

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		80°C
MBTD	Antistatic	Black		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)	Minimum P.D. of Pulleys	5% Tensile Strength (N)	Unit Price						
						1mm Increment	Min. L ~ 500	L501~1000	L1001~2000	L2001~3000	L3001~4000	L4001~5000
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								
	10	250-6000	90	46.2								
	MBTH	2	100-2000	20	2.8							
		3	100-3000	30	6.2							
		4	100-4000	40	11.1							
5		135-5000	50	18.7								
6		140-6000	60	24.9								
MBTD	3	200-3000	30	13								
	4	200-4000	40	22								
	5	200-5000	50	33								

Ordering Example: Part Number MBT5 - L 150

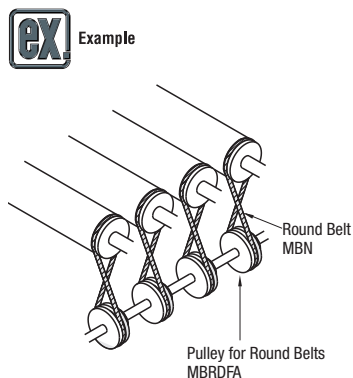
■ **Features:** Belt has no joint as it is made endless by molding.

■ **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	
														Example
MBN	2	15	100	15	1.274		4	MBN	200	30	5.292			
			125											
			140											
			160											
			170											
			180											
	3	20	2.94	190	20	2.94		5	MBN	225	40	8.232		
				200										
				239										
				250										
				260										
				290										
	3	20	2.94	305	20	2.94								
				330										
				390										

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)	Minimum P.D. of Pulleys	5% Tensile Strength (N)	Applicable Clamp Plates Connecting Hardware Joint Hardware	Unit Price/m
MBQ	5	6	1~20	40	24.5	MBQC5	
	6			50	44.1	MBQC6	

Part Number	Type	d	Material	Unit Price per Package (10 pcs./pkg.)
MBQC	5	6	A5052	
	6			

(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.



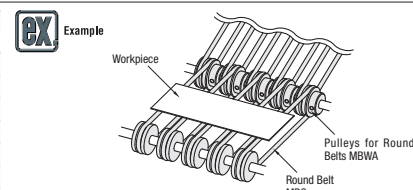
■ **Features:** Belt cut in meters. Endless jointing is not applied.

■ **Open End (Solid Type)**

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

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

Part Number	Type	d	L (Circumference Length)	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	-



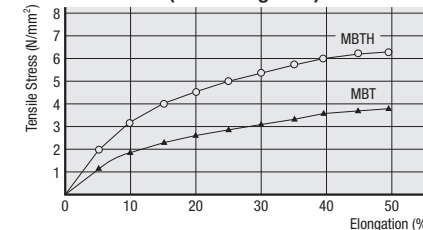
Ordering Example: Part Number MBTH-N6 - L 12

■ **Features of Polyurethane Round Belts**

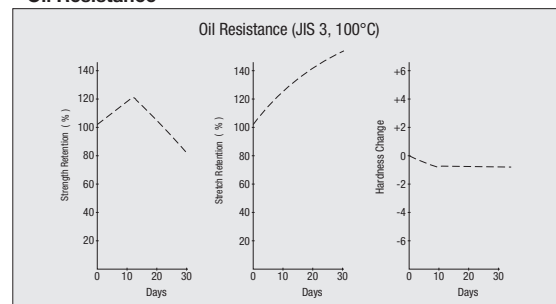
• **Physical Properties** $kgf=N \times 0.101972$

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**

