Steel ball transfer unit





#### Application area Alignment of medium-heavy and heavy materials, such as plates o containers with a smooth bottom.

heavy materials, such as plates or containers with a smooth bottom. For pushing, e.g. steel or wooden plates. Suitable for applications that require an upside-down installation.

#### Direction-independent operation

The use of balls allows transporting the material in every direction. Crossings and switches can also be implemented easily. In addition, particularly soft running balls are being used.

#### Good protection against dust and splashing water

For variants with steel balls, a felt seal keeps out dust and splashing water. Variants with balls in stainless steel design also feature a long corrosion resistance.

#### Secure support

During operation, support balls circulate under the main ball. This accomplishes a constant and optimal support of the material.









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### **Technical data**

General technical data	
Platform	5000
Max. load capacity	22,000 N
Max. conveyor speed	0.3 m/s
Temperature range	-30 to +40 °C
Material	
Ball	See load capacity table
Housing material	Zinc-plated steel (black)
Anti-static version	Yes (< 10 <sup>6</sup> Ω)

To ensure optimum load capacity, it is advised that all ball transfer units are positioned at the exact same level.

Additional variants available on request.

## Load capacities of series 5000

The following load capacity table refers to a temperature range of -30 to +40 °C.

Fastener	Ø of ball [mm]	Ball material	Material of support balls	Max. static load [N]	Article number
Base flange	12.7	Chrome steel	Chrome steel	460	S-1100048
	25.4	Chrome steel	Chrome steel	2250	S-1001365
	25.4	Chrome steel	Chrome steel	3750	S-1001366
5	38.1	Chrome steel	Chrome steel	11000	S-1001367
	50.8	Chrome steel	Chrome steel	22000	S-1001368
Threaded pin	12.7	Chrome steel	Chrome steel	460	S-1001359
	25.4	Chrome steel	Chrome steel	2250	S-1001360
	25.4	Chrome steel	Chrome steel	3750	S-1001361
	38.1	Chrome steel	Chrome steel	11000	S-1001362
	50.8	Chrome steel	Chrome steel	22000	S-1001363
Head flange	12.7	Chrome steel	Chrome steel	460	S-1001369
	25.4	Chrome steel	Chrome steel	2250	S-1001370
	25.4	Chrome steel	Chrome steel	3750	S-1001371
	38.1	Chrome steel	Chrome steel	11000	S-1001372
	50.8	Chrome steel	Chrome steel	22000	S-1001373



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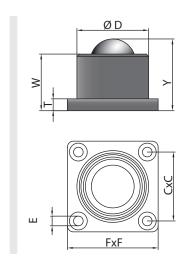


Fastener	Ø of ball [mm]	Ball material	Material of support balls	Max. static load [N]	Article number
Flush installation	12.7	Chrome steel	Chrome steel	460	S-1001356
(press fit)	38.1	Stainless steel	Stainless steel	11000	S-1001378
External suspension	38.1	Chrome steel	Chrome steel	9600 at max. deflection	S-1100285

Spring pretension of "External suspension" variant = 454 kg

### **Dimensions**

## Bottom flange (for screw fastening)

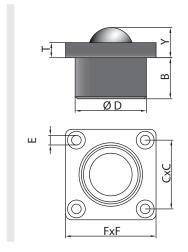


Article number	Ø Ball [mm]	Ø D [mm]	Y [mm]	W [mm]	T [mm]	F x F [mm]	C x C [mm]	E [mm]
S-1100048	12.7	23.8	22.2	18.4	3.2	Ø 44.5	Ø 34.9	2 x Ø 3.6
S-1001365	25.4	44	41.3	35.7	4.8	Ø 57.2	Ø 44.5	4 x Ø 6.1
S-1001366	25.4	50	44.5	38.1	6.4	Ø 76.2	Ø 57.9	4 x Ø 8.1
S-1001367	38.1	60	61.5	48.8	12.7	Ø 76.2	Ø 57.9	4 x Ø 8.1
S-1001368	50.8	100	98.4	84.1	9.5	Ø 127	Ø 101.6	4 x Ø 11.1*

<sup>\*</sup> not countersunk

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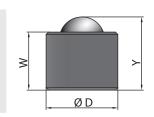
### Head flange (for screw fastening)



Article number	Ø Ball [mm]	Ø D [mm]	Y [mm]	B [mm]	T [mm]	F x F [mm]	C x C [mm]	E [mm]
S-1001369	12.7	23.8	11.2	11	3.2	Ø 44.5	Ø 34.9	2 x Ø 3.6
S-1001370	25.4	44	10.3	31	4.8	Ø 57.2	Ø 44.5	4 x Ø 6.1
S-1001371	25.4	50	12.7	31.8	6.4	Ø 76.2	Ø 57.9	4 x Ø 8.1
S-1001372	38.1	60	25.4	34.6	12.7	Ø 76.2	Ø 57.9	4 x Ø 8.1
S-1001373	50.8	109.5	33.3	65.1	19.1	Ø 127	Ø 101.6	4 x Ø 10.2*

<sup>\*</sup> not countersunk

#### Flush installation (press fit)



Article number	Ø Ball [mm]	Ø D [mm]	Y [mm]	W [mm]
S-1001356	12.7	20.6	19.1*	15.3
S-1001378	38.1	60.3	61.5	48.8

<sup>\*</sup> total height including locking pin 22.3 mm



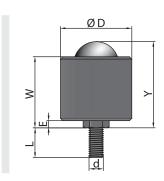
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## Threaded pin

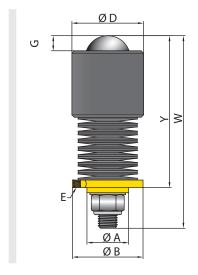




Article number	Ø Ball [mm]	Ø D [mm]	Y [mm]	W [mm]	L [mm]	d [mm]
S-1001359	12.7	20	19.1	15.3	16.1	M8 x 1.25
S-1001360	25.4	44	48.3	42.7	25	M12 x 1.75
S-1001361	25.4	50	51.3	44.9	25	M12 x 1.75
S-1001362	38.1	60	73.5	60.8	40	M20 x 2.5
S-1001363	50.8	100	105	90.7	54	M24 x 3

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### **External suspension**



Article number	Ø Ball [mm]	Pretension [kg]	Max. deflection (recd.)	Load at max. deflection [kg]	Ø D [mm]	Y [mm]	W [mm]	Ø A [mm]	Ø B [mm]	Mounting holes E (Ø Pitch circle) [mm]	G [mm]
S-1100285	38.1	454	11.1	960	60.3	129.2	162.1	35	59.4	M6 x 3 (Ø 50.8)	12.7