

KOVA

**PNEUMATIC VALVE
ED/ES SERIES**

**ELECTRIC VALVE
SE/PE SERIES**

**CONTROL VALVE
SG/CG SERIES**



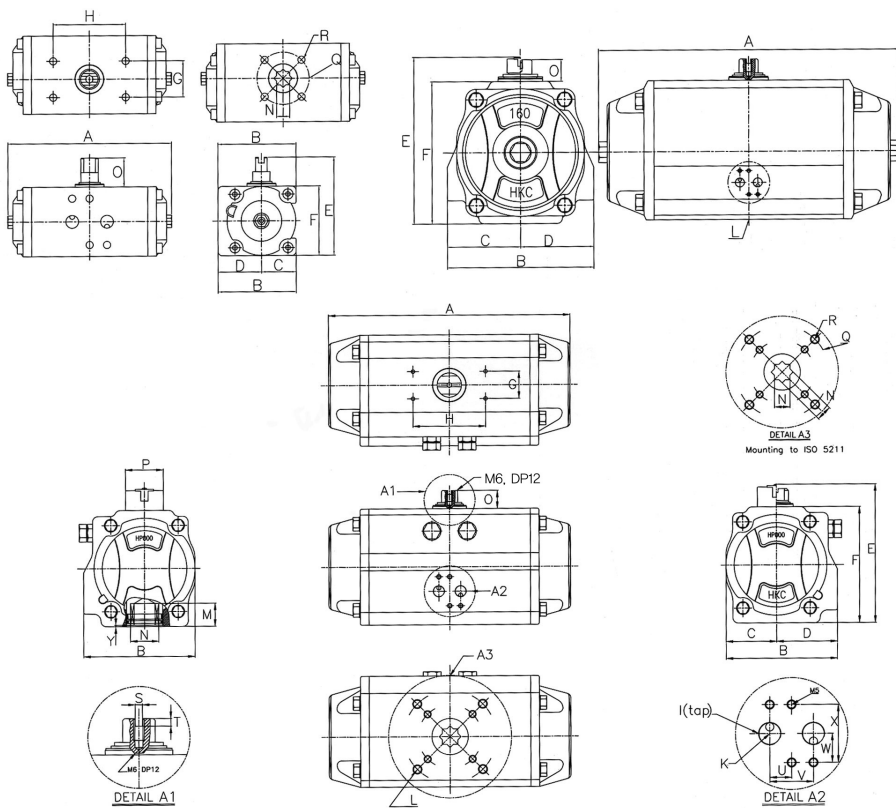
코바테크
VALVE AUTOMATION SYSTEM

KOVA PNEUMATIC ACTUATOR

DIMENSIONAL DRAWING

SPECIFICATION

- Pressure range
 - Max working pressure 10bar
 - Double acting : 2,5bar ~ 8bar
 - Spring return : 2,5bar ~ 8bar
- Temperature range
 - Standard : -20°C ~ 80°C
 - Option : -35°C ~ 80°C / -20°C ~ 150°C
- Movement
 - 90° with standard adjustable $\pm 5^\circ$
- Lubrication
 - All moving parts are factory lubricated for cycle life of the actuator.
- Cycle Life
 - 1,000,000 operations



NAMUR VDI/VDE 3845 Standard engagement

NAMUR mounting for solenoid valves

DIMENSION

MODEL	FLANGE L (ISO5211) Q	R M/N(min)	A	B	C	D	E	F	G	H	I	K	O	S	T	U	V	W	X
			E-50H	F03/F05 Ø36/Ø50	M5/M6 14/11	144	72	42	30	93	73	25	50	PF	1/8"	20	4	4	12
E-63H	F03/F05 Ø36/Ø50	M6/M8 18/14	163	85	47	38	107	87	30	80	PF	1/8"	20	4	4	12	24	16	32
E-66H	F05/F07 Ø50/Ø70	M6/M8 18/14	202	85	47	38	107	87	30	80	PF	1/8"	20	4	4	12	24	16	32
E-75H	F05/F07 Ø50/Ø70	M6/M8 22/17	210	96	53.5	42.5	124	104	30	80	PF	1/8"	20	4	4	12	24	16	32
E-88H	F05/F07/F10 Ø50/Ø70/Ø102	M6/M8/M10 22/17	247	108	58.5	49.5	136	116	30	80	PF	1/8"	20	4	4	12	24	16	32
E-100H	F07/F10 Ø70/Ø102	M8/M10 22/17	268	123	67	56	148	128	30	80	PF	1/4"	20	4	4	12	24	16	32
E-115H	F07/F10 Ø70/Ø102	M8/M10 32/22	316	141	77	64	166	146	30	80	PF	1/4"	20	4	4	12	24	16	32
E-125H	F07/F10/F12 Ø70/Ø102/Ø125	M8/M10/M12 32/22	347	151	82	69	179	159	30	80	PF	1/4"	20	4	4	12	24	16	32
E-145H	F10/F12 Ø102/Ø125	M10/M12 36/27	414	172	92	80	209	179	30	80	PF	1/4"	30	4	4	12	24	16	32
E-160H	F10/F12 Ø102/Ø125	M10/M12 36/27	467	190	101	89	226	196	30	130	PF	1/4"	30	4	4	12	24	16	32
E-180H	F10/F12 Ø102/Ø125	M10/M12 39/36	497	206	107	99	251	221	30	130	PF	1/4"	30	4	4	12	24	16	32
E-200H	F14 Ø140	M16 39/36	555	227	116	111	277	247	30	130	PF	1/4"	30	4	4	12	24	16	32
E-210H	F14 Ø140	M16 43/36	628	236	120	116	286	256	30	130	PF	1/4"	30	4	4	12	24	16	32

ORDERING INFORMATION : ORDER NO

1 - 2 3 4 - 5 6 7 - 8 9 10 11 - 12 13

1 TYPE OF ACTUATOR ED-H DOUBLE ACTING ES-H SPRING RETURN	3 VALVE SIZE 10A ~ 600A	5 BODY MAT'L A ADC12 B GC200(FC200) C GCD450(FCD45) D SCPH2 E SCS13 F SCS14 G PVC H OTHERS	7 SOLENOID VALVE S1 AC110V(비방폭) S2 AC220V(비방폭) S3 DC24V(비방폭) S4 AC110V(방폭) S5 AC220V(방폭) S6 DC24V(방폭) S7 OTHERS	9 A AIR SET S SPEED CONTROLLER
2 TYPE OF VALVE BA BALL VALVE BF BUTTERFLY PL PLUG VALVE 3P 3-PIECE BALL VB V-CUT BALL	4 END CONNECTION A JIS 10K WAFER B JIS 20K WAFER C JIS 10K RF D JIS 20K RF E SCREWED END F ANSI 150# WAFER G ANSI 300# WAFER H ANSI 150# RF I ANSI 300# RF	6 DISC/BALL MAT'L A SCS13 B SCS14 C PVC D OTHERS	8 LIMIT SWITCH L1 APL-210N(비방폭) L2 APL-310N(비방폭) L3 APL-410N(방폭) L4 OTHERS	11 POSITIONER P1 E/P POSITION P2 P/P POSITIONER P3 OTHERS
				12 G MANUAL OVERRIDE

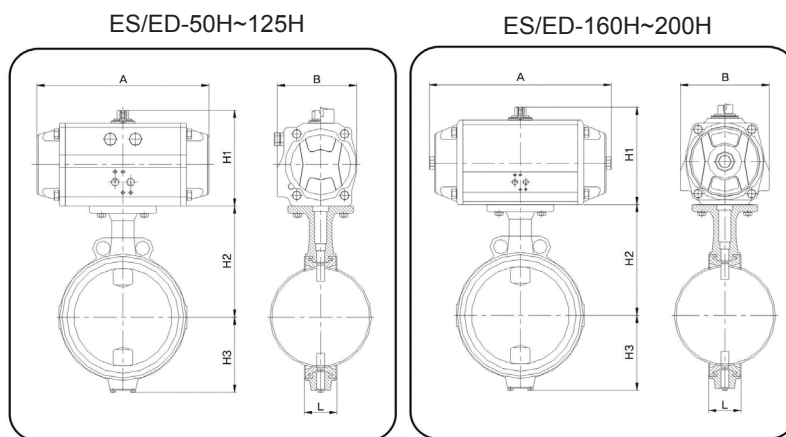
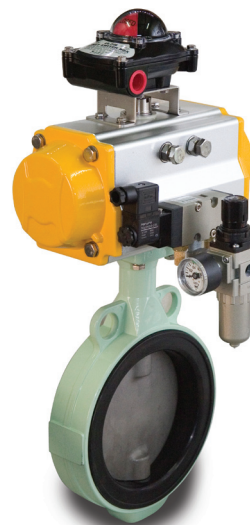
KOVA PNEUMATIC VALVE

RUBBER SEAT BUTTERFLY VALVE (AL BODY)

Valve nominal size : 40 to 300A
 Max working pressure : 10kgf/cm²
 Working temperature range : NBR Seat : -10 ~ 80°C (STD)
 EPDM Seat : -20 ~ 120°C

Accessory

ON-OFF : LIMIT SWITCH, SOLENOID VALVE, AIR SET
 비례제어 : E/P-POSITIONER, AIR SET
 기타 : MANUAL OVERRIDE, SPEED CONTROLLER, SILENCER



Actuator standard specification

Operating Pressure	2.5 ~ 8 bar
Temperature	-20 ~ +80°C
Travel angle	0 ~ 90 ± 5°
Material	Body : Extruded Aluminum Alloy
	Shaft : Steel alloy (Nickel plate)
Finish	Dry powder coating

Operating Air pressure(권장)	
Single acting	: 5.5bar
Double acting	: 5bar

Valve standard specification

Material	
Body	ADC12(Aluminum Alloy)
Disc	SCS13
Stem	SUS304
Seat	NBR(STD), EPDM

Test Condition		
Class Rating	10 K	20 K
Body Shell Test	15kgf/cm ² - Hydraulic	30kgf/cm ² - Hydraulic
Seat Leak Test	6kgf/cm ² - Air	6kgf/cm ² - Air
Applicable Flange Standard	KS, JIS, ANSI 150LB WAFER etc.	KS, JIS WAFER etc.

ES-H SERIES(Single Acting = Spring Return)

ED-H SERIES(Double Acting)

UNIT : MM

UNIT : MM

ACTUATOR MODEL	VALVE SIZE		DIMENSION					
			A	B	H1	H2	H3	L
ES-75H	1 1/2"	40A	208	96	123	115	55	33
ES-75H	2"	50A	208	96	123	130	63	40
ES-75H	2 1/2"	65A	208	96	123	140	70	43
ES-88H	3"	80A	247	108	136	150	85	43
ES-100H	4"	100A	268	123	148	165	95	50
ES-125H	5"	125A	345	151	189	185	110	53
ES-125H	6"	150A	345	151	189	200	125	53
ES-160H	8"	200A	450	202	227	240	160	63
ES-160H	10"	250A	450	202	227	270	195	63
ES-200H	12"	300A	545	224	275	310	215	75

ACTUATOR MODEL	VALVE SIZE		DIMENSION					
			A	B	H1	H2	H3	L
ED-50H	1 1/2"	40A	144	72	92	115	55	33
ED-50H	2"	50A	144	72	105	130	63	40
ED-63H	2 1/2"	65A	164	84	105	140	70	43
ED-75H	3"	80A	208	96	123	150	85	43
ED-75H	4"	100A	208	96	123	165	95	50
ED-88H	5"	125A	247	108	136	185	110	53
ED-100H	6"	150A	268	123	148	200	125	53
ED-125H	8"	200A	345	151	189	240	160	63
ED-125H	10"	250A	345	151	189	270	195	63
ED-160H	12"	300A	450	202	227	310	215	75

KOVA PNEUMATIC VALVE

RUBBER SEAT BUTTERFLY VALVE (FC, FCD BODY)

Valve nominal size : 40 to 400A

Max working pressure : 10/20kgf/cm²

Working temperature range : EPDM Seat : -20 ~ 120°C(STD)

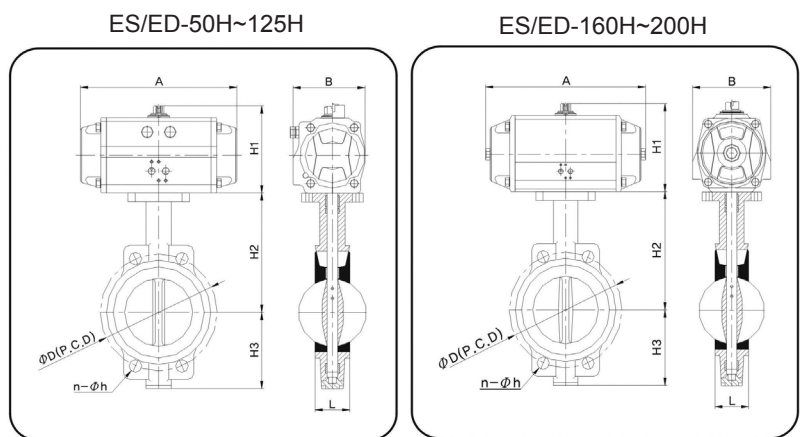
NBR Seat : -10 ~ 80°C

Accessory

ON-OFF : LIMIT SWITCH, SOLENOID VALVE, AIR SET

비례제어 : E/P-POSITIONER, AIR SET

기타 : MANUAL OVERRIDE, SPEED CONTROLLER, SILENCER



Actuator standard specification

Operating Pressure	2.5 ~ 8 bar
Temperature	-20 ~ +80°C
Travel angle	0 ~ 90 ± 5°
Material	Body : Extruded Aluminum Alloy
	Shaft : Steel alloy (Nickel plate)
Finish	Dry powder coating

Operating Air pressure(권장)	
Single acting	: 5.5bar
Double acting	: 5bar

Valve standard specification

Material		Option	
Body	GC200(FC20)	Body	GCD450(FCD45), SCPH2, SCS13
Disc	SCS13		
Stem	SUS304	Rating	JIS 10K LUG, JIS 20K WAFER
Seat	NBR(STD), EPDM		

Test Condition		
Class Rating	10 K	20 K
Body Shell Test	15kgf/cm ² - Hydraulic	30kgf/cm ² - Hydraulic
Seat Leak Test	6kgf/cm ² - Air	6kgf/cm ² - Air
Applicable Flange Standard	KS, JIS, ANSI 150LB WAFER etc.	KS, JIS WAFER etc.

ES-H SERIES(Single Acting = Spring Return)

ED-H SERIES(Double Acting)

UNIT : MM

UNIT : MM

ACTUATOR MODEL	VALVE SIZE	DIMENSION								
		A	B	H1	H2	H3	C(P.C.D)	n-h	L	
ES-75H	1 1/2"	40A	208	96	123	140	66.8	105	4-19	32.5
ES-75H	2"	50A	208	96	123	163	77	120	4-19	41
ES-75H	2 1/2"	65A	208	96	123	178	86	140	4-19	44
ES-88H	3"	80A	247	108	136	183	96	150	8-19	45
ES-100H	4"	100A	268	123	148	203	117	175	8-19	50
ES-125H	5"	125A	345	151	189	214	130	210	8-23	54
ES-125H	6"	150A	345	151	189	229	148	240	8-23	54
ES-160H	8"	200A	450	202	227	264	179	290	12-23	60
ES-160H	10"	250A	450	202	227	296	206	355	12-25	66
ES-200H	12"	300A	545	224	275	337	240	400	16-25	75.5

ACTUATOR MODEL	VALVE SIZE	DIMENSION									
		A	B	H1	H2	H3	C(P.C.D)	n-h	L		
ED-63H	1 1/2"	40A	144	72	92	140	66.8	105	4-19	32.5	
ED-63H	2"	50A	144	72	105	163	77	120	4-19	41	
ED-63H	2 1/2"	65A	164	84	105	178	86	140	4-19	44	
ED-75H	3"	80A	208	96	123	183	96	150	8-19	45	
ED-75H	4"	100A	208	96	123	203	117	175	8-19	50	
ED-88H	5"	125A	247	108	136	214	130	210	8-23	54	
ED-100H	6"	150A	268	123	148	229	148	240	8-23	54	
ED-125H	8"	200A	345	151	189	264	179	290	12-23	60	
ED-125H	10"	250A	345	151	189	296	206	355	12-25	66	
ED-160H	12"	300A	450	202	227	337	240	400	16-25	75.5	
ED-200H	14"	350A	545	224	275	371	263	445	16-27	74	
ED-200H	16"	400A	545	224	275	401	298	510	16-27	85	

KOVA PNEUMATIC VALVE

HIGH PERFORMANCE BUTTERFLY VALVE (FCD BODY)

Valve nominal size : 40 to 400A

Max working pressure : 10/20kgf/cm²

Working temperature range : (MTFE) : -20 ~ 195°C

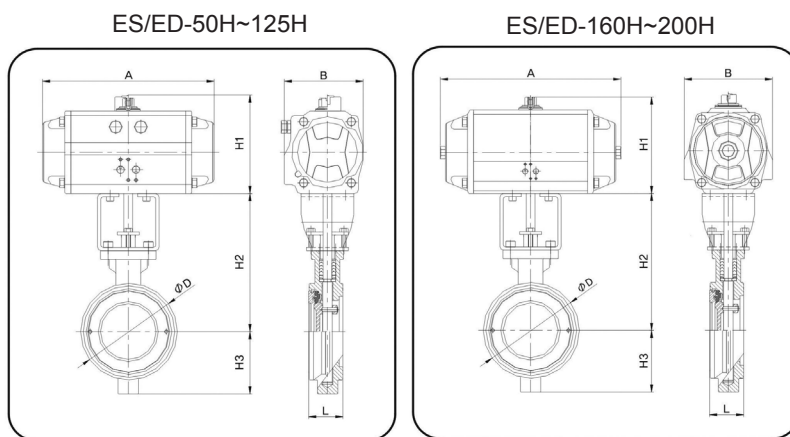
(Metal) : -40 ~ 600°C

Accessory

ON-OFF : LIMIT SWITCH, SOLENOID VALVE, AIR SET

비례제어 : E/P-POSITIONER, AIR SET

기타 : MANUAL OVERRIDE, SPEED CONTROLLER, SILENCER



Actuator standard specification

Operating Pressure	2.5 ~ 8 bar
Temperature	-20 ~ +80°C
Travel angle	0 ~ 90 ± 5°
Material	Body : Extruded Aluminum Alloy Shaft : Steel alloy (Nickel plate)
Finish	Dry powder coating

Operating Air pressure(권장)	
Single acting : 5.5bar	
Double acting : 5bar	

Valve standard specification

Material		Option	
Body	GCD45(Ductile iron)	Body	SCPH2
Disc	SCS13	Rating	JIS 20K, ANSI 300Lb WAFER
Stem	SUS304		
Seat	MTFE		

Test Condition			
Class Rating	10 K	20 K	
Body Shell Test	15kgf/cm ² - Hydraulic	30kgf/cm ² - Hydraulic	
Seat Leak Test	6kgf/cm ² - Air	6kgf/cm ² - Air	
Applicable Flange Standard	KS, JIS, ANSI 150LB RF etc.	KS, JIS, ANSI 300LB RF etc.	

ES-H SERIES(Single Acting = Spring Return)

ED-H SERIES(Double Acting)

UNIT : MM

UNIT : MM

ACTUATOR MODEL	VALVE SIZE		DIMENSION						
			A	B	D	H1	H2	H3	L
ES-75H	2"	50A	208	96	100	123	170	65	43
ES-75H	2 1/2"	65A	208	96	123	123	181	75	46
ES-88H	3"	80A	247	108	132	136	188	85	46
ES-100H	4"	100A	268	123	157	148	202	95	52
ES-125H	5"	125A	345	151	185	189	227	115	57
ES-125H	6"	150A	345	151	220	189	245	145	62
ES-160H	8"	200A	450	202	277	227	299	173	83
ES-160H	10"	250A	450	202	337	227	338	253	87
ES-200H	12"	300A	545	224	380	275	385	279	98

ACTUATOR MODEL	VALVE SIZE		DIMENSION						
			A	B	D	H1	H2	H3	L
ED-50H	2"	50A	144	72	100	92	170	65	43
ED-63H	2 1/2"	65A	164	84	123	105	181	75	46
ED-75H	3"	80A	208	96	132	123	188	85	46
ED-75H	4"	100A	208	96	157	123	202	95	52
ED-88H	5"	125A	247	108	185	136	227	115	57
ED-100H	6"	150A	268	123	220	148	245	145	62
ED-125H	8"	200A	345	151	277	189	299	173	83
ED-125H	10"	250A	345	151	337	189	338	253	87
ED-160H	12"	300A	450	202	380	227	385	279	98
ED-200H	14"	350A	545	224	410	275	413	309	100
ED-200H	16"	400A	545	224	475	275	444	340	115

KOVA PNEUMATIC VALVE

HIGH PERFORMANCE BUTTERFLY VALVE (SUS BODY)

Valve nominal size : 40 ~ 400A

Max working pressure : 10/20kgf/cm²

Working temperature range : (MTFE) : -20 ~ 195°C

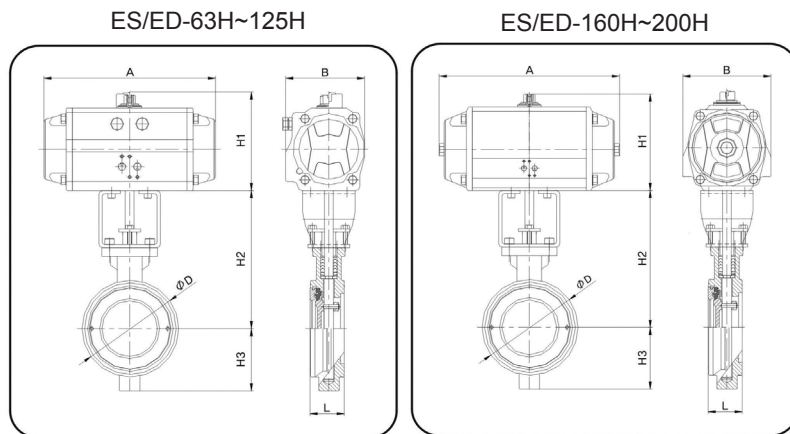
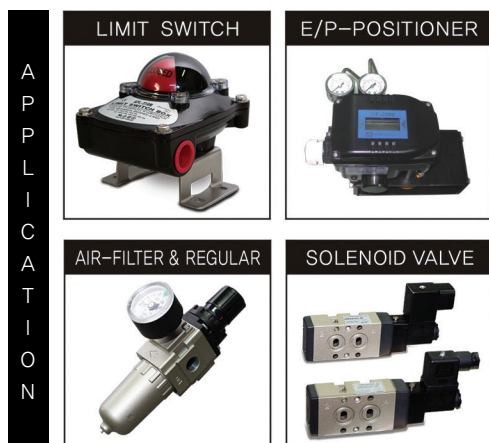
(Metal) : -40 ~ 600°C

Accessory

ON-OFF : LIMIT SWITCH, SOLENOID VALVE, AIR SET

비례제어 : E/P-POSITIONER, AIR SET

기타 : MANUAL OVERRIDE, SPEED CONTROLLER, SILENCER



Actuator standard specification

Operating Pressure	2.5 ~ 8 bar
Temperature	-20 ~ +80°C
Travel angle	0 ~ 90 ± 5°
Material	Body : Extruded Aluminum Alloy Shaft : Steel alloy (Nickel plate)
Finish	Dry powder coating

Operating Air pressure(권장)	
Single acting : 5.5bar	
Double acting : 5bar	

Valve standard specification

Material		Option	
Body	SCS13	Body	SCS14
Disc	SCS13	Rating	JIS 20K, ANSI 300LB WAFER
Stem	SUS304		
Seat	MTFE		

Test Condition		
Class Rating	10 K	20 K
Body Shell Test	15kgf/cm ² - Hydraulic	30kgf/cm ² - Hydraulic
Seat Leak Test	6kgf/cm ² - Air	6kgf/cm ² - Air
Applicable Flange Standard	KS, JIS, ANSI 150LB RF etc.	KS, JIS, ANSI 300LB RF etc.

ES-H SERIES(Single Acting = Spring Return)

ED-H SERIES(Double Acting)

UNIT : MM

UNIT : MM

ACTUATOR MODEL	VALVE SIZE		DIMENSION						
			A	B	D	H1	H2	H3	L
ES-75H	1 1/2"	40A	208	96	86	123	156	73	43
ES-75H	2"	50A	208	96	100	123	163	81	44
ES-75H	2 1/2"	65A	208	96	120	123	174	83	46
ES-88H	3"	80A	247	108	132	136	178	87	46
ES-100H	4"	100A	268	123	164	148	194	111	52
ES-125H	5"	125A	345	151	194	189	223	121	57
ES-125H	6"	150A	345	151	225	189	244	145	59
ES-160H	8"	200A	450	202	275	227	299	180	64
ES-160H	10"	250A	450	202	337	227	337	279	72
ES-200H	12"	300A	545	224	389	275	385	279	96

ACTUATOR MODEL	VALVE SIZE		DIMENSION						
			A	B	D	H1	H2	H3	L
ED-50H	1 1/2"	40A	144	72	86	92	156	73	43
ED-50H	2"	50A	144	72	100	92	163	81	44
ED-63H	2 1/2"	65A	164	84	120	105	174	83	46
ED-75H	3"	80A	208	96	132	123	178	87	46
ED-75H	4"	100A	208	96	164	123	194	111	52
ED-88H	5"	125A	247	108	194	136	223	121	57
ED-100H	6"	150A	268	123	225	148	244	145	59
ED-125H	8"	200A	345	151	275	189	299	180	64
ED-125H	10"	250A	345	151	337	189	337	279	72
ED-160H	12"	300A	450	202	389	227	385	279	96
ED-200H	14"	350A	545	224	420	275	413	309	93
ED-200H	16"	400A	545	224	470	275	444	340	115

KOVA PNEUMATIC VALVE

2-WAY FLANGED BALL VALVE

Valve nominal size : 15~200A Max working pressure : 10/20kgf/cm²

Working temperature range :

TEFLON(GLASS 15%) : -30 ~ 130°C RTFE(CARBON 25%) : -30 ~ 150°C

SOFT PEEK : -30 ~ 300°C METAL (SUS304,316) : -40 ~ 350°C

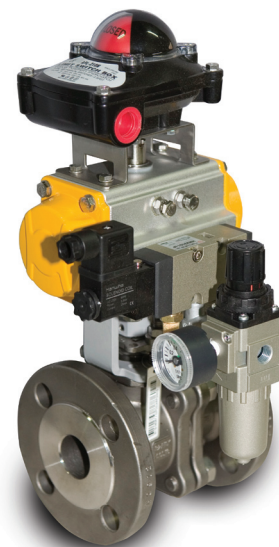
* 단 위의 온도조건은 압력 7K일때의 기준이며, 압력이 이보다 낮을시 사용할 수 있는 온도는 높아집니다.

Accessory

ON-OFF : LIMIT SWITCH, SOLENOID VALVE, AIR SET

비례제어 : E/PPOSITIONER, AIR SET

기타 : MANUAL OVERRIDE, SPEED CONTROLLER, SILENCER



APPLICATION

LIMIT SWITCH

E/P-POSITIONER

AIR-FILTER & REGULAR

SOLENOID VALVE

ES/ED-50H~125H/Flg'd End

ES/ED-160H~200H/Flg'd End

Actuator standard specification

Operating Pressure	2.5 ~ 8 bar
Temperature	-20 ~ +80°C
Travel angle	0 ~ 90 ± 5°
Material	Body : Extruded Aluminum Alloy Shaft : Steel alloy (Nickel plate)
Finish	Dry powder coating

Operating Air pressure(권장)	
Single acting : 5.5bar	
Double acting : 5bar	

Valve standard specification

Material		Option	
Body	SCS13, SCS14, SCPH2	Body	RTFE, SOFT PEEK, METAL
Disc	SCS13, SCS14		
Stem	SUS304, SUS316	Rating	JIS 20K, 30K, 40K RF ANSI 150Lb, 300Lb, 600Lb RF etc.
Seat	TEFLON(GLASS 15%)		

Test Condition		
Class Rating	10 K	20 K
Body Shell Test	15kgf/cm ² - Hydraulic	30kgf/cm ² - Hydraulic
Seat Leak Test	6kgf/cm ² - Air	6kgf/cm ² - Air
Applicable Flange Standard	KS, JIS, ANSI 150LB RF etc.	KS, JIS, ANSI 300LB RF etc.

ES-H/Flg'd End SERIES (Single Acting = Spring Return)

UNIT : MM

ACTUATOR MODEL	VALVE SIZE	DIMENSION										
		A	B	H1	H2	D	C(P.C.D)	g	d	n-h	L	
ES-50H	1/2"	15A	144	72	92	102	95	70	51	15	4-15	108
ES-63H	3/4"	20A	164	84	105	105	100	75	56	20	4-15	117
ES-75H	1"	25A	208	96	123	111	125	90	67	25	4-19	127
ES-75H	1 1/4"	32A	208	96	123	117	135	100	76	32	4-19	140
ES-88H	1 1/2"	40A	247	108	136	136	140	105	81	40	4-19	165
ES-100H	2"	50A	268	123	148	144	155	120	96	50	4-19	178
ES-125H	2 1/2"	65A	345	151	189	153	175	140	116	65	4-19	190
ES-125H	3"	80A	345	151	189	209	185	150	126	80	8-19	203
ES-160H	4"	100A	450	202	189	226	226	175	151	100	8-19	229
ES-160H	5"	125A	450	202	189	288	254	210	182	125	8-23	356
ES-200H	6"	150A	545	224	227	308	280	240	212	150	8-23	394

ED-H/Flg'd End SERIES (Double Acting)

UNIT : MM

ACTUATOR MODEL	VALVE SIZE	DIMENSION										
		A	B	H1	H2	D	C(P.C.D)	g	d	n-h	L	
ED-50H	1/2"	15A	144	72	92	102	95	70	51	15	4-15	108
ED-50H	3/4"	20A	144	72	92	105	100	75	56	20	4-15	117
ED-63H	1"	25A	164	84	105	111	125	90	67	25	4-19	127
ED-75H	1 1/4"	32A	164	84	105	117	135	100	76	32	4-19	140
ED-75H	1 1/2"	40A	208	96	123	136	140	105	81	40	4-19	165
ED-88H	2"	50A	208	96	123	144	155	120	96	50	4-19	178
ED-100H	2 1/2"	65A	247	108	136	153	175	140	116	65	4-19	190
ED-125H	3"	80A	268	123	148	209	185	150	126	80	8-19	203
ED-125H	4"	100A	345	151	189	226	226	175	151	100	8-19	229
ED-160H	5"	125A	345	151	189	288	254	210	182	125	8-23	356
ED-200H	6"	150A	450	202	227	308	280	280	212	150	8-23	394
ED-200H	8"	200A	545	224	275	362	343	330	262	200	8-23	457

KOVA PNEUMATIC VALVE

3-PIECE BALL VALVE

Valve nominal size : 15 ~ 50A

Max working pressure : 10kgf/cm²

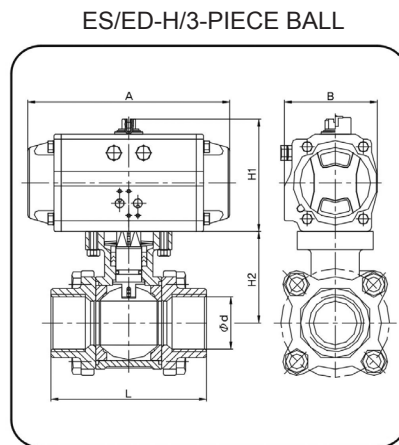
Working temperature range : (PTFE) -20 ~ 130°C
(Carbon PTFE) -20 ~ 180°C

Accessory

ON-OFF : LIMIT SWITCH, SOLENOID VALVE, AIR SET

비례제어 : E/P-POSITIONER, AIR SET

기타 : MANUAL OVERRIDE, SPEED CONTROLLER, SILENCER



Actuator standard specification

Operating Pressure	2.5 ~ 8 bar
Temperature	-20 ~ +80°C
Travel angle	0 ~ 90 ± 5°
Material	Body : Extruded Aluminum Alloy Shaft : Steel alloy (Nickel plate)
Finish	Dry powder coating

Operating Air pressure(권장)
Single acting : 5.5bar
Double acting : 5bar

Valve standard specification

Material	
Body	SCS14
Disc	SCS14
Stem	SUS316
Seat	PTFE

Test Condition (JIS 10K 기준)	
Body shell test	: 15kgf/cm ² - Hydraulic
Seat leak test	: 6kgf/cm ² - Air
Applicable flange standard	: SCREWED END TYPE

ES-H/3-PIECE SERIES (Single Acting = Spring Return)

UNIT : MM

ACTUATOR MODEL	VALVE SIZE	DIMENSION						
		A	B	H1	H2	d	L	
ES-50H	1/2"	15A	144	72	92	40	PT SCREWED	70
ES-63H	3/4"	20A	164	84	105	46	PT SCREWED	80
ES-63H	1"	25A	208	96	123	53	PT SCREWED	90
ES-75H	1 1/4"	32A	208	96	123	60	PT SCREWED	110
ES-88H	1 1/2"	40A	247	108	136	69	PT SCREWED	120
ES-88H	2"	50A	247	108	136	78	PT SCREWED	140

ED-H/3-PIECE SERIES(Double Acting)

UNIT : MM

ACTUATOR MODEL	VALVE SIZE	DIMENSION						
		A	B	H1	H2	d	L	
ED-35H	1/2"	15A	108	54	68	40	PT SCREWED	70
ED-50H	3/4"	20A	144	72	92	46	PT SCREWED	80
ED-50H	1"	25A	144	72	92	53	PT SCREWED	90
ED-63H	1 1/4"	32A	164	84	105	60	PT SCREWED	110
ED-63H	1 1/4"	40A	164	84	105	69	PT SCREWED	120
ED-75H	2"	50A	208	96	123	78	PT SCREWED	140

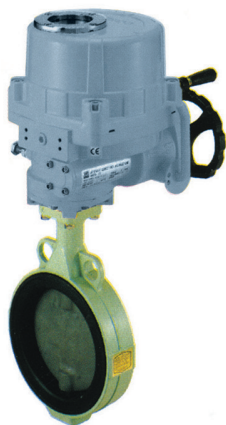
KOVA ELECTRIC ACTUATOR



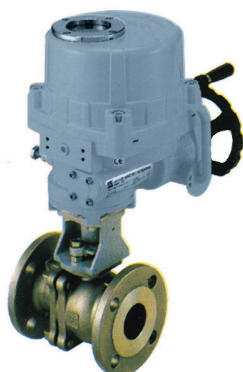
Butterfly Valve



Ball Valve



Butterfly Valve



Ball Valve

적 용 : 공장 및 산업시설과 빌딩기계설비 시설 등에 많이 사용됩니다.

브라켓트 : 액추에이터 본체와 밸브 본체를 접속하는 부품

커 플 링 : 액추에이터 출력축과 밸브시스템을 연결하는 접속부품

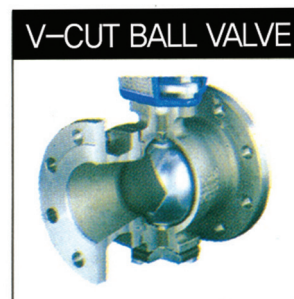
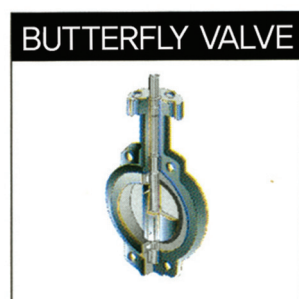
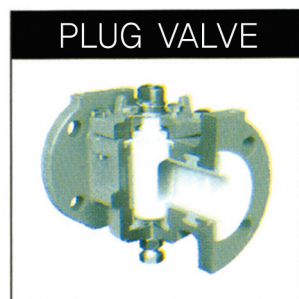
설 계 : 브라켓 커플링의 편심에 의한 문제, 밸브 내부의

유체온도에 의한 영향을 고려하여 설계되었습니다.

■ KOVA SE-00 Series

Butterfly Valve의 적용 사이즈 → 32A~500A

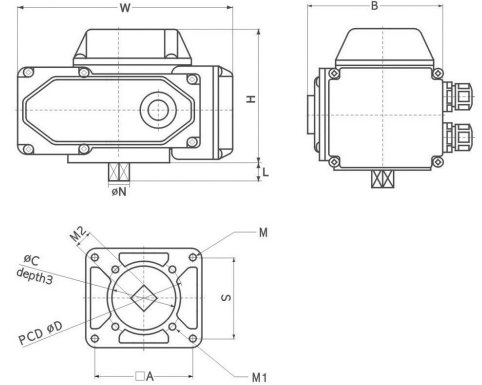
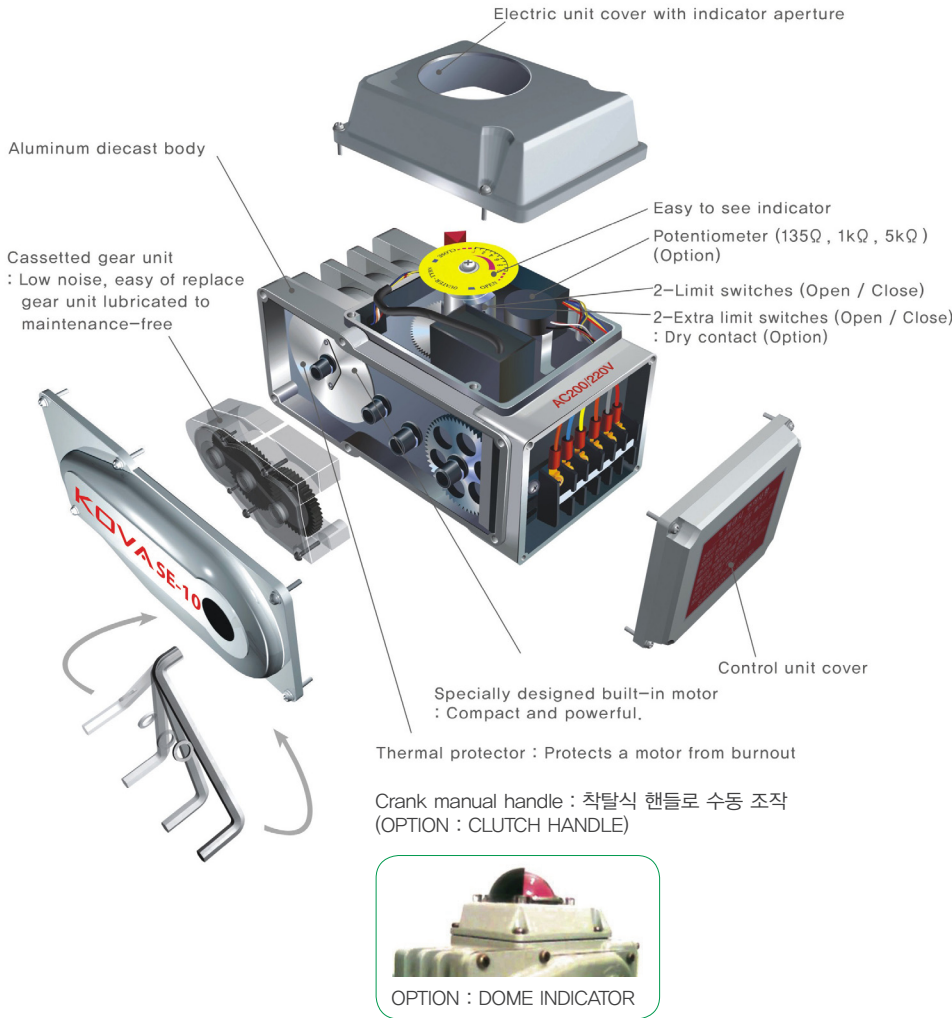
Ball Valve의 적용 사이즈 → 15A~200A



■ KOVA SE-00H Series

Butterfly Valve의 적용 사이즈 → 32A~600A

Ball Valve의 적용 사이즈 → 15A~250A



KOVA SE/PE-SERIES[일반규격]

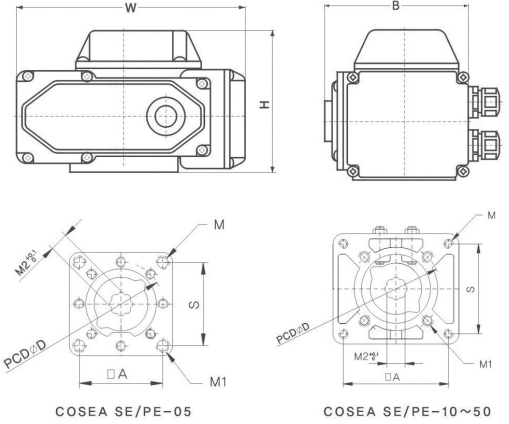
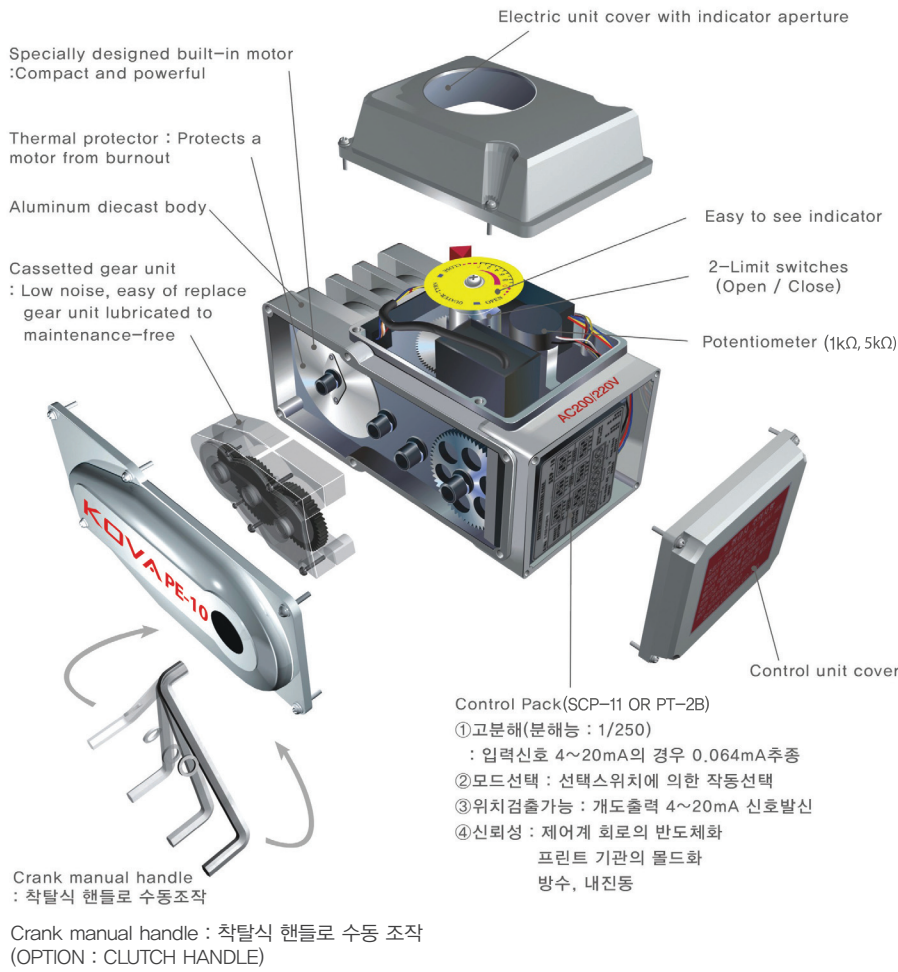
모델	05	10	25,50,60	100,200
W	157	208	256	280
B	113	120	156	156
H	103	115	141	170
L	12	16	26	26
S	60	70	84	84
□A	68	82	118	118/148
φD	70	70	102	직사각형
φC	55깊이3	55깊이3	70깊이3	직사각형
φN	15	20	28	39
M	M6x1	M6x1	M10x1,5	M12x1,75
M1	M8x1,25	M8x1,25	M10x1,5	M10x1,5
M2	12	15	23	30

SE Series

BALL, BUTTERFLY, V-CUT, PLUG VALVE, DAMPER 등에 장착 사용 가능.

모델	SE-05	SE-10	SE-25	SE-50	SE-60	SE-100	SE-200
출력축토크	5kgf · m	10kgf · m	20kgf · m	50kgf · m	60kgf · m	100kgf · m	200kgf · m
전 원	AC 110, 220V 단상 50/60Hz						
동 작 범 위	0~90°C						
동작시간 (50/60Hz)	20/16sec	30/25sec			60/50sec	50/41sec	100/83sec
가 동 모 터	10w	23w	40w	90w	90w	100w	100w
보 호 장 치	써멀 프로텍터 내장(자동복귀형)						
주 위 온 도	-30 ~ +60°C						
절 연 저 항	100MΩ(500V-DC)						
내 전 압	1,500VAC 1분간						
수 동 조 작	착탈식 크랭크 핸들조작(부속)						
정 지 장 치	전동조작시 : 개, 폐 리미트 스위치 수동 조작시 : 기계적 스톱퍼						
방수방적성	IP-67						
접 속 자 세	모든 방향 가능						
본 체 재 질	알루미늄 합금 다이캐스트						
중 량	2.6kg	3.7kg	6.7kg	7.3kg	8.0kg	11.2kg	11.2kg
배선접속구	PF1/2 × 1 수지제 방수 접속구						

Option : • DC24 : SE-05~200 • AC380V / 3PH : SE-10~SE-200 • Safety Switch
 • Potentiometer(135, 1K,5K) • 2-Extra Limit Switch(Dry Contact) • Clutch Handwheel



KOVA SE/PE-SERIES[ISO규격]

모델	05	10	25,50,60
W	155	208	256
B	101	120	156
H	115	115	141
S	49,5	70	84
A	49,5	82	118
D	50	70	102
M	M8x12	M6x10	M10x16
M1	M6x10	M8x12	M10x16
M2	11	14	17/22

PE Series

BALL, BUTTERFLY, V-CUT, PLUG VALVE, DAMPER 등에 장착 사용가능.

모델	PE-10	PE-25	PE-50	PE-60	PE-100	PE-200
출력축토크	10kgf · m	20kgf · m	50kgf · m	60kgf · m	100kgf · m	200kgf · m
전 원	AC 110, 220V 단상 50/60Hz					
동 작 범 위	0~90°C					
동작시간 (50/60Hz)	30/25sec			60/50sec	50/41sec	100/83sec
가 동 모 터	23w	40w	90w	90w	100w	100w
보 호 장 치	써멀 프로텍터 내장(자동복귀형)					
입 력	4~20mA DC, 2~10V DC					
출 력	4~20mA DC					
내 전 압	1,500VAC 1분간					
수 동 조 작	착탈식 크랭크 핸들조작(부속)					
정 지 장 치	전동조작시 : 개, 폐 리미트 스위치 수동 조작시 : 기계적 스톱퍼					
방수방적성	IP-67					
접 속 자 세	모든 방향 가능					
본 체 재 질	알루미늄 합금 다이캐스트					
중 량	4.3kg	7.5kg	7.5kg	8.0kg	11.3kg	11.5kg
배 선 접 속 구	PF1/2 × 2 수지제 방수 접속구					

KOVA ELECTRIC ACTUATOR

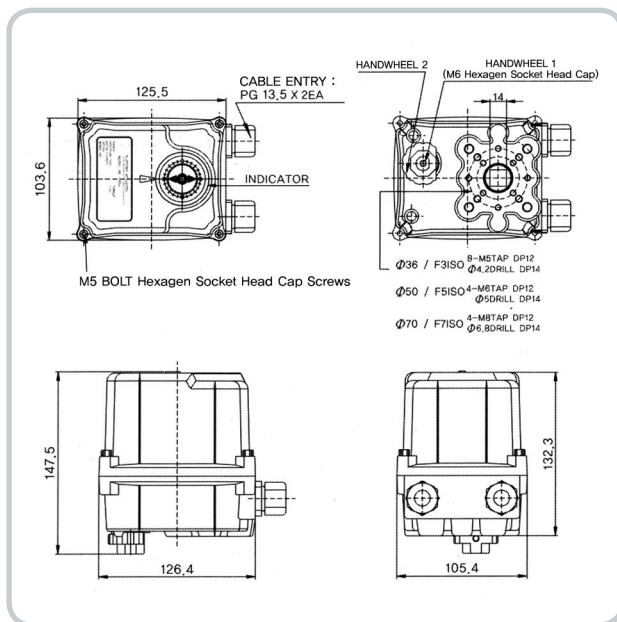
ON-OFF SE-H/ MOD PE-H SERIES

Model	KOVA	KOVA	KOVA	KOVA	KOVA	KOVA	KOVA	KOVA	KOVA	KOVA	KOVA	KOVA	
	SE/PE-60H	SE/PE-80H	SE/PE-100H	SE/PE-150H	SE/PE-200H	SE/PE-300H	SE/PE-500H	SE/PE-600H	SE/PE-800H	SE/PE-1200H	SE/PE-2000H	SE/PE-3000H	
Out torque(N.M)	58	78	98	147	196	294	490	588	784	1176	1960	2940	
Power supply	AC 110V/220V(1-PHASE), AC 380V/440V(3-PHASE)50/60Hz(EXCEPT SE-60H, 80H, 100H)												
Travel angle	0~90° ±10°												
Operating time(60Hz/50Hz)	12/14	13/16	17/20	21/25	21/25	26/31	26/31	26/31	31/37	31/37	93/112	93/112	
Motor class F frame size W*F	6*70	15*70	15*70	40*80	40*80	40*90	90*90	90*90	180*90	180*90	180*90	180*90	
Motor W(220V/60Hz)	44	121	121	195.8	195.8	202.4	341	352	473	517	473	517	
Rated current (A)	1 Phase	110V	0.40/0.39	1.10/0.95	1.10/0.95	1.65/1.67	1.65/1.67	1.85/1.86	3.60/3.62	3.65/3.62	4.10/4.10	4.20/4.10	4.10/4.10
		220V	0.20/0.19	0.55/0.54	0.55/0.54	0.89/0.85	0.89/0.85	0.92/0.92	1.55/1.58	1.60/1.62	2.15/2.20	2.35/2.30	2.15/2.30
		380V	N/A	N/A	N/A	0.31/0.31	0.31/0.31	0.35/0.35	0.59/0.59	0.60/0.59	0.85/0.85	0.87/0.87	0.85/0.85
60Hz	2 Phase	440V	N/A	N/A	N/A	0.30/0.31	0.30/0.31	0.34/0.34	0.58/0.58	0.59/0.58	0.79/0.79	0.81/0.81	0.79/0.79
		440V	N/A	N/A	N/A	0.30/0.31	0.30/0.31	0.34/0.34	0.58/0.58	0.59/0.58	0.79/0.79	0.81/0.81	0.79/0.79
Maximum bore size	F03,05,07	Ø20	Ø20	Ø22	Ø22	Ø35	Ø35	Ø35	Ø45	Ø45	Ø65	Ø65	
Number of handle turn	8	10	10	11	11	13.5	13.5	13.5	16.5	16.5	49.5	49.5	
Duty cycle	S2 35%	S2, 30%(20~50% Max 10Min ~ 30Min)											
Stall protection	Built-in thermal protection, open 150°C ± 5°C / close 97°C x ± 15°C												
Ambient temperature	-20°C~70°C(except option electronic board)												
Withstand voltage	1,800VAC 1SEC												
Manual override	※①	Decutching mechanism											
Stop control	By electric control : Limit switch - 2X open/close, SPDT, 250V AC 10A rating (SE-60H~SE-80H)												
	By overload control : Torque limit switches - open / close, SPDT, 250V AC 10A rating (except SE-60H~SE-80H)												
	By manual control : Mechanical stopper - 2X external adjustable screws												
Additional limit switches	Limit switch - 2X open / close, SPDT, 250V AC 10A rating (SE-60H : AC 3A rating)												
Enclosure	IP67	Weatherproof enclosure IP67, NEMA 4 and 6											
Materials	Steel, Aluminum alloy, Al bronze, Polycarbonate												
Weight	3Kg	7.4Kg	7.4Kg	16.6Kg	16.6Kg	22Kg	23Kg	23Kg	29Kg	29Kg	75Kg	75Kg	
Conduit entries	※②	PF 3/4" x 2 Tap											
Space heater	2W	7~10W (AC 110 / 220V) Anti-condensation											
Anti vibration	X Y Z 10g 0.2~34Hz, 30minutes (except SE-60H)												
External coating	Anodizing treatment before Dry powder, Polyester, Munsell no. CUF-100X (SE-60H : Polyester powder coating)												
PE / INPUT	4~20mA DC, 2~10V DC												
PE / OUTPUT	4~20mA												

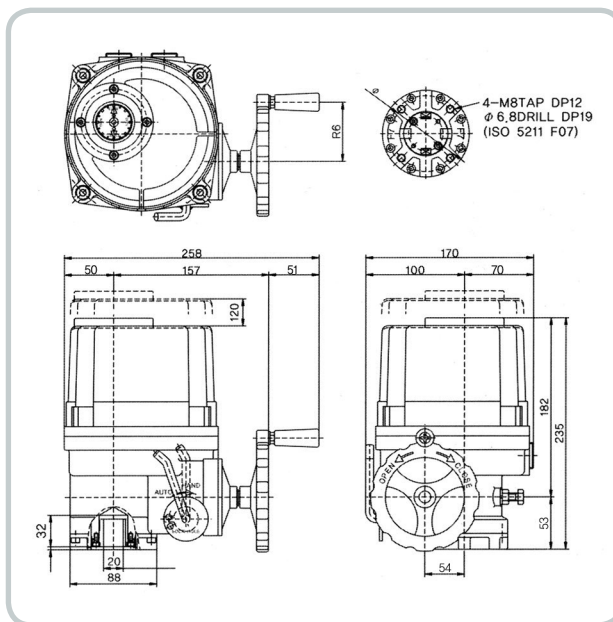
※① : Handwheel(hexagon design) ※② : PG 13.5 x Tap(Option : NPT 1/2", PT 1/2", PF 1/2")



DIMENSION



KOVA SE/PE-60H



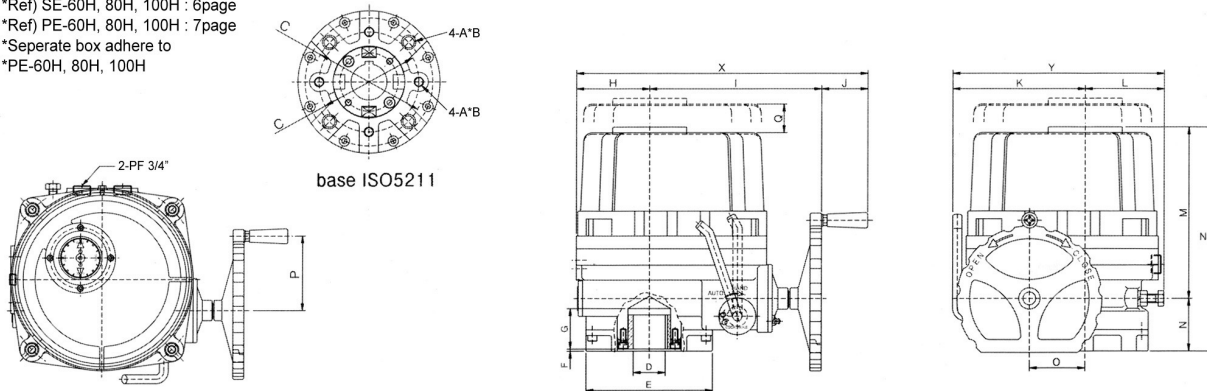
KOVA SE/PE-80H, KOVA SE/PE-100H

ON-OFF SE/PE SERIES DIMENSION

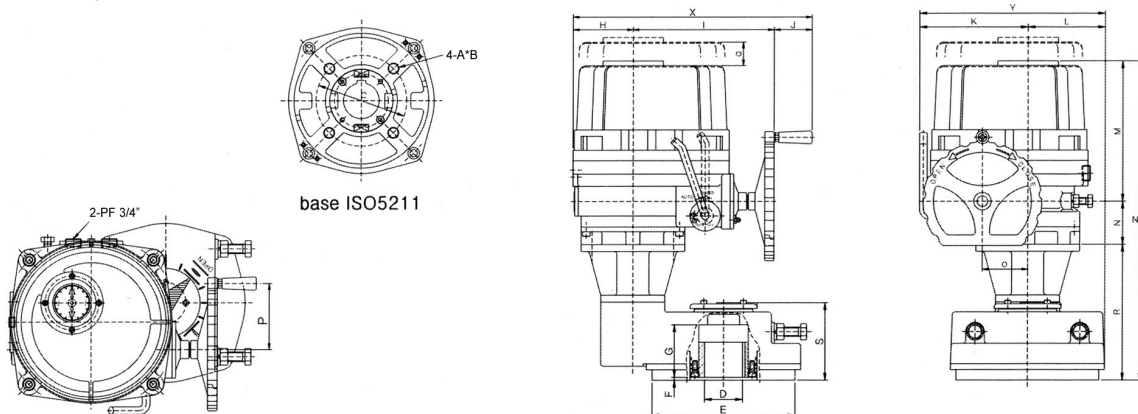
Model	Base ISO 5211 ØC	A B	D(max)	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	X	Y	Z
SE-150H	F07/F10	M8/M10	22	125	3	42	73	200	65	142	87	200	68	54	78	160	-	-	338	229	268
PE-150H	70/102	12/15																			
SE-200H	F07/F10	M8/M10	22	125	3	42	73	200	65	142	87	200	68	54	78	160	-	-	338	229	268
PE-200H	70/102	12/15																			
SE-300H	F10/F12	M10/M12	35	148	3	49	82	221	65	160	99	235	69	65	78	180	-	-	368	259	304
PE-300H	102/125	15/18																			
SE-500H	F10/F12	M10/M12	35	148	3	49	82	221	65	160	99	235	69	65	78	180	-	-	368	259	304
PE-500H	102/125	15/18																			
SE-600H	F10/F12	M10/M12	35	148	3	49	82	221	65	160	99	235	69	65	78	180	-	-	368	259	304
PE-600H	102/125	15/18																			
SE-800H	F12/F14	M12/M16	45	178	3	57	103	242	65	186	111	256	74	78	110	210	-	-	410	297	330
PE-800H	125/140	18/24																			
SE-1200H	F12/F14	M12/M16	45	178	3	57	103	242	65	186	111	256	74	78	110	210	-	-	410	297	330
PE-1200H	125/140	18/24																			
SE-2000H	F14/F16	M16*/M20	65	245	5	90	103	242	65	186	133	256	74	78	110	210	-	-	410	319	563
PE-2000H	140*/165	24*/30																			
SE-3000H	F14*/F16	M16*/M20	65	245	5	90	103	242	65	186	133	256	74	78	110	210	-	-	410	319	563
PE-3000H	140*/165	24*/30																			

SE-150H, SE-200H, SE-300H, SE-500H, SE-600H, SE-800H, SE-1200H PE-150H, PE-200H, PE-300H, PE-500H, PE-600H, PE-800H, PE-1200H

*Ref) SE-60H, 80H, 100H : 6page
 *Ref) PE-60H, 80H, 100H : 7page
 *Seperate box adhere to
 *PE-60H, 80H, 100H

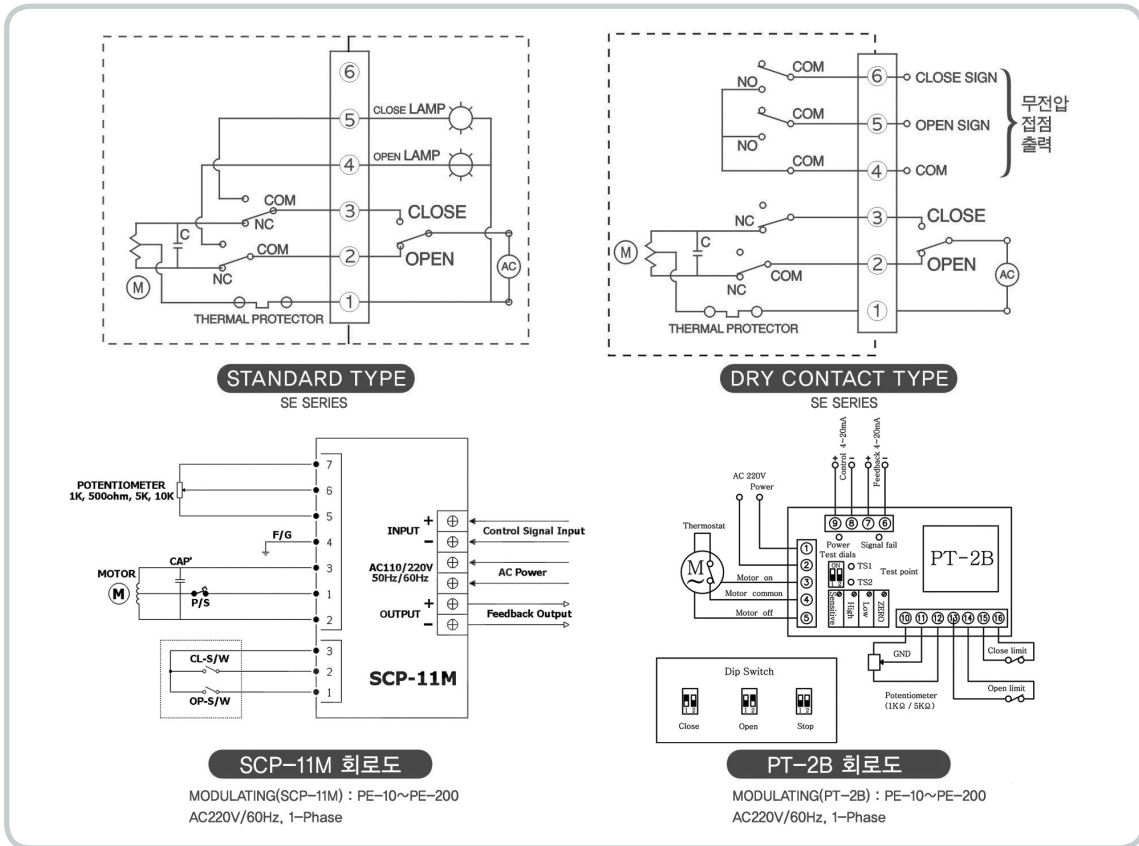


SE-2000H, SE-3000H PE-2000H, PE-3000H

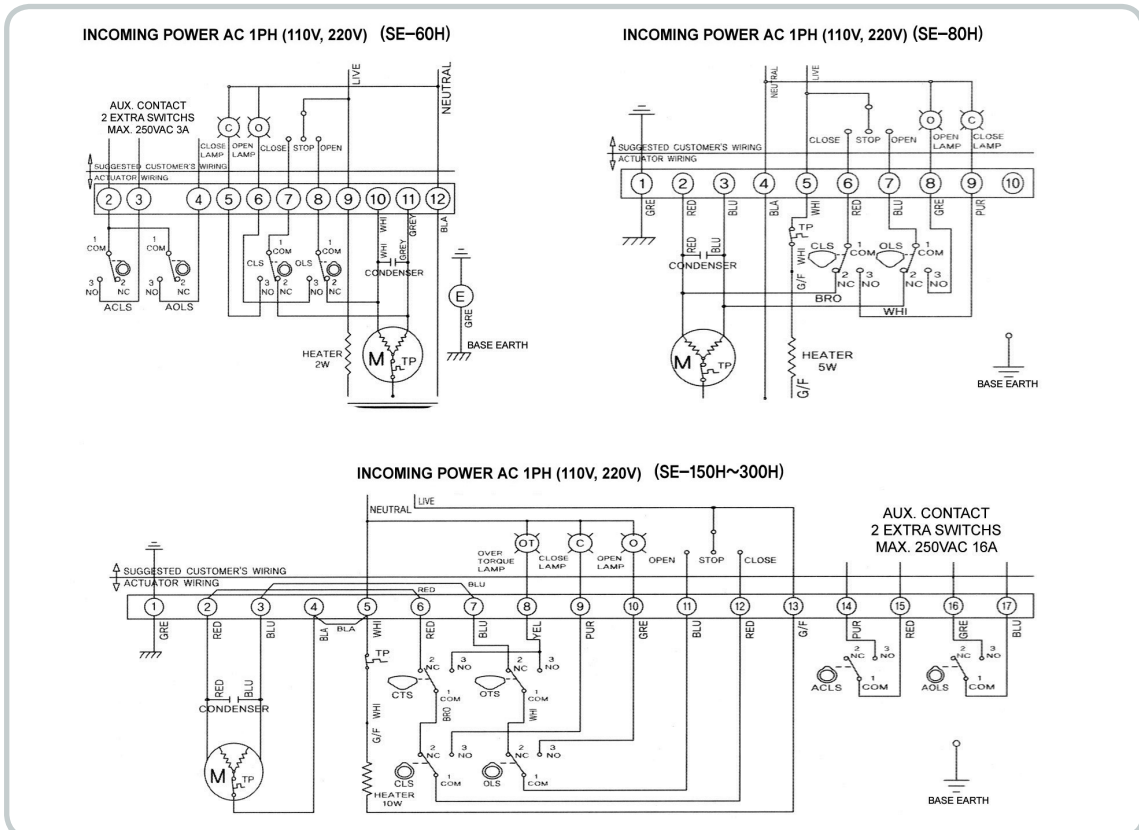


KOVA ELECTRIC ACTUATOR

◎ SE/PE-05, 10, 25, 50, 100, 200



◎ SE-60H~300H



KOVA ELECTRIC VALVE

RUBBER SEAT BUTTERFLY VALVE (FC,FCD BODY)

Valve nominal size : 40A to 600A

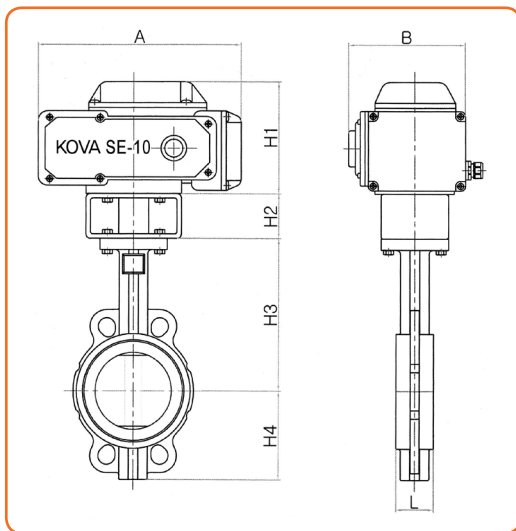
Max. working pressure : 10/20 Kgf/cm²

Working temp. range : NBR Seat : -10~80°C

EPDM Seat : -20~120°C



SE/PE SERIES



Valve standard specification

Material		Option	
Body	GC200(FC20)	Body	GCD450(FCD45), SCPH2, SCS13
Disc	SCS13		
Stem	SUS304	Rating	JIS 10K LUG, JIS 20K WAFER
Seat	NBR(STD), EPDM		
Test Condition			
Class Rating	10 K		20 K
Body Shell Test	15kgf/cm ² – Hydraulic	30kgf/cm ² – Hydraulic	
Seat Leak Test	6kgf/cm ² – Air		6kgf/cm ² – Air
Applicable Flange Standard	KS, JIS, ANSI 150LB WAFER etc.		KS, JIS WAFER etc.

Actuator standard specification

Power Supply	AC220V or AC110/50–60Hz	Manual operation	Manual Handle
Enclosure	IP67	Input & Output	4~20 mA (PE Series)
Ambient temp.	-30 ~ 60°C	Material	Al Die-cast
Protection	Thermal protector	Option Model : SE-00H, PE-00H	Explosionproof
Rotation angle	0~90 Deg.		AC380V, 440V/ 3-Phase
Limit Switch	Open/Close	Option	2-Extra Switch
Model	SE-05 ~ SE-200 (ON-OFF)		Space heater
	PE-10 ~ PE-200 (MOD.)		Clutch Handwheel

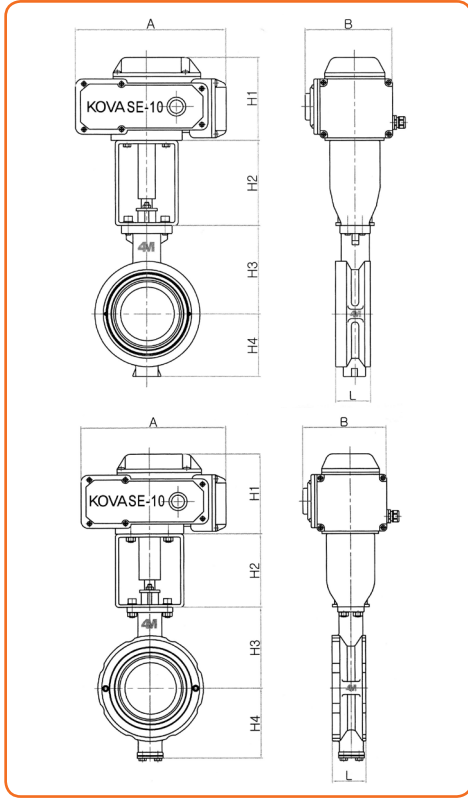
DIMENSION (SE & PE SERIES) JIS 10K WAFER

SIZE	SE SERIES (ON-OFF)				PE SERIES (MOD)				H2	H3	H4	L
	MODEL	A	B	H1	MODEL	A	B	H1				
40A	SE-05	155	113	103	PE-10	208	120	115	60	140	66.8	32.5
50A	SE-05	155	113	103	PE-10	208	120	115	60	163	77	41
65A	SE-05	155	113	103	PE-10	208	120	115	60	178	86	44
80A	SE-10	208	120	115	PE-10	208	120	115	60	183	96	45
100A	SE-10	208	120	115	PE-10	208	120	115	60	203	117	50
125A	SE-10	208	120	115	PE-25	256	156	141	60/80	214	131	54
150A	SE-25	256	156	141	PE-25	256	156	141	80	229	148	54
200A	SE-25	256	156	141	PE-50	256	156	141	80	264	179	60
250A	SE-50	256	156	141	PE-50	256	156	141	80	296	212	66
300A	SE-60	256	156	141	PE-100	280	156	170	80/100	337	240	76
350A	SE-100	280	156	170	PE-100	280	156	170	100	371	263	74
400A	SE-200	280	156	170	PE-200	280	156	170	100	401	298	85

KOVA ELECTRIC VALVE

HIGH PERFORMANCE BUTTERFLY VALVE (FCD/SUS BODY)

SE/PE SERIES



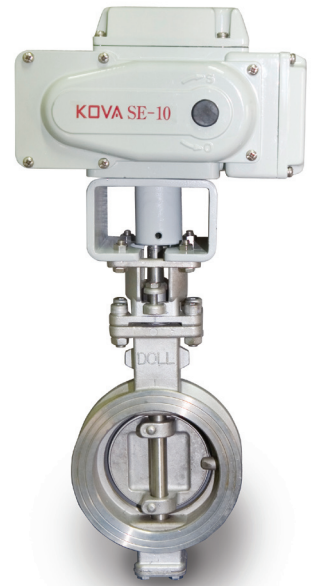
Valve nominal size : 40A to 600A

Max. working pressure : 10/20 Kgf/cm²

Working temp. range : MTFE Seat : -20~195°C

Option : Metal seat : Inconel625/ SS304/ SS316

Max. Temp. : 600°C



Valve standard specification

Material		Option	
Body	FCD45, SCS13	Body	SCPH2, SCS14
Disc	SCS13, SCS14	Seat	R-TFE, SS304, 316, INCONEL
Stem	SS304, SS316, SS410	Rating	JIS20K, ANSI300# WATER
Seat	MTFE		

	Test Condition	
Class Rating	10 K	20 K
Body Shell Test	15kgf/cm ² - Hydraulic	30kgf/cm ² - Hydraulic
Seat Leak Test	6kgf/cm ² - Air	6kgf/cm ² - Air
Applicable Flange Standard	KS, JIS, ANSI 150LB RF etc.	KS, JIS, ANSI 300LB RF etc.

Actuator standard specification

Power Supply	AC220V or AC110/50-60Hz	Manual operation	Manual Handle
Enclosure	IP67	Input & Output	4~20 mA (PE Series)
Ambient temp.	-30 ~ 60°C	Material	Al Die-cast
Protection	Thermal protector	Option Model :	Explosionproof
Rotation angle	0~90 Deg.	SE-00H, PE-00H	AC380V, 440V/ 3-Phase
Limit Switch	Open/Close	Option	2-Extra Switch
Model	SE-05 ~ SE-200 (ON-OFF)		Space heater
	PE-10 ~ PE-200 (MOD.)		Clutch Handwheel

DIMENSION (FCD BODY : SE & PE SERIES)

SIZE	SE SERIES (ON-OFF)			PE SERIES (MOD)				H2	H3	H4	L	
	MODEL	A	B	H1	MODEL	A	B					H1
50A	SE-05	155	113	103	PE-10	208	120	115	113	92	65	43
65A	SE-05	155	113	103	PE-10	208	120	115	113	103	75	46
80A	SE-10	208	120	115	PE-10	208	120	115	113	110	85	46
100A	SE-10	208	120	115	PE-10	208	120	115	113	132	95	52
125A	SE-10	208	120	115	PE-25	256	156	141	132/152	156	115	57
150A	SE-25	256	156	141	PE-25	256	156	141	152	173	145	62
200A	SE-25	256	156	141	PE-50	256	156	141	152	227	173	83
250A	SE-50	256	156	141	PE-50	256	156	141	152	265	253	87
300A	SE-60	256	156	141	PE-100	280	156	170	156/176	309	279	98
350A	SE-100	280	156	170	PE-100	280	156	170	176	337	309	100
400A	SE-200	280	156	170	PE-200	280	156	170	166	368	340	115

DIMENSION (SUS BODY : SE & PE SERIES)

SIZE	SE SERIES (ON-OFF)			PE SERIES (MOD)				H2	H3	H4	L	
	MODEL	A	B	H1	MODEL	A	B					H1
50A	SE-05	155	113	103	PE-10	208	120	115	113	92	65	44
65A	SE-05	155	113	103	PE-10	208	120	115	113	103	75	46
80A	SE-10	208	120	115	PE-10	208	120	115	113	110	85	46
100A	SE-10	208	120	115	PE-10	208	120	115	113	132	95	52
125A	SE-10	208	120	115	PE-25	256	156	141	132/152	156	115	57
150A	SE-25	256	156	141	PE-25	256	156	141	152	173	145	59
200A	SE-25	256	156	141	PE-50	256	156	141	152	227	173	64
250A	SE-50	256	156	141	PE-50	256	156	141	152	265	253	72
300A	SE-60	256	156	141	PE-100	280	156	170	156/176	309	279	96
350A	SE-100	280	156	170	PE-100	280	156	170	176	337	309	98
400A	SE-200	280	156	170	PE-200	280	156	170	166	368	340	115

KOVA ELECTRIC VALVE

2-WAY FLANGED BALL VALVE

Valve nominal size : 15A~300A

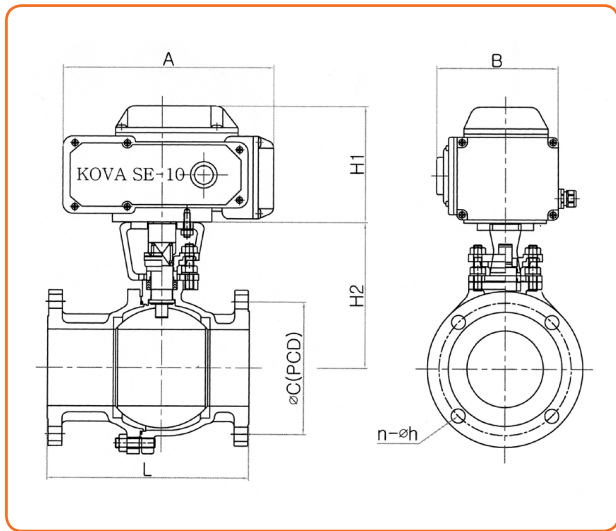
Max. working pressure : 10/20 Kgf/cm²

Working temp. range ; PTFE (GLASS 15%) : -30~130 °C
 RTFE(CARBON 25%) : -30~180 °C
 SOFT PEEK : -30~300 °C
 METAL(SS304,316) : -40~500 °C

* 위의 온도 조건은 실제 사용압력에 따라 변할 수 있습니다.



SE/PE SERIES



Valve standard specification

Material		Option	
Body	SCS13, SCS14, SCPH2	Body	RTFE, SOFT PEEK, METAL
Disc	SCS13, SCS14	Rating	JIS 20K, 30, 40K RF
Stem	SUS304, SUS316		ANSI 150Lb, 300Lb, 600Lb RF etc.
Seat	TEFLON(GLASS 15%)		

	Test Condition	
Class Rating	10 K	20 K
Body Shell Test	15kgf/cm ² - Hydraulic	30kgf/cm ² - Hydraulic
Seat Leak Test	6kgf/cm ² - Air	6kgf/cm ² - Air
Applicable Flange Standard	KS, JIS, ANSI 150LB RF etc.	KS, JIS, ANSI 300LB RF etc.

Actuator standard specification

Power Supply	AC220V or AC110/50-60Hz	Manual operation	Manual Handle
Enclosure	IP67	Input & Output	4~20 mA (PE Series)
Ambient temp.	-30 ~ 60°C	Material	Al Die-cast
Protection	Thermal protector	Option Model : SE-00H, PE-00H	Explosionproof
Rotation angle	0~90 Deg.	Option	AC380V, 440V/ 3-Phase
Limit Switch	Open/Close		2-Extra Switch
Model	SE-05 ~ SE-200 (ON-OFF) PE-10 ~ PE-200 (MOD.)		Space heater
			Clutch Handwheel

DIMENSION (SE/PE SERIES) JIS 10K RF

SIZE	SE SERIES (ON-OFF)				PE SERIES (MOD)				H2	øC (PCD)	n-h	L
	MODEL	A	B	H1	MODEL	A	B	H1				
15A	SE-05	155	113	103	PE-10	208	120	115	107	70	4-15	108
20A	SE-05	155	113	103	PE-10	208	120	115	111	75	4-15	117
25A	SE-05	155	113	103	PE-10	208	120	115	119	90	4-19	127
32A	SE-10	208	120	115	PE-10	208	120	115	121	100	4-19	140
40A	SE-10	208	120	115	PE-10	208	120	115	133	105	4-19	165
50A	SE-10	208	120	115	PE-10	208	120	115	142	120	4-19	178
65A	SE-10	208	156	141	PE-25	256	156	141	165	140	4-19	190
80A	SE-25	256	156	141	PE-25	256	156	141	174	150	8-19	203
100A	SE-25	256	156	141	PE-50	256	156	141	188	175	8-19	229
125A	SE-50	256	156	141	PE-100	280	156	170	216	210	8-23	356
150A	SE-100	280	156	170	PE-100	280	156	170	263	240	8-23	394
200A	SE-200	280	156	170	PE-200	280	156	170	340	290	12-23	457

KOVA ELECTRIC VALVE

3-PIECE BALL VALVE

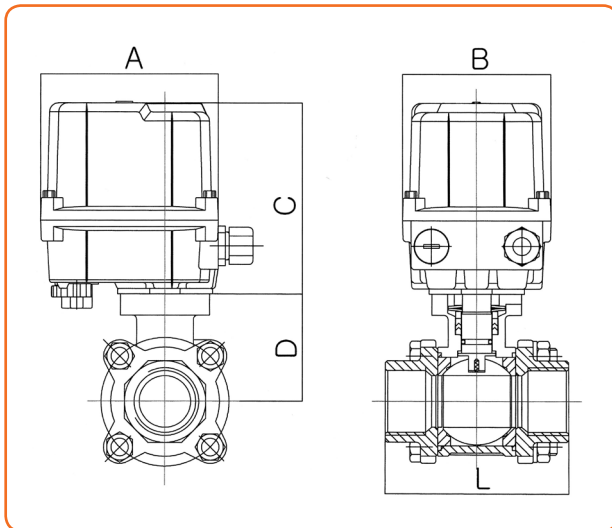
Valve nominal size : 10A ~ 50A

Max. working pressure : 1000 psi

Working temp. : -20 ~ 130°C (Option : Carbon PTFE seat : 180°C)



SE-60H/PE-60H SERIES



Valve standard specification

Material	
Body	SCS14
Disc	SCS14
Stem	SUS316
Seat	PTFE
Test Condition (JIS 10K 기준)	
Body Shell Test : 15kgf/cm ² - Hydraulic	
Seat Leak Test : 9kgf/cm ² - Air	
Applicable Flange Standard : SCREWED END TYPE	

Actuator standard specification

Power Supply	AC220V or AC110/50-60Hz	Manual operation	Manual Handle
Enclosure	IP67	Input & Output	4~20 mA (PE Series)
Ambient temp.	-30 ~ 60°C	Material	Al Die-cast
Protection	Thermal protector	Option Model :	Explosionproof
Rotation angle	0~90 Deg.	SE-00H, PE-00H	AC380V, 440V/ 3-Phase
Limit Switch	Open/Close	Option	2-Extra Switch
Model	SE-60H (ON-OFF)		Space heater
	PE-60H (MOD.)		Clutch Handwheel

DIMENSION (SE-60H/PE-60H SERIES) SCREWED END

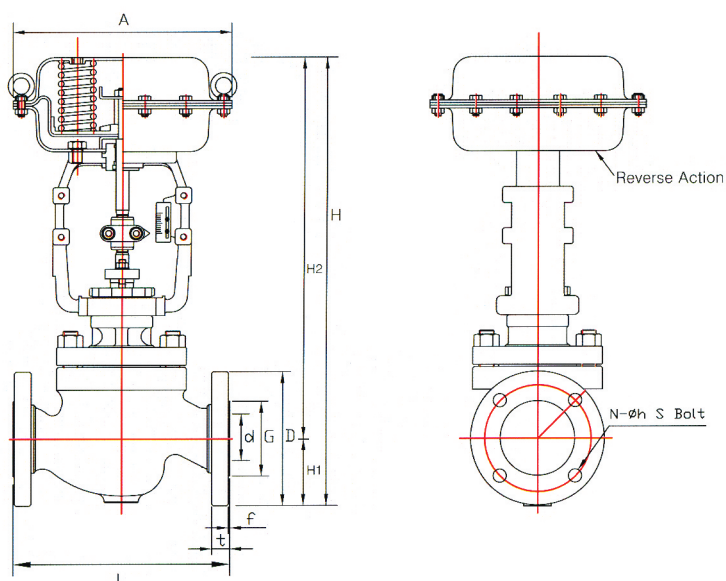
SIZE	SE SERIES (ON-OFF)				PE SERIES (MOD)				D	L
	MODEL	A	B	C	MODEL	A	B	C		
15A	SE-60H	126	105	132	PE-60H	206	110	132	37	63,5
20A	SE-60H	126	105	132	PE-60H	206	110	132	45	72,5
25A	SE-60H	126	105	132	PE-60H	206	110	132	53,4	81
32A	SE-60H	126	105	132	PE-60H	206	110	132	59	94,5
40A	SE-60H	126	105	132	PE-60H	206	110	132	74,7	108
50A	SE-60H	126	105	132	PE-60H	206	110	132	83,5	121,5

KOVA PNEUMATIC CONTROL VALVE

SG/CG SERIES

DESIGN FEATURES

● Body	Stainless Steel, Cast Steel(SCS13/WCB)	● Port	Single-seat(P/Quick), Cage(P/Window)
● Stem	Stainless Steel(SUS304/316/410)	● Seat	Stainless Steel(SUS304/316/410)
● Rating	JIS10K / ANSI(150#~2500#) / JIS	● Characteristic	Linear, EQ%
● Diaphragm	Multi-Spring Type	● Accessory	E/P(P/P)-Positioner, Air-Set



(mm)

Model	Size $\varnothing d$	L	H	H1	H2	$\varnothing A$	$\varnothing D$	T	$\varnothing G$	N- $\varnothing h$	End conn.
SG 15	1/2"	184	504	50	454	250	90	12	51	15×4	JIS 10K RF (ANSI) (JIS) (DIN)
SG 20	3/4"	184	504	50	454	250	95	14	56	15×4	
SG 25	1"	184	504	55	454	250	125	14	67	19×4	
SG 32	1-1/4"	222	557	62	495	290	135	16	76	19×4	
SG 40	1-1/2"	222	557	62	495	290	140	16	81	19×4	
SG 50	2"	254	581	75	506	290	155	16	96	19×4	
CG 65	2-1/2"	276	678	81	597	370	175	18	116	19×4	
CG 80	3"	298	700	86	614	370	185	18	126	19×8	
CG 100	4"	352	756	111	645	370	210	18	151	19×8	
CG 125	5"	403	1060	125	935	480	250	20	181	23×8	
CG 150	6"	451	1095	145	950	480	280	22	212	23×8	

* 8" to 14" available on request.

EMERGENCY SHUT OFF ACTUATOR



Electric actuator with high performance electric operation of powerful motor use.

During a power failure, emergency opening and closing are certainly possible by external signal. (ABE/HBE series)

The battery checker is able to manager of battery by remote control operation.

The solar electric power generation is able to use during a long power failure, it does not need voltage.

When motor is in not motion, consumed electric power is less than 3W. Energy-saving design.

Classification	ABR/ABE series		HBR/HBE series			
Actuator type	ABR-300	ABR-700	HBR-300	HBR-700	HBR-02K	HBR-06K
	ABE-300	ABRE-700	HBE-300	HBE-700	HBE-02K	HBE-06K
Rated torque N·m	30	70	30	70	200	600
Speed s	3~4 s	6~10 s	1~2 s	3~5 s	8~15 s	24~45 s
Power required	AC voltage : 100VA MAX. DC voltage : 80VA MAX.		AC voltage : 150VA MAX. DC voltage : 120VA MAX.			
Voltage	AC 100/110, 200/220 (50/60Hz)		DC24V			
Motor	DC motor					
Over load protection	Current limiter					
Temperature	-20 ~ 50°C					
Duty cycle	20% 15min					
Other	Enclosure : (JIS C0920 IP65) Aluminum alloy diecast cover Space heater for anti-condensation : standard Wiring conduct : 2 G1/2 Attachment : cable ground (for 6~12 cable), plug Manual over-ride : standard (with clutch)					



Excellent performance actuator for electric shut-off valves equipped with connector for damper shaft and bracket. It has a new structure with ultra high capacity electric double layer capacitor. In case of power failure, capacitor discharges electricity and operates valve. It can handle high frequency (over 200,000 times) operation. When is in not motion, consumed electric power is less than 3W, (ACR : 1W) and it is energy-saving design.

Classification	ACR/ECR series		
Actuator type	ACR-300	ECR-120	ECR-360
Rated torque N·m	3	12	36
Speed s	when turn on : less than 10 s when shut off : less than 4~6 s	3~6 s	7~14 s
Power required	when in motion : 30VA MAX, when not in motion : 1VA	when in motion : 30VA MAX, when in charge : 50VA MAX, when in not motion : 2,5VA	
Voltage	AC 90~242V (50/60Hz)	AC 100/110, 200/220 (50/60Hz)	
Motor	DC motor		
Over load protection	Thermister	Timer	
Temperature	-20 ~ 50°C		
Duty cycle	20% 15min		
Other	Polycarbonate resin cover (ACR) Aluminum alloy diecast cover (ECR) Enclosure : (JIS C0920 IP65) Space heater for anti-condensation : standard Attachments : cable ground (for 5~10,5 cable) (ECR for 6~12 cable), plug Wiring conduct : 2 G1/2 (ECR) G3/8 (ACR) Manual over-ride : standard with clutch (ECR)		



HIGH POWER ELECTRIC ACTUATOR



AD and HD series with powerful motor and control board offer reliable automatic control of quarter-turn valves. These actuators provide maximum versatility in electric control. The use of self-locking worm gear is standard and ensures positive valve position.

Classification	AD series		HD series			
	Standard type		High speed operating type			
Actuator type	AD2-300	AD2-700	HD1-300	HD1-700	HD1-02K	HD1-06K
	AD1-300	AD1-700	HD2-300	HD2-700	HD2-02K	HD2-06K
Rated torque N•m	30	70	30	70	200	600
Speed s	3~4 s	6~10 s	1~2 s	3~5 s	8~15 s	24~45 s
Power required	AC power supply : 100VA MAX.		AC power supply : 150VA MAX.			
	DC power supply : 80VA MAX.		DC power supply : 120VA MAX.			
Voltage	AC 100/110, 200/220 (50/60Hz)		DC24V (except AD1/HD1)			
Motor	DC motor		DC motor			
Over load protection	Current limiter (AD1 : Thermistor)		Current limiter (HD1 : Thermistor)			
Temperature	-20 ~ 50°C (Actuator by itself : -20~65°C)					
Duty cycle	20% 15min					
Other	Aluminum alloy diecast cover Enclosure : (JIS CO920 IP65) Space heater for anti-condensation : standard Wiring conduct : 2 G1/2 Attachment : cable ground (for Ø6~12 cable), plug					



HIGH POWER ELECTRIC/CONTROL ACTUATOR

PDX series with electric positioner and feedback potentiometer offer reliable proportional control of quarter-turn valves.

PHX series with high-frequency operating actuator with high speed brushless DC motor and contactless feedback potentiometer offer fast response and high speed control. It is suitable for control operation.

Classification	High-power Electric Control Actuator				High-power Electric Control Actuator			
	PDX-300	PDX-700	PDX-02K	PDX-06K	PHX-300	PHX-700	PHX-02K	PHX-06K
Actuator type	PDX-300	PDX-700	PDX-02K	PDX-06K	PHX-300	PHX-700	PHX-02K	PHX-06K
Rated torque N•m	21	50	140	400	21	50	140	400
Speed s	6~20 s	15~50 s	30~100 s	90~300 s	1.2~2.5 s	3.5~7 s	11~23 s	35~70 s
Power required	9.5 VA	13 VA		45 VA	120 VA MAX.			
Voltage	AC 100/110, 200/220V DC/AC/24V				AC 100/110, 200/220V DC/AC/24V			
Motor	DC motor (VIC voltage current control)				Brushless DC motor (PWM)			
Resolution	Less than 0.5%	Less than 0.2%			Less than 0.2%			
Over load protection	Current limiter				Current limiter			
Input signal	(a) 4~20mA/1~5V (input resistance :250Ω) (b) 0~5V•0~10V (input resistance : more than 1MΩ) (c) 135Ω~1KΩ (potentionmeter input)				4~20mA / 1~5V (input resistant : 250Ω)			
OPEN/SHUT input signal	Input by OPEN/SHUT control SW (Amp.required for control SW : 6mA DC 15V) A dry point/Transister Open collector (Rated input 15 D VC)							
Indicator signal	0~1mA (maximum input resistance of customer' s indication : 3KΩ)							
Temperature	-20 ~ 50°C (Actuator by itself : -20~65°C)							
Duty cycle	50% 30min				100%			
Other	Aluminum alloy diecast cover Enclosure : (JIS CO920 IP65) Space heater for anti-condensation : standard Wiring conduct : 2 G1/2 Attachments : cable ground (for 6~12 cable), plug							

Multi-Role Valve, Model MR-7

Self-Actuation On-Off / Control Valves, Shockless (No-Water hammering)

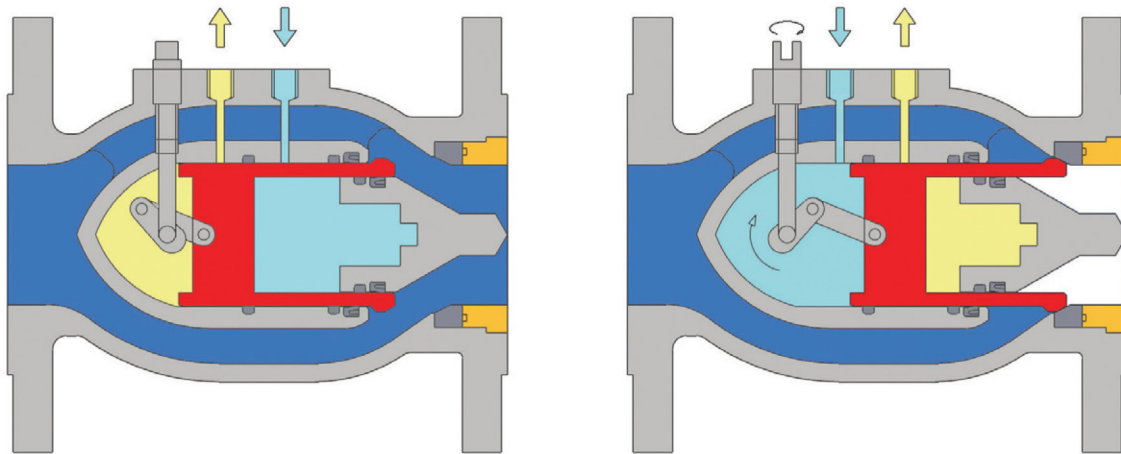
Self-Actuation Control Valves are economical Pneumatic valves for Water, gas, Air and Oil control systems. MR-7 Valves are no need Extra Actuators for Valve Operating. Valve can be actuated by Air supply injected to Valve Body.

Unique Trim & Seat design makes tight sealing & shockless in closed position.



· Temperature Range : -20°C ~ 120°C · Size & Rating : 40A(1.5") ~ 300A(12"), 10K(150#) ~ 20K(300#)

■ 용도 : 물, 가스, 공기, 오일, 복잡한 배관라인



DESIGN FEATURES

- 100% Tight sealing(완벽한 씰링)

MR-7 seat is designed for tight sealing by supplied air pressure & Seat design.

- Easy Installation (설치가 쉽다)

In complicated Pipe lines, MR-7 can be easy installed for Light weight and Compact design.

- No Back-pressure

MR-7 can mooth operate in any differential pressure.

- Minimum Working Pressure

Minimum operational air supply is 3kgf/cm².

- Good for Quick open/Quick close required applications

- Economical Valves (경제적인 밸브)

MR-7 is Low-priced automatic Valves.

- One-price dody (외부 누수가 없다)

one-priced body prevents leakage from split valve body packing.

- Easy replacement with pneumatic Ball Valves

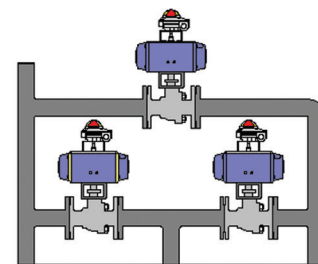
(Ball, plug와 일대일 교체 가능)

MR-7 has Same dimensions wirh 2-way Ball & Plug Valves.

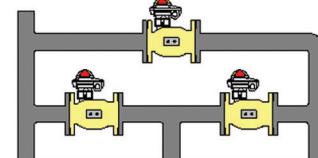
- Good for Frequent Operation

(작동이 빈번한 라인에 적합)

복잡한 배관라인에 획기적인 개선효과!



기존배관라인
(볼, 플러그, 버터플라이밸브)



개선된 배관라인(MR-7)
(좁은 공간에서도 설치가능)

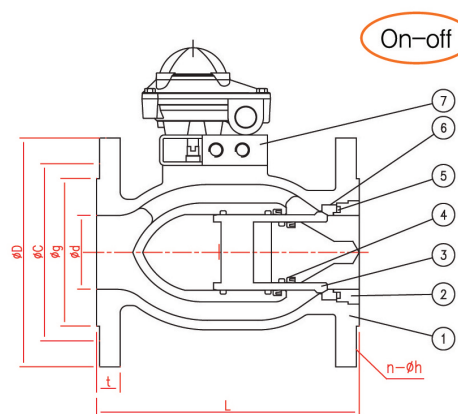
GENERAL SPECIFICATION



BODY SIZE	1.5" ~ 12" (40A~300A)
PRESSURE RATINGS	ANSI CLASS 150# ~ 300#
	JIS 10K ~ 20K (OPTION : DIN)
TRIM DESIGN	Quick Open, LINEAR, EQ-%
LEAKAGE CLASS	ANSI CLASS IV, V, VI
TEMPERATURE LIMIT	-70 ~ 250°C

STANDARD MATERIALS AND SEAT CONSTRUCTION

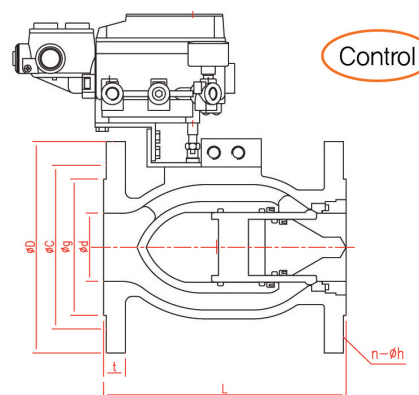
NO.	NAME OF PART	MATERIALS	
		STANDARD	OPTION
1	BODY	SCS13A	SCS14A, SCPH2
2	RETAINER	304SS	316SS
3	PISTON	304SS	316SS
4	PACKING	VITON	PTFE, R-TFE
5	CUSHION RING	NBR	VITON, EPDM
6	SEAT	PTFE	R-TFE, VITON
7	AIR BLOCK	ALUM	304SS



TECHNICAL DIMENSIONS

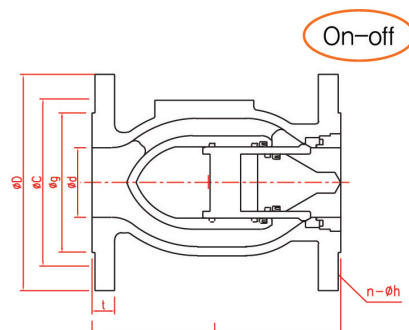
JIS 10K

SIZE	L	ϕd	ϕD	ϕg	ϕC	l	n	ϕh
40A	165	40	140	85	105	16	4	19
50A	178	50	155	100	120	16	4	19
65A	190	65	175	120	140	18	4	19
80A	203	80	185	130	150	18	8	19
100A	229	100	210	155	175	18	8	19
125A	356	125	250	185	210	20	8	23
150A	394	150	280	215	240	22	8	23
200A	457	200	330	265	290	22	12	23
250A	533	250	400	325	355	24	12	25
300A	610	300	445	370	400	24	16	25



JIS 20K

SIZE	L	ϕd	ϕD	ϕg	ϕC	l	n	ϕh
40A	165	40	140	85	105	18	4	19
50A	178	50	155	100	120	18	8	19
65A	190	65	175	120	140	20	8	19
80A	203	80	200	135	160	22	8	23
100A	229	100	225	160	185	24	8	23
125A	356	125	270	195	225	26	8	25
150A	394	150	305	230	260	28	12	25
200A	457	200	350	275	305	30	12	25
250A	533	250	430	345	380	34	12	27
300A	610	300	480	395	430	36	16	27



KOVA POSITION MONITOR

	<p style="text-align: center;">MODEL APL – 2N</p> <ul style="list-style-type: none"> – Enclosure : Weatherproof IP67/NEMA4&4X (Standard) IP68(OPTION) – Solid and compact design – Bolts on visual position indicator (Re-adjustment available upon required direction) – Dual cable entries : 2 × 1/2 NPT(Standard) M20, PG13.5, PF1/2 " , PT1/2 " .(Option) – Terminal Strips : 8 points(0.08~2.5mm²) – Captive cover bolts – Easy mounting NAMUR standard stainless steel shaft and bracket
	<p style="text-align: center;">MODEL APL – 3N</p> <ul style="list-style-type: none"> – Enclosure : Weatherproof IP67/NEMA4&4X (Standard) IP68(OPTION) – Solid and beautiful design & various options available <ul style="list-style-type: none"> • 3~4 additional switches • 8~16 points Terminal Strips – Bolts on visual position indicator – Dual cable entries : 2 × 1/2 NPT(Standard) M20, PG13.5, PF1/2 " , PT1/2 " .(Option) – Terminal Strips : 8 points(0.08~2.5mm²) – Captive cover bolts – Easy mounting NAMUR standard stainless steel shaft and bracket
	<p style="text-align: center;">MODEL APL – 4N</p> <ul style="list-style-type: none"> – Enclosure : Weatherproof IP67/NEMA4,4X,7,9 (Standard) IP68(OPTION) Explosionproof : E EX d IIB T6 – Solid and beautiful design & various options available <ul style="list-style-type: none"> • 3~4 additional switches • 8~20 points Terminal Strips • various options switches – Bolts on visual position indicator – Dual cable entries : 2 × 3/4 NPT(Standard) M20, M25, PT3/4 " , PT3/4 " 4Cable entries(OPTION) – Terminal Strips : 8 points(0.08~2.5mm²) – Captive cover bolts – Easy mounting NAMUR standard stainless steel shaft and bracket
	<p style="text-align: center;">MODEL APL – 5N</p> <ul style="list-style-type: none"> – Enclosure : Weatherproof IP67/NEMA4,4X,7,9 (Standard) IP68(OPTION) Explosionproof : E EX d IIC T6, E EX ia IIC T6, E EX d IIB T6 – Solid and compact design – Shaft holder built in the cover(Dual shaft) Easy to set the visual position indicator Unique design to put the visual indicator on the threaded joint type cover – Bolts on visual position indicator – Dual cable entries : 2 × 3/4 NPT(Standard) M20, M25, PT3/4 " , PT3/4 " (Option) – Terminal Strips : 8 points(0.08~2.5mm²) – Captive cover bolts & Spring liaded cover bolts – Easy mounting NAMUR standard stainless steel shaft and bracket – Stainless steel (316) housing as option

KOVA POSITION MONITOR

STANDARD SPECIFICATION

Model Specification	APL-2N Series	APL-3N Series	APL-4N Series	APL-5N Series
Enclosure	Weatherproof IP67/NEMA4&4X	Weatherproof IP67/NEMA4&4X	Weatherproof IP67/NEMA4&4X Explosionproof E EX d IIB T6	Weatherproof IP67/NEMA4&4X Explosionproof E EX d IIC T6
Cable entries	Two NPT 1/2 "	Two NPT 1/2 "	Two NPT 3/4 "	Two NPT 3/4 "
Ambient temperature	-20°C ~ 80°C	-20°C ~ 80°C	-20°C ~ 80°C	-20°C ~ 80°C
Terminal strips	8 points(0.08-2.5mm ²)	8 points(0.08-2.5mm ²)	8 points(0.08-2.5mm ²)	8 points(0.08-2.5mm ²)
Position indicator	0~90° (90° tum free join) close:red open:yellow	0~90° (90° tum free join) close:red open:yellow	0~90° (90° tum free join) close:red open:yellow	0~90° (90° tum free join) close:red open:yellow
Switches	Mechanical switch ×2 proximity sensor ×2	Mechanical switch ×2 proximity sensor ×2	Mechanical switch ×2 proximity sensor ×2	Mechanical switch ×2 proximity sensor ×2
Painting	Chromate Polyester podwer coating(black)	Chromate Polyester podwer coating(black)	Chromate Polyester podwer coating(black)	Chromate Polyester podwer coating(black)

OPTION SPECIFICATION

Model Specification	APL-2N Series	APL-3N Series	APL-4N Series	APL-5N Series
Enclosure	Weatherproof IP68	Weatherproof IP68	Weatherproof IP68 Explosionproof E EX ia IIB T6	Weatherproof IP68 Explosionproof E EX d IIB T6 E EX ia IIC T6
Cable entries	Two PF1/2 " ,PT1/2 " M20, PG13,5	Two PF1/2 " ,PT1/2 " M20, PG13,5	Two PF3/4 " ,PT3/4 " M20, M25	Two PF3/4 " ,PT3/4 " M20, M25
Option temperature	-	-40°C ~ 80°C -20°C ~ 150°C	-	-
Terminal strips	-	16 points(0.08-2.5mm ²)	20 points(0.08-2.5mm ²)	-
Position indicator	three position close:red open:Green	three position close:red open:Green	three position close:red open:Green	three position close:red open:Green
Switches	-	Mechanical switch ×4 proximity sensor ×4	Mechanical switch ×4 proximity sensor ×4	Mechanical switch ×4 proximity sensor ×4
Potentiometer	-	1k ohm standard, 5k ohm, 0-10k ohm	1k ohm standard, 5k ohm, 0-10k ohm	1k ohm standard, 5k ohm, 0-10k ohm
Current output signal unit	-	4~20mA DC 12.5 to 37V DC(24V typical)	4~20mA DC 12.5 to 37V DC(24V typical)	4~20mA DC 12.5 to 37V DC(24V typical)
Painting	Nylon others on request red,green,blue,yellow,silver	Nylon others on request red,green,blue,yellow,silver	Nylon others on request red,green,blue,yellow,silver	Nylon others on request red,green,blue,yellow,silver

ORDERING INFORMATION

A P L - 3 1 0 N

Enclosure _____

3. Weather proof
4. Explosion proof(Exd IIB T6)

Switch type _____

Bolt on _____
Position Indicator

Mechanical switch	Proximity Sensor	Reed type Proximity Sensor
10 2-SPDT	20 P&F NJ2-V3-N	30 General type
11 3-SPDT	21 Autonics, PS17-5DNU	31 High temp(Up to + 100°C)
12 4-SPDT	22 P&F NJ4-12GM-N	
13 2-SPDT	23 NBB2-V3	Mechanical Switch(2-SPDT)
14 2-SPDT		40 General type
15 2-SPDT + Potentiometer		41 High temp (Up to + 150°C)
16 2-SPDT + Signal unit(4-20mA)		



KVT **코바테크**
VALVE AUTOMATION SYSTEM

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