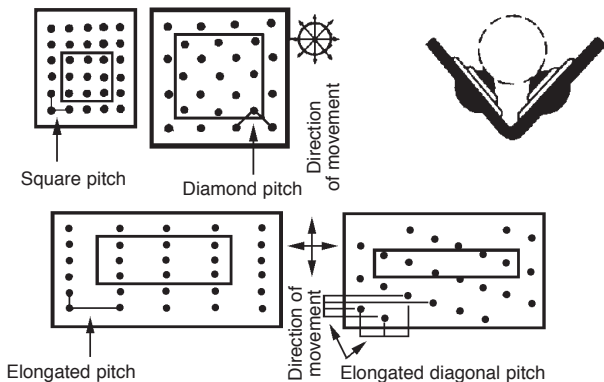
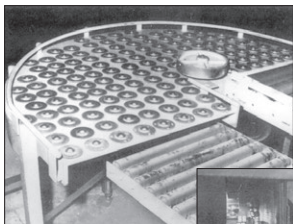


Ball transfer system

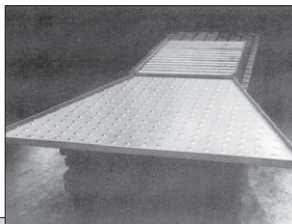
Technical information



EXAMPLES OF USE



180° rotation on a conveyor system



Centering chute



Ball transfer platform at the junction of two roller conveyors

Ball transfer system

Technical information

To determine the carrying capacity of the ball transfer unit

the weight of the article to be moved should be divided by 3, this gives the maximum weight that any single ball will carry. If a greater positioning accuracy is required then this coefficient can be increased. The condition and external hardness of the article to be moved should also be taken into account to avoid damage by the balls.

Spacing of ball transfer units

The pitch of the ball transfer units is determined by dividing the shortest dimension of the article to be moved by 3.5. This ensures that at least 3 ball transfer units will be in contact with article along the shortest dimension at any time.

Self-cleaning

Each BHTD ball transfer unit has a hole in the base to allow dust etc to escape.

Seal

A felt or polyurethane foam joint is fitted to each ball transfer unit to prevent the ingress of dirt or other material.

Lubrication

Each ball transfer unit is lubricated during manufacture and normally further maintenance is not required. However certain applications may require periodic lubrication.

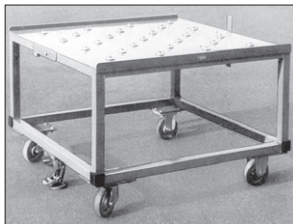
Working temperature

The ball transfer units can be used in temperatures from -30°C to $+70^{\circ}\text{C}$ (continuous) or $+100^{\circ}\text{C}$ (occasional). With the seal removed and in very clean conditions, the maximum temperature can be increased to $+150$ to 200°C .

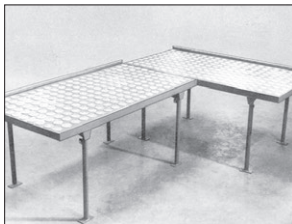
Mounting

Spare mounting rings are available.

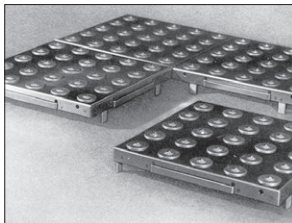
TYPICAL APPLICATION



Ball transfer trolley with brake



Adjustable height ball transfer table



Flexible arrangements

Ball transfer unit



BTHDB
BTHDBPSS
BHTDBSS

For heavy loads

- Ball transfer unit
- For heavy duty use
- Suitable for heavy loads
- Pre lubricated
- Materials:

BHTD-B

Body: machined/case hardened zinc plated steel

Ball: chromed steel (60-66HRC)

BHTD-BPSS

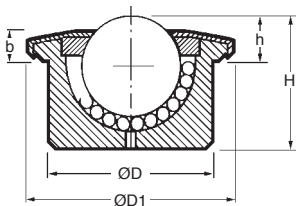
Body: machined/case hardened zinc plated steel

Ball: 420 or 440 stainless steel

BHTD-BSS

Body: machined 303 stainless steel (not treated)

Ball: 420 or 440 stainless steel



Options

- Increased load capacities up to 3500Kg
- Spring mounted ball unit
- BTEU-CLIP mounting clip

DISCOUNTS

Qty.	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Load capacity (kg)	Ball Ø	ØD	ØD1	H	h	b	Stock*	Price each 1 to 5
BTHD-15B	56	15	24 ^{+0.065}	31	21,0	9,5 ^{+0.2}	5,5	✓	15,31 €
BTHD-15BPSS	43	15	24 ^{+0.065}	31	21,0	9,5 ^{+0.2}	5,5	✓	19,67 €
BTHD-15BSS	43	15	24 ^{+0.065}	31	21,0	9,5 ^{+0.2}	5,5	✓	32,78 €
BTHD-22B	180	22	36 ^{+0.080}	45	30,5	9,8 ^{+0.2}	6,3	✓	22,53 €
BTHD-22BPSS	120	22	36 ^{+0.080}	45	30,5	9,8 ^{+0.2}	6,3	-	22,32 €
BTHD-22BSS	120	22	36 ^{+0.080}	45	30,5	9,8 ^{+0.2}	6,3	-	56,31 €
BTHD-30B	350	30	45 ^{+0.080}	55	36,8	13,8 ^{+0.2}	8,3	✓	27,06 €
BTHD-30BPSS	200	30	45 ^{+0.080}	55	36,8	13,8 ^{+0.2}	8,3	-	38,20 €
BTHD-30BSS	200	30	45 ^{+0.080}	55	36,8	13,8 ^{+0.2}	8,3	-	66,22 €
BTHD-45B	600	45	62 ^{+0.100}	75	54,0	19,0 ^{+0.3}	10,0	-	79,29 €
BTHD-45BPSS	300	45	62 ^{+0.100}	75	54,0	19,0 ^{+0.3}	10,0	-	101,69 €
BTHD-45BSS	600	45	62 ^{+0.100}	75	54,0	19,0 ^{+0.3}	10,0	-	193,80 €

*Depending on availability - Dimensions in mm

For medium loads

BTEUc
BTEUss

- **Ball transfer unit**
- Suitable for medium loads
- Pre lubricated
- No maintenance required
- Working temp -30° to +70°C
- Materials:

Steel versions

Body: zinc plated steel

Ball: steel

Stainless steel versions

Body: 304 stainless steel

Ball: 420C stainless steel (55-58 HRC)

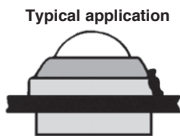
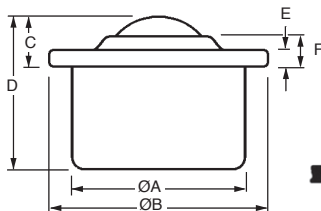


Uses

- Handling table
- Transport track
- Support feet

Option

- BTEU CLIP



DISCOUNTS

Qty.	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Load capacity (kg)	Ball Ø	ØA	ØB	C	D	E	F	Stock*	Price each 1 to 5
Steel										
BTEU-15C	45	15	24±0,065	31	9,50±0,2	21,00	2,80	6,30	✓	4,84 €
BTEU-22C	120	22	36±0,080	45	9,80±0,2	30,00	2,00	5,50	✓	11,37 €
BTEU-30C	230	30	45±0,080	55	13,80±0,3	37,00	4,00	8,30	✓	21,18 €
BTEU-45C	550	45	62±0,095	75	19,00±0,4	53,50	4,00	10,00	-	56,62 €
Stainless steel										
BTEU-15SS	45	15	24±0,065	31	9,50±0,2	21,00	2,80	6,30	✓	20,35 €
BTEU-22SS	120	22	36±0,080	45	9,80±0,2	30,00	2,00	5,50	✓	26,36 €
BTEU-30SS	230	30	45±0,080	55	13,80±0,3	37,00	4,00	8,30	-	57,83 €

*Depending on availability - Dimensions in mm

Ball transfer unit



BISFc BISFss

For light loads

- Ball transfer unit
- Suitable for light loads
- Pre lubricated
- No maintenance required
- Working temp -30° to +70°C
- Materials:

Steel versions

Body: zinc plated steel

Ball: steel

Stainless steel versions

Body: 304 stainless steel

Ball: 420C stainless steel (55-58 HRC)

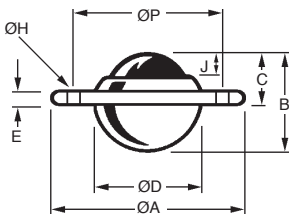


Uses

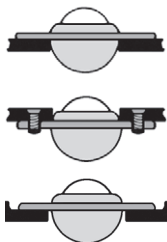
- Handling table
- Transport track
- Support feet

Accessories

- Countersunk screw



Assembly example



DISCOUNTS

Qty.	1+	6+	20+	40+	60+
Disc.	List	-10%	-15%	-20%	On request

Part number	Load capacity (kg)	Ball Ø	ØA	B	C	ØD	ØH	ØP	E	J	Stock*	Price each 1 to 5
Steel												
BISF-19C	25	19	61	22,00	10,00	29,1 ^{+0.2}	5,50	44,50	3,20	3,20	✓	6,56 €
BISF-25C	55	25	73	30,00	14,20	37,2 ^{+0.2}	5,00	55,60	3,00	6,30	✓	8,82 €
BISF-32C	125	32	73	36,20	16,30	45,5 ^{+0.2}	5,00	58,70	4,25	8,00	-	10,99 €
BISF-40C	140	40	89	46,00	21,50	55,6 ^{+0.2}	7,00	70,00	6,00	6,00	✓	29,63 €
BISF-50C	250	50	121	59,00	28,60	75,3 ^{+0.2}	8,00	92,00	6,30	14,30	-	74,63 €
Stainless steel												
BISF-19SS	25	19	61	22,00	10,00	29,1 ^{+0.2}	5,50	44,50	3,20	3,20	✓	18,66 €
BISF-25SS	55	25	73	30,00	14,20	37,2 ^{+0.2}	5,00	55,60	3,00	6,30	✓	21,89 €
BISF-32SS	125	32	73	36,20	16,30	45,5 ^{+0.2}	5,00	58,70	4,25	8,00	✓	35,68 €
BISF-40SS	140	40	89	46,00	21,50	55,6 ^{+0.2}	7,00	70,00	6,00	6,00	-	60,41 €
BISF-50SS	250	50	121	59,00	28,60	75,3 ^{+0.2}	8,00	92,00	6,30	14,30	-	207,46 €

*Depending on availability - Dimensions in mm

Plastic

BPOM
BPOMST

- **Ball transfer unit**
- Maximum temp +30°C
- Maximum carrying speed 1 m/s
- Materials:
- Body: POM
- Ball: POM or steel

Uses

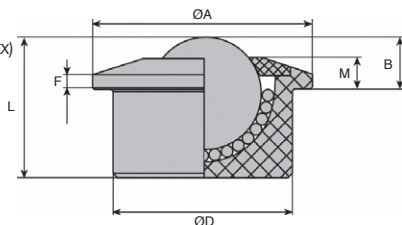
- Handling table
- Transport track

Advantages

- Resistant to acid and detergent
- Lubrication free
- Light weight* (70% less than steel)
- Sea water resistant
- Suitable to carry brittle material as glass*
- Suitable for explosive atmosphere (ATEX)

Duration

- $L = (C/F)^2 \times 10^6$
 L = nominal life duration (rotations)
 C = load capacity (N)
 F = load (N)



Temperature °C	Factory of T° f _T
40	0,93
50	0,85
60	0,75
70	0,60
80	0,45

DISCOUNTS

Qty.	1+	25+	50+	100+	250+
Disc.	List	-5%	-10%	-15%	on request

Part number	Ball Ø	ØD	ØA	L	B	F	M	Load C (N)	Price each 1 to 24
With POM ball									
BPOM-15	15	24 ±0,065	31 ±0,1	21,0	9,5 ±0,2	2,8	6,3	70	22,95 €
BPOM-22	22	36 ±0,080	45 ±0,1	30,0	9,8 ±0,2	2,8	5,5	100	29,12 €
BPOM-30	30	45 ±0,080	55 ±0,2	27,0	10,8 ±0,3	4,0	8,3	150	33,80 €
BPOM-45	45	62 ±0,095	75 ±0,2	53,5	19,0 ±0,4	4,0	10,0	200	62,34 €
With steel ball									
BPOM-15ST	15	24 ±0,065	31 ±0,1	21,0	9,5 ±0,2	2,8	6,3	70	23,23 €
BPOM-22ST	22	36 ±0,080	45 ±0,1	30,0	9,8 ±0,2	2,8	5,5	100	29,77 €
BPOM-30ST	30	45 ±0,080	55 ±0,2	27,0	10,8 ±0,3	4,0	8,3	150	35,33 €
BPOM-45ST	45	62 ±0,095	75 ±0,2	53,5	19,0 ±0,4	4,0	10,0	200	81,91 €

Dimensions in mm