

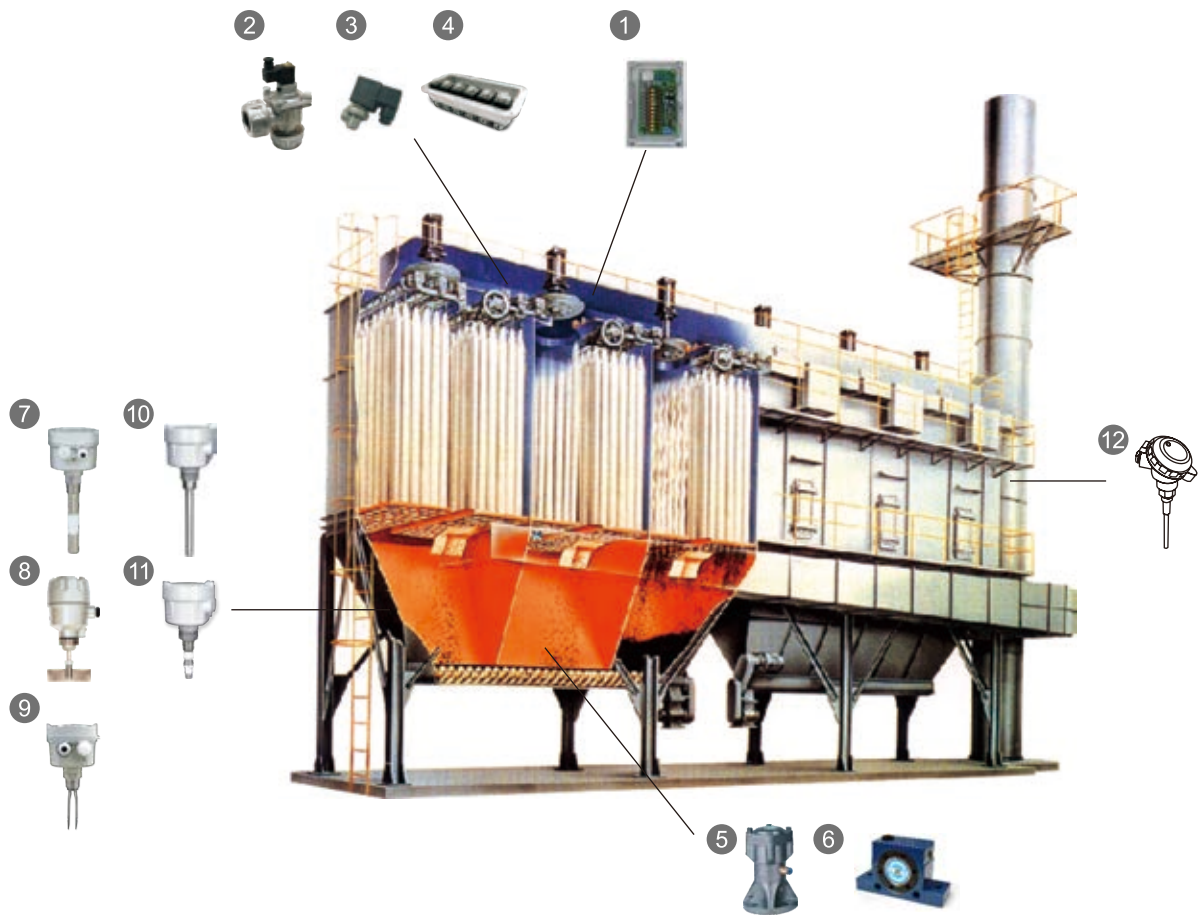


Valve and Controller for Dust Collector System





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1  Controller For Dust Collector System


2  Diaphragm Valve


3  Remote Solenoid Pilot


4  Remote Solenoid Enclosure


5  Air Hammer

6  Pneumatic Vibrator

7  Capacitance Level Switch

8  Rotary Paddle Level Switch

9  Tuning Fork Level Switch

10  Vibrating Probe Level Switch

11  RF Capacitance admittance Level Switch

12  Snifter dust monitor

PRODUCT INFORMATION

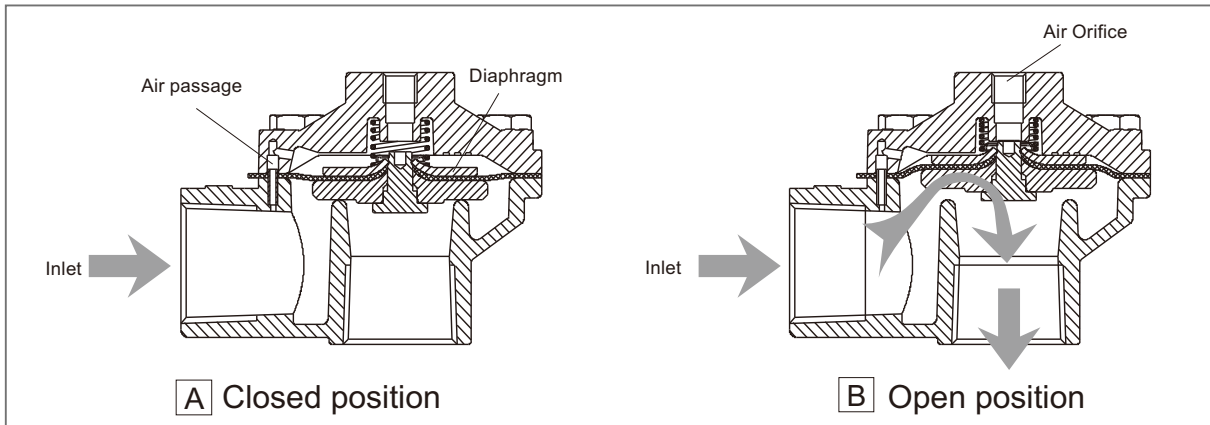
WORKING PRINCIPLE

The diaphragm valves are used specifically in the dust collector system. The valve consists of 2 air chambers divided by a piece of diaphragm. The 2 chambers are connected through an air passage (air passage's diameter is smaller than the orifice of the pilot valve). When the orifice opens, the air in the upper chamber is exhausted much faster than the speed of air that enters through the air passage. The air pressure of the upper chamber drops significantly, the higher pressure of the lower chamber pushes the diaphragm up and opens a bigger passage for air to enter into the bottom chamber. This sudden burst of air is used to inflate the fabric filter so as to shake off all the dust clinging on the bag filter. When the orifice closes, the pressure in both chambers equalizes and the diaphragm returns to its original position via the force of the coiled spring.

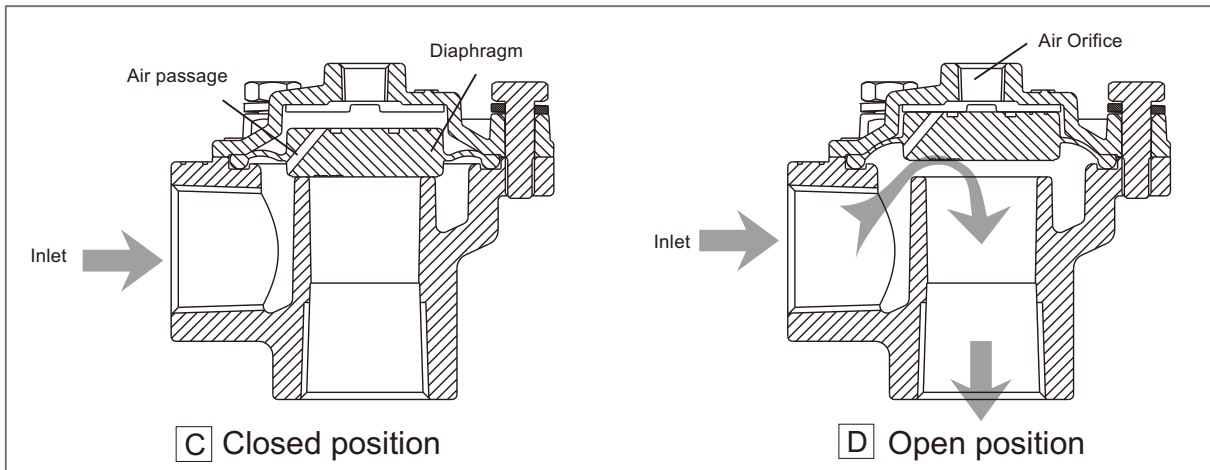
FEATURES

- Fast response, large flow volume, effective cleaning action on fabric filter
- Low air consumption
- Compatible with programmable sequential controller
- Ease of adjustment in jet pulse timing and duration

BRD:



BDV:



DIAPHRAGM VALVES WITH FEMALE THREADS



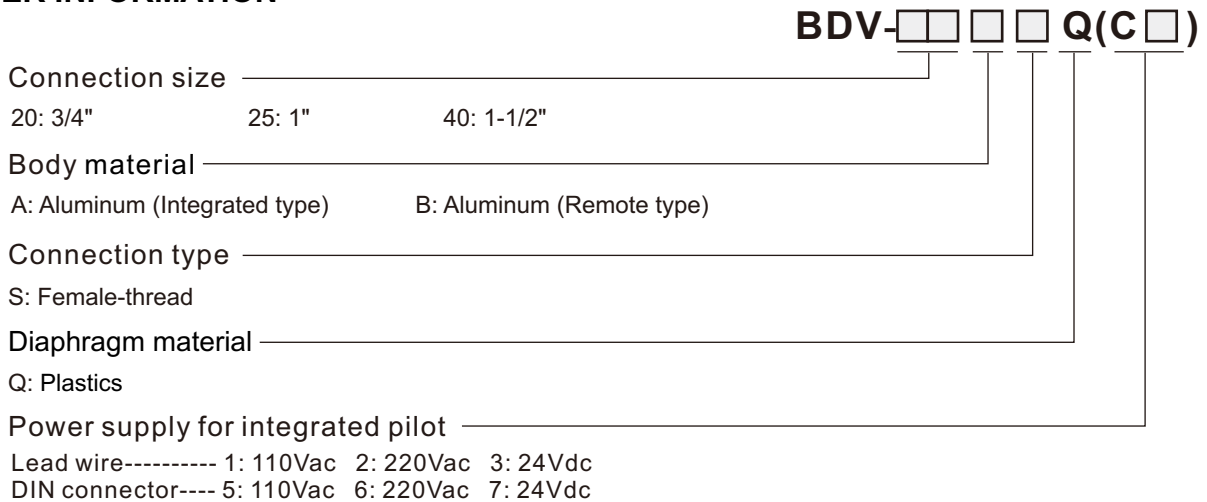
DESCRIPTION

Fast response, large flow volume, effective cleaning action on fabric filter.
 Low air consumption.
 Compatible with programmable sequential controller.
 Ease of adjustment in jet pulse timing and duration.

APPLICATION

Pulse cleaning and filtering system in dust collectors, also suitable for filter bags, filter barrels, flat bags, ceramic tubes and filter bags for metal fiber.

ORDER INFORMATION



DIAPHRAGM VALVES WITH FEMALE THREADS REMOTE TYPE



GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

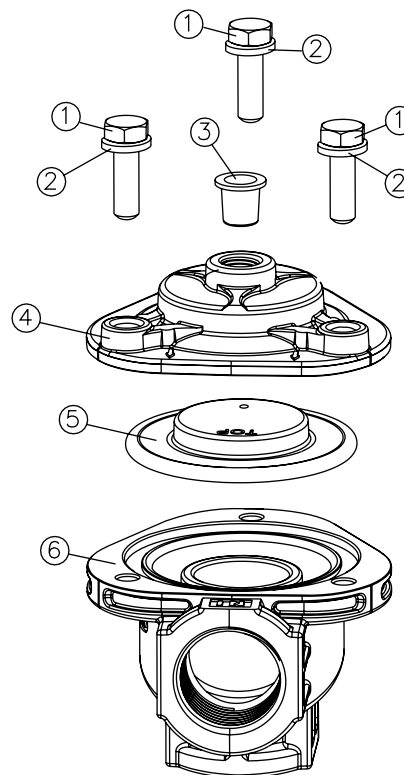
NO.	
1	Hexagon cover screws
2	Spring washer
3	Plastic plug
4	Top cover
5	Diaphragm
6	Body

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz

Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz

Ambient temp. : -20 ~ 50°C

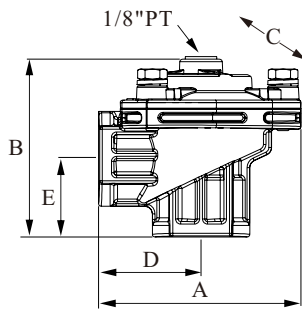


CONSTRUCTION

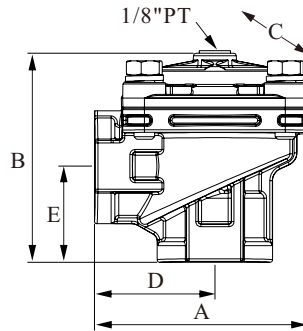
Cover : Aluminum
 Body : Aluminum

DIAPHRAGM VALVES WITH FEMALE THREADS REMOTE TYPE

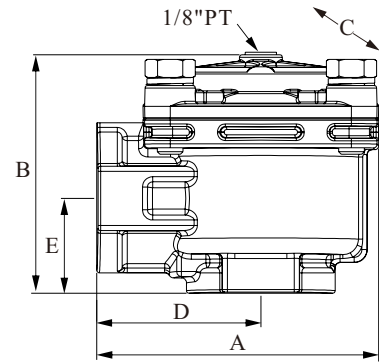
Model: BDV-20BS



Model: BDV-25BS



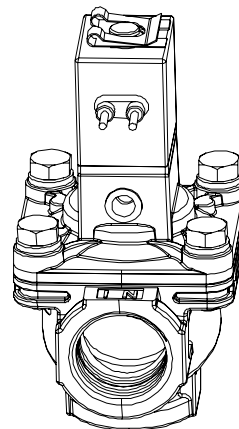
Model: BDV-40BS



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BDV-20BS	3.11	79	2.75	70	2.87	73	1.57	40	1.22	31
BDV-25BS	3.3	84	3.22	82	2.87	73	1.85	47	1.49	38
BDV-40BS	4.33	110	3.66	93	3.62	92	2.52	64	1.45	37

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BDV-20BS	3/4"	1	12.04	14	0.3 ~ 8.6	220
BDV-25BS	1"	1	19.78	23	0.3 ~ 8.6	370
BDV-40BS	1-1/2"	1	36.12	42	0.3 ~ 8.6	680

DIAPHRAGM VALVES WITH FEMALE THREADS INTEGRATED TYPE



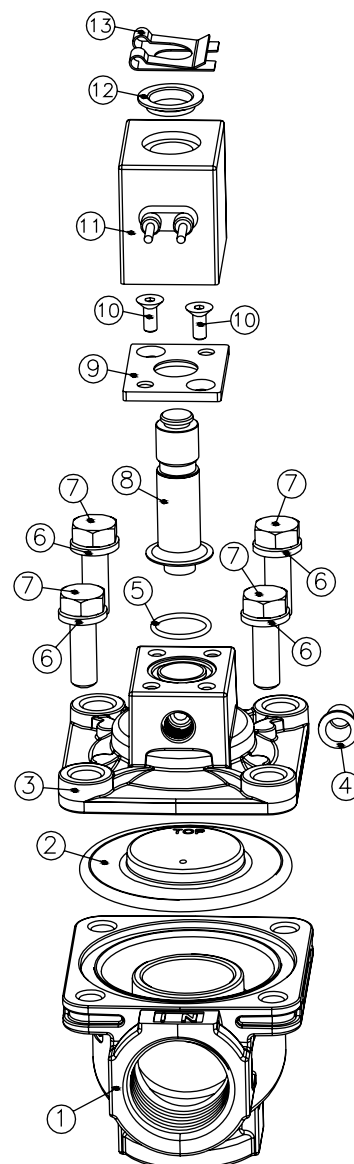
GENERAL FEATURES

Fluids : Air
 Diaphragm material : Specially Plastics
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Body
2	Diaphragm
3	Top cover
4	Plastic plug
5	O-ring
6	Spring washer
7	Hexagon cover screws
8	Pilot group
9	Base
10	Screws
11	Solenoid valve
12	Washer
13	Clip

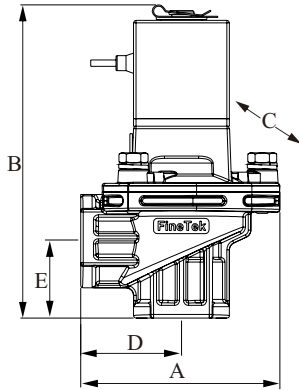


CONSTRUCTION

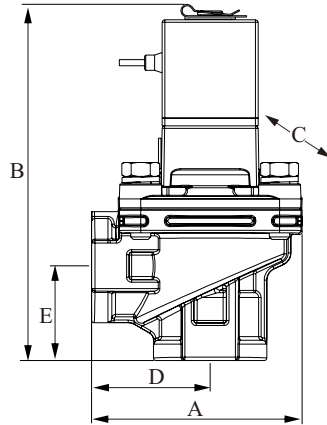
Cover : Aluminum
 Body : Aluminum

DIAPHRAGM VALVES WITH FEMALE THREAD INTEGRATED TYPE

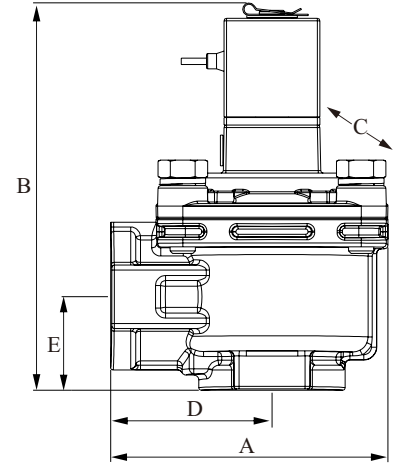
Model:BDV-20AS



Model:BDV-25AS



Model:BDV-40AS



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BDV-20AS□C□	3.11	79	4.88	124	2.87	73	1.57	40	1.22	31
BDV-25AS□C□	3.3	84	5.55	141	2.87	73	1.85	47	1.49	38
BDV-40AS□C□	4.33	110	6	153	3.62	92	2.52	64	1.45	37

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BDV-20AS□C□	3/4"	1	12.04	14	0.3 ~ 8.6	470
BDV-25AS□C□	1"	1	19.78	23	0.3 ~ 8.6	620
BDV-40AS□C□	1-1/2"	1	36.12	42	0.3 ~ 8.6	930

DIAPHRAGM VALVES WITH FEMALE THREAD(NBR DIAPHRAGM)



DESCRIPTION

Fast response, large flow volume, effective cleaning action on fabric filter.
 Low air consumption.
 Compatible with programmable sequential controller.
 Ease of adjustment in jet pulse timing and duration.

APPLICATION

Pulse cleaning and filtering system in dust collectors, also suitable for filter bags, filter barrels, flat bags, ceramic tubes and filter bags for metal fiber.

ORDER INFORMATION

BRD- **SC**

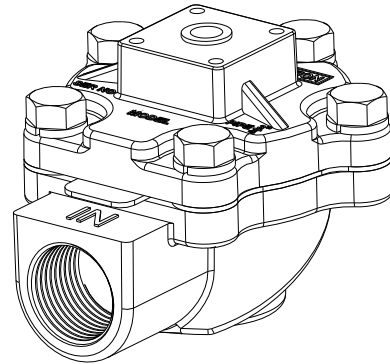
Connection size _____

Single diaphragm---- 20: 3/4" PT 25: 1" PT 40: 1-1/2" PT
 Double diaphragm--- 42: 1-1/2" PT 52: 2" PT 62: 2-1/2" PT 72: 3" PT

Power supply for integrated pilot _____

Lead wire----- 1: 110Vac 2: 220Vac 3: 24Vdc
 DIN connector---- 5: 110Vac 6: 220Vac 7: 24Vdc

DIAPHRAGM VALVES WITH FEMALE THREAD REMOTE TYPE



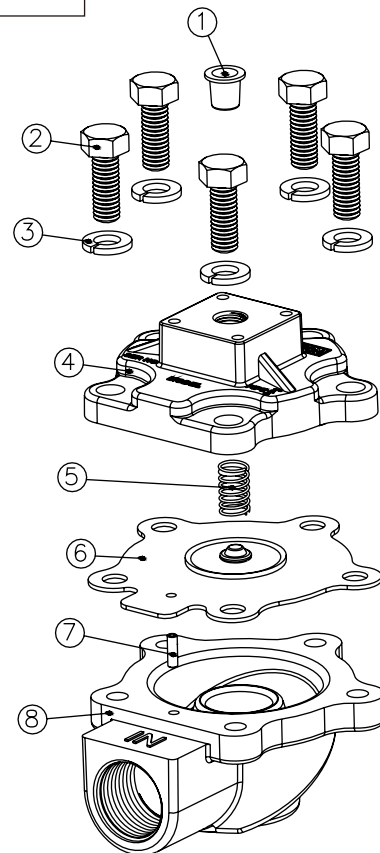
GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Plastic plug
2	Hexagon cover screws
3	Spring washer
4	Top cover
5	Spring
6	Diaphragm
7	Air passage
8	Body

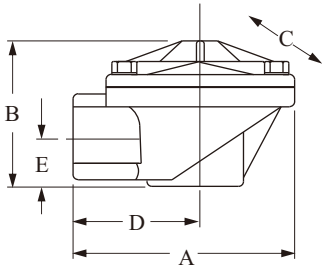


CONSTRUCTION

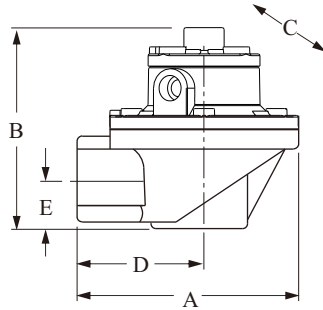
Cover : Aluminum
 Body : Aluminum

DIAPHRAGM VALVES WITH FEMALE THREAD REMOTE TYPE

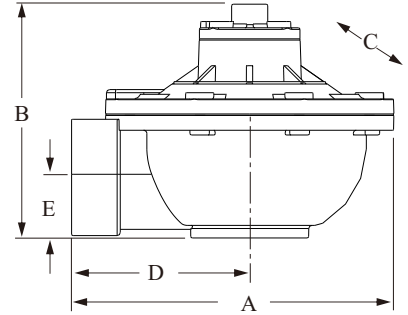
Model:BRD-□□SC



Model: BRD-42SC



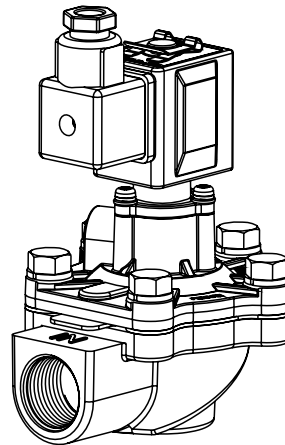
Model: BRD-□2SC



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BRD-20SC	3.95	100	2.97	75	3.44	87	2.19	56	0.78	20
BRD-25SC	4.13	105	3	76	3.25	83	2.50	64	0.87	22
BRD-40SC	5.12	130	4.91	125	4.37	111	4.5	75	1.28	36
BRD-42SC	5.12	130	5.16	131	4.37	111	4.5	75	1.28	36
BRD-52SC	8.07	205	5.87	149	7.24	184	4.45	113	1.55	40
BRD-62SC	8.27	210	6.69	170	7.24	184	4.65	118	1.89	48
BRD-72SC	8.58	218	7.83	199	7.87	200	4.65	118	2.48	63

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-20SC	3/4"	1	12.04	14	0.3 ~ 8.6	420
BRD-25SC	1"	1	19.78	23	0.3 ~ 8.6	520
BRD-40SC	1-1/2"	1	36.12	42	0.3 ~ 8.6	960
BRD-42SC	1-1/2"	2	43.86	51	0.3 ~ 8.6	1160
BRD-52SC	2"	2	91.16	106	0.3 ~ 8.6	2380
BRD-62SC	2-1/2"	2	116.96	136	0.3 ~ 8.6	2500
BRD-72SC	3"	2	143.62	167	0.3 ~ 8.6	3000

DIAPHRAGM VALVES WITH FEMALE THREAD INTEGRATED TYPE



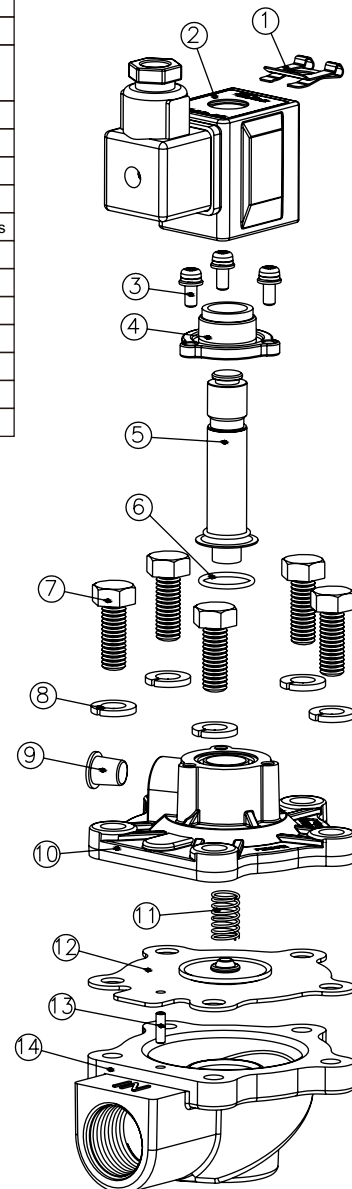
GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Clip
2	Solenoid valve with DIN connector
3	Screws
4	Base
5	Pilot group
6	O-ring
7	Hexagon cover screws
8	Spring washer
9	Plastic plug
10	Top cover
11	Spring
12	Diaphragm
13	Air passage
14	Body

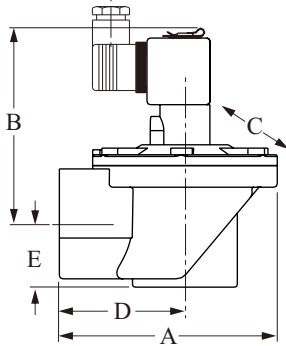


CONSTRUCTION

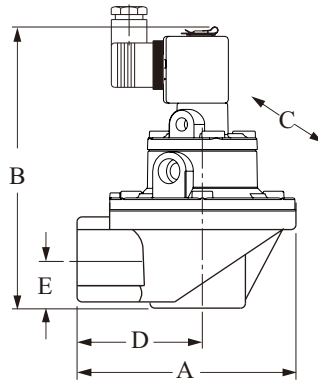
Cover : Aluminum
 Body : Aluminum

DIAPHRAGM VALVES WITH FEMALE THREAD INTEGRATED TYPE

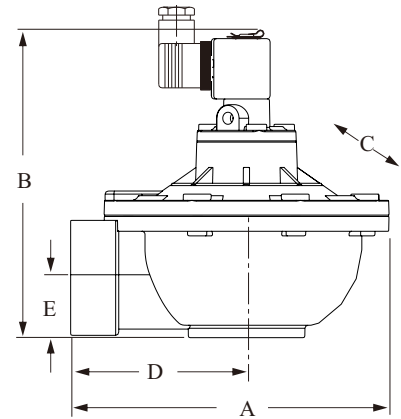
Model:BRD-□□SC



Model:BRD-42SC



Model:BRD-□2SC



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BRD-20SC□	3.95	100	4.8	122	3.44	87	2.19	56	0.78	20
BRD-25SC□	4.13	105	4.96	126	3.25	83	2.50	64	0.87	22
BRD-40SC□	5.12	130	6.06	154	4.37	111	4.5	75	1.28	36
BRD-42SC□	5.12	130	7.20	183	4.37	111	4.5	75	1.28	36
BRD-52SC□	8.07	205	7.91	201	7.24	184	4.45	113	1.55	40
BRD-62SC□	8.27	210	8.74	222	7.24	184	4.65	118	1.89	48
BRD-72SC□	8.58	218	9.88	251	7.87	200	4.65	118	2.48	63

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-20SC□	3/4"	1	12.04	14	0.3 ~ 8.6	600
BRD-25SC□	1"	1	19.78	23	0.3 ~ 8.6	750
BRD-40SC□	1-1/2"	1	36.12	42	0.3 ~ 8.6	1160
BRD-42SC□	1-1/2"	2	43.86	51	0.3 ~ 8.6	1000
BRD-52SC□	2"	2	91.16	106	0.3 ~ 8.6	1900
BRD-62SC□	2-1/2"	2	116.96	136	0.3 ~ 8.6	2500
BRD-72SC□	3"	2	143.62	167	0.3 ~ 8.6	4220

DIAPHRAGM VALVES WITH QUICK FITTINGS



DESCRIPTION

One piece membrane with better sealing to save air supply.
 Compact design for quick installation.
 Fewer components for easier maintenance.
 Fast response, large flow volume, effective cleaning action on fabric filter.
 Low air consumption.
 Compatible with programmable sequential controller.
 Ease of adjustment in jet pulse timing and duration.

APPLICATION

Pulse cleaning and filtering system in dust collectors, also suitable for filter bags, filter barrels, flat bags, ceramic tubes and filter bags for metal fiber.

ORDER INFORMATION

BDV-□□□□ Q(C□□)

Connection size _____
 20: 3/4" 25: 1" 40: 1-1/2"

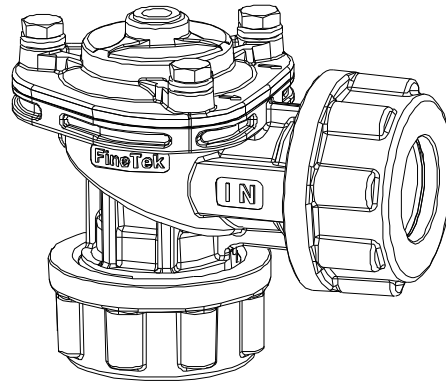
Body material _____
 A: Aluminum (Integrated type) B: Aluminum (Remote type)

Connection type _____
 N: Quick fittings

Diaphragm material _____
 Q: Plastics

Power supply for integrated pilot _____
 Lead wire----- 1: 110Vac 2: 220Vac 3: 24Vdc
 DIN connector---- 5: 110Vac 6: 220Vac 7: 24Vdc

DIAPHRAGM VALVES WITH QUICK FITTINGS REMOTE TYPE



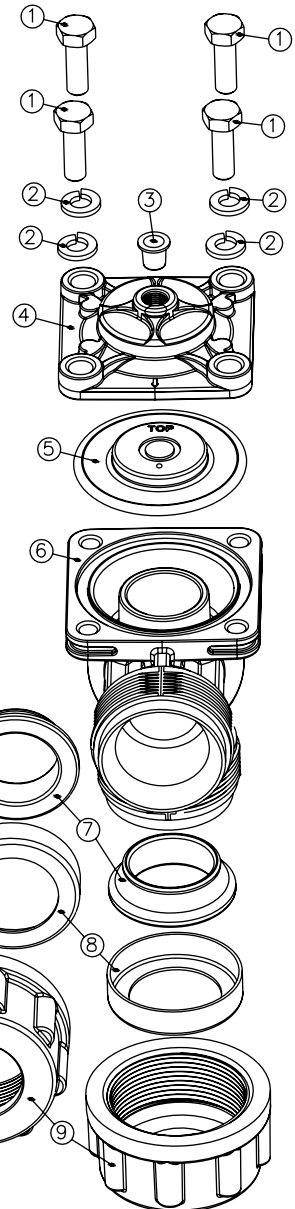
GENERAL FEATURES

Fluids : Air
 Diaphragm material: Specially Plastics
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment: EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Hexagon cover screws
2	Spring washer
3	Plastic plug
4	Top cover
5	Diaphragm
6	Body
7	Conic seal for dresser nut
8	Dresser nut insert
9	Dresser nut

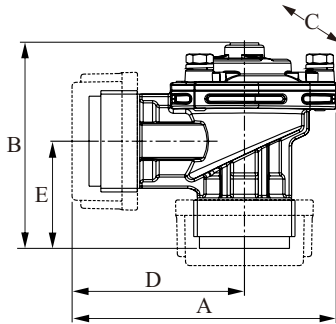


CONSTRUCTION

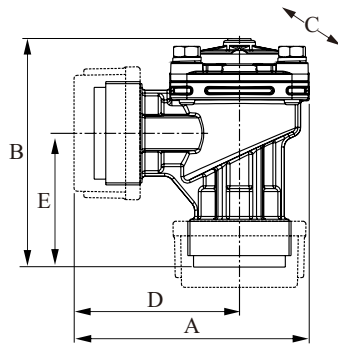
Cover : Aluminum
 Body : Aluminum

DIAPHRAGM VALVES WITH QUICK FITTINGS REMOTE TYPE

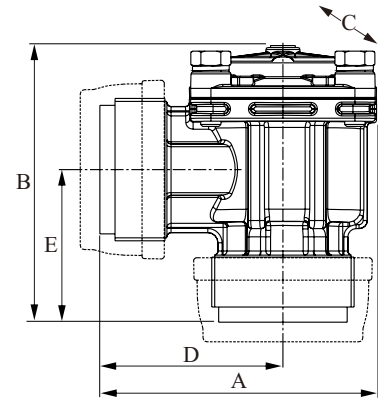
Model: BDV-20BN



Model: BDV-25BN



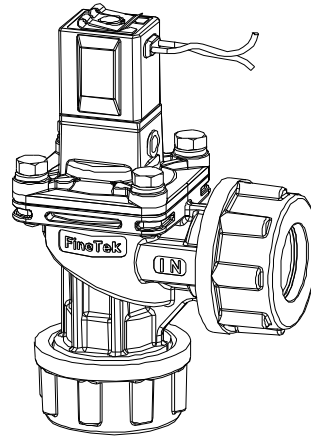
Model: BDV-40BN



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BDV-20BN	4.13	105	3.38	86	2.87	73	2.60	66	1.79	45.5
BDV-25BN	4.43	112.5	4.66	118.5	2.87	73	2.99	76	2.74	70
BDV-40BN	5.36	136	5.31	135	3.62	92	3.54	90	2.95	75

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BDV-20BN	3/4"	1	12.04	14	0.3 ~ 8.6	460
BDV-25BN	1"	1	19.78	23	0.3 ~ 8.6	830
BDV-40BN	1-1/2"	1	36.12	42	0.3 ~ 8.6	680

DIAPHRAGM VALVES WITH QUICK FITTINGS INTEGRATED TYPE



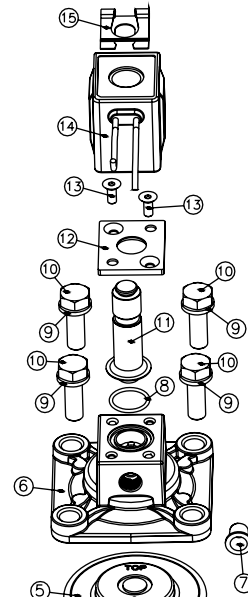
GENERAL FEATURES

Fluids : Air
 Diaphragm material : Specially Plastics
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

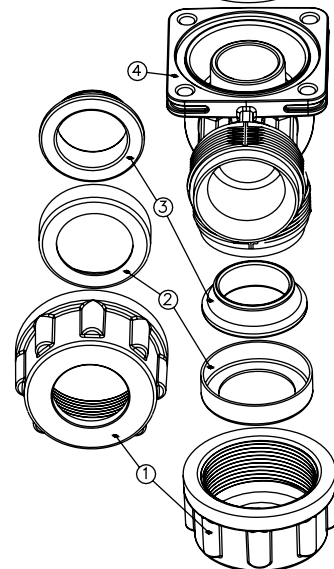
Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Dresser nut
2	Dresser nut insert
3	Conic seal for dresser nut
4	Body
5	Diaphragm
6	Top cover
7	Plastic plug
8	O-ring
9	Spring washer
10	Hexagon cover screws
11	Pilot group
12	Base
13	Screws
14	Solenoid valve
15	Clip



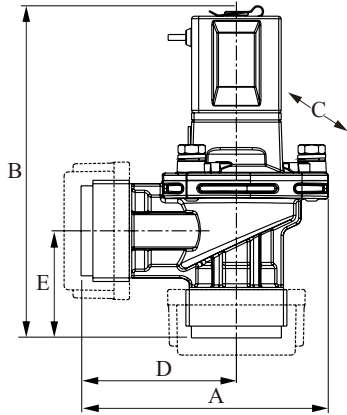
CONSTRUCTION

Cover : Aluminum
 Body : Aluminum

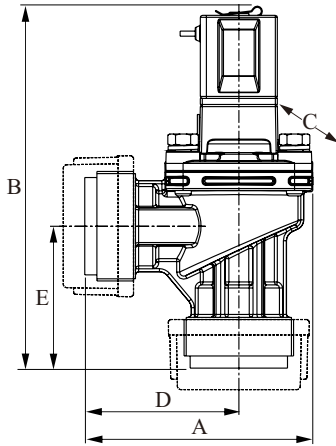


DIAPHRAGM VALVES WITH QUICK FITTINGS INTEGRATED TYPES

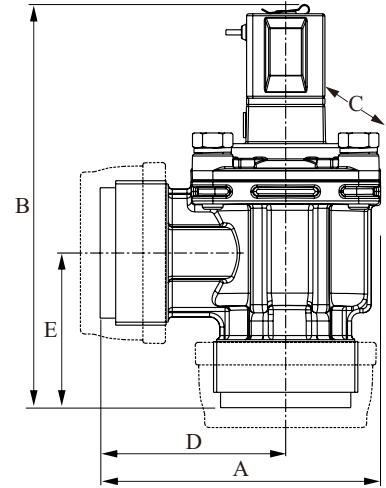
Model: BDV-20AN



Model: BDV-25AN



Model: BDV-40AN



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BDV-20AN□C□	4.13	105	5.55	141	2.87	73	2.60	66	1.79	45.5
BDV-25AN□C□	4.43	112.5	7.02	178.5	2.87	73	2.99	76	2.74	70
BDV-40AN□C□	5.36	136	7.69	195.5	3.62	92	3.54	90	2.75	75

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BDV-20AN□C□	3/4"	1	12.04	14	0.3 ~ 8.6	700
BDV-25AN□C□	1"	1	19.78	23	0.3 ~ 8.6	1080
BDV-40AN□C□	1-1/2"	1	36.12	42	0.3 ~ 8.6	930

DIAPHRAGM VALVES WITH QUICK FITTINGS



DESCRIPTION

NC Series is a range of diaphragm solenoid valves for the cleaning of dust collector filters with compressed air. These valves allow a very quick connection, by fitting directly to non-threaded pipes.

APPLICATION

Pulse cleaning and filtering system in dust collectors, also suitable for filter bags, filter barrels, flat bags, ceramic tubes and filter bags for metal fiber.

ORDER INFORMATION

BRD- NC

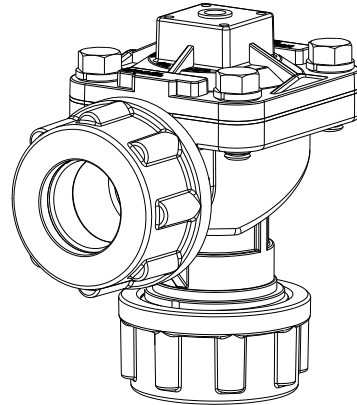
Connection size _____

Single diaphragm---- 20: 3/4" PT 25: 1" PT 40: 1-1/2" PT
 Double diaphragm--- 42: 1-1/2" PT

Power supply for integrated pilot _____

Lead wire----- 1: 110Vac 2: 220Vac 3: 24Vdc
 DIN connector---- 5: 110Vac 6: 220Vac 7: 24Vdc

DIAPHRAGM VALVES WITH QUICK FITTINGS REMOTE TYPE



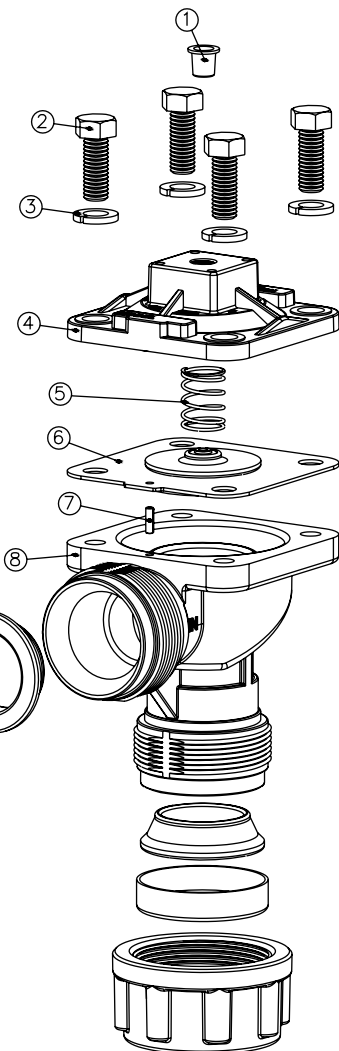
GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

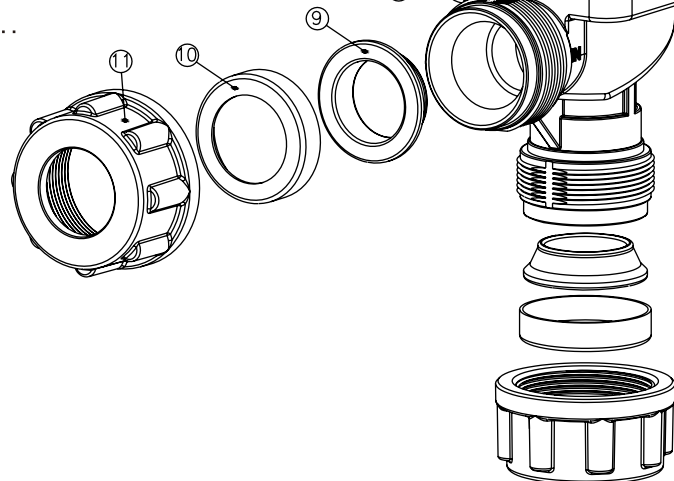
Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Plastic plug
2	Hexagon cover screws
3	Spring washer
4	Top cover
5	Spring
6	Diaphragm
7	Air passage
8	Body
9	Conic seal for dresser nut
10	Dresser nut insert
11	Dresser nut



CONSTRUCTION

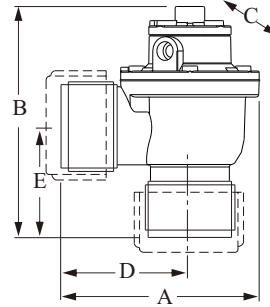
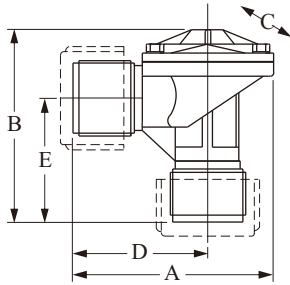
Cover : Aluminum
 Body : Aluminum



DIAPHRAGM VALVES WITH QUICK FITTINGS REMOTE TYPE

Model: BRD-□□NC

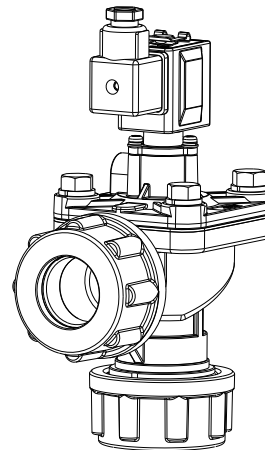
Model: BRD-42NC



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BRD-20NC	4.41	112	4	102	3.43	87	2.63	67	1.77	45
BRD-25NC	4.62	117	5	127	3.25	83	3	76	2.75	70
BRD-40NC	5.78	147	5.47	139	4.37	111	3.6	92	3	76
BRD-42NC	5.78	147	6.77	172	4.37	111	3.6	92	3	76

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-20NC	3/4"	1	12.04	14	0.3 ~ 8.6	620
BRD-25NC	1"	1	19.78	23	0.3 ~ 8.6	960
BRD-40NC	1-1/2"	1	36.12	42	0.3 ~ 8.6	1100
BRD-42NC	1-1/2"	2	43.86	51	0.3 ~ 8.6	1760

DIAPHRAGM VALVES WITH QUICK FITTINGS INTEGRATED TYPE



GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

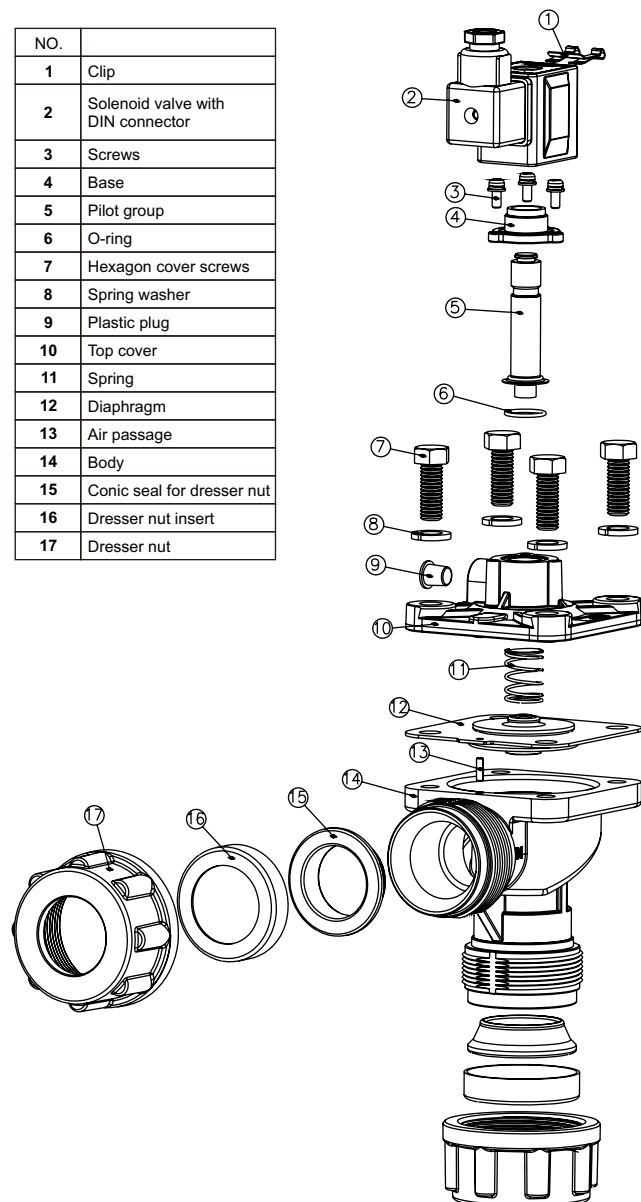
ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz

Power consumption : DC-12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz

Ambient temp. : -20 ~ 50°C

NO.	
1	Clip
2	Solenoid valve with DIN connector
3	Screws
4	Base
5	Pilot group
6	O-ring
7	Hexagon cover screws
8	Spring washer
9	Plastic plug
10	Top cover
11	Spring
12	Diaphragm
13	Air passage
14	Body
15	Conic seal for dresser nut
16	Dresser nut insert
17	Dresser nut



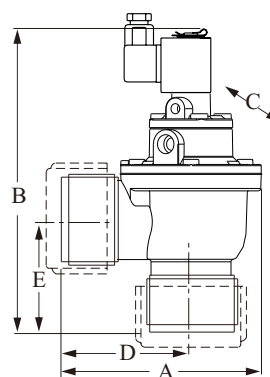
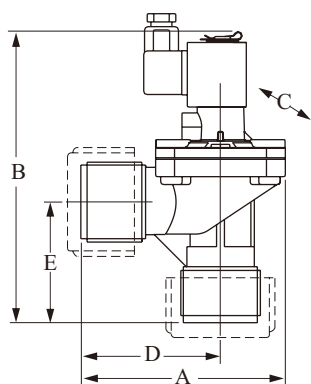
CONSTRUCTION

Cover : Aluminum
 Body : Aluminum

DIAPHRAGM VALVES WITH QUICK FITTINGS INTEGRATED TYPE

Model: BRD-□□NC□

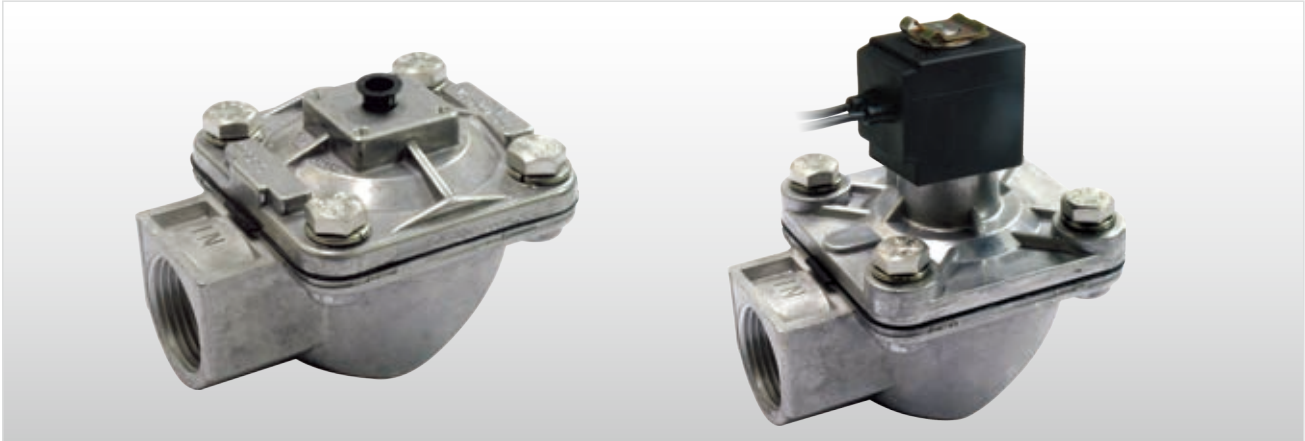
Model: BRD-42NC□



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BRD-20NC□	4.41	112	5.83	148	3.43	87	2.63	67	1.87	45
BRD-25NC□	4.62	117	6.96	177	3.25	83	3	76	2.75	70
BRD-40NC□	5.78	147	7.64	194	4.37	111	3.6	92	3	76
BRD-42NC□	5.78	147	8.82	224	4.37	111	3.6	92	3	76

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-20NC□	3/4"	1	12.04	14	0.3 ~ 8.6	830
BRD-25NC□	1"	1	19.78	23	0.3 ~ 8.6	1220
BRD-40NC□	1-1/2"	1	36.12	42	0.3 ~ 8.6	1770
BRD-42NC□	1-1/2"	2	43.86	51	0.3 ~ 8.6	1450

STAINLESS STEEL DIAPHRAGM VALVES WITH FEMALE THREADS



DESCRIPTION

The range of UC Series includes two models of 1" and 1-1/2", both single diaphragm and threaded female gas connections. These valves are made of Stainless Steel SUS316. These types of diaphragm valves are suitable for installation in very corrosive environments such as chemical industry, nuclear and off-shore plants.

APPLICATION

Pulse cleaning and filtering system in dust collectors, also suitable for filter bags, filter barrels, flat bags, ceramic tubes and filter bags for metal fiber.

ORDER INFORMATION

BRD- UC

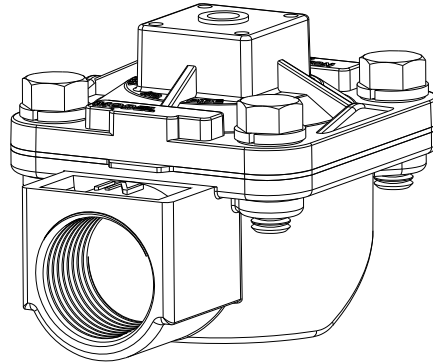
Connection size _____

- 25: 1" PT
- 40: 1-1/2" PT

Power supply for integrated pilot _____

- Lead wire----- 1: 110Vac 2: 220Vac 3: 24Vdc
- DIN connector---- 5: 110Vac 6: 220Vac 7: 24Vdc

STAINLESS STEEL DIAPHRAGM VALVES WITH FEMALE THREADS REMOTE TYPE



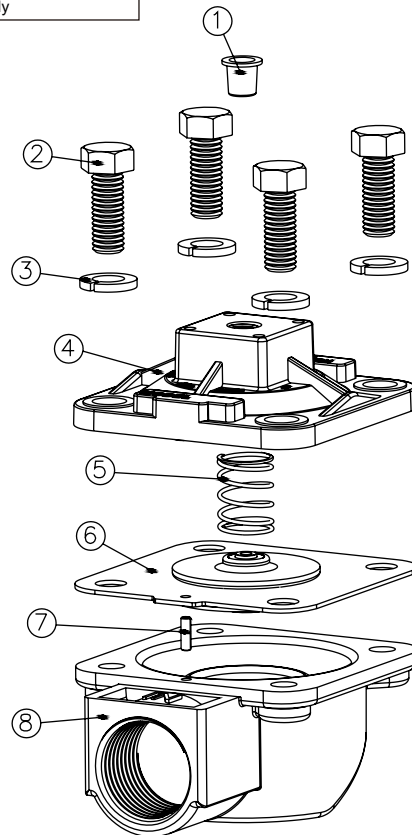
GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Plastic plug
2	Hexagon cover screws
3	Spring washer
4	Top cover
5	Spring
6	Diaphragm
7	Air passage
8	Body

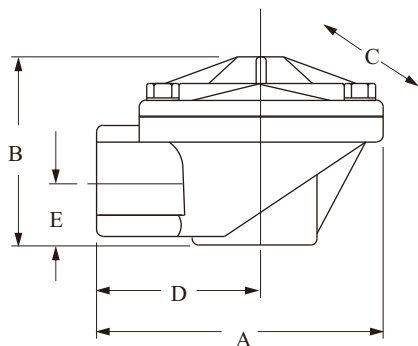


CONSTRUCTION

Cover : Aluminum
 Body : Aluminum

STAINLESS STEEL DIAPHRAGM VALVES WITH FEMALE THREADS REMOTE TYPE

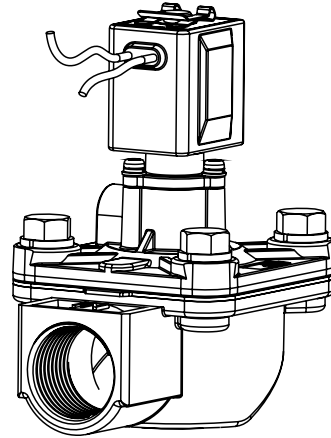
Model: BRD-□□UC



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BRD-25UC	4.13	105	3	76	3.25	83	2.50	64	0.87	22
BRD-40UC	5.12	130	4.91	125	4.37	111	4.5	75	1.28	36

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-25UC	1"	1	19.78	23	0.3 ~ 8.6	1800
BRD-42UC	1-1/2"	1	36.12	42	0.3 ~ 8.6	2700

STAINLESS STEEL DIAPHRAGM VALVES WITH FEMALE THREADS INTEGRATED TYPE



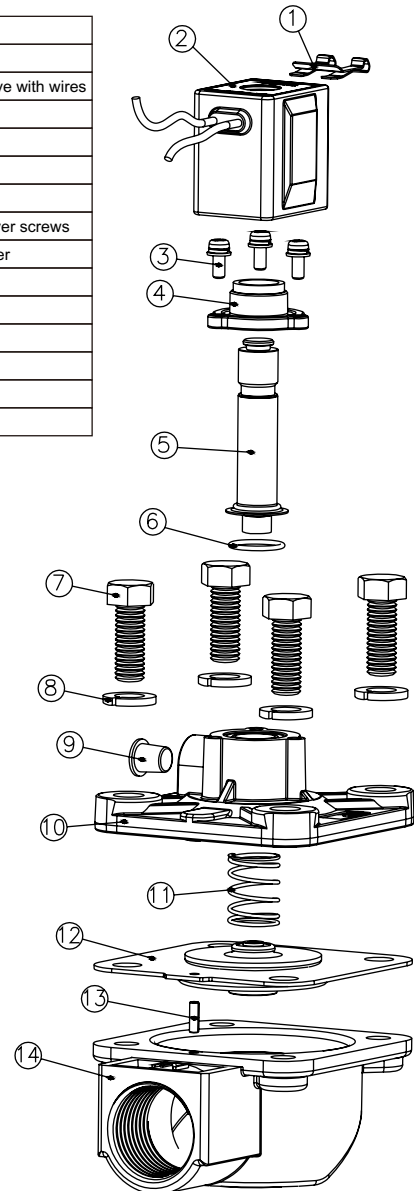
GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Clip
2	Solenoid valve with wires
3	Screws
4	Base
5	Pilot group
6	O-ring
7	Hexagon cover screws
8	Spring washer
9	Plastic plug
10	Top cover
11	Spring
12	Diaphragm
13	Air passage
14	Body

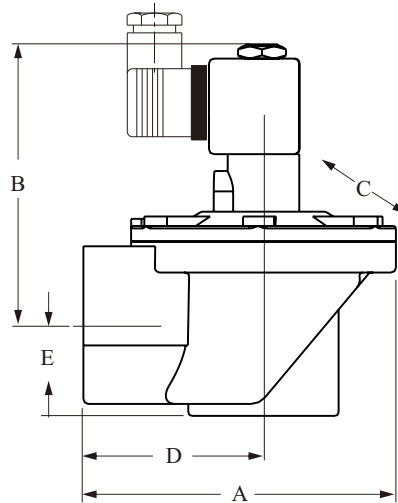


CONSTRUCTION

Cover : Aluminum
 Body : Aluminum

STAINLESS STEEL DIAPHRAGM VALVES WITH FEMALE THREADS INTEGRATED TYPE

Model: BRD-□□UC□



Model	A		B		C (wide)		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
BRD-25UC	4.13	105	4.96	126	3.25	83	2.50	64	0.87	22
BRD-40UC	5.12	130	6.06	154	4.37	111	4.5	76	1.28	36

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-25UC	1"	1	19.78	23	0.3 ~ 8.6	1800
BRD-40UC	1-1/2"	1	36.12	42	0.3 ~ 8.6	2700

“FULL IMMERSION” DIAPHRAGM VALVES



DESCRIPTION

The range of UC Series includes two models of 1" and 1-1/2", both single diaphragm and threaded female gas connections. These valves are made of Stainless Steel SUS316. These types of diaphragm valves are suitable for installation in very corrosive environments such as chemical industry, nuclear and off-shore plants.

APPLICATION

Pulse cleaning and filtering system in dust collectors, also suitable for filter bags, filter barrels, flat bags, ceramic tubes and filter bags for metal fiber.

ORDER INFORMATION

BRD- MM

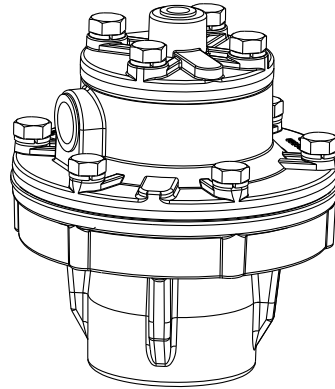
Connection size

- 25: 1" PT
- 40: 1-1/2" PT
- 42: 1-1/2" PT

Power supply for integrated pilot

- Lead wire----- 1: 110Vac 2: 220Vac 3: 24Vdc
- DIN connector---- 5: 110Vac 6: 220Vac 7: 24Vdc

“FULL IMMERSION” DIAPHRAGM VALVES



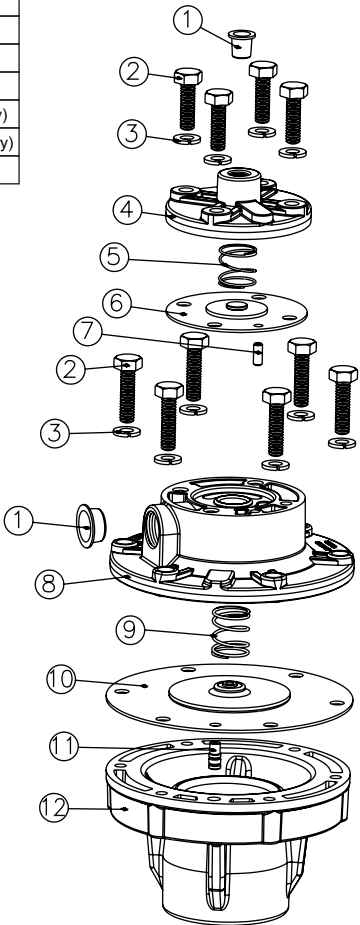
GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

NO.	
1	Plastic plug
2	Hexagon cover screws
3	Spring washer
4	Top cover
5	Spring
6	Diaphragm
7	Air passage
8	intermediate cover
9	Spring
10	Diaphragm (secondary)
11	Air passage (secondary)
12	Body

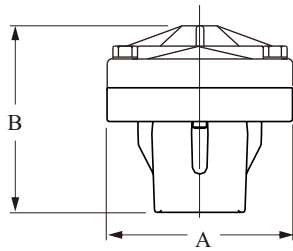


CONSTRUCTION

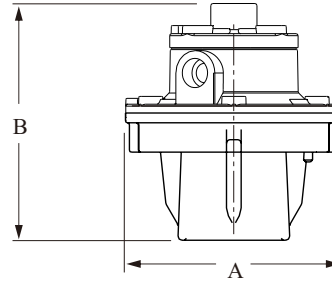
Cover : Aluminum
 Body : Aluminum

“FULL IMMERSION” DIAPHRAGM VALVES

Model: BRD-25MM



Model: BRD-45MM

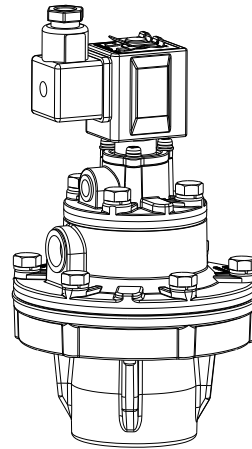


Model	A		B	
	inch	mm	inch	mm
BRD-25MM	3.25	83	3.5	89
BRD-42MM	5.78	147	4.88	124

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-25MM	1"	1	19.78	23	0.3 ~ 8.6	350
BRD-42MM	1-1/2"	2	43.86	51	0.3 ~ 8.6	650

*Other option BRD-40MM

“FULL IMMERSION” DIAPHRAGM VALVES INTEGRATED TYPE



GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz

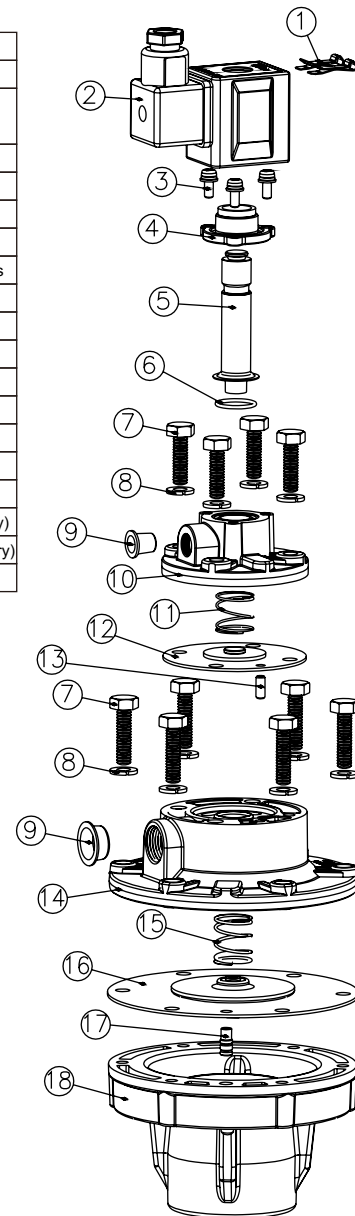
Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz

Ambient temp. : -20 ~ 50°C

CONSTRUCTION

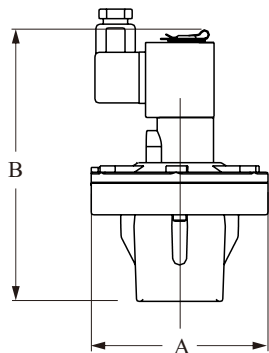
Cover : Aluminum
 Body : Aluminum

NO.	
1	Clip
2	Solenoid valve with DIN connector
3	Screws
4	Base
5	Pilot group
6	O-ring
7	Hexagon cover screws
8	Spring washer
9	Plastic plug
10	Top cover
11	Spring
12	Diaphragm
13	Air passage
14	intermediate cover
15	Spring
16	Diaphragm (secondary)
17	Air passage (secondary)
18	Body

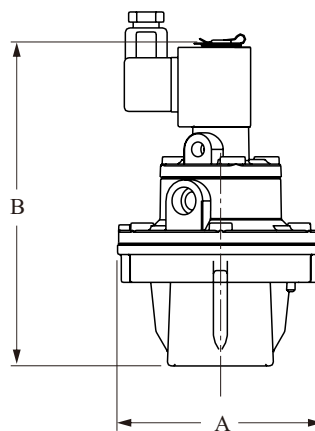


“FULL IMMERSION” DIAPHRAGM VALVES INTEGRATED TYPE

Model: BRD-25MM□



Model: BRD-42MM□



Model	A		B	
	inch	mm	inch	mm
BRD-25MM□	3.25	83	3.5	89
BRD-42MM□	5.78	147	6.92	176

Model	Orifice (inch)	Number (Diaphragm)	Flow factor Kv (m ³ /h)	Flow factor Cv (gal/min)	Operating pressure (Bar)	Weight (g)
BRD-25MM□	1"	1	19.78	23	0.3 ~ 8.6	350
BRD-42MM□	1-1/2"	2	43.86	51	0.3 ~ 8.6	650

*Other option BRD-40MM□

REMOTE SOLENOID PILOT

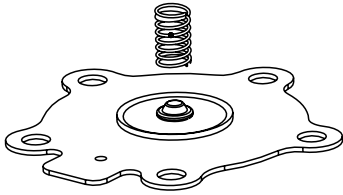
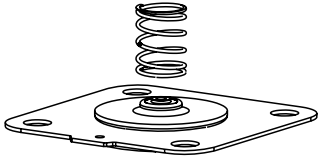
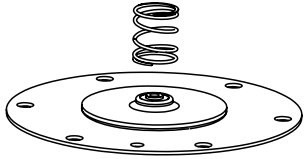
OPTIONAL ACCESSORIES

GENERAL SPECIFICATION

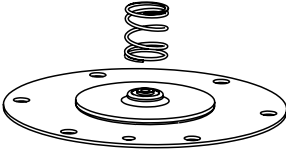
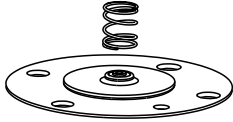
Diaphragm material : NBR
 Operating temperature : -20 ~ 85°C
 Ambient temperature : -20 ~ 60°C

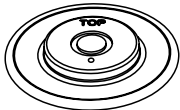
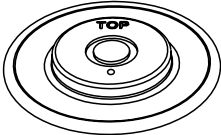
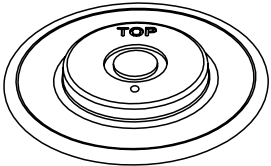
FEATURES

Consumable, spare parts, easy for regular replacement of diaphragm to ensure the fine function of equipment.

BDB-0091 BRD-20 Diaphragm + spring	BDB-0092 BRD-25 Diaphragm + spring	BDB-0093 BRD-40 Diaphragm + spring
		

(BRD-42=BDB-0093 +
 BDB-0096)
 (BRD-52=BDB-0095 +
 BDB-0096)
 (BRD-62=BDB-0095 +
 BDB-0096)

BDB-0095 BRD-52 Large diaphragm + spring	BDB-0096 BRD-10 Small diaphragm + spring
	

BDA-5030-Q BDV-20 Diaphragm one piece type	BDA-5230-Q BDV-25 Diaphragm one piece type	BDA-5430-Q BDV-40 Diaphragm one piece type
		



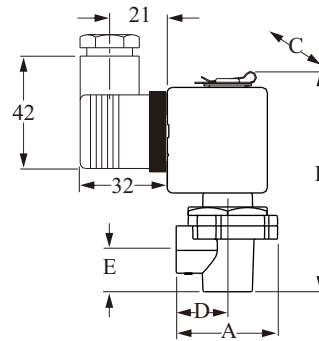
GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C

ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads (DIN 43650A)
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Standard voltages : 24Vdc ± 10%,
 110Vac ± 10%, 50/60Hz
 220Vac ± 10%, 50/60Hz
 Power consumption : 12W for 24Vdc
 AC---17VA/50Hz
 AC---14.5VA/60Hz
 Ambient temp. : -20 ~ 50°C

Model: BDB-V (W) □



Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
BDB-V □□	38.5	83.5	34	19.5	16

Model	Connection (inch)	Number (Diaphragm)	Operating pressure (Bar)
BDB-V □□	1/8" or 1/4"	1	2 ~ 8.6

CONSTRUCTION

Cover : Aluminum
 Body : Aluminum

ORDER INFORMATION

Pneumatic connection

A: 1/8"PT B: 1/8"NPT C: 1/8"G
 D: 1/4"PT E: 1/4"NPT F: 1/4"G

Voltages

Lead wire----- 1: 110Vac 2: 220Vac 3: 24Vdc
 DIN connector---- 5: 110Vac 6: 220Vac 7: 24Vdc

BDB-V□□

REMOTE SOLENOID ENCLOSURE



ENCLOSURE

NEPSY PROOF No.GYJ081151 DIP A20T_A,T₆



GENERAL FEATURES

Fluids : Air filtered and oil free air
 Diaphragm material : NBR
 Operation temp. : -20 ~ 85°C
 Ambient temp. : -20 ~ 60°C
 Pneumatic tube length 1~3 meters

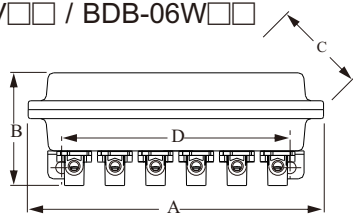
ELECTRICAL FEATURES

Coil insulation : Class F (155°C)
 Connector spec. : Flying leads
 Electrical equipment : EN 60204.1 and VDE 0580
 Electrical protection : IP65 (EN 60529)
 Ambient temp. : -20 ~ 50°C

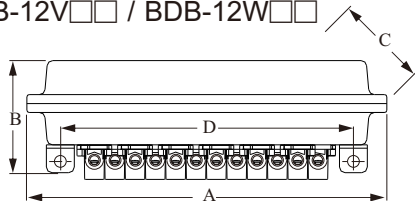
SPECIFICATION

Model	Pneumatic connection	Electrical connection (NPT)	Number (Diaphragm)	Number solenoid valve	Operating pressure (Bar)
BDB-06V□□	1/8" or 1/4"	3/4"x 1 hole	6	2,3,4,5,6	0.3 ~ 8.6
BDB-12V□□	1/8" or 1/4"	3/4"x 2 hole	12	7,8,9,10,11,12	0.3 ~ 8.6
BDB-06W□□	1/8" or 1/4"	3/4"x 1 hole	6	2,3,4,5,6	0.3 ~ 8.6
BDB-12W□□	1/8" or 1/4"	3/4"x 2 hole	12	7,8,9,10,11,12	0.3 ~ 8.6

Model No.: BDB-06V□□ / BDB-06W□□



Model No.: BDB-12V□□ / BDB-12W□□



Model NO.	Solenoid valve	A(mm)	B(mm)	C(mm)	D(mm)
BDB-06V□□	6	270	106	160	234
BDB-12V□□	12	480	106	160	446
BDB-06W□□	6	270	106	160	234
BDB-12W□□	12	480	106	160	446

ORDER INFORMATION

BDB-□□□□□

Solenoid value

06: 6
 12: 12

Explosion proof type

V: Non Explosion proof type
 W: Explosion proof type

Pneumatic connection

A: 1/8"PT B: 1/8"NPT C: 1/8"G
 D: 1/4"PT E: 1/4"NPT F: 1/4"G

Voltages

Lead wire----- 1: 110Vac 2: 220Vac 3: 24Vdc

BULKHEAD CONNECTORS

FITTINGS

DESCRIPTION

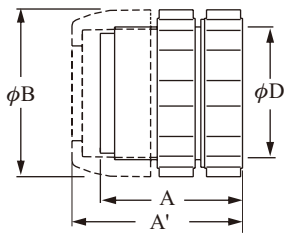
These components eliminate the requirement of welding and allow easy removal of cleaning systems and blowtubes for maintenance purposes.

CONSTRUCTURE

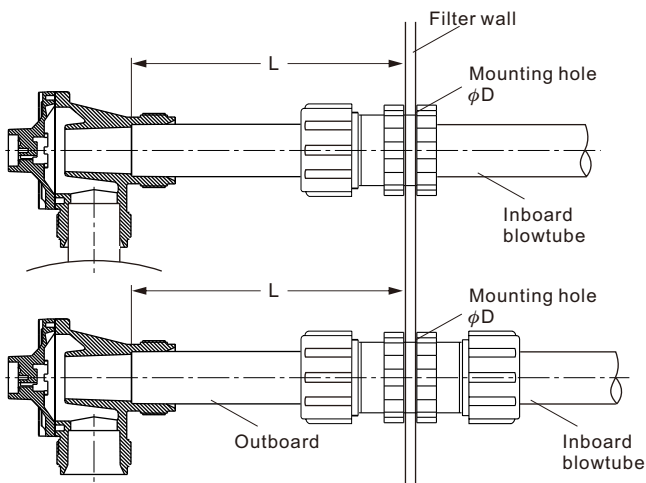
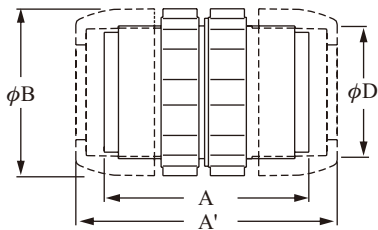
- DIN nut : Aluminum
- Body : Aluminum
- Ring nut : Aluminum
- Washer : SS41
- Conical gasket : NBR (standard)
VITON (optional)



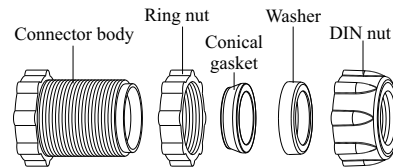
Model: BDB-□□D



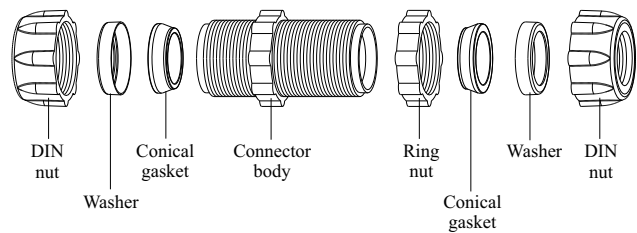
Model: BDB-□□DD



BDB-□□D



BDB-□□DD



Model No.	Orifice	A(mm)	A'(mm)	φB(mm)	φD(mm)
BDB-20D	3/4"	60.5	70	58.5	45~51
BDB-20DD	3/4"	91	110	58.5	45~51
BDB-25D	1"	69	80	70	56~62
BDB-25DD	1"	101	123	70	56~62
BDB-40D	1-1/2"	75	90	88	72~78
BDB-40DD	1-1/2"	108	138	88	72~78

PROGRAMMABLE SEQUENTIAL CONTROLLER

AE110A / 120A / 140A

The programmable sequential controller is designed specifically for use with pneumatic dust collector systems. It is used to control the solenoid of the diaphragm valve in order to program the pulse jet sequence of the valves. LED lights serve as indication of status for pulse position and timing.

Both the pulse jet timing and duration of each pulse jet could be adjusted by the logic circuitry. The controller has 2 independent "ON" and "OFF" methods, the 1st is when the AC power supply is turn off, the controller will shut down. When the AC supply is reconnected, the controller will automatically revert to its initial default settings.

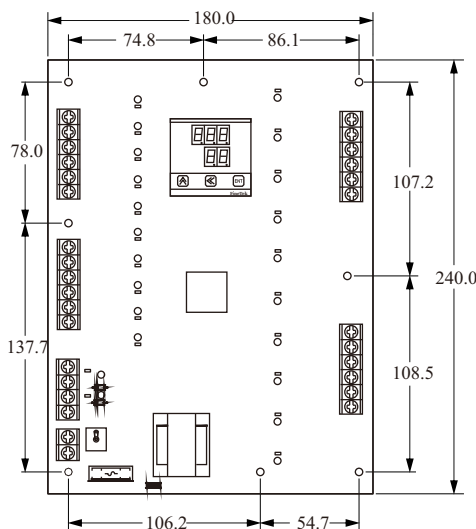
The 2nd method is to employ the use of the controller's remote contacts (R,C,A) as the controlling signal.

SPECIFICATIONS

1. Power supply: 110V/220V, -10% , +20% , 50Hz/60Hz
2. Interval adjustable range: 1s~999s
3. Spray time adjustable range: 10ms~9.99s
4. Fuse: 3A
5. Number of sequence: 1~10 / 20 / 40 points
6. Ambient temperature : -10~60°C
7. Indication: 2 Sets of digital display
8. Input: 3 Push buttons
9. Cycle washing times after shut down: 0~99 times
12. Dimension: AE110A--- 160x160mm
 AE120A--- 180x240mm
 AE140A--- 205x265mm

*CASE(Optional Part)

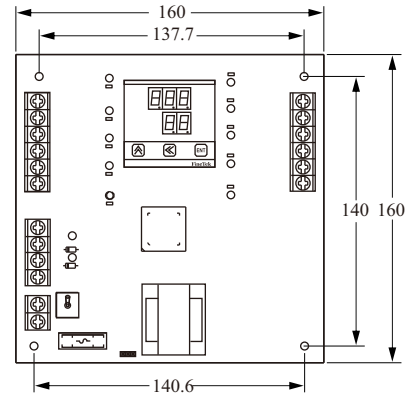
*AE120A



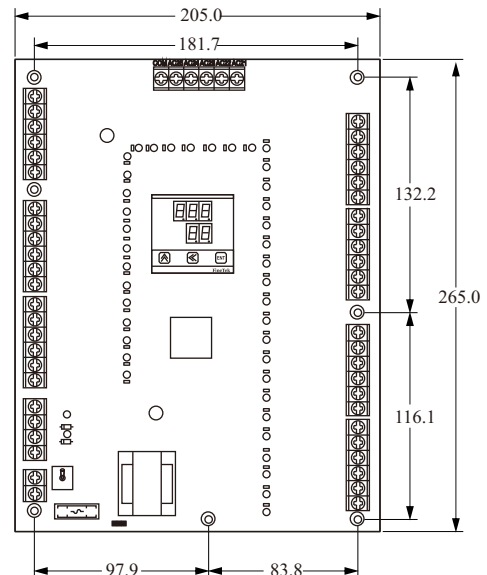
FEATURES

- Digital Display, provides ease of operation and display of operation status.
- Operating by Microprocessor: Accurate and precise operation.
- Remote Control: Convenient control through remote control.
- Able to automatically execute the pulse jet cycle even after the system shuts down so as to prevent residue sticking unto bag filter.
- Water-proof and dust-proof enclosure, to extend lifespan of the controller. (Optional)

*AE110A



*AE140A



PRESSURE DIFFERENTIAL CONTROLLER FOR DUST COLLECTOR

AE-210 / 220 / 240

The pressure differential controller is designed to be utilized in dust collector systems. It uses the pressure difference between air intake and exhaust to control on/off for solenoid valves based on pressure differential set value and time interval.

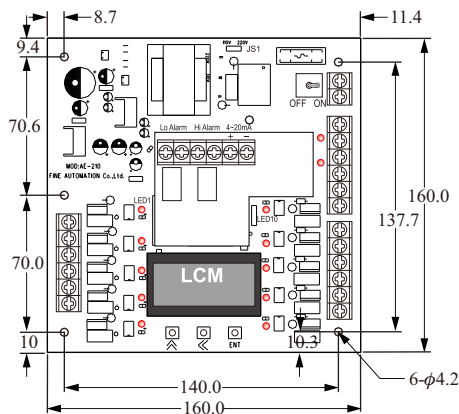
FEATURES

- LCD display allows the users to obtain up-to-date operation status.
- Microprocessor control gives high time accuracy.
- Remote control.
- RS485 Modbus communication protocol.

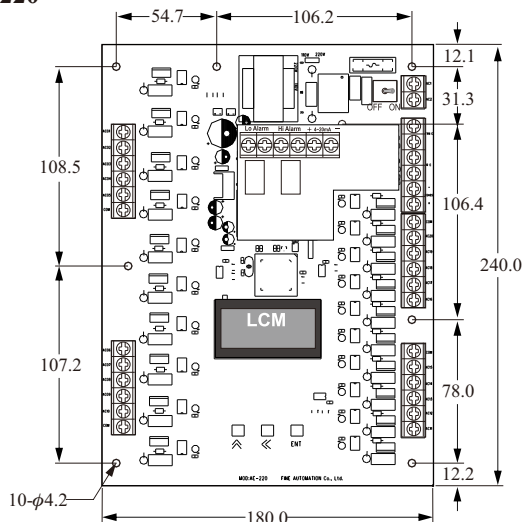
SPECIFICATIONS

1. Power supply: 110V/ 220 Vac , -10% , +20% , 50/ 60Hz
2. Operating temperature: -10~60°C
3. Operating humidity: 20~80%
4. Accuracy: 3% F.S.
5. Display: LCM Dotmatrix 8x2
6. Dial: 3 push buttons
7. Spray time range: 10mSec~9.99Sec
8. Interval range: 1Sec~999Sec
9. Number of sequence: 10/ 20/ 40 (Option)
10. Output: Transistor
11. Operating range: 200 VA
12. Pressure differential:
Max.20/ 60/ 100/ 1000 mBar (Option)
13. Measurement unit: mBar / Kpa / psi / cmH₂O
14. Alarm setup: High/low alarm set point
15. Alarm output:
2 sets of relay output
SPDT-ON: 3A / 250Vac; 3A/30Vdc
16. Analog output:
4~20mA, max. Load 500 (Option)
17. Communication protocol: RS 485 Modbus
18. Memory: By EEPROM
19. Dimension: AE-210(10 points)--- 160x160mm.
AE-220(20 points)--- 180x240mm.
AE-240(40 points)--- 205x265mm.

*AE-210

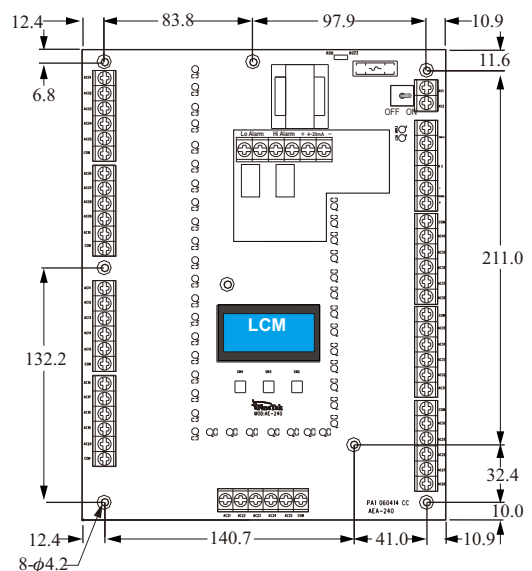


*AE-220



*CASE(Optional Part)

*AE-240



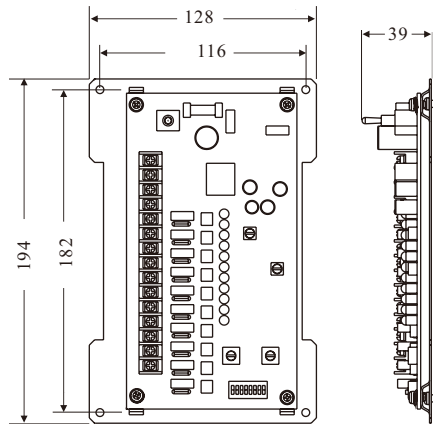
SEQUENTIAL CONTROLLER

AE71□A

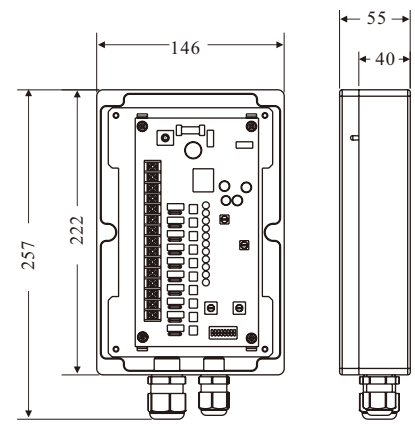
SPECIFICATIONS

1. Power supply: 100~240Vac,50Hz/60Hz
2. Interval adjustable range: 2~60s
3. Spray time adjustable range: 20~200ms
4. Fuse: 3A
5. Ambient temperature : -25~75°C
6. Case material: Cover-----PC
BOX-----ABS

***AE710A**



***AE711A**

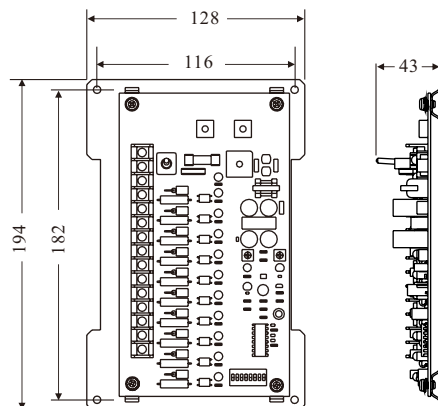


AE71□D

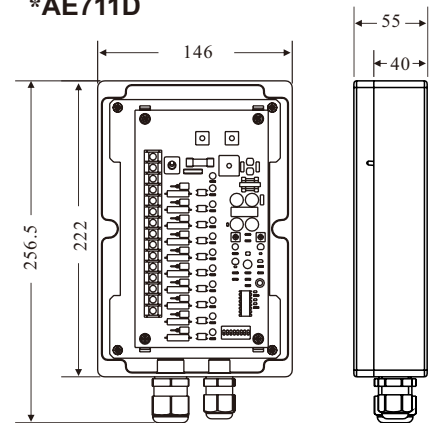
SPECIFICATIONS

1. Power supply: 24Vdc ± 10%
2. Interval adjustable range: 2~60s
3. Spray time adjustable range: 20~200ms
4. Fuse: 3A
5. Ambient temperature : -25~75°C
6. Case material: Cover-----PC
BOX-----ABS

***AE710D**



***AE711D**



AE611/621 PROGRAMMABLE SEQUENTIAL CONTROLLER (PANEL TYPE)



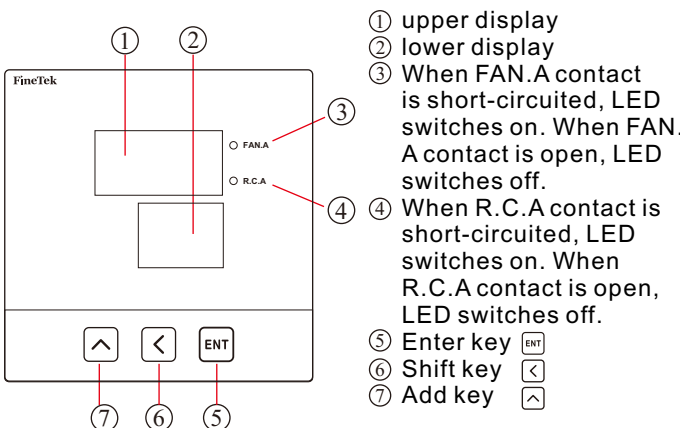
APPLICATION AND FEATURES

Programmable sequential controller is designed to control airing electro-magnetic valve using micro processor. There are 2 sets of digital display. One is to indicate the action point to wash cloth pipe. The other is to indicate remaining time to wash next set of cloth pipe. Jetting time, jetting interval, controlling points for airing electro-magnetic valve are adjustable with memory function even after shut-down. User may do setting from panel. It is widely applied and user-friendly.

SPECIFICATIONS

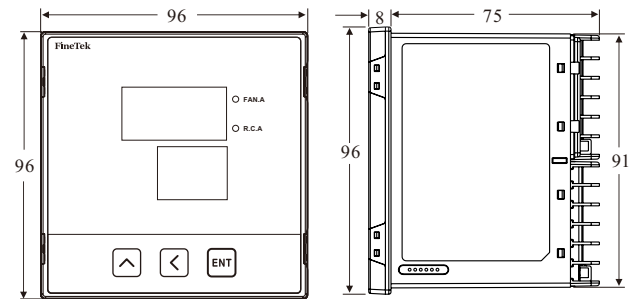
- Power: 100~240Vac ± 10% ,50Hz/60Hz
- Range of jetting interval: 1~999 S
- Range of jetting time: 10 ms~9.99 S
- Fuse: 3A
- Sequential stepping: 1~10/ 20 point
- Output rating: 200VA/ 1.2A
- Working temp: -20~60°C
- Display: sets of digital display
- Input typ: 3 buttons
- Output type: silicon controlled rectifier
- Cycle washing times after shut-down: 0~99 times
- Reliability test: compliant with IEC60947, IEC60092
- Mechanical stress test: compliant with IEC60068
- Ambient stress test: compliant with IEC60529, IEC60068
- EMS test: compliant with IEC61000

OPERATION INTERFACE DESCRIPTION

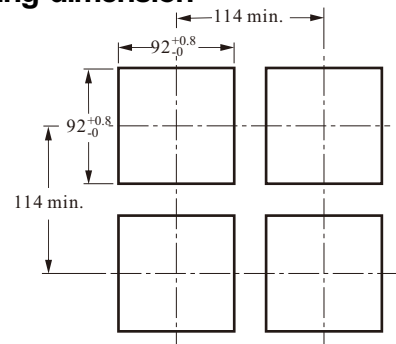


DIMENSION

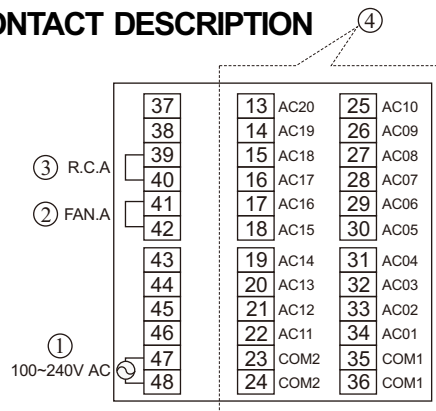
*AE611/ 621



Opening dimension



CONTACT DESCRIPTION



- ① Power terminal: terminal 47, 48
- ② Exhaust fan control input (FAN.A): Terminal 41, 42. This is keep dusting off even after exhaust fan shuts down. When input contact of exhaust fan is short-circuited, controller would operate based on setting. When input contact of exhaust fan is open, controller would auto close in cycle based on CLC setting to prevent block by dust inside cloth pipe.
- ③ Remote control contact (R.C.A): Terminal 39, 40 should remove short-circuited chip to do remote control. Then wiring to remote end to do remote control. When remote control contact is open, sequential controller stops working. When remote control contact is short-circuited, sequential controller is back to normal and control from first point.
- ④ Output terminal: Terminals connect to COM1 and COM2 as mutual contact valve.