

Round Polyurethane Belt

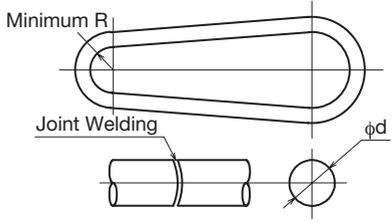
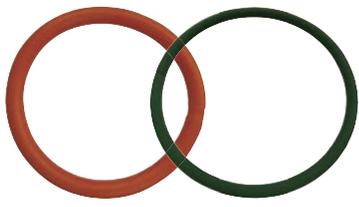
<MBT/MBTH (High-tension type)>



● Order No. Example

MBT5 150

Belt No. Circumference



Type	Color	Material	Heat-resistant temperature
MBT	Orange	Polyurethane	-10° - 60°
MBTH	Green	Polyurethane	-10° - 60°

Free design for transportation of lightweight objects, multi-axis transmission, right-angle transmission, etc. Endless joining possible for specified lengths.

Belt No.	L (Circumference)		Sectional area	Regular Part Strength Kg			Joint Strength Kg		Minimum R		Approx. Weight
	Type	d		Specified 1mm units	mm ²	MBT	MBTH	MBT	MBTH	MBT	
MBT	2	100 - 2,000	3.14	7.85	10.36	5.50	7.25	15	20	4	
	3	100 - 3,000	7.07	17.68	23.33	12.37	16.33	20	30	8	
	4	100 - 4,000	12.57	31.43	41.48	22.00	29.04	30	40	15	
	5	135 - 5,000	19.63	49.08	64.78	34.35	45.35	40	50	24	
	6	140 - 6,000	28.27	70.68	93.29	49.47	65.30	50	60	34	
	MBTH	7	180 - 7,000	38.48	96.20	126.98	67.34	88.89	60	70	46
8		190 - 8,000	50.27	125.68	165.89	87.97	116.12	70	80	60	
9		200 - 10,000	63.62	159.05	209.95	111.34	146.96	85	90	76	
10		250 - 10,000	78.54	196.35	259.18	137.45	181.43	95	100	94	
12		300 - 10,000	113.10	282.75	373.23	197.93	261.26	120	120	136	
15		500 - 10,000	176.71	441.78	583.14	309.24	408.20	150	150	212	

◇ Allowable tension (Ta.N) and stretch

Belt No.	Type	d	MBT					MBTH				
			1%	2%	3%	4%	5%	1%	2%	3%	4%	5%
MBT	2	0.4	0.8	1.2	1.5	1.9	0.6	1.2	1.8	2.3	2.8	
	3	0.9	1.8	2.5	3.3	4.1	1.4	2.6	3.8	5.0	6.2	
	4	1.6	3.0	4.5	5.9	7.4	2.4	4.6	6.8	8.8	11.1	
	5	2.5	4.8	7.2	9.2	12.5	3.7	7.3	10.8	13.8	18.7	
	6	3.6	7.0	10.2	11.2	16.6	5.5	10.5	15.3	16.8	24.9	
	MBTH	7	4.9	9.4	13.9	18.0	22.6	7.4	14.1	20.9	27.1	33.8
8		6.4	12.3	18.2	23.6	29.4	9.6	18.4	27.4	35.5	44.1	
9		8.1	15.6	23.0	30.3	37.5	12.3	23.4	34.6	45.0	56.2	
10		9.8	19.2	28.4	36.9	46.2	14.7	28.8	42.7	55.3	69.3	
12		14.4	27.7	41.0	53.2	66.5	21.7	41.5	61.5	79.7	99.7	
15		22.6	43.3	64.1	83.2	104.0	33.8	65.0	96.2	124.7	155.9	



Belt No. Circumference and Quantity



* Since we also manufacture endless lengths (1mm unit) upon request, please contact our company's sales office for details.



3-day shipping

* Single order system available

MBT/MBTH (High-tension type)

Belt No.		L (Circumference) Specified 1mm units	¥/pc.	
Type	d		MBT	MBTH
MBT MBTH	2	100 - 500		
		501 - 1000		
		1001 - 2000		
	3	100 - 500		
		501 - 1000		
		1001 - 2000		
		2001 - 3000		
	4	100 - 500		
		501 - 1000		
		1001 - 2000		
		2001 - 3000		
	5	1001 - 2000		
		2001 - 3000		
		3001 - 4000		
		4001 - 5000		
	6	140 - 500		
		501 - 1000		
		1001 - 2000		
		2001 - 3000		
		3001 - 4000		
	7	4001 - 5000		
		5001 - 6000		
		6001 - 7000		
		180 - 500		
		501 - 1000		
		1001 - 1500		
		1501 - 2000		
	8	2001 - 3000		
3001 - 4000				
4001 - 5000				
5001 - 6000				
6001 - 7000				
7001 - 8000				
190 - 500				
501 - 1000				
9	1001 - 2000			
	2001 - 3000			
	3001 - 4000			
	4001 - 5000			
	5001 - 6000			
	6001 - 7000			
	7001 - 8000			
	8001 - 9000			
	9001 - 10000			

Belt No.		L (Circumference) Specified 1mm units	¥/pc.	
Type	d		MBT	MBTH
MBT MBTH	10	250 - 500		
		501 - 1000		
		1001 - 2000		
		2001 - 3000		
		3001 - 4000		
		4001 - 5000		
		5001 - 6000		
		6001 - 7000		
		7001 - 8000		
		8001 - 9000		
		9001 - 10000		
		10001 - 11000		
	12	11001 - 12000		
		12001 - 13000		
		300 - 500		
		501 - 1000		
		1001 - 2000		
		2001 - 3000		
		3001 - 4000		
		4001 - 5000		
		5001 - 6000		
		6001 - 7000		
		7001 - 8000		
		8001 - 9000		
		9001 - 10000		
		10001 - 11000		
		11001 - 12000		
		12001 - 13000		
15	13001 - 14000			
	14001 - 15000			
	500 - 1000			
	1001 - 2000			
	2001 - 3000			
	3001 - 4000			
	4001 - 5000			
	5001 - 6000			
	6001 - 7000			
	7001 - 8000			
8001 - 9000				
9001 - 10000				
10001 - 11000				
11001 - 12000				
12001 - 13000				
13001 - 14000				
14001 - 15000				

Polyurethane Round Belts

Welded Joint, Seamless, Open End

■ **Features:** Round belt of rope shape is cut into specified length and made endless with heat welding. Required length can be selected.

■ **Welded Joint**

Type	Type	Color	Material	Heat Resistant Temperature
MBT	Standard	Orange	Polyurethane	80°C
MBTH	High Tensile Strength	Green	Polyurethane	80°C
MBTD	Antistatic	Black	Polyurethane	50°C

Both MBT and MBTH satisfy the Food Hygienic Regulations.
 MBTD has antistatic material (carbon) mixed in the base material, and therefore suitable in applications where static charge effects are unwanted.

Though connecting section may look thicker, appropriate diameter can be obtained when tension is being applied during operation.

Part Number	Type	d	L (Circumference Length)	1mm Increment	Minimum P.D. of Pulleys	5% Tensile Strength (N)	Unit Price				
							Min. L ~ 500	L501~1000	L1001~2000	L2001~3000	L3001~4000
MBT	2	100-2000	15	1.9							
	3	100-3000	20	4.1							
	4	100-4000	30	7.4							
	5	135-5000	40	12.5							
	6	140-6000	50	16.6							
	8	190-6000	70	29.4							
MBTH	10	250-6000	90	46.2							
	2	100-2000	20	2.8							
	3	100-3000	30	6.2							
	4	100-4000	40	11.1							
MBTD	5	135-5000	50	18.7							
	6	140-6000	60	24.9							
	8	190-6000	80	44.1							
	10	250-6000	100	69.3							

Ordering Example: Part Number MBT5 - L 150

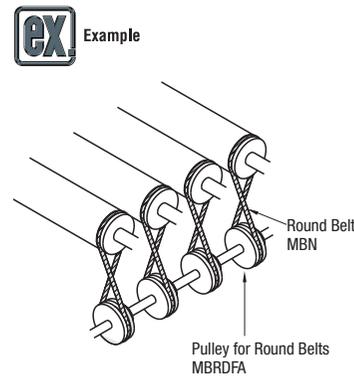
■ **Features:** Belt has no joint as it is made endless by molding.

■ **Seamless**

Type	Type	Color	Material	Heat Resistant Temperature
MBN	Seamless	Natural Color	Polyurethane	70°C

Part Number	Type	d	Circumference Length L (mm)	Minimum P.D. of Pulleys	8% Tensile Strength (N)	Unit Price	Part Number	Type	d	Circumference Length L (mm)	Minimum P.D. of Pulleys	8% Tensile Strength (N)	Unit Price
MBN	2	15	100	15	1.274		MBN	4	30	200	30	5.292	
			125							225			
			140							250			
			160							258			
			170							275			
			180							290			
	3	20	2.94	190	20			5	40	8.232	200	40	
				239							225		
				250							250		
				260							275		
				290							290		
				305							305		
		330	330										
		390	348										
			380										
			440										
			460										

Ordering Example: Part Number MBN2 - L 100



■ **Features:** Simple endless connection is possible when cross section is hollow shape and by inserting a dedicated metal jointing parts. Can be replaced without disassembling the unit.

■ **Open End (Hollow Type)**

Type	Type	Color	Material	Heat Resistant Temperature
MBQ	Hollow Rope	Orange	Polyurethane	80°C
MBQC	Metal Joints for Hollow Ropes Joint Hardware	-	A5052	-

MBQ satisfies the food and hygiene standard in accordance to the Notice No. 434 of Japanese Ministry of Health and Welfare.

Part Number	Type	d	L (Circumference Length)	1mm Increment	Minimum P.D. of Pulleys	5% Tensile Strength (N)	Unit Price/m	
							MBQC5	MBQC6
MBQ	5	6	1~20		40	24.5	MBQC5	
	6						MBQC6	

Part Number	Type	d	Material	Unit Price per Package (10 pcs./pkg.)

(How to Connect)
 Cut the round belt in the length 5% shorter than the calculated or actual measured length with a knife at a right angle. Hold the dedicated metal joint MBQC by using a pair of pliers. Insert the metal joint up to the center of the hollow belt end. To help the insertion in a cold season, warm the belt by immersing in warm water of 40°C for 1 ~ 2 minutes. Be sure not to damage the edge of the metal joint. Insert the metal joint into the other side of the belt.



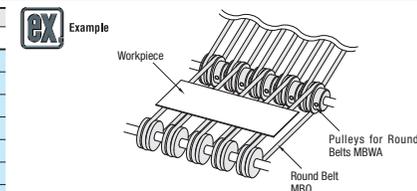
■ **Features:** Belt cut in meters. Endless jointing is not applied.

■ **Open End (Solid Type)**

Type	Type	Color	Material	Heat Resistant Temperature
MBT-N	Standard	Orange	Polyurethane	80°C
MBTH-N	High Tensile Strength	Green	Polyurethane	80°C

Both MBT-N and MBTH-N satisfy the Food Hygienic Regulations.

Part Number	Type	d	L (Circumference Length)	1m Increment	Unit Price/m	
					MBT-N	MBTH-N
MBT-N MBTH-N				10~20	1.5	
					2	
					2.5	
					3	
					3.5	
					4	
					5	
					6	
					7	
					8	
					9	
					10	
					12	
					15	



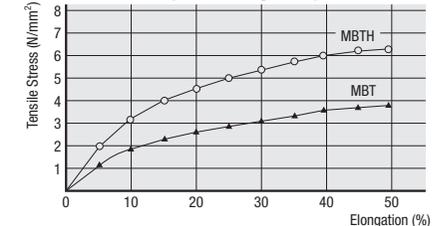
Ordering Example: Part Number MBTH-N6 - L 12

■ **Features of Polyurethane Round Belts**

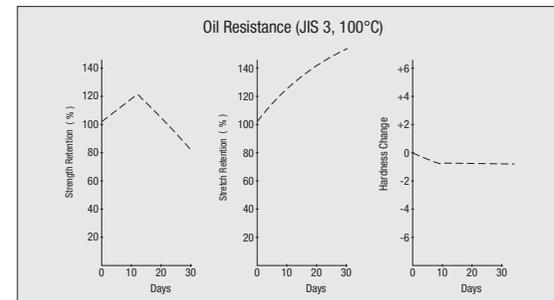
• **Physical Properties** $kgf=N \times 0.101972$

Item	Test Method	Unit	MBT	MBTH	MBN
Specific Gravity	-	-	1.22	1.22	1.26
Hardness	JIS A		88	92	72
5% Modulus	JIS K 6301	N/mm ²	1.2	2.0	0.44
10% Modulus			1.8	3.1	0.88
100% Modulus			6.3	8.8	6.0
300% Modulus			16.9	14.7	9.0
Tensile Strength			24.5 or more	32.4 or more	30 or more
Tensile Elongation at Breakage		%	400 or more	400 or more	600 or more
Tear Strength		kN/mm ²	88	93	90 or more

• **Tensile Stress (Low Elongation)**



• **Oil Resistance**



• **Temperature Dependency of Tensile Strength, Stretch and Surface Hardness**

