Remaining Thickness Standard for Brake Pad of Traction Machine

D55011-*
Issued in March 2022

Remaining Thickness Standard for Brake Pad of Traction Machine

This manual shows the “Standard values A” and “Standard values B” per traction machine type (refer to the name plate of the traction machine).
The following table is summarized according to the brake device type of the traction machine (Drum type, disc type, internal expansion drum type, clutch type).

The “Standard values A” means the applicable brake pad needs to be replaced within one year. The “Standard values B” means the brake pad needs to be replaced immediately.

<table>
<tr><th rowspan="2">Machine Room Presence or Absence</th><th rowspan="2">Brake Device Type</th><th colspan="2" rowspan="2">Gear Type</th><th colspan="2">Reference</th></tr>
<tr><th>Standard values A</th><th>Standard values B</th></tr>
<tr><td rowspan="8">With Machine Room</td><td rowspan="3">Drum Type</td><td rowspan="2">Worm Gear</td><td>No Cushioning Material</td><td colspan="2" rowspan="2">1-1</td></tr>
<tr><td>With Cushioning Material</td></tr>
<tr><td colspan="2">Helical Gear</td><td colspan="2">1-2</td></tr>
<tr><td colspan="2">Gearless</td><td colspan="2">1-3</td></tr>
<tr><td>Disk Type</td><td colspan="2">–</td><td colspan="2">1-4</td></tr>
<tr><td>Internal Expansion Drum Type</td><td colspan="2">–</td><td colspan="2">1-5</td></tr>
<tr><td>Clutch Type</td><td colspan="2">–</td><td colspan="2">1-6</td></tr>
<tr><td>External Direct Action Drum Type</td><td colspan="2">–</td><td colspan="2">1-7</td></tr>
<tr><td rowspan="4">Without Machine Room</td><td>Disk Type</td><td colspan="2">–</td><td colspan="2">2-1</td></tr>
<tr><td>Internal Expansion Drum Type</td><td colspan="2">–</td><td colspan="2">2-2</td></tr>
<tr><td>Clutch Type</td><td colspan="2">–</td><td colspan="2">2-3</td></tr>
<tr><td>External Direct Action Drum Type</td><td colspan="2">–</td><td colspan="2">2-4</td></tr>
</table>

We recommend to use our genuine Brake pads (brake linings) in order to maintain the elevator quality.

Please check the model name of the traction machine described on its name plate.
NOTE: Make sure to check the model name of the traction machine (not to mistake).

The following case should be judged as the "corrective action is required" case, even if the thickness of the pad does not reach the “Standard values B”.

“Wear amount of pad at last time inspection” - “Wear amount of pad this time”
= Almost to reach the “Corrective action required standard”

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1. With machine room

1-1. Worm traction machine

When the brake device type of the worm traction machine is a drum type, check the thickness of the brake lining.
Use the below table to judge “Standard values A” and “Standard values B”

<Confirmation method for worm traction machine >

To confirm that the traction machine type is a worm traction machine, check whether the model name of the traction machine described on its name plate is listed in below table.
If it’s listed, it means the traction machine is worm type.

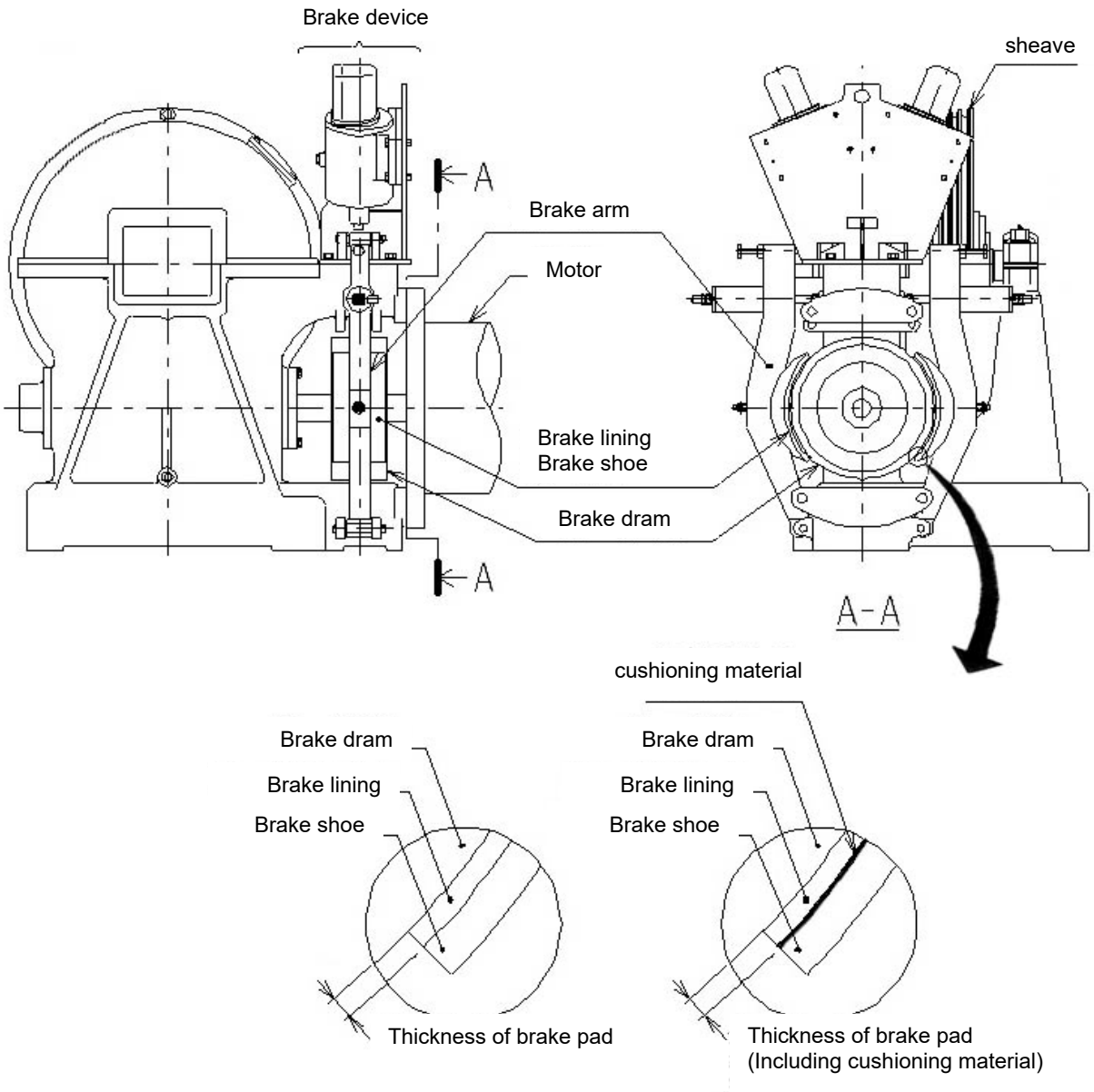
< Corrective action required values for worm traction machine >

The worm traction machine may or may not have cushioning material between the brake lining (brake pad) and the brake shoe. Refer to the figure below for how to distinguish them.

(NOTE) There are both types for the same model name of the traction machine.
(NOTE) The corrective action required value differs depending on the existence of the cushioning material.

Please check the model name of the traction machine described on itsname plate.
(NOTE) Make sure to check the model name of the traction machine (not to mistake).
(NOTE) Make sure to check the existence of cushioning material.

The control system is described on its name plate.
(NOTE) Make sure to check the model name of the control system.



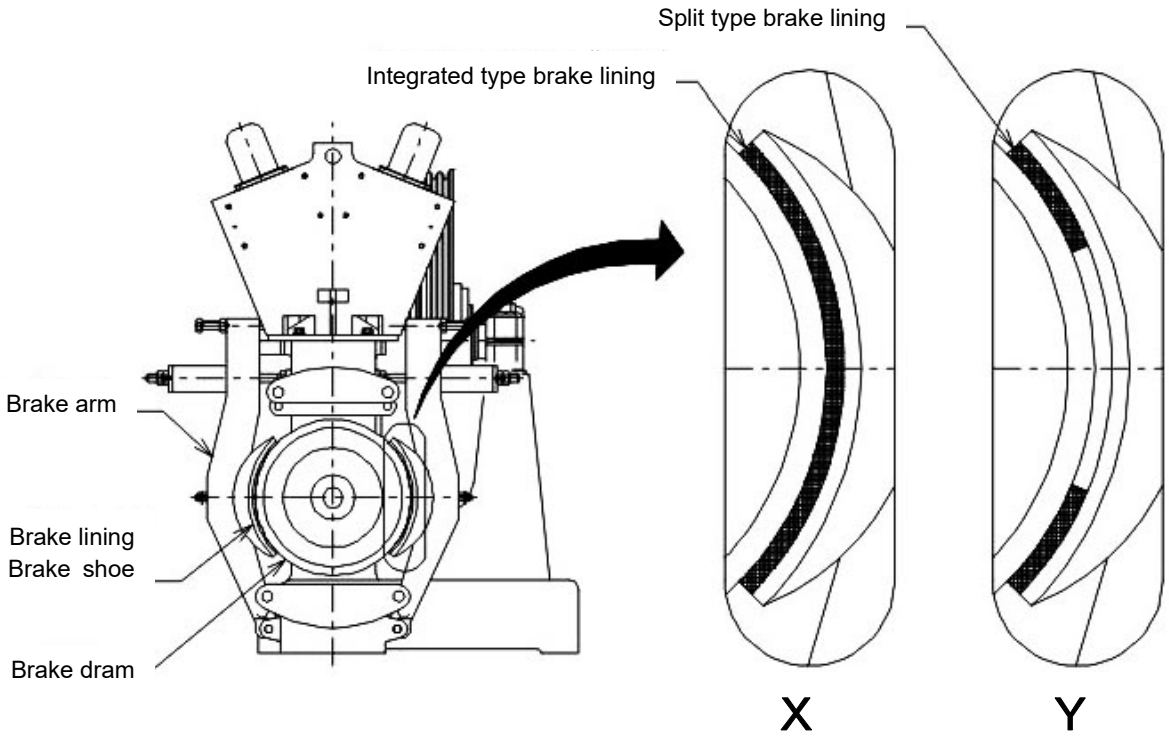
Case no cushioning material

Case with cushioning material

<u>No</u> cushioning between the brake lining and the brake shoe
-Brake system: Drum type
-Traction machine model name: “EMJ -5 * *” or “EMB -6 * *”

For the model name of the traction machine “EMJ -5 * *” or “EMB -6 * *”, Standard value B differs depending on the lining type of the brake. Check the structure carefully.

< For EMJ -5 * * >



Model name of traction machine	Control system	Lining Thickness (mm)			
		No cushioning material.		With cushioning material.	
		Standard values A	Standard values B	Standard values A	Standard values B
EM -15 * * EM -16 * *	AC -2 and others	5.5	5.0	6.0	5.5
	ACEE and others	5.2		5.7	
	VFCL				
	VFCLA				
	VFDL or later	5.4			
EM -24 * *	AC -2 and others	5.5	5.2	6.0	5.7
	ACEE and others	5.2	5.0	5.7	5.5
	VFCL				
	VFCLA				
	VFDL or later	5.5	5.3		
EM -36 * * EMX -36 * *	AC -2 and others	5.5	5.0	6.0	5.5
	ACEE and others			5.7	
	VFCL				
	VFDL or later				
EMJ -5 * * EML -5 * *	AC -2 and others	6.2	5.8	6.3	6.0
	ACEE and others	6.0 (X) 5.7 (Y)	5.8 (X) 5.5 (Y)	6.2	
	VFCL				
	VFDL or later				
EMB -6 * *	AC -2 and others	6.2	5.8	6.3	6.0
	ACEE and others	6.0 (X) 5.7 (Y)	5.8 (X) 5.5 (Y)	6.2	
	VFCL				
	VFDL or later				
EMB -2 * *	AC -2 and others	5.5	5.1	6.0	5.5
	ACEE and others			5.7	
	VFDL or later		5.3		
EMC -2 * *	AC -2 and others	5.4	5.1	5.8	5.5
	ACEE and others			5.7	
	VFDL or later	5.5	5.3		
EME -2 * *	AC -2 and others	5.5	5.0	6.0	5.5
	ACEE and others			5.7	
	BSC			6.0	
	VFDL or later		5.1	5.7	
EMF -2 * *	AC -2 and others	5.5	5.1	6.0	5.6
	ACEE and others			5.7	5.5
	BSC			6.0	5.6
	VFDL or later		5.2	5.7	5.5

Model name of traction machine	control system	Lining Thickness (mm)			
		No cushioning material.		With cushioning material.	
		Standard values A	Standard values B	Standard values A	Standard values B
EME -3 * * EMF -3 * *	AC -2 and others	5.5	5.3	6.0	5.8
	ACEE and others			5.7	5.5
	VFDL or later				
EMG -3 * * EMH -3 * *	AC -2 and others	5.5	5.2	6.0	5.7
	ACEE and others			5.7	5.5
	VFDL or later				
EMK -3 * *	AC -2 and others	5.5	5.2	6.0	5.7
	ACEE and others	5.4		5.7	5.5
	VFDL or later				
EML -3 * *	AC -2 and others	5.5	5.2	6.0	5.5
	ACEE and others			5.7	
	BSC			6.0	5.6
	VFDL or later			5.7	5.5
EME -4 * *	AC -2 and others	6.0	5.8	5.8	5.6
	ACEE and others			5.7	5.5
	VFDL or later				
EMF -4 * * EMG -4 * *	AC -2 and others	6.1	5.8	5.9	5.6
	ACEE and others	6.0		5.7	5.5
	VFDL or later				
EMH -4 * * EMX -4 * *	AC -2 and others	6.1	5.8	5.8	5.5
	ACEE and others	6.0		5.7	
	VFDL or later				
EMK -4 * *	AC -2 and others	6.3	5.9	5.9	5.5
	ACEE and others	6.0	5.8	5.7	5.5
	VFDL or later			6.2	6.0
EME -5 * *	AC -2 and others	6.0	5.5	6.3	6.0
	ACEE and others	5.7		6.2	
	VFDL or later				
EMH -5 * *	AC -2 and others	6.2	5.8	6.3	6.0
	ACEE and others	6.0		6.2	
	VFDL or later				
EMK -5 * *	AC -2 and others	6.9	5.8	7.0	6.0
	ACEE and others	6.0		6.2	
	VFDL or later				
EM -6 * *	AC -2 and others	6.2	5.8	6.3	6.0
	ACEE and others	6.0		6.2	
	VFDL or later				

The "*" under the model name of the traction machine category can be any numbers. (Example)EM -1660, EM -2430, etc.

The following table shows details of the control system described above.

control system	specific control system
AC -2 and others	AC -1 AC -2 AC-R AC1 _ EBS
BSC	AC1 _ BSC BSC -1
ACEE and others	ACE1LE ACE1LEA ACE1LEB ACE2LE ACE2LEA ACE2LEB ACEE -1 ACEE -1A ACEE -1B ACEE -1C ACEE -1D ACEE -2 ACEE -2 A ACEE -2 B ACE4LP GD-CL DC-FE/FP
VFCL	VFCL
VFCLA	VFCLA
VFDL or later	VFDL VFDL-M VFDLA VFDLA-M VFEL VFEL-M VFELR VFELRM VFELRN VFGL VFGLC VFGLCRN VFGLCRM

The "*" under the model name of the traction machine category can be any number. (Example)EM -1660, EM -2430, etc.

(Note) Check the control system on the name plate of control panel.

(Note) The values shown in the table above are limited for when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

1-2. Helical traction machine with drum type brake

This section describes about the “Standard values A” and “Standard values B” for the helical traction machine with drum type brake system. The “Standard values A” and “Standard values B” may be inspected by the method described in 2 -2.

(NOTE) There is no distinction about presence or absence of cushioning material between the brake lining and the brake shoe in the helical traction machine.

<table>
<tr><th>Model name of
traction machine</th><th>Standard values A
(mm)</th><th>Standard values B
(mm)</th></tr>
<tr><td>EH -42 * *</td><td rowspan="2">5.2</td><td rowspan="5">5.0</td></tr>
<tr><td>EH -45 * *</td></tr>
<tr><td>EH -51 * *
EHB - ↓</td><td rowspan="3">5.5</td></tr>
<tr><td>EH -62 * *
EHB - ↓
EHC-↓</td></tr>
<tr><td>EH -63 * *
EHB - ↓</td></tr>
</table>

The "*" under the model name of the traction machine category can be any number. (Example)EHB -6330, etc.

(Note) The values shown in the table above are limited for when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

< Confirmation Method for Helical Traction Machine >

To confirm that the traction machine type is a helical traction machine, check whether the model name of the traction machine described on its name plate is listed in above table.

If it’s listed, it means the traction machine is helical type.

Inspection of Standard values A **for helical traction machine**
(Excluding traction machine: “EH -42 * *” and “EH -45 * *”)

For “EH -42 * *” and “EH -45 * *”, check with the " Standard values A **" shown in the table in 1 -5 -2.**

The abrasion amount of brake linings in the previous year and this year is used for the judgment of " Standard values B".
More specifically, if the remaining thickness before reaching the standard of the “Standard values B” is 1.2 times or less of the abrasion in brake lining from last inspection, the careful inspection is required.
Therefore, the equation of " Standard values A " are as follows.

Standard values A **=** Standard values B + 1.2 x (β-α) [mm]
(α : The thickness of the brake lining at the time of this periodic inspection. β :The value of “α” at the time of the last periodic inspection.)

※ **If the “value of α at the last periodic inspection” is unknown, the 'thickness of the brake lining when its’s new' may be used as β when calculate.**
However, the lining thickness of new products may vary slightly (β-α ≦ 0). In this case, the lining thickness can be determined to be as good as new (with little abrasion).

※ " Standard values A " shown in above table may be used.

< Judgment example of critical inspection >
Assume that the inspection result of this year is 6.0 mm (= the remaining thickness before reaching the corrective action required value is 1.0 mm) for a brake lining with a “Standard values B” of 5.0 mm.
[Example 1]
If the inspection value in last year is 7.0 mm, 1.2 times of abrasion in 1 year is 1.2 mm. Therefore, it is larger than the remaining thickness of 1.0 mm before reaching the “Standard values B”. In this case, it is judged as "critical inspection is required".
[Example 2]
If the inspection value in last year is 6.5 mm, 1.2 times of abrasion in 1 year is 0.6 mm. Therefore, it is smaller than the remaining thickness of 1.0 mm before reaching the “Standard values B”. In this case, it is judged as "inspection not required".

(Notes)
This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

1-3. Gearless traction machine with drum type brake

This section describes about the “Standard values A” and “Standard values B” for the gearless traction machine with drum type brake system.

(NOTE) There is no distinction about presence or absence of cushioning material between the brake lining and the brake shoe in the gearless traction machine.

(NOTE) The concept that the remaining thickness from the head of the screw (rivet head) fixed to the brake shoe is used as the standard of the “Standard values B” does not apply to gearless traction machines.

Model name of traction machine	Standard values A (mm)	Standard values B (mm)
MD 103 B	4.0	3.5
MD 105	4.5	4.0
MD 106		
GL -21 KA ↓ KB ↓ KC ↓ KD ↓ KE ↓ KEZ ↓ KEZS ↓ KS		
GL -25 Z		
GL -28 A		

(Note) This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

Model name of traction machine	Standard values A (mm)	Standard values B (mm)
GL -2 A	4.5	4.0
↓ B		
↓ B2		
↓ B3		
↓ B4		
↓ C3		
↓ KCZ		
↓ KSZ		
GL -3 B		
↓ B2		
↓ B3		
↓ BS		
↓ C		
↓ C3		
↓ KSZ		
GL -4 M		
Down Arrow N		
GL -5 M		
GL -6.5 C		
↓ M		
↓ T		
GL -7 A		
Down Arrow AX		
↓ B		
↓ C		
↓ M		
GL -8 A		
↓ B		
↓ C		
↓ M		
↓ M2		
Down Arrow MZ		
Down Arrow N		
↓ N2		
GL -8.5 M		
↓ N		
GL -9 B		
Down Arrow BZ		
↓ M		
Down Arrow N		
GL -10 M		
↓ M2		
↓ N		
GL -11 M		
GL -12 M		
↓ N		
GL -13 M		
GL -14 M		

Model name of traction machine	Standard values A (mm)	Standard values B (mm)
GL -150 A ↓ B	4.5	4.0
GL -180 B		
GL -200 A ↓ B ↓ C		
GL -300 A		
GL -350 A ↓ B ↓ C		
GL -551 A ↓ B		
GL -801 A		
AL -400 A		
AL -550 A ↓ B		
AL -551 A		
AL -602 A TAL -55 A TAL -85 A TAL -70 A TAL -120 A		
GL -33 KB ↓ KC ↓ KS	5.5	5.0
GL -42 KB ↓ KC ↓ KCZ ↓ KS ↓ KSZ		
GL -6.5 A	5.2	5.0
MD 101 ↓ A	6.0	5.5
MD 103 A ↓ B		
GL -38 KM		
MD 104	6.5	6.0
GL -33 KA		
GL -42 KA		
GL -45 A		
GL -56 A		
PML -94 A	4.5	4.0

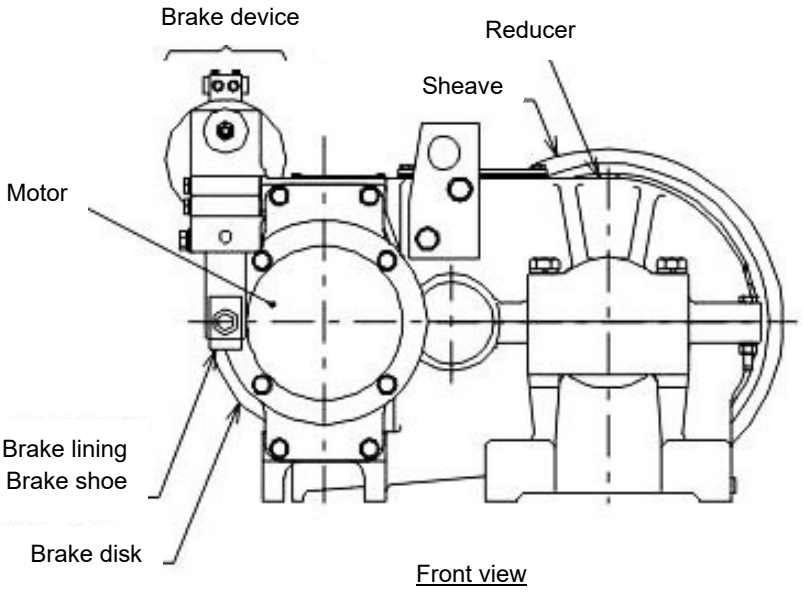
(Note) This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

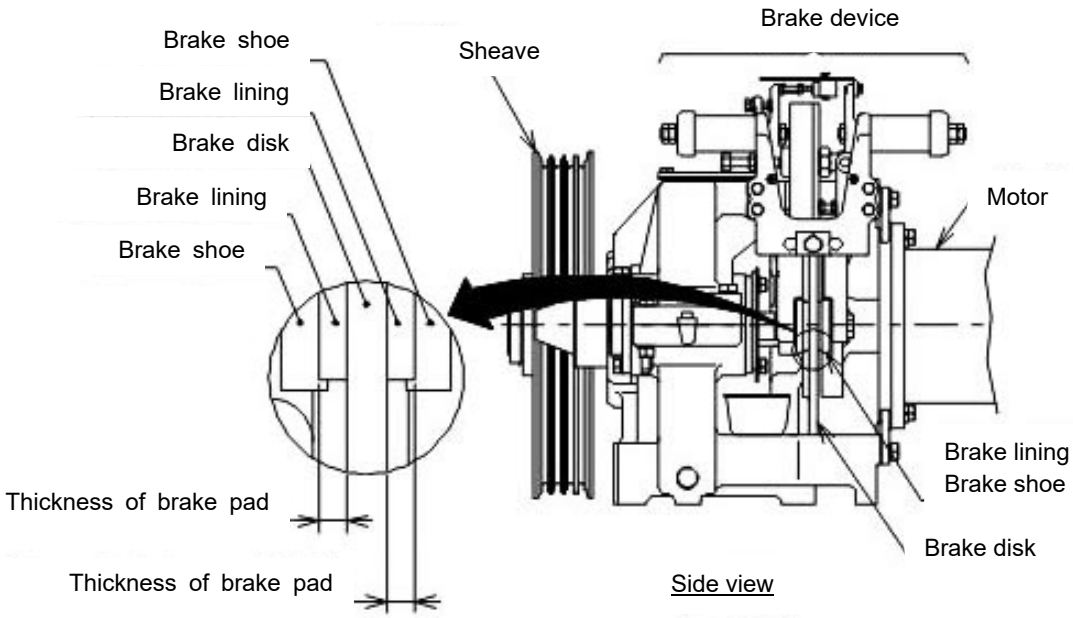
1-4. Disc type brake system

For traction machines with disc brake system, check the thickness of brake lining shown below.
Refer to the table below for the “Standard values A” and “Standard values B”
There are also two types of disk traction machines: a geared traction machine and a gearless traction machine.
Please check the table of section 1-5.

Please check the model name of the traction machine described on its name plate.
(NOTE) Make sure to check the model name of the traction machine (not to mistake).

< Example of a geared traction machine >





Disc type brake system (Geared traction machine)

Model name of traction machine	Standard values A (mm)	Standard values B (mm)
EH -35 * *	5.5	5.0
EH -38 * *		
EH -41 * * EHB - ↓ EHC-↓ EHD-↓		
EH -54 * * EHB - ↓ EHC-↓		

The "*" under the model name of the traction machine category can be any number. (Example)EHC -5420, etc.

(Note) This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

Disc type brake system (Gearless traction machine):

Model name of traction machine	Standard values A (mm)	Standard values B (mm)
PMF020ML PMF027ML	5.0	4.5
PML -25 A ↓ B PML -40 A ↓ B	5.0	4.5
PML-F 25 A PML-F 40 A		
PML -34 A PML -50 A		
PML-F 34 A PML-F 50 A		
PML -63 A	5.5	5.0
PML -94 B		
PML-F 81 A	7.0	6.5
PML 120 SA PML 120 MA PML 120 LA		
PML -115 A ↓ B PML -170 A ↓ B	5.0	4.5
PML -210 A		
PML -160 C PML -210 C		
PML -310A PML -360A		

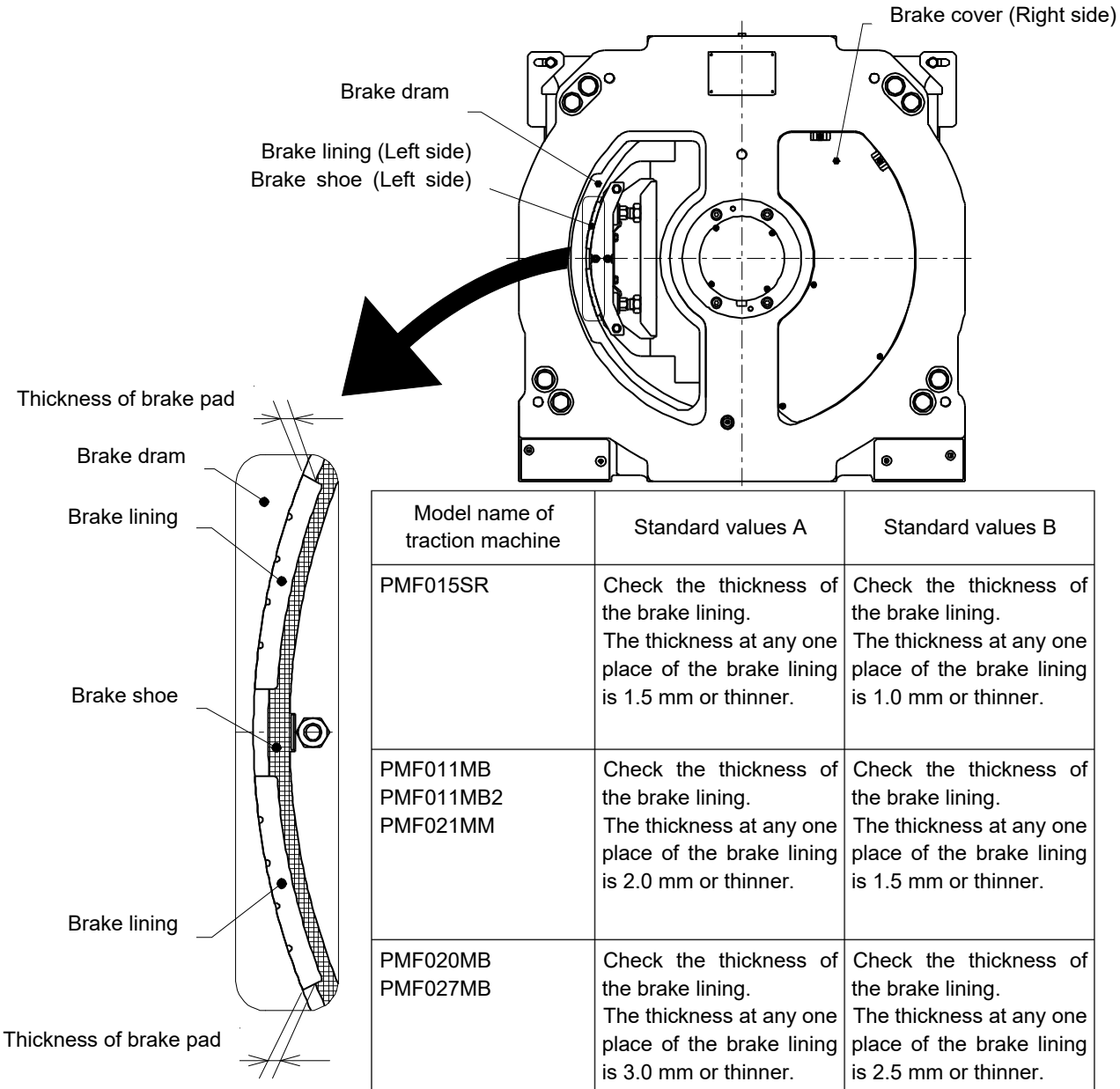
(Note) This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

1-5. Internal expansion drum type brake system

If the brake system is an internal expansion drum type, check the thickness of the brake lining.
Refer to the table below for the “Standard values A” and “Standard values B”

Please check the model name of the traction machine described on its name plate.
(NOTE) Make sure to check the model name of the traction machine (not to mistake).

< Traction machine with internal expansion drum type brake >



Model name of traction machine	Standard values A	Standard values B
PMF015SR	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.0 mm or thinner.
PMF011MB PMF011MB2 PMF021MM	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 2.0 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.5 mm or thinner.
PMF020MB PMF027MB	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 3.0 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 2.5 mm or thinner.

*Since the structure that part of the lining is embedded in the brake shoe, the lining thickness shall be controlled by the outlet from the brake shoe.

* This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

1-6. Clutch type brake system:

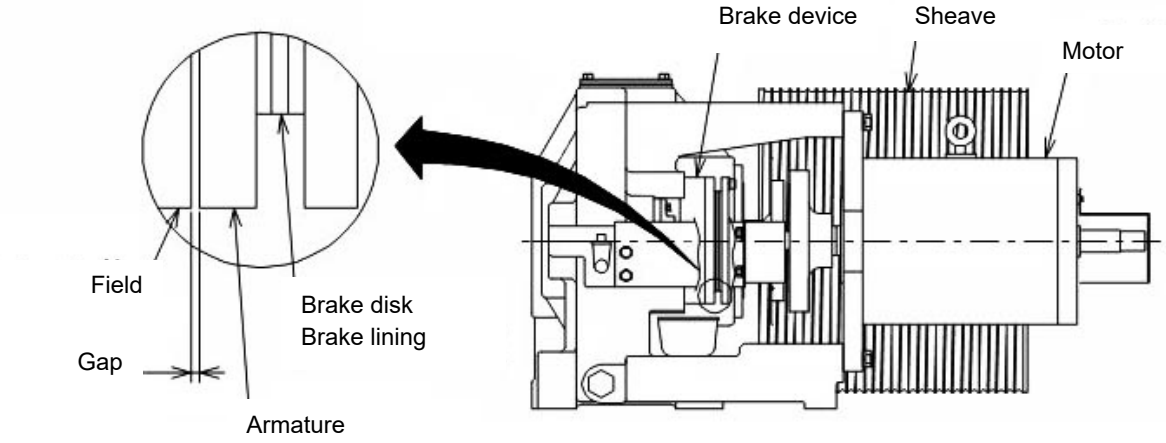
When the brake system is a clutch type, the replacement standard differs depending on the model name of the traction machine. The “Standard values A” and the “Standard values B” are described per model name.

The model name of the traction machine is “EH -37 * *” and “EH -37 * * S”

Please check the model name of the traction machine described on its name plate.
(NOTE) Make sure to check the model name of the traction machine (not to mistake).

0.33 mm and 0.35 mm skimmer gauges are needed for this inspection.
Prepare them in advance.

<”EH -37 * *” and “EH -37 * * S”>



< Inspection standard and confirmation method for ”EH -37 * *” and “EH -37 * *S” >

The following standards only apply to the traction machine with model names of “EH -37 * *” and “EH -37 * * S”.
(NOTE) Make sure to double-check the model name of the traction machine.

Standard values A	When the gap between the field and the armature is measured with a skimmer gauge at all stud bolts (or bolts) position, and if the gap is 0.33 mm or more at any one point: **->If the 0.33mm skimmer gauge can be inserted into one of the gaps measured at any bolt positions, the critical inspection is required.**
Standard values B	When the gap between the field and the armature is measured with a skimmer gauge at all stud bolts (or bolts) position, and if the gap is 0.35 mm or more at any one point: **-> If the 0.35mm skimmer gauge can be inserted into one of the gaps measured at any bolt positions, the corrective action is required.**

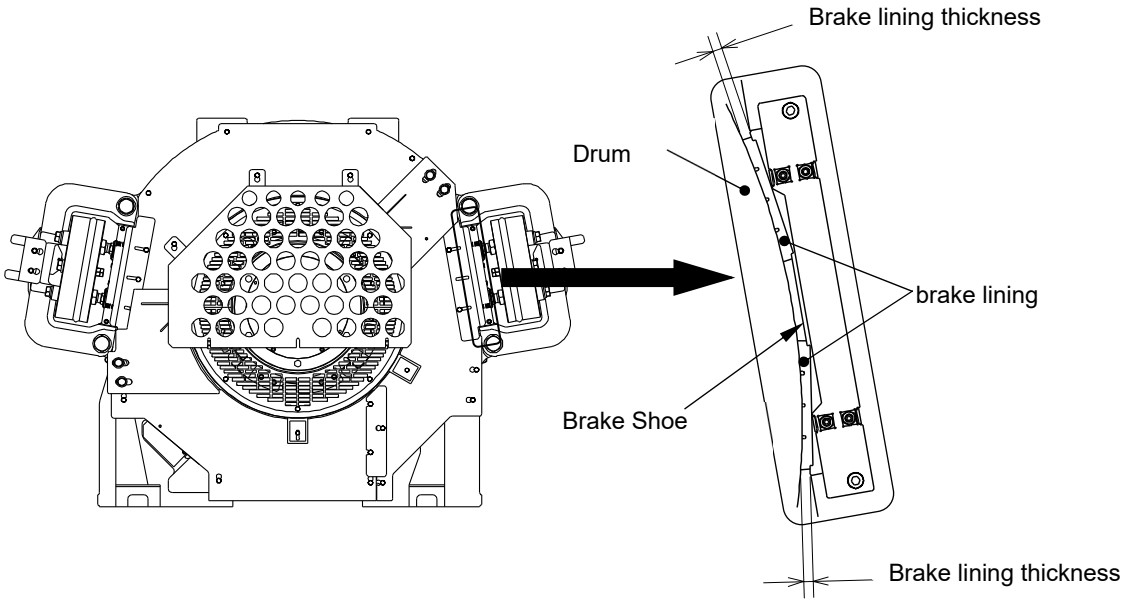
(Note) This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

1-7. Brake system of external direct action drum type:

If the brake system is an external direct action drum type, check the thickness of the brake lining.
Refer to the table below for the “Standard values A” and “Standard values B”.

Please check the model name of the traction machine described on its name plate.
(NOTE) Make sure to check the model name of the traction machine (not to mistake).

< Traction machine with external direct action drum type brake>



Model name of traction machine	Standard values A (mm)	Standard values B (mm)
PM3P7SR PM6P5SR PM6P5SR2 PM011SR PM011SR2 PM016SR PM025MR PM040MR	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 4.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 4 mm thinner.
PM015S PM018S PM021S PM025S	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 6.0 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 5.5 mm thinner.

*Since a part of the lining is embedded in the brake shoe, the lining thickness shall be controlled by the outlet from the brake shoe.

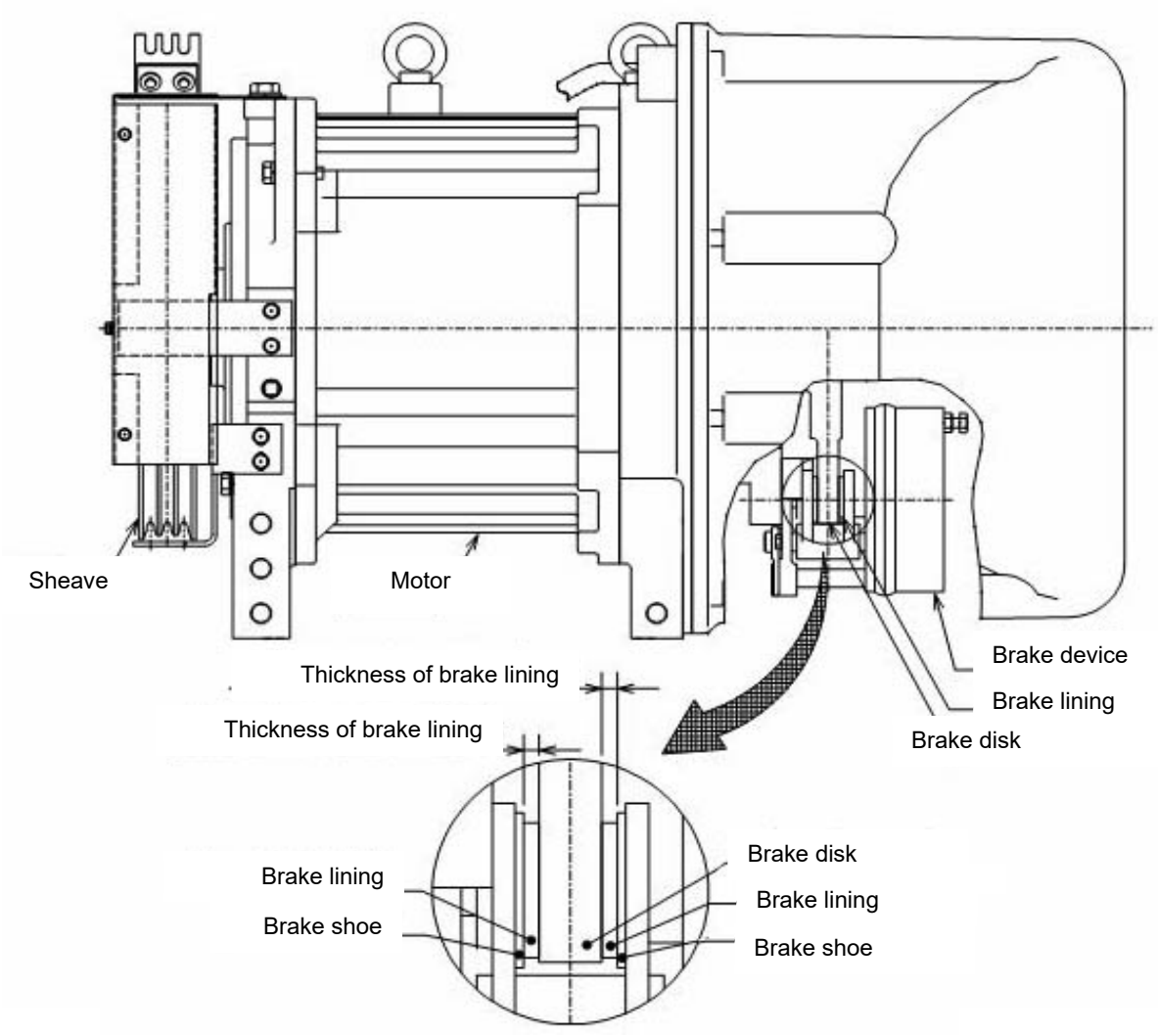
* This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.

2-1. Disc type brake system:

For traction machines with disc type brake system, check the thickness of the brake lining shown in the figure below. Refer to the table below for the “Standard values A” and the “Standard values B”.
For elevators without machine rooms, the traction machine with the disk type brake system only applies to a gearless traction machine. Please check the table below.

Please check the model name of the traction machine described on its name plate.
(NOTE) Make sure to check the model name of the traction machine (not to mistake).

Example of “PML-0037” Traction Machine



Disc type brake system (Gearless traction machine):

Model name of traction machine	Standard values A (mm)	Standard values B (mm)
PML-0028A	3.5	3.0
PML-0037A ↓ B ↓ C		
PML-0065A ↓ B		
PML-0046A	5.0	4.5
PML-0062A ↓ B		
PML-0110A ↓ B		

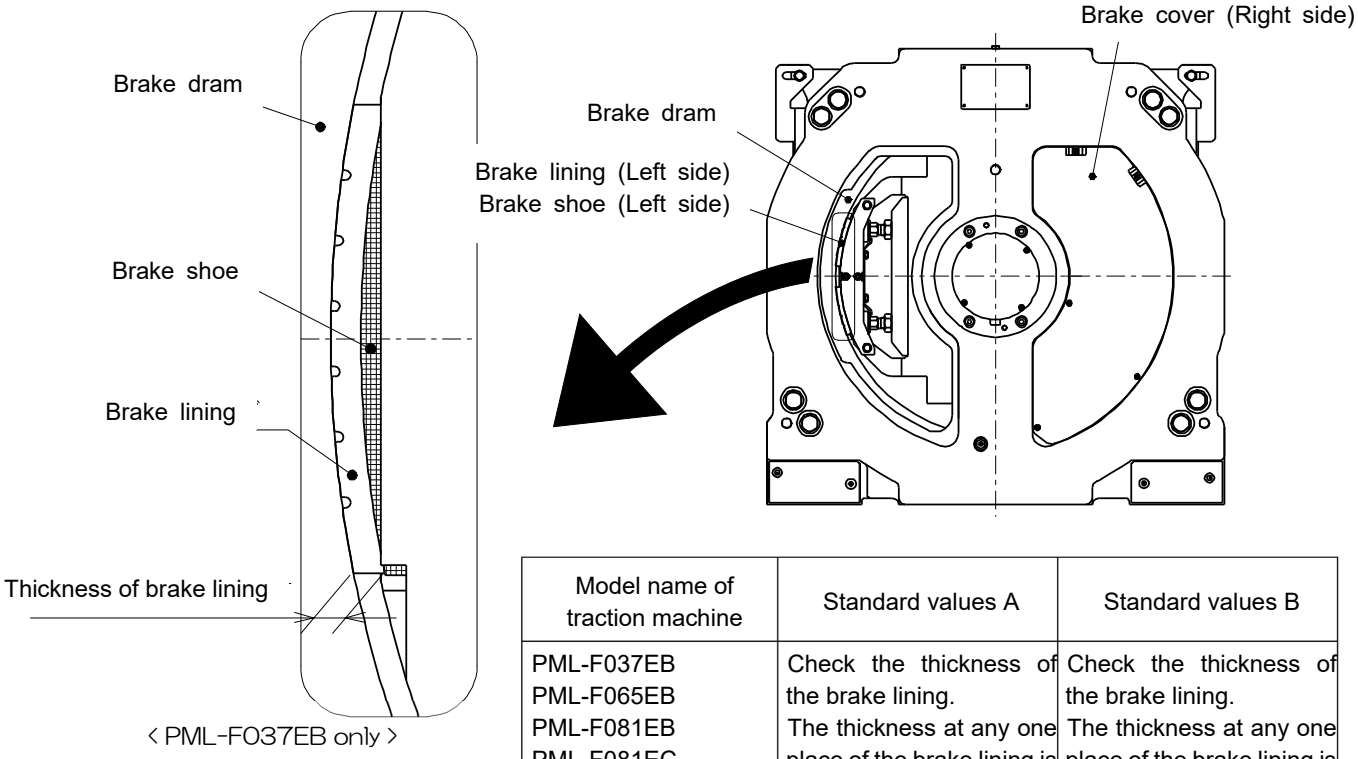
The lining thickness should be controlled by the outlet from the brake shoe. Since a part of the lining is embedded in the brake shoe, the lining thickness shall be controlled by the outlet from the brake shoe.

2-2. Internal expansion drum type brake system

When the brake system is an internal drum type, check the thickness of the brake lining.
Refer to the table below for the “Standard values A” and the “Standard values B”.

Please check the model name of the traction machine described on its name plate.
(NOTE) The standard differs depending on the model name of the traction machine, so make sure to check the model name of the traction machine (not to mistake).

< Traction machine with inner expansion drum type brake >



Model name of traction machine	Standard values A	Standard values B
PML-F037EB PML-F065EB PML-F081EB PML-F081EC PML-F110EB	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.0 mm or thinner.
PML-F180	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 5.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 5.0 mm or thinner
PMF018S	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.0 mm or thinner.
PMF3P7S-E PMF6P5S-E PMF011S-E	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.0 mm or thinner.
PMF020MS PMF020MSB	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 2.0 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 1.5 mm or thinner

Since the structure that part of the lining is embedded in the brake shoe, the lining thickness shall be controlled by the outlet from the brake shoe.

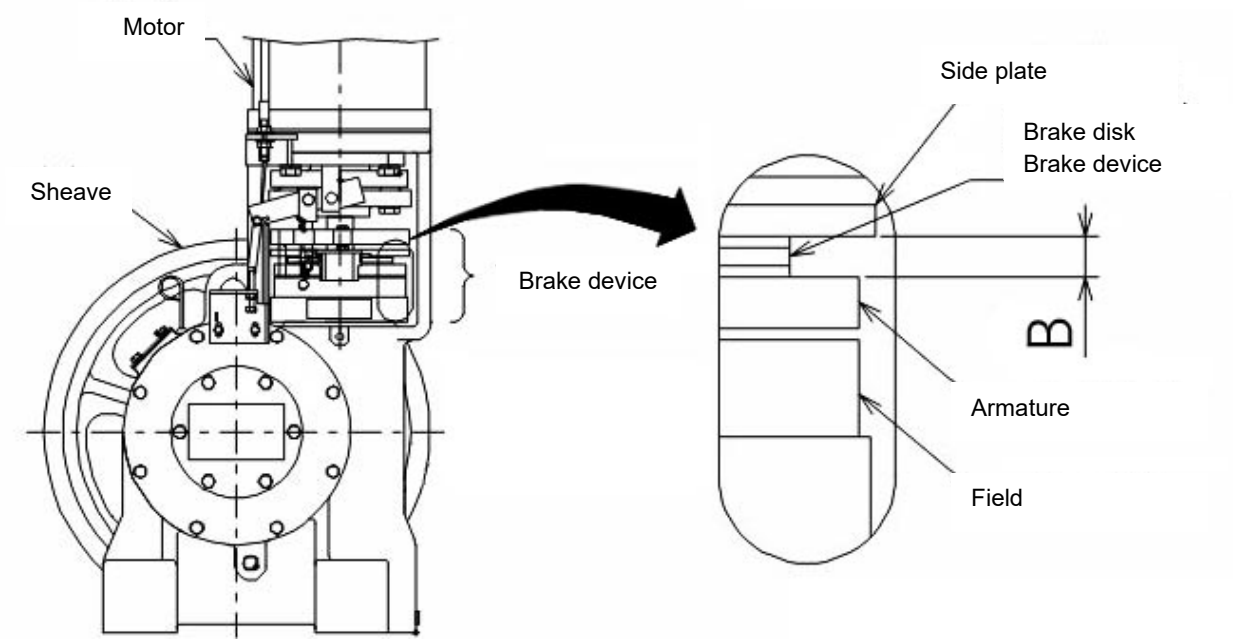
2-3. Clutch type brake system:

When the brake system is a clutch type, the replacement standard differs depending on the model name of the traction machine. The “Standard values A” and the “Standard values B” are described per model name.

The model name of the traction machine is “EM -1100”

For “EM -1100” inspection, measure the distance between the side plate and the armature (dimension B in the figure). Refer to the figure below for details.

< EM -1100 >



< Inspection Standards and Confirmation Method for “EM -1100” >

The following standards only apply to traction machine with model name “EM -1100”.
(NOTE) Make sure to double-check the model name of the traction machine.

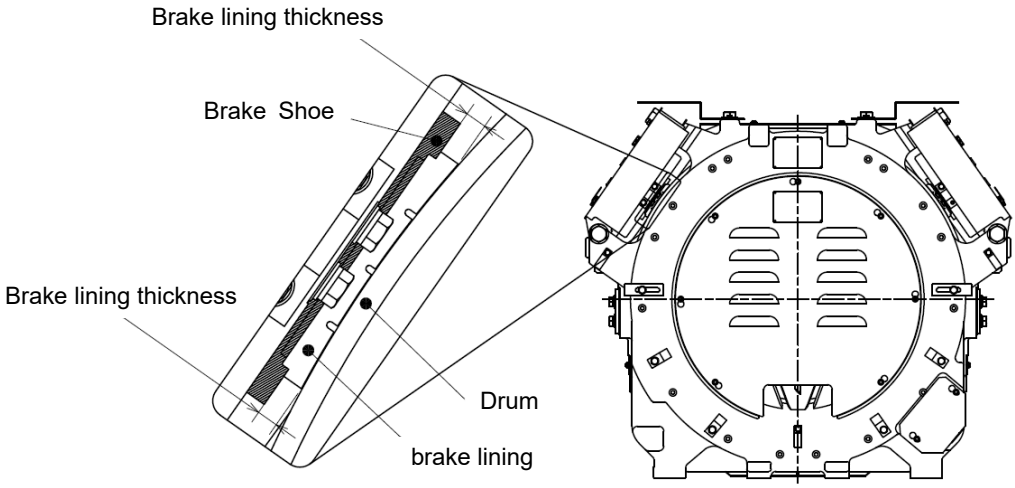
Standard values A	Measure the entire circumference of the distance between the side plate and the armature (dimension B in Figure B above). Then, if the distance at any one place between the side plate and the armature is 7.8 mm or thinner.
Standard values B	Measure the entire circumference of the distance between the side plate and the armature (dimension B in Figure B above). Then, if the distance at any one place between the side plate and the armature is 7.5 mm or thinner.

2-4. Brake system of external direct action drum type:

If the brake system is an external direct action drum type, check the thickness of the brake lining.
Refer to the table below for the “Standard values A” and “Standard values B”

Please check the model name of the traction machine described on its name plate.
(NOTE) Make sure to check the model name of the traction machine (not to mistake).

< Traction machine with external direct action drum type brake>



Model name of traction machine	Standard values A (mm)	Standard values B (mm)
PM2P8GS	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 3.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 3.0 mm thinner.
PM3P7SS PM6P5SS PM6P5SS2 PM011SS PM011SS2	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 4.5 mm or thinner.	Check the thickness of the brake lining. The thickness at any one place of the brake lining is 4.0 mm thinner.

*Since a part of the lining is embedded in the brake shoe, the lining thickness shall be controlled by the outlet from the brake shoe.

* This is limited for the case when genuine products from our company are used and no processing is done for brake linings, brake shoes, etc.