ANSI G8 STANDARD ROLLER CHAIN

TSUBAKI's 8th model upgrade, celebrating 100 years of quality. Pursuing the ultimate in quality, TSUBAKI has created the world's highest standard of roller chain.

Technical Evolution

All ANSI Chains Are Not Created Equal

ANSI defines minimum threshold standards: acceptable, but they won't improve your bottom line. TSUBAKI ANSI G8 Chains set the bar higher with design innovations that deliver solid results!

Solid Lube Groove Bush

Unlike curled bush, TSUBAKI SOLID Lube Groove Bush does not have a split. This means that oil cannot leak from the bearing area as a result of that type of manufacturing process. Additional to that innovation TSUBAKI developed a unique process to add grooves to the inner surface of the solid bush. This lube groove process ensures longer and better lubrication which results in an extended chain life.

The Lube Groove Bush is available in ANSI sizes RS80 through RS140, perfectly sized for the most demanding applications.

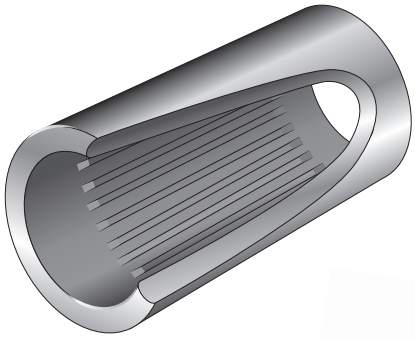


Fig. 15 Solid Lube Groove Bush

Advantages

TSUBAKI has enhanced the ANSI G8 with the following advantages:

Save Operating Costs and Reduce Downtime

Normally, ANSI chains are removed or replaced due to elongation caused by wear in the pin-bush joint. The patented Lube Groove retains lubricant right where it's needed: in the pin-bush joint. In many applications you'll notice a significant difference in maintenance, operating, and replacement costs due to the increased reliability of the ANSI G8 chains.

Increased kW Rating

Transmission capacity has been increased by applying the TSUBAKI Ring Coining process on the 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 Ring Coining process. By applying the 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 increased to 100% of that of the base chain.

Constant Quality Level

In pursuit of outstanding quality, every TSUBAKI chain is made of a special steel alloy developed by the TSUBAKI Engineering Department.
Besides that, TSUBAKI produces the ANSI G8 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

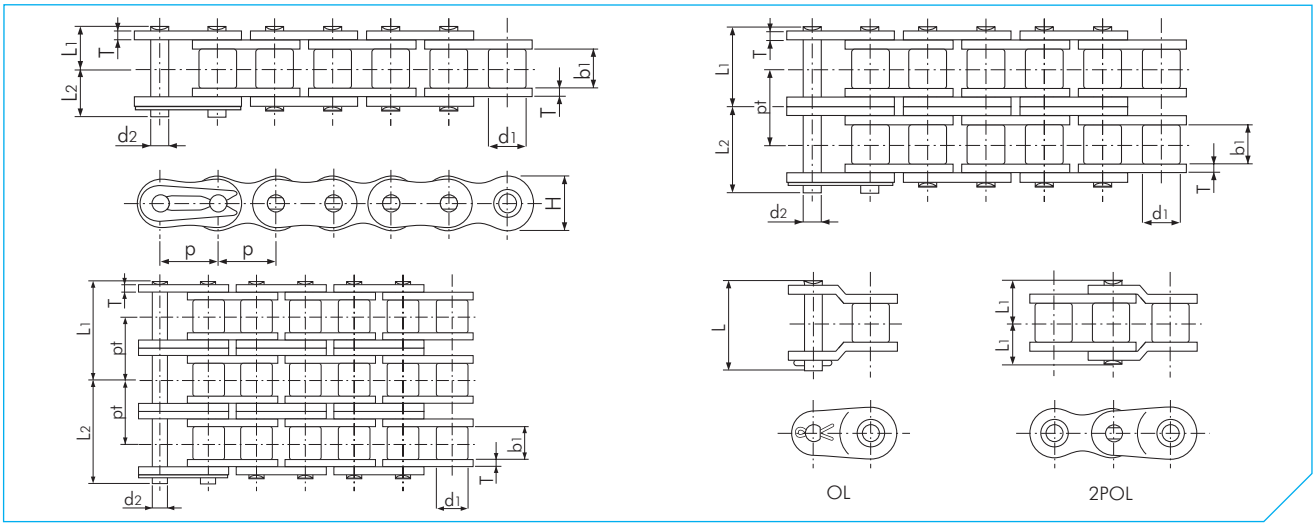
Proper lubrication is the key to extend the life and improve the performance of a chain. In order to get the best performance in general applications (-10 to +60°C), all ANSI G8 drive chains are pre-lubricated.
For special applications, TSUBAKI can provide chains which are pre-lubricated with a special lubricant on customer demand:

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

Please consult TSUBAKI for more detailed information.



ANSI G8 STANDARD ROLLER CHAIN



ANSI G8

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 Tickness T	Link Plate Height H (max)	Transverse Pitch pt	Min. Tensile Strength acc. to ANSI kN	Min. Tensile Strength acc. to Tsubaki kN	Approx. Mass kg/m
RS25-1	6.35	(1/4")	3.30	3.18	2.31	3.80	4.50	-	0.75	5.84	-	3.5	4.12	0.14
RS25-2						7.00	7.70	-			6.40	7.0	8.24	0.27
RS25-3						10.20	10.90	-			6.40	10.5	12.4	0.42
RS35-1	9.525	(3/8")	5.08	4.78	3.59	5.85	6.85	13.50	1.25	9.00	-	7.9	9.81	0.33
RS35-2						10.90	11.90	24.50			10.10	15.8	19.6	0.69
RS35-3						16.00	16.90	34.60			10.10	23.7	29.4	1.05
RS35-4						21.05	21.95	44.70			10.10	-	39.2	1.41
RS37-1	12.70	(1/2")	7.80	3.40	3.63	5.10	5.90	12.45	1.00	9.80	-	-	8.14	0.29
RS38-1	12.70	(1/2")	7.80	4.80	3.63	6.00	7.10	14.10	1.10	9.80	-	-	8.14	0.35
RS41-1	12.70	(1/2")	7.77	6.38	3.59	6.75	7.95	15.10	1.25	9.80	-	6.7	10.3	0.41
RS40-1	12.70	(1/2")	7.92	7.95	3.97	8.25	9.95	18.20	1.50	12.00	-	13.9	17.7	0.64
RS40-2						15.45	17.15	33.50			14.40	27.8	35.3	1.27
RS40-3						22.65	24.15	47.90			14.40	41.7	53.0	1.90
RS40-4						29.90	31.30	62.30			14.40	-	70.6	2.53
RS50-1	15.875	(5/8")	10.16	9.53	5.09	10.30	11.90	22.60	2.00	15.00	-	21.8	28.4	1.04
RS50-2						19.35	21.15	41.80			18.10	43.6	56.9	2.07
RS50-3						28.40	30.20	59.90			18.10	65.4	85.3	3.09
RS50-4						37.45	39.25	78.10			18.10	-	114.0	4.11
RS60-1	19.05	(3/4")	11.91	12.70	5.96	12.85	14.75	28.20	2.40	18.10	-	31.3	40.2	1.53
RS60-2						24.25	26.25	52.60			22.80	62.6	80.4	3.04
RS60-3						35.65	38.15	75.50			22.80	93.9	121.0	4.54
RS60-4						47.05	49.55	98.30			22.80	-	161.0	6.04
RS80-1	25.40	(1")	15.88	15.88	7.94	16.25	19.25	36.60	3.20	24.10	-	55.6	71.6	2.66
RS80-2						30.90	33.90	67.50			29.30	111.2	143.0	5.27
RS80-3						45.60	48.50	96.90			29.30	166.8	215.0	7.89
RS80-4						60.25	63.25	126.30			29.30	-	286.0	10.50
RS100-1	31.75	(1 1/4")	19.05	19.05	9.54	19.75	22.85	43.70	4.00	30.10	-	87.0	107.0	3.99
RS100-2						37.70	40.80	81.50			35.80	174.0	214.0	7.85
RS100-3						55.65	58.75	117.30			35.80	261.0	321.0	11.77
RS100-4						73.55	76.65	153.10			35.80	-	428.0	15.70
RS120-1	38.10	(1 1/2")	22.23	25.40	11.11	24.90	28.90	55.00	4.80	36.20	-	125.0	148.0	5.93
RS120-2						47.60	51.60	103.20			45.40	250.0	296.0	11.70
RS120-3						70.40	74.40	148.60			45.40	375.0	444.0	17.53
RS120-4						93.10	97.10	194.00			45.40	-	592.0	23.36
RS140-1	44.45	(1 3/4")	25.40	25.40	12.71	26.90	31.70	59.50	5.60	42.20	-	170.0	193.0	7.49
RS140-2						51.35	56.15	112.30			48.90	340.0	386.0	14.83
RS140-3						75.85	80.75	161.30			48.90	510.0	580.0	22.20
RS160-1	50.80	(2")	28.58	31.75	14.29	31.85	36.85	70.20	6.40	48.20	-	223.0	255.0	10.10
RS160-2						61.15	66.15	132.20			58.50	446.0	510.0	20.04
RS160-3						90.45	95.45	190.70			58.50	669.0	765.0	30.02
RS180-1	57.15	(2 1/4")	35.71	35.72	17.46	35.65	42.45	80.60	7.15	54.20	-	281.0	336.0	13.45
RS180-2						68.75	75.35	151.10			65.80	562.0	673.0	26.52
RS180-3						101.70	108.50	216.90			65.80	843.0	1010.0	38.22
RS200-1	63.50	(2 1/2")	39.68	38.10	19.85	39.00	44.80	87.30	8.00	60.30	-	347.0	427.0	16.49
RS200-2						74.85	80.65	161.20			71.60	694.0	853.0	32.63
RS200-3						110.75	116.45	233.00			71.60	1041.0	1280.0	49.02
RS240-1	76.20	(3")	47.63	47.63	23.81	47.90	55.50	106.70	9.50	72.40	-	500.0	623.0	24.50
RS240-2						91.90	99.40	198.40			87.80	1000.0	1250.0	48.10

Note:

1. RS25 - RS35 are rollerless chain (only bush). The figure shown is the bush diameter.
2. Connecting links are clip type for sizes up to RS60, and cotter type for sizes RS80 to RS200. RS240 connecting links are spring pin type.
3. When a single pitch offset link is used, please calculate a 35% reduction of the fatigue strength.