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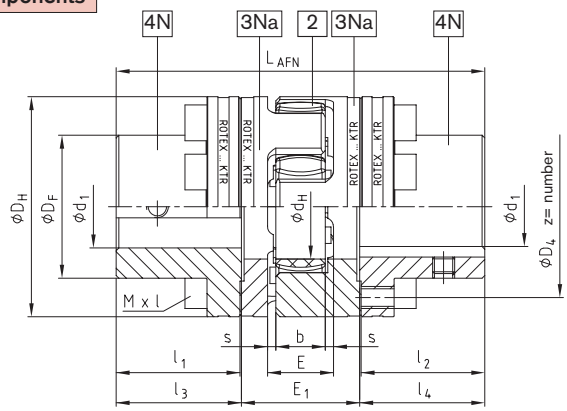
## Flange designs AFN and BFN

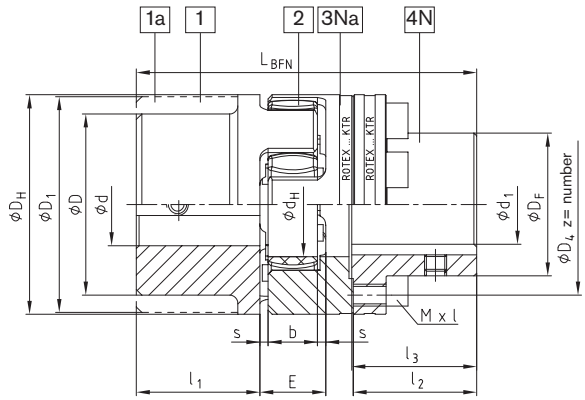
Same advantages as the standard ROTEX® in addition:

- Double flange design AFN and single flange design BFN
- Reduced maintenance, eliminates the need to move components (e.g. motor and pump)
- AFN design allows spider replacement while coupling is installed
- Flange component materials: 4N Steel
  3Na Nodular Iron
  EN-GJS-400-15 (GGG 40)
- ⟨Ex⟩ certified to EC Standard 94/9/EC
- Installation instructions available at www.ktr.com

### Components




Design AFN




Design BFN

**ROTEX® AFN (No. 002) and BFN (No. 004)**

| Size | Bore d; D; $D_1$ | Component 4N bore $d_1$ | Dimensions [in] | | | | | | | | | | | | | Fasteners [3] DIN EN ISO 4762 - 12.9 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | $D_H$ | $D_F$ | $D_4$ | $d_H$ | $l_1$; $l_2$ | E | $E_1$ | s | b | $l_3$; $l_4$ | $L_{AFN}$ | $L_{BFN}$ | | Mxl | z | Pitch [2] | [1] $T_A$ [lb-in] |
| 24 | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | 0.938 | 2.17 | 1.42 | 1.77 | 1.06 | 1.18 | 0.71 | 1.30 | 0.08 | 0.55 | 1.20 | 3.70 | 3.39 | | M5x16 | 8 | | 89 |
| 28 | | 1.125 | 2.56 | 1.65 | 2.13 | 1.18 | 1.38 | 0.79 | 1.54 | 0.10 | 0.59 | 1.40 | 4.33 | 3.94 | | M6x20 | 8 | 8x45° | 150 |
| 38 | | 1.438 | 3.15 | 2.05 | 2.60 | 1.50 | 1.77 | 0.94 | 1.69 | 0.12 | 0.71 | 1.79 | 5.28 | 4.88 | | M8x22 | 8 | | 363 |
| 42 | | 1.563 | 3.74 | 2.44 | 3.15 | 1.81 | 1.97 | 1.02 | 1.89 | 0.12 | 0.79 | 2.01 | 5.91 | 5.43 | | M8x25 | 12 | 16x22.5° | 363 |
| 48 | | 1.813 | 4.13 | 2.76 | 3.54 | 2.01 | 2.20 | 1.10 | 1.97 | 0.14 | 0.83 | 2.24 | 6.46 | 5.98 | | M8x25 | 12 | | 363 |
| 55 | | 2.125 | 4.72 | 3.15 | 4.02 | 2.36 | 2.56 | 1.18 | 2.36 | 0.16 | 0.87 | 2.60 | 7.56 | 6.93 | | M10x30 | 8 | 8x45° | 735 |
| 65 | | 2.500 | 5.31 | 3.70 | 4.57 | 2.68 | 2.95 | 1.38 | 2.56 | 0.18 | 1.02 | 2.99 | 8.54 | 7.91 | | M10x30 | 12 | 16x22.5° | 735 |
| 75 | | 2.813 | 6.30 | 4.25 | 5.35 | 3.15 | 3.35 | 1.57 | 2.95 | 0.20 | 1.18 | 3.41 | 9.76 | 9.02 | | M12x40 | 15 | | 1,062 |
| 90 | | 3.875 | 7.87 | 5.59 | 6.77 | 3.94 | 3.94 | 1.77 | 3.23 | 0.22 | 1.34 | 4.00 | 11.22 | 10.43 | | M16x40 | 15 | | 2,611 |
| 100 | | 4.250 | 8.86 | 6.22 | 7.68 | 4.45 | 4.33 | 1.97 | 3.82 | 0.24 | 1.50 | 4.39 | 12.60 | 11.61 | | M16x50 | 15 | | 2,611 |
| 110 | | 4.813 | 10.04 | 7.01 | 8.58 | 5.00 | 4.72 | 2.17 | 4.06 | 0.26 | 1.65 | 4.80 | 13.66 | 12.64 | | M20x50 | 15 | 20x18° | 5,133 |
| 125 | | 5.563 | 11.42 | 8.11 | 9.92 | 5.79 | 5.51 | 2.36 | 4.57 | 0.28 | 1.81 | 5.59 | 15.75 | 14.57 | | M20x60 | 15 | | 5,133 |
| 140 | | 6.375 | 12.60 | 9.25 | 11.10 | 6.50 | 6.10 | 2.56 | 5.04 | 0.30 | 1.97 | 6.20 | 17.44 | 16.10 | | M20x60 | 15 | | 5,133 |
| 160 | | 7.313 | 14.57 | 10.63 | 12.80 | 7.48 | 6.89 | 2.95 | 5.75 | 0.35 | 2.24 | 6.99 | 19.72 | 18.23 | | M24x70 | 15 | | 8,850 |
| 180 | | 8.500 | 16.54 | 12.40 | 14.76 | 8.66 | 7.68 | 3.35 | 6.26 | 0.41 | 2.52 | 7.80 | 21.85 | 20.28 | | M24x80 | 18 | 24x15° | 8,850 |

[1] Fastener tightening torque $T_A$ [lb in].
[2] Thread in drive flange between jaws.
[3] Coupling is shipped unassembled.
Inch bores machined to AGMA Class 1, Metric bores machined to H7

### Order form

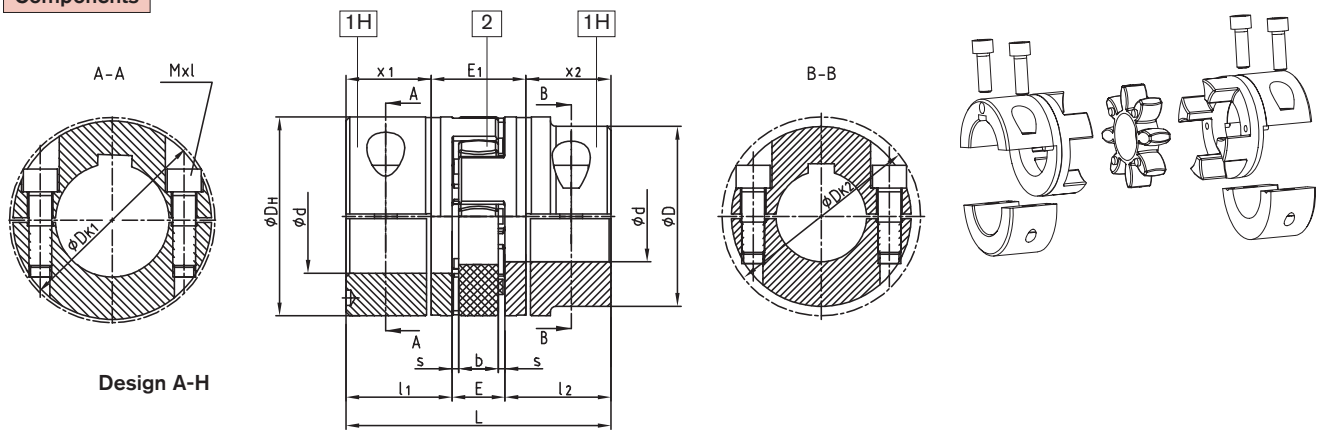
| ROTEX® 38 | AFN | 92 Sh A | 4N – Ø 38 | | 4N – Ø 35 | |
|---|---|---|---|---|---|---|
| Coupling size | Type | Spider hardness | Compo-nent | Bore | Compo-nent | Bore |

## Drop-out center coupling design A-H

Same advantages as the standard ROTEX® in addition:

- Complete installation and removal using only 4 fasteners
- Reduced maintenance by not having to move components (e.g. motor and pump)
- Keyed and frictional hub combinations can be installed radially (dimension $E_1$ for design AFN = dimension $E_1$ for A-H)
- Ⓔx certified to EC Standard 94/9/EC (design 7.8 clamping hub without key only to category 3)
- Installation instructions available at www.ktr.com

### Components




| ROTEX® Design A-H | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | Component | Bore $Ød_{max.}$ [in] | Dimension [in] | | | | | | | | | | | Fastener DIN EN ISO 4762 | |
| | | | L | $l_1$; $l_2$ | E | b | s | $D_H$ | D | $D_{K1}$ | $D_{K2}$ | $x_1/x_2$ | $E_1$ | MxI | $T_A$ [lb-in] |
| 19 | 1H | 0.813 | 2.60 | 0.98 | 0.63 | 0.47 | 0.08 | 1.57 | - | 1.81 | - | 0.69 | 1.22 | M6x16 | 124 |
| 24 | 1H | 1.125 | 3.07 | 1.18 | 0.71 | 0.55 | 0.08 | 2.17 | - | 2.26 | - | 0.89 | 1.30 | M6x20 | |
| 28 | 1H | 1.438 | 3.54 | 1.38 | 0.79 | 0.59 | 0.10 | 2.56 | - | 2.87 | - | 1.00 | 1.54 | M8x25 | 310 |
| 38 | 1H | 1.688 | 4.49 | 1.77 | 0.94 | 0.71 | 0.12 | 3.15 | - | 3.29 | - | 1.40 | 1.69 | M8x30 | |
| 42 | 1H | 1.875 | 4.96 | 1.97 | 1.02 | 0.79 | 0.12 | 3.74 | 3.35 | - | 3.68 | 1.54 | 1.89 | M10x30 | 611 |
| | | 2.125 | | | | | | | - | 3.82 | - | | | M10x35 | |
| 48 | 1H | 2.125 | 5.51 | 2.20 | 1.10 | 0.83 | 0.14 | 4.13 | 3.74 | - | 4.13 | 1.77 | 1.97 | M12x35 | 1,062 |
| | | 2.313 | | | | | | | - | 4.27 | 0.00 | | | M12x40 | |
| 55 | 1H | 2.500 | 6.30 | 2.56 | 1.18 | 0.87 | 0.16 | 4.72 | 4.33 | - | 4.70 | 1.97 | 2.36 | M12x40 | 1,062 |
| | | 2.625 | | | | | | | - | 4.80 | - | | | M12x45 | |
| 65 | 1H | 2.625 | 7.28 | 2.95 | 1.38 | 1.02 | 0.18 | 5.31 | 4.53 | - | 4.86 | 2.36 | 2.56 | M12x40 | 1,062 |
| | | 3.000 | | | | | | | - | 5.22 | - | | | M12x45 | |
| 75 | 1H | 3.000 | 8.27 | 3.35 | 1.57 | 1.18 | 0.20 | 6.30 | 5.31 | - | 5.81 | 2.66 | 2.95 | M16x50 | 2,611 |
| | | 3.438 | | | | | | | - | 6.22 | - | | | | |
| 90 | 1H | 3.438 | 9.65 | 3.94 | 1.77 | 1.34 | 0.22 | 7.87 | 6.30 | - | 6.93 | 3.21 | 3.23 | M20x60 | 5,133 |
| | | 4.250 | | | | | | | - | 7.76 | - | | | | |
| 100 1) | 1H | 4.250 | 10.63 | 4.33 | 1.97 | 1.50 | 0.24 | 8.86 | 7.09 | - | 7.30 | 3.31 | 4.02 | M16x50 | 2,611 |
| 110 1) | 1H | 4.625 | 11.61 | 4.72 | 2.17 | 1.65 | 0.26 | 10.04 | 7.87 | - | 8.19 | 3.54 | 4.69 | M20x60 | 5,133 |
| 125 1) | 1H | 5.375 | 13.39 | 5.51 | 2.36 | 1.81 | 0.28 | 11.42 | 9.06 | - | 9.55 | 4.13 | 5.12 | M24x70 | 8,850 |

With maximum bore the keyways are offset by approx. 5°.

Hub materials: up to size 90 S355J2G3
from size 100 EN-GJS-400-15

1) From size 100: 4 fasteners for each clamping hub.
Inch bores machined to AGMA Class 1, Metric bores machined to H7

### Order form

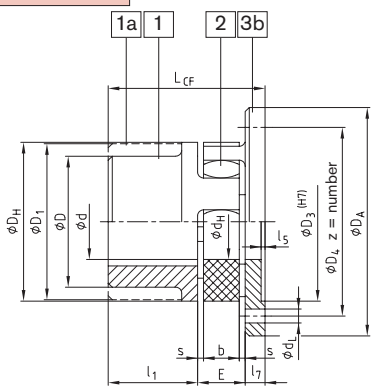
| ROTEX® 38 | A-H | 98 Sh A | 1H – Ø 38 | | 1H – Ø 30 | |
|---|---|---|---|---|---|---|
| Coupling size | Design | Spider hardness | Comp-nent | Bore | Compo-nent | Bore |

## Flange designs CF, CFN, DF and DFN

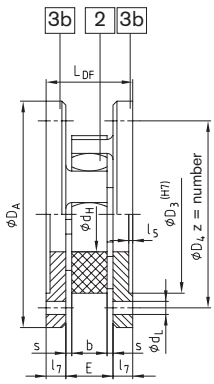
Same advantages as the standard ROTEX® in addition:

- CF and CFN - flange to shaft connection
- DF and DFN - double flange design, allows radial installation without moving components
- CFN and DFN - small outside diameters
- DF and DFN – compact design
- Flange material part 3b: Nodular Iron EN-GJS-400-15 (GGG 40)
- ⟨Ex⟩ certified to EC Standard 94/9/EC
- Installation instructions available at www.ktr.com

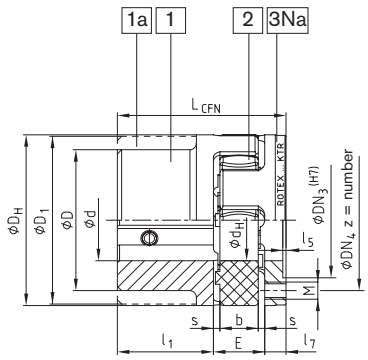
### Components



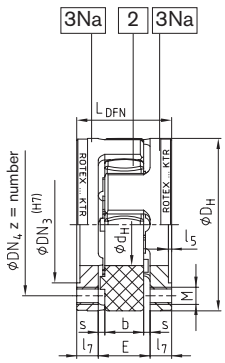

**Design CF**




**Design DF**




**Design CFN**




**Design DFN**

**ROTEX® CF; CFN (No. 005) and DF; DFN (No. 006)**

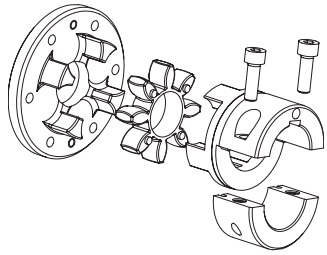
| Size | d<br>D<br>$D_1$ | General dimension (in) | | | | | | | | Dimensions CF and DF (in) | | | | | | | Dimensions CFN and DFN (in) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $D_H$ | $d_H$ | $l_1$ | E | s | b | $l_5$ | $l_7$ | $D_A$ | $D_3$ | $D_4$ | z | $d_L$ | $L_{CF}$ | $L_{DF}$ | $DN_3$ | $DN_4$ | M | z | Pitch [2] | $L_{CFN}$ | $L_{DFN}$ |
| 24 | | 2.17 | 1.06 | 1.18 | 0.71 | 0.08 | 0.55 | 0.06 | 0.31 | 3.15 | 2.17 | 2.56 | 0.20 | 0.18 | 2.20 | 1.34 | 1.42 | 1.77 | M5 | 8 | | 2.20 | 1.34 |
| 28 | | 2.56 | 1.18 | 1.38 | 0.79 | 0.10 | 0.59 | 0.06 | 0.39 | 3.94 | 2.56 | 3.15 | 0.24 | 0.26 | 2.56 | 1.57 | 1.73 | 2.13 | M6 | | 8x45° | 2.56 | 1.57 |
| 38 | | 3.15 | 1.50 | 1.77 | 0.94 | 0.12 | 0.71 | 0.06 | 0.39 | 4.53 | 3.15 | 3.74 | 0.24 | 0.26 | 3.11 | 1.73 | 2.13 | 2.60 | M8 | | | 3.11 | 1.73 |
| 42 | | 3.74 | 1.81 | 1.97 | 1.02 | 0.12 | 0.79 | 0.08 | 0.47 | 5.51 | 3.74 | 4.53 | 0.24 | 0.35 | 3.46 | 1.97 | 2.56 | 3.15 | M8 | 12 | 16x22.5° | 3.46 | 1.97 |
| 48 | | 4.13 | 2.01 | 2.20 | 1.10 | 0.14 | 0.83 | 0.08 | 0.47 | 5.91 | 4.13 | 4.92 | 0.31 | 0.35 | 3.78 | 2.05 | 2.95 | 3.54 | M8 | | | 3.78 | 2.05 |
| 55 | | 4.72 | 2.36 | 2.56 | 1.18 | 0.16 | 0.87 | 0.08 | 0.63 | 6.89 | 4.72 | 5.71 | 0.31 | 0.43 | 4.37 | 2.44 | 3.31 | 4.02 | M10 | 8 | 8x45° | 4.37 | 2.44 |
| 65 | | 5.31 | 2.68 | 2.95 | 1.38 | 0.18 | 1.02 | 0.08 | 0.63 | 7.48 | 5.31 | 6.30 | 0.39 | 0.43 | 4.96 | 2.64 | 3.78 | 4.57 | M10 | 12 | 16x22.5° | 4.96 | 2.64 |
| 75 | | 6.30 | 3.15 | 3.35 | 1.57 | 0.20 | 1.18 | 0.10 | 0.75 | 8.46 | 6.30 | 7.28 | 0.39 | 0.53 | 5.67 | 3.07 | 4.41 | 5.35 | M12 | 15 | | 5.67 | 3.07 |
| 90 | | 7.87 | 3.94 | 3.94 | 1.77 | 0.22 | 1.34 | 0.12 | 0.79 | 10.24 | 7.87 | 8.86 | 0.47 | 0.53 | 6.50 | 3.35 | 5.71 | 6.77 | M16 | | | 6.50 | 3.35 |
| 100 | | 8.86 | 4.45 | 4.33 | 1.97 | 0.24 | 1.50 | 0.16 | 0.98 | 11.22 | 8.86 | 9.84 | 0.47 | 0.53 | 7.28 | 3.94 | 6.50 | 7.68 | M16 | | | 7.28 | 3.94 |
| 110 | | 10.04 | 5.00 | 4.72 | 2.17 | 0.26 | 1.65 | 0.16 | 1.02 | 12.99 | 10.04 | 11.42 | 0.47 | 0.71 | 7.91 | 4.21 | 7.09 | 8.58 | M20 | | 20x18° | 7.91 | 4.21 |
| 125 | | 11.42 | 5.79 | 5.51 | 2.36 | 0.28 | 1.81 | 0.20 | 1.18 | 14.57 | 11.42 | 12.80 | 0.63 | 0.71 | 9.06 | 4.72 | 8.46 | 9.92 | M20 | | | 9.06 | 4.72 |
| 140 | | 12.60 | 6.50 | 6.10 | 2.56 | 0.30 | 1.97 | 0.20 | 1.34 | 16.14 | 12.60 | 14.17 | 0.63 | 0.87 | 10.00 | 5.24 | 9.65 | 11.10 | M20 | | | 10.00 | 5.24 |
| 160 | | 14.57 | 7.48 | 6.89 | 2.95 | 0.35 | 2.24 | 0.20 | 1.50 | 18.11 | 14.57 | 16.14 | 0.63 | 0.87 | 11.34 | 5.94 | 11.02 | 12.80 | M24 | | | 11.34 | 5.94 |
| 180 | | 16.54 | 8.66 | 7.68 | 3.35 | 0.41 | 2.52 | 0.22 | 1.57 | 20.47 | 16.54 | 18.31 | 0.63 | 1.02 | 12.60 | 6.50 | 12.99 | 14.76 | M24 | 18 | 24x15° | 12.60 | 6.50 |

Maximum bore size dependent on hub style and material, refer to design No. 001 for details

See Page 34 for additional flange dimensions
Inch bores machined to AGMA Class 1, Metric bores machined to H7

**Additional designs:** ROTEX® CF-H
Drop-out center flange coupling

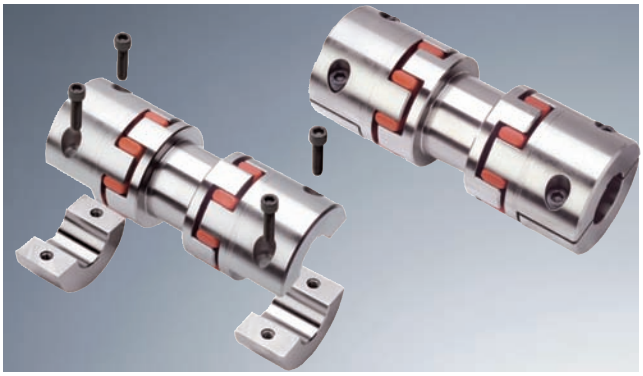
Please request sheet M412069



**Order form:**

| ROTEX® 38 | CF | 92 Sh A | 1 — EN-GJL-250 — Ø 20 |
|---|---|---|---|
| Coupling size | Design | Spider hardness | Compo-nent material Bore |

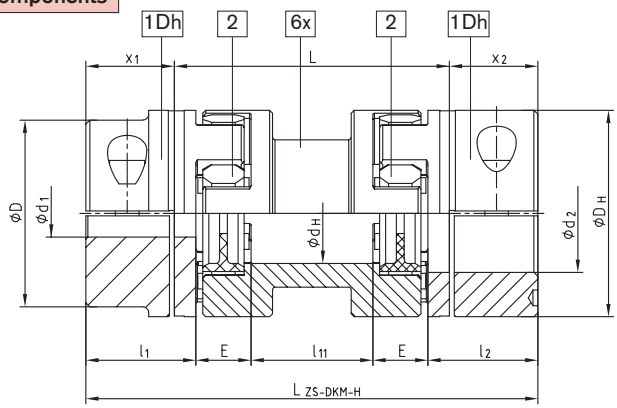
## Double-cardanic spacer design ZS-DKM-H



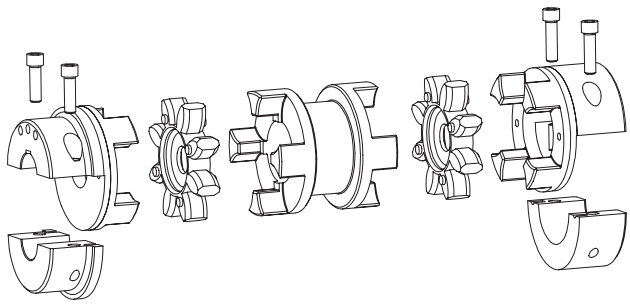
Same advantages as the standard ROTEX® in addition:

- Standard spacers up to 9.84" shaft gap
- Complete installation and removal using only 4 fasteners
- Accommodates high shaft misalignments while remaining torsionally symmetric
- Restoring forces are reduced to a minimum
- Ex Certified to EC Standard 94/9/EC (design 7.5 clamping hub without key according to category 3)
- Installation instructions available at www.ktr.com

### Components




Design ZS-DKM-H



**ROTEX® ZS-DKM-H**

| Size | DBSE L [in] | Bore. Ød1/d2 [in] | Spider (part 2) 1) TKN [lb-in] | Dimensions [in] | | | | | | | Fastener DIN EN ISO 4762 – 12.9 | | Max. misalignments | | | | | Weight2) [lbs] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | DH | dH | l1; l2 | x1; x2 | l11 | E | LZS-DKM-H | M | TA [lb-in] | Axial [in] | at n = 1800 rpm | | at n = 3600 rpm | | |
| | | | | | | | | | | | | | | Parallel [in] | Angular [°] | Parallel [in] | Angular [°] | |
| 24 | 3.94 | 1.125 | 300 | 2.17 | 1.06 | 1.18 | 0.89 | 1.93 | 0.71 | 5.71 | M6 | 124 | 0.06 | 0.04 | | 0.03 | | 3.1 |
| | 5.51 | | | | | | | 3.50 | | 7.28 | | | | 0.07 | | 0.04 | | 3.5 |
| 28 | 3.94 | 1.438 | 840 | 2.56 | 1.18 | 1.38 | 1.00 | 1.61 | 0.79 | 5.94 | M8 | 310 | 0.06 | 0.04 | | 0.03 | | 4.2 |
| | 5.51 | | | | | | | 3.19 | | 7.52 | | | | 0.06 | | 0.04 | | 4.9 |
| 38 | 3.94 | 1.688 | 1,680 | 3.15 | 1.50 | 1.77 | 1.40 | 1.30 | 0.94 | 6.73 | M8 | 310 | 0.07 | 0.04 | | 0.02 | | 8.6 |
| | 5.51 | | | | | | | 2.87 | | 8.31 | | | | 0.06 | | 0.04 | | 9.0 |
| 42 | 3.94 | 2.125 | 2,340 | 3.74 | 1.81 | 1.97 | 1.54 | 1.02 | 1.02 | 7.01 | M10 | 611 | 0.08 | 0.03 | | 0.02 | | 11 |
| | 5.51 | | | | | | | 2.60 | | 8.58 | | | | 0.06 | | 0.04 | | 13 |
| 48 | 3.94 | 2.313 | 2,740 | 4.13 | 2.01 | 2.20 | 1.77 | 0.87 | 1.10 | 7.48 | M12 | 1,062 | 0.08 | 0.03 | | 0.02 | | 16 |
| | 5.51 | | | | | | | 2.44 | | 9.06 | | | | 0.06 | | 0.04 | | 17 |
| 55 | 3.94 | 2.625 | 3,620 | 4.72 | 2.36 | 2.56 | 1.97 | 0.39 | 1.18 | 7.87 | M12 | 1,062 | 0.09 | 0.02 | 0.9 | 0.02 | 0.6 | 21 |
| | 5.51 | | | | | | | 1.97 | | 9.45 | | | | 0.05 | | 0.03 | | 25 |
| | 7.09 | | | | | | | 3.54 | | 11.02 | | | | 0.07 | | 0.05 | | 27 |
| | 7.87 | | | | | | | 4.33 | | 11.81 | | | | 0.09 | | 0.06 | | 28 |
| 65 | 5.51 | 3.000 | 5,530 | 5.31 | 2.68 | 2.95 | 2.36 | 1.57 | 1.38 | 10.24 | M12 | 1,062 | 0.10 | 0.05 | | 0.03 | | 36 |
| | 7.09 | | | | | | | 3.15 | | 11.81 | | | | 0.07 | | 0.05 | | 37 |
| 75 | 5.51 | 3.438 | 11,320 | 6.30 | 3.15 | 3.35 | 2.66 | 0.98 | 1.57 | 10.83 | M16 | 2,611 | 0.12 | 0.04 | | 0.03 | | 52 |
| | 7.09 | | | | | | | 2.56 | | 12.40 | | | | 0.06 | | 0.04 | | 57 |
| | 7.87 | | | | | | | 3.35 | | 13.19 | | | | 0.08 | | 0.05 | | 60 |
| | 9.84 | | | | | | | 5.31 | | 15.16 | | | | 0.11 | | 0.07 | | 65 |
| 90 | 7.09 | 4.250 | 21,240 | 7.87 | 3.94 | 3.94 | 3.21 | 2.09 | 1.77 | 13.50 | M20 | 5,133 | 0.13 | 0.06 | | 0.04 | | 108 |
| | 9.84 | | | | | | | 4.84 | | 16.26 | | | | 0.10 | | 0.07 | | 116 |

1) Maximum torque of the coupling $TK_{max.}$ = rated torque of the coupling $T_{KN}$ x 2
Size 24 to 75 spider type 95/98 Sh A-GS; at size 90 spider type 95 Sh A with inner ring
ZS-DKM-H: transmittable torque according to 92 Sh A-GS

2) Calculated to max. bore
Inch bores machined to AGMA Class 1, Metric bores machined to H7

NOTE: The standard is only for horizontal design. Vertical design on request.

### Order form

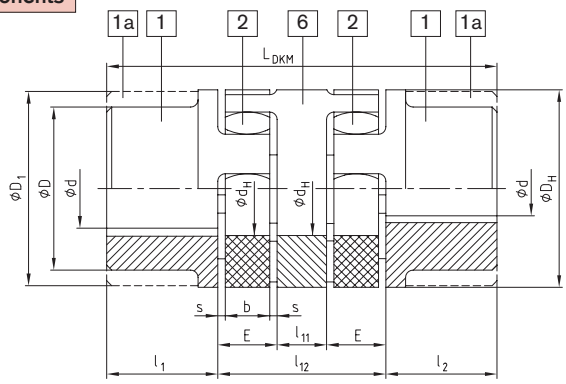
| ROTEX® 38 | ZS-DKM-H | 140 | 98 Sh A | ∅38 | ∅30 |
|---|---|---|---|---|---|
| Coupling size | Design | Shaft distance dimension L | Spider hardness | Bore | Bore |

## Double-cardanic spacer design DKM

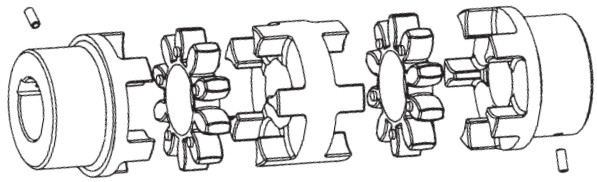
Same advantages as the standard ROTEX® in addition:

- Greater shaft misalignments
- 3-part double cardanic design eliminating the need for bearing support
- Restoring forces are reduced to a minimum
- ⟨Ex⟩ certified to EC Standard 94/9/EC (Explosion Certificate ATEX 95)
- Installation instructions available at www.ktr.com

### Components




Design DKM



| ROTEX® DKM (No. 018) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | Ød ØD ØD1 | Spider (part 2) Nominal torque [lb-in] | | Dimensions [in] | | | | | | | | | Max. misalignments at n = 1800 rpm | | |
| | | 92 Sh-A | 98 Sh-A | $D_H$ | $d_H$ | $l_1$; $l_2$ | $l_{11}$ | $l_{12}$ | E | s | b | $L_{DKM}$ | Parallel [in] | Angular [°] | Axial [in] |
| 19 | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | 89 | 150 | 1.57 | 0.71 | 0.98 | 0.39 | 1.65 | 0.63 | 0.08 | 0.47 | 3.62 | 0.02 | 0.9 | +0.05/-0.04 |
| 24 | | 300 | 530 | 2.17 | 1.06 | 1.18 | 0.63 | 2.05 | 0.71 | 0.08 | 0.55 | 4.41 | 0.02 | 0.9 | +0.06/-0.04 |
| 28 | | 840 | 1,410 | 2.56 | 1.18 | 1.38 | 0.71 | 2.28 | 0.79 | 0.10 | 0.59 | 5.04 | 0.02 | 0.9 | +0.06/-0.06 |
| 38 | | 1,680 | 2,870 | 3.15 | 1.50 | 1.77 | 0.79 | 2.68 | 0.94 | 0.12 | 0.71 | 6.22 | 0.03 | 0.9 | +0.07/-0.06 |
| 42 | | 2,340 | 3,980 | 3.74 | 1.81 | 1.97 | 0.87 | 2.91 | 1.02 | 0.12 | 0.79 | 6.85 | 0.03 | 0.9 | +0.08/-0.08 |
| 48 | | 2,740 | 4,640 | 4.13 | 2.01 | 2.20 | 0.94 | 3.15 | 1.10 | 0.14 | 0.83 | 7.56 | 0.03 | 0.9 | +0.08/-0.08 |
| 55 | | 3,620 | 6,060 | 4.72 | 2.36 | 2.56 | 1.10 | 3.46 | 1.18 | 0.16 | 0.87 | 8.58 | 0.04 | 0.9 | +0.09/-0.08 |
| 65 | | 5,530 | 8,310 | 5.31 | 2.68 | 2.95 | 1.26 | 4.02 | 1.38 | 0.18 | 1.02 | 9.92 | 0.04 | 0.9 | +0.10/-0.08 |
| 75 | | 11,320 | 16,990 | 6.30 | 3.15 | 3.35 | 1.42 | 4.57 | 1.57 | 0.20 | 1.18 | 11.26 | 0.05 | 0.9 | +0.12/-0.12 |
| 90 | | 21,240 | 31,860 | 7.87 | 3.94 | 3.94 | 1.57 | 5.12 | 1.77 | 0.22 | 1.34 | 12.99 | 0.05 | 0.9 | +0.13/-0.12 |

Inch bores machined to AGMA Class 1, Metric bores machined to H7

**Additional design: ZS-DKM1**
Please request sheet M369832.

**Order form:**

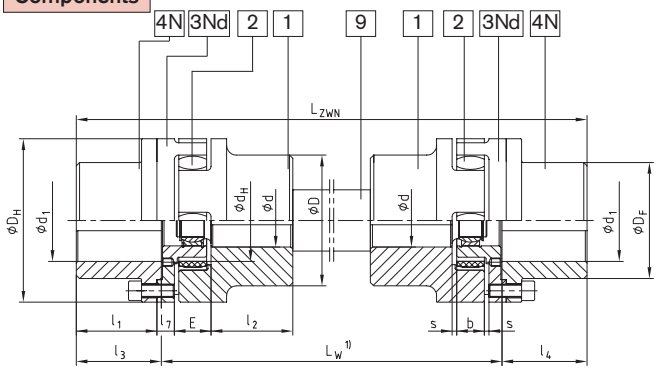
| ROTEX® 38 | DKM | EN-GJL-250 | 98 Sh A | 1 — | Ø 38 | 1 — | Ø 30 |
|---|---|---|---|---|---|---|---|
| Coupling size | Design | Material | Spider hardness | Comp-onent | Bore | Comp-onent | Bore |

## Intermediate shaft design ZWN and ZR

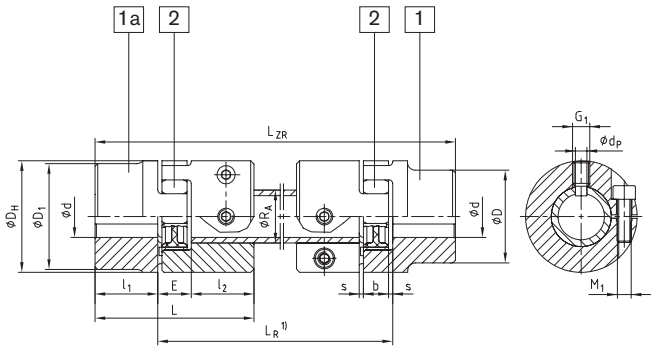
Same advantages as the standard ROTEX® in addition:

- Connects applications with large shaft gaps
- Compensates for greater parallel misalignments
- Allows radial installation without moving components
- ZWN style – bearing supported intermediate shaft
- ZR style – intermediate shaft coupling with the GS spider can be removed radially
- Installation instructions available at www.ktr.com

### Components




Design ZWN




Design ZR with GS spider

**ROTEX® ZWN (Nr. 017) and ZR (Nr. 037)**

| Size | Bore Ød ØD ØD1 | Dimensions of ZWN and ZR (in) | | | | | | | | | | | Dimensions for ZR (in) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Component 4N [St] bore Ød1 max | Materials see page 46 | | | | | | | | | | Tube | | Fastener | | | | | | | |
| | | | $D_H$ | $D_F$ | $d_H$ | $l_1; l_2$ | E | s | b | $l_3; l_4$ | $l_7$ | $L_{ZWN}$ | $R_A$ | $C^{2)}$ lb-ft²/rad | $M_1$ | $T_A$ [lb-in] | | L | Dog point setscrew $G_1$ | Dog Point $d_P$ [in] | Axial misalignment [in] | Angular misalignment [degrees] |
| 19[3] | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | — | 1.57 | — | 0.71 | 0.98 | 0.63 | 0.08 | 0.47 | — | — | — | 3/4x11GA | 520 | M6 | 124 | | 2.60 | M6 | 0.16 | 0.05 | 0.9 |
| 24 | | 0.938 | 2.17 | 1.42 | 1.06 | 1.18 | 0.71 | 0.08 | 0.55 | 1.20 | 0.31 | | 1x5/32 | 2,463 | M6 | 124 | | 3.07 | M8 | 0.22 | 0.06 | 0.9 |
| 28 | | 1.125 | 2.56 | 1.65 | 1.18 | 1.38 | 0.79 | 0.10 | 0.59 | 1.40 | 0.39 | | 1-3/8x5/32 | 4,145 | M8 | 310 | $L_{ZR} = L_R + 2 \cdot l_1$ | 3.54 | M10 | 0.28 | 0.06 | 0.9 |
| 38 | | 1.438 | 3.15 | 2.05 | 1.50 | 1.77 | 0.94 | 0.12 | 0.71 | 1.79 | 0.39 | | 1-5/8x5/32 | 6,464 | M8 | 221 | | 4.49 | M12 | 0.33 | 0.07 | 0.9 |
| 42 | | 1.563 | 3.74 | 2.44 | 1.81 | 1.97 | 1.02 | 0.12 | 0.79 | 2.01 | 0.47 | $L_{ZWN} = L_W + 2 \cdot l_3$ | 1-3/4x5/32 | 9,523 | M10 | 434 | | 4.96 | M12 | 0.33 | 0.08 | 0.9 |
| 48 | | 1.813 | 4.13 | 2.76 | 2.01 | 2.20 | 1.10 | 0.14 | 0.83 | 2.24 | 0.47 | | 2x5/32 | 13,423 | M12 | 761 | | 5.51 | M16 | 0.47 | 0.08 | 0.9 |
| 55 | | 2.125 | 4.72 | 3.15 | 2.36 | 2.56 | 1.18 | 0.16 | 0.87 | 2.60 | 0.63 | | 2-1/8x5/32 | 21,600 | M12 | 1,062 | | 6.30 | M16 | 0.47 | 0.09 | 0.9 |
| 65 | | 2.500 | 5.31 | 3.70 | 2.68 | 2.95 | 1.38 | 0.18 | 1.02 | 2.99 | 0.63 | | 2-1/2x3/16 | 37,212 | M12 | 1,062 | | 7.28 | M16 | 0.47 | 0.10 | 0.9 |
| 75 | | 2.813 | 6.30 | 4.25 | 3.15 | 3.35 | 1.57 | 0.20 | 1.18 | 3.41 | 0.75 | | 3x3/16 | 58,817 | M16 | 2,611 | | 8.27 | M16 | 0.47 | 0.12 | 0.9 |
| 90 | | 3.875 | 7.87 | 5.59 | 3.94 | 3.94 | 1.77 | 0.22 | 1.34 | 4.00 | 0.79 | | **Selection indication for design ZR:** | | | | | | | | | |
| 100 | | 4.250 | 8.86 | 6.22 | 4.45 | 4.33 | 1.97 | 0.24 | 1.50 | 4.39 | 0.98 | | • Transmittable torques of keyless clamping hubs have to be observed. Please order dimension sheet no. 5020/000/017–757537. | | | | | | | | | |
| 110 | | 4.813 | 10.04 | 7.01 | 5.00 | 4.72 | 2.17 | 0.26 | 1.65 | 4.80 | 1.02 | | | | | | | | | | | |
| 125 | | 5.563 | 11.42 | 8.11 | 5.79 | 5.51 | 2.36 | 0.28 | 1.81 | 5.59 | 1.18 | | • Material on request. | | | | | | | | | |

[1)]) Please provide the shaft distance dimension $L_W$ or $L_R$ in all inquiries and orders along with the maximum speed to review the critical whipping speed.

[2)] Torsion spring stiffness when the intermediate tube is 39 in

[3)] Design ZR

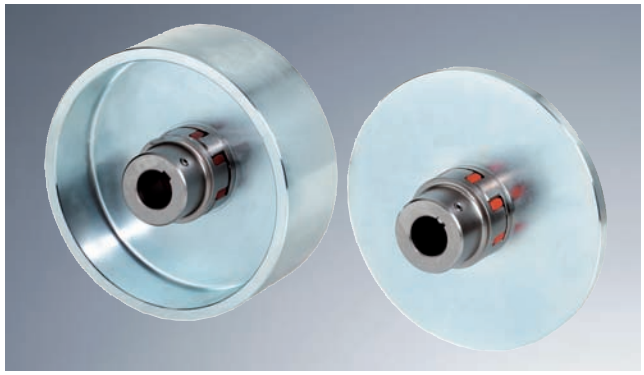
Inch bores machined to AGMA Class 1, Metric bores machined to H7

Design ZWNV - for vertical assembly with thrust bearing, please request sheet 5020/000/027-760390.

**Order form:**

| ROTEX® 38 | ZWN | 1200 | St / EN-GJL-250 | 98 Sh A | 4N — | Ø 38 | 4N — | Ø 30 |
|---|---|---|---|---|---|---|---|---|
| Coupling size | Design | Shaft distance dim. $L_W$ | Material | Spider hardness | Compo-nent | Bore | Compo-nent | Bore |

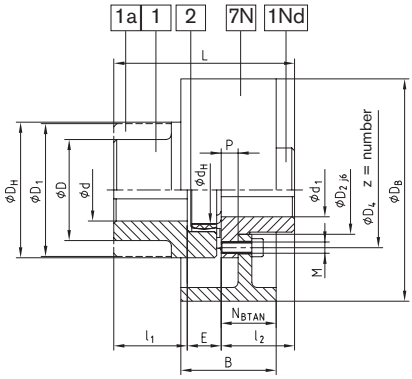
## Design BTAN with brake drum/design SBAN with brake disc



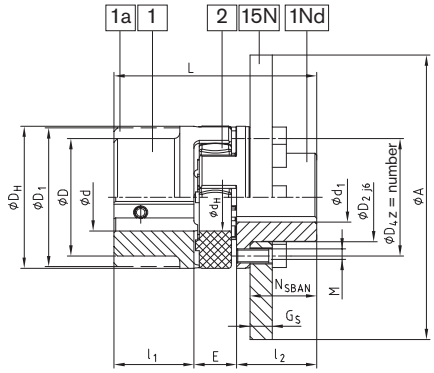
Same advantages as the standard ROTEX® in addition:

- Shaft coupling BTAN designed to be mounted to external brake drums with brake discs to DIN 5431/15435
- Shaft coupling BTAN with disc for brake calipers
- Each coupling design can be combined with several sizes of brake drums (see dimension "N")
- The brake drum or brake disc must be mounted onto the shaft with the highest mass moment of inertia
- The maximum brake torque must not exceed the maximum coupling torque
- Installation instructions available at www.ktr.com

### Components




Brake drum design BTAN




Disc brake design SBAN

| ROTEX® type BTAN (No. 011) and SBAN (No. 013) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | Pilot bore Ød; ØD ØD1 | Bore max.d1 | | Dimensions [in] | | | | | | | | | | | | |
| | | EN-GJS-400-15 | Steel | $D_H$ | $D_2$ | $D_4$ | $d_H$ | z | pitch [1] | M | $T_A$ [lb-in] | $l_1$; $l_2$ | E | L | P | $N_{SBAN}$ |
| 38 | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | — | 1.313 | 3.15 | 1.97 | 2.60 | 1.50 | 8 | 8x45° | M8 | 363 | 1.77 | 0.94 | 4.49 | 0.30 | 1.48 |
| 42 | | — | 1.563 | 3.74 | 2.36 | 3.15 | 1.81 | 12 | 16x22.5° | M8 | 363 | 1.97 | 1.02 | 4.96 | 0.37 | 1.59 |
| 48 | | — | 1.813 | 4.13 | 2.68 | 3.54 | 2.01 | 12 | | M8 | 363 | 2.20 | 1.10 | 5.51 | 0.41 | 1.79 |
| 55 | | — | 2.125 | 4.72 | 3.07 | 4.02 | 2.36 | 8 | 8x45° | M10 | 735 | 2.56 | 1.18 | 6.30 | 0.49 | 2.07 |
| 65 | | — | 2.500 | 5.31 | 3.62 | 4.57 | 2.68 | 12 | 16x22.5° | M10 | 735 | 2.95 | 1.38 | 7.28 | 0.53 | 2.42 |
| 75 | | — | 2.813 | 6.30 | 4.17 | 5.35 | 3.15 | 15 | | M12 | 1062 | 3.35 | 1.57 | 8.27 | 0.61 | 2.74 |
| 90 | | — | 3.875 | 7.87 | 5.51 | 6.77 | 3.94 | 15 | | M16 | 2611 | 3.94 | 1.77 | 9.65 | 0.73 | 3.21 |
| 100 | | 3.875 | — | 8.86 | 6.14 | 7.68 | 4.45 | 15 | 20x18° | M16 | 2611 | 4.33 | 1.97 | 10.63 | 0.81 | 3.52 |
| 110 | | 4.250 | — | 10.04 | 6.93 | 8.58 | 5.00 | 15 | | M20 | 5133 | 4.72 | 2.17 | 11.61 | 0.93 | 3.80 |
| 125 | | 5.000 | — | 11.42 | 8.03 | 9.92 | 5.79 | 15 | | M20 | 5133 | 5.51 | 2.36 | 13.39 | 1.08 | 4.43 |

[1] Thread in the hub between the jaws

| Design BTAN | | | | | | | | | | | | Design SBAN | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brake drum | ROTEX® BTAN dimension „$N_{BTAN}$“ | | | | | | | | | | Speed rpm [V] (98 ft/s) | Brake Disc | ROTEX® SBAN coupling/disc brake dimension | | | | | | | | | | Speed rpm [V] (98 ft/s) |
| | 38 | 42 | 48 | 55 | 65 | 75 | 90 | 100 | 110 | 125 | | | 38 | 42 | 48 | 55 | 65 | 75 | 90 | 100 | 110 | 125 | |
| 160x60 | 1.22 | | | | | | | | | | 3,550 | 200x12.5 | x | | | | | | | | | | 2,800 |
| 200x75 | 1.42 | 1.50 | 1.54 | 1.61 | | | | | | | 2,800 | 250x12.5 | x | x | x | | | | | | | | 2,240 |
| 250x95 | 1.73 | 1.81 | 1.85 | 1.93 | 1.97 | 2.05 | | | | | 2,240 | 315x16 | | x | x | x | x | x | | | | | 1,800 |
| 315x118 | | 2.17 | 2.20 | 2.28 | 2.32 | 2.40 | 2.52 | | | | 1,800 | 400x16 | | | x | x | x | x | x | x | x | | 1,400 |
| 400x150 | | 2.68 | 2.72 | 2.80 | 2.83 | 2.91 | 3.03 | 3.11 | 3.23 | | 1,400 | 500x16 | | | | x | x | x | x | x | x | x | 1,120 |
| 500x190 | | | | | 3.43 | 3.50 | 3.62 | 3.70 | 3.82 | 3.98 | 1,120 | 630x20 | | | | | x | x | x | x | x | x | 900 |
| 630x236 | | | | | | 4.21 | 4.33 | 4.41 | 4.53 | 4.69 | 900 | 710x20 | | | | | x | x | x | x | x | x | 800 |
| 710x265 | | | | | | | | 4.84 | 4.96 | 5.12 | 800 | 800x25 | | | | | | | x | x | x | x | 710 |
| 800x300 | | | | | | | | | | 5.67 | 710 | 900x25 | | | | | | | | | x | x | 630 |

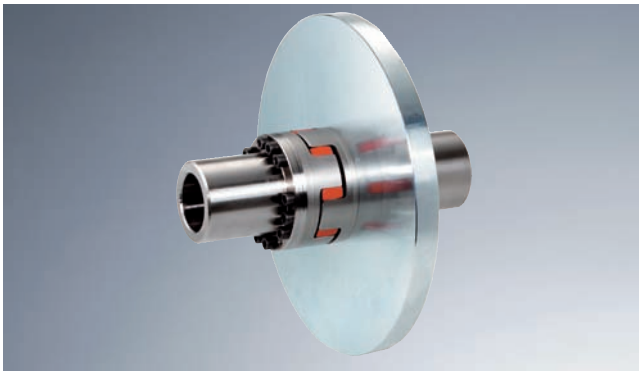
Other sizes available, request sheets: BTAN:M 380821
SBAN straight: M380822; offset: M370065
FNN hub: M380823

Inch bores machined to AGMA Class 1, Metric bores machined to H7

**Order form:**

| ROTEX® 38 | BTAN | ∅200x75 | 92 Sh A | 1Nd — | Ø 38 | 1 — | Ø 30 |
|---|---|---|---|---|---|---|---|
| Coupling size | Design | ∅Brake drum x witdh of brake drum | Spider hardness | Compo-nent | Bore | Compo-nent | Bore |

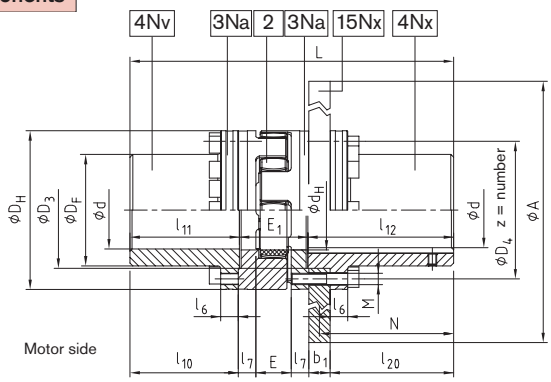
## Design AFN-SB special with brake disc

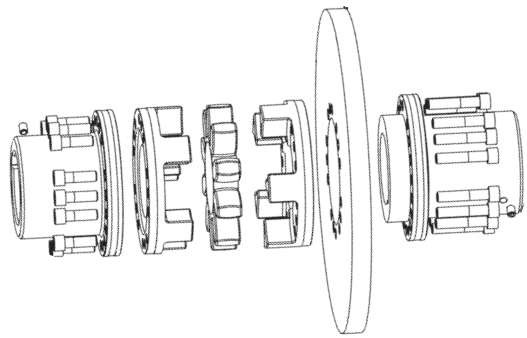


Same advantages as the standard ROTEX® in addition:

- Shaft coupling AFN-SB special with brake disc for brake calipers
- The brake disc must be mounted onto the shaft with the highest mass moment of inertia
- The maximum brake torque must not exceed the maximum coupling torque
- Installation instructions available at www.ktr.com

### Components



| ROTEX® Design AFN-SB special | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | Bore Ød | | Dimensions [in] | | | | | | | | | | |
| | min. | max. | $D_H$ | $D_F$ | $D_3$ H7/h7 | $D_4$ | $d_H$ | E | $E_1$ | M | z | Pitch | $T_A$ [lb-in] |
| 65 | 0.875 | 2.500 | 5.31 | 3.70 | 3.78 | 4.57 | 2.68 | 1.38 | 2.56 | M10 | 12 | 16x22,5° | 730 |
| 75 | 1.188 | 2.813 | 6.30 | 4.25 | 4.41 | 5.35 | 3.15 | 1.57 | 2.95 | M12 | 15 | | 1,060 |
| 90 | 1.625 | 3.875 | 7.87 | 5.59 | 5.71 | 6.77 | 3.94 | 1.77 | 3.23 | M16 | 15 | | 2,610 |
| 100 | 1.813 | 4.250 | 8.86 | 6.22 | 6.50 | 7.68 | 4.45 | 1.97 | 3.82 | M16 | 15 | | 2,610 |
| 110 | 2.375 | 4.813 | 10.04 | 7.01 | 7.09 | 8.58 | 5.00 | 2.17 | 4.06 | M20 | 15 | 20x18° | 5,130 |
| 125 | 2.375 | 5.563 | 11.42 | 8.11 | 8.46 | 9.92 | 5.79 | 2.36 | 4.57 | M20 | 15 | | 5,130 |
| 140 | 2.375 | 6.375 | 12.60 | 9.25 | 9.65 | 11.10 | 6.50 | 2.56 | 5.04 | M20 | 15 | | 5,130 |
| 160 | 3.188 | 7.313 | 14.57 | 10.63 | 11.02 | 12.80 | 7.48 | 2.95 | 5.75 | M24 | 15 | | 8,850 |

| ROTEX® Design AFN-SB special | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | Torque[1] w/ 95Sh-A | | Max. speed [rpm] | Max.[1] brake torque [lb-in] | Dimensions [in] | | | | | | | |
| | $T_{KN}$ | $T_{Kmax.}$ | | | $l_6$ | $l_7$ | $l_{10}$ | $l_{11}$ | $l_{12}$ | $l_{20}$ | N | L |
| 65 | 8,310 | 16,630 | 3,450 | 16,630 | 0.59 | 0.63 | 4.43 | 4.47 | 6.54 | 5.31 | 5.91 | 13.56 |
| 75 | 16,990 | 33,980 | 3,250 | 33,980 | 0.79 | 0.75 | 5.18 | 5.24 | 6.56 | 5.31 | 5.91 | 14.74 |
| 90 | 31,860 | 63,720 | 3,000 | 63,720 | 0.79 | 0.79 | 6.46 | 6.52 | 8.13 | 6.89 | 7.48 | 17.87 |
| 100 | 43,800 | 87,610 | 2,800 | 87,610 | 0.98 | 0.98 | 6.04 | 6.10 | 8.13 | 6.89 | 7.48 | 18.05 |
| 110 | 63,720 | 127,440 | 2,600 | 127,440 | 0.98 | 1.02 | 7.93 | 8.01 | 8.35 | 7.09 | 7.68 | 20.41 |
| 125 | 88,500 | 177,000 | 2,250 | 177,000 | 1.18 | 1.18 | 7.81 | 7.89 | 8.35 | 7.09 | 7.68 | 20.81 |
| 140 | 113,280 | 226,560 | 1,800 | 226,560 | 1.18 | 1.34 | 9.63 | 9.72 | 9.94 | 8.66<br>8.27 [2] | 9.25<br>9.06 [2] | 24.70 |
| 160 | 169,920 | 339,840 | 1,500 | 339,840 | 1.34 | 1.50 | 8.92 | 9.02 | 9.94 | 8.66<br>8.27 [2] | 9.25<br>9.06 [2] | 24.70 |

| Selection of ROTEX® coupling/ brake disc | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | Brake disc ∅A x $b_1$ | | | | | | | | | | |
| | 355x30 | 400x30 | 450x30 | 500x30 | 560x30 | 630x30 | 710x30 | 800x30 | 900x30 | 900x40 | 1000x40 |
| 65 | x | x | x | | | | | | | | |
| 75 | | x | x | x | | | | | | | |
| 90 | | | x | x | x | x | | | | | |
| 100 | | | | x | x | x | | | | | |
| 110 | | | | x | x | x | x | | | | |
| 125 | | | | | | x | x | x | | | |
| 140 | | | | | | | x | x | x | x | x |
| 160 | | | | | | | x | x | x | x | x |

[1] The max. braking torque must not exceed the maximum torque of the coupling.

[2] Dimensions for a brake disc width $b_1$ = 1.57 in.

**Order form:**

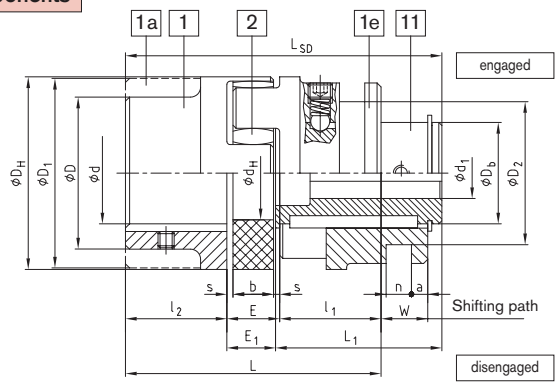
| ROTEX® 90 | AFN-SB special | ∅450x30 | 95 Sh A | 4Nv — | Ø 90 | 4Nx — | Ø 90 |
|---|---|---|---|---|---|---|---|
| Coupling size | Design | ∅Disc brake width of disc] | Spider Hardness | Compo-nent | Bore | Compo-nent | Bore |

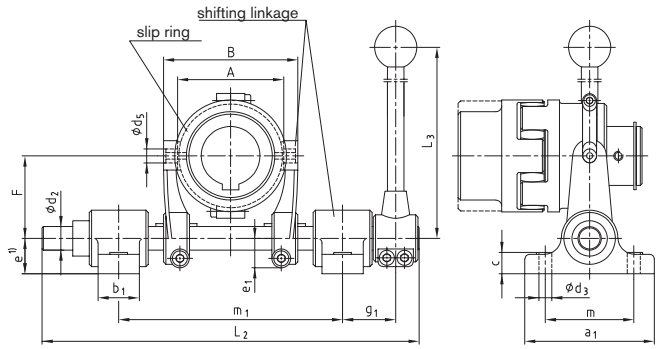
## Design SD (shiftable at standstill)

Same advantages as the standard ROTEX® in addition:

- Shiftable coupling for all applications in general industry
- Easy to engage and disengage drive and driven at standstill
- Optional shiftable linkage kit available to ease installation
- Spring and ball detent locking mechanism
- Installation instructions available at www.ktr.com

### Components




### ROTEX® design SD (No. 015)

| Size | ∅d ∅D ∅$D_1$ | Bore $d_1$ | | Dimensions [in] | | | | | | | | | | | | | | | | Shifting force set in [lbf] | Slip ring size | Shiftable linkage size |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | min. | max. | $D_H$ | $D_2$±0,1 | $D_b$ | $d_H$ | $l_1$;$l_2$ | E | s | b | $E_1$ | L | $L_1$ | W | a | n±0,1 | $L_{SD}$ | | | |
| 24 | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | 0.375 | 0.688 | 2.17 | 1.61 | 1.18 | 1.06 | 1.18 | 0.71 | 0.08 | 0.55 | 0.65 | 3.07 | 2.03 | 0.63 | 0.24 | 0.24 | 3.86 | 25 | — | — |
| 28 | | 0.438 | 0.875 | 2.56 | 2.28 | 1.42 | 1.18 | 1.38 | 0.79 | 0.10 | 0.59 | 0.71 | 3.54 | 2.36 | 0.69 | 0.31 | 0.31 | 4.45 | 29 | — | — |
| 38 | | 0.500 | 1.125 | 3.15 | 2.78 | 1.77 | 1.50 | 1.77 | 0.94 | 0.12 | 0.71 | 0.87 | 4.49 | 2.87 | 0.83 | 0.31 | 0.49 | 5.51 | 34 | 1.1 | 1 |
| 42 | | 0.563 | 1.250 | 3.74 | 2.78 | 1.97 | 1.81 | 1.97 | 1.02 | 0.12 | 0.79 | 0.94 | 4.96 | 3.23 | 0.91 | 0.31 | 0.49 | 6.14 | 41 | 1.1 | 1 |
| 48 | | 0.625 | 1.500 | 4.13 | 3.52 | 2.36 | 2.01 | 2.20 | 1.10 | 0.14 | 0.83 | 1.00 | 5.51 | 3.56 | 0.96 | 0.24 | 0.69 | 6.77 | 45 | 2.2 | 2 |
| 55 | | 0.750 | 1.813 | 4.72 | 4.43 | 2.76 | 2.36 | 2.56 | 1.18 | 0.16 | 0.87 | 1.06 | 6.30 | 4.06 | 1.02 | 0.24 | 0.71 | 7.68 | 56 | 3.3 | 3 |
| 65 | | 0.813 | 2.125 | 5.31 | 4.43 | 3.15 | 2.68 | 2.95 | 1.38 | 0.18 | 1.02 | 1.26 | 7.28 | 4.72 | 1.20 | 0.28 | 0.71 | 8.94 | 63 | 3.3 | 3 |
| 75 | | 1.000 | 2.500 | 6.30 | 5.14 | 3.74 | 3.15 | 3.35 | 1.57 | 0.20 | 1.18 | 1.46 | 8.27 | 5.31 | 1.38 | 0.24 | 0.81 | 10.12 | 79 | 4.4 | 3 |
| 90 | | 1.125 | 2.813 | 7.87 | 6.48 | 4.33 | 3.94 | 3.94 | 1.77 | 0.22 | 1.34 | 1.61 | 9.65 | 5.98 | 1.56 | 0.31 | 1.00 | 11.54 | 79 | 5.5 | 4 |
| 100 | | 1.188 | 3.000 | 8.86 | 6.48 | 4.53 | 4.45 | 4.33 | 1.97 | 0.24 | 1.50 | 1.81 | 10.63 | 6.65 | 1.73 | 0.55 | 1.00 | 12.80 | 86 | 5.5 | 4 |
| 110 | | 1.438 | 3.250 | 10.04 | 6.48 | 4.92 | 5.00 | 4.72 | 2.17 | 0.26 | 1.65 | 2.03 | 11.61 | 7.24 | 1.91 | 0.73 | 1.00 | 13.98 | 101 | 5.5 | 4 |
| 125 | | 1.625 | 3.875 | 11.42 | 8.29 | 5.71 | 5.79 | 5.51 | 2.36 | 0.28 | 1.81 | 2.19 | 13.39 | 8.21 | 2.09 | 0.73 | 1.20 | 15.91 | 113 | 6.6 | 5 |

### slip ring and shiftable linkage

| Size | Shiftable linkage size | Dimensions [in] | | | | | | | | | | | | | | | | | Max. speed n for slip ring [rpm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $a_1$ | $b_1$ | c | $d_2$ | $d_3$ | $d_5$ | $e^{1)}$ | $e_1$ | F | $g_1$ | $L_2$ | $L_3$ | m | $m_1$ min. | $m_1$ max. | A | B | |
| 38 | 1 | 4.33 | 1.38 | 0.71 | 0.79 | 0.43 | 0.47 | 1.18 | 0.98 | 2.76 | 2.17 | 12.60 | 15.75 | 2.95 | 7.09 | 7.48 | 3.54 | 4.49 | 3,280 |
| 42 | 1 | | | | | | | | | | | | | | | | | | |
| 48 | 2 | 5.51 | 1.57 | 0.98 | 0.98 | 0.53 | 0.67 | 1.57 | 1.06 | 3.84 | 2.36 | 16.93 | 17.72 | 3.94 | 9.45 | 10.63 | 4.37 | 5.94 | 2,550 |
| 55 | 3 | | | | | | | | | | | | | | | | 5.51 | 7.09 | 2,120 |
| 65 | 3 | | | | 1.18 | | | | 1.28 | 4.72 | 2.76 | 19.29 | 23.62 | | 11.02 | 12.20 | | | |
| 75 | 3 | | | | | | | | | | | | | | | | 6.69 | 8.27 | 1,710 |
| 90 | 4 | 6.30 | 1.77 | | | | | 1.97 | 1.48 | 5.81 | 2.76 | 22.24 | 29.53 | 4.72 | 12.64 | 14.37 | 7.87 | 9.61 | 1,360 |
| 100 | 4 | | | | 1.38 | | 0.83 | | | | | | | | | | | | |
| 110 | 4 | | | | | | | | | | | | | | | | | | |
| 125 | 5 | | | | 1.57 | | 0.98 | | 1.81 | 7.48 | 3.15 | 24.80 | 42.05 | | 14.37 | 16.14 | 9.84 | 11.81 | 855 |

[1)] In case of a extended base plate the dimension "e" of the shiftable linkage size 5 has to be increased by at least 0.4 in.

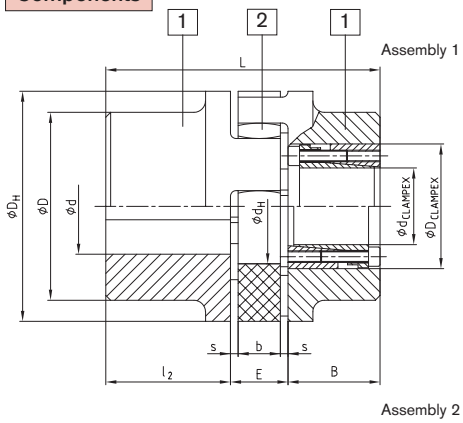
Inch bores machined to AGMA Class 1, Metric bores machined to H7

**Order form:**

| ROTEX® 38 | SD | with 1,1 and 1 | 92 Sh A | 1 — | Ø 38 | 11 — | Ø 28 |
|---|---|---|---|---|---|---|---|
| Coupling size | Design | with slip ring 1,1 and shiftable linkage 1 | Spider hardness | Compo-nent | Bore | Compo-nent | Bore |

## Additional designs

### Components



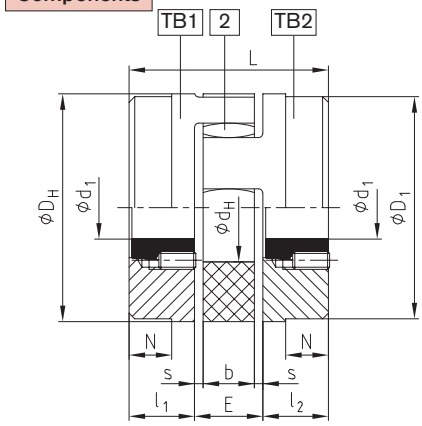

**ROTEX® type No. 001 with clamping unit CLAMPEX® KTR 200**

| Size | Ød ØD ØD1 | Hub material | CLAMPEX® KTR 200 Largest poss KTR clamping set dxD | CLAMPEX® KTR 200 Transmittable torques and force T [lb-in] | CLAMPEX® KTR 200 Transmittable torques and force FAX [lbf] | B | Dimensions [in] l2 | E | s | b | DH | D | dH | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 42 | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | Steel | 30x55 | 6,800 | 11,460 | 1.89 | 1.97 | 1.02 | 0.12 | 0.79 | 3.74 | — | 1.81 | length L = l2+ E + B (clamping set) |
| 48 | | | 35x60 | 10,590 | 15,280 | 1.89 | 2.20 | 1.10 | 0.14 | 0.83 | 4.13 | — | 2.01 | |
| 55 | | | 45x75 | 18,870 | 21,350 | 2.32 | 2.56 | 1.18 | 0.16 | 0.87 | 4.72 | — | 2.36 | |
| 65 | | | 45x75 | 18,870 | 21,350 | 2.32 | 2.95 | 1.38 | 0.18 | 1.02 | 5.31 | 4.53 | 2.68 | |
| 75 | | | 50x80 | 27,960 | 28,320 | 2.32 | 3.35 | 1.57 | 0.20 | 1.18 | 6.30 | 5.31 | 3.15 | |
| 90 | | | 65x95 | 36,350 | 28,320 | 2.32 | 3.94 | 1.77 | 0.22 | 1.34 | 7.87 | 6.30 | 3.94 | |
| 100 | | EN-GJS-400-15 | 65x95 | 36,350 | 28,320 | 2.32 | 4.33 | 1.97 | 0.24 | 1.50 | 8.86 | 7.09 | 4.45 | |
| 110 | | | 70x110 | 62,160 | 45,180 | 2.76 | 4.72 | 2.17 | 0.26 | 1.65 | 10.04 | 7.87 | 5.00 | |
| 125 | | | 80x120 | 71,030 | 45,180 | 2.76 | 5.51 | 2.36 | 0.28 | 1.81 | 11.42 | 9.06 | 5.79 | |
| 140 | | | 95x135 | 100,660 | 53,720 | 2.76 | 6.10 | 2.56 | 0.30 | 1.97 | 12.60 | 10.04 | 6.50 | |
| 160 | | | 110x155 | 142,210 | 65,640 | 3.15 | 6.89 | 2.95 | 0.35 | 2.24 | 14.57 | 11.42 | 7.48 | |
| 180 | | | 120x165 | 193,920 | 82,050 | 3.15 | 7.68 | 3.35 | 0.41 | 2.52 | 16.54 | 12.80 | 8.66 | |

**ROTEX® type No. 001 with clamping unit CLAMPEX® KTR 200**

| KTR 200 Size | Length | Transmittable torque and axial force | | Clamping screw DIN EN ISO 4762 – 12.9 | | KTR 200 Size | Length | Transmittable torque and axial force | | Clamping screw DIN EN ISO 4762 – 12.9 | | KTR 200 Size | Length | Transmittable torque and axial force | | Clamping screw DIN EN ISO 4762 – 12.9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| dxD | B | T [lb-in] | Fax [lbf] | zxM | TA [lb-in] | dxD | B | T [lb-in] | Fax [lbf] | zxM | TA [lb-in] | dxD | B | T [lb-in] | Fax [lbf] | zxM | TA [lb-in] |
| 20x47 | 1.89 | 4,540 | 11,460 | 6xM6 | 150 | 38x65 | 1.89 | 11,490 | 15,280 | 8xM6 | 150 | 65x95 | 2.32 | 36,340 | 28,320 | 8xM8 | 363 |
| 22x47 | 1.89 | 4,990 | 11,460 | 6xM6 | 150 | 40x65 | 1.89 | 12,100 | 15,280 | 8xM6 | 150 | 70x110 | 2.76 | 62,150 | 45,180 | 8xM10 | 735 |
| 24x50 | 1.89 | 5,450 | 11,460 | 6xM6 | 150 | 42x75 | 2.32 | 17,610 | 21,350 | 6xM8 | 363 | 75x115 | 2.76 | 66,580 | 45,180 | 8xM10 | 735 |
| 25x50 | 1.89 | 5,670 | 11,460 | 6xM6 | 150 | 45x75 | 2.32 | 18,860 | 21,350 | 6xM8 | 363 | 80x120 | 2.76 | 71,030 | 45,180 | 8xM10 | 735 |
| 28x50 | 1.89 | 6,350 | 11,460 | 6xM6 | 150 | 48x80 | 2.32 | 26,840 | 28,320 | 8xM8 | 363 | 85x125 | 2.76 | 94,330 | 56,420 | 10xM10 | 735 |
| 30x55 | 1.89 | 6,800 | 11,460 | 6xM6 | 150 | 50x80 | 2.32 | 27,950 | 28,320 | 8xM8 | 363 | 90x130 | 2.76 | 99,880 | 56,420 | 10xM10 | 735 |
| 32x60 | 1.89 | 9,680 | 15,280 | 8xM6 | 150 | 55x85 | 2.32 | 30,750 | 28,320 | 8xM8 | 363 | 95x135 | 2.60 | 100,650 | 53,720 | 10xM10 | 735 |
| 35x60 | 1.89 | 10,590 | 15,280 | 8xM6 | 150 | 60x90 | 2.32 | 33,550 | 28,320 | 8xM8 | 363 | For further details please see CLAMPEX® catalog | | | | | |

### Components




**ROTEX® design No. 001 with Taper-loc Bushing**

| Size | Taper-Clamp Bushing | Dimensions [in] l1;l2 | E | s | b | L | N | DH | D1 | dH | Set screw for taper bushing Size [Inch] | Length [in] | Number | TA [lb-in] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | 1108 | 0.91 | 0.79 | 0.10 | 0.59 | 2.60 | — | 2.56 | 2.56 | 1.18 | 1/4" | 1/2" | 2 | 50 |
| 38 | 1108 | 0.91 | 0.94 | 0.12 | 0.71 | 2.76 | 0.59 | 3.15 | 3.07 | 1.50 | 1/4" | 1/2" | 2 | 50 |
| 42 | 1610 | 1.02 | 1.02 | 0.12 | 0.79 | 3.07 | 0.63 | 3.74 | 3.70 | 1.81 | 3/8" | 5/8" | 2 | 177 |
| 48 | 1615 | 1.54 | 1.10 | 0.14 | 0.83 | 4.17 | 1.10 | 4.13 | 4.09 | 2.01 | 3/8" | 5/8" | 2 | 177 |
| 55 | 2012 | 1.30 | 1.18 | 0.16 | 0.87 | 3.78 | 0.79 | 4.72 | 4.65 | 2.36 | 7/16" | 7/8" | 2 | 274 |
| 75 | 2517 | 2.05 | 1.57 | 0.20 | 1.18 | 5.67 | 1.42 | 6.30 | 5.31 | 3.15 | 1/2" | 1" | 2 | 434 |
| | ▪ 3020 | | | | | | | | | | 5/8" | 1 1/4" | | 814 |

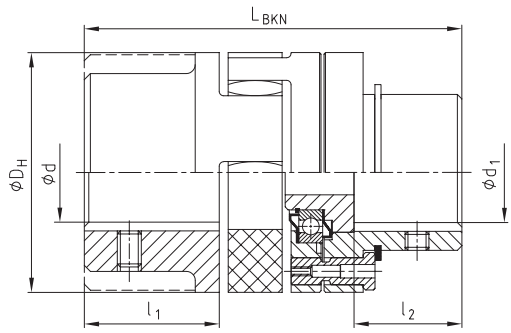
▪ Only available for design TB 2
* 1. BSW thread

**Coupling design TB 1/1; TB 2/2; TB 1/2 possible**

▪ Please request sheet M373054.

## Additional designs with torque limiter

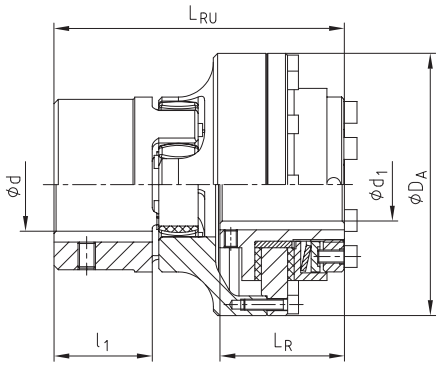
Due to the many applications of ROTEX® in several different mounting situations, this coupling system is available with various hub designs. These designs are available for either keyed or frictionally engaged connections. Installation for gear shafts with integrated jaws or similar applications are also available.




**ROTEX® BKN - shear pin coupling, design BKN No. 009**

| Size | Ød | Max. Ød$_1$ | $l_1$ | $l_2$ | $L_{BKN}$ | $D_H$ | Min. fracture torque [lb-in] |
|---|---|---|---|---|---|---|---|
| 28 | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | 1.125 | 1.38 | 0.98 | 3.98 | 2.56 | 880 |
| 38 | | 1.438 | 1.77 | 1.38 | 4.92 | 3.15 | 1,680 |
| 42 | | 1.563 | 1.97 | 1.57 | 5.47 | 3.74 | 2,210 |
| 48 | | 1.813 | 2.20 | 1.81 | 6.02 | 4.13 | 2,650 |
| 55 | | 2.125 | 2.56 | 2.17 | 6.97 | 4.72 | 3,540 |
| 65 | | 2.500 | 2.95 | 2.56 | 7.95 | 5.31 | 4,420 |
| 75 | | 2.813 | 3.35 | 2.76 | 9.06 | 6.30 | 5,310 |
| 90 | | 3.875 | 3.94 | 3.35 | 10.47 | 7.87 | 6,190 |

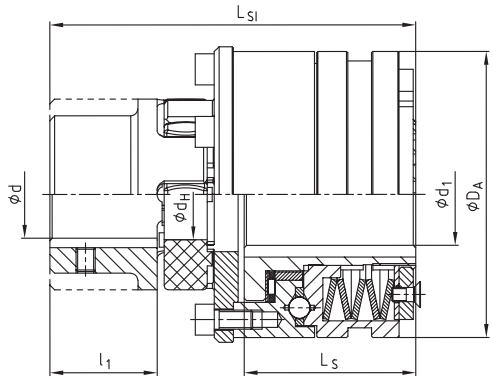
Shear torques required with your order.
Request sheet 5020/000/009-7603




**ROTEX® - RUFLEX® - coupling with torque limiter, design No. 070**

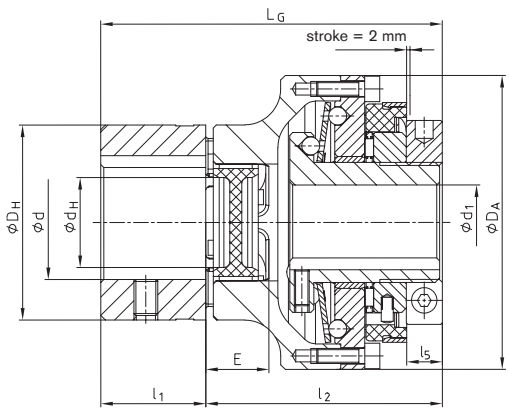
| ROTEX® Size | RUFLEX® Size | Slip torques [lb-in] | Ød | Ød$_1$ max. | $D_A$ | $l_1$ | $L_R$ | $L_{RU}$ |
|---|---|---|---|---|---|---|---|---|
| 14 | 00 | 4 — 44 | Maximum bore size dependent on hub style and material, refer to design No. 001 for | 0.375 | 1.73 | 0.43 | 1.22 | 2.32 |
| 19 | 0 | 18 — 170 | | 0.750 | 2.48 | 0.98 | 1.30 | 3.07 |
| 24 | 01 | 44 — 610 | | 0.875 | 3.15 | 1.18 | 1.77 | 3.86 |
| 28 | 1 | 170 — 1,770 | | 1.000 | 3.86 | 1.38 | 2.05 | 4.45 |
| 38 | 2 | 220 — 3,540 | | 1.313 | 4.72 | 1.77 | 2.24 | 5.24 |
| 48 | 3 | 440 — 7,080 | | 1.688 | 6.38 | 2.20 | 2.68 | 6.54 |
| 75 | 4 | 790 — 14,160 | | 2.125 | 7.28 | 3.35 | 3.07 | 8.07 |

[1] Shallow key required for shafts above Ø.75.




**ROTEX® - KTR-SI - coupling with torque limiter, design No. 070**

| ROTEX® Size | KTR-SI design | KTR-SI Size | Ratchet torque [lb-in] | Ød | max. Ød$_1$ | $D_A$ | $l_1$ | $L_S$ | $L_{SI}$ |
|---|---|---|---|---|---|---|---|---|---|
| 28 | DK | 2 | 100 - 1,770 | Maximum bore size dependent on hub style and material, refer to design No. 001 for details | 1.313 | 3.94 | 1.38 | 2.20 | 4.88 |
| | SR/SGR | 0 | 44 - 350 | | 0.813 | 2.17 | | 1.36 | 4.02 |
| 38 | DK | 3 | 220 - 3,980 | | 1.688 | 4.72 | 1.77 | 2.87 | 6.10 |
| | SR/SGR | 1 | 100 - 880 | | 1.000 | 3.23 | | 1.89 | 5.10 |
| 48 | DK | 4 | 440 - 8,850 | | 2.125 | 5.75 | 2.20 | 3.68 | 7.64 |
| | SR/SGR | 2 | 220 - 1,770 | | 1.313 | 3.94 | | 2.20 | 6.10 |
| 55 | DK | 5 | 750 - 17,700 | | 2.500 | 6.93 | 2.56 | 4.21 | 8.76 |
| | SR/SGR | 3 | 440 - 3,980 | | 1.688 | 4.72 | | 2.87 | 7.32 |
| 75 | DK | — | — | | — | — | 3.35 | — | — |
| | SR/SGR | 4 | 880 - 17,700 | | 2.125 | 5.75 | | 3.68 | 9.51 |
| 90 | DK | — | — | | — | — | 3.94 | — | — |
| | SR/SGR | 5 | 1500 - 30,090 | | 2.500 | 6.93 | | 4.21 | 10.85 |

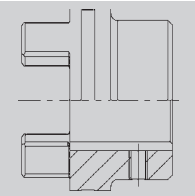



**SYNTEX® - zero-backlash, torsionally rigid overload coupling with ROTEX® - GS**

| ROTEX® Size | SYNTEX® Size | SYNTEX® torque range disc spring [lb-in] | | | | Max. bore | | $D_A$ | $D_H$ | $d_H$ | E | L | $L_G$ | $l_1$ | $l_2$ | $l_5$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $DK_1$ | $DK_2$ | $SK_1$ | $SK_2$ | d | $d_1$ | | | | | | | | | |
| 24 | 20 | 50-170 | 130-260 | 80-170 | 170-570 | 1.313 | 0.813 | 3.15 | 2.17 | 1.06 | 0.71 | 1.77 | 3.94 | 1.18 | 2.76 | 0.39 |
| 28 | 25 | 170-530 | 390-790 | 220-570 | 350-880 | 1.500 | 1.000 | 3.86 | 2.56 | 1.18 | 0.79 | 1.97 | 4.45 | 1.38 | 3.07 | 0.43 |
| 38 | 35 | 220-700 | 660-1,320 | 260-880 | 610-1,590 | 1.813 | 1.313 | 4.72 | 3.15 | 1.50 | 0.94 | 2.36 | 5.35 | 1.77 | 3.58 | 0.51 |
| 48 | 50 | 530-1,590 | 1,540-2650 | 700-2,470 | 1,410-3540 | 2.125 | 1.875 | 6.38 | 4.13 | 2.01 | 1.10 | 2.76 | 6.57 | 2.20 | 4.37 | 0.55 |

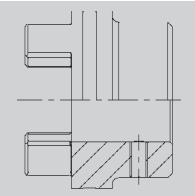
## Hub designs

**Design 1.0 hub with keyway and set screw**



Positive hub to shaft connection. Transmittable torque is dependent on surface pressure on the keyway only.

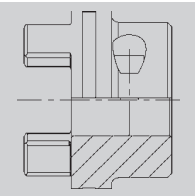
**Design 1.1 hub without keyway, with setscrew**



Positive torque transmission for pressed or glued connections. (No ATEX certification available)

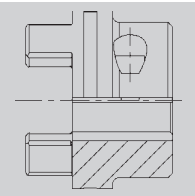
**Design 1.3 hub with spline bore**

**Design 2.0 clamping hub, single slotted, without keyway**



Frictionally engaged shaft-hub connection. Transmittable torque depends on the bore size. (Only for ATEX category 3)

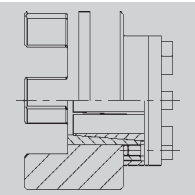
**Design 2.1 clamping hub, single slotted, with keyway**



Positive torque transmission with additional frictional torque capacity. The additional frictional torque capacity reduces backlash. Surface pressure of the keyway is also reduced.

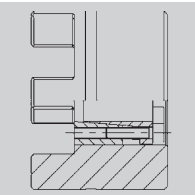
**Design 2.3 clamping hub with spline bore (page 33)**

**Design 4.2 with CLAMPEX® clamping element KTR 250**



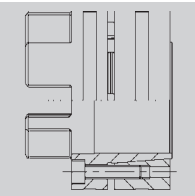
Frictionally engaged shaft-hub connection for average torque.

**Design 4.1 w. CLAMPEX® clamping set KTR 200/f. KTR 400 design 4.3**



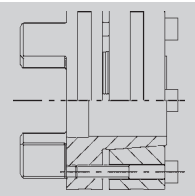
Frictionally engaged, zero-backlash shaft-hub connection for high torque. Largest clamping device possible depends on the hub O.D. Clamping device can be mounted on jaw side or back face. For details, see the CLAMPEX® section.

**Design 6.0 clamping ring hub (see ROTEX® GS series)**



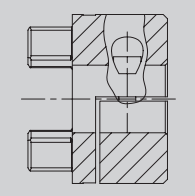
Integrated frictionally engaged shaft-hub-connection for high torque. Fasteners are in the face of the hub. For details about torques and dimensions see page 32. Suitable for high speeds.

**Design 6.5 clamping ring hub**



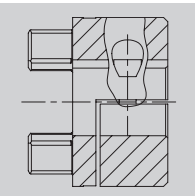
Design equal to 6.0, but fasteners are on the back face. Suitable for easy disassembly of intermediate shafts (special design).

**Design 7.5 axially split clamping hub without keyway for a double-cardanic connection**



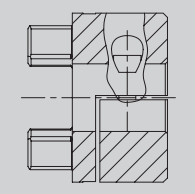
Frictionally engaged shaft-hub connection for radial assembly of couplings. Transmittable torque depends on the bore size (only for ATEX category 3).

**Design 7.6 axially split clamping hub without keyway for a double-cardanic connection**



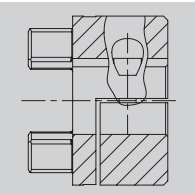
Positive power transmission with frictionally engaged operation for radial assembly of couplings. The frictionally engaged operation reduces backlash. Surface pressure of the keyway connection is reduced.

**Design 7.8 axially split clamping hub without keyway**



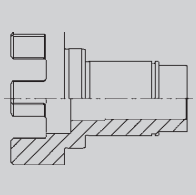
Frictionally engaged shaft-hub connection for radial assembly of couplings.Transmittable torque depends on the bore size (only for ATEX category 3)

**Design 7.9 axially split clamping hub with keyway**

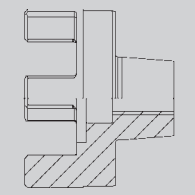


Positive torque transmission with keyway for radial assembly of couplings. Positive lock reduces backlash. Surface pressure of the keyway connection is reduced.

**Special hubs on request**



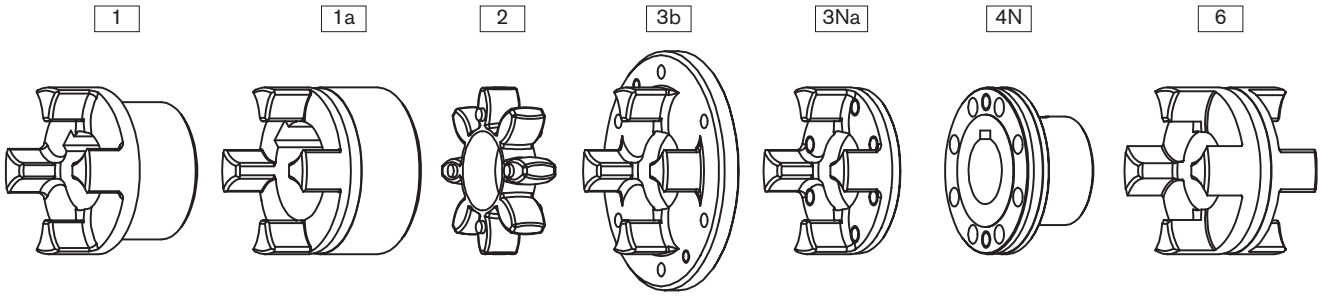
Special lengthened hub/shaft with integrated jaws.



Special hub with an external taper for a frictional connection.

## Weights and mass moment of inertia

### Components




**ROTEX® component values**

| Size | Standard hub | | | | Large hub | | | Spider | Driving flange | | | Coupling flange | DKM spacer |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Part 1 | | | | Part 1a | | | Part 2 | Part 3b | Part 3Na | | Part 4N | |
| | Alu [lbs] [lb-in-sec²] | EN-GJL-250 [lbs] [lb-in-sec²] | EN-GJS-400-15 [lbs] [lb-in-sec²] | St [lbs] [lb-in-sec²] | Alu [lbs] [lb-in-sec²] | EN-GJL-250 [lbs] [lb-in-sec²] | St [lbs] [lb-in-sec²] | Polyurethane (Vulkollan) [lbs] [lb-in-sec²] | EN-GJS- [lbs] [lb-in-sec²] | St [lbs] [lb-in-sec²] | EN-GJS-400-15 [lbs] [lb-in-sec²] | St [lbs] [lb-in-sec²] | Alu [lbs] [lb-in-sec²] |
| 14 | — | — | — | — | 0.0441 | — | — | 0.0097 | — | — | — | — | — |
| | — | — | — | — | 0.0000266 | — | — | 0.0000044 | — | — | — | — | — |
| 19 | 0.141 | — | — | — | 0.163 | — | 0.551 | 0.012 | — | — | — | — | — |
| | 0.000089 | — | — | — | 0.000177 | — | 0.000531 | 0.000009 | — | — | — | — | — |
| 24 | 0.271 | — | — | — | 0.384 | — | 1.213 | 0.031 | 0.062 | 0.320 | — | 0.662 | 0.309 |
| | 0.000354 | — | — | — | 0.000708 | — | 0.002036 | 0.000053 | 0.002036 | 0.000620 | — | 0.000797 | 0.000531 |
| 28 | 0.441 | — | — | — | 0.582 | — | 1.962 | 0.053 | 1.191 | 0.512 | — | 1.080 | 0.485 |
| | 0.000885 | — | — | — | 0.001682 | — | 0.004691 | 0.000089 | 0.006195 | 0.001505 | — | 0.001770 | 0.001151 |
| 38 | 0.970 | 2.56 | — | 3.31 | 1.04 | 2.91 | 2.80 | 0.093 | 1.61 | — | 0.690 | 1.92 | 0.772 |
| | 0.002921 | 0.007611 | — | 0.010709 | 0.004071 | 0.011948 | 0.012390 | 0.000266 | 0.008850 | — | 0.003363 | 0.004425 | 0.003098 |
| 42 | 1.52 | 3.86 | — | 5.56 | 1.70 | 4.52 | 4.06 | 0.143 | 2.78 | — | 1.34 | 3.09 | 1.04 |
| | 0.005930 | 0.015753 | — | 0.025046 | 0.009824 | 0.025754 | 0.015045 | 0.000620 | 0.028320 | — | 0.007877 | 0.009735 | 0.006018 |
| 48 | 1.76 | 5.38 | — | 7.36 | 2.23 | 6.13 | 6.04 | 0.190 | 3.20 | — | 1.66 | 4.23 | 1.37 |
| | 0.097350 | 0.027258 | — | 0.041861 | 0.015399 | 0.042834 | 0.046020 | 0.001151 | 0.038055 | — | 0.012018 | 0.015930 | 0.009735 |
| 55 | — | 8.11 | — | 11.14 | — | 9.00 | 8.67 | 0.243 | 5.69 | — | 2.74 | 6.46 | 1.98 |
| | — | 0.054428 | — | 0.083898 | — | 0.081951 | 0.088500 | 0.002036 | 0.092925 | — | 0.025842 | 0.032745 | 0.018585 |
| 65 | — | 12.50 | — | 14.97 | — | 13.32 | 12.90 | 0.375 | 6.84 | — | 3.61 | 9.61 | 2.89 |
| | — | 0.109740 | — | 0.134166 | — | 0.158327 | 0.168150 | 0.003717 | 0.131865 | — | 0.043285 | 0.061065 | 0.034515 |
| 75 | — | 19.23 | — | 23.22 | — | 21.01 | 19.98 | 0.706 | 9.83 | — | 5.54 | 14.99 | 4.34 |
| | — | 0.233994 | — | 0.289661 | — | 0.349221 | 0.354000 | 0.010266 | 0.248685 | — | 0.092925 | 0.133635 | 0.072570 |
| 90 | — | 32.63 | — | 41.23 | — | 40.13 | 37.49 | 1.26 | 15.30 | — | 9.15 | 28.31 | 7.61 |
| | — | 0.595605 | — | 0.773667 | — | 1.335111 | 1.035450 | 0.028586 | 0.576135 | — | 0.240986 | 0.396480 | 0.198240 |
| 100 | — | — | 43.44 | — | — | — | — | 1.79 | 22.49 | — | 14.00 | 35.63 | — |
| | — | — | 1.034919 | — | — | — | — | 0.052038 | 1.031025 | — | 0.466661 | 0.706230 | — |
| 110 | — | — | 60.42 | — | — | — | — | 2.62 | — | — | 18.91 | 47.08 | — |
| | — | — | 1.811153 | — | — | — | — | 0.097085 | — | — | 0.807209 | 2.499240 | — |
| 125 | — | — | 93.27 | — | — | — | — | 3.59 | — | — | 27.78 | 75.70 | — |
| | — | — | 3.604340 | — | — | — | — | 0.174522 | — | — | 1.546007 | 2.857665 | — |
| 140 | — | — | 128.1 | — | — | — | — | 4.65 | — | — | 38.08 | 107.4 | — |
| | — | — | 5.994902 | — | — | — | — | 0.276917 | — | — | 2.588360 | 4.351545 | — |
| 160 | — | — | 185.7 | — | — | — | — | 7.08 | — | — | 58.00 | 156.7 | — |
| | — | — | 11.658017 | — | — | — | — | 5.595678 | — | — | 5.260086 | 8.578305 | — |
| 180 | — | — | 261.3 | — | — | — | — | 11.58 | — | — | 72.93 | 241.3 | — |
| | — | — | 20.428898 | — | — | — | — | 1.220327 | — | — | 8.619369 | 17.390250 | — |

Weight and mass moment of inertia each refer to the mid-range bore without keyway.

## Weights and mass moment of inertia

**ROTEX® complete coupling values**

| Size | AFN | | BFN | | CF | | DF | | ZWN [1] | | SD | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Weight [lb] | Mass moment of inertia J [lb-in-sec²] | Weight [lbs] | Mass moment of inertia J [lb-in-sec²] | Weight [lbs] | Mass moment of inertia J [lb-in-sec²] | Weight [lbs] | Mass moment of inertia J [lb-in-sec²] | Weight [lbs] | Mass moment of inertia J [lb-in-sec²] | Weight [lbs] | Mass moment of inertia J [lb-in-sec²] |
| 19 | — | — | — | — | 0.97 | 0.000160 | 0.84 | 0.000200 | — | — | 0.93 | 0.000080 |
| 24 | 2.16 | 0.000360 | 2.43 | 0.000410 | 1.85 | 0.000470 | 1.26 | 0.000470 | 4.85 | 0.000840 | 2.43 | 0.000460 |
| 28 | 3.53 | 0.000830 | 3.75 | 0.000950 | 3.31 | 0.001240 | 2.43 | 0.001410 | 7.94 | 0.001930 | 4.19 | 0.001060 |
| 38 | 6.17 | 0.002090 | 5.73 | 0.001930 | 4.19 | 0.002170 | 3.31 | 0.002590 | 12.1 | 0.003930 | 6.62 | 0.004350 |
| 42 | 9.92 | 0.004720 | 9.04 | 0.004190 | 6.84 | 0.005130 | 5.73 | 0.006620 | 19.0 | 0.008530 | 9.70 | 0.008040 |
| 48 | 13.0 | 0.007360 | 12.1 | 0.006840 | 8.60 | 0.007550 | 6.62 | 0.008810 | 24.9 | 0.013800 | 13.7 | 0.002230 |
| 55 | 19.6 | 0.014800 | 18.3 | 0.013690 | 14.1 | 0.016920 | 11.7 | 0.021310 | 39.0 | 0.027900 | 21.6 | 0.016600 |
| 65 | 28.4 | 0.026600 | 27.1 | 0.025900 | 19.6 | 0.027800 | 14.1 | 0.003037 | 58.0 | 0.053100 | 32.9 | 0.032600 |
| 75 | 45.4 | 0.060100 | 42.6 | 0.057200 | 29.8 | 0.055700 | 20.3 | 0.057410 | 91.7 | 0.117200 | 51.2 | 0.070600 |
| 90 | 83.3 | 0.171800 | 75.4 | 0.155100 | 49.2 | 0.135600 | 32.0 | 0.133300 | 161 | 0.317300 | 89.3 | 0.189100 |
| 100 | 109 | 0.306800 | 99.7 | 0.273700 | 68.1 | 0.240100 | 46.7 | 0.239400 | 218 | 0.562900 | 103 | 0.246700 |
| 110 | 149 | 0.538500 | 136 | 0.479300 | 94.6 | 0.432400 | 65.7 | 0.444600 | 298 | 0.986000 | 136 | 0.418600 |
| 125 | 226 | 1.048500 | 208 | 0.941300 | 142 | 0.818700 | 93 | 0.803100 | 455 | 1.937000 | 213 | 0.849700 |
| 140 | 311 | 1.743000 | 286 | 1.564000 | 199 | 1.422100 | 138 | 1.458000 | 625 | 3.222000 | 282 | 1.368000 |
| 160 | 464 | 3.517000 | 421 | 3.107000 | 281 | 2.589000 | 184 | 2.480500 | 922 | 6.393000 | 420 | 2.723000 |
| 180 | 676 | 6.582000 | 605 | 5.668000 | 386 | 4.448000 | 238 | 4.141000 | 1327 | 11.682000 | 578 | 4.810000 |

**BTAN/SBAN without drum/disc**

| Size | Weight [lbs] | Mass moment of inertia J [kgm²] |
|---|---|---|
| 28 | 0.90 | 0.0004 |
| 38 | 2.10 | 0.0014 |
| 42 | 3.24 | 0.0031 |
| 48 | 4.41 | 0.0053 |
| 55 | 6.60 | 0.0105 |
| 65 | 10.1 | 0.0209 |
| 75 | 15.4 | 0.0442 |
| 90 | 27.6 | 0.1224 |
| 100 | 36.9 | 0.2074 |
| 110 | 50.9 | 0.3665 |
| 125 | 79.1 | 0.7349 |
| 140 | 109 | 1.2292 |
| 160 | 162 | 2.4569 |
| 180 | 233 | 4.4967 |

**Drum for BTAN [2]**

| Brake disc $\varnothing D_B$ x B | Weight [lbs] | Mass moment of inertia J [lb-in-sec²] |
|---|---|---|
| 160 x 60 | 4.67 | 0.08851 |
| 200 x 75 | 7.61 | 0.26553 |
| 250 x 95 | 15.1 | 0.70808 |
| 315 x 118 | 33.0 | 2.47828 |
| 400 x 150 | 68.8 | 7.87739 |
| 500 x 190 | 132 | 23.8977 |
| 630 x 236 | 247 | 70.8965 |
| 710 x 265 | 355 | 131.880 |
| 800 x 300 | 445 | 240.747 |

**Disc for SBAN [2]**

| Brake disc $\varnothing A$ x $G_S$ | Weight [lbs] | Mass moment of inertia J [lb-in-sec²] |
|---|---|---|
| 200x12.5 | 6.46 | 0.1360133 |
| 250x12.5 | 10.28 | 0.3326560 |
| 315x16 | 19.00 | 0.9897985 |
| 400x16 | 33.58 | 2.7898883 |
| 500x16 | 52.84 | 6.8149425 |
| 630x20 | 105.2 | 21.475704 |
| 710x20 | 134.4 | 34.652550 |
| 800x25 | 209.3 | 69.737011 |
| 900x25 | 262.3 | 111.60305 |
| 1000x25 | 326.9 | 170.24846 |

Weights and mass moments of inertia refer to standard hub with mid-range bore without keyway.

[1] Weights and mass moments of inertia without intermediate shaft.

[2] Selection of ROTEX® brake drum - disc brake see page 40.