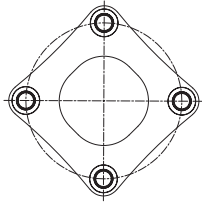


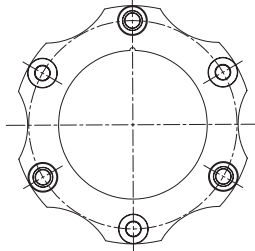
Technical data

The following lamina types are distinguished with RIGIFLEX®-N:

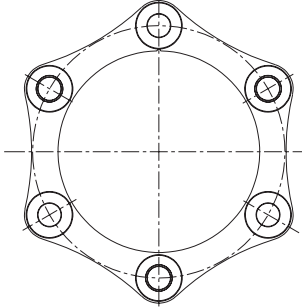
Size 35 – 65
(lamina with 4 holes)



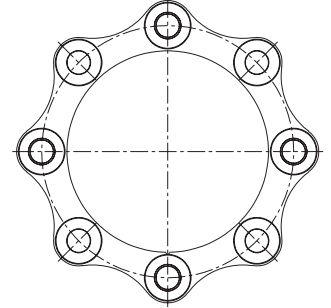
Size 75 – 160
(lamina with 6 holes)



Size 166 – 406
(lamina with 6 holes)



Size 168 – 408
(lamina with 8 holes)



| Torques and displacements | | | | | | | | | | | |
|---------------------------|-----------------|--------------|---------|--------|--|---------------------------------|---|-------|-------|-------|-------|
| Size | Lamina type | Torques [Nm] | | | Angular displacement ± Kw ¹⁾ [°] | Axial displacement ± Ka [mm] | Perm. displacements | | | | |
| | | TKN | TK max. | TKW | | | Radial ± Kr [mm] | | | | |
| | | | | | | | E=100 | E=140 | E=180 | E=200 | E=250 |
| 35 | | 130 | 260 | 65 | 0,7 | 1,2 | 0,90 | 1,40 | – | – | – |
| 50 | lam. w. 4 holes | 270 | 540 | 135 | 0,7 | 1,4 | 0,77 | 1,26 | – | – | – |
| 65 | | 550 | 1100 | 275 | 0,7 | 1,5 | 0,75 | 1,23 | 1,72 | – | – |
| 75 | | 1100 | 2200 | 550 | 0,7 | 1,8 | 0,73 | 1,22 | 1,71 | – | – |
| 85 | | 1900 | 3800 | 950 | 0,7 | 2,1 | – | 1,14 | 1,62 | 1,87 | 2,48 |
| 110 | | 3500 | 7000 | 1750 | 0,7 | 2,4 | – | 1,05 | 1,54 | 1,78 | 2,39 |
| 120 | | 5750 | 11500 | 2875 | 0,7 | 2,6 | – | 1,00 | 1,49 | 1,73 | 2,35 |
| 140 | | 10500 | 21000 | 5250 | 0,7 | 3,3 | – | – | – | 1,55 | 2,16 |
| 160 | | 16000 | 32000 | 8000 | 0,7 | 3,8 | – | – | – | – | 1,99 |
| 166 | lamina with | 19000 | 38000 | 9500 | 0,7 | 3,7 | Mounting dimension E as indicated by the customer | | | | |
| 196 | 16 holes | 22500 | 45000 | 11250 | 0,7 | 4,2 | | | | | |
| 216 | | 32000 | 64000 | 16000 | 0,7 | 4,5 | | | | | |
| 256 | | 52500 | 105000 | 26250 | 0,7 | 5,2 | | | | | |
| 306 | | 86000 | 172000 | 43000 | 0,7 | 6,0 | | | | | |
| 346 | | 135000 | 270000 | 67500 | 0,7 | 6,7 | | | | | |
| 406 | | 210000 | 420000 | 105000 | 0,7 | 7,5 | | | | | |
| 168 | | 25000 | 50000 | 12500 | 0,5 | 2,6 | | | | | |
| 198 | | 30000 | 60000 | 15000 | 0,5 | 2,8 | | | | | |
| 218 | | 42500 | 85000 | 21500 | 0,5 | 3,0 | | | | | |
| 258 | lamina with | 70000 | 140000 | 35000 | 0,5 | 3,5 | | | | | |
| 308 | 8 holes | 115000 | 230000 | 57500 | 0,5 | 4,0 | | | | | |
| 348 | | 180000 | 360000 | 90000 | 0,5 | 4,5 | | | | | |
| 408 | | 280000 | 560000 | 140000 | 0,5 | 5,0 | | | | | |

¹⁾ Angular displacement each lamina set

If axial, angular and radial shaft displacement arises in parallel please note the following table:

| Size | Permissible angular displacement | | | | | | | | |
|------|----------------------------------|------|------|------|------|------|------|------|--|
| | 0 | 0,1 | 0,2 | 0,3 | 0,4 | 0,5 | 0,6 | 0,7 | |
| | Permissible axial displacement | | | | | | | | |
| 35 | 1,20 | 1,00 | 0,85 | 0,74 | 0,60 | 0,40 | 0,20 | 0,00 | |
| 50 | 1,40 | 1,20 | 1,00 | 0,80 | 0,60 | 0,40 | 0,20 | 0,00 | |
| 65 | 1,50 | 1,29 | 1,07 | 0,86 | 0,64 | 0,43 | 0,22 | 0,00 | |
| 75 | 1,80 | 1,54 | 1,29 | 1,03 | 0,77 | 0,52 | 0,26 | 0,00 | |
| 85 | 2,10 | 1,80 | 1,50 | 1,20 | 0,90 | 0,60 | 0,30 | 0,00 | |
| 110 | 2,40 | 2,06 | 1,71 | 1,37 | 1,03 | 0,69 | 0,34 | 0,00 | |
| 120 | 2,60 | 2,23 | 1,86 | 1,48 | 1,11 | 0,74 | 0,37 | 0,00 | |
| 140 | 3,30 | 2,83 | 2,36 | 1,88 | 1,41 | 0,94 | 0,47 | 0,00 | |
| 160 | 3,80 | 3,26 | 2,71 | 2,17 | 1,63 | 1,09 | 0,54 | 0,00 | |
| 166 | 3,70 | 3,17 | 2,64 | 2,12 | 1,59 | 1,06 | 0,53 | 0,00 | |
| 196 | 4,20 | 3,60 | 3,00 | 2,40 | 1,80 | 1,20 | 0,60 | 0,00 | |
| 216 | 4,50 | 3,86 | 3,21 | 2,57 | 1,93 | 1,29 | 0,64 | 0,00 | |
| 256 | 5,20 | 4,46 | 3,71 | 2,97 | 2,23 | 1,49 | 0,74 | 0,00 | |
| 306 | 6,00 | 5,14 | 4,29 | 3,43 | 2,57 | 1,72 | 0,86 | 0,00 | |
| 346 | 6,75 | 5,79 | 4,82 | 3,86 | 2,89 | 1,93 | 0,96 | 0,00 | |
| 406 | 7,50 | 6,43 | 5,36 | 4,28 | 3,21 | 2,14 | 1,07 | 0,00 | |
| 168 | 2,60 | 2,08 | 1,56 | 1,04 | 0,52 | 0,00 | – | – | |
| 198 | 2,80 | 2,24 | 1,68 | 1,12 | 0,56 | 0,00 | – | – | |
| 218 | 3,00 | 2,40 | 1,80 | 1,20 | 0,60 | 0,00 | – | – | |
| 258 | 3,50 | 2,80 | 2,10 | 1,40 | 0,70 | 0,00 | – | – | |
| 308 | 4,00 | 3,20 | 2,40 | 1,60 | 0,80 | 0,00 | – | – | |
| 348 | 4,50 | 3,60 | 2,70 | 1,80 | 0,90 | 0,00 | – | – | |
| 408 | 5,00 | 4,00 | 3,00 | 2,00 | 1,00 | 0,00 | – | – | |

RIGIFLEX®-N

Steel lamina couplings

Technical data

| Permissible speeds and stiffness | | | | | | | | | |
|----------------------------------|------------------|-----------------|-------------------------------|--|---------|---------|---------|---------|--|
| Size | Max. speed [rpm] | Each lamina set | | ct [Nm/rad] for complete coupling with mounting length E | | | | | |
| | | cw [Nm/rad] | ct x 10 ⁶ [Nm/rad] | E=100 | E=140 | E=180 | E=200 | E=250 | |
| 35 | 23000 | 170 | 0,056 | 65020 | 56700 | - | - | - | |
| 50 | 18000 | 490 | 0,27 | 73953 | 63990 | - | - | - | |
| 65 | 13600 | 260 | 0,5 | 146022 | 129938 | 117046 | - | - | |
| 75 | 12400 | 1000 | 0,67 | 306145 | 278381 | 255234 | - | - | |
| 85 | 11000 | 1500 | 0,9 | - | 406641 | 369429 | 353265 | 318433 | |
| 110 | 9000 | 1500 | 1,5 | - | 664284 | 637587 | 625028 | 595693 | |
| 120 | 8000 | 3000 | 2,0 | - | 1798018 | 1637553 | 1567602 | 1416348 | |
| 140 | 6400 | 10000 | 3,5 | - | - | - | 2363340 | 2226630 | |
| 160 | 5600 | 10350 | 6,9 | - | - | - | - | 2654894 | |
| 166 | 5600 | 26800 | 13,0 | Mounting dimension E as indicated by the customer | | | | | |
| 196 | 5200 | 35800 | 17,0 | | | | | | |
| 216 | 4600 | 41500 | 19,0 | | | | | | |
| 256 | 3900 | 65000 | 31,0 | | | | | | |
| 306 | 3300 | 112000 | 55,0 | | | | | | |
| 346 | 2900 | 205000 | 79,0 | | | | | | |
| 406 | 2500 | 276000 | 125,0 | | | | | | |
| 168 | 5600 | 44300 | 20,0 | | | | | | |
| 198 | 5200 | 82200 | 26,0 | | | | | | |
| 218 | 4600 | 90000 | 30,0 | | | | | | |
| 258 | 3900 | 138000 | 49,0 | | | | | | |
| 308 | 3300 | 234000 | 83,0 | | | | | | |
| 348 | 2900 | 416000 | 125,0 | | | | | | |
| 408 | 2500 | 562000 | 200,0 | | | | | | |

cw = angular stiffness
ct = torsion spring stiffness

| Weights and mass moments of inertia | | | | | | | | | | | | | |
|-------------------------------------|-----------------|---------------------|---|--------|--------|--------|--------|--|---------|---------|---------|---------|--|
| Size | Hub (max. bore) | | Spacer complete [kg] | | | | | Spacer complete [x10 ³ kgm ²] | | | | | |
| | [kg] | [kgm ²] | E=100 | E=140 | E=180 | E=200 | E=250 | E=100 | E=140 | E=180 | E=200 | E=250 | |
| 35 | 0,60 | 0,0007 | 1,030 | 1,120 | - | - | - | 0,00040 | 0,00050 | - | - | - | |
| 50 | 0,92 | 0,001019 | 2,262 | 2,442 | - | - | - | 0,00256 | 0,00263 | - | - | - | |
| 65 | 2,7 | 0,00541 | 3,922 | 4,183 | 4,445 | - | - | 0,00810 | 0,00830 | 0,00828 | - | - | |
| 75 | 2,4 | 0,00566 | 4,482 | 4,842 | 5,202 | - | - | 0,01143 | 0,01191 | 0,01239 | - | - | |
| 85 | 3,7 | 0,01135 | - | 7,154 | 7,548 | 7,746 | 8,239 | - | 0,02364 | 0,02427 | 0,02459 | 0,02538 | |
| 110 | 6,7 | 0,03222 | - | 12,492 | 13,478 | 13,972 | 15,205 | - | 0,06291 | 0,06540 | 0,06665 | 0,06976 | |
| 120 | 9,2 | 0,05238 | - | - | 17,324 | 17,842 | 19,137 | - | - | 0,10314 | 0,10458 | 0,10818 | |
| 140 | 18,2 | 0,15175 | - | - | - | 32,530 | 34,325 | - | - | - | 0,31901 | 0,32845 | |
| 160 | 29,9 | 0,33890 | - | - | - | - | 52,458 | - | - | - | - | 0,68640 | |
| 166 | 28,0 | 0,32 | Mounting dimension E as indicated by the customer | | | | | | | | | | |
| 196 | 37,0 | 0,554 | | | | | | | | | | | |
| 216 | 50,0 | 0,85 | | | | | | | | | | | |
| 256 | 95,0 | 2,35 | | | | | | | | | | | |
| 306 | 138,0 | 4,55 | | | | | | | | | | | |
| 346 | 215,0 | 9,75 | | | | | | | | | | | |
| 406 | 310,0 | 18,95 | | | | | | | | | | | |
| 168 | 30,0 | 0,33 | | | | | | | | | | | |
| 198 | 40,0 | 0,56 | | | | | | | | | | | |
| 218 | 52,0 | 0,88 | | | | | | | | | | | |
| 258 | 99,0 | 2,43 | | | | | | | | | | | |
| 308 | 142,0 | 4,78 | | | | | | | | | | | |
| 348 | 222,0 | 9,83 | | | | | | | | | | | |
| 408 | 325,0 | 19,22 | | | | | | | | | | | |

Any questions? Please contact us.

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RADEX®-N

Lamina couplings

RIGIFLEX®-N

RIGIFLEX®-HP

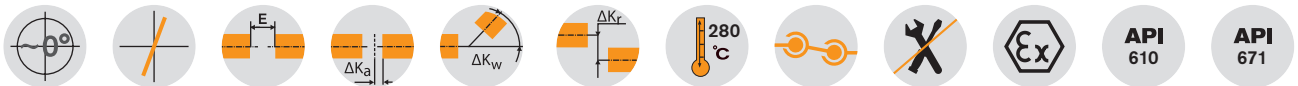
RIGIFLEX®-N

Steel lamina coupling

Standard type A

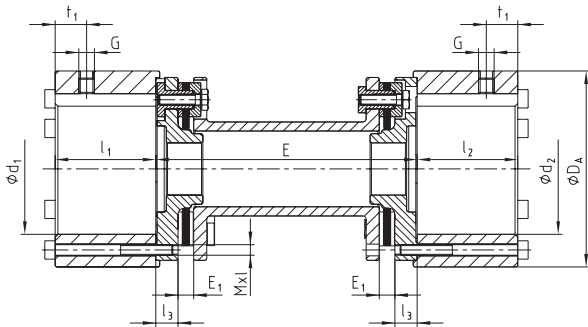


For legend of pictogram please refer to flapper on the cover

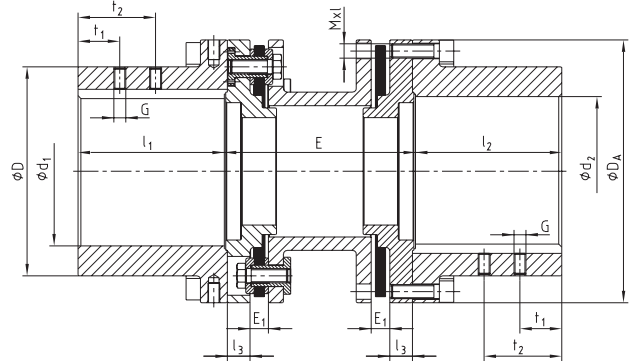


Components

Size 35



Size 50 - 408



| RIGIFLEX®-N Type A | | | | | | | | | | | | | | | | | | | |
|--------------------|-----------------|---------------------|-----------------|--|-----------------|----------------|--------------------------------|----------------|-----|----------------|----------------|----------------|-----------------------------------|-----|------------------------|-----|---------|---------------------|-----|
| Size | Torques [Nm] | | | Max. finish bore d ₁ /d ₂ | Dimensions [mm] | | | | | | | | | | Screws DIN EN ISO 4762 | | | | |
| | T _{KN} | T _{K max.} | T _{KW} | | D | D _A | l ₁ /l ₂ | l ₃ | G | t ₁ | t ₂ | E ₁ | E ¹⁾ | | | | MxI | T _A [Nm] | |
| 35 | 130 | 260 | 65 | 50 | - | 75 | 38,5 | 8,5 | M6 | 15 | - | 6 | 100 | 140 | - | - | - | M4x45 | 4,1 |
| 50 | 270 | 540 | 135 | 50 | 70 | 95 | 50 | 12 | M6 | 10 | - | 9 | 100 | 140 | - | - | - | M6x22 | 14 |
| 65 | 550 | 1100 | 275 | 65 | 100 | 126 | 63 | 12 | M8 | 20 | - | 11 | 100 | 140 | 180 | - | - | M6x25 | 14 |
| 75 | 1100 | 2200 | 550 | 75 | 105 | 138 | 62,5 | 12 | M8 | 20 | - | 11 | 100 | 140 | 180 | - | - | M8x30 | 35 |
| 85 | 1900 | 3800 | 950 | 85 | 120 | 156 | 72,5 | 15 | M10 | 20 | - | 12 | - | 140 | 180 | 200 | 250 | M8x30 | 35 |
| 110 | 3500 | 7000 | 1750 | 110 | 152 | 191 | 87 | 18 | M10 | 25 | - | 12 | - | 140 | 180 | 200 | 250 | M10x35 | 69 |
| 120 | 5750 | 11500 | 2875 | 120 | 165 | 213 | 102 | 20 | M12 | 25 | - | 12 | - | - | 180 | 200 | 250 | M12x40 | 120 |
| 140 | 10500 | 21000 | 5250 | 140 | 200 | 265 | 126 | 25 | M12 | 30 | - | 15 | - | - | - | 200 | 250 | M16x50 | 295 |
| 160 | 16000 | 32000 | 8000 | 160 | 230 | 305 | 145 | 31 | M12 | 30 | - | 15 | - | - | - | - | 250 | M16x55 | 295 |
| 166 | 19000 | 38000 | 9500 | 160 | 230 | 305 | 155 | 31 | M16 | 30 | 70 | 17 | | | | | M20x50 | 560 | |
| 196 | 22500 | 45000 | 11250 | 190 | 260 | 330 | 185 | 32 | M16 | 40 | 90 | 24 | | | | | M20x50 | 560 | |
| 216 | 32000 | 64000 | 16000 | 210 | 285 | 370 | 205 | 32 | M20 | 50 | 110 | 26 | | | | | M20x65 | 560 | |
| 256 | 52500 | 105000 | 26250 | 250 | 350 | 440 | 245 | 38 | M20 | 70 | 130 | 31 | | | | | M24x80 | 970 | |
| 306 | 86000 | 172000 | 43000 | 300 | 400 | 515 | 295 | 43 | M24 | 70 | 130 | 36 | | | | | M27x100 | 1450 | |
| 346 | 135000 | 270000 | 67500 | 340 | 460 | 590 | 335 | 55 | M24 | 95 | 175 | 45 | | | | | M30x110 | 1950 | |
| 406 | 210000 | 420000 | 105000 | 400 | 530 | 675 | 395 | 58,5 | M24 | 95 | 175 | 50 | acc. to customer's specifications | | | | M36x130 | 3300 | |
| 168 | 25000 | 50000 | 12500 | 160 | 230 | 305 | 155 | 31 | M16 | 30 | 70 | 17 | | | | | M20x50 | 560 | |
| 198 | 30000 | 60000 | 15000 | 190 | 260 | 330 | 185 | 32 | M16 | 40 | 90 | 24 | | | | | M20x50 | 560 | |
| 218 | 42500 | 85000 | 21500 | 210 | 285 | 370 | 205 | 32 | M20 | 50 | 110 | 26 | | | | | M20x65 | 560 | |
| 258 | 70000 | 140000 | 35000 | 250 | 350 | 440 | 245 | 38 | M20 | 70 | 130 | 31 | | | | | M24x80 | 970 | |
| 308 | 115000 | 230000 | 57500 | 300 | 400 | 515 | 295 | 43 | M24 | 70 | 130 | 36 | | | | | M27x100 | 1450 | |
| 348 | 180000 | 360000 | 90000 | 340 | 460 | 590 | 335 | 55 | M24 | 95 | 175 | 45 | | | | | M30x110 | 1950 | |
| 408 | 280000 | 560000 | 140000 | 400 | 530 | 675 | 395 | 58,5 | M24 | 95 | 175 | 50 | | | | | M36x130 | 3300 | |

¹⁾ Other shaft distance dimensions available on request.
For selection of coupling see page 14 et seqq. Mounting instructions No. 47410 available at www.ktr.com.

| | | | | | |
|-------------------|-----------------|------|---------------------|---------------------|----------------------------|
| Ordering example: | RIGIFLEX®-N 120 | A | Ø 100 | Ø 120 | 200 |
| | Coupling size | Type | Bore d ₁ | Bore d ₂ | Shaft distance dimension E |