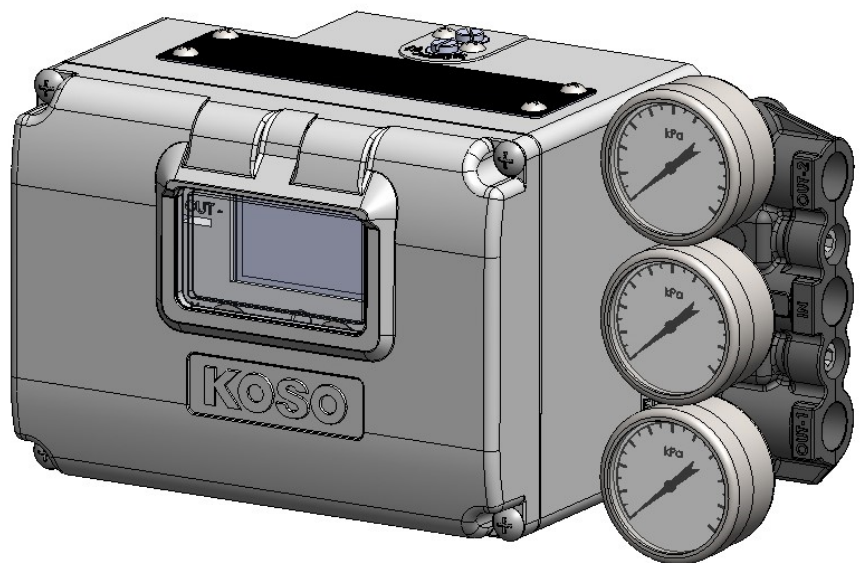


KGP5000/2000 시리즈 스마트 밸브 포지셔너

취급설명서 Annex 1 PID 파라미터 테이블



Annex 1. PID 파라미터 테이블

1 Software Version 과 PID 파라미터 테이블

PID 파라미터 테이블은 기존의 Software Version 및 Booster option 설정에 따라 달라집니다.

표 1 Software Version 과 PID 파라미터 테이블

KGP5000 Software Version	KGP2000 Software Version	부스터 릴레이가 없는 경우 ※1 PID 파라미터 테이블	부스터 릴레이가 있는 경우 ※1 PID 파라미터 테이블
0.4.7 까지	대상외	표 2-1 리니어·싱글액팅 선택시 표 2-2 리니어·더블액팅 선택시 표 2-3 로터리·싱글액팅 선택시 표 2-4 로터리·더블액팅 선택시 표 2-5 5300LA 시리즈 선택시	미대응
0.4.8 ~0.6.1	대상외	표 3-1 리니어·싱글액팅 선택시 표 3-2 리니어·더블액팅 선택시 표 3-3 로터리·싱글액팅 선택시 표 3-4 로터리·더블액팅 선택시 표 3-5 5300LA 시리즈 선택시	미대응
1.0.0 이후	1.0.0 이후	표 4-1 리니어·싱글액팅 선택시 표 4-2 리니어·더블액팅 선택시 표 4-3 로터리·싱글액팅 선택시 표 4-4 로터리·더블액팅 선택시 표 4-5 5300LA 시리즈 선택시	表 5-1 리니어·싱글액팅 선택시 表 5-2 리니어·더블액팅 선택시 表 5-3 로터리·싱글액팅 선택시 表 5-4 로터리·더블액팅 선택시 表 5-5 5300LA 시리즈 선택시

※1.부스터 릴레이 유무에 대해서는 본체 취급설명서 4.3.1 을 참고 해 주십시오.

2 부스터 릴레이가 없는 경우 PID 파라미터 테이블

(KGP5000 Software Version 0.4.7 까지)

표 2-1 리니어·싱글액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.6	30	1.1	0.9	30	1.3	10	1.4	3.0	3.0	4.0	3.0	1.3
	High	0.7	30	1.2	0.9	30	1.2	10	1.8	3.0	3.0	3.6	3.0	1.4
SS	Low	0.7	30	1.3	0.9	30	1.6	10	2.1	3.0	3.7	3.9	3.0	2.6
	High	1.3	30	2.2	1.5	30	2.4	10	2.6	3.0	4.1	4.2	3.0	2.5
S	Low	0.7	30	1.5	0.9	30	1.8	10	2.8	3.0	4.3	3.8	3.0	3.8
	High	1.8	30	3.1	2.0	30	3.5	10	3.4	3.0	5.3	4.8	3.0	3.5
M	Low	1.5	30	4.0	1.9	30	5.0	10	4.7	3.0	6.5	5.2	3.0	5.0
	High	2.5	30	4.0	2.8	30	5.0	10	4.7	3.0	6.5	5.2	3.0	5.0
L	Low	2.0	30	5.0	2.2	30	6.0	10	6.0	3.0	7.0	7.0	3.0	6.0
	High	3.6	30	6.5	4.0	30	8.0	10	5.2	3.0	8.5	5.6	3.0	8.0
LL	Low	2.8	30	6.5	3.1	30	8.0	10	8.0	3.0	9.0	9.0	3.0	8.5
	High	5.1	30	8.5	5.6	30	9.0	10	6.8	3.0	9.0	7.2	3.0	8.5
XL	Low	8.0	30	19.2	8.2	30	23.6	10	20.0	3.0	21.8	22.0	3.0	22.6
	High	21.0	30	35.4	23.0	30	40.0	10	17.0	1.0	22.6	14.0	1.0	25.4

표 2-2 리니어·더블액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	1.2	30	2.0	1.3	30	2.2	10	1.4	3.0	2.2	1.5	3.0	2.4
	High	1.3	30	2.2	1.4	30	2.7	10	2.0	3.0	3.5	2.1	3.0	3.7
SS	Low	1.3	30	2.5	1.5	30	2.6	10	2.0	3.0	3.5	2.1	3.0	3.5
	High	1.5	30	2.8	1.5	30	3.0	10	3.4	3.0	4.3	3.5	3.0	4.2
S	Low	1.5	30	3.4	1.8	30	3.4	10	3.8	3.0	5.0	5.0	3.0	4.6
	High	1.9	30	3.4	1.8	30	3.4	10	4.8	3.0	5.0	5.0	3.0	4.6
M	Low	2.8	30	6.5	2.8	30	6.5	10	6.0	3.0	7.5	6.0	3.0	7.5
	High	3.0	30	7.0	2.8	30	6.5	10	6.0	3.0	7.5	6.0	3.0	7.5
L	Low	21.0	30	30.0	13.0	30	39.5	10	38.0	1.0	34.0	36.0	1.0	46.4
	High	8.0	30	20.0	6.6	30	20.0	10	15.0	1.0	20.0	15.0	1.0	20.0
LL	Low	23.0	30	48.0	14.0	30	55.0	10	45.0	1.0	51.0	38.0	1.0	60.0
	High	16.0	30	42.0	13.0	30	33.0	10	28.0	1.0	42.0	28.0	1.0	42.0
XL	Low	28.0	30	96.0	17.0	30	96.0	10	64.0	1.0	96.0	43.0	1.0	96.0
	High	39.0	30	96.0	13.0	30	67.0	10	84.0	1.0	96.0	15.0	1.0	67.0

표 2-3 로터리·싱글액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.8	5	1.3	1.3	5	0.8	5	2.7	1.0	2.8	3.2	1.0	1.8
	High	1.0	5	1.6	1.0	5	1.8	10	3.3	1.0	6.0	2.8	1.0	4.5
SS	Low	0.8	30	1.8	1.2	30	1.6	10	1.8	3.0	3.0	3.2	3.0	2.9
	High	1.0	30	1.3	1.5	30	2.0	10	3.0	3.0	5.2	5.6	3.0	1.6
S	Low	0.8	30	1.8	2.3	30	3.2	10	1.7	3.0	4.4	5.0	3.0	3.8
	High	1.8	30	2.2	2.1	30	3.2	10	4.0	3.0	5.2	5.3	3.0	4.1
M	Low	1.2	30	3.5	2.5	30	4.8	10	3.0	3.0	8.0	7.5	3.0	7.2
	High	2.2	30	5.4	2.9	30	5.4	10	5.7	3.0	6.1	8.1	3.0	5.4
L	Low	3.3	30	6.8	2.8	30	7.0	10	9.0	3.0	8.0	9.0	3.0	8.0
	High	3.2	30	7.4	4.0	30	8.6	10	7.3	3.0	14.7	12.5	3.0	18.0
LL	Low	6.0	30	15.0	5.1	30	14.0	10	14.4	3.0	20.4	13.4	3.0	22.2
	High	6.0	30	17.0	7.0	30	21.0	10	14.0	3.0	33.0	21.0	3.0	46.0
XL	Low	6.5	30	23.3	8.0	30	23.8	10	36.0	1.5	51.0	22.0	1.5	49.0
	High	10.5	30	42.0	19.0	30	52.0	10	26.0	1.0	60.6	28.0	1.0	40.0

표 2-4 로터리·더블액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	1.0	30	1.4	1.0	30	1.4	10	2.6	3.0	2.8	2.8	3.0	2.8
	High	1.2	30	1.9	1.0	30	2.2	10	2.7	3.0	5.0	2.8	3.0	5.2
SS	Low	1.7	30	2.2	1.2	30	2.5	10	4.0	3.0	3.1	2.2	3.0	3.5
	High	1.9	30	2.2	1.7	30	2.5	10	4.5	3.0	2.6	4.5	3.0	3.5
S	Low	2.2	30	3.1	2.0	30	3.2	10	6.0	3.0	4.2	4.2	3.0	5.6
	High	2.5	30	3.4	2.2	30	3.2	10	7.0	3.0	3.0	5.0	3.0	4.5
M	Low	3.5	30	6.0	4.0	30	6.4	10	9.0	3.0	8.5	6.5	3.0	9.6
	High	4.2	30	7.0	4.0	30	7.0	10	10.0	3.0	9.0	7.0	3.0	10.0
L	Low	4.7	30	9.5	5.4	30	8.2	10	10.0	3.0	10.3	7.7	3.0	12.6
	High	4.9	30	10.1	5.7	30	10.1	10	10.6	3.0	14.6	9.4	3.0	13.5
LL	Low	9.4	30	20.0	12.0	30	22.5	10	18.0	3.0	27.8	16.0	3.0	26.5
	High	9.5	30	23.0	12.5	30	23.0	10	18.0	3.0	36.0	18.0	3.0	30.0
XL	Low	28.0	30	51.3	38.0	30	53.2	10	54.0	1.5	65.0	46.0	1.5	81.2
	High	36.0	30	94.0	38.0	30	71.7	10	38.0	1.5	93.4	38.0	1.5	93.4

표 2-5 5300LA 시리즈 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.9	30	2.4	2.8	30	3.0	10	1.8	1.5	7.0	6.0	1.5	8.0
	High	1.4	30	2.5	2.7	30	3.0	10	2.5	2.0	7.0	5.0	2.0	10.0
S	Low	1.3	30	3.4	3.8	30	5.0	10	3.0	3.0	9.0	9.0	3.0	8.0
	High	1.7	30	4.4	4.2	30	5.5	10	3.3	3.0	10.2	9.9	3.0	10.0
M	Low	4.8	30	6.7	4.5	30	8.0	10	9.5	1.0	14.0	11.7	1.0	9.6
	High	5.0	30	7	4.7	30	8.6	10	10.0	1.0	15.5	12.0	1.0	10.0
L	Low	5.7	30	19	8	30	17.0	10	13.0	1.0	20.0	18.0	1.0	20.0
	High	6.2	30	20	7.2	30	22.0	10	15.0	1.0	28.0	22.0	1.0	29.0
LL	Low	7.7	30	30	11	30	25.0	10	18.0	1.0	26.0	25.0	1.0	29.0
	High	8.5	30	40	9.5	30	38.0	10	25.0	1.0	56.0	35.0	1.0	46.0

3 부스터 릴레이가 없는 경우 PID 파라미터 테이블

(KGP5000 Software Version 0.4.8 ~ 0.6.1)

표 3-1 리니어·싱글액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.5	5	1.0	0.8	5	0.9	10	1.4	2.0	2.4	3.0	2.0	1.4
	High	0.6	5	1.0	1.0	5	1.2	10	1.7	2.0	1.9	3.5	2.0	2.0
SS	Low	0.7	5	1.8	1.2	5	1.7	10	1.5	2.0	3.7	3.5	2.0	2.7
	High	0.8	5	1.3	1.1	5	1.5	10	1.7	2.0	2.5	3.3	2.0	2.0
S	Low	0.9	5	2.5	1.5	5	2.5	10	1.6	2.0	5.0	4.0	2.0	4.0
	High	1.0	5	1.6	1.2	5	1.7	10	1.7	2.0	3.0	3.0	2.0	2.0
M	Low	1.6	5	2.7	1.8	5	3.0	10	3.0	1.5	6.0	5.8	1.5	5.0
	High	1.6	5	3.5	1.8	5	2.6	10	3.8	1.5	7.0	4.0	1.5	5.0
L	Low	3.2	5	8.0	3.3	5	5.4	10	5.0	1.5	9.5	7.5	1.5	7.6
	High	4.0	5	8.5	5.2	5	8.8	10	4.9	1.0	17.0	6.5	1.0	11.0
LL	Low	3.0	5	9.0	3.2	5	5.8	10	7.2	1.0	12.5	6.0	1.0	9.5
	High	5.0	5	10.5	6.5	5	11.2	10	5.5	1.0	21.0	6.0	1.0	16.0
XL	Low	8.0	5	25.0	7.0	5	15.0	10	13.8	1.0	32.0	12.6	1.0	27.0
	High	7.0	5	26.0	6.0	5	17.0	10	16.0	1.5	34.0	14.0	1.5	31.0

표 3-2 리니어·더블액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.6	8	1.1	0.7	8	1.2	10	2.0	2.5	1.8	2	2.5	1.5
	High	0.8	3	1.7	0.9	3	1.5	10	3.5	2.0	2.3	4.5	2.0	1.0
SS	Low	0.7	8	1.4	1.1	8	1.9	10	2.1	2.5	0.8	2.2	2.5	3.0
	High	1.1	3	1.9	1.5	3	1.6	10	3.2	2.0	1.9	4.3	2.0	3.3
S	Low	1.0	5	2.0	1.1	5	1.8	10	3.0	2.5	3.2	3.2	2.5	3.2
	High	1.1	5	2.2	1.4	5	2.2	10	5.0	2.5	4.0	6.0	2.5	3.0
M	Low	4.1	5	8.6	4.5	5	8.0	10	5.2	2.0	10.3	4.5	2.0	15.2
	High	4.8	5	9.2	4.2	5	6.0	10	4.8	2.0	12.0	4.5	2.0	16.5
L	Low	10.8	5	22.1	12.3	5	21.2	10	11.8	2.0	26.1	13.0	2.0	26.2
	High	11.4	5	23.2	13.2	5	21.7	10	12.8	2.0	27.8	15.0	2.0	27.2
LL	Low	17.0	5	34.6	21.0	5	36.0	10	17.0	1.0	34.6	21.0	1.0	36.0
	High	17.0	5	34.6	23.0	5	36.0	10	17.0	1.0	34.6	23.0	1.0	36.0
XL	Low	37.0	5	76.0	40.5	5	70.0	10	37.0	1.0	95.0	40.5	1.0	88.0
	High	37.0	5	76.0	40.5	5	70.0	10	37.0	1.0	95.0	40.5	1.0	88.0

표 3-3 로터리·싱글액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.4	5	0.5	0.6	5	0.8	10	1.7	2.0	3.0	3.8	2.0	1.6
	High	0.6	5	0.8	0.6	5	0.5	10	1.0	1.5	1.8	3	1.5	1.8
SS	Low	0.3	10	1.3	0.7	10	1.1	10	0.7	2.5	2.8	2.8	2.5	1.8
	High	0.4	10	1.5	0.8	10	1.0	10	0.5	2.5	2.0	3.2	2.5	2.0
S	Low	0.6	5	2.0	1.2	5	1.6	10	1.2	2.0	3.2	3.5	2.0	3.0
	High	0.8	5	1.5	1.3	5	1.6	10	1.4	1.5	4.0	4.4	1.5	4.2
M	Low	1.4	5	2.8	2.0	5	2.6	10	3.2	2.0	7.2	5.0	2.0	6.8
	High	1.4	5	2.8	2.0	5	2.6	10	3.2	2.0	7.2	4.5	2.0	6.5
L	Low	1.6	5	4.2	2.5	5	3.4	10	4.7	1.0	8.2	6.0	1.0	6.8
	High	1.5	5	3.5	2.3	5	2.5	10	5.0	1.5	12.0	7.5	1.5	9.0
LL	Low	3.4	5	10.5	4.6	5	10.5	10	6.8	0.7	18.0	12.0	1.5	18.0
	High	3.8	5	11.0	4.5	5	11.0	10	7.8	1.0	16.5	11.0	1.0	16.5
XL	Low	5.5	5	15.0	6.0	5	15.0	10	10.0	2.0	20.0	12.0	2.0	20.0
	High	7.0	5	15.0	8.0	5	15.0	10	14.0	2.0	18.0	15.0	2.0	20.0

표 3-4 로터리·더블액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.6	5	1.4	0.8	5	1.4	10	1.9	1.5	2.4	2.3	1.5	2.4
	High	0.8	5	1.2	0.9	5	1.2	10	2.2	1.5	1.9	2.7	1.5	1.9
SS	Low	0.7	5	1.1	0.8	5	1.2	10	2.9	1.0	4.0	3.0	1.0	4.0
	High	0.7	5	1.1	0.8	5	1.2	10	2.9	1.0	4.0	3.0	1.0	4.0
S	Low	1.0	5	2.0	1.3	5	2.5	10	3.6	1.0	4.4	4.0	1.0	4.4
	High	1.2	5	2.2	1.4	5	2.2	10	3.8	1.0	4.4	4.2	1.0	4.4
M	Low	2.1	5	4.0	2.3	5	3.5	10	4.8	1.0	7.0	6.5	1.0	7.5
	High	2.0	5	4.0	2.2	5	3.5	10	4.8	2.0	7.0	6.5	2.0	7.5
L	Low	2.5	5	5.0	3.2	5	5.4	10	5.0	1.5	9.0	5.4	1.5	10.0
	High	3.0	5	5.4	3.3	5	5.0	10	4.3	1.5	10.5	4.6	1.5	11.0
LL	Low	5.2	5	11.0	5.2	5	10.0	10	8.0	1.5	16.0	8.0	1.5	14.5
	High	5.0	5	10.0	5.5	5	9.0	10	5.9	1.5	15.0	6.5	1.5	13.5
XL	Low	15.0	5	32.0	15.0	5	29.0	10	20.0	2.5	44.0	20.0	2.5	41.0
	High	15.0	5	30.0	16.0	5	27.0	10	17.0	2.0	44.0	21.0	2.0	40.0

표 3-5 5300LA 시리즈 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inner Air-IN			Inner Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.7	5	1.2	1.3	5	1.6	10	1.0	1.5	3.0	3.8	1.5	2.5
	High	0.9	5	2.3	1.5	5	1.9	10	1.5	2.5	4.4	4.0	2.5	3.0
S	Low	1.4	5	3.2	2.2	5	3.2	10	3.4	1.0	6.1	4.5	1.0	4.9
	High	1.8	5	4.5	2.6	5	4.0	10	2.7	2.5	9.0	4.0	2.5	4.4
M	Low	3.2	5	8	3.3	5	4.9	10	5.0	1.5	10.3	6.4	1.5	7.1
	High	4.0	5	8	3.8	5	6.3	10	6.0	1.0	15.0	6.7	1.0	8.0
L	Low	6.3	5	13	5.4	5	7.5	10	7.0	1.0	16.5	11.0	1.0	16.3
	High	7.2	5	10.5	7.4	5	6.8	10	7.7	1.0	20.0	7.4	1.0	18.0
LL	Low	9.0	5	21.5	10	5	18.2	10	9.1	1.5	22.7	10.1	1.5	18.8
	High	13.8	5	23.7	12.8	5	14.0	10	15.6	1.0	38.1	14.4	1.0	27.4

4 부스터 릴레이가 없는 경우 PID 파라미터 테이블

(KGP5000 Software Version 1.0.0 이후/KGP2000 Software Version 1.0.0 이후)

표 4-1 리니어·싱글액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.5	5.0	1.0	0.8	5.0	0.9	10	1.4	2.0	2.4	3.0	2.0	1.4
	High	0.6	5.0	1.0	1.0	5.0	1.2	10	1.7	2.0	1.9	3.5	2.0	2.0
SS	Low	0.7	5.0	1.8	1.2	5.0	1.7	10	1.5	2.0	3.7	3.5	2.0	2.7
	High	0.8	5.0	1.3	1.1	5.0	1.5	10	1.7	2.0	2.5	3.3	2.0	2.0
S	Low	0.9	5.0	2.5	1.5	5.0	2.5	10	1.6	2.0	5.0	4.0	2.0	4.0
	High	1.0	5.0	1.6	1.2	5.0	1.7	10	1.7	2.0	3.0	3.0	2.0	2.0
M	Low	1.6	5.0	2.7	1.8	5.0	3.0	10	3.0	1.5	6.0	5.8	1.5	5.0
	High	1.6	5.0	3.5	1.8	5.0	2.6	10	3.8	2.0	7.0	4.0	2.0	5.0
L	Low	3.2	5.0	8.0	3.3	5.0	5.4	10	5.0	1.5	9.5	7.5	1.5	7.6
	High	4.0	5.0	8.5	5.2	5.0	8.8	10	4.9	2.0	17.0	6.5	2.0	11.0
LL	Low	3.0	5.0	9.0	3.2	5.0	5.8	10	7.2	1.0	12.5	6.0	1.0	9.5
	High	5.0	5.0	10.5	6.5	5.0	11.2	10	5.5	2.0	21.0	6.0	2.0	16.0
XL	Low	8.0	5.0	25.0	7.0	5.0	15.0	10	13.8	1.0	32.0	12.6	1.0	27.0
	High	7.0	5.0	26.0	6.0	5.0	17.0	10	16.0	2.0	34.0	14.0	2.0	31.0

표 4-2 리니어·더블액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.6	8.0	1.1	0.7	8.0	1.2	10	2.0	2.5	1.8	2.0	2.5	1.5
	High	0.8	3.0	1.7	0.9	3.0	1.5	10	3.5	2.0	2.3	4.5	2.0	1.0
SS	Low	0.7	8.0	1.4	1.1	8.0	1.9	10	2.1	2.5	0.8	2.2	2.5	3.0
	High	1.1	3.0	1.9	1.5	3.0	1.6	10	3.2	2.0	1.9	4.3	2.0	3.3
S	Low	1.0	5.0	2.0	1.1	5.0	1.8	10	3.0	2.5	3.2	3.2	2.5	3.2
	High	1.1	5.0	2.2	1.4	5.0	2.2	10	5.0	2.5	4.0	6.0	2.5	3.0
M	Low	4.1	5.0	8.6	4.5	5.0	8.0	10	5.2	2.0	10.3	4.5	2.0	15.2
	High	4.8	5.0	9.2	4.2	5.0	6.0	10	4.8	2.0	12.0	4.5	2.0	16.5
L	Low	10.8	5.0	22.1	12.3	5.0	21.2	10	11.8	2.0	26.1	13.0	2.0	26.2
	High	11.4	5.0	23.2	13.2	5.0	21.7	10	12.8	2.0	27.8	15.0	2.0	27.2
LL	Low	17.0	5.0	34.6	21.0	5.0	36.0	10	17.0	1.0	34.6	21.0	1.0	36.0
	High	17.0	5.0	34.6	23.0	5.0	36.0	10	17.0	2.0	34.6	23.0	2.0	36.0
XL	Low	37.0	5.0	76.0	40.5	5.0	70.0	10	37.0	1.0	95.0	40.5	1.0	88.0
	High	37.0	5.0	76.0	40.5	5.0	70.0	10	37.0	2.0	95.0	40.5	2.0	88.0

표 4-3 로터리·싱글액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.4	5.0	0.5	0.6	5.0	0.8	10	1.7	2.0	3.0	3.8	2.0	1.6
	High	0.6	5.0	0.8	0.6	5.0	0.5	10	1.0	2.0	1.8	3.0	2.0	1.8
SS	Low	0.3	10.0	1.3	0.7	10.0	1.1	10	0.7	2.5	2.8	2.8	2.5	1.8
	High	0.4	10.0	1.5	0.8	10.0	1.0	10	0.5	2.5	2.0	3.2	2.5	2.0
S	Low	0.6	5.0	2.0	1.2	5.0	1.6	10	1.2	2.0	3.2	3.5	2.0	3.0
	High	0.8	5.0	1.5	1.3	5.0	1.6	10	1.4	2.0	4.0	4.4	2.0	4.2
M	Low	1.4	5.0	2.8	2.0	5.0	2.6	10	3.2	2.0	7.2	5.0	2.0	6.8
	High	1.4	5.0	2.8	2.0	5.0	2.6	10	3.2	2.0	7.2	4.5	2.0	6.5
L	Low	1.6	5.0	4.2	2.5	5.0	3.4	10	4.7	1.0	8.2	6.0	1.0	6.8
	High	1.5	5.0	3.5	2.3	5.0	2.5	10	5.0	2.0	12.0	7.5	2.0	9.0
LL	Low	3.4	5.0	10.5	4.6	5.0	10.5	10	6.8	1.0	18.0	12.0	1.5	18.0
	High	3.8	5.0	11.0	4.5	5.0	11.0	10	7.8	2.0	16.5	11.0	2.0	16.5
XL	Low	5.5	5.0	15.0	6.0	5.0	15.0	10	10.0	2.0	20.0	12.0	2.0	20.0
	High	7.0	5.0	15.0	8.0	5.0	15.0	10	14.0	2.0	18.0	15.0	2.0	20.0

표 4-4 로터리·더블액팅 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.6	5.0	1.4	0.8	5.0	1.4	10	1.9	1.5	2.4	2.3	1.5	2.4
	High	0.8	5.0	1.2	0.9	5.0	1.2	10	2.2	2.0	1.9	2.7	2.0	1.9
SS	Low	0.7	5.0	1.1	0.8	5.0	1.2	10	2.9	1.0	4.0	3.0	1.0	4.0
	High	0.7	5.0	1.1	0.8	5.0	1.2	10	2.9	2.0	4.0	3.0	2.0	4.0
S	Low	1.0	5.0	2.0	1.3	5.0	2.5	10	3.6	1.0	4.4	4.0	1.0	4.4
	High	1.2	5.0	2.2	1.4	5.0	2.2	10	3.8	2.0	4.4	4.2	2.0	4.4
M	Low	2.1	5.0	4.0	2.3	5.0	3.5	10	4.8	1.0	7.0	6.5	1.0	7.5
	High	2.0	5.0	4.0	2.2	5.0	3.5	10	4.8	2.0	7.0	6.5	2.0	7.5
L	Low	2.5	5.0	5.0	3.2	5.0	5.4	10	5.0	1.5	9.0	5.4	1.5	10.0
	High	3.0	5.0	5.4	3.3	5.0	5.0	10	4.3	2.0	10.5	4.6	2.0	11.0
LL	Low	5.2	5.0	11.0	5.2	5.0	10.0	10	8.0	1.5	16.0	8.0	1.5	14.5
	High	5.0	5.0	10.0	5.5	5.0	9.0	10	5.9	2.0	15.0	6.5	2.0	13.5
XL	Low	15.0	5.0	32.0	15.0	5.0	29.0	10	20.0	2.5	44.0	20.0	2.5	41.0
	High	15.0	5.0	30.0	16.0	5.0	27.0	10	17.0	2.0	44.0	21.0	2.0	40.0

표 4-5 5300LA 시리즈 선택시

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.7	5.0	1.2	1.3	5.0	1.6	10	1.0	1.5	3.0	3.8	1.5	2.5
	High	0.9	5.0	2.3	1.5	5.0	1.9	10	1.5	2.5	4.4	4.0	2.5	3.0
S	Low	1.4	5.0	3.2	2.2	5.0	3.2	10	3.4	1.0	6.1	4.5	1.0	4.9
	High	1.8	5.0	4.5	2.6	5.0	4.0	10	2.7	2.5	9.0	4.0	2.5	4.4
M	Low	3.2	5.0	8.0	3.3	5.0	4.9	10	5.0	1.5	10.3	6.4	1.5	7.1
	High	4.0	5.0	8.0	3.8	5.0	6.3	10	6.0	2.0	15.0	6.7	2.0	8.0
L	Low	6.3	5.0	13.0	5.4	5.0	7.5	10	7.0	1.0	16.5	11.0	1.0	16.3
	High	7.2	5.0	10.5	7.4	5.0	6.8	10	7.7	2.0	20.0	7.4	2.0	18.0
LL	Low	9.0	5.0	21.5	10.0	5.0	18.2	10	9.1	1.5	22.7	10.1	1.5	18.8
	High	13.8	5.0	23.7	12.8	5.0	14.0	10	15.6	2.0	38.1	14.4	2.0	27.4

5 부스터 릴레이가 있는 경우 PID 파라미터 테이블

(KGP5000 Software Version 1.0.0 이후/KGP2000 Software Version 1.0.0 이후)

표 5-1 리니어·싱글액팅 선택시

Booster option 이 **Large** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.5	5.0	0.6	0.4	5.0	0.5	10	4.0	2.0	5.0	5.0	5.0	5.5
	High	0.6	5.0	0.8	0.6	5.0	1.1	10	4.5	2.0	5.5	5.5	5.0	7.0
S	Low	0.7	5.0	1.0	0.9	5.0	1.3	10	4.0	2.0	5.0	5.0	5.0	6.0
	High	0.7	5.0	1.2	0.9	5.0	1.3	10	4.0	2.0	6.0	5.0	5.0	5.0
M	Low	0.8	5.0	1.6	1.0	5.0	1.4	10	4.5	2.0	6.5	6.0	5.0	6.0
	High	0.8	5.0	1.6	1.0	5.0	1.4	10	5.0	2.0	7.0	7.0	5.0	7.0
L	Low	0.8	5.0	1.2	0.9	5.0	1.2	10	4.6	2.0	6.3	5.0	5.0	6.3
	High	0.9	5.0	1.5	0.9	5.0	1.5	10	5.0	2.0	7.0	6.0	5.0	7.0
LL	Low	1.4	5.0	1.8	1.2	5.0	1.8	10	6.0	2.0	9.0	5.0	5.0	8.0
	High	1.4	5.0	2.5	1.2	5.0	2.2	10	7.0	2.0	10.5	6.0	5.0	9.0
XL	Low	1.7	5.0	2.2	1.5	5.0	2.2	10	6.0	2.0	10.4	5.1	2.0	8.7
	High	1.7	5.0	3.1	1.4	5.0	2.7	10	8.1	2.0	12.2	6.4	2.0	9.9

Booster option 이 **Small** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.4	5.0	1.0	0.6	5.0	0.9	10	2.8	2.0	4.0	4.5	5.0	5.0
	High	0.5	5.0	1.0	0.6	5.0	0.9	10	3.5	2.0	4.5	4.5	5.0	5.0
S	Low	0.7	5.0	1.3	0.8	5.0	1.4	10	3.0	2.0	6.5	3.5	5.0	5.5
	High	0.7	5.0	1.2	0.8	5.0	1.4	10	3.5	2.0	6.5	5.0	5.0	5.0
M	Low	0.8	5.0	1.6	0.9	5.0	1.7	10	4.5	2.0	3.5	4.0	5.0	8.0
	High	0.8	5.0	1.6	0.9	5.0	1.7	10	3.5	2.0	9.0	4.5	5.0	5.5
L	Low	0.8	5.0	1.6	0.9	5.0	1.7	10	4.5	2.0	5.5	4.0	5.0	8.0
	High	0.8	5.0	1.6	0.9	5.0	1.8	10	3.5	2.0	9.0	4.5	5.0	5.5
LL	Low	1.4	5.0	1.8	1.2	5.0	1.8	10	6.0	2.0	9.0	4.0	5.0	12.0
	High	1.4	5.0	2.5	1.2	5.0	3.5	10	5.0	2.0	13.0	5.0	5.0	13.0
XL	Low	1.8	5.0	2.1	1.4	5.0	2.1	10	7.3	2.0	10.4	3.9	2.0	14.5
	High	1.7	5.0	3.1	1.4	5.0	4.4	10	8.1	2.0	12.2	6.4	2.0	9.9

표 5-2 리니어·더블액팅 선택시

Booster option 이 **Large** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.3	5.0	0.3	0.4	5.0	0.5	10	5.5	2.0	8.5	4.0	2.0	6.0
	High	0.4	5.0	0.7	0.5	5.0	0.6	10	5.5	2.0	8.5	4.0	2.0	6.0
SS	Low	0.9	5.0	1.8	1.1	5.0	1.6	10	6.0	2.0	6.5	6.0	2.0	8.5
	High	1.1	5.0	2.3	1.2	5.0	1.7	10	6.5	2.0	8.0	6.5	2.0	8.0
S	Low	2.0	5.0	4.0	2.5	5.0	4.0	10	7.0	2.0	9.0	7.0	2.0	9.0
	High	2.6	5.0	5.2	3.0	5.0	4.0	10	7.0	2.0	9.0	7.0	2.0	9.0
M	Low	3.5	5.0	5.5	5.5	5.0	8.5	10	10.0	2.0	10.0	10.0	2.0	10.0
	High	5.0	5.0	9.0	5.5	5.0	7.0	10	8.5	2.0	10.0	10.0	2.0	9.5
L	Low	12.0	5.0	24.0	15.0	5.0	20.0	10	10.0	2.0	20.0	13.0	2.0	20.0
	High	11.5	5.0	24.0	14.0	5.0	20.0	10	10.0	2.0	20.0	11.0	2.0	20.0
LL	Low	15.0	5.0	30.0	20.0	5.0	30.0	10	15.0	2.0	30.0	18.0	2.0	30.0
	High	15.0	5.0	30.0	20.0	5.0	30.0	10	20.0	2.0	25.0	20.0	2.0	25.0

Booster option 이 **Small** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
XS	Low	0.3	5.0	0.3	0.4	5.0	0.5	10	5.0	2.0	5.5	4.0	2.0	6.0
	High	0.4	5.0	0.7	0.5	5.0	0.6	10	4.5	2.0	8.5	4.0	2.0	6.0
SS	Low	0.8	5.0	1.6	1.2	5.0	1.6	10	5.5	2.0	6.5	6.0	2.0	10.0
	High	1.1	5.0	1.8	1.2	5.0	1.6	10	6.0	2.0	6.5	6.0	2.0	8.0
S	Low	2.5	5.0	7.0	3.0	5.0	7.0	10	10.0	2.0	15.0	10.0	2.0	13.0
	High	3.0	5.0	10.0	4.0	5.0	8.0	10	8.5	2.0	9.0	10.0	2.0	10.0
M	Low	3.5	5.0	11.0	3.5	5.0	13.0	10	10.0	2.0	15.0	10.0	2.0	13.0
	High	5.0	5.0	15.0	5.0	5.0	10.0	10	8.5	2.0	9.0	10.0	2.0	10.0
L	Low	12.0	5.0	24.0	15.0	5.0	20.0	10	10.0	2.0	20.0	13.0	2.0	20.0
	High	12.5	5.0	24.0	17.0	5.0	20.0	10	10.0	2.0	20.0	11.0	2.0	20.0
LL	Low	20.0	5.0	30.0	20.0	5.0	30.0	10	15.0	2.0	30.0	18.0	2.0	30.0
	High	20.0	5.0	30.0	20.0	5.0	30.0	10	20.0	2.0	25.0	20.0	2.0	25.0

표 5-3 로터리·싱글액팅 선택시

Booster option 이 **Large** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.5	5.0	0.8	0.7	5.0	1.2	10	4.0	2.0	6.0	5.0	5.0	5.0
	High	0.6	5.0	1.0	0.6	5.0	1.1	10	4.5	2.0	6.0	5.5	5.0	6.0
S	Low	0.4	5.0	0.8	0.8	5.0	1.2	10	4.5	2.0	6.5	3.5	5.0	4.5
	High	0.7	5.0	1.3	0.7	5.0	1.2	10	4.5	2.0	5.0	6.0	5.0	7.0
M	Low	1.0	5.0	1.8	1.3	5.0	2.4	10	4.0	2.0	6.0	6.5	5.0	7.0
	High	1.0	5.0	2.5	1.2	5.0	2.2	10	5.0	2.0	7.0	6.0	5.0	6.0
L	Low	2.3	5.0	3.9	2.8	5.0	5.4	10	4.5	2.0	9.9	6.3	5.0	9.9
	High	2.3	5.0	3.9	2.8	5.0	5.4	10	4.5	2.0	9.9	6.3	5.0	9.9
LL	Low	3.0	5.0	5.2	3.7	5.0	7.2	10	11.3	2.0	10.6	12.0	5.0	13.4
	High	2.4	5.0	4.7	3.0	5.0	5.6	10	10.7	2.0	10.5	9.7	5.0	10.5

Booster option 이 **Small** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.4	5.0	0.8	0.7	5.0	1.2	10	3.5	2.0	6.0	4.5	5.0	4.5
	High	0.7	5.0	1.2	0.7	5.0	1.2	10	3.5	2.0	4.5	5.0	5.0	5.0
S	Low	0.4	5.0	0.8	0.8	5.0	1.3	10	3.0	2.0	4.0	5.0	5.0	7.0
	High	0.6	5.0	1.1	0.8	5.0	1.3	10	3.5	2.0	4.5	5.0	5.0	6.0
M	Low	0.9	5.0	1.8	1.3	5.0	2.4	10	3.5	2.0	5.0	6.0	5.0	7.0
	High	1.0	5.0	2.7	1.2	5.0	2.4	10	3.5	2.0	6.5	5.0	5.0	8.0
L	Low	1.4	5.0	2.7	1.8	5.0	3.6	10	8.5	2.0	8.5	8.5	5.0	9.5
	High	1.4	5.0	2.7	1.8	5.0	3.6	10	8.5	2.0	8.5	8.5	5.0	9.5
LL	Low	2.2	5.0	4.2	2.8	5.0	5.6	10	11.3	2.0	15.8	13.9	5.0	17.5
	High	2.2	5.0	4.5	2.5	5.0	5.8	10	11.8	2.0	12.8	10.6	5.0	14.0

표 5-4 로터리·더블액팅 선택시

Booster option 이 **Large** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.5	5.0	0.8	0.5	5.0	0.7	10	5.5	2.0	6.0	5.5	5.0	6.0
	High	0.5	5.0	0.8	0.5	5.0	0.6	10	6.0	2.0	6.0	6.0	5.0	6.0
S	Low	0.7	5.0	1.1	0.7	5.0	1.1	10	7.0	2.0	9.0	6.0	2.0	9.0
	High	0.7	5.0	1.1	0.7	5.0	1.0	10	7.0	2.0	9.0	6.0	2.0	9.0
M	Low	1.2	5.0	2.0	1.3	5.0	1.8	10	6.5	2.0	8.0	7.0	2.0	9.0
	High	1.2	5.0	1.9	1.4	5.0	2.0	10	6.5	2.0	8.5	7.0	2.0	9.0
L	Low	1.8	5.0	3.0	1.9	5.0	2.6	10	7.5	2.0	9.5	8.0	2.0	10.0
	High	1.8	5.0	2.9	2.2	5.0	3.2	10	7.0	2.0	9.0	7.0	2.0	9.0
LL	Low	4.9	5.0	8.4	5.3	5.0	7.1	10	11.3	2.0	15.8	13.9	2.0	17.5
	High	4.9	5.0	8.1	6.4	5.0	9.5	10	11.3	2.0	15.8	13.9	2.0	17.5

Booster option 이 **Small** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.5	5.0	0.9	0.5	5.0	0.8	10	4.5	2.0	5.5	6.0	5.0	7.0
	High	0.6	5.0	1.2	0.6	5.0	0.9	10	4.5	2.0	5.5	6.0	5.0	7.0
S	Low	0.6	5.0	0.9	0.7	5.0	0.9	10	5.5	2.0	8.0	6.0	2.0	6.0
	High	0.8	5.0	1.3	0.8	5.0	1.1	10	6.0	2.0	9.0	6.5	2.0	9.0
M	Low	1.2	5.0	1.9	1.3	5.0	1.8	10	5.5	2.0	7.5	6.5	2.0	8.5
	High	1.2	5.0	2.0	1.4	5.0	1.9	10	5.5	2.0	7.5	6.5	2.0	8.5
L	Low	1.8	5.0	3.0	1.9	5.0	2.6	10	6.5	2.0	9.0	8.0	2.0	9.5
	High	1.7	5.0	2.9	2.2	5.0	3.0	10	7.0	2.0	9.0	7.0	2.0	9.0
LL	Low	5.0	5.0	8.6	5.3	5.0	7.3	10	9.1	2.0	14.9	14.0	2.0	18.5
	High	4.3	5.0	7.2	6.1	5.0	8.2	10	12.0	2.0	14.7	9.1	2.0	12.2

표 5-5 5300LA 시리즈 선택시

Booster option 이 **Large** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.4	5.0	0.5	0.6	5.0	0.7	10	4.0	2.0	6.0	6.0	5.0	5.0
	High	0.7	5.0	0.7	0.6	5.0	0.7	10	5.0	2.0	8.0	6.0	5.0	5.0
S	Low	0.8	5.0	1.1	0.9	5.0	1.0	10	5.0	2.0	7.0	6.0	5.0	3.2
	High	0.7	5.0	0.9	1.0	5.0	1.3	10	5.0	2.0	8.0	8.0	5.0	6.0
M	Low	1.0	5.0	1.7	0.9	5.0	1.2	10	4.0	2.0	6.0	5.0	5.0	6.0
	High	1.0	5.0	1.7	0.9	5.0	1.2	10	4.0	2.0	6.0	5.0	5.0	7.0
L	Low	1.5	5.0	3.0	1.4	5.0	1.5	10	6.0	2.0	9.0	8.0	5.0	9.0
	High	1.5	5.0	3.0	1.4	5.0	1.5	10	6.0	2.0	9.0	8.0	5.0	9.0

Booster option 이 **Small** 로 설정된 경우

Rank	Packing	Air-IN			Air-OUT			b	Inside Air-IN			Inside Air-OUT		
		P	I	D	rP	rI	rD		P	I	D	rP	rI	rD
SS	Low	0.5	5.0	0.6	0.7	5.0	1.1	10	3.5	2.0	5.0	5.0	5.0	2.0
	High	0.6	5.0	0.8	0.7	5.0	0.9	10	4.0	2.0	6.5	4.5	5.0	4.0
S	Low	0.7	5.0	1.1	0.9	5.0	1.2	10	4.0	2.0	6.0	5.5	5.0	6.0
	High	0.7	5.0	1.0	0.9	5.0	1.1	10	4.3	2.0	6.8	5.1	5.0	5.5
M	Low	0.9	5.0	1.5	0.9	5.0	1.2	10	2.6	2.0	7.0	4.0	5.0	6.0
	High	1.0	5.0	1.7	0.9	5.0	1.4	10	4.0	2.0	7.0	5.0	5.0	7.0
L	Low	1.6	5.0	3.3	1.5	5.0	2.9	10	5.3	2.0	10.7	7.0	5.0	10.7
	High	1.5	5.0	3.0	1.4	5.0	1.5	10	6.0	2.0	9.0	8.0	5.0	9.0