BS LAMBDA LUBE FREE ROLLER CHAIN

TSUBAKI's LAMBDA Chains were the first in the industry to use a special oil impregnated bush. Since their launch in 1988, they have been adopted for diverse industries and applications, and their performance has been highly rated. TSUBAKI has a wide line-up of lube-free, long life products that help customers reduce costs.

Technical Evolution

As a pioneer in the lube-free chain market, TSUBAKI will reveal some of the key elements behind BS LAMBDA's outstanding performance:

Sintered Oil Impregnated Bush

The microscopic pores in the seamless sintered bush are vacuum filled with high performance NSF-H1 lubricant. This innovation provides a 30%* longer wear life.

* Average increase compared to the previous generation of Lambda chain.

Special Coated Pin

The special coating on the pin surface enhances the long term internal lubrication.

Centre Sink Rivet

The unique centre sink pin design offers easy chain disassembly and the markings on the rivet head will identify pin rotation.

Ring Coin

The Ring Coin connecting link ensures that the chain can be specified up to its full chain capacity.

Special Environments

TSUBAKI BS LAMBDA has outstanding performance in temperatures up to +150°C.

For temperatures above +150°C: Due to special NSF-H1 certified lubrication impregnated bushes, TSUBAKI BS LAMBDA KF Series is usable in a wide temperature range (from -10°C to +230°C) while at the same time being kind to the environment. Please consult TSUBAKI for more detailed information.

Advantages

TSUBAKI has enhanced the BS LAMBDA with the following advantages:

Save Maintenance Costs

No expensive labour costs as it is not required to manually lubricate this chain.

Save Purchasing Costs

Lower frequency of purchasing due to the high quality of the chain and its long economic life. No purchasing of lubricants or lubrication systems necessary.

Higher Productivity

No unforeseen downtime due to chain breakdown.
Less time required for maintenance and therefore more time for production.

Environmental Friendly

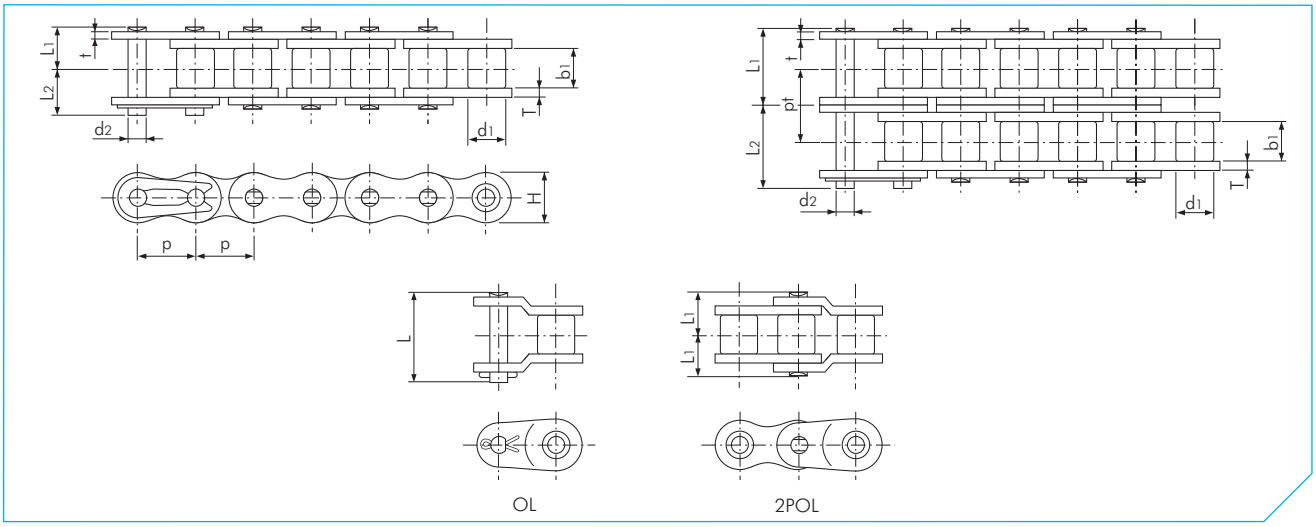
Applications run clean thus reducing the risk of contaminating products, machines, floor etc. In addition, the LAMBDA chain is ideally suited for food industry applications due to the use of a NSF-H1 lubricant.

Interchangeability

Chains:
BS LAMBDA Chains are fully interchangeable with standard BS roller chains.

Sprockets:
Standard BS roller chain sprockets can be used. However, due to the extended lifetime of BS LAMBDA chain, TSUBAKI recommends to install sprockets with hardened teeth in every LAMBDA application.

Fig. 10 Basic Construction



BS LAMBDA Chain

Dimensions in mm

TSUBAKI Chain No.	Pitch p		Roller Diameter d1	Inner Width b1	Pin Diameter d2	Pin Length L1	Pin Length L2	Pin Length L	Link Plate Thickness T	Link Plate Thickness t	Link Plate Height H (max)	Transverse Pitch pt	Min. Tensile Strength acc. to ISO 606 kN	Approx. Mass kg/m
RF06B-LM-1	9.525	(3/8")	6.35	5.72	3.28	6.10	7.70	15.10	1.30	1.00	8.20	-	8.9	0.39
RF06B-LM-2						11.20	12.80	25.90				10.24	16.9	0.75
RS08B-LM-1	12.70	(1/2")	8.51	7.75	4.45	8.40	10.00	18.60	1.60	1.60	11.80	-	17.8	0.70
RS08B-LM-2						15.30	16.90	34.50				13.92	31.1	1.35
RS10B-LM-1	15.875	(5/8")	10.16	9.65	5.08	9.55	11.25	20.80	1.50	1.50	14.70	-	22.2	0.95
RS10B-LM-2						17.85	19.55	39.40				16.59	44.5	1.85
RS12B-LM-1	19.05	(3/4")	12.07	11.68	5.72	11.10	13.00	24.40	1.80	1.80	16.10	-	28.9	1.25
RS12B-LM-2						20.85	22.75	45.90				19.46	57.8	2.50
RS16B-LM-1	25.40	(1")	15.88	17.02	8.28	17.75	19.95	41.10	4.00	3.20	21.00	-	60.0	2.70
RS16B-LM-2						33.55	35.75	75.20				31.88	106.0	5.40
RS20B-LM-1	31.75	(1 1/4")	19.05	19.56	10.19	19.90	23.10	46.60	4.40	3.40	26.40	-	95.0	3.85
RS20B-LM-2						38.25	41.45	84.60				36.45	170.0	7.65
RS24B-LM-1	38.10	(1 1/2")	25.40	25.40	14.63	26.65	31.85	61.70	6.00	5.60	33.40	-	160.0	7.45
RS24B-LM-2						50.80	56.00	112.80				48.36	280.0	14.65

Note:

1. Connecting links are clip type for sizes up to RS16B-LM, and cotter type for sizes RS20B-LM to RS24B-LM.
2. RF06B-LM chain has flat shaped link plates.
3. Intermediate plate of RF06B-LM-2 and RS08B-LM-2 is a solid plate.
4. Centre sink riveting is applied for RS08B-LM-1 to RS16B-LM-1. Double stake riveting is applied to all other sizes including multi-strand chain.
5. Warning: previous generations of Lambda chain can not be connected with the above chains due to different dimensions.
6. When a single pitch offset link is used, please calculate a 40% reduction of the fatigue strength.
7. Also available in NEPTUNE™ specification.
8. The improved bush design is applicable on RF06B until RS16B.