



<p>L1706</p>  <p>Closed, open + adjustable</p>	<p>L1712</p>  <p>Double compliment versions</p>	<p>L1715</p>  <p>Compact versions</p>
<p>L1718</p>  <p>Front flanged standard</p>	<p>L1723</p>  <p>Front flanged double compliment</p>	<p>L1731</p>  <p>Centre flanged double compliment</p>
<p>L1740</p>  <p>Superball bushings</p>	<p>L1750</p>  <p>Closed linear carriage</p>	<p>L1753</p>  <p>Open linear carriage</p>

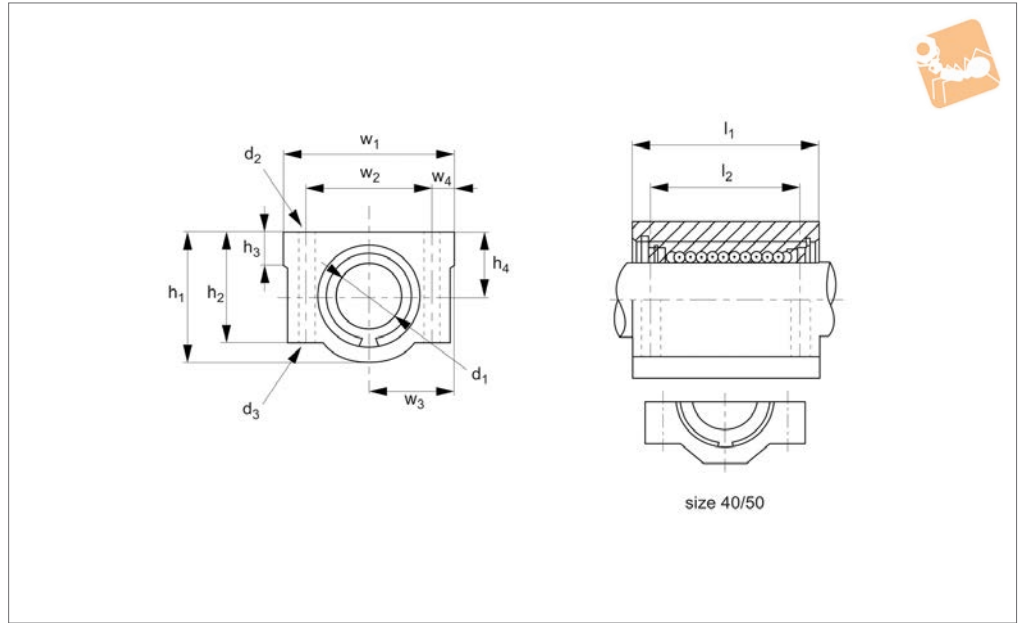
**For full technical information,
see end of product section.**

Linear Ball Bushings from Automation Components

LINEAR BEARINGS



L1750



Material

Aluminium body, with linear bearing L1706 (steel shell) installed. Bearing has a resin retainer (POM).

Supplied with nitrile rubber (NBR) end seals -UU as standard.

Long versions have L1712 linear bearing installed, short versions have L1715 Linear bearing installed.

Technical Notes

For use with hardened shafts only (see part

nos. L1770 - L1772).

Temperature range: -20°C to +80°C.

Steel ball retainers can be supplied for higher temperature applications (up to 120°C - with no end seals. Please advise at time of ordering if this is required.

Order No.	Type	d ₁ tol. h6	l ₁	d ₂	d ₃	h ₁	h ₂	h ₃	Weight g
L1750.008	Standard	8	30.0	M 4x8	3.4	22.0	18.0	6	60
L1750.012	Standard	12	39.0	M 5x10	4.3	30.0	24.5	8	118
L1750.016	Standard	16	44.0	M 5x12	4.3	38.5	32.5	9	180
L1750.020	Standard	20	53.0	M 6x12	5.2	41.0	35.0	11	245
L1750.025	Standard	25	67.0	M 8x18	6.8	51.5	41.0	12	550
L1750.030	Standard	30	76.0	M 8x18	6.8	59.5	49.0	15	760
L1750.040	Standard	40	90.0	M10x25	8.6	78.0	62.0	20	1700
L1750.050	Standard	50	110.0	M10x25	8.6	102.0	80.0	24	2950
L1750.008-L	Long	8	58.0	M 4x8	3.4	22.0	18.0	6	98
L1750.012-L	Long	12	77.0	M 5x10	4.3	30.0	24.5	8	232
L1750.016-L	Long	16	89.0	M 5x12	4.3	38.5	32.5	9	360
L1750.020-L	Long	20	106.0	M 6x12	5.2	41.0	35.0	11	490
L1750.025-L	Long	25	136.0	M 8x18	6.8	51.5	41.0	12	1100
L1750.030-L	Long	30	154.0	M 8x18	6.8	59.5	49.0	15	1525
L1750.040-L	Long	40	180.0	M10x25	8.6	78.0	62.0	20	3400
L1750.050-L	Long	50	230.0	M10x25	8.6	102.0	80.0	24	5920
L1750.008-S	Short	8	14.4	M 4x8	3.4	22.0	18.0	6	40
L1750.012-S	Short	12	20.3	M 5x10	4.3	30.0	24.5	8	82
L1750.016-S	Short	16	22.3	M 5x12	4.3	38.5	32.5	9	122
L1750.020-S	Short	20	28.3	M 6x12	5.2	41.0	35.0	11	176
L1750.025-S	Short	25	40.4	M 8x18	6.8	51.5	41.0	12	400
L1750.030-S	Short	30	48.4	M 8x18	6.8	59.5	49.0	15	570
L1750.040-S	Short	40	56.4	M10x25	8.6	78.0	62.0	20	1320
L1750.050-S	Short	50	72.3	M10x25	8.6	102.0	80.0	24	1900

Order No.	h ₄ ±0.02	l ₂ ±0.2	w ₁	w ₂ ±0.2	w ₃ ±0.02	w ₄	Dyn. load C N max.	Static load C ₀ N max.	Linear ball bushing used
L1750.008	11	18	34	24	17	5.0	260	400	L1706.008
L1750.012	15	26	44	33	22	5.5	410	590	L1706.012
L1750.016	19	34	50	36	25	7.0	770	1170	L1706.016
L1750.020	21	40	54	40	27	7.0	860	1370	L1706.020



Linear Carriages

closed

Linear Bearings

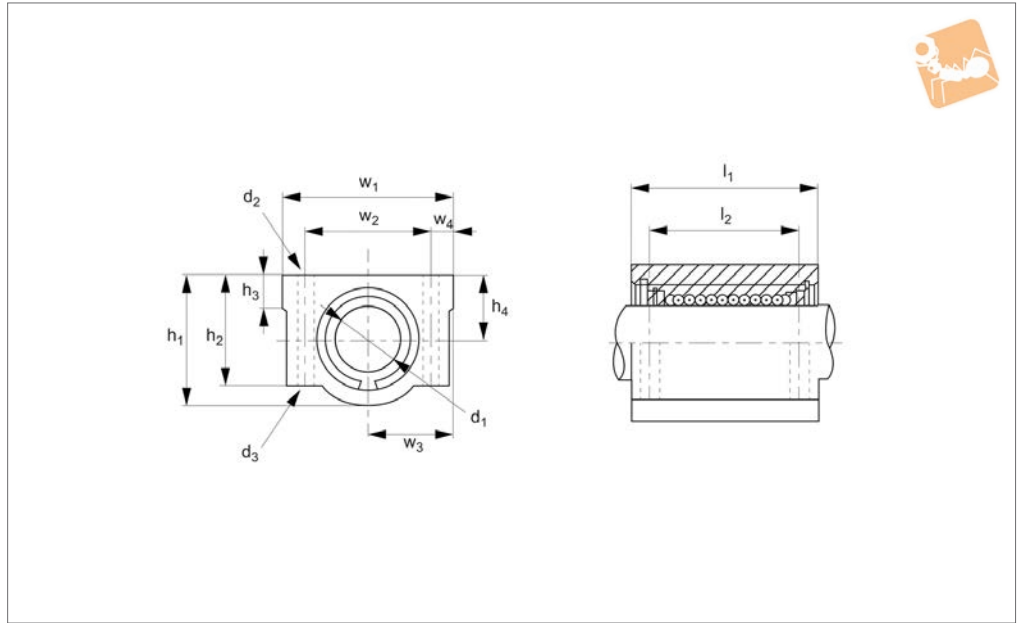


Order No.	h_4 ± 0.02	l_2 ± 0.2	w_1	w_2 ± 0.2	w_3 ± 0.02	w_4	Dyn. load C N max.	Static load C_0 N max.	Linear ball bushing used
L1750.025	26	50	76	54	38	11.0	980	1560	L1706.025
L1750.030	30	58	78	58	39	10.0	1560	2740	L1706.030
L1750.040	40	60	102	80	51	11.0	2150	4010	L1706.040
L1750.050	52	80	122	100	61	11.0	3820	7930	L1706.050
L1750.008-L	11	42	34	24	17	5.0	410	800	2 x L1706.008
L1750.012-L	15	64	44	33	22	5.5	650	1180	2 x L1706.012
L1750.016-L	19	79	50	36	25	7.0	1230	2340	2 x L1706.016
L1750.020-L	21	90	54	40	27	7.0	1370	2740	2 x L1706.020
L1750.025-L	26	119	76	54	38	11.0	1560	3120	2 x L1706.025
L1750.030-L	30	132	78	58	39	10.0	2490	5480	2 x L1706.030
L1750.040-L	40	150	102	80	51	11.0	3440	8020	2 x L1706.040
L1750.050-L	52	200	122	100	61	11.0	6110	15860	2 x L1706.050
L1750.008-S	11	-	34	24	17	5.0	260	400	L1706.008
L1750.012-S	15	-	44	33	22	5.5	410	590	L1706.012
L1750.016-S	19	-	50	36	25	7.0	770	1170	L1706.016
L1750.020-S	21	-	54	40	27	7.0	860	1370	L1706.020
L1750.025-S	26	-	76	54	38	11.0	980	1560	L1706.025
L1750.030-S	30	-	78	58	39	10.0	1560	2740	L1706.030
L1750.040-S	40	-	102	80	51	11.0	2150	4010	L1706.040
L1750.050-S	52	-	122	100	61	11.0	3820	7930	L1706.050

LINEAR BEARINGS



L1751



Material

Aluminium carriage housing with L1709, stainless steel (440C) linear bushing installed.
 Bushing has a resin -RS (POM) or stainless

steel -SS (316) retainer and nitrile rubber (NBR) end seals -UU.
 Stainless steel balls 440C.
 Long versions have L1713 linear bearing installed.

Technical Notes

For use with corrosion resistant hardened shafts (see part no. L1772).
 Temperature range: -20°C to +120°C.

Order No.	Type	Ball cage	d ₁ tol. h6	l ₁	d ₂	d ₃	h ₁	h ₂	Weight g
L1751.008-RS	Normal	Resin	8	30.0	M4x 8	3.4	22.0	18.0	60
L1751.012-RS	Normal	Resin	12	39.0	M5x10	4.3	30.0	24.5	118
L1751.016-RS	Normal	Resin	16	44.0	M5x12	4.3	38.5	32.5	180
L1751.020-RS	Normal	Resin	20	53.0	M6x12	5.2	41.0	35.0	245
L1751.025-RS	Normal	Resin	25	67.0	M8x18	6.8	51.5	41.0	550
L1751.008-SS	Normal	Stainless	8	30.0	M4x 8	3.4	22.0	18.0	60
L1751.012-SS	Normal	Stainless	12	39.0	M5x10	4.3	30.0	24.5	118
L1751.016-SS	Normal	Stainless	16	44.0	M5x12	4.3	38.5	32.5	180
L1751.020-SS	Normal	Stainless	20	53.0	M6x12	5.2	41.0	35.0	245
L1751.025-SS	Normal	Stainless	25	67.0	M8x18	6.8	51.5	41.0	550
L1751.008-L-RS	Long	Resin	8	58.0	M4x 8	3.4	22.0	18.0	98
L1751.012-L-RS	Long	Resin	12	77.0	M5x10	4.3	30.0	24.5	232
L1751.016-L-RS	Long	Resin	16	89.0	M5x12	4.3	38.5	32.5	360
L1751.020-L-RS	Long	Resin	20	106.0	M6x12	5.2	41.0	35.0	490
L1751.025-L-RS	Long	Resin	25	136.0	M8x18	6.8	51.5	41.0	1100
L1751.008-L-SS	Long	Stainless	8	58.0	M4x 8	3.4	22.0	18.0	98
L1751.012-L-SS	Long	Stainless	12	77.0	M5x10	4.3	30.0	24.5	232
L1751.016-L-SS	Long	Stainless	16	89.0	M5x12	4.3	38.5	32.5	360
L1751.020-L-SS	Long	Stainless	20	106.0	M6x12	5.2	41.0	35.0	490
L1751.025-L-SS	Long	Stainless	25	136.0	M8x18	6.8	51.5	41.0	1100
L1751.008-S-RS	Short	Resin	8	14.4	M4x 8	3.4	22.0	18.0	40
L1751.012-S-RS	Short	Resin	12	20.3	M5x10	4.3	30.0	24.5	82
L1751.016-S-RS	Short	Resin	16	22.3	M5x12	4.3	38.5	32.5	122
L1751.020-S-RS	Short	Resin	20	28.3	M6x12	5.2	41.0	35.0	176
L1751.025-S-RS	Short	Resin	25	40.4	M8x18	6.8	51.5	41.0	400
L1751.008-S-SS	Short	Stainless	8	14.4	M4x 8	3.4	22.0	18.0	40
L1751.012-S-SS	Short	Stainless	12	20.3	M5x10	4.3	30.0	24.5	82
L1751.016-S-SS	Short	Stainless	16	22.3	M5x12	4.3	38.5	32.5	122
L1751.020-S-SS	Short	Stainless	20	28.3	M6x12	5.2	41.0	35.0	176
L1751.025-S-SS	Short	Stainless	25	40.3	M8x18	6.8	51.5	41.0	400



Stainless Linear Carriages

closed

Linear Bearings

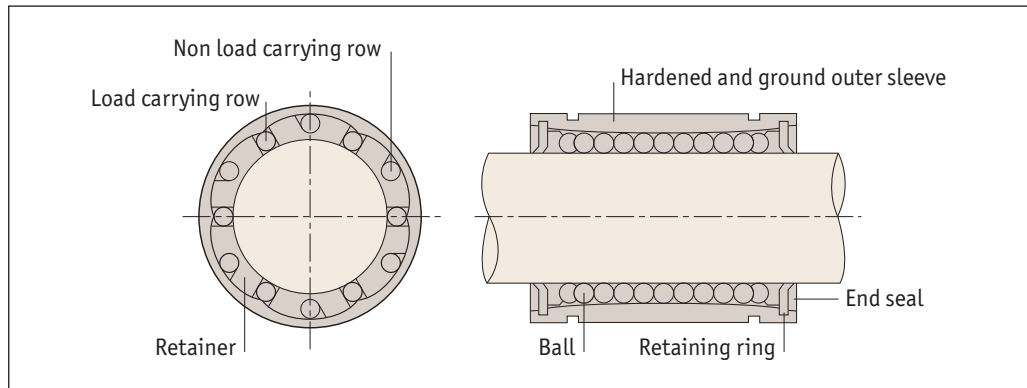


Order No.	h ₃	h ₄ ±0.02	l ₂ ±0.2	w ₁	w ₂ ±0.2	w ₃ ±0.02	w ₄	Dyn. load C	Static load C ₀	Linear ball bushing used
								N max.	N max.	
L1751.008-RS	6	11	18	34	24	17	5.0	260	400	L1709.008
L1751.012-RS	8	15	26	44	33	22	5.5	410	590	L1709.012
L1751.016-RS	9	19	34	50	36	25	7.0	770	1170	L1709.016
L1751.020-RS	11	21	40	54	40	27	7.0	860	1370	L1709.020
L1751.025-RS	12	26	50	76	54	38	11.0	980	1560	L1709.025
L1751.008-SS	6	11	18	34	24	17	5.0	260	400	L1709.508
L1751.012-SS	8	15	26	44	33	22	5.5	410	590	L1709.512
L1751.016-SS	9	19	34	50	36	25	7.0	770	1170	L1709.516
L1751.020-SS	11	21	40	54	40	27	7.0	860	1370	L1709.520
L1751.025-SS	12	26	50	76	54	38	11.0	980	1560	L1709.525
L1751.008-L-RS	6	11	42	34	24	17	5.0	410	800	2 x L1709.008
L1751.012-L-RS	8	15	64	44	33	22	5.5	650	1180	2 x L1709.012
L1751.016-L-RS	9	19	79	50	36	25	7.0	1230	2340	2 x L1709.016
L1751.020-L-RS	11	21	90	54	40	27	7.0	1370	2740	2 x L1709.020
L1751.025-L-RS	12	26	119	76	54	38	11.0	1560	3120	2 x L1709.025
L1751.008-L-SS	6	11	42	34	24	17	5.0	410	800	2 x L1709.508
L1751.012-L-SS	8	15	64	44	33	22	5.5	650	1180	2 x L1709.512
L1751.016-L-SS	9	19	79	50	36	25	7.0	1230	2340	2 x L1709.516
L1751.020-L-SS	11	21	90	54	40	27	7.0	1370	2740	2 x L1709.520
L1751.025-L-SS	12	26	119	76	54	38	11.0	1560	3120	2 x L1709.525
L1751.008-S-RS	6	11	-	34	24	17	5.0	260	400	L1709.008
L1751.012-S-RS	8	15	-	44	33	22	5.5	410	590	L1709.012
L1751.016-S-RS	9	19	-	50	36	25	7.0	770	1170	L1709.016
L1751.020-S-RS	11	21	-	54	40	27	7.0	860	1370	L1709.020
L1751.025-S-RS	12	26	-	76	54	38	11.0	980	1560	L1709.025
L1751.008-S-SS	6	11	-	34	24	17	5.0	260	400	L1709.508
L1751.012-S-SS	8	15	-	44	33	22	5.5	410	590	L1709.512
L1751.016-S-SS	9	19	-	50	36	25	7.0	770	1170	L1709.516
L1751.020-S-SS	11	21	-	54	40	27	7.0	860	1370	L1709.520
L1751.025-S-SS	12	26	-	76	54	38	11.0	980	1560	L1709.525

LINEAR BEARINGS



Linear ball bushings



Applications

- Computers and peripheral equipment.
- Recording equipment.
- Linear motion systems.
- Multi-axis drilling machine.
- Printing machines.
- Food packaging machines.
- Punching presses.
- Tool grinders.
- Assembly systems.
- Card selectors.

Interchangeability

Our linear bushing systems are designed to have full interchangeability, with other manufacturers' parts. **For shafting see part numbers L1770 to L1785.**

High precision retainer

The single body retainer guides 4-6 ball circuits. It precisely guides the balls with a smooth motion.

Tolerance of housing bore

Normal fit is standard, pressed fit is for without clearance.

Type	Case	
	Normal fit	Pressed fit
Part no.		
L1706 to L1733	H7	K6, J6
L1706... ⁻¹ to L1733... ⁻¹	H7	J7

Rigid outer sleeve

The hardened and precisely ground outer sleeve is made of bearing steel.

L1750 bushing carriages

Consists of light aluminium case and L1706 type linear bushing, so the installation can be finished simply by bolting. Longer life can be obtained by adjusting the orientation of the ball circuits in the linear carriage element against the direction of load.

Tolerance of shaft

Type	Shaft	
	Normal fit	Tight fit
Part no.		
L1706 to L1733	h6	k6
L1706... ⁻¹ to L1733... ⁻¹	f6, g6	h6