

Integrated Gas Systems



Fittings

Valves

Regulators

Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

Contents

Fittings	Features	I-18
Valves	Process Specification	I-20
	Modular System Design Processes	I-21
Regulators	Parts	I-22
	Substrates ISW Series	I-22
	Substrates ISC Series	I-32
	Sealing Gaskets IWG Series	I-45
Filters	Sealing Gaskets ICG Series	I-47
Tubing		
Integrated Systems		
Other Products		
Technical Information		

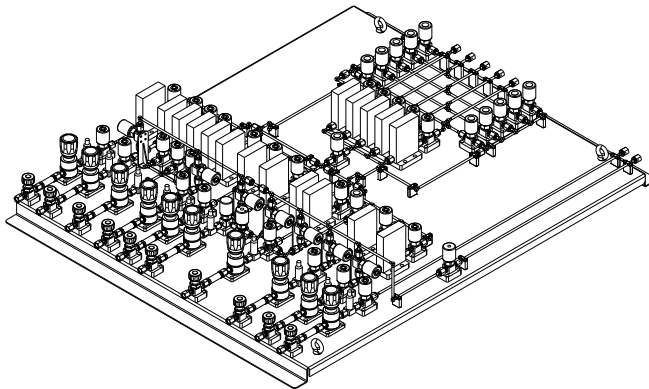
Features

FITOK Integrated Gas System is used to control gas in the semiconductor industry, integrating valves, fittings, and other piping components, as well as other necessary measuring and control instruments. FITOK Integrated Gas System uses SEMI compliant surface-mounted components and is modularly designed. While reducing the size of the device, installation and maintenance become easier.

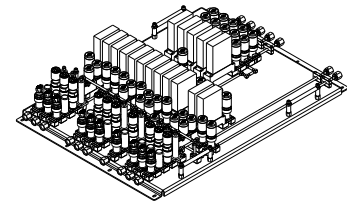
Miniaturization

The size is about 1/3 the traditional panel, and the corresponding flow path size is also reduced for better contamination control.

Traditional Panel

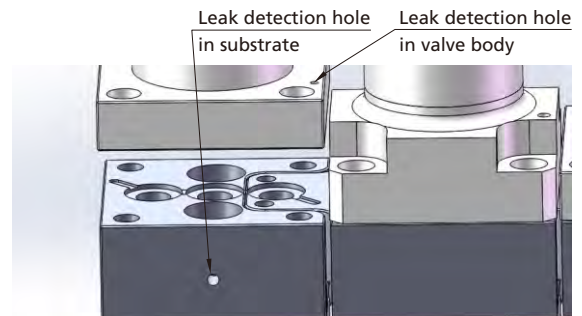
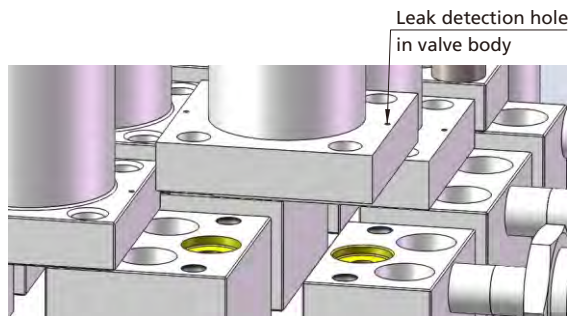


IGS Panel



Leak Detection Hole

Every sealing face has a leak detection hole.



Silver-Plated Bolts

IGS uses silver-plated bolts to prevent galling. Silver-plated bolts can be ordered individually. Part number:
BL-M4×10 (10 mm long)
BL-M4×30 (30 mm long)
For other sizes, please contact FITOK Group.



Bolts with Falling Prevention Design

Silver-plated bolt is gripped by the valve and will not fall even when the valve is upside down during installation and maintenance.



Fittings

Valves

Regulators

Filters

Tubing

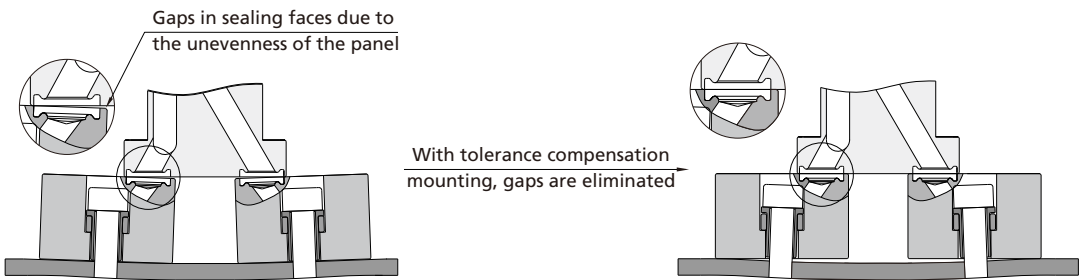
Integrated
SystemsOther
ProductsTechnical
Information

Tolerance Compensation Structure (W-Seal Only)

W-seal substrates are designed with a tolerance compensation construction, allowing for less assembly tolerance and ensuring the system sealing performance to the greatest extent.

The substrate is locked to the panel through the bolt pressing the sleeve, while the substrate is variable.

- 1. Horizontally variable: Used to compensate for the machining tolerances in panel threaded holes to ensure that substrates are mounted in a straight line.
- 2. Vertically variable: Used to compensate for dimensional tolerances of panels and substrates to ensure sealing performance.



W/C-Seal

W-seal and C-seal are functionally the same but differ in size due to different SEMI standards applied. Users can choose W-seal or C-seal based on customs and accessories selection. The leak rate (helium) of the sealing face $\leq 1 \times 10^{-9}$ std·cm³/s.

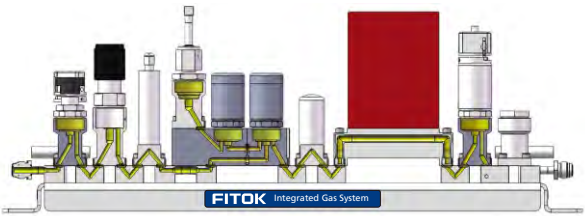
W-Seal Body/Substrate/Gasket



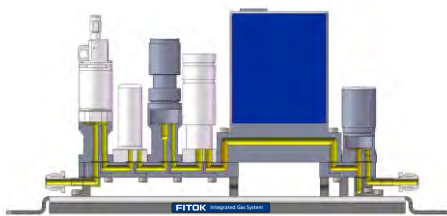
C-Seal Body/Substrate/Gasket



Typical W-Seal System



Typical C-Seal System



Special Tool Kit



FITOK provides special tool kits to enable efficient assembly and maintenance.

Part number: SC-IGS-11.

Special tool kit content:

Name	Function	Qty.
Substrate positioning fixture	W-seal substrate positioning	3 pcs.
MFC (92 mm) positioning fixture	W-seal substrate positioning	1 pc.
Torque screwdriver	1~6 N·m, used to secure substrates and valves	1 pc.
Torque screwdriver bits	For M4 screws	2 pcs.
Extra-long T type hex key	For M4 screws	1 pc.
Gasket tweezers	For 1.125" W-seal gaskets	1 pc.

Heat Trace Cable

Heat trace cables are optional for gas path in need of heat trace.



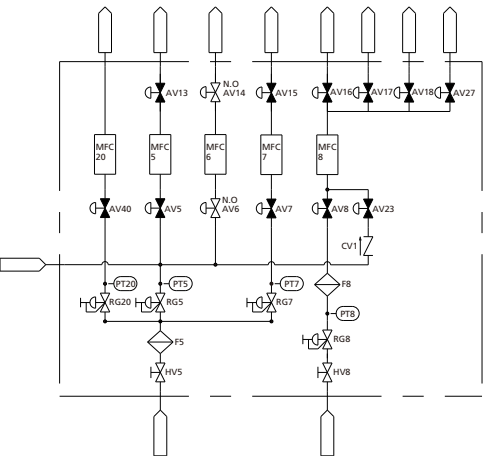
Process Specification

Item	Process Specification	Ultra High Purity Process (FC-03)
Material		316L SS, 316L SS VAR
Wetted Surface Roughness		Ra 5 $\mu\text{in.}$ (0.13 μm)
Polishing Process		Electropolished
Cleaning		Ultra high purity cleaning in continuously monitored ultrasonic cleaning system with deionized water
Assembly Environment		ISO 4 / Federal 10 Clean Room
Packaging		Double bagged in cleanroom

Modular System Design Processes

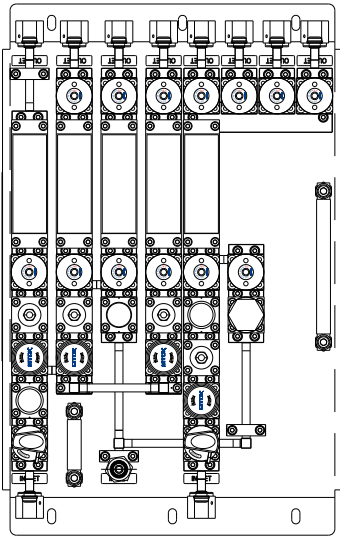
Step 1: System Design

Determine basic component selections based on the schematic diagram provided by the customer.



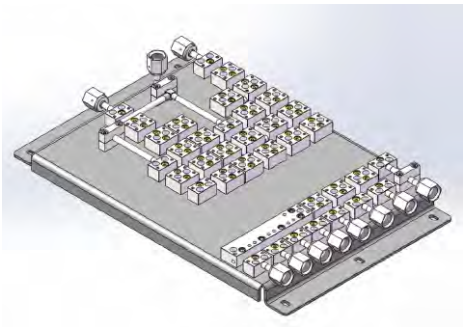
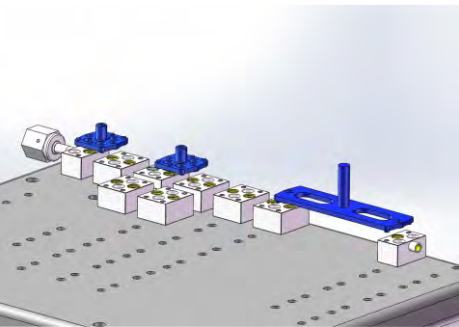
Step 2: Component Manufacturing

Manufacture components to the drawings after the customer finalizes the configuration.



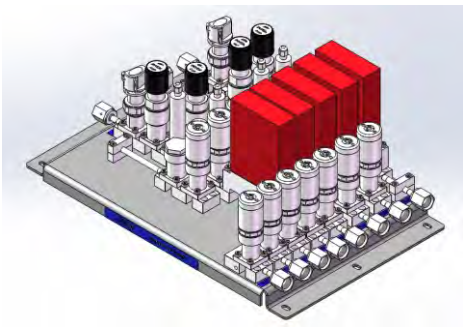
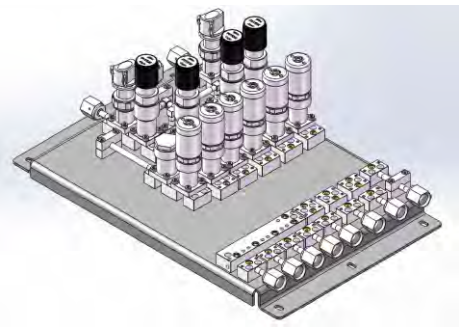
Step 3: Component Assembly

A substrate positioning tool is required for W-seal system assembly, but not for C-seal systems.



Step 4: Testing

Standard tests include helium leak testing and pressure testing. Particle testing is optional.



Parts

Substrates ISW Series

Features

- ◎ Tolerance compensation structure to enable less assembly tolerances and maximize system sealing performance
- ◎ Final assembly and packaging performed in ISO 4 cleanroom



Technical Data

- ◎ 1.125" W-Seal
- ◎ Leak Rate (Helium): $\leq 1 \times 10^{-9}$ std-cm³/s
- ◎ FC-03 Ultra-high Purity Process Specification
- ◎ Wetted surface roughness less than Ra 5 μ in. (0.13 μ m)
For Pores with an L/D Greater than 10, the Roughness Less than Ra 32 μ in. (0.8 μ m)

Process Specification

Item	Process Specification	Ultra High Purity Process (FC-03)
Material		316L SS, 316L SS VAR
Wetted Surface Roughness		Ra 5 μ in. (0.13 μ m)
Polishing Process		Electropolished

Fittings

Valves

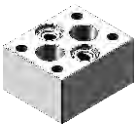
Regulators

Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

Contents

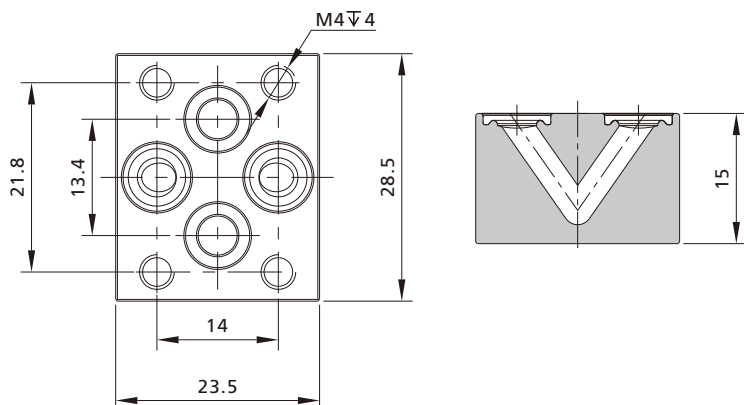
Fittings		Standard Substrates -IVB	I-24
Valves		1-Path Bypass Substrates -ISB	I-24
Regulators		Plugs -IEC	I-27
Filters		Transition Substrates -ITC	I-28
Tubing		2-Path Bypass Substrates -IDB	I-29
Integrated Systems		End Substrates -IEB	I-30
Other Products		Ordering Number Description	I-31
Technical Information			

Dimensions and Ordering Information

Standard Substrates

Basic Ordering Number: -IVB-WS11-V014-F3

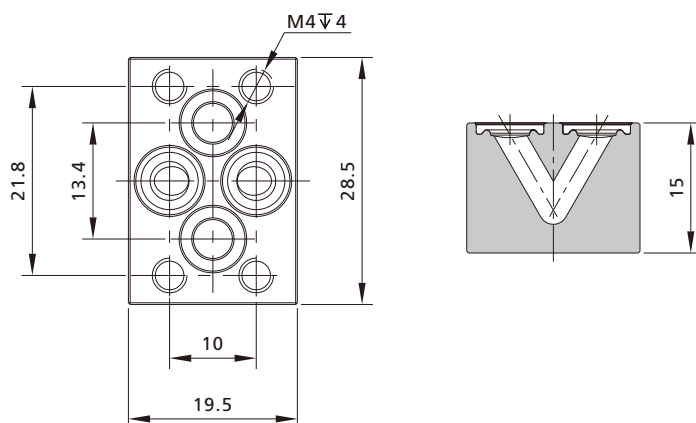
Unit: mm



Standard Substrates

Basic Ordering Number: -IVB-WS11-V010-F3

Unit: mm

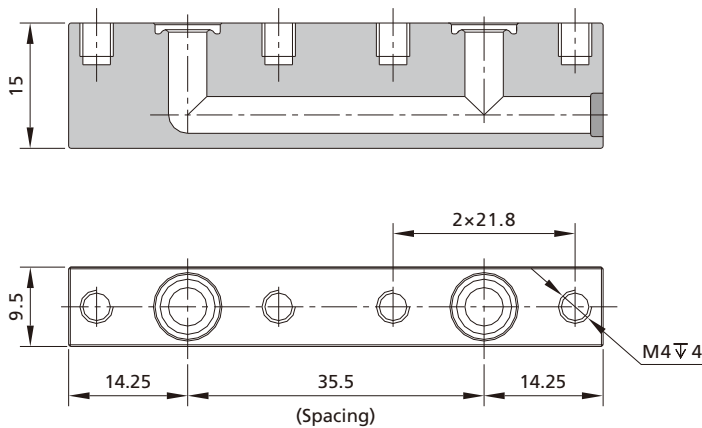


1-Path Bypass Substrates

Spacing 35.5 mm Basic Ordering Number: -ISB-WS11-M200-F3

Spacing 30 mm Basic Ordering Number: -ISB-WS11-M201-F3

Unit: mm



Fittings

Valves

Regulators

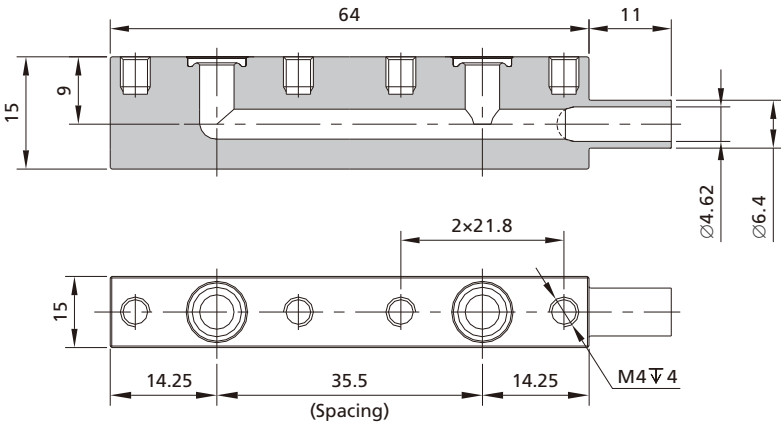
Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

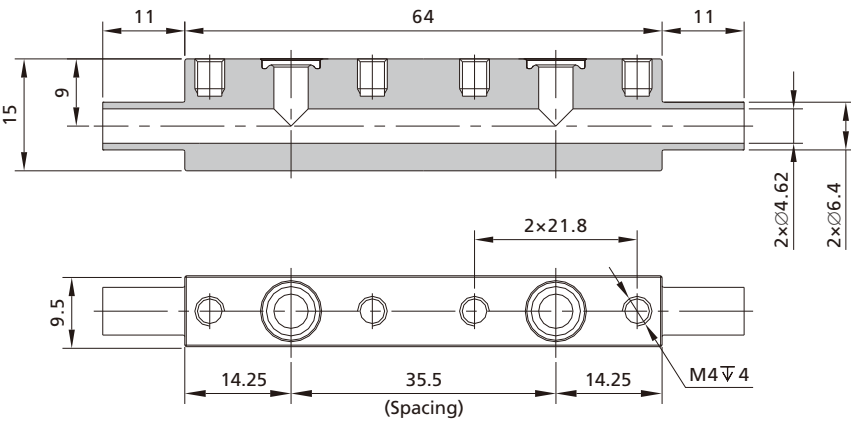
1-Path Bypass Substrates

Spacing 35.5 mm Basic Ordering Number: -ISB-WS11-M210-F3
Spacing 30 mm Basic Ordering Number: -ISB-WS11-M211-F3
Unit: mm



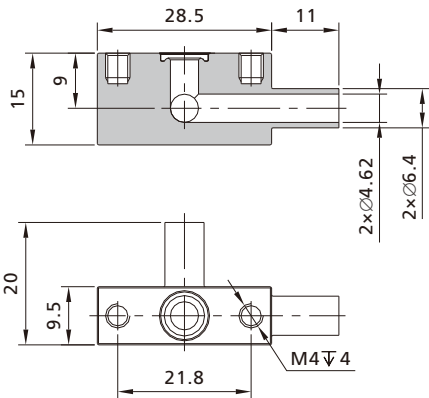
1-Path Bypass Substrates

Spacing 35.5 mm Basic Ordering Number: -ISB-WS11-M220-F3
Spacing 30 mm Basic Ordering Number: -ISB-WS11-M221-F3
Unit: mm



1-Path Bypass Substrates

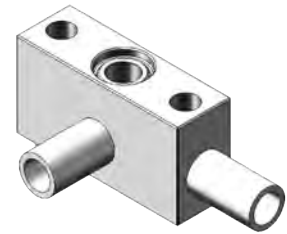
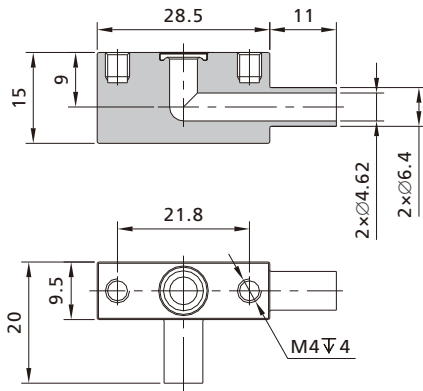
Basic Ordering Number: -ISB-WS11-S122-F3
Unit: mm



1-Path Bypass Substrates

Basic Ordering Number: -ISB-WS11-S121-F3

Unit: mm



Fittings

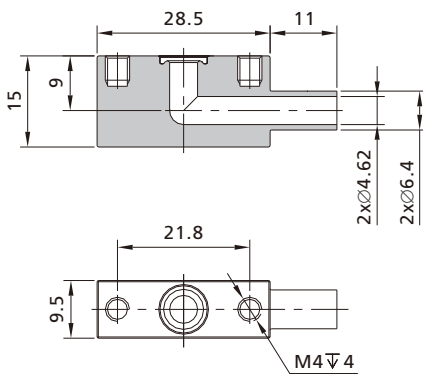
Valves

Regulators

1-Path Bypass Substrates

Basic Ordering Number: -ISB-WS11-S110-F3

Unit: mm



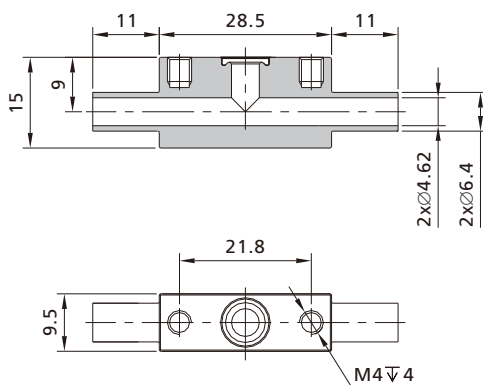
Filters

Tubing

1-Path Bypass Substrates

Basic Ordering Number: -ISB-WS11-S120-F3

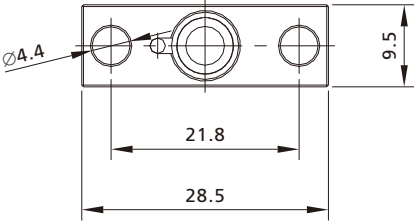
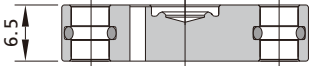
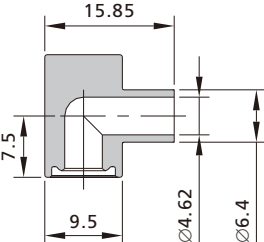
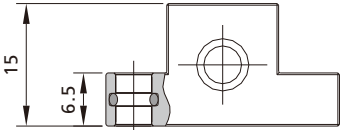
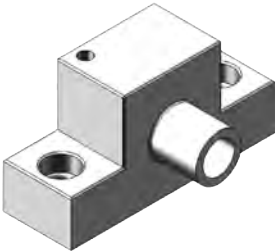
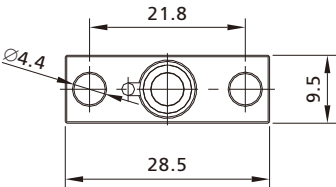
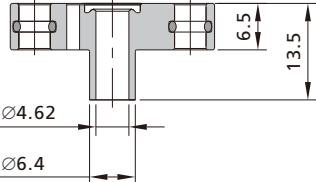
Unit: mm



Integrated
Systems

Other
Products

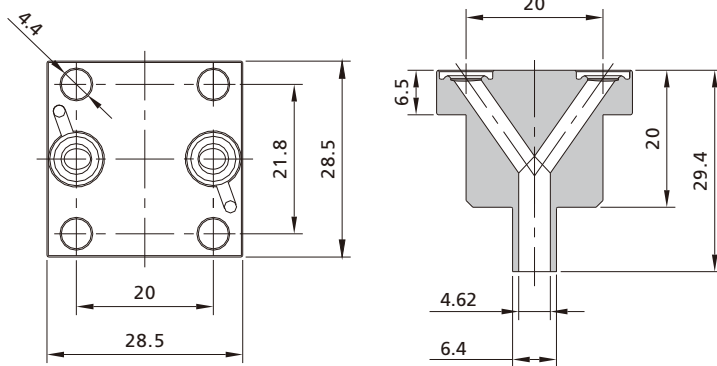
Technical
Information

Fittings	Plugs Basic Ordering Number: -IEC-WS11-S100-F3 Unit: mm 	
Valves		
Regulators		
Filters	Plugs Basic Ordering Number: -IEC-WS11-S120-F3 Unit: mm 	
Tubing		
Integrated Systems	Plugs Basic Ordering Number: -IEC-WS11-S110-F3 Unit: mm 	
Other Products		
Technical Information		

Transition Substrates

Basic Ordering Number: -ITC-WS11-S201-F3

Unit: mm



Fittings

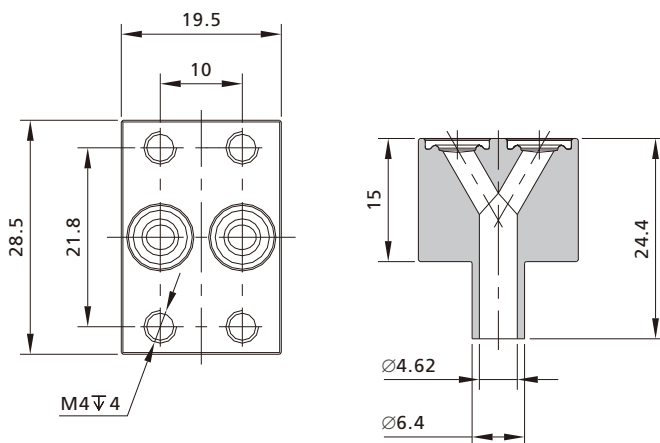
Valves

Regulators

Transition Substrates

Basic Ordering Number: -ITC-WS11-N201-F3

Unit: mm



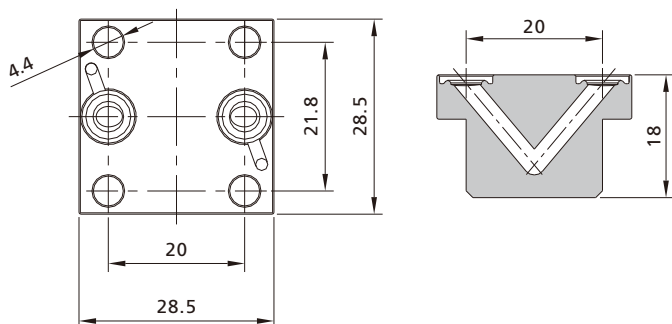
Filters

Tubing

Transition Substrates

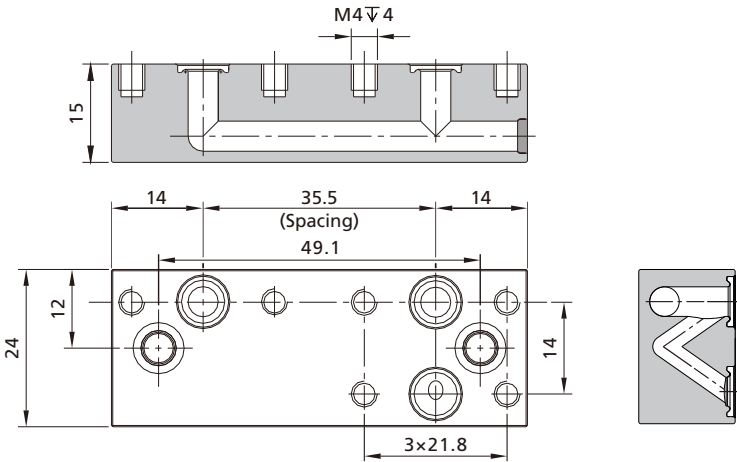
Basic Ordering Number: -ITC-WS11-S200-F3

Unit: mm

Integrated
SystemsOther
ProductsTechnical
Information

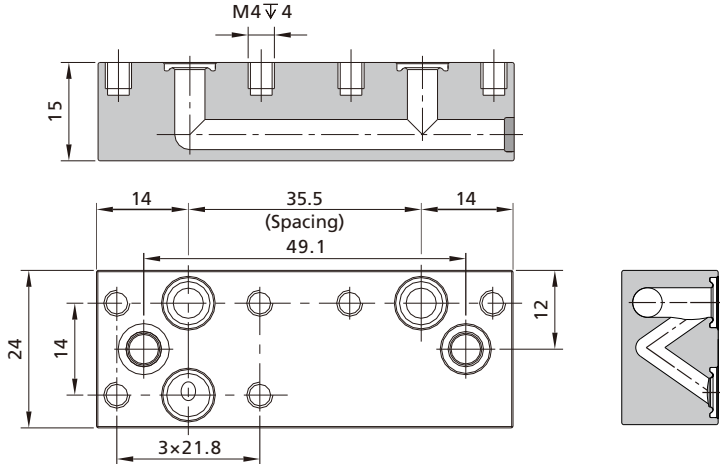
2-Path Bypass Substrates

Spacing 35.5 mm Basic Ordering Number: -IDB-WS11-M210-F3
Spacing 30 mm Basic Ordering Number: -IDB-WS11-M211-F3
Unit: mm



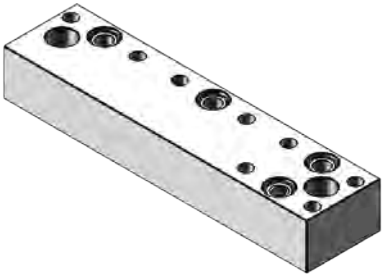
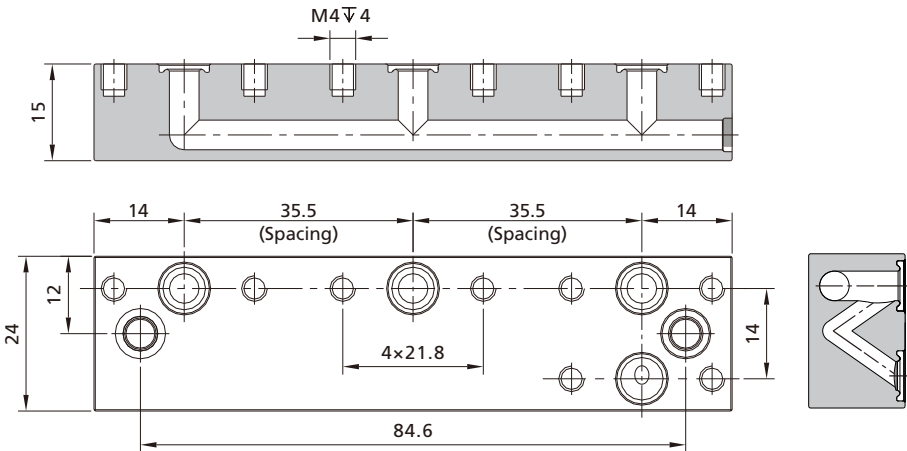
2-Path Bypass Substrates

Spacing 35.5 mm Basic Ordering Number: -IDB-WS11-M220-F3
Spacing 30 mm Basic Ordering Number: -IDB-WS11-M221-F3
Unit: mm



2-Path Bypass Substrates

Spacing 35.5 mm Basic Ordering Number: -IDB-WS11-M310-F3
Spacing 30 mm Basic Ordering Number: -IDB-WS11-M311-F3
Unit: mm

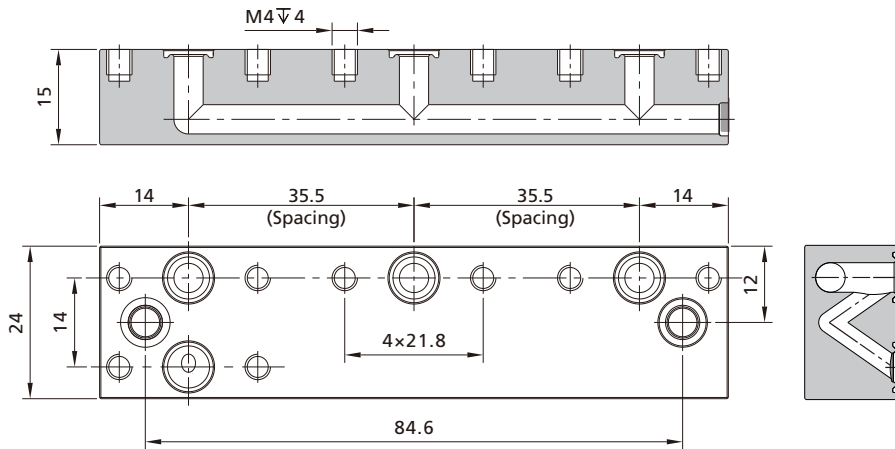


2-Path Bypass Substrates

Spacing 35.5 mm Basic Ordering Number: -IDB-WS11-M320-F3

Spacing 30 mm Basic Ordering Number: -IDB-WS11-M321-F3

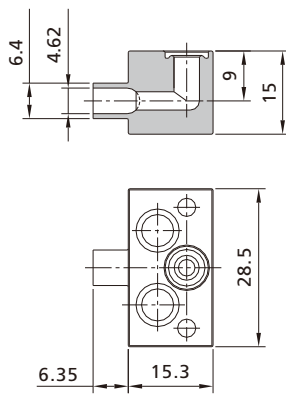
Unit: mm



End Substrates

Basic Ordering Number: -IEB-WS11-E102-F3

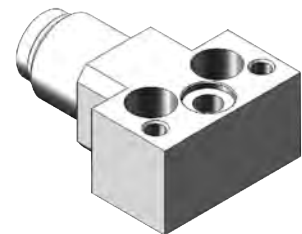
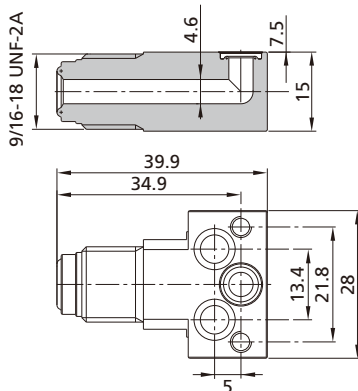
Unit: mm



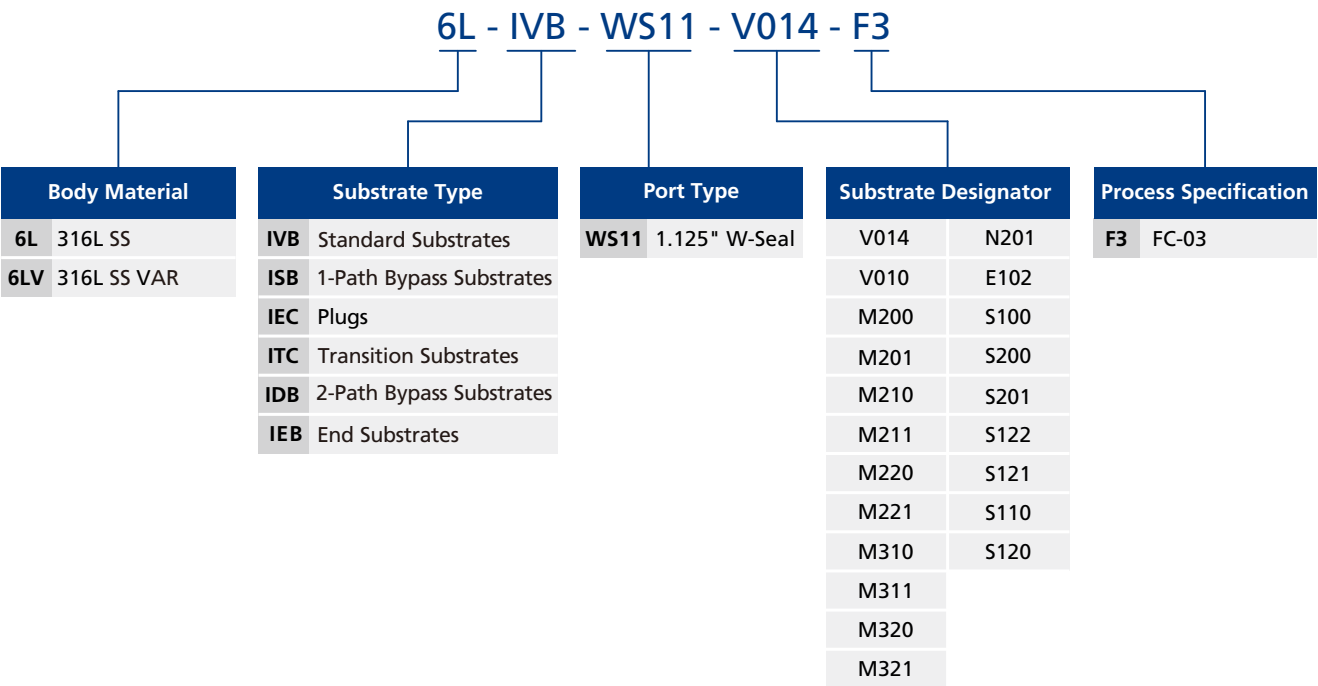
End Substrates

Basic Ordering Number: -IEB-WS11-FR4-34.9-F3

Unit: mm



Ordering Number Description



Notes:
"Ordering Number Description" is a reference to understand the combination rules of FITOK product part number.
Not all combinations are available. Please contact FITOK Group or our authorized distributors if you have any requests.

Parts

Substrates ISC Series

Features

- Multiple types of flow path applicable to various integrated systems
- Final assembly and packaging performed in ISO 4 cleanroom

Technical Data

- 1.125" C-Seal
- Leak Rate (Helium): $\leq 1 \times 10^{-9}$ std-cm³/s
- FC-03 Ultra-high Purity Process Specification
- Wetted surface roughness less than Ra 5 μ in. (0.13 μ m)



Process Specification

Item	Process Specification	Ultra High Purity (FC-03)
Material		316L SS, 316L SS VAR
Wetted Surface Roughness		Ra 5 μ in. (0.13 μ m)
Polishing Process		Electropolished

Fittings

Valves

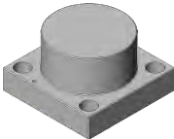
Regulators

Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

Contents

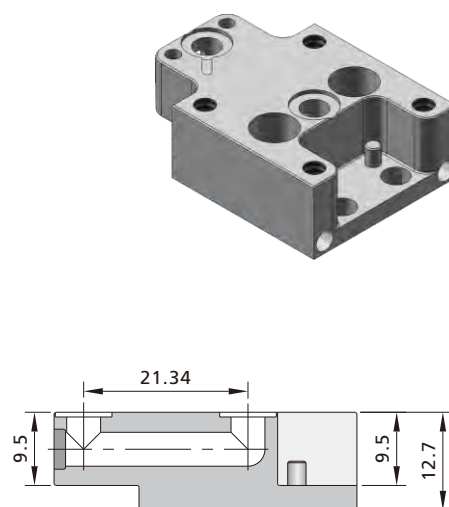
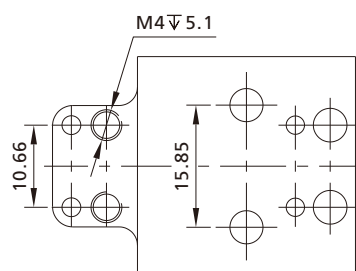
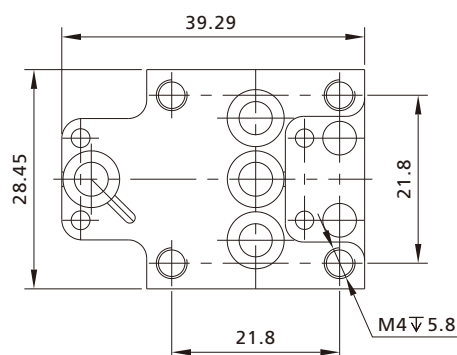
Fittings		Standard Substrates -IVB	I-34
Valves		1-Path Bypass Substrates -ISB	I-37
Regulators		Plugs -IEC	I-39
Filters		Transition Substrates -ITC	I-41
Tubing		Mount Block -IDK	I-42
Integrated Systems		Brackets -IZJ	I-44
Other Products		Ordering Number Description	I-42
Technical Information			

Dimensions and Ordering Information

Standard Substrates

Basic Ordering Number: -IVB-CS11-D200-F3

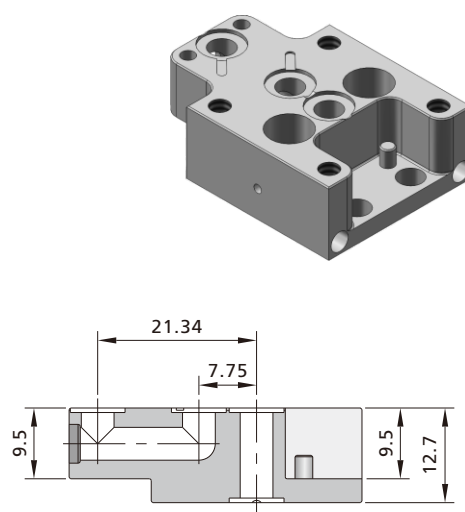
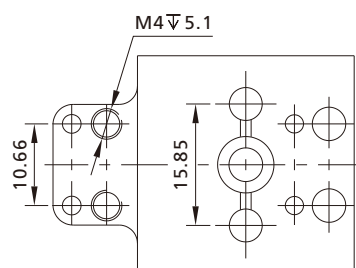
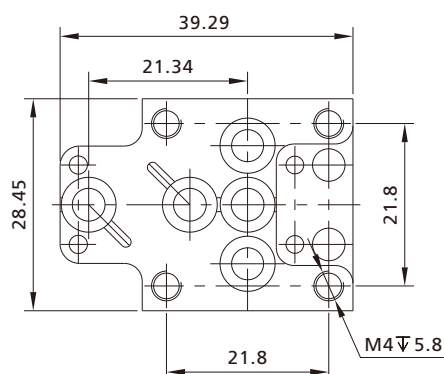
Unit: mm



Standard Substrates

Basic Ordering Number: -IVB-CS11-D310-F3

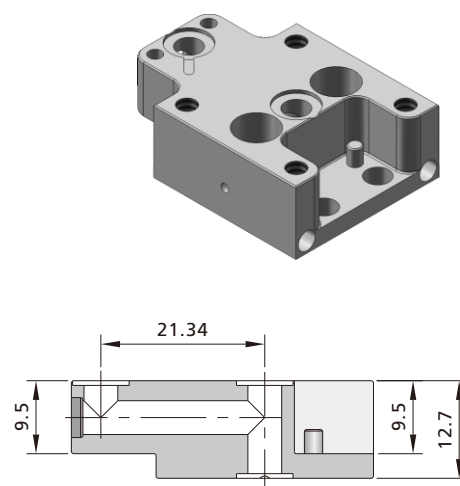
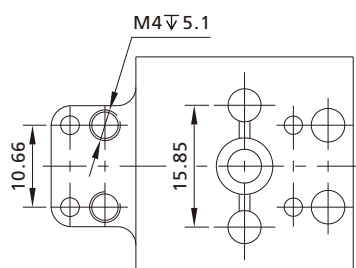
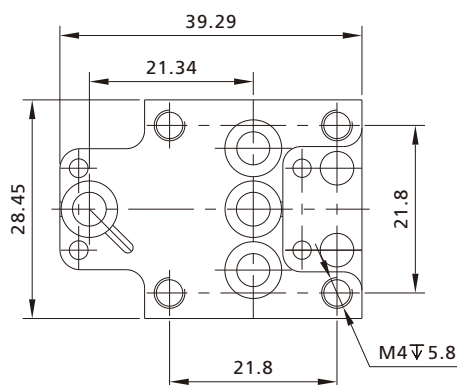
Unit: mm



Standard Substrates

Basic Ordering Number: -IVB-CS11-D210-F3

Unit: mm



Fittings

Valves

Regulators

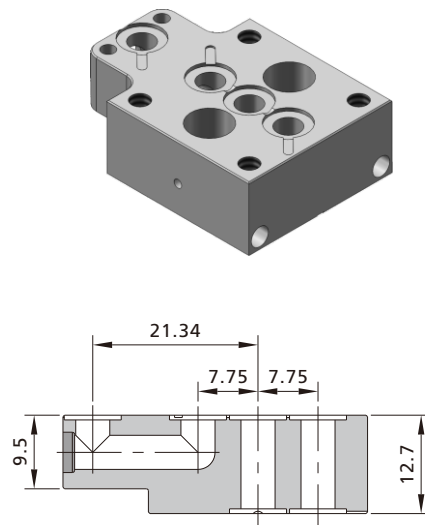
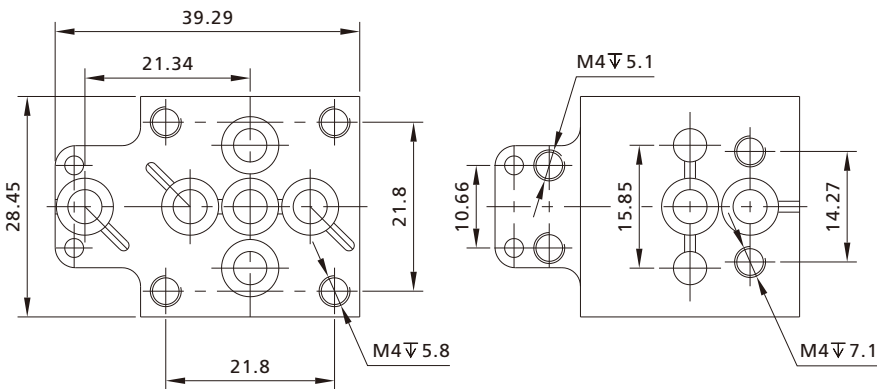
Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

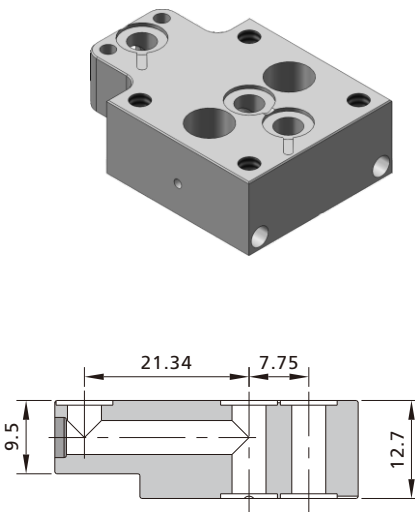
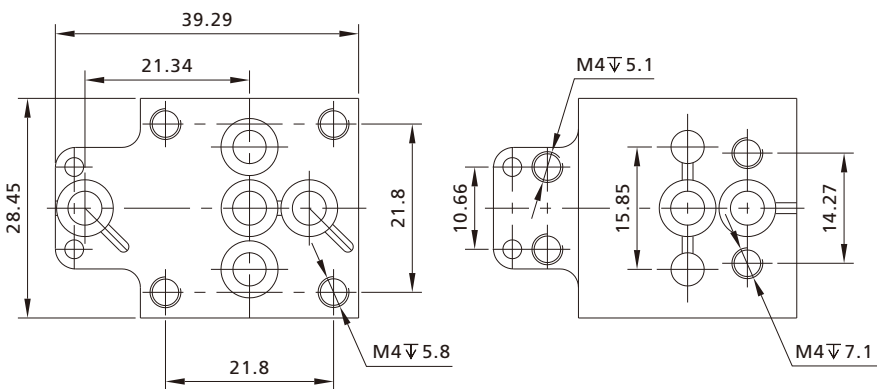
Standard Substrates

Basic Ordering Number: -IVB-CS11-M420-F3
Unit: mm



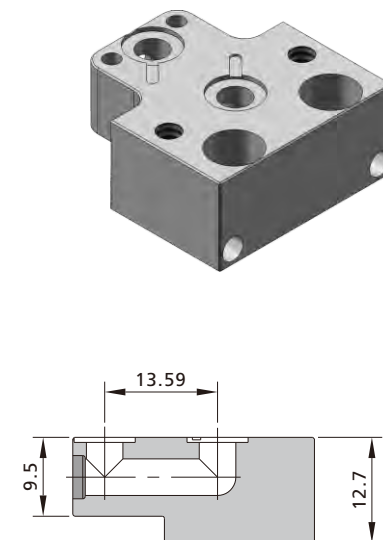
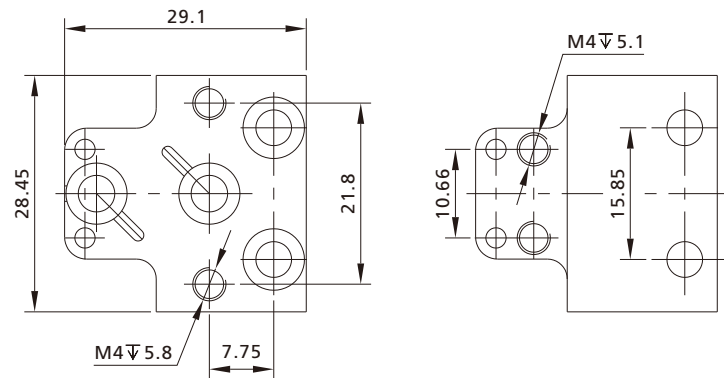
Standard Substrates

Basic Ordering Number: -IVB-CS11-M320-F3
Unit: mm



Standard Substrates

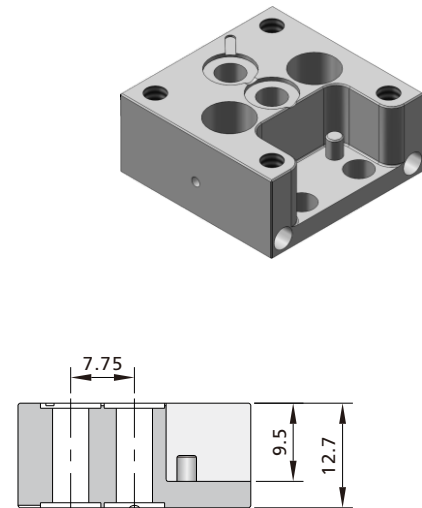
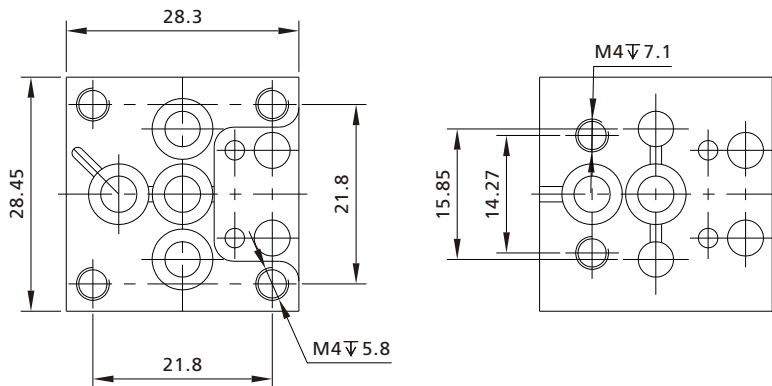
Basic Ordering Number: -IVB-CS11-M202-F3
Unit: mm



Standard Substrates

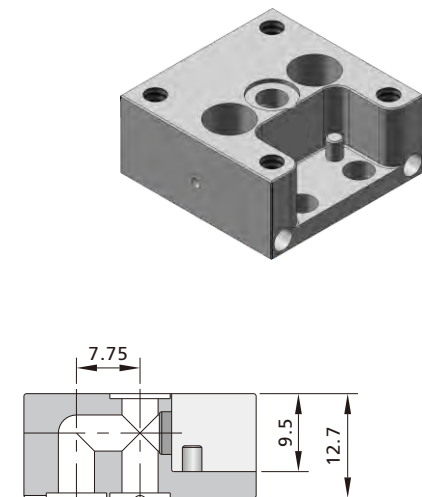
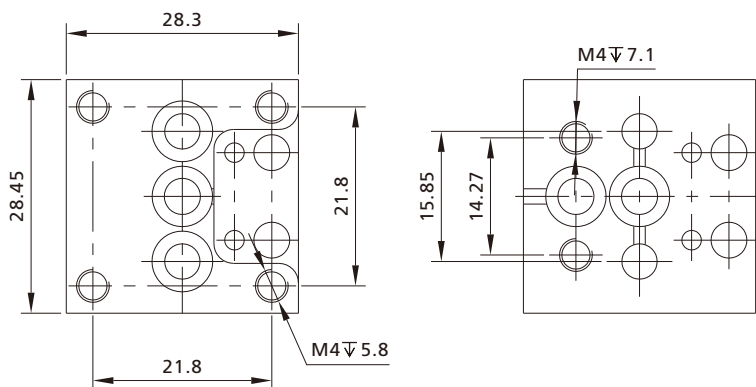
Basic Ordering Number: -IVB-CS11-F220-F3

Unit: mm

**Standard Substrates**

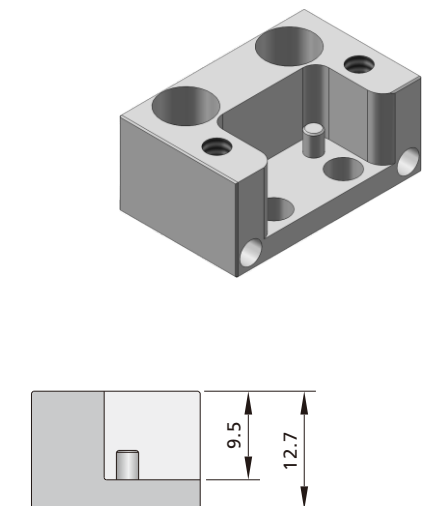
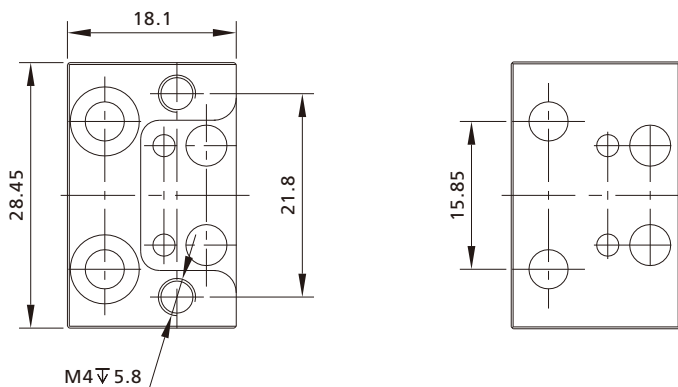
Basic Ordering Number: -IVB-CS11-F120-F3

Unit: mm

**Standard Substrates**

Basic Ordering Number: -IVB-CS11-F002-F3

Unit: mm



Fittings

Valves

Regulators

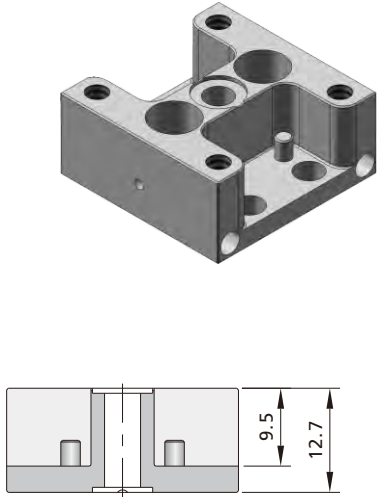
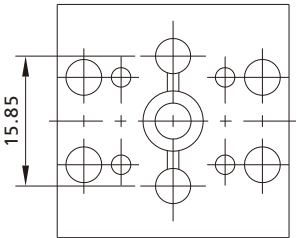
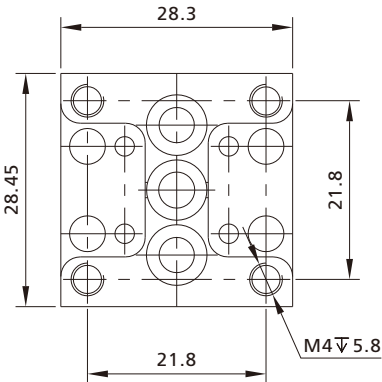
Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

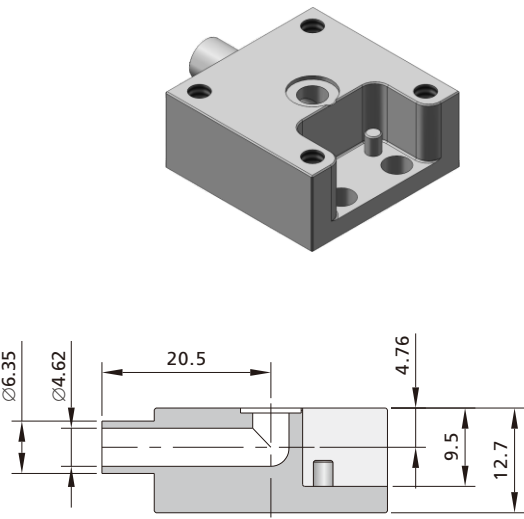
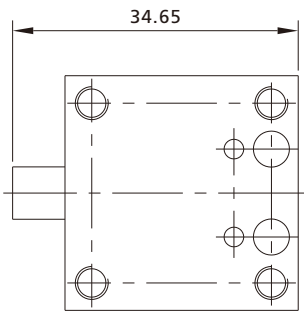
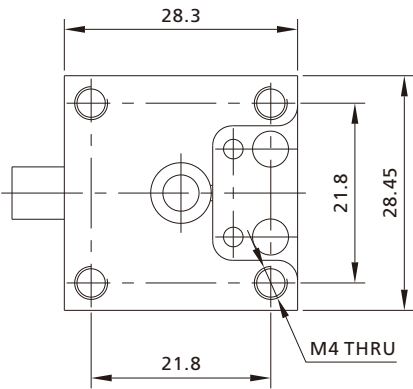
Standard Substrates

Basic Ordering Number: -IVB-CS11-B110-F3
Unit: mm



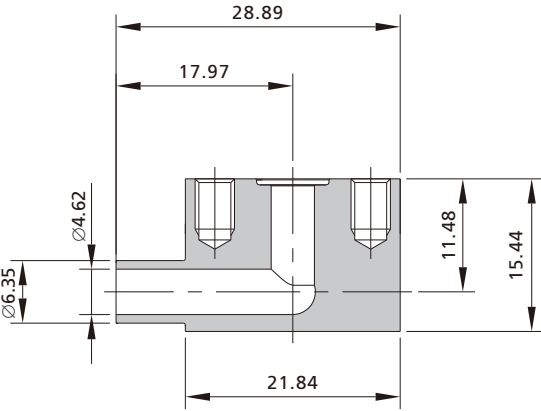
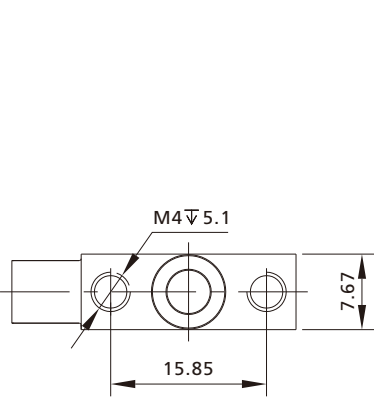
Standard Substrates

Basic Ordering Number: -IVB-CS11-F100-F3
Unit: mm



1-Path Bypass Substrates

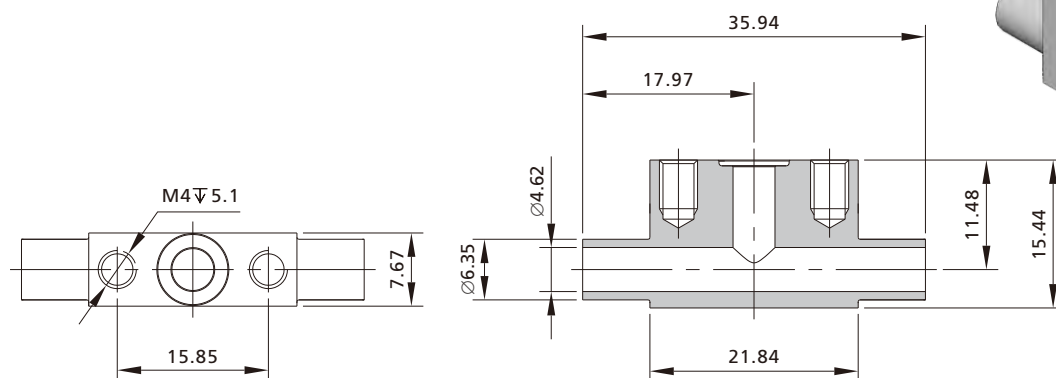
Basic Ordering Number: -ISB-CS11-S110-F3
Unit: mm



1-Path Bypass Substrates

Basic Ordering Number: -ISB-CS11-S120-F3

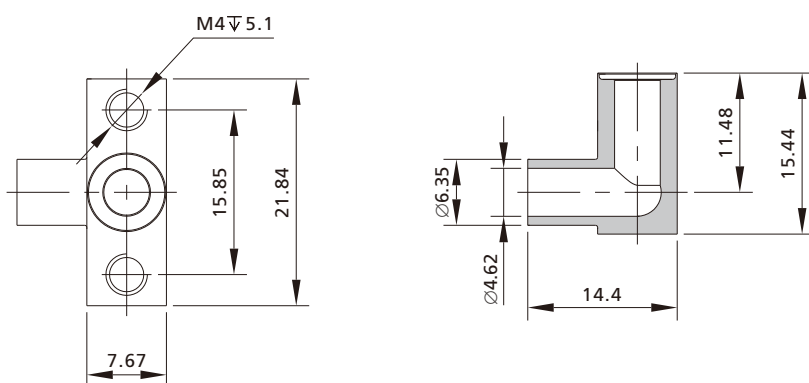
Unit: mm



1-Path Bypass Substrates

Basic Ordering Number: -ISB-CS11-S111-F3

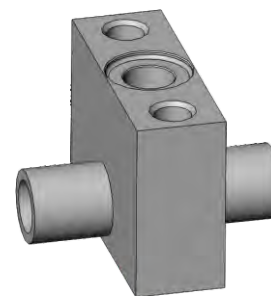
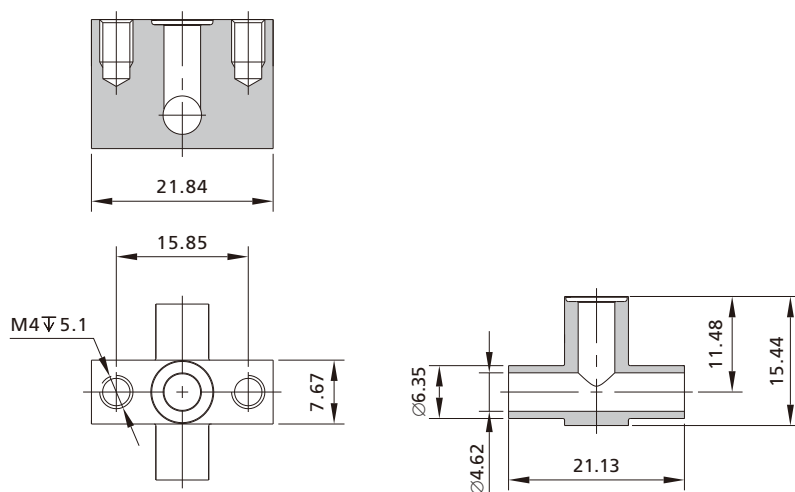
Unit: mm



1-Path Bypass Substrates

Basic Ordering Number: -ISB-CS11-S126-F3

Unit: mm



Fittings

Valves

Regulators

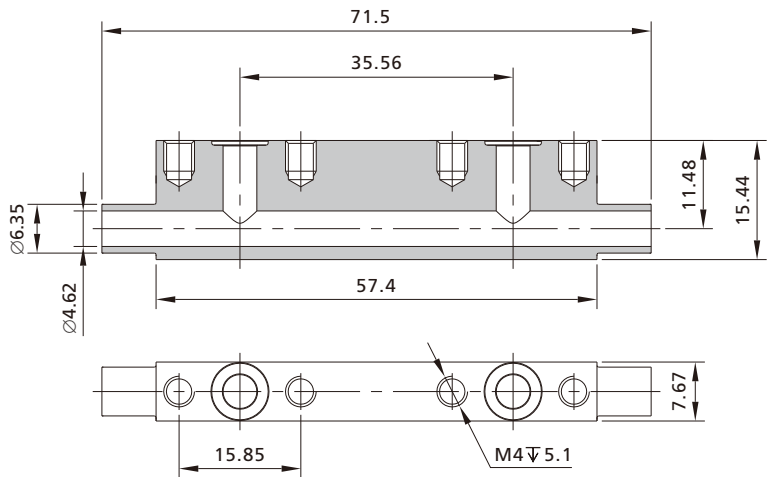
Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

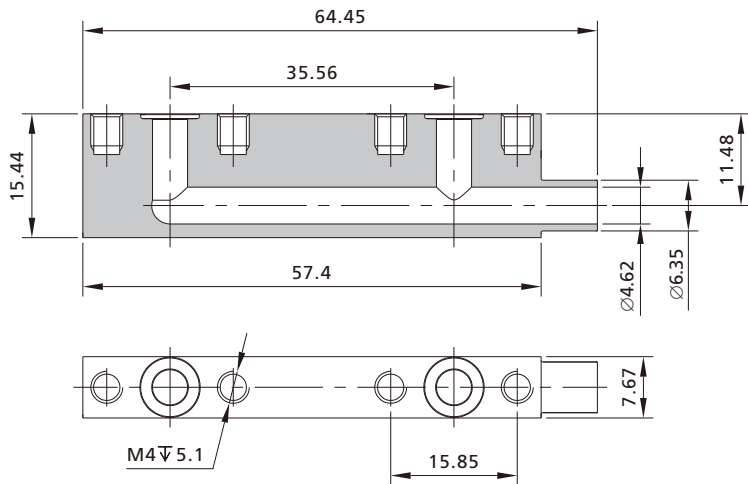
1-Path Bypass Substrates

Basic Ordering Number: -ISB-CS11-M220-F3
Unit: mm



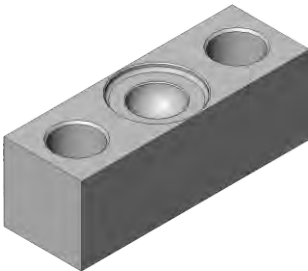
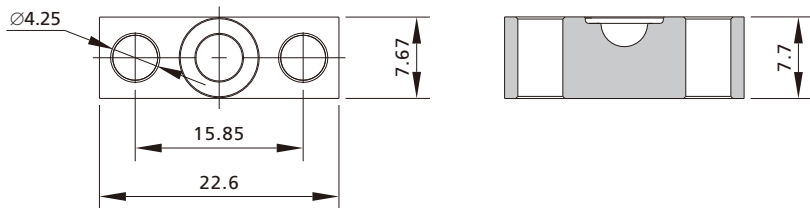
1-Path Bypass Substrates

Basic Ordering Number: -ISB-CS11-M210-F3
Unit: mm



Plugs

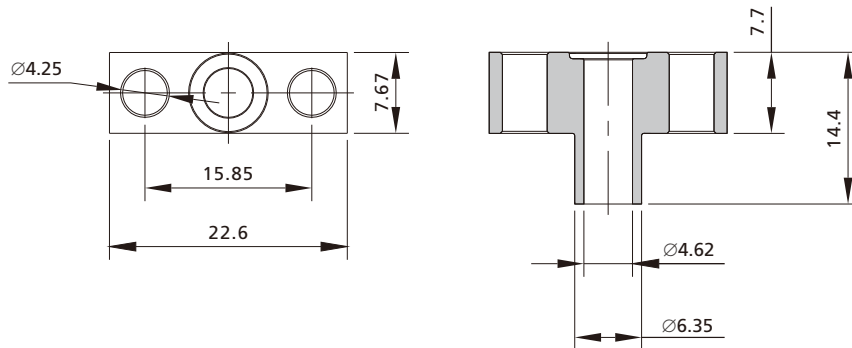
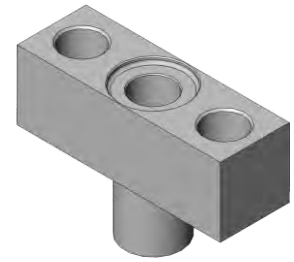
Basic Ordering Number: -IEC-CS11-S102-F3
Unit: mm



Plugs

Basic Ordering Number: -IEC-CS11-S112-F3

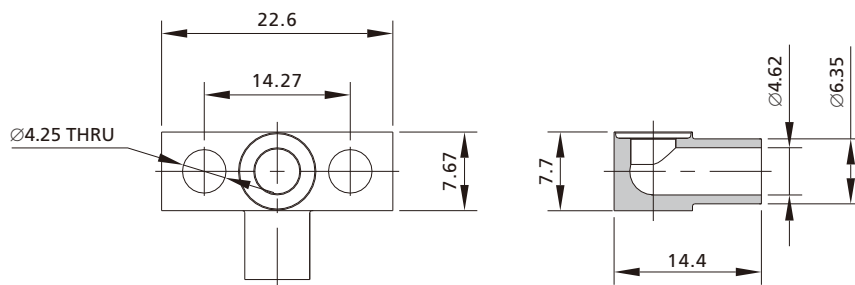
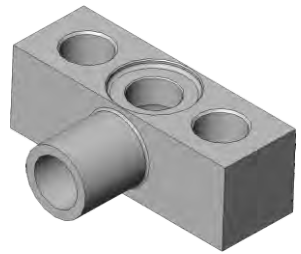
Unit: mm



Plugs

Basic Ordering Number: -IEC-CS11-S120-F3

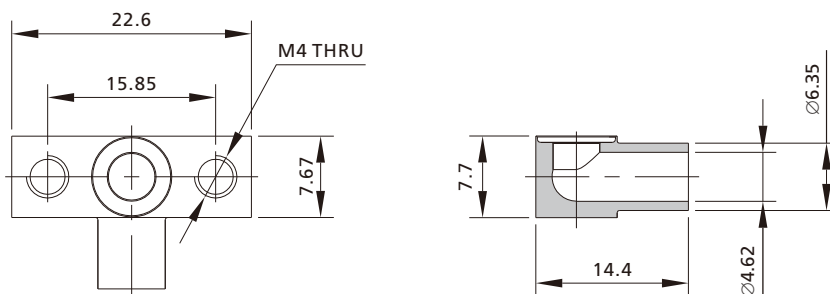
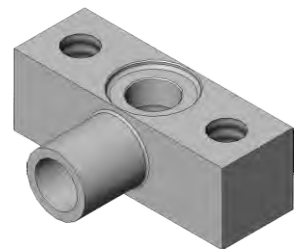
Unit: mm



Plugs

Basic Ordering Number: -IEC-CS11-S121-F3

Unit: mm



Fittings

Valves

Regulators

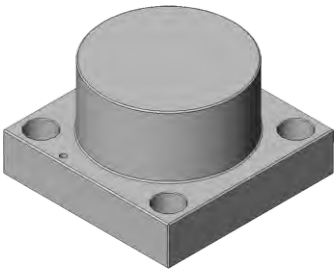
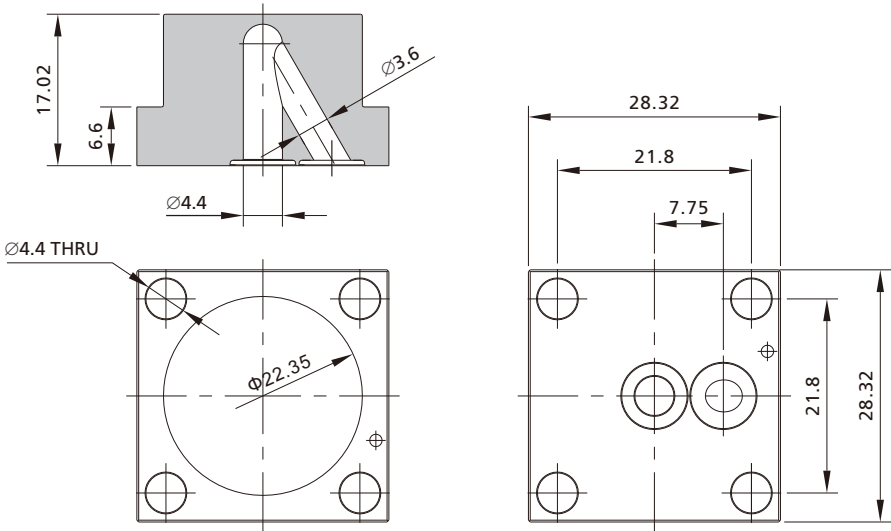
Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

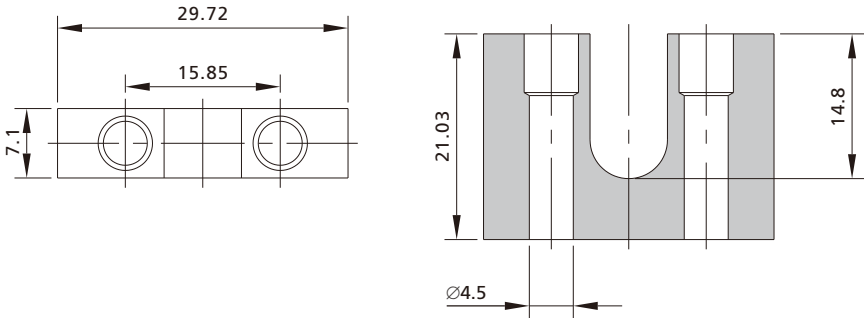
Transition Substrates

Basic Ordering Number: -ITC-CS11-S200-F3
Unit: mm



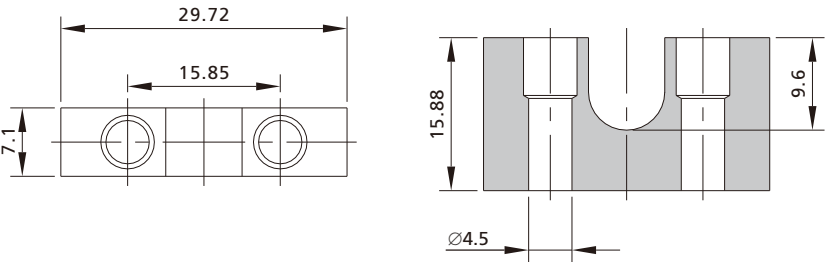
Mount Blocks

Ordering Number: AL-IDK-S418-F3
Unit: mm



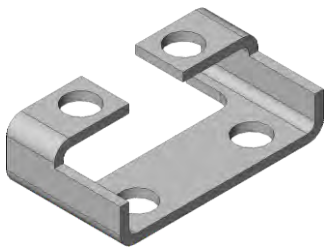
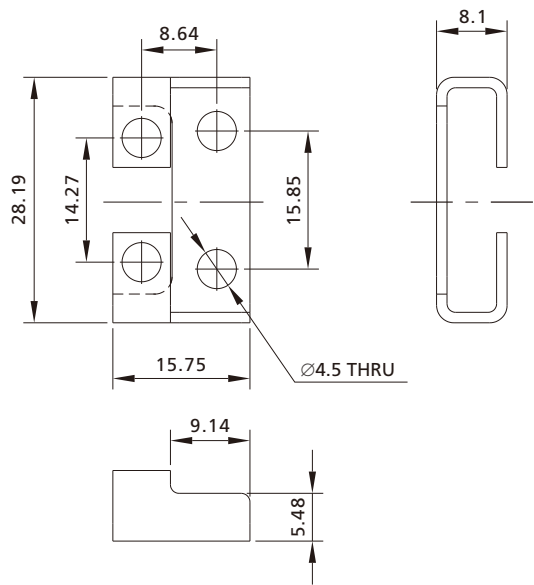
Mount Blocks

Ordering Number: AL-IDK-S416-F3
Unit: mm



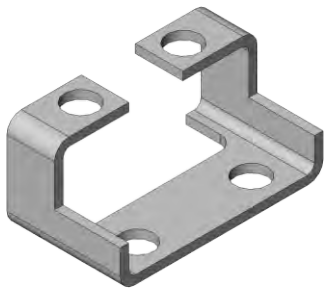
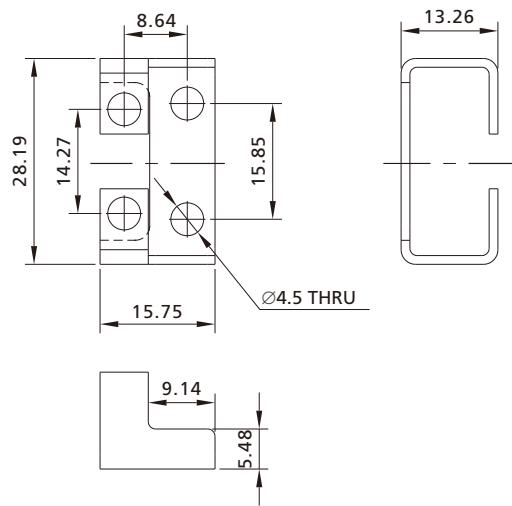
Brackets

Ordering Number: S4-IZJ-C413-F3
Unit: mm



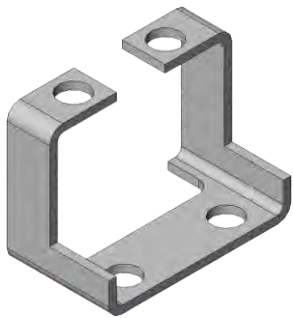
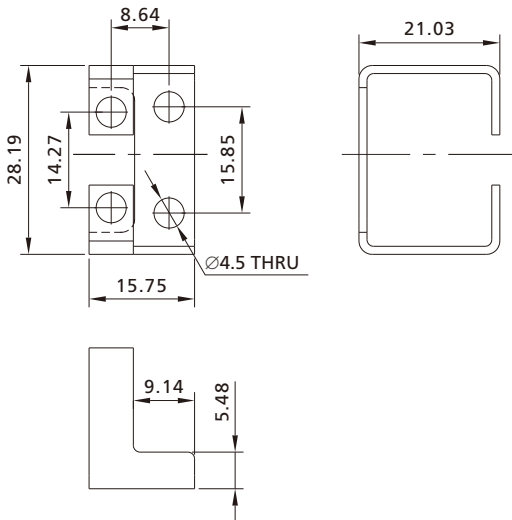
Brackets

Ordering Number: S4-IZJ-C415-F3
Unit: mm



Brackets

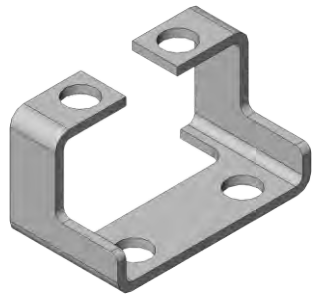
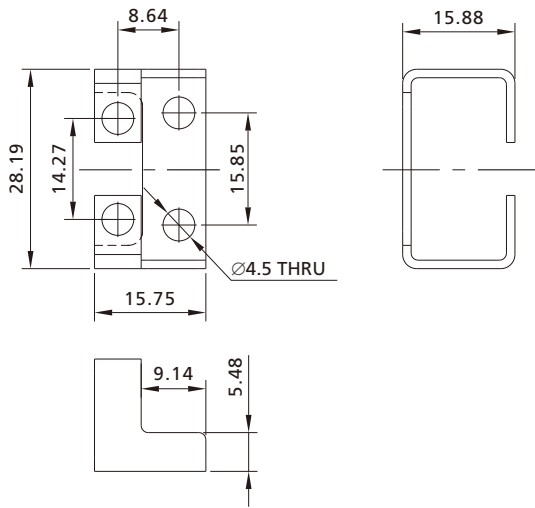
Ordering Number: S4-IZJ-C418-F3
Unit: mm



Fittings
Valves
Regulators
Filters
Tubing
Integrated Systems
Other Products
Technical Information

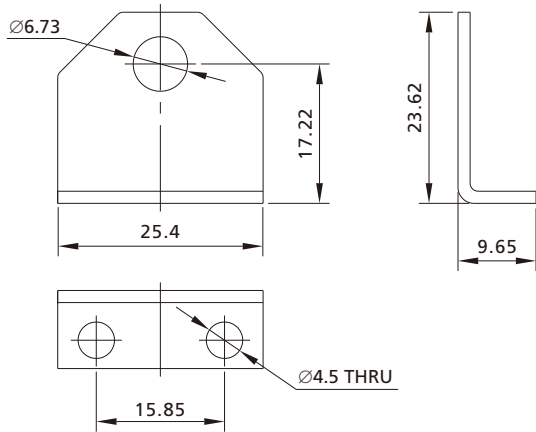
Brackets

Ordering Number: S4-IZJ-C416-F3
Unit: mm



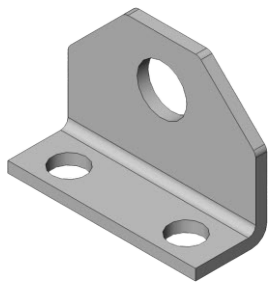
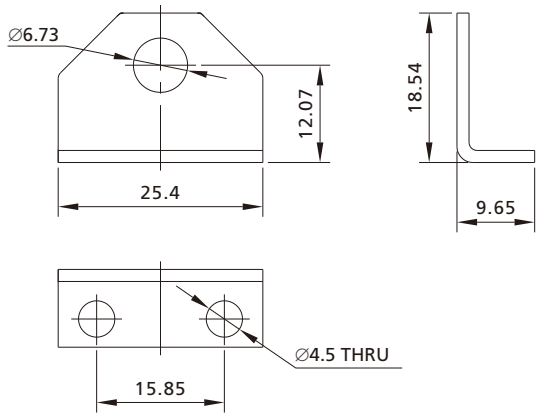
Brackets

Ordering Number: S4-IZJ-L417-F3
Unit: mm

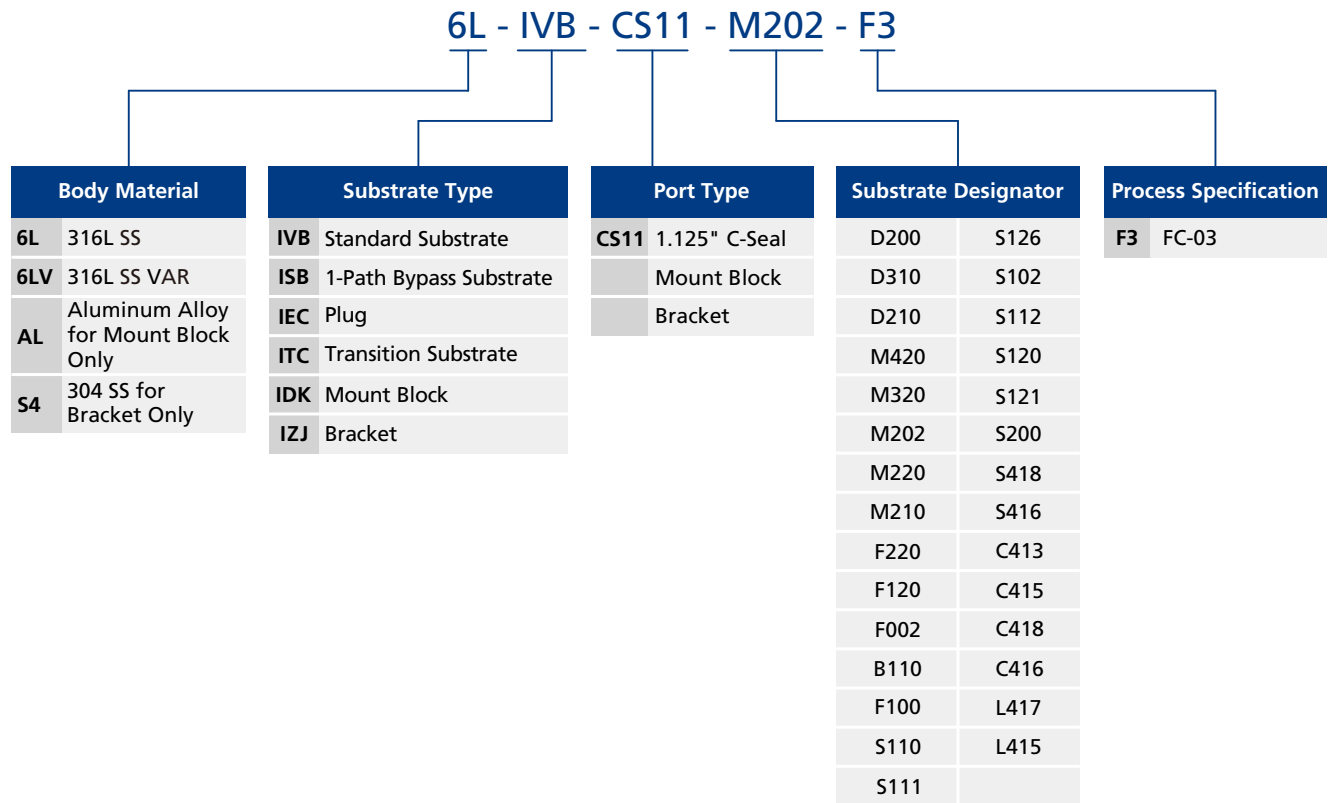


Brackets

Ordering Number: S4-IZJ-L415-F3
Unit: mm



Ordering Number Description



Notes:

- "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number.
Not all combinations are available. Please contact FITOK Group or our authorized distributors if you have any requests.
- Brackets and mount blocks are only cleaned and packaged in accordance with FC-03.

Fittings

Valves

Regulators

Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information

Parts

Sealing Gaskets IWG Series

Features

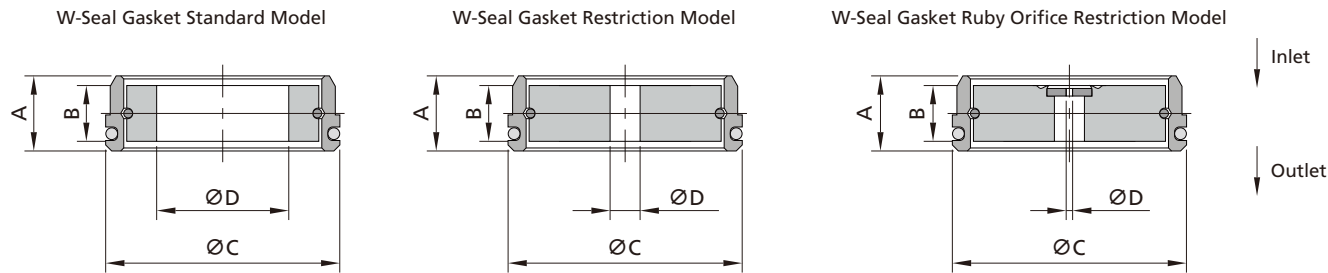
- 1.125" and 1.5"
- Sealing faces independent of components receiving external forces
- Electropolished to a surface finish of Ra 5 µin. (0.13 µm) max.
- Leak Rate (Helium): ≤1×10⁻⁹ std-cm³/s



Process Specification

Item	Process Specification	Ultra High Purity (FC-03)
Material		316L SS, 316L SS VAR
Wetted Surface Roughness		Ra 5 µin. (0.13 µm)
Polishing Process		Electropolished

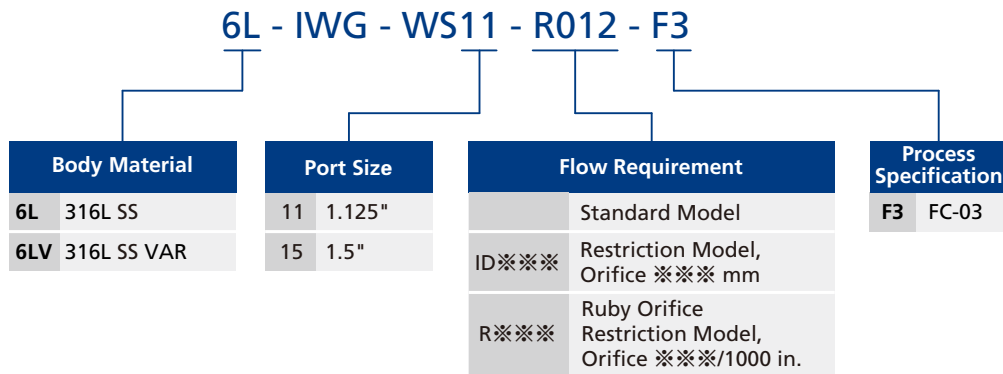
Dimensions and Ordering Information



Basic Ordering Number	Port Type and Size	Dimensions, in. (mm)			
		A	B	C	D
-IWG-WS11-F3	1.125" W-Seal (Standard Model)	0.1 (2.5)	0.07 (1.86)	0.31 (7.8)	0.17 (4.4)
-IWG-WS11-ID***-F3 ^①	1.125" W-Seal (Restriction Model)	0.1 (2.5)	0.07 (1.86)	0.31 (7.8)	***
-IWG-WS11-R***-F3 ^②	1.125" W-Seal (Ruby Restriction Model)	0.1 (2.5)	0.07 (1.86)	0.31 (7.8)	***
-IWG-WS15-F3	1.5" W-Seal (Standard Model)	0.15 (3.8)	0.07 (1.9)	0.39 (10)	0.17 (4.4)

- ① ID*** indicates restriction orifice sizes, such as 0.3, which means an orifice size of Ø0.3 mm (only in mm).
Example: 6L-IWG-WS11-ID0.3-F3. Orifice sizes are available from 0.05 mm to 4.35 mm in 0.05 mm increments.
For more size options, please contact FITOK.
- ② a. R*** indicates ruby orifice sizes, such as 012, which means an orifice size of Ø0.012" (012/1000", only in inch).
Example: 6L-IWG-WS11-R012-F3. Orifice sizes are available from 0.0015" to 0.035" in 0.0005" increments.
For more size options, please contact FITOK.
- b. When using the ruby orifice restriction gasket, it is recommended that the ruby side faces the gas inlet to enable more stable and uniform flow.
- c. The maximum working pressure of the ruby orifice restriction gasket is 145 psig (10 bar). For use in working conditions with higher pressure requirements, please contact FITOK.

Ordering Number Description



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number.
 Not all combinations are available. Please contact FITOK Group or our authorized distributors if you have any requests.

Fittings

Valves

Regulators

Filters

Tubing

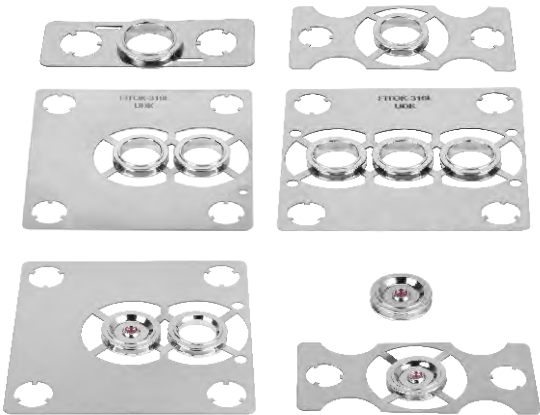
Integrated
SystemsOther
ProductsTechnical
Information

Parts

Sealing Gaskets ICG Series

Features

- 1.125" and 1.5"
- Electropolished to a surface finish of Ra 5 µin. (0.13 µm) max.
- Leak Rate (Helium): ≤1×10⁻⁹ std·cm³/s

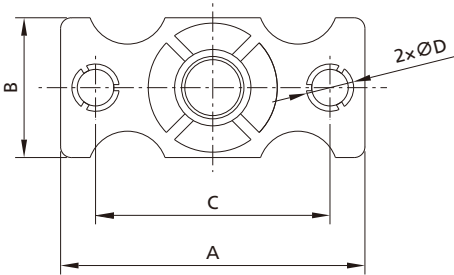


Process Specification

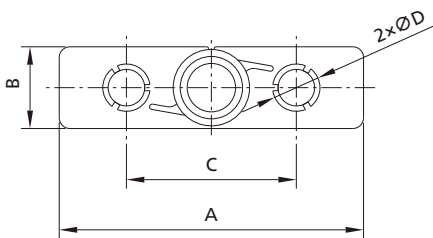
Process Specification	
Item	Ultra High Purity (FC-03)
Material	316L SS, 316L SS VAR
Wetted Surface Roughness	Ra 5 µin. (0.13 µm)
Polishing Process	Electropolished

Dimensions and Ordering Information

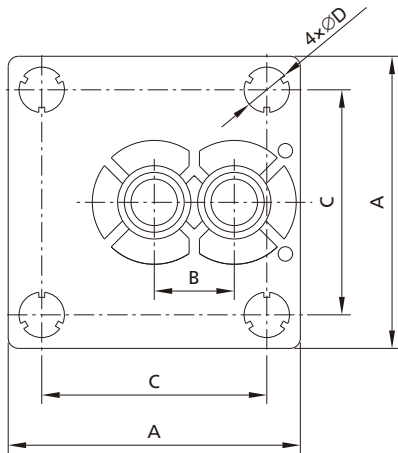
C-Seal Gasket Bracket 1P Standard Model



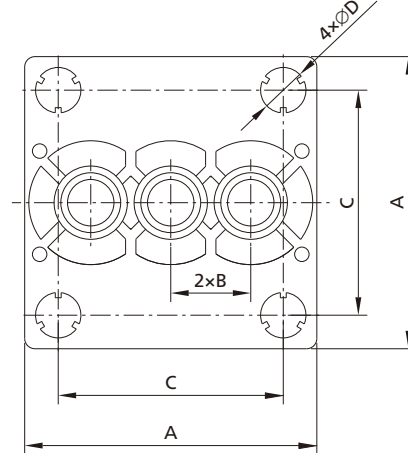
C-Seal Gasket Bracket 1P Special Size Model
"-M-""-F-""-M86-"



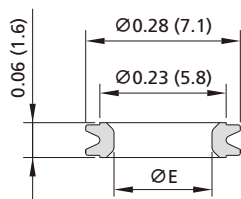
C-Seal Gasket Bracket 2P Standard Model



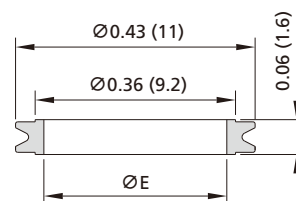
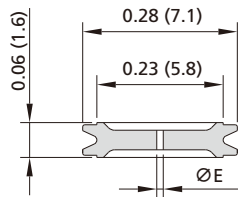
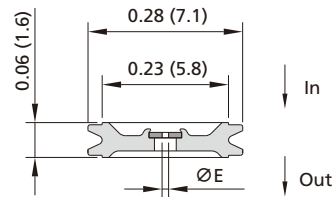
C-Seal Gasket Bracket 3P Standard Model



C-Seal Gasket Standard Model



C-Seal Gasket High Flow Model


C-Seal Gasket Restriction Model
(Only for CS11)

C-Seal Gasket Ruby Orifice Restriction Model
(Only for CS11)


Fittings

Valves

Regulators

Filters

Tubing

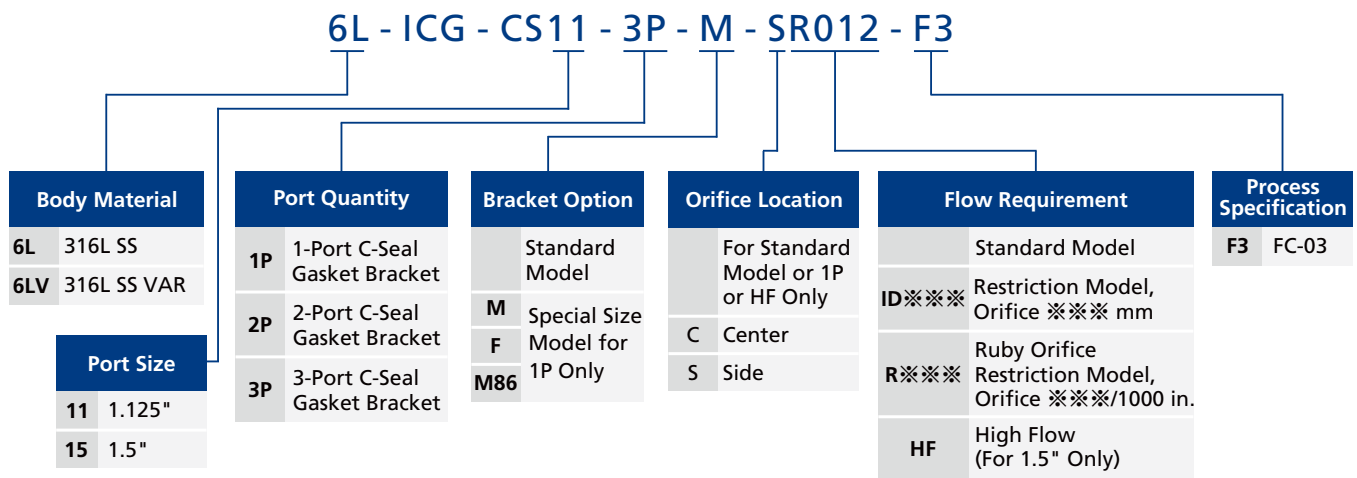
Integrated
Systems

Other
Products

Technical
Information

	Basic Ordering Number	Port Type and Size	Dimensions, in. (mm)				
			A	B	C	D	E
Fittings	-ICG-CS11-1P-F3	1.125" C-Seal (Standard Model)	1.11 (28.3)	0.51 (13)	0.86 (21.80)	0.17 (4.4)	0.18 (4.5)
	-ICG-CS11-1P-M-F3	1.125" C-Seal (Special Size Model)	1.11 (28.3)	0.30 (7.6)	0.62 (15.85)	0.17 (4.4)	0.18 (4.5)
	-ICG-CS11-1P-F-F3	1.125" C-Seal (Special Size Model)	1.11 (28.3)	0.30 (7.6)	0.56 (14.27)	0.17 (4.4)	0.18 (4.5)
Valves	-ICG-CS11-1P-M86-F3	1.125" C-Seal (Special Size Model)	0.85 (21.6)	0.30 (7.6)	0.62 (15.85)	0.17 (4.4)	0.18 (4.5)
	-ICG-CS11-1P-ID***-F3 ^①	1.125" C-Seal (Restriction Model)	1.11 (28.3)	0.51 (13)	0.86 (21.8)	0.17 (4.4)	***
	-ICG-CS11-1P-R***-F3 ^②	1.125" C-Seal (Ruby Restriction Model)	1.11 (28.3)	0.51 (13)	0.86 (21.8)	0.17 (4.4)	***
	-ICG-CS11-2P-F3	1.125" C-Seal (Standard Model)	1.11 (28.3)	0.31 (7.75)	0.86 (21.8)	0.17 (4.4)	0.18 (4.5)
Regulators	-ICG-CS11-2P-CID***-F3 ^①	1.125" C-Seal (Restriction Model)	1.11 (28.3)	0.31 (7.75)	0.86 (21.8)	0.17 (4.4)	***
	-ICG-CS11-2P-SR***-F3 ^②	1.125" C-Seal (Ruby Restriction Model)	1.11 (28.3)	0.31 (7.75)	0.86 (21.8)	0.17 (4.4)	***
	-ICG-CS11-3P-F3	1.125" C-Seal (Standard Model)	1.11 (28.3)	0.31 (7.75)	0.86 (21.8)	0.17 (4.4)	0.18 (4.5)
	-ICG-CS11-3P-SID***-F3 ^①	1.125" C-Seal (Restriction Model)	1.11 (28.3)	0.31 (7.75)	0.86 (21.8)	0.17 (4.4)	***
Filters	-ICG-CS11-3P-CR***-F3 ^②	1.125" C-Seal (Ruby Restriction Model)	1.11 (28.3)	0.31 (7.75)	0.86 (21.8)	0.17 (4.4)	***
	-ICG-CS15-1P-F3	1.5" C-Seal (Standard Model)	1.48 (37.6)	0.51 (13)	1.18 (30.2)	0.2 (5.2)	0.18 (4.5)
	-ICG-CS15-2P-F3	1.5" C-Seal (Standard Model)	1.48 (37.6)	0.31 (7.75)	1.18 (30.2)	0.2 (5.2)	0.18 (4.5)
	-ICG-CS15-3P-F3	1.5" C-Seal (Standard Model)	1.48 (37.6)	0.31 (7.75)	1.18 (30.2)	0.2 (5.2)	0.18 (4.5)
Tubing	-ICG-CS15-1P-HF-F3	1.5" C-Seal (High Flow Model)	1.48 (37.6)	0.52 (13.2)	1.18 (30.2)	0.2 (5.2)	0.33 (8.4)
	-ICG-CS15-2P-HF-F3	1.5" C-Seal (High Flow Model)	1.48 (37.6)	0.46 (11.6)	1.18 (30.2)	0.2 (5.2)	0.33 (8.4)
	-ICG-CS15-3P-HF-F3	1.5" C-Seal (High Flow Model)	1.48 (37.6)	0.46 (11.6)	1.18 (30.2)	0.2 (5.2)	0.33 (8.4)
Integrated Systems	^① ID*** indicates restriction orifice sizes, such as 0.3, which means an orifice size of Ø0.3 mm (only in mm). Example: 6L-ICG-CS11-1P-ID0.3-F3. Orifice sizes are available from 0.05 mm to 4.45 mm in 0.05 mm increments. For more size options, please contact FITOK.						
	^② a. R*** indicates ruby orifice sizes, such as 012, which means an orifice size of Ø0.012" (012/1000", only in inch). Example: 6L-ICG-CS11-1P-R012-F3. Orifice sizes are available from 0.0015" to 0.035" in 0.0005" increments. For more size options, please contact FITOK.						
	b. When using the ruby orifice restriction gasket, it is recommended that the ruby side faces the gas inlet to enable more stable and uniform flow. c. The maximum working pressure of the ruby orifice restriction gasket is 145 psig (10 bar). For use in working conditions with higher pressure requirements, please contact FITOK.						
Other Products							
Technical Information							

Ordering Number Description



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number.
Not all combinations are available. Please contact FITOK Group or our authorized distributors if you have any requests.

Fittings

Valves

Regulators

Filters

Tubing

Integrated
SystemsOther
ProductsTechnical
Information