

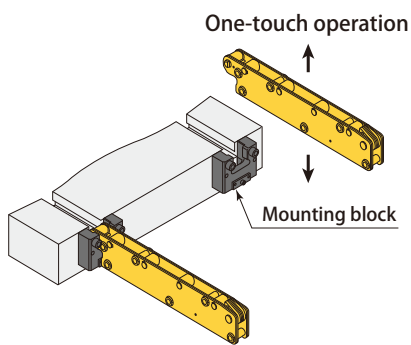
Pre-roller

model **PR**



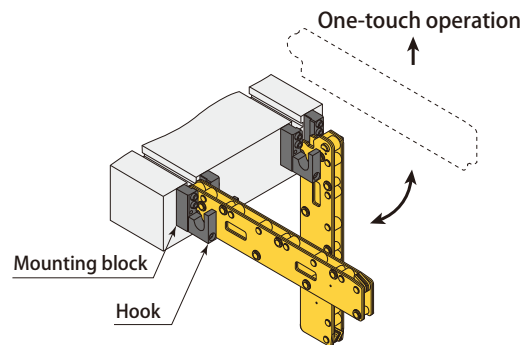
Removable & fold type

model
PRA

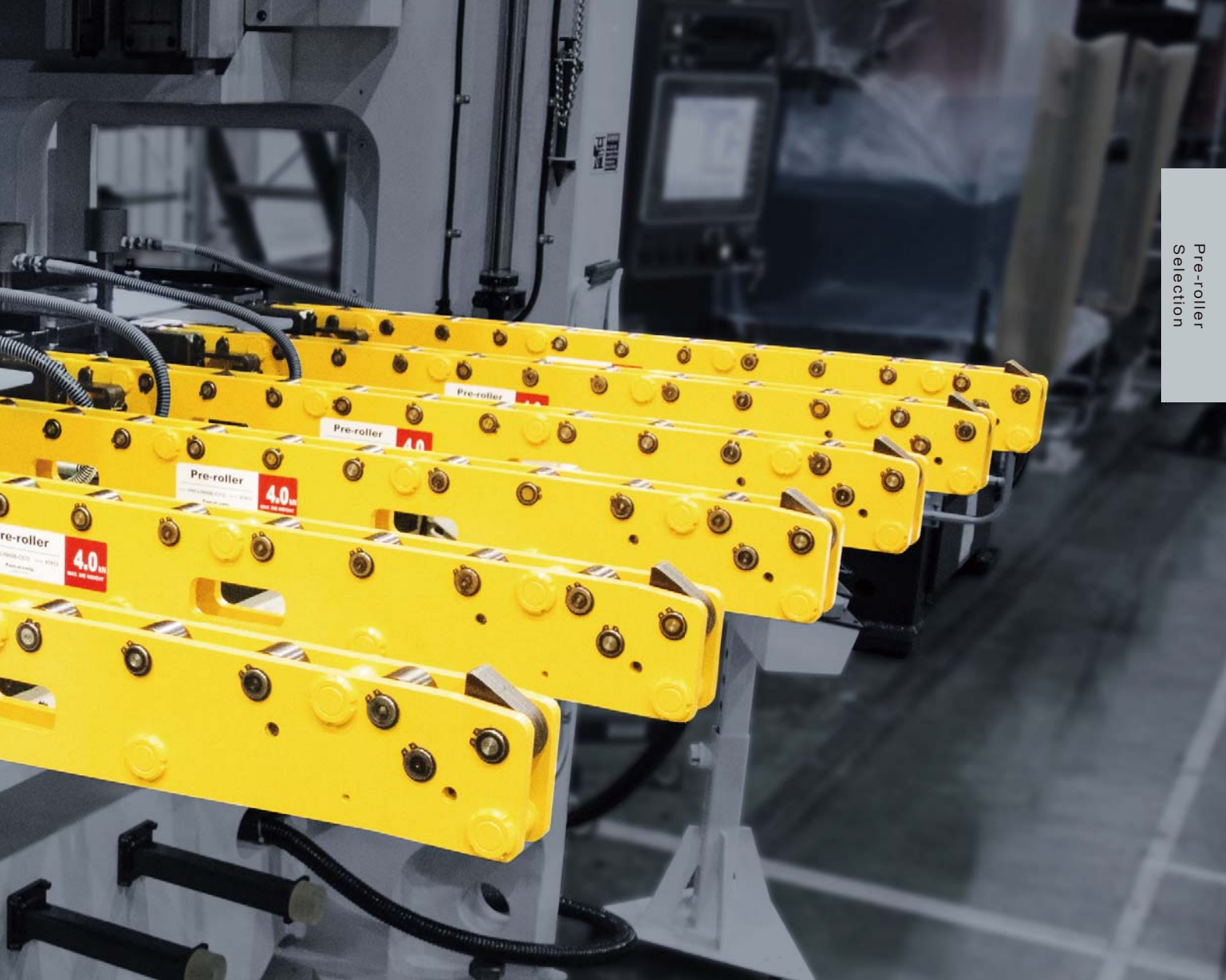


page → 143

model
PRF

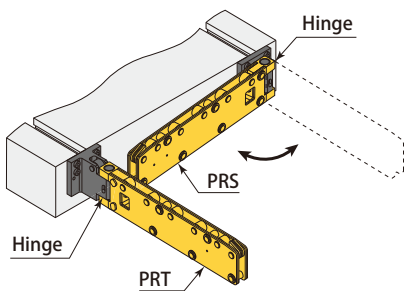


page → 155



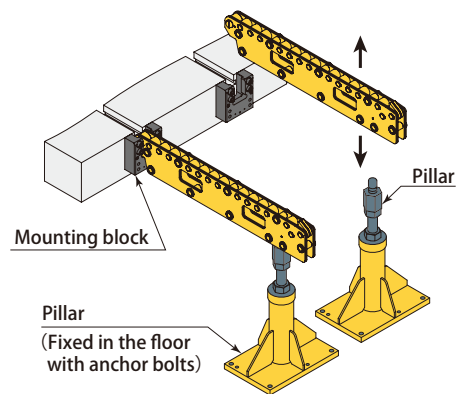
Horizontally fold type

model **PRS** / model **PRT**



Heavy load type

model **PRC**



* The bending position is different between S and T.
Refer to page → 167 for the details.

page → 179

Model designation

PR **A** **3** - **0630** B

- 1** Model
- 2** Size
- 3** Die travel (mm) * Indicated in 4 digits

1 Model

A	F	S / T	C
(Standard)	Removable & fold type	Horizontally fold type	Heavy load type
page → 143	page → 155	page → 167	page → 179

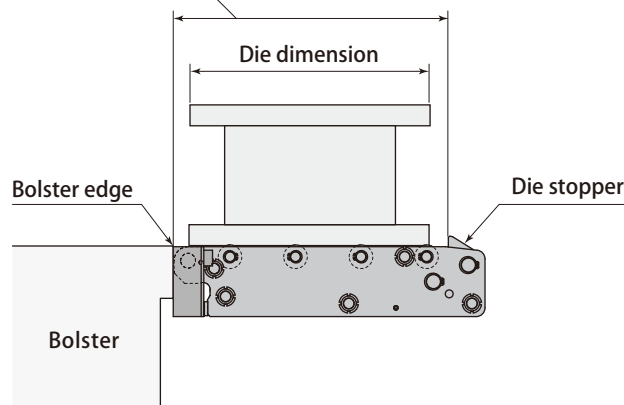
2 Size

PRA			PRF			PRS / T			PRC	
2	3	5	2	3	5	3	5	8	3	5

3 Die travel

Die travel

Die travel = Length from bolster edge to the stopper.



● Select the Pre-roller where die dimensions are within die travel.

Selection of Pre-roller

Selection of Pre-roller each for allowable load (Die weight)

In case the die weight is 5 tons, select PRA5-0400B or PRF5-0400B or PRS8-0630B/PRT8-0630B or PRC3-0950B.

mm

Allowable load * (Die weight)	PRA2	PRA3	PRA5	PRF2	PRF3	PRF5	PRS3 PRT3	PRS5 PRT5	PRS8 PRT8	PRC3	PRC5
	Die travel										
8 tonf (80kN)											
7 tonf (70kN)											1250
6 tonf (60kN)										800	
5 tonf (50kN)			400			400			630	950	
4 tonf (40kN)			450			450			710	1000	
3.2 tonf (32kN)		355	560		355	560	355	630	900		
2.6 tonf (26kN)		400	710		400	710	450	710	1000		
2 tonf (20kN)		450	850		450	850	500	850			
1.6 tonf (16kN)	250	630	1000	250	630	1000	630	950			
1.2 tonf (12kN)		710			710		710	1000			
1 tonf (10kN)	355	850		355	850						
0.8 tonf (8kN)	450	950		450	950						
0.6 tonf (6kN)	500	1000		500	1000						
0.5 tonf (5kN)	630			630							

Pre-roller Selection

* The allowable load of above table is for 2 pre-rollers.

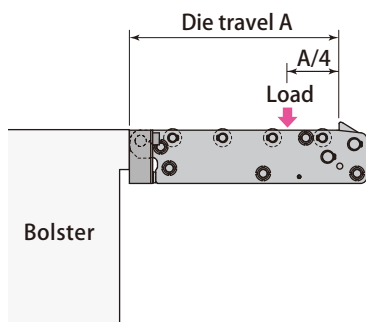
Allowable load

- Select Pre-roller where allowable load (kN) multiplied by the quantity is greater than the die weight.
SI conversion : Die weight (kN)=Die weight (kgf)×9.8÷1000

Allowable load of

PRA **PR**F **PR**S
PRT

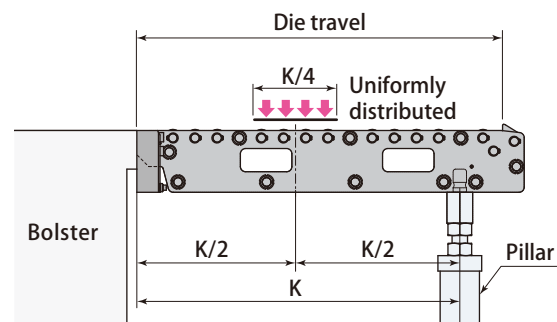
Static load measured at the position of 1/4 of the die travel



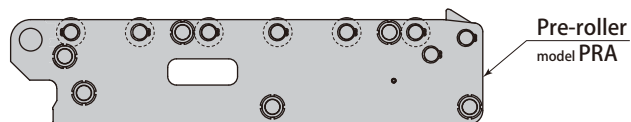
Allowable load of

PRC

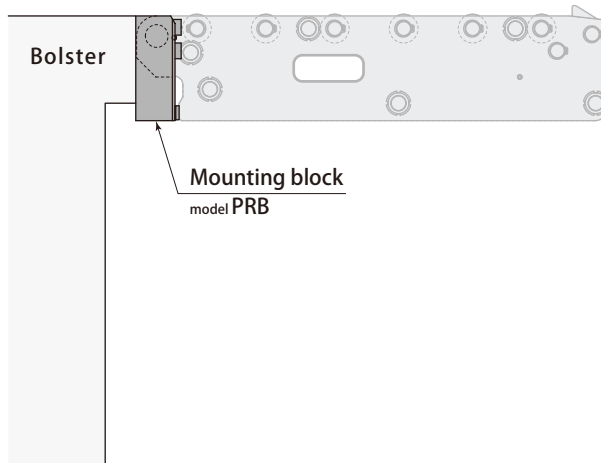
Uniformly distributed and held by the middle part of the Pre-roller



Detachable type Pre-roller



It can be installed and removed at one touch operation.



- The Pre-roller may be damaged due to the vibration through stamping operation. The removal of pre-roller during the operation is recommended.
- Be noted that the specifications of Mounting block PRB and PRB□F(mounting block for PRF) are different.

Model designation

Set model (Pre-roller + Mounting block)

PRA **2** - **0200** B - S

Size
PRA2 PRA3 PRA5

1 Die travel (mm)
* Indicated in 4digits

For set model, S is added
at the end of model No.

Pre-roller model type

PRA **2** - **0200** B

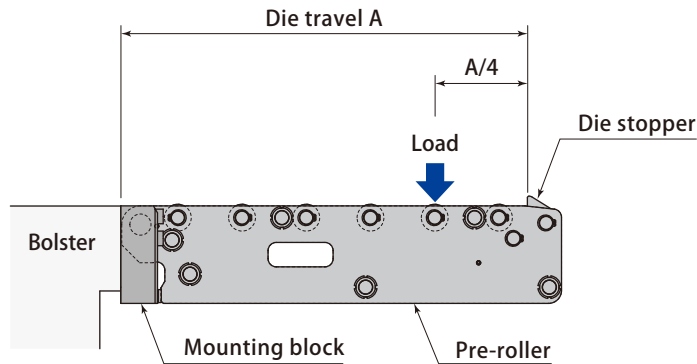
Size
PRA2 PRA3 PRA5

1 Die travel (mm) * Indicated in 4 digits

Mounting block model type

PRB **2**

Size
PRB2 PRB3 PRB5



1 Die travel **200** ~ **1000** mm

Die travel		mm	200	250	315	355	400	450	500	560	630	710	800	850	900	950	1000
PRA2	Allowable load *	kN	8	8	5	5	4	4	3	2.5	2.5	—	—	—	—	—	—
	Number of rollers		3	4	4	5	5	6	6	7	7	—	—	—	—	—	—
	Weight	kg	3.1	3.7	4.2	4.7	5.1	5.5	5.9	6.6	7.2	—	—	—	—	—	—
PRA3	Allowable load	kN	—	—	16	16	13	10	8	8	8	6	5	5	4	4	3
	Number of rollers		—	—	4	4	5	5	6	6	7	7	7	8	8	8	9
	Weight	kg	—	—	7.6	8.4	9.5	10	11.1	12.1	13.4	14.7	16.3	17.4	18.4	19.2	20.3
PRA5	Allowable load	kN	—	—	—	—	25	20	16	16	13	13	10	10	8	8	8
	Number of rollers		—	—	—	—	4	5	5	6	6	7	7	8	8	9	9
	Weight	kg	—	—	—	—	10.4	11.4	12.2	13.6	15.1	16.9	18.1	19.2	20.1	21.5	22.5

● Die loading speed on Pre-roller : Less than 50mm/s ● Die transfer speed : Less than 100mm/s ● Weight does not include mounting block.
* Allowable load is a static load measured at the position of 1/4 of the die travel from the stopper. Select Pre-roller where allowable load (kN) multiplied by the quantity is greater than the die weight. SI conversion : Die weight (kN)=Die weight (kgf)×9.8÷1000

Dimensions

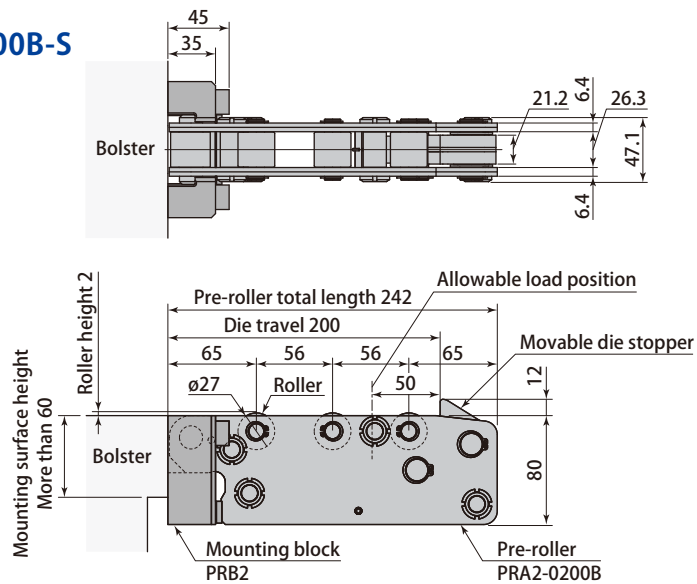
PRA 2 - 0200 B - S

1 Die travel (mm)
* Indicated in 4 digits

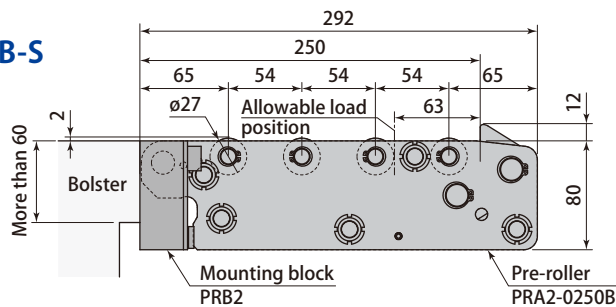
1 Die travel 200 ~ 630 mm

Model	PRA2-0200B	PRA2-0250B	PRA2-0315B	PRA2-0355B	PRA2-0400B	PRA2-0450B	PRA2-0500B	PRA2-0560B	PRA2-0630B
Die travel	mm 200	250	315	355	400	450	500	560	630
Pre-roller total length	mm 242	292	357	397	442	492	542	602	672
Weight	kg 3.1	3.7	4.2	4.7	5.1	5.5	5.9	6.6	7.2

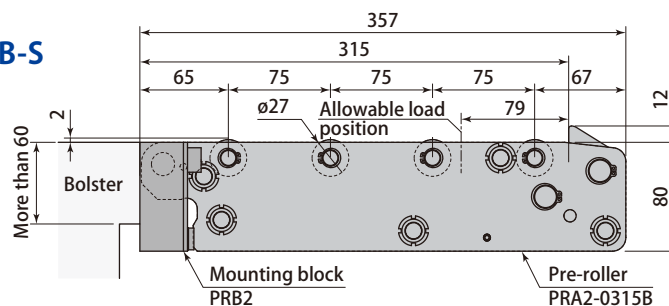
PRA2-0200B-S



PRA2-0250B-S



PRA2-0315B-S



Dimensions

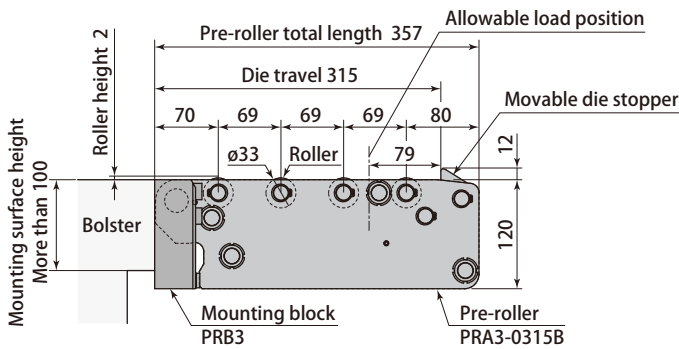
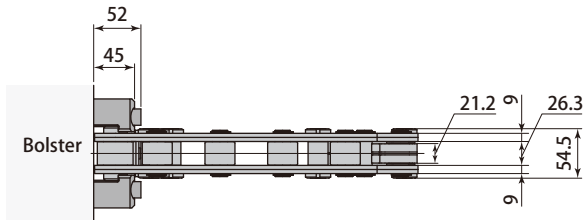
PRA 3 - 0315 B - S

1 Die travel (mm)
* Indicated in 4 digits

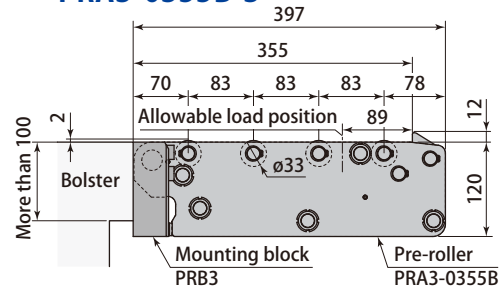
1 Die travel 315 ~ 1000 mm

Model	PRA3-0315B	PRA3-0355B	PRA3-0400B	PRA3-0450B	PRA3-0500B	PRA3-0560B	PRA3-0630B	PRA3-0710B	PRA3-0800B	PRA3-0850B	PRA3-0900B	PRA3-0950B	PRA3-1000B
Die travel	mm 315	355	400	450	500	560	630	710	800	850	900	950	1000
Pre-roller total length	mm 357	397	442	492	542	602	672	752	842	892	942	992	1042
Weight	kg 7.6	8.4	9.5	10	11.1	12.1	13.4	14.7	16.3	17.4	18.4	19.2	20.3

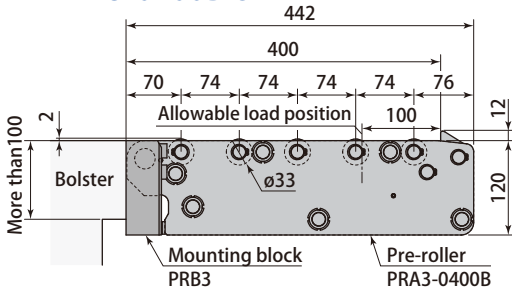
PRA3-0315B-S



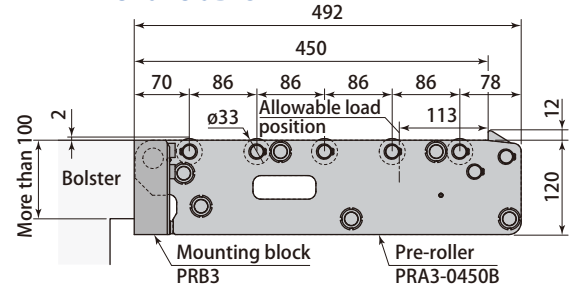
PRA3-0355B-S



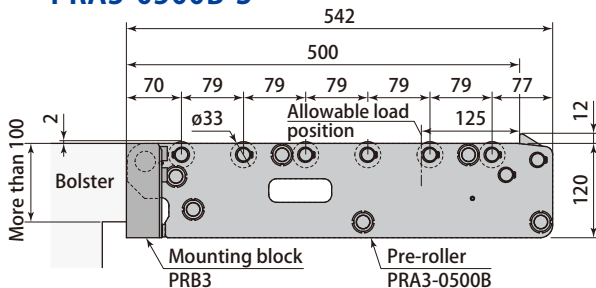
PRA3-0400B-S



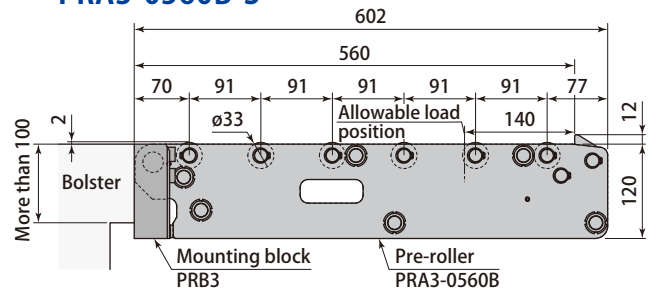
PRA3-0450B-S



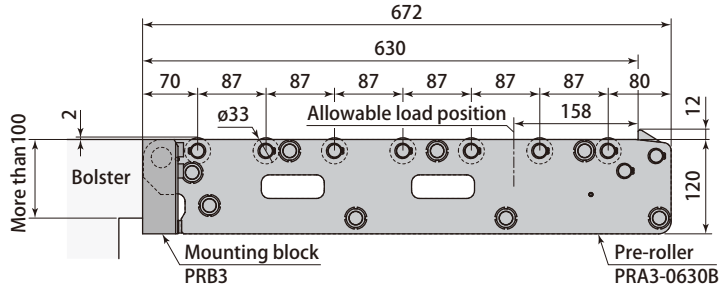
PRA3-0500B-S



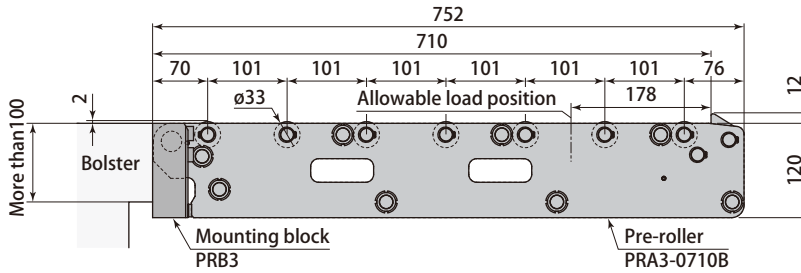
PRA3-0560B-S



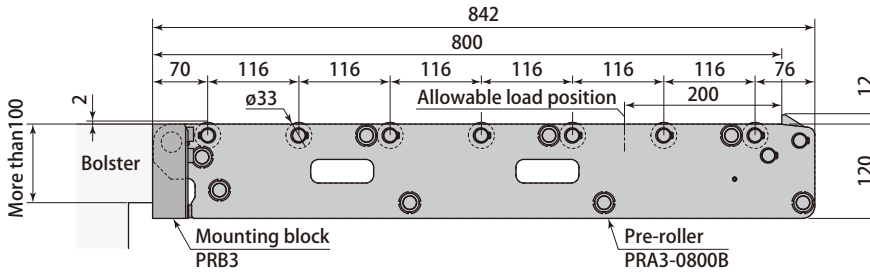
PRA3-0630B-S



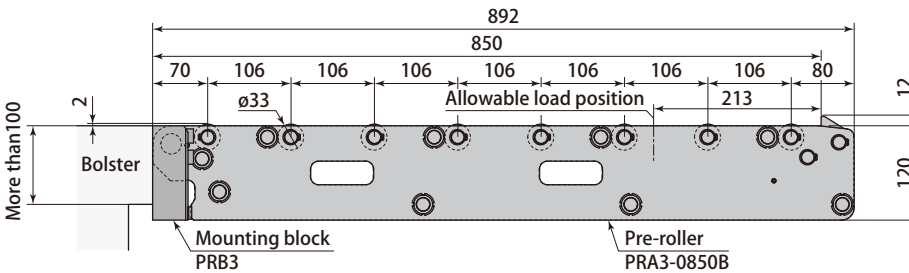
PRA3-0710B-S



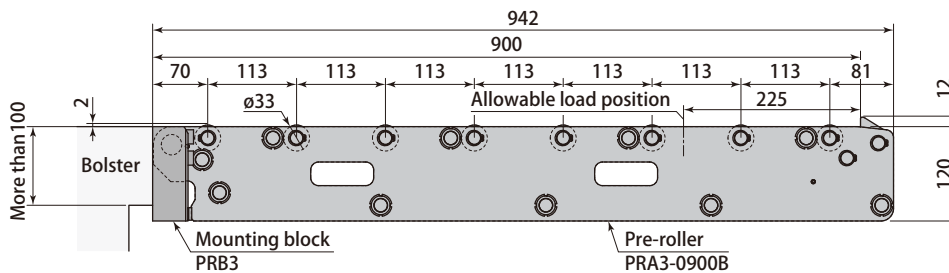
PRA3-0800B-S



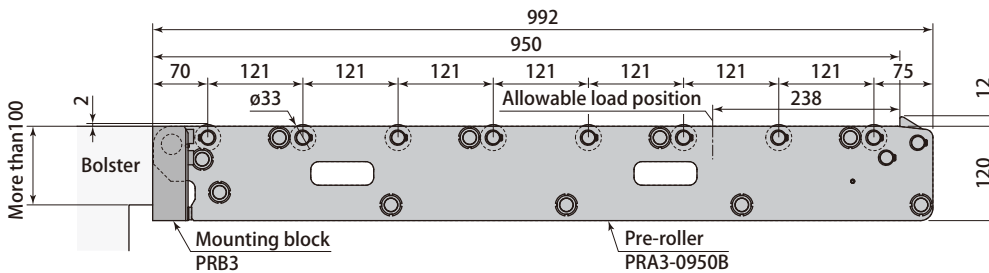
PRA3-0850B-S



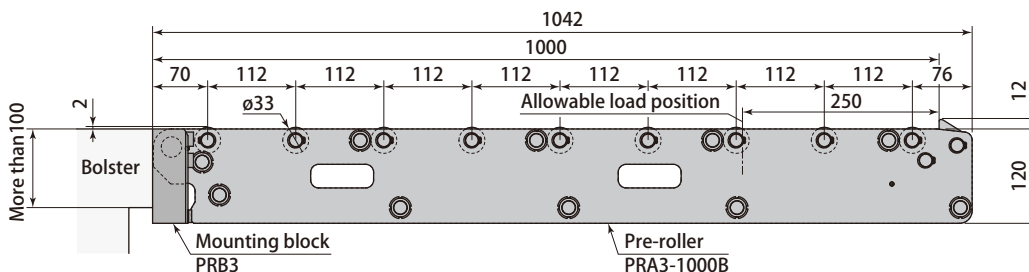
PRA3-0900B-S



PRA3-0950B-S



PRA3-1000B-S



Dimensions

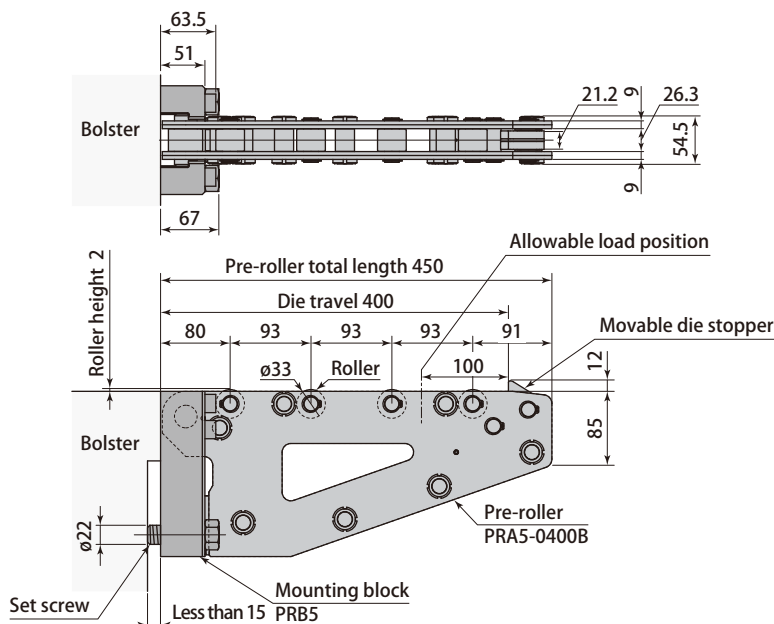
PRA 5 - 0400 B - S

1 Die travel (mm)
* Indicated in 4 digits

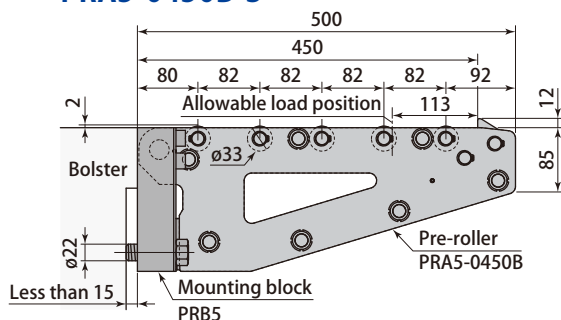
1 Die travel 400 ~ 1000 mm

Model	PRA5-0400B	PRA5-0450B	PRA5-0500B	PRA5-0560B	PRA5-0630B	PRA5-0710B	PRA5-0800B	PRA5-0850B	PRA5-0900B	PRA5-0950B	PRA5-1000B
Die travel	mm 400	450	500	560	630	710	800	850	900	950	1000
Pre-roller total length	mm 450	500	550	610	680	760	850	900	950	1000	1050
Weight	kg 10.4	11.4	12.2	13.6	15.1	16.9	18.1	19.2	20.1	21.5	22.5

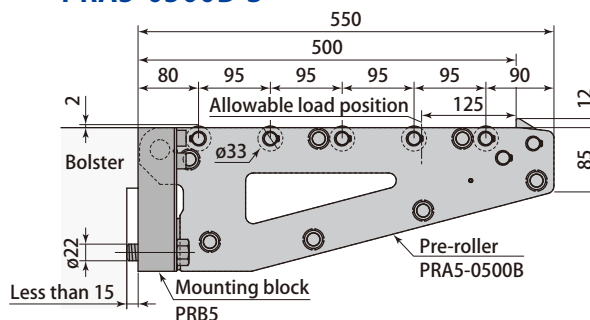
PRA5-0400B-S



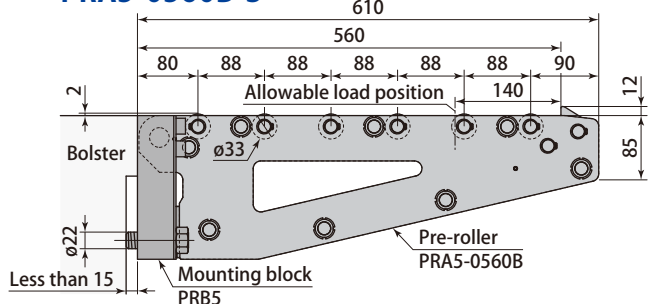
PRA5-0450B-S



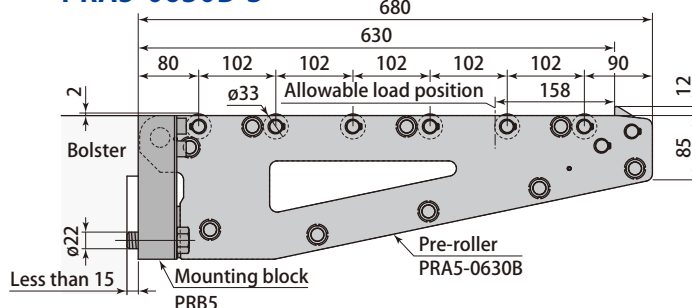
PRA5-0500B-S



PRA5-0560B-S

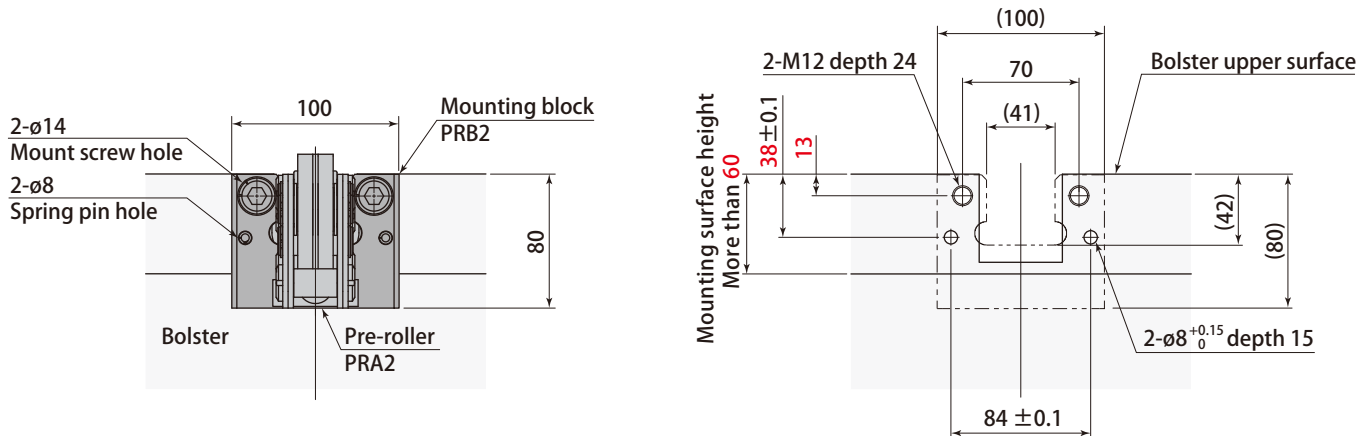


PRA5-0630B-S



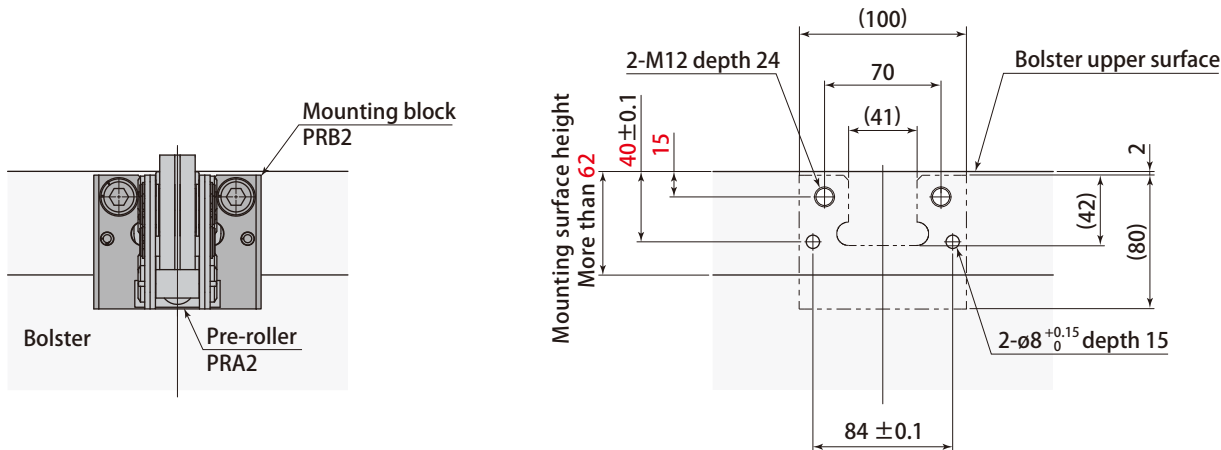
Dimensions, Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface.



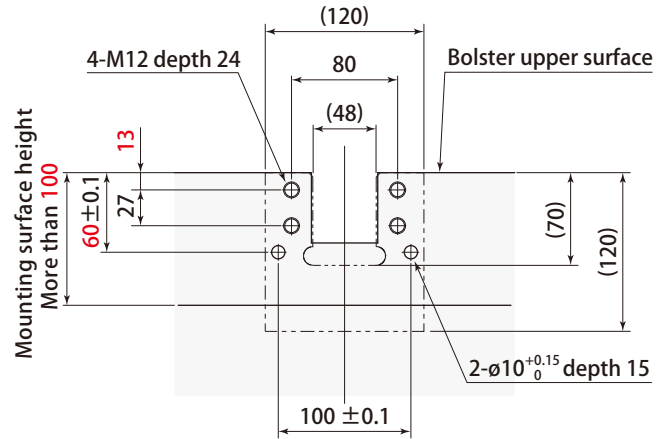
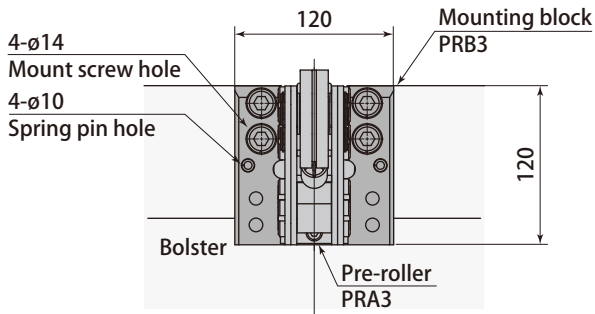
- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 8mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Model		PRB2
Weight	kg	1.5
Mount screw		2-M12 length 55
Spring washer		2-M12
Spring pin		2-ø8 length 45

● Mounting block for PRA2

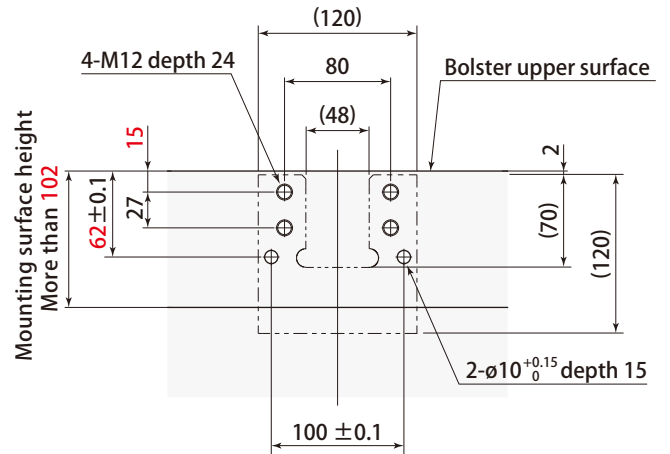
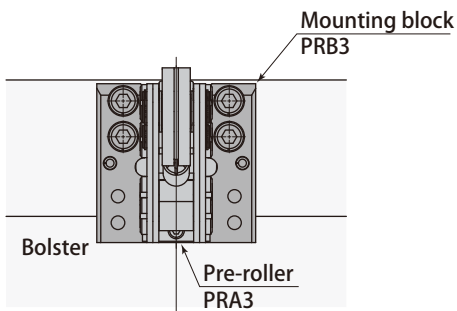
Dimensions, Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface.



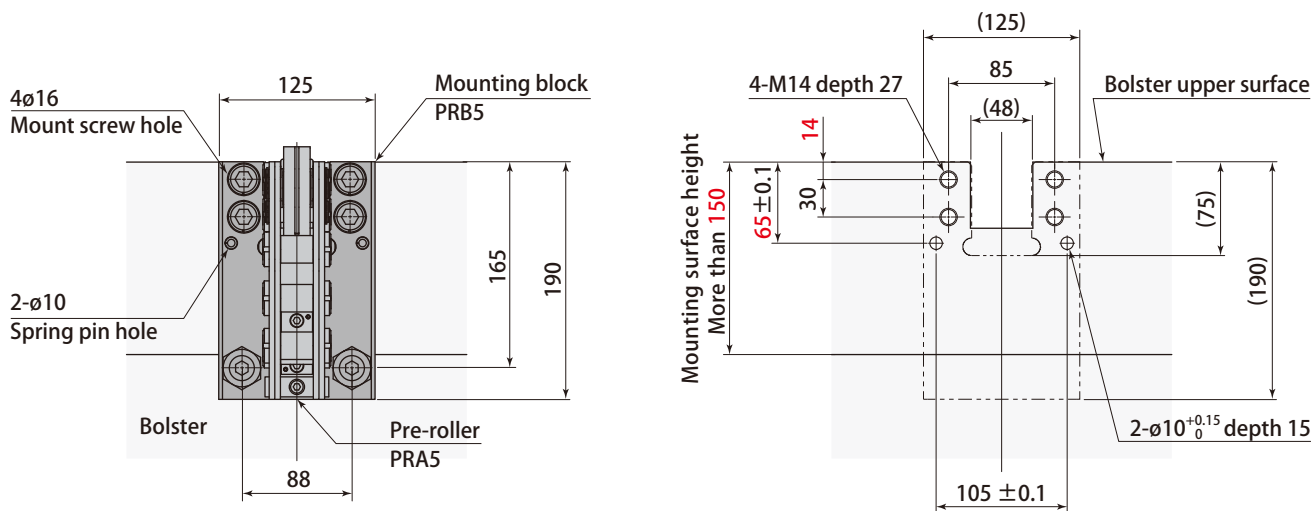
- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Model		PRB3
Weight	kg	3.6
Mount screw		4-M12 length 60
Spring washer		4-M12
Spring pin		2-ø10 length 56

● Mounting block for PRA3

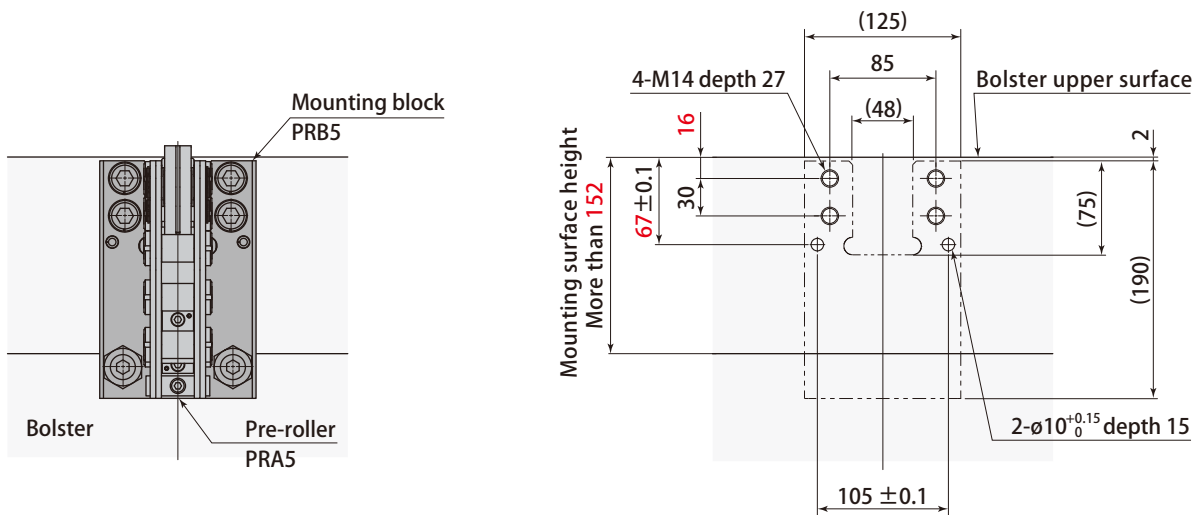
Dimensions, Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface.



- When machining the spring pin hole, keep with the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Model		PRB5
Weight	kg	7.5
Mount screw		4-M14 length 75
Spring washer		4-M14
Spring pin		2-Ø10 length 63

● Mounting block for PRA5

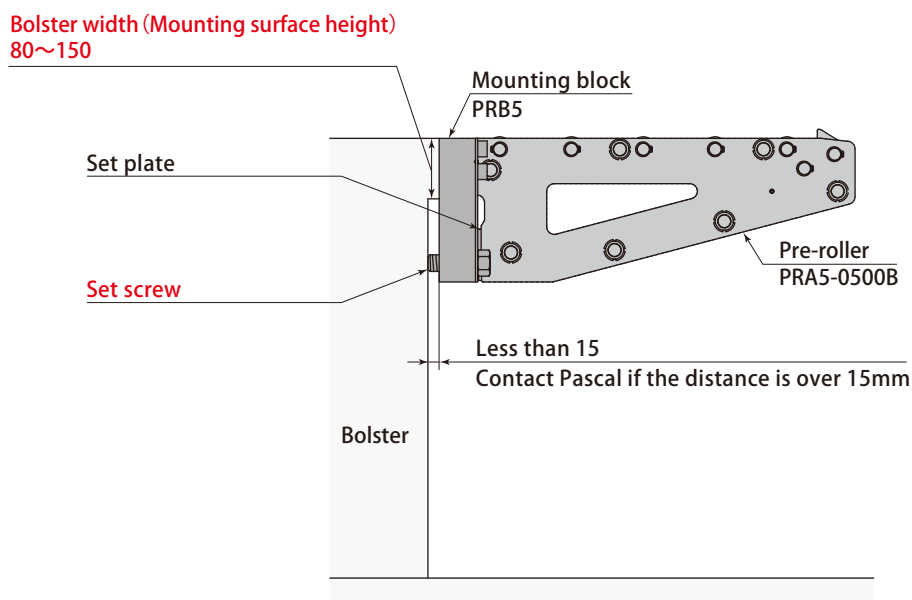
Set screw (only PRA5)

● Set screw presence

Model	PRA2	PRA3	PRA5
Set screw	Not included	Not included	Included

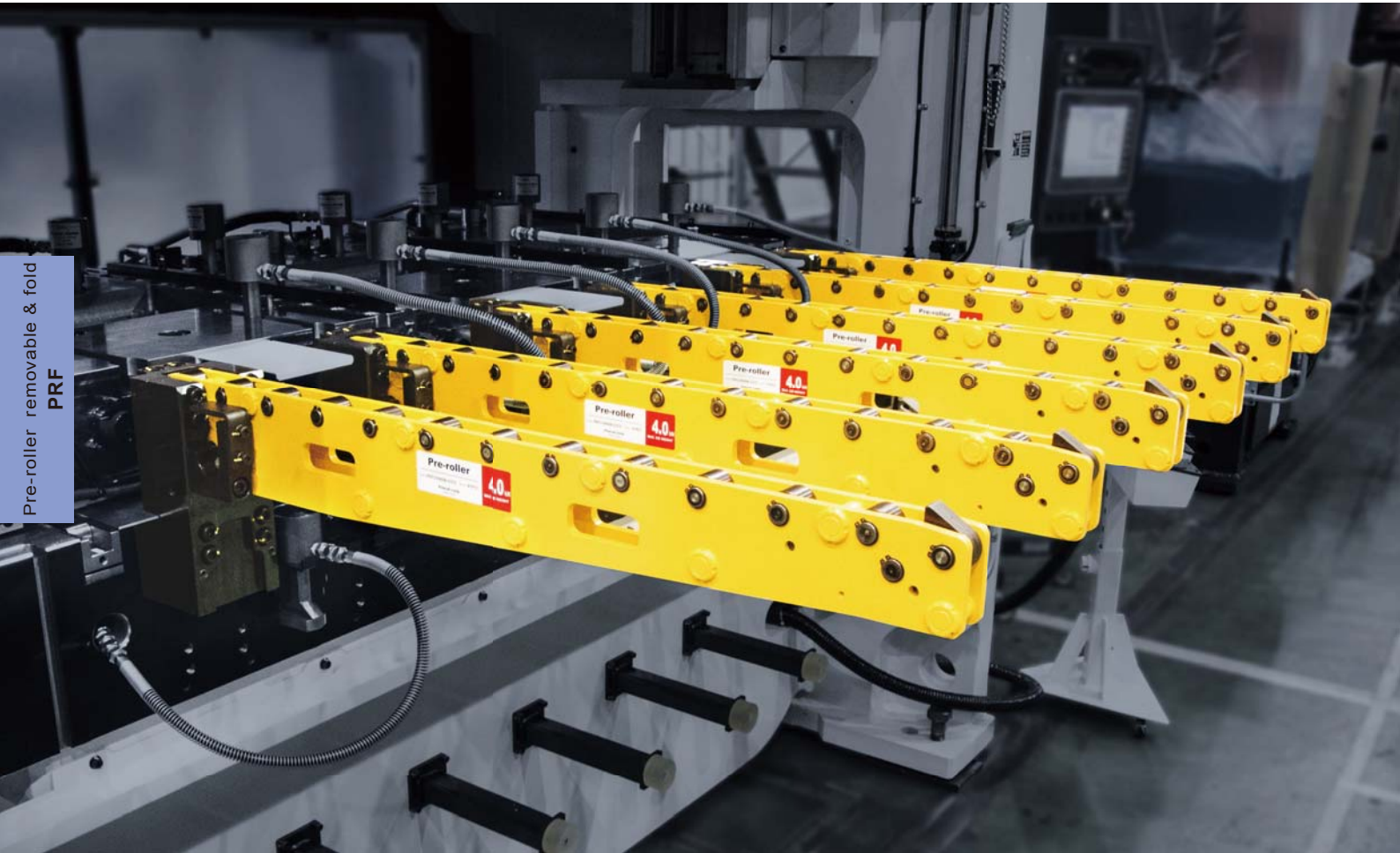
Model	PRA5	
Mounting surface height	80mm ~ 150mm	More than 150mm
Use of set screw	Required	Not required

- The set screw is used to prevent the inclination of pre-roller, in case that the mounting surface height is short.



* This drawing indicates PRA5-0500B-S.

It is the pre-roller installed with fold to removable type PRA.

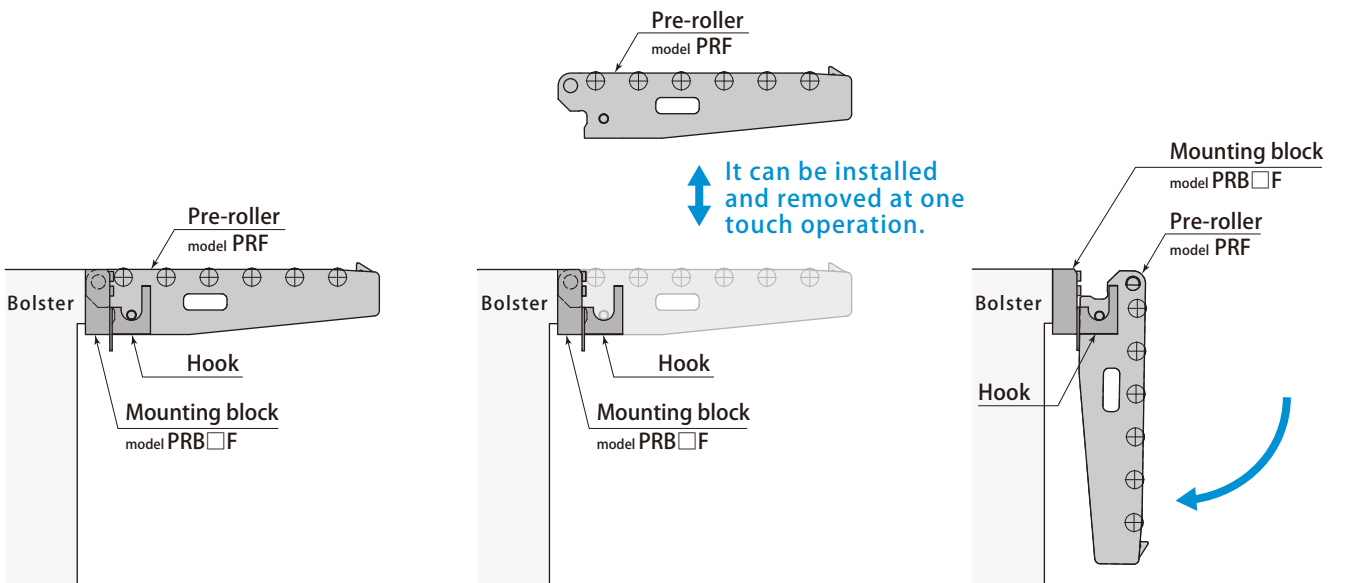


Pre-roller removable & fold PRF

At installation

At removal

At hanging



- Be noted that the specifications of Mounting block PRB and PRB□F (mounting block for PRA) are different.
- Pull down the pre-roller slowly at folding.

Model designation

Set model (Pre-roller + Mounting block)

PRF 2 - 0200 B - S

Size
PRF2 PRF3 PRF5

1 Die travel (mm)
* Indicated in 4 digits

For set model, S is added
at the end of model No.

Pre-roller model type

PRF 2 - 0200 B

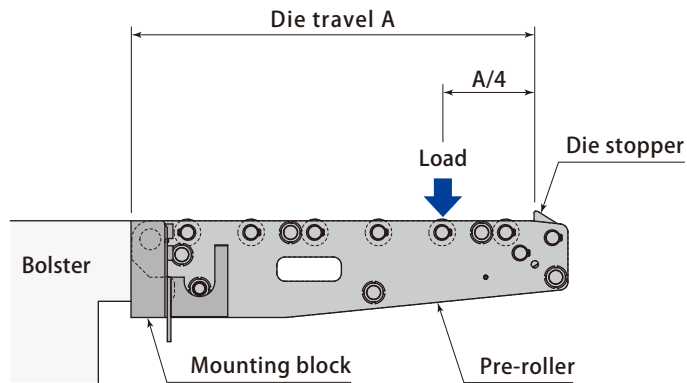
Size
PRF2 PRF3 PRF5

1 Die travel (mm) * Indicated in 4 digits

Mounting block model type

PRB 2 F

Size
PRB2F PRB3F PRB5F



1 Die travel 200 ~ 1000 mm

Die travel		mm	200	250	315	355	400	450	500	560	630	710	800	850	900	950	1000
PRF2	Allowable load *	kN	8	8	5	5	4	4	3	2.5	2.5	—	—	—	—	—	—
	Number of rollers		3	4	4	5	5	6	6	7	7	—	—	—	—	—	—
	Weight	kg	3.1	3.7	4.2	4.7	5.1	5.5	5.9	6.6	7.2	—	—	—	—	—	—
PRF3	Allowable load	kN	—	—	16	16	13	10	8	8	8	6	5	5	4	4	3
	Number of rollers		—	—	4	4	5	5	6	6	7	7	7	8	8	8	9
	Weight	kg	—	—	7.2	8	8.8	9.2	10.1	11	12.1	13.5	14.9	15.9	16.7	17.5	18.4
PRF5	Allowable load	kN	—	—	—	—	25	20	16	16	13	13	10	10	8	8	8
	Number of rollers		—	—	—	—	4	5	5	6	6	7	7	8	8	9	9
	Weight	kg	—	—	—	—	10.4	11.4	12.2	13.6	15.1	16.9	18.1	19.2	20.1	21.5	22.5

● Die loading speed on Pre-roller : Less than 50mm/s ● Die transfer speed : Less than 100mm/s

● Weight does not include mounting block.

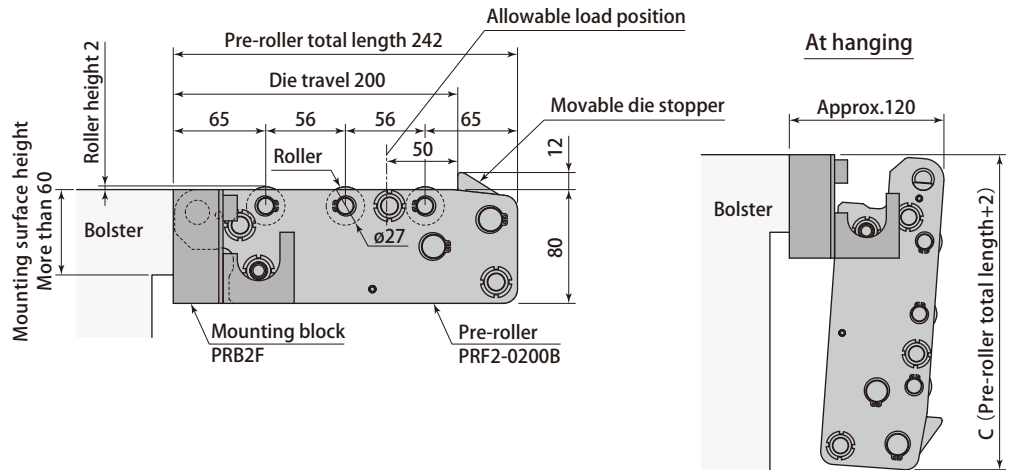
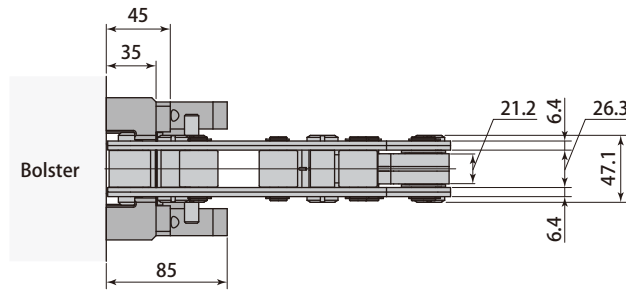
* Allowable load is a static load measured at the position of 1/4 of the die travel from the stopper. Select Pre-roller where allowable load (kN) multiplied by the quantity is greater than the die weight. SI conversion : Die weight (kN)=Die weight (kgf)×9.8÷1000

Dimensions

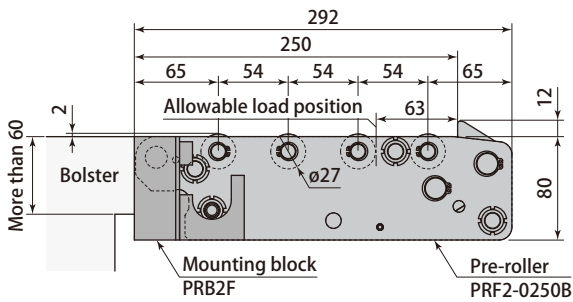
PRF 2 - **0200** B - S

- 1 Die travel (mm)
- * Indicated in 4 digits

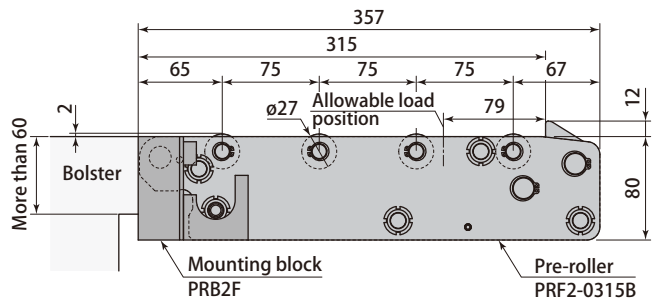
PRF2-0200B-S



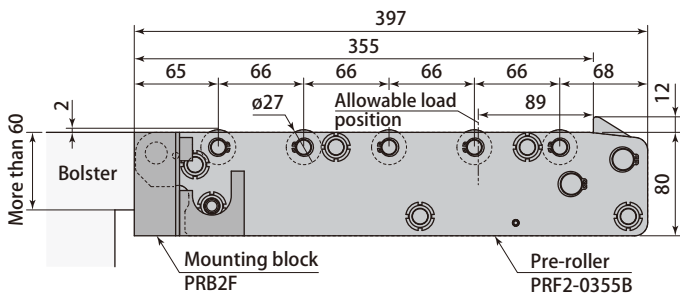
PRF2-0250B-S



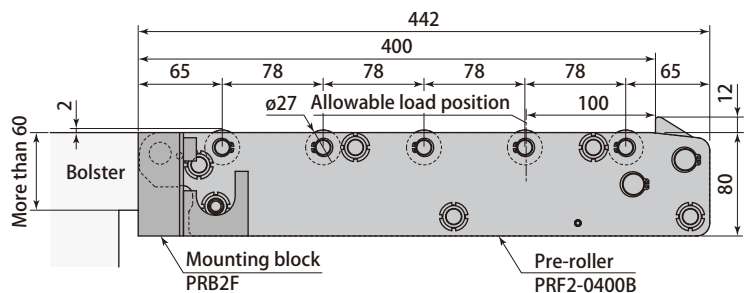
PRF2-0315B-S



PRF2-0355B-S



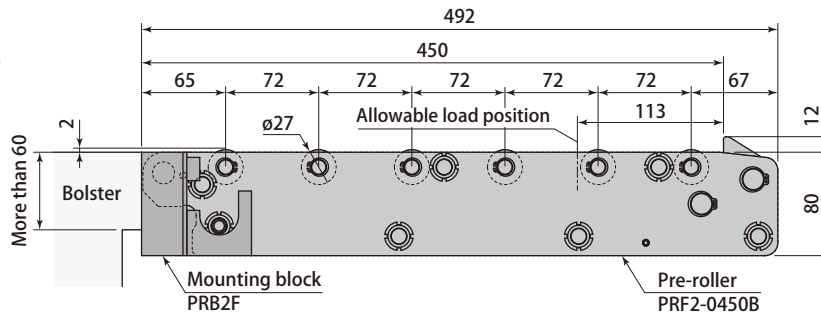
PRF2-0400B-S



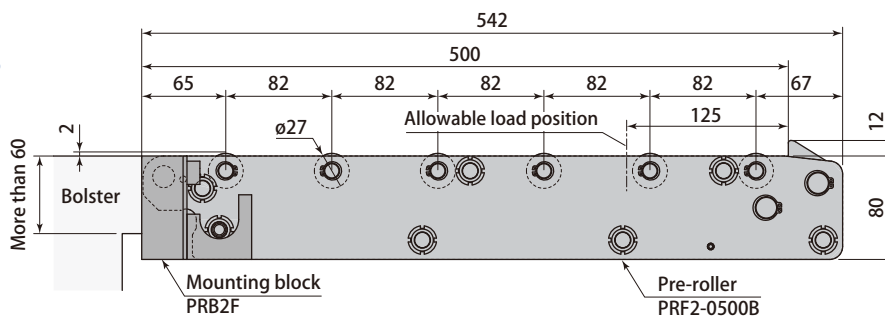
1 Die travel 200 ~ 630 mm

Model	PRF2-0200B	PRF2-0250B	PRF2-0315B	PRF2-0355B	PRF2-0400B	PRF2-0450B	PRF2-0500B	PRF2-0560B	PRF2-0630B
Die travel	mm	200	250	315	355	400	450	500	630
Pre-roller total length	mm	242	292	357	397	442	492	542	672
C	mm	244	294	359	399	444	494	544	674
Weight	kg	3.1	3.7	4.2	4.7	5.1	5.5	5.9	7.2

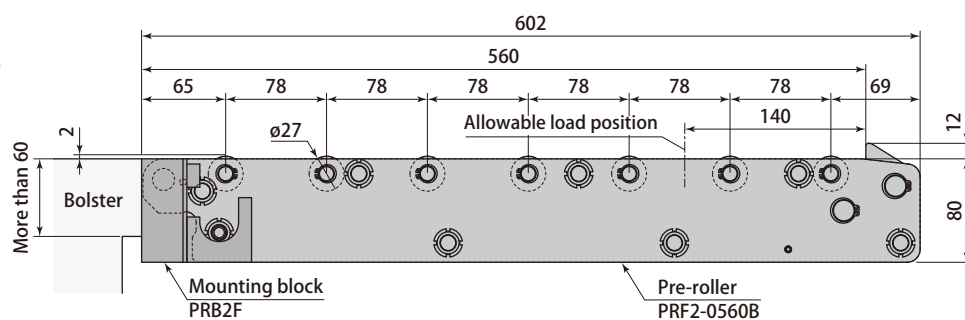
PRF2-0450B-S



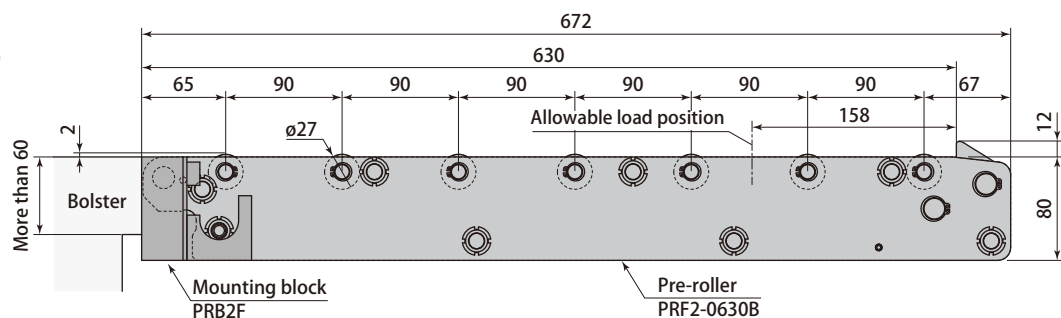
PRF2-0500B-S



PRF2-0560B-S



PRF2-0630B-S



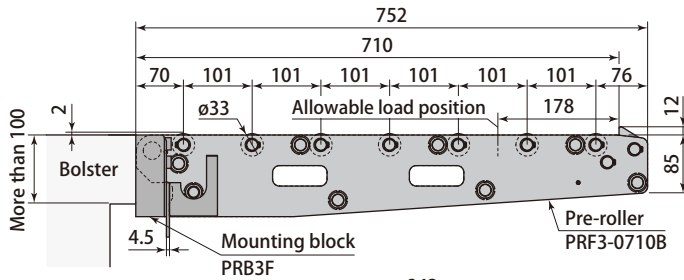
PRF3

Pre-roller Removable & fold type PRF

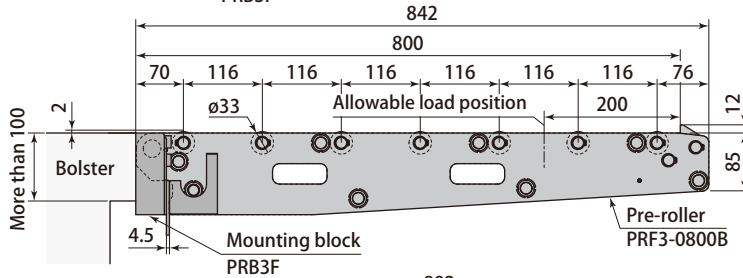
1 Die travel 315 ~ 1000 mm

Model	PRF3-0315B	PRF3-0355B	PRF3-0400B	PRF3-0450B	PRF3-0500B	PRF3-0560B	PRF3-0630B	PRF3-0710B	PRF3-0800B	PRF3-0850B	PRF3-0900B	PRF3-0950B	PRF3-1000B
Die travel mm	315	355	400	450	500	560	630	710	800	850	900	950	1000
Pre-roller total length mm	357	397	442	492	542	602	672	752	842	892	942	992	1042
C mm	363	403	448	498	548	608	678	758	848	898	948	998	1048
Weight kg	7.2	8	8.8	9.2	10.1	11	12.1	13.5	14.9	15.9	16.7	17.5	18.4

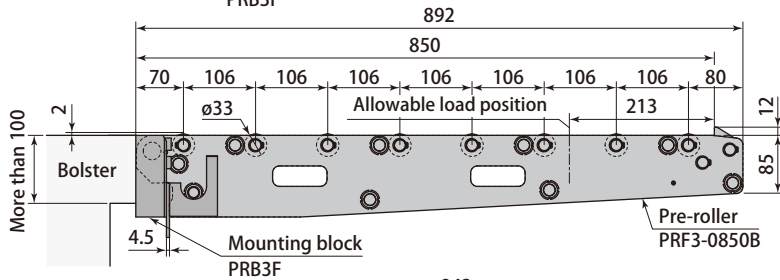
PRF3-0710B-S



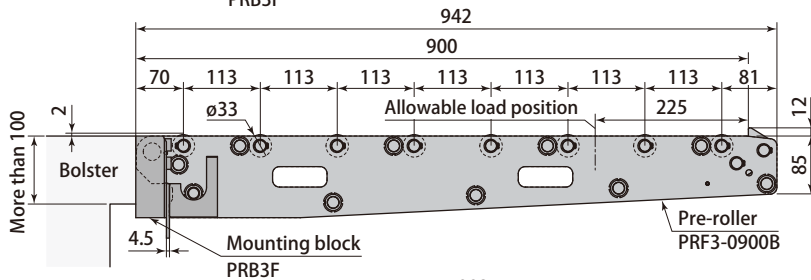
PRF3-0800B-S



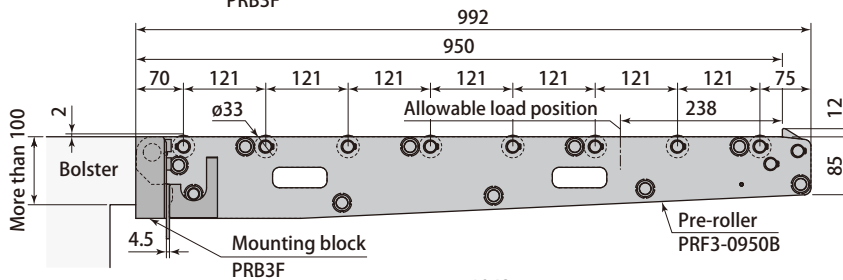
PRF3-0850B-S



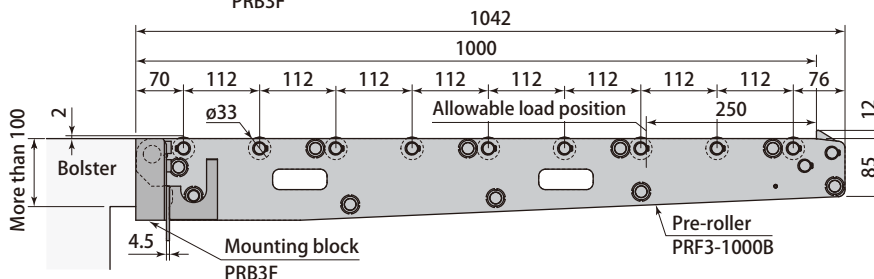
PRF3-0900B-S



PRF3-0950B-S



PRF3-1000B-S



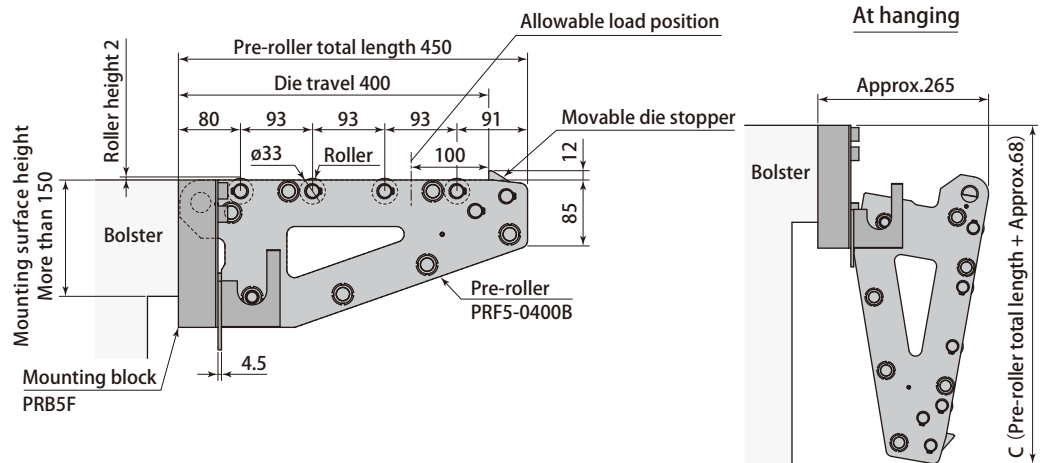
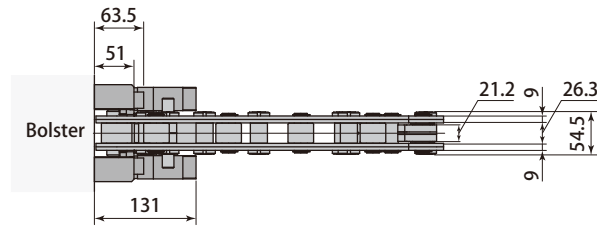
Pre-roller removable & fold PRF

Dimensions

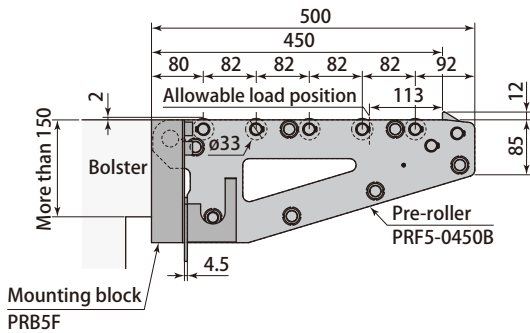
PRF 5 - **0400** B - S

- 1 Die travel (mm)
- * Indicated in 4 digits

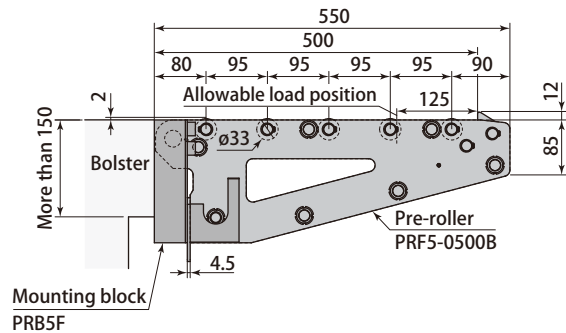
PRF5-0400B-S



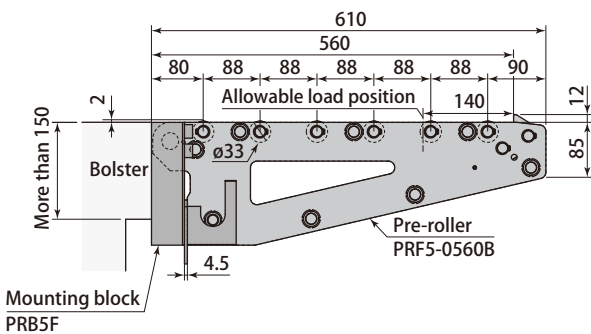
PRF5-0450B-S



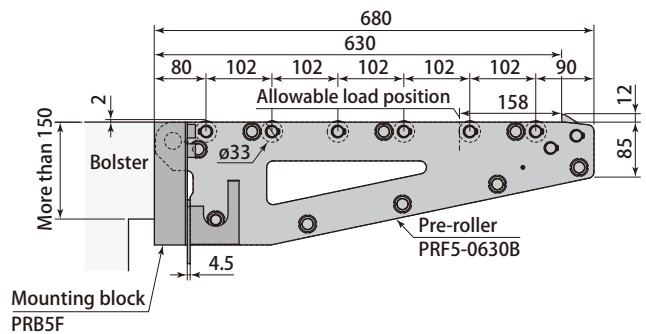
PRF5-0500B-S



PRF5-0560B-S



PRF5-0630B-S



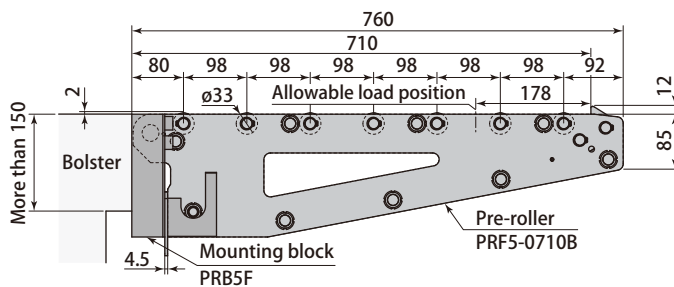
PRF5

Pre-roller Removable & fold type PRF

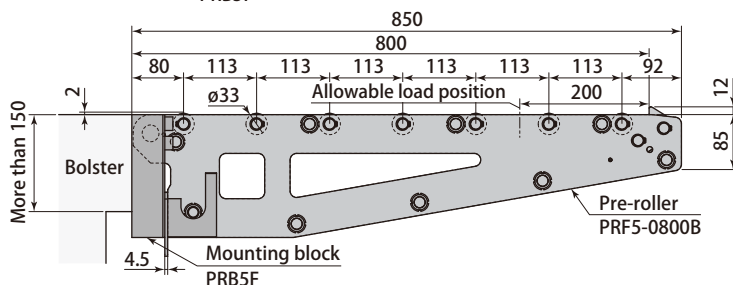
1 Die travel 400 ~ 1000 mm

Model	PRF5-0400B	PRF5-0450B	PRF5-0500B	PRF5-0560B	PRF5-0630B	PRF5-0710B	PRF5-0800B	PRF5-0850B	PRF5-0900B	PRF5-0950B	PRF5-1000B
Die travel mm	400	450	500	560	630	710	800	850	900	950	1000
Pre-roller total length mm	450	500	550	610	680	760	850	900	950	1000	1050
C (Approximately) mm	518	568	618	678	748	828	918	968	1018	1068	1118
Weight kg	10.4	11.4	12.2	13.6	15.1	16.9	18.1	19.2	20.1	21.5	22.5

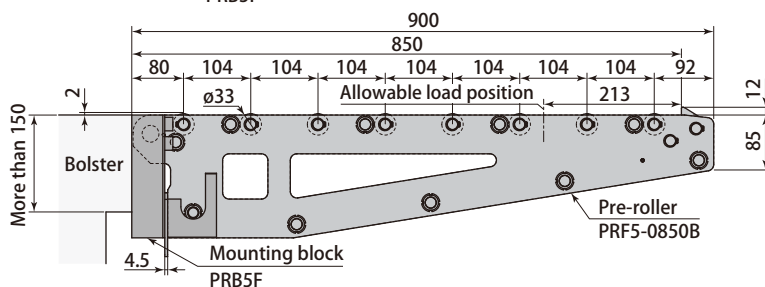
PRF5-0710B-S



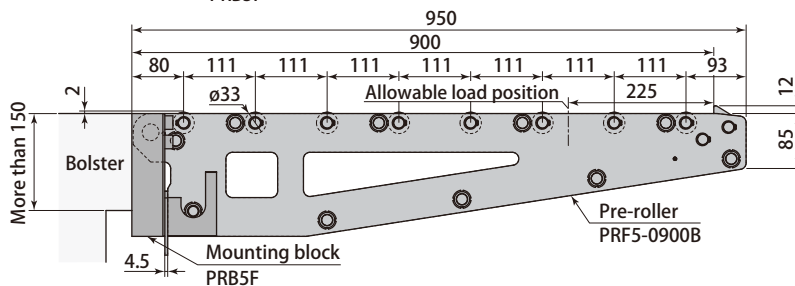
PRF5-0800B-S



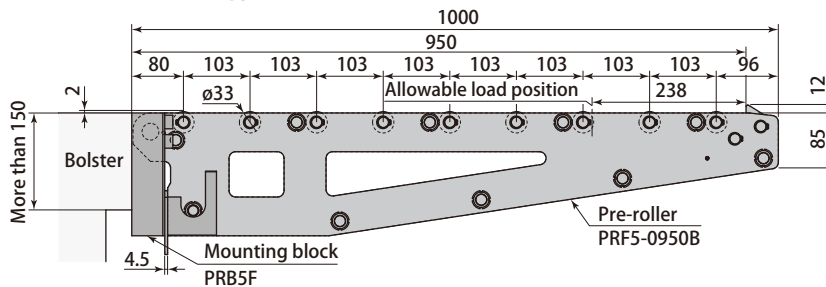
PRF5-0850B-S



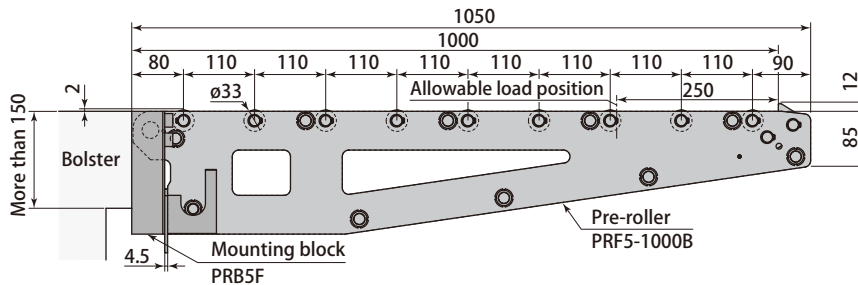
PRF5-0900B-S



PRF5-0950B-S



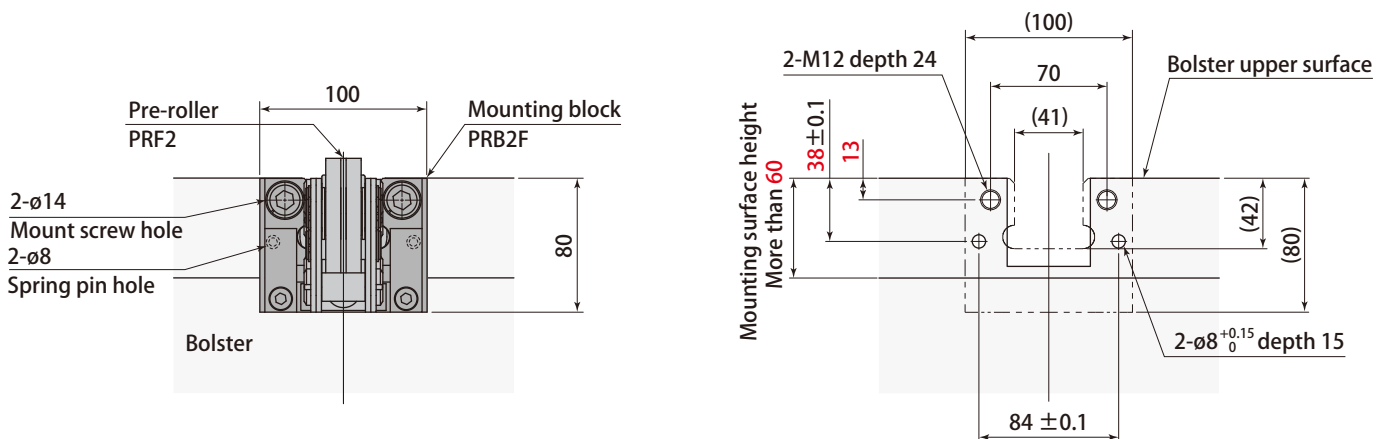
PRF5-1000B-S



Pre-roller removable & fold PRF

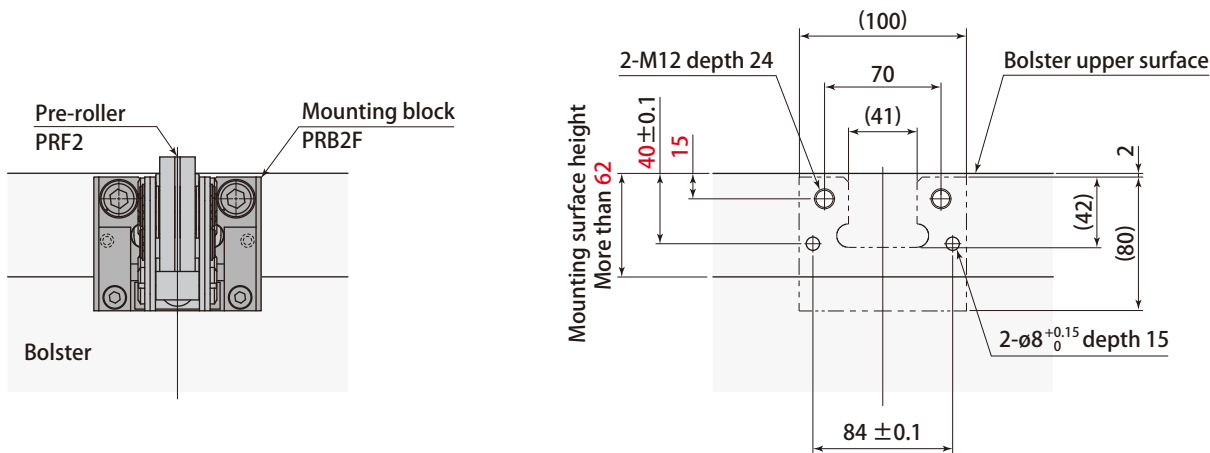
Dimensions, Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface



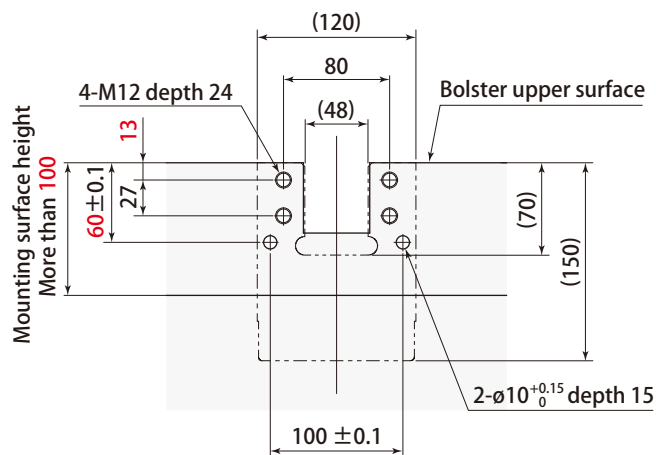
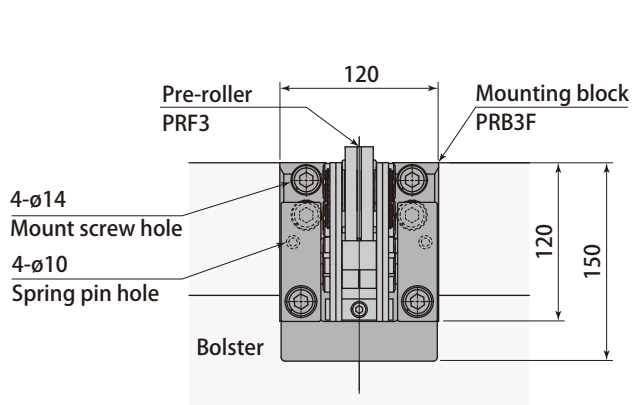
- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 8mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Model	PRB2F
Weight	kg 2.1
Mount screw	2-M12 length 55
Spring washer	2-M12
Spring pin	2-ø8 length 45

● Mounting block for PRF2

Dimensions, Mounting details

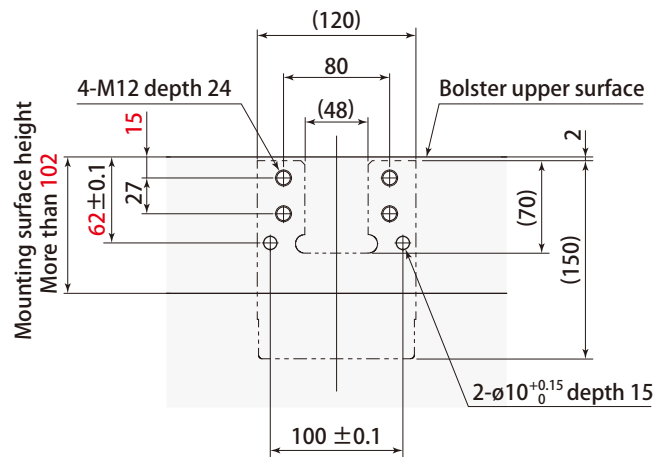
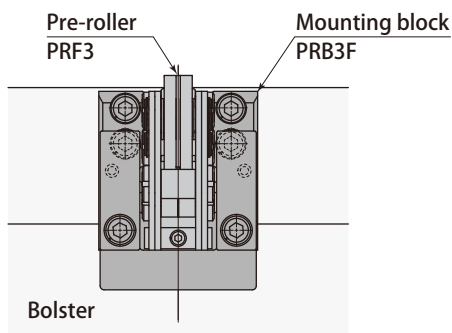
● When using the Die-lifter



Pre-roller removable & fold
PRF Mounting block

● When not using the Die-lifter

When aligning the level between roller top and bolster surface



- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

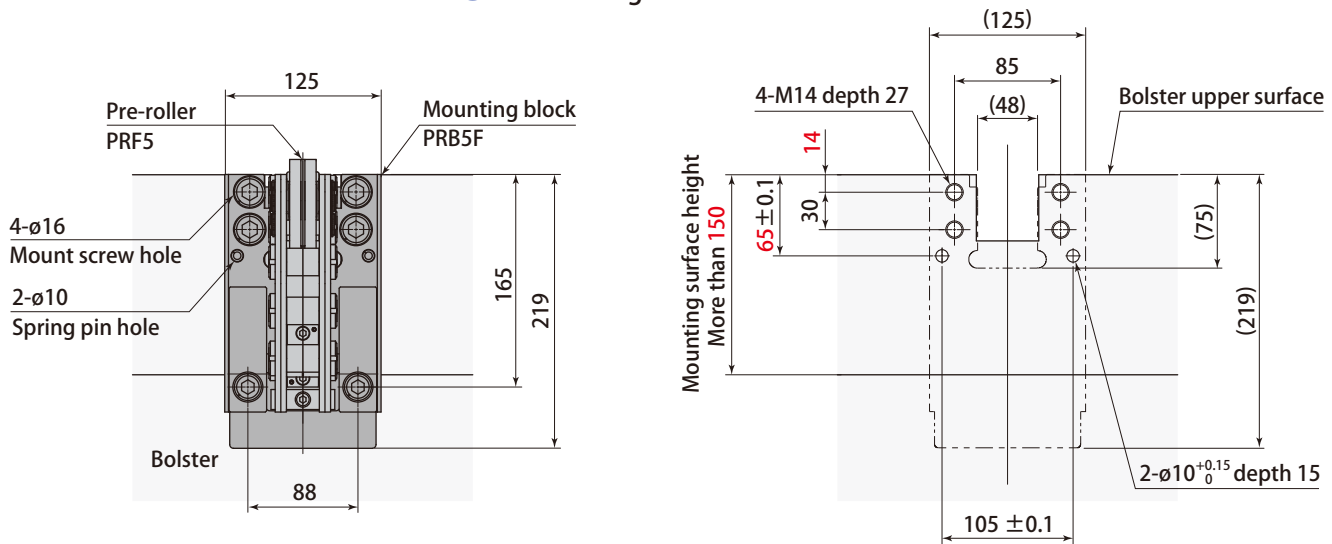
Model	PRB3F
Weight	kg 5.8
Mount screw	4-M12 length 60
Spring washer	4-M12
Spring pin	2-ø10 length 56

● Mounting block for PRF3

Dimensions, Mounting details

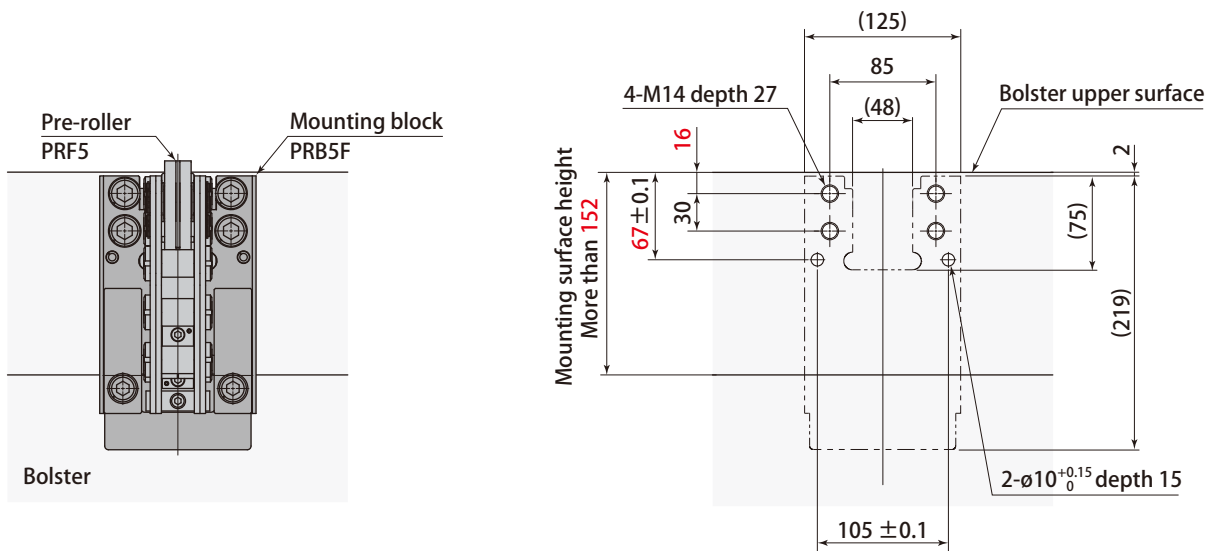
Pre-roller removable & fold
PRF Mounting block

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface



- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Model	PRB5F
Weight	kg 10
Mount screw	4-M14 length 75
Spring washer	4-M14
Spring pin	2-ø10 length 63

● Mounting block for PRF5

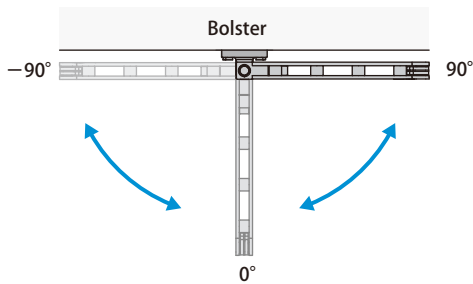
It is a horizontally fold type of pre-roller which can be folded horizontally.



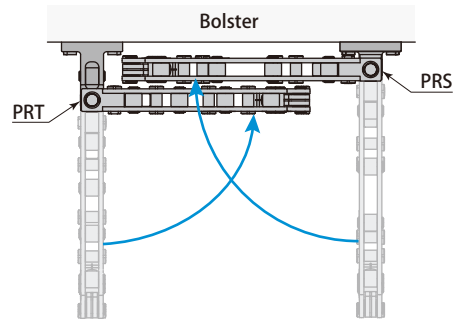
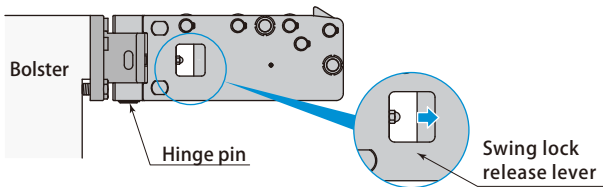
Pre-roller horizontally fold PRS/T

Folding method

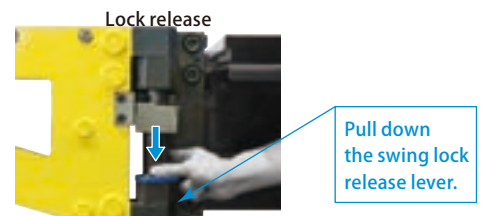
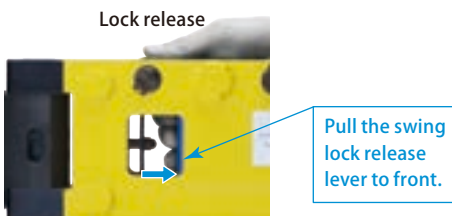
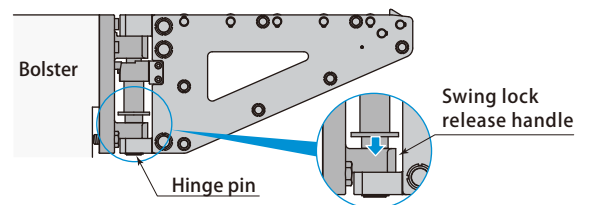
Pre-roller will lock at 0°, 90°, and -90° positions.



PRS3 PRT3 PRS5 PRT5



PRS8 PRT8



- Hinge pins with grease nipples are available as an option to prevent fretting corrosion. Contact Pascal for detail when installing it on high-speed presses.

Model designation

PRS Pre-roller model type

PRS **3** - **0630** B

Size ●
PRS3 PRS5 PRS8

1 Die travel (mm) * Indicated in 4 digits

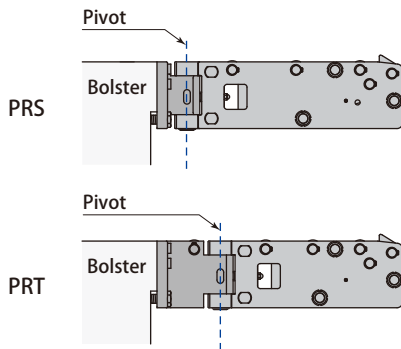
PRT Pre-roller model type

PRT **3** - **0630** B

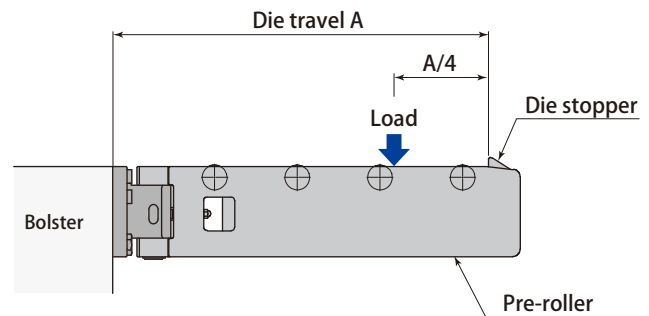
Size ●
PRT3 PRT5 PRT8

1 Die travel (mm) * Indicated in 4 digits

Difference of PRS/PRT



Pivot position is different.



Pre-roller horizontally fold PRS/T

1 Die travel **315** ~ **1000** mm

Die travel		mm	315	355	400	450	500	560	630	710	800	850	900	950	1000
PRS3	Allowable load *	kN	16	16	13	13	10	8	8	6	—	—	—	—	—
	Number of rollers		3	3	3	4	4	5	5	6	—	—	—	—	—
	Weight	kg	11.3	12.1	12.9	14	15	16.2	17.4	19.2	—	—	—	—	—
PRT3	Allowable load	kN	16	16	13	13	10	8	8	6	—	—	—	—	—
	Number of rollers		3	4	4	4	5	6	6	7	—	—	—	—	—
	Weight	kg	12.6	13.5	14.4	15.4	16.4	17.7	18.9	20.6	—	—	—	—	—
PRS5	Allowable load	kN	—	—	—	—	16	16	16	13	10	10	8	8	6
	Number of rollers		—	—	—	—	5	5	5	6	7	7	7	8	8
	Weight	kg	—	—	—	—	24.3	26	28	30.4	33.1	34.4	35.8	37.4	38.8
PRT5	Allowable load	kN	—	—	—	—	16	16	16	13	10	10	8	8	6
	Number of rollers		—	—	—	—	5	5	5	6	7	7	7	8	8
	Weight	kg	—	—	—	—	27.3	28.9	30.8	33.3	36.1	37.5	38.9	40.4	41.5
PRS8	Allowable load	kN	—	—	—	—	—	—	25	20	16	16	16	13	13
	Number of rollers		—	—	—	—	—	—	5	6	6	7	7	8	8
	Weight	kg	—	—	—	—	—	—	44.8	47.3	49.9	51.5	52.9	54.6	56.1
PRT8	Allowable load	kN	—	—	—	—	—	—	25	20	16	16	16	13	13
	Number of rollers		—	—	—	—	—	—	5	6	7	7	8	8	8
	Weight	kg	—	—	—	—	—	—	51.1	53.5	56.5	57.9	59.5	60.9	62.3

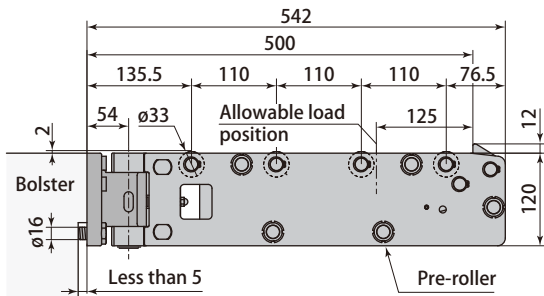
● Die loading speed on Pre-roller : Less than 50mm/s ● Die transfer speed : Less than 100mm/s

* Allowable load is a static load measured at the position of 1/4 of the Die travel from the stopper. Select Pre-roller where allowable load (kN) multiplied by the quantity is greater than the die weight. SI conversion : Die weight (kN)=Die weight (kgf)×9.8÷1000

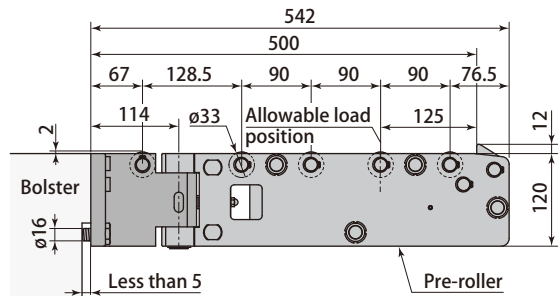
1 Die travel 315 ~ 710 mm

Model PRS3	PRS3-0315B	PRS3-0355B	PRS3-0400B	PRS3-0450B	PRS3-0500B	PRS3-0560B	PRS3-0630B	PRS3-0710B	
Model PRT3	PRT3-0315B	PRT3-0355B	PRT3-0400B	PRT3-0450B	PRT3-0500B	PRT3-0560B	PRT3-0630B	PRT3-0710B	
Die travel	mm	315	355	400	450	500	560	630	710
Pre-roller total length	mm	357	397	442	492	542	602	672	752
PRS3 weight	kg	11.3	12.1	12.9	14	15	16.2	17.4	19.2
PRT3 weight	kg	12.6	13.5	14.4	15.4	16.4	17.7	18.9	20.6

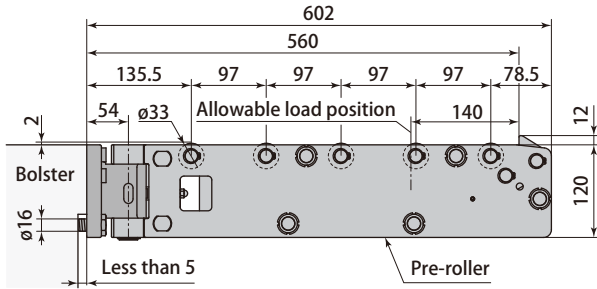
PRS3-0500B



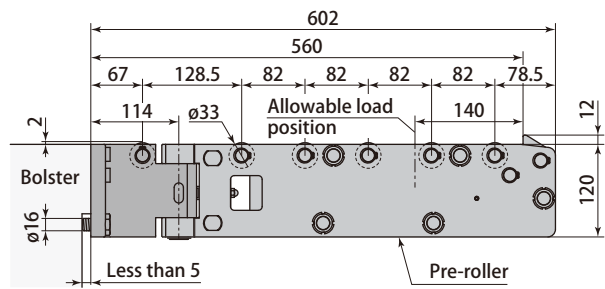
PRT3-0500B



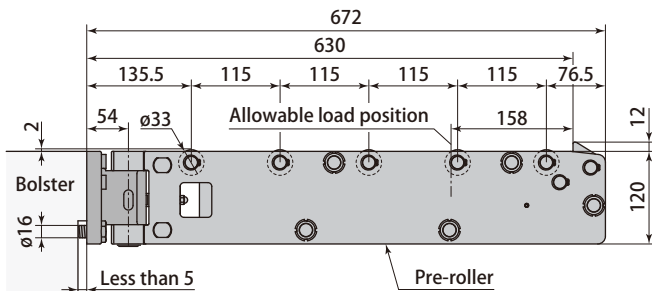
PRS3-0560B



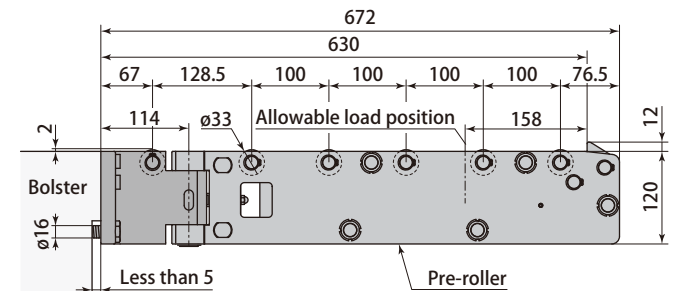
PRT3-0560B



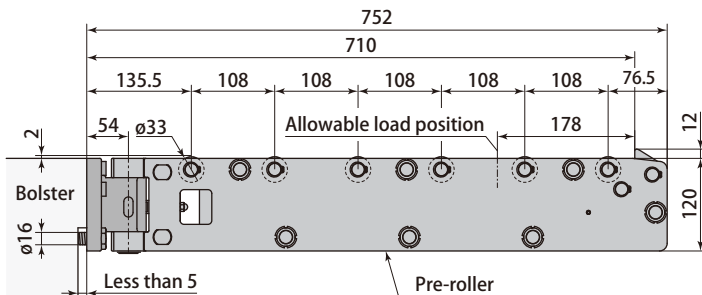
PRS3-0630B



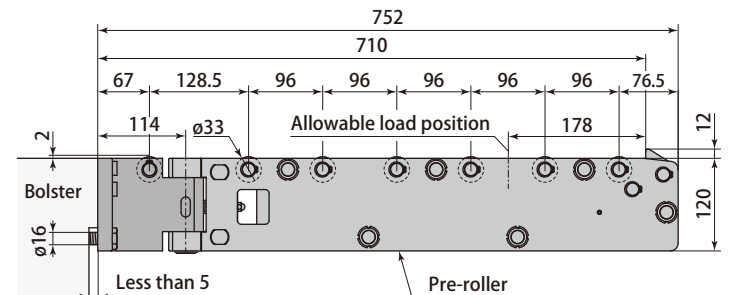
PRT3-0630B



PRS3-0710B



PRT3-0710B



Pre-roller horizontally fold PRS/T

External dimension

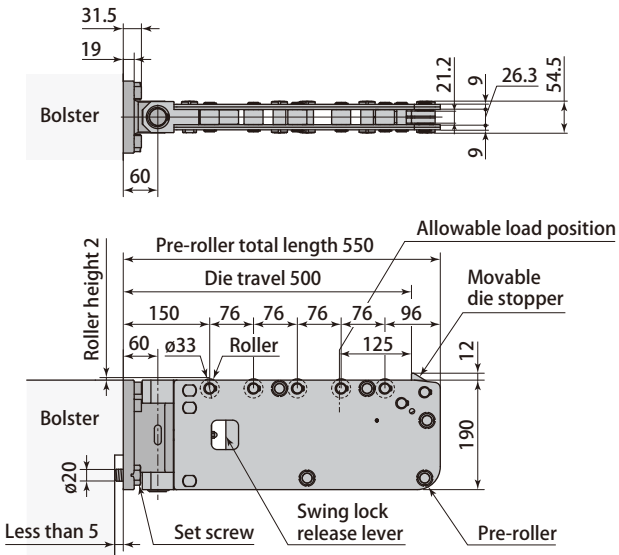
PRS 5 - 0500 B

1 Die travel (mm)
* Indicated in 4 digits

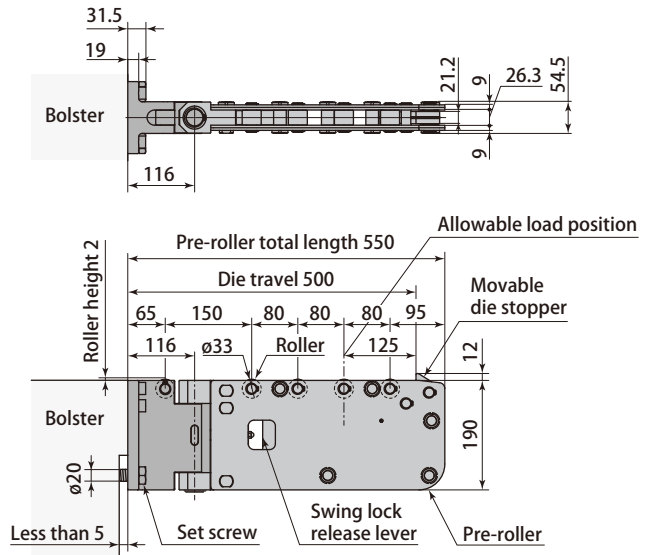
PRT 5 - 0500 B

1 Die travel (mm)
* Indicated in 4 digits

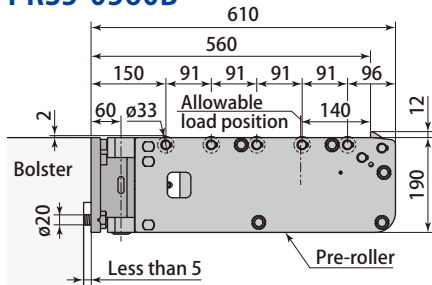
PRS5-0500B



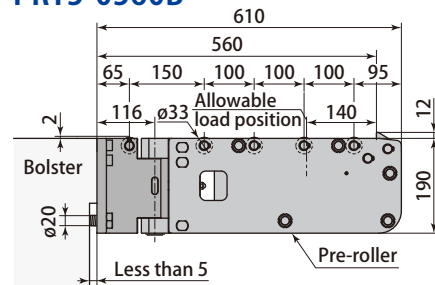
PRT5-0500B



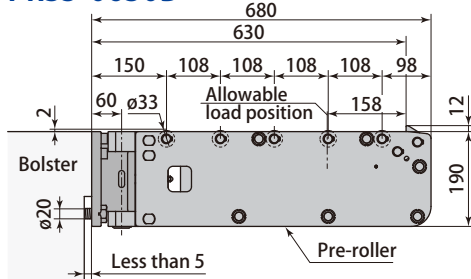
PRS5-0560B



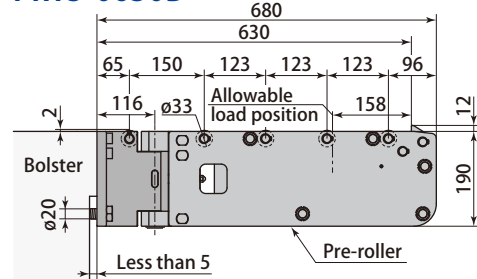
PRT5-0560B



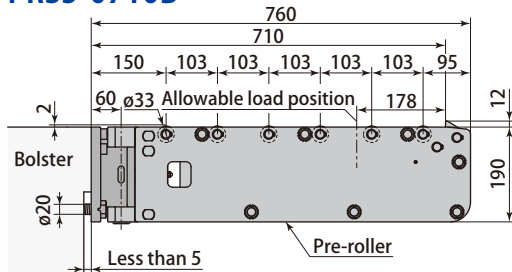
PRS5-0630B



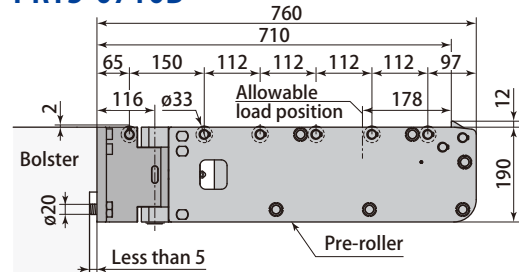
PRT5-0630B



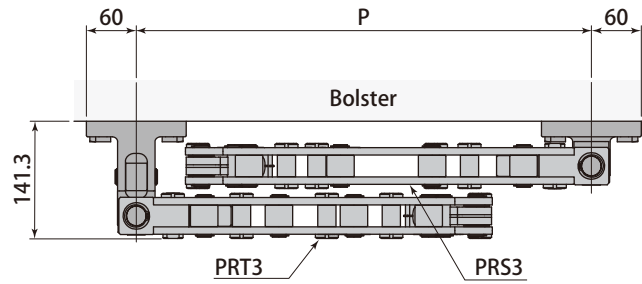
PRS5-0710B



PRT5-0710B



Pre-roller horizontally fold
PRS/T



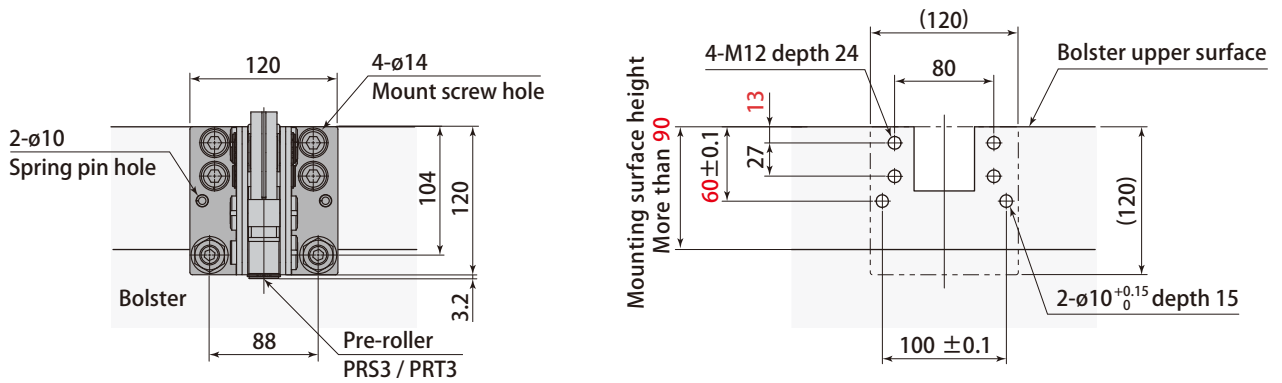
Minimum mounting pitch

mm

Model	PRS3-0315B	PRS3-0355B	PRS3-0400B	PRS3-0450B	PRS3-0500B	PRS3-0560B	PRS3-0630B	PRS3-0710B
	PRT3-0315B	PRT3-0355B	PRT3-0400B	PRT3-0450B	PRT3-0500B	PRT3-0560B	PRT3-0630B	PRT3-0710B
Minimum mounting pitch P	362	402	447	497	547	607	677	757

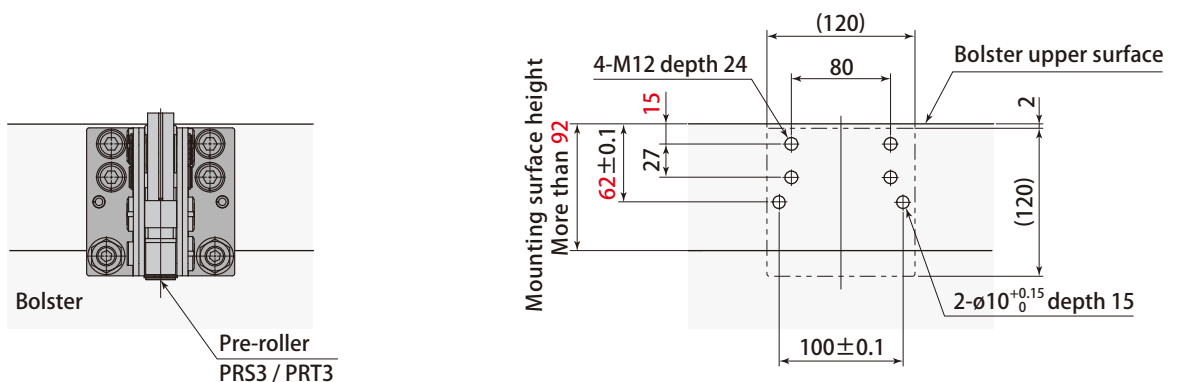
Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface

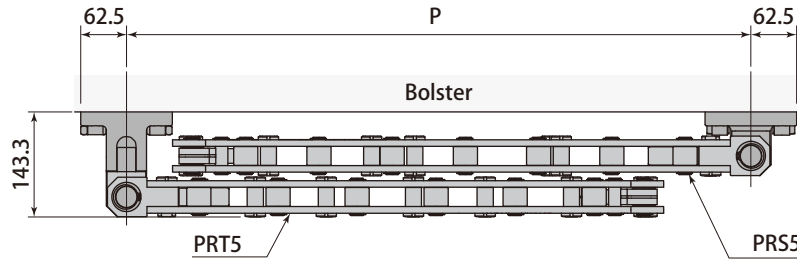


- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Included

Pre-roller model type	PRS3 / PRT3
Mount screw	4-M12 length 35
Spring washer	4-M12
Spring pin	2-C10 length 32

Pre-roller horizontally fold
PRS/T Mounting details



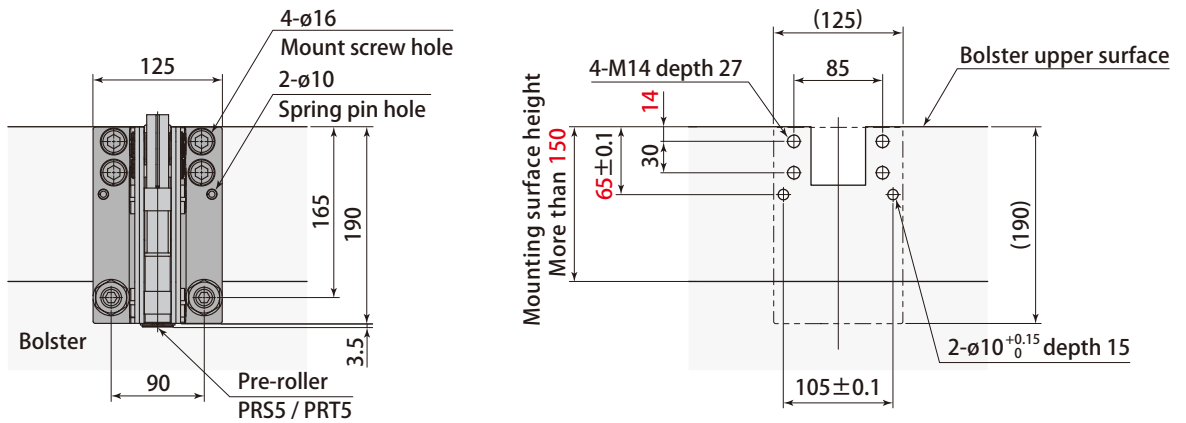
Minimum mounting pitch

mm

Model	PRS5-0500B	PRS5-0560B	PRS5-0630B	PRS5-0710B	PRS5-0800B	PRS5-0850B	PRS5-0900B	PRS5-0950B	PRS5-1000B
	PRT5-0500B	PRT5-0560B	PRT5-0630B	PRT5-0710B	PRT5-0800B	PRT5-0850B	PRT5-0900B	PRT5-0950B	PRT5-1000B
Minimum mounting pitch P	553	613	683	763	853	903	953	1003	1053

Mounting details

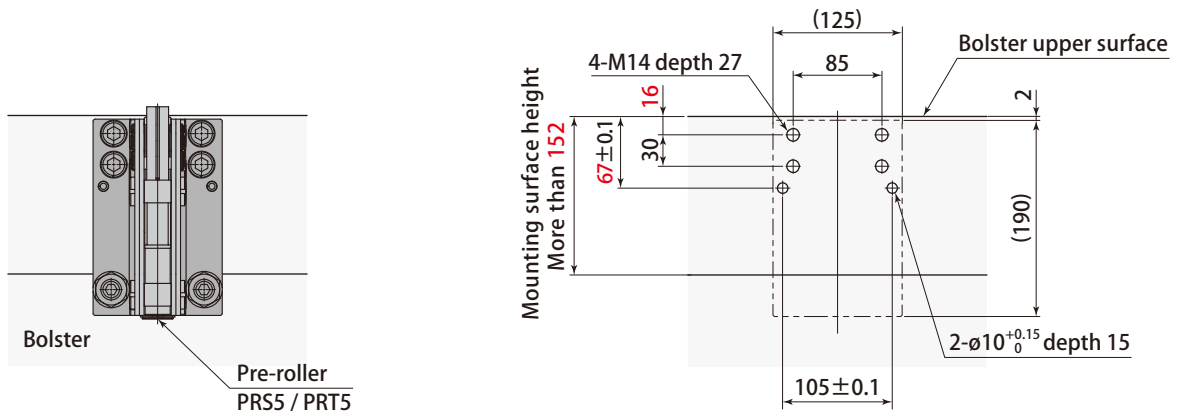
● When using the Die-lifter



Pre-roller horizontally fold
PRS/T Mounting details

● When not using the Die-lifter

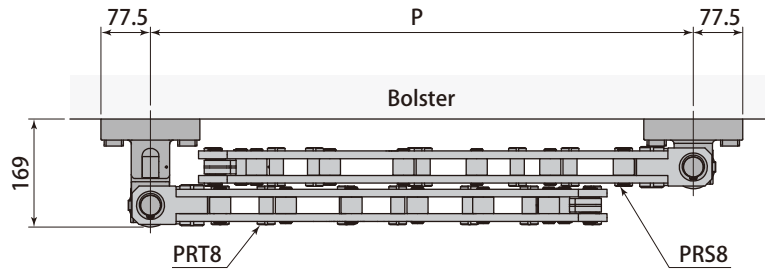
When aligning the level between roller top and bolster surface



- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Included

Pre-roller model type	PRS5 / PRT5
Mount screw	4-M14 length 40
Spring washer	4-M14
Spring pin	2-C10 length 32

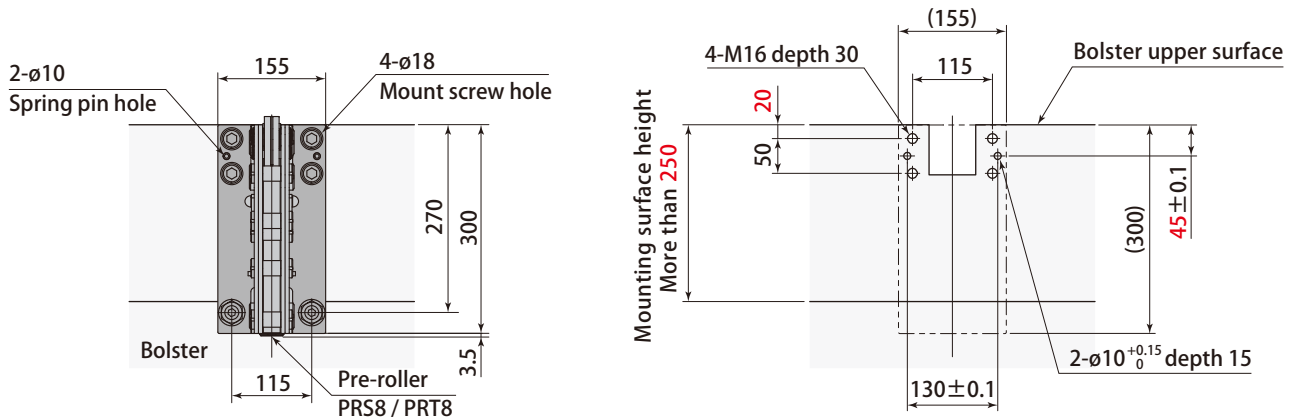


Minimum mounting pitch

Model	PRS8-0630B	PRS8-0710B	PRS8-0800B	PRS8-0850B	PRS8-0900B	PRS8-0950B	PRS8-1000B
	PRT8-0630B	PRT8-0710B	PRT8-0800B	PRT8-0850B	PRT8-0900B	PRT8-0950B	PRT8-1000B
Minimum mounting pitch P	680	760	850	900	950	1000	1050

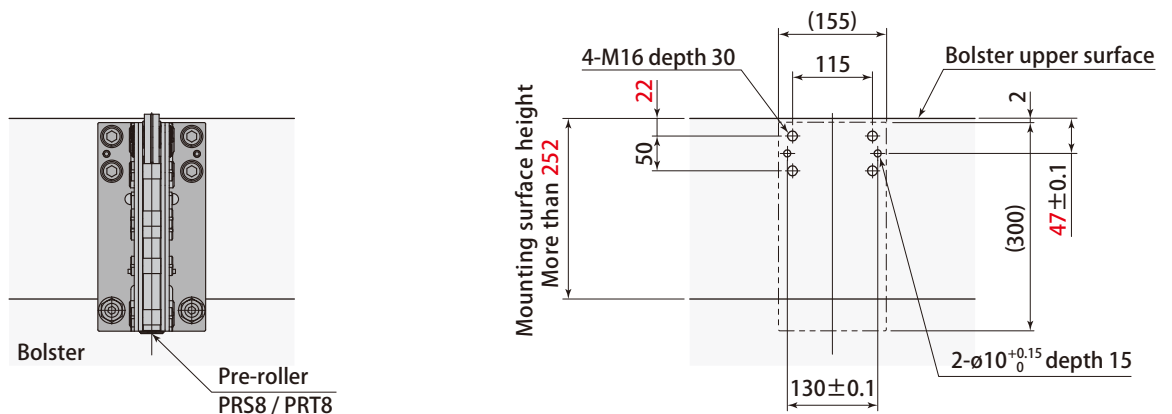
Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface



- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Included

Pre-roller model type	PRS8 / PRT8
Mount screw	4-M16 length 55
Spring washer	4-M16
Spring pin	2-C10 length 45

Pre-roller horizontally fold PRS/T Mounting details

Set screw (PRS 3 / PRT3 , PRS 5 / PRT 5 , PRS 8 / PRT 8)

The set screw is included to all the models for PRS/T.

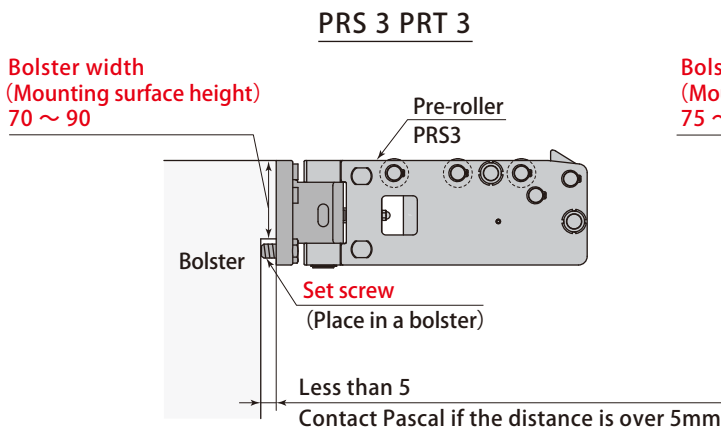
Model	PRS 3 / PRT3	
Bolster width (Mounting surface height)	70mm ~ 90mm	More than 90mm
Set screw	Required	Not required

Model	PRS 5 / PRT 5	
Bolster width (Mounting surface height)	75mm ~ 150mm	More than 150mm
Set screw	Required	Not required

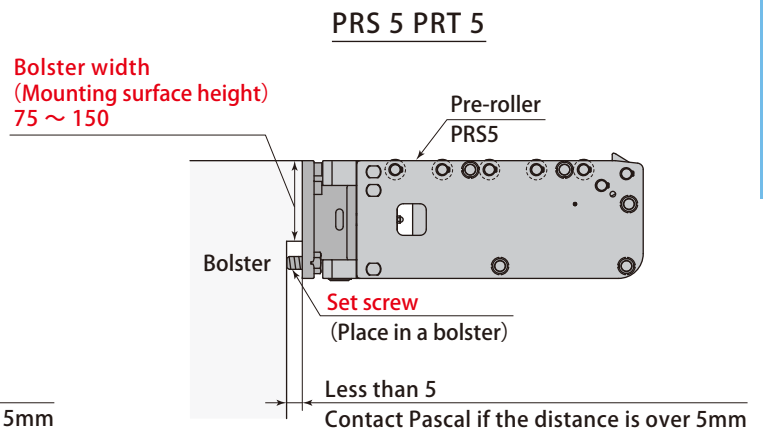
Model	PRS 8 / PRT 8	
Bolster width (Mounting surface height)	85mm ~ 250mm	More than 250mm
Set screw	Required	Not required

● The set screw is used to prevent the inclination of pre-roller, in case that the mounting surface height is short.

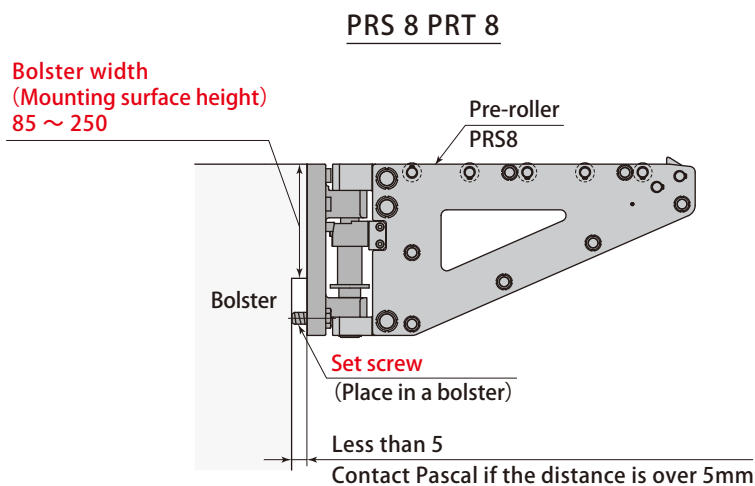
Pre-roller horizontally fold
PRS/T Caution in use



* This drawing is PRS3-0315B.



* This drawing is PRS5-0500B.



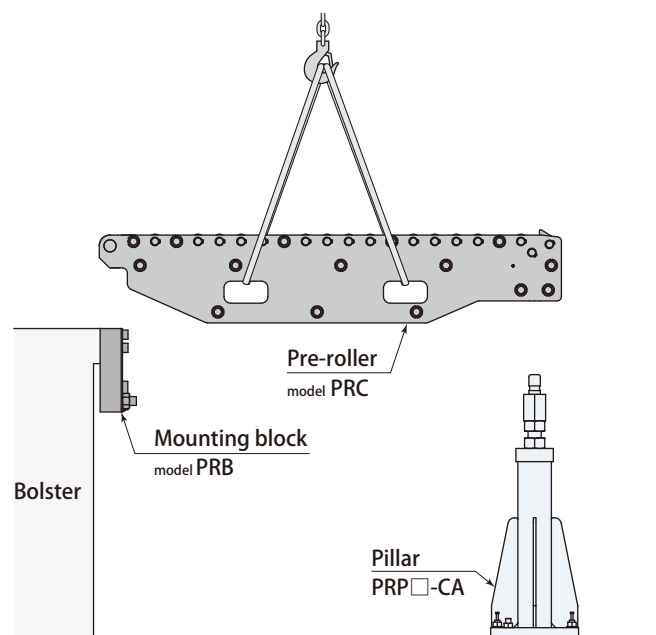
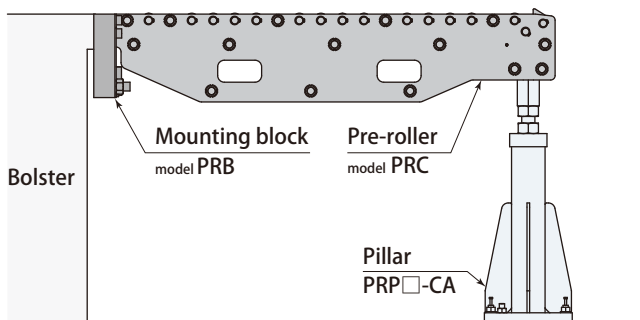
* This drawing is PRS8-0630B.

It is heavy load type of pre-roller which attaches pillar to the removal type PRA.



At installation

At removal



- The Pre-roller may be damaged due to the vibration through stamping operation. The removal of pre-roller during the operation is recommended.

Model designation

Set model (Pre-roller + Mounting block + Pillar)

PRC **3** - **0710** B **0300** - S

Size
PRC3 PRC5

1 Die travel (mm) * Indicated in 4 digits

Pillar size * Indicated in 4 digits
Refer to page → 187

For set model,
S is added at the end of model No.

Pre-roller model type

PRC **3** - **0710** B

Size
PRC3 PRC5

1 Die travel (mm) * Indicated in 4 digits

Mounting block model type

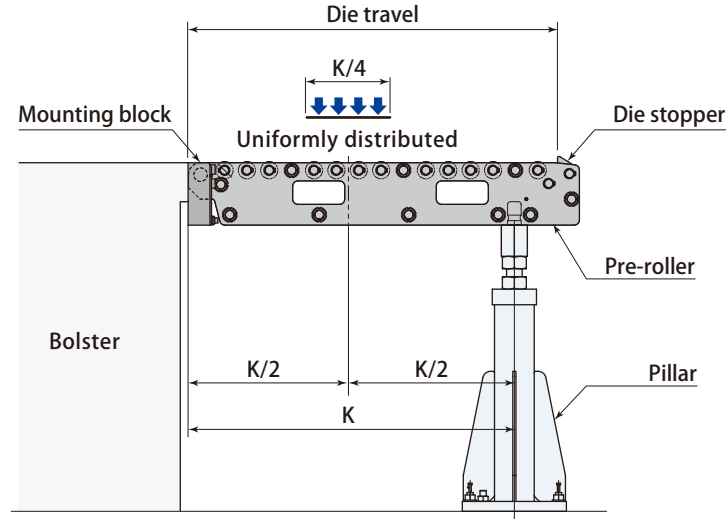
PRB **3**

Size
PRB3 PRB5

Pillar model type

PRP **0300** - CA

Pillar size * Indicated in 4 digits
Refer to page → 187



1 Die travel **710** ~ **1250** mm

Die travel		mm	710	800	850	900	950	1000	1250
PRC3	Allowable load *	kN	30	30	25	25	25	20	16
	Number of rollers		12	12	14	14	16	16	22
	Weight	kg	15.4	16.9	18.3	19.2	20.5	21.3	27.5
PRC5	Allowable load	kN	—	—	—	—	—	35	35
	Number of rollers		—	—	—	—	—	14	18
	Weight	kg	—	—	—	—	—	29.8	38

● Die loading speed on Pre-roller : Less than 50mm/s ● Die transfer speed : Less than 100mm/s

● Weight does not include mounting block and pillar.

* Allowable load is uniformly distributed and is held by the middle part of the Pre-roller. Select Pre-roller where allowable load (kN) multiplied by the quantity is greater than the die weight. SI conversion : Die weight (kN)=Die weight (kgf)×9.8÷1000

Dimensions

PRC 5 – 1000 B 0300 – S

1 Die travel (mm) •.....
* Indicated in 4 digits

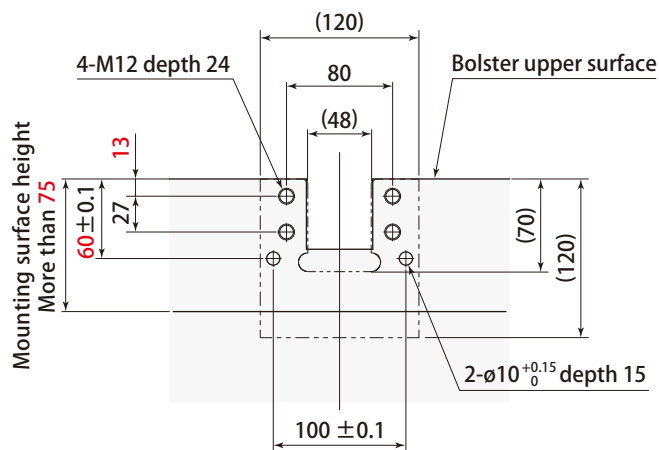
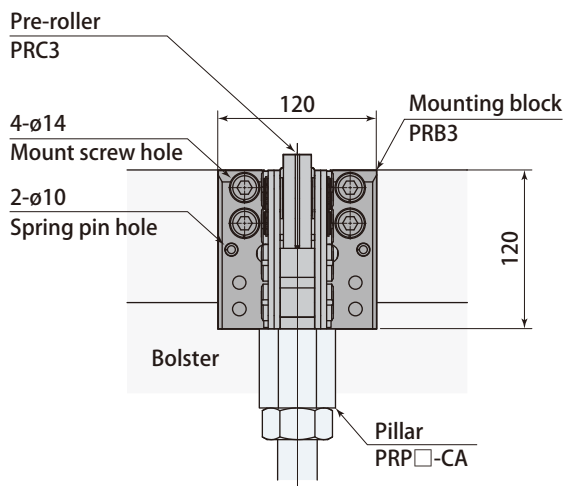
Pillar size •.....
* Indicated in 4 digits

1 Die travel 1000, 1250 mm

Model		PRC5-1000B	PRC5-1250B
Die travel	mm	1000	1250
Pre-roller total length	mm	1050	1300
Weight	kg	29.8	38

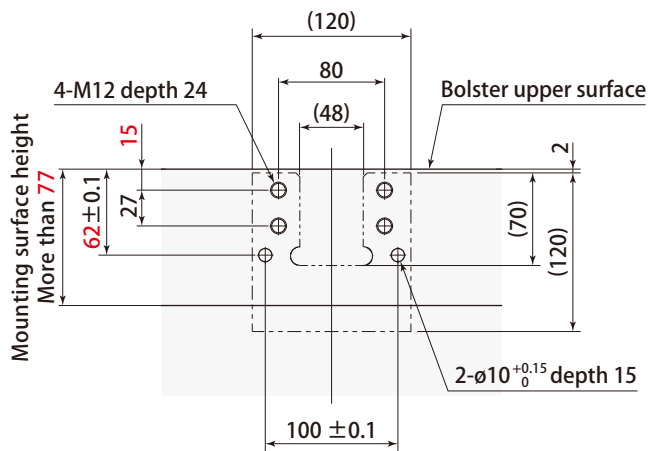
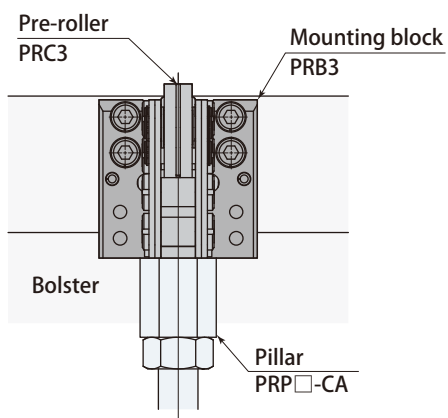
Dimensions, Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface



- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

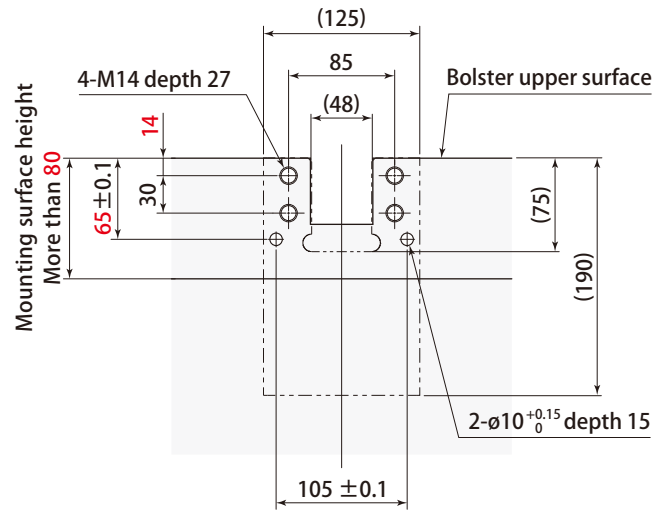
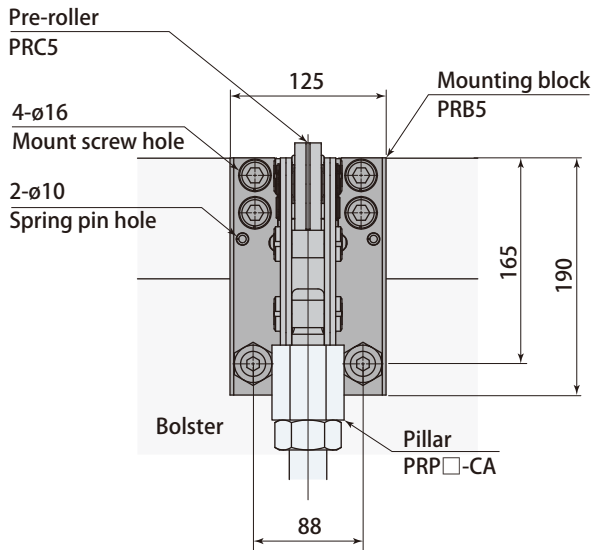
Model	PRB3
Weight	kg 3.6
Mount screw	4-M12 length 60
Spring washer	4-M12
Spring pin	2-C10 length 56

● Mounting block for PRC3

Pre-roller heavy load
PRC Mounting details

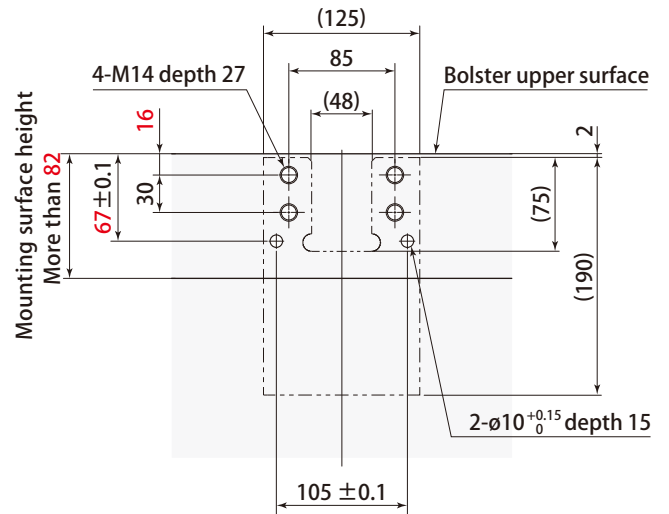
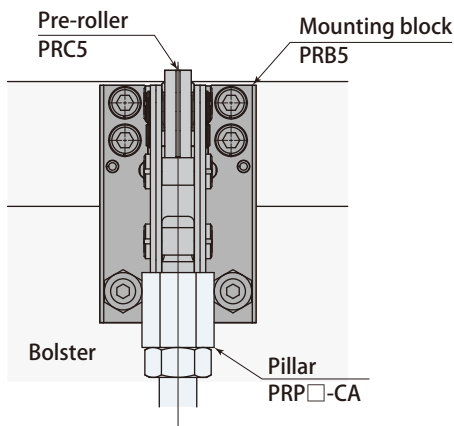
Dimensions, Mounting details

● When using the Die-lifter



● When not using the Die-lifter

When aligning the level between roller top and bolster surface



- When machining the spring pin hole, keep the tolerances shown above.
- Drill dia 10mm, 15mm deep hole for spring pin when co-machining the block with mount face.

Model	PRB5
Weight	kg 7.5
Mount screw	4-M14 length 75
Spring washer	4-M14
Spring pin	2-C10 length 63

● Mounting block for PRC5

Pillar Select Pillar for aligning the height with bolster. Pillar weight and dimension of PRC3 and PRC5 is the same.

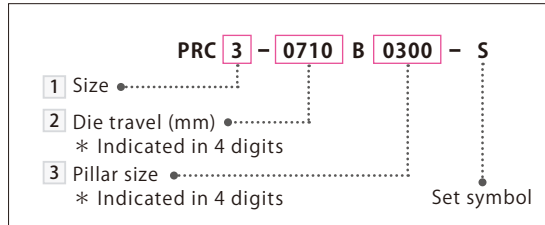
Model designation

Pillar model type

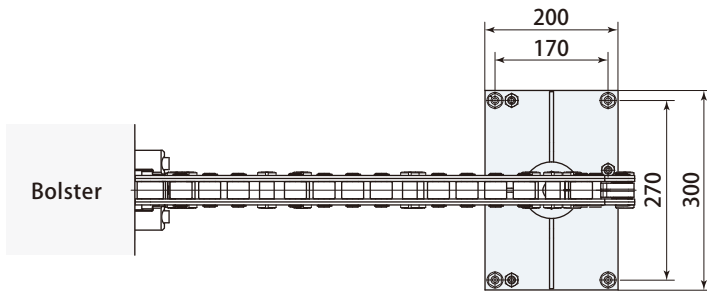
PRP **0300** - CA

3 Pillar size
* Indicated in 4 digits

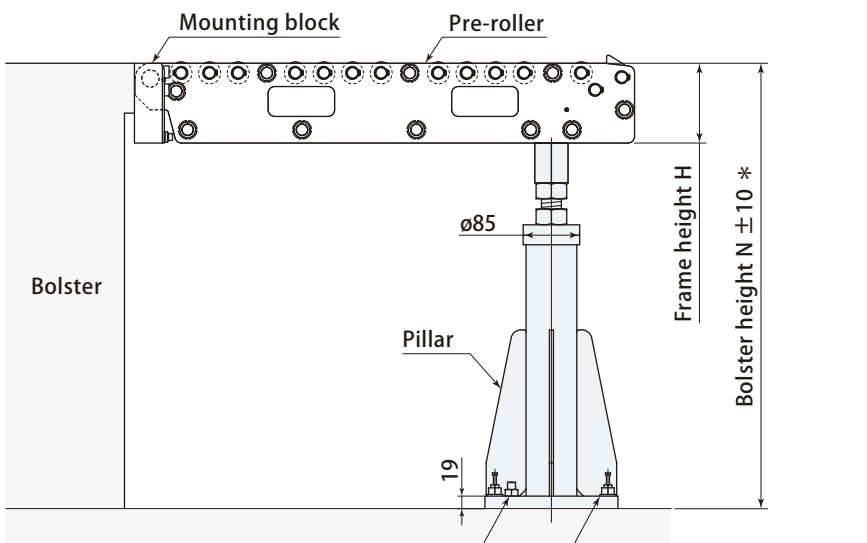
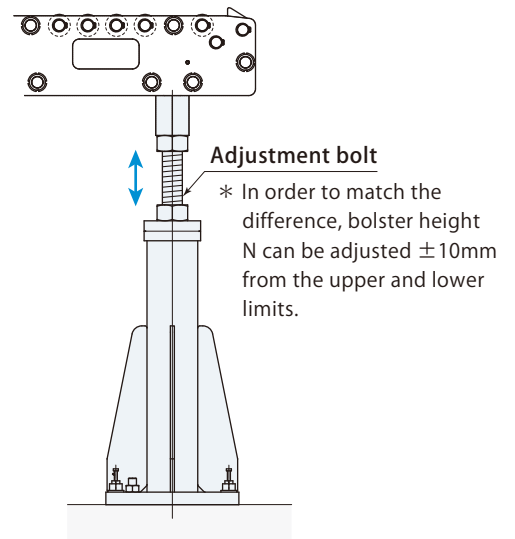
Set model



1 2
Refer to page → 180



With the Adjustment bolt, Pillar height can be adjusted



- 3- ϕ 10.3
- 3-M12 length 40 Level adjustment bolt
- 3-M12 Hex. Nut
- ϕ 85
- 4- ϕ 14
- 4-C12 length 90 Strike anchor

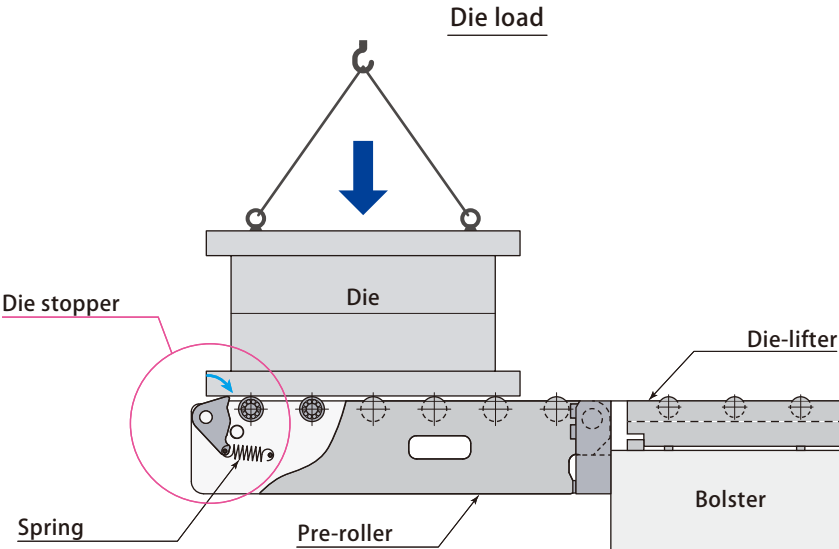
- Adjust the Pillar horizontally using a level adjustment bolt and shim.
- The shim is not included. Order it separately.

3 Pillar size **0300** ~ **1050**

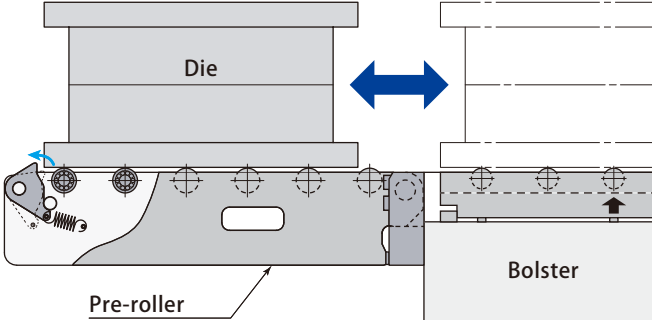
Pillar size		0300	0350	0400	0450	0500	0550	0600	0650	0700	0750	0800	0850	0900	0950	1000	1050
PRC3-0710 ~ 1250	Bolster height N mm	420 S 469	470 S 519	520 S 569	570 S 619	620 S 669	670 S 719	720 S 769	770 S 819	820 S 869	870 S 919	920 S 969	970 S 1019	1020 S 1069	1070 S 1119	1120 S 1169	1170 S 1219
	Frame height H mm	120															
PRC5-1000, 1250	Bolster height N mm	450 S 499	500 S 549	550 S 599	600 S 649	650 S 699	700 S 749	750 S 799	800 S 849	850 S 899	900 S 949	950 S 999	1000 S 1049	1050 S 1099	1100 S 1149	1150 S 1199	1200 S 1249
	Frame height H mm	150															
Weight kg		15.7	16.1	16.5	18.4	18.8	19.2	19.6	20.0	20.4	20.8	21.2	21.6	22.0	22.4	22.8	23.2

Die stopper

- When Die is pulled down on die stopper, the stopper is pushed down due to weight of die itself. When Die is pulled up, the stopper is lifted up again with spring.



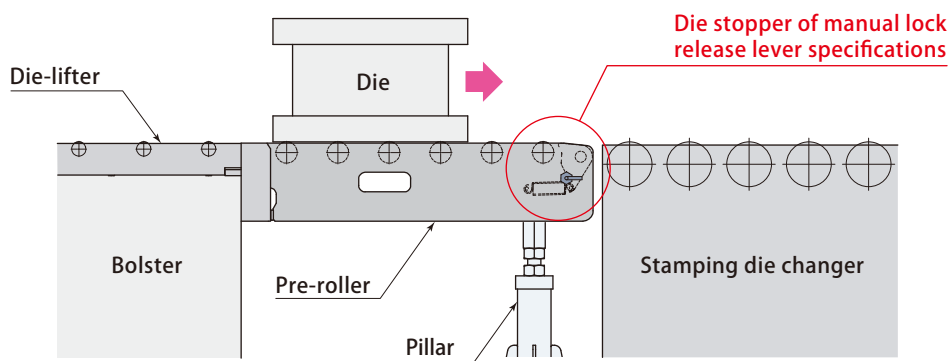
Transfer die to bolster



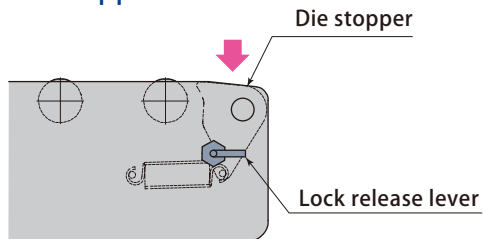
Die stopper Manual lock release lever PR□-□□BT

It is special design of pre roller due to the spring-back type of stopper as standard.

- When die is pulled up, the stopper is lifted up with spring, so select Die stopper of manual lock release lever specifications in case of unloading die by using stamping die changer.
- When changing the die with the die changer, pre-roller model PRC that contains a pillar should be selected to keep the roller level of pre-roller and the die changer the same. Model PRA, PRF and PRS/PRT are not recommended for such an application since tip of the roller arm may be sagged down due to the die weight.

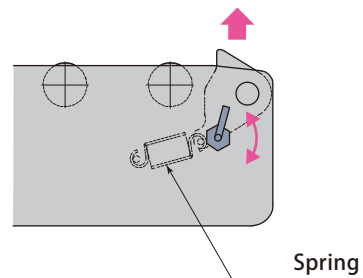


Stopper lock



When die stopper is pushed down to the end, the pin inside lock release lever sticks out and the stopper is locked automatically.

Stopper unlock



Stopper lock is released by lifting up or down the lever.

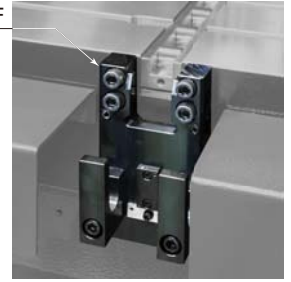
- Contact Pascal for the details.

Mounting block

- Select mounting block for the removable type of pre-roller PRA, PRF, PRC.

Model	PRB2	PRB3	PRB5	PRB2F	PRB3F	PRB5F
Pre-roller model type	PRA2	PRA3 PRC3	PRA5 PRC5	PRF2	PRF3	PRF5

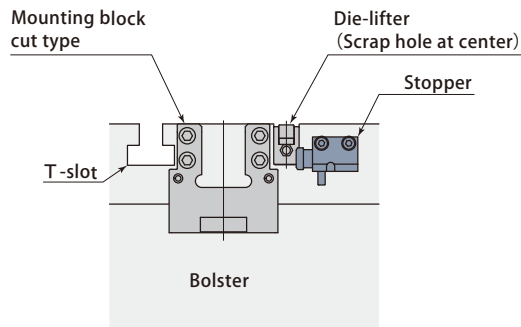
Mounting block PRB5F
(For Pre-roller PRF5)



- As the mounting block can be installed on multiple presses, a combined use on one set of Pre-rollers is possible.
- Mounting block alone can be purchased.

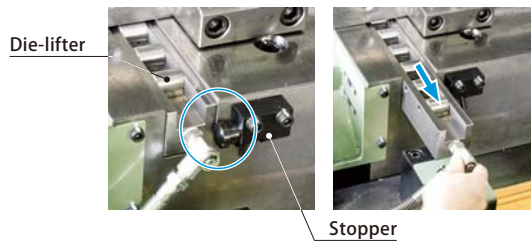
Caution of mounting block installation

- Make sure if the mounting block installation area is secured not to block the T-slot and die-lifter slot.
- When installation die-lifter with P or A type of stopper, be noted for the installed position so that mounting block does not interfere with T-slot and die-lifter slot.
- If the mounting block installed surface interferes with T-slot and die-lifter slot, select mounting block cut type (Refer to [page → 192](#)), or perform the additional machining on the mounting block.



Die-lifter Scrap hole at center

It is the model that can lock or unlock the stopper and remove / insert the die-lifter.



- Refer to the below specifications and mounting details of each model.

Mounting block cut type

It is applied in case that it interferes with T-slot and die-lifter slot.

Model designation

PRB 3 A

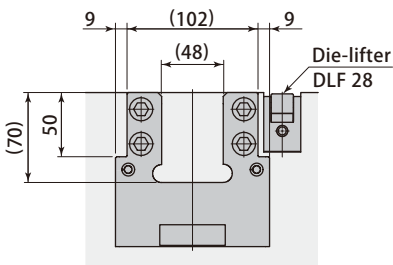
Size ●
 * Indicated in 1-2 digits
 Cut type ●

* No cut type is available for PRB2.

Mounting block cut type A

PRB3A

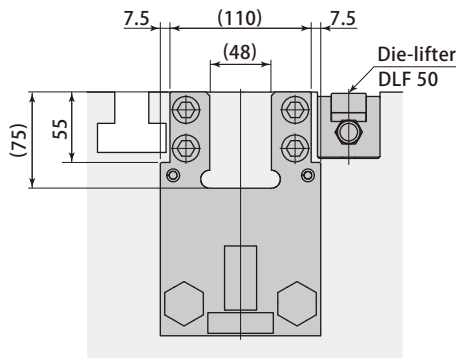
Pre-roller model type : PRA3



Mounting block cut type A

PRB5A

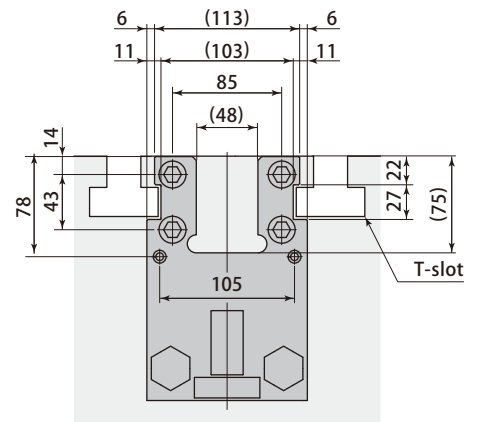
Pre-roller model type : PRA5



Mounting block cut type B

PRB5B

Pre-roller model type : PRA5

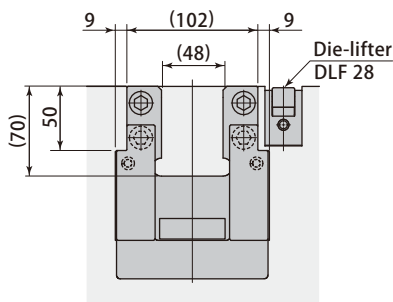


The location for mount screws and dowel pin changes.

Mounting block cut type A

PRB3FA

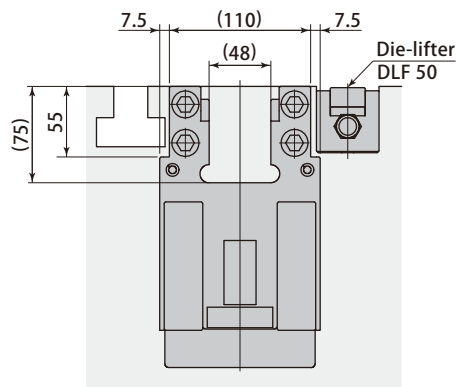
Pre-roller model type : PRF3



Mounting block cut type A

PRB5FA

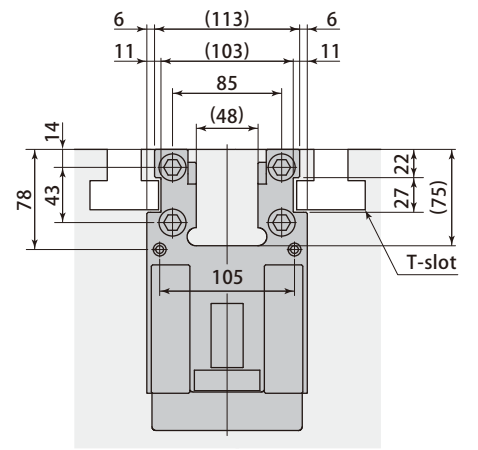
Pre-roller model type : PRF5



Mounting block cut type B

PRB5FB

Pre-roller model type : PRF5

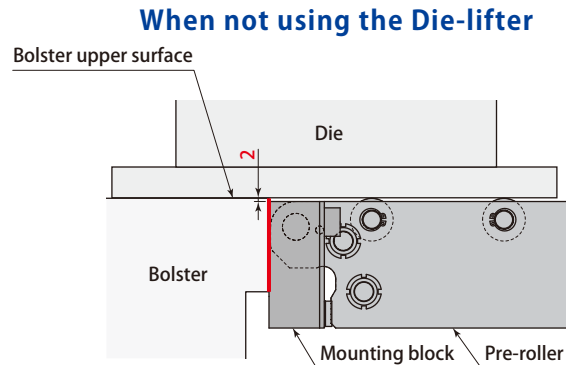
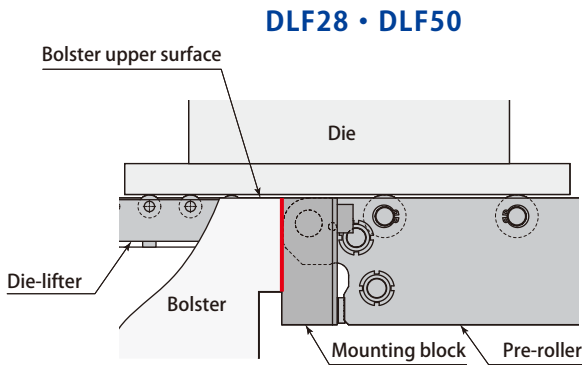


The location for mount screws and dowel pin changes.

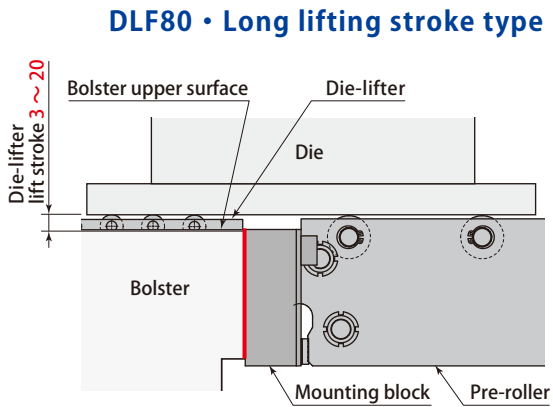
Mounting position of Pre-roller

- Mounting position of Pre-roller varies according to the die-lifter specifications.

Die-lifter specifications	DLF28 • DLF50	When not using the Die-lifter	DLF80 • Long lifting stroke type
Mounting position of Pre-roller	Standard	Lower 2mm	Special specifications



- In case no Die-lifter is used, (in case of matching the roller level and bolster), lower the mounting position 2mm.

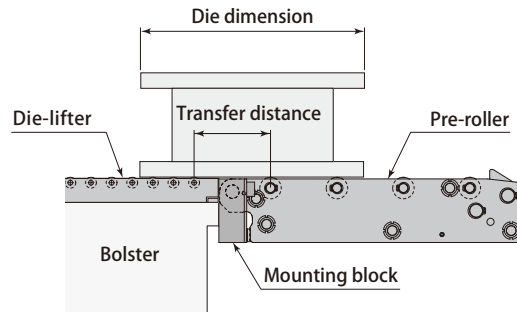


- In case that the Die-lifter is long lift stroke specifications DLF80, Pre-roller shall be a special type to match the roller level.

- Please inquire if there is a notch, hole, etc. on the underside of the die.
- Refer to the below specifications and mounting details of each model.

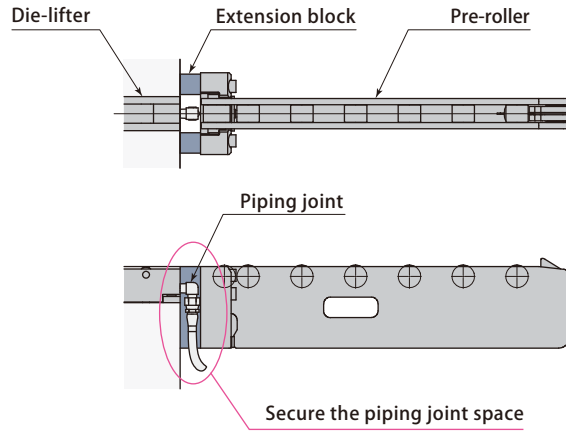
Die dimension

- Die dimension requires at least 3 times more than the dimension between the rollers shown below. If die dimension is small, please contact Pascal.

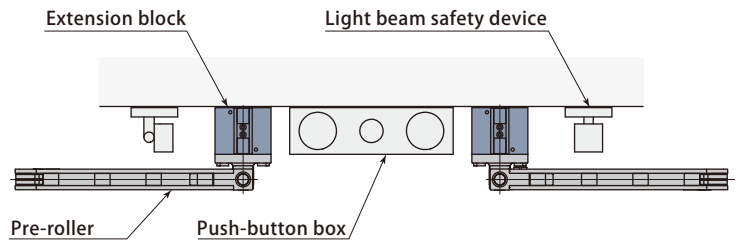


Add the extension block in the following case.

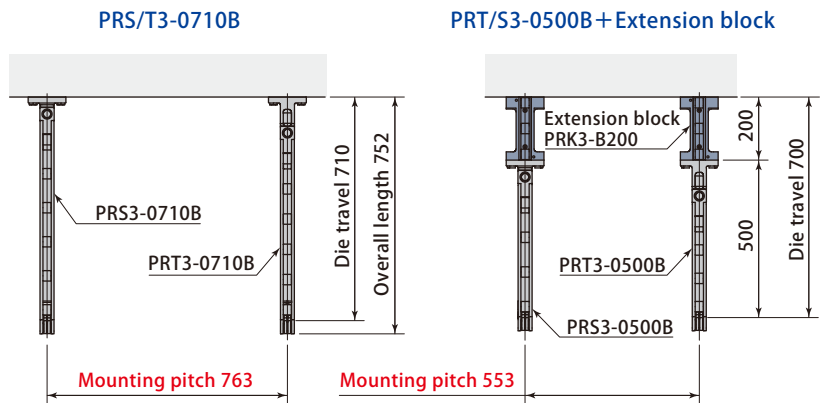
- In case that Positioning the Pre-roller and Die-lifter evenly and piping for the Die-lifter is located by the Pre-roller



- In case that the swing type Pre-roller when folded interferes with the press machine



- In case that the mounting pitch can not be secured



Model designation

PR **J2** - **A** **030**

- 1 Extension block model
 - 2 Die-lifter piping direction / Positioning method
 - 3 Extension block length (mm)
- * Indicated in 3 digits

1 Extension block model type

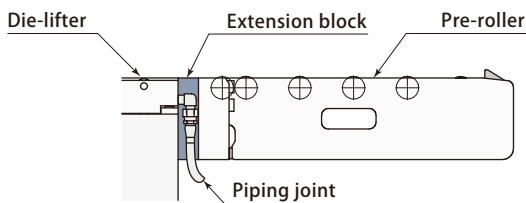
Symbol	J2	J3	J5	K3	K5	K8
Pre-roller model type	PRA 2 PRF 2	PRA 3 PRF 3 PRC 3	PRA 5 PRF 5 PRC 5	PRS3/PRT3	PRS5/PRT5	PRS 8/PRT 8

2 Die-lifter piping direction / Positioning method

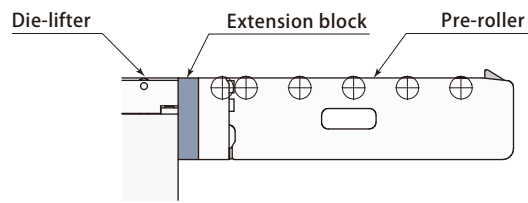
Symbol	A	B	C	D
Die-lifter piping direction Positioning method	Front piping with spring pin hole	Rear piping with spring pin hole	Front piping without spring pin hole	Rear piping without spring pin hole

● There is no method for 30mm long block without spring hole.

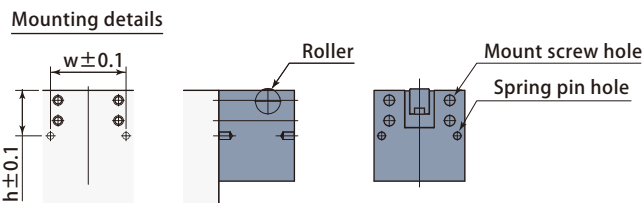
Die-lifter: Front piping
(When piping is on the Pre-roller side)



Die-lifter: Rear piping

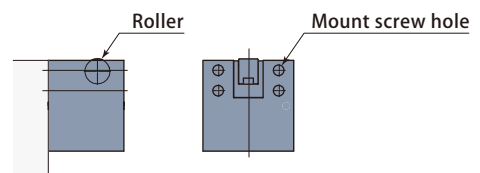


With spring pin hole



Pre-roller's mounting position cannot be adjusted.
Machine mounting surface of extension block on the press side.

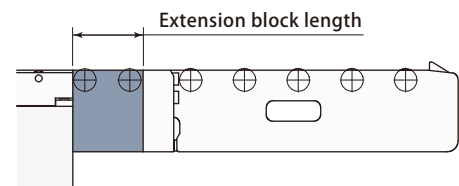
Without spring pin hole



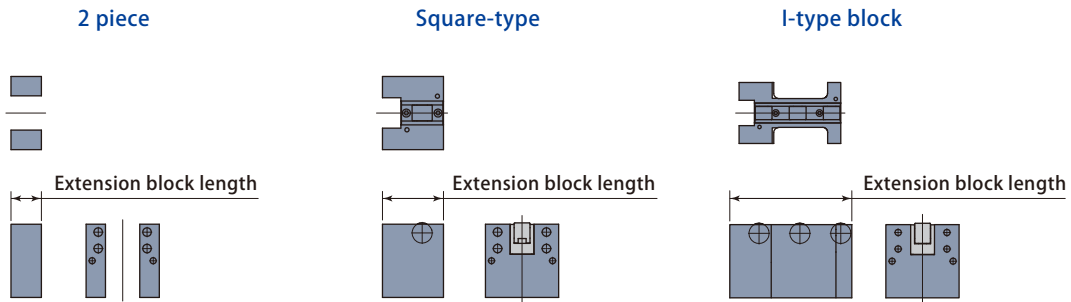
Determine the positioning for extension block and Pre-roller by co-machining one-side after installation.

3 Extension block length

Extension block length							mm
030	050	100	150	200	250	300	



- The shape of extension block varies according to extension block model and size, Die-lifter piping direction and block length.



Extension block model (Model, Size)	PRJ2-A PRJ2-C	PRJ2-B PRJ2-D	PRJ 3-A PRJ 3-C PRK3-A PRK3-C	PRJ 3-B PRJ 3-D PRK3-B PRK3-D	PRJ 5-A PRJ 5-C PRK5-A PRK5-C	PRJ 5-B PRJ 5-D PRK5-B PRK5-D	PRK8-A PRK8-C	PRK8-B PRK8-D
Pre-roller model type (Model, Size)	PRA 2 PRF 2		PRA 3 PRF 3 PRC 3 PRS3/PRT3		PRA 5 PRF 5 PRC 5 PRS5/PRT5		PRS 8/PRT 8	
Die-lifter piping direction	Front piping	Rear piping	Front piping	Rear piping	Front piping	Rear piping	Front piping	Rear piping
Extension block length	030	2 piece	2 piece	2 piece	2 piece	2 piece	2 piece	2 piece
	050							
	100	Square-type block	Square-type block	Square-type block	Square-type block	Square-type block	Square-type block	Square-type block
	150	I-type block	I-type block	I-type block	I-type block	I-type block	I-type block	I-type block
	200							
	250							
	300							

- Mount screw size for I-type block
PRJ2/PRJ3/PRK3:M14 PRJ5/PRK5:M16 PRK8:M20
- Allowable load changes according to the die travel dimension. Contact Pascal for the details.