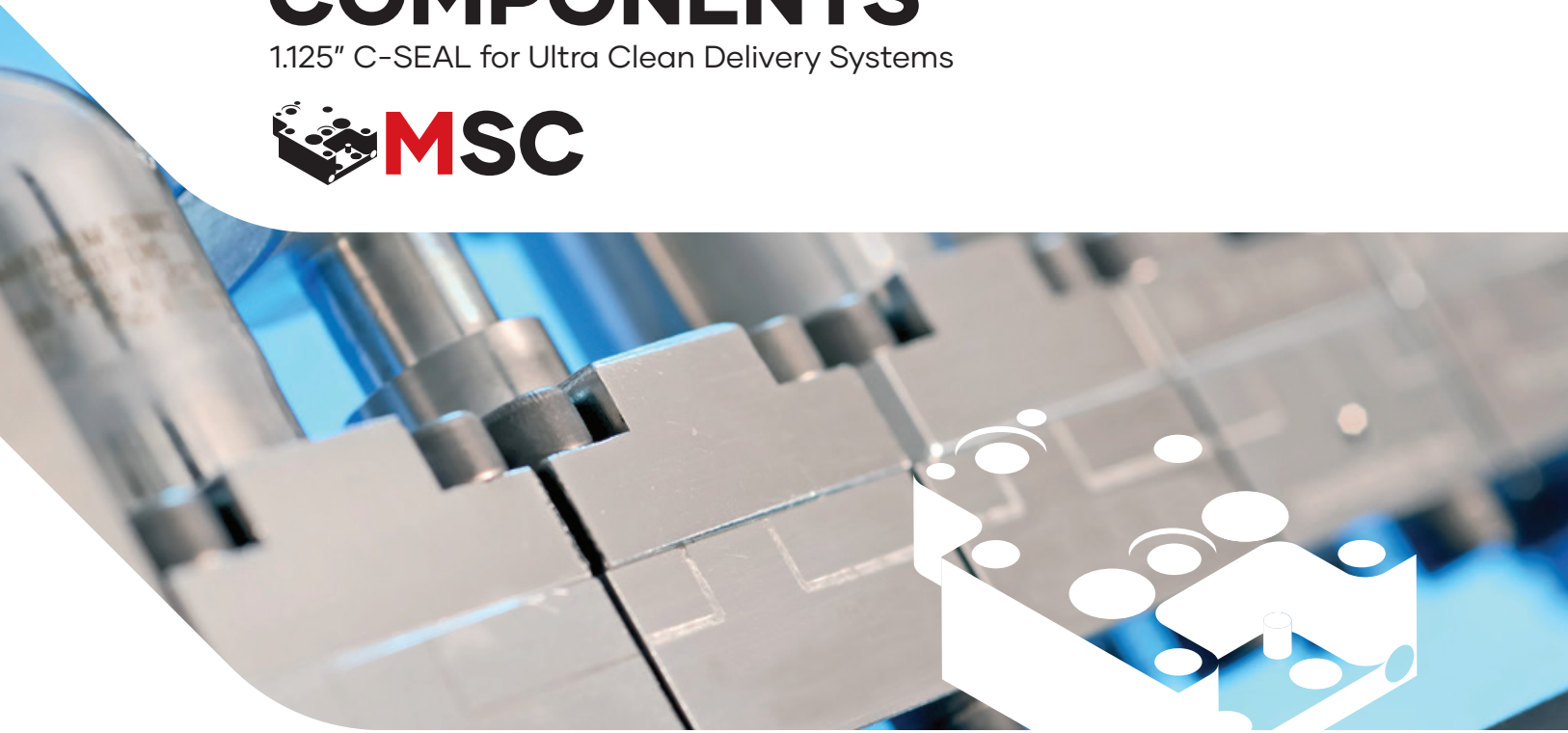


MODULAR SUBSTRATE COMPONENTS

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

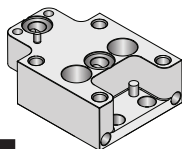
⁽¹⁾ SEMI F20 - 0815

⁽²⁾ SEMI F19 - 0706^E (R0917)

MODULAR SUBSTRATE INDEX

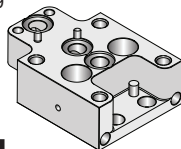
SUBSTRATE

ISO MALE FEMALE
32205



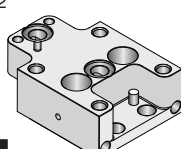
4

3 PORT MALE FEMALE
32209



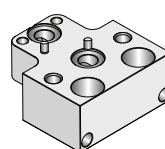
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LUS/DS MALE FEMALE
32212



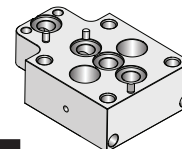
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MCF MALE
32213



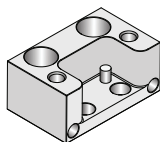
5

3 PORT MALE END
32208



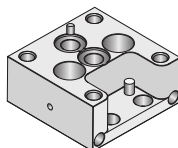
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MCF FEMALE
32214



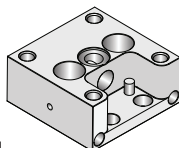
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3 PORT FEMALE END
32206



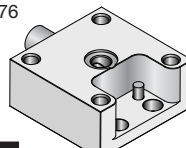
6

US / DS FEMALE END
32210



6

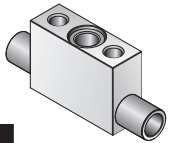
2 PORT FEMALE END 1/4 TS
34476



6

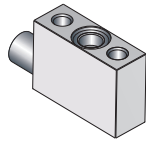
MANIFOLD

1400 1T
32223



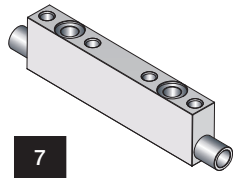
7

1400 1L
32221



7

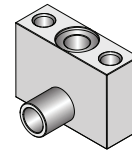
1400 2T
32224



7

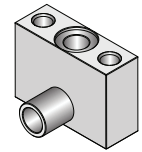
SIDE - 2

34495



8

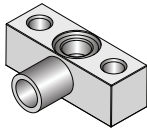
SIDE - 1
32255



8

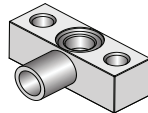
FLANGE

THREADED 1/4 TW SIDE
32218



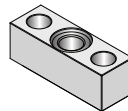
9

1/4 TW SIDE
32215



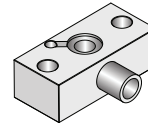
9

624 CAP
32258



9

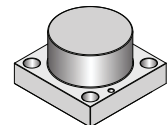
MFC FLANGE SIDE
32229



10

CAP

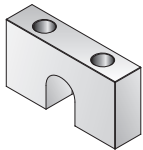
COMP 2 PORT
32268



10

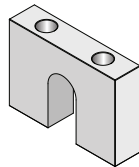
MOUNT BLOCK

BLOCK 0.62 HEIGHT
32226



11

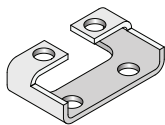
BLOCK 0.82 HEIGHT
32754



11

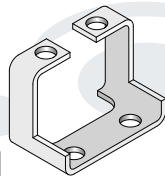
BRACKET

MOUNTING BRACKET 0.32"
32227



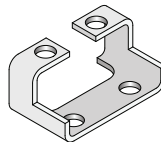
12

MOUNTING BRACKET 0.82"
32752



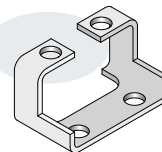
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MOUNTING BRACKET 0.52"
32751



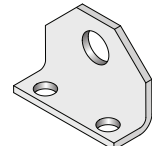
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MOUNTING BRACKET 0.62"
32228



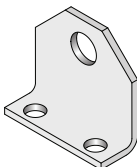
13

SUPPORT BRACKET 1/4 TUBE
32245



13

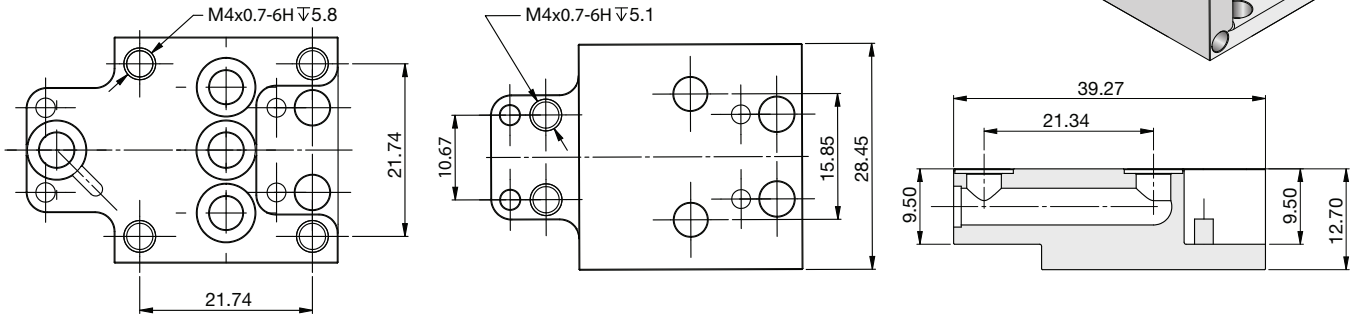
SUPPORT BRACKET 1/4 TUBE HEATED
32778



13

MSC MODULAR, ISO, MALE, FEMALE

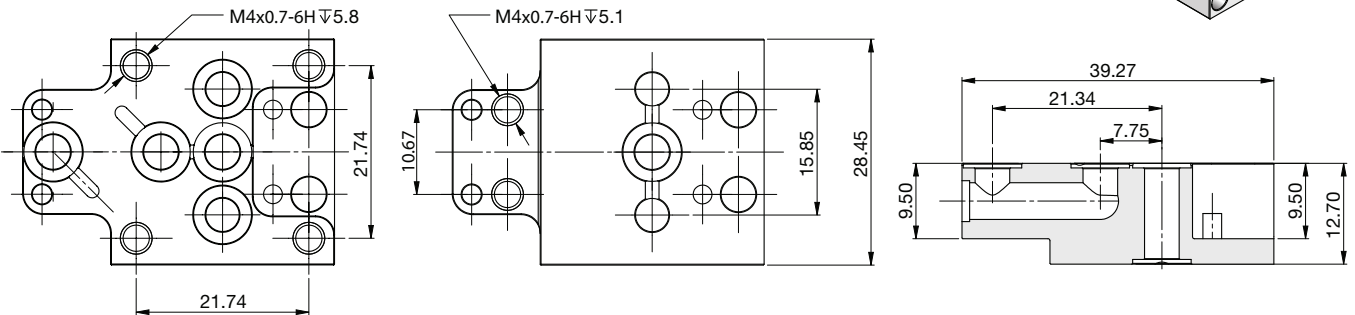
Part Number: 32205



All dimensions in mm

MSC MODULAR, 3 PORT, MALE, FEMALE

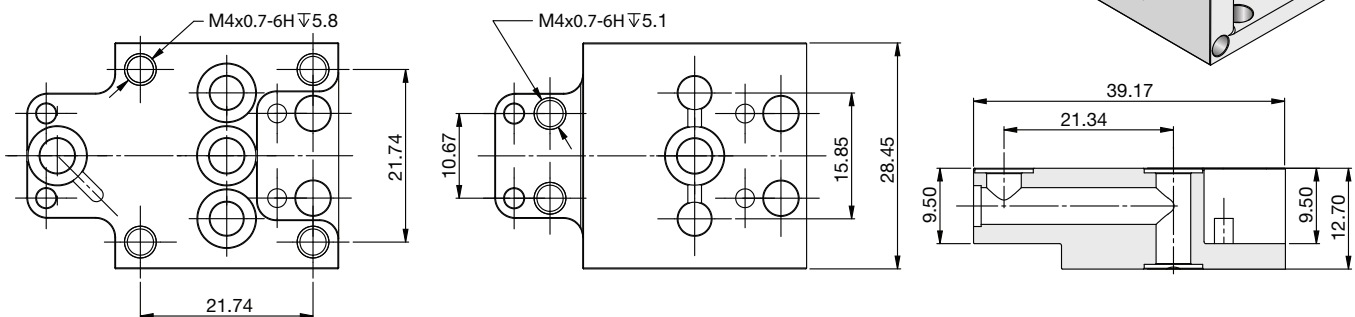
Part Number: 32209



All dimensions in mm

MSC MODULAR, US/DS, MALE, FEMALE

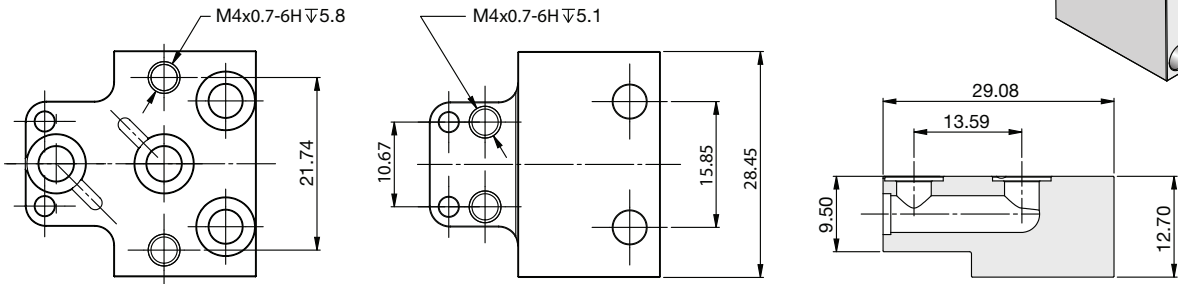
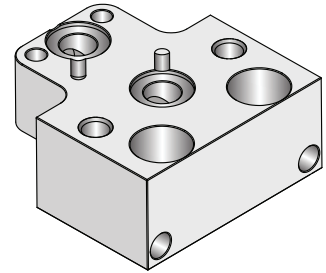
Part Number: 32212



All dimensions in mm

MSC MODULAR, MCF, MALE

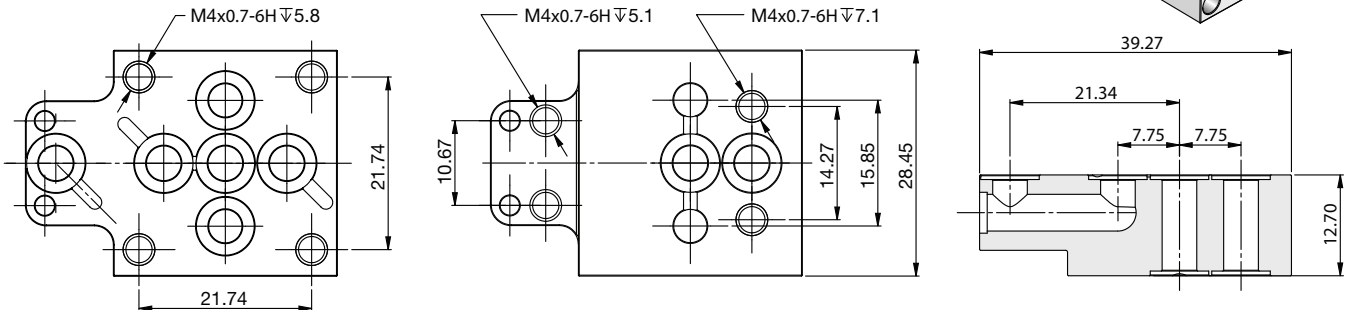
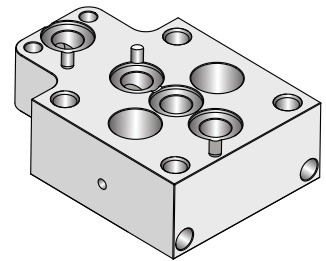
Part Number: 32213



All dimensions in mm

MSC MODULAR, 3 PORT, MALE, END

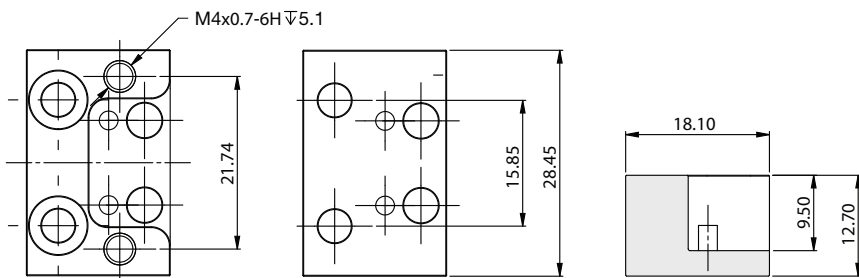
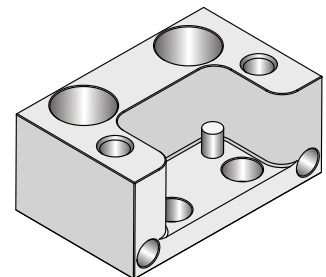
Part Number: 32208



All dimensions in mm

MSC MODULAR, FEMALE

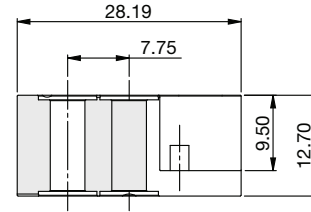
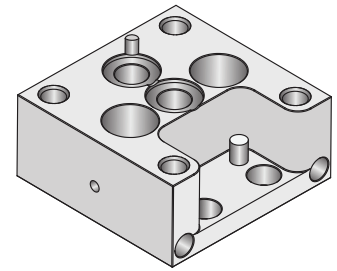
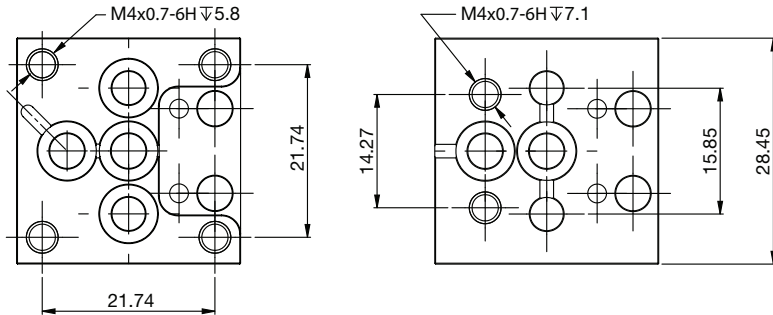
Part Number: 32214



All dimensions in mm

MSC MODULAR, 3 PORT, FEMALE, MALE

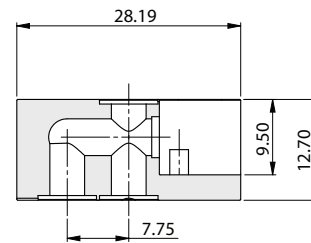
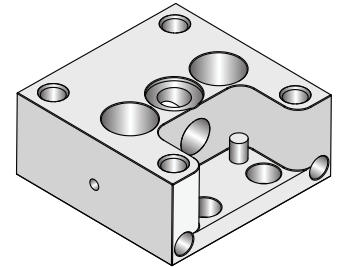
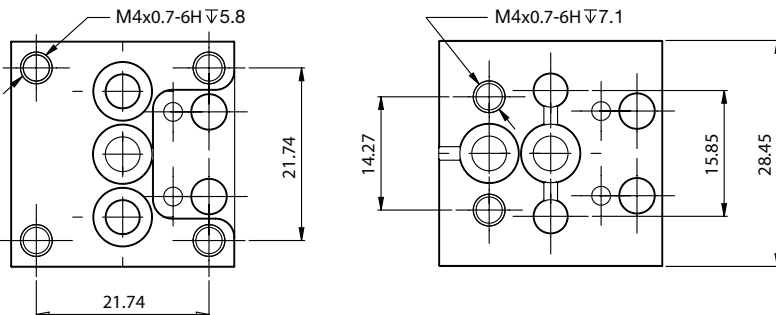
Part Number: 32206



All dimensions in mm

MSC MODULAR, US/DS FEMALE END

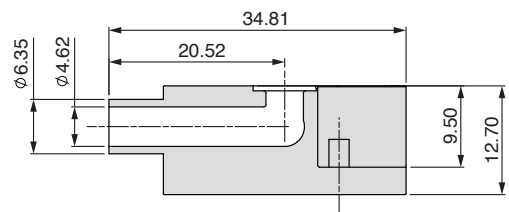
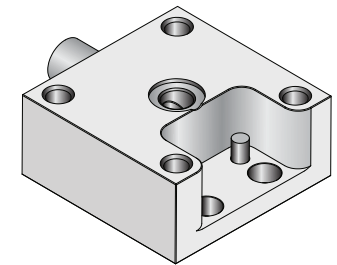
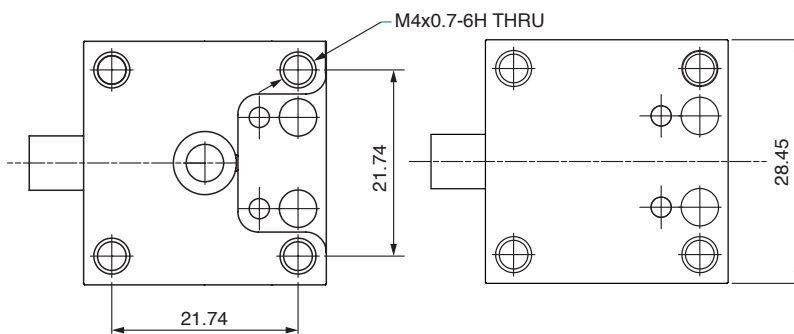
Part Number: 32210



All dimensions in mm

MSC MODULAR, 2 PORT, FEMALE, END 1/4" TS

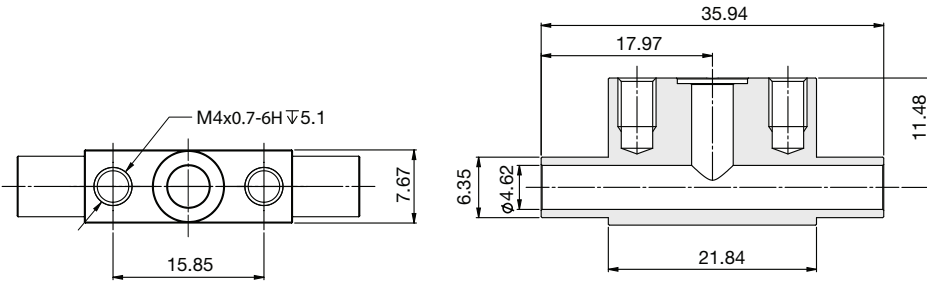
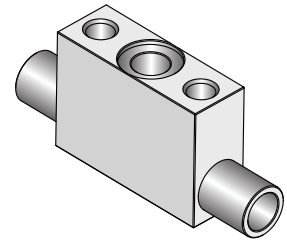
Part Number: 34476



All dimensions in mm

MSC MODULAR, MANIFOLD, 1400, 1T

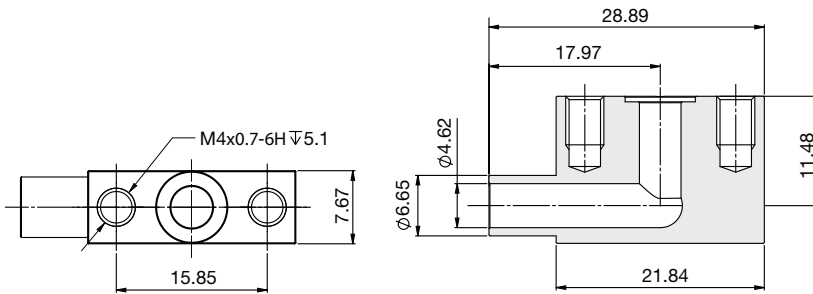
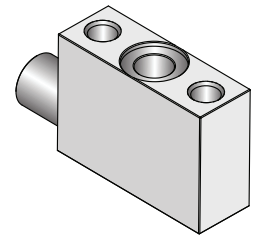
Part Number: 32223



All dimensions in mm

MSC MODULAR, MANIFOLD, 1400, 1L

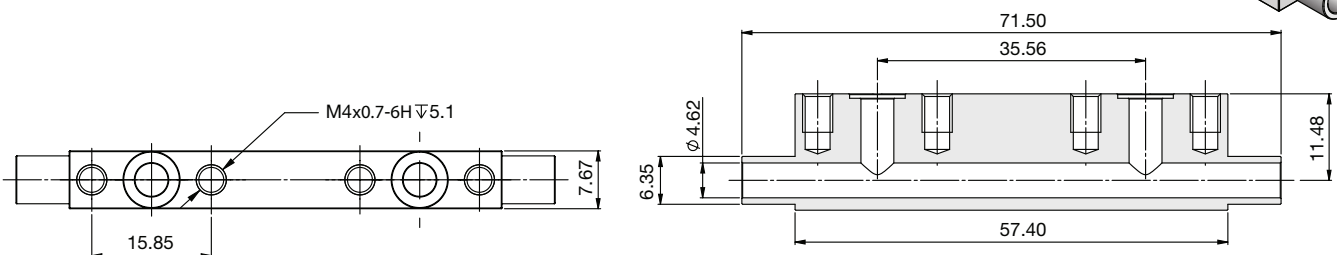
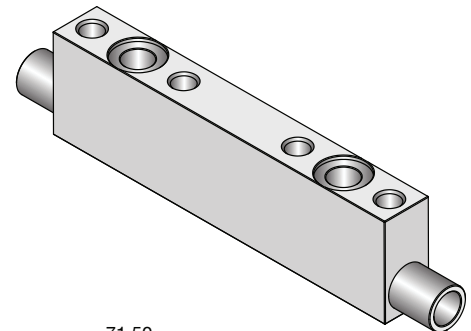
Part Number: 32221



All dimensions in mm

MSC MODULAR, MANIFOLD, 1400, 2T

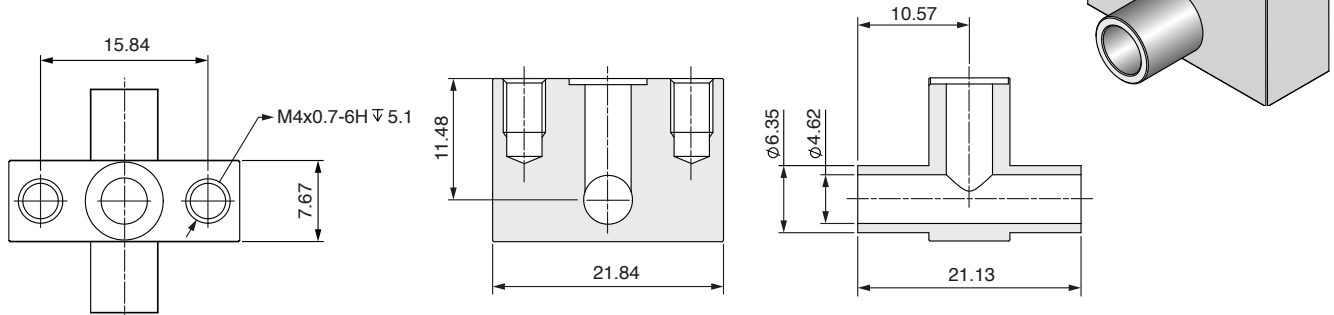
Part Number: 32224



All dimensions in mm

MSC MODULAR, SIDE - 2

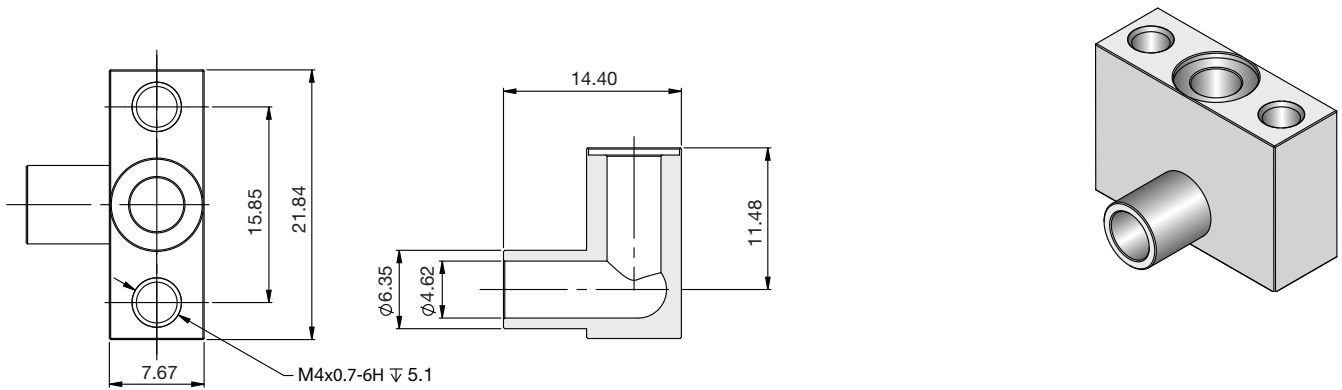
Part Number: 34495



All dimensions in mm

MSC MODULAR, SIDE - 1

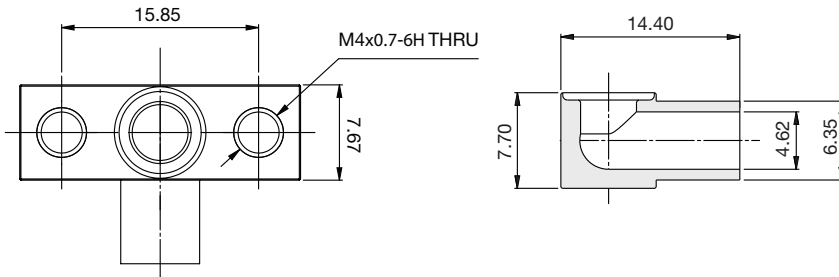
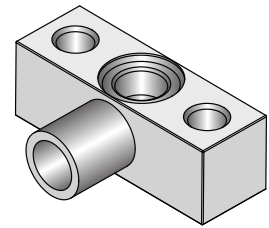
Part Number: 32255



All dimensions in mm

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

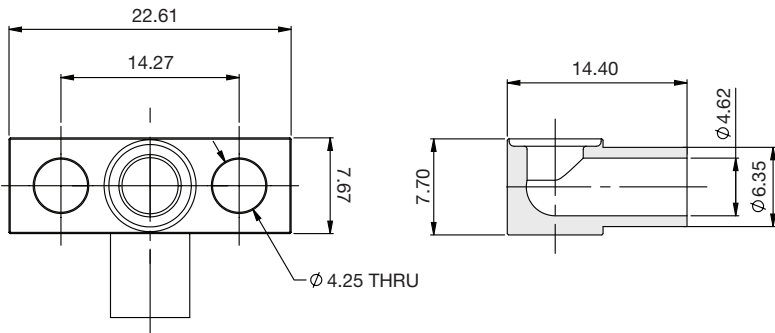
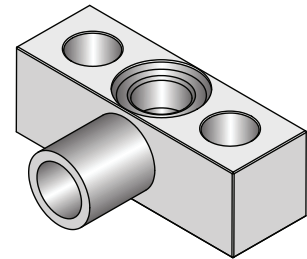
Part Number: 32218



All dimensions in mm

MSC MODULAR, FLANGE, 1/4 TW, SIDE

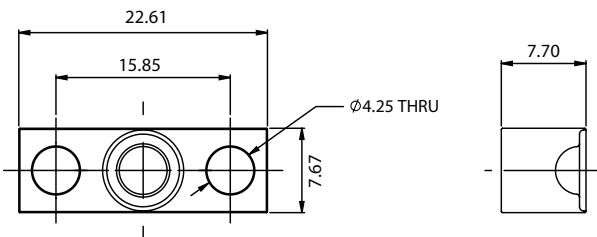
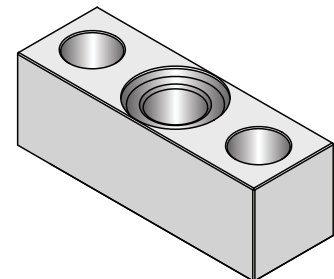
Part Number: 32215



All dimensions in mm

MSC MODULAR, 624 CAP

Part Number: 32258

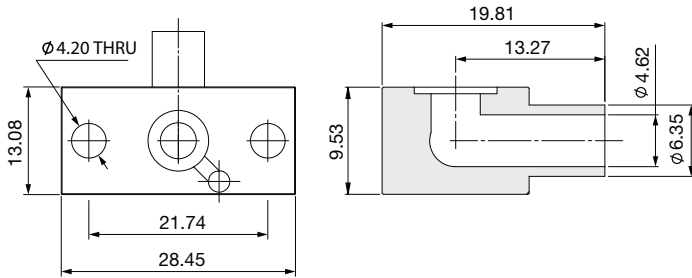


All dimensions in mm

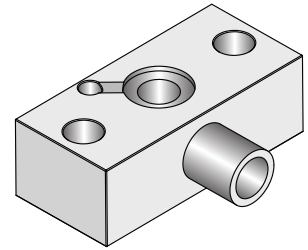
FLANGE

MSC MODULAR, MFC FLANGE SIDE

Part Number: 32229



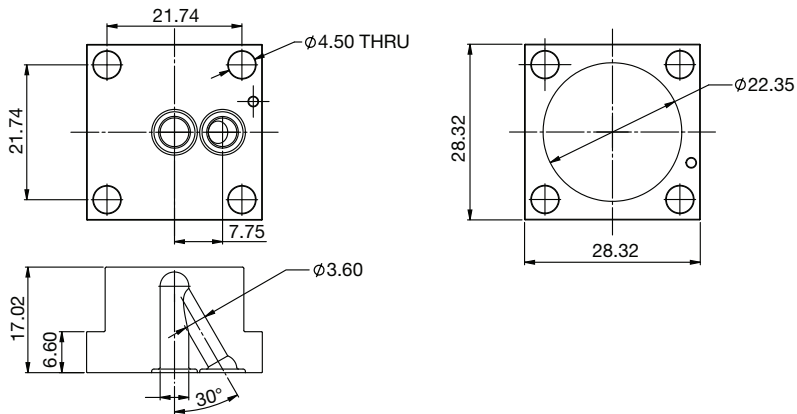
All dimensions in mm



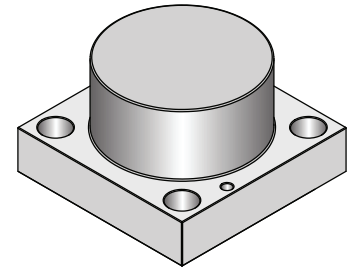
CAP

MSC FLOW THRU CAP, 2 PORT

Part Number: 32268

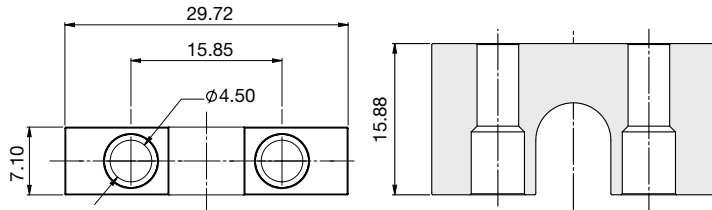


All dimensions in mm

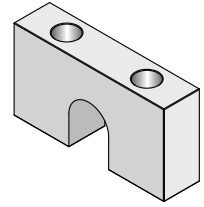


MSC MODULAR, SUBSTRATE MOUNTING, BLOCK, 0.62 HEIGHT

Part Number: 32226

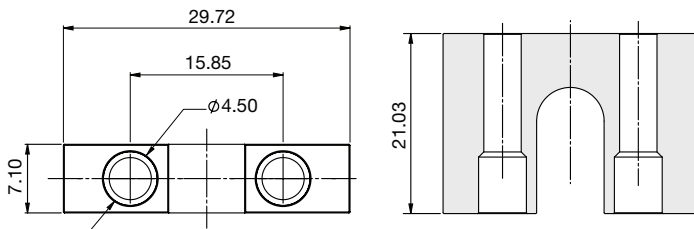


All dimensions in mm

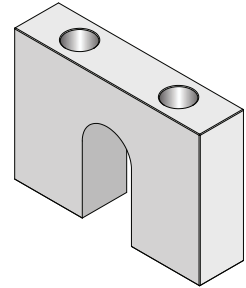


MSC MODULAR, MANIFOLD, 1400, 1T

Part Number: 32754

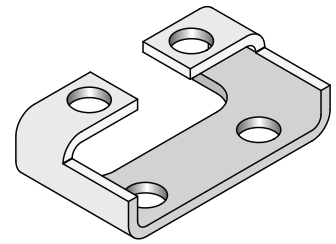
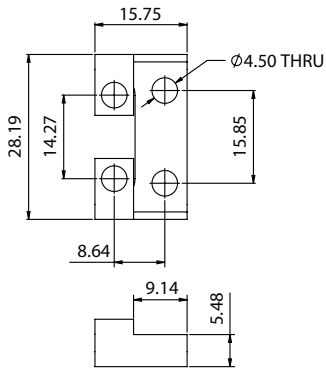


All dimensions in mm



MSC SUBSTRATE MTG BRK 0.32"

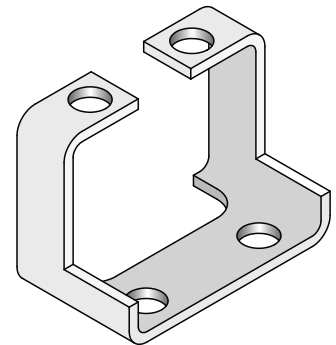
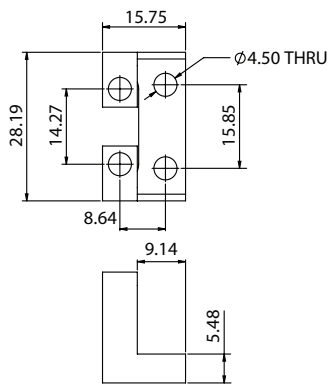
Part Number: 32227



All dimensions in mm

MSC SUBSTRATE MTG BRK 0.82"

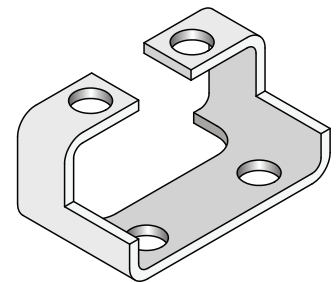
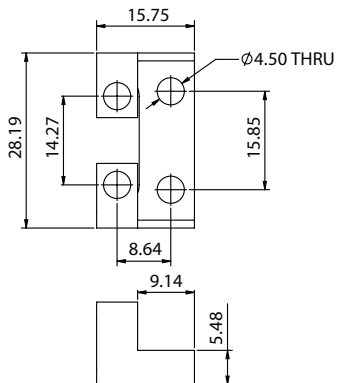
Part Number: 32752



All dimensions in mm

MSC SUBSTRATE MTG BRK 0.52"

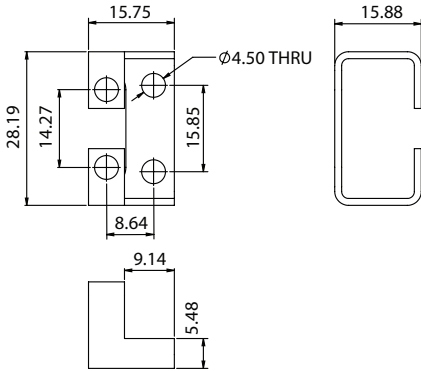
Part Number: 32751



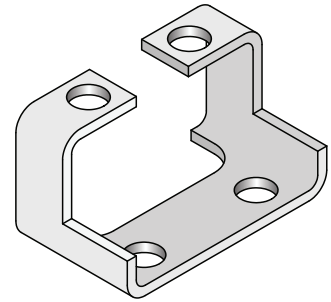
All dimensions in mm

MSC SUBSTRATE MTG BRK 0.62"

Part Number: 32228

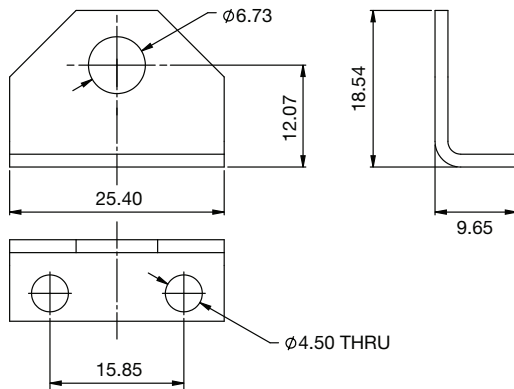


All dimensions in mm

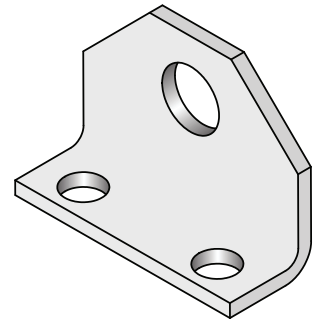


MSC SUPPORT BRACKET 1/4" TUBE

Part Number: 32245

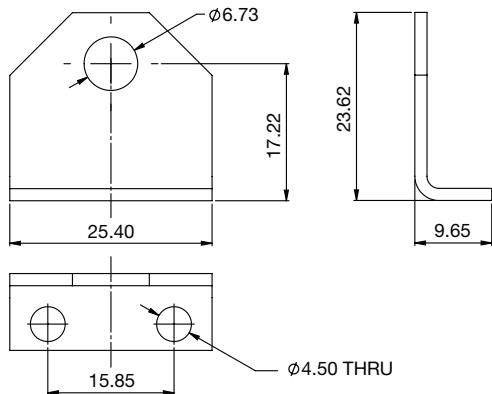


All dimensions in mm

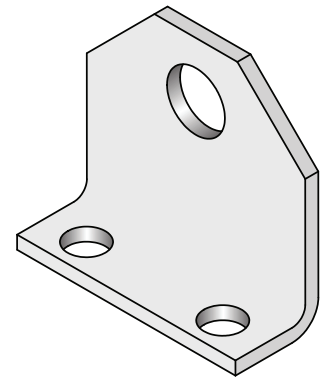


MSC SUPPORT BRACKET 1/4" TUBE HEATED

Part Number: 32778



All dimensions in mm



HOW TO ORDER - MODULAR SUBSTRATE COMPONENTS

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	
		32221	
		32223	
		32224	
		32255	
		34495	
		M	32215
	32218		
	32229		
	F	32258	
		32268	
	C		
	MB	32226	
		32754	
	B	32227	
		32228	
		32215	
		32778	
		32751	
		32752	

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

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

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