

AVH·AVS·NAVR series

Corrosion-resistant Solenoid Valves

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AVH·AVS·NAVR series

Corrosion-resistant Solenoid Valves

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AVH·AVS·NAVR series

Corrosion-resistant Solenoid Valve

An electrically operated valve. Very compact. Wetted material is fluoropolymer which is highly resistant to chemical.



Corrosion-resistant Solenoid Valve

AVH-1*1*



Specifications

Model Code	AVH-121*	AVH-161*	AVH-131*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ1.2 Equivalency [mm]		
Connection Size	M6 P=1.0		
Cv	0.04		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -50~200kPa OUT: 0~50kPa	IN: 0~200kPa OUT: 0~50kPa	COM: -50~100kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	2.4W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE Diaphragm: PTFE	Valve Body: PTFE Diaphragm: PTFE	Valve Body: PTFE Diaphragm: PTFE Stem: Sapphire

*Specifications are subject to change without notice.

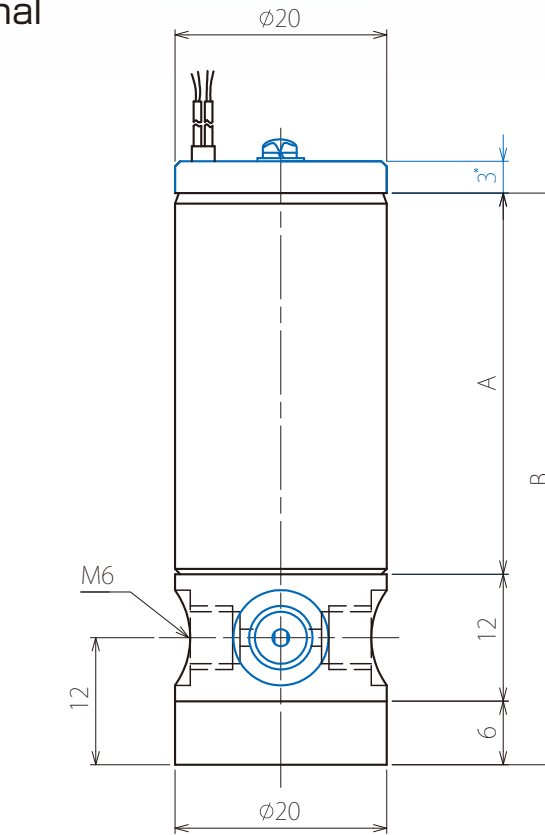
Model Selection Table

AVH-1*1*

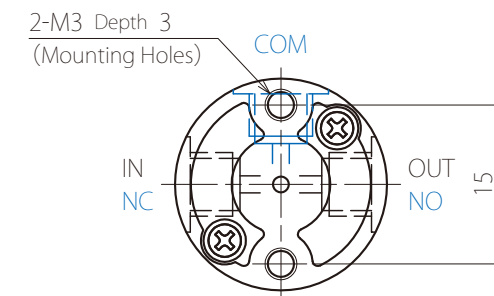
Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

Dimensional Drawing



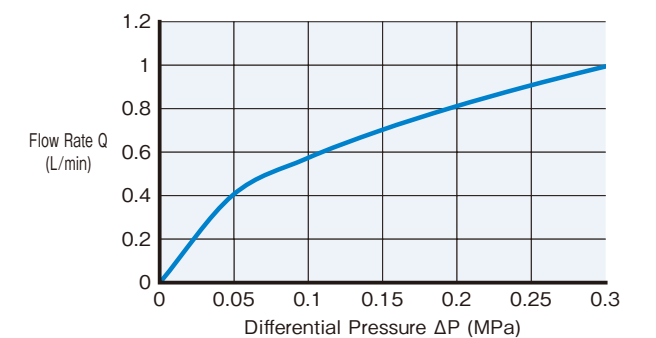
	A	B
AVH-121*	35	53
AVH-161*	36	54
AVH-131*		



Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.04



Corrosion-resistant Solenoid Valve

AVH-2*1*



Specifications

Model Code	AVH-221*	AVH-261*	AVH-231*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ1.6 Equivalency [mm]		
Connection Size	M6 P=1.0		
Cv	0.05		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -90~300kPa OUT: 0~100kPa	IN: -50~200kPa OUT: 0~50kPa	COM: -90~100kPa NO,NC: 0~100kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	3.0W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PFA	Valve Body: PFA	Valve Body: PFA
	Diaphragm: PTFE	Diaphragm: PTFE	Diaphragm: PTFE
			Stem: Sapphire

*Specifications are subject to change without notice.

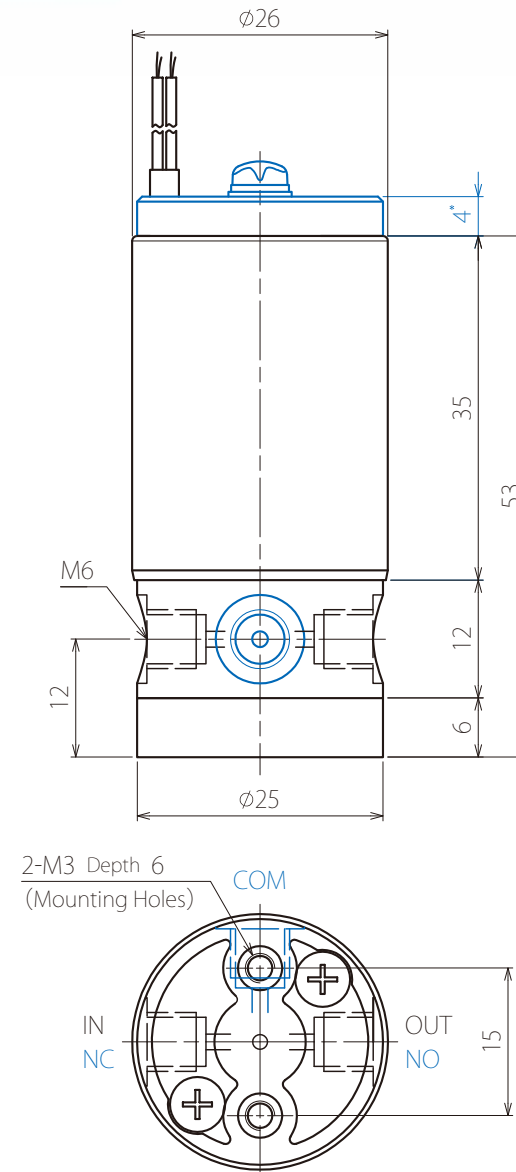
Model Selection Table

AVH-2*1*

Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

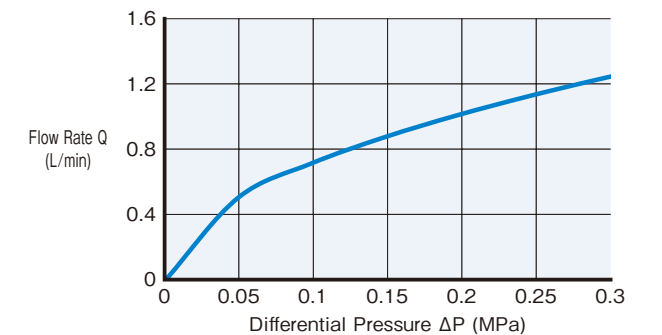
Dimensional Drawing



Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.05



Corrosion-resistant Solenoid Valve

AVH-3*3*



Specifications

Model Code	AVH-323*	AVH-363*	AVH-333*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ3.0 Equivalency [mm]		
Connection Size	Rc1/8		
Cv	0.13		0.1
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -90~300kPa OUT: 0~100kPa	IN: -90~300kPa OUT: 0~100kPa	COM: -90~200kPa NO,NC: 0~100kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	5.0W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE	Valve Body: PTFE	Valve Body: PTFE
	Diaphragm: PTFE	Diaphragm: PTFE	Diaphragm: PTFE
			Stem: Sapphire

*Specifications are subject to change without notice.

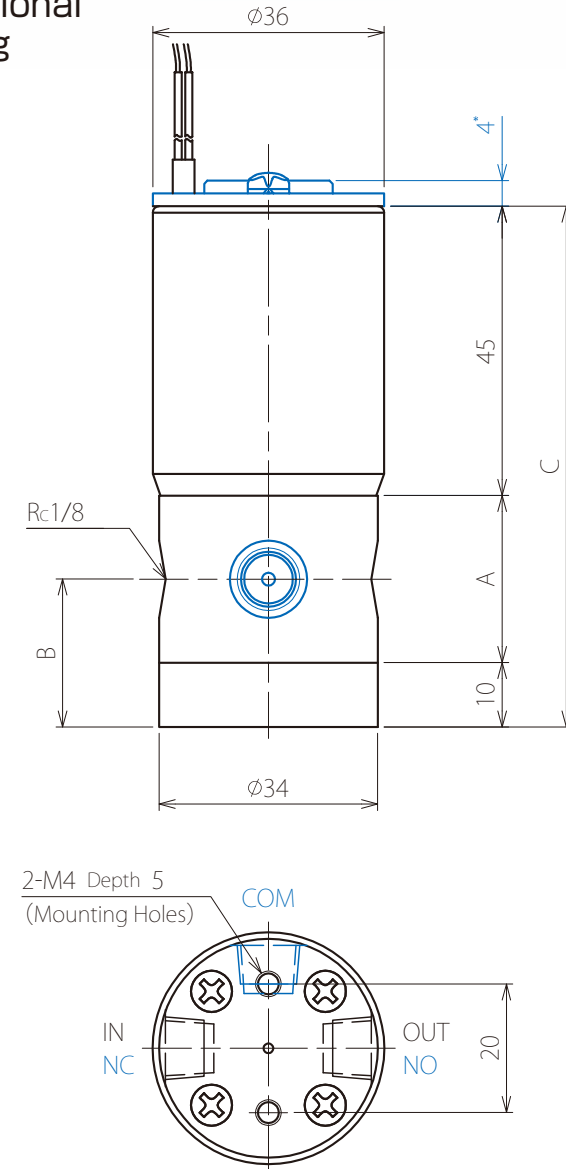
Model Selection Table

AVH-3*3*

Voltage
1: DC 12V
2: DC 24V
5: AC 100V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

Dimensional Drawing

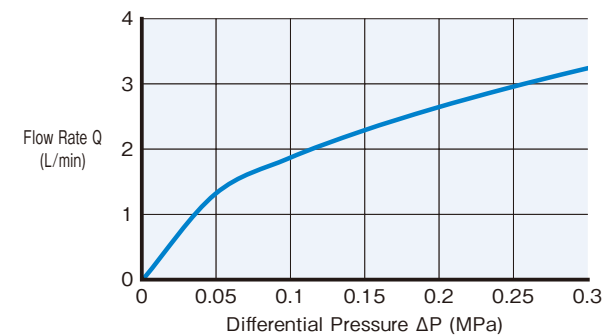


	A	B	C
AVH-323*	24	20	79
AVH-363*			
AVH-333*	26	23	81

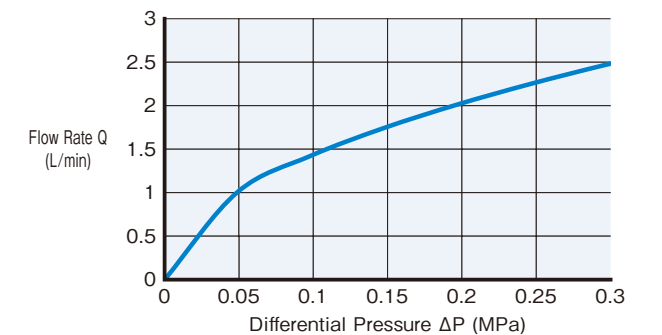
Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.13



Flow Rate Cv:0.1



Corrosion-resistant Solenoid Valve

AVH-4*4*



Specifications

Model Code	AVH-424*	AVH-464*	AVH-434*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ5.0 Equivalency [mm]		
Connection Size	Rc1/4		
Cv	0.3		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -90~300kPa OUT: 0~100kPa	IN: -90~300kPa OUT: 0~100kPa	COM: -90~200kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	10W		
Coil Temperature Rise	70°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE	Valve Body: PTFE	Valve Body: PTFE
	Diaphragm: PTFE	Diaphragm: PTFE	Diaphragm: PTFE
			Stem: PCTFE

*Specifications are subject to change without notice.

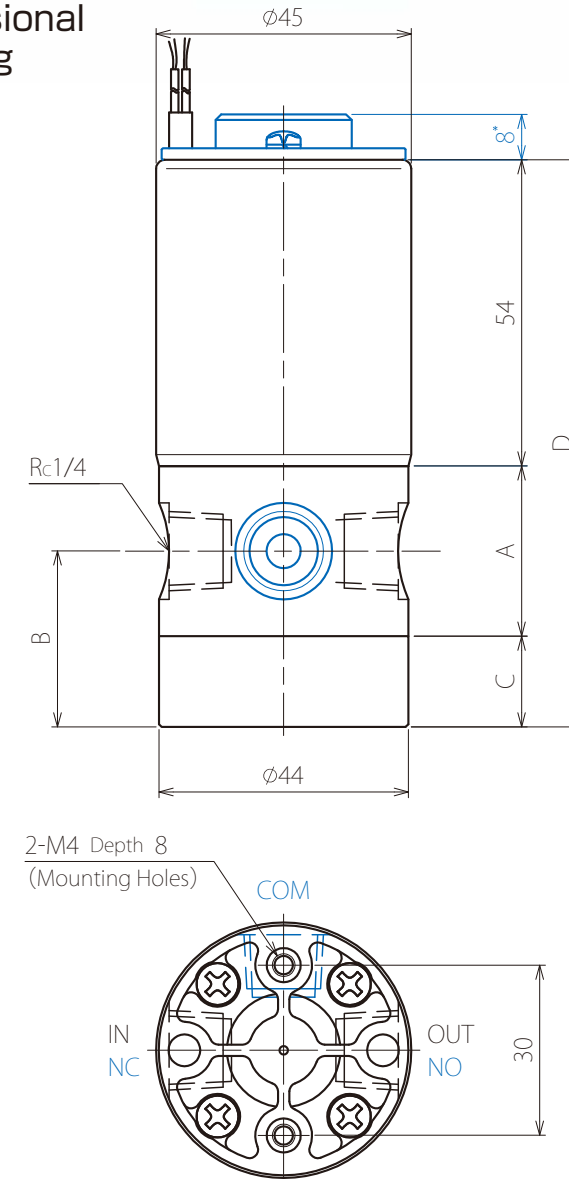
Model Selection Table

AVH-4*4*

Voltage
1: DC 12V
2: DC 24V
5: AC 100V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

Dimensional Drawing

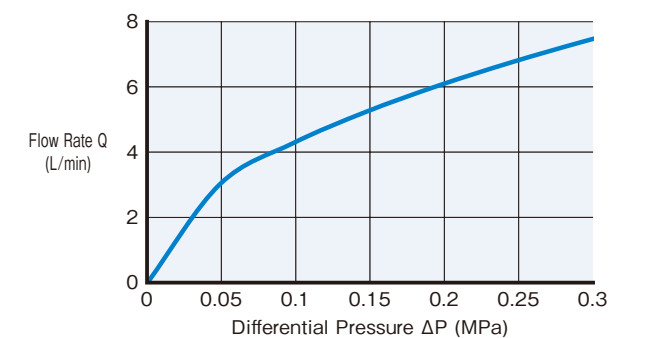


	A	B	C	D
AVH-424*	31	24	12	97
AVH-464*	30	31	16	100

Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.3



Corrosion-resistant Solenoid Valve

AVS-1*1*



Specifications

Model Code	AVS-121*	AVS-161*	AVH-131*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ1.2 Equivalency [mm]		
Connection Size	M6 P=1.0		
Cv	0.04		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -50~200kPa OUT: 0~50kPa	IN: 0~200kPa OUT: 0~50kPa	COM: -50~100kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	2.4W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE	Valve Body: PTFE	Valve Body: PTFE
	Diaphragm: FKM	Diaphragm: FKM	Diaphragm: FKM
			Stem: PTFE

*Specifications are subject to change without notice.

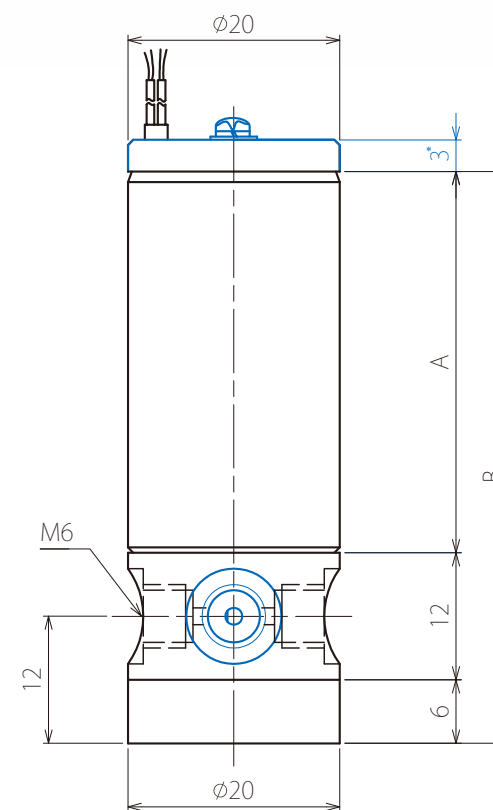
Model Selection Table

AVS-1*1*

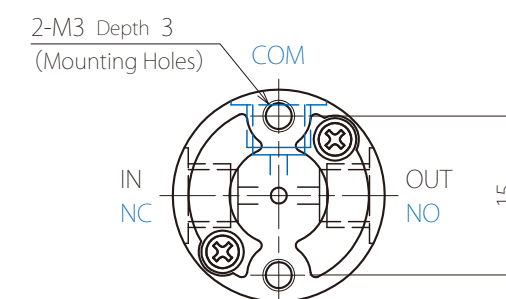
Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

Dimensional Drawing



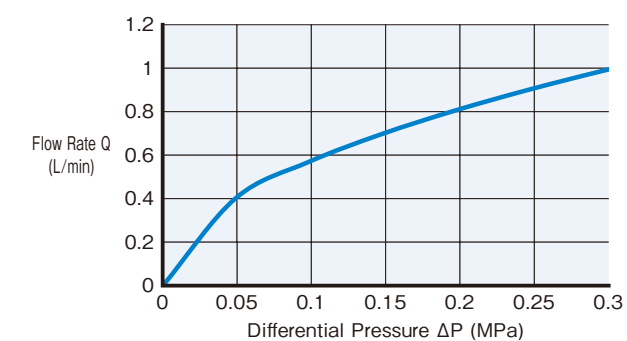
	A	B
AVH-121*	35	53
AVH-161*	36	54
AVH-131*		



Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.04



Corrosion-resistant Solenoid Valve

AVS-2*1*



Specifications

Model Code	AVS-221*	AVS-261*	AVS-231*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ1.6 Equivalency [mm]		
Connection Size	M6 P=1.0		
Cv	0.05		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -50~200kPa OUT: 0~50kPa	IN: 0~200kPa OUT: 0~50kPa	COM: 0~100kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	3.0W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PFA	Valve Body: PFA	Valve Body: PFA
	Diaphragm: FKM	Diaphragm: FKM	Diaphragm: FKM
			Stem: PTFE

*Specifications are subject to change without notice.

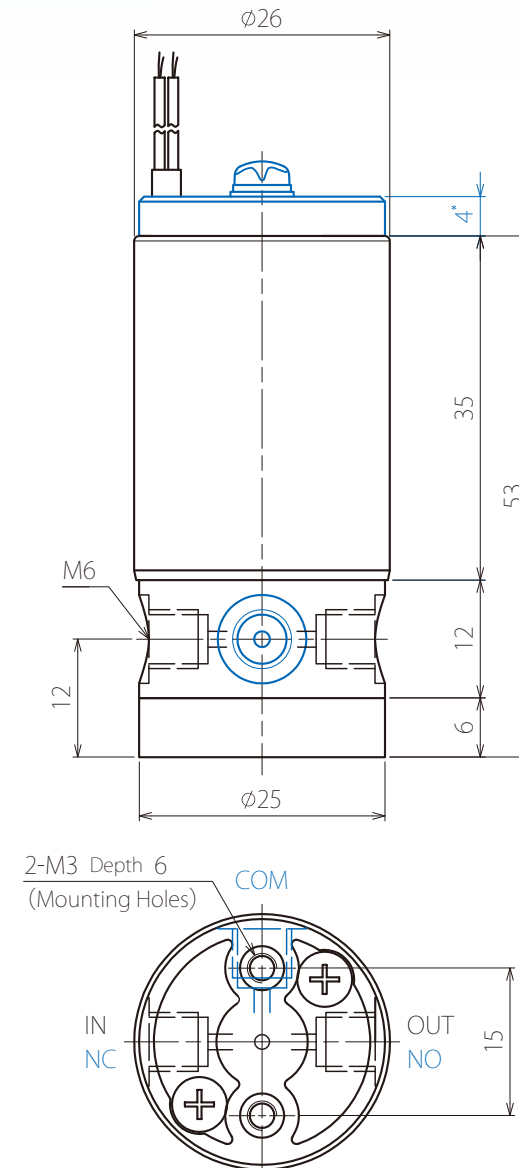
Model Selection Table

AVS-2*1*

Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

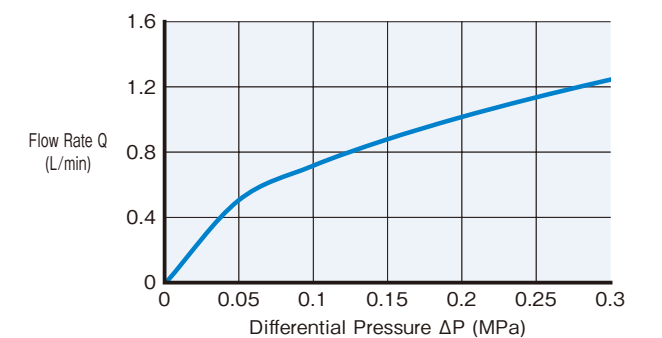
Dimensional Drawing



Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.05



Corrosion-resistant Solenoid Valve

AVS-3*3*



Specifications

Model Code	AVS-323*	AVS-363*	AVS-333*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ3.0 Equivalency [mm]		
Connection Size	Rc1/8		
Cv	0.13		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: 0~200kPa OUT: 0~50kPa	IN: 0~200kPa OUT: 0~50kPa	COM: 0~200kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	5.0W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE Diaphragm: FKM	Valve Body: PTFE Diaphragm: FKM	Valve Body: PTFE Diaphragm: FKM Stem: PTFE

*Specifications are subject to change without notice.

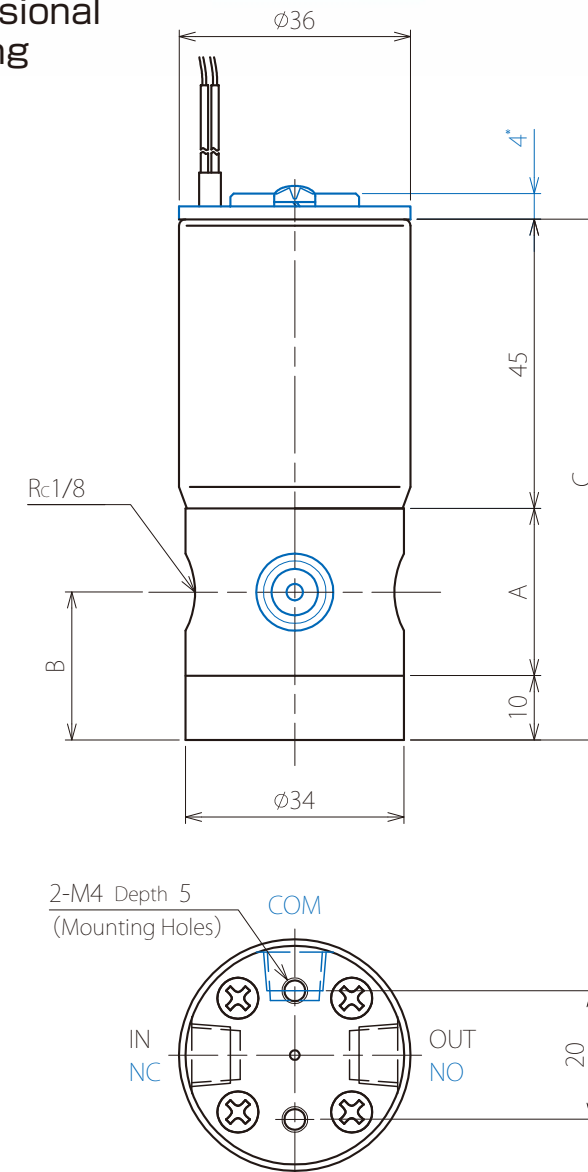
Model Selection Table

AVS-3*3*

Voltage
1: DC 12V
2: DC 24V
5: AC 100V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

Dimensional Drawing

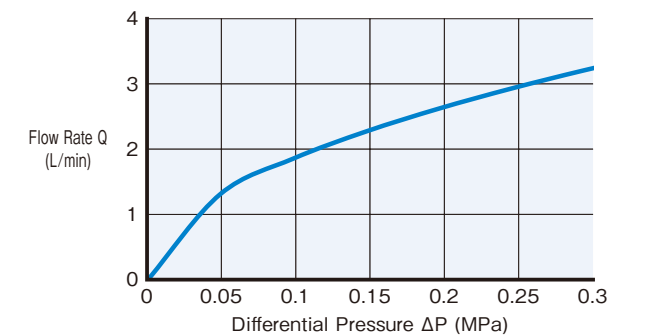


	A	B	C
AVS-323*	24	20	79
AVS-363*	24	20	79
AVS-333*	26	23	81

*Blue outlines represent 3-way valve and top portion (※) of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.13



Corrosion-resistant Solenoid Valve

AVS-4*4*



Specifications

Model Code	AVS-424*	AVS-464*	AVS-434*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ5.0 Equivalency [mm]		
Connection Size	Rc1/4		
Cv	0.3		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: 0~200kPa OUT: 0~50kPa	IN: 0~200kPa OUT: 0~50kPa	COM: 0~100kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	10W		
Coil Temperature Rise	70°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE Diaphragm: FKM	Valve Body: PTFE Diaphragm: FKM	Valve Body: PTFE Diaphragm: FKM Stem: PTFE

*Specifications are subject to change without notice.

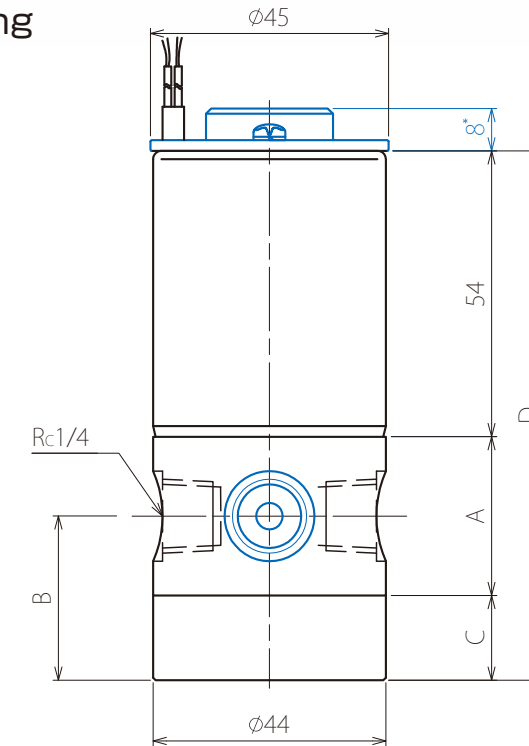
Model Selection Table

AVS-4*4*

Voltage
1: DC 12V
2: DC 24V
5: AC 100V

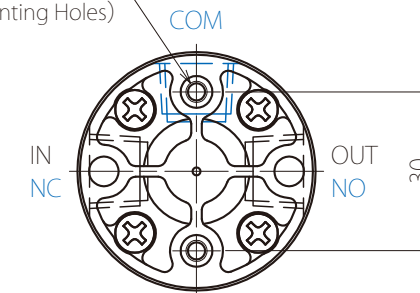
Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

Dimensional Drawing



	A	B	C	D
AVS-424*	31	24	12	97
AVS-464*	30	31	16	100

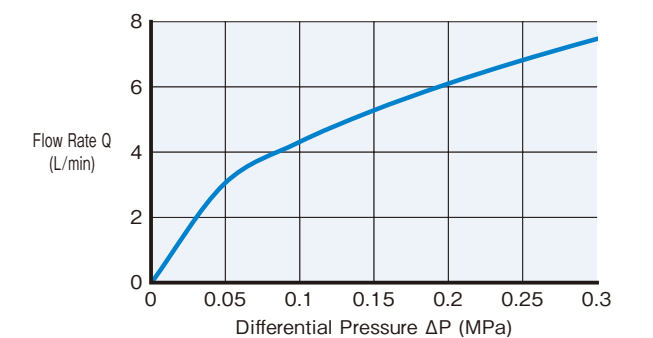
2-M4 Depth 8
(Mounting Holes)



*Blue outlines represent 3-way valve and top portion (※) of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.3



Corrosion-resistant Solenoid Valve

NAVR-0*0*



Specifications

Model Code	NAVR-020*	NAVR-030*
Structure	2-way (Normally Closed)	3-way
Orifice Size	φ1.0 Equivalency [mm]	
Connection Size	M5 P=0.8	
Cv	0.02	0.014
Applicable Media	DI Water, Corrosive Fluid	
Media Pressure	IN: -40~200kPa OUT: 0~50kPa	COM: -40~100kPa NO,NC: 0~50kPa
Media Temperature	10~50°C	
Ambient Temperature	10~50°C	
Power Consumption	2.0W	
Coil Temperature Rise	50°C [degrees C (or less)]	
Insulation Class	Class B (JIS C 4003)	
Wetted Material	Valve Body: PTFE	Valve Body: PTFE
	Diaphragm: PTFE+FFKM	Diaphragm: PTFE+FFKM
	Plug: Zirconia	Stem: Alumina
		Plug: Zirconia Base: PTFE
Accessory	Fixing fitting	

*Specifications are subject to change without notice.

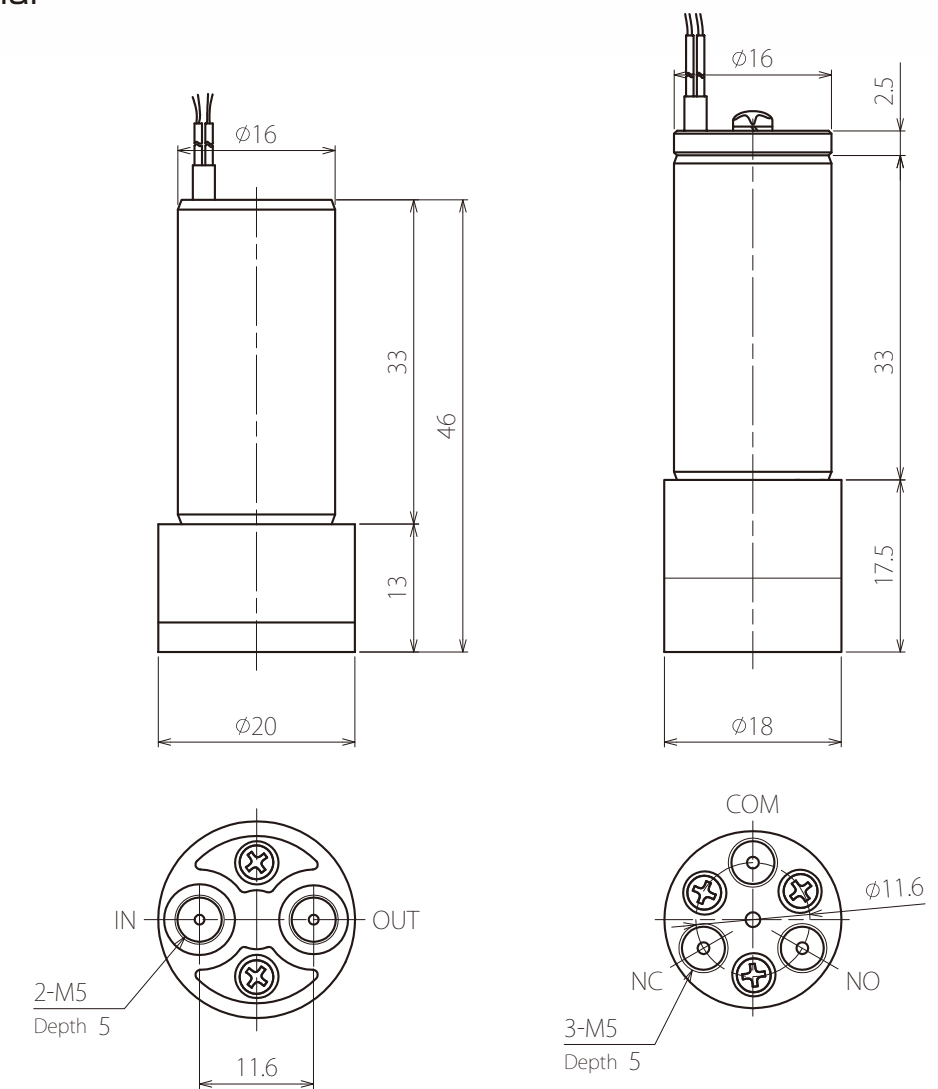
Model Selection Table

NAVR-0*0*

Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way

Dimensional Drawing

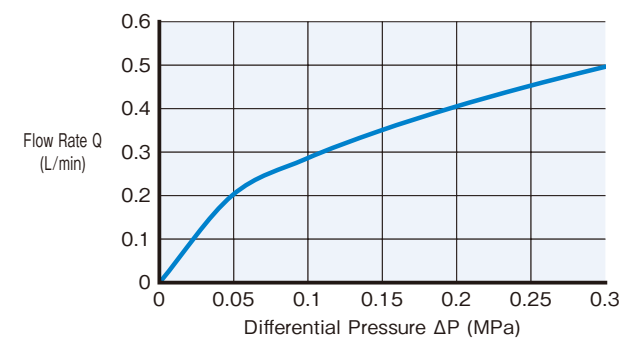


NAVR-020*

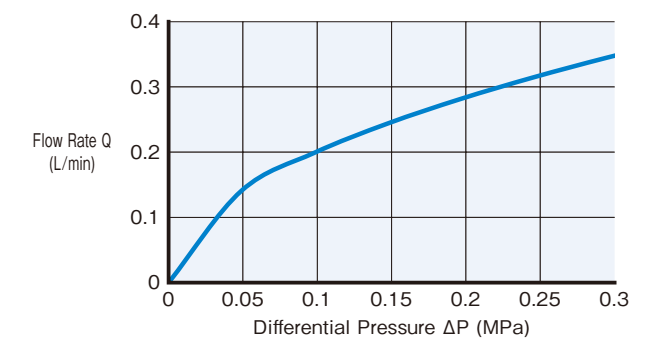
NAVR-030*

(unit : mm)

Flow Rate Cv:0.02



Flow Rate Cv:0.014



Corrosion-resistant Solenoid Valve

NAVR-1*1*



Specifications

Model Code	NAVR-121*	NAVR-161*	NAVR-131*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ1.2 Equivalency [mm]		
Connection Size	M6 P=1.0		
Cv	0.04		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: 0~200kPa OUT: 0~50kPa	IN: 0~200kPa OUT: 0~50kPa	COM: -50~100kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	2.4W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE Diaphragm: PTFE+FFKM	Valve Body: PTFE Diaphragm: PTFE+FFKM	Valve Body: PTFE Diaphragm: PTFE+FFKM Stem: Sapphire

*Specifications are subject to change without notice.

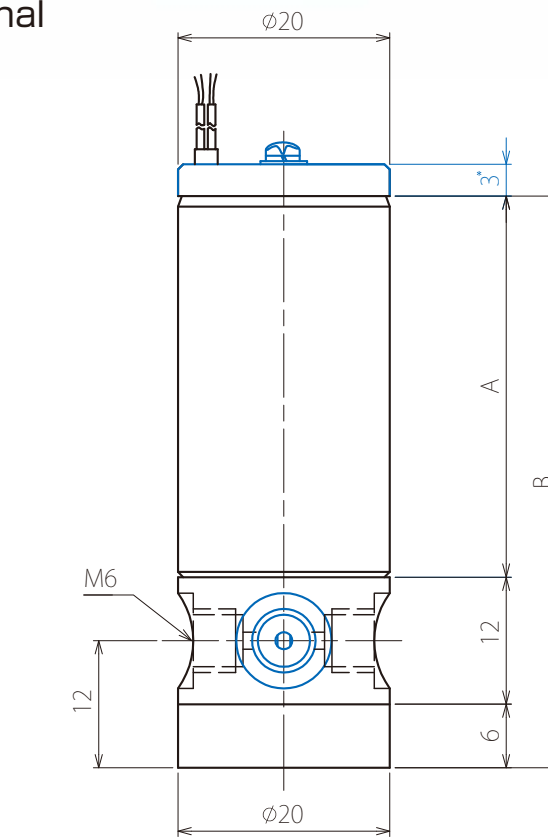
Model Selection Table

NAVR-1*1*

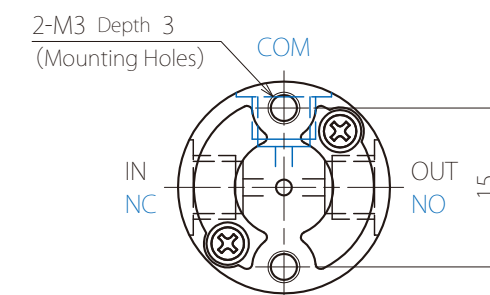
Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

Dimensional Drawing



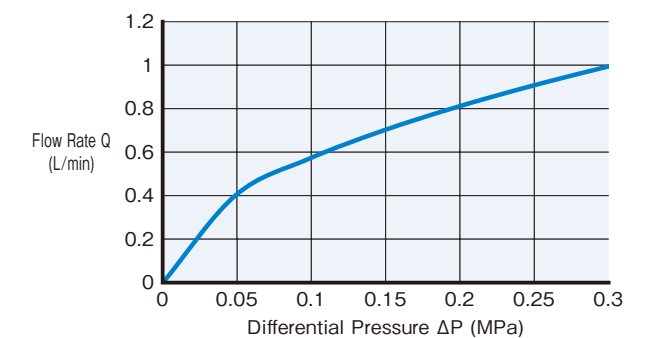
	A	B
AVH-121*	35	53
AVH-161*	36	54
AVH-131*		



*Blue outlines represent 3-way valve and top portion (※) of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.04



Corrosion-resistant Solenoid Valve

NAVR-2*1*



Specifications

Model Code	NAVR-221*	NAVR-261*	NAVR-231*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ1.6 Equivalency [mm]		
Connection Size	M6 P=1.0		
Cv	0.05		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -90~200kPa OUT: 0~50kPa	IN: -50~200kPa OUT: 0~50kPa	COM: -50~100kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	3.0W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE Diaphragm: PTFE+FFKM	Valve Body: PTFE Diaphragm: PTFE+FFKM	Valve Body: PTFE Diaphragm: PTFE+FFKM Stem: Sapphire

*Specifications are subject to change without notice.

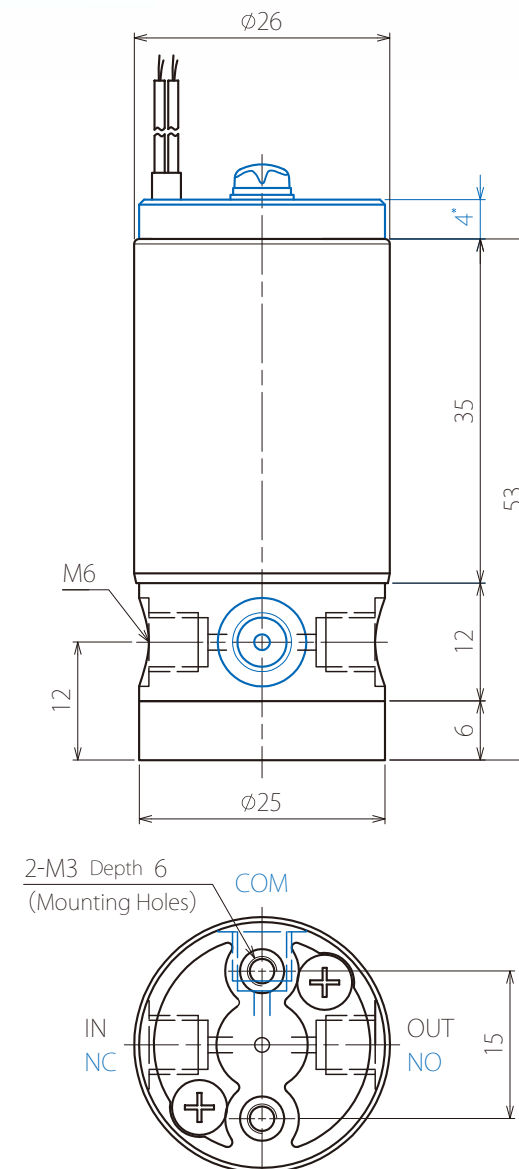
Model Selection Table

NAVR-2*1*

Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

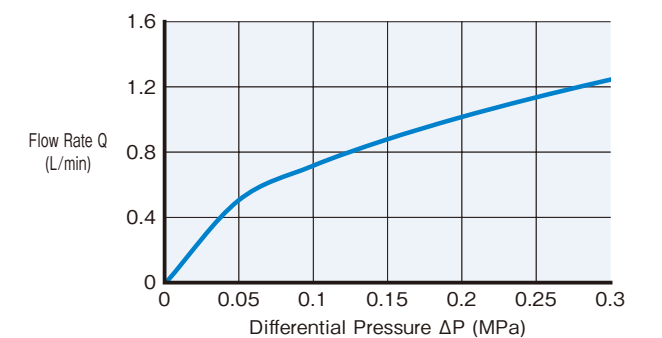
Dimensional Drawing



Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.05



Corrosion-resistant Solenoid Valve

NAVR-3*3*



Specifications

Model Code	NAVR-323*	NAVR-363*	NAVR-333*
Structure	2-way(Normally Closed)	2-way(Normally Open)	3-way
Orifice Size	φ3.0 Equivalency [mm]		
Connection Size	Rc1/8		
Cv	0.13		
Applicable Media	DI Water, Corrosive Fluid		
Media Pressure	IN: -50~200kPa OUT: 0~50kPa	IN: -50~200kPa OUT: 0~50kPa	COM: -50~150kPa NO,NC: 0~50kPa
Media Temperature	10~50°C		
Ambient Temperature	10~50°C		
Power Consumption	4.0W		
Coil Temperature Rise	60°C [degrees C (or less)]		
Insulation Class	Class B (JIS C 4003)		
Wetted Material	Valve Body: PTFE Diaphragm: PTFE+FFKM	Valve Body: PTFE Diaphragm: PTFE+FFKM	Valve Body: PTFE Diaphragm: PTFE+FFKM Stem: Sapphire

*Specifications are subject to change without notice.

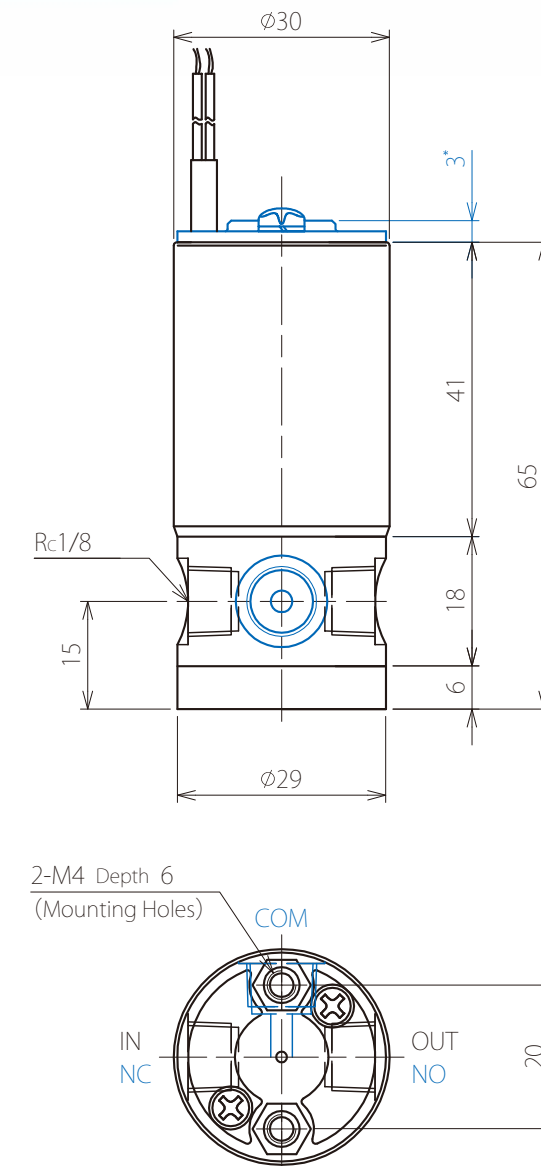
Model Selection Table

NAVR-3*3*

Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way
6: 2-way (Normally Open)

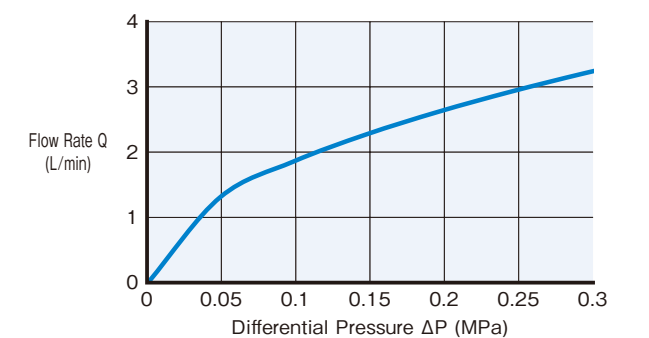
Dimensional Drawing



Blue outlines represent 3-way valve and top portion () of normally open 2-way valve.

(unit : mm)

Flow Rate Cv:0.13

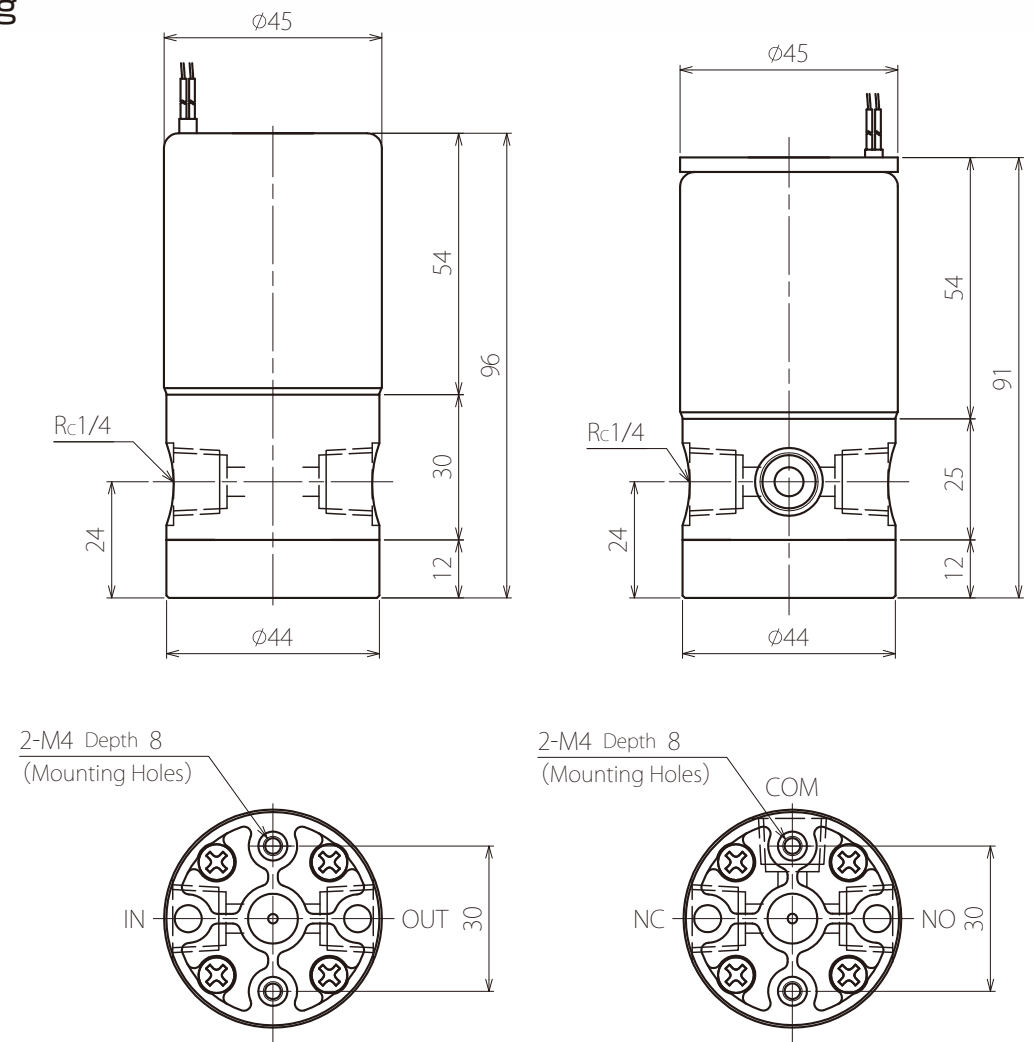


Corrosion-resistant Solenoid Valve

NAVR-4*4*



Dimensional Drawing



NAVR-424*

NAVR-434*

(unit : mm)

Specifications

Model Code	NAVR-424*	NAVR-434*
Structure	2-way (Normally Closed)	3-way
Orifice Size	φ5.0 Equivalency [mm]	
Connection Size	Rc1/4	
Cv	0.3	
Applicable Media	DI Water, Corrosive Fluid	
Media Pressure	IN: -90~200kPa OUT: 0~50kPa	COM: -90~200kPa NO,NC: 0~50kPa
Media Temperature	10~50°C	
Ambient Temperature	10~50°C	
Power Consumption	7.0W	
Coil Temperature Rise	60°C [degrees C (or less)]	
Insulation Class	Class B (JIS C 4003)	
Wetted Material	Valve Body: PTFE	Valve Body: PTFE
	Diaphragm: PTFE+FKM	Diaphragm: PTFE+FKM
	Stem: PCTFE	

*Specifications are subject to change without notice.

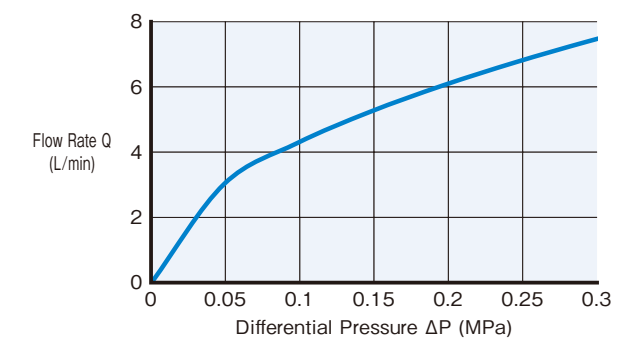
Model Selection Table

NAVR-4*4*

Voltage
1: DC 12V
2: DC 24V

Structure
2: 2-way (Normally Closed)
3: 3-way

Flow Rate Cv:0.3



MEMO

MEMO