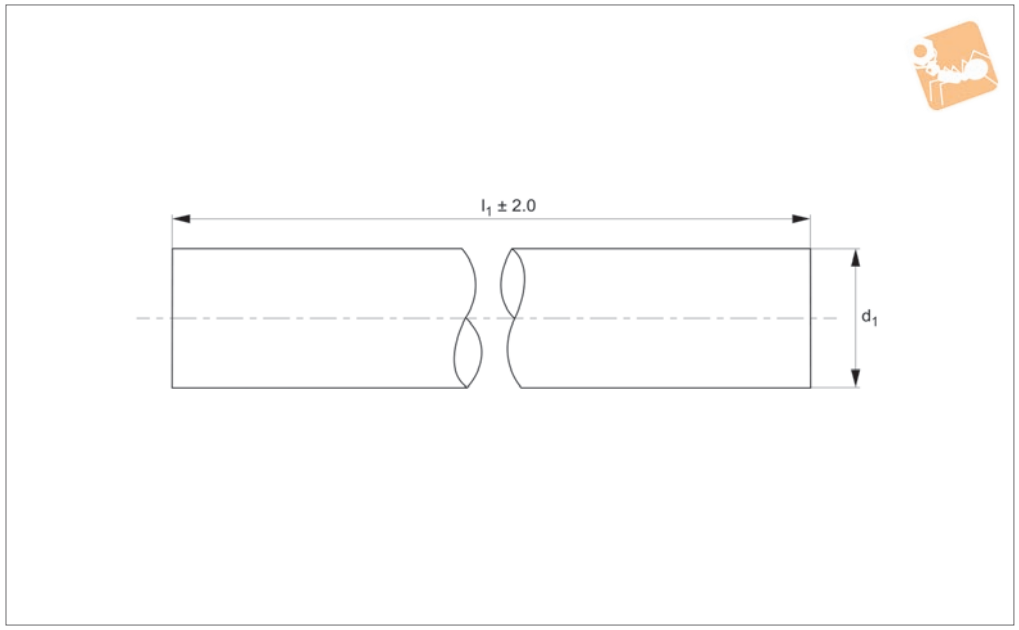

L1778.10

Material
Aluminium EN AW 6061/6060
Surface: Hard anodized
Hardness: 450-550 HV

Technical Notes
Designed to be used with self-lubricating ceramic bushings (part no.s L1764 to L1769).
Temp. range -130°C to +200°C.
Non-magnetic, contaminants do not stick to surface, coating is FDA compliant, light-weight.

Tips
Shaft ends are not coated as standard, however coated ends are available on request.
Modifications, drilled and tapped holes, circlip grooves, special coatings etc. available.
Shafts lengths are cut to typically ± 2mm.

Order No.	d_1 tol. h6	l_1	Tolerance µ tol. h6
L1778.10-0100	10	100	+0,-9
L1778.10-0150	10	150	+0,-9
L1778.10-0200	10	200	+0,-9
L1778.10-0250	10	250	+0,-9
L1778.10-0300	10	300	+0,-9
L1778.10-0350	10	350	+0,-9
L1778.10-0400	10	400	+0,-9
L1778.10-0450	10	450	+0,-9
L1778.10-0500	10	500	+0,-9
L1778.10-0550	10	550	+0,-9
L1778.10-0600	10	600	+0,-9
L1778.10-0650	10	650	+0,-9
L1778.10-0700	10	700	+0,-9
L1778.10-0750	10	750	+0,-9
L1778.10-0800	10	800	+0,-9
L1778.10-0850	10	850	+0,-9
L1778.10-0900	10	900	+0,-9
L1778.10-1000	10	1000	+0,-9
L1778.10-1050	10	1050	+0,-9
L1778.10-1100	10	1100	+0,-9
L1778.10-1150	10	1150	+0,-9
L1778.10-1200	10	1200	+0,-9
L1778.10-1250	10	1250	+0,-9
L1778.10-1300	10	1300	+0,-9
L1778.10-1350	10	1350	+0,-9
L1778.10-1400	10	1400	+0,-9
L1778.10-1450	10	1450	+0,-9
L1778.10-1500	10	1500	+0,-9
L1778.10-1550	10	1550	+0,-9
L1778.10-1600	10	1600	+0,-9

10Ø Aluminium Shafts

Order No.	d_1 tol. h6	l_1	Tolerance μ tol. h6
L1778.10-1650	10	1650	+0,-9
L1778.10-1700	10	1700	+0,-9
L1778.10-1750	10	1750	+0,-9
L1778.10-1800	10	1800	+0,-9
L1778.10-1850	10	1850	+0,-9
L1778.10-1900	10	1900	+0,-9
L1778.10-1950	10	1950	+0,-9
L1778.10-2000	10	2000	+0,-9

Hardened steel linear shafting (L1770 – L1771)

Carbon steel to BS 070M55 hardened to 60-65 HRC. Carbon Steel B.S. 070M55 is a medium carbon steel which is used when greater strength and hardness is desired than in it's as rolled condition. Extreme size accuracy, straightness and concentricity are combined to minimise wear in high speed applications. Suitable for use with all types of linear bushings.

Corrosion resistant steel (L1772)

440C is a high carbon chromium martensitic stainless steel, generally supplied in the annealed condition with a maximum hardness of 50-55 HR_C. Characterised by good corrosion resistance in mild domestic and industrial environments, including fresh water, organic materials, mild acids, various petroleum products, coupled with extreme high strength, hardness and wear resistance when in the hardened and tempered condition. Used for parts requiring a combination of excellent wear resistance, plus reasonable corrosion resistance. Typical applications are: ball bearings and races, bushings, cutlery, chisels, knife blades, pump parts, surgical instruments, valve seats etc. Material magnetic in all conditions. Suitable for use with all types of linear bushings.

Stainless steel AISI 303 (L1773)

303 is a free machining chromium-nickel austenitic stainless steel with good strength and good corrosion resistance, as supplied in the annealed condition. Characterised by excellent machinability and non galling properties due to its higher sulphur content, which has the effect of slightly lowering its corrosion resistance. It is however, fairly resistant to general atmospheric corrosion, general foodstuffs, sterilizing solutions, dyestuffs, most organic chemicals, plus some inorganic chemicals. But has very limited resistance to acids. 303 cannot be hardened by thermal treatment, but strength and hardness can be increased substantially by cold working, with subsequent reduction in ductility. It is used primarily for production runs involving extensive machining, or complex parts requiring excellent machinability. Typical uses are: architectural components, food processing equipment, dairy equipment, dying industry, hardware and kitchenware manufacturing and allied industries. Commonly used to manufacture bolts and nuts, bushes, gears, shafts, valve bodies and fittings etc. Material is non magnetic in the annealed condition, but can become mildly magnetic following heavy cold working. Annealing is required to rectify if necessary.

Not suitable for use with linear ball bushings, please use ceramic bearings.

Stainless steel AISI 303 (L1774)

316 is a chromium-nickel-molybdenum austenitic stainless steel with good strength and excellent corrosion resistance, as supplied in the annealed condition. Characterised by high corrosion resistance in marine and industrial atmospheres, it exhibits excellent resistance to chloride attack and against complex sulphur compounds employed in the pulp and paper processing industries. The addition of 2% to 3% of molybdenum increases its resistance to pitting corrosion and improves its creep resistance at elevated temperatures. Also it displays good oxidation resistance at elevated temperatures and has excellent weldability. AISI 316 cannot be hardened by thermal treatment, but strength and hardness can be increased substantially by cold working, with subsequent reduction in ductility. It is used extensively by the marine, chemical, petrochemical, pulp and paper, textile, transport, manufacturing and allied industries. Typical uses are: architectural components, textile equipment, pulp and paper processing equipment, marine equipment and fittings, photographic equipment and x-ray equipment etc. Material non magnetic in the annealed condition, but can become mildly magnetic following heavy cold working. Annealing is required to rectify if necessary.

Note: Optimum corrosion resistance is achieved in the annealed condition. Not suitable for use with linear ball bushings; please use ceramic bearings.

Linear Shafts from Automotion Components

Linear Shafts

Overview

Linear Shafts from Automotion Components

L1770 - Hardened steel shafts

For use with linear bearings.

Ø6 to Ø60

L1771 - Hardened hollow shafts

For use with linear bearings. Hollowed for lighter weight.

Ø12 to Ø50

L1772 - Hardened Stainless shafts

For use with linear bearings

Anti-corrosion.

Ø6 to Ø60

L1773 - Stainless 303 shafts

Soft stainless, high anti-corrosion.

Not for use with ball bush linear bearings.

Ø6 to Ø60

L1774 - Stainless 316 shafts

Soft stainless, very high anti-corrosion.

Not for use with ball bushing linear bearings.

Ø6 to Ø60

L1778 - Aluminium shafts

Light weight, non-magnetic.

Ø10 to Ø50