

HIGH PRESSURE VALVES



Manufacturer

||| HAMAI

HAMAI INDUSTRIES LIMITED

<http://www.hamai-valve.com/en/>

SG Square 2F, 7-7-7 Nishi-Gotanda,

Shinagawa-Ku, Tokyo 141-8512, Japan

Phone: +81-3-3492-6655, Fax: +81-3-3492-6660

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||| HAMAI

STAINLESS STEEL HIGH PRESSURE CYLINDER VALVES

SOFIC

Small, light-weight, high driving force actuator
SAFETY OIL-FREE INHIBIT COMPACT



Valve with SOFIC

GAS	Model	Notes
Ultra High Purity Gas	PAW	Diaphragm Type
	EGPA	Tied Diaphragm Type

Standard Specifications

Operation method	Piston method using the gas pressure
Operation pressure	0.5~0.7MPa (compressed air or nitrogen)
Temperature range	+5°C~40°C(normal temperature environment)
Operation pressure	Manually operable φ6 (available φ4)

FEATURES 1

High Driving Force Function

- The small light-weight SOFIC actuator has been updated.
- Its load increased to 5,000 N, exceeding the 3,500 N, soon load from the model.
- This high load-bearing maximizes seal performance.
- It is also ideal for liquefied gas valves that need large flow quantities.

FEATURES 2

Downsizing and Light-Weighting

- By largely downsizing and light-weighting the opening/closing parts, it is much easier to attach and remove for easy installation.

FEATURES 3

Oil-Free Structure

- The SOFIC self-opens using air pressure.
- Its oil-free structure keeps your equipment safe.

※If you would like to know more about slow-starter function type, please feel free to contact us.

STAINLESS STEEL HIGH PRESSURE CYLINDER VALVES

EGVN

High-Flow Cylinder Valves
 for Ultra High-Purity Corrosive Gases
TIED DIAPHRAGM SEAL TYPE



EGVN

GAS	Model	Notes
Ultra High Purity Gas	EGVN	

Standard Specifications

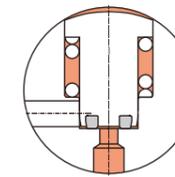
Maximum service pressure	~20.0MPa
Temperature range	-20~+65°C
Flow coefficient Cv	0.4~0.6
Recommended torque	7~10N-m
Helium leak rate -On seat, gland and safety	1.0×10 ⁻⁹ [Pa · m ³ /sec]

FEATURES 1

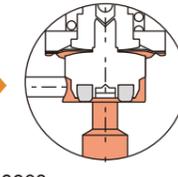
Reduced Dead Spaces

- Tied diaphragm design prevents particle generation and creates minimal dead space.
- Reduced dead spaces and gas-wetted volumes improve the purging performance.
- This is particularly beneficial when using the valve for hygroscopic, corrosive, pyrophoric or high purity gases, where inert gas purging is necessary before opening or after closing the valve.

■ Diaphragm Type



■ EGVN Tied Diaphragm Type



60% reduction in dead space compared with diaphragm type

※The colored areas are dead spaces.

FEATURES 2

Flow Coefficient CV 0.6

- High-flow cylinder valves are ideal for low-pressure corrosive liquefied gas.

FEATURES 3

Option for Alternative Seat Disc Materials

- Option available to choose seat disc materials according to the composition of the gases.

Body	Diaphragm	Lower - Stem	Seat
ASTM A182 F316L	ASTM N010276	SUS 316L	PCTFE
			PVDF

FOR ULTRA-HIGH PURITY & SPECIAL GASES

THE PRACTICAL DESIGN, THE OPTIMUM MATERIALS AND
EXCEPTION PERFORMANCE WITHOUT
COMPROMISE

EXPERIENCE THE LATEST GENERATION OF VALVE AND
ADVANCED TECHNOLOGY FROM HAMAI



Manufacturing high quality products

From product planning to design, quality assurance, procurement, manufacturing, and customer support, all members are committed to manufacturing for more reliable quality.



True high quality and reliability

All models undergo thorough quality testing during the design and development stages. In addition, dedicated inspectors check the quality of all products in the final product process.



Highest tightness technology

Our long-standing commitment to craftsmanship and unique production system have enabled us to provide valves with excellent tightness to the world.



Innovative research and development

Responsible for the quality, reliability, and durability of our products, we are constantly evolving performance and functionality and engaging in creative development.

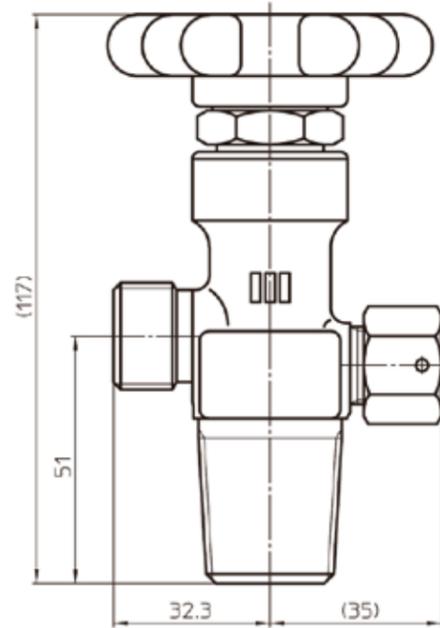


VALVES

STAINLESS STEEL
HIGH PRESSURE CYLINDER VALVES

SUS-12

FOR SPECIALTY GAS
PRESSURE SEAL TYPE



SUS-12 TYPE

DESCRIPTION

Pressure seal type
Stainless steel cylinder valve
For high purity gases

FEATURES

- Double O-ring sealing structure is suitable for vacuuming.
- Valves suitable for high purity gas.
- Available to meet wide ranges of international standards.

MODEL No. SUS-12-0H



FS-55LN / FSC-55LN

Cleaning and assembling in clean room

FOR SPECIALTY GAS
DIAPHRAGM SEAL TYPE

FS-55LN TYPE

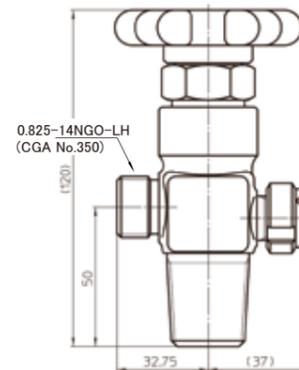
DESCRIPTION

Diaphragm seal type
Stainless steel cylinder valve
For high purity gases

FEATURES

- High leak tightness integrity through diaphragm sealing.
- Manual operating mechanism designed to prevent loosening by vibration in transit.
- Valve orifice is 4mm and Cv value is 0.3.
- Seat disc materials. (PCTFE,PVDF,PI,NYLON66) (Option)
- Adjustable seat plug type.(NOZZLE,FLAT type)(Option)
- Orifice to prevent exceeded flowing.(Option)
- Available connection to meet wide ranges of international standards.(CGA/DISS standard)

MODEL No. FS-55LN-350K



FSC-55LN TYPE Cleaning and assembling in clean room

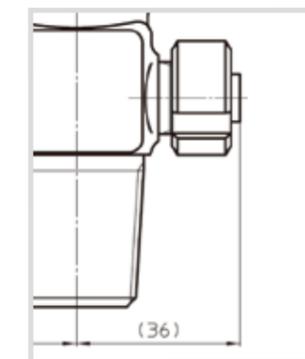
DESCRIPTION

Diaphragm seal type
Stainless steel cylinder valve
For ultra high purity gases (for the semi-conductor industries)

FEATURES

- Inside surface of gas wetted area of body polished is less than Rmax 1 μm.
- Ultra pure water cleaning and assembling in clean room.
- External leak tightness(gland nut area) checked by helium pressure method.(helium leak detector)
- Removable fusible metal in baking. (Maximum baking temperature 50°C)

MODEL No. FSC-55LN-640K2



MODEL No. FS-55LN



SUS-55L / SCR-55L

Cleaning and assembling in clean room

FOR SPECIALTY GAS
DIAPHRAGM SEAL TYPE

SUS-55L TYPE

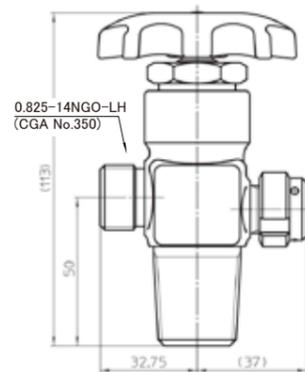
DESCRIPTION

Diaphragm seal type
Stainless steel cylinder valve
For high purity gases

FEATURES

- High leak tightness integrity through diaphragm sealing.
- Valve orifice is 4mm and Cv value is 0.3.
- Seat disc materials. (PCTFE,PVDF,PI,NYLON66)(Option)
- Adjustable seat plug type.(NOZZLE,FLAT type)(Option)
- Orifice to prevent exceeded flowing.(Option)
- Available connection to meet wide ranges of international standards.(CGA/DISS standard)

MODEL No. SUS-55L-350K



SCR-55L TYPE

Cleaning and assembling in clean room

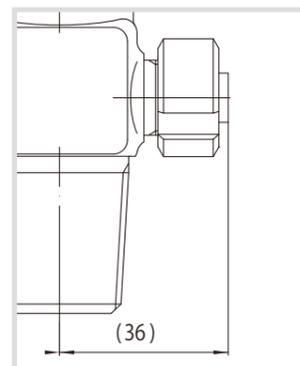
DESCRIPTION

Diaphragm seal type
Stainless steel cylinder valve
For ultra high purity gases (for the semi-conductor industries)

FEATURES

- Inside surface of gas wetted area of body polished is less than $R_{max} 1 \mu m$.
- Ultra pure water cleaning and assembling in clean room.
- External leak tightness(gland nut area) checked by helium pressure method.(helium leak detector)
- Removable fusible metal in baking. (Maximum baking temperature 50°C)

MODEL No. SCR-55L-1HF



MODEL No. SUS-55L-0HF



SUS-01L-N

FOR SPECIALTY GAS
DIAPHRAGM SEAL TYPE

SUS-01L-N TYPE

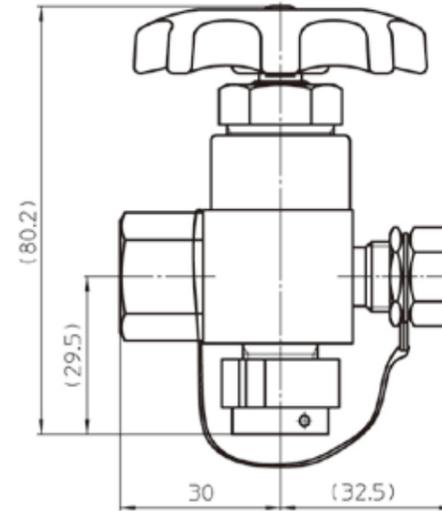
SUS-01L-N is designed and developed for specialty gases used ion implantation system in the field of semiconductors.

DESCRIPTION

Diaphragm seal type
Stainless steel cylinder valve
For specialty gas(AsH₃/PH₃/11BF₃ etc.) used ion implantation system

FEATURES

- High leak tightness integrity through diaphragm sealing.
- Selectable handwheel color. (Red,Gray)

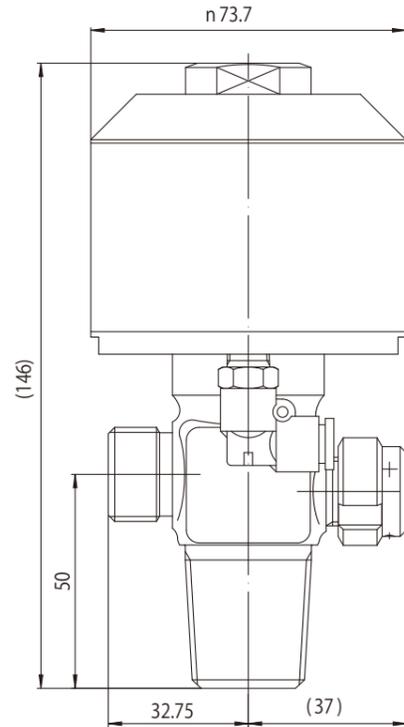


MODEL No. SUS-01L-N



PAS-55L

FOR SPECIALTY GAS (CORROSIVE etc.)
DIAPHRAGM SEAL TYPE



PAS-55L TYPE

DESCRIPTION

Pneumatic type
Diaphragm seal type
Stainless steel cylinder valve
For high purity gases

FEATURES

- Miniaturized by single operated tandem dual piston method. (Normal close)
- By combination with other controlling equipment, the valve is
 - 1) Shut off at the time of emergency
 - 2) Remote controlled
 - 3) Auto closed-opened
- Actuator lock function to prevent from miss-operation.
- Easy to connect and take off the piping for actuating pressure.

OPTION

- Opne and close indicator.

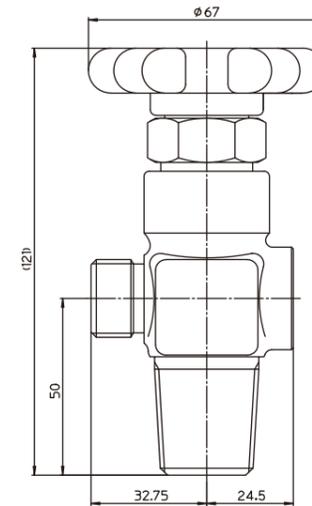
MODEL No. PAS-55L



AD-M / AD-P

Cleaning and assembling in clean room

FOR SPECIALTY GAS (CORROSIVE etc.)
DIRECT-DIAPHRAGM SEAL TYPE



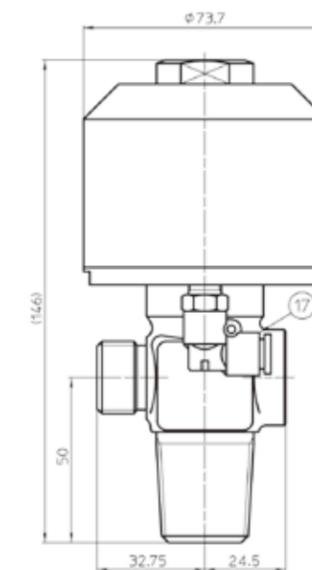
AD-M TYPE (MANUAL OPERATION) Cleaning and assembling in clean room

DESCRIPTION

Direct diaphragm seal type
Stainless steel cylinder valve
For ultra high purity gases (for the semi-conductor industries)

FEATURES

- Inside surface of gas wetted area of body polished is less than $R_{max} 1 \mu m$.
- Ultra pure water cleaning and assembling in clean room.
- External leak tightness(gland nut area) checked by helium pressure method.(helium leak detector)
- The cleanliness of purging performance and removing moisture are improved by no dead space.



AD-P TYPE (MANUAL OPERATION) Cleaning and assembling in clean room

FEATURES

- Miniaturized by single operated tandem dual piston method. (Normal close)
- By combination with other controlling equipment, the valve is
 - 1) Shut off at the time of emergency
 - 2) Remote controlled
 - 3) Auto closed-opened
- Actuator lock function to prevent from miss-operation.
- Easy to connect and take off the piping for actuating pressure.

OPTION

- Opne and close indicator.

MODEL No. AD-PS-2100 · AD-MS-2100



VALVE FOR SPECIALTY GASES



Hamai uses stainless steel valve to supply gases safety with high quality considering characters fo specialty gases. These cylinder valves are applied to the high pressure gas safety law in Japan and JIS B8246.

Also Hamai, we prepares the demande for valves with CGA standard(DISS) is increased.

TYPE OF GAS		JIS OUTLET	DISS OUTLET No.	INLET	Standerd	Manual Type	Pneumatic Valve
AsH ₃	Arsine	W22-14L	632				
GeH ₄	Germane	W22-14L	632				
SiH ₄	Silane	W22-14L	632				
B ₂ H ₆	Diborane	W22-14L	632				
H ₂ Se	Hydrogen Selenide	W22-14L	632				
Si ₂ H ₆	Disilane	W22-14L	632				
PH ₃	Phosphine	W22-14L	632				
BCL ₃	Boron Trichloride	W22-14L	634	JIS B8246			
HBr	Hydrogen Bromide	W22-14L	634	(V1)			
CL ₂	Chlorine	W26-14R	634	(V2)			
HCL	Hydrogen Chloride	W26-14R	634		KHK		
SiH ₂ CL ₂	Dichlorosilane	W22-14L	636	3/4-14NGT	KGS		
WF ₆	Tungsten Hexafluoride	W22-14R	638				
NF ₃	Nitrogen Trifluoride	W22-14L	640				
SiF ₄	Silicon Tetrafluoride	W22-14L	642		GB		
BF ₃	Boron Trifluoride	W22-14L	642	B.S 341			
N ₂ O	Nitorous Oxide	W22-14R	712		CGA		
C ₂ F ₆	Hexafluoroethane	W22-14L	716				
C ₃ F ₈	Octafluoro Propane	W22-14L	716				
CF ₄	Tetrafluoromethane	W22-14L	716	DIN.477			
CHF ₃	Fluoroform	W22-14L	716				
C ₄ F ₈	Octafluorocyclobutane	W22-14L	716				
SF ₆	Sulfur Hexafluoride	W22-14R	716				
NH ₃	Ammonia	W22-14R	720				
CO	Carbon monoxide	W22-14L	724				
CH ₂ F ₂	Difluoromethane	W22-14L	724				
CL ₂	Chlorine	W26-14R	728				

STAINLESS STEEL
PRESSURE SEAL TYPE
(FOR SPECIALTY GAS)
SUS-12

STAINLESS STEEL
DIAPHRAGM SEAL TYPE
(FOR SPECIALTY GAS)

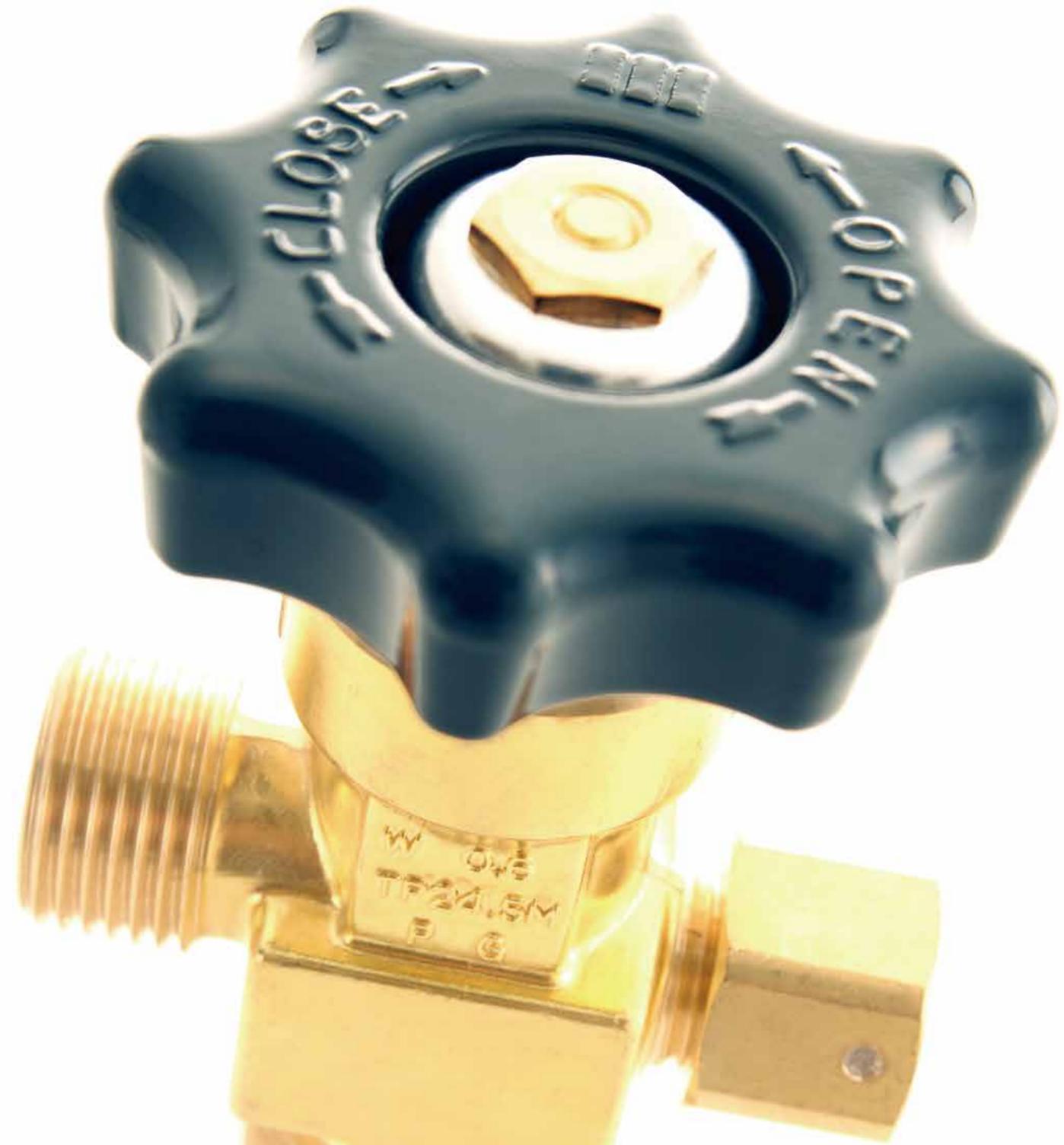
SUS-55L
SCR-55L
PAS-55L
PASC-55L
PAW(SOFIC)

STAINLESS STEEL
DIRECT DIAPHRAGM SEAL TYPE
(FOR SPECIALTY GAS)

AD-MS
AD-PS

STAINLESS STEEL
TIED-DIAPHRAGM SEAL TYPE
(FOR SPECIALTY GAS)

EGVN
EGPA(SOFIC)

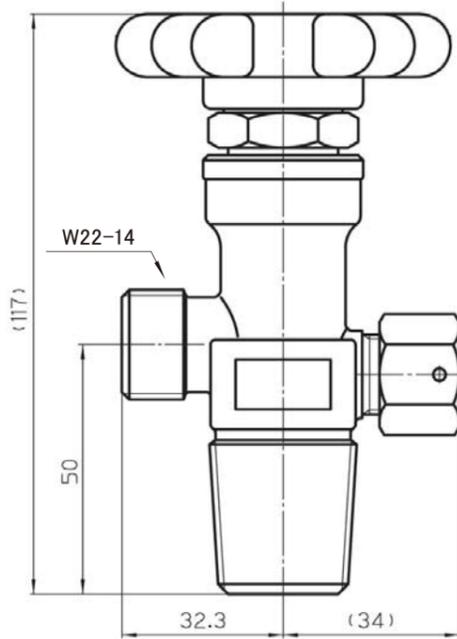


VALVES

BRASS
HIGH PRESSURE CYLINDER VALVES

G-12

FOR HIGH PURITY GAS
PRESSURE SEAL TYPE



**Pressure seal type
Stainless steel cylinder valve
Double O-ring sealing design in gland nut part
with safety relief**

DESCRIPTION

Hamai safely provide speciality gases industries with stainless steel cylinder valve of high quality.

FEATURES

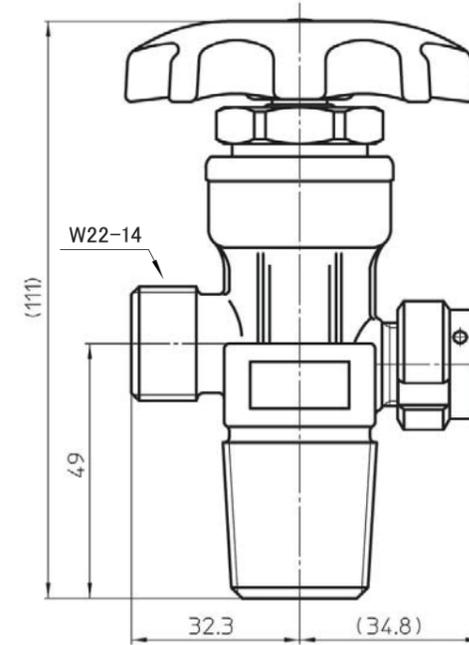
- Double O-ring sealing structure is suitable for vacuuming.
- This type of valves is also available for gas cylinders of a working pressure, 19.6MPa / 24.5MPa.
- Valves suitable for high purity gas.
- Available to meet wide ranges of international standards.

MODEL No. G-12



G-55L

FOR HIGH PURITY GAS
DIAPHRAGM SEAL TYPE



DESCRIPTION

Diaphragm seal type
Brass cylinder valve
For high purity gases

FEATURES

- This type has the identical structure as duablu as SUS-55L type of stainless steel cylinder valve.
- Diaphragm seal of this type are designed the possibility of non-grease throught the use of polish finishing diaphragm plate.
- This type of valves is also available JIS V1 inlet threads for small sizes of gas cylinders.

MODEL No. G-55L



BRASS HIGH PRESSURE CYLINDER VALVES

K-40 / K-10

Handtype Small size of gas cylinder(V1)

FOR INDUSTRIAL GAS
PRESSURE SEAL TYPE

K-40 series
(Handtype/wrenchtype/
type with residual pressure valve)

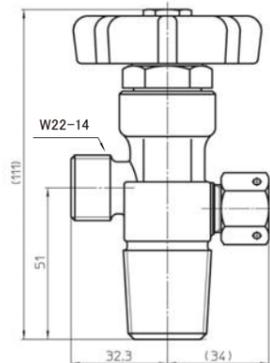
DESCRIPTION

Pressure seal type
Brass cylinder valve
For industrial gases

FEATURES

- K-40 series of valves is also available for gas cylinders of a working pressure, 19.6MPa.
- This valve has a counterflow-proof function as well as a residual pressure-holding function.

K-40series handle type



K-10 series
(Small size of gas cylinder (V1))

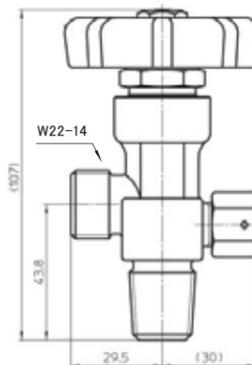
DESCRIPTION

Pressure seal type
Brass cylinder valve
For industrial gases
For small size of cylinder

FEATURES

- K-10 series are designed with JIS V1 inlet threads for small sizes of gas cylinders for industrial gases.

K-10series



MODEL No. K-40

MODEL No. K-10



wrench type

handle type



BRASS HIGH PRESSURE CYLINDER VALVES

K-30

Female thread type

FOR INDUSTRIAL GAS
PRESSURE SEAL TYPE

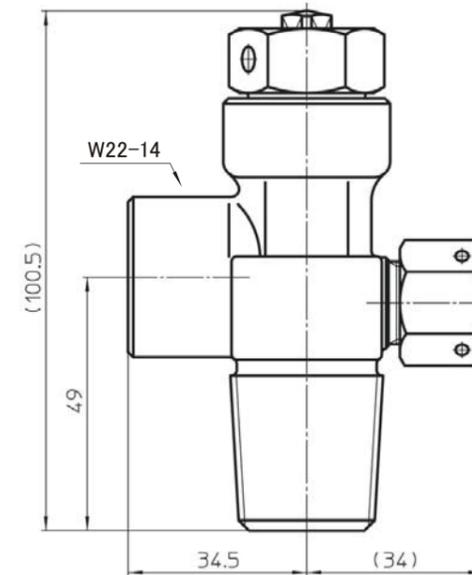
K-30 series

DESCRIPTION

Pressure seal type
Brass cylinder valve
For industrial gases

FEATURES

- This valve has a wrenching design and its outlet has female threads.



MODEL No. K-30



BRASS HIGH PRESSURE CYLINDER VALVES

K-44

W-O-ring Type

FOR INDUSTRIAL GAS
PRESSURE SEAL TYPE

K-44 series

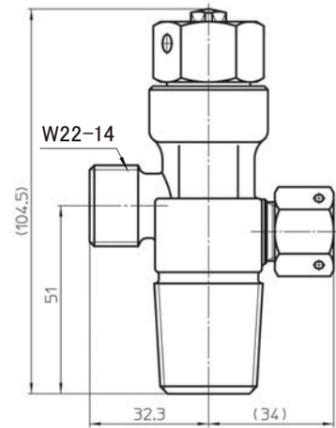
MODEL No. K-44 series

DESCRIPTION

Pressure seal type
Stainless steel cylinder valve
For industrial gases

FEATURES

- Double O-rings are being built in this valve and is the most recommendable for vacuuming.



MODEL No. K-44



SAFETY PRO series

Open - closed indicator



FEATURES

- Safety pro provide a safe and secure environment and protect accident against incorrect operation of the valves.
- Handle made of polycarbonate are light and toughness.
- This device are availability for the valve needed more than spin 360 degree to open and close.

K-44 series	
Model No.	KX-44
Handle model No.	KH-07

BRASS HIGH PRESSURE CYLINDER VALVES

G-700

FOR HYDROGEN / HELIUM
PRESSURE SEAL TYPE

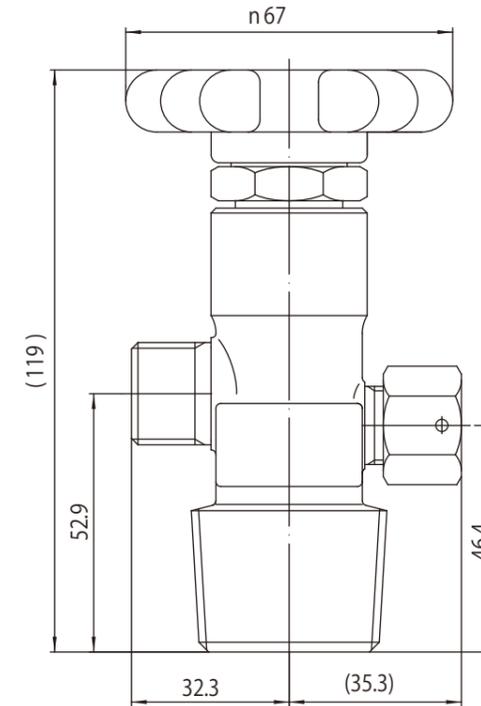
G-700

DESCRIPTION

Pressure seal type
Brass cylinder valve
For hydrogen / helium gas

FEATURES

- This valve is used for tubes with a trailer, cylinders with a self-loader or cylinders with a manifold.
- A valve for hydrogen service specially has a pressure relief device with accessories for hydrogen to be relieved outdoor.



MODEL No. G-12



PIN-INDEX YOKE TYPE VALVE

YVRH

OR MEDICAL CARE
YOKE TYPE

YVRH series

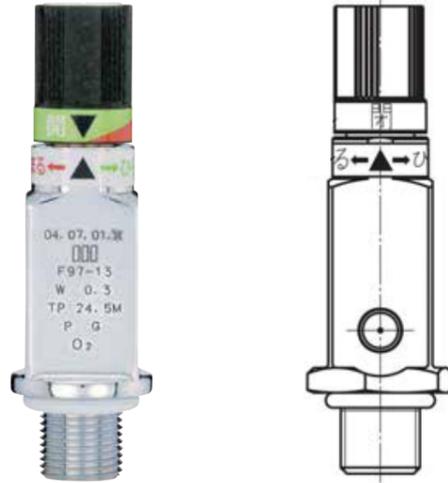
DESCRIPTION

O-ring seal type
Brass cylinder valve
For medical care

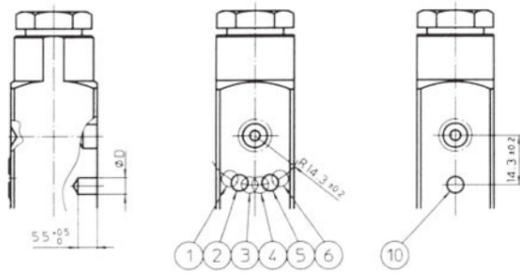
FEATURES

- This is a pin-index yoke-type valve aimed for medical use and has a round shape of handle, a butterfly shape of handle and a wrenching type of handle to meet various needs.
- In addition both inlets of taper and parallel threads are available.

YVRH-PX2



PINHOLE SIZE



D	TWO PINHOLE	4.7 ^{+0.1} ₀
	ONE PINHOLE	5.7 ^{+0.2} ₀

GAS NAME	PINHOLE NUMBER	GAS NAME	PINHOLE NUMBER
O ₂	② × ⑤	He or He/O ₂ Mix (O ₂ Mix rate is under 20%)	④ × ⑥
CO ₂ /O ₂ Mix (CO ₂ Mix rate is less than or equal to 7%)	② × ⑥	CO ₂ or CO ₂ /O ₂ Mix (O ₂ Mix rate is over 7%)	① × ⑥
O ₂ /He Mix (He Mix rate is less than or equal to 80%)	② × ④	Air	① × ⑤
H ₂ C=CH ₂	① × ③	N ₂	① × ④
N ₂ O	③ × ⑤	O ₂ /N ₂ O Mix (N ₂ O Mix rate is 30% or 50%)	⑩
C ₂ H ₆	③ × ⑥		

Quick connector

WEH series

MODEL No. WEH-C1-110469



MODEL No. WEH-C1-64002



FEATURES

- WEH-C1-110469 provides superior cost performance.
- WEH-C1-64002 values importance to the safety of products in operating.

Type	New ly Product	Conventional Product
Name	WEH-C1-110469	WEH-C1-64002
Drawing No.	S-4623-A	S-4376-A
Design Pressure	22MPa	22MPa
Leakage Test Pressure	22MPa	22MPa
Gas	O ₂	O ₂
Connector	W22-14TPI ※Without swiveljoint ※Straight type	W22-14TPI ※With swiveljoint ※Angle type
Handle Type	Cam lever type ※Without lock function	Rotating lever type ※With lock function
Note	To be designed with gastightness at low temperature	

※Quick connector is import and sale of product from WEH GmbH in Germany

BRASS HIGH PRESSURE CYLINDER VALVES

A-55-F

FOR ACETHYLENE GAS
PRESSURE SEAL TYPE

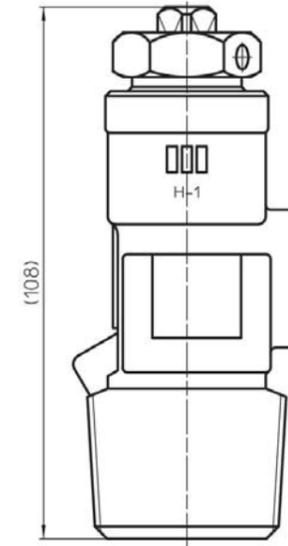
A-55-F

DESCRIPTION

Pressure seal type
Brass cylinder valve
For acetylene gas

FEATURES

- This is a brass valve aimed for disolved acetylene and a fuse plug for acetylene is also available.



MODEL No. A-55-F



VALVES FOR INDUSTRIAL GASES



Hamai provides stable supplies of valves for industrial gases such as oxygen, nitrogen and argon to a wide range of industries.

TYPE OF GAS		JIS OUTLET	CGA OUTLET No.	BS OUTLET	DIN OUTLET	INLET	Standard	Manual Type
(Air)	Air	W22-14R	346	No.3	No.13			
Ar	Argon	W22-14R	580	No.3	No.6			
AsH ₃	Arsine	W22-14L	350					
BF ₃	Boron Trifluoride	W22-14L	330		No.8			
CL ₂	Chlorine	W26-14R	660	No.6	No.8			
F ₂	Fluorine	W22-14L	670		No.8			
HCL	Hydrogen Chloride	W26-14R	330	No.6	No.8			
H ₂	Hydrogen	W22-14L	350	No.4	No.1			
H ₂ S	Hydrogen sulfide	W22-14L	330	No.15	No.5			
He	Helium	W21-14L	580	No.3	No.6			
Kr	Krypton	W26-14R	580	No.3	No.6	JIS B8246		
NH ₃	Ammonia	W22-14L	660	No.10	No.6	(V1)		
NO	Nitric Oxide	W22-14R	660		No.8	(V2)		
N ₂	Nitrogen	W22-14R	580	No.3	No.10		KHK	BRASS PRESSURE SEAL TYPE (FOR INDUSTRIAL GAS)
N ₂ O	Nitrous Oxide	W22-14R	326	No.13	No.11**1	3/4-14NGT		K-40
Ne	Neon	W22-14R	580	No.3	No.6		KGS	K-30
O ₂	Oxygen	W22-14R	540	No.3	No.9			K-44
PH ₃	Phosphine	W22-14L	350	No.4	No.1		GB	
SF ₆	Sulfur Hexafluoride	W22-14R	590	No.6	No.6	BS 341		BRASS (FOR HIGH PURITY GAS)
SiH ₄	Monosilane	W22-14L	350	No.3	No.1		CGA	G-12
SO ₂	Sulfur Dioxide	W22-14R	660	No.10	No.7			G-55L
Xe	Xenon	W22-14R	580	No.3	No.6			
CCL ₂ F ₂	Fluorocarbon-12	W26-14R	660	No.6	No.6	DIN 477		
CHCLF ₂	Fluorocarbon-22	W26-14R	660	No.6	No.6	/ISO 25E		
CH ₄	Methane	W22-14L	350	No.4	No.1			
CO	Carbon monoxide	W22-14L	350	No.4	No.5			
CO ₂	Carbon Dioxide	W22-14R	320	No.8	No.6			
C ₂ H ₂	Acetylene	YOKE GATT TYPE	510	No.2	No.3			
C ₂ H ₄	Ethylene	W22-14L	350	No.4	No.1			
C ₂ H ₄ O	Ethylene oxide	W22-14L	510	No.7	No.1			
C ₂ H ₆	Ethane	W22-14L	350	No.2	No.1			
C ₃ H ₆	Propylene	W22-14L	510	No.2	No.1			
C ₃ H ₈	Propane	W22.5-14L	510	No.4	No.1**2			
C ₄ H ₁₀	butane	W22-14L	510	No.9	No.1**2			



VALVES
STAINLESS STEEL
HIGH PRESSURE LINE VALVES

PS-110-R / PS-115-R / PS-119-WB

FOR SPECIALTY GAS

PS-110-R

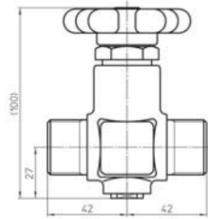
DESCRIPTION

Stainless steel high pressure line valve

FEATURES

- This is a compact-sized line valve, whose seat diameter is 10mm.

CONNECTION
IN : W29-16TPI.RH
OUT : W29-16TPI.RH



Design Pressure	17MPa/25MPa
Cv Value	2.0

PS-115-R

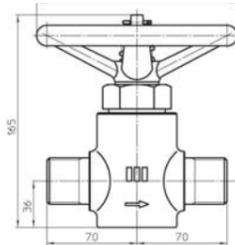
DESCRIPTION

Stainless steel high pressure line valve

FEATURES

- This is a large-sized line valve, whose seat diameter is 15mm.
- Another type whose gland area has a bearing structure is also available (Model No. PS-115-WB)

CONNECTION
IN : M36×3
OUT : M36×3



Design Pressure	17MPa/20MPa/25MPa
Cv Value	3.2

PS-119-WB

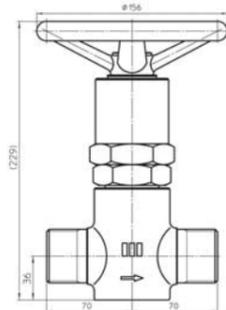
DESCRIPTION

Stainless steel high pressure line valve

FEATURES

- This is a large-sized line valve, whose seat diameter is 19mm. Due to its bearing structure the valve is smoothly operated even at a high pressure.
- A standard type without bearing is also available. (Model No. PS-119-R)

CONNECTION
IN : W44-12TPI.RH
OUT : W44-12TPI.RH



Design Pressure	17MPa/25MPa
Cv Value	5.5

PS-12 / GS-12

FOR SPECIALTY GAS
PRESSURE SEAL TYPE

PS-12

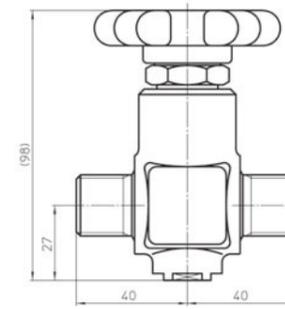
DESCRIPTION

Pressure seal type
Stainless steel high pressure line valve
For high purity gases

FEATURES

- This is a pressure seal type of a line valve is available for max. service pressure to be 41.2MPa (420Kgf/Cm2).
- A valve to be fixed onto a panel is also available. Model No. PS-12-PNL

Connection
IN : W22-14TPI.RH
OUT : W22-14TPI.RH



Design Pressure	17MPa/25MPa/41.2MPa
Cv Value	0.3

GS-12

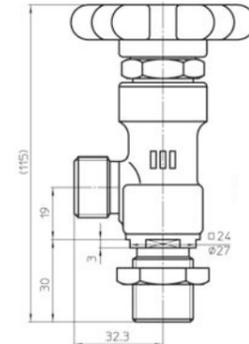
DESCRIPTION

Pressure seal type
Stainless steel high pressure line valve
For high purity gases
Angle type

FEATURES

- This is a pressure seal type of a line valve for max. service pressure to be 33MPa (336Kgf/Cm2).
- This type is also available with nut to connect a pressure gauge. Outlet threaded nut to connect a pressure is to be G1/2. Model No. GS-12AS connection IN : W22-14TPI.RH OUT : G1/2
- A valve to be fixed onto a panel is also available. Model No. GS-12-PNL

Connection
IN : W22-14TPI.RH
OUT : W22-14TPI.RH



Design Pressure	17MPa/25MPa/33MPa
Cv Value	0.35

MODEL No. GS-12



PS-55L / GS-55L

FOR SPECIALTY GAS
DIAPHRAGM SEAL TYPE

PS-55L

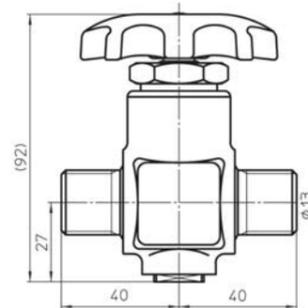
DESCRIPTION

Diaphragm seal type
Stainless steel high pressure line valve
For ultra high purity gases

FEATURES

- This is a simply designed diaphragm line valve. Standard has 4mm diameter of seat and Cv value 0.35, while 6mm diameter of seat and Cv value 0.45 is also available.
- In addition one called clean-finish whose inside surface is polished is available.
- One to be fixed onto a panel is also available.

Connection
IN : W22-14TPI.RH
OUT : W22-14TPI.RH



Design Pressure	17MPa/25MPa
Cv Value	0.35

GS-55L

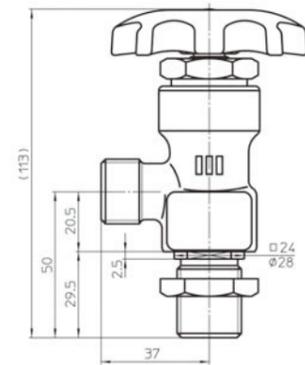
DESCRIPTION

Diaphragm seal type
Stainless steel high pressure line valve
For ultra high purity gases
Angle type

FEATURES

- This is a simply designed diaphragm line valve. Standard has 4mm diameter of seat and Cv value 0.35, while 6mm diameter of seat and Cv value 0.45 is also available.
- In addition one called clean-finish whose inside surface is polished is available.
- One to be fixed onto a panel is also available.

Connection
IN : W22-14TPI.RH
OUT : W22-14TPI.RH



Design Pressure	17MPa/25MPa
Cv Value	0.35

MODEL No. PS-55L



MODEL No. GS-55L



PAV-55L / PAVS-55L

FOR SPECIALTY GAS
DIAPHRAGM SEAL TYPE

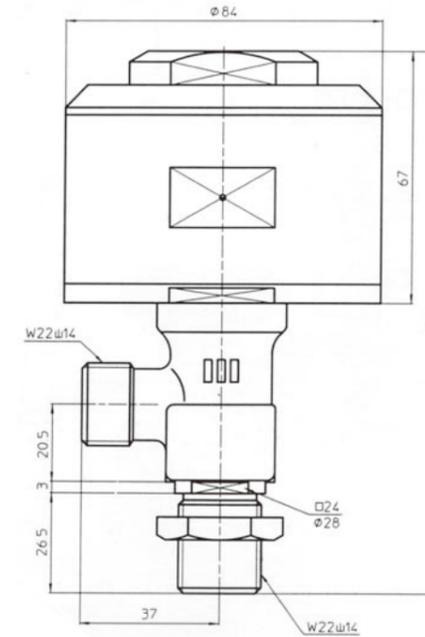
PAV-55L

DESCRIPTION

Diaphragm seal type
Stainless steel high pressure line valve
For high purity gases

FEATURES

- This is an actuator-mounted line valve operated with air (Angle type). 14.7M type and 24.5M type are available.
- A straight type called PAVS is also available. Model No. PAVS-55L





VALVES

BRASS
HIGH PRESSURE LINE VALVES

BRASS HIGH PRESSURE LINE VALVES

G-110-R / G-115-R / G-119-R FOR VARIOUS GAS EQUIPMENT PRESSURE SEAL TYPE

G-110-R

DESCRIPTION

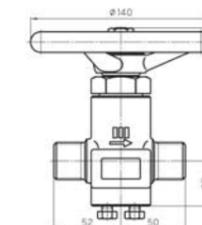
Brass line valve

FEATURES

- This is a line valve whose seat diameter is 10mm
- An angle-shaped one in the same structure is also available.

Design Pressure	17MPa/25MPa/30MPa
Cv Value	2.1

Connection
IN : W29-16TPIRH
OUT : W29-16TPIRH



G-115-R

DESCRIPTION

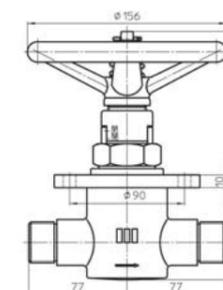
Brass line valve

FEATURES

- This is a large-sized line valve whose seat diameter is 15mm.
- There are two types. One is a panel-fixing flange type called G-115R and the other is bolt-stationary type called G-115RB.

Design Pressure	17MPa/25MPa
Cv Value	3.3

Connection
IN : W32-12TPIRH
OUT : W32-12TPIRH



G-119-R

DESCRIPTION

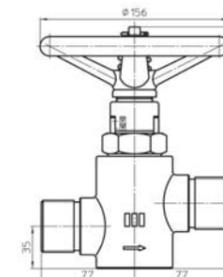
Brass line valve

FEATURES

- This is a large-sized line valve whose seat diameter is 19mm.

Design Pressure	17MPa/25MPa
Cv Value	5.5

Connection
IN : W44-12TPIRH
OUT : W44-12TPIRH



BRASS HIGH PRESSURE LINE VALVES

P-12 / G-12 MAIN VALVE FOR FILLING

FOR VARIOUS GAS EQUIPMENT
PRESSURE SEAL TYPE

P-12 series

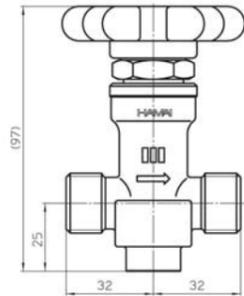
DESCRIPTION

Pressure seal type
Brass line valve

FEATURES

- This is a pressure seal type line valve.
 - This type is also available with nut to connect a pressure gauge. Outlet threaded nut to connect a pressure is to be G1/2.
- Model No. P-12-0FM connection IN : W22-14TPI.RH
OUT : G1/2

Connection
IN : W22-14TPI.RH
OUT : W22-14TPI.RH



Design Pressure	17MPa/25MPa
Cv Value	0.3

G-12 series (Main valve for filling)

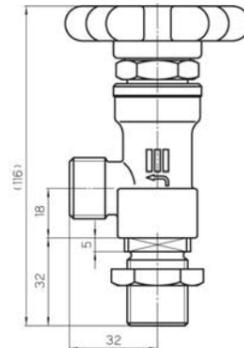
DESCRIPTION

Pressure seal type
Brass line valve
Angle type

FEATURES

- This is a pressure seal type line valve.
 - This type is also available with outlet threaded to be W22 LH.
- This type is also available with nut to connect a pressure gauge and blowing device.
- Model No. G-12-AS connection IN : W22-14TPI.RH
OUT : G1/2

Connection
IN : W22-14TPI.RH
OUT : W22-14TPI.RH



Design Pressure	17MPa/25MPa/27MPa
Cv Value	0.35

MODEL No. P-12



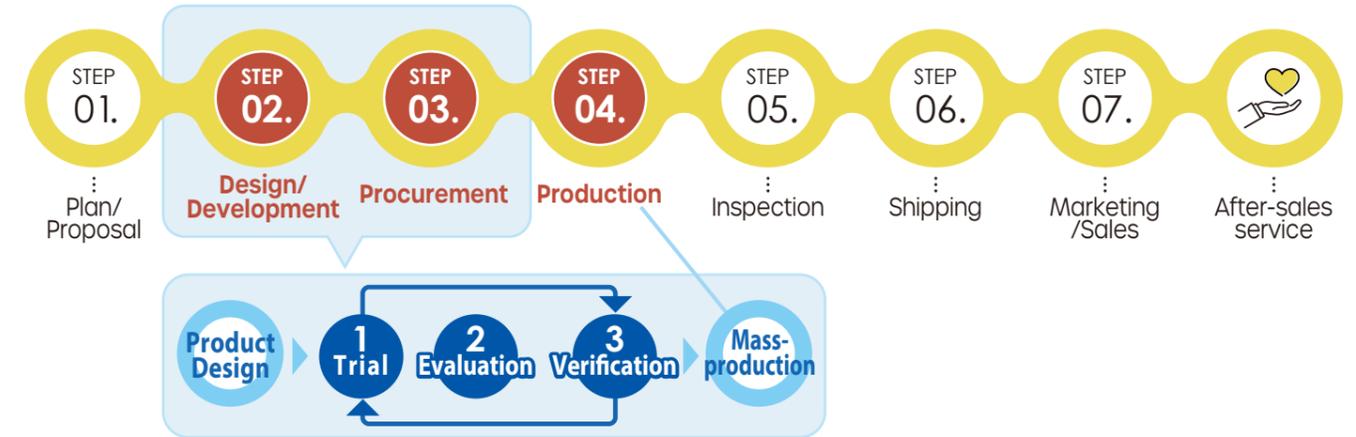
MODEL No. G-12



Reliable Quality and Production

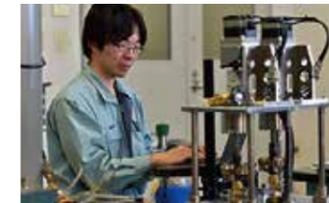
Processes essential for safe and secure use

We provide products through our streamlined system from planning, proposal, design, development, manufacturing to after-sales service.



Design Quality

During the development and design phase, quality and functional requirements, including market needs and customer requirements, are developed into design quality. The development and engineering teams conduct a series of prototype evaluations and partial prototypes to ensure thorough safety assurance. To further enhance reliability, the design review is conducted by expert staff to ensure that manufacturing technology, accumulated experimental data, and quality information are effectively reflected in the design and that appropriate designs are in place.



Open-Close durability test



Vibration test



Temperatures test



Clean room and inspection

Production Quality

To assure quality in the manufacturing process, we design a process flow that builds in quality, and conduct incoming inspections of purchased materials, processed parts, assemblies, and other components, as well as in-process inspections appropriate to product characteristics.

Quality Assurance

In order to provide products of high quality and performance, all products are inspected by specialized staff prior to shipment. This prevents initial defects and outflow of defective products. Hamai Group will continue to stably provide better products that meet the diversifying needs of our customers.

Environmental Consideration Initiatives

Hamai Group recognizes that the preservation of the global environment is an issue common to all humankind, and we will promote the preservation of the global environment and the reduction of environmental burdens through our business activities.

