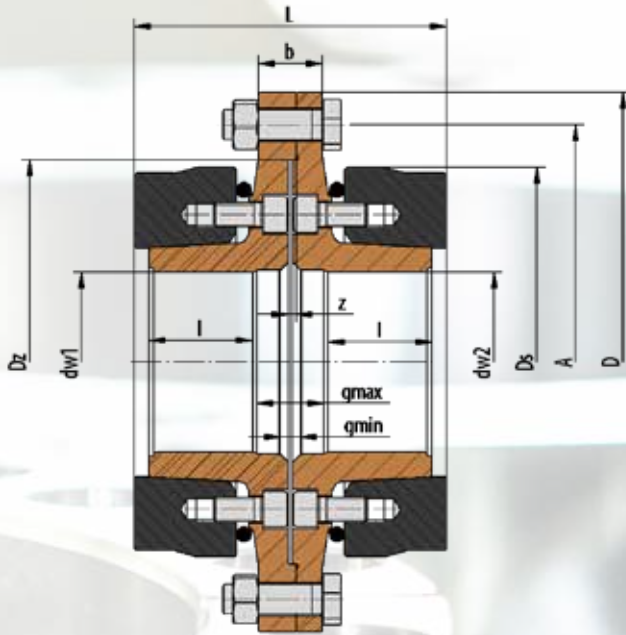


# Flanschkupplung FKE

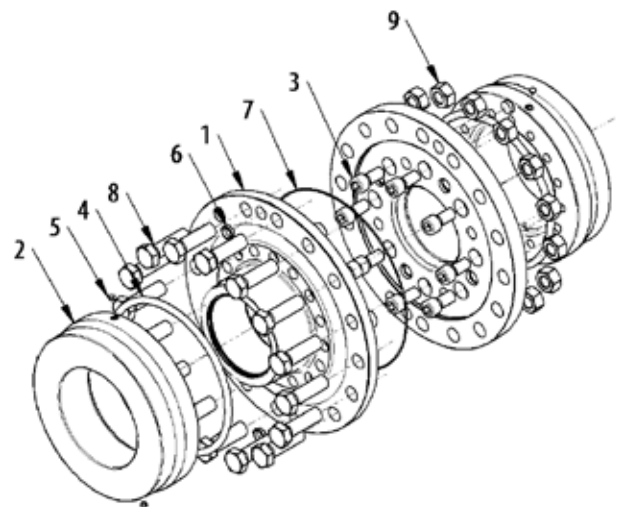


Optional auch mit  
hydraulischem  
Spannwerkzeug  
lieferbar!  
(ab Größe 150)

## Verwendete Formelzeichen

|                |                      |   |
|----------------|----------------------|---|
| FKE            |                      | Nenngröße   |
| $d_w$          | [mm]                 | Wellendurchmesser                                   |
| $M_t$          | [Nm]                 | maximal übertragbares Moment                        |
| $M_{bs_{max}}$ | [Nm]                 | maximal übertragbares Biegemoment (statisch)        |
| $M_{bd_{max}}$ | [Nm]                 | maximal übertragbares Biegemoment (dynamisch)       |
| $D_s$          | [mm]                 | Außendurchmesser Druckring                          |
| Z              | [Stk.]               | Anzahl Spannschrauben                               |
| S              |                      | Schraubengröße der Spannschrauben                   |
| $M_A$          | [Nm]                 | Erforderliches Anzugsmoment Spannschrauben          |
| A              | [mm]                 | Teilkreisdurchmesser der Verbindungs-schrauben      |
| D              | [mm]                 | Außendurchmesser der Flanschkupplung                |
| $D_z$          | [mm]                 | Durchmesser der Zentrierung                         |
| L              | [mm]                 | Breite der Flanschkupplung                          |
| l              | [mm]                 | Spannlänge  |
| $g_{min}$      | [mm]                 | Minimaler Wellenabstand                             |
| $g_{max}$      | [mm]                 | Maximaler Wellenabstand                             |
| b              | [mm]                 | Flanschdicke  |
| z              | [mm]                 | Tiefe der Zentrierung                               |
| $Z_F$          | [Stk.]               | Anzahl Verbindungsschrauben                         |
| $S_F$          |                      | Schraubengröße der Verbindungs-schrauben            |
| $M_{AF}$       | [mm]                 | Erforderliches Anzugsmoment<br>Verbindungsschrauben |
| $n_{max}$      | [min <sup>-1</sup> ] | Zulässige Drehfrequenz                              |
| I              | [kgm <sup>2</sup> ]  | Trägheitsmoment                                     |
| m              | [kg]                 | Masse der kompletten Kupplung                       |
| ph             | [bar]                | Arbeitsdruck des opt. Spannwerkzeuges               |

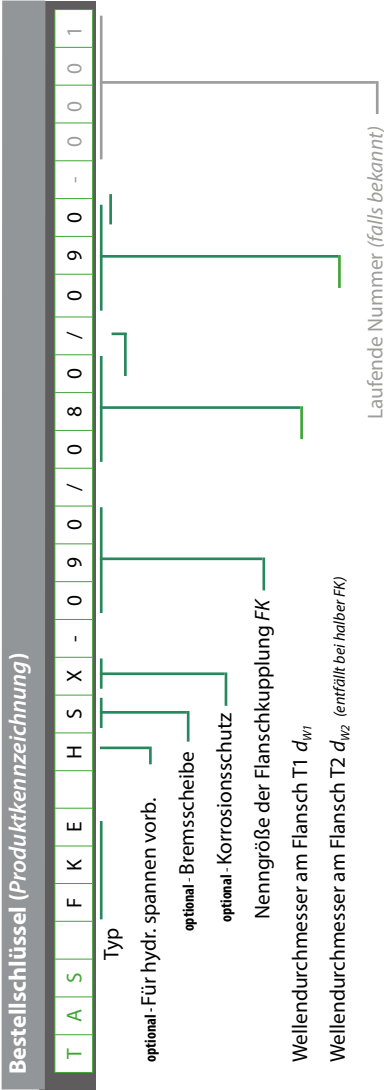
| Pos. | Benennung           |
|------|---------------------|
| 1    | Flanschkupplung     |
| 2    | Druckring           |
| 3    | Spannschraube       |
| 4    | Dichtung            |
| 5    | Stopfen             |
| 6    | Stopfen             |
| 7    | O-Ring              |
| 8    | Verbindungsschraube |
| 9    | Mutter              |



| Größe<br>FKE<br>(mm) | Welle<br>d <sub>W</sub><br>(mm) | Moment<br>M <sub>T</sub><br>(Nm) | Biegung stat.<br>M <sub>bs</sub><br>(Nm) | Biegung dyn.<br>M <sub>bd</sub><br>(Nm) | Druckring              |             | Angaben Kupplung |                        |           |           |                        |           |           |                          |                          |           | Flanschschrauben |                          |                | Weitere Angaben         |  |                            | Spannwerk-<br>zeug |             |
|----------------------|---------------------------------|----------------------------------|--|---|------------------------|-------------|------------------|------------------------|-----------|-----------|------------------------|-----------|-----------|--------------------------|--------------------------|-----------|------------------|--------------------------|----------------|-------------------------|--|----------------------------|--------------------|-------------|
|                      |                                 |                                  |  |   | D <sub>s</sub><br>(mm) | Z<br>(Stk.) | S                | M <sub>k</sub><br>(Nm) | A<br>(mm) | D<br>(mm) | D <sub>Z</sub><br>(mm) | L<br>(mm) | l<br>(mm) | g <sub>inn</sub><br>(mm) | g <sub>max</sub><br>(mm) | b<br>(mm) | z<br>(mm)        | Z <sub>L</sub><br>(Stk.) | S <sub>L</sub> | M <sub>kL</sub><br>(Nm) | n <sub>max</sub><br>(min <sup>-1</sup> ) | l*<br>(kgm <sup>-2</sup> ) | m*<br>(kg)         | ph<br>(bar) |
| 50                   | 40                              | 1030                             | 412                                      | 309                                     | 118                    | 6           | M8x25            | 22                     | 170       | 200       | 125                    | 111       | 35        | 1                        | 27                       | 29        | 4                | 6                        | M12x45         | 85                      | 3237                                     | 0,047                      | 11,5               | -           |
|                      | 50                              | 2100                             | 840                                      | 630                                     |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 60                   | 50                              | 1900                             | 760                                      | 570                                     | 134                    | 8           | M8x30            | 21                     | 190       | 220       | 145                    | 123       | 37        | 1                        | 33                       | 34        | 4                | 6                        | M16x55         | 210                     | 2851                                     | 0,085                      | 16                 | -           |
|                      | 60                              | 3200                             | 1280                                     | 690                                     |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 75                   | 65                              | 4800                             | 1920                                     | 1440                                    | 158                    | 8           | M10x30           | 40                     | 210       | 240       | 170                    | 147       | 46        | 1                        | 37                       | 34        | 4                | 6                        | M16x55         | 210                     | 2418                                     | 0,14                       | 22,5               | -           |
|                      | 75                              | 7300                             | 2920                                     | 2190                                    |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 90                   | 80                              | 9800                             | 3920                                     | 2490                                    | 200                    | 8           | M12x40           | 75                     | 265       | 305       | 215                    | 174       | 56        | 2                        | 42                       | 42        | 5                | 6                        | M20x70         | 420                     | 1910                                     | 0,44                       | 44,5               | -           |
|                      | 90                              | 13100                            | 5240                                     | 3930                                    |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 100                  | 90                              | 13500                            | 5400                                     | 4050                                    | 214                    | 9           | M12x40           | 80                     | 286       | 340       | 230                    | 188       | 60        | 2                        | 46                       | 44        | 5                | 5                        | M24x80         | 720                     | 1785                                     | 0,67                       | 56                 | -           |
|                      | 100                             | 17900                            | 7160                                     | 5370                                    |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 120                  | 100                             | 24700                            | 9880                                     | 7410                                    | 276                    | 8           | M16x50           | 200                    | 356       | 400       | 300                    | 220       | 71        | 2                        | 52                       | 54        | 5                | 8                        | M24x90         | 720                     | 1384                                     | 1,7                        | 105                | -           |
|                      | 120                             | 38700                            | 15480                                    | 11610                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 130                  | 110                             | 28700                            | 11480                                    | 8610                                    | 284                    | 8           | M16x50           | 200                    | 356       | 400       | 300                    | 220       | 71        | 2                        | 52                       | 54        | 5                | 8                        | M24x90         | 720                     | 1345                                     | 1,75                       | 105                | -           |
|                      | 130                             | 42600                            | 17040                                    | 12780                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 150                  | 130                             | 57500                            | 23000                                    | 17250                                   | 320                    | 8           | M20x50           | 400                    | 420       | 475       | 350                    | 264       | 84        | 2                        | 66                       | 64        | 6                | 10                       | M30x100        | 1450                    | 1194                                     | 4,2                        | 175                | 235         |
|                      | 150                             | 80000                            | 32000                                    | 24000                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 165                  | 135                             | 64000                            | 25600                                    | 19200                                   | 345                    | 8           | M24x50           | 530                    | 440       | 510       | 370                    | 296       | 100       | 2                        | 66                       | 64        | 6                | 14                       | M30x100        | 1450                    | 1107                                     | 5,6                        | 205                | 230         |
|                      | 165                             | 103000                           | 41200                                    | 30900                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 180                  | 150                             | 93000                            | 37200                                    | 27900                                   | 390                    | 8           | M24x50           | 690                    | 475       | 540       | 405                    | 312       | 108       | 2                        | 66                       | 64        | 6                | 16                       | M30x100        | 1450                    | 979                                      | 8                          | 260                | 240         |
|                      | 180                             | 144000                           | 57600                                    | 43200                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 200                  | 170                             | 129000                           | 51600                                    | 38700                                   | 415                    | 8           | M27x60           | 800                    | 500       | 560       | 430                    | 350       | 123       | 2                        | 70                       | 72        | 8                | 16                       | M30x110        | 1450                    | 920                                      | 10,7                       | 315                | 245         |
|                      | 200                             | 190000                           | 76000                                    | 57000                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 220                  | 180                             | 156000                           | 62400                                    | 46800                                   | 445                    | 8           | M27x60           | 860                    | 530       | 590       | 460                    | 372       | 135       | 2                        | 70                       | 72        | 8                | 18                       | M30x110        | 1450                    | 858                                      | 14                         | 370                | 240         |
|                      | 220                             | 250000                           | 100000                                   | 75000                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 240                  | 200                             | 205000                           | 82000                                    | 61500                                   | 467                    | 9           | M27x60           | 870                    | 555       | 615       | 485                    | 394       | 145       | 2                        | 74                       | 72        | 8                | 20                       | M30x110        | 1550                    | 818                                      | 17,5                       | 420                | 235         |
|                      | 240                             | 315000                           | 126000                                   | 90000                                   |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 260                  | 220                             | 297000                           | 118800                                   | 71400                                   | 548                    | 9           | M33x65           | 1720                   | 640       | 710       | 570                    | 434       | 153       | 2                        | 92                       | 86        | 8                | 24                       | M30x130        | 1550                    | 697                                      | 36,5                       | 660                | 240         |
|                      | 260                             | 435000                           | 174000                                   | 130500                                  |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 290                  | 240                             | 336000                           | 134400                                   | 100800                                  | 560                    | 9           | M33x65           | 1720                   | 660       | 720       | 590                    | 444       | 158       | 2                        | 92                       | 86        | 8                | 24                       | M30x130        | 1550                    | 682                                      | 39                         | 660                | 225         |
|                      | 290                             | 519000                           | 207600                                   | 155700                                  |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |
| 310                  | 260                             | 462000                           | 184800                                   | 138600                                  | 615                    | 9           | M36x80           | 2300                   | 735       | 805       | 660                    | 482       | 170       | 2                        | 102                      | 92        | 8                | 28                       | M30x130        | 1550                    | 621                                      | 63,5                       | 890                | 240         |
|                      | 310                             | 697000                           | 278800                                   | 178000                                  |                        |             |                  |                        |           |           |                        |           |           |                          |                          |           |                  |                          |                |                         |  |                            |                    |             |

| Größe<br>FKE<br>(mm) | Weile<br>d <sub>W</sub><br>(mm) | Moment<br>M <sub>T</sub><br>(Nm) | Biegung stat.<br>M <sub>bs</sub><br>(Nm) | Biegung dyn.<br>M <sub>bd</sub><br>(Nm) | Druckring              |             | Angaben Kupplung |                        |           |           |            |           |           |                          |                          |           | Flanschschrauben |                          | Weitere Angaben |                         |  | Spannwerk-<br>zeug |                            |            |
|----------------------|---------------------------------|----------------------------------|--|---|------------------------|-------------|------------------|------------------------|-----------|-----------|------------|-----------|-----------|--------------------------|--------------------------|-----------|------------------|--------------------------|-----------------|-------------------------|--|--------------------|----------------------------|------------|
|                      |                                 |                                  |  |   | D <sub>S</sub><br>(mm) | Z<br>(Stk.) | S                | M <sub>S</sub><br>(Nm) | A<br>(mm) | D<br>(mm) | Dz<br>(mm) | L<br>(mm) | l<br>(mm) | q <sub>max</sub><br>(mm) | q <sub>min</sub><br>(mm) | b<br>(mm) | z<br>(mm)        | Z <sub>L</sub><br>(Stk.) | Σ <sub>i</sub>  | M <sub>FS</sub><br>(Nm) | n <sub>max</sub><br>(min <sup>-1</sup> ) |                    | ρ*<br>(kgm <sup>-2</sup> ) | m*<br>(kg) |
| 340                  | 290                             | 60000                            | 240000                                   | 180000                                  | 644                    | 10          | M36x80           | 2300                   | 770       | 835       | 690        | 530       | 187       | 2                        | 112                      | 98        | 10               | 30                       | M30 x130        | 1550                    | 593                                      | 80,5               | 1020                       | 230        |
|                      | 340                             | 862000                           | 344800                                   | 220000                                  |                        |             |                  |                        |           |           |            |           |           |                          |                          |           |                  |                          |                 |                         |  |                    |                            |            |
| 380                  | 310                             | 757000                           | 302800                                   | 227100                                  | 700                    | 12          | M36x80           | 2300                   | 845       | 920       | 770        | 554       | 194       | 2                        | 122                      | 118       | 10               | 35                       | M30 x130        | 1550                    | 546                                      | 118                | 1250                       | 235        |
|                      | 380                             | 1198000                          | 479200                                   | 255000                                  |                        |             |                  |                        |           |           |            |           |           |                          |                          |           |                  |                          |                 |                         |  |                    |                            |            |
| 410                  | 350                             | 980000                           | 392000                                   | 294000                                  | 768                    | 12          | M42x110          | 2700                   | 940       | 1030      | 850        | 616       | 210       | 4                        | 144                      | 124       | 12               | 32                       | M36 x180        | 2500                    | 497                                      | 206                | 1730                       | 240        |
|                      | 410                             | 1430000                          | 572000                                   | 340000                                  |                        |             |                  |                        |           |           |            |           |           |                          |                          |           |                  |                          |                 |                         |  |                    |                            |            |
| 440                  | 380                             | 1410000                          | 564000                                   | 423000                                  | 828                    | 14          | M42x110          | 3000                   | 1000      | 1100      | 900        | 694       | 245       | 4                        | 154                      | 128       | 14               | 36                       | M36 x180        | 2500                    | 461                                      | 302                | 2250                       | 240        |
|                      | 440                             | 1960000                          | 784000                                   | 460000                                  |                        |             |                  |                        |           |           |            |           |           |                          |                          |           |                  |                          |                 |                         |  |                    |                            |            |
| 470                  | 410                             | 1680000                          | 672000                                   | 504000                                  | 900                    | 16          | M42x110          | 3050                   | 1080      | 1180      | 980        | 742       | 267       | 4                        | 154                      | 130       | 14               | 40                       | M36 x180        | 2500                    | 424                                      | 439                | 2860                       | 235        |
|                      | 470                             | 2300000                          | 920000                                   | 690000                                  |                        |             |                  |                        |           |           |            |           |           |                          |                          |           |                  |                          |                 |                         |  |                    |                            |            |
| 500                  | 440                             | 1860000                          | 744000                                   | 558000                                  | 935                    | 16          | M42x110          | 3100                   | 1110      | 1210      | 1020       | 742       | 267       | 4                        | 154                      | 130       | 14               | 42                       | M36 x180        | 2500                    | 409                                      | 496                | 3000                       | 235        |
|                      | 500                             | 2500000                          | 1000000                                  | 750000                                  |                        |             |                  |                        |           |           |            |           |           |                          |                          |           |                  |                          |                 |                         |  |                    |                            |            |

\* bezogen auf Nenngroße



- Beispiele:
- TAS FKE-090/085/095 Flanschkupplung in Nenngroße FKE = 090 / d<sub>WT1</sub> = Ø85 / d<sub>WT2</sub> = Ø95
  - TAS FKE H-090/085/095 Flanschkupplung mit Vorbereitung für hydraulisches Spannwerkzeug in Nenngroße FKE = 090 / d<sub>WT1</sub> = Ø85 / d<sub>WT2</sub> = Ø95
  - TAS FKE S-090/085/095 Flanschkupplung mit Bremsscheibe in Nenngroße FKE = 090 / d<sub>WT1</sub> = Ø85 / d<sub>WT2</sub> = Ø95
  - TAS FKE X-090/085/095 Flanschkupplung mit erweitertem Korrosionsschutz in Nenngroße FKE = 090 / d<sub>WT1</sub> = Ø85 / d<sub>WT2</sub> = Ø95
  - TAS FKE HX-090/085/095 Flanschkupplung mit Vorbereitung für hydraulisches Spannwerkzeug mit erweitertem Korrosionsschutz in Nenngroße FKE = 090 / d<sub>WT1</sub> = Ø85 / d<sub>WT2</sub> = Ø95

Zusatzoptionen sind beliebig kombinierbar