |
| **1120 TGHS** | 143.00 | 13 700 | 2 025 | 60 | 136 | 170 | 308.0 | 119 | 149.2 | 179.4 | 125 | 205 | 225 | 1.6 | 319 | – | – | 4.0 | 1.5 | 6 | 12 | 0.735 | 129.0 |
| **1130 TGHS** | 208.00 | 19 900 | 1 800 | 66 | 165 | 190 | 346.0 | 135 | 161.9 | 217.5 | 130 | 205 | 238 | 1.6 | 346 | – | – | 4.0 | 1.5 | 6 | 12 | 0.907 | 179.0 |
| **1140 TGHS** | 299.00 | 28 600 | 1 650 | 66 | 184 | 210 | 384.0 | 152 | 184.2 | 254.0 | 135 | 205 | 266 | 1.6 | 386 | – | – | 4.0 | 1.5 | 6 | 12 | 1.130 | 252.0 |
| **1150 TGHS** | 416.00 | 39 800 | 1 500 | 108 | 203 | 270 | 453.1 | 173 | 182.9 | 269.2 | 175 | 187 | 334 | 5.1 | 425 | – | – | – | 1.5 | 6 | 14 | 1.950 | 348.0 |
| **1160 TGHS** | 586.00 | 55 900 | 1 350 | 120 | 228 | 290 | 501.4 | 186 | 198.1 | 304.8 | 180 | 205 | 366 | 6.6 | 457 | – | – | – | 1.5 | 6 | 14 | 2.810 | 441.0 |
| **1170 TGHS** | 781.00 | 74 600 | 1 225 | 133 | 279 | 340 | 566.4 | 220 | 215.9 | 355.6 | 194 | 224 | 425 | 8.4 | 527 | – | – | – | 1.5 | 6 | 16 | 3.490 | 652.0 |
| **1180 TGHS** | 1 080.00 | 103 000 | 1 100 | 133 | 311 | 340 | 629.9 | 249 | 238.8 | 393.7 | 202 | 247 | 451 | 5.1 | 591 | – | – | 8.1 | 1.5 | 6 | 16 | 3.760 | 877.0 |
| **1190 TGHS** | 1 430.00 | 137 000 | 1 050 | 152 | 339 | 380 | 675.6 | 276 | 259.1 | 436.9 | 207 | 267 | 508 | 5.1 | 660 | – | – | 8.1 | 1.5 | 6 | 18 | 4.400 | 1150.0 |
| **1200 TGHS** | 1 950.00 | 186 000 | 900 | 177 | 361 | 400 | 756.9 | 305 | 279.4 | 497.8 | 224 | 289 | 530 | 6.1 | 711 | – | – | 9.1 | 1.5 | 6 | 18 | 5.620 | 1484.0 |

Horizontal split cover half spacer couplings are designed to be used where there is no need to accommodate long distances between the shafts. It provides an economical alternative to the full spacer and is an ideal choice for pumps.

Very high-torque ratings, along with unparalleled bore capacities, give this coupling a great advantage over other types of couplings. SKF gear couplings are rated up to 555 000 Nm with a maximum bore of 495 mm. This is a heavy duty coupling with incredible design flexibility, making it an economical choice for many applications.

The unique design of the gear couplings tooth crowning dramatically reduces backlash and radial clearance. The hub bore capacities are the largest in the industry allowing for low cost and long service life.

## Order data

| Coupling type<br>– | Hubs | Qty | Cover<br>– | Qty | Assembly kit<br>– | Qty | Spacer/floating shaft and kits<br>(... = DBSE dimension) | Qty |
|---|---|---|---|---|---|---|---|---|
| Double engagement | PHE 50GCRSB | 2 | PHE 50GCCOVER | 2 | PHE 50GCKIT | 1 | – | – |
| Size 80 and above | PHE 80GCRSB | 2 | PHE 80GCMCOVER | 1 | PHE 80GCKIT | 1 | – | – |
| | – | – | PHE 80GCFCOVER | 1 | – | – | – | – |
| Single engagement | PHE 50GCSERSB | 1 | PHE 50GCCOVER | 1 | PHE 50GCKIT | 1 | – | – |
| | PHE 50GCRSB | 1 | – | – | – | – | – | – |
| Size 80 and above | PHE 80GCSERSB | 1 | PHE 80GCMCOVER | 1 | PHE 80GCKIT | 1 | – | – |
| | PHE 80GCRSB | 1 | – | – | – | – | – | – |
| Double engagement spacer | PHE 50GCRSB | 2 | PHE 50GCCOVER | 2 | PHE 50GCKIT | 2 | PHE 50GCSPACER...MM | 1 |
| Double engagement slide type 1, 2, 3 | | | | | | | | |
| Type 1 | PHE 50GCRSB | 2 | PHE 50GCSCOVER | 2 | PHE 50GCKIT | 1 | PHE 50GCCPLATE | 1 |
| Type 2 | PHE 50GCST2RSB | 2 | PHE 50GCSCOVER | 2 | PHE 50GCKIT | 1 | PHE 50GCCPLATE | 1 |
| Type 3 | PHE 50GCRSB | 2 | PHE 50GCCCOVER | 2 | PHE 50GCKIT | 1 | PHE 50GCCPLATE | 1 |
| | – | – | – | – | – | – | PHE 50GCT3DISC | 2 |
| Single engagement slide type 1 and 2 | | | | | | | | |
| Type 1 | PHE 50GCRSB | 1 | PHE 50GCSCOVER | 1 | PHE 50GCKIT | 1 | PHE 50GCCPLATE | 1 |
| | PHE 50GCSERSB | 1 | – | – | – | – | – | – |
| Type 2 | PHE 50GCST2RSB | 1 | PHE 50GCSCOVER | 1 | PHE 50GCKIT | 1 | PHE 50GCCPLATE | 1 |
| | PHE 50GCSERSB | 1 | – | – | – | – | – | – |
| Single engagement floating shaft | PHE 50GCFSERSB | 2 | PHE 50GCCOVER | 2 | PHE 50GCKIT | 2 | PHE 50GCFSHAFT .. MM | 1 |
| | PHE 50GCRSB | 2 | – | – | – | – | PHE 50GCFSEDISC | 2 |
| Double engagement vertical | PHE 50GCVRSB | 2 | PHE 50GCVCOVER | 2 | PHE 50GCKIT | 1 | 50GCVCTRKIT | 1 |
| Single engagement vertical | PHE 50GCVRSB | 1 | PHE 50GCVCOVER | 1 | PHE 50GCKIT | 1 | 50GCVCTRKIT | – |
| | PHE 50GCSERSB | 1 | – | – | – | – | – | – |
| Single engagement vertical floating | PHE 50GCVRSB | 1 | PHE 50GCVCOVER | 1 | PHE 50GCKIT | 2 | 50GCVCTRKIT | 2 |
| | PHE 50GCFSERSB | 1 | – | – | – | – | – | – |
| | PHE 50GCVRSB | 1 | PHE 50GCVCOVER | 1 | PHE 50GCKIT | 2 | PHE 50GCFSHAFT .. MM | 1 |
| | PHE 50GCSERSB | 1 | – | – | – | – | – | – |
| Rigid flanged sleeve | PHE 50GCRRSB | 2 | | – | PHE 50GCRKIT | 1 | – | – |
| Size 80 and above | PHE 80GCRRSB | 2 | | – | PHE 80GCRKIT | 1 | PHE 80GCRRING | 1 |

A complete gear coupling consists of: 2 hubs, 2 covers and 1 assembly kit.
Coupling size 80 and above consists of: 2 hubs, 1 male cover, 1 female cover and 1 assembly kit.
For bored to size designations, add bore size RSB. For example: PHE 50GCX500MM.
For shrouded bolt covers, use cover number, e.g. PHE 50SGCCOVER and PHE 50SGCKIT for the assembly kit.
The assembly kit includes oil seals, gasket, bolts and lock-nuts.