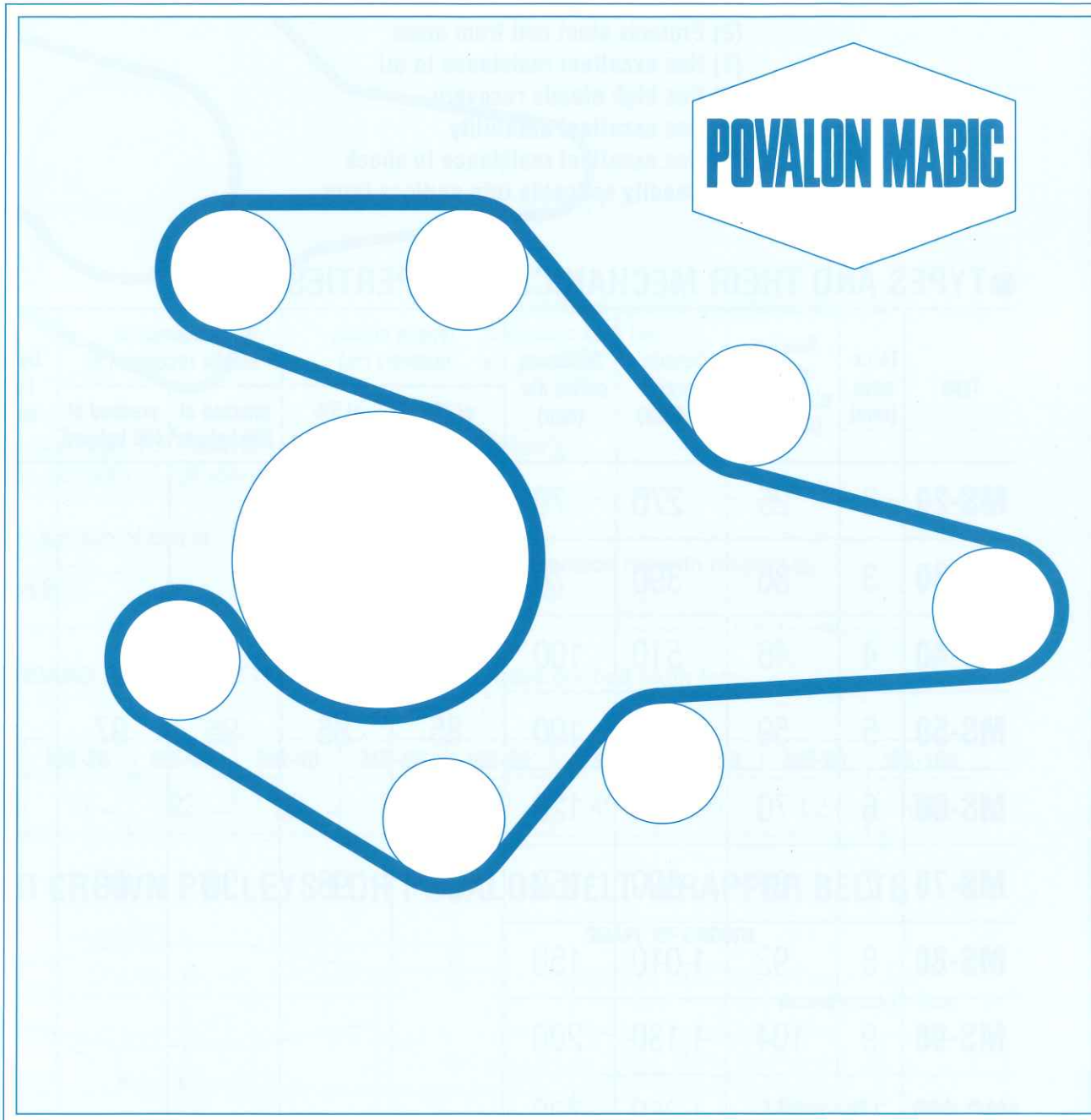


KURARAY TRADING CO., LTD. **POVALON MABIC**

# BELT FOR BELT-WRAPPER



**KURARAY TRADING CO., LTD.**

**<Osaka Head Office>**  
Shin-Hankyu Building, Umeda 1-12-39, Kita-ku,  
Osaka city, Osaka Prefecture 530-8611  
TEL : 06-6348-9280 FAX : 06-6348-9850

**<Tokyo Head Office>**  
Ote-Center Building, Otemachi 1-1-3, Chiyoda-ku,  
Tokyo prefecture 100-0004  
TEL : 03-6701-2012 FAX : 03-6701-2141  
URL : <http://www.kuraray-trading.co.jp>

**Agent**

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## BELT FOR BELT-WRAPPER

### FUNCTIONS & CHARACTERISTICS

- (1) Helps winding steel strip tight and without damages
- (2) Protects steel coil from dusts
- (3) Has excellent resistance to oil
- (4) Has high elastic recovery
- (5) Has excellent durability
- (6) Has excellent resistance to shock
- (7) Readily splicable into endless form.

### ● TYPES AND THEIR MECHANICAL PROPERTIES

Type	Thick-ness (mm)	Tension at 5% elongation (kgf/cm)	Tensile strength (kgf/cm)	Minimum pulley dia. (mm)	Tensile elastic recovery (%)		Compressive elastic recovery (%)		Dynamic friction coeff※	Hardness (shore A)
					at 2% elongation	at 5% elongation	pressed at 200 kgf/cm <sup>2</sup>	pressed at 400 kgf/cm <sup>2</sup>		
MS-20	2	25	270	70						
MS-30	3	36	390	70						
MS-40	4	48	510	100						
MS-50	5	59	640	100	85	86	96	97		94
MS-60	6	70	760	120	~	~	~	~	0.2	~
MS-70	7	81	890	150	97	98	98	99		98
MS-80	8	92	1,010	150						
MS-90	9	104	1,130	200						
MS-100	10	115	1,260	200						

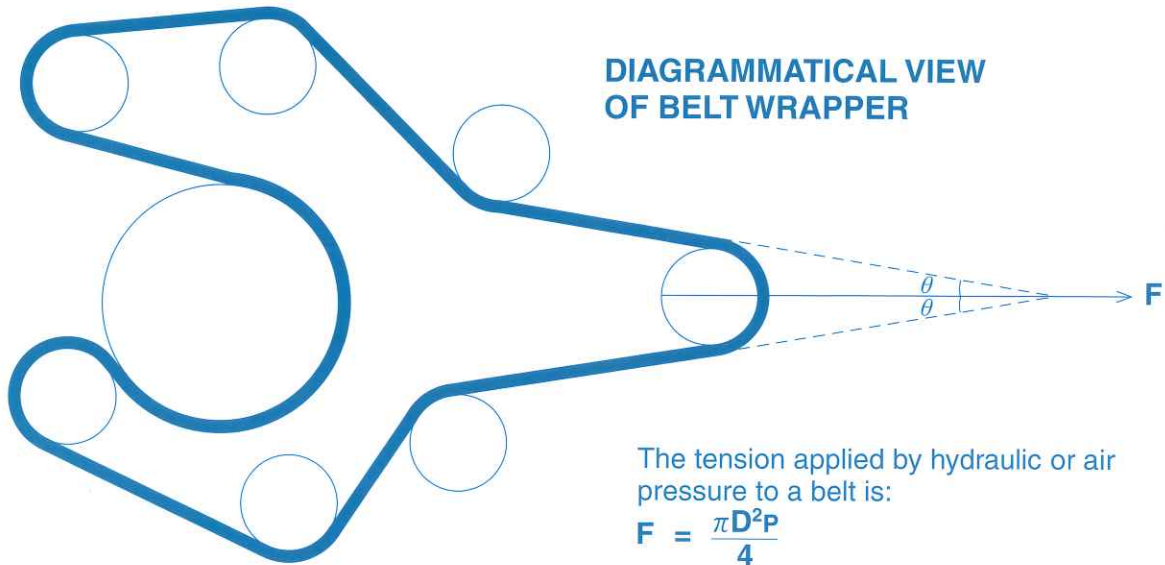
#### Notes:

- 1) Also available are types comprising the above laminated on the top or back side thereof a canvas, nonwoven, Clarino (KURARAY man-made leather), leather or the like, to protect the belts from scratches and tear and to increase running stability. When you use such modified types, use the above data for strength calculation.
- 2) Assume proportional relationship between the elongation and the tension upto 10% elongation.  
 ※against chrome-plated surface



## ● HOW TO SELECT A PROPER TYPE

Select depending on the maximum tension ( $F_M$ ) actually applied and the standard allowable tension given below.



where:  $F$  = tension (kgf),  $P$  = maximum cylinder pressure (kgf/cm<sup>2</sup>), and  $D$  = inside diameter of cylinder (cm).

The maximum tension of belt is:

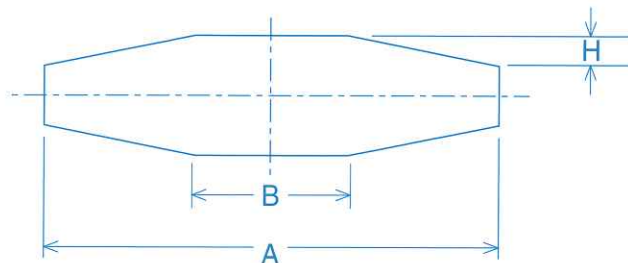
$$F_M = \frac{F}{2 \cdot \cos \theta}$$

where  $\theta$  = angle of belt at the tension roll with respect to horizontal line. Then,

$$\frac{F_M}{b} \leq \text{STANDARD ALLOWABLE TENSION (kgf/cm)} \quad \text{where } b = \text{belt width (cm)}.$$

Type	MS-20	MS-30	MS-40	MS-50	MS-60	MS-70	MS-80	MS-90	MS-100
STANDARD ALLOWABLE TENSION (kgf/cm)	15	22	29	35	42	49	55	62	69

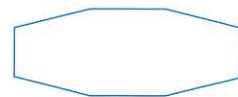
## ● HOW TO CROWN PULLEYS FOR POVALON BELT-WRAPPER BELTS



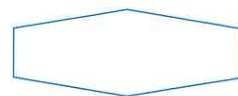
### SHAPE OF CROWN



Round (arch) Best



Trapezoid Acceptable



Triangular Unacceptable

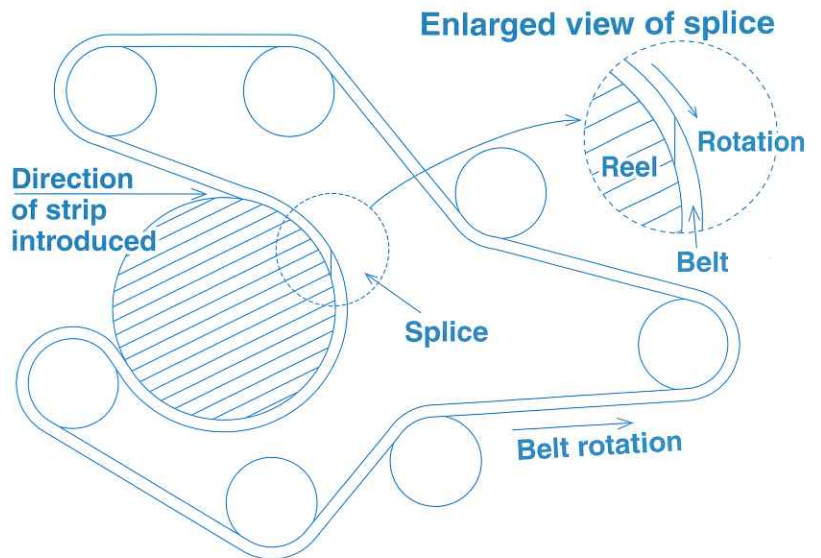
A (mm)	500~700	700~1,000	1,000~
H/(A-B)(%)	0.3	0.28	0.25

- (1) if you employ trapezoid crown, set the length of the central plateau (B) to 1/3 that of the total length (A).
- (2) Do not crown rolls contacting the strip via the belt during operation of the belt wrapper.

# POINTS TO BE OBSERVED FOR OPERATION AND IN MAINTENANCE

## ● MOUNTING

- (1) Mount the belt to run in the direction of the arrow mark stamped on its back side, the direction being for longer life.
- (2) Mount the belt in such a direction that the steel strip to be introduced will not catch the belt splice, as shown on the right.
- (3) If (1) and (2) do not consist together, give priority to (2).



## ● INSPECTION BEFORE STARTING

Before starting the belt, be sure to carefully inspect the top and back sides of the belt and spaces between the belt and pulleys for foreign materials. Remove foreign materials if any, before starting.

## ● CAUTIONS AGAINST CROOKED RUNNING OF BELT

A belt tends to run crooked at the time of start-up.

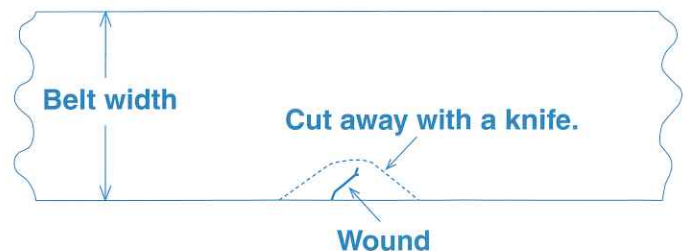
Start the belt with its position at the center of the rolls. After the start, pay full attention to the running state.

When the belt runs crooked, do best to find out the real cause and then cure appropriately while running the belt unloaded.

If a belt continue to run crooked, it is readily damaged to shorten its life.

## ● OTHER PRACTICES

- (1) When introducing a steel strip, pay full attention and start as slowly as possible, since in most cases the belt is damaged to shorten its life by an irregular shock with the strip end or the like at the introducing operation.
- (2) When the belt is damaged at its edge by some accident, stop operation and cut away the wound with a knife or like tools as shown in dotted line in the right figure.



If a belt has suffered a large damage, replace quickly to evade from possible breakage.

- (3) When conducting gas or electric welding or cutting at places near a belt, take care not to permit flame or the burner end or the like to contact the belt.
- (4) Since the belt are made of a hydrophilic polymer, which is sensitive to moisture and water, be sure to keep them from vapor or water.
- (5) Store the belts sealed moisture-proof in polyethylene or polyvinyl chloride film, and place them horizontally.