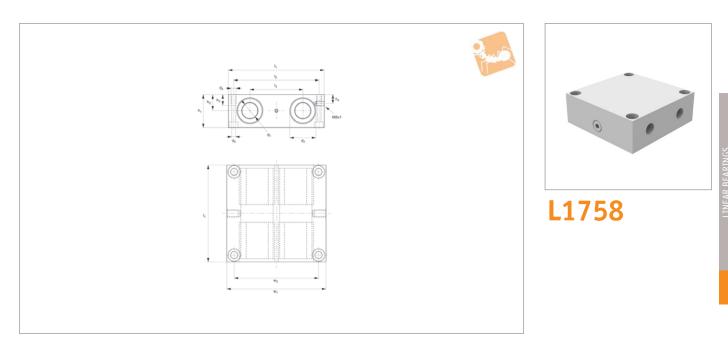


# Quadro Carriages closed type bearings

# -inear Bearings



## Material

Aluminium alloy body. Steel bearings with plastic ball retainer and end seals. bearings with two integral seals and lubrication hole.

Bearings are fixed in the housing by retaining rings (DIN 472).

For use with hardened shafts only (see part no.s L1770 - L1772). Load ratings apply for hardened and ground shafts only.

Temperature range: -20°C to +80°C.

For applications requiring higher temperatures we can make the bushings suitable for use up to +120°C by changing the ball retainers, end plates, and seals. Please advise at time of ordering if this is required.

### **Technical Notes**

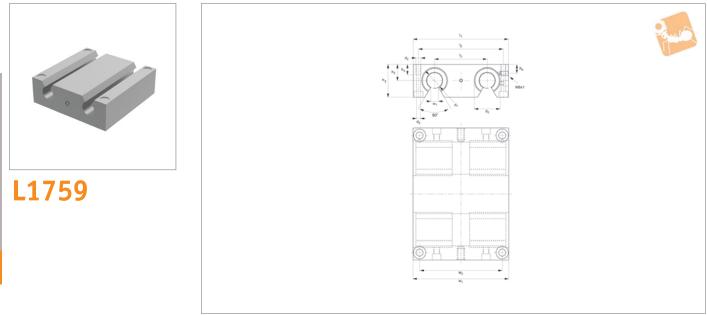
Quadruple, closed, self-aligning linear ball

Order No.	$d_1$ for $h_7$	d <sub>2</sub> tol. h6	$w_1$	h <sub>1</sub>	h <sub>2</sub> +0.01 -0.02	h <sub>3</sub>	h <sub>4</sub>	$I_1$	l <sub>2</sub> & w <sub>2</sub>	l <sub>3</sub> ±0.02	d <sub>3</sub>	d <sub>4</sub>	Dyn. load C kN max.	Static load C <sub>o</sub> kN max.	Weight kg
L1758.012	12	22	85	32	16	13	13	85	73	42	5.3	М 6	1.3	2.0	0.70
L1758.016	16	26	100	36	18	13	15	100	88	54	5.3	Μ6	1.4	2.2	1.02
L1758.020	20	32	130	46	23	18	19	130	115	72	6.8	M 8	3.2	4.9	2.15
L1758.025	25	40	160	56	28	22	24	160	140	88	9.0	M10	5.5	8.5	4.07
L1758.030	30	47	180	64	32	26	27	180	158	96	10.5	M12	6.2	9.5	5.87
L1758.040	40	62	230	80	40	34	35	230	202	122	13.5	M16	10.5	14.0	11.78



# Quadro Carriages open type bearings





### Material

Aluminium alloy body. Steel bearings with plastic ball retainer and end seals.

inear Bearings

bearings with two integral seals and lubrication hole. Bearings are fixed in the housing by retaining rings (DIN 472). For use with hardened shafts only (see part no.s L1770 - L1772). Load ratings apply for hardened and ground shafts only. Temperature range: -20°C to +80°C. For applications requiring higher temperatures we can make the bushings suitable for use up to +120°C by changing the ball retainers, end plates, and seals. Please advise at time of ordering if this is required.

### Technical Notes Quadruple, closed, self-aligning linear ball

Order No.	$d_1$ for $h_7$	d <sub>2</sub> tol. h6	W	$w_1$	h <sub>1</sub>	h <sub>2</sub> +0.01 -0.02	h <sub>3</sub>	h <sub>4</sub>	I <sub>1</sub>	l <sub>2</sub> & w <sub>2</sub>	l <sub>3</sub> ±0.02	d <sub>3</sub>	d <sub>4</sub>	Dyn. Ioad C kN max.	Static load C <sub>o</sub> kN max.	Weight kg
L1759.012	12	22	7.0	85	30	18	13	13	85	73	42	5.3	Μ6	1.3	2.0	0.59
L1759.016	16	26	9.4	100	35	22	13	15	100	88	54	5.3	Μ6	1.4	2.2	0.92
L1759.020	20	32	10.2	130	42	25	18	19	130	115	72	6.8	M 8	3.2	4.9	1.82
L1759.025	25	40	12.9	160	51	30	22	24	160	140	88	9.0	M10	5.5	8.5	3.46
L1759.030	30	47	13.9	180	60	35	26	27	180	158	96	10.5	M12	6.2	9.5	5.19
L1759.040	40	62	18.2	230	77	45	34	35	230	202	122	13.5	M16	10.5	14.0	10.78

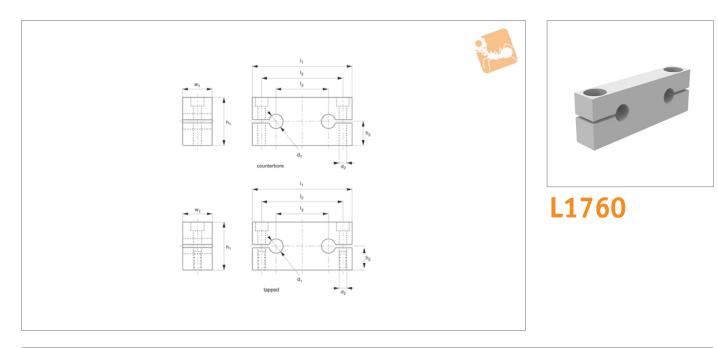




**End Blocks for Twin Shafts** 

clearance and tapped hole fixing





### Material Aluminium alloy.

**Technical Notes** 

For use with parts L1758 and L1759.

Order No.	Туре	$d_1$	d <sub>2</sub>	$w_1$	h <sub>1</sub>	h <sub>2</sub> ±0.015	$I_1$	I <sub>2</sub>	l <sub>3</sub>	Weight kg
L1760.008-C	Clearance	8	5.5	12	23	12.5	65	52	32	0.04
L1760.012-C	Clearance	12	6.6	14	32	18.0	85	70	42	0.07
L1760.016-C	Clearance	16	9.0	18	36	20.0	100	82	54	0.13
L1760.020-C	Clearance	20	11.0	20	46	25.0	130	108	72	0.22
L1760.025-C	Clearance	25	13.5	25	56	30.0	160	132	88	0.44
L1760.030-C	Clearance	30	13.5	25	64	35.0	180	150	96	0.56
L1760.040-C	Clearance	40	17.5	30	80	44.0	230	190	122	1.00
L1760.008-T	Tapped	8	M 5	12	22	11	65	52	32	0.04
L1760.012-T	Tapped	12	M 6	14	28	14	85	70	42	0.07
L1760.016-T	Tapped	16	M 8	18	32	16	100	82	54	0.13
L1760.020-T	Tapped	20	M10	20	42	21	130	108	72	0.22
L1760.025-T	Tapped	25	M12	25	52	26	160	132	88	0.44
L1760.030-T	Tapped	30	M12	25	58	29	180	150	96	0.56
L1760.040-T	Tapped	40	M16	30	72	36	230	190	122	1.00



# **Linear Ball Bushings**

**Overview** 



LINEAR BEARINGS

inear Ball Bushings from Automotion Components

inear Ball

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



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# **Technical Information**

Applications and tolerances

Food packaging machines.

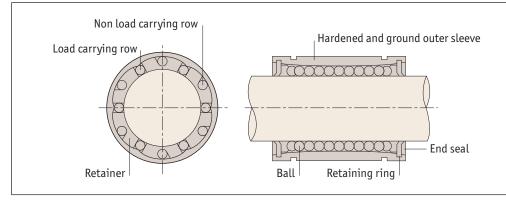
Punching presses.

Assembly systems. Card selectors.

Tool grinders.



# Linear ball bushings



# Applications

- Computers and peripheral equipment. •
- Recording equipment.
- Linear motion systems.
- Multi-axis drilling machine.
- Printing machines.

# 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.

Туре	Case						
Part no.	Normal fit	Pressed fit					
L1706 to L1733	H7	K6, J6					
L1706 <sup>-1</sup> to L1733 <sup>-1</sup>	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**

Туре	Shaft						
Part no.	Normal fit	Tight fit					
L1706 to L1733	h6	k6					
L1706 <sup>-1</sup> to L1733 <sup>-1</sup>	f6, g6	h6					

