


# Cutters / Replacement Cutter Blades / Deburring Tools / Replacement Blades

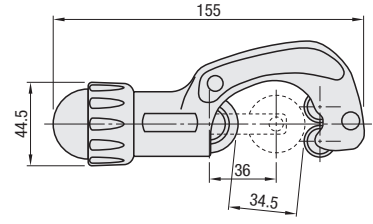
# How to Calculate Pipe Dimension

## Metal Joints / Plastic Joints

**Cutters**



**PFCAT PFCATS**



Reinforced aluminum pipe frames and factory frames cannot be cut with this cutter.

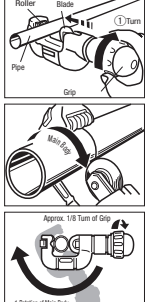
Part Number	Applicable Frame	Mass (g)	Unit Price 1~9 pcs.	Volume Discount Rate 10~20
PFCAT	Extruded Aluminum Pipe Frame / Plastic Coated Pipe Frame	350		
PFCATS	Stainless Steel Pipe Frame	356		

**How to Use**


- Rotate the grip and place the pipe between the cutter blade and the rollers. Be sure that the pipe protrudes more than the width of the rollers.
- Turn the grip further 1/4 rotation in the arrow direction in the diagram after the blade contacts the pipe, then rotate the pipe once to cut along the circumference.
- Then turn the grip slowly (approx. 1/8 turn per each body rotation) to cut gradually deeper and turn the main body to completely cut the pipe. \*If the cutting speed is too fast, it may cause pipe deformation, or shorten the blade's service life.

**Caution**

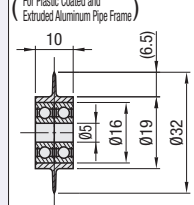
- If the cutter is used to cut unintended objects or used for purposes than the original, the cutter may be damaged or accidents may result.
- Be sure to check the cutter before use. If something is not right, do not use until it is repaired or replaced.
- Do not touch the blade during operation. Accidents or injury may result.
- Be careful of falling while carrying or operating.
- If the cutter becomes wet, be sure to wipe it dry. If water gets into the bearing, rust will prevent the bearing from functioning.



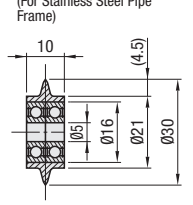
**Replacement Cutter Blades**



**PFCATH** (For Plastic Coated and Extruded Aluminum Pipe Frame)



**PFCATHS** (For Stainless Steel Pipe Frame)



Accessory: Retaining Ring E Type 1 pc.


Part Number	Mass (g)	Unit Price 1~9 pc(s).	Volume Discount Rate 10~20
PFCATH (For Plastic Coated and Extruded Aluminum Pipe Frame)	19		
PFCATHS (For Stainless Steel Pipe Frame)	25		

For orders larger than indicated quantity, please check with WOS.

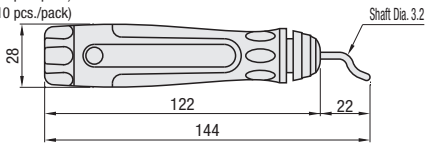
How to Replace Replacement Blades: Remove the retaining ring E Type of the cutter body, then pull installation pin for replacement.

Ordering Example: **Part Number PFCAT PFCATH**

**Deburring Tools / Replacement Blades**



**M-NG1000-F** (Deburring Tool: PFREMH-BS1010x1 pc.)  
**M-NG1000-S** (Deburring Tool: PFREMH-BS1018x1 pc.)  
**PFREMH-BS1010** (Replacement Blades, 10 pcs./pack)  
**PFREMH-BS2010** (Replacement Blades, 10 pcs./pack)  
**PFREMH-BS1018** (Replacement Blades, 10 pcs./pack)



Material: Handle: Plastic + Rubber

**Deburring Tool**

Part Number	Mass (g)	Unit Price 1~9 pc(s).	Volume Discount Rate 10~30
M-NG1000-F	31		
M-NG1000-S	31		

Ordering Example: **Part Number M-NG1000-F PFREMH-BS1010**

**CAUTION**

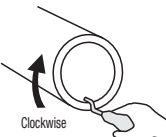
Use for purposes other than deburring may cause damages or accidents. Be sure to check the deburring tool before use. If something is not right, do not use until it is repaired or replaced. Do not touch the blade during operation. Accidents or injury may result. \*The P/N PEREM has been changed to M-NG1000-F. The handle shape is slightly different but the functionality is the same.

**Replacement Blades**

Part Number Type	No.	Features	Unit Price* 1~9 pc(s).	Volume Discount Rate 10~30
PFREMH	BS1010	For milling steel and aluminum. One sided blade used in clockwise rotation Black		
	BS2010	For cast iron, brass and plastic. Double sided blade used in both directions Silver		
	BS1018	For hard-cutting material such as stainless steel. One sided blade used in clockwise rotation Silver		

**How to Use**

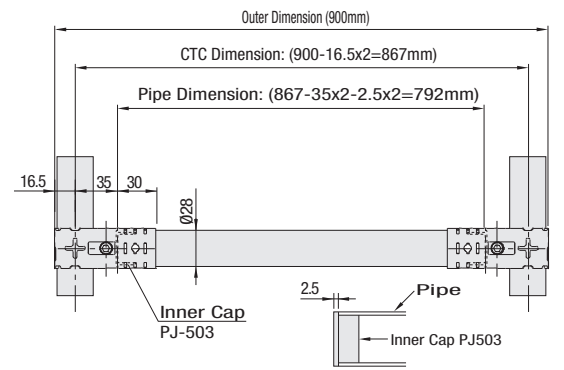
- Hold the grip and apply the blade to the inside of the frame.
- Turn at least one full turn while keeping the blade in the direction of the pipe.



**Example of Metal Joint Calculation**

When using PBLSN1

CTC Dimension =  $900 - 16.5 \times 2 = 867$   
 = Outer Dimension - Metal Joint Radius x2  
 Pipe Dimension =  $867 - 35 \times 2 - 2.5 \times 2 = 792$   
 = CTC Dimension - Length From Metal Joint Center to Pipe End

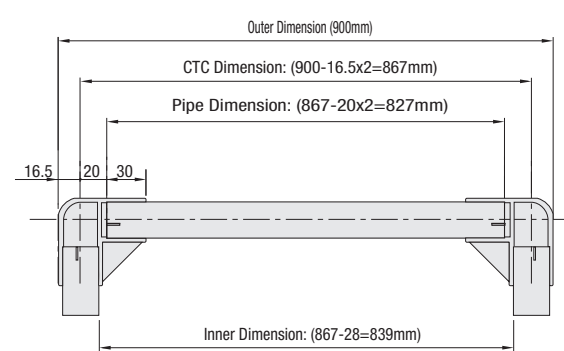


**Example of Plastic Joint Calculation**

Extruded Aluminum Pipe Frames and Stainless Steel Pipe Frames should not be combined with Plastic Joints.

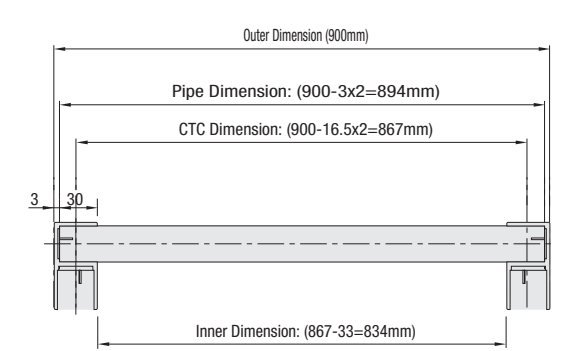
When using PJ002

CTC Dimension =  $900 - 16.5 \times 2 = 867$   
 = Outer Dimension - Plastic Joint Radius x2  
 Pipe Dimension =  $867 - 20 \times 2 = 827$   
 = CTC Dimension - Length from Plastic Joint Center to Pipe End



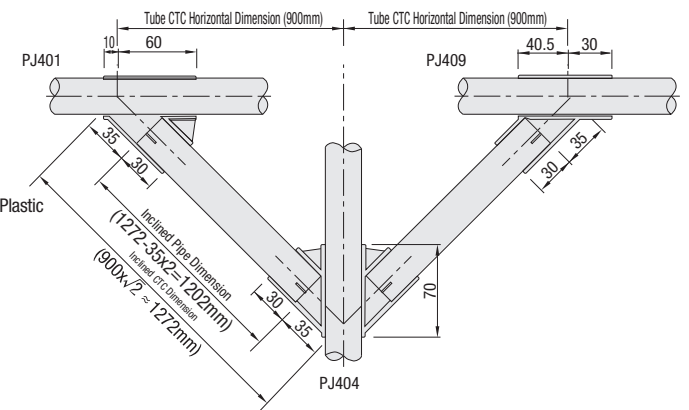
When using PJ003

CTC Dimension =  $900 - 16.5 \times 2 = 867$   
 = Outer Dimension - Plastic Joint Radius x2  
 Pipe Dimension =  $900 - 3 \times 2 = 894$   
 = Outer Dimension - Plastic Joint ends to the Pipe ends



When using PJ401, PJ404 or PJ409

Inclined CTC Dimension =  $900 \times \sqrt{2} \approx 1272$   
 = Tube CTC Horizontal Dimension x  $\sqrt{2}$   
 Inclined Pipe Dimension =  $1272 - 35 \times 2 = 1202$   
 = Inclined CTC Dimension - Length from Plastic Joint Center to Pipe End



\* One set contains 10 pieces. For orders larger than indicated quantity, please check with WOS.