

# UBM\_S Series UBH\_S Series

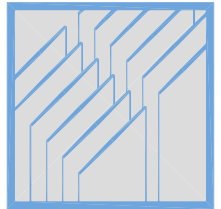
Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Attachment Holes

**ALPHA**

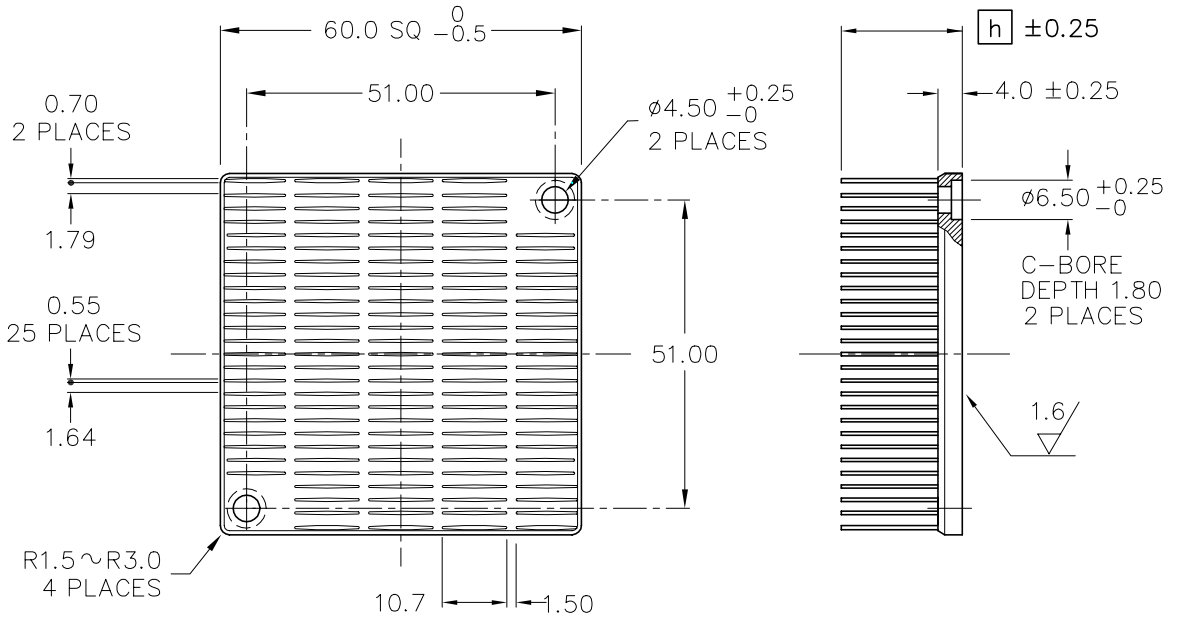
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with attachment holes

# UBM60S



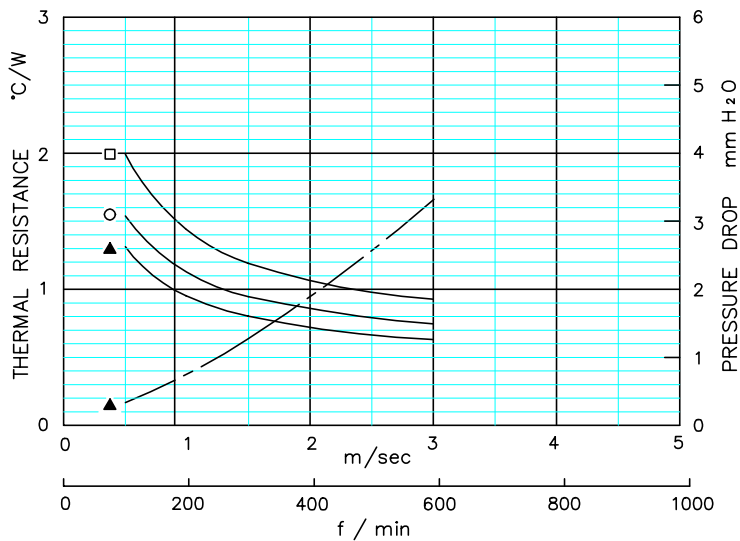
DIM



| MODEL      | HEIGHT [h] | WEIGHT (grams) |
|------------|------------|----------------|
| UBM60S-15B | 15         | 56.8           |
| UBM60S-20B | 20         | 64.8           |
| UBM60S-25B | 25         | 72.8           |

MATERIAL : A 6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



□ UBM60S-15B  
○ UBM60S-20B  
▲ UBM60S-25B

● DUCTED CONDITION  
DUMMY HEATER SIZE: 12.7 SQ  
THERMAL RESISTANCE \_\_\_\_\_  
PRESURE DROP - - - - -

AIR VELOCITY: DUCTED CONDITION

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN  
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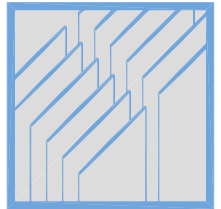
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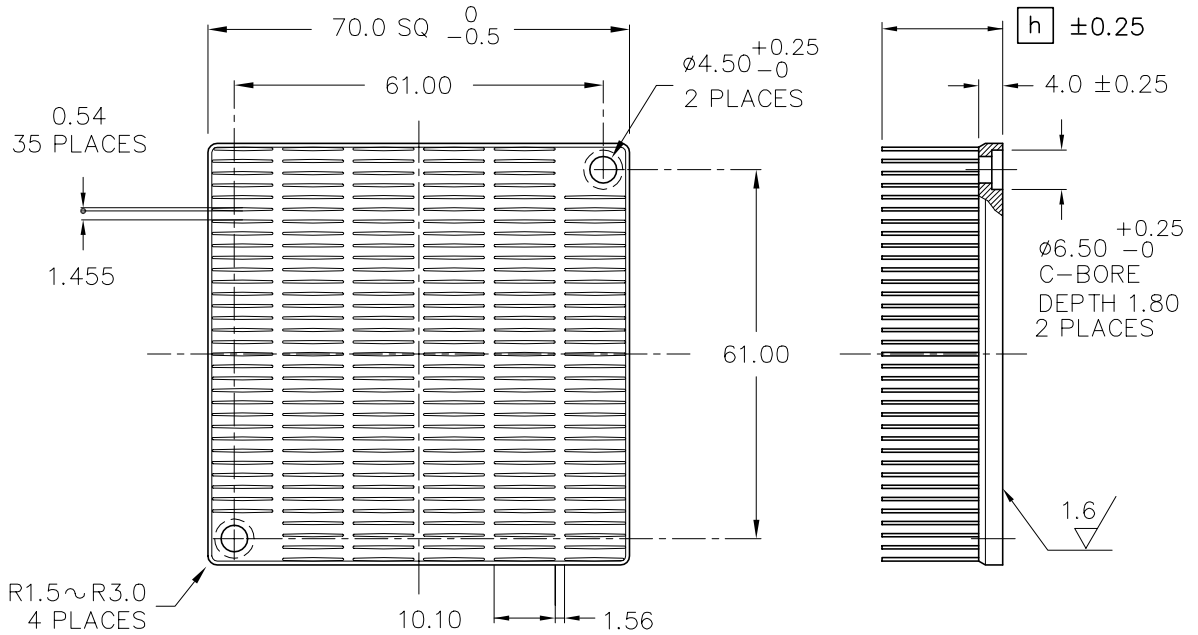
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with attachment holes

# UBM70S



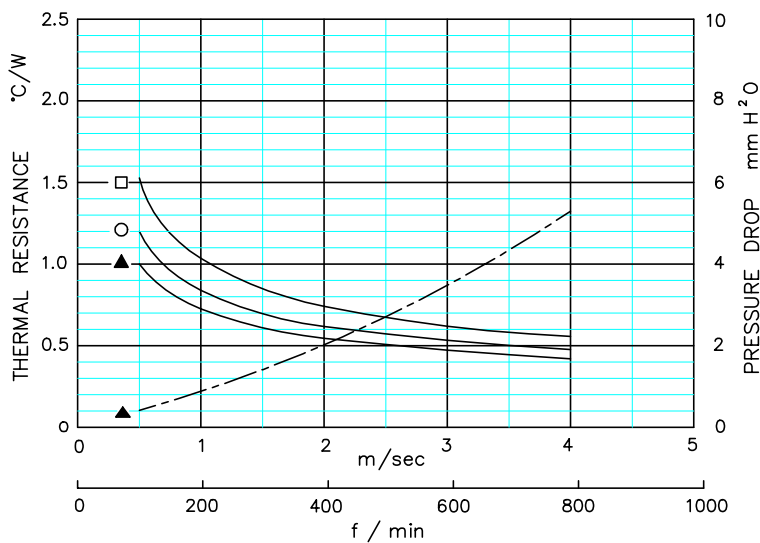
DIM



| MODEL      | HEIGHT [h] | WEIGHT (grams) |
|------------|------------|----------------|
| UBM70S-15B | 15         | 97.0           |
| UBM70S-20B | 20         | 108.7          |
| UBM70S-25B | 25         | 120.4          |

MATERIAL : A 6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



□ UBM70S-15B  
○ UBM70S-20B  
▲ UBM70S-25B

● DUCTED CONDITION  
DUMMY HEATER SIZE: 12.7 SQ  
THERMAL RESISTANCE ———  
PRESSURE DROP - - - - -

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.  
REFER TO TECHNICAL INFORMATION.

AIR VELOCITY: DUCTED CONDITION

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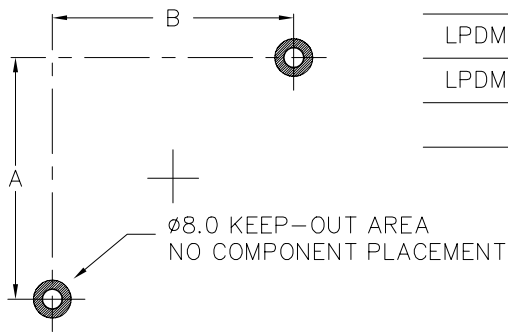
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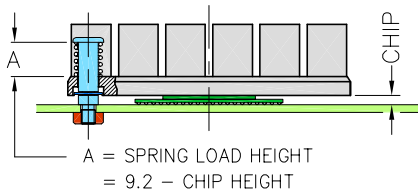
● BOARD KEEPOUT PATTERNS



|                    |      |      |
|--------------------|------|------|
| LPDM60S AND UBM60S | 51.0 | 51.0 |
| LPDM70S AND UBM70S | 61.0 | 61.0 |
| MODEL              | A    | B    |

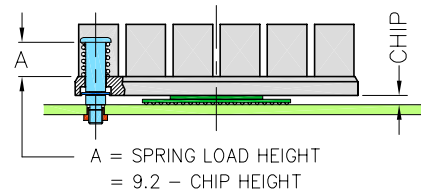
● INSTALLATION

USE HEX NUTS M3x0.5



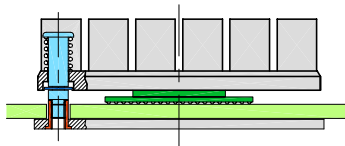
REQUIRES ø3.2 THRU HOLES IN BOARD.  
RECOMMENDED P.C.B THICKNESS 1.6mm.  
MINIMUM CHIP HEIGHT 1.5mm.

USE MAC8 TH-1.6-XX-M3



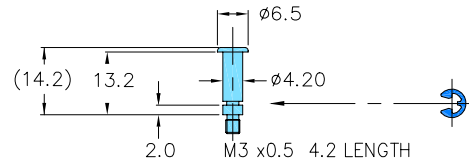
REQUIRES ø3.7 THRU HOLES IN BOARD.  
MAC8 THREAD INSERT NEED THE SOLDERING.  
RECOMMENDED P.C.B THICKNESS  
MINIMUM 1.6mm ~ MAXIMUM 3.7mm  
MINIMUM CHIP HEIGHT 1.5mm.

USE CUSTOM BACKING-PLATE



CUSTOM DESIGN FOR ANY P.C.B THICKNESS.

SHOULDER-SCREW/RETAINING RING E-2.5



REFER TO THE DRAWING FOR DETAIL SPECIFICATION.

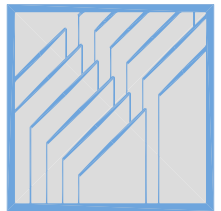
● FORCE



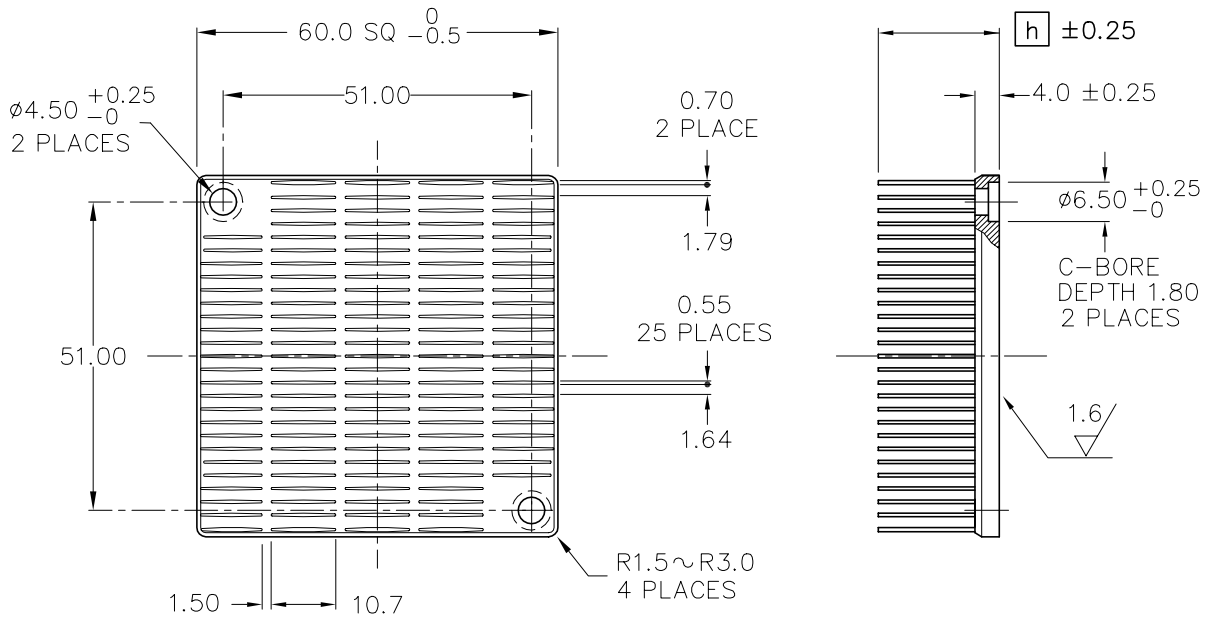
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Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with attachment holes

# UBH60S



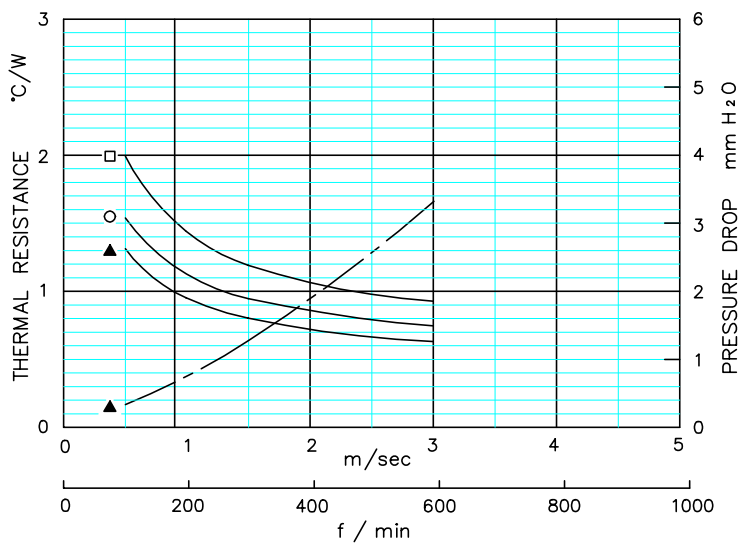
DIM



| MODEL      | HEIGHT $h$ | WEIGHT (grams) |
|------------|------------|----------------|
| UBH60S-15B | 15         | 56.8           |
| UBH60S-20B | 20         | 64.8           |
| UBH60S-25B | 25         | 72.8           |

MATERIAL : A 6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



AIR VELOCITY: DUCTED CONDITION

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

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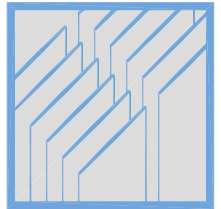
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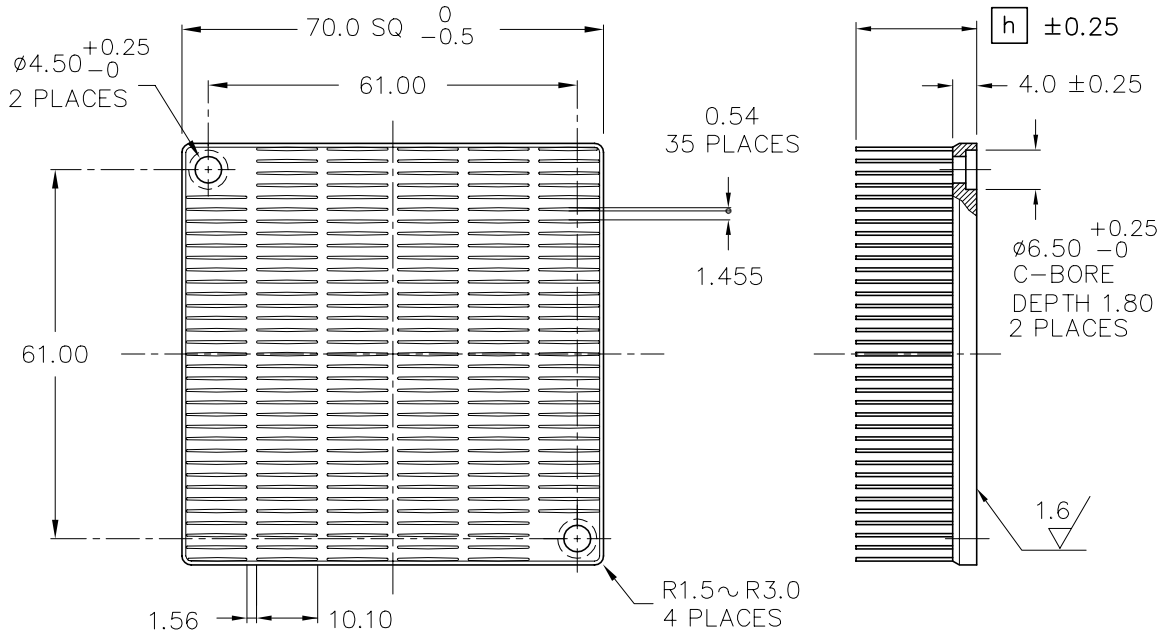
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with attachment holes

# UBH70S



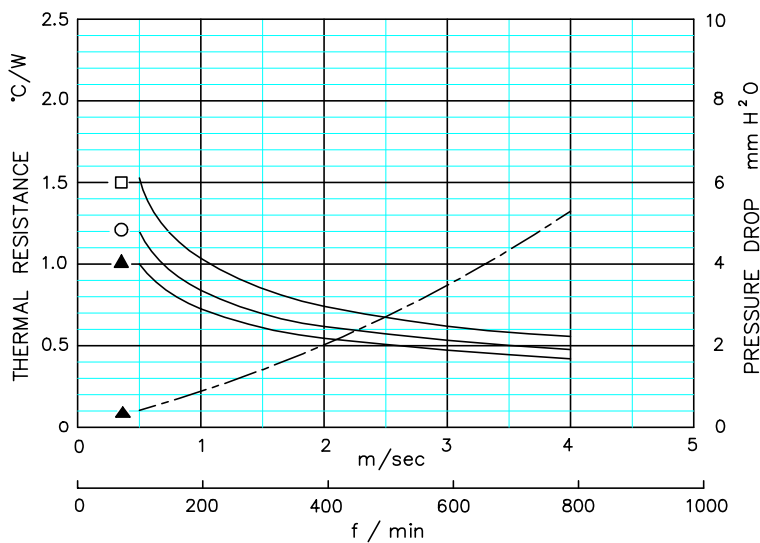
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MATERIAL : A 6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



□ UBH70S-15B  
○ UBH70S-20B  
▲ UBH70S-25B

● DUCTED CONDITION  
DUMMY HEATER SIZE: 12.7 SQ  
THERMAL RESISTANCE ———  
PRESSURE DROP - - - - -

AIR VELOCITY: DUCTED CONDITION

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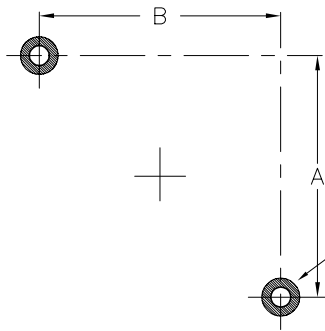
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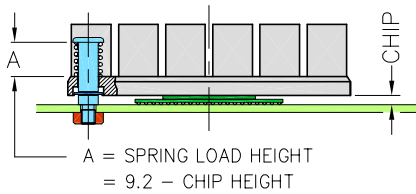
● BOARD KEEPOUT PATTERNS



|                    |      |      |
|--------------------|------|------|
| LPDH60S AND UBH60S | 51.0 | 51.0 |
| LPDH70S AND UBH70S | 61.0 | 61.0 |
| MODEL              | A    | B    |

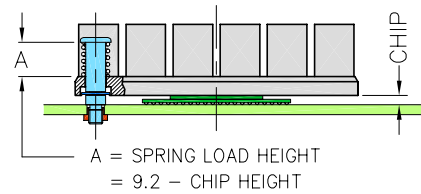
● INSTALLATION

USE HEX NUTS M3x0.5



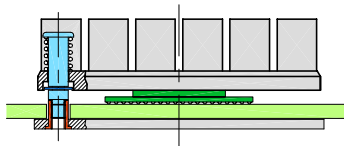
REQUIRES  $\phi 3.2$  THRU HOLES IN BOARD.  
RECOMMENDED P.C.B THICKNESS 1.6mm.  
MINIMUM CHIP HEIGHT 1.5mm.

USE MAC8 TH-1.6-XX-M3



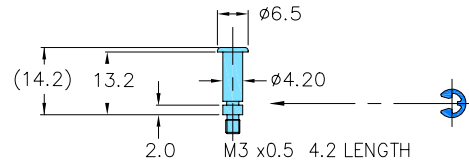
REQUIRES  $\phi 3.7$  THRU HOLES IN BOARD.  
MAC8 THREAD INSERT NEED THE SOLDERING.  
RECOMMENDED P.C.B THICKNESS  
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USE CUSTOM BACKING-PLATE



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SHOULDER-SCREW/RETAINING RING E-2.5



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● FORCE

