



Available materials

- CC	Chrome steel AISI 52100 Balls. Machined AISI 1016 steel housing, toughened & zinc plated
Solve specific application requirements by upgrading materials. Select option by adding suffix i.e. - CS	
- CS	Stainless Steel Balls (AISI 420) but other materials as Standard. Reduce load by 30%.
- SS	All parts in Stainless Steel - out housing AISI 416, Balls AISI 420. Reduce load by 30%.
- CD	Acetal (POM) main ball option - reduce load. See chart overleaf

Fixing clip selection

Part No.	Ball Size	Minimum Bore ø	Maximum Bore ø
P2730.015	15	24,8	25,0
P2730.022	22	37,0	37,2
P2730.030	30	46,3	46,7

Clip requires a minimum plate thickness of 3mm to grip securely

How to select the correct unit

Ball Type	Max Load (Kg)	Friction (% of load)	Speed m/sec	Shock Loads		Arduous Conditions	Orientation	Instant Change
Medium Duty	20-3500	2%	1,5	✓✓✓	✓✓	✓✓		✓✓✓
Light Duty	7-250	3%	1,0	✓		✓✓		✓✓✓

Variables to consider:



Shock Loads:

Standard material ball units have Rockwell 'C' hardness of 60 minimum



Track Hardness/Conveyed Item Material:

Standard material ball units have Rockwell 'C' hardness of 60 minimum



Delicate Surfaces:

Ball Units - Acetal (POM) & Phenolic Resin

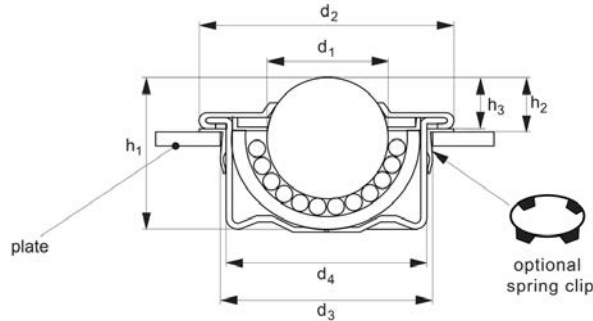


Operating Environment:

Wet, dirty, outdoor, radioactive



P2700.AV



Material

Steel (zinc plated), stainless steel (AISI 416 for housing and AISI 420 for balls) and acetal (POM).

Technical Notes

Cost-effective and light-weight units formed from sheet steel material.
No reduction in load carrying capacity even

when installed upside down.

Sizes 22 and 30 have a felt seal for the ball.
Low friction 1:0,03, speeds up to 1m/s.
Temperature range -20°C to +70°C.

Tips

To compensate for irregular bore diameters we recommend using the spring clip (stainless) part no. P2730.

Clip requires a minimum plate thickness of 3mm to grip securely.
These rollers can only be used in the horizontal or „ball up“ direction.

Order No.	d ₁	d ₂	h ₁	h ₂	d ₃ min.	d ₃ max.	d ₄	h ₃	Housing	Ball	Load kg max.
P2700.150-CC	15	31	21	10.1	25	25.5	24	9.8	Steel	Steel	60
P2700.150-CS	15	31	21	10.1	25	25.5	24	9.8	Steel	Stainless	60
P2700.150-CA	15	31	21	10.1	25	25.5	24	9.8	Steel	Acetal	10
P2700.150-SS	15	31	21	10.1	25	25.5	24	9.8	Stainless	Stainless	40
P2700.220-CC	22	45	29.5	10.4	37.0	37.5	36	10.1	Steel	Steel	160
P2700.220-CS	22	45	29.5	10.4	37.0	37.5	36	10.1	Steel	Stainless	160
P2700.220-CA	22	45	29.5	10.4	37.0	37.5	36	10.1	Steel	Acetal	20
P2700.220-SS	22	45	29.5	10.4	37.0	37.5	36	10.1	Stainless	Stainless	90
P2700.300-CC	30	55	37	14.4	46	46.5	45	14.1	Steel	Steel	280
P2700.300-CS	30	55	37	14.4	46	46.5	45	14.1	Steel	Stainless	280
P2700.300-CA	30	55	37	14.4	46	46.5	45	14.1	Steel	Acetal	25
P2700.300-SS	30	55	37	14.4	46	46.5	45	14.1	Stainless	Stainless	200

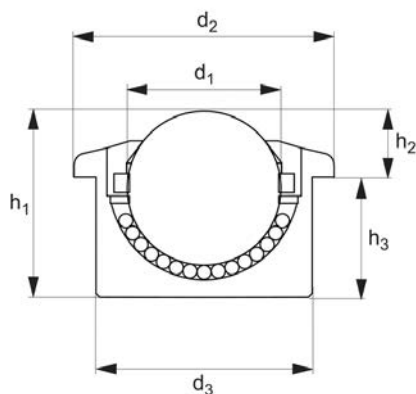


Acetal Body Ball Transfer Units

light duty, acetal body



Material Handling



P2701

MATERIAL HANDLING

Material

Acetal (POM) housing with acetal or stainless (AISI 316) balls.

Technical Notes

Push-fit units, these acetal units resist

salt water and chemicals.

They are non-conductive and non-magnetic, low friction 1:0,03.

Temperature range -20°C to +70°C, speeds up to 1m/s.

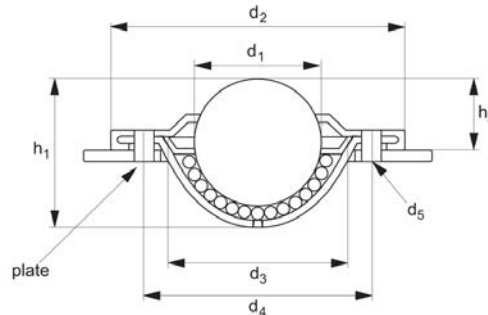
Tips

These rollers can only be used in the horizontal or „ball up“ direction.

Order No.	d ₁	d ₂	h ₁	h ₂	d ₃	h ₃	Housing	Ball
P2701.150-AS	15	31	21	9.5	24	11.5	Acetal	Stainless
P2701.150-AA	15	31	21	9.5	24	11.5	Acetal	Acetal
P2701.220-AS	22	45	30.5	9.8	36	20.7	Acetal	Stainless
P2701.220-AA	22	45	30.5	9.8	36	20.7	Acetal	Acetal
P2701.300-AS	30	55	37	13.8	45	23.2	Acetal	Stainless
P2701.300-AA	30	55	37	13.8	45	23.2	Acetal	Acetal
P2701.450-AS	45	75	53.5	19	62	34.5	Acetal	Stainless
P2701.450-AA	45	75	53.5	19	62	34.5	Acetal	Acetal



P2702



Material

Steel (AISI 1040 housing and AISI 52100 for balls),
stainless steel (AISI 416 for housing and AISI 420 for balls) and acetal (POM).

Technical Notes

Cost-effective and light-weight units

formed from sheet steel material.

No reduction in load carrying capacity even when installed upside down.

Low friction 1:0,03, temperature range - 20°C to +70°C, speeds up to 1m/s.

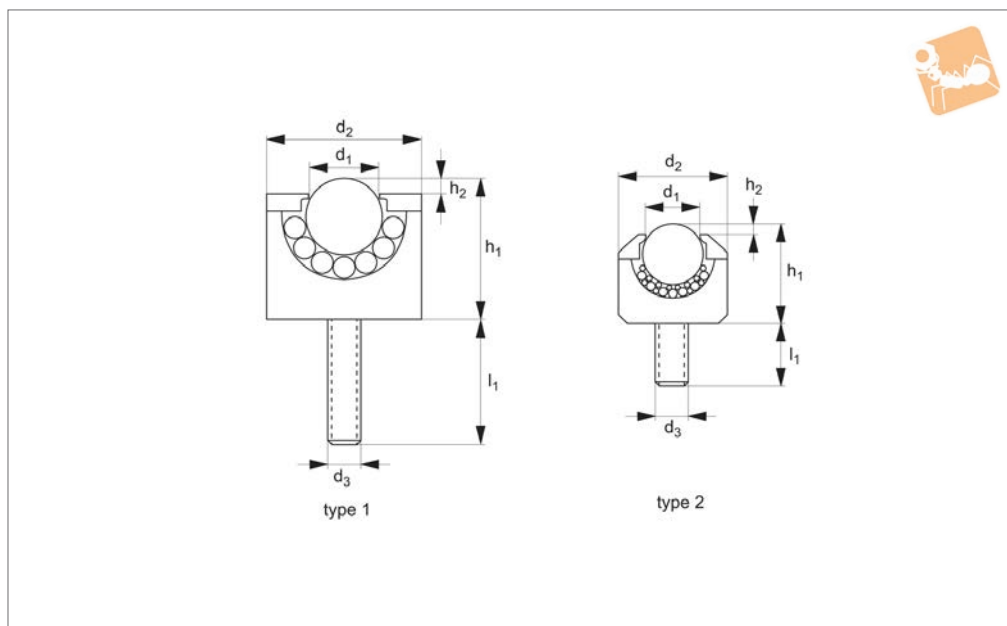
Tips

Theses rollers can only be used in the hori-

zontal or „ball up“ direction.

P2702.320-SS and P2702.330-SS have 7 large fluid drain holes & no felt seal.

Order No.	d ₁	d ₂	h ₁	h ₂	d ₃	d ₄	d ₅	Housing	Ball	Load kg max.
P2702.160-CC	15	41.0	19.3	10.8	24.0	30.0	2 x 3,4	Steel	Steel	15
P2702.160-CS	15	41.0	19.3	10.8	24.0	30.0	2 x 3,4	Steel	Stainless	10
P2702.160-CA	15	41.0	19.3	10.8	24.0	30.0	2 x 3,4	Steel	Acetal	10
P2702.220-CC	23	45.0	27.7	9.8	33.0	39.0	3 x 3,5	Steel	Steel	120
P2702.220-CA	23	45.0	27.7	9.8	33.0	39.0	3 x 3,5	Steel	Acetal	90
P2702.320-SS	32	73.7	36.1	16.2	45.5	58.7	2 x 5,5	Stainless	Stainless	125
P2702.250-CA	25	56.0	30.0	14.6	36.0	45.0	2 x 4,0	Steel	Acetal	22
P2702.330-SS	32	74.0	36.1	16.2	46.0	58.7	3 x 5,5	Stainless	Stainless	125
P2702.220-CS	23	45.0	27.7	9.8	33.0	39.0	3 x 3,5	Steel	Stainless	22
P2702.250-CC	25	56.0	30.0	14.6	36.0	45.0	2 x 4,0	Steel	Steel	60
P2702.250-CS	25	56.0	30.0	14.6	36.0	45.0	2 x 4,0	Steel	Stainless	40
P2702.250-SS	25	47.1	29.6	14.3	38.1	-	-	Stainless	Stainless	55



P2705

Material

Carbon steel, aluminium or stainless steel housing. Carbon steel or stainless steel balls.

Technical Notes

All steel parts are supplied with a small

amount of oil, to protect from oxidation.

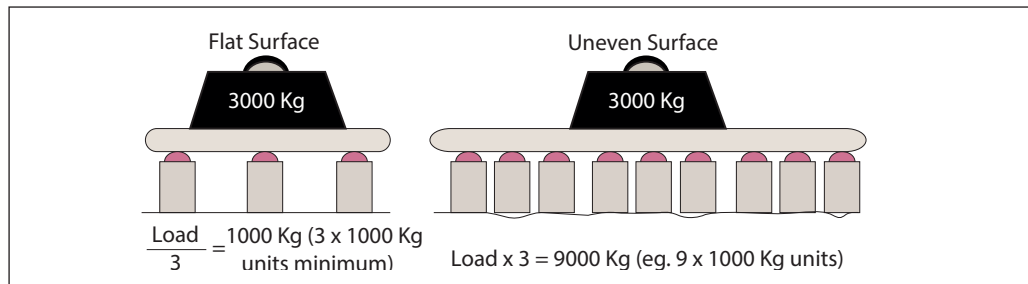
Tips

Normally used in measuring equipment, small linear motion systems (e.g photocopy slides) and miniature mechanisms.

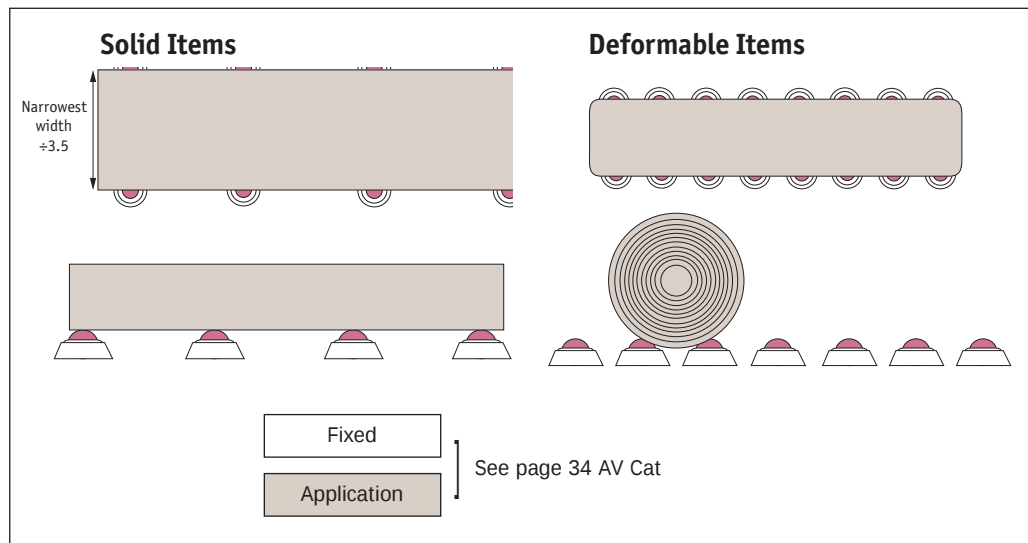
Order No.	Type	d ₁	d ₂	h ₁	h ₂	d ₃	l ₁	Housing	Ball	Load kg max.
P2705.050-CC	Type 1	4.8	13	9	1	M6	15	Steel	Steel	10
P2705.150-CC	Type 1	15.8	24	20.5	4	M6	12	Steel	Steel	70
P2705.150-SS	Type 1	15.8	24	20.5	4	M6	12	Stainless	Stainless	70
P2705.160-CC	Type 1	15.8	24	20.5	4	M6	12	Steel	Steel	70
P2705.160-SS	Type 1	15.8	24	20.5	4	M6	12	Stainless	Stainless	70
P2705.050-SS	Type 1	4.8	13	9	1	M6	15	Stainless	Stainless	10
P2705.050-AS	Type 2	4.8	8	6	1	M2	2.5	Aluminium	Stainless	5
P2705.060-SS	Type 1	6.4	17	11	2	M6	15	Steel	Steel	20
P2705.070-SS	Type 1	6.4	17	11	2	M6	15	Stainless	Stainless	20
P2705.060-AS	Type 2	6.4	13	10.5	2	M3	6	Aluminium	Stainless	15
P2705.080-CC	Type 1	7.9	18	14	2	M8	18	Steel	Steel	30
P2705.080-SS	Type 1	7.9	18	14	2	M8	18	Stainless	Stainless	30
P2705.090-AS	Type 2	7.9	15	12.5	2	M4	8	Aluminium	Stainless	20
P2705.100-CC	Type 1	9.6	23	20	2	M8	20	Steel	Steel	40
P2705.100-SS	Type 1	9.6	23	20	2	M8	20	Stainless	Stainless	40
P2705.130-CC	Type 1	12.7	28	25	3.5	M8	23	Steel	Steel	50
P2705.130-SS	Type 1	12.7	28	25	3.5	M8	23	Stainless	Stainless	50



Load & Stability



Pitch & Spacing



Operating Temperature

