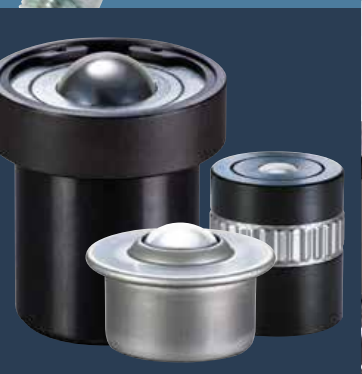
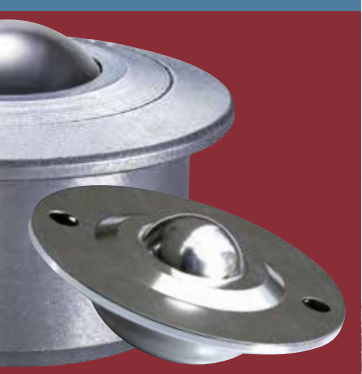


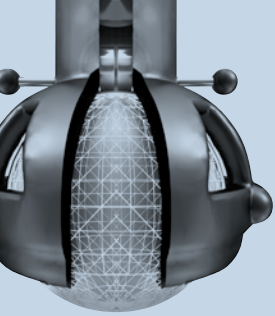


**omnitrack**<sup>®</sup>  
omnidirectional movement

*Effortless Precision*



**SINCE  
1909**

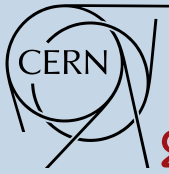


**2017**  
Heavy duty 8000 kg Ball Unit.  
New technology & materials

**2014**  
New Omnicaster  
Range Launched



**2011**  
"Bloodhound" 1000mph  
Land Speed Record  
(Product Sponsor)



**2009**  
CERN "Hadron" collider  
particle research  
project supplier



**1990**  
Euro Fighter production  
project supplier

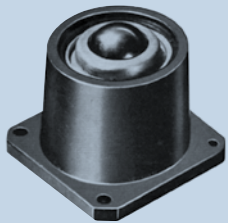


**1970**  
Blue Steel nuclear warhead  
handling equipment –  
design & production

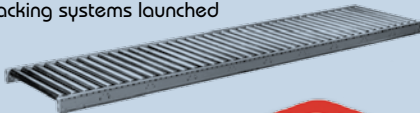


**1962**  
De Havilland Aircraft  
landing gear – design  
& manufacture contract

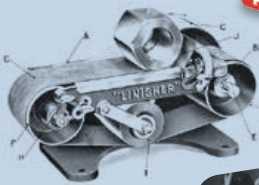
**1958**  
1958 Patented "OMNITRACK"  
Ball Transfer Units launched



**1928**  
Gravity conveyor rollers, Skatewheels &  
live racking systems launched

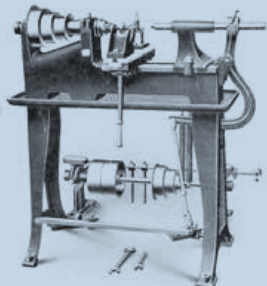
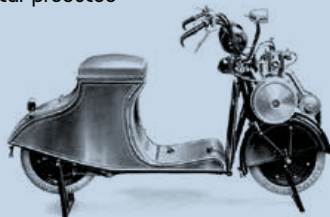


**1930**  
Belt "Linisher"  
designed & launched



**1923**  
TST "Townsend, Skinner  
& Tingle" car produced

**1918**  
"AUTOGLIDER" scooter range  
Mass produced & exported



**1909**  
Inception as manufacturer of  
Lathes, heavy duty Castors &  
Cabinet Drawer Slides



**omnitrack**  
**BALL TRANSFER UNITS**  
page 4 - 13

- Heavy Duty load capacity 8,000 KG/unit
- Low friction < 0.005  $\mu$  (0.5% of conveyed load)
- Instant & precise directional change
- Resistance to shock impact, temperature & speed



**BALL TABLES & PLATFORMS**  
page 19



# omnitrack<sup>®</sup>

omnidirectional movement



Call, email or chat online.  
Free technical advice now.



No minimum order charges.  
Buy what you need now.



Rapid production of  
a bespoke solution  
to meet your needs.



Immediate despatch from  
stock & fast global delivery.



SINCE  
1909

Original Patented design, tested &  
manufactured in the UK since 1909.

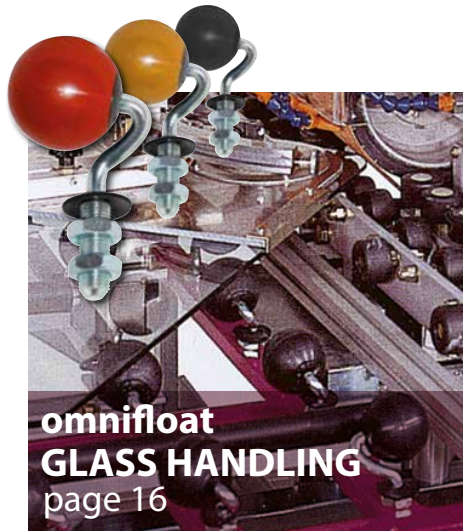
*Effortless Precision*



## omnicaster PLASTIC CASTORS

page 14 - 15

- Easy steering & fast directional change
- Suitable for delicate surfaces
- Self-cleaning in operation
- Large ball projection



## omnifloat GLASS HANDLING

page 16

- Ideal for glass & other sheet materials
- Extra hard-wearing & high heat ball upgrade options
- Stainless steel arm upgrade for wet & corrosive conditions



## omniwheel CONVEYOR ROLLERS

page 16

- Ideal in outdoor, dusty & 'washdown' areas
- Easy integration within existing conveyor roller systems
- Hexagon drive for powered or 'Plain' centre for gravity conveying



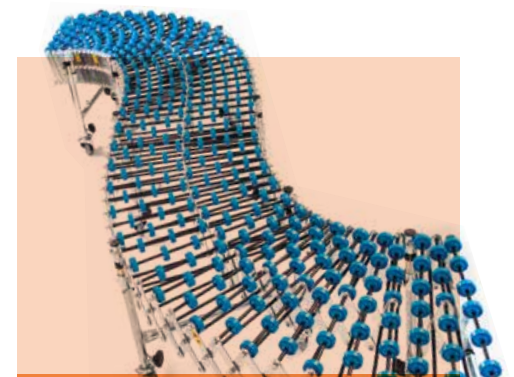
## BALL RAILS

page 18



## BALL SKATES

page 20



## FLEXIBLE CONVEYORS

page 17



▼ = Not applicable on units with Ball Ø 12.7mm

<b>Low Friction</b> 1: 0,005 	<b>Speed</b> 2 m/sec 	<b>Temp -30 to 160 °C</b> 	<b>Orientation ANY</b> 	<b>High Shock Resistance</b> 	<b>Drain/Debris Channels</b> ▼ 	<b>User Serviceable</b> ▼ 
-------------------------------------	-----------------------------	-------------------------------	----------------------------	----------------------------------	------------------------------------	-------------------------------

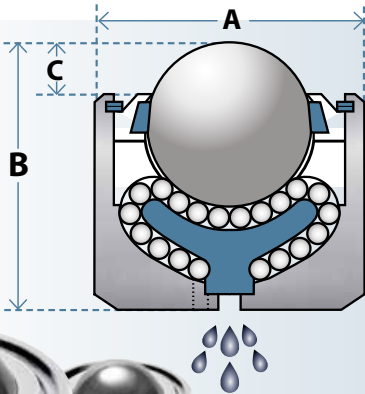
**8000 kg capacity at any angle of orientation**
**Heavy duty precision machined construction**
**"Endless track" design - smoothest precision**
**Service kits & factory spares since 1954**

<b>8000 KG</b> LOAD RATINGS UNAFFECTED AT ANY ORIENTATION	<b>STANDARD MATERIALS</b> - AISI 52100 high chrome steel balls & "Anti-Oxide" electrophoretic coating of machined steel housing. Solve specific application requirements by upgrading standard materials - select option below by adding suffix:	Corrosion	Contamination	Temperature		Radiation
<b>A</b>	<b>STAINLESS STEEL BALLS UPGRADE</b> - (AISI 440C) - "Anti-Oxide" housing & load rating remain as standard.	✓	✓	✓	✓	✓
<b>Z</b>	<b>ARDUOUS CONDITIONS UPGRADE</b> - Stainless steel AISI440 balls & internal components. Outer housing & load rating as standard.	✓✓	✓✓	✓✓	✓	✓
<b>SS</b>	<b>ALL STAINLESS STEEL UPGRADE</b> - Stainless Steel AISI 440 internal parts & balls, AISI 304 housing. Load rating as standard.	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓

<b>PB</b>	<b>PHENOLIC RESIN BALL OPTION</b> - minimise marking of delicate surfaces. Friction, wear & temperature properties change - consult us if in doubt. Reduced load ratings indicated.	BALL Ø (mm)	12.7	25.4	38.1+
		PB LOAD (kg)	10	30	35

## 90 Series - PLAIN FIT

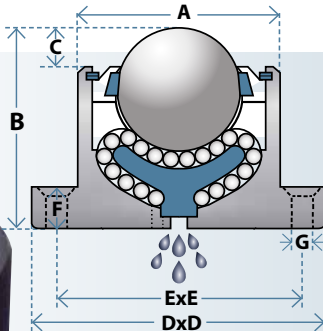


PART	LOAD kg	BALL Ø mm	A	B	C
9000	50	12.7	20	20	3.8 ♦
9001	50	12.7	20.6	19.1 *	3.8 ♦
9010	50	12.7	22.2	22.2	3.8 ♦
9020	225	25.4	44	41.3	5.6
9021	225	25.4	44.5	41.3	5.6
9022	225	25.4	44.5	41.3	7.1
9030	385	25.4	50	44.5	6.4
9031	385	25.4	50.8	44.5	6.4
9040	1100	38.1	60	61.5	12.7
9041	1100	38.1	60.3	61.5	12.7
9042	1100	38.1	60.3	60.3	12.7
9050	2200	50.8	100	95	14.3
9051	2200	50.8	101.6	98.4	14.3
9060	4550	76.2	160	145	21
9070	8000	101.6	228	190	38

\* 9001 has spigot 3.2mm x 8mm dia. ♦ further 1.5mm @ 16.2mm outside Ø

Fixing Options - page 11

## 92 Series - FLANGE MOUNTED



PART	LOAD kg	BALL Ø	A	B	C	D x D	E x E	F	G Ø
9200	50	12.7	23.8	22.2	3.8 ~	44.5 Ø ♦	34.9	3.2	2 x 3.6
9210	50	12.7	23.8	22.2	3.8 ~	47.7 x 32 *	34.9	2	2 x 4 ♦
9220	225	25.4	44	41.3	5.6	57.2	44.5	4.8	4 x 6.1
9221	225	25.4	44.5	41.3	7.1	57.2	44.5	4.8	4 x 6.1
9230	385	25.4	50	44.5	6.4	76.2	57.9	6.4	4 x 8.1
9240	1100	38.1	60	61.5	12.7	76.2	57.9	12.7	4 x 8.1
9241	1100	38.1	60.3	60.3	12.7	76.2	57.9	12.7	4 x 8.1
9250	2200	50.8	100	98.4	14.3	127	101.6	9.5	4 x 11.1 ♦
9260	4550	76.2	160	145	21	175	145	15	4 x 13.1
9270	8000	101.6	228	190	38.1	235	190.5	25	4 x 16.1

♦ 9200 - Circular flange \* 9210 - Elliptical flange

~ further 1.5mm @ 16.2mm outside Ø ♦ Not countersunk

## 91 Series - THREADED STUD

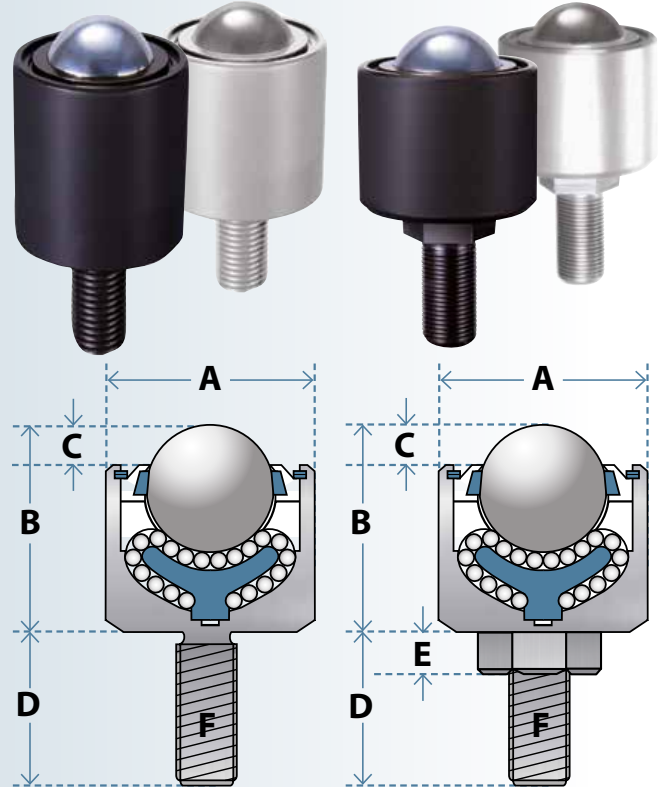
PART	LOAD kg	BALL Ø mm	A	B	C	D	E	F
9100	50	12.7	20	19.1	3.8*	16.1		M8 x 1.25
9101	50	12.7	20.6	19.1	3.8*	28.7		M8 x 1.25
9102	50	12.7	20.6	19.1	3.8*	28.7		5/16" UNF
9112	50	12.7	22.2	22.2	3.8*	25.4		5/16" UNF
9120	225	25.4	44	48.3	5.6	25		M12 x 1.75
9123	225	25.4	44	47.3	5.6	25	6	M12 x 1.75
9124	225	25.4	44.5	47.3	7.1	25.4	6	1/2" UNF
9130	385	25.4	50	51.3	6.4	25		M12 x 1.75
9133	385	25.4	50	50.5	6.4	25	6	M12 x 1.75
9134	385	25.4	50.8	50.5	6.4	25.4	6	1/2" UNF
9135	385	25.4	50.8	42	6.4	60	10	1" UNF
9140	1100	38.1	60	73.5	12.7	40		M20 x 2.5
9143	1100	38.1	60	71.5	12.7	40	10	M20 x 2.5
9144	1100	38.1	60.3	71.5	12.7	38.1	10	3/4" UNF
9145	1100	38.1	60.3	60	12.7	75	6	1" UNF
9150	2200	50.8	100	105	14.3	54		M24 x 3.0
9153	2200	50.8	100	109	14.3	50	10.6	M24 x 3.0
9154	2200	50.8	101.6	109	14.3	50.8	10.6	1" UNF
9160	4550	76.2	160	145	21	57.2		1" UNF
9163	4550	76.2	160	145	21	100	15	M30 x 3.5

\* further 1.5mm @ 16.2mm outside Ø

91 Series units omit drain/debris channel - contact us if required

91 SERIES  
ENDING 0, 1, 2 & 5

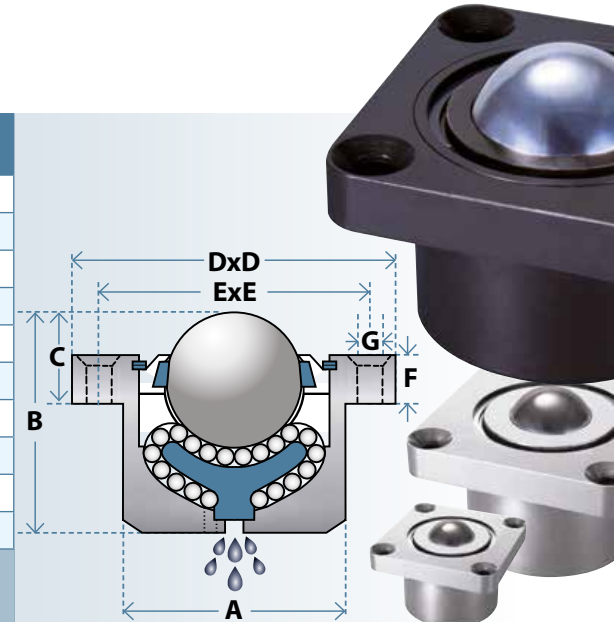
91 SERIES  
ENDING 3 & 4



## 93 Series - FLANGE SOCKET

PART	LOAD kg	BALL Ø mm	A	B	C	D x D	E x E	F	G Ø
9300	50	12.7	23.8	22.2	11.2	44.5 ◊	34.9	3.2	2 x 3.6
9310	50	12.7	23.8	22.2	7.9	47.7 x 32 *	34.9	2	2 x 4 ◊
9320	225	25.4	44	41.3	10.3	57.2	44.5	4.8	4 x 6.1
9321	225	25.4	44.5	41.3	11.9	57.2	44.5	4.8	4 x 6.1
9330	385	25.4	50	44.5	12.7	76.2	57.9	6.4	4 x 8.1
9341	1100	38.1	60	60	25.4	76.2	57.9	12.7	4 x 8.1
9350	2200	50.8	100	95	33.3	127	101.6	19.1	4 x 11.1
9351	2200	50.8	101.6	98.4	36.5	127	101.6	22.2	4 x 11.1
9352	2200	50.8	109.5	98.4	33.3	127	101.6	19.1	4 x 10.3 ◊
9360	4550	76.2	160	145	36	175	145	15	4 x 13.1

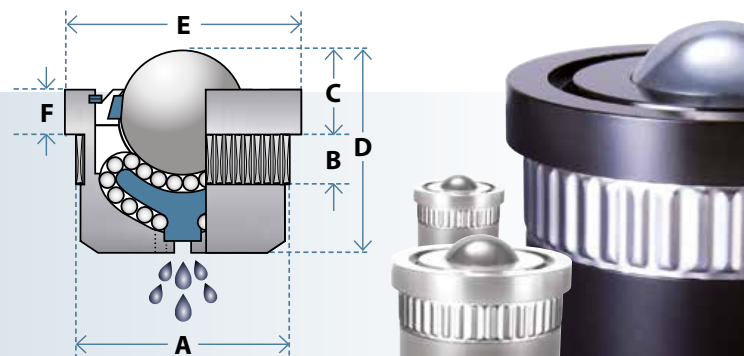
◊ 9300 - Circular flange \* 9310 - Elliptical flange  
◊ Not countersunk



## 98 Series - TOLERANCE RING

PART	LOAD kg	BALL Ø mm	A	B	C	D	E	F
9810	50	12.7	22 *	12	6	21	24	2.4
9820	225	25.4	45 *	15	14	40	49	6.9
9830	385	25.4	50 *	16	15	44	55	8.6
9840	1100	38.1	65 *	20	25	60	70	12.3
9850	2200	50.8	100 *	24	30	95	110	15.7

\* Bore Ø to ISO H9 fit





▼ = Not applicable on units with Ball Ø 12.7mm

<b>Low Friction</b> 1: 0,005 	<b>Speed</b> 2 m/sec 	<b>Temp -50 to 160 °C</b> 	<b>Orientation ANY</b> 	<b>High Shock Resistance</b> 	<b>Uneven Loads</b> 	<b>Factory Refurbishment</b> 
-------------------------------------	-----------------------------	-------------------------------	----------------------------	----------------------------------	-------------------------	----------------------------------

Springs resist shock impact & misaligned loads  
'Endless track' - smoothest precision at any angle

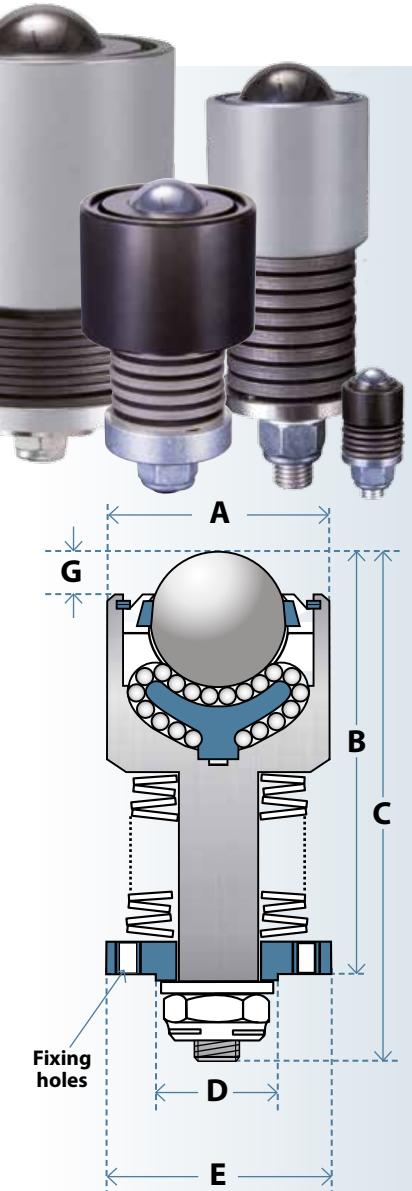
Uneven track conditions – springs self adjust  
Heavy duty precision machined construction

STANDARD MATERIALS - AISI 52100 high chrome steel balls & "Anti-Oxide" electrophoretic coating of machined steel housing. Spring mechanism parts in carbon spring steel irrespective of material upgrade options below.		Corrosion	Contamination	Temperature		Radiation
Solve specific application requirements by upgrading standard materials - select option below by adding suffix:						
<b>8000 KG</b>  <b>LOAD RATINGS UNAFFECTED AT ANY ORIENTATION</b>	<b>A</b> <b>STAINLESS STEEL BALLS UPGRADE</b> - AISI 440C "Anti-Oxide" housing & load rating remain as standard.	✓	✓	✓	✓	✓
	<b>Z</b> <b>ARDUOUS CONDITIONS UPGRADE</b> - Stainless Steel AISI440 internal parts & balls. "Anti-Oxide" electrophoretic outer casing & carbon steel spring mechanism. Spring values & load ratings as standard.	✓✓	✓✓	✓✓	✓	✓
	<b>SS</b> <b>ALL STAINLESS STEEL UPGRADE</b> - Stainless steel AISI304 housing. Balls & Internal parts AISI 440. Spring values & load ratings as standard.	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓

## 94 Series - EXTERNAL SPRING LOADED

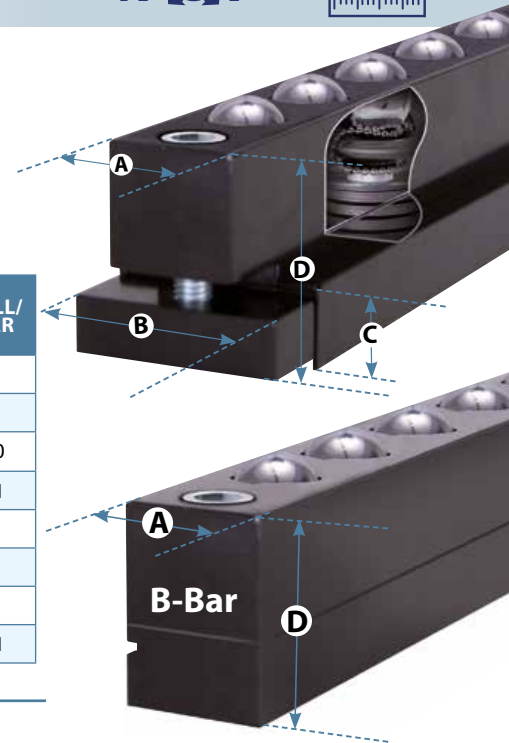
PART	BALL Ø mm	PRE-LOAD kg	MAX DEFLECTION ADVISED	LOAD AT MAX DEFLECTION kg	A	B	C	D	E	FIXING HOLES (PCD)	G
9401	12.7	7	2	32	20.6	32.2	47.0	14.7	20		3.8 ~
9402	12.7	14	2	35	20.6	31.8	47.0	14.7	20		3.8 ~
9403	12.7	23	2	38	20.6	32.2	47.0	14.7	20		3.8 ~
9404	12.7	23	2	38	20	32.2	47.0	14.7	20		3.8 ~
9410	12.7	7	2	32	22.2	39	47.0	14.7	20		3.8 ~
9411	12.7	14	2	35	22.2	38.6	47.0	14.7	20		3.8 ~
9412	12.7	23	2	38	22.2	39	47.0	14.7	20		3.8 ~
9420	25.4	7	5.4	136	44.5	61.9	77	19.2	31.8	3 x M5 (24.8)	5.6
9421	25.4	23	5	136	44.5	61.5	77	19.2	31.8	3 x M5 (24.8)	5.6
9422	25.4	45	4.4	136	44.5	60.9	77	19.2	31.8	3 x M5 (24.8)	5.6
9423	25.4	68	5.3	136	44.5	61.8	77	19.2	31.8	3 x M5 (24.8)	5.6
9424	25.4	89	2.7	204	44.5	61.5	77	19.2	31.8	3 x M5 (24.8)	5.6
9425	25.4	109	2.6	204	44	63	77	19.2	31.8	3 x M5 (24.8)	5.6
9430	25.4	91	7.7	331	50.8	80.8	95.3	19.2	38.1	3 x M6 (29)	6.4
9431	25.4	136	6.5	331	50.8	79.6	95.3	19.2	38.1	3 x M6 (29)	6.4
9432	25.4	181	5.8	331	50.8	80.5	95.3	19.2	38.1	3 x M6 (29)	6.4
9433	25.4	227	4.6	331	50.8	81	95.3	19.2	38.1	3 x M6 (29)	6.4
9440	38.1	227	10.5	960	60.3	115	162.1	35	59.4	3 x M6 (50.8)	12.7
9441	38.1	318	11.1	960	60.3	121	162.1	35	59.4	3 x M6 (50.8)	12.7
9442	38.1	454	11.1	960	60.3	129.2	162.1	35	59.4	3 x M6 (50.8)	12.7
9443	38.1	567	8.8	960	60.3	126.9	162.1	35	59.4	3 x M6 (50.8)	12.7
9444	38.1	680	9.2	960	60.3	146.3	189.7	35	59.4	3 x M6 (50.8)	12.7
9445	38.1	748	8.2	960	60.3	156.2	189.7	35	59.4	3 x M6 (50.8)	12.7
9450	50.8	764	2	1400	101.6	139.1	160.3	50.8	101.6	4 x M8 (76.2)	14.3
9451	50.8	764	5.3	1400	101.6	175.1	200.9	57	101.6	4 x M8 (76.2)	14.3
9452	50.8	1018	6	1400	101.6	177.4	200.9	57	101.6	4 x M8 (76.2)	14.3
9453	50.8	1273	5.9	1800	101.6	174.6	200.9	57	101.6	4 x M8 (76.2)	14.3
9454	50.8	1364	2.5	2000	101.6	137	158.4	50.8	101.6	4 x M8 (76.2)	14.3
9455	50.8	1527	5.7	2036	101.6	171.5	200.9	57	101.6	4 x M8 (76.2)	14.3

~ further 1.5mm @ 16.2mm outside Ø



## T-BARS & B-BARS

'T' & 'B' Bars incorporate Heavy Duty spring-loaded ball units for accurate positioning & effortless conveying of tools & dies on press & machine beds. Once positioned, clamp the tool & the springs allow the ball units to retract beneath the bed. Unclamp & the ball units will raise the tool above the bed ready to convey again. 'T' bars feature an integral locking mechanism - 'B' bars are locked using recessed M8 cap screw (requires drilling & tapping of the bed). Custom sizes available.

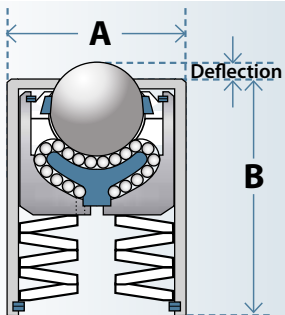


BAR	A	B	C	D	BAR LENGTH mm	SUPPORTS LOAD/BAR kg	DEFLECTION mm	LOAD AT MAX DEFLECTION kg	BALL/BAR
T-20	20	34	10	35	300	224	2.6	352	8
T-22	22	37	16	38	343	252	2.6	396	9
T-24	24	42	18	42	415	280	2.6	440	10
T-28	28	46	20	48	305	308	2.6	484	11
T-36	36	56	25	61	345	252	2.6	396	9
B-21	20.6			25.4	250	168	2.6	264	6
B-22	22.2			30.1	395	224	2.6	352	8
B-25	25.4			38.1	350	305	2.6	484	11

## SPRING LOADED 94, 95, 96 & 97 SERIES

Omnitrack Heavy Duty spring loaded units are ideal where uneven track conditions or shock loading occurs. 95, 96 & 97 Series offer full retraction of the ball within the housing. We can easily tailor spring pre-loads, deflections & characteristics to your requirements. Consider alternative material upgrade options to withstand severe operating environments.

### 95 Series - HOUSED SPRING LOADED



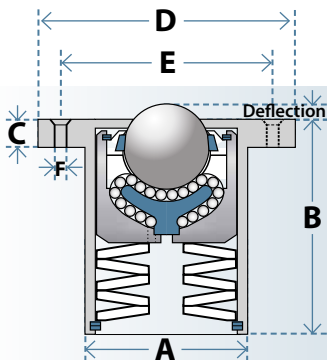
PART	SUPPORTS LOAD kg	DEFLECTION mm	LOAD AT MAX DEFLECTION kg	BALL Ø	A	B
9500	23	2.2	38	12.7	25.4*	25.4
9501	12	3.3	46	12.7	25.4*	25.4
9520	91	4.8	188	25.4	50.8	55.5
9530	227	2.4	367	25.4	63.5	60.3
9540	450	10	960	38.1	69.9	114.3
9550	1000	6.1	2000	50.8	120	138.9

\* 8mm wide (fine) knurl on outside Ø



Fixing Options - page 11

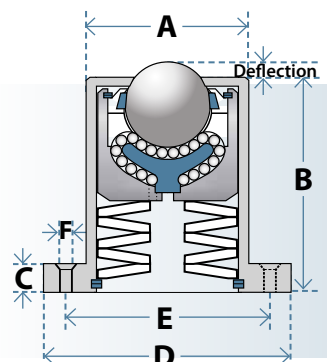
### 96 Series - FLANGE SOCKET SPRING LOADED



PART	SUPPORTS LOAD kg	DEFLECTION mm	LOAD AT MAX DEFLECTION kg	BALL Ø	A	B	C	D	E (PCD)	F COUNTER-SUNK
9601	12	3.3	46	12.7	25.4	25.4	5	50	36	2 x 5.1
9620	91	4.8	188	25.4	50.8	55.5	6	80	65	3 x 6.1
9630	227	2.4	367	25.4	63.5	60.3	6	100	80	3 x 8.1
9640	450	10	960	38.1	69.9	114.3	10	115	92	3 x 10.1
9650	1000	6.1	2000	50.8	120	138.9	12	165	140	3 x 10.1



### 97 Series - FLANGE MOUNTED SPRING LOADED



PART	SUPPORTS LOAD kg	DEFLECTION mm	LOAD AT MAX DEFLECTION kg	BALL Ø	A	B	C	D	E (PCD)	F COUNTER-SUNK
9701	12	3.3	46	12.7	25.4	25.4	5	50	36	2 x 5.1
9720	91	4.8	188	25.4	50.8	55.5	6	80	65	3 x 6.1
9730	227	2.4	367	25.4	63.5	60.3	6	100	80	3 x 8.1
9740	450	10	960	38.1	69.9	114.3	10	115	92	3 x 10.1
9750	1000	6.1	2000	50.8	120	138.9	12	165	140	3 x 10.1





Low Friction  
1:0,02

Speed  
1.5 m/sec

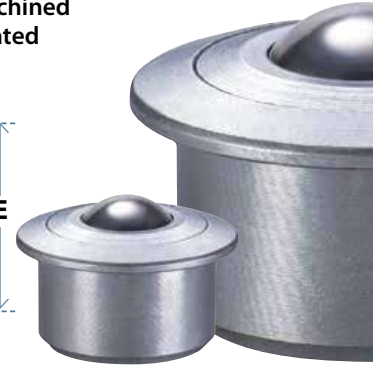
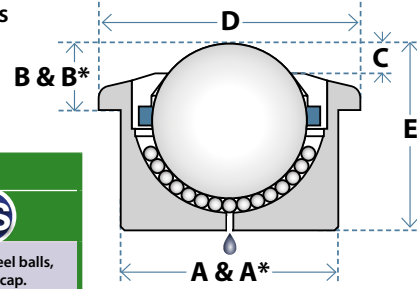
Temp -30  
to 100 °C

Orientation  
Horizontal/  
Ball 'up

Shock  
Resistance

Medium Duty ball units are machined from solid steel & case hardened for wear resistance. Reinforced machined steel top cap protect against impact from misalignment of the conveyed item. Lubricated for life & zinc plated for resistance to corrosion. Standard materials; Body & cap AISI 1015, Balls AISI 52100. Stainless steel upgrade 'A' & 'SS' feature AISI420 balls & body. Main ball sizes ≥19mm incorporate a felt seal to minimise contamination. 'M','MG' & 'MS' Series feature a single drain hole.

## M Series - PUSH FIT



MAXIMUM LOAD CAPACITY & NETT WEIGHT kg																
PART	STANDARD		A		D		SS		Ball Ø	A	A*	B	B*	C	D	E
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT								
M12*	25	0.038	20	0.038	5	0.031	20	0.038	12	22		8		3.2	27	16.7
M14	60	0.053	50	0.053	10	0.039	40	0.051	15	24	25.0-25.5	8.1	8.4	5	30	20
M15*	60	0.059	50	0.059	10	0.044	40	0.058	15	24	25.0-25.5	9.5	9.8	4	31	21
M22	180	0.189	180	0.188	20	0.150	126	0.188	22	36	37.0-37.2	9.8	10.1	3.8	45	30.5
M25*	200	0.193	140	0.192	25	0.137	140	0.192	25	38		13		6	46	30.5
M30	350	0.360	350	0.357	25	0.277	220	0.357	30	45	46.3-46.7	13.8	14.01	5.8	55	36.8
M45	600	1.010	600	1.000	25	0.710	350	1.020	45	62	63.0-63.5	19	19.3	9	75	53.5
M60	1500	3.71	1100	3.820	N/A	N/A	1050	3.830	60	100		30		15	117	77.5

\* Denotes pressed top cap. When using K clips dimensions A & B change to A\* & B\*

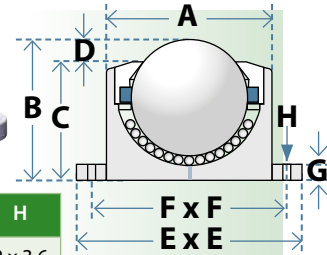
## Fixing Options - page 11



## MF Series - BOTTOM FLANGE

MAXIMUM LOAD CAPACITY & NETT WEIGHT kg															
PART	STANDARD		A		D		BALL Ø	A	B	C	D	ExE	Fx F	G	H
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT									
MF12*	25	0.103	20	0.103	5	0.100	12	23.9	20.7	17.2	3.5	44.5#	34.9	3.2	2 x 3.6
MF15*	60	0.049	50	0.048	10	0.089	15	24	21	16	5	45	32	4.8	4 x 4.6
MF22	180	0.177	180	0.257	20	0.219	22	36	30.5	27.9	4.5	57.2	44.5	4.8	4 x 5.6
MF30	350	0.501	350	0.504	25	0.416	30	45	36.8	30.3	6.5	76.2	57.9	6.3	4 x 7.1
MF45	600	1.138	600	1.168	25	0.928	45	62	53.5	45	8.5	85	69	6.3	4 x 7.1

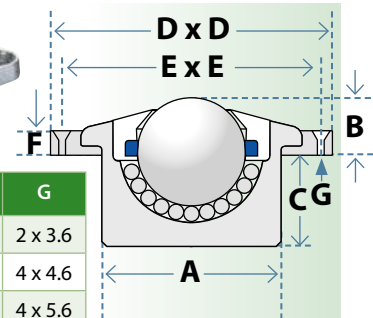
# MF12 has a 44.5mm circular flange with 2 mounting holes \* Denotes pressed top cap.



## MS Series - TOP FLANGE

MAXIMUM LOAD CAPACITY & NETT WEIGHT kg														
PART	STANDARD		A		D		BALL Ø	A	B	C	DxD	ExE	F	G
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT								
MS12*	25	0.103	20	0.100	5	0.100	12	23.9	9.6	11.1	44.5#	34.9	3.2	2 x 3.6
MS15*	60	0.059	50	0.059	10	0.044	15	24	11.3	9.7	45	32	4.8	4 x 4.6
MS22	180	0.189	180	0.188	20	0.150	22	36	11.8	18.7	57.2	44.5	4.8	4 x 5.6
MS30	350	0.360	350	0.357	25	0.277	30	45	16.8	20	76.2	57.9	6.3	4 x 7.1
MS45	600	1.010	600	1.000	25	0.710	45	62	22	31.5	85	69	9.5	4 x 7.1

# MS12 has a 44.5mm circular flange with 2 mounting holes \* Denotes pressed top cap.

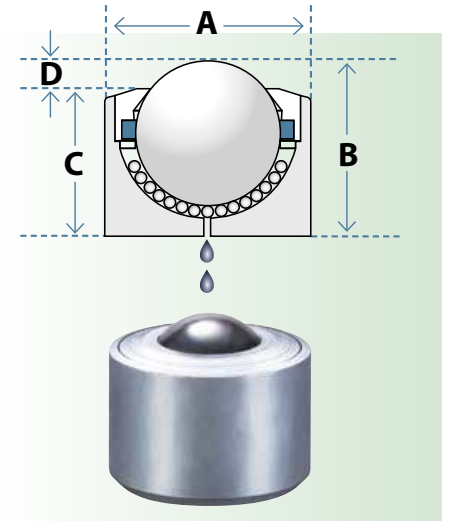




## MG Series - PLAIN FITTING

PART	MAXIMUM LOAD CAPACITY & NETT WEIGHT kg						BALL Ø	*Dimension A changes when using fixing clips (p11)			
	STANDARD		A		D			A	B	C	D
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT					
MG8*	13	0.017	10	0.018	5	0.016	8	18	12	10	2
MG10	25	0.028	20	0.028	5	0.022	10	20	16.5	13.5	3
MG12*	25	0.035	20	0.034	5	0.027	12	22	17.5	14	3.5
MG15	60	0.049	50	0.048	10	0.035	15	24	20	15	5
MG22	180	0.177	180	0.178	20	0.140	22	36	30.5	27.9	4.5
MG30	350	0.335	350	0.338	25	0.250	30	45	36.8	30.3	6.5
MG45	600	0.940	600	0.97	25	0.730	45	62	53.5	45	8.5
MG60	1500	3.650	1100	3.590	N/A	N/A	60	100	77.5	61	16.5
MG76	2500	8.600	1700	8.600	N/A	N/A	76	130	103	80	23
MG90	3500	11.310	2400	11.310	N/A	N/A	90	145	115	90	25

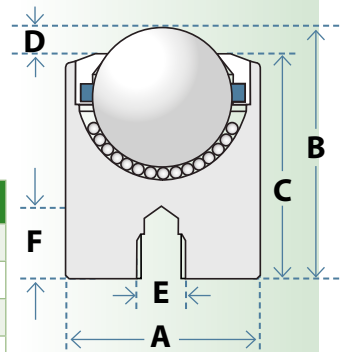
\* Denotes pressed top cap.



## MI Series - INTERNAL THREAD FIXING

PART	MAXIMUM LOAD CAPACITY & NETT WEIGHT kg						BALL Ø	A	B	C	D	E	F
	STANDARD		A		D								
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT							
MI12*	25	0.050	20	0.050	5	0.043	12	22	24	20.5	3.5	M8 x 1.25	5
MI15	60	0.074	50	0.074	10	0.061	15	24	28	23	5	M8 x 1.25	8
MI22	180	0.254	180	0.256	20	0.210	22	36	40.5	34	4.5	M8 x 1.25	10
MI30	350	0.460	350	0.450	25	0.360	30	45	46.8	38.8	8	M8 x 1.25	10
MI45	600	1.180	600	1.170	25	0.950	45	62	63.5	50.5	13	M8 x 1.25	10

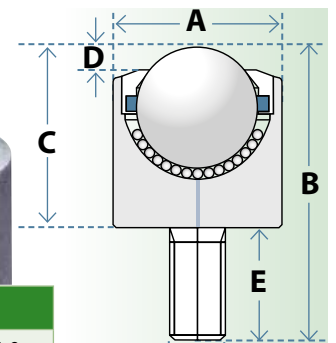
\* Denotes pressed top cap.



## MSP Series - BOLT FITTING

PART	MAXIMUM LOAD CAPACITY & NETT WEIGHT kg						BALL Ø	A	B	C	D	E	F
	STANDARD		A		D								
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT							
MSP8	13	0.021	8	0.021	3	0.019	8	18	27	12	2	15	M6 x 1.0
MSP10	25	0.036	20	0.036	5	0.031	12	20	29.8	17.8	3	12	M8 x 1.25
MSP11	25	0.044	20	0.043	5	0.040	12	20	48	20	3	28	M6 x 1.0
MSP12*	25	0.039	20	0.039	5	0.039	12	22	42.5	22.5	3.5	20	M8 x 1.25
MSP14	60	0.055	50	0.065	10	0.042	15	24	32.5	20.5	3.9	12	M6 x 1.0
MSP15	60	0.083	50	0.083	10	0.069	15	25	46	26	5	20	M8 x 1.25
MSP19	75	0.109	55	0.113	20	0.088	19	30	46.5	26	4.8	20.5	M8 x 1.25
MSP22	180	0.256	180	0.256	20	0.200	22	36	62.9	37.5	4.5	25.4	M12 x 1.75
MSP30	350	0.440	350	0.430	25	0.346	30	45	69.2	43.8	6.5	25.4	M12 x 1.75
MSP45	600	1.360	600	1.350	25	1.100	45	62	107.3	66	8.5	41.3	M20 x 2.5

\* Denotes pressed top cap.





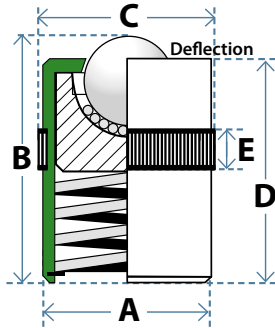
Low Friction  
1:0,02

Speed  
1.5 m/sec

Temp -30  
to 100 °C

Orientation  
Horizontal/  
Ball 'up

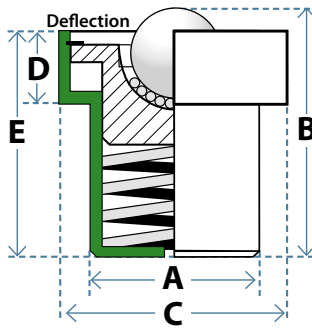
High Shock  
Resistance



MN/MM Series - HOUSED SPRING LOADED

PART	SUPPORTS LOAD kg	DEFLECTION mm	LOAD AT MAX DEFLECTION kg	BALL Ø	A	B	C	D	E
MN12	40	1.5	90	12.7	23.9	30	24.5	28.5	10.5
MN16	60	1.5	110	15.8	29.9	36	30.5	34.5	10.5
MN25	100	1.5	175	25.4	39.8	48	40.5	46.5	10.5
MN30	335	1.5	585	30	49.9	60	50.5	58.5	12.3

**A** = STAINLESS STEEL BALL UPGRADE.  
= Improved corrosion resistance with no change in load or spring values - add suffix 'A'



PART	SUPPORTS LOAD kg	DEFLECTION mm	LOAD AT MAX DEFLECTION kg	BALL Ø	A	B	C	D	E
MM22	70	4.5	90	22	39	58	50	14	53.5
MM30	135	7	170	30	48.5	70	62	17.5	63
MM45	230	10.5	290	45	66.5	100.5	85	25.5	90

Alternative spring-loaded solutions – page 6 & 7.



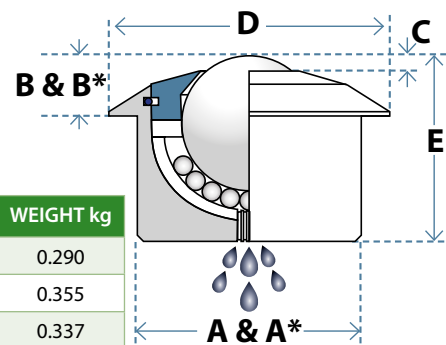
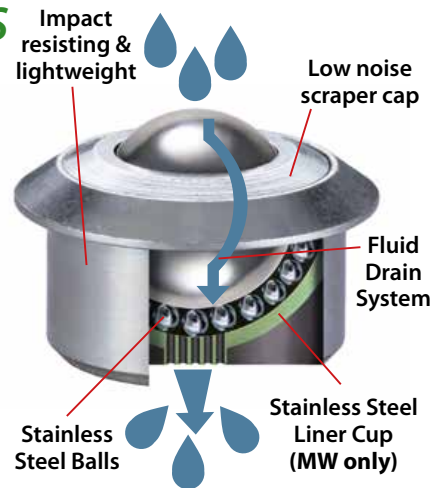
MV, MX & MW AIR CARGO BALL UNITS

MV, MX & MW Air Cargo Ball Units

Compliant with ISO Air cargo industry standards these units utilise stainless steel (AISI 420) balls recirculating within a precision machined Steel (AISI 1015) housing. All models feature fluid drain & omit felt seal. Consult page 11 for C-type (stainless steel) & K-type (spring steel) optional fixing clips.

Series	High Temperature	Load & Shock	Low Noise	Corrosion Resistance	Construction options (Add suffix)
MV	✓✓	✓✓	✓✓✓	✓✓	<b>E</b> Lightweight construction
MX	✓✓	✓✓	✓✓	✓	<b>SS</b> Stainless Steel
MW	✓	✓	✓	✓✓✓	<b>SL</b> Stainless Liner Cup

**MV 'Imperial' Series** – integral moulded scraper cap reduces weight & noise levels during operation. Compact inch series dimensions ideal for high-density ball cargo decks.  
**MX 'Cargo' Series** – Steel scraper cap protects against impact damage from misaligned loads. Multiple debris/drain channels rapidly eject contamination & fluid.  
**MW 'Washdown' Series** – internal stainless steel liner cup provides a cost efficient alternative to all stainless steel construction. Effective corrosion resistance & fluid draining in washdown applications. Also available in all stainless steel.



\*Using fixing clips changes values A & B to A\* & B\*.

PART	LOAD kg	BALL Ø	WITHOUT CLIP		WITH K-TYPE CLIP			C	D	E	DRAIN CHANNELS	WEIGHT kg
			A	B	Clip #	A*	B*					
MV30	350	30	45	13.8	K30	46.0 - 46.5	14.1	5.5	50	34.8	4 slots	0.290
MX30	350	30	45	13.8	K30	46.0 - 46.5	14.1	5.5	55	36.8	7 holes	0.355
MW30	220	30	45	13.8	K30	46.0 - 46.5	14.1	5.5	55	36.8	5 holes	0.337
MX45	600	45	62	19	K45	63.0 - 63.5	19.3	9	75	53.5	7 holes	1.010
MW45	450	45	62	19	K45	63.0 - 63.5	19.3	9	75	53.5	1 hole	0.960



## K & C Type Clips

✓ Compensate for irregularities in bore & diameter

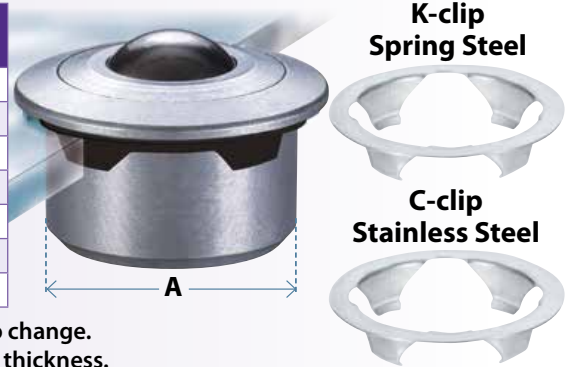
✓ Ideal where only single-sided access of mounting surface is reachable

**1** Fit clip to mounting bore

**2** Push Ball unit through clip

**3** Peripheral tags expand & grip the ball unit

MEDIUM DUTY	LIGHT DUTY	CLIP	A	BORE Ø MIN/MAX	INCREASED FITTED HEIGHT
M14 - M15 - MG15	L15 - LP15	K15	24	25.0 - 25.5	0.3+
		C15	24	24.8 - 25.0	0.3+
M22 - MG22	L22 - LP22	K22	36	37.0 - 37.5	0.3+
		C22	36	37.0 - 37.2	0.3+
M30 - MG30 - MV30 MX30 - MW30	L30 - LP30	K30	45	46.0 - 46.5	0.3+
		C30	45	46.3 - 46.7	0.3+
M45 - MG45 - MX45 - MW45	L45 - LP45	K45	62	63.0 - 63.5	0.3+



Other clips available.

Fixing clips cause fitted height & bore Ø values to change. Effective retention requires 3mm minimum plate thickness.

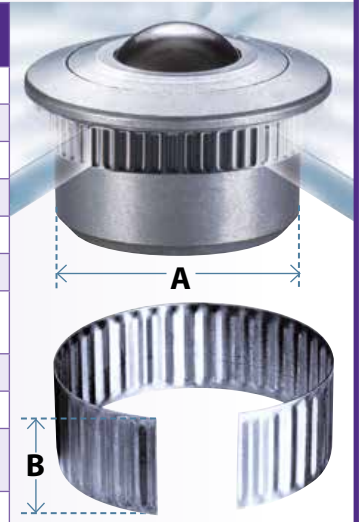
## Tolerance Rings

✓ Ideal where only single-sided access of mounting surface is reachable

✓ Compensate for irregularities in bore & diameter

Bore Ø specifications change when using Tolerance Rings. Contact us if in doubt.

HEAVY DUTY	MEDIUM DUTY	LIGHT DUTY	PART	A	BORE Ø MIN/MAX	B
	MG8		TR18	18	19.30 - 19.55	6.00
9000 - 9001*	MG10		TR20	20	21.80 - 22.05	12.00
9010*	M12 - MG12			22	23.80 - 24.05	12.00
9300* - 9310*	M14 - M15 - MG15	L15 - LP15	TR24	24	25.65 - 25.90	15.00
9500* - 9501* - 9601*			TR25	25	27.20 - 27.45	8.00
	M22 - MG22	L22 - LP22	TR36	36	37.80 - 38.00	12.00
9020* - 9021* - 9022* - 9320* - 9321*	M30 - MG30 - MV30 MX30 - MW30	L30 - LP30	TR45	45	46.80 - 47.00	15.00
9030 - 9031* - 9330 - 9520*			TR50	50	51.90 - 52.10	15.00
9040 - 9041* - 9042* - 9341				60	62.10 - 62.30	20.00
9530*	M45 - MG45 - MX45 - MW45	L45 - LP45	TR60	62	64.30 - 64.50	20.00
9540* - 9640*				70	72.35 - 72.55	20.00
9050 - 9350 - 9051*	M60 - MG60		TR100	100	103.75 - 104.05	20.00



\* Ø Min/Max tolerance varies - Contact Us.

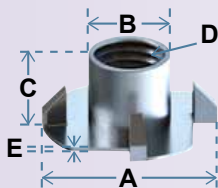
98 Series - see page 5.

## Nyloc Nut & Washer + 'T' wood insert kits

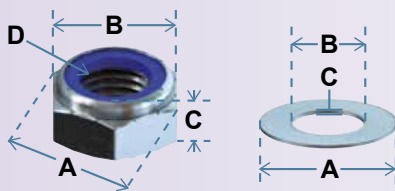
Use with Heavy Duty 91 Series, Medium Duty MSP Series & Omnicaster Ball Casters.



### Wood Insert Fixing



### Nut & Washer Fixing



Model	9100 - 9101		OC35 - OC50 OC55 - OC55B				9120 - 9123 9130 - 9133		
	MSP10 - MSP12 MSP15 - MSP19						MSP22 - MSP30		
	OC30 - OC30F						OC100 - OC100B		
Fixing	T8	N8	T10	N10	T12	N12			
A	22.2	14.4	16	25	18.9	20	27	21.1	24
B	9.1	13	8	11.2	17	10	14	19	12
C	11	8	1.6	13.1	10	2	14	12	2.5
D	M8 x 1.25	M8 x 1.25	M10 x 1.5	M10 x 1.5	M12 x 1.75	M12 x 1.75			
E	1.3			1.4			1.8		

Other thread types & sizes available on request.



Low Friction  
1: 0,03



Speed  
1 m/sec



Temp -20  
to 70 °C



Orientation  
Horizontal/  
ball up

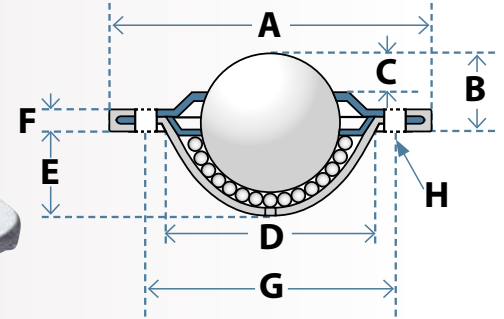


Economy  
Value



## LD - SATURN TYPE

Pressed steel 'Saturn' units are easily secured or riveted using integral fixing holes & are ideal for many light duty, low profile conveying applications. Models feature single drain hole & felt seal except LD16. LD32-SS & LD32/3-SS omit felt seal, other variants feature 7 rapid drain holes.

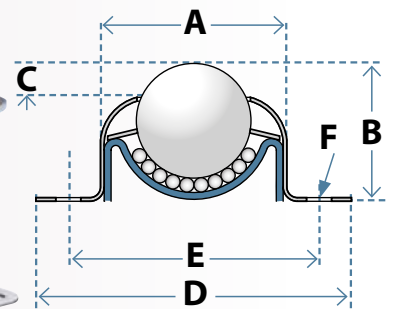


PART	MAXIMUM LOAD Capacity & NETT WEIGHT kg								Ball Ø	A	B	C	D	E	F	G	H
	STANDARD		A		D		SS										
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT									
LD16	15	0.045	10	0.044	10	0.030	NA	0.031	15	41	10.8	5.0	24	8.5	3.2	30	2 x 3.4
LD19	25	0.090	25	0.089	20	0.063	25	0.086	19	61	10	3.2	29.1	12	3.2	44.5	2 x 5.1
LD19/3	25	0.089	25	0.088	20	0.062	25	0.086	19	61	10	3.2	29.1	12	3.2	44.5	3 x 5.1
LD23	120	0.096	90	0.096	22	0.059	NA	N/A	23	45	9.8	6.2	33	17.9	3.6	39	3 x 3.5
LD25	55	0.170	55	0.166	25	0.110	55	0.172	25.4	73	14.2	6.3	37.2	15.8	3.5	55.6	2 x 5.1
LD25/3	55	0.168	55	0.167	25	0.110	55	0.171	25.4	73	14.2	6.3	37.2	15.8	3.5	55.6	3 x 5.1
LD26	60	0.125	40	0.126	22	0.070	NA	N/A	25	56	14.6	7.8	36	15.4	3.3	45	2 x 4.0
LD32	125	0.269	125	0.269	N/A	N/A	125	0.256	32	73.7	16.2	8	45.5	19.9	4.2	58.7	2 x 5.1
LD32/3	125	0.269	125	0.267	N/A	N/A	125	0.255	32	73.7	16.2	8	45.5	19.9	4.2	58.7	3 x 5.1

LD32-SS & LD32/3-SS units feature 7 large fluid drain holes & omit felt seal.

## LF - FLANGE MOUNTED 2 & 4 HOLE

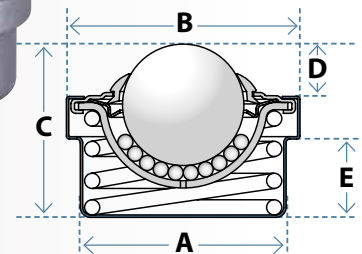
High profile, surface mounted units with fixing flange. Pressed steel construction with either 2 or 4 fixing points. LF26 units incorporate 2 slots rather than holes to accommodate varying fixing centres (55.9mm - 60.3mm). LF units feature debris drain hole. Models LF25 & LF38 omit felt seal.



PART	MAXIMUM LOAD Capacity & NETT WEIGHT kg								Ball Ø	A	B	C	D	E	F
	STANDARD		A		D		SS								
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT							
LF25	55	0.141	N/A	N/A	N/A	N/A	N/A	N/A	25.4	42	30.2	7.9	69.9 x 50.8	55.6	2 x 5.6 Ø
LF26	55	0.155	55	0.154	25	0.097	55	0.151	25.4	45	30.4	6.3	69 x 51	55.9 - 60.3	2 x 5.5 x 7.7mm slot
LF38	115	0.520	N/A	N/A	N/A	N/A	N/A	N/A	38.1	66.9	46.2	9.8	76.2 x 76.2	62.7 x 62.7	4 x 7.1 Ø

## LM - CASED SPRING LOADED

Load equalising spring loaded unit with integral moulded nylon seal. Internal coil spring deflects for biased loads or to compensate for surface irregularities. Carbon chrome balls & zinc plated pressings.



PART	SUPPORT LOAD kg	DEFLECTION mm	LOAD AT MAX DEFLECTION	BALL Ø	A	B	C	D	E	NETT WEIGHT kg
LM25	20	4.5	55	25	43.5	49.1	35.7	10.1	15.7	0.174

Low Friction  
1: 0,03



Speed  
1 m/sec



Temp -20  
to 70 °C



Orientation  
Horizontal/  
ball up

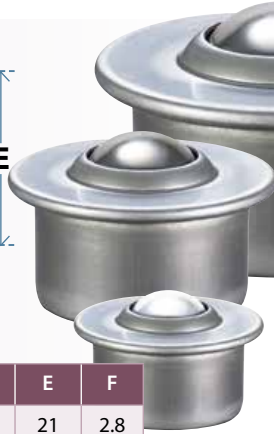
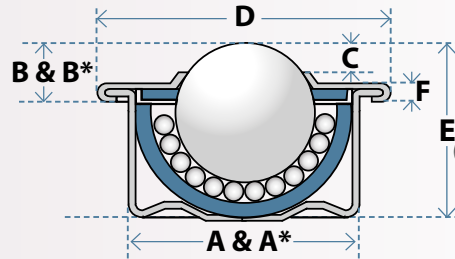


Economy  
Value

€ \$ ¥  
₹ £ €  
₱ ₪

## L - PUSH FIT & CLIP FIXING RANGE

Push fit retention for rapid installation & replacement where only single-sided access of mounting surface is reachable. Compensate for irregularities in seating bore diameter using optional (spring steel) 'K-clips', or (stainless steel) 'C-clips'. When using optional clips dimensions 'A' & 'B' become 'A\*' & 'B\*'. K-clip seating bore values are shown below - see page 11 for all fixing clips & tolerance ring details.



MAXIMUM LOAD Capacity & NETT WEIGHT kg															
PART	STANDARD		A		D		SS		Ball Ø	A & A*	B & B*	C	D	E	F
	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT	LOAD	WEIGHT							
L15	60	0.041	60	0.039	10	0.026	40	0.039	15	24	9.8	4.6	31	21	2.8
L15-K	60	0.041	60	0.039	10	0.026	40	0.039	15	25.0 - 25.5	10.1	4.6	31	21	2.8
L22	160	0.128	160	0.125	20	0.088	90	0.125	22	36	10.1	3.9	45	29.5	2.9
L22-K	160	0.128	160	0.125	20	0.088	90	0.125	22	37.0 - 37.5	10.4	3.9	45	29.5	2.9
L30	280	0.253	280	0.249	25	0.154	200	0.271	30	45	14.1	6.8	55	37	3.6
L30-K	280	0.253	280	0.249	25	0.154	200	0.271	30	46.0 - 46.5	14.4	6.8	55	37	3.6
L45	600	0.720	550	0.710	NA	N/A	260	0.710	45	62	19	9.0	75	53.5	4.0
L45-K	600	0.720	550	0.710	NA	N/A	260	0.710	45	63.0 - 63.5	19.3	9.0	75	53.5	4.0

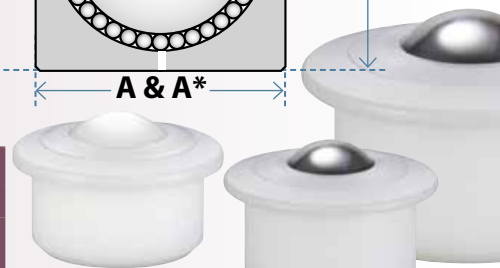
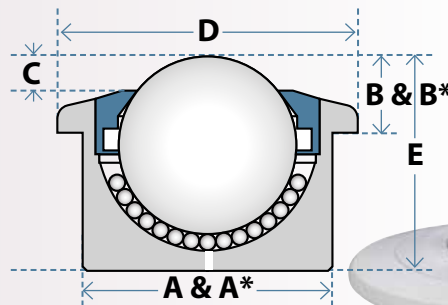
All variants with 22mm & 30mm main balls feature a felt seal.  
Values A & B change to A\* & B\* when using K-clips.

## LP - ALL PLASTIC & CLIP FIXING RANGE

Machined Acetal (POM) plastic housing fitted with either Acetal (POM) balls or AISI 316 stainless steel balls (add suffix 'A').

- Resists salt water & chemical attack
- Non conductive & non magnetic
- Suited to antimicrobial applications

Optional fixing clips & rings - see page 11.  
Spring steel 'K-clips' & 'C-clips'/tolerance rings in stainless steel.

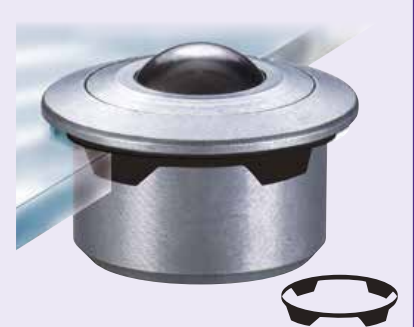


MAXIMUM LOAD Capacity & NETT WEIGHT kg										
PART	STANDARD		A		Ball Ø	A & A*	B & B*	C	D	E
	LOAD	WEIGHT	LOAD	WEIGHT						
LP15	7	0.010	7	0.027	15	24	9.5	4.8	31	21
LP15-K	7	0.010	7	0.027	15	25.0 - 25.5	9.8	4.8	31	21
LP22	10	0.035	10	0.050	22	36	9.8	4.5	45	30.5
LP22-K	10	0.035	10	0.052	22	37.0 - 37.5	10.1	4.5	45	30.5
LP30	15	0.065	15	0.174	30	45	13.8	5.8	55	37
LP30-K	15	0.065	15	0.174	30	46.0 - 46.5	14.1	5.8	55	37
LP45	20	0.182	20	0.500	45	62	19	8.5	75	53.5
LP45-K	20	0.182	20	0.505	45	63.0 - 63.5	19.3	8.5	75	53.5

Values 'A' & 'B' become A\* & B\* when using K-type clips.  
All LP series omit felt seal.

### FIXING CLIPS 'K-clips' spring steel 'C-clips' stainless steel.

- Compensate for irregularities in bore & diameter
- Ideal when only single sided access of mounting surface is reachable



Adding suffix 'K' or 'C' to ball unit part number will specify supply of the optional clip (eg 'L22K' or 'L22C'). When using clips, fit the clip to the bore & then push the ball unit through the clip. Peripheral tags expand & securely retain the ball unit.

Dimensions A & B change to A\* & B\* when using clips. Tolerance ring & full clip options shown on page 11.



Temp -30 to 90 °C

- Fast directional change - easier steering than traditional casters
- Glide smoothly over carpet, wood & marble floors
- Multiple drain channels expel debris & fluids
- Effortlessly convey delicate materials with minimal damage

Brake Option

Speed 1 m/sec

Rapid Drain Options

Delicate Contact

### Optional Fixing Kits

Wood Insert Fixing

Nut & Washer Fixing

Model	OC 30 \ OC 30F			OC35 \ OC50 OC55 \ OC55B			OC100 \ OC100B		
Fixing	T8	N8		T10	N10		T12	N12	
A	22.2	14.4	16	25	18.9	20	27	21.1	24
B	9.1	13	8	11.2	17	10	14	19	12
C	11	8	1.6	13.1	10	2	14	12	2.5
D	M8 x 1.25		M8 x 1.25	M10 x 1.5		M10 x 1.5	M12 x 1.75		M12 x 1.75
E	1.3			1.4		1.8			

Metric dimensions subject to general tolerance of +/- 0.3mm

## OC30 & OC30F



Fixing Options

T8 & T10    N8 & N10

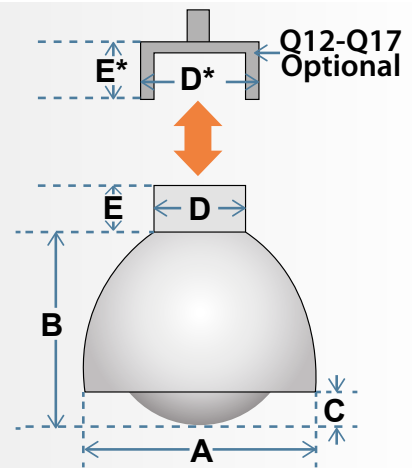
Push Fit

Q12 Countersink 10mm    Q13 M8 13mm    Q14 M10 16mm    Q15 UNC 3/8" 45/64"

Q16 Gripneck 10mm    Q17 Gripneck 11mm 18mm

PART	OC 30 & OC 30F~
MAX LOAD kg	30
BALL Ø	35
A	63.8
B / B~	53.5 / 52~
C / C~	9 / 7.5~
D / D* ø	25 / 32*
E / E*	13 / 18*

~'Fixed'/non rolling caster\*  
Values using 'Quick Fit' adaptors



### Quick Fit Adaptors

## OC35

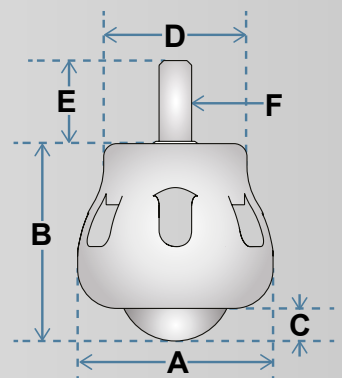


Fixing Options

T10    N10

Debris Exit

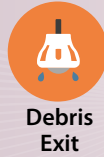
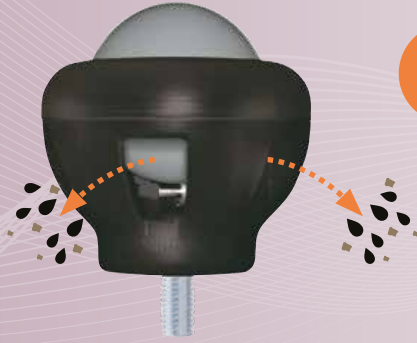
PART	OC 35
MAX LOAD kg	30
BALL Ø	35
A	60
B	60
C	9.6
D ø	44
E	25
F	M10 x 1.5



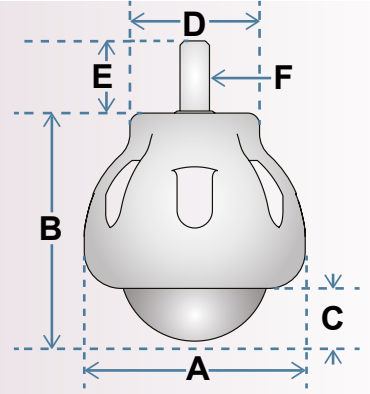
# OC50

Fixing Options

T10 N10



PART	OC 50
MAX LOAD kg	60
BALL Ø	50
A	75
B	77
C	17.8
D	44
E	25
F	M10 x 1.5



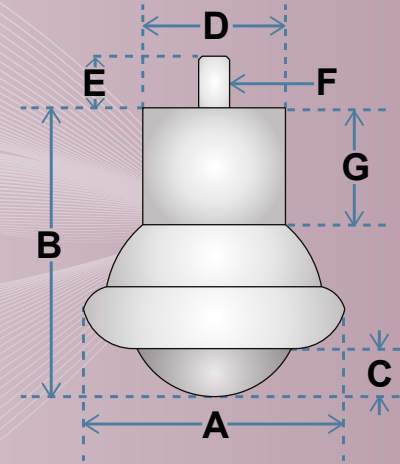
# OC55 & OC55B

Fixing Options

T10 N10



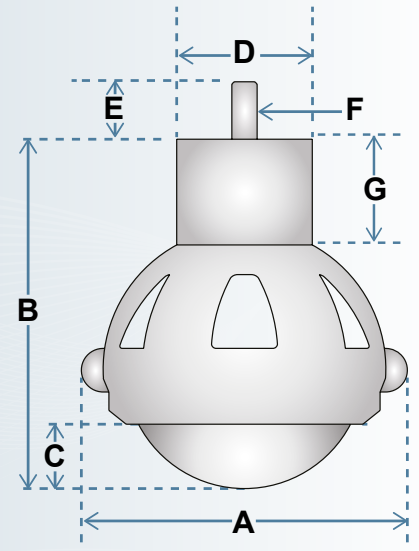
PART	OC 55 & OC55B
MAX LOAD kg	60
BALL Ø	50
A	76
B	84
C	14
D ø	41.5
E	15
F	M10 x 1.5
G	34.5 (OC55) 26.0 (OC55B)



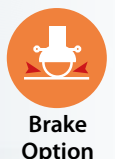
# OC100 & OC100B



PART	OC 100 & OC100B
MAX LOAD kg	80
BALL Ø	104
A	143
B	151.5
C	29
D ø	58
E	25
F	M12 x 1.75
G	46 (OC100) 34 (OC100B)



Metric dimensions subject to general tolerance of +/- 0.3mm





# OMNIFLOAT & OMNIWHEEL

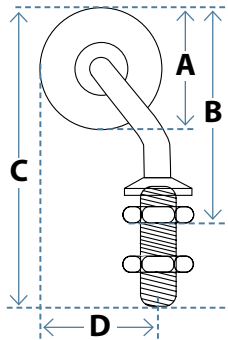
## omnifloat®

Omnifloat castors allow smooth conveying & directional change with minimal damage to delicate surfaces. Specified throughout the glass handling industry for conveying glass through wet, corrosive, dusty & high temperature processes.

Omnifloats are typically supplied with a 50% mix of 'left hand' & 'right hand' swivel trail. We recommend fitting the castors in a regular, alternate pattern to minimise bias & provide a neutral conveying plane.

Replacement balls available as spares. Alternative materials can be retro-fitted for extended durability & service.

Service Kits  
pg. 21



PART	MAX LOAD kg	A BALL Ø	B MIN-MAX	C	D	THREAD
OF 35-55	18kg	35	54-76	92	27.5	M14 x 1.5
OF 35-75	18kg	35	54-71	87	37.5	M14 x 1.5
OF 50-100	22kg	50	69-91	107	50	M14 x 1.5

### Specify your materials:

- R** = Rubber Ball add suffix 'R'  
Better Grip (Black)  
70 Shore 'A' -20°C to +80°C
- P** = Polyurethane Ball add suffix 'P'  
Wear resistant (Caramel)  
92 Shore 'A' -20°C to +80°C
- HT** = High Temperature add suffix 'HT'  
Heat resistant (Red)  
80 Shore 'A' -20°C to +150°C

Standard arm is zinc plated steel (AISI 1113)

- SS** = Corrosion/Chemical attack?  
Specify Stainless Steel Arm AISI 304

### To Order:

- Select model: OF35-55 / OF35-75 / OF50-100
- Specify Ball material: 'R'= Rubber, 'P'= Polyurethane & 'HT'= High Temperature (i.e. OF35-75HT)
- Stainless Steel Arm required? Add suffix 'SS' (otherwise zinc plated steel arm)

## omniwheel®

Omniwheels feature 3 peripheral polyamide rollers which rotate on stainless steel axles. Ideal for assembly lines, machine feed & packing areas. Produced with either:

- **PLAIN BORE** for gravity fed conveyor systems
- **HEX-DRIVE CENTRE** (suffix '-H') for hexagon driven conveyor systems.

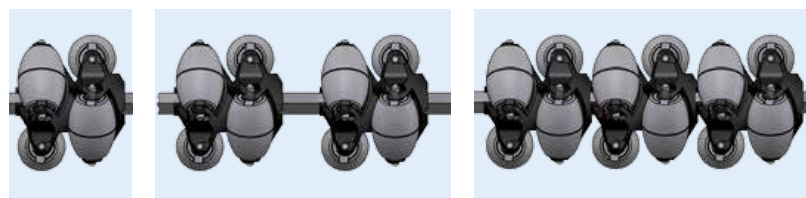
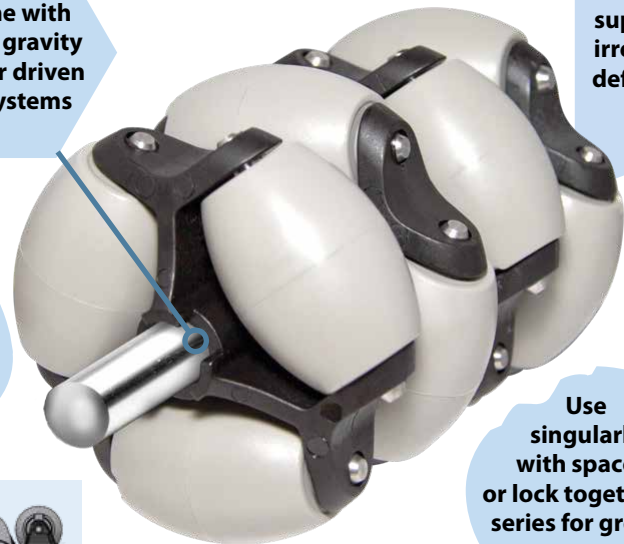
Lock Omniwheels together in series for 360 degree support across narrow or irregular shaped items. We can supply spacer tubes (pre-cut to the required length) to reduce density for items with larger surface area.

Easily combine with existing gravity (plain) or driven (Hex) systems

Greater support for irregular or deformable items

Ideal in dirty, wet & dusty conditions

Use singularly with spacers or lock together in series for greater contact

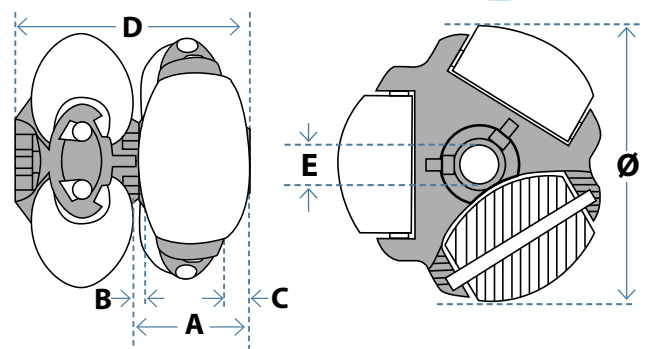


Twin

Spaced Twin

Series

PART	MAX LOAD kg	WHEEL Ø	A	B	C	D	E
OW48	8	48	21.5	3	3	40	Ø 8.2
OW48-H	8	48	21.5	3	3	40	8.1 HEX DRIVE
OW80	25	80	34	4	4	65	Ø 12.2
OW80-H	25	80	34	4	4	65	11.2 HEX DRIVE





# FLEXIBLE CONVEYORS

Omnitrack Flexible Conveyors - versatile & mobile conveyor modules. Compact conveyors extend up to 3.6 times their retracted length & sturdy castors are then locked once positioned. All models are height adjustable & assembled with either Skatewheels (for flat based items & tighter turns) or Conveyor Rollers (for increased support of irregular/deformable items). Rollers & wheels are produced from low-inertia, high-impact PVC.

- 80 kg/metre load rating
- Adjustable working height (650mm - 1100mm)
- Maximum axle pitch 125mm (extended)
- 400mm or 600mm standard conveyor width
- Other models & materials available.

## FLEXIBLE CONVEYORS WITH SKATEWHEELS – for flat-based items & for tighter turns



400mm WIDTH	600mm WIDTH	EXTENDED LENGTH	RETRACTED LENGTH
S400/2000	S600/2000	2	0.63
S400/3500	S600/3500	3.5	1.02
S400/5000	S600/5000	5	1.41
S400/6500	S600/6500	6.5	1.8
S400/8000	S600/8000	8	2.19
S400/9500	S600/9500	9.5	2.58

Dimensions in metres



## FLEXIBLE CONVEYORS WITH ROLLERS – for increased support of irregular/deformable items

400mm WIDTH	600mm WIDTH	EXTENDED LENGTH	RETRACTED LENGTH
R400/2000	R600/2000	2	0.94
R400/3500	R600/3500	3.5	1.56
R400/5000	R600/5000	5	2.18
R400/6500	R600/6500	6.5	2.8
R400/8000	R600/8000	8	3.42
R400/9500	R600/9500	9.5	4.04

Dimensions in metres



Optional Connecting Hooks link multiple conveyors together. (CH1)

PART	OPTIONAL PARTS
CH1	Connecting Hooks (1 Pair)
ES400	End Stop (400mm width)
ES600	End Stop (600mm width)

Optional End Stops (ES400/ES600) or Ball Platforms & Tables (page 19).

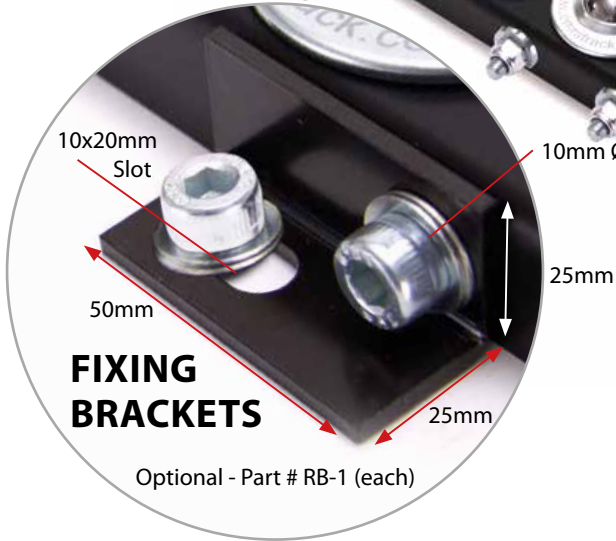
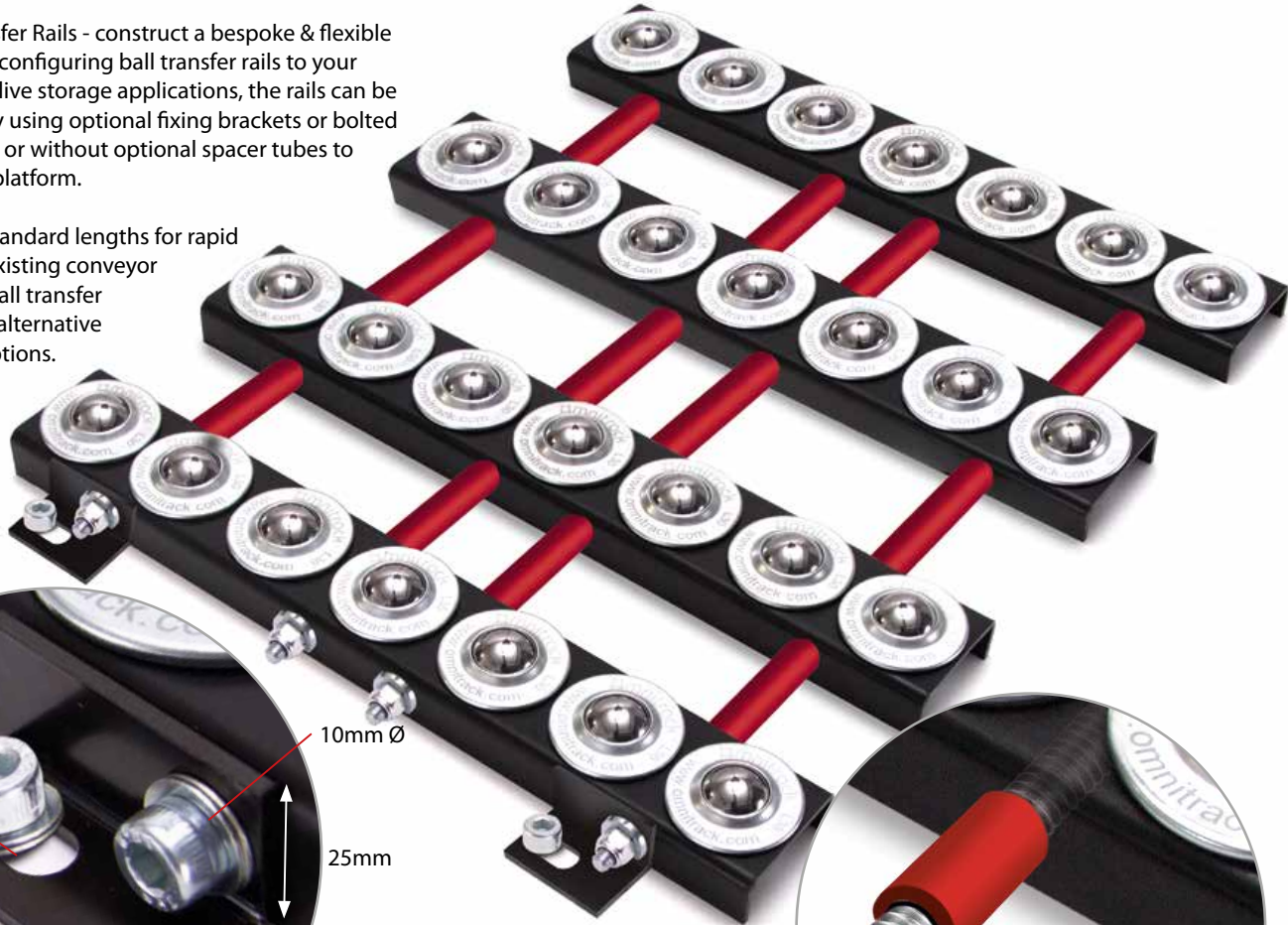




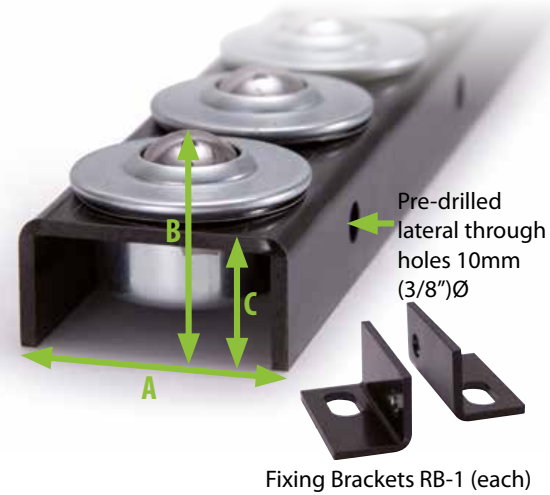
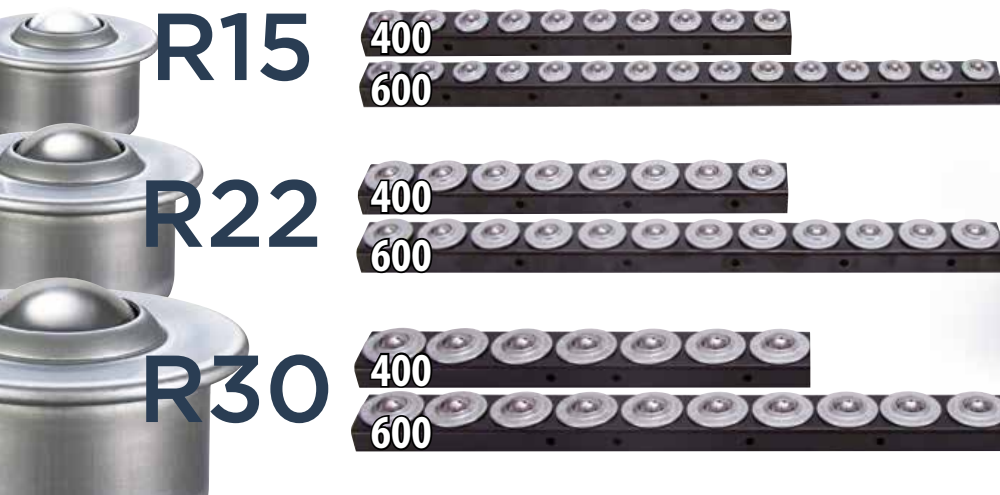
# BALL TRANSFER RAILS

Omnitrack Ball Transfer Rails - construct a bespoke & flexible conveying plane by configuring ball transfer rails to your application. Ideal in live storage applications, the rails can be installed individually using optional fixing brackets or bolted together either with or without optional spacer tubes to form a ball transfer platform.

400mm & 600mm standard lengths for rapid integration within existing conveyor roller installations. Ball transfer units available with alternative material upgrade options.

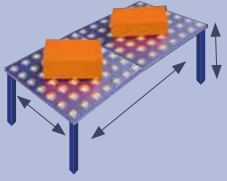


BALL Ø	RAIL LENGTH # OF BALL UNITS @ SPACING mm				MAX LOAD kg												A RAIL WIDTH	B FITTED HEIGHT	C RAIL HEIGHT
	400mm LENGTH		600mm LENGTH		STANDARD MATERIALS			A			D			SS					
	Carbon steel bearings, zinc pressings		Stainless steel balls, zinc plated pressings		Nylon load ball, zinc plated pressings			Stainless steel bearings & pressings											
	Unit	400	600	Unit	400	600	Unit	400	600	Unit	400	600	Unit	400	600				
15	R15-400	10 @ 40	R15-600	15 @ 40	60	600	900	60	600	900	10	100	150	40	400	600	40	34.5	25
22	R22-400	8 @ 50	R22-600	12 @ 50	160	1280	1920	160	1280	1920	20	160	240	90	720	1080	50	34.8	25
30	R30-400	7 @ 57.5	R30-600	10 @ 60	280	1960	2800	280	1960	2800	25	175	250	200	1400	2000	60	38.8	25



**BALL TABLES & CONVEYING PLATFORMS**

We'll design & build your custom solution.  
Just send us your application criteria:



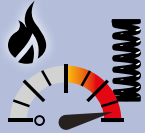
Table/platform dimensions.  
Sides & end stops?



Conveyed item(s) - maximum/minimum dimensions & weights



Conveyed item(s) - material & finish, deformability & flatness.

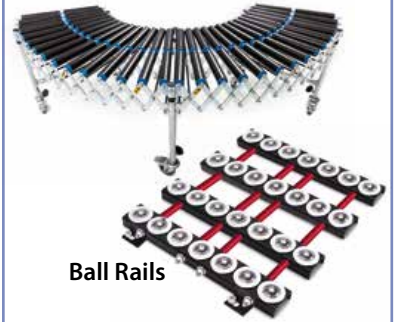


Special operations - shock loads, speed, assembly procedures.



Operating environment - outdoors, refrigerated conditions, hygienic areas, washdown areas.

Also consider:  
Flexible Conveyors



Ball Rails



**CONTACT US NOW**

**Kg**  
Heavy & Shock Loads

**Low Friction**

**Instant Directional Change**

**High & low Temperatures**

**Glass & Delicate sheet handling**

**Outdoor, wet & contaminated conditions**

**High Temperature Use**

**Service kits available**

**Driven Conveyor Systems**

**Outdoor, wet & contaminated conditions**

**Irregular & deformable objects**

**Washdown Areas**

**UNIT SPACING**  
= Shortest Dimension  
3.5

**Delicate Contact**

**Contaminated Conditions**

**Brake Option**

**Rapid Drain & Debris Channels**



**Ball Skate BB30/4**

Lightweight &



**durable  
 construction**

1000 kg



**Load  
 per skate**

Parking

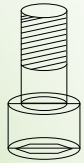


**brake  
 standard**

Corrosion



**resisting  
 S/S Balls**



12.7mm Ø through counter bore for:

- Optional Load Plate
- Socket head screw for permanent attachment.

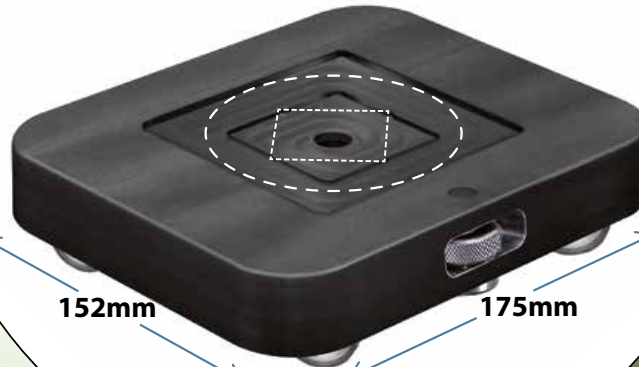


**Accepts most standard legs**

**Circular Leg Recess  
 20mm<sup>2</sup>Ø - 80mm<sup>2</sup>Ø**

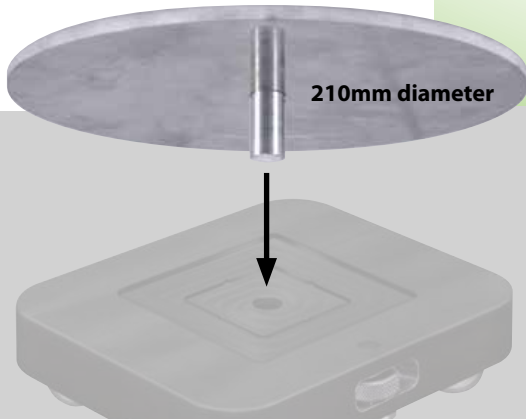
**Optional  
 Load Plate**

**Square Leg Recess  
 20mm<sup>2</sup>Ø - 100mm<sup>2</sup>Ø**



**Ground Clearance 13.8mm  
 Ball Projection 5.5mm**

210mm diameter



**Load Plate - Part # BL2**

Ideal where flat or wide surfaces require increased support. Easy push fit & removal utilising central hole in skate.

**Pry Bar - Part # BP2**

Use to lift or lever items & fit/remove ball skates. Heavy duty 2-piece design for ease of transport.



**Shelving Tie  
 Brackets - Part # BS2**

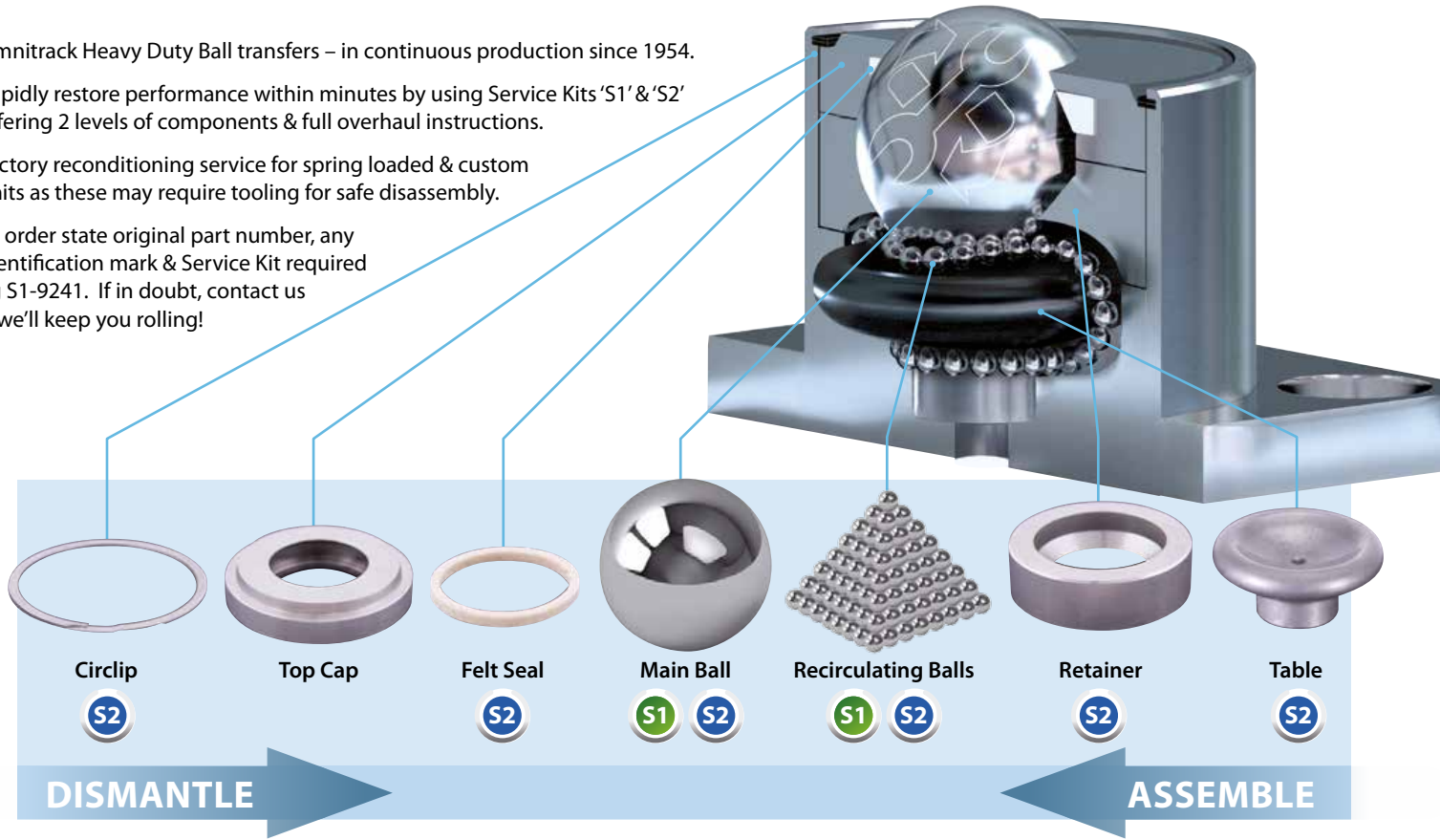
Ball skates are ideal to move laden connected shelving aisles. Use universal tie brackets to secure upper areas of connected gondola shelving.

Omnitrack Heavy Duty Ball transfers – in continuous production since 1954.

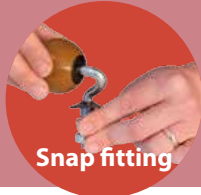
Rapidly restore performance within minutes by using Service Kits 'S1' & 'S2' offering 2 levels of components & full overhaul instructions.

Factory reconditioning service for spring loaded & custom units as these may require tooling for safe disassembly.

To order state original part number, any identification mark & Service Kit required eg S1-9241. If in doubt, contact us & we'll keep you rolling!



### OMNIFLOAT



Replacement parts available as spares. Alternative materials can be retro-fitted for extended durability & service.

- R** = Rubber Ball  
Better Grip (Black)  
70 Shore 'A' -20°C to +80°C
- P** = Polyurethane Ball  
Wear resistant (Caramel)  
92 Shore 'A' -20°C to +80°C
- HT** = High Temperature Ball  
Heat resistant (Red)  
80 Shore 'A' -20°C to +150°C

Ball Ø mm

	35	50
<b>R</b>	S35R	S50R
<b>P</b>	S35P	S50P
<b>HT</b>	S35HT	S50HT





Evaluate these aspects when choosing your solution:

<h3>Orientation</h3> <p>Which position does your application require the units to be mounted or function? Load ball 'up', 'down' or other? Heavy duty range units operate at maximum load in all orientations.</p>	<h3>Track &amp; Contact</h3> <p>What is the condition, hardness &amp; surface finish of the material the units will be conveying or bearing against? Uneven, deformable &amp; delicate surfaces need special consideration.</p>	<h3>Load</h3> <p>Dynamic &amp; static load ratings are identical. Where loads are unevenly distributed or high impact/shock conditions exist, spring loaded units are ideal.</p>
<h3>Speed</h3> <p>Maximum conveying speeds are limited; frequency &amp; duration may also require consideration. Dynamic &amp; static speed ratings are identical.</p>	<h3>Friction &amp; Precision</h3> <p>Lowest coefficient of friction &amp; highest levels of precision movement are provided by the Heavy duty range units. Some applications will allow a design concession to be made</p>	<h3>Stability</h3> <p>Consider the stability of the conveyed item. Ensure sufficient points of contact (pitch) to consistently support the mass. Provision for control &amp; braking of the mass should not be overlooked.</p>
<h3>Environment</h3> <p>Consider material upgrade options to better resist adverse environmental operating conditions: dirty or dusty conditions? Wet &amp; contaminated areas? Chemical attack/contamination? Magnetic permeability &amp; Radioactive fields.</p>	<h3>Lubrication &amp; Service</h3> <p>Omnitrack products are lubricated for life. Heavy duty &amp; Omnifloat ranges offer additional user-service kits (see page 21) to further extend service life.</p>	<h3>Temperature</h3> <p>Ambient temperature &amp; maximum/minimum temperature ranges must be evaluated. Stainless steel components resist higher &amp; lower temperatures better than standard materials - consult temperature chart on page 23.</p>

**CONTACT US NOW**

**Drawings are available for all of our parts online**

	Max Load	Friction % of Load	Speed m/second	Shock loads		Arduous conditions		Orientation	Instant change
<b>Heavy Duty</b>	8000	0.5	2	✓✓✓✓✓ 94-97 Series	✓✓✓✓✓ 90-93 & 98 Series	✓✓✓✓	Z' & 'SS' options		✓✓✓
<b>Medium Duty</b>	3500	2	1.5	✓✓✓✓✓ MM - MN Series	✓✓✓✓ MX Series	✓✓✓✓	MW, MV30 & 'SS' option		✓✓✓
<b>Light Duty</b>	7-250	3	1	✓✓✓	✓ LM series	✓✓	'SS' options		✓✓✓
<b>Omicaster</b>	30 & 60	3	1	✓		✓✓✓			✓✓
<b>Omnwheel</b>	8 & 25	5	1	✓		✓✓✓✓			✓
<b>Omnifloat</b>	18 & 22	6	1	✓✓		✓✓✓✓✓			✓
<b>Flexible Conveyors</b>	80/ per metre	4	2	✓✓		✓✓✓✓✓			✓✓
<b>Rails &amp; Tables</b>	300+	3	1	✓		✓✓			✓
<b>Skates</b>	1000	3	1.5	✓✓		✓✓✓			✓

## HEAVY DUTY BALL UNITS



"Anti-oxide" electrophoretic black finish  
>330 hours ISO salt resistance.  
Stainless steel units - natural finish



(Ball Ø > 12.7mm)

Lubricated for life -  
Mobil Vactra 1 Oil



LOAD RATINGS UNAFFECTED AT ANY ORIENTATION

Standard & **A**  
1 x drain channel

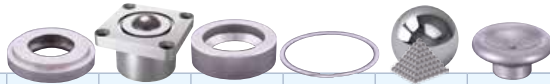


**Z**  
2 x drain channels

**DEBRIS & DRAIN CHANNELS**  
All units (main ball > 15.8mm)



## Component materials & Corrosion resistance



<b>SS</b>	'All Stainless steel'	1	1	1	5	3	3
<b>Z</b>	'Arduous Conditions'	4	4	1	5	3	3
<b>A</b>	'Stainless steel balls, other materials as standard'	4	4	6	5	3	6
	Standard Materials	4	4	6	5	6	6

- 1 = AISI 304 stainless steel
- 2 = AISI 302 stainless steel
- 3 = AISI 440 stainless steel
- 4 = AISI 1050 'Anti-oxide' finish
- 5 = AISI 1070 chrome steel
- 6 = AISI 52100 chrome steel

## LOAD & STABILITY



Ensure sufficient load capacity.

$$\frac{\text{Load}}{3} = 3 \times 1000\text{Kg}$$



$$\text{Unit spacing} = \frac{\text{shortest dimension}}{3.5}$$

Specify Spring Loaded units where shock loads or uneven track or load conditions exist.



Free technical advice

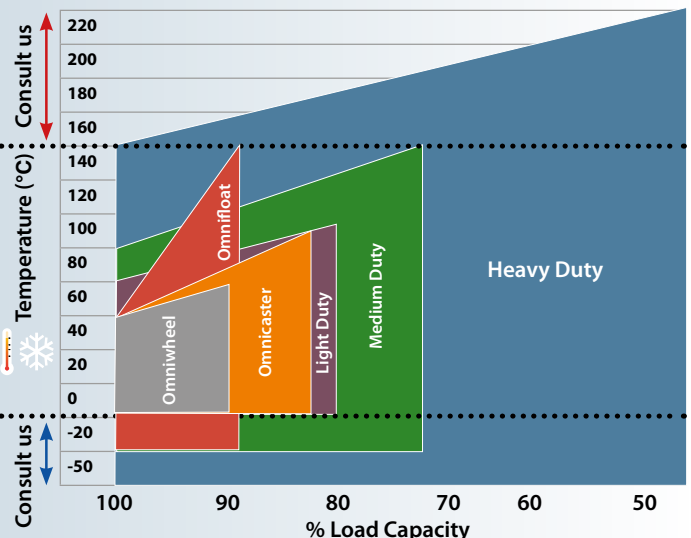


Bespoke design



In-house manufacturing

## OPERATING TEMPERATURE



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omnifloat®



omniwheel®



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