

BS RUNNER STANDARD ROLLER CHAIN

For standard situations, TSUBAKI can provide you with outstanding roller chain: the BS Runner. The BS Runner is produced according to the appropriate European Standards.

Advantages

TSUBAKI BS Runner is enhanced with the following advantages:

Increased kW Rating

Transmission capacity has been increased by applying the patented TSUBAKI Ring Coining process on the connecting link plate.



Fig. 13 Ring Coined Connecting Link Plate

For easy assembling the pin and link plate of a connecting link are slip fit. In general, this type of connecting link has a 20% lower fatigue strength than the chain itself. However, TSUBAKI developed a special process to eliminate that loss of fatigue strength and still satisfy the customers demand for easy assembly: the patented Ring Coining process. By applying the patented Ring Coining process, TSUBAKI generates a cold deformation around the pin hole of the connecting link plate. This results in residual stress around the pin hole and thereby adds strength. By using this process transmission capacity is 100% of the base chain.

Constant Quality Level

In pursuit of outstanding quality, every TSUBAKI chain is made of a special steel alloy, the specification of which has been developed by the TSUBAKI Engineering Department, for selected steel mills to work with.

Besides that, TSUBAKI produces the BS Runner under highly controlled conditions in its advanced heat treatment facilities. This, in combination with the TSUBAKI fatigue strength confirmation tests, ensures that our customers can always rely on a constant level of TSUBAKI quality.

Customised Pre-Lubrication Service

Proper lubrication is the key to extend the life and improve the performance of a chain. In order to get the best performance in general applications (-10°C to +60°C), all BS Runner drive chains are pre-lubricated.

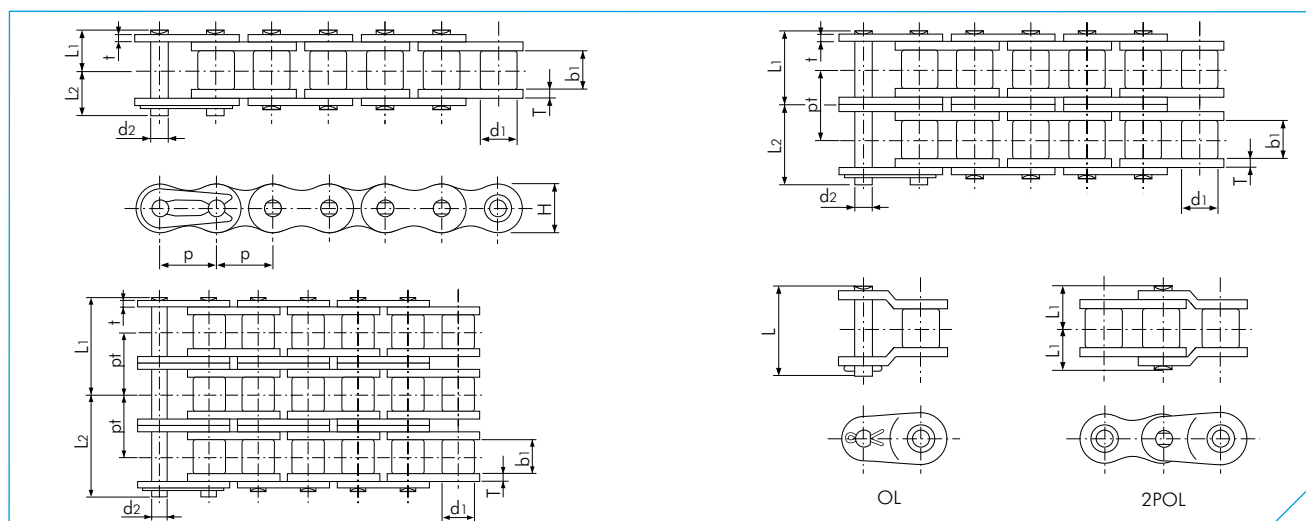
For special applications, TSUBAKI can provide chains which are pre-lubricated with a special lubricant on customer demand:

- High temperature
- Low temperature
- Food safe
- Outdoor exposure
- Dusty environment

Please consult TSUBAKI for more detailed information.



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BS Runner

Dimensions in mm

TSUBAKI Chain No.	Pitch	Roller Diameter	Inner Width	Pin				Link Plate			Transverse Pitch	Min. Tensile Strength acc. to ISO 606	Min. Tensile Strength acc. to Tsubaki	Av. Tensile Strength acc. to Tsubaki	Approx. Mass			
				Diameter	Length	Length	Length	Thickness	Thickness	Height								
	p	d1	b1	d2	L1	L2	L	T	t	H (max)	pt	kN	kN	kN	kg/m			
RS05B-1	8.00 (0.315")	5.00	3.00	2.30	3.80	4.70	-	0.75	0.75	7.10	-	4.4	5.0	5.8	0.18			
RS05B-2					6.65	7.52	-				5.64	7.8	7.8	8.9	0.35			
RS05B-3					9.45	10.34	-				5.64	11.1	11.2	12.8	0.53			
RF06B-1	9.525 (3/8")	6.35	5.72	3.27	6.10	7.70	14.20	1.30	1.00	8.20	-	8.9	9.0	9.9	0.39			
RF06B-2					11.43	12.57	-				10.24	16.9	17.0	18.7	0.75			
RF06B-3					16.90	17.50	-				10.24	24.9	24.9	27.4	1.11			
RS08B-1	12.70 (1/2")	8.51	7.75	4.45	8.40	10.00	18.40	1.60	1.60	12.00	-	17.8	19.0	20.9	0.70			
RS08B-2					15.30	16.90	33.60				13.92	31.1	32.0	35.2	1.35			
RS08B-3					22.25	23.85	47.60				13.92	44.5	47.5	52.3	2.00			
RS10B-1	15.875 (5/8")	10.16	9.65	5.08	9.55	11.25	21.10	1.50	1.50	14.70	-	22.2	23.0	25.3	0.95			
RS10B-2					17.85	19.55	39.40				16.59	44.5	44.5	49.0	1.85			
RS10B-3					26.15	27.85	56.10				16.59	66.6	66.8	73.5	2.80			
RS12B-1	19.05 (3/4")	12.07	11.68	5.72	11.10	13.00	24.80	1.80	1.80	16.10	-	28.9	31.0	34.1	1.25			
RS12B-2					20.85	22.75	46.30				19.46	57.8	61.0	67.1	2.50			
RS12B-3					30.60	32.50	66.00				19.46	86.7	92.0	101.0	3.80			
RS16B-1	25.40 (1")	15.88	17.02	8.28	17.75	19.95	38.90	4.00	3.20	21.00	-	60.0	70.0	77.0	2.70			
RS16B-2					33.55	35.75	73.80				31.88	106.0	128.0	141.0	5.40			
RS16B-3					49.50	51.70	105.90				31.88	160.0	192.0	211.0	8.00			
RS20B-1	31.75 (1 1/4")	19.05	19.56	10.19	19.90	23.10	46.95	4.40	3.40	26.00	-	95.0	98.1	108.0	3.85			
RS20B-2					38.25	41.45	84.85				36.45	170.0	197.0	217.0	7.65			
RS20B-3					56.50	59.70	121.35				36.45	250.0	295.0	325.0	11.45			
RS24B-1	38.10 (1 1/2")	25.40	25.40	14.63	26.65	31.85	62.00	6.00	5.60	33.40	-	160.0	167.0	184.0	7.45			
RS24B-H-1					29.30	34.20	-				7.50	6.00	36.20	-	-	234.0	270.0	8.20
RS24B-2					50.80	56.00	112.95				48.36	280.0	335.0	369.0	14.65			
RS24B-3					75.10	80.20	161.35				48.36	425.0	500.0	550.0	21.75			
RS28B-1	44.45 (1 3/4")	27.94	30.99	15.90	32.45	37.45	74.50	7.50	6.30	36.40	-	200.0	200.0	220.0	9.45			
RS28B-2					62.15	67.15	136.85				59.56	360.0	374.0	411.0	18.80			
RS28B-3					91.95	96.95	196.45				59.56	530.0	560.0	616.0	28.20			
RS32B-1	50.80 (2")	29.21	30.99	17.81	32.10	37.70	73.50	7.00	6.30	42.20	-	250.0	255.0	281.0	10.25			
RS32B-2					61.25	66.85	135.25				58.55	450.0	485.0	534.0	21.10			
RS32B-3					90.50	96.10	193.80				58.55	670.0	729.0	802.0	29.90			
RS40B-1	63.50 (2 1/2")	39.37	38.10	22.89	39.25	45.05	88.85	8.50	8.00	52.90	-	355.0	373.0	410.0	16.35			
RS40B-2					75.40	81.20	163.55				72.29	630.0	716.0	788.0	32.00			
RS40B-3					111.50	117.30	235.85				72.29	950.0	1080.0	1190.0	47.75			
RS48B-1	76.20 (3")	48.26	45.72	29.23	49.30	58.80	117.70	12.10	10.00	63.80	-	560.0	565.0	618.0	25.00			
RS48B-2					95.00	104.40	209.00				91.21	1000.0	1000.0	1150.0	50.00			
RS48B-3					140.60	150.00	300.20				91.21	1500.0	1520.0	1750.0	75.00			

Note:

1. Connecting links are clip type for sizes up to RS16B, and cotter type for sizes RS20B to RS48B.
2. RF06B chain has flat-shaped link plates.
3. Intermediate plate of multi strand RF06B-2 and RS08B-2 chain is a solid plate.
4. Center sink riveting is applied to RS08B-1 to RS16B-1 single strand chain.
5. Double stake riveting is applied to all other sizes including multi-strand chain.
6. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.
7. RS24B-H-1 chain is a reinforced RS24B-1 chain.