VPL

Solenoid valve 솔레노이드 밸브(대유량)



특징(Features)

- 3/2, 5/2, 5/3way
- 배관 1/8, 1/4, 3/8, 1/2
- 유량 470 ~ 3,350 l/min
- 최대 17연 매니폴드
- 전원 24VDC, 110VAC, 220VAC
- NAMUR 타입 지원

데이터 시트

일반 기술 자료					
밸브 기능		2위치 싱글-3/2way	2위치 싱글-5/2way	2위치 더블-5/2way	3위치 공급,정지,배기
복귀방법		기계+공압 혼합		공압	기계+공압 혼합
동작방식		Dynamic Soft Seal 구조의 슬라이딩 밸브와 파일럿 작동형 솔레노이드 밸브			
수동 작동기/Lock		누름/고정형			
파일로트 에어 공급		내부 파일로트			
사용 압력 범위		+1.5 ... +0.8 MPa			
표준공칭 유량 1/8	[l/min]	600	600	600	470
표준공칭 유량 1/4	[l/min]	1050	1050	1050	700
표준공칭 유량 3/8	[l/min]	1500	1800	1800	1200
표준공칭 유량 1/2	[l/min]	3300	3350	3350	2400

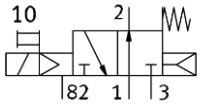
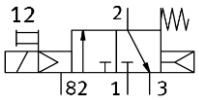
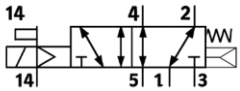
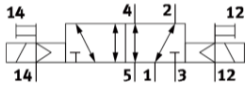
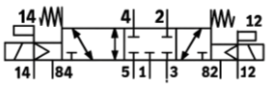
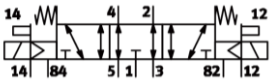
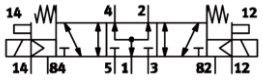
전기 사양		
작동전압-밸브	[V DC]	24 ±10%
작동전압-밸브	[V AC]	24 ±10% , 110 ±10% , 220 ±10% , 240 ±10%
출력-밸브 DC	[W]	2.8 또는 3.0
출력-밸브 AC	[VA]	24V, 110V==> 4/2.5VA, 220V==> 3.5VA, 240V ==> 6/5.0VA
Duty cyle ED		100 % Continuous duty
동작표시등		LED green/red
서지 보호		과도전압 보호 다이오드

재질	
밸브 하우징	Aluminum
밸브 스풀	Aluminum
씰	NBR
스프링	Stainless steel

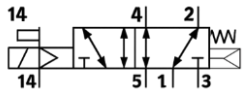
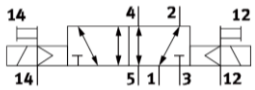
작동 및 환경 조건	
사용매체	40µm 필터 처리된 압축공기 사용, 윤활/무윤활 모두 가능
주변/매체 온도	-5 ~ +50°C

밸브 기호

일반 밸브

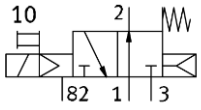
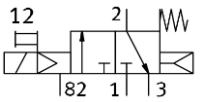
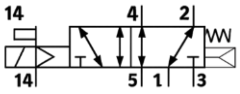
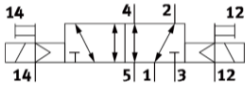
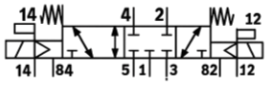
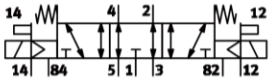
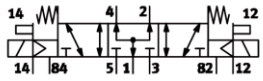
주문코드	공압기호	사이즈(mm)	l/min	kg	설명
3		1/8	600	0.13	2위치 단동 3/2 WAY N.O. * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		1/4	1050	0.20	
		3/8	1500	0.27	
		1/2	3300	0.30	
4		1/8	600	0.13	2위치 단동 3/2 WAY N.C. * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		1/4	1050	0.20	
		3/8	1500	0.27	
		1/2	3300	0.38	
5		1/8	600	0.13	2위치 단동 5/2 WAY * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		1/4	1050	0.20	
		3/8	1800	0.28	
		1/2	3350	0.50	
5		1/8	600	0.19	2위치 복동 5/2 WAY * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		1/4	1050	0.31	
		3/8	1800	0.39	
		1/2	3350	0.62	
6		1/8	470	0.21	3위치 더블 중간위치 정지 * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPaa
		1/4	700	0.36	
		3/8	1200	0.46	
		1/2	2400	0.71	
7		1/8	470	0.21	3위치 더블 중간위치 배기 * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		1/4	700	0.36	
		3/8	1200	0.46	
		1/2	2400	0.71	
8		1/8	470	0.21	3위치 더블 중간위치 공급 * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		1/4	700	0.36	
		3/8	1200	0.46	
		1/2	2400	0.71	

NAMUR 밸브

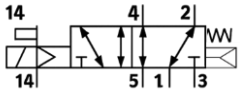
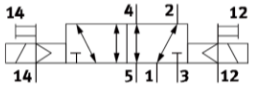
주문코드	공압기호	사이즈(mm)	l/min	kg	설명
5		1/8	600	0.13	2위치 단동 5/2 WAY * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		-	-	-	
		-	-	-	
		-	-	-	
5		-	-	-	2위치 복동 5/2 WAY * 공압+기계 스프링 복귀 * 0.15 ... 0.8 MPa
		1/4	1050	0.20	
		3/8	1500	0.27	
		-	-	-	

자주 사용하는 주문 코드

일반 밸브

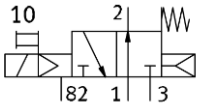
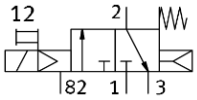
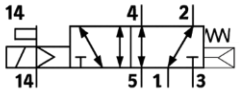
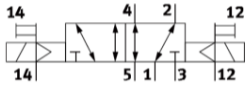
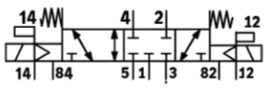
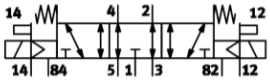
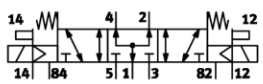
밸브 사이즈	사이즈	사이즈	주문 코드 - 24 VDC	주문 코드 - **220 VAC**
	3/2way 단동 N.O.	1/8	VPL33A317D-C-A213F	VPL33A317D-C-A219F
		1/4	VPL33B317A-A-B213J	VPL33B317A-A-B219J
		3/8	VPL33C317A-A-C213J	VPL33C317A-A-C219J
		1/2	VPL33D317A-A-D213J	VPL33D317A-A-D219J
	3/2way 단동 N.C.	1/8	VPL33A417D-C-A213F	VPL33A417D-C-A219F
		1/4	VPL33B417A-A-B213J	VPL33B417A-A-B219J
		3/8	VPL33C417A-A-C213J	VPL33C417A-A-C219J
		1/2	VPL33D417A-A-D213J	VPL33D417A-A-D219J
	5/2way 단동	1/8	VPL33A517D-C-A213F	VPL33A517D-C-A219F
		1/4	VPL33B517A-A-B213J	VPL33B517A-A-B219J
		3/8	VPL33C517A-A-C213J	VPL33C517A-A-C219J
		1/2	VPL33D517A-A-D213J	VPL33D517A-A-D219J
	5/2way 복동	1/8	VPL33A511D-C-A213F	VPL33A511D-C-A219F
		1/4	VPL33B511A-A-B213J	VPL33B511A-A-B219J
		3/8	VPL33C511A-A-C213J	VPL33C511A-A-C219J
		1/2	VPL33D511A-A-D213J	VPL33D511A-A-D219J
	5/3way 중간정지	1/8	VPL33A611D-C-A213F	VPL33A611D-C-A219F
		1/4	VPL33B611A-A-B213J	VPL33B611A-A-B219J
		3/8	VPL33C611A-A-C213J	VPL33C611A-A-C219J
		1/2	VPL33D611A-A-D213J	VPL33D611A-A-D219J
	5/3way 중간배기	1/8	VPL33A711D-C-A213F	VPL33A711D-C-A219F
		1/4	VPL33B711A-A-B213J	VPL33B711A-A-B219J
		3/8	VPL33C711A-A-C213J	VPL33C711A-A-C219J
		1/2	VPL33D711A-A-D213J	VPL33D711A-A-D219J
	5/3way 중간공급	1/8	VPL33A811D-C-A213F	VPL33A811D-C-A219F
		1/4	VPL33B811A-A-B213J	VPL33B811A-A-B219J
		3/8	VPL33C811A-A-C213J	VPL33C811A-A-C219J
		1/2	VPL33D811A-A-D213J	VPL33D811A-A-D219J

NAMUR 밸브

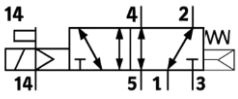
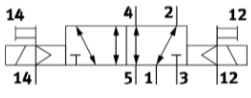
	5/2way 단동 또는 3/2way 단동	1/8	-	-
		1/4	VPL33C517A-A-E213J	VPL33C517A-A-E219J
		3/8	VPL33C517A-A-F213J	VPL33C517A-A-F219J
		1/2	-	-
	5/2way 복동 또는 3/2way 복동	1/8	-	-
		1/4	VPL33C511A-A-E213J	VPL33C511A-A-E219J
		3/8	VPL33C511A-A-F213J	VPL33C511A-A-F219J
		1/2	-	-

자주 사용하는 주문 코드

일반 밸브

밸브 사이즈	사이즈	사이즈	주문 코드 - **110 VAC**	주문 코드 - **24 VAC**
	3/2way 단동 N.O.	1/8	VPL33A317DC-A218F	-
		1/4	VPL33B317A-A-B218J	VPL33B317A-A-B214J
		3/8	VPL33C317A-A-C218J	VPL33C317A-A-C214J
		1/2	VPL33D317A-A-D218J	VPL33D317A-A-D214J
	3/2way 단동 N.C.	1/8	VPL33A417D-C-A218F	-
		1/4	VPL33B417A-A-B218J	VPL33B417A-A-B214J
		3/8	VPL33C417A-A-C218J	VPL33C417A-A-C214J
		1/2	VPL33D417A-A-D218J	VPL33D417A-A-D214J
	5/2way 단동	1/8	VPL33A517D-C-A218F	-
		1/4	VPL33B517A-A-B218J	VPL33B517A-A-B214J
		3/8	VPL33C517A-A-C218J	VPL33C517A-A-C214J
		1/2	VPL33D517A-A-D218J	VPL33D517A-A-D214J
	5/2way 복동	1/8	VPL33A511D-C-A218F	-
		1/4	VPL33B511A-A-B218J	VPL33B511A-A-B214J
		3/8	VPL33C511A-A-C218J	VPL33C511A-A-C214J
		1/2	VPL33D511A-A-D218J	VPL33D511A-A-D214J
	5/3way 중간정지	1/8	VPL33A611D-C-A218F	-
		1/4	VPL33B611A-A-B218J	VPL33B611A-A-B214J
		3/8	VPL33C611A-A-C218J	VPL33C611A-A-C214J
		1/2	VPL33D611A-A-D218J	VPL33D611A-A-D214J
	5/3way 중간배기	1/8	VPL33A711D-C-A218F	-
		1/4	VPL33B711A-A-B218J	VPL33B711A-A-B214J
		3/8	VPL33C711A-A-C218J	VPL33C711A-A-C214J
		1/2	VPL33D711A-A-D218J	VPL33D711A-A-D214J
	5/3way 중간공급	1/8	VPL33A811D-C-A218F	-
		1/4	VPL33B811A-A-B218J	VPL33B811A-A-B214J
		3/8	VPL33C811A-A-C218J	VPL33C811A-A-C214J
		1/2	VPL33D811A-A-D218J	VPL33D811A-A-D214J

NAMUR 밸브

	5/2way 단동 또는 3/2way 단동	1/8	-	-
		1/4	VPL33C517A-A-E218J	VPL33C517A-A-E214J
		3/8	VPL33C517A-A-F218J	VPL33C517A-A-F214J
		1/2	-	-
	5/2way 복동 또는 3/2way 복동	1/8	-	-
		1/4	VPL33C511A-A-E218J	VPL33C511A-A-E214J
		3/8	VPL33C511A-A-F218J	VPL33C511A-A-F214J
		1/2	-	-

자주 사용하는 주문 코드

5/2 way Manifold

연수	주문코드 1/8	주문코드 1/4	주문코드 3/8	주문코드 1/2
2연	VPL33A2	VPL33B2	VPL33C2	VPL33D2
3연	VPL33A3	VPL33B3	VPL33C3	VPL33D3
4연	VPL33A4	VPL33B4	VPL33C4	VPL33D4
5연	VPL33A5	VPL33B5	VPL33C5	VPL33D5
6연	VPL33A6	VPL33B6	VPL33C6	VPL33D6
7연	VPL33A7	VPL33B7	VPL33C7	VPL33D7
8연	VPL33A8	VPL33B8	VPL33C8	VPL33D8
9연	VPL33A9	VPL33B9	VPL33C9	VPL33D9
10연	VPL33A10	VPL33B10	VPL33C10	VPL33D10
11연	VPL33A11	VPL33B11	VPL33C11	VPL33D11
12연	VPL33A12	VPL33B12	VPL33C12	VPL33D12
13연	VPL33A13	VPL33B13	VPL33C13	VPL33D13
14연	VPL33A14	VPL33B14	VPL33C14	VPL33D14
15연	VPL33A15	VPL33B15	VPL33C15	VPL33D15
16연	VPL33A16	VPL33B16	VPL33C16	VPL33D16
17연	VPL33A17	VPL33B17	VPL33C17	VPL33D17

5/2 way Blanking

	주문코드 1/8	주문코드 1/4	주문코드 3/8	주문코드 1/2
블랭킹	VPL33A0551	VPL33B0551	VPL33C0551	VPL33D0551

NAMUR 변환 플레이트

VPL33C-Z01

자주 사용하는 주문 코드

3/2 way Manifold

연수	주문코드 1/8	주문코드 1/4	주문코드 3/8	주문코드 1/2
2연	VPL33A/32	VPL33B/32	VPL33C/32	VPL33D/32
3연	VPL33A/33	VPL33B/33	VPL33C/33	VPL33D/33
4연	VPL33A/34	VPL33B/34	VPL33C/34	VPL33D/34
5연	VPL33A/35	VPL33B/35	VPL33C/35	VPL33D/35
6연	VPL33A/36	VPL33B/36	VPL33C/36	VPL33D/36
7연	VPL33A/37	VPL33B/37	VPL33C/37	VPL33D/37
8연	VPL33A/38	VPL33B/38	VPL33C/38	VPL33D/38
9연	VPL33A/39	VPL33B/39	VPL33C/39	VPL33D/39
10연	VPL33A/310	VPL33B/310	VPL33C/310	VPL33D/310
11연	VPL33A/311	VPL33B/311	VPL33C/311	VPL33D/311
12연	VPL33A/312	VPL33B/312	VPL33C/312	VPL33D/312
13연	VPL33A/313	VPL33B/313	VPL33C/313	VPL33D/313
14연	VPL33A/314	VPL33B/314	VPL33C/314	VPL33D/314
15연	VPL33A/315	VPL33B/315	VPL33C/315	VPL33D/315
16연	VPL33A/316	VPL33B/316	VPL33C/316	VPL33D/316
17연	VPL33A/317	VPL33B/317	VPL33C/317	VPL33D/317

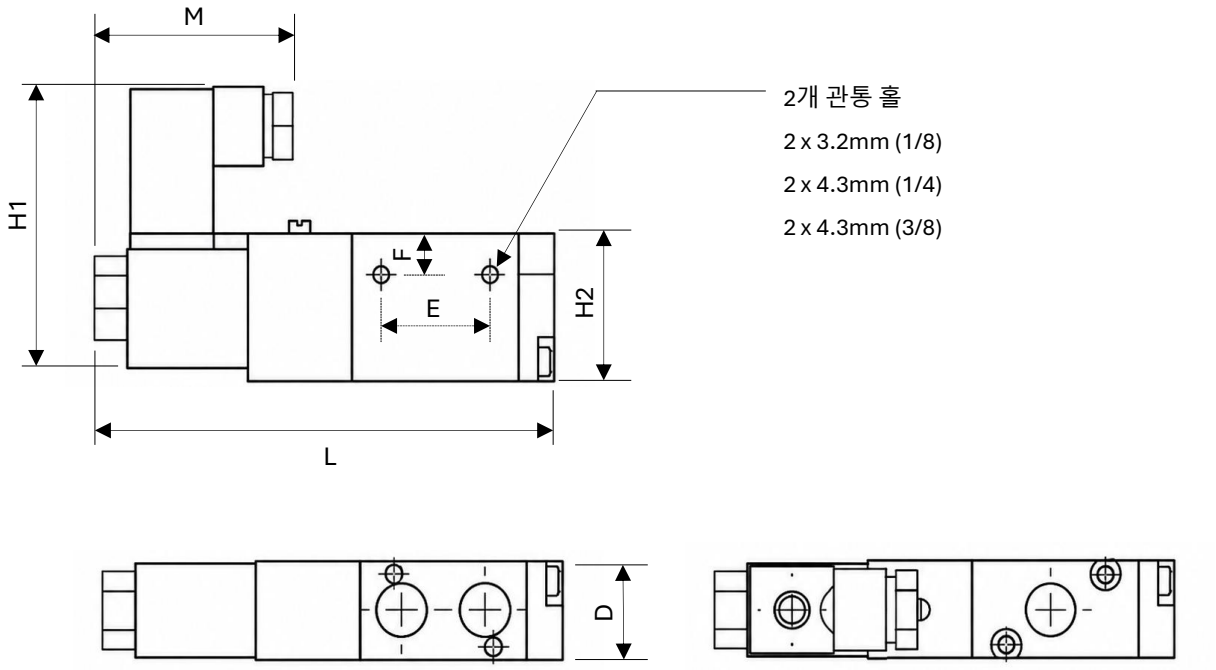
3/2 way Blanking

	주문코드 1/8	주문코드 1/4	주문코드 3/8	주문코드 1/2
블랭킹	VPL33A0351	VPL33B0351	VPL33C0351	VPL33D0351

NAMUR 변환 플레이트

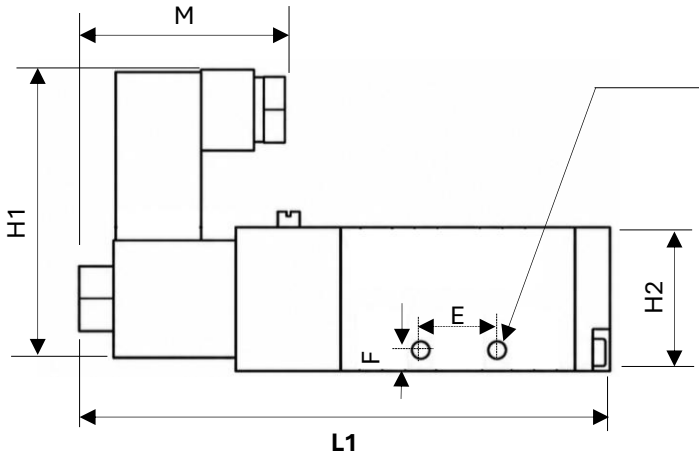
VPL33C-Z01

3/2 way 단동

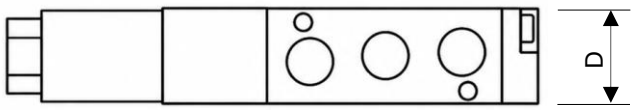


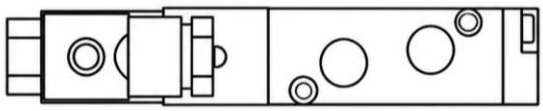
밸브 사이즈	L	H1	H2	D	M	E	F
1/8	88	54	27	18	39	21	7.5
1/4	110	67	35	22	55	25	8.2
3/8	118	70	40	27	55	30	10.5

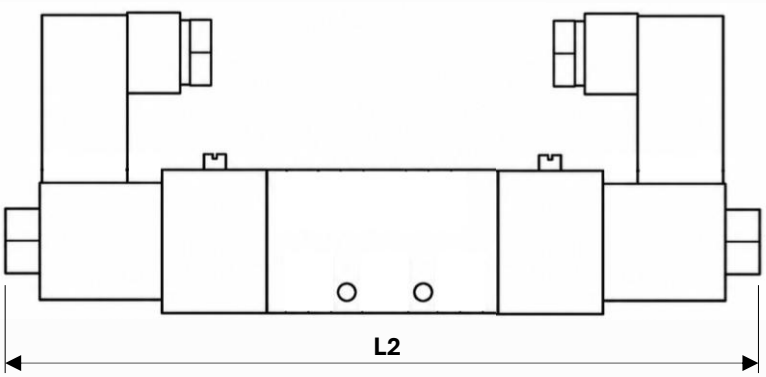
5/2 way 단동, 복동, 5/3 way 중간위치



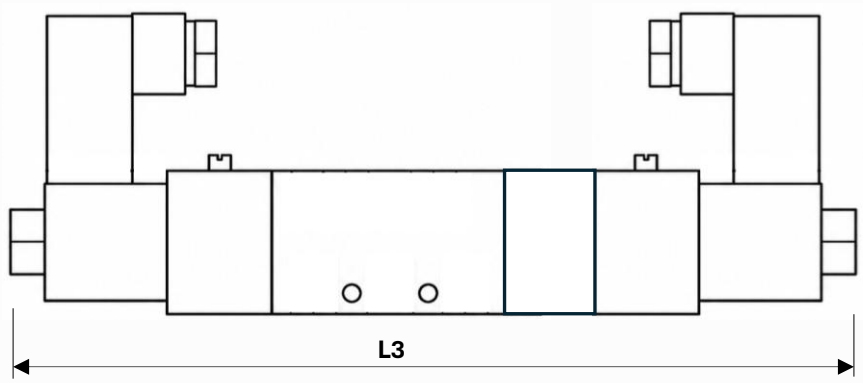
2개 관통 홀
2 x 3.2mm (1/8)
2 x 4.3mm (1/4)
2 x 4.3mm (3/8)
2 x 5.5mm (1/2)





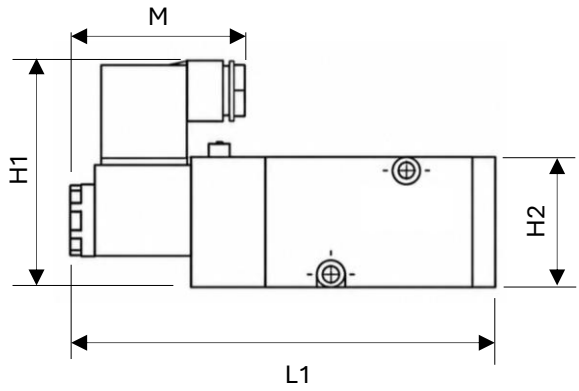


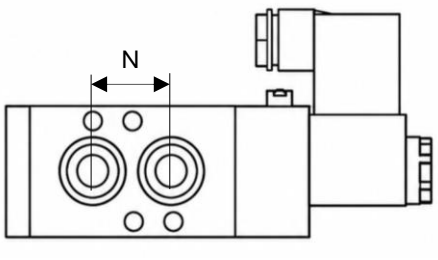
* L 길이만 다르고 다른 치수들은
2위치 단동과 동일함

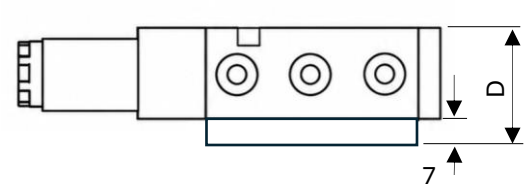


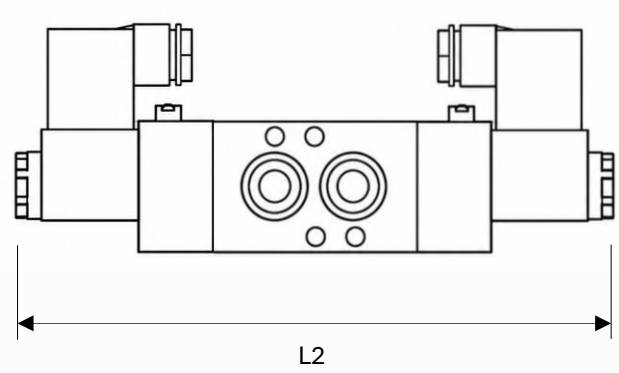
밸브 사이즈	**L1**	**L2**	**L3**	H1	H2	D	M	E	F
1/8	99	142	157	54	27	18	39	14	4
1/4	118	173	192	67	35	22	55	20	7
3/8	135	190	207	70	40	27	55	24	6.5
1/2	170	225	248	74	50	34	55	28	7.5

NAMUR 5/2 way 단동, 복동





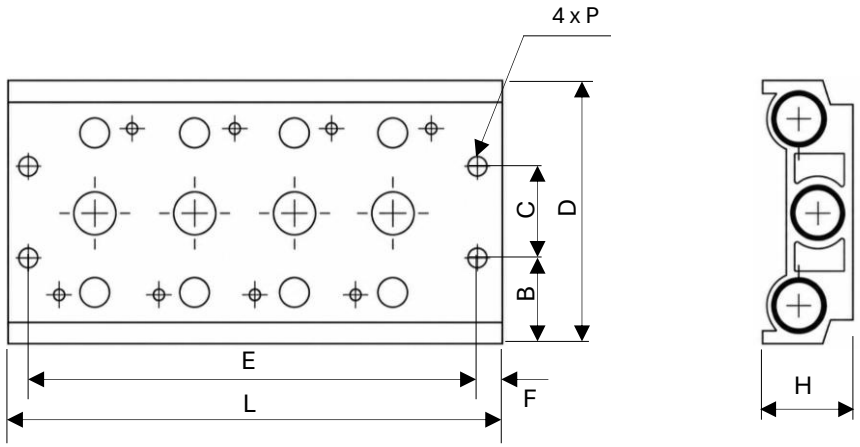




* L 길이만 다르고 다른 치수들은
2위치 단동과 동일함

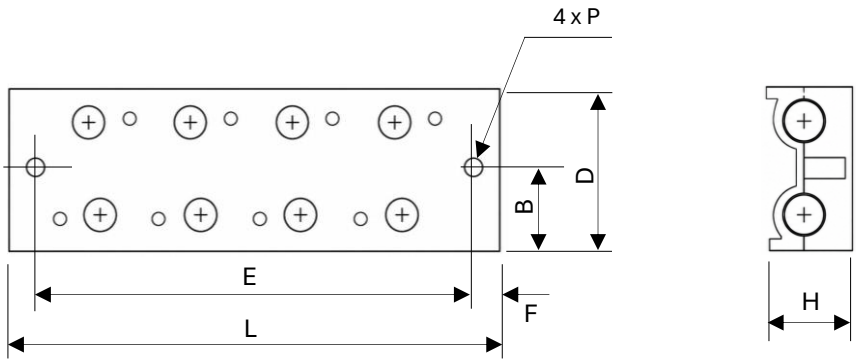
밸브 사이즈	**L1**	**L2**	H1	H2	D	M	N
1/4	135	190	70	40	37	55	24
3/8	135	190	70	40	37	55	24

5/2 way Manifold



밸브 사이즈	연결구	L	D	H	C	B	E	F	P
1/8	1/8	19+(N*19)	40	9	20	10	9+(N*19)	5	4.5
1/4	1/4	23+(N*19)	43	9	21	11	11+(N*19)	6	
3/8	3/8	26+(N*19)	53	11.7	26	13.5	14+(N*19)	6	
1/2	1/2	28+(N*19)	70	16.5	32	19	14+(N*19)	7	

3/2 way Manifold



밸브 사이즈	연결구	L	D	H	B	E	F	P
1/8	1/8	18+(N*19)	31	6	19	9+(N*19)	4.5	15.5
1/4	1/4	23+(N*19)	45	8.5	22.5	11+(N*19)	4.5	22.5
3/8	3/8	26+(N*19)	50	12	25	14+(N*19)	4.5	25
1/2	1/2	28+(N*19)	62.5	16	31.5	14+(N*19)	5.5	31