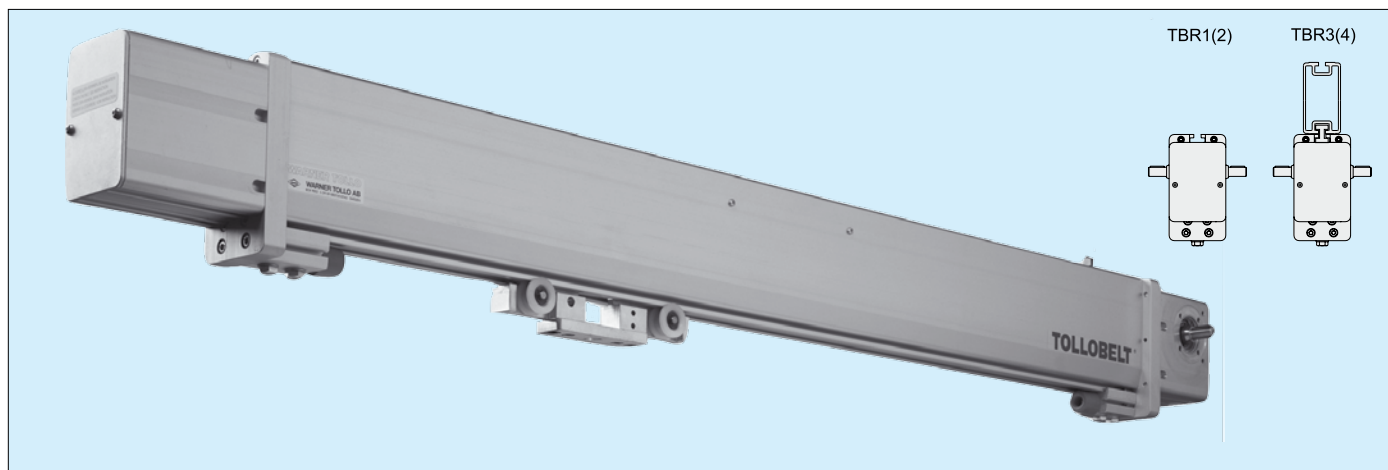


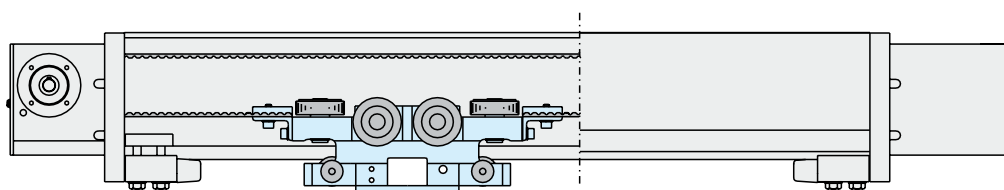
## Tollobelt - general product information

Tollobelt TBR1, TBR2, TBR3 and TBR4



### Belt drive, roller guide

- Four sizes
- Belt drive
- Ball bearing trolleys
- Speed up to 5 m/s
- Stroke up to 20 m
- Load up to 600 kg
- One to four trolleys possible.



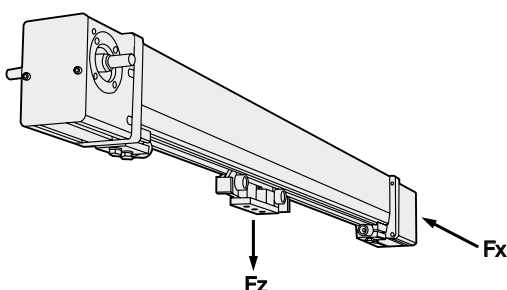
## Tollobelt TBR1, TBR2, TBR3, TBR4

### General

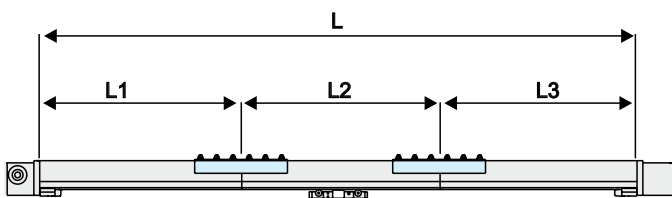
Parameters	TBR1	TBR2	TBR3	TBR4
Weight per trolley (kg)	3,5	3,5	3,5	3,5
Max. input speed (rpm)	1250	1250	1250	1250
Move (mm/revolution)	240	240	240	240
Ambient temperature (°C)	-20 to 70	-20 to 70	-20 to 70	- 20 to 70
Weight with single trolley (kg/m)	11,5 + L x 6,3	13,5 + L x 9,1	13,5 + L x 16,3	13,5 + L x 16,3

### Load capacity

Parameters	TBR1	TBR2	TBR3	TBR4
Max. stroke (m)	15	20	20	20
Fx max. (N)	800	1250	1250	1250
Fz max. (N)	3000	6000	6000	6000
Max. speed (m/s)	5	5	5	5
Repeatability (±mm)	0,5	0,5	0,5	0,5
Resolution (mm)	1	1	1	1



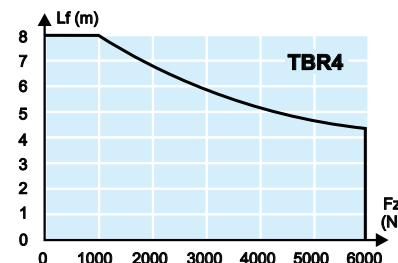
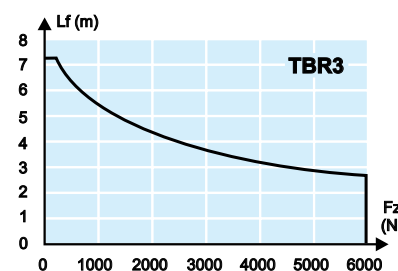
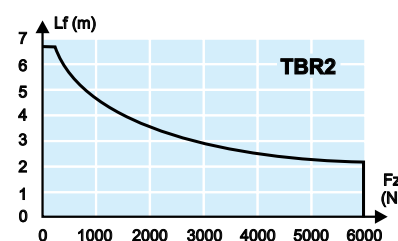
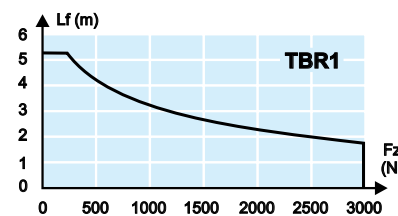
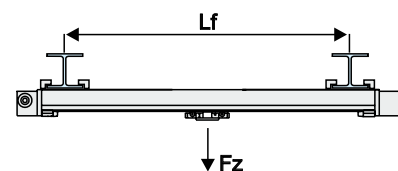
### Length of profile sections and number of connections



L (ordering length in cm)						
	0 – 800	801 – 1200	1201 – 1400	1401 – 1600	1601 – 1800	1801 – 2000
L1 (cm)	0 – 800	600	600	800	600	600
L2 (cm)		201 – 600	601 – 800	601 – 800	600	600
L3 (cm)					401 – 600	601 – 800

Note! sectioning can be done in other ways if agreed before order.

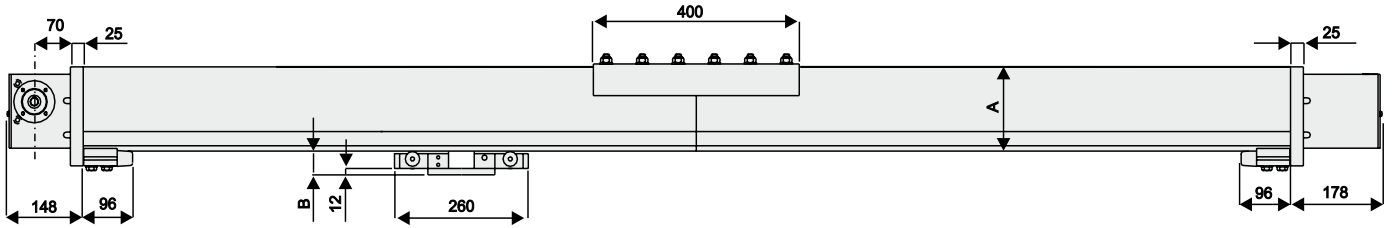
### Deflection of the beam



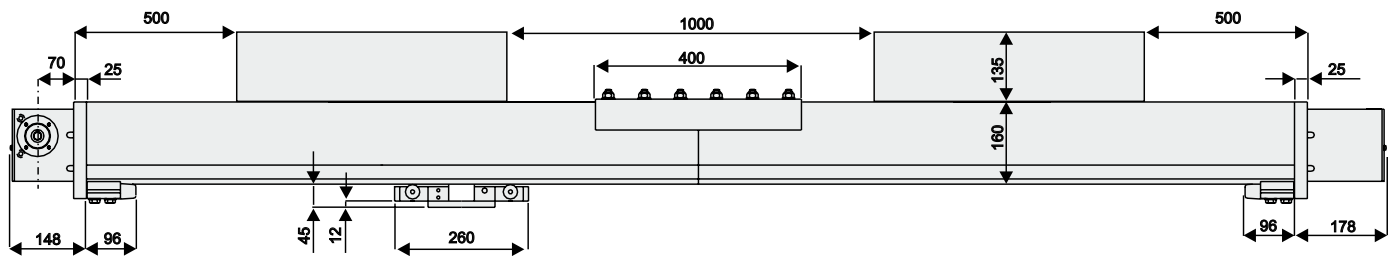
# Tollobelt TBR1, TBR2, TBR3, TBR4

## Dimensions

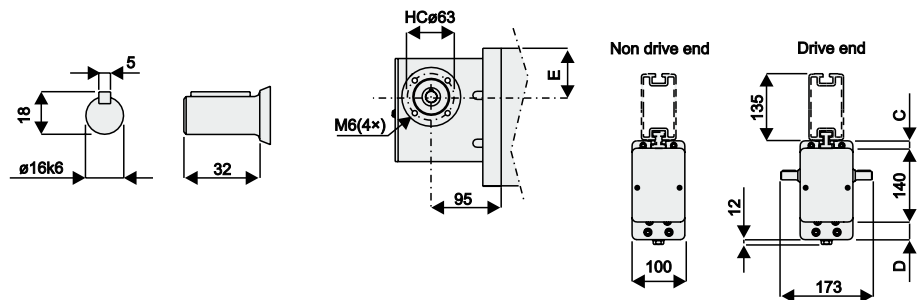
Designation: TBR1(2)B240 .....



Designation: TBR3(4)B240 .....

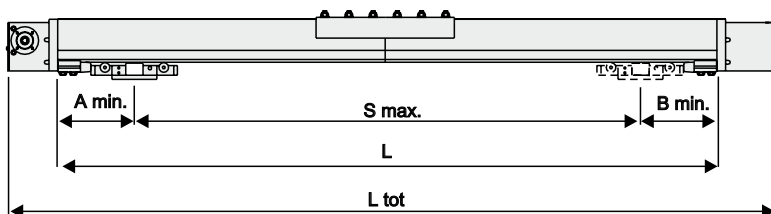


	TBR1	TBR2(3/4)
A	125	160
B	50	45
C	11	15
D	0	34
E	62,5	66,5

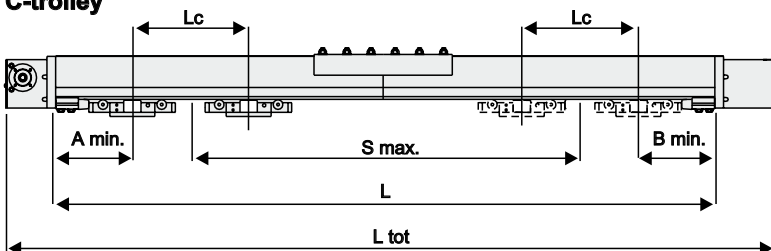


## Ordering length

### A-trolley



### C-trolley



	A min.	B min.	Trolley c/c distance*	Ordering length	Total length
TBR •	226	226	Lc min = 410	$L = S \text{ max.} + Lc + A \text{ min.} + B \text{ min.}$	$L \text{ tot} = L + 326$

\* For A-trolleys, Lc = 0 mm

## Designation information

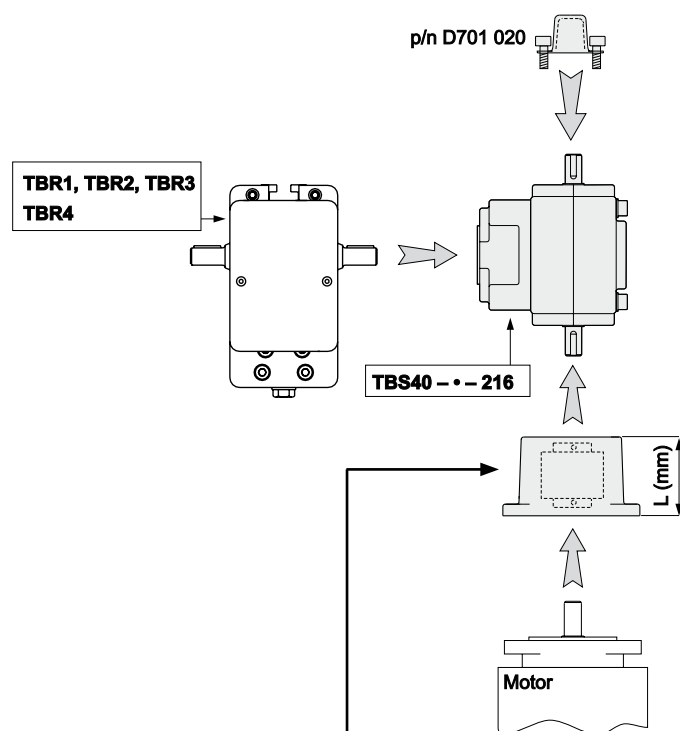
### Tollobelt

Designation example	<b>TB</b>	<b>R</b>	<b>1</b>	<b>B</b>	<b>240</b>	<b>C</b>	<b>700</b>	<b>1000</b>
<b>Unit type</b> Tollobelt	TB							
<b>Guide</b> Roller guide		R						
<b>Profile height</b> 125 mm 160 mm 295 mm, bolted version 295 mm, welded version			1 2 3 4					
<b>Drive mechanism</b> Belt drive				B				
<b>Linear move per input shaft revolution</b> 240 mm					240			
<b>Number of trolleys</b> One trolley Two trolleys Three trolleys Fout trolleys						A B C D		
<b>Lc distance between trolleys in cm</b> One trolley Multiple trolleys (specify distance)							000 ...	
<b>Ordering length in cm</b>								....

## Flanges and gears

### Worm gear type TBS40

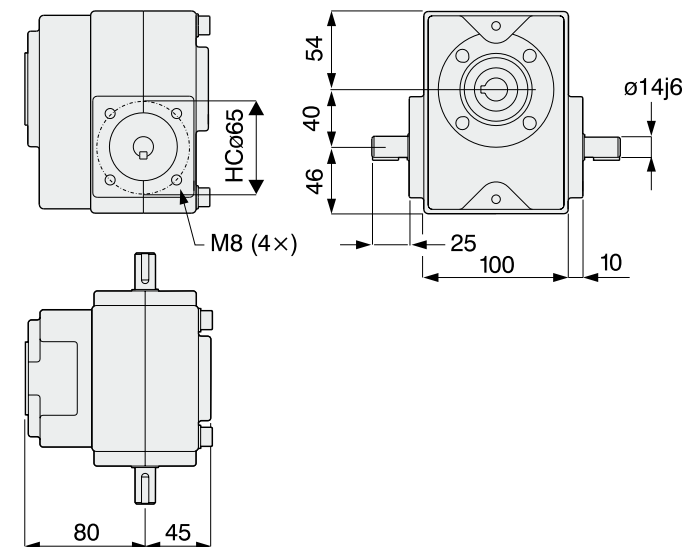
The worm gear is installed directly to the unit while the motor has to be installed to an intermediate bell house flange which includes a matching coupling. The gear and the bell house are ordered separately.



Part number table for bell house

Bell house		
IEC 71 B14	IEC 80 B14	Servo 95
L = 58	L = 68	L = 78
D701 011	D701 015	D389 825

### TBS40



### Ordering key for worm gear TBS40

Example: TBS40- 5,5 -216

#### Gear ratio

3	3
5,5	5,5
7,5	7,5
10	10
15	15
20	20
24	24
30	30
40	40
48	48
60	60

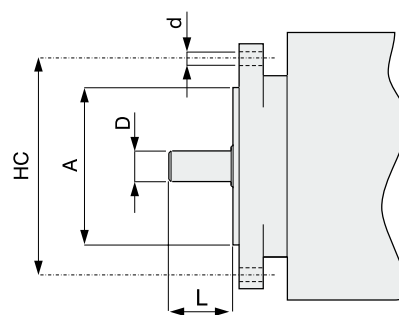
### Motor size table



Keep in mind that heavy motors will need extra support in order not to break the flange or gear due to the load torque created.

Motor size	A	D	L	HC	d
IEC 63 B14	60	11	23	75	M5
IEC 71 B14	70	14	30	85	M6
IEC 80 B14	80	19	40	100	M6
IEC 90 B14	95	24	50	115	M8
IEC 100/112 B14	110	28	60	130	M8
Servo 80*	80	14	30	100	ø7
Servo 95*	95	19	40	115	ø9
Servo A200	130	24	50	165	ø11

\* Measures according to DIN 42950.



## Flanges and gears

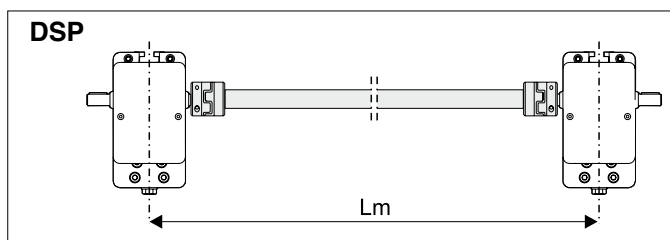
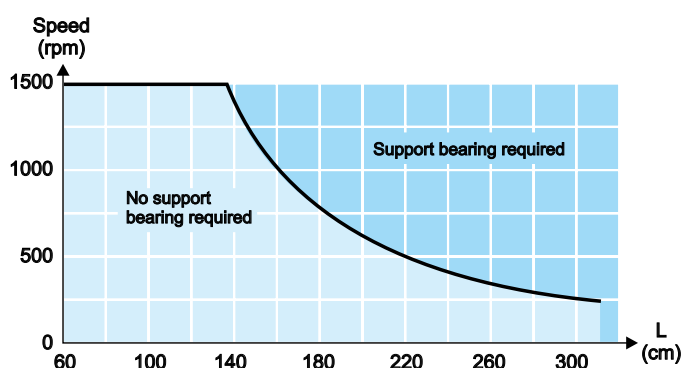
### Intermediate shafts

The intermediate shafts provides synchronous drive of multiple Tollobelt units with a single motor.

The intermediate shaft type DSP consists of couplings matching the drive shaft of the Tollobelt units and a high precision tube with customer defined length.

The intermediate shaft has a critical speed which may not be exceeded. The critical speed is a function of the length of the tube, as diagrammed below. Higher speed or longer transmissions require additional support bearings which can be ordered from your local bearing supplier.

#### Critical speed

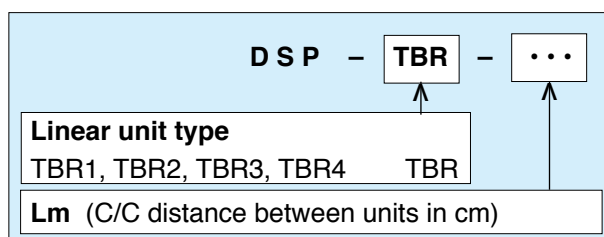


#### Technical data

	DSP
Weight (kg)	$1,3 + 0,026 \times (Lm - 20)$
Max. speed (rpm)	1500
Diameter (mm)	30

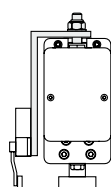
#### Ordering information

#### Designation for DSP



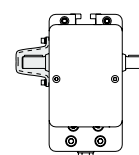
## Accessories

### Brackets for mechanical limit switch



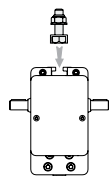
	TBR1	TBR2	TBR3(4)
	D390 017	D390 016	D390 015

### Shaft cover



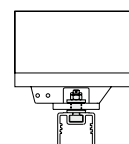
	TBR1(2/3/4)
	D700 178

### T-slot bolts



	TBR1(2/3/4)		
	M12 h = 26 D102 510	M12 h = 42 D102 530	M12 h = 89 D102 520

### Flexible trolley bolt connection



	TBR1(2/3/4)
	D105 710