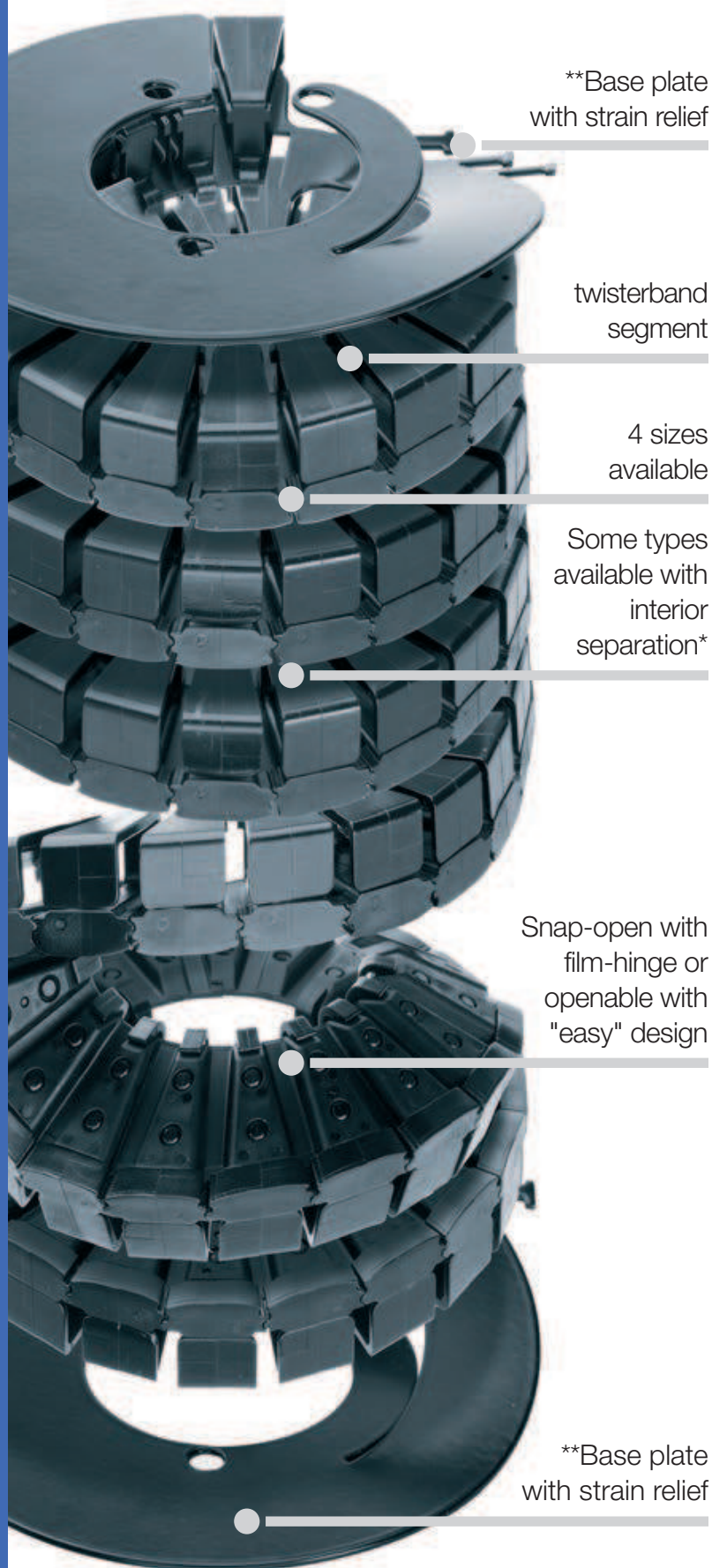




**Base plate
with strain relief

twisterband
segment

4 sizes
available

Some types
available with
interior
separation*

Snap-open with
film-hinge or
openable with
"easy" design

**Base plate
with strain relief

**Base plates are delivered by standard.
They are part of the twisterband-module!

Compact, modular and cost effective - twisterband

Rotary movements in small spaces - up to 20 times its own axis. With the very compact igus® twisterband rotations can be implemented economically and with low wear and low maintenance in a confined space. Energy, data and media are kept secure.

- Available in 4 sizes
- Rotary movements up to 7000° (Installation position, vertical: up to 3.000°, horizontal: 7.000° and more possible)
- Rotary speeds up to 360°/s possible
- Compact, modular and lightweight
- Ribbons can be shortened easily
- Minimum installation space, fits very closely around the rotary axis
- Can be reliably used in various installation positions (horizontal or vertical)
- Cost effective
- Easy filling
- chainflex® cables in very limited spaces

Typical industries and applications

- Cable reels
- Robots (robot arms, 1/6 axis, scara robots)
- Tooling machines
- Leisure rides
- Medical equipment
- Radar and telescope equipment
- Aerospace, test, measurement, handling, lifting and installation equipment
- Wind turbines (e.g. blade adjustment)
- Wherever rotary unions are used



twisterband (7000° rotation) | Selection table

Seriesw	Inner height <i>hi</i> [mm]	Inner width <i>Bi</i> [mm]	Ø <i>X₁</i> [mm]	Ø <i>X₂</i> [mm]	<i>R min.</i> [mm]	<i>R max.</i> [mm]	Interior separation	Opening principle	Page
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twisterband
rotary movements in
small spaces -
up to 20 times its own axis

Installation position, vertical: up to 3.000°,
horizontal: 7.000° and more possible

TB12.23.09	9	23	40	140	24	35	–	"easy" design	652
TB20.44.12	12	44	50	220	34	57	–	"easy" design	652
TB20.44.18	18	44	50	220	34	57	yes	film-hinge	652
TB29.27.22	22	27	200	320	69	82	yes	film-hinge	652
TB30.75.22	22	75	90	330	44	77	yes	film-hinge	652

More sizes available upon request! *X₁* = inner machine construction space *X₂* = outer machine construction space

twisterband features



A shaft must be centrally installed
for angles of rotation from 1500°
rotating and horizontal

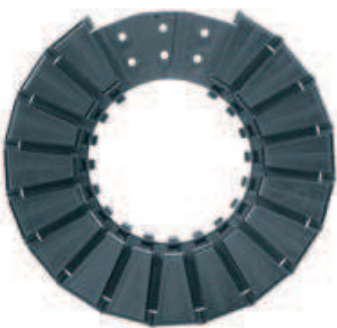
360°... 3000°



Max. rotation angle: as a rule of
thumb: Each section gives 180° =
360° more rotation



Film hinge: easy access and quick
filling with cables and hoses



igus® twisterband, minimum
installation space, fits very closely
around the rotary axis



Compact, modular, cost effective -
up to 7.000° rotary* motions in
smallest spaces (*Installation position, vertical:
up to 3.000°, horizontal: 7.000° and more possible)



Can be reliably used in various in-
stallation positions (horizontal: 7.000° and
more possible). Limited length compen-
sation possible

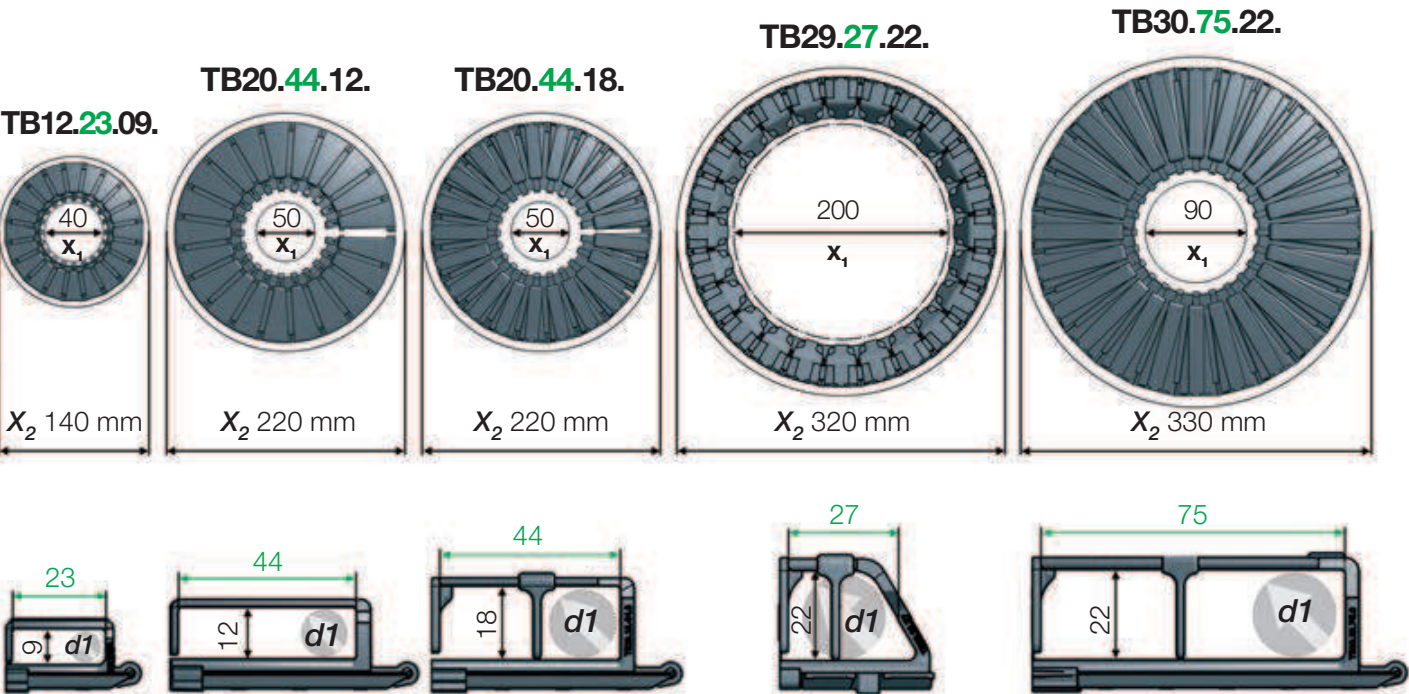


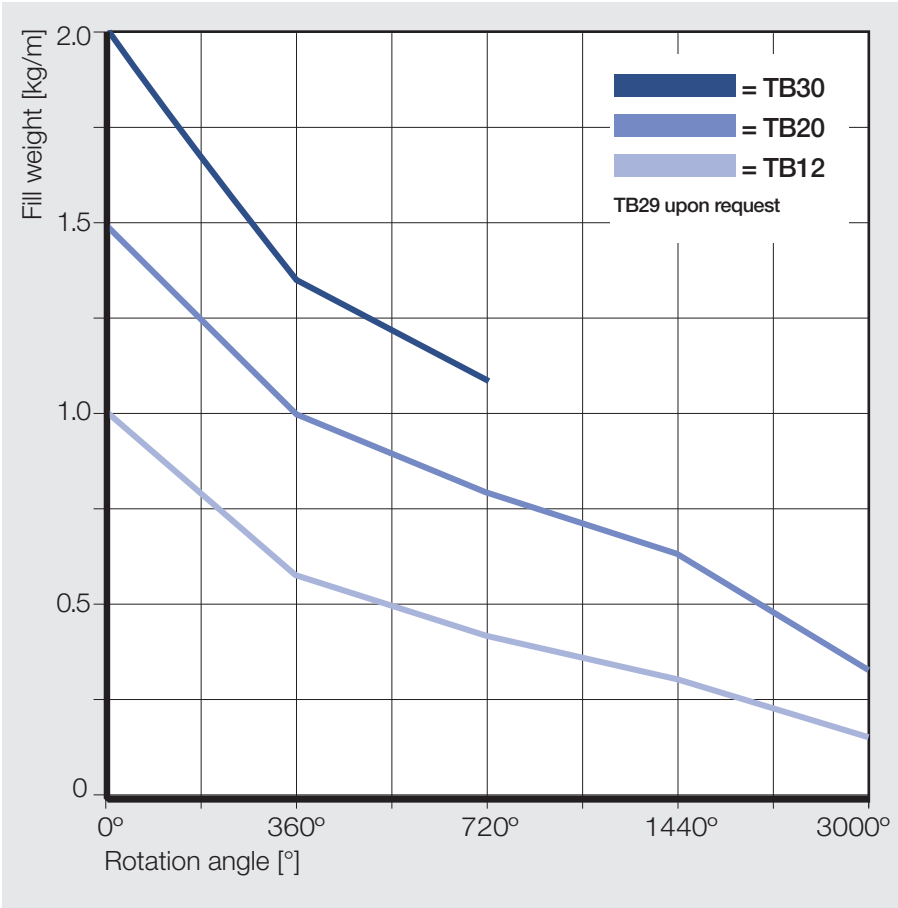
twisterband | Crossbars snap-open with film-hinge or openable with "easy" design

Part No. twisterband	Inner width <i>Bi</i> [mm]	Inner height <i>hi</i> [mm]	<i>X</i> ₁ = inner machine construction space [mm]	<i>X</i> ₁ = outer machine construction space [mm]	<i>R</i> min. [mm]	≤ <i>R</i> [mm]	Opening principle	≤ <i>d</i> 1 [mm]
TB12.23.09. X.01.0	23	9	Ø 40	Ø 140	24	35	"easy" design	7
TB20.44.12. X.01.0	44	12	Ø 50	Ø 220	34	57	"easy" design	9
TB20.44.18. X.01.0	44	18	Ø 50	Ø 220	34	57	film-hinge	14
TB29.27.22. X.01.0	27	22	Ø 200	Ø 320	69	82	film-hinge	17
TB30.75.22. X.01.0	75	22	Ø 90	Ø 330	44	77	film-hinge	17

Supplement Part No. with required number of ribbons **X** (see calculation box) e.g. TB20.44.12.6.01.0

*Base plates are delivered by standard. They are part of the twisterband-module! more twisterband sizes upon request!

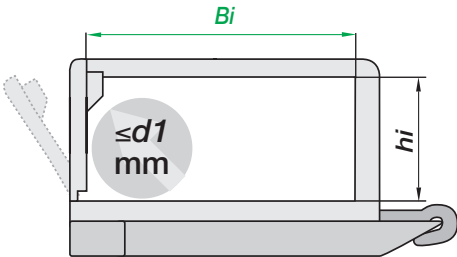
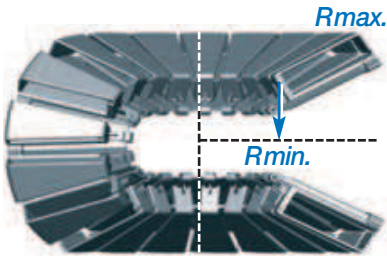




Fill weights depending of the rotation angle



Series	Speed max.
TB12.23.	180°/s
TB20.44.	180°/s
TB20.44.	180°/s
TB29.27.	upon request
TB30.75.	180°/s



Calculation: number of ribbons depending on rotation angle
(please always round up number of ribbons)

TB12: $X \approx \frac{\text{Rotation angle}}{360} + 2$ = Example: $X \approx \frac{1200^\circ}{360} + 2$ = Result: $X \approx 6$ ribbons

TB20: $X \approx \frac{\text{Rotation angle}}{340} + 2$ = Example: $X \approx \frac{1200^\circ}{340} + 2$ = Result: $X \approx 6$ ribbons

TB29: $X \approx \frac{\text{Rotation angle}}{180} + 6$ = Example: $X \approx \frac{1200^\circ}{180} + 6$ = Result: $X \approx 13$ ribbons

TB30: $X \approx \frac{\text{Rotation angle}}{180} + 6$ = Example: $X \approx \frac{1200^\circ}{180} + 6$ = Result: $X \approx 13$ ribbons

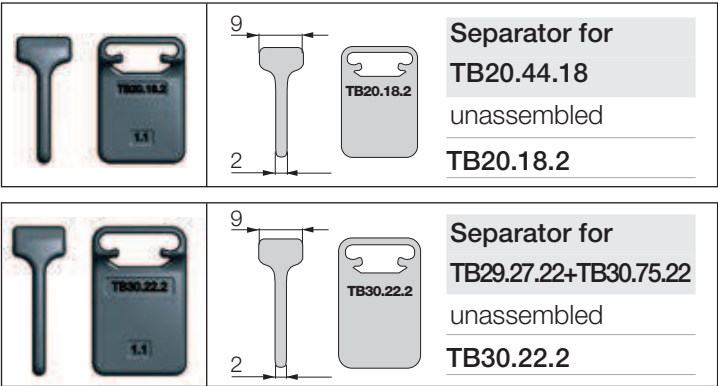
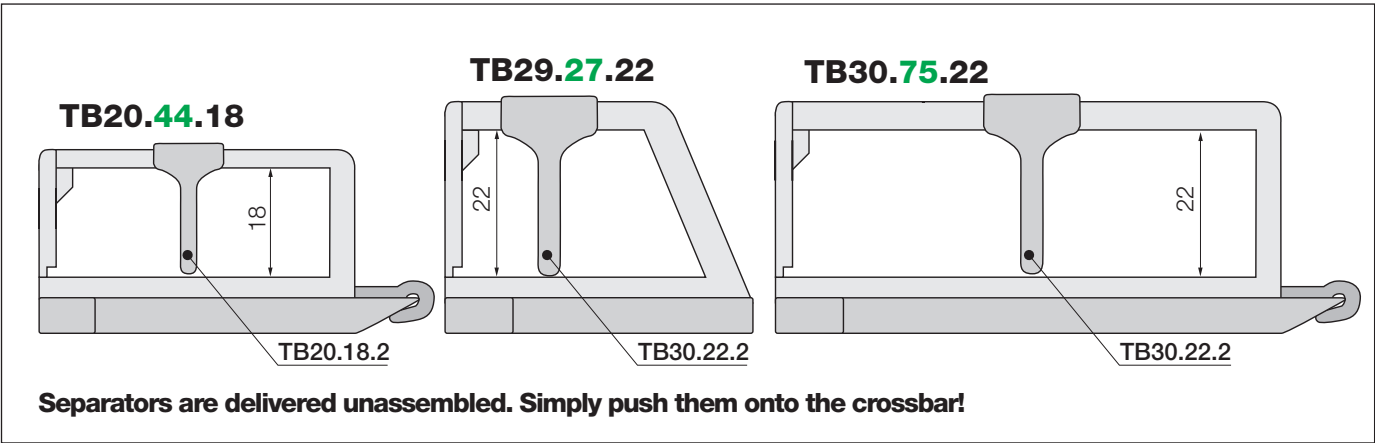


B_i = inner width e-chain®
 h_i = inner height e-chain®

X_1 = inner machine construction space
 X_2 = outer machine construction space

$R_{min.}$ = min. bend radius
 $R_{max.}$ = max. bend radius

d_1 = max. cable diameter
 X = number of ribbons

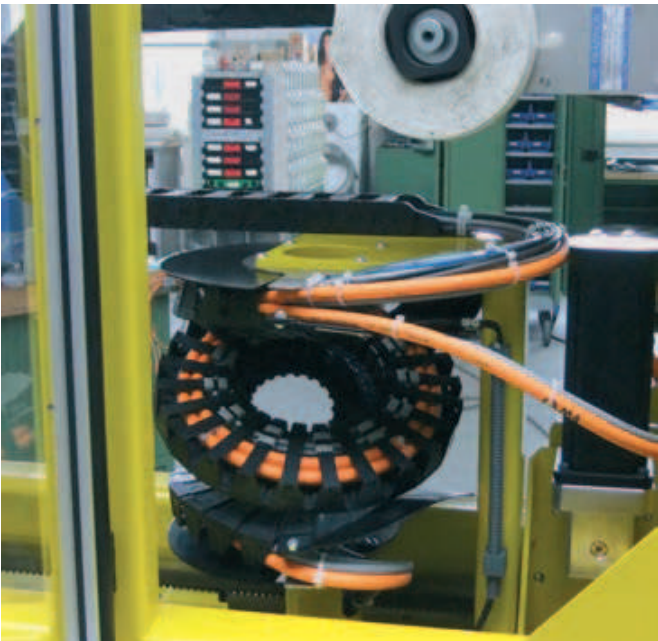


Separators

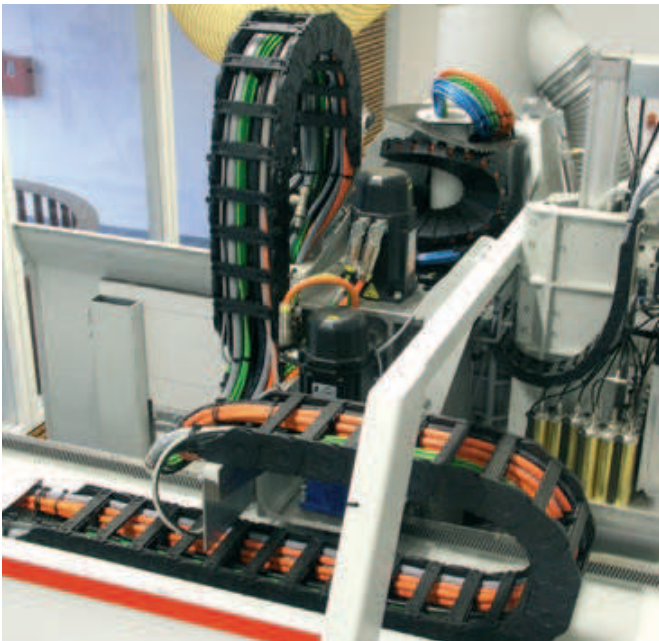
For series TB20 with an inner height of 18 mm and series TB29 and TB30 (inner height: 22 mm). For installation simply open the e-chain®, insert a cable and push the separator onto the crossbar. Then add more cables. The separators provide a clear, cablefriendly interior separation.



Easy opening and filling of the twisterbandes with a click or with the "easy" design. Simply push separators on and add more cables. The separators provide a clear, cable-friendly interior separation.



igus® twisterband TB30 for rotations of 360° and E2 mini and E2/000 e-chains® in an un- and loading unit



An igus® twisterband guides the energy of the 5-axis cutting heat in this wood working machine, safe and cost effective

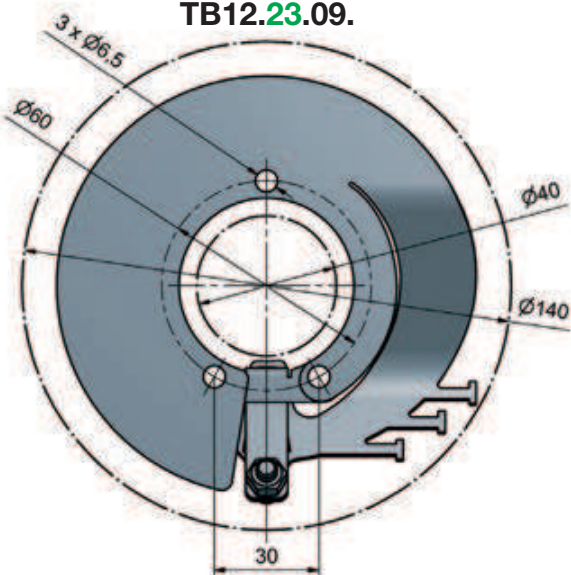
654 More information ► www.igus.eu/twisterband

twisterband (7000° rotation) | Accessories

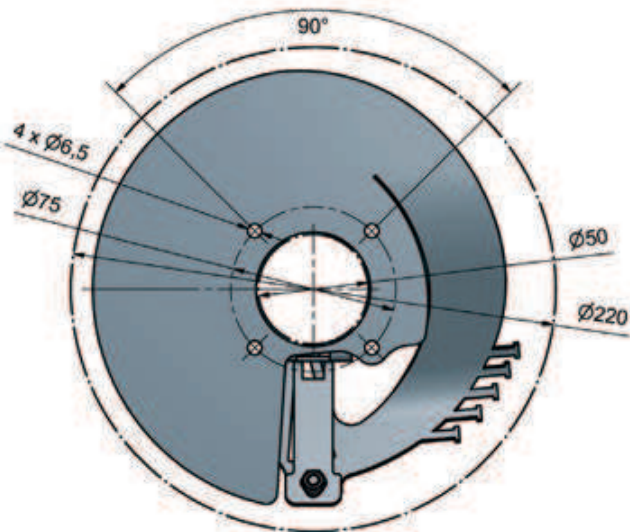
Base plates with strain relief

Dimensions - base plates made of steel with strain relief for the following series:
(for TB29.27.22 upon request)

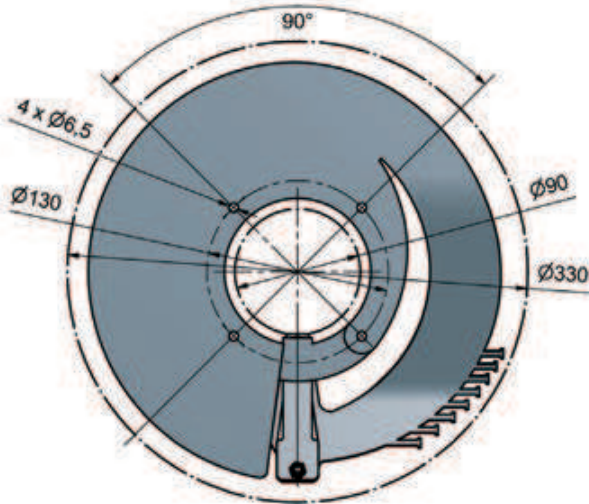
TB12.23.09.



TB20.44.12. / TB20.44.18.



TB30.75.22.



Base plates are delivered by standard. They are part of the twisterband-module!



twisterband application of two systems mounted above one another. This space-saving solution allows double filling space with a constant outer diameter of the system