



Oil pressure product

Pressure tester

Suitable for occasional pressure detection if you don't always measure pressure!

RoHS

※ See a water pressure product page about SUS spec.



- You can measure circuit pressure up to 35MPa even during pressurization.
- If you install a special nipple to a circuit where you need to measure pressure, you can check pressure whenever required.
- Cost reduction, by replacing a pressure gauge in use with a pressure tester.
- You can read pressure at all positions by connecting a high pressure hose.
- Suitable for venting air from a circuit and getting a sample of hydraulic oil.
- Easy diagnosis and maintenance of a hydraulic circuit.

! Safety precaution

- Use a pressure tester when you check temporary pressure. If your circuit is always pressured, use our "NH hose" with hose fittings. (P37)
- A pressure tester hose is mainly made of nylon resin. Do not fold or twist it.

Specification

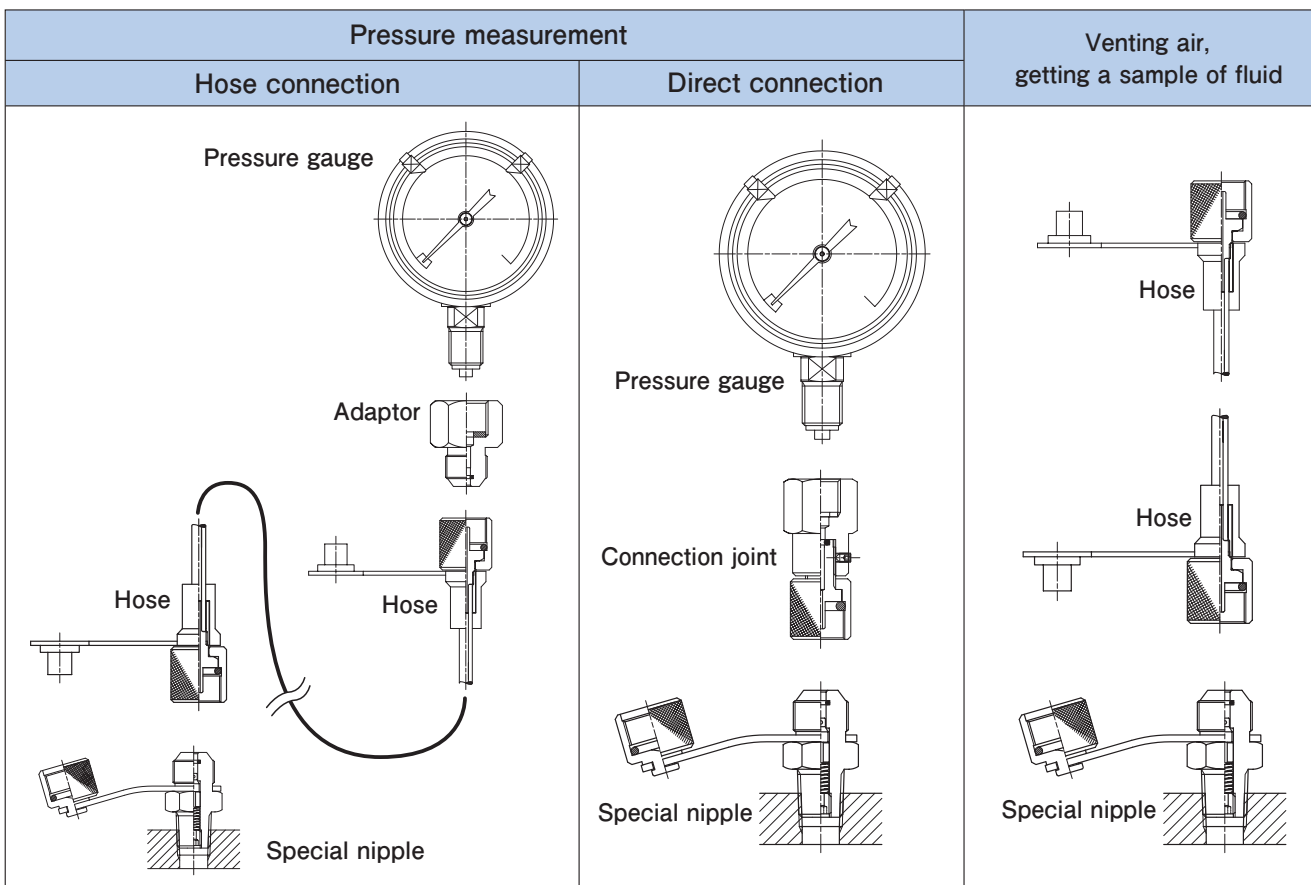
Max. pressure	35MPa
Proof pressure	50MPa
Fluid	Petroleum oil

※ We recommend SUS spec if you use water and glycol based oil. (P63)

Example of use

Construction	Concrete pumping car, shovel car, bulldozer
Machine	Large machine, special-purpose machine, hydraulic press
Iron and steel	Iron and steel making plants
Injection	Accumulator injection circuits, clamping circuits
Vehicle	Large special vehicles

Example of combination



Special nipple



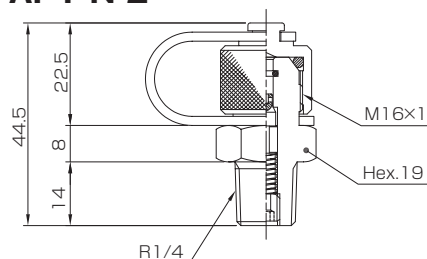
JIS symbol



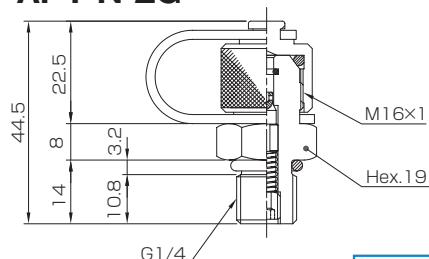
This is a check valve type special nipple. If you tighten a metal fitting on a high pressure hose side, a check valve will open.

Order no.	Model	Screw type	Packing material/size	Weight
A040-N02	APT-N-2	R1/4	—	80g
A040-N2G	APT-N-2G	G1/4	NBR / P11	

APT-N-2



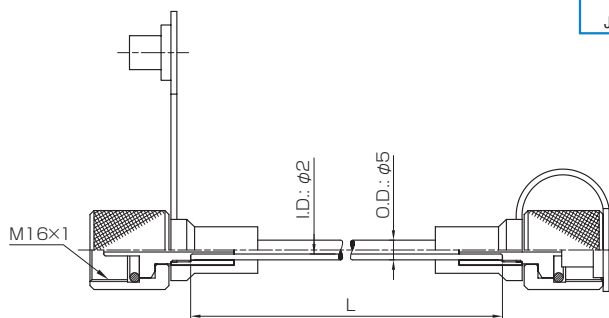
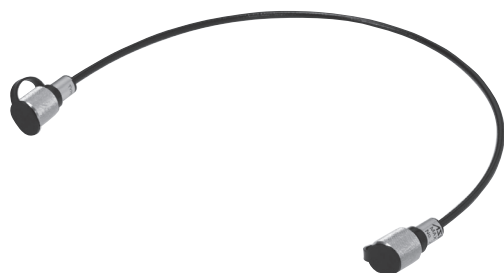
APT-N-2G



High pressure hose



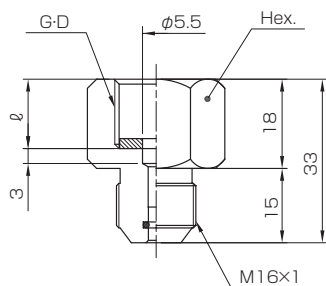
JIS symbol



This is a high pressure hose to connect between a special nipple and a glycerin pressure gauge. You can use it when a pressure detecting position is far.

Order no.	Model	Length L	Max. pressure	Proof pressure	Temp. range	Ambient temp.	Min. bending radius	Weight
A040-005	APT-05	0.5m	35MPa	50MPa	-20~60°C	Max. 60°C or less	40mm	90g
A040-010	APT-10	1.0m						100g
A040-020	APT-20	2.0m						120g
A040-030	APT-30	3.0m						130g

Pressure gauge adaptor



Order no.	Model	Screw type G · D	Packing material	Packing dimension	ℓ	Hex	Weight
A040-G02	APT-G-2	G1/4	C1100	11.2 × 6 × 1.5	12	21	60g
A040-G03	APT-G-3	G3/8		14.7 × 6 × 2	14	24	

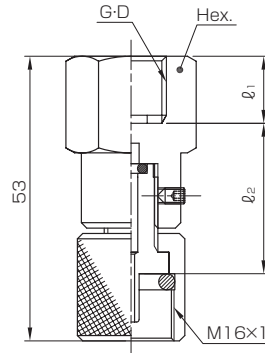
- This is an adaptor to connect a high pressure hose to a glycerin pressure gauge.
Select the best adaptor in conformance to the screw diameter of a glycerin pressure gauge to be used.
- If you use this pressure gauge adaptor, you can easily connect or disconnect a glycerin pressure gauge and a high pressure hose by hand without using a wrench.
Be sure to use an adaptor for each pressure gauge.

Direct connection joint



Order no.	Model	Screw type G · D	Packing material	Packing dimension	ℓ ₁	ℓ ₂	Hex	Weight
A040-PG2	APT-PG-2	G1/4	C1100	11.2 × 6 × 1.5	12	29	21	100g
A040-PG3	APT-PG-3	G3/8		14.7 × 6 × 2	14	27	24	

APT-PG- ※



- This is a joint to connect between a special nipple and a glycerin pressure gauge.
- Use this joint when you want to measure pressure without using a high pressure hose.
- Select the best joint in conformance to the screw diameter of a glycerin pressure gauge to be used.

Storage kit (Plastic case)

- Suitable for accommodating pressure tester pieces in a compact space, to be used as a portable tool.
- This case can accommodate up to 3 glycerin pressure gauges, 6 special nipples, 3 pressure gauge adaptors, 1 direct connection joint, and 3 high pressure hoses.

Order no.	Model	Dimension	Weight
A040-BOX	APT-BOX	410 × 300 × 70	1300g



Glycerin pressure gauge for pressure tester

- Sturdy stainless steel case!
- Select a pressure gauge whose full scale pressure is more than double your pressure range.

Order no.	Model	Stock
R403-510	OPG-AT-G1/4-60 × 4MPa	○
R403-511	OPG-AT-G1/4-60 × 6MPa	○
R403-512	OPG-AT-G1/4-60 × 10MPa	○
R403-513	OPG-AT-G1/4-60 × 16MPa	○
R403-514	OPG-AT-G1/4-60 × 25MPa	○
R403-515	OPG-AT-G1/4-60 × 40MPa	○
R403-516	OPG-AT-G1/4-60 × 60MPa	○

※ Regarding spec of this gauge, see P21, 22.



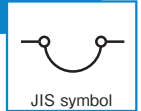
High pressure nylon hose (For small diameter piping)

Characterized flexibility and high pressure use!

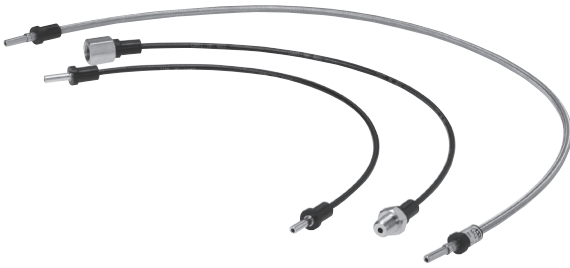
NH

RoHS

※ See a water pressure product page about SUS spec.



- This is a small diameter nylon hose for high pressure.
- This hose eliminates the need of bending work by a vendor, and reduces your time for complicated or long piping.



Note

Refer to "Hose length" below, when ordering.

Safety precaution

- NH hose is made of nylon resin. It must be connected without "fold" or "twist".
- Expansion and contraction of hose outer diameter and length is generated, due to changes of inner pressure. If you use a hose clamp to fix a hose, do not fix the hose tightly because of it. Select hose length added 20mm to your length, just in case.
- Bending radius of hose must be more than the minimum value in "spec".
- Keep NH hose away from fire.
- Do not use beyond temperature range.

Specification

Model	NH2	NH3	NH4
O.D. × I.D.	φ 5 × φ 2	φ 6 × φ 3	φ 8 × φ 4
Min. bending radius	40mm	50mm	60mm
Max. pressure	35MPa		
Proof pressure	70MPa		
Temp. range	-20°C ~ 60°C		
Ambient temp.	Max. 60°C		
Fluid	Petroleum oil, Phosphate ester oil		
Weight	20g/m	30g/m	40g/m

※ We recommend SUS spec if you use water and glycol based oil. (P66)

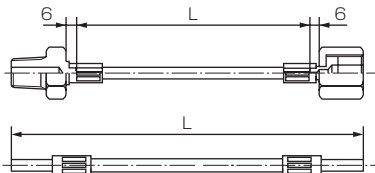
Example of use

- Piping for a pressure gauge
- Piping for a small flow rate pilot line
- Hydraulic clamp for work
- Piping for a miniature cylinder
- Hydraulic circuit for an injection molding machine
- Piping for a clamp cylinder and a pressure gauge of hydraulic press
- Piping pressure gauge of hydraulic unit

※ Suitable for hydraulic circuits of low flow rate.

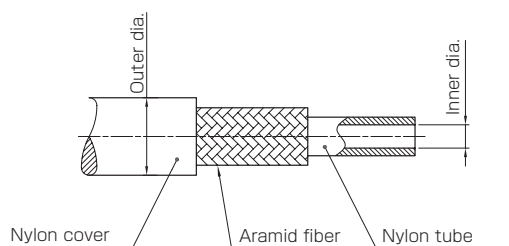
Description

Note of hose length



L means hose total length, if K6 type for both sides.

Structure



NH3 - R2 - 1.0 - G2 -

① ② ③ ④ ⑤

①	Model	NH2 : O.D. φ 5 × I.D. φ 2 NH3 : O.D. φ 6 × I.D. φ 3 NH4 : O.D. φ 8 × I.D. φ 4
②	Fitting model	Select from hose fitting table. P38
③	Hose length L	1.0m or more: Order by the 0.1m From 0.2m till 1.0m: Order by the 0.05m Less than 0.2m: Not available
④	Fitting model	Select from hose fitting table. P38
⑤	Wire blade	Unmarked: Without wire blade W : With wire blade (SUS) ※ Wire blade: Only for NH2 and NH3

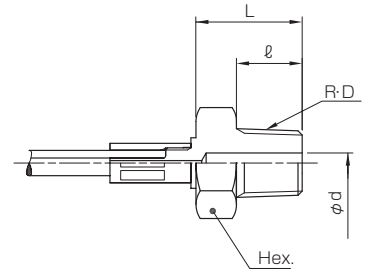
Hose fitting

NH※-R

Male fitting

Material: SUM

Model	Screw type R · D	L	ℓ	φd	Hex.	Applicable	Weight
NH2-R1	R1/8	19	11	4	14	NH2	20g
NH2-R2	R1/4	21	13		19		30g
NH3-R2	R1/4	21	13			NH3	30g

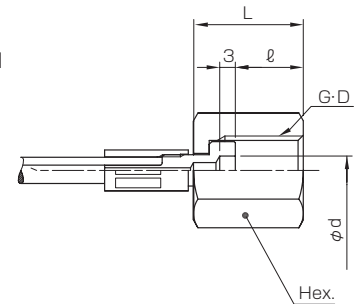


NH※-G

For gauge

Material: SUM

Model	Screw type G · D	L	ℓ	φd	Hex.	Packing material	Packing size	Applicable	Weight
NH2-G2	G1/4	21	13	5.5	19	C1100	11.2×6×1.5	NH2	40g
NH2-G3	G3/8				21		14.7×6×2		50g
NH3-G2	G1/4				19		11.2×6×1.5	NH3	40g
NH3-G3	G3/8				21		14.7×6×2		50g

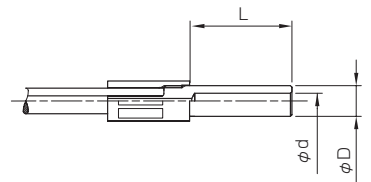


NH※-K6

For flareless joint

Material: SUM

Model	φD	L	ℓ	φd	Hex.	Applicable	Weight
NH2-K6	6	20	-	3	-	NH2	15g
NH3-K6						NH3	
NH4-K6						NH4	

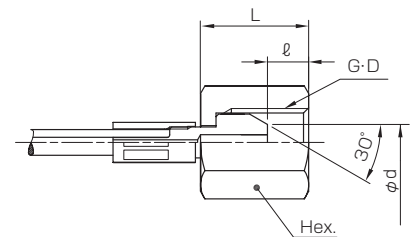


NH※-UM

Union male fitting

Material: SUM

Model	Screw type G · D	L	ℓ	φd	Hex.	Applicable	Weight
NH2-UM1	G1/8	16	6	4.5	14	NH2	20g
NH2-UM2	G1/4	21	8	7	19		40g
NH3-UM2						NH3	40g

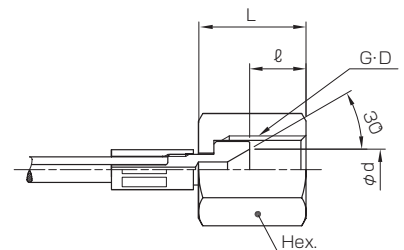


NH2-UF

Union female fitting

Material: SUM

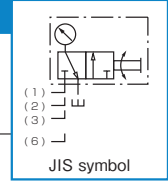
Model	Screw type G · D	L	ℓ	φd	Hex.	Applicable	Weight
NH2-UF1	G1/8	16	9	6	14	NH2	20g
NH2-UF2	G1/4	21	11	8	19		40g



Switching valve with glycerin pressure gauge

A switching valve with a built-in glycerin pressure gauge!

SVPG



- You can reduce your piping time because you don't need connect a pressure gauge and this valve. You don't also need drill holes for a pressure gauge panel installation.
- You can easily measure circuit pressure by setting an arrow mark on a knob to each port number.
- "0" positions are marked between each port. Internal residual pressure of a pressure gauge is discharged to a drain port. A pointer of a pressure gauge always indicates "0" (zero), except the time measured pressure. This improves the accuracy and durability of a pressure gauge.

Specification

Max. pressure	21MPa
Proof pressure	38MPa
How to install	Panel mount type
Fluid	Petroleum oil (Contact us, if you use phosphate ester oil or water-glycol based oil.)
Amount of leak from drain port	Condition: Oil : ISO VG32 Oil temp. : 45 ± 5°C 7MPa : 20cm ³ / min or less 14MPa : 30cm ³ / min or less 21MPa : 40cm ³ / min or less
Back pressure from drain port	1.5MPa or less
Weight	2500g

! Safety precaution

- Pipe to each port of a switching valve so that pressure is applied uniformly to all ports.
- Metal seal structure is designed so that clearance between spool outer diameter and body inner diameter is about 10 μ . Dust sticking causes malfunction of knob rotating. Take care of dirty oil.
- When flushing a pipe, keep your valve away from dirty flushing oil.
- Perform knob switching at a regular interval. If a knob is left unmoved for a long time, the knob movement may become heavy due to hydraulic locking.
- If internal pressure is retained into a drain port, a valve knob may fall out. Make sure that a drain port is connected to a drain pipe.

Description

SVPG - 3 18 - 10MPa

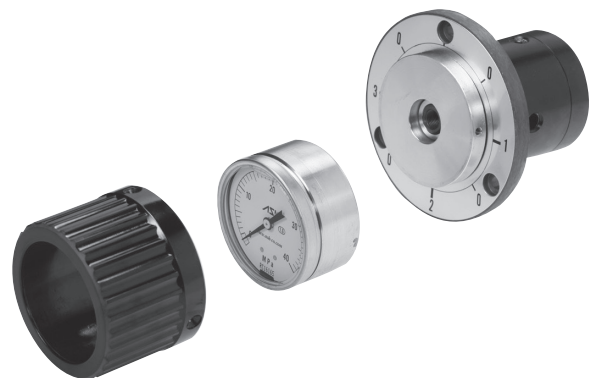
① ② ③ ④

①	N a m e	Switching valve with glycerin pressure gauge
②	Number of ports	3 : 3 ports 6 : 6 ports
③	S c r e w t y p e Rc · D	18 : Rc1/8 14 : Rc1/4
④	Pressure range	4 : 0 ~ 4MPa 6 : 0 ~ 6MPa 10 : 0 ~ 10MPa 16 : 0 ~ 16MPa 25 : 0 ~ 25MPa 40 : 0 ~ 40MPa

※ Contact us about G screw type

Replacement of pressure gauge

- If a glycerin pressure gauge of this valve is damaged, remove a knob and replace only a pressure gauge.
- Model (Pressure gauge) : OPG-ADMU-R1/8-60 ×※ MPa
Refer to "Description" table about pressure range.

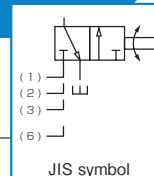


See **P41** for dimension

Switching valve

A substantial reduction of hydraulic device costs!

SV



- This valve has been developed to measure circuit pressure at max. 6 positions with a pressure gauge.
- All you need is only a pressure gauge. This means a substantial cutdown of your pressure gauge costs and machining costs for pressure gauge panel installation holes.
- This is a rotary type switching valve. Just set an arrow mark of a knob to one of circuit numbers, and you can measure pressure.
- Set a knob to "ALL CLOSE". Then, internal residual pressure of a gauge is discharged into a drain port. This improves the accuracy and durability of your pressure gauge.

Specification

Max. pressure	21MPa
Proof pressure	38MPa
How to install	Panel mount type
Amount of leak from drain port	Condition: Oil : ISO VG32 Oil temp. : 45 ± 5°C 7MPa : 20cm ³ /min or less 14MPa : 30cm ³ /min or less 21MPa : 40cm ³ /min or less
Back pressure from drain port	1.5MPa or less
Weight	1400g

! Safety precaution

- Pipe to each port of a switching valve so that pressure is applied uniformly to all ports.
- Metal seal structure is designed so that clearance between spool outer diameter and body inner diameter is about 10 μ . Dust sticking causes malfunction of knob rotating. Take care of dirty oil.
- When flushing a pipe, keep your valve away from dirty flushing oil.
- Perform knob switching at a regular interval.
- Raise a drain pipe once to a position higher than a valve, and then connect the pipe to a drain port. This step prevents hydraulic locking.
- If internal pressure is retained into a drain port, a valve knob may fall out. Make sure that a drain port is connected to a drain pipe.

Specification

Order no.	Model	Number of ports	Screw type Rc · D	Fluid	
A030-318	SV-318	3 ports	Rc1/8	Petroleum oil	
A030-314	SV-314		Rc1/4		
A030-618	SV-618	6 ports	Rc1/8		
A030-614	SV-614		Rc1/4		
A130-318	F-SV-318	3 ports	Rc1/8		Phosphate ester oil
A130-314	F-SV-314		Rc1/4		
A130-618	F-SV-618	6 ports	Rc1/8		
A130-614	F-SV-614		Rc1/4		

* Contact us about G screw type and water - glycol based oil

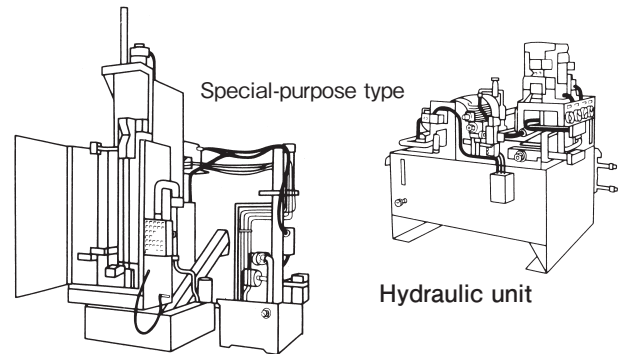
See **P41** for dimension

Switching valve with glycerin pressure gauge / Pressure gauge switching valve

SVPG/SV

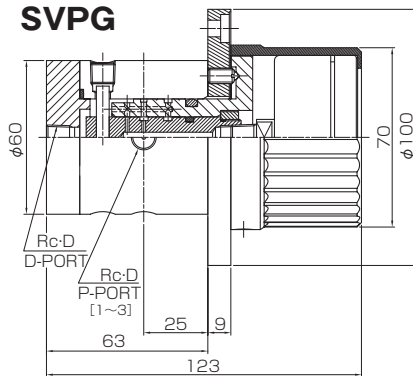
Example of use (SVPG · SV)

- Plastic/Rubber injection molding machine
- Hydraulic press : Powder, ceramic, rubber press
- Machine tool : Large type, special-purpose type, NC lathe
- Hydraulic unit : For industry, machine tool, ship, valve stand

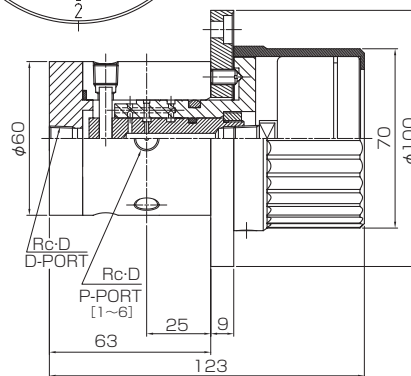
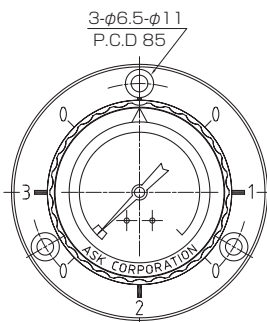


Dimension

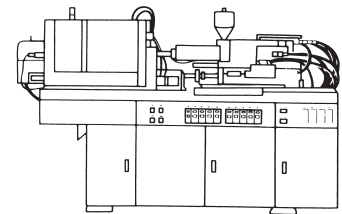
SVPG



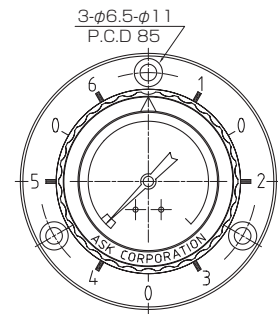
3 ports



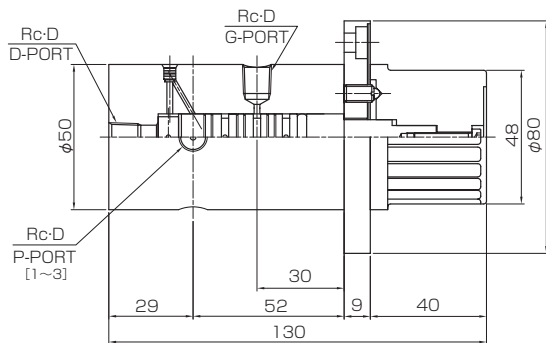
6 ports



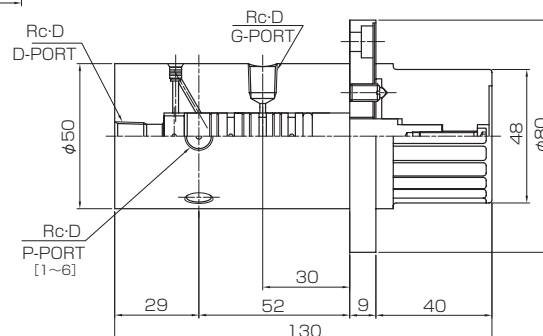
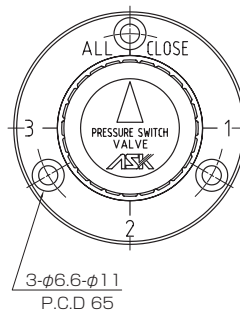
Injection molding machine



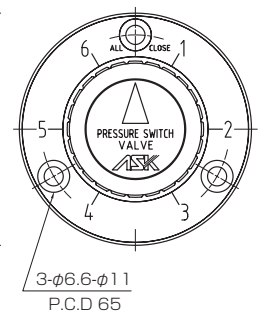
SV



3 ports



6 ports



Gauge valve

Can be used as a small-flow-rate throttle valve!

SAN-100/SAN-100N

RoHS

※ See a water pressure product page about SUS spec.



JIS symbol



SAN-100

SAN-100N

- SAN-100 gauge valve is a needle valve for a pressure gauge.
- SAN-100N gauge valve is a needle valve for a panel-mounted pressure gauge.

Specification

Max. pressure	35MPa
Proof pressure	63MPa
Material	C3771

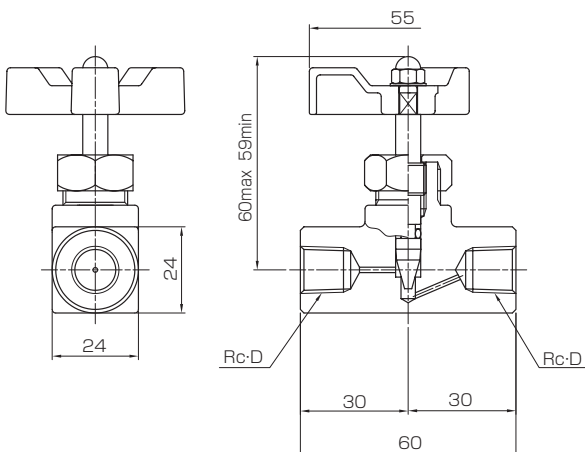
※G screw type is available. Please contact us.

Model

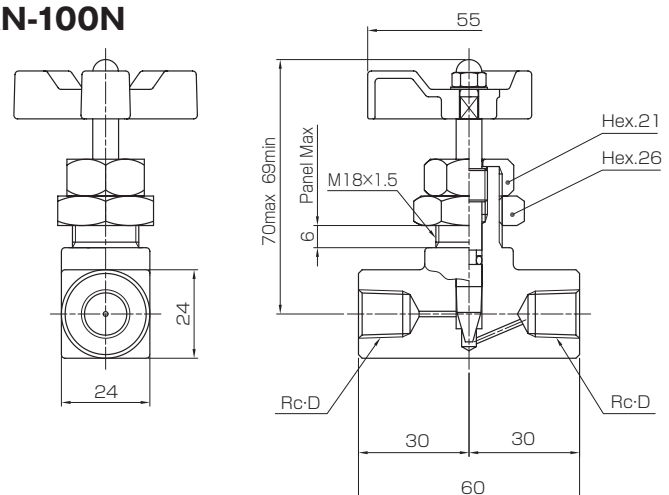
Order no.	Model	Screw type Rc · D	Connection type	Fluid	Weight
A010-102	SAN-100-2	Rc1/4	In-line type	Petroleum oil	320g
A010-103	SAN-100-3	Rc3/8		Phosphate ester oil	
A110-102	F-SAN-100-2	Rc1/4		Water-glycol based oil	
A110-103	F-SAN-100-3	Rc3/8			
A210-102	W-SAN-100-2	Rc1/4			
A210-103	W-SAN-100-3	Rc3/8	Panel mount type	Petroleum oil	360g
A011-102	SAN-100N-2	Rc1/4		Phosphate ester oil	
A011-103	SAN-100N-3	Rc3/8		Water-glycol based oil	
A111-102	F-SAN-100N-2	Rc1/4			
A111-103	F-SAN-100N-3	Rc3/8			
A211-102	W-SAN-100N-2	Rc1/4			
A211-103	W-SAN-100N-3	Rc3/8			

Dimension

SAN-100



SAN-100N



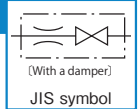
Gauge valve with damper

Needle valve for pressure gauge with damper function!

SAN-200N/SAN-300N

RoHS

※ See a water pressure product page about SUS spec.



- As surge pressure and pulsating pressure are absorbed by a damper, accuracy and durability of a pressure gauge are greatly improved.
- Than a damper and a gauge valve are installed separately, this installation method saves space and reduces your costs.
- You can easily set the direction of a pressure gauge by a gauge socket.

Specification

Max. pressure		35MPa	
Proof pressure		63MPa	
Material		C3771	
Torque ※	G·D	G1/4	40N · m
		G3/8	50N · m
		G1/2	

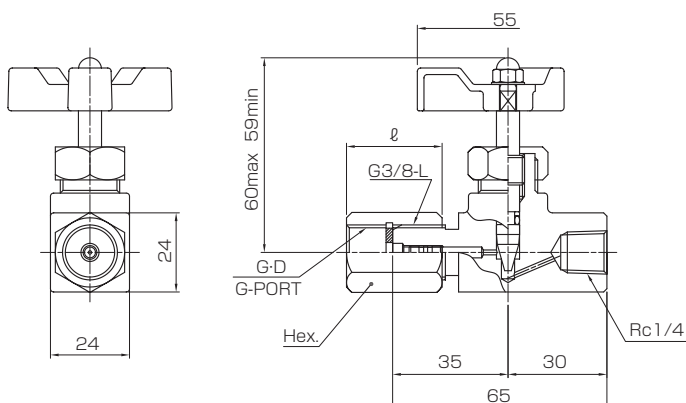
※ As to be safely sealed the space between the pressure gauge and gauge valve socket by using the attached a copper packing, please refer to the torque which we recommend on the left table before installing.

Model

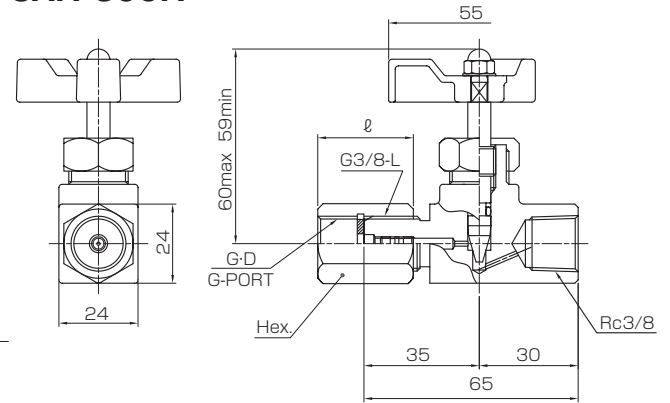
Order No.	Model	Gauge screw type G · D	Pipe screw type	ℓ	Hex	O-ring	Copper packing dimension	Fluid	Weight
A012-202	SAN-200N-2	G1/4	Rc1/4	29	21	NBR	14.7×6×2	Petroleum oil	360g
A012-203	SAN-200N-3	G3/8		29	21		14.7×6×2		360g
A012-204	SAN-200N-4	G1/2		31	26		17.8×6×2		390g
A112-202	F-SAN-200N-2	G1/4		29	21	FKM	14.7×6×2	Phosphate ester oil	360g
A112-203	F-SAN-200N-3	G3/8		29	21		14.7×6×2		360g
A112-204	F-SAN-200N-4	G1/2		31	26		17.8×6×2		390g
A212-202	W-SAN-200N-2	G1/4		29	21	NBR	14.7×6×2	Water-glycol based oil	360g
A212-203	W-SAN-200N-3	G3/8		29	21		14.7×6×2		360g
A212-204	W-SAN-200N-4	G1/2		31	26		17.8×6×2		390g
A013-303	SAN-300N-3	G3/8	Rc3/8	29	21	NBR	14.7×6×2	Petroleum oil	360g
A013-304	SAN-300N-4	G1/2		31	26		17.8×6×2		390g
A113-303	F-SAN-300N-3	G3/8		29	21		FKM		14.7×6×2
A113-304	F-SAN-300N-4	G1/2		31	26	17.8×6×2		390g	
A213-303	W-SAN-300N-3	G3/8		29	21	NBR		14.7×6×2	Water-glycol based oil
A213-304	W-SAN-300N-4	G1/2		31	26		17.8×6×2	390g	

Dimension

SAN-200N



SAN-300N



Panel-mounted type gauge valve

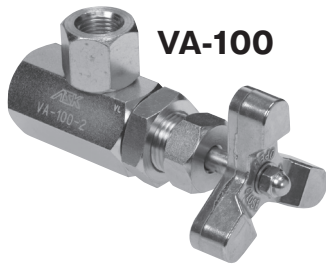
For protection of pressure gauge, or shut-off of pressure gauge circuit!

VA

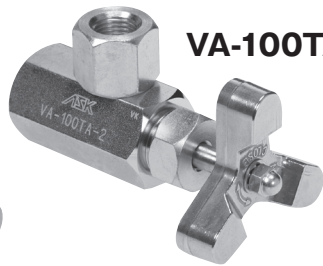
RoHS



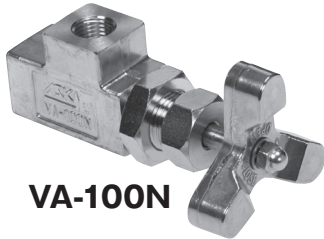
JIS symbol



VA-100



VA-100TA



VA-100N

- Two types: an angle type needle valve for gauge and a panel-mounted needle valve.
- Can be used as a small-flow-rate throttle valve.

Specification

Max. pressure		25MPa	
Proof pressure		45MPa	
Torque ※	G·D	G1/4	30N·m
		G3/8	50N·m

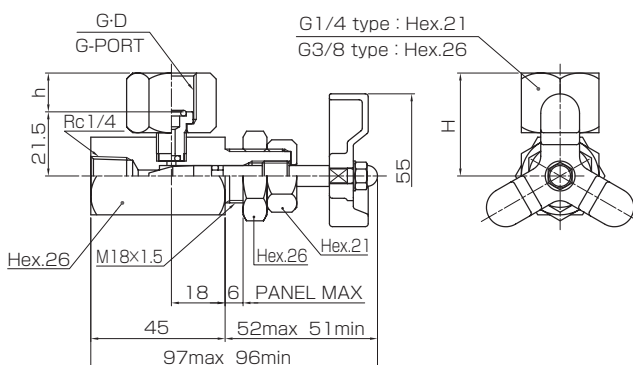
※ As to be safely sealed the space between a pressure gauge and a gauge valve socket by using the attached an O-ring, please refer to the torque which we recommend on the left table before installing.

Model

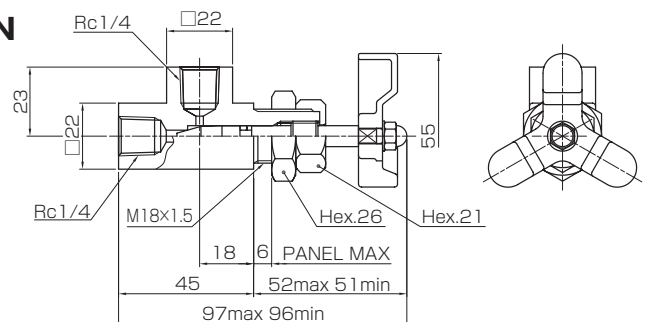
Order No.	Model	Screw type G·D	h	H	O-ring	O-ring size	Fluid	How to use	Material	Weight
A014-102	VA-100-2	G1/4	10.5	32.5	NBR	P6	Petroleum oil	Fix a valve body to a panel. A union joint is used for connection of a pressure gauge, so you can set it in any desired direction.	SUM	380g
A014-103	VA-100-3	G3/8	13	34.5		P7				
A114-102	F-VA-100-2	G1/4	10.5	32.5	FKM	P6	Phosphate ester oil			
A114-103	F-VA-100-3	G3/8	13	34.5		P7				
A214-102	W-VA-100-2	G1/4	10.5	32.5	NBR	P6	Water-glycol based oil			
A214-103	W-VA-100-3	G3/8	13	34.5		P7				
A015-002	VA-100N	Rc1/4	—	—	—	—	Petroleum oil	Fix a valve body to a panel.	C3771	300g
A115-002	F-VA-100N	Rc1/4	—	—			Phosphate ester oil			
A215-002	W-VA-100N	Rc1/4	—	—			Water-glycol based oil			
A016-102	VA-100TA-2	G1/4	10.5	32.5	NBR	P6	Petroleum oil	Install a valve directly to a gauge. A union joint is used for connection of a pressure gauge, so you can set it in any desired direction.	SUM	320g
A016-103	VA-100TA-3	G3/8	13	34.5		P7				
A116-102	F-VA-100TA-2	G1/4	10.5	32.5	FKM	P6	Phosphate ester oil			
A116-103	F-VA-100TA-3	G3/8	13	34.5		P7				
A216-102	W-VA-100TA-2	G1/4	10.5	32.5	NBR	P6	Water-glycol based oil			
A216-103	W-VA-100TA-3	G3/8	13	34.5		P7				

Dimension

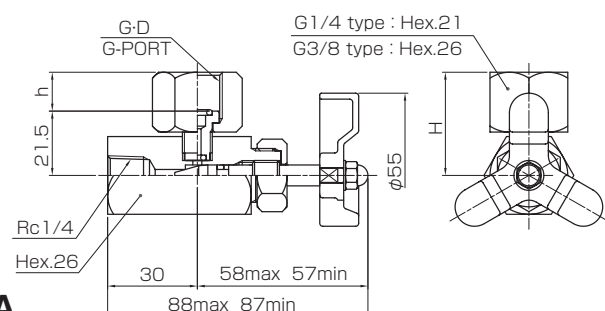
VA-100



VA-100N



VA-100TA

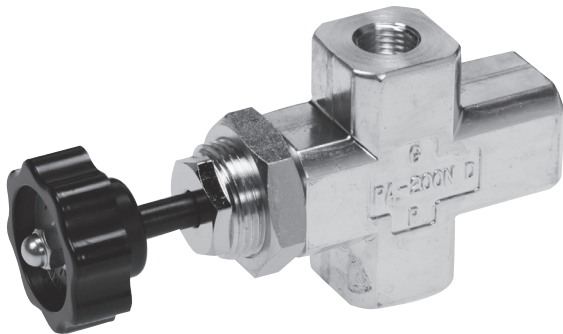
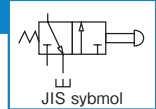


Push type gauge valve with drain

Just push and you can check pressure!

PA

RoHS



- When you want to measure pressure in a circuit, just push a knob.
- Normally, a gauge pointer remains "0". This keeps a pressure gauge accurate long, and ensures improved durability.
- Best suited to check pressure measurement.
- When you check long time, turn a knob right after pushing it. Then, the knob is locked.

Specification

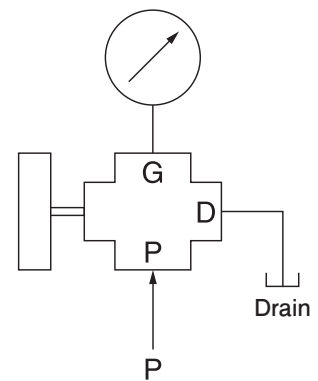
Max. pressure	25MPa
Proof pressure	45MPa
Leakage from drain port	Condition: Oil: ISO VG32 Oil temp.: 45 ± 5°C 7MPa: 20cc/min or less 14MPa: 30cc/min or less 21MPa: 40cc/min or less ※ Knob at the neutral position/closed position
Back pressure from drain port	0.5MPa or less
Torque	25N · m

※ G screw type is available. Please contact us.

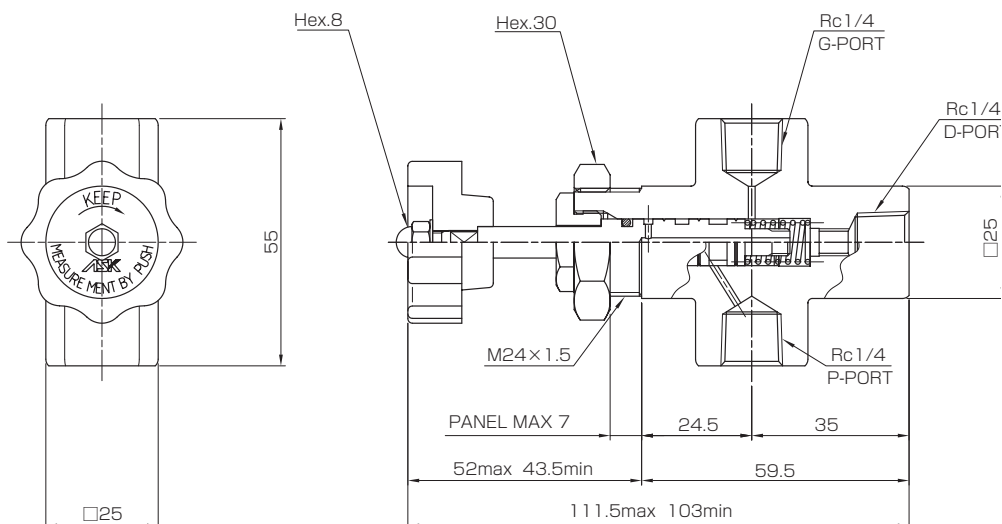
Model

Order no.	Model	Screw type	Fluid	Weight
A020-202	PA-200N	Rc1/4	Petroleum oil, Water-glycol based oil	530g
A120-202	F-PA-200N		Phosphate ester oil	

Connection



Dimension



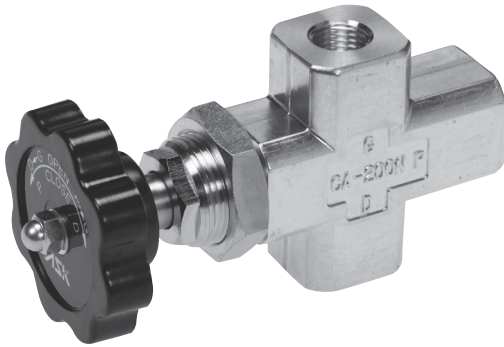
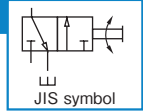
Needle gauge valve with drain

One valve performs the functions of two valves!

CA

RoHS

※ See a water pressure product page about SUS spec.



- Set a knob in "Close" position after measuring, and a gauge pointer goes to "0."
- If you always set "Close", normally, a gauge pointer remains "0". This keeps the pressure gauge accurate long, and ensures improved durability.
- A shaft is a needle valve structure to prevent fluid leakage when fully closed. The SUS shaft is good for water and oil.

Structure

- Two needle valves symmetrically facing each other.

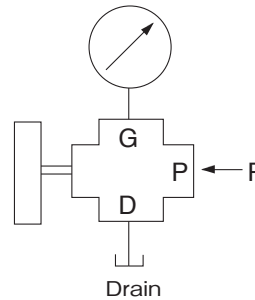
- Knob Open : for measuring
- Knob Middle : for circuit air purge
- Knob Close : for circuit port shut-off

- Both ordinary gauge valve function and circuit air purge valve function can be provided by a single valve.

Specification

Max. pressure	35MPa
Proof pressure	63MPa
Torque	25N·m

Connection

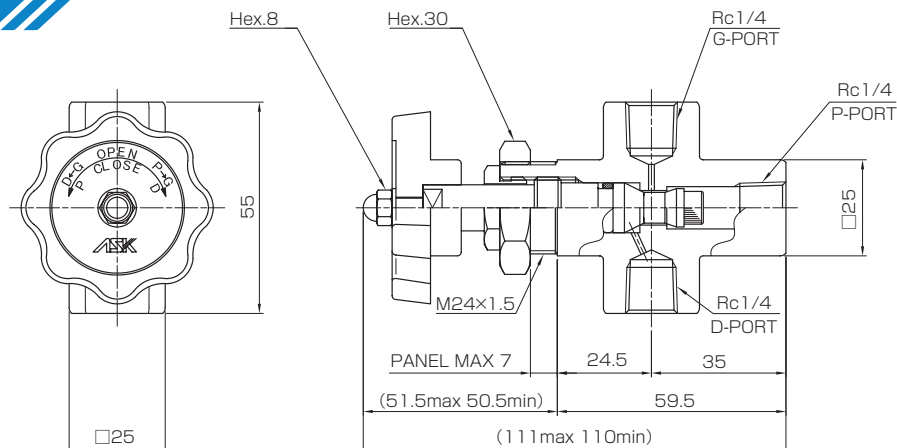


Residual pressure returns to a drain port.
2 functions: Valve to purge air and gauge valve

Model

Order no.	Model	Fluid	Diameter	Weight
A021-202	CA-200N	Petroleum oil, Water-glycol based oil	Rc1/4	530g
A121-202	F-CA-200N	Phosphate ester oil		

Dimension



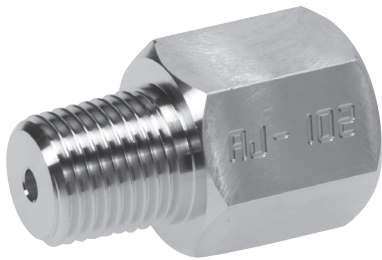
Joint for pressure gauge

For connection between valve and pressure gauge!

AJ

RoHS

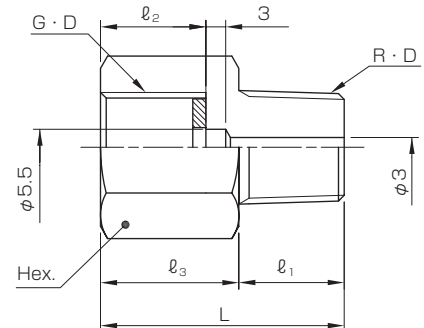
※ See a water pressure product page about SUS spec.



Specification

Max. pressure	35MPa
Proof pressure	63MPa
Material	C3604
Fluid	Petroleum oil, Phosphate ester oil, Water-glycol based oil, Air

Dimension



Model

Order no.	Model	G · D	R · D	l ₁	l ₂	l ₃	L	Hex	Torque	Packing material	Packing dimension	Weight
A005-102	AJ-102	G1/4	R1/4	14	14	19	33	19	40N · m	C1100	11.2 × 6 × 1.5	40g
A005-103	AJ-103	G3/8	R1/4	14	16	21	35	24	50N · m		14.7 × 6 × 2	60g
A005-302	AJ-302	G1/4	R3/8	16	14	19	35	24	40N · m		11.2 × 6 × 1.5	40g
A005-303	AJ-303	G3/8	R3/8	16	16	21	37	24	50N · m		14.7 × 6 × 2	60g

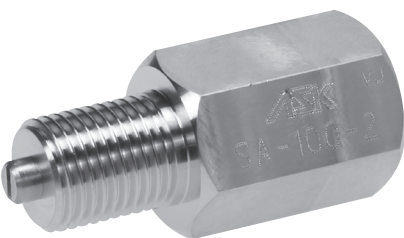
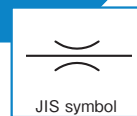
Low pressure damper

Prevent pulsating pressure of a pressure gauge!

SA

RoHS

※ See water pressure product page about SUS spec.

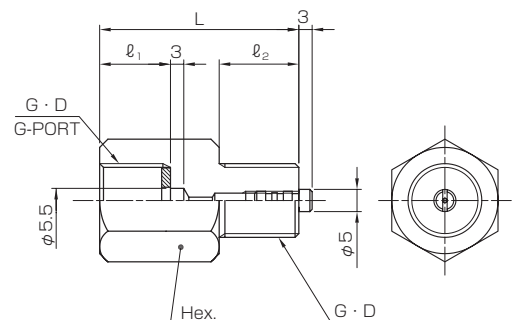


- Use this fixed throttle valve at a position where you measure pressure.
- You can also use it for synthetic oil, water based oil, and brake oil.

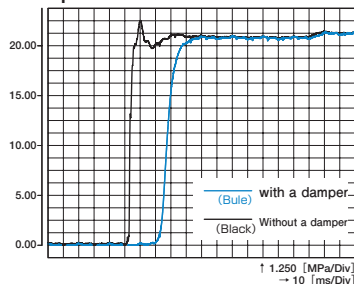
Specification

Max. pressure	10MPa
Proof pressure	18MPa
Material	C3604
Fluid	Oil, Water, Air
Fluid	Petroleum oil, Phosphate ester oil, Water-glycol based oil, Air

Dimension



Damper effect test



Model

Order no.	Model	G · D	l ₁	l ₂	L	Hex	Torque	Packing	Packing dimension	Weight
A001-102	SA-100-2	G1/4	14	16	42	19	40N · m	C1100	11.2 × 6 × 1.5	60g
A001-103	SA-100-3	G3/8	16	18	45	24	50N · m	(Material)	14.7 × 6 × 2	100g

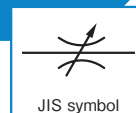
High pressure damper

Prevent pulsating pressure of a pressure gauge!

SAH

RoHS

※ See a water pressure product page about SUS spec.

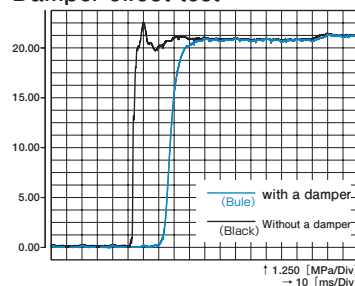


- As abrupt surge pressure is absorbed, a damper is prevented from breakdown of a gauge.
- Pulsation is also removed; therefore, durability of gauge is improved.
- You can adjust pulsation by a needle valve, and also use as a stop valve.

Specification

Max. pressure	35MPa
Proof pressure	63MPa
Material	C3604

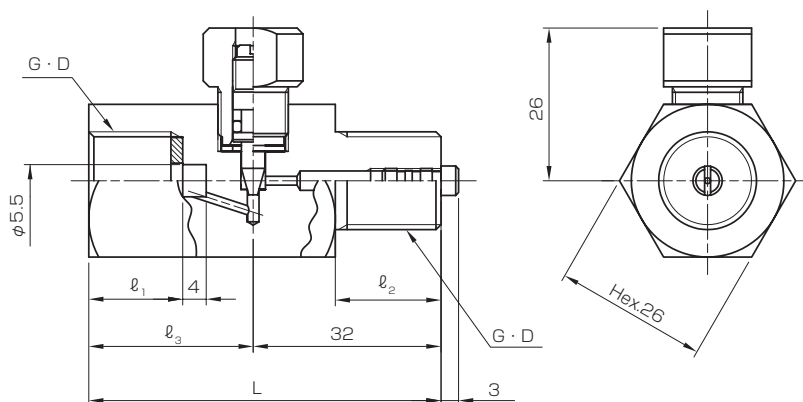
Damper effect test



Model

Order no.	Model	G · D	l ₁	l ₂	l ₃	L	Torque	Packing material	Packing dimension	Fluid	Weight
A002-102	SAH-100-2	G1/4	14	16	26	58	40N · m	C1100	11.2 × 6 × 1.5	Petroleum oil	220g
A002-103	SAH-100-3	G3/8	16	18	28	60	50N · m		14.7 × 6 × 2		230g
A102-102	F-SAH-100-2	G1/4	14	16	26	58	40N · m		11.2 × 6 × 1.5	Phosphate ester oil	220g
A102-103	F-SAH-100-3	G3/8	16	18	28	60	50N · m		14.7 × 6 × 2		230g
A202-102	W-SAH-100-2	G1/4	14	16	26	58	40N · m		11.2 × 6 × 1.5	Water-glycol based oil, Air	220g
A202-103	W-SAH-100-3	G3/8	16	18	28	60	50N · m		14.7 × 6 × 2		230g

Dimension



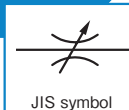
Glycerin pressure gauge damper

Prevent pulsating pressure of a pressure gauge!

SAD

RoHS

※ See a water pressure product page about SUS spec.



- This damper is developed to prevent pulsating pressure of a gauge. It is designed to have a needle control valve structure.
- You can also use this as a stop valve.

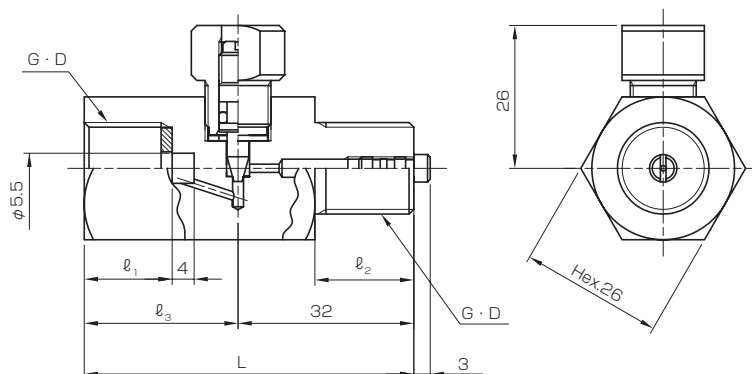
Specification

Max. pressure	35MPa
Proof pressure	63MPa
Material	C3604

Model

Order No.	Model	G·D	R·D	ℓ ₁	ℓ ₂	ℓ ₃	ℓ ₄	L	Torque	Packing material	Packing dimension	Fluid	Weight
A003-02T	SAD-2T	G1/4	R1/4	14	14	26	26	52	40N·m	C1100	11.2×6×1.5	Petroleum oil	210g
A003-03T	SAD-3T	G3/8	R3/8	16	16	28	28	56	50N·m		14.7×6×2		220g
A103-02T	F-SAD-2T	G1/4	R1/4	14	14	26	26	52	40N·m		11.2×6×1.5	Phosphate ester oil	210g
A103-03T	F-SAD-3T	G3/8	R3/8	16	16	28	28	56	50N·m		14.7×6×2		220g
A203-02T	W-SAD-2T	G1/4	R1/4	14	14	26	26	52	40N·m		11.2×6×1.5	Water-glycol based oil, Air	210g
A203-03T	W-SAD-3T	G3/8	R3/8	16	16	28	28	56	50N·m		14.7×6×2		220g

Dimension



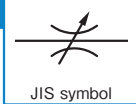
Pressure switch damper

Pressure switch damper absorbs hydraulic pulsation!

PSD

RoHS

※ See a water pressure product page about SUS spec.

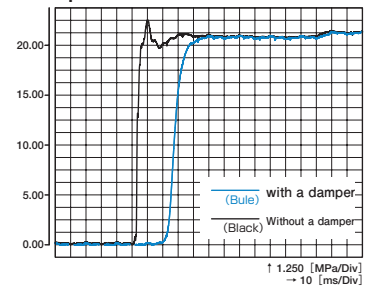


- A damper mounted on a screw of a pressure switch absorbs hydraulic pulsation and prevents chattering of a contact.
- Durability of a pressure switch is improved.
- You can use this for a pressure gauge as well.
- You can also use this as a stop valve.

Specification

Max. pressure	35MPa
Proof pressure	63MPa
Material	C3604

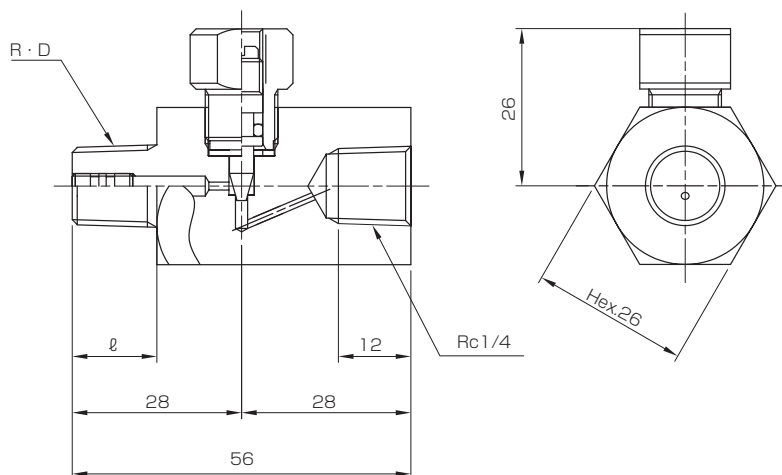
Damper effect test



Model

Order No.	Model	R·D	Torque	ℓ	Fluid	Weight
A004-002	PSD-2	R1/4	25N·m	14	Petroleum oil	230g
A004-003	PSD-3	R3/8	45N·m	16		
A104-002	F-PSD-2	R1/4	25N·m	14	Phosphate ester oil	
A104-003	F-PSD-3	R3/8	45N·m	16		
A204-002	W-PSD-2	R1/4	25N·m	14	Water-glycol based oil, Air	
A204-003	W-PSD-3	R3/8	45N·m	16		

Dimension

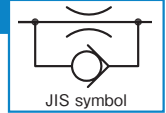


Miniature cartridge type in-line check valve

Save pipe space and joint costs!

ACC

RoHS



- This valve can be directly built into a joint and manifold.
- You can install this into holes of the same dimensions in either direction.
- This is equipped with a slow return function. (with a choke hole)



Specification

Max. pressure	30MPa
Proof pressure	38MPa
Material	SUM
Fluid	Petroleum oil
Weight	10g

Caution of use

- In the case of the type without a choke hole, coat the outer diameter mounting screw (M12 x 1) with sealant to prevent oil leak through the threads.
- Caution: if ACC valve is installed with the outer diameter screw coated with sealant, it is impossible to detach the ACC valve.

Model

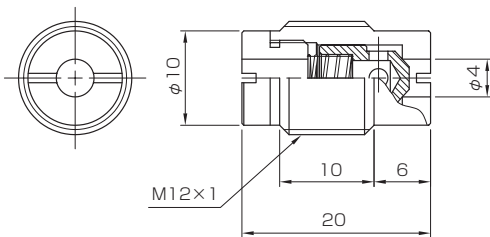
ACC - 05 - 11 - C ※

① ② ③ ④ ⑤

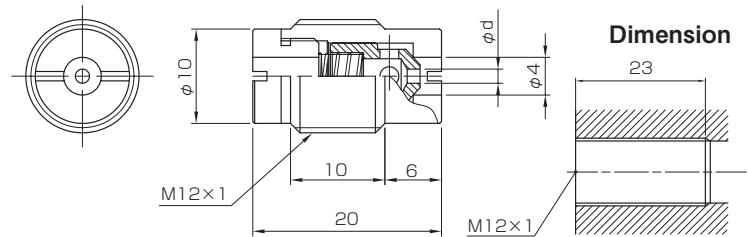
①	Name	Miniature sized cartridge type in-line check valve
②	Cracking pressure	05 : 0.05MPa
③	Model number	11 : Standard spec
④	Choke hole	Unmarked : Without a choke hole C : With a choke hole
⑤	Choke hole size ϕd	Available size: $\phi 0.5\text{mm} \sim \phi 2.2\text{mm}$

Dimension

ACC-05-11 (Without a choke hole)



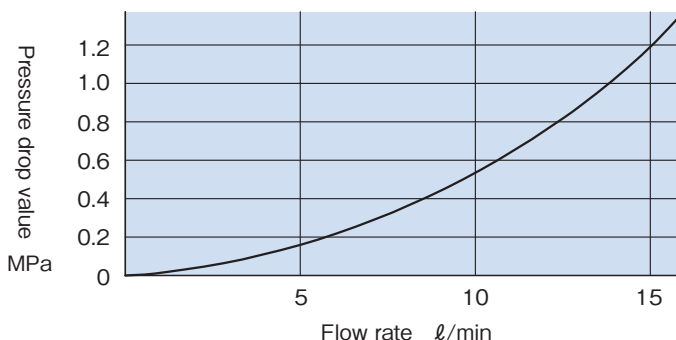
ACC-05-11-C ※ (With a choke hole)



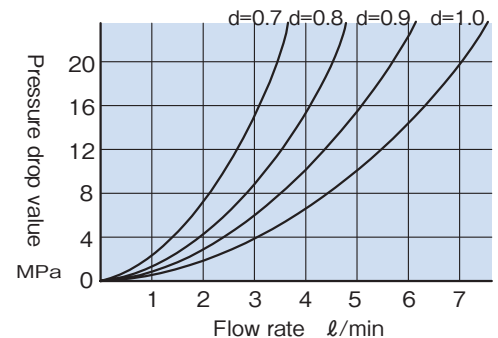
Data sheet Flow rate/pressure drop characteristics

Condition / Oil : ISO VG32
Oil temp. : $45 \pm 5^\circ\text{C}$

Free flow/Pressure drop characteristic



Throttle flow/Pressure drop characteristic



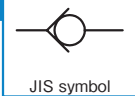
In-line check valve

In-line type for easy pipe connection!

AIC

RoHS

※ See a water pressure product page about SUS spec.



■ A choke hole will be machined according to your requirements.



Specification

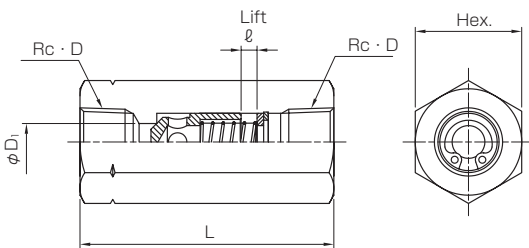
Max. pressure	25MPa
Proof pressure	45MPa
Fluid	Petroleum oil

Description

AIC - 02 - 04 - 11 - C ※

① ② ③ ④ ⑤ ⑥

Dimension



①	Name	In-line check valve
②	Screw type	02 : Rc1/4 03 : Rc3/8 04 : Rc1/2 06 : Rc3/4
③	Cracking pressure	04 : 0.04MPa (Standard) 35 : 0.35MPa (Option) 50 : 0.5 Mpa (Option)
④	Model number	11 : Standard spec (Material : SUM)
⑤	Choke hole	Unmarked : Without a choke hole C : With a choke hole
⑥	Choke hole size (mm)	Screw 02 (Rc1/4) → φ 0.5 ~ φ 2.5mm 03 (Rc3/8) → φ 0.5 ~ φ 4.5mm 04 (Rc1/2) → φ 0.5 ~ φ 5.5mm 06 (Rc3/4) → φ 0.5 ~ φ 6.5mm

※ For optional products, please contact us for combinations of screw diameter and cracking pressure.

Model

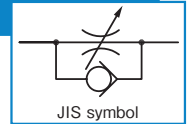
Order no.	Model	Rc · D	L	D ₁	ℓ	Hex	Weight
A055-102	AIC-02-04-11	Rc1/4	53	7	4	21	120g
A055-103	AIC-03-04-11	Rc3/8	62	9	4	26	220g
A055-104	AIC-04-04-11	Rc1/2	73	11	5	30	320g
A055-106	AIC-06-04-11	Rc3/4	83	14	6	35	460g
A056-102	AIC-02-04-11-C ※	Rc1/4	53	7	4	21	120g
A056-103	AIC-03-04-11-C ※	Rc3/8	62	9	4	26	220g
A056-104	AIC-04-04-11-C ※	Rc1/2	73	11	5	30	320g
A056-106	AIC-06-04-11-C ※	Rc3/4	83	14	6	35	460g

Throttle check valve

Offers excellent small-flow-rate control characteristics!

ATC

RoHS



■ Small size and light.



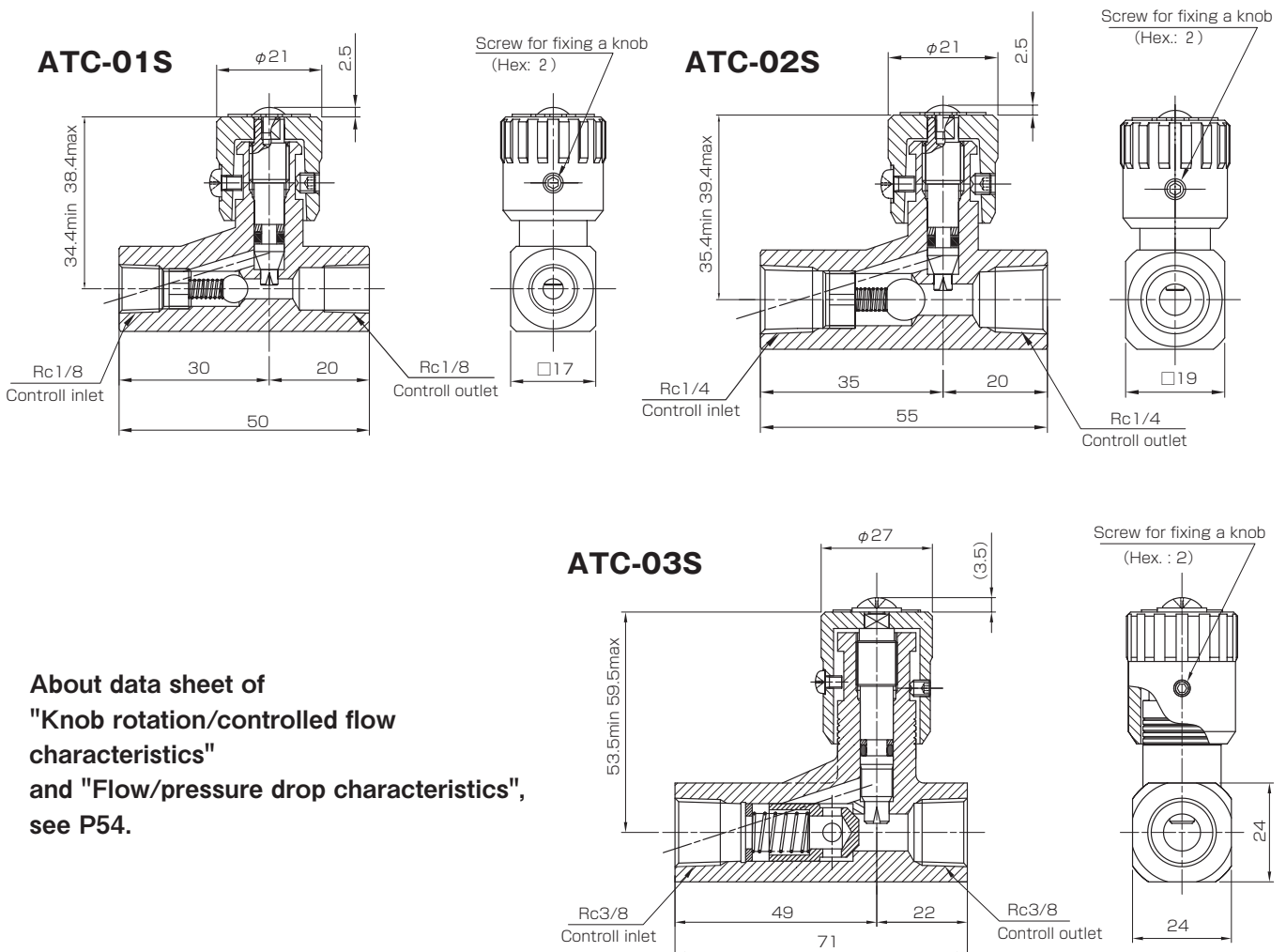
Specification

Max. pressure	21MPa
Proof pressure	38MPa
Cracking pressure	0.04MPa
Fluid	Petroleum oil, Phosphate ester oil

Model

Order no.	Model	Screw type	Weight
A058-11S	ATC-01S	Rc1/8	180g
A058-12S	ATC-02S	Rc1/4	190g
A058-13S	ATC-03S	Rc3/8	400g

Dimension



About data sheet of "Knob rotation/controlled flow characteristics" and "Flow/pressure drop characteristics", see P54.

Oil pressure product

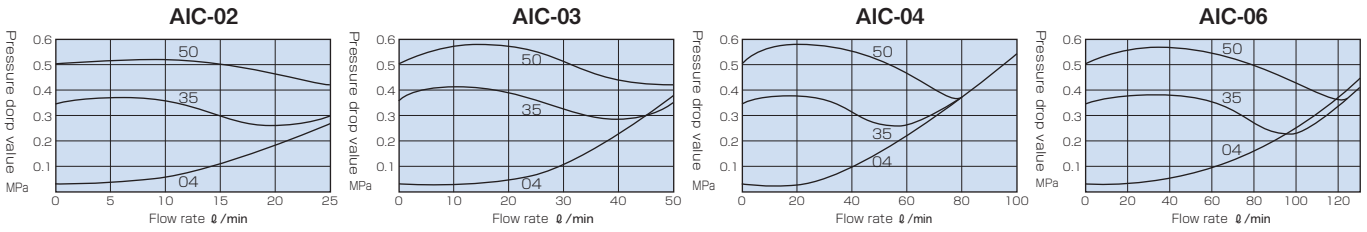
In-line check valve / Throttle check valve

AIC/ATC

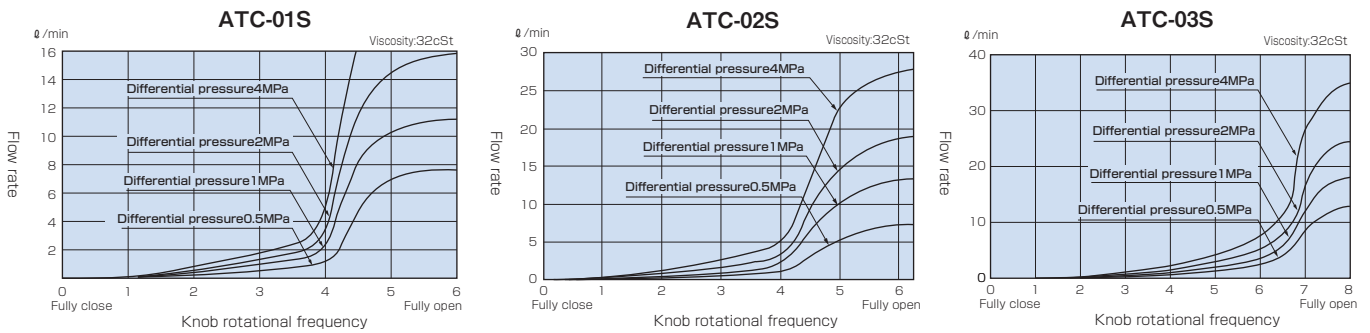
RoHS

Condition / Oil : ISO VG32 Oil temp. : 45 ± 5°C

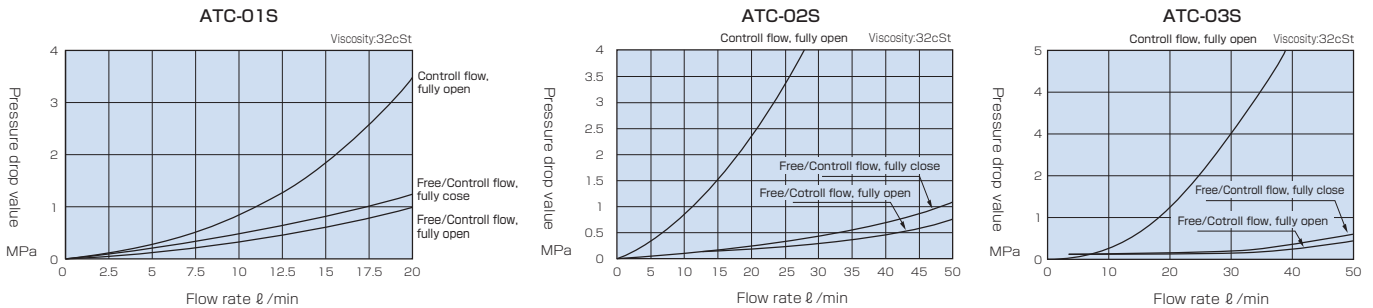
AIC Data sheet: Flow/pressure drop characteristics



ATC Data sheet: Knob rotation/controlled flow characteristics



ATC Data sheet: Flow/pressure drop characteristics



Universal nozzle for coolant

Stop of coolant dripping!

UN

RoHS



UN-02-6



UNC-18-※-M1

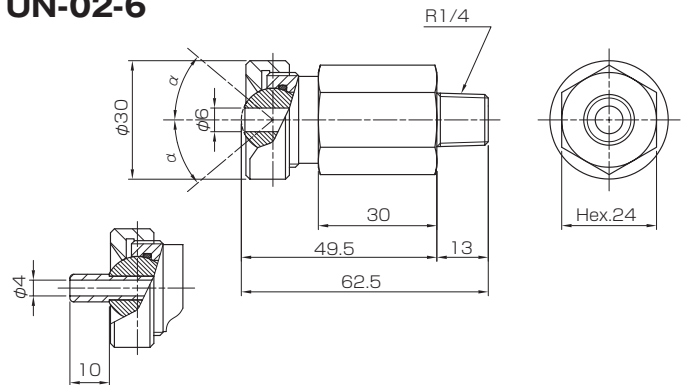
- A universal nozzle has a check valve inside. Immediately when a coolant pump is stopped, dripping of coolant from a nozzle is suspended. It is reduction of work time.
- Should a nozzle be clogged with chips, you can disassemble and clean it from the nozzle side.
- You can manually move a nozzle freely 80 degrees in all directions.
- Clean working environment without coolant splash.
- Effective for a ceiling shower coolant nozzle of a machining center.
- A type of nozzle with a branch is available, whose nozzle end is long for correctly shooting coolant at a work machining spot.

Specification

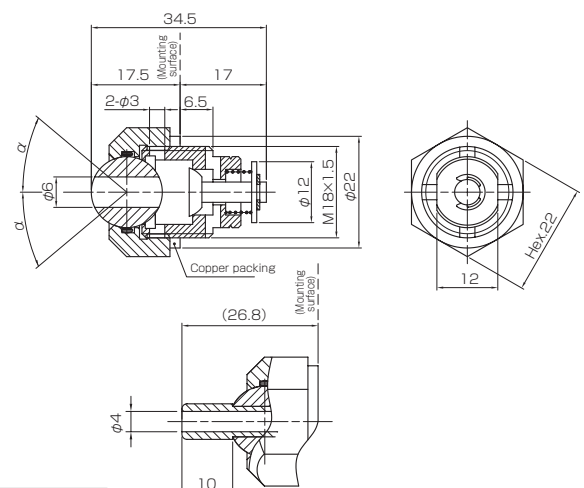
Model	UN-02-6	UNC-18-※-M1
Order no.	A059-003	A059-009
Screw type	R1/4	M18 × 1.5
Sealing type	Taper screw type	Copper packing type
Nozzle diameter	6mm	4mm, 6mm
Nozzle swivel angle	± 40° With a branch : α = 30°	
Weight	150g	60g
Feature	For ceiling shower coolant nozzle or nozzle at unlimited installation place	Cartridge type nozzle which remains min. (17.5mm) from a spindle flange installation part
Max. pressure	7MPa	
Resistance	11MPa	
Cracking pressure	0.01MPa	
Body	C3604 (Chromium plating)	
	Check valve	SUS630
Packing material	—	
Packing dimension	—	
		18 × 22 × 2

Dimension

UN-02-6



UNC-18-※-M1



Description

UN - 02 - 6 - 10L

① ② ③

		Universal nozzle		Universal nozzle for Cartridge	
①	Model	UN		UNC	
②	Screw type	02	R1/4	18	M18 × 1.5
③	Model number ※	6	Nozzle (inside): 6mm	6-M1	Nozzle (inside): 6mm
		6-10L	Nozzle (inside): 4mm Branch length:10mm	6-M1-10L	Nozzle (inside): 4mm Branch length:10mm

※If you hope for a nozzle except for 6mm without a branch, please contact us.

Oil pressure product



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