



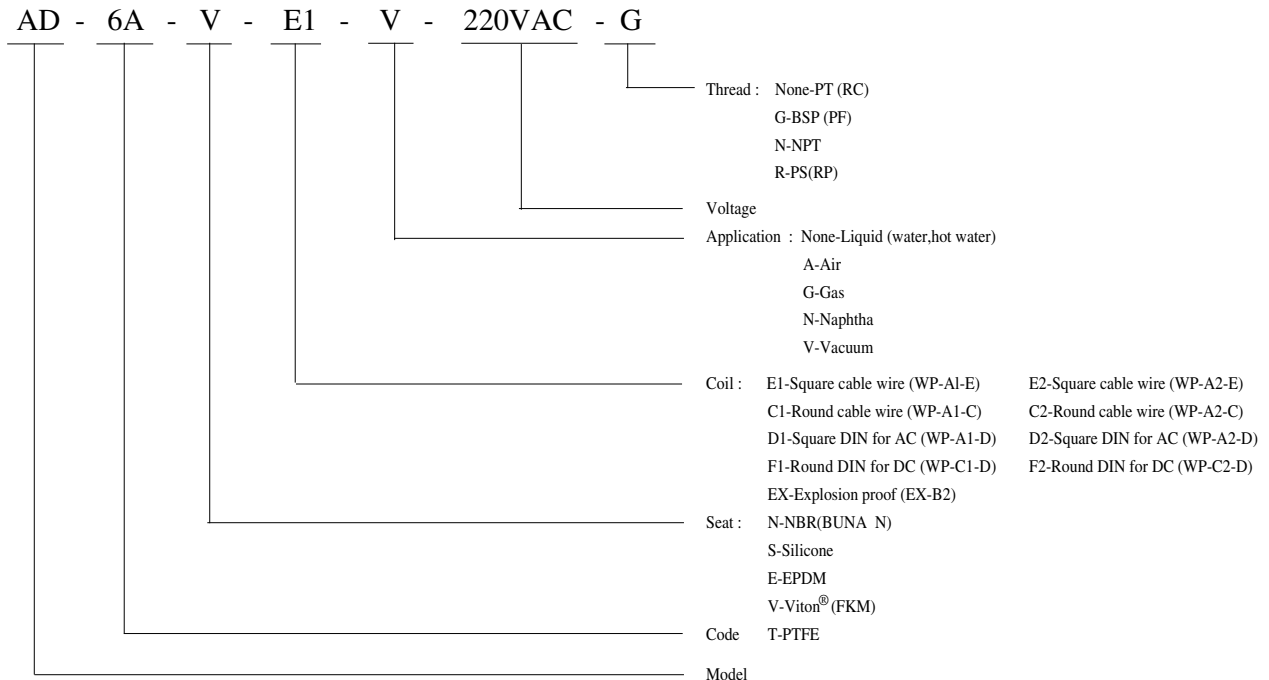
2/2-way solenoid valve of forged brass body for general application

Direct-operated Type



Model	Port size	Orifice (mm)	CV value	Fluid temp. (°C)	Seat disc	Differential pressure kg/cm ² (bar)					Wt. (kg)
						Liquid	Air	Gas	Naphtha (120°C)	Vacuum	
AD - 6A	1/8 "	3	0.26	-10	NBR	0-10	0-10	0-10	0-7	0-10 ⁻⁶ torr	0.49
AD - 6B	1/8 "	4	0.58			0-7	0-7	0-7	0-5	0-10 ⁻⁶ torr	0.49
AD - 6C	1/8 "	5	0.64			0-5	0-5	0-5	0-3	0-10 ⁻⁶ torr	0.49
AD - 8A	1/4 "	3	0.26		Silicone	0-10	0-10	0-10	0-7	0-10 ⁻⁶ torr	0.47
AD - 8B	1/4 "	4	0.58			0-7	0-7	0-7	0-5	0-10 ⁻⁶ torr	0.47
AD - 8C	1/4 "	5	0.64	J 80 (120)	EPDM	0-5	0-5	0-5	0-3	0-10 ⁻⁶ torr	0.47
AD - 10A	3/8 "	4	0.58			0-10	0-10	0-10	0-7	0-10 ⁻⁶ torr	0.73
AD - 10B	3/8 "	6	0.79		Viton®	0-5	0-5	0-5	0-3	0-10 ⁻⁶ torr	0.73
AD - 10C	3/8 "	8	0.97			0-2	0-2	0-2	0-1	0-10 ⁻⁶ torr	0.73
AD - 12A	1/2 "	6	0.79		PTFE	0-5	0-5	0-5	0-3	0-10 ⁻⁶ torr	0.78
AD - 12B	1/2 "	8	0.97			0-2	0-2	0-2	0-1	0-10 ⁻⁶ torr	0.78

How to order



Notes:

1. Direct-acting valves are ideally suited to allocate at any angle.
2. Voltage drop range is within $\pm 10\%$.
3. Pressure of voltage DC is 70% of voltage AC only.
4. Max. temperature is up to 120°C.
5. Selection of coil refer to page 136~139.
6. PTFE seat is custom-made.

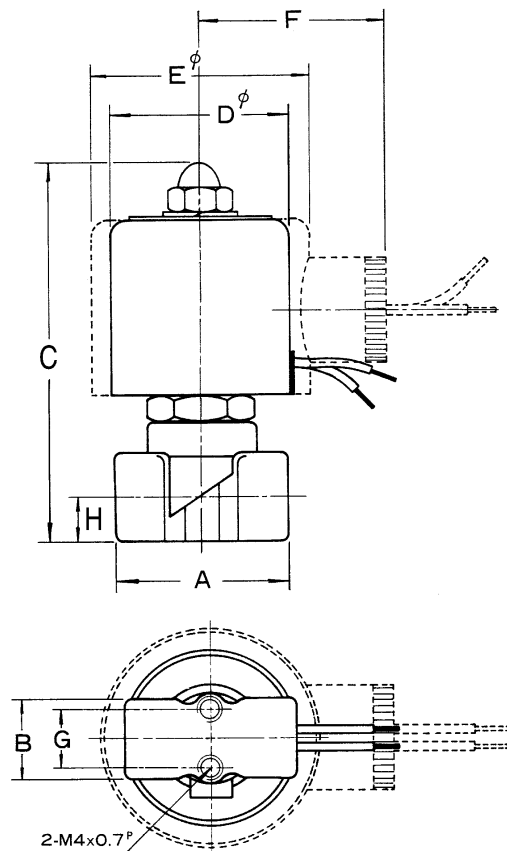
Inapplicable Fluids:

1. Fluids that have kinematic viscosity over 50 CST.
2. Fluids that will turn to liquid after being heated and become solid after being cooled.
3. Corrosive fluids.

AD

2/2-way solenoid valve of forged brass body for general application

● AD-6A~12B Contour Specification Chart



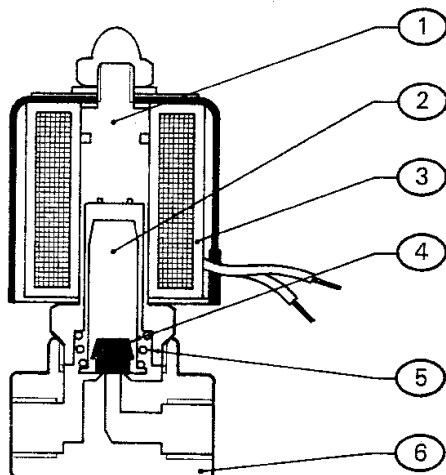
● Specifications

Unit:mm

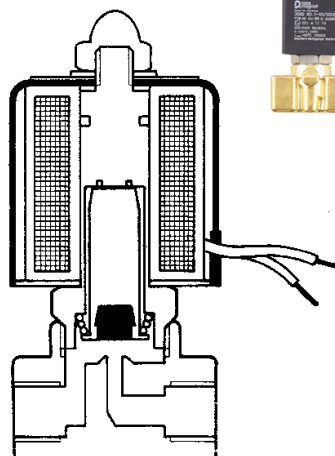
Item Model	A	B	C	D	E	F	G	H	Coil Model
AD-6A~8C	41	19	89	41.5	--	22	15	10.5	WP-A1-C
	41	19	85	53	--	63	15	10.5	WP-A1-D*
	41	19	85	58	--	33	15	10.5	WP-A1-E
	41	19	86	56	--	64	15	10.5	WP-C1-D*
AD-10A~10C	50	25	93	--	53	47	15	11.7	WP-A2-C
	50	25	90	--	58	65	15	11.7	WP-A2-D*
	50	25	90	--	63	40	15	11.7	WP-A2-E
	50	25	90	--	68	70	15	11.7	WP-C2-D*
AD-12A~12B	55	27	91	--	53	47	--	13	WP-A2-C
	55	27	91	--	58	65	--	13	WP-C2-D*
	55	27	91	--	63	40	--	13	WP-A2-E
	55	27	91	--	68	70	--	13	WP-A2-D*

* with connector

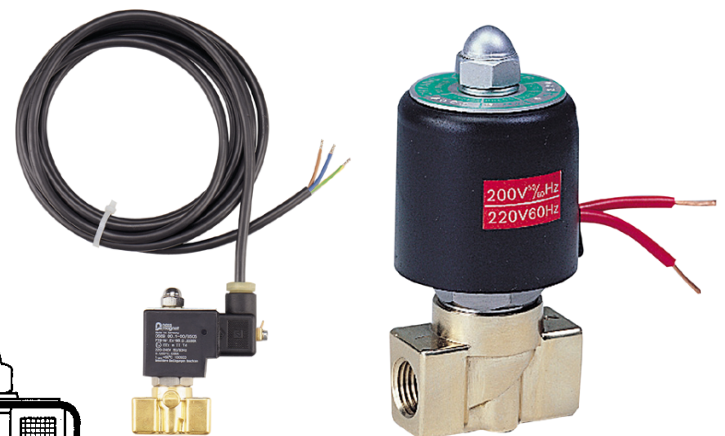
● AD-6A~12B Operation Chart



Direction of Flow
when power is off



Direction of Flow
when power is on



● Material Table

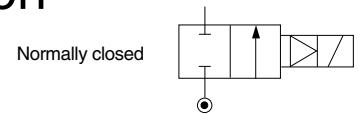
Item	Article	Material
1	Solenoid Tube	Stainless Steel
2	Armature Core	Stainless Steel
3	Coil	Brass Wire
4	Seat	NBR,Silicone, EPDM,Viton®
5	Spring	Stainless Steel
6	Valve Body	Forged Brass

Solenoid Valves



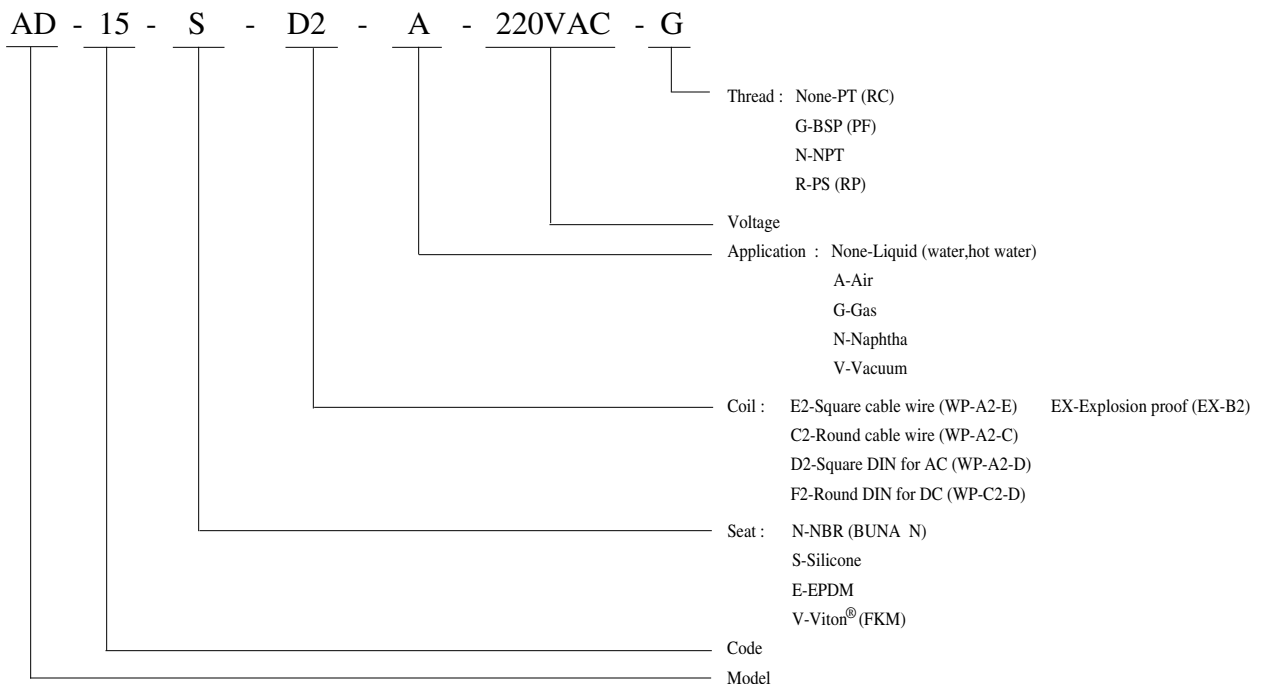
2/2-way solenoid valve of forged brass body for general application

Magnalift Type



Model	Port size	Orifice (mm)	CV value	Fluid temp. (°C)	Seat disc	Differential pressure kg/cm ² (bar)					Wt. (kg)
						Liquid	Air	Gas	Naphtha (120°C)	Vacuum	
AD - 14	3/8 "	15	4.5	-10	NBR	0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	1.03
AD - 15	1/2 "	15	4.5			0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	1.06
AD - 20	3/4 "	20	9.3			0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	1.24
AD - 25	1 "	25	13.2			0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	1.51
AD - 35	1 1/4 "	35	26			0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	2.87
AD - 40	1 1/2 "	35	26	J	Silicone	0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	2.77
AD - 50	2 "	50	48			0-7	0-7	0-7	0-5	0-10 ⁻⁶ torr	4.81
AD - 25AF	1" Flange	25	13.2		EPDM	0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	5.35
AD - 35AF	1 1/4 " Flange	35	26			0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	7.75
AD - 40AF	1 1/2 " Flange	35	26		Viton®	0-10	0-10	0-10	0-10	0-10 ⁻⁶ torr	8.00
AD - 50AF	2" Flange	50	48	80 (120)		0-7	0-7	0-7	0-5	0-10 ⁻⁶ torr	11.0

How to order



Notes:

In order to prolong operating life, it is better to allocate pipe horizontally and coil to face upward.
Voltage drop range is within $\pm 10\%$.
Pressure of voltage DC is 70% of voltage AC only.
Combined diaphragm design assures no breaking.
Max. temperature is up to 120°C.
Selection of coil refer to page 136-139.

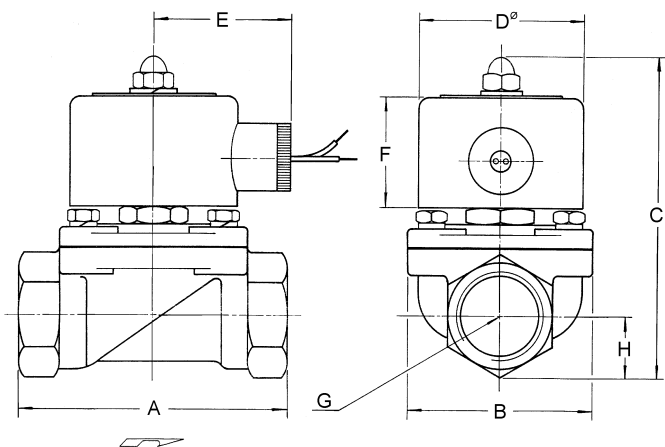
Inapplicable Fluids:

1. Fluids that have kinematic viscosity over 50 CST.
2. Fluids that will turn to liquid after being heated and become solid after being cooled.
3. Corrosive fluids.

AD

2/2-way solenoid valve of forged brass body for general application

● AD-14~50 Contour Specification Chart



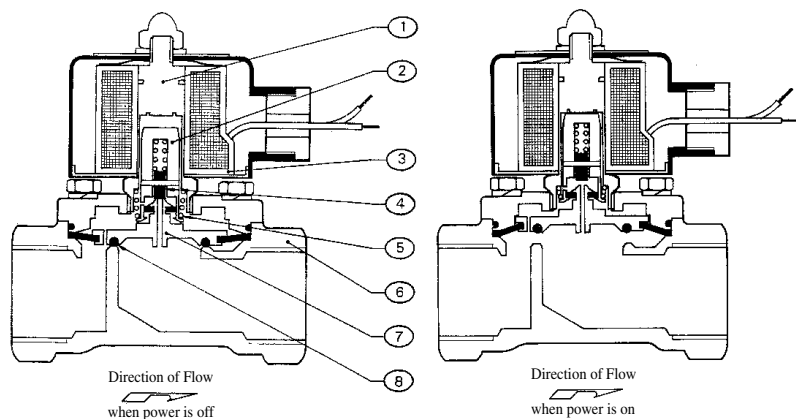
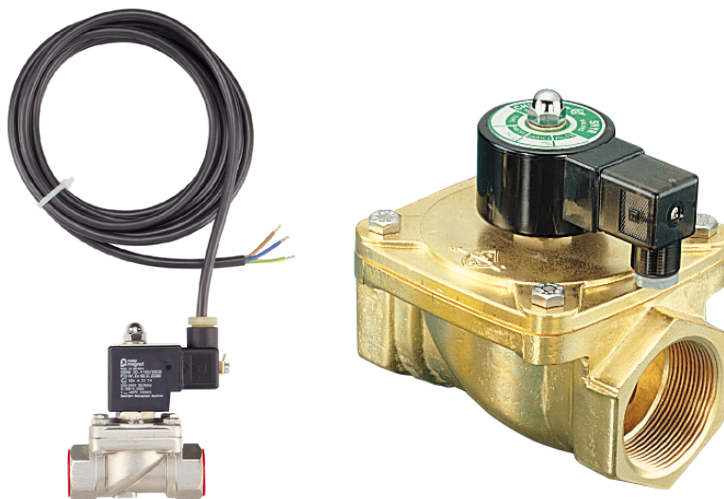
● Specifications

Unit:mm

Item Model	A	B	C	D	E	F	G	H
AD-14	75	52	103				3/8"	14.5
AD-15	75	52	103	WP-A2-C:53	WP-A2-C:47	WP-A2-C:43	1/2"	14.5
AD-20	85	60	114	WP-A2-D:40	WP-A2-D:65*	WP-A2-D:38	3/4"	18
AD-25	100	70	120				1"	23
AD-35	120	90	140	WP-A2-E:40	WP-A2-E:40	WP-A2-E:38	1 1/4"	33
AD-40	120	90	140				1 1/2"	33
AD-50	150	120	160	WP-C2-D:56	WP-C2-D:70*	WP-C2-D:37	2"	40.5

* with connect

● AD-14~50 Operation Chart



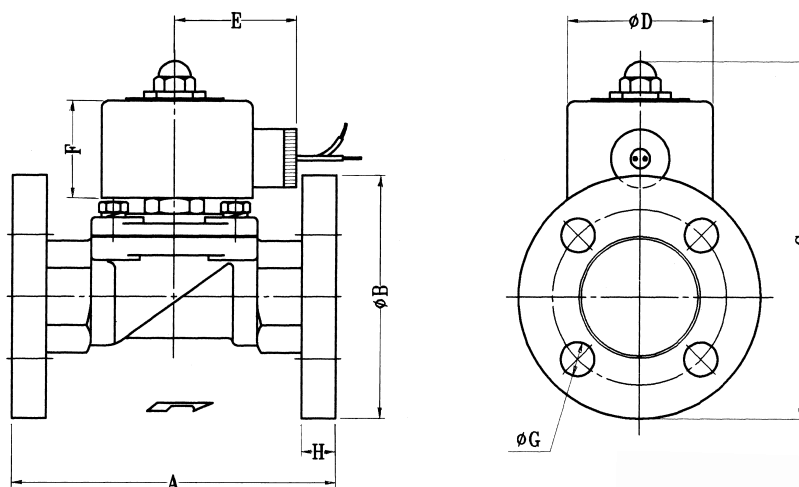
● AD-14~50 Material Table

Item	Article	Material
1	Solenoid Tube	Stainless Steel
2	Armature Core	Stainless Steel
3	Coil	Brass Wire
4	Seat	NBR, Silicone, Viton®, EPDM
5	Spring	Stainless Steel
6	Valve Body	Forged Brass
7	Diaphragm	Brass/Synthetic Rubber
8	Leakproof Ring	Synthetic Rubber

AD

2/2-way solenoid valve of forged brass body for general application

● AD-25AF~50AF Contour Specification Chart

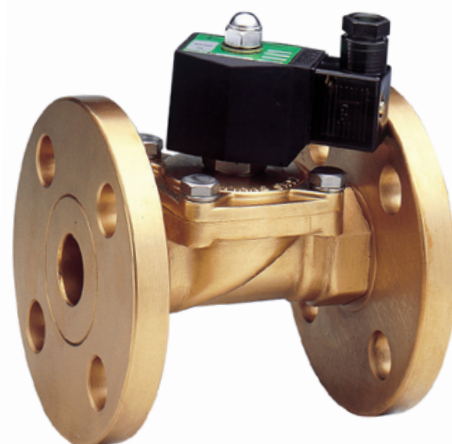


● Specifications

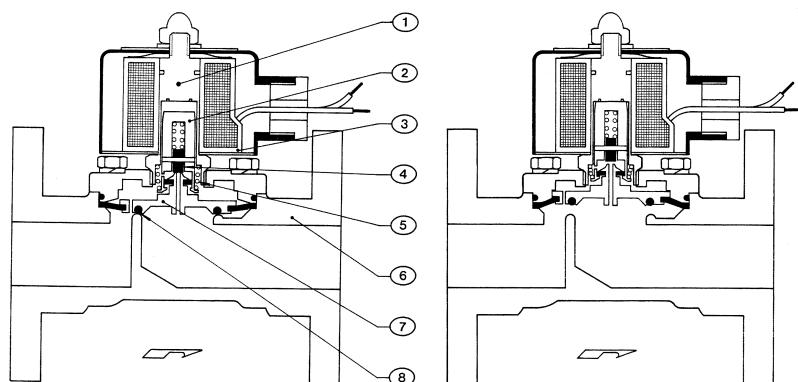
Unit:mm

Item Model	A	B	C	D	E	F	G	H
AD-25AF	130	125	162	WP-A2-C:53	WP-A2-C:47	WP-A2-C:43	19	14
AD-35AF	160	135	174	WP-A2-D:40	WP-A2-D:65*	WP-A2-D:38	19	16
AD-40AF	160	140	177	WP-A2-E:40	WP-A2-E:40	WP-A2-E:38	19	16
AD-50AF	200	155	195	WP-C2-D:56	WP-C2-D:70*	WP-C2-D:37	19	16

(*with connector) JIS Flange Specification:10kg/cm²



● AD-25AF~50AF Operation Chart



● AD-25AF~50AF Material Table

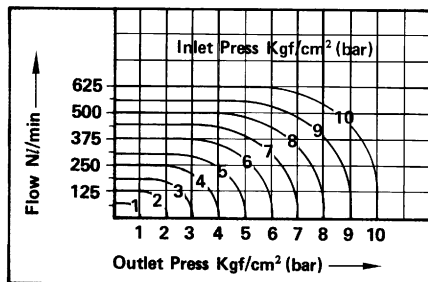
Item	Article	Material
1	Solenoid Tube	Stainless Steel
2	Armature Core	Stainless Steel
3	Coil	Brass Wire
4	Seat	NBR, Silicone, Viton®, EPDM
5	Spring	Stainless Steel
6	Valve Body	Forged Brass
7	Diaphragm	Brass/Synthetic Rubber
8	Leakproof Ring	Synthetic Rubber



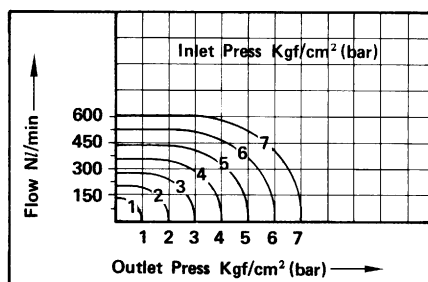
2/2-way solenoid valve of forged brass body for general application

Flow Curve Chart

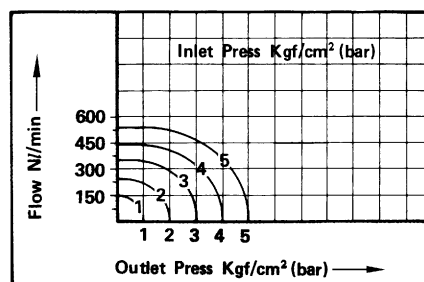
● Fluid: Air AD-6A . 8A



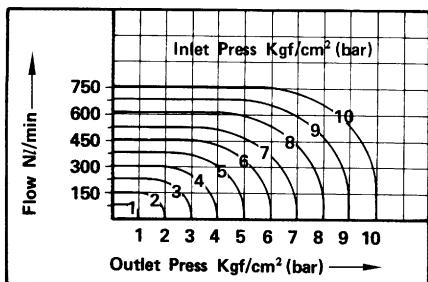
● Fluid: Air AD-6B . 8B



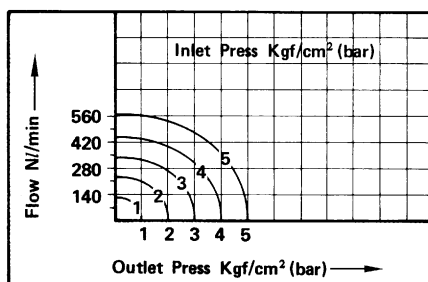
● Fluid: Air AD-6C . 8C



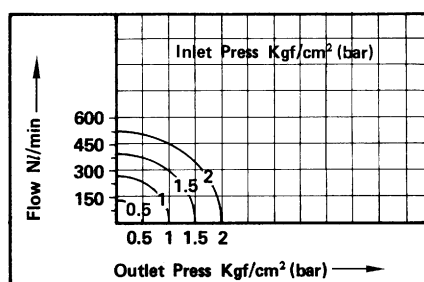
● Fluid: Air AD-10A



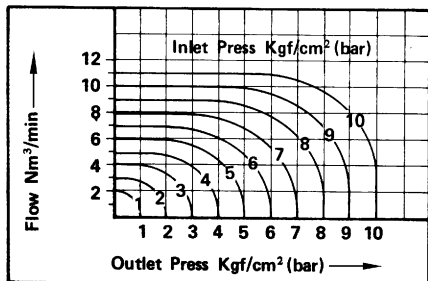
● Fluid: Air AD-10B . 12A



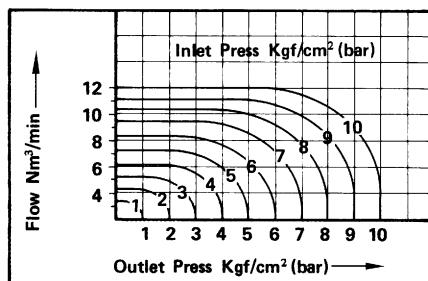
● Fluid: Air AD-10C . 12B



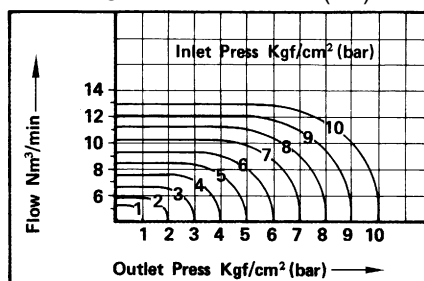
● Fluid: Air AD-14.15



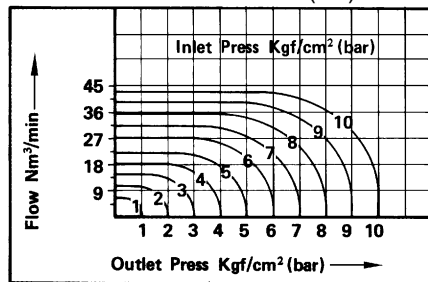
● Fluid: Air AD-20



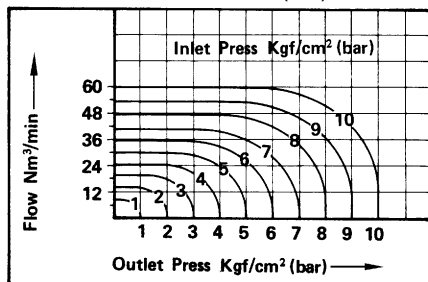
● Fluid: Air AD-25 (AF)



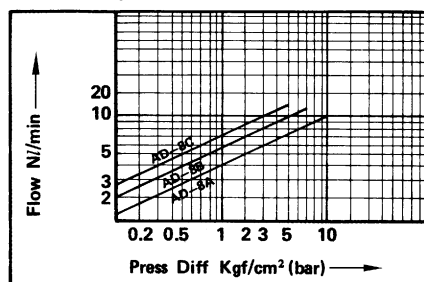
● Fluid: Air AD-35.40 (AF)



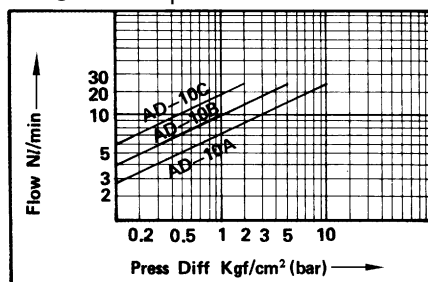
● Fluid: Air AD-50 (AF)



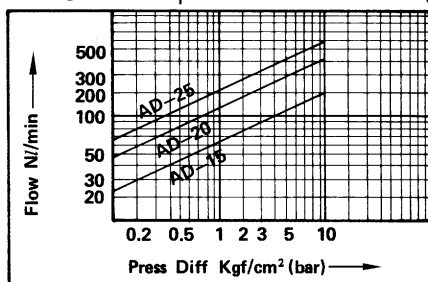
● Fluid: Liquid AD-6A.8A . 6B.8B . 6C.



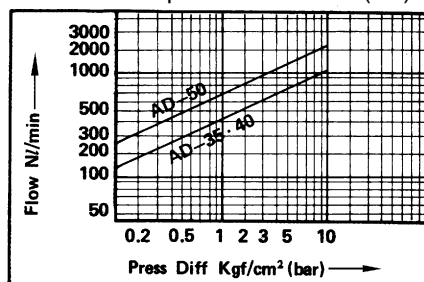
● Fluid: Liquid AD-10A . 10B. 10C



● Fluid: Liquid AD-14.15.20.25 (AF)



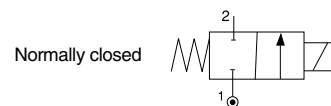
● Fluid: Liquid AD-35.40.50 (AF)



BD

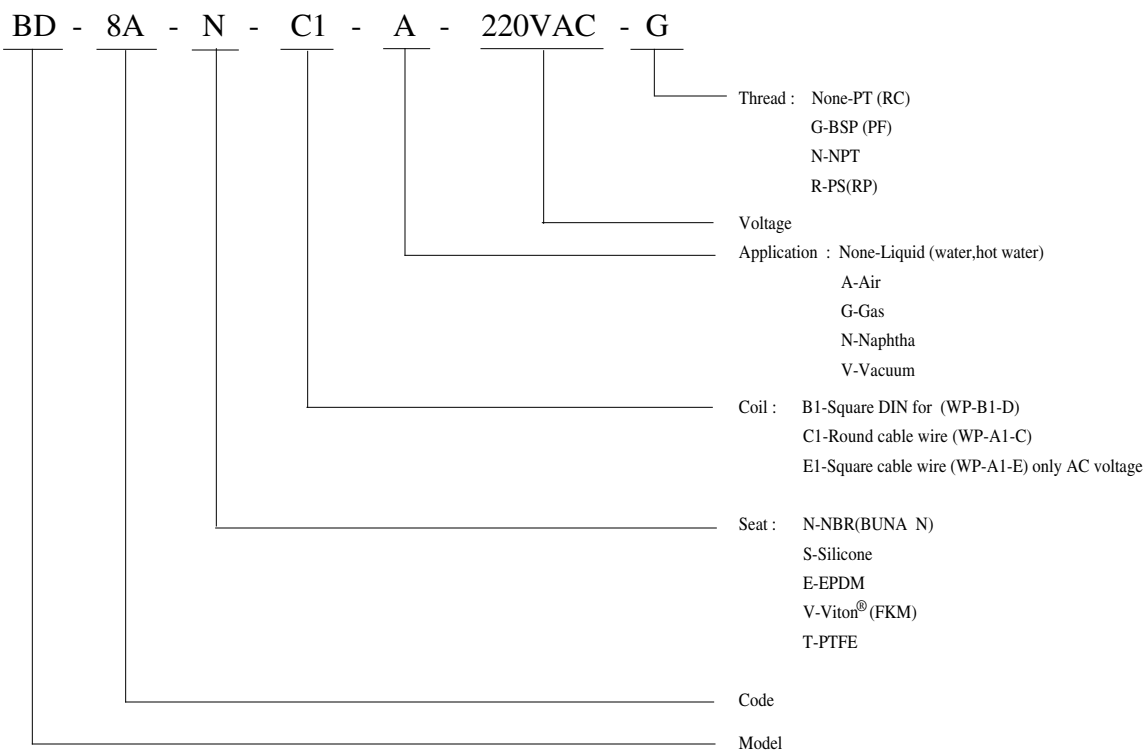
2/2-way solenoid valve of forged brass body for general application

Direct-operated Type



Model	Port size	Orifice (mm)	CV value	Fluid temp. (°C)	Seat disc	Differential pressure kg/cm ² (bar)					Wt. (kg)
						Liquid	Air	Gas	Naphtha (120°C)	Vacuum	
BD - 8A	1/4 "	2.5	0.23	-10	NBR	0-10	0-10	0-10	0-7	0-10 ⁻⁴ torr	0.35
BD - 8B	1/4 "	3.5	0.42		Silicone	0-7	0-7	0-7	0-5	0-10 ⁻⁴ torr	0.35
BD - 8C	1/4 "	4.5	0.61		EPDM	0-5	0-5	0-5	0-3	0-10 ⁻⁴ torr	0.35
BD - 10A	3/8 "	4	0.58	80 (120)	Viton®	0-7	0-7	0-7	0-5	0-10 ⁻⁴ torr	0.50
BD - 10B	3/8 "	6	0.79		PTFE	0-3	0-3	0-3	0-2	0-10 ⁻⁴ torr	0.50
BD - 12A	1/2 "	6	0.79			0-3	0-3	0-3	0-2	0-10 ⁻⁴ torr	0.55

How to order



Notes:

1. Direct-acting valves are ideally suited to allocate at any angle.
2. Voltage drop range is within $\pm 10\%$.
3. Pressure of voltage DC is 70% of voltage AC only.
4. Max. temperature is up to 120°C.
5. Selection of coil refer to page 136~139.
6. PTFE seat is custom-made.

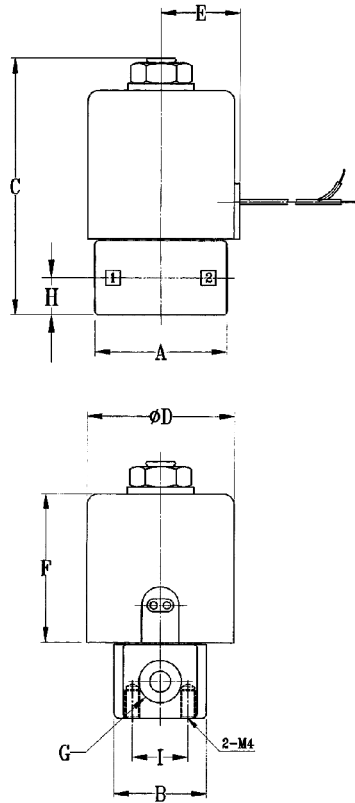
Inapplicable Fluids:

1. Fluids that have kinematic viscosity over 50 CST.
2. Fluids that will turn to liquid after being heated and become solid after being cooled.
3. Corrosive fluids.

BD

2/2-way solenoid valve of forged brass body for general application

● BD-8A~8C Contour Specification Chart



● Specifications

Unit:mm

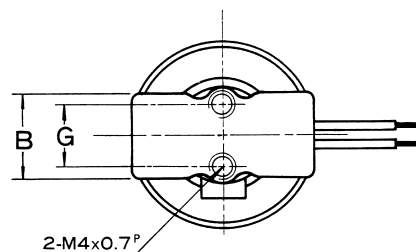
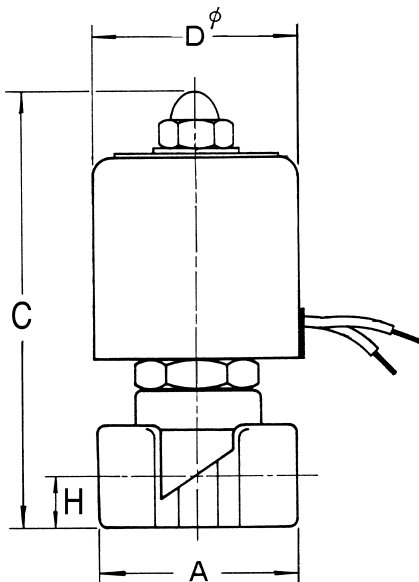
Item Model	A	B	C	D	E	F	G	H	I	Coil Model
BD-8A~8C	41	25	68.5	30	53	40	1/4 "	10.5	15	WP-B1-D*
	41	25	68.5	41.5	22	40	1/4 "	10.5	15	WP-A1-C
	41	25	68.5	34.5	38	32.5	1/4 "	10.5	15	WP-A1-E

Item Model	A	B	C	D	E	F	G	H	Coil Model
BD-10A~10C	50	25	87	30	-	-	15	11.7	WP-B1-D*
	50	25	87	41.5	-	-	15	11.7	WP-A1-C
	50	25	87	34.5	-	-	15	11.7	WP-A1-E
BD-12A	55	27	90	30	-	-	-	13	WP-B1-D*
	55	27	90	41.5	-	-	-	13	WP-A1-C
	55	27	90	34.5	-	-	-	13	WP-A1-E

* with connector



● BD-10A~12A Contour Specification Chart



● Material Table

Item	Article	Material
1	Valve Body	Forged Brass
2	Seat	NBR,Silicone, EPDM,Viton®
3	Solenoid Tube	Stainless Steel
4	Armature Core	Stainless Steel
5	Spring	Stainless Steel
6	Top Core	Stainless Steel
7	Coil	Brass Wire
8	Gasket	S45C
9	Nameplate	Aluminum
10	Knurled Nut	Brass/S45C Zinc