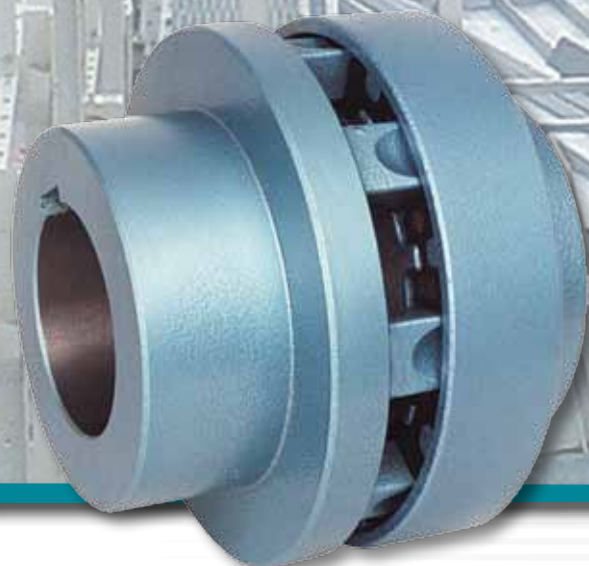


**Flexible
claw couplings
ELKU-N**

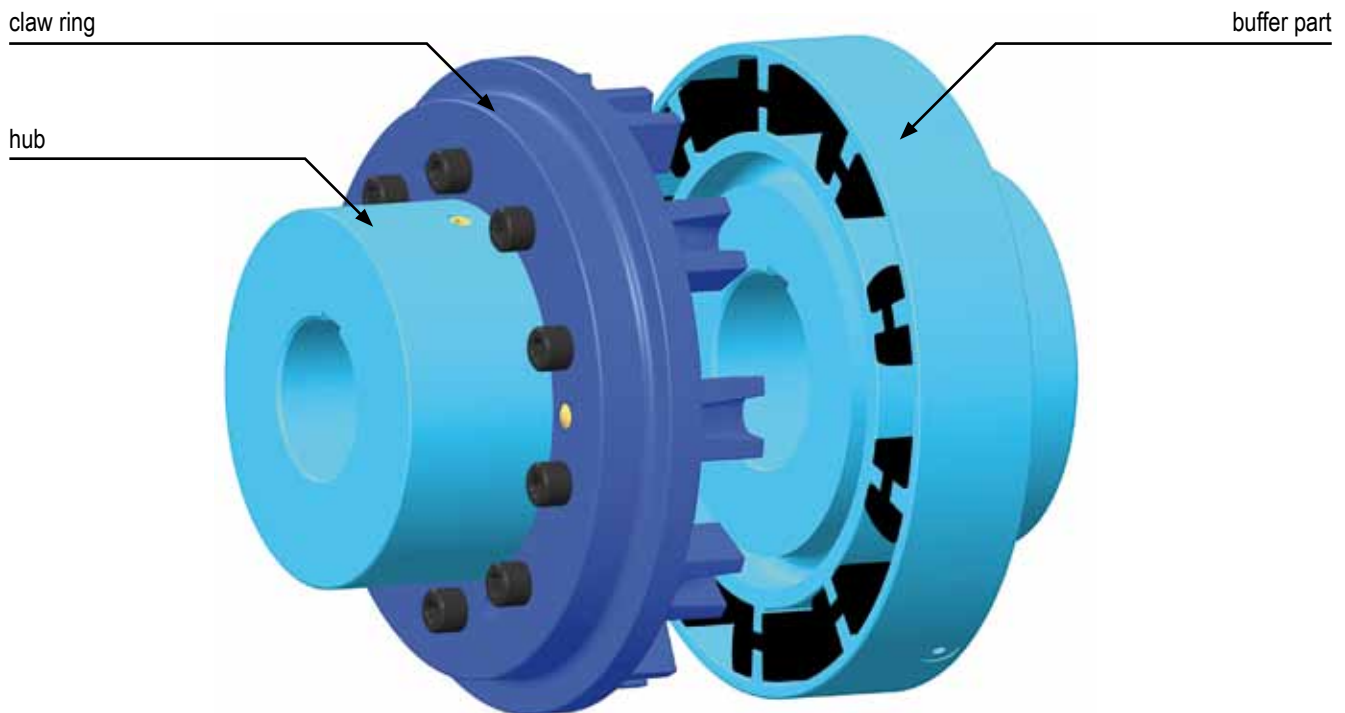
KWN 22013



Couplings from Dresden/Germany
By specialists – for specialists



řemeny, převody a lineární technika



technical features

The flexible claw coupling N (ELKU-N) is a positive-locking, torsionally, flexible coupling which allows radial, axial and angular displacement between the driving and the driven shafts. It is slip proof.

Torque is transmitted through the flexible buffer set into the pockets of the flexible buffer section which is distributed evenly over the circumference of the coupling.

The claws on the guide ring or claw section grip into the buffer gaps.

The buffers are subjected to compression from which results slight wear and high loading capacity.

The high damping of the coupling protects the drive from excessive dynamic overloading. The progressively rising spring characteristic allows a rapid reduction in energy oscillations and limits their amplitude.

Perfect operation can be guaranteed at a working temperature of -30 °C to +80 °C.

The standard design is in grey cast iron EN-GJL-250-DIN EN 1561.

we also offer special models:

- design with spacer
- design with brake disc or brake drum
- design with radially removable brake disk
- design for vertical fitting
- design for explosive surroundings



II 2 G IIB T5 -20 °C ≤ T_a ≤ 50 °C
 II 2 D 90 °C -20 °C ≤ T_a ≤ 50 °C

- design of claw couplings according to KWN 22003
- other designs on request

| Table 1 | | Recommended values for influence factors | | | | |
|--------------------|----------------|--|------------|------------|------------|------------|
| temperature factor | S_{θ} | numerical values for perbunan | | | | |
| | | S_{θ} | 1 | 1 | 1 | 1,2 |
| | | °C von bis | -30 +30 | -30 +40 | -40 +60 | +60 +80 |
| starting factor | S_Z | number of starts per hour | | | | |
| | | number of starts per hour | 100 | 200 | 400 | 800 |
| | | S_Z | 1,0 | 1,2 | 1,4 | 1,6 |
| | | over 800 starts per hour please request | | | | |
| impact factor | S_A or S_L | S_A or S_L | | | | |
| | | slight impacts | | | | 1,5 |
| | | medium impacts | | | | 1,8 |
| | | high impacts | | | | 2,2 |

calculation example:

Coupling ELKU-N searched for steady drive.

Driving machine:

AC motor type 315 L - 200 kW - 1 485 rpm, shaft diameter 80 mm

$$T_{AN} = 9\,550 \cdot \frac{P_{AN}}{n_{AN}} = 9\,550 \cdot \frac{200}{1\,485} = 1\,287 \text{ [Nm]}$$

quantity Z = 40 per hour - ambient temperature $\vartheta = +40 \text{ }^{\circ}\text{C}$

starting torque $T_{AS} \approx 2T_{AN} = 2\,574 \text{ Nm}$

Working machine:

centrifugal pump with a relatively low mass inertia

average load torque $T_{LN} = 1\,150 \text{ Nm}$

impact of the rated torque

$$T_{KN} \geq T_{LN} \cdot S_{\theta} = 1\,150 \text{ Nm} \cdot 1,2 = 1\,380 \text{ Nm}$$

according to the rated torque is the ELKU-N coupling size 250 in question for $T_{KN} = 2\,500 \text{ Nm}$ and $T_{Kmax} = 5\,000 \text{ Nm}$.

Check for T_{Kmax} factors:

starting factor: $S_Z = 1$

temperature factor: $S_{\theta} = 1,2$

impact factor: $S_A = 1,5$

$$T_{Kmax} \geq T_{AS} \cdot S_Z \cdot S_{\theta} \cdot S_A = 2\,574 \text{ Nm} \cdot 1 \cdot 1,2 \cdot 1,5 = 4\,633 \text{ Nm}$$

With this example, a coupling selection is simplified by Bill passage represented. It is recommended that a coupling selection by the trained personnel of KWD leave to carry.

The variety of types

Type A

three parts design

Type B

in two parts design

Type S1

design with brake disk

Type S2

design with radial dismountable brake disk

Type H

design with spacer

T_{AN} : installation torque [Nm]

T_{KN} : coupling torque [Nm]

T_{LN} : load torque [Nm]

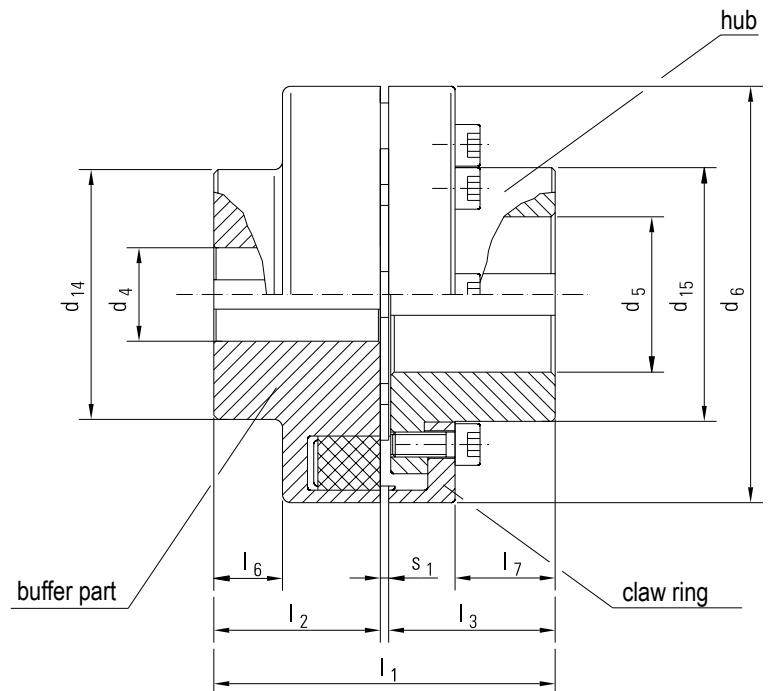
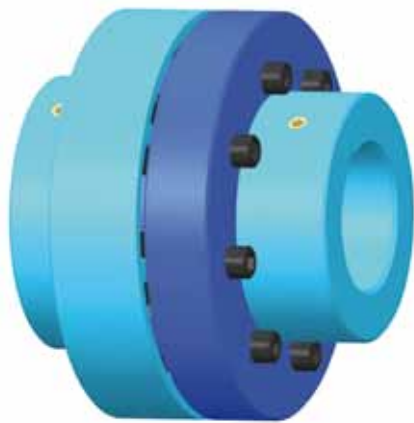
T_{Kmax} : max. coupling torque [Nm]

P_{AN} : power [kW]

n_{AN} : input speed [rpm]

Z: starting frequency

ϑ : ambient temperature [$^{\circ}\text{C}$]



Ordering example: ELKU-N A 16 - 47 H7 (x28) - 12v⁴ (x40)³ KWN 22013

Designation of a flexible claw coupling N type A, nominal size 16, finished bore $d_4 = 47$ mm, tolerance zone H7, without keyway in the shortened buffer part (hub length $l_2 = 28$ mm) (for clamping unit) and pilot bore $d_5 = 12$ mm (with hub length $l_3 = 40$ mm).

Footnotes see page 14.

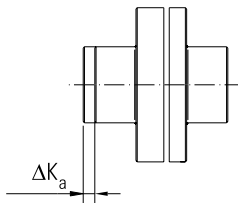
| main dimensions | | | | | | | | | | | | | Table 2 | | |
|-----------------|--------------------------|-----------------------------------|-----|--------------------------|-----------------------------------|-----|-------|----------|----------|-------|-------|-------|---------|-------|-------|
| size | pilot bore ²⁾ | d_4 finished bore ¹⁾ | | pilot bore ²⁾ | d_5 finished bore ¹⁾ | | d_6 | d_{14} | d_{15} | l_1 | l_2 | l_3 | l_6 | l_7 | s_1 |
| | | min | max | | min | max | | | | | | | | | |
| 16 | - | 14 | 48 | - | 14 | 38 | 110 | 78 | 62 | 82 | 40 | 40 | 13 | 20 | 2 |
| 25 | - | 15 | 55 | - | 15 | 45 | 125 | 90 | 75 | 102 | 50 | 50 | 19 | 27 | 2 |
| 40 | - | 18 | 60 | - | 18 | 50 | 140 | 98 | 82 | 112 | 55 | 55 | 21 | 27 | 2 |
| 63 | - | 22 | 65 | - | 22 | 58 | 160 | 108 | 95 | 122 | 60 | 60 | 21 | 32 | 2 |
| 100 | - | 24 | 75 | - | 24 | 65 | 180 | 125 | 108 | 142 | 70 | 70 | 28 | 40 | 2 |
| 160 | - | 28 | 85 | - | 28 | 75 | 200 | 140 | 122 | 162 | 80 | 80 | 33 | 48 | 2 |
| 200 | - | 38 | 90 | - | 24 | 85 | 225 | 150 | 138 | 182 | 90 | 90 | 38 | 52 | 2 |
| 250 | 44 | 48 | 100 | 30 | 32 | 95 | 250 | 165 | 155 | 203 | 100 | 100 | 40 | 58 | 3 |
| 400 | 47 | 55 | 110 | 52 | 55 | 105 | 280 | 180 | 172 | 223 | 110 | 110 | 45 | 68 | 3 |
| 500 | 47 | 60 | 100 | 44 | 48 | 100 | 315 | 165 | 165 | 253 | 125 | 125 | 55 | 78 | 3 |
| | 88 | 105 | 120 | 88 | 105 | 120 | | 200 | 200 | | | | | | |
| 630 | 59 | 65 | 110 | 59 | 65 | 110 | 350 | 180 | 180 | 283 | 140 | 140 | 66 | 89 | 3 |
| | 88 | 115 | 140 | 88 | 115 | 140 | | 230 | 230 | | | | | | |
| 1 000 | 64 | 70 | 120 | 64 | 70 | 120 | 400 | 200 | 200 | 323 | 160 | 160 | 82 | 104 | 3 |
| | 98 | 125 | 150 | 98 | 125 | 150 | | 250 | 250 | | | | | | |
| 1 250 | 78 | 80 | 130 | 78 | 80 | 130 | 440 | 215 | 215 | 365 | 180 | 180 | 94 | 116 | 5 |
| | 118 | 135 | 160 | 118 | 135 | 160 | | 240 | 240 | | | | | | |
| 1 600 | 88 | 90 | 145 | 88 | 90 | 145 | 480 | 240 | 240 | 385 | 190 | 190 | 100 | 125 | 5 |
| | 134 | 150 | 180 | 134 | 150 | 180 | | 300 | 300 | | | | | | |
| 2 500 | 98 | 100 | 150 | 98 | 100 | 150 | 520 | 250 | 250 | 425 | 210 | 210 | 108 | 142 | 5 |
| | 138 | 155 | 190 | 138 | 155 | 190 | | 315 | 315 | | | | | | |
| 3 150 | 118 | 120 | 200 | 118 | 120 | 200 | 560 | 320 | 320 | 449 | 220 | 220 | 105 | 140 | 6 |
| 4 000 | 128 | 130 | 220 | 128 | 130 | 220 | 610 | 352 | 352 | 489 | 240 | 240 | 119 | 152 | 6 |
| 5 000 | 138 | 140 | 240 | 138 | 140 | 240 | 660 | 384 | 384 | 529 | 260 | 260 | 128 | 164 | 6 |
| 6 300 | 138 | 140 | 260 | 138 | 140 | 260 | 710 | 416 | 416 | 589 | 290 | 290 | 152 | 188 | 6 |

Table 3

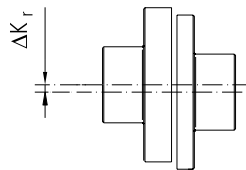
permissible shaft misalignment and alignment dimension

| size | | 16 | 25 | 40 | 63 | 100 | 160 | 200 | 250 | 400 | 500 | 630 | 1 000 | 1 250 | 1 600 | 2 500 | 3 150 | 4 000 | 5 000 | 6 300 |
|---|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| dimension s_{\min} [mm] | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| dimension s_{\max} [mm] | | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 12 | 12 | 12 | 12 |
| perm. axial displacement ΔK_a [mm] | | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| | n [min ⁻¹] | | | | | | | | | | | | | | | | | | | |
| perm. radial displacement ΔK_r [mm] at speed n | 500 | 0,3 | 0,3 | 0,4 | 0,4 | 0,5 | 0,5 | 0,6 | 0,7 | 0,7 | 0,8 | 0,9 | 1 | 1 | 1 | 1 | 1,2 | 1,3 | 1,4 | 1,5 |
| | 1 000 | 0,3 | 0,3 | 0,4 | 0,4 | 0,4 | 0,4 | 0,5 | 0,5 | 0,4 | 0,4 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,8 | 0,9 | 1 | |
| | 1 500 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,4 | 0,3 | 0,3 | | | | |
| perm. angular displacement ΔK_w^* [mm] at speed n | 2 000 | 0,2 | 0,2 | 0,3 | 0,2 | 0,2 | 0,2 | 0,3 | 0,2 | 0,2 | 0,2 | 0,3 | 0,2 | | | | | | | |
| | 2 500 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | | | | | | | |
| | 3 000 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 | 0,2 | 0,2 | - | - | | | | | | | | | | |
| | $\geq 3 500$ | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | - | - | - | - | | | | | | | | | | |
| | n [min ⁻¹] | | | | | | | | | | | | | | | | | | | |
| perm angular displacement ΔK_w [°] at speed n | 500 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,12 | 0,12 | 0,12 | 0,12 |
| | 1 000 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,08 | 0,08 | | |
| | 1 500 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | | | |
| | 2 000 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | | | | | | |
| | 2 500 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | | | | | | | | | |
| | 3 000 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | | | | | | | | | | | |
| | $\geq 3 500$ | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | | | | | | | | | | | | | |

axial displacement



radial displacement



angular displacement

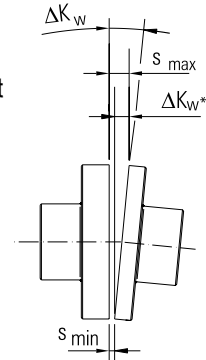
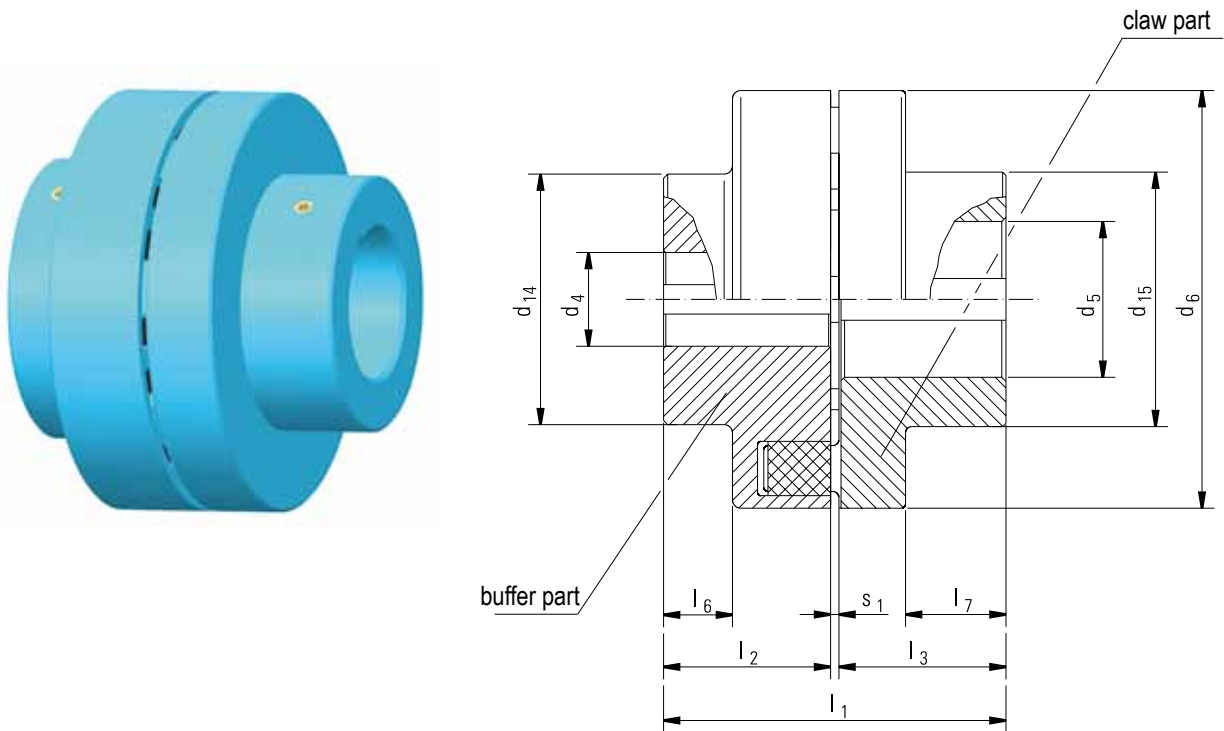


Table 4

characteristic values

| size | speed n [min ⁻¹] | torque [Nm] | | | torsion angle φ [°] | dyn. torsional stiffness C_{dyn} [kNm/rad] | | rel. damping Ψ [-] | moment of inertia J [kgm ²] | | mass m [kg] | |
|-------|------------------------------------|-----------------|-------------------|---------------------|-----------------------------------|---|-----------------|-------------------------------|--|-------------|--------------------|-------------|
| | | T_{KN} | T_{Kmax} | $\pm T_{\text{KW}}$ | | at T_{KN} | T_{KN} | | $0,5 \cdot K_{\text{max}}$ | buffer part | claw ring + hub | buffer part |
| 16 | 5 000 | 160 | 320 | 40 | 45 | 12,6 | 5,8 | 0,9 | 0,002 | 0,002 | 1,5 | 1,5 |
| 25 | 5 000 | 250 | 500 | 62 | 45 | 19,0 | 8,8 | 0,9 | 0,004 | 0,004 | 2,5 | 2,5 |
| 40 | 4 900 | 400 | 800 | 100 | 45 | 26,0 | 11,9 | 0,9 | 0,007 | 0,007 | 3,3 | 3,4 |
| 63 | 4 250 | 630 | 1 260 | 160 | 45 | 58,9 | 27,1 | 0,9 | 0,013 | 0,013 | 4,7 | 4,8 |
| 100 | 3 800 | 1 000 | 2 000 | 250 | 45 | 88,5 | 40,6 | 0,9 | 0,023 | 0,024 | 6,9 | 6,8 |
| 160 | 3 400 | 1 600 | 3 200 | 400 | 45 | 138,8 | 63,8 | 0,9 | 0,04 | 0,04 | 9,5 | 10 |
| 200 | 3 000 | 2 000 | 4 000 | 500 | 45 | 236,0 | 108,4 | 0,9 | 0,07 | 0,08 | 13 | 14 |
| 250 | 2 750 | 2 500 | 5 000 | 625 | 45 | 305,4 | 140,3 | 0,9 | 0,12 | 0,13 | 17,5 | 19,5 |
| 400 | 2 450 | 4 000 | 8 000 | 1 000 | 45 | 404,3 | 185,8 | 0,9 | 0,2 | 0,2 | 24 | 24 |
| 500 | 2 150 | 5 000 | 10 000 | 1 250 | 45 | 618,6 | 284,2 | 0,9 | 0,31 | 0,33 | 31 | 32 |
| | | | | | | | | | 0,34 | 0,37 | 32 | 34 |
| 630 | 1 950 | 6 300 | 12 600 | 1 575 | 45 | 893,7 | 410,4 | 0,9 | 0,54 | 0,54 | 43 | 43 |
| | | | | | | | | | 0,6 | 0,63 | 45 | 47 |
| 1 000 | 1 700 | 10 000 | 20 000 | 2 500 | 45 | 1 245 | 572,5 | 0,9 | 1,0 | 0,9 | 63 | 59 |
| | | | | | | | | | 1,2 | 1,0 | 66 | 64 |
| 1 250 | 1 550 | 12 500 | 25 000 | 3 125 | 45 | 1 693 | 777,6 | 0,9 | 1,5 | 1,5 | 79 | 80 |
| | | | | | | | | | 1,7 | 1,7 | 82 | 85 |
| 1 600 | 1 400 | 16 000 | 32 000 | 4 000 | 45 | 2 122 | 973,9 | 0,9 | 2,3 | 2,3 | 100 | 100 |
| | | | | | | | | | 2,6 | 2,6 | 105 | 110 |
| 2 500 | 1 300 | 25 000 | 50 000 | 6 250 | 45 | 2 812 | 1 292 | 0,9 | 3,5 | 3,2 | 130 | 120 |
| | | | | | | | | | 3,8 | 3,6 | 140 | 135 |
| 3 150 | 1 200 | 31 500 | 63 000 | 7 300 | 45 | 3 600 | 1 500 | 1,1 | 5,9 | 6 | 180 | 185 |
| 4 000 | 1 100 | 40 000 | 80 000 | 9 600 | 45 | 5 000 | 2 070 | 1,1 | 8,6 | 9,3 | 225 | 240 |
| 5 000 | 1 000 | 50 000 | 100 000 | 12 350 | 45 | 6 800 | 2 800 | 1,1 | 13 | 14 | 290 | 320 |
| 6 300 | 950 | 63 000 | 126 000 | 15 600 | 45 | 9 300 | 3 900 | 1,1 | 18,5 | 20 | 370 | 400 |



Ordering example: ELKU-N B 10 - 20 H7P1⁴⁾ (x35)³⁾ - 16 H7P2⁴⁾ (x25) KWN 22013

Designation of a flexible claw coupling N type B, nominal size 10, finished bore $d_4 = 20$ mm, tolerance zone H7, with keyway in buffer part, (hub length $l_2 = 35$ mm), finished bore $d_5 = 16$ mm, tolerance zone H7 and two keyways (120° staggered) in the shortened claw part (with hub length $l_3 = 25$ mm).

Footnotes see page 14.

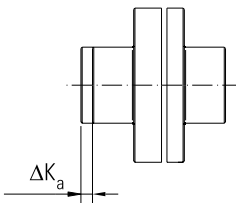
| main dimensions | | | | | | | | | | | | | Table 5 | | |
|-----------------|--------------------------|-----------------------------------|-----|--------------------------|-----------------------------------|-----|-------|----------|----------|-------|-------|-------|---------|-------|-------|
| size | pilot bore ²⁾ | d_4 finished bore ¹⁾ | | pilot bore ²⁾ | d_5 finished bore ¹⁾ | | d_6 | d_{14} | d_{15} | l_1 | l_2 | l_3 | l_6 | l_7 | s_1 |
| | | min | max | | min | max | | | | | | | | | |
| 2,5 | - | 8 | 19 | 8 | - | 24 | 58 | - | 40 | 42 | 20 | 20 | - | 12 | 2 |
| 4 | - | 8 | 24 | 8 | - | 28 | 68 | - | 46 | 42 | 20 | 20 | - | 12 | 2 |
| 6,3 | - | 10 | 32 | 10 | 50 | 38 | 80 | 50 | 62 | 62 | 30 | 30 | 9 | 20 | 2 |
| 10 | - | 11 | 42 | 11 | 68 | 42 | 95 | 68 | 70 | 72 | 35 | 35 | 11 | 24 | 2 |
| 16 | - | 14 | 48 | 14 | 78 | 48 | 110 | 78 | 80 | 82 | 40 | 40 | 13 | 26 | 2 |
| 25 | - | 15 | 55 | 15 | 90 | 55 | 125 | 90 | 90 | 102 | 50 | 50 | 19 | 33 | 2 |
| 40 | - | 18 | 60 | 18 | 98 | 60 | 140 | 98 | 98 | 112 | 55 | 55 | 21 | 35 | 2 |
| 63 | - | 22 | 65 | 22 | 108 | 65 | 160 | 108 | 108 | 122 | 60 | 60 | 21 | 40 | 2 |
| 100 | - | 24 | 75 | 24 | 125 | 75 | 180 | 125 | 125 | 142 | 70 | 70 | 28 | 50 | 2 |
| 160 | - | 28 | 85 | 28 | 140 | 85 | 200 | 140 | 140 | 162 | 80 | 80 | 33 | 56 | 2 |
| 200 | - | 38 | 90 | 38 | 150 | 90 | 225 | 150 | 150 | 182 | 90 | 90 | 38 | 72 | 2 |
| 250 | 44 | 48 | 100 | 48 | 165 | 100 | 250 | 165 | 165 | 203 | 100 | 100 | 40 | 82 | 3 |
| 400 | 47 | 55 | 110 | 55 | 180 | 110 | 280 | 180 | 180 | 223 | 110 | 110 | 45 | 90 | 3 |

Table 6

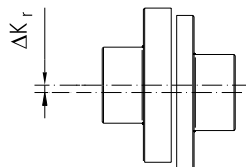
permissible shaft misalignment and alignment dimension

| size | | 2,5 | 4 | 6,3 | 10 | 16 | 25 | 40 | 63 | 100 | 160 | 200 | 250 | 400 |
|---|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| dimension s_{\min} [mm] | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 |
| dimension s_{\max} [mm] | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 |
| perm. axial displacement ΔK_a [mm] | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 5 |
| | n [min ⁻¹] | | | | | | | | | | | | | |
| perm. radial displacement ΔK_r [mm] at speed n | 500 | 0,2 | 0,2 | 0,2 | 0,3 | 0,3 | 0,3 | 0,4 | 0,4 | 0,5 | 0,5 | 0,6 | 0,7 | 0,7 |
| | 1 000 | 0,2 | 0,2 | 0,2 | 0,3 | 0,3 | 0,3 | 0,4 | 0,4 | 0,4 | 0,4 | 0,5 | 0,5 | 0,4 |
| | 1 500 | 0,2 | 0,2 | 0,2 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 | 0,3 |
| perm. angular displacement ΔK_w^* [mm] at speed n | 2 000 | 0,2 | 0,2 | 0,2 | 0,3 | 0,2 | 0,2 | 0,3 | 0,2 | 0,2 | 0,2 | 0,3 | 0,2 | 0,2 |
| | 2 500 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| | 3 000 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 | 0,2 | 0,2 | | |
| | $\geq 3 500$ | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | | | |
| | n [min ⁻¹] | | | | | | | | | | | | | |
| perm angular displacement ΔK_w [°] at speed n | 500 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| | 1 000 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| | 1 500 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| | 2 000 | 0,2 | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| | 2 500 | 0,2 | 0,2 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 |
| | 3 000 | 0,2 | 0,1 | 0,2 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | |
| | $\geq 3 500$ | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | 0,1 | | | | |

axial displacement



radial displacement



angular displacement

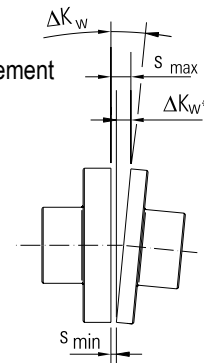
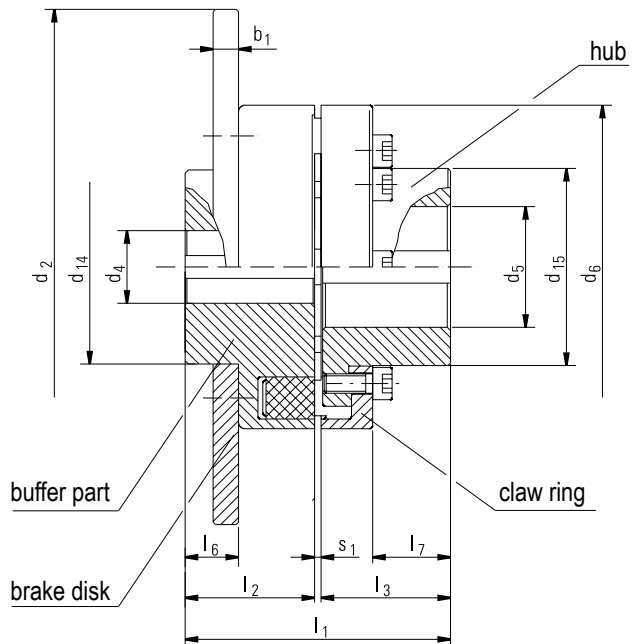
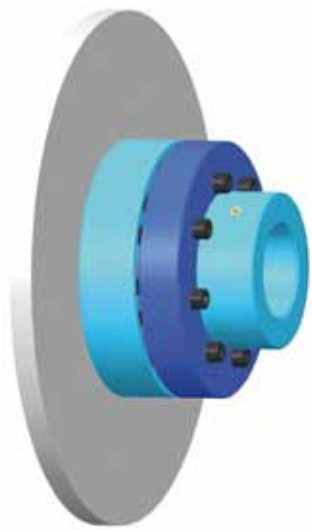


Table 7

characteristic values

| size | speed n [min ⁻¹] | torque [Nm] | | | torsion angle | dyn. torsional stiffness C_{dyn} [kNm/rad] | | rel. damping | moment of inertia J [kgm ²] | | mass m [kg] | |
|------|--------------------------------------|-------------|----------------|--------------|---------------|---|----------------------|--------------|---|-----------|---------------|-----------|
| | | T_{KN} | $T_{K_{\max}}$ | $\pm T_{KW}$ | at T_{KN} | T_{KN} | $0,5 \cdot K_{\max}$ | Ψ | buffer part | claw part | buffer part | claw part |
| 2,5 | 5000 | 25 | 50 | 6 | 45 | 2,3 | 0,9 | 0,9 | 0,0001 | 0,0001 | 0,2 | 0,2 |
| 4 | 5000 | 40 | 80 | 10 | 45 | 3,6 | 1,6 | 0,9 | 0,0002 | 0,0001 | 0,3 | 0,3 |
| 6,3 | 5000 | 63 | 126 | 16 | 45 | 5,4 | 2,5 | 0,9 | 0,0004 | 0,0004 | 0,6 | 0,7 |
| 10 | 5000 | 100 | 200 | 25 | 45 | 8,3 | 3,8 | 0,9 | 0,0009 | 0,0008 | 0,9 | 1,1 |
| 16 | 5000 | 160 | 320 | 40 | 45 | 12,6 | 5,8 | 0,9 | 0,002 | 0,002 | 1,5 | 1,6 |
| 25 | 5000 | 250 | 500 | 62 | 45 | 19,0 | 8,8 | 0,9 | 0,004 | 0,004 | 2,5 | 2,6 |
| 40 | 4900 | 400 | 800 | 100 | 45 | 26,0 | 11,9 | 0,9 | 0,007 | 0,007 | 3,3 | 3,6 |
| 63 | 4250 | 630 | 1260 | 160 | 45 | 58,9 | 27,1 | 0,9 | 0,013 | 0,012 | 4,7 | 4,7 |
| 100 | 3800 | 1000 | 2000 | 250 | 45 | 88,5 | 40,6 | 0,9 | 0,023 | 0,022 | 6,9 | 7,1 |
| 160 | 3400 | 1600 | 3200 | 400 | 45 | 138,8 | 63,8 | 0,9 | 0,04 | 0,04 | 9,5 | 10,5 |
| 200 | 3000 | 2000 | 4000 | 500 | 45 | 236,0 | 108,4 | 0,9 | 0,07 | 0,065 | 13 | 11,5 |
| 250 | 2750 | 2500 | 5000 | 625 | 45 | 305,4 | 140,3 | 0,9 | 0,12 | 0,11 | 17,5 | 16,5 |
| 400 | 2450 | 4000 | 8000 | 1000 | 45 | 404,3 | 185,8 | 0,9 | 0,2 | 0,17 | 24 | 21 |

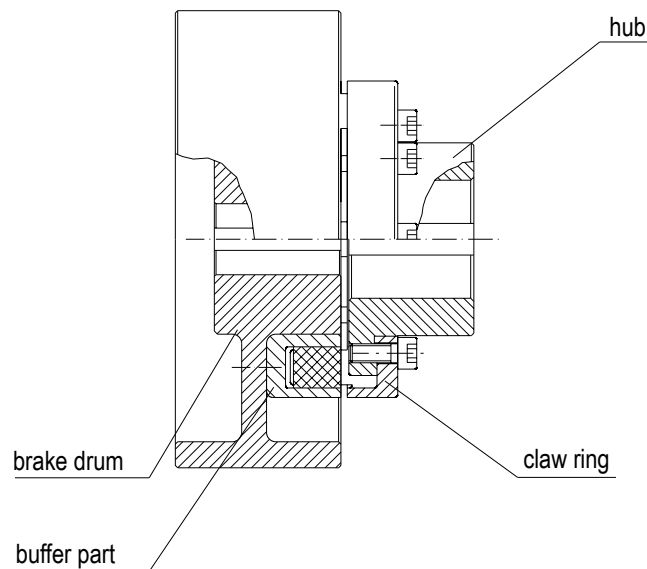
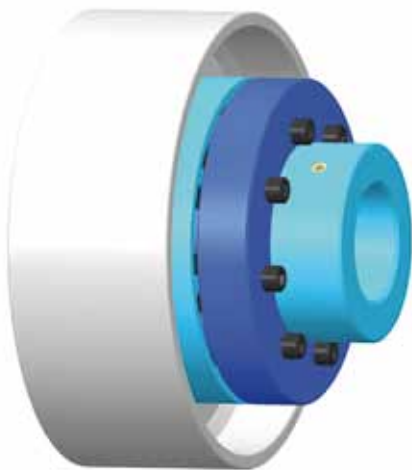


Ordering example: ELKU-N S1 25 - 315 - 50 H7P1⁴⁾ (x50)³⁾ - 13v⁴⁾ (x50)³⁾ KWN 22013

Designation of a flexible claw coupling N type S1, nominal size 25 with brake disk $d_2 = 315$ mm, finished bore $d_4 = 50$ mm, tolerance zone H7, with keyway, (hub length $l_2 = 50$ mm), pilot bore $d_5 = 13$ mm, (hub length $l_3 = 50$ mm).

Footnotes see page 14.

| main dimensions | | | | | | | | | | | | | Table 8 | | | | |
|--------------------------|--------------------------|-----------------------------------|-----|-----------------------------------|-----|-------|----------|----------|-------|-------|-------|-------|---------|-------|-------|-------|----|
| size | pilot bore ²⁾ | d_4 finished bore ¹⁾ | | d_5 finished bore ¹⁾ | | d_6 | d_{14} | d_{15} | d_2 | b_1 | l_1 | l_2 | l_3 | l_6 | l_7 | s_1 | |
| | | min | max | min | max | | | | | | | | | | | | h9 |
| brake torque statically | 25 | - | 15 | 55 | 15 | 45 | 125 | 85 | 75 | 315 | 16 | 102 | 50 | 50 | 19 | 27 | 2 |
| | 40 | - | 18 | 55 | 18 | 50 | 140 | 85 | 82 | 315 | 16 | 112 | 55 | 55 | 21 | 27 | 2 |
| | 63 | - | 22 | 65 | 22 | 60 | 160 | 105 | 98 | 355 | 18 | 122 | 60 | 60 | 21 | 32 | 2 |
| | 100 | - | 24 | 70 | 24 | 65 | 180 | 115 | 108 | 400 | 18 | 142 | 70 | 70 | 28 | 40 | 2 |
| | 160 | - | 28 | 75 | 28 | 75 | 200 | 120 | 122 | 450 | 20 | 162 | 80 | 80 | 33 | 48 | 2 |
| | 200 | - | 38 | 75 | 24 | 85 | 225 | 120 | 138 | 450 | 20 | 182 | 90 | 90 | 38 | 52 | 2 |
| | 250 | 30 | 48 | 100 | 32 | 95 | 250 | 160 | 155 | 500 | 20 | 203 | 100 | 100 | 40 | 58 | 3 |
| | 400 | 52 | 55 | 105 | 55 | 105 | 280 | 170 | 172 | 630 | 30 | 223 | 110 | 110 | 45 | 68 | 3 |
| | 500 | 44 | 60 | 100 | 48 | 100 | 315 | 160 | 165 | 560 | 30 | 253 | 125 | 125 | 55 | 78 | 3 |
| brake torque dynamically | 500 | 88 | 105 | 120 | 105 | 120 | 315 | 195 | 200 | 710 | 30 | 253 | 125 | 125 | 55 | 78 | 3 |
| | | 59 | 65 | 105 | 65 | 110 | 350 | 170 | 180 | 630 | 30 | 283 | 140 | 140 | 66 | 89 | 3 |
| | 630 | 88 | 110 | 135 | 115 | 140 | 350 | 220 | 230 | 800 | 30 | 283 | 140 | 140 | 66 | 89 | 3 |
| | | 64 | 70 | 120 | 70 | 120 | 400 | 195 | 200 | 710 | 30 | 323 | 160 | 160 | 82 | 104 | 3 |
| | 1 000 | 98 | 125 | 135 | 125 | 150 | 400 | 220 | 250 | 800 | 30 | 323 | 160 | 160 | 82 | 104 | 3 |
| | | 78 | 80 | 120 | 80 | 130 | 440 | 195 | 215 | 710 | 30 | 365 | 180 | 180 | 94 | 116 | 5 |
| | 1 250 | 118 | 125 | 135 | 135 | 160 | 440 | 220 | 265 | 800 | 30 | 365 | 180 | 180 | 94 | 116 | 5 |
| | | 88 | 90 | 135 | 90 | 145 | 480 | 220 | 240 | 1 000 | 30 | 385 | 190 | 190 | 100 | 125 | 5 |
| | 1 600 | 134 | 140 | 175 | 145 | 180 | 480 | 280 | 300 | 1 120 | 30 | 385 | 190 | 190 | 100 | 125 | 5 |
| 98 | | 100 | 140 | 90 | 150 | 520 | 230 | 250 | 1 000 | 30 | 425 | 210 | 210 | 108 | 142 | 5 | |
| 2 500 | 138 | 145 | 180 | 155 | 190 | 520 | 295 | 315 | 1 120 | 30 | 425 | 210 | 210 | 108 | 142 | 5 | |
| 3 150 | 118 | 110 | 190 | 120 | 200 | 560 | 300 | 320 | 1 000 | 30 | 449 | 220 | 220 | 105 | 140 | 6 | |
| 4 000 | 128 | 120 | 210 | 130 | 220 | 610 | 332 | 352 | 1 250 | 30 | 489 | 240 | 240 | 119 | 152 | 6 | |
| 5 000 | 138 | 130 | 230 | 140 | 240 | 660 | 364 | 384 | 1 250 | 30 | 529 | 260 | 260 | 128 | 164 | 6 | |
| 6 300 | 138 | 130 | 250 | 140 | 260 | 710 | 396 | 416 | 1 250 | 30 | 589 | 290 | 290 | 152 | 188 | 6 | |

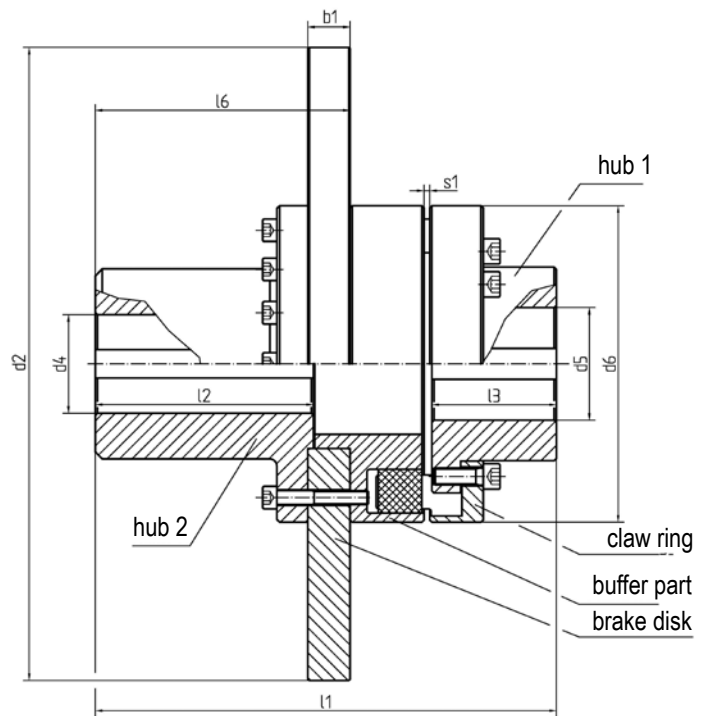
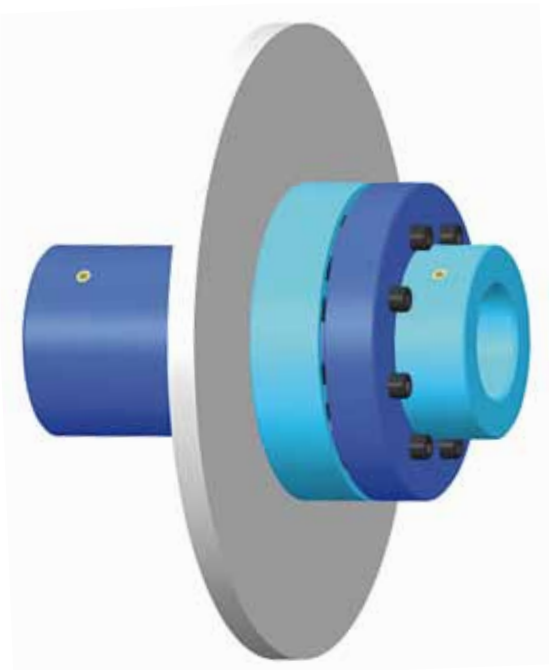


ELKU-N P: flexible claw coupling with brake drum

Table 9

characteristic values

| size | speed n [min ⁻¹] | torque [Nm] | | | torsion angle φ [°] | dyn. torsional stiffness C _{dyn} [kNm/rad] | | rel. damping Ψ [-] | moment of inertia J [kgm ²] | | mass m [kg] | |
|-------|------------------------------------|-----------------|-------------------|------------------|------------------------|---|-----------------|--------------------------|--|----------------------------|--------------------|----------------------------|
| | | T _{KN} | T _{Kmax} | ±T _{KW} | | at T _{KN} | T _{KN} | | 0,5 · K _{max} | bufferpart + brake disk | claw ring + hub | bufferpart + brake disk |
| 25 | 4 800 | 250 | 500 | 62 | 4,5 | 19,0 | 8,8 | 0,9 | 0,124 | 0,004 | 11,4 | 2,5 |
| 40 | 4 800 | 400 | 800 | 100 | 4,5 | 26,0 | 11,9 | 0,9 | 0,127 | 0,007 | 12,0 | 3,4 |
| 63 | 4 250 | 630 | 1 260 | 160 | 4,5 | 58,9 | 27,1 | 0,9 | 0,231 | 0,013 | 17,3 | 4,8 |
| 100 | 3 800 | 1 000 | 2 000 | 250 | 4,5 | 88,5 | 40,6 | 0,9 | 0,374 | 0,024 | 22,7 | 6,8 |
| 160 | 3 400 | 1 600 | 3 200 | 400 | 4,5 | 138,8 | 63,8 | 0,9 | 0,664 | 0,04 | 31,5 | 10 |
| 200 | 3 000 | 2 000 | 4 000 | 500 | 4,5 | 236,0 | 108,4 | 0,9 | 0,69 | 0,08 | 34,1 | 14 |
| 250 | 2 750 | 2 500 | 5 000 | 625 | 4,5 | 305,4 | 140,3 | 0,9 | 1,07 | 0,13 | 44,7 | 19,5 |
| 400 | 2 400 | 4 000 | 8 000 | 1 000 | 4,5 | 404,3 | 185,8 | 0,9 | 3,82 | 0,2 | 91,0 | 24 |
| 500 | 2 150 | 5 000 | 10 000 | 1 250 | 4,5 | 618,6 | 284,2 | 0,9 | 2,56 | 0,33 | 83,7 | 32 |
| | 2 150 | 5 000 | 10 000 | 1 250 | 4,5 | 618,6 | 284,2 | 0,9 | 6,18 | 0,37 | 117,5 | 34 |
| 630 | 1 950 | 6 300 | 12 600 | 1 575 | 4,5 | 893,7 | 410,4 | 0,9 | 4,16 | 0,54 | 109,5 | 43 |
| | 1 900 | 6 300 | 12 600 | 1 575 | 4,5 | 893,7 | 410,4 | 0,9 | 9,99 | 0,63 | 152,5 | 47 |
| 1000 | 1 700 | 10 000 | 20 000 | 2 500 | 4,5 | 1 245 | 572,5 | 0,9 | 6,83 | 0,9 | 148,2 | 59 |
| | 1 700 | 10 000 | 20 000 | 2 500 | 4,5 | 1 245 | 572,5 | 0,9 | 10,5 | 1,0 | 168,3 | 64 |
| 1250 | 1 550 | 12 500 | 25 000 | 3 125 | 4,5 | 1 693 | 777,6 | 0,9 | 8,29 | 1,5 | 160,4 | 80 |
| | 1 550 | 12 500 | 25 000 | 3 125 | 4,5 | 1 693 | 777,6 | 0,9 | 10,9 | 1,7 | 178,8 | 85 |
| 1600 | 1 400 | 16 000 | 32 000 | 4 000 | 4,5 | 2 122 | 973,9 | 0,9 | 25,3 | 2,3 | 270,0 | 100 |
| | 1 350 | 16 000 | 32 000 | 4 000 | 4,5 | 2 122 | 973,9 | 0,9 | 38,6 | 2,6 | 315,3 | 110 |
| 2 500 | 1 300 | 25 000 | 50 000 | 6 250 | 4,5 | 2 812 | 1 292 | 0,9 | 26,5 | 3,2 | 300,0 | 120 |
| 2 500 | 1 200 | 25 000 | 50 000 | 6 250 | 4,5 | 2 812 | 1 292 | 0,9 | 40,1 | 3,6 | 355,0 | 135 |
| 3 150 | 1 200 | 31 500 | 63 000 | 7 300 | 4,5 | 3 600 | 1 500 | 1,1 | 28,9 | 6,0 | 350,0 | 185 |
| 4 000 | 1 100 | 40 000 | 40 000 | 9 600 | 4,5 | 5 000 | 2 070 | 1,1 | 64,6 | 9,3 | 490,0 | 240 |
| 5 000 | 1 000 | 50 000 | 100 000 | 12 350 | 4,5 | 6 800 | 2 800 | 1,1 | 69,0 | 14,0 | 555,0 | 320 |
| 6 300 | 950 | 63 000 | 126 000 | 15 600 | 4,5 | 9 300 | 3 900 | 1,1 | 74,5 | 20,0 | 635,0 | 400 |



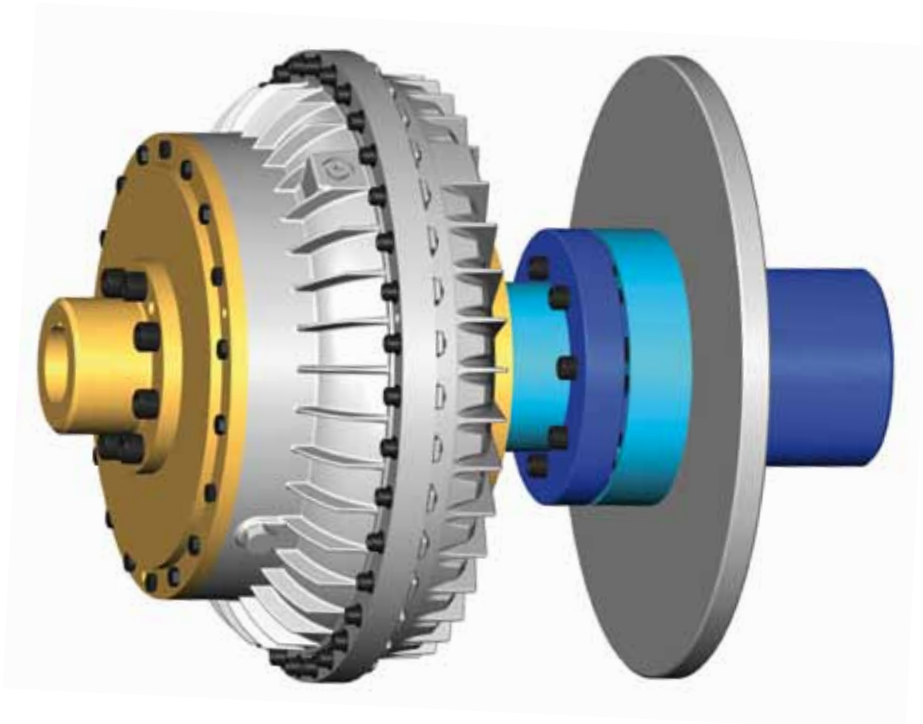
ELKU-N S2: flexible claw coupling with brake disc, five parts

Ordering example: ELKU-N S2 25 - 315x30 - 50 H7P1⁴⁾ (x50)³⁾ - 13v⁴⁾ (x50)³⁾ KWN 22013

Designation of a flexible claw coupling N type S2, nominal size 25 with brake disk $d_2 = 315$ mm, $b_1 = 30$ mm, finished bore $d_4 = 50$ mm, tolerance zone H7, with keyway, (hub length $l_2 = 50$ mm), pilot bore $d_5 = 13$ mm, (hub length $l_3 = 50$ mm).

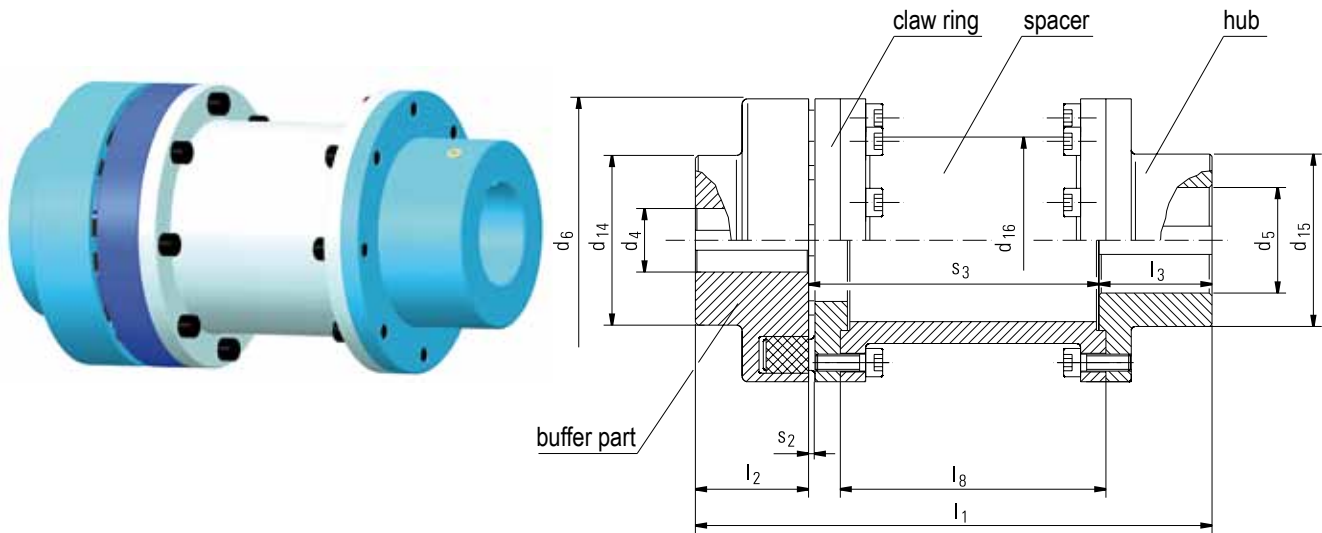
Footnotes see page 14.

| main dimensions | | | | | | | | | | | Table 10 |
|-----------------|--------------------------------------|--------------------------------------|-----|-------------|-------|-------|-------|-------|-------|-------|----------|
| size | d_4 finished bore ¹⁾ | d_5 finished bore ¹⁾ | | d_6 h9 | d_2 | b_1 | l_1 | l_2 | l_3 | l_6 | s_1 |
| | max | min | max | | | | | | | | |
| 25 | 55 | 15 | 45 | 125 | 315 | 30 | 222 | 110 | 50 | 138 | 3 |
| 40 | 60 | 18 | 50 | 140 | 315 | 30 | 260 | 140 | 55 | 168 | 3 |
| 63 | 65 | 22 | 60 | 160 | 315 | 30 | 270 | 140 | 60 | 167 | 4 |
| 100 | 75 | 24 | 65 | 180 | 355 | 30 | 283 | 140 | 70 | 167 | 4 |
| 160 | 85 | 28 | 75 | 200 | 400 | 30 | 328 | 170 | 80 | 197 | 4 |
| 200 | 90 | 24 | 85 | 225 | 450 | 30 | 343 | 170 | 90 | 197 | 4 |
| 250 | 100 | 32 | 95 | 250 | 500 | 30 | 402 | 210 | 100 | 236 | 6 |
| 400 | 110 | 55 | 105 | 280 | 560 | 30 | 417 | 210 | 110 | 236 | 6 |
| 500 | 120 | 48 | 100 | 315 | 630 | 30 | 437 | 210 | 125 | 236 | 6 |
| | 120 | 105 | 120 | 315 | 630 | 30 | 452 | 210 | 125 | 236 | 6 |
| 630 | 140 | 65 | 110 | 350 | 710 | 30 | 456 | 210 | 140 | 236 | 6 |
| | 140 | 115 | 140 | 350 | 710 | 30 | 456 | 210 | 140 | 236 | 6 |



ELKU-N S2: flexible claw coupling as connecting coupling for hydrodynamically coupling TK-N S

| Table 11 | | characteristic values | | | | | | | | | | |
|----------|------------------------------------|-----------------------|-------------------|------------------|---------------------------|--|-----------------|-----------------------------|---|--------------------------|--------------------|--------------------------|
| size | speed n [min ⁻¹] | torque [Nm] | | | torsion angle φ [°] | dyn. torsional stiffness C _{dyn} [kNm/rad] | | rel. damping Ψ [-] | moment of inertia J [kgm ²] | | mass m [kg] | |
| | | T _{KN} | T _{Kmax} | ±T _{KW} | | at T _{KN} | T _{KN} | | 0,5 • K _{max} | bufferpart + BS + hub | claw ring + hub | bufferpart + BS + hub |
| 25 | 3 400 | 250 | 500 | 62 | 4,5 | 19,0 | 8,8 | 0,9 | 0,2 | 0,004 | 22 | 2,5 |
| 40 | 2 750 | 400 | 800 | 100 | 4,5 | 26,0 | 11,9 | 0,9 | 0,25 | 0,007 | 26,5 | 3,4 |
| 63 | 2 750 | 630 | 1 260 | 160 | 4,5 | 58,9 | 27,1 | 0,9 | 0,26 | 0,013 | 29,5 | 4,8 |
| 100 | 2 150 | 1 000 | 2 000 | 250 | 4,5 | 88,5 | 40,6 | 0,9 | 0,4 | 0,024 | 35 | 6,8 |
| 160 | 2 150 | 1 600 | 3 200 | 400 | 4,5 | 138,8 | 63,8 | 0,9 | 0,68 | 0,04 | 53 | 10 |
| 200 | 1 700 | 2 000 | 4 000 | 500 | 4,5 | 236,0 | 108,4 | 0,9 | 1,1 | 0,08 | 63 | 14 |
| 250 | 1 400 | 2 500 | 5 000 | 625 | 4,5 | 305,4 | 140,3 | 0,9 | 1,65 | 0,13 | 83 | 19,5 |
| 400 | 1 100 | 4 000 | 8 000 | 1 000 | 4,5 | 404,3 | 185,8 | 0,9 | 2,75 | 0,2 | 117 | 24 |
| 500 | 1 100 | 5 000 | 10 000 | 1 250 | 4,5 | 618,6 | 284,2 | 0,9 | 4,2 | 0,33 | 138 | 32 |
| | 1 100 | 5 000 | 10 000 | 1 250 | 4,5 | 618,6 | 284,2 | 0,9 | 4,2 | 0,37 | 138 | 34 |
| 500 | 950 | 5 000 | 10 000 | 1 250 | 4,5 | 618,6 | 284,2 | 0,9 | 4,25 | 0,33 | 145 | 32 |
| | 950 | 5 000 | 10 000 | 1 250 | 4,5 | 618,6 | 284,2 | 0,9 | 4,25 | 0,37 | 145 | 34 |
| 630 | 1 100 | 6 300 | 12 600 | 1 575 | 4,5 | 893,7 | 410,4 | 0,9 | 7,2 | 0,54 | 195 | 43 |
| | 1 100 | 6 300 | 12 600 | 1 575 | 4,5 | 893,7 | 410,4 | 0,9 | 7,2 | 0,63 | 195 | 47 |
| 630 | 950 | 6 300 | 12 600 | 1 575 | 4,5 | 893,7 | 410,4 | 0,9 | 7,3 | 0,54 | 205 | 43 |
| | 950 | 6 300 | 12 600 | 1 575 | 4,5 | 893,7 | 410,4 | 0,9 | 7,3 | 0,63 | 205 | 47 |

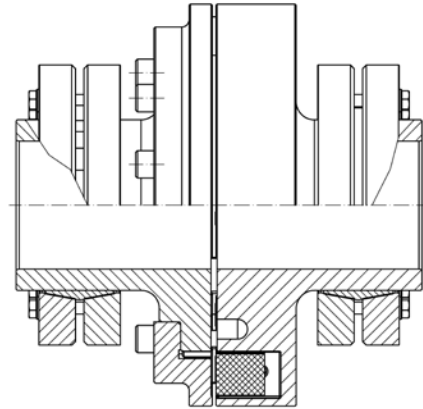


Ordering example: ELKU-N H 63 - 140 - 40 H7P1⁴⁾ (x60)³⁾ - 20v⁴⁾ (x70)³⁾ KWN 22013

Designation of a flexible claw coupling N type H, nominal size 63 with spacer $s_3 = 140$ mm, finished bore $d_4 = 40$ mm, tolerance zone H7, with keyway, (hub length $l_2 = 60$ mm), pilot bore $d_5 = 20$ mm, (hub length $l_3 = 70$ mm).

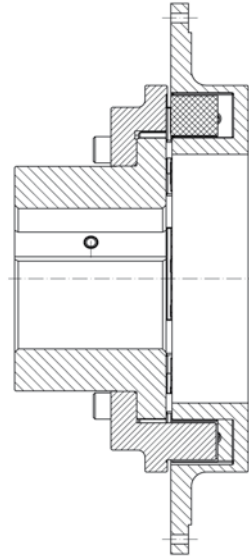
Footnotes see page 14.

| main dimensions | | | | | | | | | | | | | Table 12 | | |
|-----------------|--------------------------|-----------------------------------|-----|-----------------------------------|-----|-------------|----------|----------|----------|-------|-------|-------|----------|-------|-------|
| size | pilot bore ²⁾ | d_4 finished bore ¹⁾ | | d_5 finished bore ¹⁾ | | d_6 h9 | d_{14} | d_{15} | d_{16} | l_1 | l_2 | l_3 | l_8 | s_2 | s_3 |
| | | min | max | min | max | | | | | | | | | | |
| 6,3 | - | 10 | 32 | 10 | 32 | 80 | 50 | 50 | 51 | 175 | 30 | 45 | 87 | 5 | 100 |
| 6,3 | - | 10 | 32 | 10 | 32 | 80 | 50 | 50 | 51 | 215 | 30 | 45 | 127 | 5 | 140 |
| 10 | - | 11 | 42 | 11 | 42 | 95 | 68 | 70 | 63 | 180 | 35 | 45 | 87 | 5 | 100 |
| 10 | - | 11 | 42 | 11 | 42 | 95 | 68 | 70 | 63 | 220 | 35 | 45 | 127 | 5 | 140 |
| 16 | - | 14 | 48 | 14 | 48 | 110 | 78 | 80 | 73 | 190 | 40 | 50 | 85 | 5 | 100 |
| 16 | - | 14 | 48 | 14 | 48 | 110 | 78 | 80 | 73 | 230 | 40 | 50 | 125 | 5 | 140 |
| 16 | - | 14 | 48 | 14 | 48 | 110 | 78 | 80 | 73 | 280 | 40 | 60 | 165 | 5 | 180 |
| 25 | - | 15 | 55 | 15 | 55 | 125 | 90 | 90 | 85 | 200 | 50 | 50 | 85 | 5 | 100 |
| 25 | - | 15 | 55 | 15 | 55 | 125 | 90 | 90 | 85 | 240 | 50 | 50 | 125 | 5 | 140 |
| 25 | - | 15 | 55 | 15 | 55 | 125 | 90 | 90 | 85 | 290 | 50 | 60 | 165 | 5 | 180 |
| 25 | - | 15 | 55 | 15 | 55 | 125 | 90 | 90 | 85 | 320 | 50 | 70 | 185 | 5 | 200 |
| 25 | - | 15 | 55 | 15 | 55 | 125 | 90 | 90 | 85 | 380 | 50 | 80 | 235 | 5 | 250 |
| 40 | - | 18 | 60 | 18 | 60 | 140 | 98 | 98 | 91 | 220 | 55 | 65 | 82 | 5 | 100 |
| 40 | - | 18 | 60 | 18 | 60 | 140 | 98 | 98 | 91 | 260 | 55 | 65 | 122 | 5 | 140 |
| 40 | - | 18 | 60 | 18 | 60 | 140 | 98 | 98 | 91 | 300 | 55 | 65 | 162 | 5 | 180 |
| 40 | - | 18 | 60 | 18 | 60 | 140 | 98 | 98 | 91 | 320 | 55 | 65 | 182 | 5 | 200 |
| 40 | - | 18 | 60 | 18 | 60 | 140 | 98 | 98 | 91 | 385 | 55 | 80 | 232 | 5 | 250 |
| 63 | - | 22 | 65 | 22 | 65 | 160 | 108 | 108 | 111 | 230 | 60 | 70 | 81,5 | 6 | 100 |
| 63 | - | 22 | 65 | 22 | 65 | 160 | 108 | 108 | 111 | 270 | 60 | 70 | 121,5 | 6 | 140 |
| 63 | - | 22 | 65 | 22 | 65 | 160 | 108 | 108 | 111 | 310 | 60 | 70 | 161,5 | 6 | 180 |
| 63 | - | 22 | 65 | 22 | 65 | 160 | 108 | 108 | 111 | 330 | 60 | 70 | 181,5 | 6 | 200 |
| 63 | - | 22 | 65 | 22 | 65 | 160 | 108 | 108 | 111 | 390 | 60 | 80 | 231,5 | 6 | 250 |
| 100 | - | 24 | 75 | 24 | 75 | 180 | 125 | 125 | 131 | 290 | 70 | 80 | 121,5 | 6 | 140 |
| 100 | - | 42 | 75 | 24 | 75 | 180 | 125 | 125 | 131 | 330 | 70 | 80 | 161,5 | 6 | 180 |
| 100 | - | 24 | 75 | 24 | 75 | 180 | 125 | 125 | 131 | 350 | 70 | 80 | 181,5 | 6 | 200 |
| 100 | - | 24 | 75 | 24 | 75 | 180 | 125 | 125 | 131 | 400 | 70 | 80 | 231,5 | 6 | 250 |
| 160 | - | 28 | 85 | 28 | 85 | 200 | 140 | 140 | 144 | 310 | 80 | 90 | 118,5 | 6 | 140 |
| 160 | - | 28 | 85 | 28 | 85 | 200 | 140 | 140 | 144 | 350 | 80 | 90 | 158,5 | 6 | 180 |
| 160 | - | 28 | 85 | 28 | 85 | 200 | 140 | 140 | 144 | 370 | 80 | 90 | 178,5 | 6 | 200 |
| 160 | - | 38 | 85 | 28 | 85 | 200 | 140 | 140 | 144 | 420 | 80 | 90 | 228,5 | 6 | 250 |
| 200 | - | 38 | 90 | 38 | 90 | 225 | 150 | 150 | 169 | 370 | 90 | 100 | 158,5 | 6 | 180 |
| 200 | - | 38 | 90 | 38 | 90 | 225 | 150 | 150 | 169 | 390 | 90 | 100 | 178,5 | 6 | 200 |
| 200 | - | 28 | 90 | 38 | 90 | 225 | 150 | 150 | 169 | 440 | 90 | 100 | 228,5 | 6 | 250 |
| 200 | - | 38 | 90 | 38 | 90 | 225 | 150 | 150 | 169 | 470 | 90 | 100 | 258,5 | 6 | 280 |
| 250 | 44 | 48 | 100 | 48 | 100 | 250 | 165 | 165 | 185 | 390 | 100 | 110 | 152,5 | 8 | 180 |
| 250 | 44 | 48 | 100 | 48 | 100 | 250 | 165 | 165 | 185 | 410 | 100 | 110 | 172,5 | 8 | 200 |
| 250 | 44 | 48 | 100 | 48 | 100 | 250 | 165 | 165 | 185 | 460 | 100 | 110 | 222,5 | 8 | 250 |



ELKU-N: flexible claw coupling with taper-lock-clamping unit

| Table 13 | | characteristic values | | | | | | | | | | | |
|----------|--|-----------------------|-------------------|------------------|---|--|------------------------|---------------------------------|----------------|---|--------------------------------|-------------------|--------------------------------|
| size | speed n [min ⁻¹] | torque [Nm] | | | torsion angle φ [°] at T _{KN} | dyn. torsional stiffness C _{dyn} [kNm/rad] | | rel. damping ψ [-] | l _g | moment of inertia J [kgm ²] | | mass m [kg] | |
| | | T _{KN} | T _{Kmax} | ±T _{KW} | | T _{KN} | 0,5 • K _{max} | | | buffer part | claw ring + spacer + hub | buffer part | claw ring + spacer + hub |
| 6,3 | 5 000 | 63 | 126 | 16 | 4,5 | 5,4 | 2,5 | 0,9 | 87 | 0,0004 | 0,0013 | 0,6 | 1,9 |
| 6,3 | 5 000 | 63 | 126 | 16 | 4,5 | 5,4 | 2,5 | 0,9 | 127 | 0,0004 | 0,0014 | 0,6 | 2 |
| 10 | 5 000 | 100 | 200 | 25 | 4,5 | 8,3 | 3,8 | 0,9 | 87 | 0,0009 | 0,0028 | 0,9 | 2,7 |
| 10 | 5 000 | 100 | 200 | 25 | 4,5 | 8,3 | 3,8 | 0,9 | 127 | 0,0009 | 0,0031 | 0,9 | 3 |
| 16 | 5 000 | 160 | 320 | 40 | 4,5 | 12,6 | 5,8 | 0,9 | 85 | 0,002 | 0,0056 | 1,5 | 3,9 |
| 16 | 5 000 | 160 | 320 | 40 | 4,5 | 12,6 | 5,8 | 0,9 | 125 | 0,002 | 0,0060 | 1,5 | 4,3 |
| 16 | 5 000 | 160 | 320 | 40 | 4,5 | 12,6 | 5,8 | 0,9 | 165 | 0,002 | 0,0064 | 1,5 | 4,7 |
| 25 | 5 000 | 250 | 500 | 62 | 4,5 | 19,0 | 8,8 | 0,9 | 85 | 0,004 | 0,0099 | 2,5 | 5,3 |
| 25 | 5 000 | 250 | 500 | 62 | 4,5 | 19,0 | 8,8 | 0,9 | 125 | 0,004 | 0,0100 | 2,5 | 5,8 |
| 25 | 5 000 | 250 | 500 | 62 | 4,5 | 19,0 | 8,8 | 0,9 | 165 | 0,004 | 0,0110 | 2,5 | 6,3 |
| 25 | 5 000 | 250 | 500 | 62 | 4,5 | 19,0 | 8,8 | 0,9 | 185 | 0,004 | 0,0115 | 2,5 | 6,6 |
| 25 | 5 000 | 250 | 500 | 62 | 4,5 | 19,0 | 8,8 | 0,9 | 235 | 0,004 | 0,0120 | 2,5 | 7,1 |
| 40 | 4 900 | 400 | 800 | 100 | 4,5 | 26,0 | 11,9 | 0,9 | 82 | 0,007 | 0,0180 | 3,3 | 8 |
| 40 | 4 900 | 400 | 800 | 100 | 4,5 | 26,0 | 11,9 | 0,9 | 122 | 0,007 | 0,0190 | 3,3 | 8,5 |
| 40 | 4 900 | 400 | 800 | 100 | 4,5 | 26,0 | 11,9 | 0,9 | 162 | 0,007 | 0,0200 | 3,3 | 9 |
| 40 | 4 900 | 400 | 800 | 100 | 4,5 | 26,0 | 11,9 | 0,9 | 182 | 0,007 | 0,0210 | 3,3 | 9,3 |
| 40 | 4 900 | 400 | 800 | 100 | 4,5 | 26,0 | 11,9 | 0,9 | 232 | 0,007 | 0,0220 | 3,3 | 9,9 |
| 63 | 4 250 | 630 | 1 260 | 160 | 4,5 | 58,9 | 27,1 | 0,9 | 81,5 | 0,013 | 0,0300 | 4,7 | 9,8 |
| 63 | 4 250 | 630 | 1 260 | 160 | 4,5 | 58,9 | 27,1 | 0,9 | 121,5 | 0,013 | 0,0320 | 4,7 | 10,5 |
| 63 | 4 250 | 630 | 1 260 | 160 | 4,5 | 58,9 | 27,1 | 0,9 | 161,5 | 0,013 | 0,0340 | 4,7 | 11,3 |
| 63 | 4 250 | 630 | 1 260 | 160 | 4,5 | 58,9 | 27,1 | 0,9 | 181,5 | 0,013 | 0,0350 | 4,7 | 11,7 |
| 63 | 4 250 | 630 | 1 260 | 160 | 4,5 | 58,9 | 27,1 | 0,9 | 231,5 | 0,013 | 0,0370 | 4,7 | 12,7 |
| 100 | 3 800 | 1 000 | 2 000 | 250 | 4,5 | 88,5 | 40,6 | 0,9 | 121,5 | 0,023 | 0,0540 | 6,9 | 14,1 |
| 100 | 3 800 | 1 000 | 2 000 | 250 | 4,5 | 88,5 | 40,6 | 0,9 | 161,5 | 0,023 | 0,0580 | 6,9 | 15 |
| 100 | 3 800 | 1 000 | 2 000 | 250 | 4,5 | 88,5 | 40,6 | 0,9 | 181,5 | 0,023 | 0,0600 | 6,9 | 15,5 |
| 100 | 3 800 | 1 000 | 2 000 | 250 | 4,5 | 88,5 | 40,6 | 0,9 | 231,5 | 0,023 | 0,0650 | 6,9 | 16,5 |
| 160 | 3 400 | 1 600 | 3 200 | 400 | 4,5 | 138,8 | 63,8 | 0,9 | 118,5 | 0,04 | 0,0950 | 9,5 | 19,7 |
| 160 | 3 400 | 1 600 | 3 200 | 400 | 4,5 | 138,8 | 63,8 | 0,9 | 158,5 | 0,04 | 0,1000 | 9,5 | 20,8 |
| 160 | 3 400 | 1 600 | 3 200 | 400 | 4,5 | 138,8 | 63,8 | 0,9 | 178,5 | 0,04 | 0,1050 | 9,5 | 21,4 |
| 160 | 3 400 | 1 600 | 3 200 | 400 | 4,5 | 138,8 | 63,8 | 0,9 | 228,5 | 0,04 | 0,1100 | 9,5 | 22,6 |
| 200 | 3 000 | 2 000 | 4 000 | 500 | 4,5 | 236,0 | 108,4 | 0,9 | 158,5 | 0,07 | 0,1600 | 13 | 26 |
| 200 | 3 000 | 2 000 | 4 000 | 500 | 4,5 | 236,0 | 108,4 | 0,9 | 178,5 | 0,07 | 0,1700 | 13 | 26,7 |
| 200 | 3 000 | 2 000 | 4 000 | 500 | 4,5 | 236,0 | 108,4 | 0,9 | 228,5 | 0,07 | 0,1800 | 13 | 28,5 |
| 200 | 3 000 | 2 000 | 4 000 | 500 | 4,5 | 236,0 | 108,4 | 0,9 | 258,5 | 0,07 | 0,1900 | 13 | 29,5 |
| 250 | 2 750 | 2 500 | 5 000 | 625 | 4,5 | 305,4 | 140,3 | 0,9 | 152,5 | 0,12 | 0,2700 | 17,5 | 36 |
| 250 | 2 750 | 2 500 | 5 000 | 625 | 4,5 | 305,4 | 140,3 | 0,9 | 172,5 | 0,12 | 0,2800 | 17,5 | 37,2 |
| 250 | 2 750 | 2 500 | 5 000 | 625 | 4,5 | 305,4 | 140,3 | 0,9 | 222,5 | 0,12 | 0,3000 | 17,5 | 39 |



ELKU-N: flexible claw coupling in flange design

If orders do not specify the length of the hub is, we have been supplying prospectus.

Special designs are available on request:

- Available in cast iron EN-GJS-400-15U DIN EN 1563,
- two keyways
- with locking thread
- finish bore without keyway (for clamping sets)
- Versions with hole for removing the shaft
- hard chromed brake disk

- 1) finished bore to ISO-fit H7, keyway to DIN 6885 sheet 1, fit JS 9
- 2) without keyway, pilot bore - untoleranced dimension, „average“ to DIN ISO 2768
- 3) see page 14 „remarks“
- 4) see page 14 „type of hub bore“

| type of the hub bore | | Tolerancefield H7 | | | | Table 14 |
|----------------------|-------------|-------------------|------------|----------------------------|----------------------------|----------|
| Hub bore | pilot bored | without keyway | one keyway | two keyways 120° turned | two keyways 180° turned | |
| Abbreviation | v | - | P1 | P2 | P3 | |



roll screen with ELKU-N



log washer drive with ELKU-N

Materials

Hub, claw ring, claw body and buffer part:
EN-GJL-250 DIN EN 1561

brake disk: EN 10025-2-S355J2+N / GS 30 DIN 1681

buffer: Perbunan 80 Shore A

spacer: EN-GJS-400-15U DIN EN 1563

alternative materials at the manufacturer's

Installation and operating conditions

The arrangement of the coupling parts to be connected to the Shaft ends is desired.

The given permitted misalignment values provide general Values under the following conditions is:

- Load up to the rated torque
- Operating speed $n = 1\ 500$ rpm
(for $n < 1\ 500\ \text{min}^{-1}$ is the maximum speed)
- ambient temperature of $+30\ ^\circ\text{C}$.
- Maximum values in radial or angular misalignment

If both shifts at the same time, the values may only be used proportionately. In this case, please consult with the manufacturer.

balancing condition

In general, the elastic claw couplings in unbalanced state delivered.

After the user's requirements, they can dynamically the quality Q 6.3 (ISO Recommendation 1940) or static delivered balanced.

Size selection in accordance with DIN 740 Part 2

Size selection in accordance with DIN 740 Part 2 The design of the coupling is the laws of physics.

It is recommended that a coupling selection the trained personnel of KWD perform to leave.



Sídlo firmy a centrální sklad /
Headquarters

TYMA CZ, s.r.o.
Na Pískách 731/12
CZ - 400 04 Trmice
Tel.: +420 475 655 010
Fax: +420 475 655 018
E-mail: info@tyma.cz
[http: www.tyma.cz](http://www.tyma.cz)
e-shop: belt-online.com



Issue: 02/2013



Certified in accordance with ISO 9001: 2008
Scope development, manufacture, sale
and servicing of couplings in the drive
technology field



Certified Welding
Company / GSI SLV