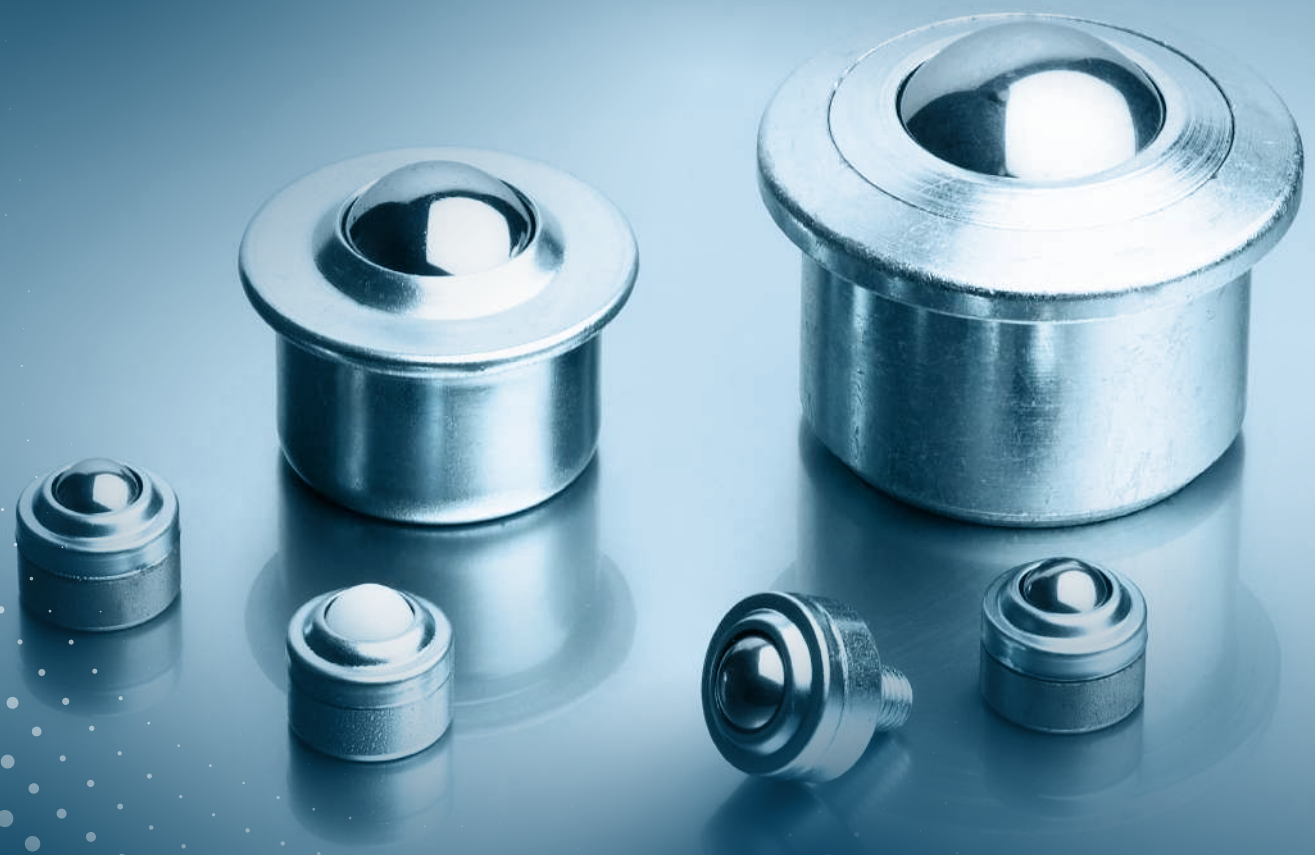
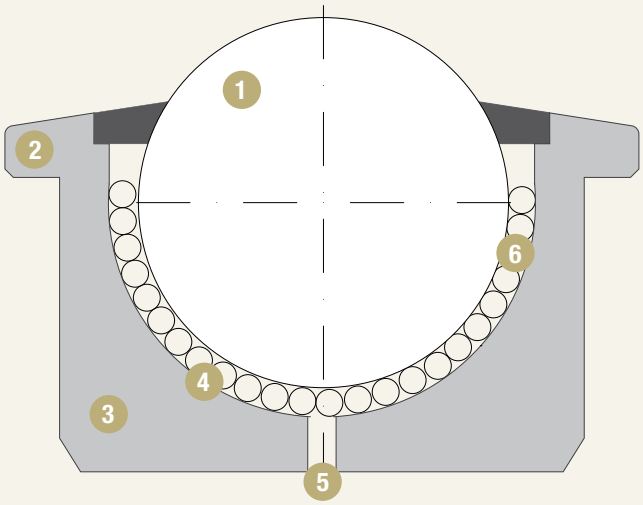
LUIS APARICIO
PRECISION BALLS

BALL TRANSFER UNITS



ISO 9001
BUREAU VERITAS
Certification

BALL TRANSFER UNITS



1. MAIN BALL
2. COLLAR
3. BODY
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5. EXIT HOLE
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For light loads

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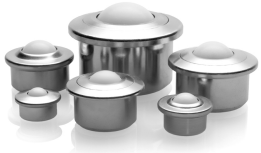
08 SERIES “SPM” HEAVY DUTY WITH COLLAR



09 SERIEs “SPM” HEAVY DUTY WITH COLLAR AND PLASTIC BALL

10 SERIES “SBM” HEAVY DUTY WITHOUT COLLAR

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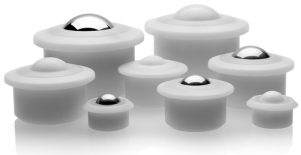
12 SERIES “SBM” AND “SPM” +FL WITH THREADED NUT

13 SERIES “SPM-CARGO” FOR AIRPORT APPLICATIONS

SERIES “SBM” HEAVY DUTY WITHOUT COLLAR



14 SERIES “SPP” WITH PLASTIC BODY
For food and chemistry industry

15 FIXING CLIP

CONSTRUCTION

Ball transfer units are composed of a large precision ball rolling on a bed of small precision balls seated in a hardened hemispheric cup.

All the balls are ground and heat treated in order to allows the large ball to rotate freely in any direction. Friction is extremely reduced and a smooth movement is provided at speed 2m/sec. Very heavy loads can be easily moved with low effort. Machined Heavy Duty units are studied for heavy shock loads and long life applications. Pressed Light Duty units are suitable for light loads.

The manufacturing range includes ball transfer units with main supporting balls from 8mm (5/16") up to 90mm (3.1/2" Diameter) in steel, stainless steel or polyacetal material and loading capacities up to 3.000 KGS. (4.500 pounds). The housings of the units could be bright metal, zinc plated or completely in stainless steel, with oiled felt sealing system incorporated (except SP 8, SP 12, SP 15, SP 25) and self cleaning bottom holes (except SPS, SP25 and SPM-FL series). This is available on request on SP 15 & 25 series only. We can also provide ball transfer units with main balls made of AISI 440C, AISI 304, AISI 316, teflon, glass, with various coupling between big and small balls

Regarding the shape of the body and fixing methode, we can find three types of transfer units:

- Ball transfer with collar on top positoned by gravity.
- Ball transfer without collar for support on bottom.
- Ball transfer units with holes for screw fixing.

APPLICATIONS

Ball transfer units are widely used in all industries to allow freely conveying in any direction of heay loads with low stress.

MOST POPULAR APPLICATIONS

- Aircraft transport cargo rolling decks
- Sheet-metal-working machines
- Folding presses
- Ball-transfer tables
- Lifting equipment & platforms
- Conveyors
- Transporters for containers & pallets
- Sliding walls, doors & Windows

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TECHNICAL DATA

HOW TO DETERMINE THE LOAD EACH BALL UNIT WILL NEED TO SUPPORT

Ball size loading capacity & the loading placed on each ball transfer unit is normally provided by the weight of charge divided by 3. The result gives the highest load which any individual ball transfer unit may have to support. A suitable security charge margin is suggested.

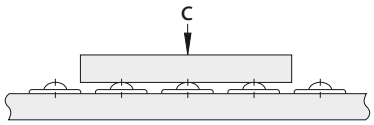
It's important that the load must be supported through the centre line of the unit. Downwards & sideways applications will affect relative loading capacities.

EXAMPLE 1

Load: 600 kg

Load /ball unit

$$c = \frac{600\ \text{kg}}{3} = 200\ \text{kg}$$



DISTANCE BETWEEN BALL TRANSFER UNITS

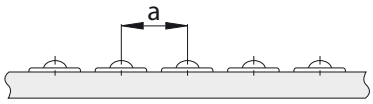
In order to determine the distance between ball transfer units divide the shortest horizontal distance by 3,50. For example, for a weight measuring across the base 350 mm. x 1.000 mm. The recommended distance will be 100 mm. (350 mm. : 3,50).

EXAMPLE 2

Base surface: 350x1.000 mm

Distance between ball units:

$$a = \frac{350\ \text{mm}}{3{,}5} = 100\ \text{mm}$$



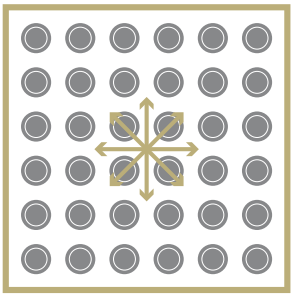
TEMPERATURE RESISTANCE

Generally temperaturas -30°C to +70°C continuos and +100°C intermittent, do not affect the running and quality.

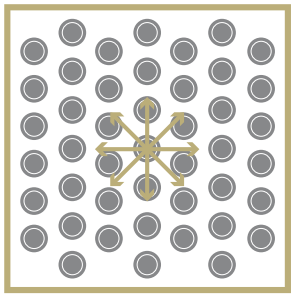
Types without sealing and plastic ball could resist temperatures up to +150/200°C are. For higher temperatures we can offer special productions.

THE UNITS CAN BE USUALLY PLACED IN THREE DIFFERENT WAYS

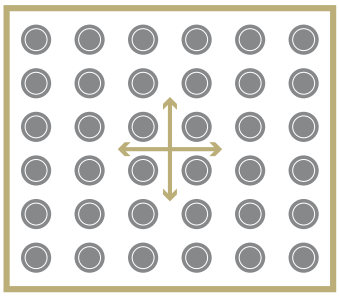
SQUARED PITCH



DIAMOND PITCH



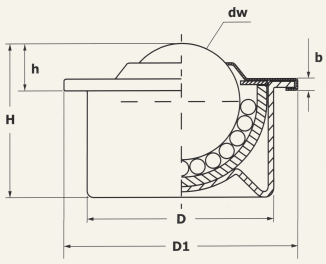
EXTENDED PITCH



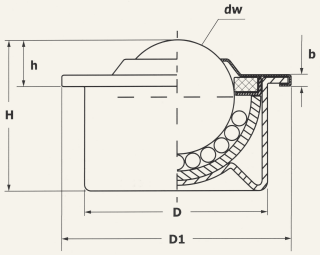
SERIES "SPS" LIGHT DUTY WITH COLLAR

PRESSED STEEL BALL TRANSFER UNITS WITH HARDENED BALL RACE. ZINC PLATED BODY, OILED FELT SEALING SYSTEM INCORPORATED IN TYPES SPS 22, SPS 30 AND 45 ONLY.
WORKING TEMPERATURE: +100 ºC -20 ºC

SPS 15



SPS 22-30-45

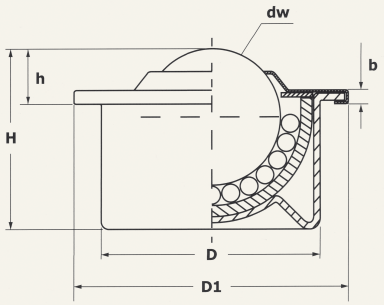


TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b	Kg Loading Capacity		Kg Weight
SPS 15 B	ZINC PLATED BODY AND STEEL BALLS	15	24	±0,08	31	9,5	±0,2	21	2,8	50	35	0,038
SPS 22 B		22	36	±0,08	45	9,8	±0,2	29,5	3,5	120	80	0,132
SPS 30 B		30	45	±0,1	55	13,8	±0,3	36,8	4	250	170	0,265
SPS 15 C	ZINC PLATED BODY AND STAINLESS STEEL BALLS AISI 420	15	24	±0,08	31	9,5	±0,2	21	2,8	35	25	0,038
SPS 22 C		22	36	±0,08	45	9,8	±0,2	29,5	3,5	90	60	0,132
SPS 30 C		30	45	±0,01	55	13,8	±0,3	36,8	4	140	100	0,265
SPS 15 SS	COMPLETELY S.S. BODY AISI 304 WITH S.S. HARDENED BALL RACE AISI 420 AND STAINLESS BALLS AISI 420	15	24	±0,08	31	9,5	±0,2	21	2,8	35	25	0,038
SPS 22 SS		22	36	±0,08	45	9,8	±0,2	29,5	3,5	90	60	0,132

Load Up Load Down

SERIES "SPS" LIGHT DUTY WITH COLLAR AND MAIN ALL IN PLASTIC

PRESSED STEEL BALL TRANSFER UNITS. WITH MAIN BALL IN POM-POLYACETAL (DELRIN). ZINC PLATED BODY, WITHOUT OILED FELT SEALING SYSTEM.
NOT SUITABLE FOR REVERSE APPLICATION
WORKING TEMPERATURE: 0°C ±60° C



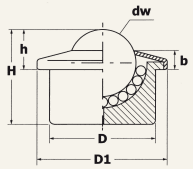
TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b	Kg Loading Capacity	Kg Weight
SPS 15 B-D	PRESSED ZINC PLATED BODY, MAIN BALL IN PLASTIC(DELRIN) AND STEEL BALLS	15	24	±0,08	31	9,5	±0,2	21	2,8	13	0,024
SPS 22 B-D		22	36	±0,08	45	9,8	±0,2	29,5	3,5	20	0,084
SPS 30 B-D		30	45	±0,1	55	13,8	±0,3	36,8	4	25	0,155
SPS 15 C-D	PRESSED ZINC PLATED BODY, MAIN BALL IN PLASTIC(DELRIN) , SMALL BALLS S.S.AISI 420	15	24	±0,08	31	9,5	±0,2	21	2,8	13	0,024
SPS 22 C-D		22	36	±0,08	45	9,8	±0,2	29,5	3,5	20	0,084
SPS 30 C-D		30	45	±0,1	55	13,8	±0,3	36,8	4	25	0,155
SPS 15 SS-CD	COMPLETELY S.S. BODY AISI 304 WITH S.S. BALL RACE AISI 420 , MAIN BALL IN PLASTIC (DELRIN) AND SMALL BALLS S.S. AISI 420	15	24	±0,08	31	9,5	±0,2	21	2,8	13	0,024
SPS 22 SS-CD		22	36	±0,08	45	9,8	±0,2	29,5	3,5	20	0,084

Only Load Up

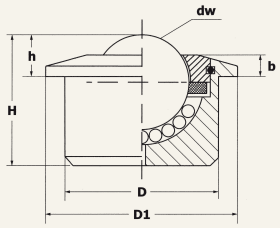
SERIES "SPM" HEAVY DUTY WITH COLLAR

BODY IN MACHINED LOW CARBON STEEL OR STAINLESS STEEL
BALLS IN CHROME STEEL AISI 52100 OR STAINLESS STEEL AISI 420
HARDENED INNER BALL RACE
SELF CLEANING HOLE INCOPORADED IN ALL UNITS
OILED FELT SEALING SYSTEM INCORPORATED IN TYPES SPM 22, 30 AND 45 ONLY
WORKING TEMPERATURE: -20°C - +100° C

SPM 12



SPM 15-22-30-45



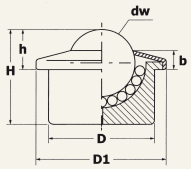
TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b	Kg Loading Capacity		Kg Weight
SPM 12 B	ZINC PLATED MACHINED BODY AND STEEL BALLS	12	22	±0,08	27	8	±0,2	16,8	5	20	15	0,035
SPM 15 B		15	24	±0,08	31	9,5	±0,2	21	5,5	50	35	0,06
SPM 22 B		22	36	±0,08	45	9,8	±0,2	30,5	6	180	125	0,185
SPM 30 B		30	45	±0,08	55	14	±0,3	36,8	8	350	250	0,355
SPM 45 B		45	62	±0,1	75	19	±0,4	53,5	10	600	420	0,990
SPM 12 C	ZINC PLATED MACHINED BODY AND STAINLESS STEEL BALLS AISI 420	12	22	±0,08	27	8	±0,2	16,8	5	15	10	0,035
SPM 15 C		15	24	±0,08	31	9,5	±0,2	21	5,5	40	25	0,06
SPM 22 C		22	36	±0,08	45	9,8	±0,2	30,5	6	130	90	0,185
SPM 30 C		30	45	±0,08	55	14	±0,3	36,8	8	240	170	0,355
SPM 45 C		45	62	±0,1	75	19	±0,4	53,5	10	400	280	0,990
SPM 12 SS	ALL COMPONENTS IN STAINLESS STEEL AISI 420	12	22	±0,08	27	8	±0,2	16,8	5	15	10	0,035
SPM 15 SS		15	24	±0,08	31	9,5	±0,2	21	5,5	40	25	0,06
SPM 22 SS		22	36	±0,08	45	9,8	±0,2	30,5	6	130	90	0,185
SPM 30 SS		30	45	±0,08	55	14	±0,3	36,8	8	240	170	0,355
SPM 45 SS		45	62	±0,1	75	19	±0,4	53,5	10	400	280	0,990

Load Up Load Down

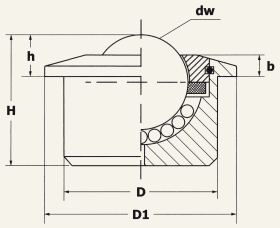
SERIES "SPM" HEAVY DUTY WITH COLLAR AND PLASTIC BALL

BODY IN MACHINED LOW CARBON STEEL OR STAINLESS STEEL
MAIN BALL IN POM-POLIACETAL(DELRIN)
WITHOUT FELT SEALING SYSTEM TO GARANTEE A GOOD FLUENCY
SELF CLEANING HOLE INCOPORADED IN ALL UNIT
NOT SUITABLE FOR REVERSE APPLICATION
WORKING TEMPERATURE: 0°C +60° C

SPM 12

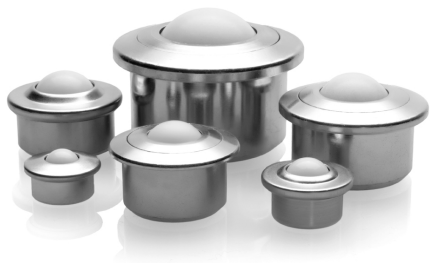


SPM 15-22-30-45



TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b	Kg Loading Capacity	Kg Weight
SPM 12 B-D	ZINC PLATED MACHINED BODY, MAIN BALL IN DELRIN(POM) AND SMALL BALLS IN STEEL AISI 52100	12	22	±0,08	27	8	±0,2	16,8	5	5	0,03
SPM 15 B-D		15	24	± 0,08	31	9,5	±0,2	21	5,5	13	0,046
SPM 22 B-D		22	36	± 0,08	45	9,8	±0,2	30,5	6	20	0,150
SPM 30 B-D		30	45	± 0,08	55	13,8	±0,3	36,8	8	25	0,240
SPM 45 B-D		45	62	±0,1	75	19	±0,4	53,5	10	30	0,670
SPM 12 C-D	ZINC PLATED MACHINED BODY, MAIN BALL IN DELRIN(POM) AND SMALL BALLS IN STAINLESS STEEL AISI 420	12	22	±0,08	27	8	±0,2	16,8	5	5	0,03
SPM 15 C-D		15	24	± 0,08	31	9,5	±0,2	21	5,5	13	0,046
SPM 22 C-D		22	36	± 0,08	45	9,8	±0,2	30,5	6	20	0,150
SPM 30 C-D		30	45	± 0,08	55	13,8	±0,3	36,8	8	25	0,240
SPM 45 C-D		45	62	±0,1	75	19	±0,4	53,5	10	30	0,670
SPM 12 SSC-D	STAINLESS STEEL BODY, BALLS MADE OF STAINLESS STEEL AISI 420, MAIN BALL IN DELRIN(POM)	12	22	±0,08	27	8	±0,2	16,8	5	5	0,03
SPM 15 SSC-D		15	24	± 0,08	31	9,5	±0,2	21	5,5	13	0,046
SPM 22 SSC-D		22	36	± 0,08	45	9,8	±0,2	30,5	6	20	0,150
SPM 30 SSC-D		30	45	± 0,08	55	13,8	±0,3	36,8	8	25	0,240
SPM 45 SSC-D		45	62	±0,1	75	19	±0,4	53,5	10	30	0,670

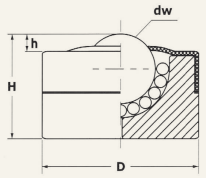
Only Load Up



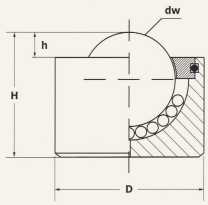
SERIES "SBM" HEAVY DUTY WITHOUT COLLAR

BODY IN MACHINED LOW CARBON STEEL OR STAINLESS STEEL
OILED FELT SEALING SYSTEM INCORPORATED ONLY SBM 22 /30 /45
SELF CLEANING HOLE INCOPORADED IN ALL UNITS
WORKING TEMPERATURE : -20°C +100 °C
EXCEPT TYPES WITH MAIN BALL IN PLASTIC:
WORKING TEMPERATURE 0° - 60° C

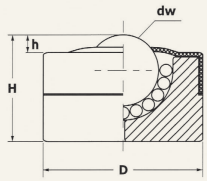
SBM 8



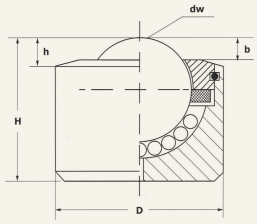
SBM 15



SBM 12



SBM 22-30-45



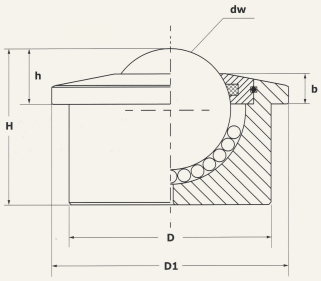
TYPE	Features	Dw	D	Tol	h	Tol	H	b	Kg Loading Capacity		Kg Weight
SBM 8 B	ZINC PLATED MACHINED BODY AND STEEL BALLS	8	18	± 0,08	2	±0,2	12	-	12	9	0,018
SBM 12 B		12	22	± 0,08	5,5	±0,2	17,5	-	20	15	0,035
SBM 15 B		15	24	± 0,08	5	±0,2	20	-	50	35	0,050
SBM 22 B		22	36	± 0,08	5,3	±0,2	30,5	4	180	125	0,170
SBM 30 B		30	45	± 0,08	8	±0,3	36.8	5,5	350	250	0,330
SBM 45 B		45	62	± 0,1	13	±0,3	53,5	10	600	420	0,945
SBM 8 C	ZINC PLATED MACHINED BODY AND STAINLESS STEEL BALLS AISI 420	8	18	± 0,08	2	±0,2	12	-	10	7	0,018
SBM 12 C		12	22	± 0,08	5,5	±0,2	17,5	-	15	10	0,035
SBM 15 C		15	24	± 0,08	5	±0,2	20	-	40	25	0,050
SBM 22 C		22	36	± 0,08	5,3	±0,2	30,5	4	130	90	0,170
SBM 30 C		30	45	± 0,08	8	±0,3	36.8	5,5	240	170	0,330
SBM 45 C		45	62	± 0,1	13	±0,3	53,5	10	400	280	0,945
SBM 8 SS	STAINLESS STEEL BODY AND BALLS IN STAINLESS STEEL AISI 420	8	18	± 0,08	2	±0,2	12	-	10	9	0,018
SBM 12 SS		12	22	± 0,08	5,5	±0,2	17,5	-	15	10	0,035
SBM 15 SS		15	24	± 0,08	5	±0,2	20	-	40	25	0,050
SBM 8 B-D	ZINC PLATED MACHINED BODY, MAIN BALL IN DELRIN(POM) AND STEEL BALLS	8	18	± 0,08	2	±0,2	12	-	3	-	0,016
SBM 12 B-D		12	22	± 0,08	5,5	±0,2	17,5	-	5	-	0,030
SBM 15 B-D		15	24	± 0,08	5	±0,2	20	-	13	-	0,035
SBM 22 B-D		22	36	± 0,08	5,3	±0,2	30,5	4	20	-	0,140
SBM 30 B-D		30	45	± 0,08	8	±0,3	36.8	5,5	25	-	0,240
SBM 45 B-D		45	62	± 0,1	13	±0,3	53,5	10	30	-	0,650
SBM 8 C-D	ZINC PLATED MACHINED BODY, MAIN BALL IN DELRIN(POM) AND SMALL BALLS IN STAINLESS STEEL BALLS AISI 420	8	18	± 0,08	2	±0,2	12	-	3	-	0,016
SBM 12 C-D		12	22	± 0,08	5,5	±0,2	17,5	-	5	-	0,030
SBM 15 C-D		15	24	± 0,08	5	±0,2	20	-	13	-	0,035
SBM 22 C-D		22	36	± 0,08	5,3	±0,2	30,5	4	20	-	0,140
SBM 30 C-D		30	45	± 0,08	8	±0,3	36.8	5,5	25	-	0,240
SBM 45 C-D		45	62	± 0,1	13	±0,3	53,5	10	30	-	0,650
SBM 8 SS C-D	STAINLESS STEEL BODY, MAIN BALL IN DELRIN(POM) AND SMALL BALLS IN STAINLESS STEEL AISI 420	8	18	± 0,08	2	±0,2	12	-	3	-	0,016
SBM 12 SS C-D		12	22	± 0,08	5,5	±0,2	17,5	-	5	-	0,030
SBM 15 SS C-D		15	24	± 0,08	5	±0,2	20	-	13	-	0,035

Load Up Load Down

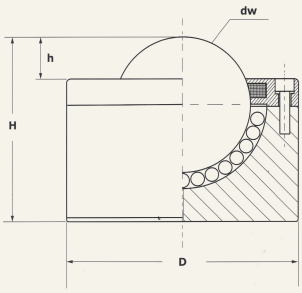
SERIES “SPM” SUPER HEAVY DUTY

SOLID MACHINED BODY STEEL FOR VERY HEAVY LOADS AND LONG LIFE
SELF CLEANING HOLE INCOPORADED IN ALL UNITS
OILED FELT SEALING SYSTEM INCORPORATED
WORKING TEMPERATURE: -20°C - +100° C

SPM 60



SBM 76 / 90



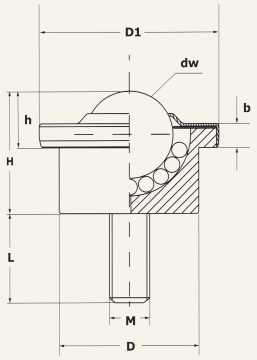
TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b	Kg Loading Capacity		Kg Weight
SPM 60 A	MACHINED BODY AND STEEL BALLS	60	100	±0,1	117	30	±0,4	77,5	15	1500	900	4
SBM 76 A		76	130	±0,1	-	23	±0,4	103	-	2500	1500	10
SBM 90 A		90	145	±0,1	-	25	±0,4	115	-	3000	2000	11,25
SPM 60 B	ZINC PLATED MACHINED BODY AND STEEL BALLS	60	100	±0,1	117	30	±0,4	77,5	15	1500	900	4
SBM 76 B		76	130	±0,1	-	23	±0,4	103	-	2500	1500	10
SBM 90 B		90	145	±0,1	-	25	±0,4	115	-	3000	2000	11,25
SPM 60 C	ZINC PLATED MACHINED BODY AND STAINLESS STEEL BALLS AISI 420	60	100	±0,1	117	30	±0,4	77,5	15	900	600	4
SBM 76 C		76	130	±0,1	-	23	±0,4	103	-	1500	900	10
SBM 90 C		90	145	±0,1	-	25	±0,4	115	-	1800	1200	11,25
SPM 60 SS	BALLS AND BODY MADE OF STAINLESS STEEL AISI 420	60	100	±0,1	117	30	±0,4	77,5	15	900	600	4
SBM 76 SS		76	130	±0,1	-	23	±0,4	103	-	1500	900	10
SBM 90 SS		90	145	±0,1	-	25	±0,4	115	-	1800	1200	11,25

Load Up Load Down

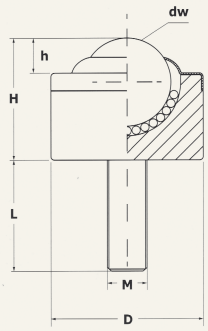
SERIES “SBM” AND “SPM” +FL WITH THREADED NUT

SOLID MACHINED STEEL BODY WITH THREATED NUT
WITHOUT FELT SEALING SYSTEM AND SELF CLEANING HOLE
WORKING TEMPERATURE : -20°C +100 °C
EXCEPT TYPES WITH MAIN BALL IN PLASTIC:
WORKING TEMPERATURE 0° - 60° C
STANDARD THREAD DIAMETER:
SBM 8 = 6 mm, SBM 12 and SPM 15 = 8 mm
STANDARD LENGHT: 15 mm
POSSIBILITY TO SUPPLY WITH LENGTH BETWEEN 15-30 mm

SPM 15



SBM 8/12

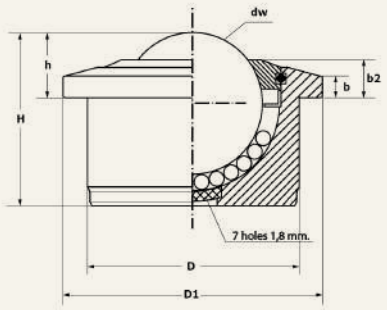


TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b	Kg Loading Capacity		Kg Weight
SBM 8 B-FL	ZINC PLATED MACHINED BODY AND STEEL BALLS	8	18	±0,08	-	2	±0,2	12	-	12	9	0,025
SBM 12 B-FL		12	22	±0,08	-	5	±0,2	17,5	-	20	15	0,045
SPM 15 B-FL		15	24	±0,08	31	9,5	±0,2	21	5,5	50	35	0,070
SBM 8 C-FL	ZINC PLATED MACHINED BODY AND STAINLESS STEEL BALLS AISI 420	8	18	±0,08	-	2	±0,2	12	-	10	7	0,025
SBM 12 C-FL		12	22	±0,08	-	5	±0,2	17,5	-	15	10	0,045
SPM 15 C-FL		15	24	±0,08	31	9,5	±0,2	21	5,5	40	25	0,070
SBM 8 SS-FL	STAINLESS STEEL BODY AND BALLS STAINLESS STEEL AISI 420	8	18	±0,08	-	2	±0,2	12	-	10	7	0,025
SBM 12 SS-FL		12	22	±0,08	-	5	±0,2	17,5	-	15	10	0,045
SPM 15 SS-FL		15	24	±0,08	31	9,5	±0,2	21	5,5	40	25	0,070
SBM 8 BD-FL	ZINC PLATED MACHINED BODY, MAIN BALL IN DELRIN(POM) AND STEEL BALLS	8	18	±0,08	-	2	±0,2	12	-	3	-	0,020
SBM 12 BD-FL		12	22	±0,08	-	5	±0,2	17,5	-	5	-	0,035
SPM 15 BD-FL		15	24	±0,08	31	9,5	±0,2	21	5,5	13	-	0,055
SBM 8 CD-FL	ZINC PLATED MACHINED BODY, MAIN BALL IN DELRIN(POM) AND SMALL BALLS IN STAINLESS STEEL BALLS AISI 420	8	18	±0,08	-	2	±0,2	12	-	3	-	0,020
SBM 12 CD-FL		12	22	±0,08	-	5	±0,2	17,5	-	5	-	0,035
SPM 15 CD-FL		15	24	±0,08	31	9,5	±0,2	21	5,5	13	-	0,055
SBM 8 SS CD-FL	ZINC PLATED MACHINED BODY, MAIN BALL IN DELRIN(POM) AND SMALL BALLS IN STAINLESS STEEL BALLS AISI 420	8	18	±0,08	-	2	±0,2	12	-	3	-	0,020
SBM 12 SS CD-FL		12	22	±0,08	-	5	±0,2	17,5	-	5	-	0,035
SPM 15 SS CD-FL		15	24	±0,08	31	9,5	±0,2	21	5,5	13	-	0,055

Load Up Load Down

SERIES "SPM-CARGO" FOR AIRPORT APPLICATIONS

BODY MADE OF SOLID MACHINED ZINC PLATED CARBON OR STAINLESS STEEL.
HOUSING MADE OF ZINC PLATED STEEL WITH SEALING COATING TO INCREASE CORROSION RESISTANCE.
WITHOUT OILED FELT SEALING TO GUARANTEE HIGHEST FLUENCY IN ALL WOKING CONDITIONSSTAINLESS STEEL DISC WITH SEVEN DRAIN HOLES TO FAVOUR THE DRAINING OF POWDER, IMPURITES,...
WORKING TEMPERATURE: -50°C -+100° C.
SPECIALLY DESIGNED TO ALLOW LONG LIFE USE AND CORROSION RESISTANCE TO PARTICULAR APPLICATIONS, SUCH AS EXTREME OUTDOORS CONDITIONS (RAIN, SNOW, ICE AND DUST).

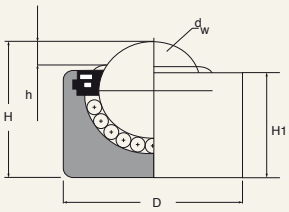


TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b2	Kg Loading Capacity	Kg Weight
SPM 30 C-Cargo	ZINC PLATED MACHINED BODY AND STAINLESS STEEL BALLS AISI 420	30	45	±0,08	55	13,8	±0,3	36,8	8,5	240	0,355
SPM 45 C-Cargo		45	62	±0,1	75	19	±0,4	53,5	10	400	0,990
SPM 30 SS-Cargo	BODY AND BALLS IN STAINLESS STEEL AISI 420	30	45	±0,08	55	13,8	±0,3	36,8	8,5	240	0,355
SPM 45 SS-Cargo		45	62	±0,1	75	19	±0,4	53,5	10	400	0,990

Load Up Load Down

SERIES "SBM" HEAVY DUTY WITHOUT COLLAR

SOLID MACHINE BODY STEEL BALLS AISI 52100. SELF CLEANING HOLE INCORPORATED



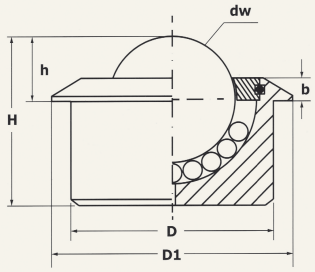
TYPE	Features	Dw	D	A	h	H	Tol	Kg Loading Capacity	Kg Weight
SBM 12 B D=20	ZINC PLATED MACHINED BODY AND STEEL BALLS	12	20	±0,065	3	16,5	±0,2	28	0,028

Only Load Up

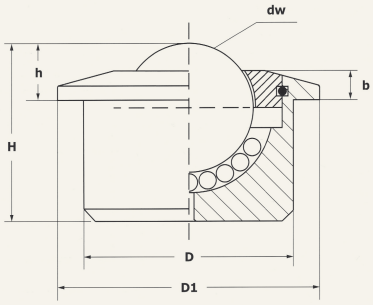
SERIES "SPP " WITH PLASTIC BODY

BALL TRANSFER UNITS WITH SOLID MACHINED BODY IN POLYACETAL-DELRIN(POM)
BALLS MADE OF STAINLESS STEEL AISI 316 OR DELRIN
WITHOUT OILED FELT SEALING SYSTEM
SELF CLEANING HOLE INCOPORADED IN ALL UNITS
NOT SUITABLE FOR REVERSE APPLICATION
FOR APPLICATIONS WHERE HIGH CORRISION RESISTANCE IS REQUIRED AS CHEMICAL, PHARMACEUTIC AND MEDICAL INDUSTRY
WORKING TEMPERATURE: 0° - +60° C

SPP 15

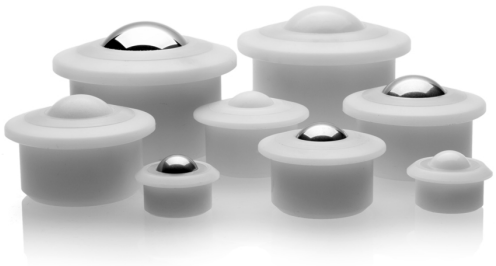


SPP 22 -30 -45



TYPE	Features	Dw	D	Tol	D1	h	Tol	H	b	Kg Loading Capacity	Kg Weight
SPP 15 P-C	BODY MADE OF DELRIN(POM) AND STAINLESS STEEL BALLS AISI 316	15	24	±0,08	30	8	±0,2	20	3	7	0,024
SPP 22 P-C		22	36	±0,08	45	9,8	±0,2	30,5	4,5	10	0,074
SPP 30 P-C		30	45	±0,08	55	13,8	±0,3	36,8	8	15	0,162
SPP 45 P-C		45	62	±0,1	75	19	±0,4	53,5	10	20	0,502
SPP 15 P-CD	BODY MADE OF DELRIN(POM), MAIN BALL IN DELRIN AND SMALL BALLS IN STAINLESS STEEL BALLS AISI 316	15	24	±0,08	30	8	±0,2	20	3	7	0,015
SPP 22 P-CD		22	36	±0,08	45	9,8	±0,2	30,5	4,5	10	0,040
SPP 30 P-CD		30	45	±0,08	55	13,8	±0,3	36,8	8	15	0,070
SPP 45 P-CD		45	62	±0,1	75	19	±0,4	53,5	10	20	0,185
SPP 15 P-D	BODY AND ALL BALLS MADE OF DELRIN (POM)	15	24	±0,08	30	8	±0,2	20	3	7	0,012
SPP 22 P-D		22	36	±0,08	45	9,8	±0,2	30,5	4,5	10	0,036
SPP 30 P-D		30	45	±0,08	55	13,8	±0,3	36,8	8	15	0,066
SPP 45 P-D		45	62	±0,1	75	19	±0,4	53,5	10	20	0,176

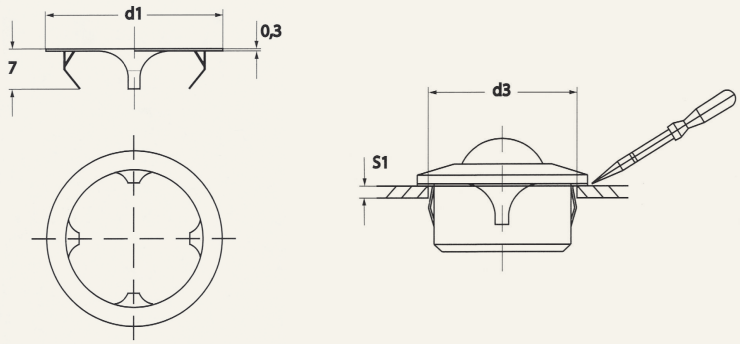
Only Load Up



FIXING CLIPS-REMOVABLE

FIXING CLIPS ARE AVAILABLE FOR BALL TRANSFER UNITS WITH COLLAR AND HOLE DIAMETERS 24, 36 AND 45 mm. EASY TO DISMANTLE.

FIXING CLIPS-REMOVABLE



UNIT TYPE	Ø FIXING HOLE WITH CLIP	D1	D3	S1
SP 15	SPS 15 / SPM 15 / SPP 15	30,50	25 -0,2	2 – 3 mm
SP 22	SPS 22 / SPM 22 / SPP 20	44	37 -0,3	2 – 4 mm
SP 30	SPS 30 / SPM 30 / SPP 30	54,80	46,7 -0,2	2 – 4 mm

FIXING CLIPS NOT REMOVABLE

WE CAN SUPPLY VERSIONS OF THIS FIXING CLIP FOR CONVEYOR BALLS WITH COLLAR AND END DIAMETERS OF 22, 24 AND 45 MM. MOUNTED BY THE PART LOWER.

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The information provided in this catalog is correct at the time of printing, although the technical characteristics of the products may be subject to change.

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BUREAU VERITAS
Certification