

MODULAR SUBSTRATE COMPONENTS

1.125" C-SEAL for Ultra Clean Delivery Systems



MODULAR SUBSTRATE FOR GAS DELIVERY SYSTEMS

Smaller footprint

Surface mount technology provides a method of constructing gas delivery systems in a much more compact package compared to in-line, face-seal construction. For example, a valve occupies a space of 1.125" square. Each surface mount component follows SEMI dimensional standards to provide interchangeability between manufacturers.

Configurability

The Modular Substrate Component (MSC) system enables easy configuration changes by providing pre-machined flow paths that can be assembled in different sequences without the need for any welded assemblies.

Easier Maintenance

Surface mount technology simplifies maintenance by needing top only access for component replacement and service.

Table specification

Ultra high purity	
Material of construction	316L alloy with additional processing to exceed SEMI F20 ¹ Ultra High Purity grade requirements
Surface Chemistry characteristics	Wetted surface properties exceed all SEMI F19 ² Ultra High Purity grade requirements
Surface finish	Electropolished to < 5 microinch Ra ave
Quality & Process Assurance	Full material and production process traceability is available
Cleaning & Packaging	Final cleaning and packaging performed in a class 10 clean room
Sealing technology	1.125" C-Seal

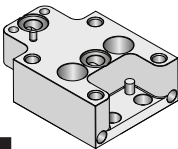
(1) SEMI F20 - 0815

(2) SEMI F19 - 0706^E (R0917)

MODULAR SUBSTRATE INDEX

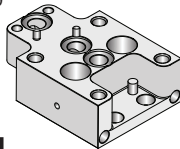
SUBSTRATE

ISO MALE FEMALE
32205



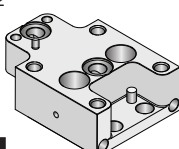
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3 PORT MALE FEMALE
32209



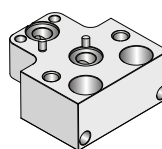
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LUS/DS MALE FEMALE
32212



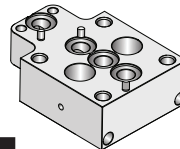
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MCF MALE
32213



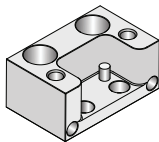
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3 PORT MALE END
32208



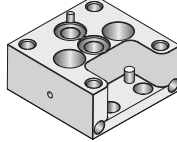
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MCF FEMALE
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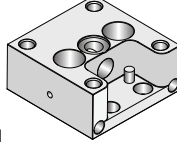
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3 PORT FEMALE END
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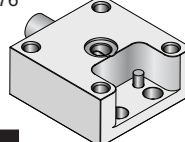
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US / DS FEMALE END
32210



6

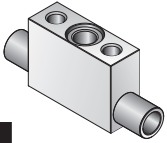
2 PORT FEMALE END 1/4 TS
34476



6

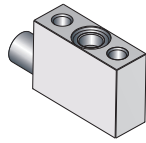
MANIFOLD

1400 1T
32223



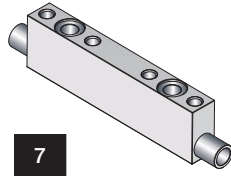
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1400 1L
32221



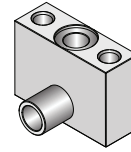
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1400 2T
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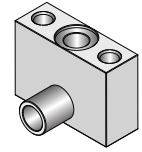
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SIDE - 2
34495



8

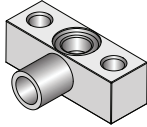
SIDE - 1
32255



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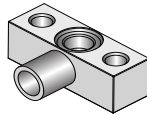
FLANGE

THREADED 1/4 TW SIDE
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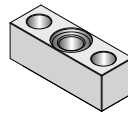
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1/4 TW SIDE
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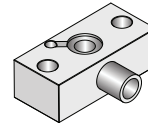
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624 CAP
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9

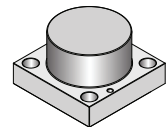
MFC FLANGE SIDE
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10

CAP

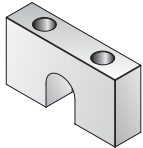
COMP 2 PORT
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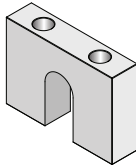
MOUNT BLOCK

BLOCK 0.62 HEIGHT
32226



11

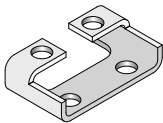
BLOCK 0.82 HEIGHT
32754



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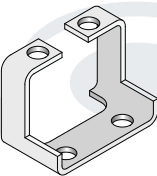
BRACKET

MOUNTING BRACKET 0.32"
32227



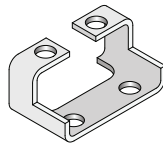
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MOUNTING BRACKET 0.82"
32752



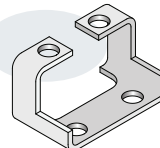
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MOUNTING BRACKET 0.52"
32751



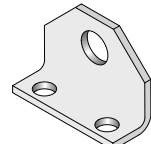
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MOUNTING BRACKET 0.62"
32228



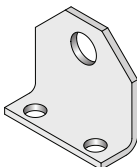
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SUPPORT BRACKET 1/4 TUBE
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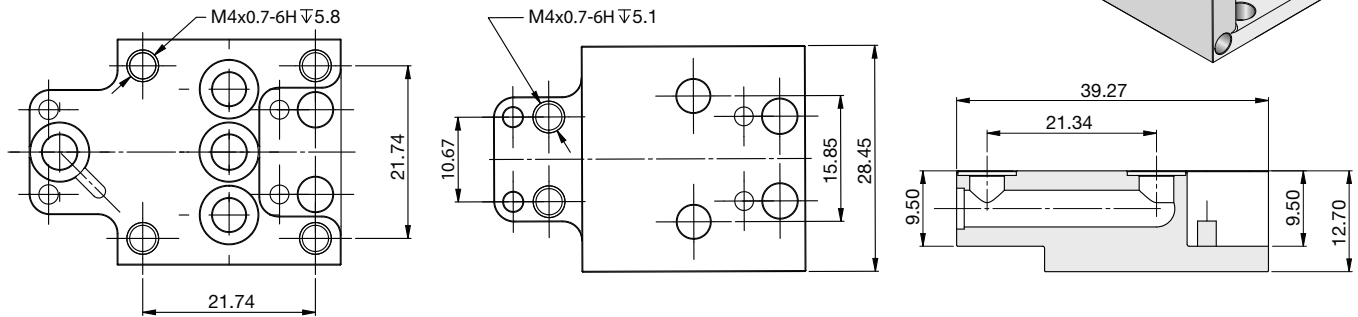


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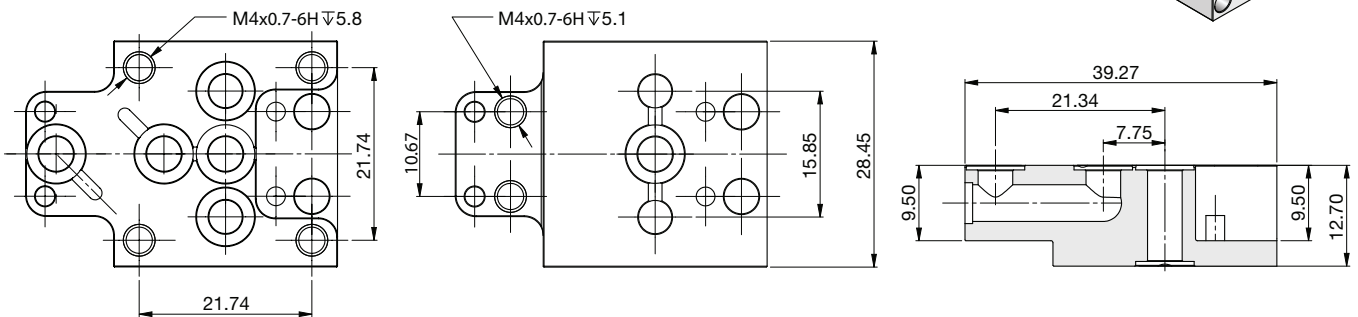
SUPPORT BRACKET 1/4 TUBE HEATED
32778



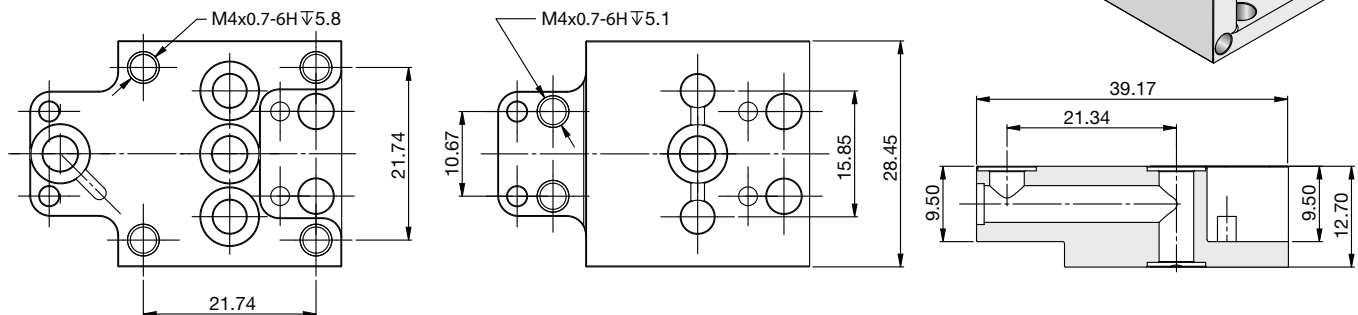
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MSC MODULAR, ISO, MALE, FEMALE**Part Number: 32205**

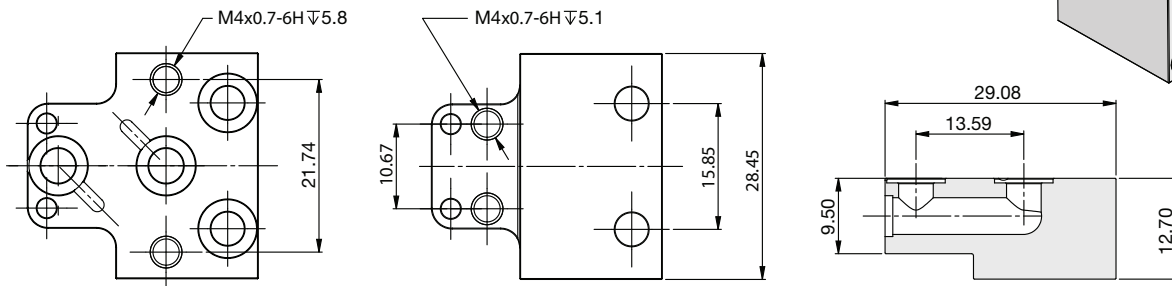
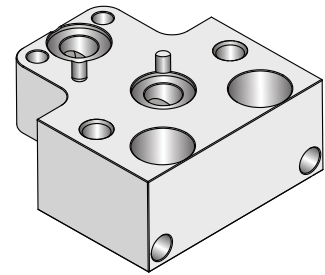
All dimensions in mm

MSC MODULAR, 3 PORT, MALE, FEMALE**Part Number: 32209**

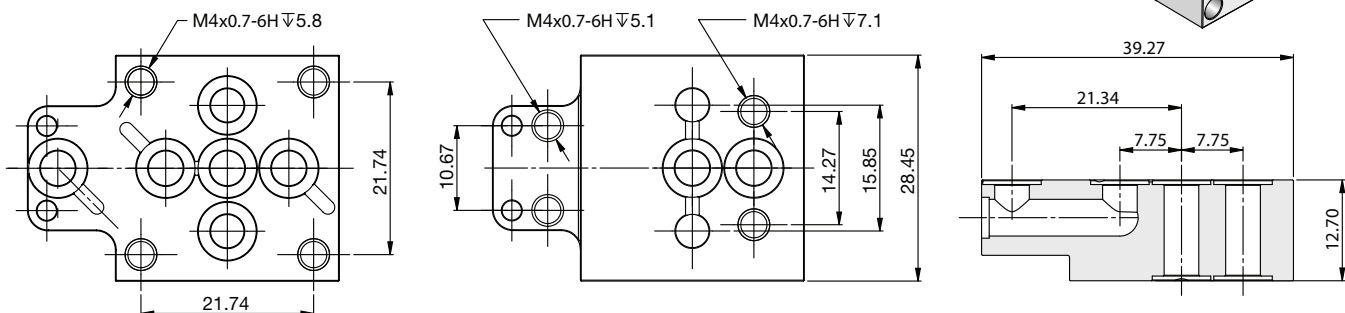
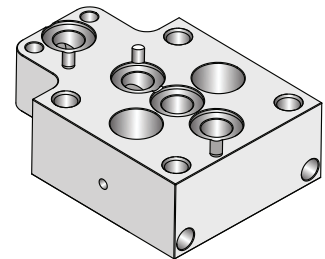
All dimensions in mm

MSC MODULAR, US/DS, MALE, FEMALE**Part Number: 32212**

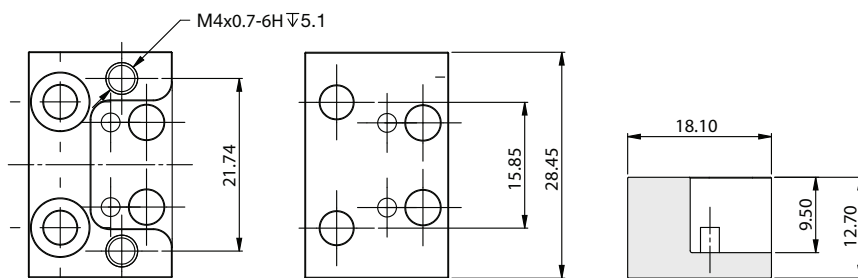
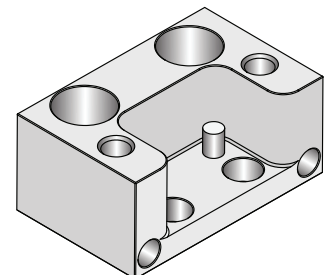
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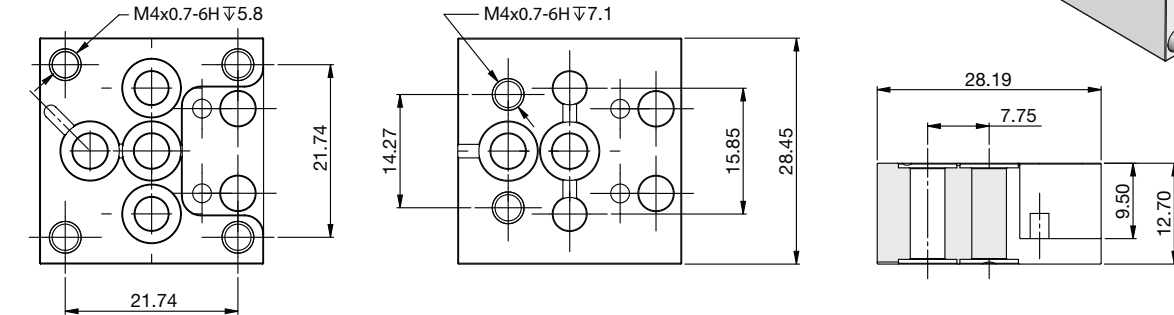
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MSC MODULAR, 3 PORT, MALE, END**Part Number: 32208**

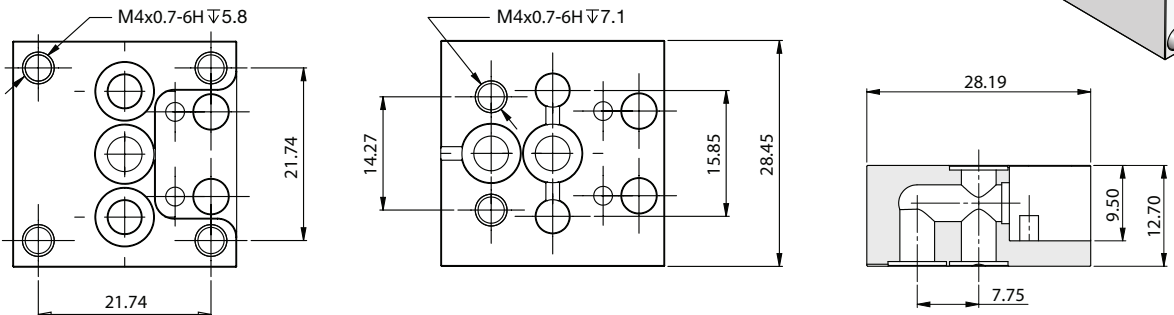
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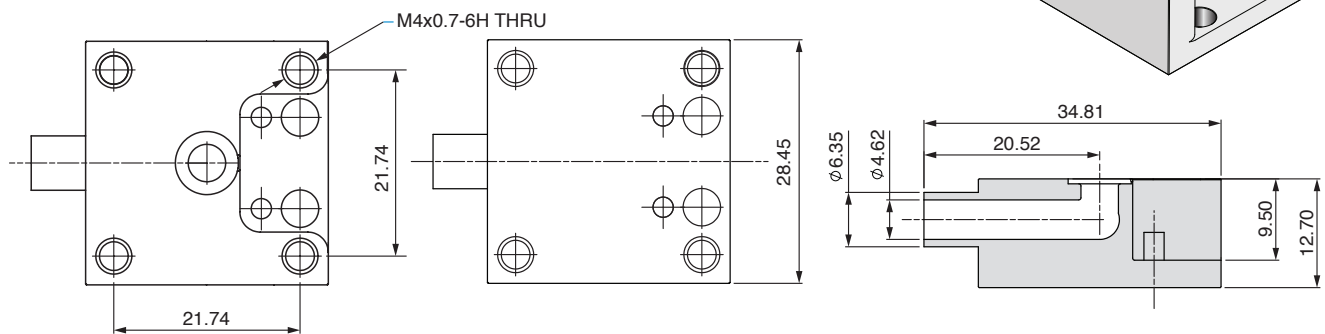
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MSC MODULAR, 3 PORT, FEMALE, END**Part Number: 32206**

All dimensions in mm

MSC MODULAR, US/DS FEMALE END**Part Number: 32210**

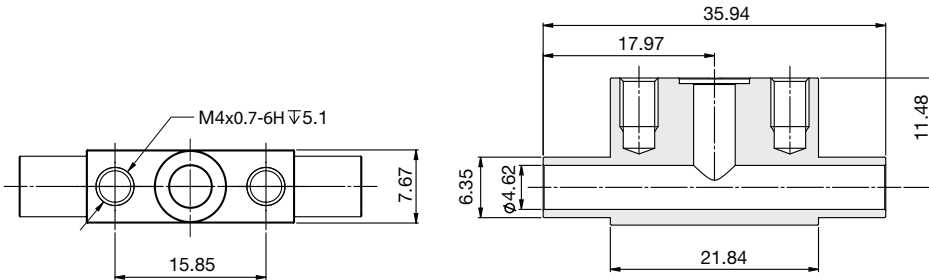
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MSC MODULAR, 2 PORT, FEMALE, END 1/4" TS**Part Number: 34476**

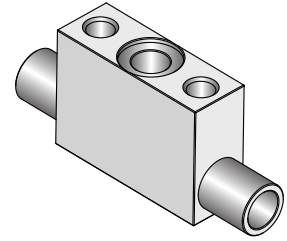
All dimensions in mm

MSC MODULAR, MANIFOLD, 1400, 1T

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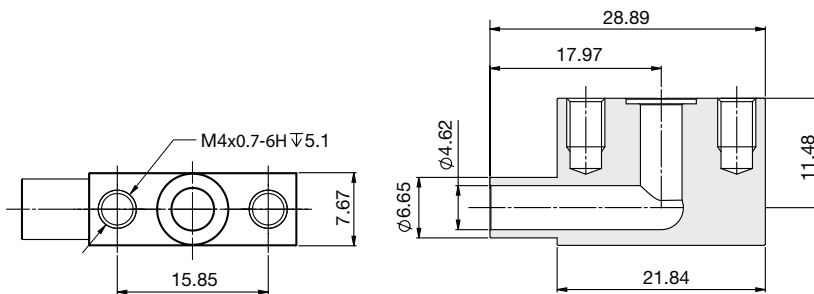


All dimensions in mm

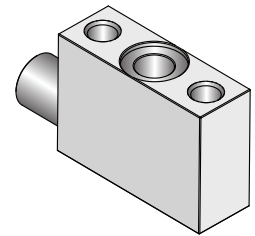


MSC MODULAR, MANIFOLD, 1400, 1L

Part Number: 32221

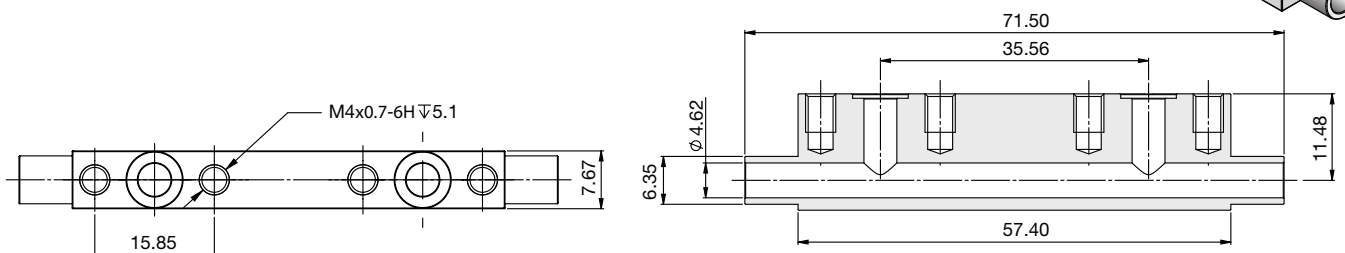


All dimensions in mm

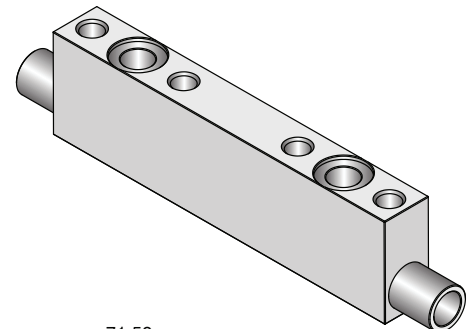


MSC MODULAR, MANIFOLD, 1400, 2T

Part Number: 32224

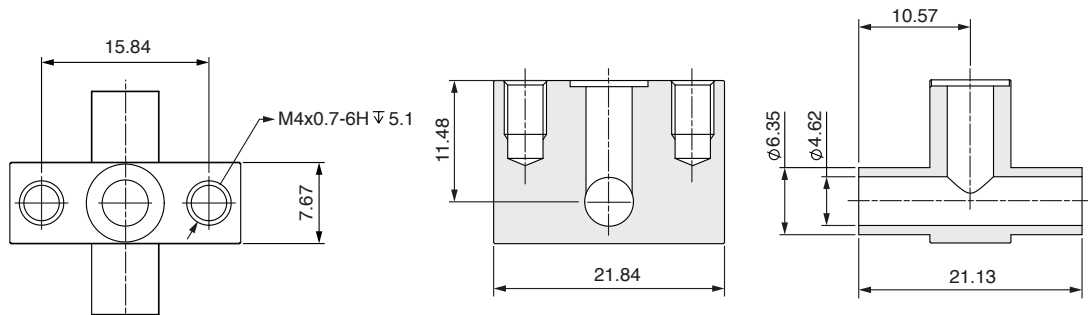


All dimensions in mm



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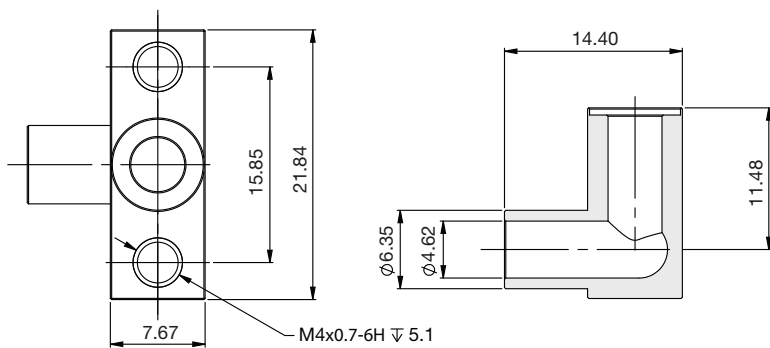
Part Number: 34495



All dimensions in mm

MSC MODULAR, SIDE - 1

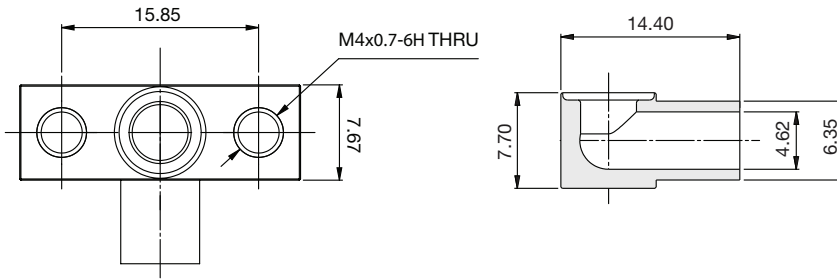
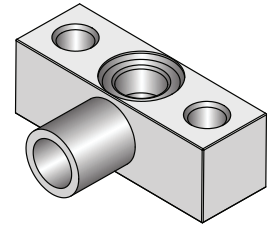
Part Number: 32255



All dimensions in mm

MSC MODULAR, THREADED FLANGE, 1/4 TW, SIDE

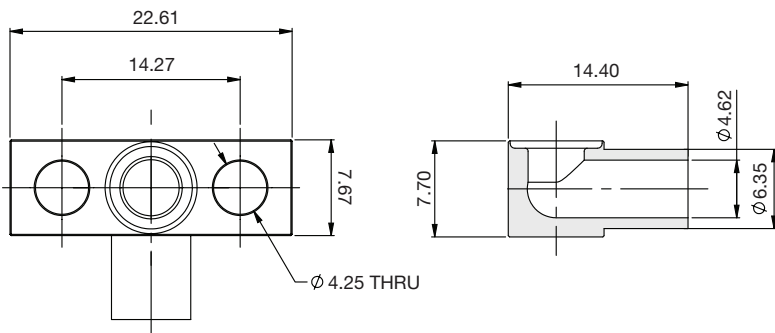
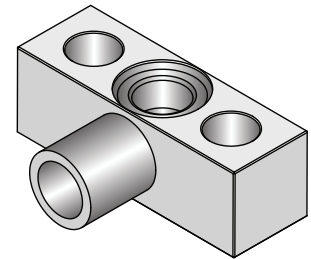
Part Number: 32218



All dimensions in mm

MSC MODULAR, FLANGE, 1/4 TW, SIDE

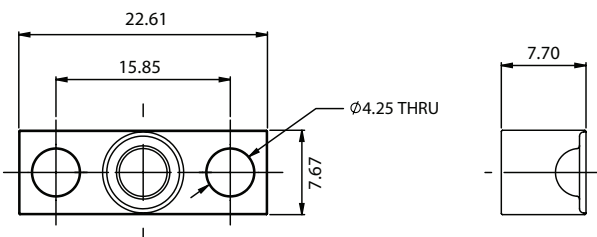
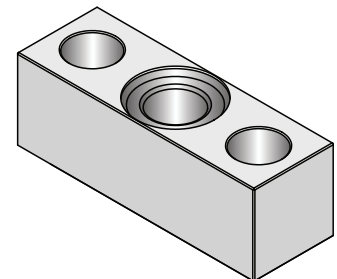
Part Number: 32215



All dimensions in mm

MSC MODULAR, 624 CAP

Part Number: 32258

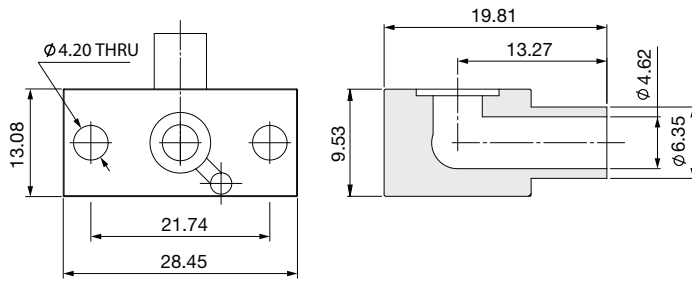


All dimensions in mm

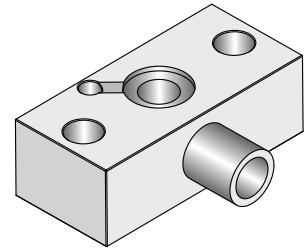
FLANGE

MSC MODULAR, MFC FLANGE SIDE

Part Number: 32229



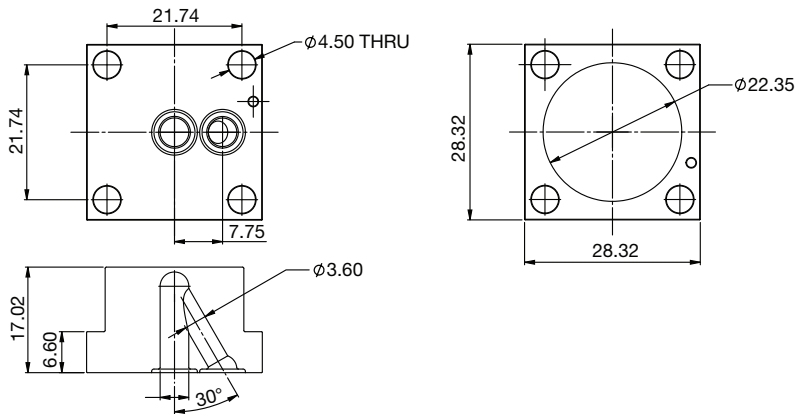
All dimensions in mm



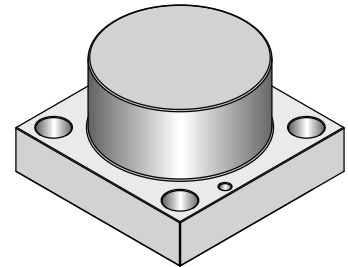
CAP

MSC FLOW THRU CAP, 2 PORT

Part Number: 32268

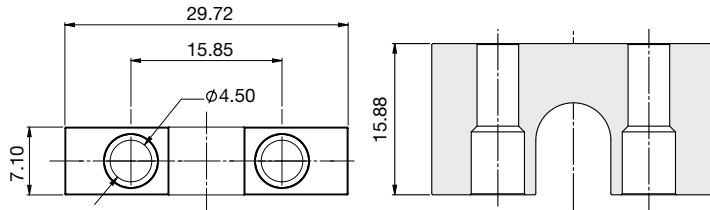


All dimensions in mm

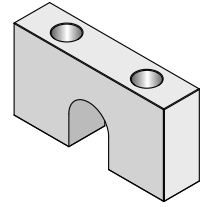


MSC MODULAR, SUBSTRATE MOUNTING, BLOCK, 0.62 HEIGHT

Part Number: 32226

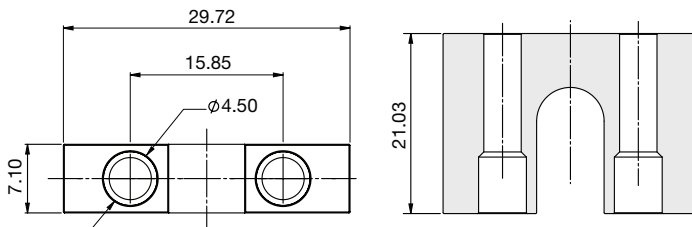


All dimensions in mm

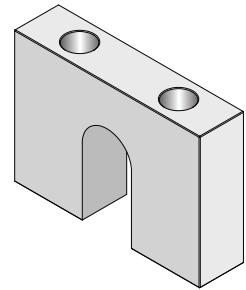


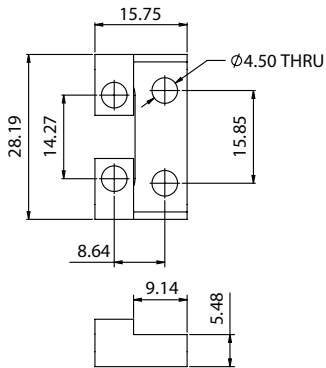
MSC MODULAR, MANIFOLD, 1400, 1T

Part Number: 32754

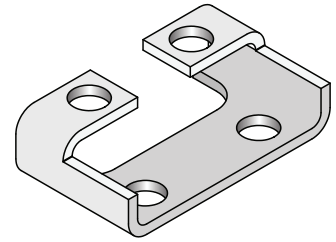
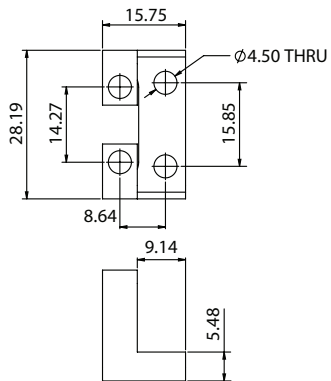


All dimensions in mm

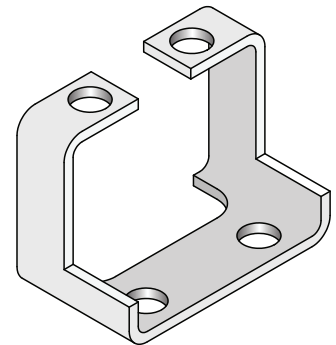
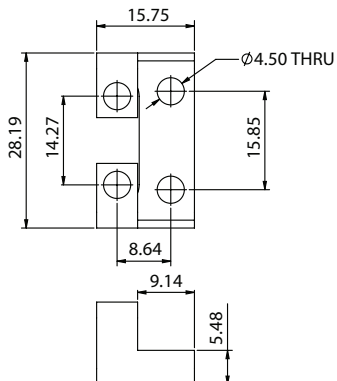


MSC SUBSTRATE MTG BRK 0.32"**Part Number: 32227**

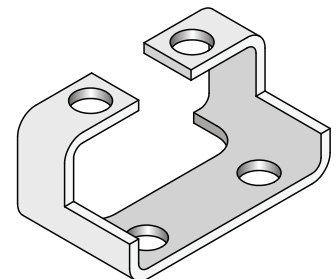
All dimensions in mm

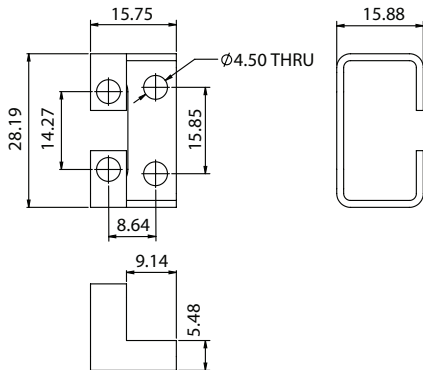
**MSC SUBSTRATE MTG BRK 0.82"****Part Number: 32752**

All dimensions in mm

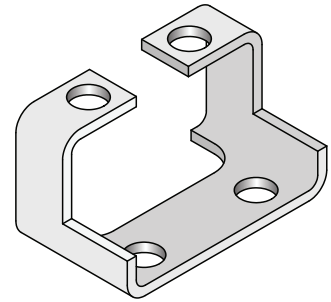
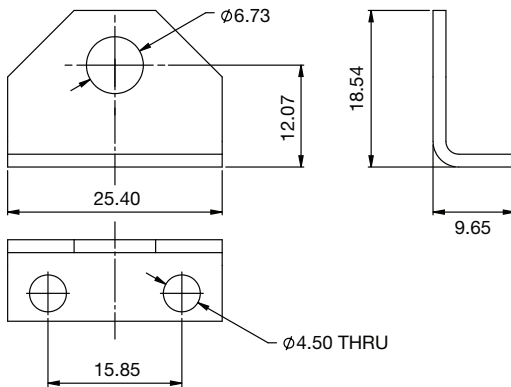
**MSC SUBSTRATE MTG BRK 0.52"****Part Number: 32751**

All dimensions in mm

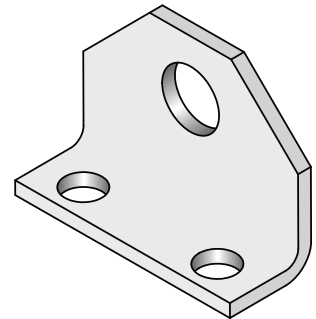
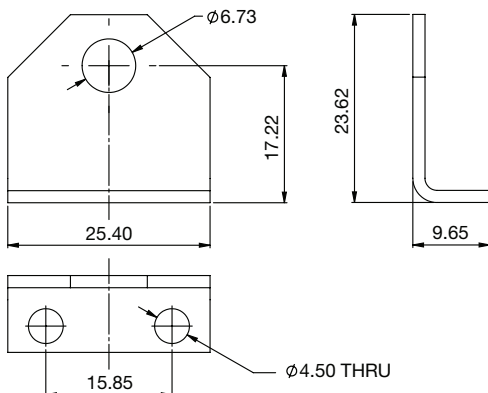


MSC SUBSTRATE MTG BRK 0.62"**Part Number: 32228**

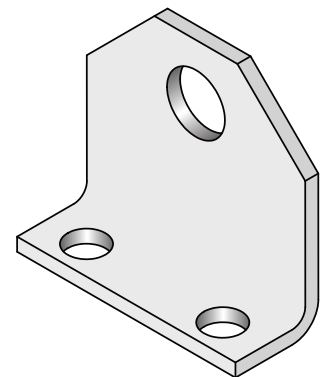
All dimensions in mm

**MSC SUPPORT BRACKET 1/4" TUBE****Part Number: 32245**

All dimensions in mm

**MSC SUPPORT BRACKET 1/4" TUBE HEATED****Part Number: 32778**

All dimensions in mm



HOW TO ORDER - MODULAR SUBSTRATE COMPONENTS

MSC	-	S	-	32205	-	V
Series		Type		Part No.		Material
MSC						
		S		32205		V 316L F20 ⁽¹⁾
				32206		P 316L ⁽²⁾
				32208		AL AL. 6061 ⁽³⁾
				32209		
				32210		
				32212		
				32213		
				32214		
				34476		
		M		32221		
				32223		
				32224		
				32255		
				34495		
		F		32215		
				32218		
				32229		
				32258		
		C		32268		
		MB		32226		
				32754		
		B		32227		
				32228		
				32215		
				32778		
				32751		
				32752		

S – Substrate
M – Manifold
F – Flange
C – Cap
MB – Mount Block
B – Bracket

⁽¹⁾ SEMI F20- 0815 Ultra-High Purity grade 316L
⁽²⁾ Relevant for Brackets
⁽³⁾ Relevant for Mount blocks

MSC | 2020_Rev00

Note: For additional part numbers, please contact your local representative