

Valves

99.9 MPa Flow Control Valves (Compact Type)

60,000 psi Type



Features

1. Precise flow control for ultra high-pressure hydrogen gas.
2. Flow coefficient (Cv Value) can be selected and replaced from a large variety of disc & sheats.
3. Smart positioner with communications function can be available.

Specifications

Design Pressure	99.9 MPa
Design Temperature	85 °C
Fluid Temperature Range	-10 to +85 °C

Note: When using in a pre cool line, please contact **Fujikin** when ordering.

Materials

Parts	Materials
Body	SUS316+Co base alloy
Seat	SUS316+Co base alloy
Stem	SUS316+Co base alloy
Gland Packing	PVDF+PFA
Packing Gland Bush	SUS304

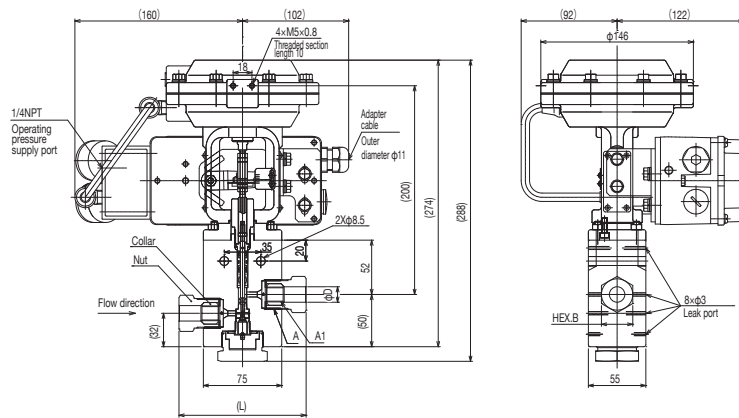
Dimensions, Ordering No.

Nominal Diameter	Nut Threads (valve body side)	Collar Threads (tube side)	L Collar and nut insertion reference dimensions	HEX. B	Cv Value MAX.	Ordering No.
	A	A1				
6.35	9/16-18UNF	(Left) 1/4-28UNF	99	17	0.1	E32M3R4-7100-6.35+MG-N28.5-CN
9.52	3/4-16UNF	(Left) 3/8-24UNF	107	22	0.15	E32M3R4-7100-9.52+MG-N28.5-CN
14.2	1 1/8-12UNF	(Left) 9/16-18UNF	121	30	0.25	E32M3R4-7100-14.2+MG-N28.5-CN

*: Indicates the Cv Value number

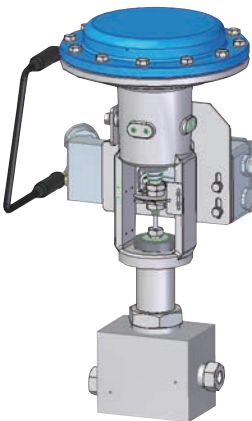
Other

Stop Valves without positioner also available.



99.9 MPa Flow Control Valves (High Cv Value Type)

40,000 psi Type



Features

1. Precise flow control for ultra high-pressure hydrogen.
2. Flow coefficient (Cv Value) can be selected and replaced from a large variety of disc & sheats.
3. Smart positioner with communications function can be available.

Specifications

Design Pressure	99.9 MPa
Design Temperature	85 °C
Usage Fluid Temperature Range	-10 to +85 °C

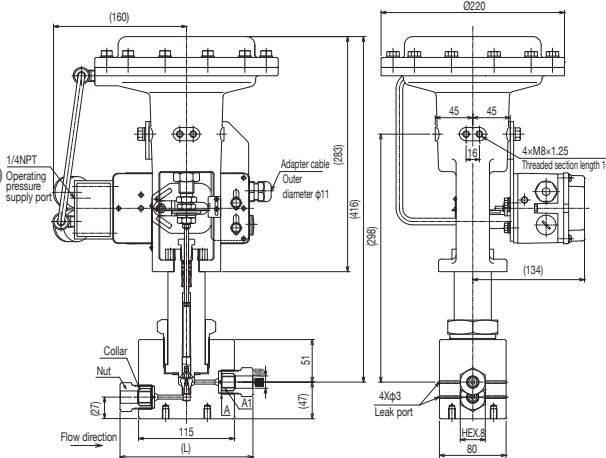
Materials

Parts	Materials
Body	SUS316+Co base alloy
Seat	SUS316+Co base alloy
Disc	SUS316+Co base alloy
Stem	SUH660
Gland Packing	PVDF+PFA

Dimensions, Ordering No.

Nominal Diameter	Nut Threads (valve body side)	Collar Threads (tube side)	L Collar and nut insertion reference dimensions	HEX. B	Cv Value MAX.	Ordering No.
	A	A1				
14.2	1 1/8-12UNF	(Left) 9/16-18UNF	161	30	0.5	E32M2R2-7100W-14.2-40+-N28.5-CN

*: Indicates the Cv Value number



Positioner

Positioner Model	Description
E32	Electropneumatic positioner (Smart positioner, Samsung, Type 3730-2) (Equipped with diagnosis function; intrinsic safety explosion-proof: Exia II CT6)
E53	Electropneumatic positioner (Smart positioner, Samsung, Type 3731-3) (Equipped with diagnosis function and HART® communications function; pressure-/explosion-proof: Exd II CT6)

*: Please contact us when ordering for required explosion-proof standards. (ATEX, CSA, KCs...etc.)

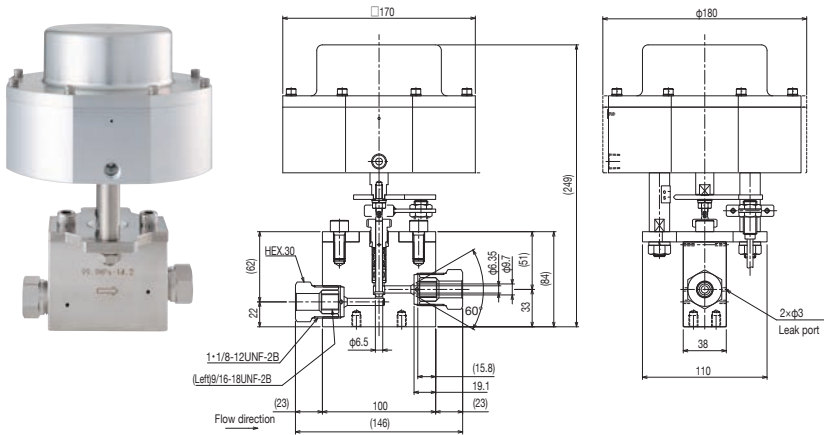
Cv Value

Cv Value number	Value Nature Range Ability Cv Value	EQ%. Linear									
		R2 20:1	R3 30:1	R4 40:1	R5 50:1	R6 60:1	R7 70:1	R8 80:1	R9 90:1	R10 100:1	
07	0.5										
08	0.35										
09	0.25										
10	0.15										
11	0.1										
12	0.07										
13	0.05										
14	0.035										
15	0.025										
16	0.015										
17	0.01										

It is possible a combination of inner painted in blue.

99.9 MPa Stop Valves (High Cv Value Type)

40,000 psi Type



Features

1. Full-bore type [accommodates port diameter equal to or greater than the inner diameter of 14.2 (40,000psi) size (ø6.35)]
2. No usage restrictions on flow direction and differential pressure.

Specifications

Design Pressure	99.9 MPa
Design Temperature	85 °C
Usage Fluid Temperature Range	-10 to +85 °C
Operating Pressure	0.5 to 0.7MPa
Cv Value(MAX.)	1

Note: When using in a pre cool line, please contact **Fujikin** when ordering.

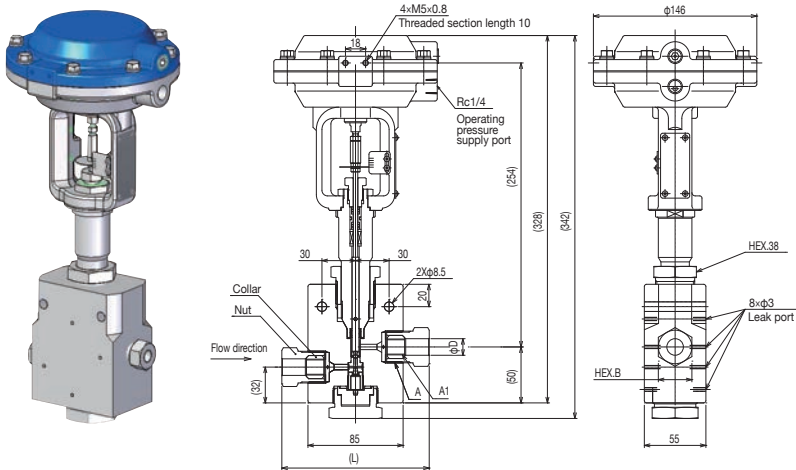
Materials

Parts	Materials
Body	SUS316+Co base alloy
Disc	SUH660
Gland Packing	PVDF+PFA
Actuator	A5056 (amongst others)

Ordering No. C160-UH-7100-14.2-40-N28.5-CN

99.9 MPa Stop Valves (For Precool Low Temperature)

60,000 psi Type



Features

1. No usage restrictions on flow direction and differential pressure

Specifications

Design Pressure	99.9 MPa
Design Temperature	50 °C
Usage Fluid Temperature Range	-40 to +50 °C
Operating Pressure	0.4 MPa
Cv Value	0.25

Materials

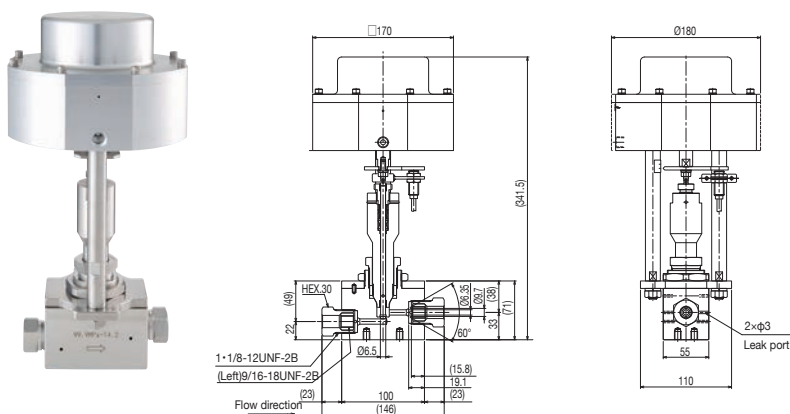
Parts	Materials
Body	SUS316+Co base alloy
Lid	SUS316+Co base alloy
Seat	SUS316+Co base alloy
Stem	SUH660
Gland Packing	PVDF+PFA

Dimensions, Ordering No.

Nominal Diameter	Nut Threads (valve body side)	Collar Threads (tube side)	L Collar and nut insertion reference dimensions	HEX.B	Cv Value MAX.	Ordering No.
6.35	9/16-18UNF	(Left)1/4-28UNF	109	17	0.1	M3R4-7100M-6.35-MG-N28.5-CN
9.52	3/4-16UNF	(Left)3/8-24UNF	117	22	0.15	M3R4-7100M-9.52-MG-N28.5-CN
14.2	1 1/8-12UNF	(Left)9/16-18UNF	131	30	0.25	M3R4-7100M-14.2-MG-N28.5-CN

99.9 MPa Stop Valves (For Precool Low Temperature, High Cv Value Type)

40,000 psi Type



Features

1. Full-bore type [accommodates port diameter equal to or greater than the inner diameter of 14.2 (40,000psi) size (ø6.35)]
2. No usage restrictions on flow direction and differential pressure

Specifications

Design Pressure	99.9 MPa
Design Temperature	85 °C
Usage Fluid Temperature Range	-40 to +85 °C
Operating Pressure	0.5~0.7MPa
Cv Value	1

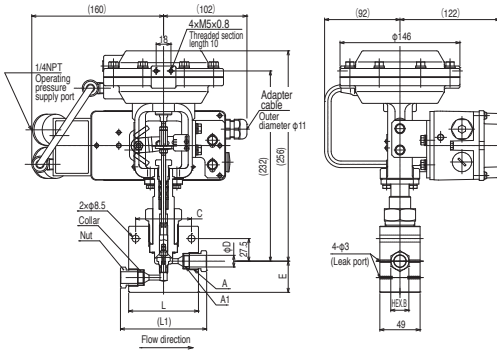
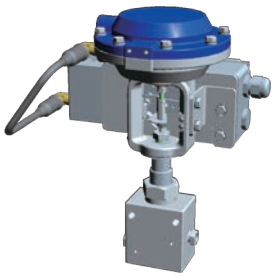
Materials

Parts	Materials
Body	SUS316+Co base alloy
Disc	SUH660
Gland Packing	PVDF+PFA
Actuator	A5056, other

Ordering No. C160-UH-7100C-14.2-40-N28.5-CN

50 MPa Flow Control Valves (Compact Type)

20,000 psi Type



Features

1. Precise flow control for ultra high-pressure hydrogen gas.
2. Flow coefficient (Cv Value) can be selected and replaced from a large variety of disc sheets.
3. Smart positioner with communications function can be available.

Specifications

Design Pressure	50 MPa
Design Temperature	85 °C
Fluid Temperature Range	-40 to +85 °C

Materials

Parts	Materials
Body	SUS316+Co base alloy
Seat	SUS316+Co base alloy
Disc	SUS316+Co base alloy
Stem	SUS316
Gland Packing	PVDF+PFA
O-ring	HNBR

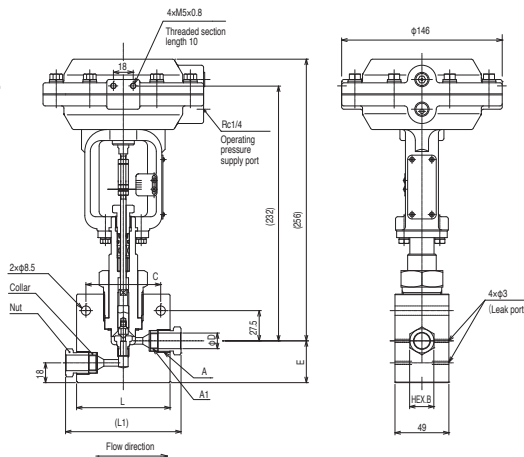
Dimensions, Ordering No.

Nominal Diameter	Nut Threads (valve body side)	Collar Threads (tube side)	L	L1	C	E	HEX.B	Cv Value MAX.	Ordering No.
	A	A1		Collar and nut insertion reference dimensions					
6.35	7/16-20UNF	(Left)1/4-28UNF	70	88	26.5	36	14	0.15	E32M3R4-750-6.35+N28.5-CN
9.52	9/16-18UNF	(Left)3/8-24UNF	70	88	26.5	36	17	0.35	E32M3R4-750-9.52+N28.5-CN
14.2	13/16-16UNF	(Left)9/16-18UNF	85	105	34	38	22	0.5	E32M3R4-750-14.2+N28.5-CN

*: Indicates the Cv Value number

50 MPa Stop Valves

20,000 psi Type



Features

1. Easy maintenance due to disk and sheet replacement.

Specifications

Design Pressure	50 MPa
Design Temperature	85 °C
Fluid Temperature Range	-40 to +85 °C

Materials

Parts	Materials
Body	SUS316+Co base alloy
Seat	SUS316+Co base alloy
Disc	SUS316+Co base alloy
Stem	SUS316
Gland Packing	PVDF+PFA
O-ring	HNBR

Dimensions, Ordering No.

Nominal Diameter	Nut Threads (valve body side)	Collar Threads (tube side)	L	L1	C	E	HEX.B	Cv Value MAX.	Ordering No.
	A	A1		Collar and nut insertion reference dimensions					
6.35	7/16-20UNF	(Left)1/4-28UNF	70	88	26.5	36	14	0.15	M3R4-750-6.35-N28.5-CN
9.52	9/16-18UNF	(Left)3/8-24UNF	70	88	26.5	36	17	0.5	M3R4-750-9.52-N28.5-CN
14.2	13/16-16UNF	(Left)9/16-18UNF	85	105	34	38	22	0.5	M3R4-750-14.2-N28.5-CN

Positioner

Positioner Model	Description
E32	Electropneumatic positioner (Smart positioner, Samsung, Type 3730-2) (Equipped with diagnosis function; intrinsic safety explosion-proof: Exia II CT6)
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*: Please contact us when ordering for required explosion-proof standards. (ATEX, CSA, KCs...etc.)

Cv Value

Cv Value number	Value Nature Range Ability	EQ%. Linear									
		R2	R3	R4	R5	R6	R7	R8	R9	R10	
		20:1	30:1	40:1	50:1	60:1	70:1	80:1	90:1	100:1	
07	0.5										
08	0.35										
09	0.25										
10	0.15										
11	0.1										
12	0.07										
13	0.05										
14	0.035										
15	0.025										
16	0.015										
17	0.01										

It is possible a combination of inner painted in blue.

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