



Pilot kick type 2 port solenoid valve  
(general purpose valve)

# ADK11/ADK12 Series

- NC (normally closed) type, NO (normally open) type
- Port size: Rc1/4 to Rc1
- Diaphragm structure



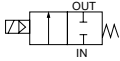
Refer to Ending 17 for more details.

Excluding ADK12

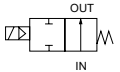


## JIS symbol

- ADK11: NC (normally closed) type



- ADK12: NO (normally open) type



## Common specifications

Descriptions	Standard specifications	Optional specifications
Working fluid	Air, low vacuum ( $1.33 \times 10^3$ Pa (abs)), water, kerosene, oil (50 mm <sup>2</sup> /s or less)	Hot water
Working pressure differential range MPa	0 to 1.0 (Refer to max. working pressure differential on individual specifications.)	
Max. working pressure MPa	2	
Withstanding pressure (water) MPa	4	
Fluid temperature (Note 1) °C	-10 to 60	-10 to 90
Ambient temperature °C	-10 to 60	
Heat proof class	B	H
Atmosphere	Place free of corrosive gas and explosive gas	
Valve structure	Pilot kick type poppet diaphragm structure	
Valve seat leakage (Note 2) cm <sup>3</sup> /min. (ANR)	1 or less (air)	
Mounting attitude	Free	
Body/sealant	Bronze, nitrile rubber	Bronze, ethylene propylene diene rubber

Note 1: No freezing

Note 2: For ADK11 (NC (normally closed) ), these values apply at pneumatic pressure 0.02 to 1.0 MPa, and for the ADK12 (NO (normally open) ), these apply at pneumatic pressure 0.02 to 0.6 MPa. When used at a pressure less than 0.02 MPa, the sealant may be unstable. Consult CKD.

## Individual specifications

Descriptions	Port size	Orifice (mm)	Min. working pressure diff. (MPa)	Max. working pressure diff. (MPa)						Rated voltage	Apparent power (VA)				Power consumption (W)		Mass (kg)														
				Air		Water, kerosene		Oil (50mm <sup>2</sup> /s)			Holding		Starting		AC	DC															
Model no.				AC	DC	AC	DC	AC	DC		50Hz	60Hz	50Hz	60Hz	50/60Hz	DC															
<b>NC (normally closed) type</b>																															
<b>ADK11-8A</b>	Rc1/4	12	0	1	0.7	1	0.7	0.7	0.6	100 VAC 50/60Hz	24	19	61	54	10/8	11*2 (10.4)	0.65														
<b>ADK11-10A</b>	Rc3/8	12																													
<b>ADK11-15A</b>	Rc1/2	16									0.6	0.6	0.6	0.5	200 VAC 50/60Hz	25	21	84	75	10/8.5	14*3 (17)	1.0									
<b>ADK11-20A</b>	Rc3/4	23																													
<b>ADK11-25A</b>	Rc1	28																													
<b>NO (normally open) type</b>																															
<b>ADK12-15A</b>	Rc1/2	16	0	0.6	0.6	0.6	0.6	0.5	0.5	48 VDC	30	25	180	150	13/11	14	1.2														
<b>ADK12-20A</b>	Rc3/4	23																													
<b>ADK12-25A</b>	Rc1	28																													

\*1: Models above show basic port size (Rc). Refer to How to order for other combinations.

\*2: The values in ( ) are the power consumption for the type with DIN terminal box.

\*3: The values in [ ] are the power consumption for the coil with diode.

\*4: Refer to DC column for maximum working pressure differential of coil with diode.

\*5: Keep the voltage fluctuation to within  $\pm 10\%$  of the rated voltage.

\*6: Consider using the AB71 Series if the pressure is 0.02 MPa or less.

\*7: When using with a low vacuum, vacuum the OUT port side.

## Optional specifications

Sealant	Fluoro rubber		Ethylene propylene diene rubber	
	B	H	B	H
Coil (heat proof class)				
Fluid temperature °C	5 to 60	5 to 90	-10 to 60 (Note 1)	-10 to 90 (Note 1)
Ambient temperature °C	-10 to 60			
Valve seat leakage (Note 2) cm <sup>3</sup> /min. (ANR)	1 or less (air)			

Note 1: No freezing

Note 2: For ADK11 (NC (normally closed)), these values apply at pneumatic pressure 0.02 to 1.0 MPa, and for the ADK12 (NO (normally open)), these apply at pneumatic pressure 0.02 to 0.6 MPa. When used at a pressure less than 0.02 MPa, the sealant may be unstable. Consult CKD.

## Flow characteristics

Model no.	Port size	Orifice (mm)	Flow characteristics			
			C[dm <sup>3</sup> /(s·bar)]	b	Cv flow factor	S (mm <sup>2</sup> )
<b>NC (normally closed) type</b>						
<b>ADK11-8A</b>	Rc 1/4	12	9.2	0.36	2.0	-
<b>ADK11-10A</b>	Rc 3/8	12	11	0.46	2.4	-
<b>ADK11-15A</b>	Rc 1/2	16	20	0.31	4.5	-
<b>ADK11-20A</b>	Rc 3/4	23	-	-	8.6	162
<b>ADK11-25A</b>	Rc 1	28	-	-	12.0	231
<b>NO (normally open) type</b>						
<b>ADK12-15A</b>	Rc 1/2	16	20	0.31	4.5	-
<b>ADK12-20A</b>	Rc 3/4	23	-	-	8.6	162
<b>ADK12-25A</b>	Rc 1	28	-	-	12.0	231

\*1: Effective sectional area S and sonic conductance C are converted as  $S \approx 5.0 \times C$ .

HNB/G

USB/G

FAB/G

FGB/G

FVB

FWB/G

FHB

FLB

AB

AG

AP/AD

APK/ADK

For dry air

Explosion proof

HVB/HVL

SAB/SVB

NP/NAP/NVP

CHB/G

MXB/G

Other G.P. systems

PD/FAD/PJ

CVE/CVSE

CPE/CPD

Medical analysis

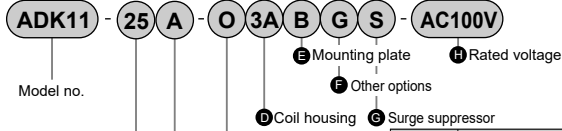
Custom order

General purpose valve

Pilot kick type 2 port solenoid valve

## How to order

● NC (normally closed) type



Symbol	Descriptions
<b>A</b> Port size	
<b>8</b>	1 / 4
<b>10</b>	3 / 8
<b>15</b>	1 / 2
<b>20</b>	3 / 4
<b>25</b>	1

Symbol	Descriptions
<b>B</b> Type of screw	
<b>A</b>	Rc
<b>G</b>	G
<b>N</b>	NPT

Symbol		Body	Sealant	Treat	Remarks
<b>O</b>	Std	Nitrile rubber		-	Air, water, low vacuum, kerosene, oil (up to 60 °C)
		Fluoro rubber			Air, low vacuum, kerosene, oil (up to 90 °C *1)
	Stainless steel	Nitrile rubber			Air, water, low vacuum, kerosene, oil (up to 60 °C)
		Fluoro rubber			Air, low vacuum, kerosene, oil (up to 90 °C *1)
<b>Option</b>	Bronze	Nitrile rubber		Oil-prohibit	Air, water, low vacuum, kerosene, oil (up to 60 °C)
		Fluoro rubber			Air, low vacuum, kerosene, oil (up to 90 °C *1)
		Ethylene propylene diene rubber			Hot water (up to 90 °C *1)
	Stainless steel	Nitrile rubber			Air, water, low vacuum, kerosene, oil (up to 60 °C)
		Fluoro rubber			Air, low vacuum, kerosene, oil (up to 90 °C *1)
		Ethylene propylene diene rubber			Hot water (up to 90 °C *1)

- \*1
- \*2
- \*3
- \*4

Refer to page 36 in the introduction for details on the material combinations.

**D to H**

Refer to the following page for details on the coil housing, other options and voltage, etc.

<Example 1 of model number>

**ADK11-15A-02C-AC100V**

Series: ADK11

**A** Port size: 1/2

**B** Type of thread: Rc

Body, sealant combination

: Body - bronze, sealant - nitrile rubber

**D** Coil housing: Grommet lead wire

**E** to **G**: Blank

**H** Rated voltage

: 100 VAC 50/60 Hz, 110 VAC 60 Hz

<Example 2 of model number>

**ADK11-20N-B4ABS-AC200V**

Series: ADK11

**A** Port size: 3/4

**B** Type of thread: NPT

**C** Body, sealant combination

: Body - bronze, sealant - fluoro rubber

**D** Coil housing

: Open frame type lead wire (H class coil)

**E** Mounting plate: With mounting plate

**F** Other options: Blank

**G** Surge suppressor: With surge suppressor

**H** Rated voltage

: 200 VAC 50/60 Hz, 220 VAC 60 Hz

### ▲ Note on model no. selection

#### Note on (C)

\*1: (C): When selecting 4A, 4K, 4H.

\*2: Only (A) (port size) 15 (1/2), 20 (3/4) or 25 (1) is available for (C) P or R.






\*3: The maximum working pressure difference is 0.6 MPa for the ethylene propylene diene rubber seal combination ((C) P, R).

\*4: The ethylene propylene diene rubber seal combination ((C) P, R) cannot be used with air. (Compressed air contains oil, and ethylene propylene diene rubber is not oil-resistant.)


For (D) to (H), the combinations indicated with symbols can be manufactured.  
Note that if the (E) to (G) options are not required, no symbol is indicated.

D		Coil housing		E	F				Other options		G	H		Rated voltage	
Descriptions		Mounting plate		Cable gland			Conduit		Surge suppressor		Descriptions				
				(Marine cable gland)			(Conduit pipe)								
				A-15a	A-15b	A-15c	CTC 19	G	H						
2C	Std	Grommet lead wire		B						S	100 VAC, 200 VAC				
2E		DIN terminal box (G1/2)									100 VAC, 200 VAC, 12 VDC, 24 VDC, 48 VDC, 100 VDC				
2G		DIN terminal box (Pg11)								100 VAC, 200 VAC, 24 VDC					
2H		DIN terminal box + small light (Pg11)							H	100 VAC, 200 VAC, 24 VDC					
3A	Option	Lead wire		B				G	H	S	100 VAC, 200 VAC, 12 VDC, 24 VDC, 48 VDC, 100 VDC				
3K		Open frame type Square terminal box (G1/2)			D	E	F				100 VAC, 200 VAC, 24 VDC, 100 VDC				
3H		Open frame type Square terminal box + light (G1/2)									100 VAC, 200 VAC, 12 VDC, 24 VDC, 48 VDC, 100 VDC				
3P		Open frame type Square terminal box (IP65 or equivalent) (G1/2)									100 VAC, 200 VAC, 24 VDC, 100 VDC				
3Q		Open frame type Square terminal box + light (IP65 or equivalent) (G1/2)									100 VAC, 200 VAC, 24 VDC, 100 VDC				
4A	Option	Lead wire		B				G	H	S	100 VAC, 200 VAC				
4K		Open frame type Square terminal box (G1/2)			D	E	F				100 VAC, 200 VAC				
4H		Open frame type Square terminal box + light (G1/2)													
5A	Option	Lead wire		B				G	H	S	100 VAC, 200 VAC				
5K		Open frame type Square terminal box (G1/2)			D	E	F				100 VAC, 200 VAC				
5H		Open frame type Square terminal box + light (G1/2)									100 VAC, 200 VAC				
5P		Open frame type Square terminal box (IP65 or equivalent) (G1/2)									100 VAC, 200 VAC				
5Q		Open frame type Square terminal box + light (IP65 or equivalent) (G1/2)													

▲ Refer to the following precautions for (D) to (H).

2C		● Grommet lead wire 300 mm
2E 2G 2H		● DIN terminal box
3A 4A 5A		● Open frame Grommet lead wire 300 mm ● 4A (Heat proof class H) ● 5A (Diode integrated)
3K 3H 4K 4H 5K 5H		● Open frame square terminal box ● 4K, 4H (Heat proof class H) ● 5K, 5H (Diode integrated)
3P 3Q 5P 5Q		● Open frame square terminal box (IP65 or equivalent) ● 5P, 5Q (Diode integrated)

Refer to page 222 for coil selection.

G H		● Conduit ● G (CTC19) ● H (G1/2)
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### ▲ Note on model no. selection

#### Note on (D)

\*5: 5A, 5K, 5H, 5P and 5Q are coils which convert AC power to DC with a diode.

#### Note on (E) to (G)

- \*6: Select one among D, E, F, G and H for (F).
- \*7: The surge suppressor is an accessory for the lead wire coil. When using the coil with terminal box, the surge suppressor is mounted in the terminal box.
- \*8: The coil with a diode and the (D) 2H 24 VDC coil have a surge suppressor incorporated as standard.
- \*9: Tropic care treatment (rust-proof coating) is available as a measure against rust.

#### Note on (H)

\*10: 100 VAC coil is compatible with 100 VAC 50/60 Hz, 110 VAC 60 Hz, and 200 VAC coil is compatible with 200 VAC 50/60 Hz, 220 VAC 60 Hz. Note that the (D) 5A, 5K, 5H, 5P and 5Q coil can be used only with 100 VAC 50/60 Hz or 200 VAC 50/60 Hz.

\*11: Consult with CKD about other than above voltage.

\*12: The lead wire is available in the standard 300 mm length, and 500 mm, 1000 mm, 2000 mm and 3000 mm lengths. Contact CKD for more information.

HNB/G

USB/G

FAB/G

FGB/G

FVB

FWB/G

FHB

FLB

AB

AG

AP/AD

APK/ADK

For dry air

Explosion proof

HVB/HVL

SAB/SVB

NP/NAP/NVP

CHB/G

MXB/G

Other G.P. systems

PD/FAD/PJ

CVE/CVSE

CPE/CPD

Medical analysis

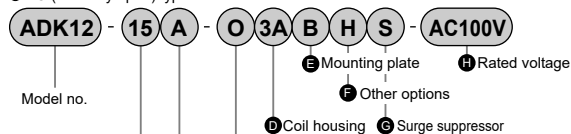
Custom order

General purpose valve

Pilot kick type 2 port solenoid valve

## How to order

● NO (normally open) type



Symbol	Descriptions			
<b>A Port size</b>				
15	1 / 2			
20	3 / 4			
25	1			
<b>B Type of screw</b>				
A	Rc			
G	G			
N	NPT			
<b>C Body, sealant combination</b>				
	Body	Sealant	Treat	
			Remarks	
O	Std	Nitrile rubber	-	Air, water, low vacuum, kerosene, oil (up to 60 °C)
B	Bronze	Fluoro rubber		Air, low vacuum, kerosene, oil (up to 90 °C *1)
D	Stainless steel	Nitrile rubber	-	Air, water, low vacuum, kerosene, oil (up to 60 °C)
E		Fluoro rubber		Air, low vacuum, kerosene, oil (up to 90 °C*1)
H	Oil/iron	Nitrile rubber	Oil-prohibit	Air, water, low vacuum, kerosene, oil (up to 60 °C)
J		Fluoro rubber		Air, low vacuum, kerosene, oil (up to 90 °C *1)
P		Ethylene propylene diene rubber		Hot water (up to 90 °C*1)
L		Nitrile rubber		Air, water, low vacuum, kerosene, oil (up to 60 °C)
M	Stainless steel	Fluoro rubber	-	Air, low vacuum, kerosene, oil (up to 90 °C*1)
R	Ethylene propylene diene rubber	Hot water (up to 90 °C *1)		
Refer to page 36 in the introduction for details on the material combinations.				
<b>D to H</b>				
Refer to the following page for details on the coil housing, other options and voltage, etc.				

<Example 1 of model number>

**ADK12-20A-03A-DC24V**

Series: ADK12

**A** Port size: 3/4

**B** Type of thread: Rc

**C** Body, sealant combination

: Body - bronze, sealant - nitrile rubber

**D** Coil housing: Open frame lead wire

**E** to **G** : Blank

**H** Rated voltage: 24 VDC

<Example 2 of model number>

**ADK12-15G-B3HBD-AC100V**

Series: ADK12

**A** Port size: 1/2

**B** Type of thread: G

**C** Body, sealant combination

: Body - bronze, sealant - fluoro rubber

**D** Coil housing: Open frame type

Square terminal box with light (G1/2)

**E** Mounting plate: With mounting plate

**F** Other options: Cable gland A-15a

**G** Surge suppressor: Blank

**H** Rated voltage

:100 VAC 50/60 Hz, 110 VAC 60 Hz

**▲ Note on model no. selection**




Note on (C)


\*1: (C): When selecting 4A, 4K, 4H.

For (D) to (H), the combinations indicated with symbols can be manufactured. Note that if the (E) to (G) options are not required, no symbol is indicated.

D Coil housing			E			F Other options			G		H Rated voltage	
Descriptions		Mounting plate	Cable gland (Marine cable gland)			Conduit (Conduit pipe)		Surge suppressor	Descriptions			
			A-15a	A-15b	A-15c	CTC19	G 1 / 2					
3A	Std.	Lead wire				G	H	S	100 VAC, 200 VAC, 12 VDC, 24 VDC, 48 VDC, 100 VDC			
3K	Open frame type	Square terminal box (G1/2)	B	D	E	F	S		100 VAC, 200 VAC, 24 VDC, 100 VDC			
3H		Square terminal box + light (G1/2)							100 VAC, 200 VAC, 24 VDC, 100 VDC			
3P		Square terminal box (IP65 or equivalent) (G1/2)							100 VAC, 200 VAC, 12 VDC, 24 VDC, 48 VDC, 100 VDC			
3Q	Square terminal box + light (IP65 or equivalent) (G1/2)	100 VAC, 200 VAC, 24 VDC, 100 VDC										
4A	Option	Lead wire	B					G	H	S	100 VAC, 200 VAC	
4K		Square terminal box (G1/2)		D	E	F						
4H	Square terminal box + light (G1/2)											
5A	Open frame type (Diode integrated)	Lead wire	B				G	H	S	100 VAC, 200 VAC		
5K		Square terminal box (G1/2)		D	E	F						
5H		Square terminal box + light (G1/2)										
5P		Square terminal box (IP65 or equivalent) (G1/2)										
5Q	Square terminal box + light (IP65 or equivalent) (G1/2)											

⚠ Refer to the following precautions for (D) to (H).

3A 4A 5A		<ul style="list-style-type: none"> <li>● Open frame Grommet lead wire 300 mm</li> <li>● 4A (Heat proof class H)</li> <li>● 5A (Diode integrated)</li> </ul>
3K 3H 4K 4H 5K 5H		<ul style="list-style-type: none"> <li>● Open frame square terminal box</li> <li>● 4K, 4H (Heat proof class H)</li> <li>● 5K, 5H (Diode integrated)</li> </ul>
3P 3Q 5P 5Q		<ul style="list-style-type: none"> <li>● Open frame square terminal box (IP65 or equivalent)</li> <li>● 5P, 5Q (Diode integrated)</li> </ul>

G H		<ul style="list-style-type: none"> <li>● Conduit</li> <li>● G (CTC19)</li> <li>● H (G1/2)</li> </ul>
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Refer to page 222 for coil selection.

### ⚠ Note on model no. selection

#### Note on (D)

\*2: 5A, 5K, 5H, 5P and 5Q are coils which convert AC power to DC with a diode.

#### Note on (E) to (G)

- \*3: Select one among D, E, F, G and H for (F).
- \*4: The surge suppressor is an accessory for the lead wire coil. When using the coil with terminal box, the surge suppressor is mounted in the terminal box.
- \*5: Surge suppressor is incorporated in coil with diode as standard.
- \*6: Tropic care treatment (rust-proof coating) is available as a measure against rust.

#### Note on (H)

- \*7: 100 VAC coil is compatible with 100 VAC 50/60 Hz, 110 VAC 60 Hz, and 200 VAC coil is compatible with 200 VAC 50/60 Hz, 220 VAC 60 Hz. Note that (D) 5A, 5K, 5H, 5P, and 5Q coils are used only with 100 VAC 50/60 Hz or 200 VAC 50/60 Hz.
- \*8: Consult with CKD about other than above voltage.
- \*9: The lead wire is available in the standard 300 mm length, and 500 mm, 1000 mm, 2000 mm and 3000 mm lengths. Contact CKD for more information.

HNB/G

USB/G

FAB/G

FGB/G

FVB

FWB/G

FHB

FLB

AB

AG

AP/AD

APK/ADK

For dry air

Explosion proof

HVB/HVL

SAB/SVB

NP/NAP/NVP

CHB/G

MXB/G

Other G.P. systems

PD/FAD/PJ

CVE/CVSE

CPE/CPD

Medical analysis

Custom order

General purpose valve

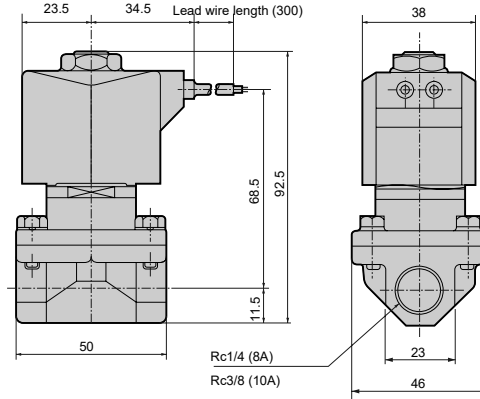
Pilot kick type 2 port solenoid valve

# ADK11/ADK12 Series

Dimensions: ADK11 Series

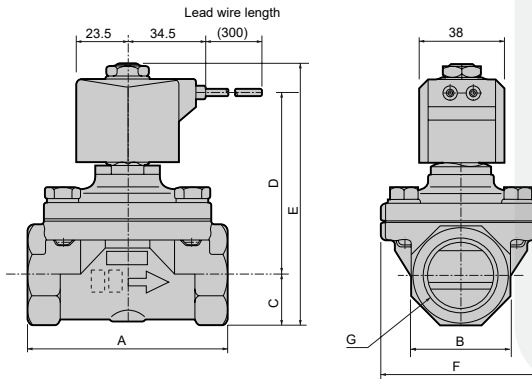


- Grommet lead wire type  
ADK11-8A/10A-\*2C



\*1: The dimensions are the same for the G or NPT thread port size.


- Grommet lead wire type  
ADK11-15A/20A/25A-\*2C



\*1: The dimensions are the same for the G or NPT thread port size.

Model no.	A	B	C	D	E	F	G
ADK11-15A-02C	71	29	14.5	75.5	102	50	Rc1/2
ADK11-20A-02C	80	35	17.5	79	108.5	60	Rc3/4
ADK11-25A-02C	90	45	22.5	84.5	119	71	Rc1

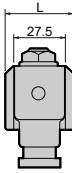
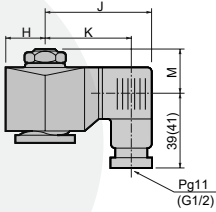
## Optional dimensions: ADK11 Series

 (Page 302)

\* Refer to the grommet lead wire type dimensions on the left page for the common dimensions.

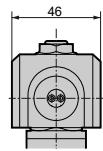
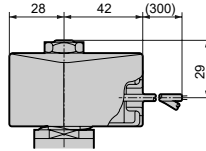
- DIN terminal box  
ADK11-8A to 25A-<sup>\*</sup>

2E
2G
2H



- Open frame type lead wire  
ADK11-8A to 25A-<sup>\*</sup>

3A
4A
5A

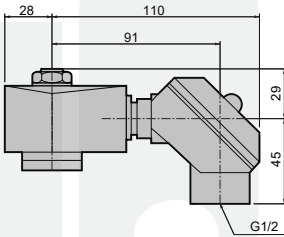


Dimensions shown in ( ) are for the G1/2.

Model no.	H	J	K	L	M
ADK11-8A to 25A- <sup>*</sup> 2□-AC	23.5	65.5	54(53.5)	38	22
ADK11-8A/10A- <sup>*</sup> 2□-DC	23.5	66	54.5(54)	38	22
ADK11-15A to 25A- <sup>*</sup> 2□-DC	28	72	60.5(60)	46	22

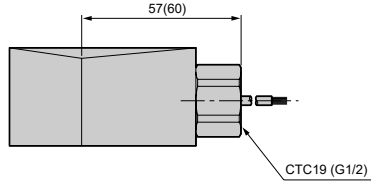
- Open frame type + square terminal box  
ADK11-8A to 25A-<sup>\*</sup>

3K	4K
5H	4H
P	Q



- Open frame type + conduit  
ADK11-8A to 25A-<sup>\*</sup>

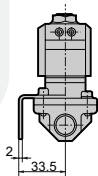
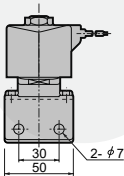
3A	G
4A	H
5A	



Dimensions shown in ( ) are for the G1/2.

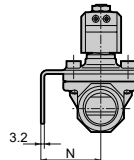
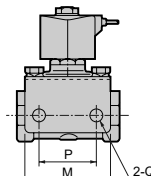
- Mounting plate  
ADK11-8A/10A-<sup>\*\*\*</sup>

B
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- Mounting plate  
ADK11-15A/20A/25A-<sup>\*\*\*</sup>

B
---



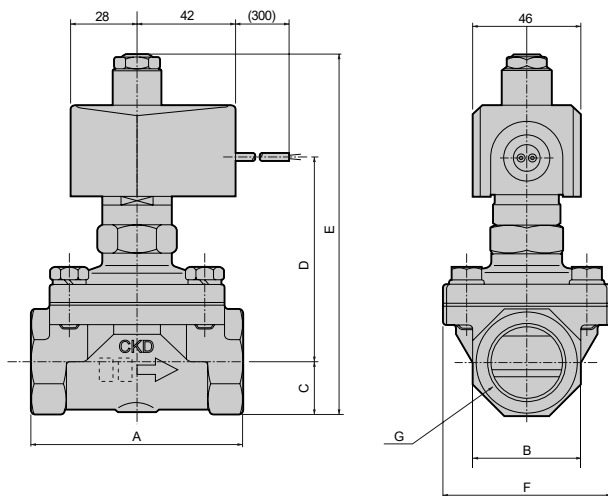
Model no.	M	N	P	Q
ADK11-15A- <sup>***</sup> B	56	45	40	φ9
ADK11-20A- <sup>***</sup> B	63	50	45	φ9
ADK11-25A- <sup>***</sup> B	75	56	50	φ11

HNB/G  
USB/G  
FAB/G  
FGB/G  
FVB  
FWB/G  
FHB  
FLB  
AB  
AG  
AP/AD  
APK/  
ADK  
For  
dry air  
Explosion  
proof  
HVB/  
HVL  
SAB/  
SVB  
NP/NAP/  
NVP  
CHB/G  
MXB/G  
Other G.P.  
systems  
PD/FAD/  
PJ  
CVE/  
CVSE  
CPE/  
CPD  
Medical  
analysis  
Custom  
order

General purpose valve  
Pilot kick type 2 port solenoid valve



- Open frame lead wire type  
ADK12-15A/20A/25A-\*3A



\*1: The dimensions are the same for the G or NPT thread port size.

Model no.	A	B	C	D	E	F	G
ADK12-15A-03A	71	29	14.5	77	134.5	50	Rc1/2
ADK12-20A-03A	80	35	17.5	80.5	141	60	Rc3/4
ADK12-25A-03A	90	45	22.5	86	151.5	71	Rc1

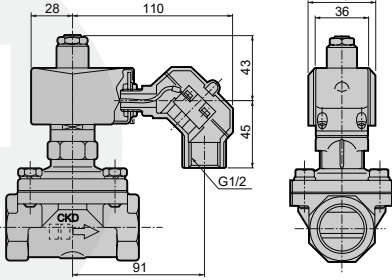
## Optional dimensions: ADK12 Series



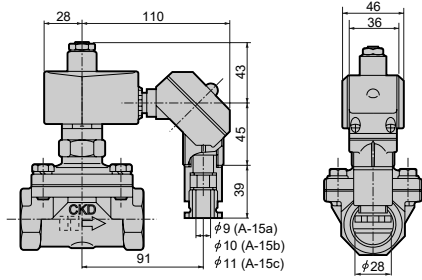
(Page 302)

\* Refer to open frame lead wire type dimensions on a left page for common dimensions.

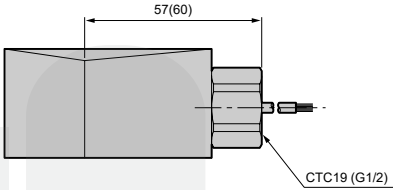
- Open frame type + square terminal box  
ADK12-15A/20A/25A-\*



- Open frame type + cable gland  
ADK12-15A/20A/25A-\*

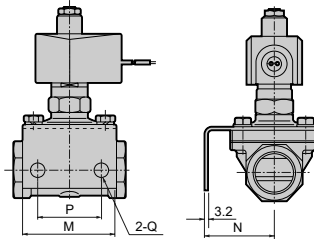


- Open frame type + conduit  
ADK12-15A/20A/25A-\*



Dimensions shown in ( ) are for the G1/2.

- Mounting plate  
ADK12-15A/20A/25A-\*\*\*B



Model no.	M	N	P	Q
<b>ADK12-15A-***B</b>	56	45	40	$\phi 9$
<b>ADK12-20A-***B</b>	63	50	45	$\phi 9$
<b>ADK12-25A-***B</b>	75	56	50	$\phi 11$

HNB/G

USB/G

FAB/G

FGB/G

FVB

FWB/G

FHB

FLB

AB

AG

AP/AD

APK/  
ADK

For  
dry air

Explosion  
proof

HVB/  
HVL

SAB/  
SVB

NP/NAP/  
NVP

CHB/G

MXB/G

Other G.P.  
systems

PD/FAD/  
PJ

CVE/  
CVSE

CPE/  
CPD

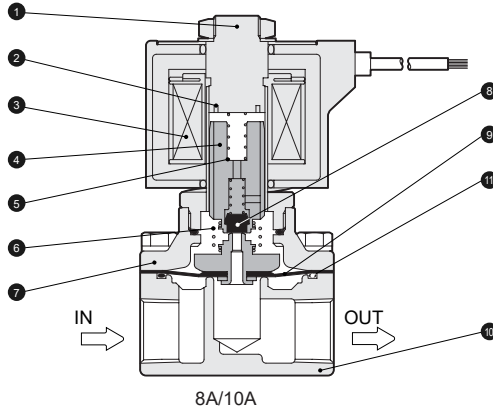
Medical  
analysis

Custom  
order

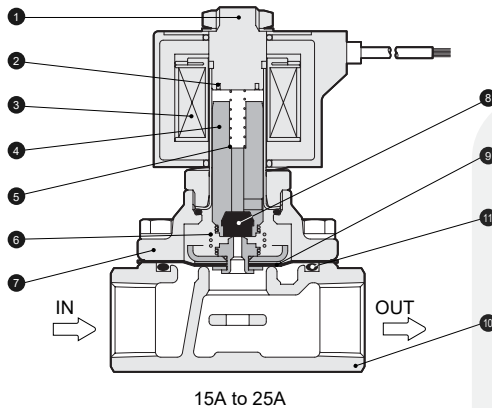
General purpose valve  
Pilot kick type 2 port solenoid valve

## Internal structure and main parts materials

### ●ADK11-8A/10A



### ●ADK11-15A/20A/25A



No.	Parts name	Material	
1	Core assembly	SUS405 or equivalent, SUS316L, SUS403	Stainless steel
2	Shading coil *1	Cu (Ag when stainless steel body)	Copper (silver when stainless steel body)
3	Coil	-	-
4	Plunger assembly	SUS405 or equivalent, SUS304, NBR (SUS405 or equivalent, SUS304, FKM or EPDM) *2, 3	Stainless steel
5	Plunger spring	SUS304	Stainless steel
6	Kick spring	SUS304	Stainless steel
7	Stuffing	C3771 (SCS13)	Bronze casting (stainless steel casting)
8	Sealant	NBR (FKM, EPDM)	Nitrile rubber (fluoro rubber or ethylene propylene diene rubber)
9	Diaphragm assembly	SUS303, SUS304, NBR (SUS303, SUS304, FKM or EPDM) *3	Stainless steel and nitrile rubber (stainless steel, fluoro rubber or ethylene propylene diene rubber)
10	Body	CAC407 (SCS13)	Bronze casting (stainless steel casting)
11	O ring	NBR (FKM, EPDM)	Nitrile rubber (fluoro rubber or ethylene propylene diene rubber)

Options are shown in ( ).

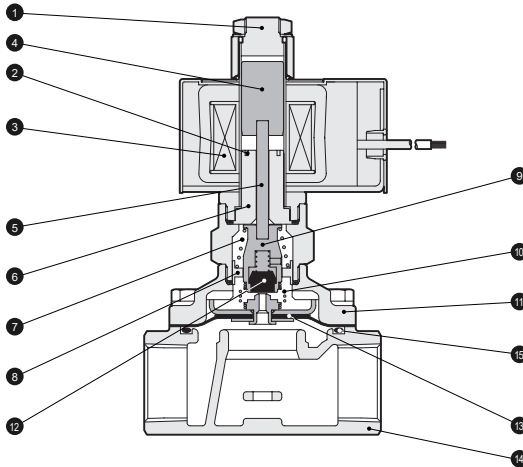
\*1: When using the DC coil or a coil with a diode, no shedding coil is used.

\*2: SUS304 is not used for the port size 15 (1/2) to 25 (1).

\*3: EPDM is not compatible with the port size 8 (1/4) and 10 (3/8).

## Internal structure and main parts materials

● ADK12 Series



No.	Parts name	Material	
1	Core assembly	SUS403, SUS316L, SUS304 *1	Stainless steel
2	Shading coil *2	Cu (Ag when stainless steel body)	Copper (silver when stainless steel body)
3	Coil	-	-
4	Plunger	SUS405 or equivalent	Stainless steel
5	Push rod	SUS304	Stainless steel
6	Fixed ferrous core	SUS405 or equivalent	Stainless steel
7	Spring	SUS304	Stainless steel
8	Spring holder	POM (SUS303)	Acetal resin (stainless steel)
9	NO valve assembly	SUS303, SUS304, NBR (SUS303, SUS304, FKM, EPDM)	Stainless steel and nitrile rubber (stainless steel, fluoro rubber or ethylene propylene diene rubber)
10	Kick spring	SUS304	Stainless steel
11	Stuffing	C3771 (SCS13)	Bronze casting (stainless steel casting)
12	Sealant	NBR (FKM, EPDM)	Nitrile rubber (fluoro rubber or ethylene propylene diene rubber)
13	Diaphragm assembly	SUS303, SUS304, NBR (SUS303, SUS304, FKM or EPDM)	Stainless steel and nitrile rubber (stainless steel, fluoro rubber or ethylene propylene diene rubber)
14	Body	CAC407 (SCS13)	Bronze casting (stainless steel casting)
15	O ring	NBR (FKM, EPDM)	Nitrile rubber (fluoro rubber or ethylene propylene diene rubber)

Options are shown in ( ).

\*1: When the body and sealant combination symbol is other than O or H, the material is SUS430, SUS316L, SUS304.

\*2: When using the DC coil or a coil with a diode, no shedding coil is used.

HNB/G

USB/G

FAB/G

FGB/G

FVB

FWB/G

FHB

FLB

AB

AG

AP/AD

APK/  
ADK

For  
dry air

Explosion  
proof

HVB/  
HVL

SAB/  
SVB

NP/NAP/  
NVP

CHB/G

MXB/G

Other G.P.  
systems

PD/FAD/  
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Medical  
analysis

Custom  
order

General purpose valve  
Pilot kick type 2 port solenoid valve