Field Wiring Solution

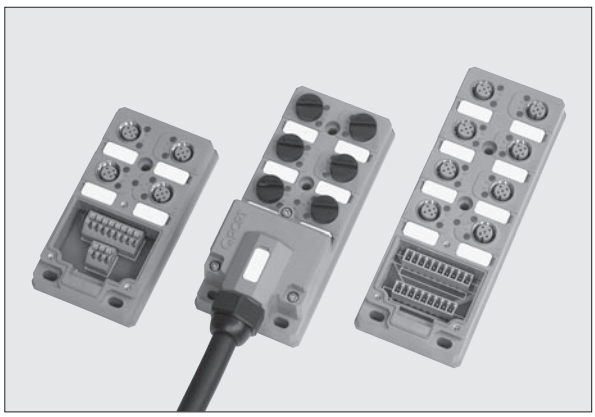
QPORT

● MPT 시리즈 (단자대 장착형보드 M12 분기박스)	C - 2
● MPA 시리즈 (메인케이블 일체형보드 M12 분기박스)	C - 7
● MPB 시리즈 (M23 메인케이블 분리형보드 M12 분기박스)	C - 12
● MSA 시리즈 (메인케이블 일체형 M8분기박스)	C - 17
● MSB 시리즈 (M23 메인케이블 분리형 M8분기박스)	C - 20
● M23 메인케이블 (MPB / MSB 분기박스 접속용)	C - 22
● M12 센서 엑츄에이터 케이블	C - 24
● M12 5Pole 쉴드 케이블	C - 27
● M12 8Pole 쉴드 케이블	C - 29
● M12 12Pole 쉴드 케이블	C - 32
● M12 LED 장착형 센서 케이블	C - 35
● M8 센서 접속용 케이블	C - 37
● M8 B-Code 센서 접속용 케이블	C - 40
● M12 분기박스 - M8 센서 접속용 케이블	C - 42
● M8 분기박스 - M12 센서 접속용 케이블	C - 44
● M12 표준 분기형 케이블	C - 46
● M12 중간 분기형 케이블	C - 49
● Y12D 시리즈 (2신호 분기 / 변환 콘넥터)	C - 51
● Y12W 시리즈 (2신호 분기 / 변환 콘넥터)	C - 52
● M12A-S 시리즈 (납땜형 M12콘넥터)	C - 53
● M12A-B 시리즈 (Screw 조임형 M12콘넥터)	C - 55
● M8A-B 시리즈 (Screw 조임형 M8콘넥터)	C - 58
● M12A-I 시리즈 (M12 IDC 콘넥터)	C - 60
● 벨브플러그 케이블 (유공압 솔레노이드 벨브용 전원플러그)	C - 62
● M12 / M8 접속용 케이블 악세사리	C - 64
● M12 센서 케이블 선정일람	C - 68
● 센서 메이커별 선정일람	C - 70
● 접속 Application	C - 79

MPT시리즈 (단자대 장착형 분기박스)

CE

메인케이블 접속용 단자대가 장착되어 있는 경제형 분기박스



■ 특장점

- 단자대가 장착되어 있는 제품으로 사용자의 용도에 맞는 케이블을 직접 선정하여 결선가능
- 단자대 일체형/단자대 분리형(Plug형)의 2종 생산
  - 단자대 일체형 : PCB에 단자대가 장착되어 있는 경제형보드
  - 단자대 분리형 : Plug형의 단자대가 장착되어 있어 외부에서 하네스 작업 후 현장조립이 가능한 고기능성 보드
- M12방식의 센서, 리미트, 솔레노이드 밸브등을 집배선 할 수있는 제어반외용 중계박스
- IP67을 실현하고 크기를 소형화시킨 견고한 제품
- 전원/신호램프 부착으로 I/O체크가 용이
- NPN, PNP, 2선식 센서 전용보드의 구분 생산으로 대부분의 M12형 센서에 대응가능하고, N.O/N.C접점의 기본대응 (1신호 보드)

■ 모델선정 Model Selection

MP T - J 8 0 N - A / BL

구분	Series
MP	M12용 Multi Port

구분	메인케이블 접속방법
A	케이블 일체형
B	케이블 분리형(콘넥터타입)
T	단자대 장착형

구분	Port당 접속가능 신호수
J	1신호 / Port
K	2신호 / Port
P	2신호 / Port, 분리전원형 주)
L	1신호 / 2선식 센서전용

주) 분리전원형 제품은 2신호 / 8Port / 단자대분리형 전용 제품임

구분	Port 수
8	8Port 용
6	6Port 용
4	4Port 용

구분	Body 색상
BL	청색
BK	검정

구분	단자대 형태
A	단자대 일체형
B	단자대 분리형(Plug type)

구분	Common 극성
N	NPN ⊕COM
P	PNP ⊖COM

구분	메인 케이블 구성
0	메인케이블 없음

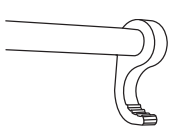
■ 정격/사양 Rating and Specifications

사용전압	DC12~24V
정격전류	2A Per I/O
	4A Per Port
절연저항	100MΩ이상(DC500V)
내전압	AC500V 1분간
보호구조	IP67(방수커버/M12콘넥터 결합시)
탈착내구	200회
적합 케이블 외경	Φ8.0~Φ13.5
사용주위온도	-25 ~ +75°C

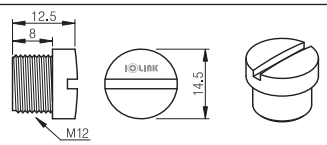
■ 재질 Materials and Finish

콘넥터 (M12)	Shell : Brass / Nickel-Plated
	Contact : Brass / Gold-Plated
케이스	Modified PPO
방수부싱	실리콘 고무
기판	양면 에폭시기판
몰딩제	에폭시 수지

■ M12 잠금 Tool (별매품)

TL-M12	

■ 방수커버 (별매품)

CV-M12 (Port용 방수커버 보호구조 IP67)	

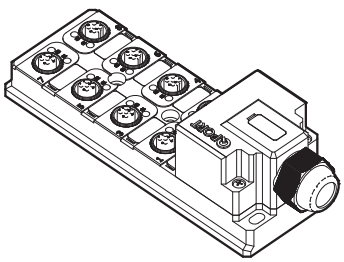
CE

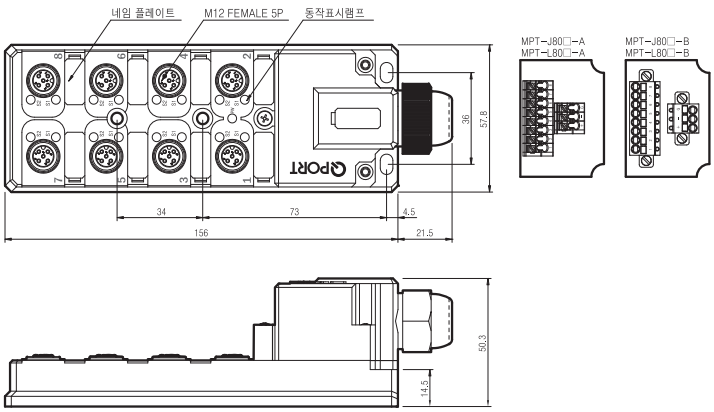
MPT시리즈 (단자대 장착형 분기박스)

메인케이블 접속용 단자대가 장착되어 있는 경제형 분기박스

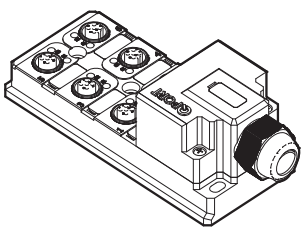
■ 외관도 (1신호용)

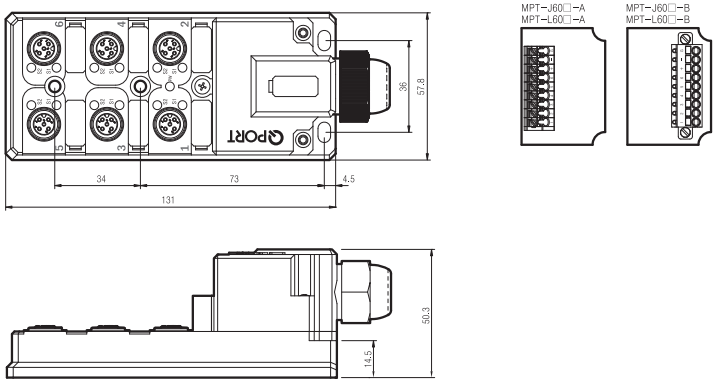
* MPT-J80□-□ (8포트/단자대 장착형)
  MPT-L80□-□ (8포트/1신호, 2선식 센서전용)



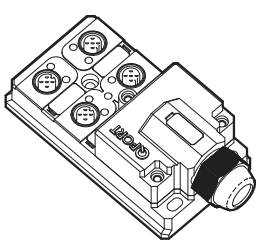


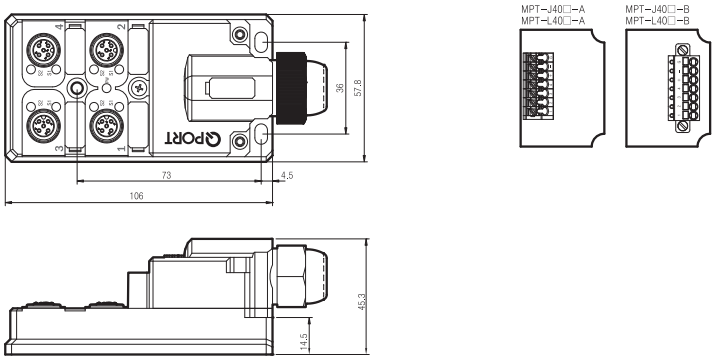
* MPT-J60□-□ (6포트/단자대 장착형)
  MPT-L60□-□ (6포트/1신호, 2선식 센서전용)





* MPT-J40□-□ (4포트/단자대 장착형)
  MPT-L40□-□ (4포트/1신호, 2선식 센서전용)





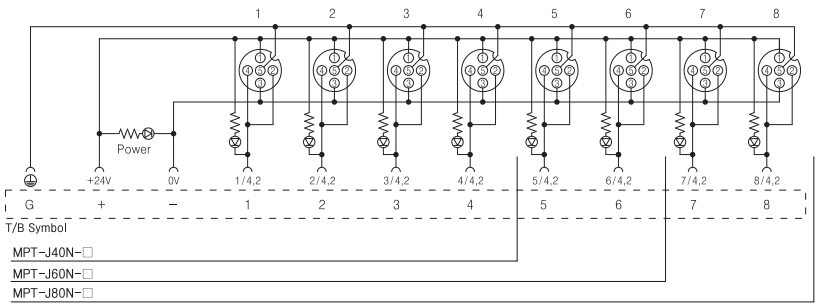
MPT시리즈 (단자대 장착형 분기박스)

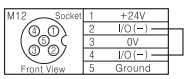
CE

메인케이블 접속용 단자대가 장착되어 있는 경제형 분기박스

■ 내부회로도 (1신호용)

* MPT-J80N-□ / MPT-J60N-□ / MPT-J40N-□ (1신호용, NPN) ⊕COM

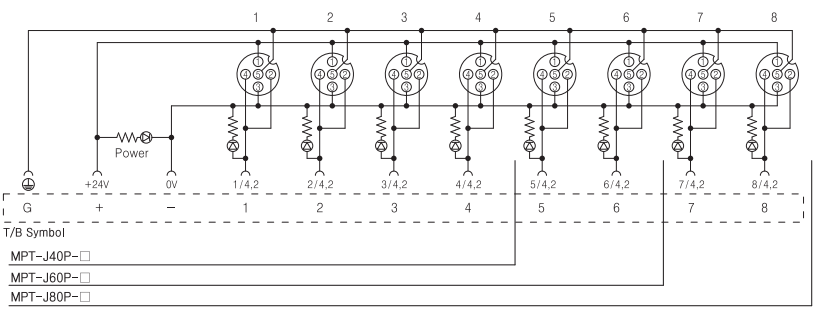


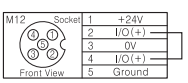


T/B Symbol

Power Line	
+24V	+
0V	−
Ground	G
M12-4,2(I/O)	
1/4,2	1
2/4,2	2
3/4,2	3
4/4,2	4
5/4,2	5
6/4,2	6
7/4,2	7
8/4,2	8

* MPT-J80P-□ / MPT-J60P-□ / MPT-J40P-□ (1신호용, PNP) ⊖COM

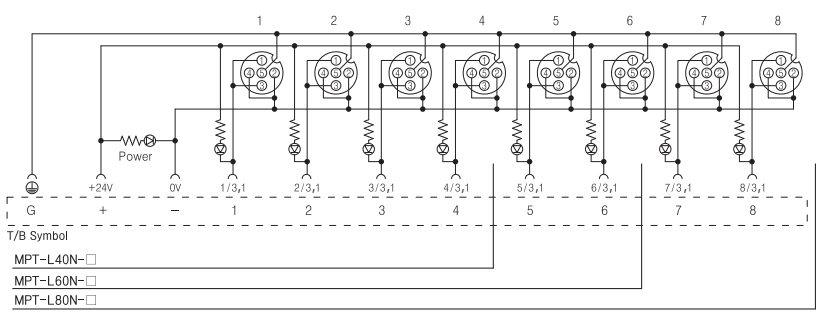


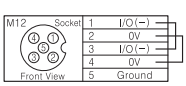


T/B Symbol

Power Line	
+24V	+
0V	−
Ground	G
M12-4,2(I/O)	
1/4,2	1
2/4,2	2
3/4,2	3
4/4,2	4
5/4,2	5
6/4,2	6
7/4,2	7
8/4,2	8

* MPT-L80N-□ / MPT-L60N-□ / MPT-L40N-□ (1신호 2선식 센서전용, NPN) ⊕COM

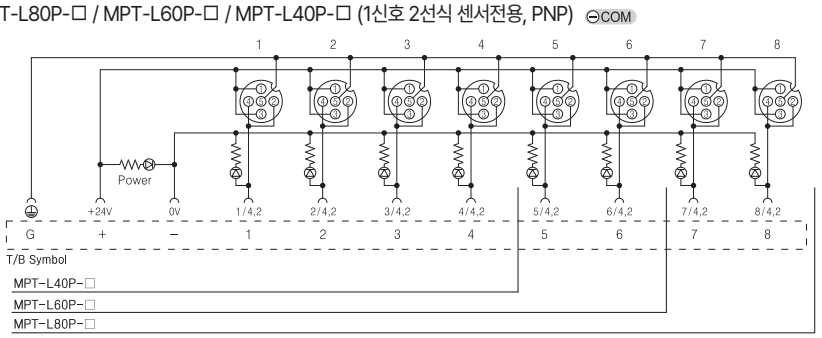


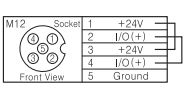


T/B Symbol

Power Line	
+24V	+
0V	−
Ground	G
M12-4,2(I/O)	
1/3,1	1
2/3,1	2
3/3,1	3
4/3,1	4
5/3,1	5
6/3,1	6
7/3,1	7
8/3,1	8

* MPT-L80P-□ / MPT-L60P-□ / MPT-L40P-□ (1신호 2선식 센서전용, PNP) ⊖COM





T/B Symbol

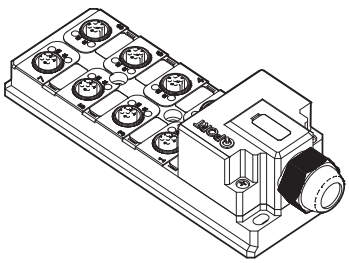
Power Line	
+24V	+
0V	−
Ground	G
M12-4,2(I/O)	
1/4,2	1
2/4,2	2
3/4,2	3
4/4,2	4
5/4,2	5
6/4,2	6
7/4,2	7
8/4,2	8

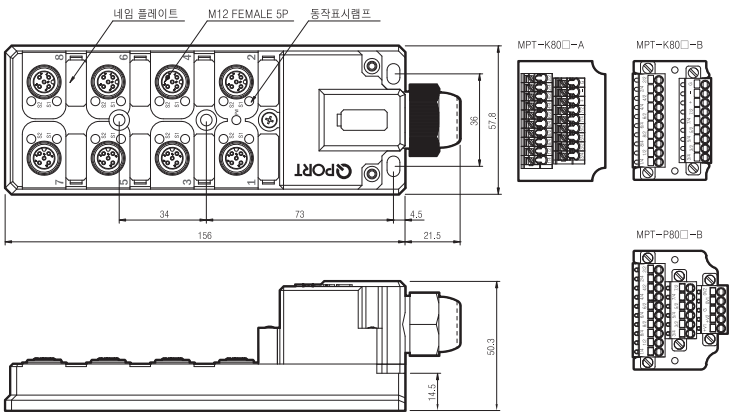
MPT시리즈 (단자대 장착형 분기박스)

메인케이블 접속용 단자대가 장착되어 있는 경제형 분기박스

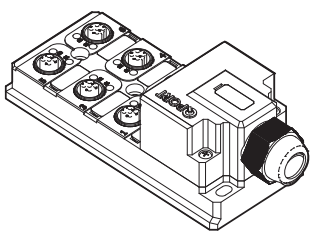
■ 외관도 (2신호용)

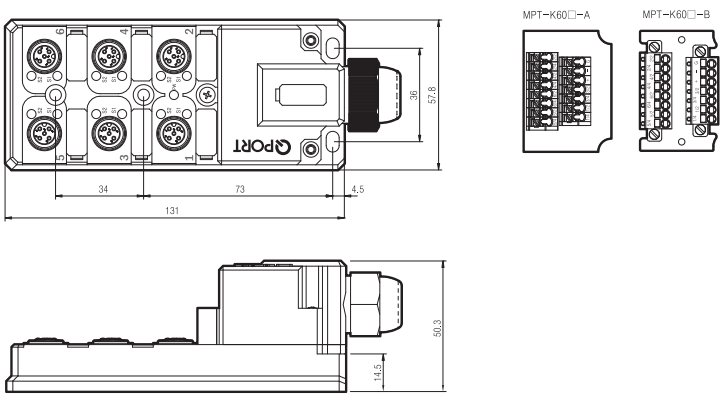
* MPT-K80□-□ (8포트/단자대 장착형)
  MPT-P80□-□ (8포트/분리전원/단자대 장착형)



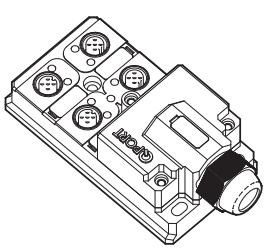


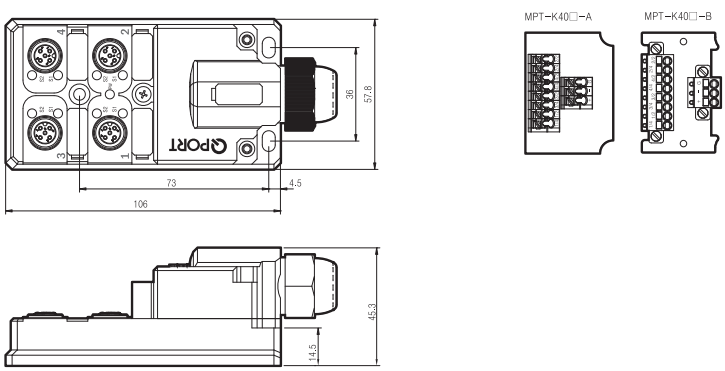
* MPT-K60□-□ (6포트/단자대 장착형)





* MPT-K40□-□ (4포트/단자대 장착형)





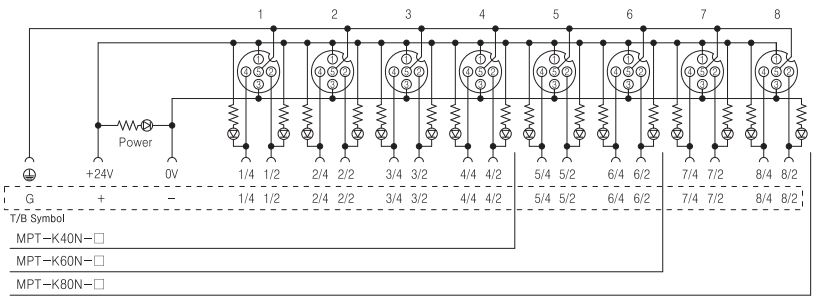
MPT시리즈 (단자대 장착형 분기박스)

CE

메인케이블 접속용 단자대가 장착되어 있는 경제형 분기박스

■ 내부회로도 (2신호용)

* MPT-K80N-□ / MPT-K60N-□ / MPT-K40N-□ (2신호용, NPN) ⊕COM



(NPN) ⊕COM

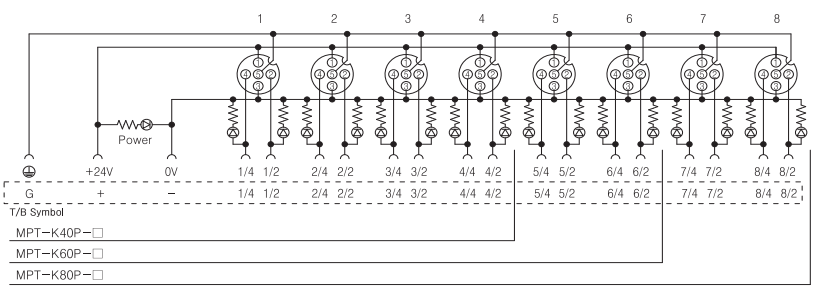
M12 Socket		
Front View	1	+24V
	2	I/O2 (−)
	3	0V
	4	I/O1 (−)
	5	Ground

T/B Symbol

Power Line	
+24V	+
0V	−
Ground	G

M12−4(I/O1)		M12−2(I/O2)	
1/4	1/4	1/2	1/2
2/4	2/4	2/2	2/2
3/4	3/4	3/2	3/2
4/4	4/4	4/2	4/2
5/4	5/4	5/2	5/2
6/4	6/4	6/2	6/2
7/4	7/4	7/2	7/2
8/4	8/4	8/2	8/2

* MPT-K80P-□ / MPT-K60P-□ / MPT-K40P-□ (2신호용, PNP) ⊖COM



(PNP) ⊖COM

M12 Socket		
Front View	1	+24V
	2	I/O2 (+)
	3	0V
	4	I/O1 (+)
	5	Ground

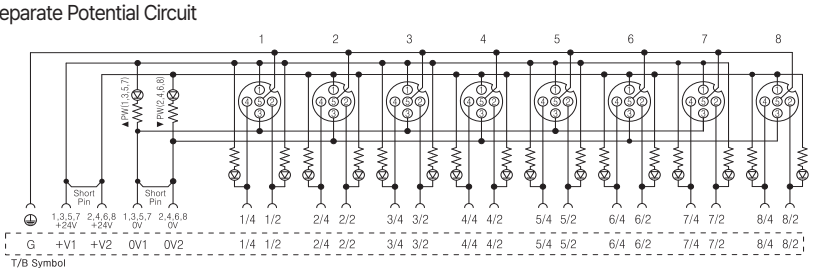
T/B Symbol

Power Line	
+24V	+
0V	−
Ground	G

M12−4(I/O1)		M12−2(I/O2)	
1/4	1/4	1/2	1/2
2/4	2/4	2/2	2/2
3/4	3/4	3/2	3/2
4/4	4/4	4/2	4/2
5/4	5/4	5/2	5/2
6/4	6/4	6/2	6/2
7/4	7/4	7/2	7/2
8/4	8/4	8/2	8/2

* MPT-P80N-B (2신호용, NPN 분리전원형) ⊕COM

Two Separate Potential Circuit



※ Short pin을 제거하면 1, 3, 5, 7 / 2, 4, 6, 8번 포트에 각기 다른전원이 공급 가능합니다.

(NPN) ⊕COM

M12 Socket		
Front View	1	+24V
	2	I/O2 (−)
	3	0V
	4	I/O1 (−)
	5	Ground

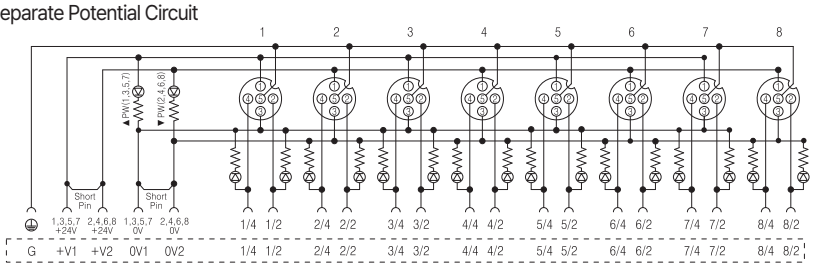
T/B Symbol

1,3,5,7 +24V	+V1
2,4,6,8 +24V	+V2
1,3,5,7 0V	0V1
2,4,6,8 0V	0V2
Ground	G

M12−4(I/O1)		M12−2(I/O2)	
1/4	1/4	1/2	1/2
2/4	2/4	2/2	2/2
3/4	3/4	3/2	3/2
4/4	4/4	4/2	4/2
5/4	5/4	5/2	5/2
6/4	6/4	6/2	6/2
7/4	7/4	7/2	7/2
8/4	8/4	8/2	8/2

* MPT-P80P-B (2신호용, PNP 분리전원형) ⊖COM

Two Separate Potential Circuit



※ Short pin을 제거하면 1, 3, 5, 7 / 2, 4, 6, 8번 포트에 각기 다른전원이 공급 가능합니다.

(PNP) ⊖COM

M12 Socket		
Front View	1	+24V
	2	I/O2 (+)
	3	0V
	4	I/O1 (+)
	5	Ground

T/B Symbol

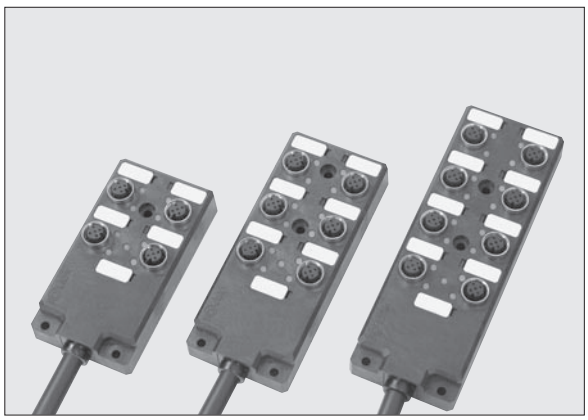
1,3,5,7 +24V	+V1
2,4,6,8 +24V	+V2
1,3,5,7 0V	0V1
2,4,6,8 0V	0V2
Ground	G

M12−4(I/O1)		M12−2(I/O2)	
1/4	1/4	1/2	1/2
2/4	2/4	2/2	2/2
3/4	3/4	3/2	3/2
4/4	4/4	4/2	4/2
5/4	5/4	5/2	5/2
6/4	6/4	6/2	6/2
7/4	7/4	7/2	7/2
8/4	8/4	8/2	8/2

CE

MPA 시리즈 (메인케이블 일체형 분기박스)

전원/신호선이 구분된 내유성 복합케이블 적용



■ 특장점

- M12방식의 센서, 리미트스위치, 솔레노이드 밸브 등을 집배선 할 수 있는 제어반외용 중계박스
- M12전용콘넥터의 사용으로 현장설치시 공수를 대폭절감
- IP67을 실현하고 크기를 소형화시킨 견고한 제품
- 전원/신호램프 부착으로 I/O체크가 용이
- 전제품이 동일한 설치 치수로 포트수에 관계없이 설치 및 증설이 간단
- 1신호, 2신호 및 NPN, PNP형 구분생산
- 내유성 케이블 기본적용
- 메인케이블이 일체형으로 부착되어 경제적인 배선을 실현

■ 모델선정 Model Selection

MP A - J 8 3 N - V 050 / BL

구분	Series
MP	M12용 Multi Port

구분	메인케이블 접속방법
A	케이블 일체형
B	케이블 분리형(콘넥터타입)
T	단자대 장착형

구분	Port당 접속가능 신호수
J	1신호 / Port
K	2신호 / Port
L	1신호 / 2선식 센서전용

구분	Port 수
8	8Port 용
6	6Port 용
4	4Port 용

구분	메인케이블 구성
3	1신호 : 0.75mm²∗ 3C+0.34mm²∗ 8C
	2신호 : 1.0mm²∗ 3C+0.34mm²∗16C

구분	Body 색상
BL	청색
BK	검정

구분	표준 케이블 길이
030	3M
050	5M
070	7M
100	10M
120	12M
150	15M

구분	케이블 사양
V	UL / 내유성 케이블

구분	Common 극성
N	NPN ⊕COM
P	PNP ⊖COM

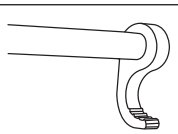
■ 정격/사양 Rating and Specifications

사용전압	DC12~24V
정격전류	2A Per I/O
	4A Per Port
절연저항	100MΩ 이상(DC500V)
내전압	AC500V 1분간
보호구조	IP67 (방수커버/M12콘넥터 결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

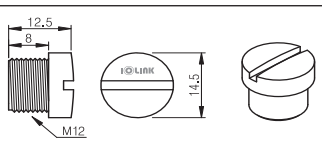
■ 재질 Materials and Finish

콘넥터 (M12)	Shell : Brass / Nickel-Plated
	Contact : Brass / Gold-Plated
케이블	1신호 : 0.75mm² ∗ 3C+0.34mm² ∗ 8C
	2신호 : 1.0mm² ∗ 3C+0.34mm² ∗ 16C
케이스	Modified PPO
방수부싱	실리콘 고무
기판	양면 에폭시기판
몰딩제	에폭시 수지

■ M12 잠금 Tool (별매품)

TL-M12	

■ 방수커버 (별매품)

CV-M12 (Port용 방수커버 보호구조 IP67)	

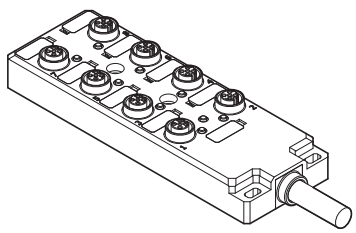
MPA 시리즈 (메인케이블 일체형 분기박스)

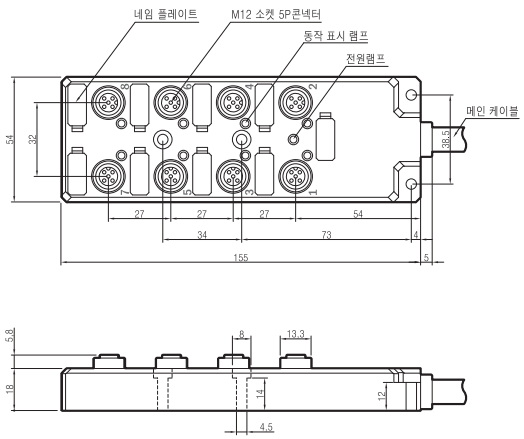
CE

전원/신호선이 구분된 내유성 복합케이블 적용

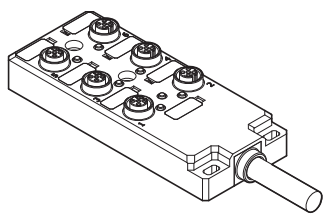
■ 외관도 (1신호용)

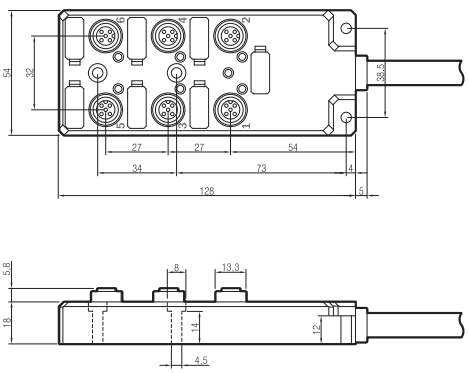
* MPA-J83□-□□ (8포트/메인케이블 일체형)
  MPA-L83□-□□ (8포트/1신호, 2선식 센서전용)



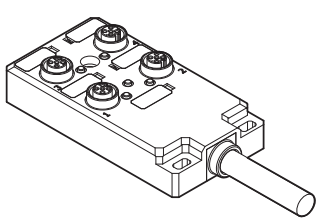


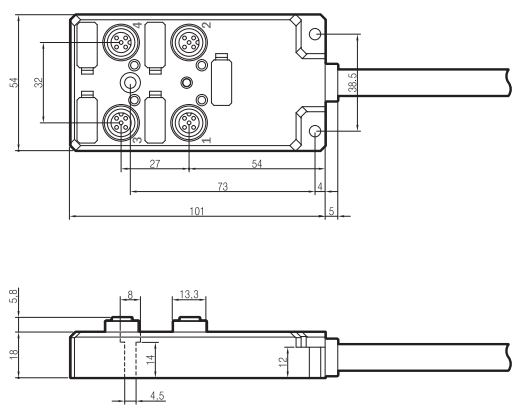
* MPA-J63□-□□ (6포트/메인케이블 일체형)
  MPA-L63□-□□ (6포트/1신호, 2선식 센서전용)





* MPA-J43□-□□ (4포트/메인케이블 일체형)
  MPA-L43□-□□ (4포트/1신호, 2선식 센서전용)





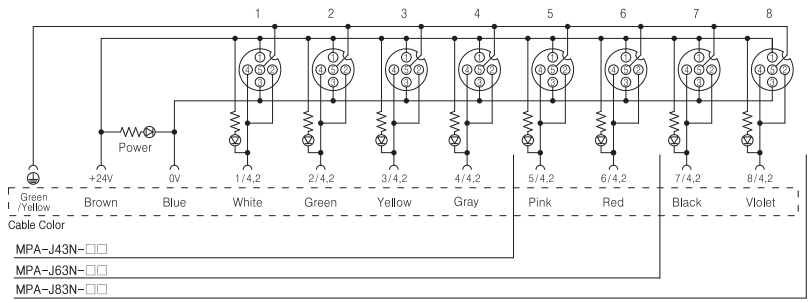
CE

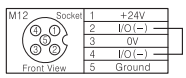
MPA 시리즈 (메인케이블 일체형 분기박스)

전원/신호선이 구분된 내유성 복합케이블 적용

■ 내부회로도 (1신호용)

* MPA-J83N-□□ / MPA-J63N-□□ / MPA-J43N-□□ (1신호용, NPN) ⊕COM

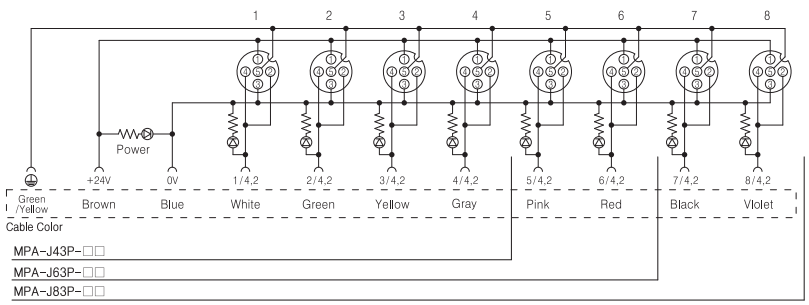


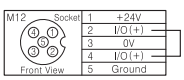


Main Cable Color

Power Line	
+24V	Brown
0V	Blue
Ground	Green/Yellow
M12-4,2(I/O)	
1/4,2	White
2/4,2	Green
3/4,2	Yellow
4/4,2	Gray
5/4,2	Pink
6/4,2	Red
7/4,2	Black
8/4,2	Violet

* MPA-J83P-□□ / MPA-J63P-□□ / MPA-J43P-□□ (1신호용, PNP) ⊖COM

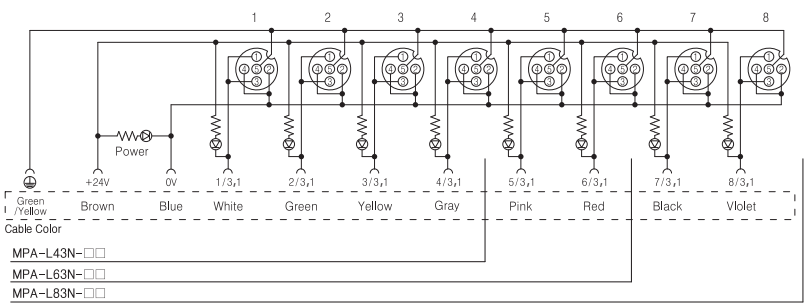


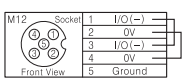


Main Cable Color

Power Line	
+24V	Brown
0V	Blue
Ground	Green/Yellow
M12-4,2(I/O)	
1/4,2	White
2/4,2	Green
3/4,2	Yellow
4/4,2	Gray
5/4,2	Pink
6/4,2	Red
7/4,2	Black
8/4,2	Violet

* MPA-L83N-□□ / MPA-L63N-□□ / MPA-L43N-□□ (1신호 2선식 센서전용, NPN) ⊕COM

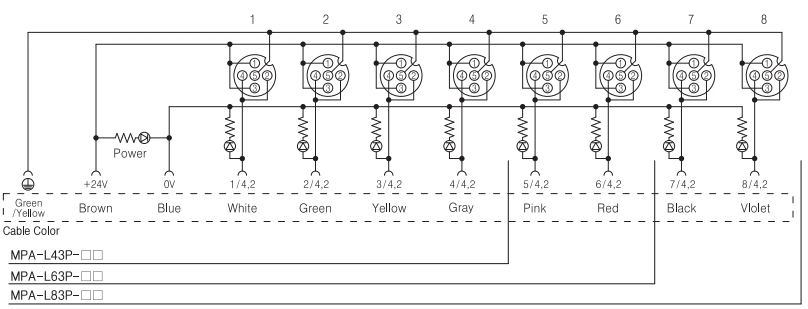


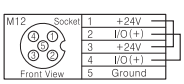


Main Cable Color

Power Line	
+24V	Brown
0V	Blue
Ground	Green/Yellow
M12-4,2(I/O)	
1/3,1	White
2/3,1	Green
3/3,1	Yellow
4/3,1	Gray
5/3,1	Pink
6/3,1	Red
7/3,1	Black
8/3,1	Violet

* MPA-L83P-□□ / MPA-L63P-□□ / MPA-L43P-□□ (1신호 2선식 센서전용, PNP) ⊖COM





Main Cable Color

Power Line	
+24V	Brown
0V	Blue
Ground	Green/Yellow
M12-4,2(I/O)	
1/4,2	White
2/4,2	Green
3/4,2	Yellow
4/4,2	Gray
5/4,2	Pink
6/4,2	Red
7/4,2	Black
8/4,2	Violet

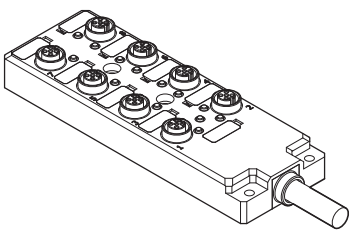
MPA 시리즈 (메인케이블 일체형 분기박스)

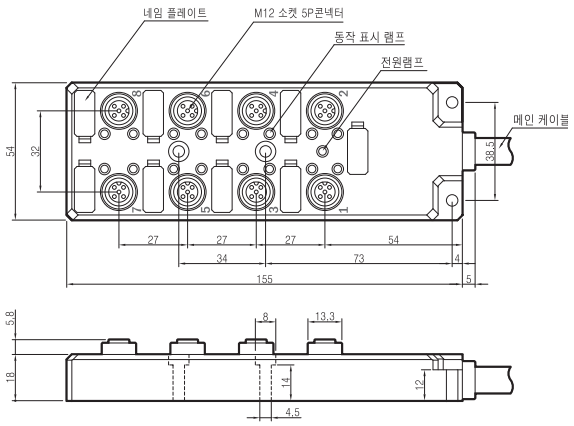
CE

전원/신호선이 구분된 내유성 복합케이블 적용

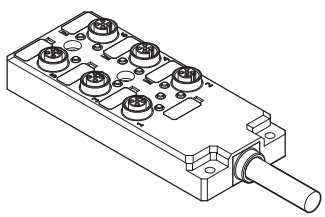
■ 외관도 (2신호용)

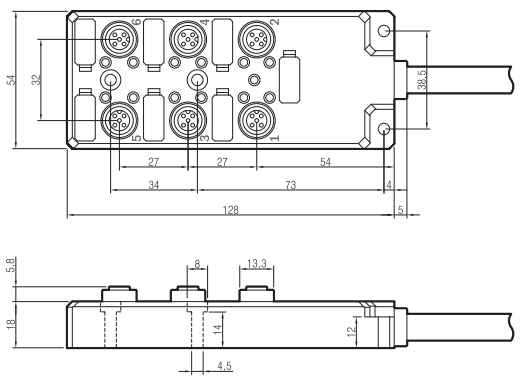
* MPA-K83□-□□ (8포트/메인케이블 일체형)



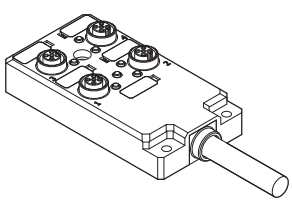


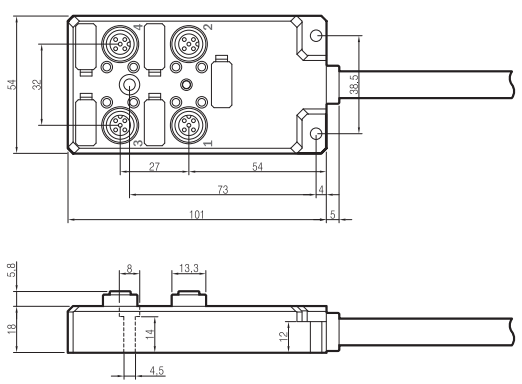
* MPA-K63□-□□ (6포트/메인케이블 일체형)





* MPA-K43□-□□ (4포트/메인케이블 일체형)





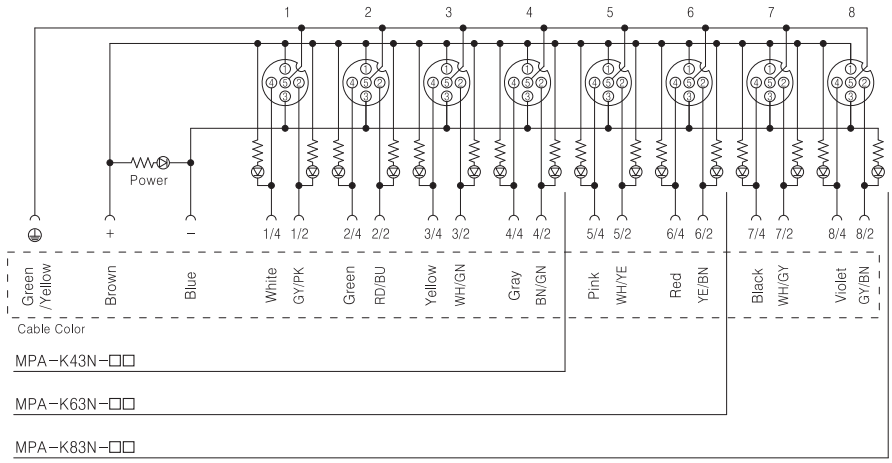
CE

MPA 시리즈 (메인케이블 일체형 분기박스)

전원/신호선이 구분된 내유성 복합케이블 적용

■ 내부회로도 (2신호용)

* MPA-K83N-□□ / MPA-K63N-□□ / MPA-K43N-□□ (2신호용, NPN) ⊕COM



(NPN) ⊕COM

M12 Socket		
Front View	1	+24V
	2	I/O2(−)
	3	0V
	4	I/O1(−)
	5	Ground

Main Cable Color

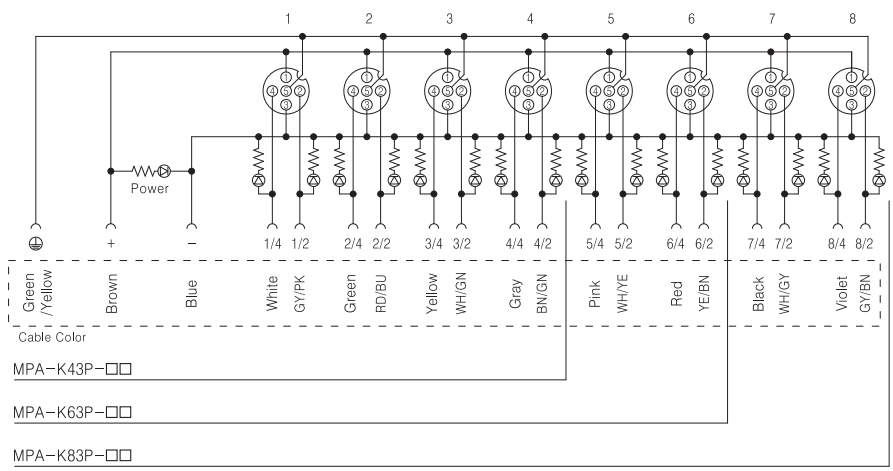
Power Line	
+24V	Brown
0V	Blue
Ground	Green/Yellow

M12-4 (I/O1)		M12-2 (I/O2)	
1/4	White	1/2	GY/PK
2/4	Green	2/2	RD/BU
3/4	Yellow	3/2	WH/GN
4/4	Gray	4/2	BN/GN
5/4	Pink	5/2	WH/YE
6/4	Red	6/2	YE/BN
7/4	Black	7/2	WH/GY
8/4	Violet	8/2	GY/BN

Signal2 Cable Color Code

WH	White	PK	Pink
GN	Green	RD	Red
YE	Yellow	BK	Black
GY	Gray	VT	Violet
BU	Blue	BN	Brown

* MPA-K83P-□□ / MPA-K63P-□□ / MPA-K43P-□□ (2신호용, PNP) ⊖COM



(PNP) ⊖COM

M12 Socket		
Front View	1	+24V
	2	I/O2(+)
	3	0V
	4	I/O1(+)
	5	Ground

Main Cable Color

Power Line	
+24V	Brown
0V	Blue
Ground	Green/Yellow

M12-4 (I/O1)		M12-2 (I/O2)	
1/4	White	1/2	GY/PK
2/4	Green	2/2	RD/BU
3/4	Yellow	3/2	WH/GN
4/4	Gray	4/2	BN/GN
5/4	Pink	5/2	WH/YE
6/4	Red	6/2	YE/BN
7/4	Black	7/2	WH/GY
8/4	Violet	8/2	GY/BN

Signal2 Cable Color Code

WH	White	PK	Pink
GN	Green	RD	Red
YE	Yellow	BK	Black
GY	Gray	VT	Violet
BU	Blue	BN	Brown

MPB 시리즈 (M23 메인케이블 분리형 분기박스)

CE

M23 메인케이블 분리형으로 현장작업성 및 유지.보수성 향상



■ 특장점

- M12방식의 센서, 리미트스위치, 솔레노이드 밸브 등을 집배선 할 수 있는 제어반외용 중계박스
- M12전용콘넥터의 사용으로 현장설치시 공수를 대폭절감
- M23 메인케이블이 분리되어 현장 작업성이 매우 높으며 유지.보수가 간편함
- 전원/신호램프 부착으로 I/O체크가 용이
- 전제품이 동일한 설치 치수로 포트수에 관계없이 설치 및 증설이 간단
- 1신호, 2신호 및 NPN, PNP형 구분생산
- IP67을 실현하고 크기를 소형화시킨 견고한 제품

■ 모델선정 Model Selection

MP B - J 8 0 N / BL

구분	Series
MP	M12용 Multi Port

구분	메인케이블 접속방법
A	케이블 일체형
B	케이블 분리형 (콘넥터타입)
T	단자대 장착형

구분	Port당 접속가능 신호수
J	1신호 / Port
K	2신호 / Port
L	1신호 / 2선식 센서전용

* M23 메인케이블은 Page C-22를 참조 바랍니다.

구분	Body 색상
BL	청색
BK	검정

구분	Common 극성
N	NPN ⊕COM
P	PNP ⊖COM

구분	메인 케이블 구성
0	메인케이블 없음

구분	Port 수
8	8Port 용
6	6Port 용
4	4Port 용

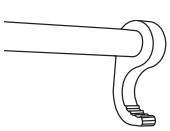
■ 정격/사양 Rating and Specifications

사용전압	DC12~24V
정격전류	2A Per I/O
	4A Per Port
절연저항	100MΩ이상 (DC500V)
내전압	AC500V 1분간
보호구조	IP67 (방수커버 / M12콘넥터 결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

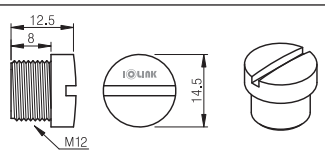
■ 재질 Materials and Finish

콘넥터 (M12/M23)	Shell : Brass / Nickel-Plated
	Contact : Brass / Gold-Plated
케이스	Modified PPO
방수부싱	실리콘 고무
기판	양면 에폭시기판
몰딩제	에폭시 수지

■ M12 잠금 Tool (별매품)

TL-M12	

■ 방수커버 (별매품)

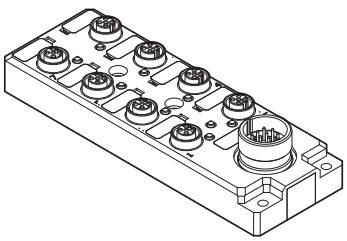
CV-M12 (Port용 방수커버 보호구조 IP67)	

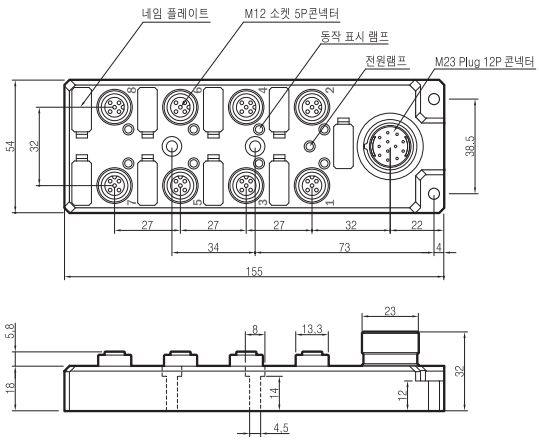
MPB 시리즈 (M23 메인케이블 분리형 분기박스)

M23 메인케이블 분리형으로 현장작업성 및 유지.보수성 향상

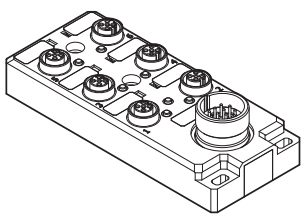
■ 외관도 (1신호용)

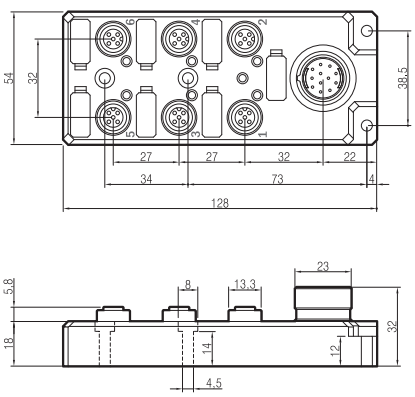
* MPB-J80□ (8포트/M23 메인케이블 분리형)
  MPB-L80□ (8포트/1신호, 2선식 센서전용)
  (M23 메인 콘넥터 Pin수 : 12Pin)



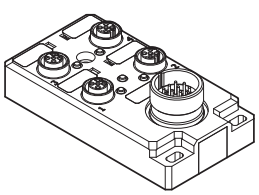


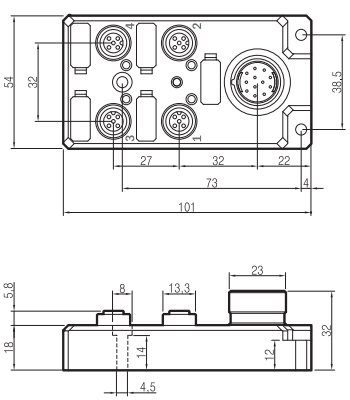
* MPB-J60□ (6포트/M23 메인케이블 분리형)
  MPB-L60□ (6포트/1신호, 2선식 센서전용)
  (M23 메인 콘넥터 Pin수 : 12Pin)





* MPB-J40□ (4포트/M23 메인케이블 분리형)
  MPB-L40□ (4포트/1신호, 2선식 센서전용)
  (M23 메인 콘넥터 Pin수 : 12Pin)





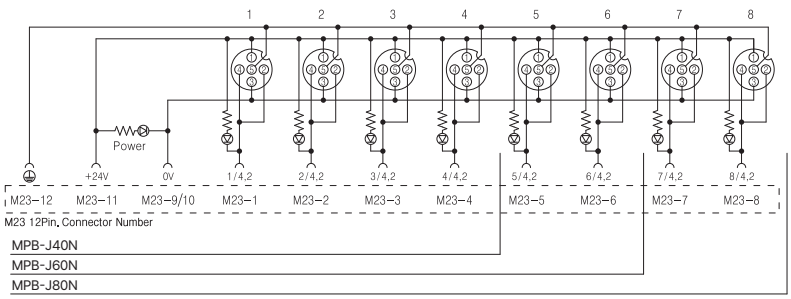
MPB 시리즈 (M23 메인케이블 분리형 분기박스)

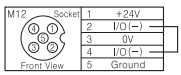
CE

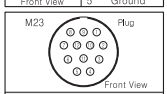
M23 메인케이블 분리형으로 현장작업성 및 유지.보수성 향상

■ 내부회로도 (1신호용)

* MPB-J80N / MPB-J60N / MPB-J40N (1신호용, NPN) ⊕COM

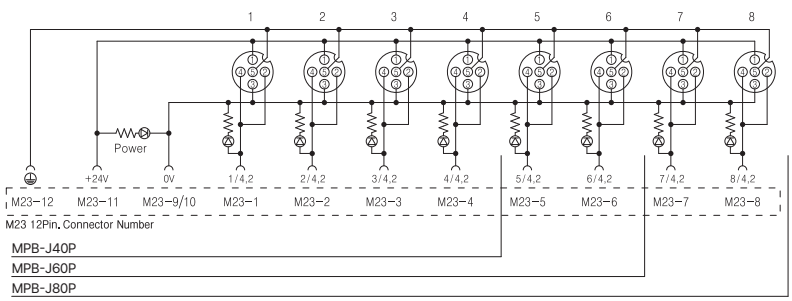


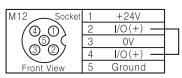


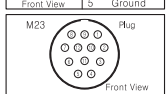


Power Line	
+24V	11
0V	9+10
Ground	12
M12-4,2(I/O)	
1/4,2	1
2/4,2	2
3/4,2	3
4/4,2	4
5/4,2	5
6/4,2	6
7/4,2	7
8/4,2	8

* MPB-J80P / MPB-J60P / MPB-J40P (1신호용, PNP) ⊖COM

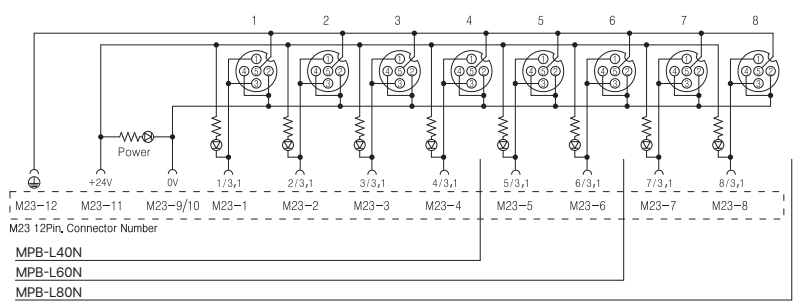


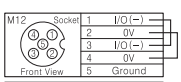


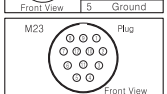


Power Line	
+24V	11
0V	9+10
Ground	12
M12-4,2(I/O)	
1/4,2	1
2/4,2	2
3/4,2	3
4/4,2	4
5/4,2	5
6/4,2	6
7/4,2	7
8/4,2	8

* MPB-L80N / MPB-L60N / MPB-L40N (1신호 2선식 센서전용, NPN) ⊕COM

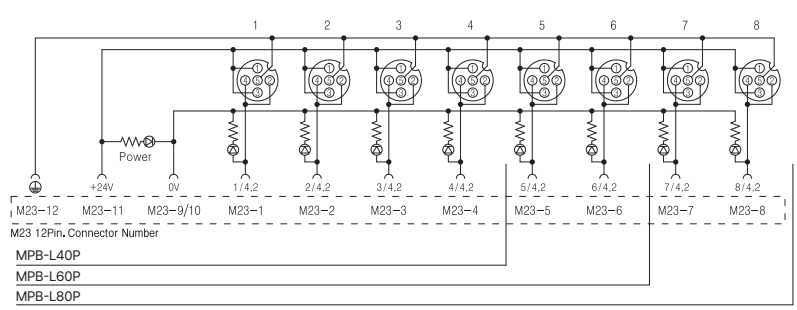


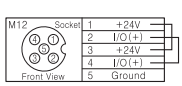


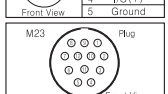


Power Line	
+24V	11
0V	9+10
Ground	12
M12-4,2(I/O)	
1/3,1	1
2/3,1	2
3/3,1	3
4/3,1	4
5/3,1	5
6/3,1	6
7/3,1	7
8/3,1	8

* MPB-L80P / MPB-L60P / MPB-L40P (1신호 2선식 센서전용, PNP) ⊖COM







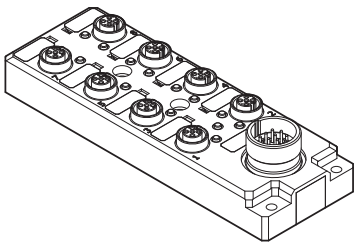
Power Line	
+24V	11
0V	9+10
Ground	12
M12-4,2(I/O)	
1/4,2	1
2/4,2	2
3/4,2	3
4/4,2	4
5/4,2	5
6/4,2	6
7/4,2	7
8/4,2	8

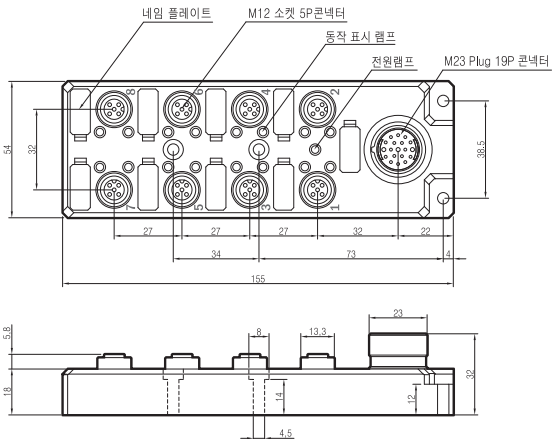
MPB 시리즈 (M23 메인케이블 분리형 분기박스)

M23 메인케이블 분리형으로 현장작업성 및 유지.보수성 향상

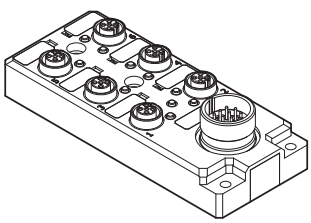
■ 외관도 (2신호용)

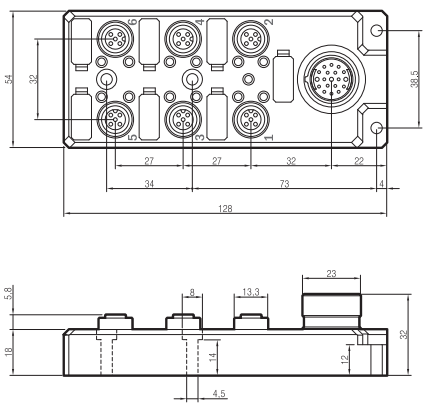
* MPB-K80□ (8포트 / M23 메인케이블 분리형)
(M23 메인 콘넥터 Pin수 : 19 Pin)



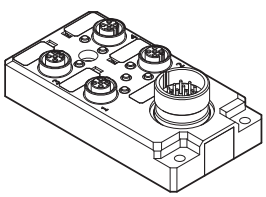


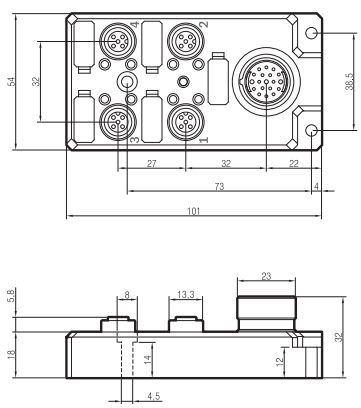
* MPB-K60□ (6포트 / M23 메인케이블 분리형)
(M23 메인 콘넥터 Pin수 : 19 Pin)





* MPB-K40□ (4포트 / M23 메인케이블 분리형)
(M23 메인 콘넥터 Pin수 : 19 Pin)



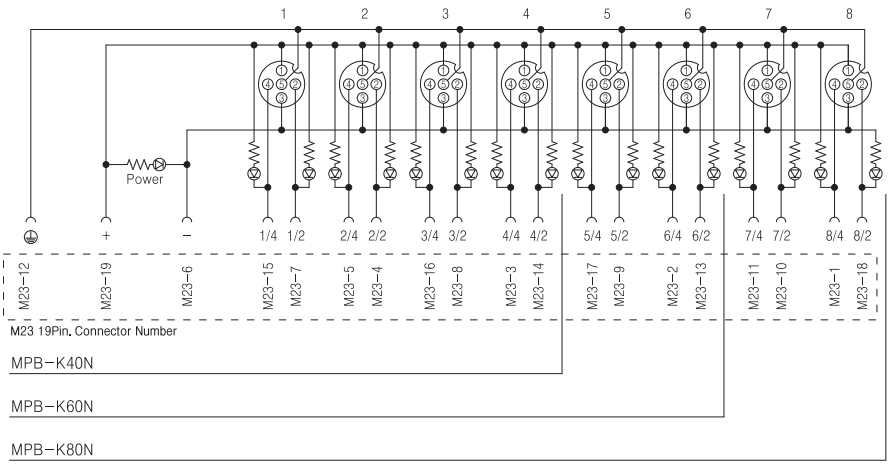


MPB 시리즈 (M23 메인케이블 분리형 분기박스)

M23 메인케이블 분리형으로 현장작업성 및 유지.보수성 향상

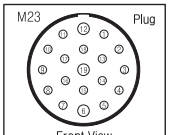
■ 내부회로도 (2신호용)

* MPB-K80N / MPB-K60N / MPB-K40N (2신호용, NPN) ⊕COM



(NPN) ⊕COM

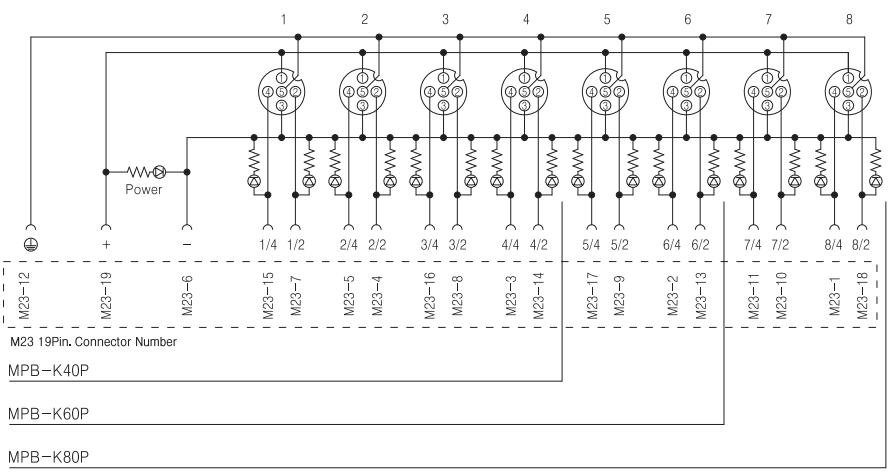
M12 Socket		
Front View	1	+24V
	2	I/O2(–)
	3	0V
	4	I/O1(–)
	5	Ground



Power Line	
+24V	19
0V	6
Ground	12

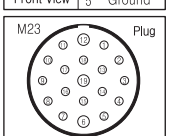
M12-4 (I/O1)		M12-2 (I/O2)	
1/4	15	1/2	7
2/4	5	2/2	4
3/4	16	3/2	8
4/4	3	4/2	14
5/4	17	5/2	9
6/4	2	6/2	13
7/4	11	7/2	10
8/4	1	8/2	18

* MPB-K80P / MPB-K60P / MPB-K40P (2신호용, PNP) ⊖COM



(PNP) ⊖COM

M12 Socket		
Front View	1	+24V
	2	I/O2(+)
	3	0V
	4	I/O1(+)
	5	Ground



Power Line	
+24V	19
0V	6
Ground	12

M12-4 (I/O1)		M12-2 (I/O2)	
1/4	15	1/2	7
2/4	5	2/2	4
3/4	16	3/2	8
4/4	3	4/2	14
5/4	17	5/2	9
6/4	2	6/2	13
7/4	11	7/2	10
8/4	1	8/2	18

MSA 시리즈 (메인케이블 일체형 M8분기박스)

전원/신호선이 구분된 내유성 복합케이블 적용



■ 특장점

- M8방식의 센서, 리미트 스위치, 솔레노이드 밸브 등의 집배선 할 수 있는 제어반외용 중계박스
- M8 콘넥터의 사용으로 현장설치시 공간활용이 용이함 (폭 30mm)
- IP67의 보호등급으로 현장배선용으로 적합
- 1신호, 2신호 및 NPN, PNP형 구분 생산
- 메인케이블이 일체형으로 부착되어 경제적인 배선을 실현

■ 모델선정 Model Selection

MS A - J 8 3 N - V 050 / BL

구분	Series
MS	M8 콘넥터 분기박스

구분	메인케이블 접속방법
A	케이블 일체형
B	케이블 분리형 (콘넥터타입)

구분	Port당 접속가능 신호수
J	1신호 / Port (M8 3Pin)
K	2신호 / Port (M8 4Pin)

구분	Port 수
8	8Port 용

구분	메인케이블 구성
3	1신호 : 0.75mm² * 2C+0.34mm² * 8C
	2신호 : 1.0mm² * 2C+0.34mm² * 16C

구분	Common 극성
N	NPN ⊕COM
P	PNP ⊖COM

구분	케이블 사양
V	UL / PVC / 내유성 케이블

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	Body 색상
BL	청색
BK	검정

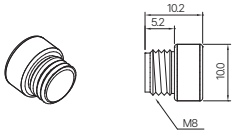
■ 정격/사양 Rating and Specifications

사용전압	DC12~24V
정격전류	2A Per I/O
	6A Per Port
절연저항	100MΩ 이상 (DC500V)
내전압	AC500V 1분간
보호구조	IP67 (방수커버 / M8콘넥터 결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

콘넥터 (M8)	Shell : Brass / Nickel-Plated
	Contact : Brass / Gold-Plated
케이블	1신호 : 0.75mm² * 2C+0.34mm² * 8C
	2신호 : 1.0mm² * 2C+0.34mm² * 16C
케이스	Modified PPO
방수부싱	실리콘 고무
기판	양면 에폭시기판
몰딩제	에폭시 수지

■ 방수커버 (별매품)

CV-M8 (Port용 방수커버 보호구조 IP67)	

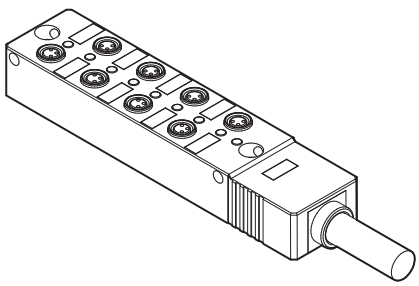
MSA 시리즈 (메인케이블 일체형 M8분기박스)

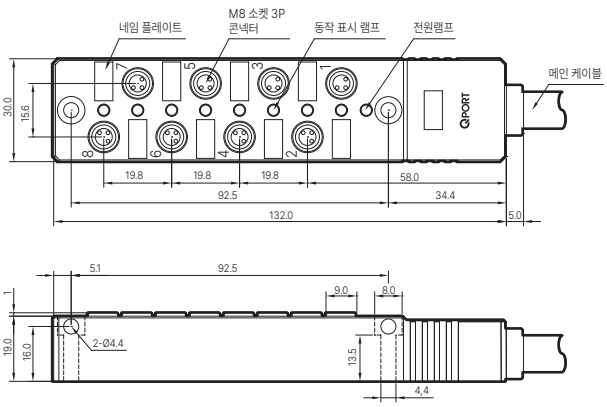
CE

전원/신호선이 구분된 내유성 복합케이블 적용

■ 외관도 (1신호용)

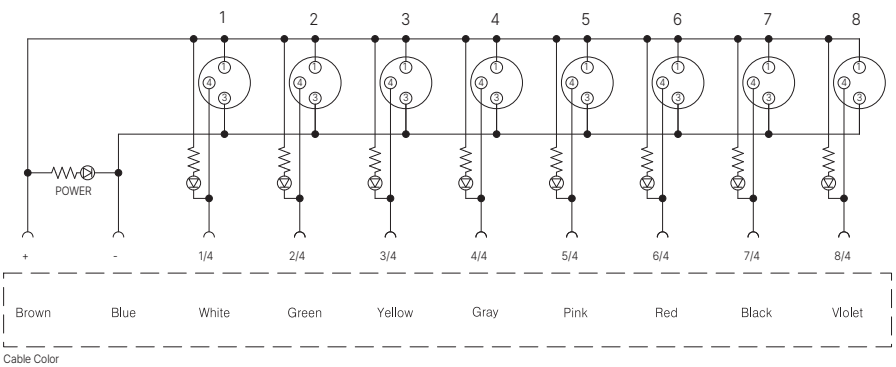
* MSA-J83□-□ (8포트/메인케이블 일체형)
(0.75mm² * 2C + 0.34mm² * 8C)





■ 내부회로도 (1신호용)

* MSA-J83N-□□ (1신호용, NPN) ⊕COM



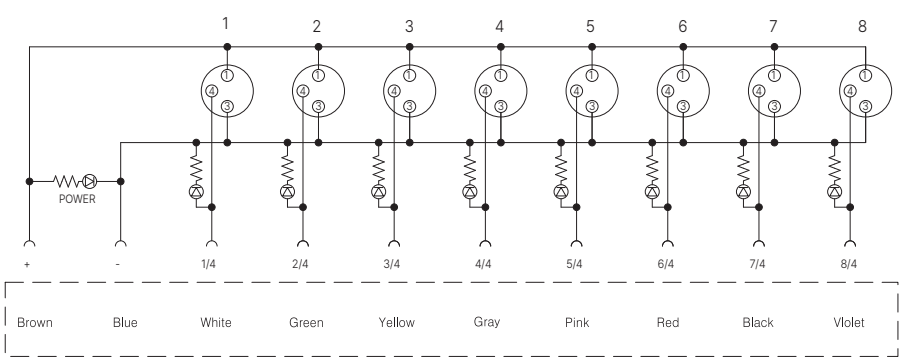
M8 Socket

Front View	1	+24V
	3	0V
	4	I/O(-)

Main Cable Color

Power Line	
+24V	Brown
0V	Blue
M8-4(I/O)	
1/4	White
2/4	Green
3/4	Yellow
4/4	Gray
5/4	Pink
6/4	Red
7/4	Black
8/4	Violet

* MSA-J83P-□□ (1신호용, PNP) ⊖COM



M8 Socket

Front View	1	+24V
	3	0V
	4	I/O(+)

Main Cable Color

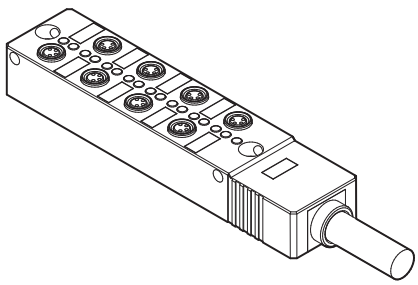
Power Line	
+24V	Brown
0V	Blue
M8-4(I/O)	
1/4	White
2/4	Green
3/4	Yellow
4/4	Gray
5/4	Pink
6/4	Red
7/4	Black
8/4	Violet

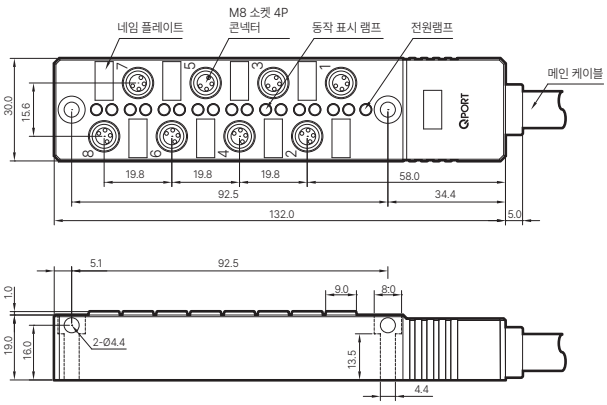
MSA 시리즈 (메인케이블 일체형 M8분기박스)

전원/신호선이 구분된 내유성 복합케이블 적용

■ 외관도 (2신호용)

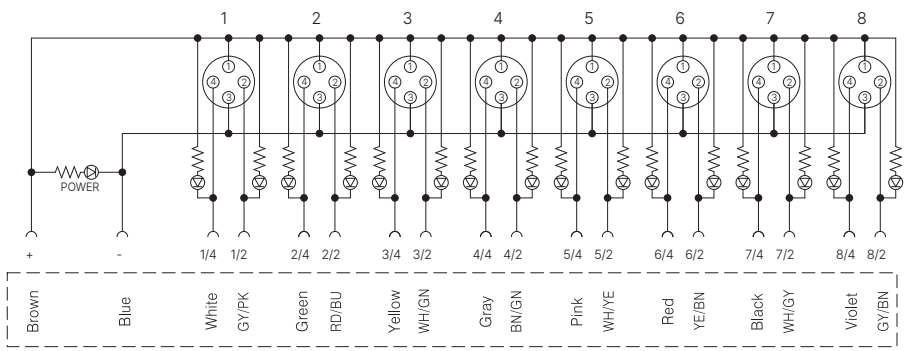
* MSA-K83□-□□ (8포트/메인케이블 일체형)
(1.0mm² * 2C + 0.34mm² * 16C)





■ 내부회로도 (2신호용)

* MSA-K83N-□□ (2신호용, NPN) ⊕COM



M8 Socket



1	+24V
2	I/O2(-)
3	0V
4	I/O1(-)

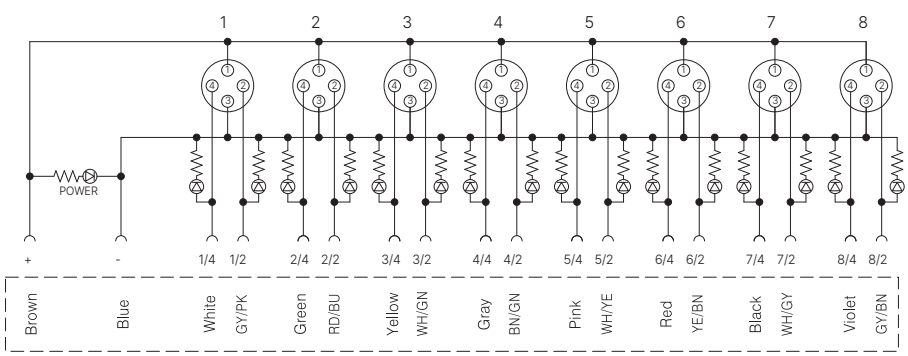
Main Cable Color

Power Line			
+24V		Brown	
0V		Blue	
M8-4(I/O1)		M8-2(I/O2)	
1/4	While	1/2	GY/PK
2/4	Green	2/2	RD/BU
3/4	Yellow	3/2	WH/GN
4/4	Gray	4/2	BN/GN
5/4	Pink	5/2	WH/YE
6/4	Red	6/2	YE/BN
7/4	Black	7/2	WH/GY
8/4	Violet	8/2	GY/BN

Signal2 Cable Color Code

WH	While	PK	Pink
GN	Green	RD	Red
YE	Yellow	BK	Black
GY	Gray	VT	Violet
BU	Blue	BN	Brown

* MSA-K83P-□□ (2신호용, PNP) ⊖COM



M8 Socket



1	+24V
2	I/O2(+)
3	0V
4	I/O1(+)

Main Cable Color

Power Line			
+24V		Brown	
0V		Blue	
M8-4(I/O1)		M8-2(I/O2)	
1/4	While	1/2	GY/PK
2/4	Green	2/2	RD/BU
3/4	Yellow	3/2	WH/GN
4/4	Gray	4/2	BN/GN
5/4	Pink	5/2	WH/YE
6/4	Red	6/2	YE/BN
7/4	Black	7/2	WH/GY
8/4	Violet	8/2	GY/BN

Signal2 Cable Color Code

WH	While	PK	Pink
GN	Green	RD	Red
YE	Yellow	BK	Black
GY	Gray	VT	Violet
BU	Blue	BN	Brown

MSB 시리즈 (M23 메인케이블 분리형 M8분기박스)

CE

M23 메인케이블 분리형으로 현장작업성 및 유지·보수성 향상



■ 특장점

- M8방식의 센서, 리미트스위치, 솔레노이드 밸브 등의 집배선 할 수 있는 제어반외용 중계박스
- M8 콘넥터의 사용으로 현장설치시 공간활용이 용이함 (폭 30mm)
- IP67의 보호등급으로 현장배선용으로 적합
- M23 메인케이블이 분리되어 현장 작성이 매우 높으며 유지 · 보수가 간편함
- 1신호 NPN, PNP형 구분 생산

■ 모델선정 Model Selection

MS B - J 8 0 N / BL

구분	Series
MS	M8용 콘넥터 분기박스

구분	메인케이블 접속방법
A	케이블 일체형
B	케이블 분리형 (콘넥터타입)

구분	Port당 접속가능 신호수
J	1신호 / Port (M8 3Pin)

구분	Port 수
8	8Port 용

구분	Body 색상
BL	청색
BK	검정

구분	Common 극성
N	NPN ⊕COM
P	PNP ⊖COM

구분	메인 케이블 구성
0	메인케이블 없음

* M23 메인케이블은 Page C-22를 참조 바랍니다.

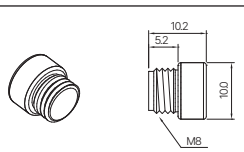
■ 정격/사양 Rating and Specifications

사용전압	DC12~24V
정격전류	2A Per I/O
	6A Per Port
절연저항	100MΩ이상 (DC500V)
내전압	AC500V 1분간
보호구조	IP67 (방수커버 / M8콘넥터 결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

콘넥터 (M8/M23)	Shell : Brass / Nickel-Plated
	Contact : Brass / Gold-Plated
케이스	Modified PPO
방수부싱	실리콘 고무
기판	양면 에폭시기판
몰딩제	에폭시 수지

■ 방수커버 (별매품)

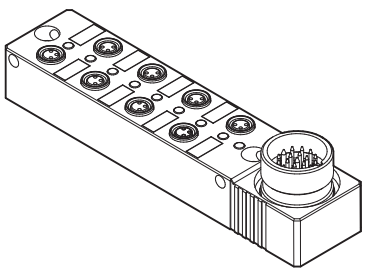
CV-M8 (Port용 방수커버 보호구조 IP67)	

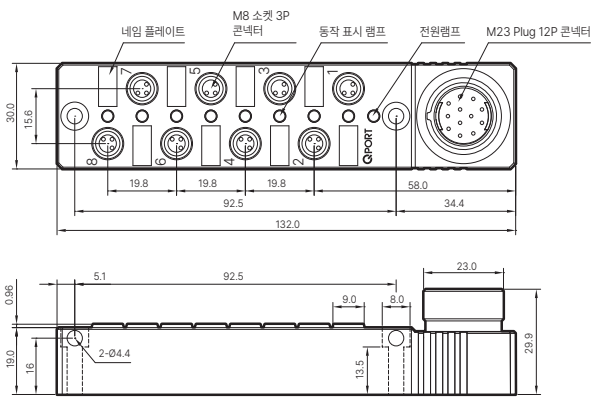
MSB 시리즈 (M23 메인케이블 분리형 M8분기박스)

M23 메인케이블 분리형으로 현장작업성 및 유지·보수성 향상

■ 외관도 (1신호용)

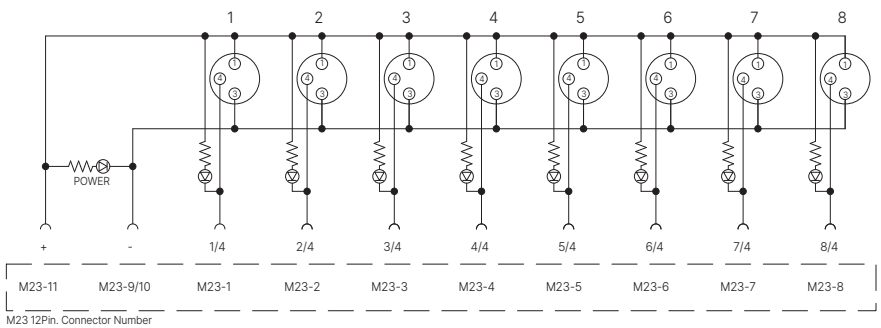
* MSB-J80□ (8포트/M23 메인케이블 분리형)
(M23 메인콘넥터 Pin수 : 12Pin))

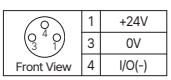




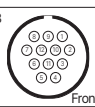
■ 내부회로도

* MSB-J80N (1신호용, NPN) ⊕COM



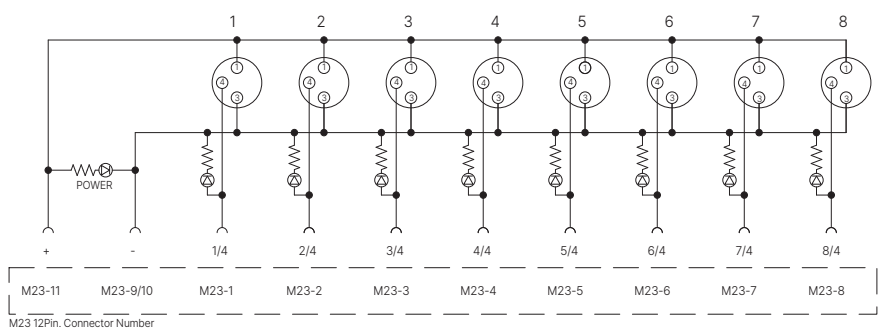


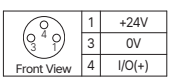
1	+24V
3	0V
4	I/O(-)



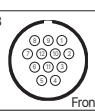
Power Line	
+24V	11
0V	9+10
M8-4(I/O)	
1/4	1
2/4	2
3/4	3
4/4	4
5/4	5
6/4	6
7/4	7
8/4	8

* MSB-J80P (1신호용, PNP) ⊖COM





1	+24V
3	0V
4	I/O(+)

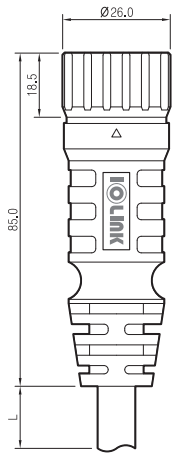


Power Line	
+24V	11
0V	9+10
M8-4(I/O)	
1/4	1
2/4	2
3/4	3
4/4	4
5/4	5
6/4	6
7/4	7
8/4	8

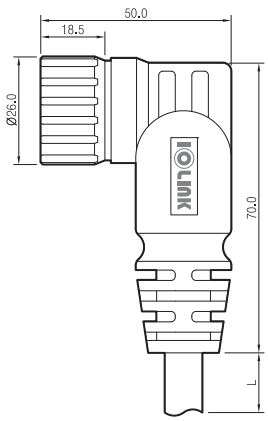
M23 메인케이블 (MPB/MSB 분기박스 접속용)

전원/신호선이 구분된 내유성 M23 메인케이블









■ 특장점

- MPB/MSB 시리즈 보드용 M23 내유성 메인케이블
- 나사 고정타입으로 접속신뢰성과 안전성 매우 높음
- 콘넥터 부착 케이블로 사용자가 별도의 하네스 작업이 불필요하며 현장작업의 효율성이 매우 높은 제품
- 스트레이트 또는 'ㄱ'자형 제품으로 사용환경에 따라 선택가능

■ 케이블 사양

Model	Sheath	Spec	Color
M23J	PVC(Oil Resistance)	3 * 0.75SQ	Black
		8 * 0.34SQ	
M23K	PVC(Oil Resistance)	3 * 1.0SQ	Black
		16 * 0.34SQ	

■ 정격/사양 Rating and Specifications

정격전압	12Pin : 240V AC / 19Pin : 120V AC
정격전류	8A (Total)
보호구조	IP67(결합시)
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

Cover	TPU
Insert	PA66
Contact	Brass / Gold-Plated
Coupling Nut	Brass / Nickel-Plated

■ 모델선정 Model Selection

M23 J - G 8 3 - V 050

구분	Series
M23	M23콘넥터 부착 메인케이블

구분	콘넥터 사양
J	12Pole (1신호용)
K	19Pole (2신호용)

구분	콘넥터 형태
G	Female Straight
H	Female Angle

구분	Port 수
8	8, 6, 4Port 용

구분	표준 케이블 길이
030	3M
050	5M
070	7M
100	10M
120	12M
150	15M
200	20M

구분	케이블 사양
V	UL / 내유성 케이블

구분	메인케이블 구성
3	1신호 : 0.75mm² * 3C+0.34mm² * 8C
	2신호 : 1.0mm² * 3C+0.34mm² * 16C

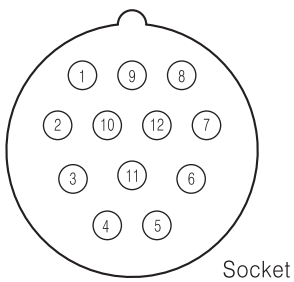
M23 메인케이블 (MPB/MSB 분기박스 접속용)

전원/신호선이 구분된 내유성 M23 메인케이블

■ 외관도 (1신호용)

* M23J-□-□
MPB-J, MPB-L, MSB-J 분기박스 접속용

M23
12 Pin

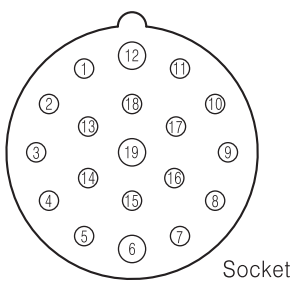


Front View

No.	Cable Color	전선색상	보드결선	전선사양
1	White	백색	1/4	0.34SQ
2	Green	녹색	2/4	
3	Yellow	황색	3/4	
4	Gray	회색	4/4	
5	Pink	분홍색	5/4	
6	Red	적색	6/4	
7	Black	흑색	7/4	
8	Violet	보라색	8/4	
9	Blue	청색	0V	0.75SQ
10	-	-	-	
11	Brown	갈색	+24V	
12	Green/Yellow	녹/황색	G	

* M23K-□-□
MPB-K 분기박스 접속용

M23
19 Pin



Front View

No.	Cable Color	전선색상	보드결선	전선사양
1	Violet	보라색	8/4	0.34SQ
2	Red	적색	6/4	
3	Gray	회색	4/4	
4	Red/Blue	적/청색	2/2	
5	Green	녹색	2/4	
6	Blue	청색	0V	1.0SQ
7	Gray/Pink	회/분홍색	1/2	0.34SQ
8	White/Green	백/녹색	3/2	
9	White/Yellow	백/황색	5/2	
10	White/Gray	백/회색	7/2	
11	Black	흑색	7/4	
12	Green/Yellow	녹/황색	G	1.0SQ
13	Yellow/Brown	황/갈색	6/2	0.34SQ
14	Brown/Green	갈/녹색	4/2	
15	White	백색	1/4	
16	Yellow	황색	3/4	
17	Pink	분홍색	5/4	
18	Gray/Brown	회/갈색	8/2	
19	Brown	갈색	+24V	1.0SQ

M12 센서 엑츄에이터 케이블

IP67에 적합한 M12 표준 규격 방수 케이블



■ 특장점

- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지 · 보수가 간편해짐
- 풀림방지 구조로 진동에 강하여 접속 신뢰성을 향상
- IP67에 적합한 M12표준규격 방수콘넥터
- 다양한 액세서리 제공으로 솔레노이드 밸브, 리미트 스위치, 센서등에 접속가능
- 내유성 PVC / 내유성 PUR / 내유성 가동용 PURケーブル의 구분생산
- 양산품외 로봇용/사용자 지정 케이블로 제작가능

■ 모델선정 Model Selection

M12S - A 4 3 - V 050

구분	Series
M12S	M12 콘넥터 일체형 케이블

구분	콘넥터 형태
A	Male Straight-Female Straight
B	Male Straight-Female Angled
C	Male Angled-Female Straight
D	Male Angled-Female Angled
E	Male Straight-Free end
F	Male Angled-Free end
G	Free end-Female Straight
H	Free end-Female Angled

구분	케이블 Core 수
4	4Core
5	5Core

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
V	UL / 내유성 케이블
U	UL / PUR / 내유강화형
H	UL / PUR / 가동용

구분	케이블 도체 크기
3	0.34SQ

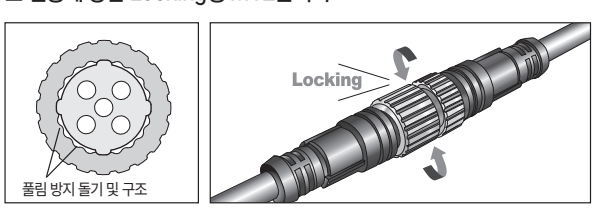
■ 정격/사양 Rating and Specifications

정격전압	4Pole : 125V / 5Pole 60V
정격전류	3A
절연저항	1,000MΩ이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67(결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	4P : Phosphor Bronze / Gold over Nickel plated
	5P : Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

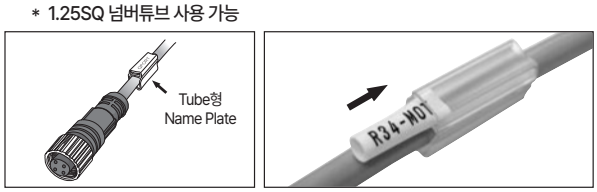
■ 진동에 강한 Locking형 M12콘넥터



* 위와 같은 구조로 풀림 방지 기능이 있어 진동에 잘 풀리지 않아 접속 신뢰성이 높음

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능



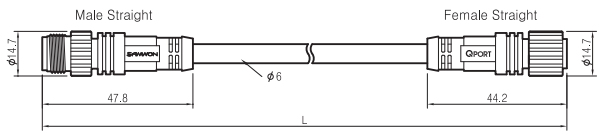
M12 센서 엑츄에이터 케이블

IP67에 적합한 M12 표준 규격 방수 케이블

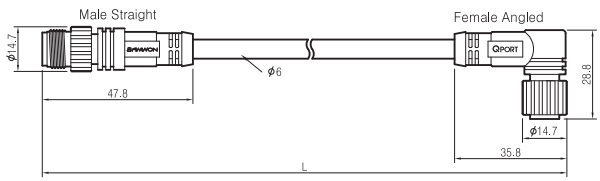
■ 제품일람

센서 / IO기기 접속용

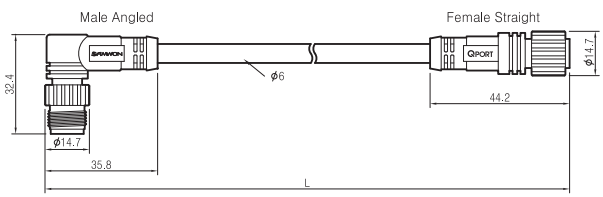
M12S-A43-□□
M12S-A53-□□
M12S-AE3-□□



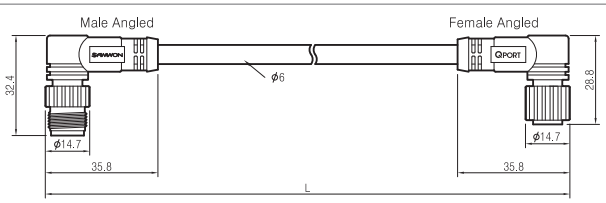
M12S-B43-□□
M12S-B53-□□
M12S-BE3-□□



M12S-C43-□□
M12S-C53-□□
M12S-CE3-□□

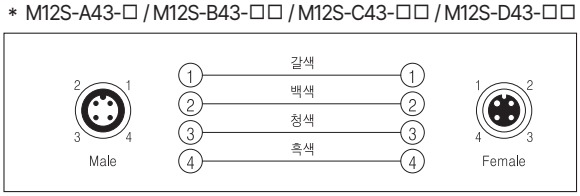


M12S-D43-□□
M12S-D53-□□
M12S-DE3-□□

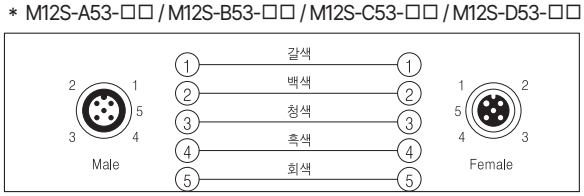


■ 결선도

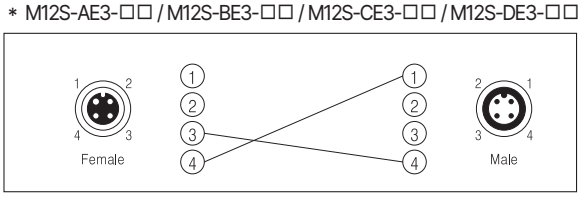
* M12S-A43-□ / M12S-B43-□□ / M12S-C43-□□ / M12S-D43-□□



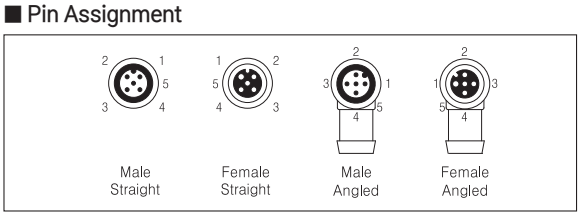
* M12S-A53-□□ / M12S-B53-□□ / M12S-C53-□□ / M12S-D53-□□



* M12S-AE3-□□ / M12S-BE3-□□ / M12S-CE3-□□ / M12S-DE3-□□



■ Pin Assignment



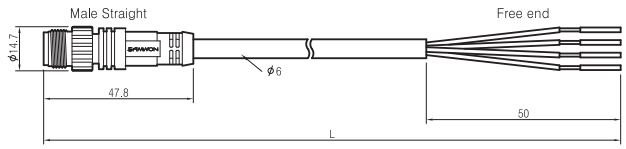
M12 센서 엑츄에이터 케이블

IP67에 적합한 M12 표준 규격 방수 케이블

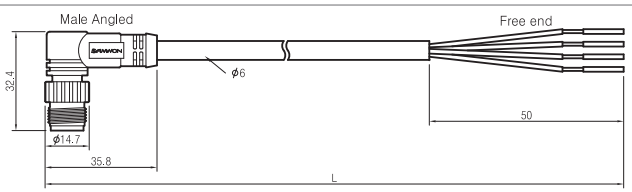
■ 제품일람

센서 / IO기기 접속용

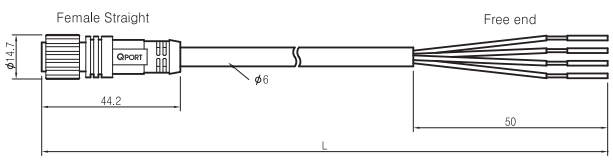
M12S-E43-□□
M12S-E53-□□



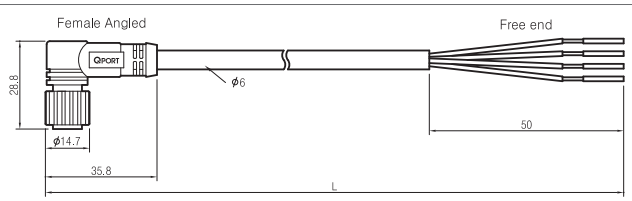
M12S-F43-□□
M12S-F53-□□



M12S-G43-□□
M12S-G53-□□

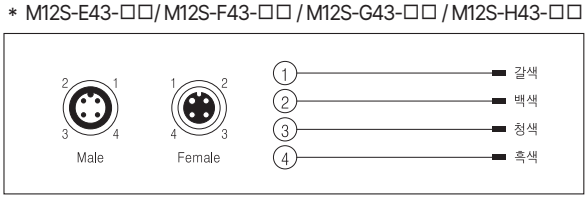


M12S-H43-□□
M12S-H53-□□

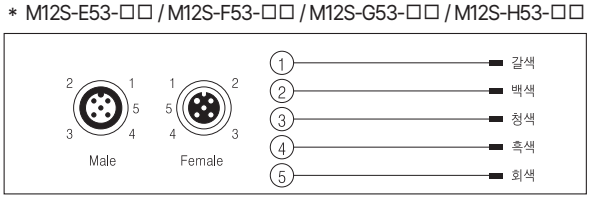


■ 결선도

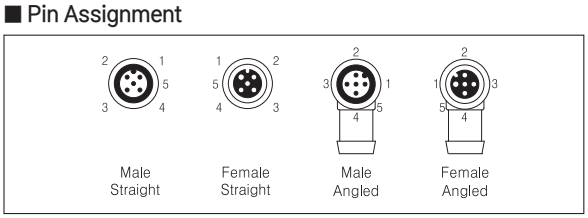
* M12S-E43-□□/ M12S-F43-□□ / M12S-G43-□□ / M12S-H43-□□



* M12S-E53-□□ / M12S-F53-□□ / M12S-G53-□□ / M12S-H53-□□



■ Pin Assignment



M12 5Pole 쉴드 케이블

외부 노이즈에 강한 M12 쉴드케이블



■ 특장점

- M12 Coupling과 케이블의 Shield가 접속되어 EMI 기능 향상
- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지, 보수가 간편해짐
- 풀림방지 구조로 진동에 강하여 접속 신뢰성을 향상
- IP67에 적합한 M12 A-coded 콘넥터 적용
- 넘버링을 삽입 할 수 있는 네임 플레이트 장착

EMI란 Electro magnetic interference의 약어로 전기, 전자기기로 부터 직접 방사 또는 전도되는 전자파가 다른기기의 전자기 수신 기능에 장해를 주는 것

■ 모델선정 Model Selection

M12S - A 4 3 - VS 010

구분	Series
M12S	M12 콘넥터 일체형 케이블

구분	콘넥터 형태
A	Male Straight - Female Straight
E	Male Straight - Free end
G	Free end-Female Straight

구분	케이블 Core 수
4	4 Core
5	5 Core

구분	케이블 도체 크기
3	0.34SQ

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
VS	UL / 내유성 쉴드 케이블

■ 정격/사양 Rating and Specifications

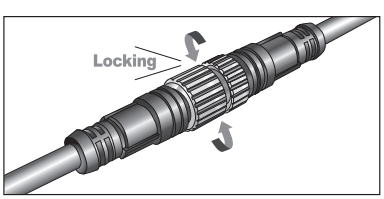
정격전압	4Pole : 125V / 5Pole : 60V
정격전류	3A
절연저항	1,000MΩ이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67 (결합시)
탈착내구	50회 이상
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber

■ 진동에 강한 Locking형 M12콘넥터



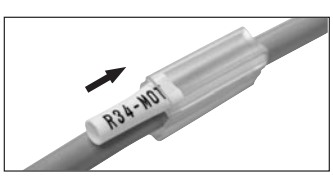


* 위와 같은 구조로 풀림 방지 기능이 있어 진동에 잘 풀리지 않아 접속 신뢰성이 높음

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





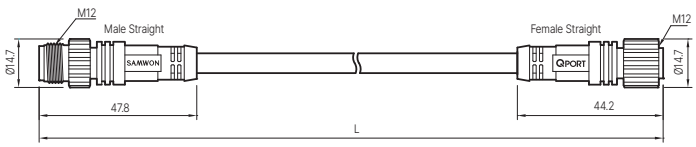
M12 5Pole 쉴드 케이블

외부 노이즈에 강한 M12 쉴드케이블

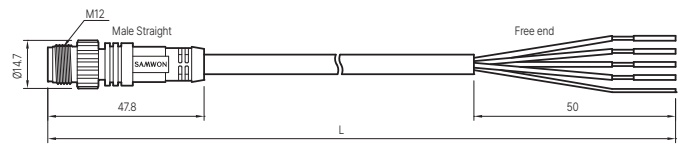
■ 제품일람

센서 / IO기기 접속용

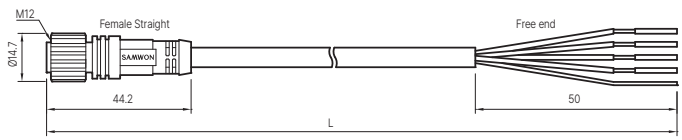
M12S-A43-VS□
M12S-A53-VS□



M12S-E43-VS□
M12S-E53-VS□

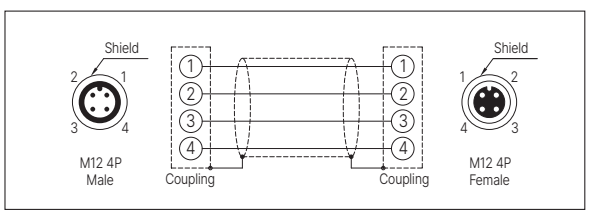


M12S-G43-VS□
M12S-G53-VS□

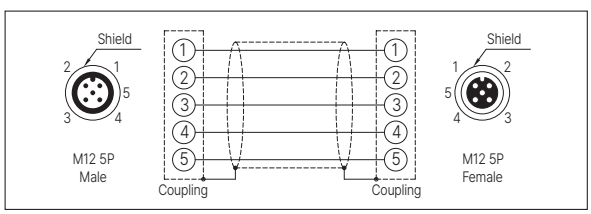


■ 결선도

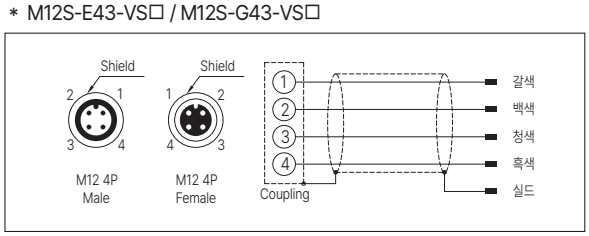
* M12S-A43-VS□



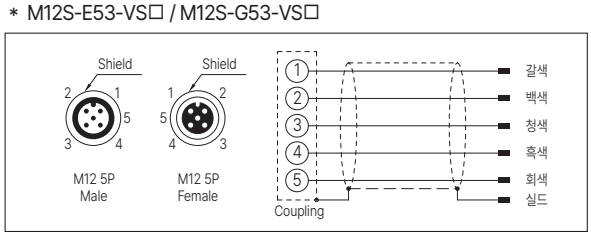
* M12S-A53-VS□



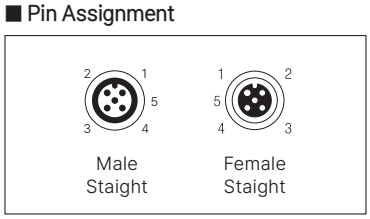
* M12S-E43-VS□ / M12S-G43-VS□



* M12S-E53-VS□ / M12S-G53-VS□

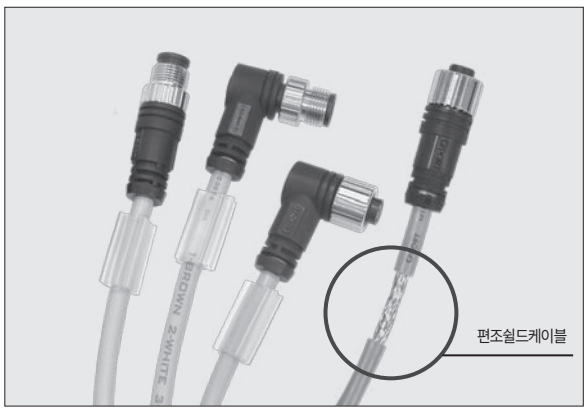


■ Pin Assignment



M12 8Pole 쉴드 케이블

세이프티 라이트 커튼 I/O에 적합한 M12 8P 케이블



■ 특장점

- M12 Coupling과 케이블의 Shield가 접속되어 EMI 기능 향상
- 세이프티 라이트 커튼 I/O에 적합함(8Core)
- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지, 보수가 간편해짐
- 풀림방지 구조로 진동에 강하여 접속 신뢰성을 향상
- 케이블 색상 2종(회색/검정)으로 구분 생산
- IP67에 적합한 M12 8Pole 방수콘넥터 적용

EMI란 Electro magnetic interference의 약어로 전기, 전자기기로 부터 직접 방사 또는 전도되는 전자파가 다른기기의 전자기 수신 기능에 장해를 주는 것

■ 모델선정 Model Selection

M12S - A 8 2 - VS 010 / GY

구분	Series
M12S	M12 콘넥터 일체형 케이블

구분	콘넥터 형태
A	Male Straight-Female Straight
B	Male Straight-Female Angled
C	Male Angled-Female Straight
D	Male Angled-Female Angled
E	Male Straight-Free end
F	Male Angled-Free end
G	Free end-Female Straight
H	Free end-Female Angled

구분	케이블 Core 수
8	8 Core (SHIELD)
7	7 Core (SHIELD)

구분	케이블 색상
GY	회색
BK	검정

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
VS	UL / 내유성 쉴드 케이블

구분	케이블 도체 크기
2	0.25SQ

■ 정격/사양 Rating and Specifications

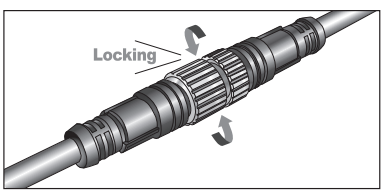
정격전압	36V DC
정격전류	2.0A
절연저항	1,000MΩ이상 (DC500V)
내전압	AC 800V 1min
보호구조	IP67 (결합시)
탈착내구	50회 이상
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber

■ 진동에 강한 Locking형 M12콘넥터



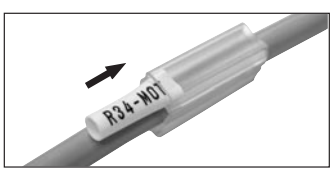


* 위와 같은 구조로 풀림 방지 기능이 있어 진동에 잘 풀리지 않아 접속 신뢰성이 높음

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





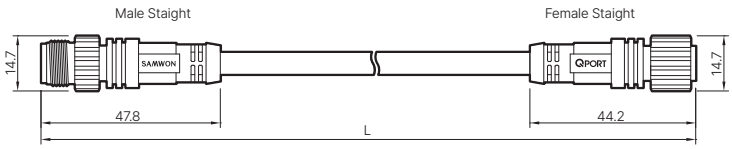
M12 8Pole 쉴드 케이블

세이프티 라이트 커튼 I/O에 적합한 M12 8P 케이블

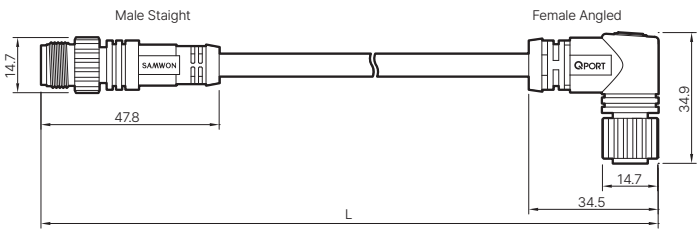
■ 제품일람

센서 / IO기기 접속용

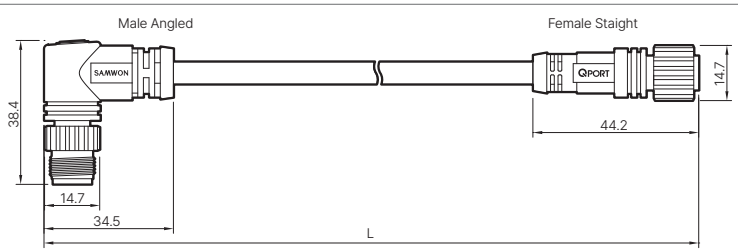
M12S-A72-VS□
M12S-A82-VS□



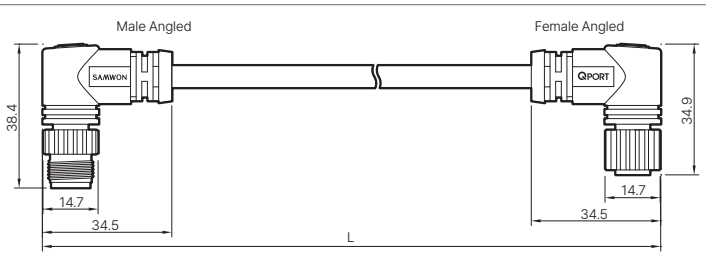
M12S-B72-VS□
M12S-B82-VS□



M12S-C72-VS□
M12S-C82-VS□

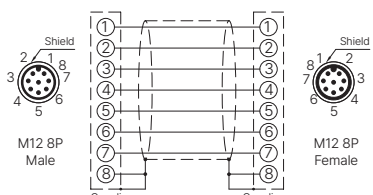


M12S-D72-VS□
M12S-D82-VS□

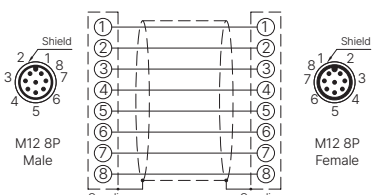


■ 결선도

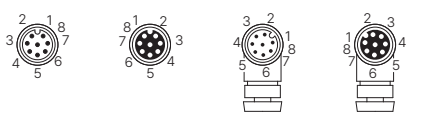
* M12S-A72-VS□ / M12S-B72-VS□ / M12S-C72-VS□ / M12S-D72-VS□



* M12S-A82-VS□ / M12S-B82-VS□ / M12S-C82-VS□ / M12S-D82-VS□



■ Pin Assignment



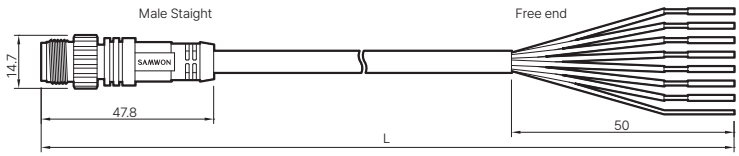
M12 8Pole 쉴드 케이블

세이프티 라이트 커튼 I/O에 적합한 M12 8P 케이블

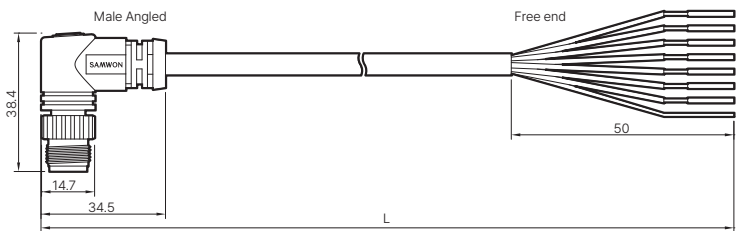
■ 제품일람

센서 / IO기기 접속용

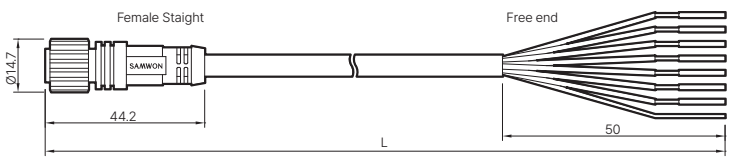
M12S-E72-VS□
M12S-E82-VS□



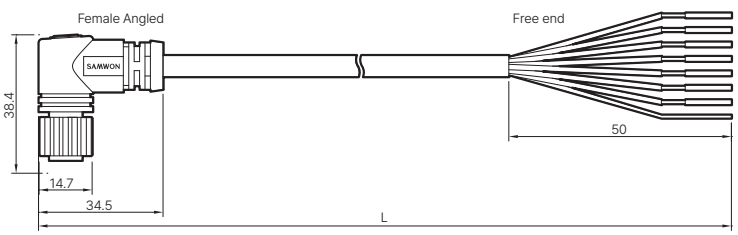
M12S-F72-VS□
M12S-F82-VS□



M12S-G72-VS□
M12S-G82-VS□

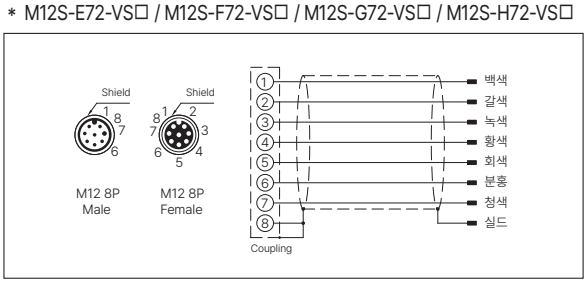


M12S-H72-VS□
M12S-H82-VS□

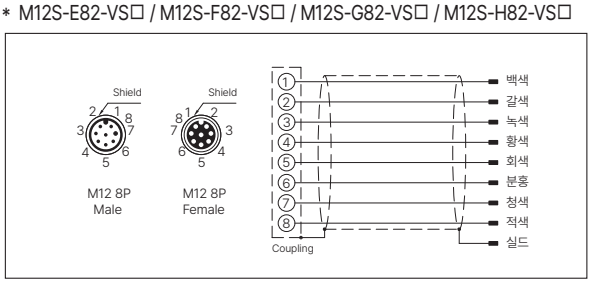


■ 결선도

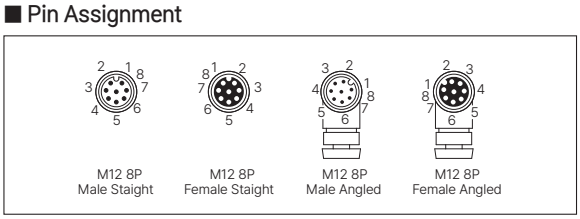
* M12S-E72-VS□ / M12S-F72-VS□ / M12S-G72-VS□ / M12S-H72-VS□



* M12S-E82-VS□ / M12S-F82-VS□ / M12S-G82-VS□ / M12S-H82-VS□

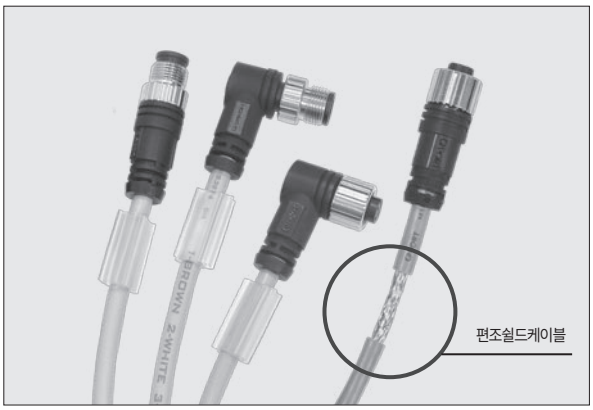


■ Pin Assignment



M12 12Pole 쉴드 케이블

비전센서, 멀티코드리더 등에 적합한 M12 12P 케이블



■ 특장점

- M12 Coupling과 케이블의 Shield가 접속되어 EMI 기능 향상
- 머신비전 시스템의 구성품으로 비전 센서, 멀티코드리더, 레이저 스케너, 엔코더 등에 접속가능
- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지, 보수가 간편해짐
- 풀림방지 구조로 진동에 강하여 접속 신뢰성을 향상
- IP67에 적합한 M12 12Pole 방수콘넥터 적용

EMI란 Electro magnetic interference의 약어로 전기, 전자기기로 부터 직접 방사 또는 전도되는 전자파가 다른기기의 전자기 수신 기능에 장해를 주는 것

■ 모델선정 Model Selection

M12S - A 12 1 - VS 010

구분	Series
M12S	M12 콘넥터 일체형 케이블

구분	콘넥터 형태
A	Male Straight-Female Straight
B	Male Straight-Female Angled
C	Male Angled-Female Straight
D	Male Angled-Female Angled
E	Male Straight-Free end
F	Male Angled-Free end
G	Free end-Female Straight
H	Free end-Female Angled

구분	케이블 Core 수
12	12 Core

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
VS	UL / 내유성 쉴드 케이블

구분	케이블 도체 크기
1	0.13SQ

■ 정격/사양 Rating and Specifications

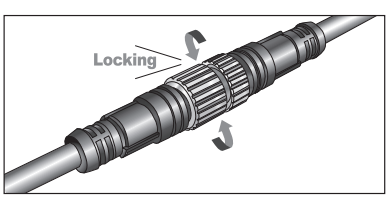
정격전압	30V
정격전류	1.5A
절연저항	100MΩ이상
내전압	AC 500V 1min
보호구조	IP67 (결합시)
탈착내구	50회 이상
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber

■ 진동에 강한 Locking형 M12콘넥터



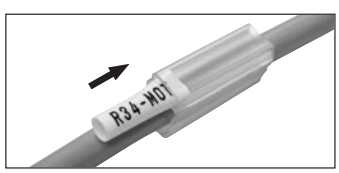


* 위와 같은 구조로 풀림 방지 기능이 있어 진동에 잘 풀리지 않아 접속 신뢰성이 높음

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





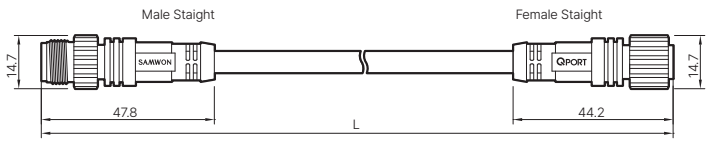
M12 12Pole 쉴드 케이블

비전센서, 멀티코드리더 등에 적합한 M12 12P 케이블

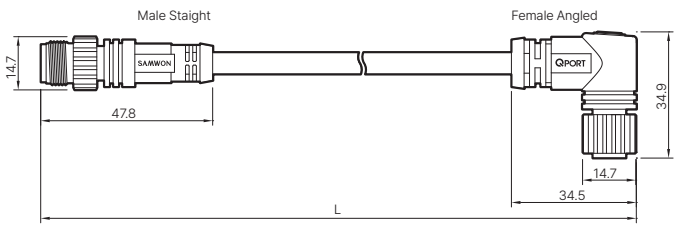
■ 제품일람

센서 / IO기기 접속용

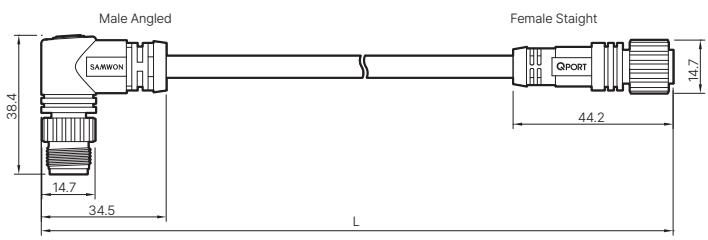
M12S-A121-VS□



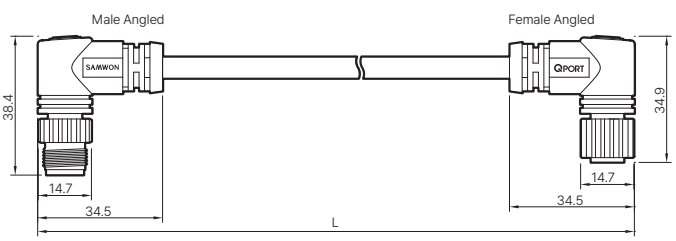
M12S-B121-VS□



M12S-C121-VS□

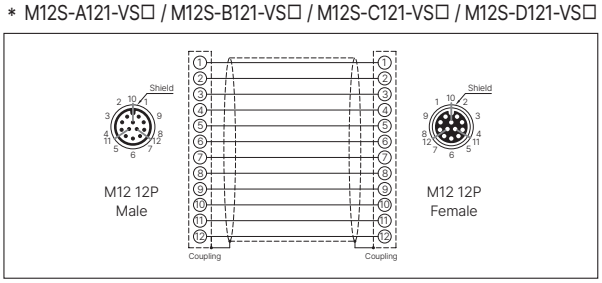


M12S-D121-VS□

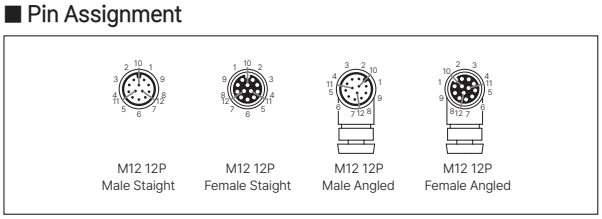


■ 결선도

* M12S-A121-VS□ / M12S-B121-VS□ / M12S-C121-VS□ / M12S-D121-VS□



■ Pin Assignment



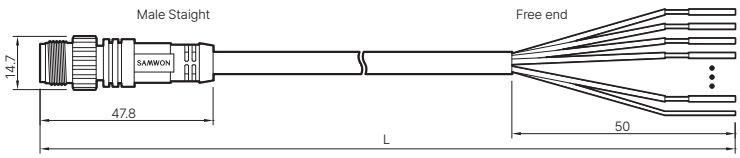
M12 12Pole 쉴드 케이블

비전센서, 멀티코드리더 등에 적합한 M12 12P 케이블

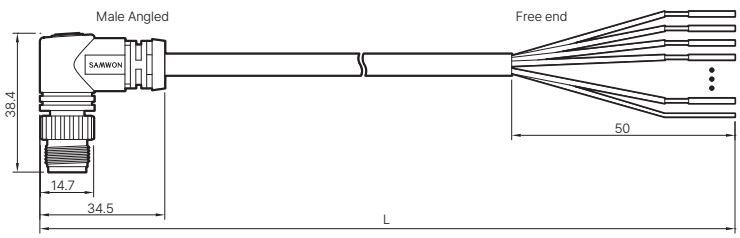
■ 제품일람

센서 / IO기기 접속용

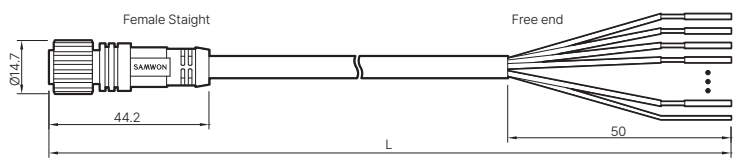
M12S-E121-VS□



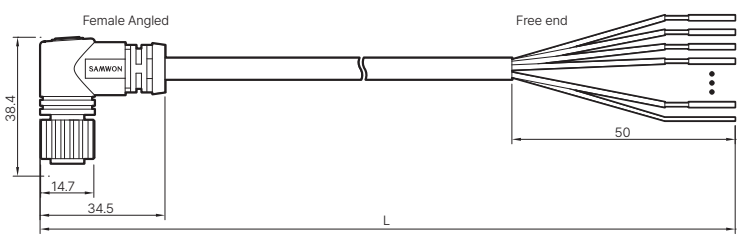
M12S-F121-VS□



M12S-G121-VS□

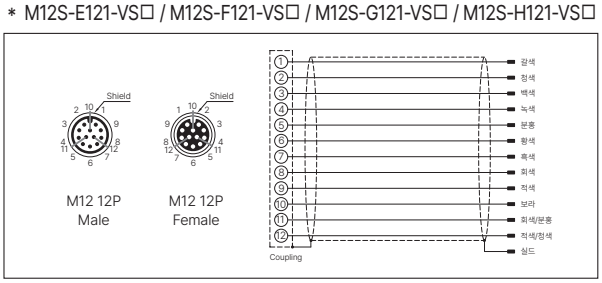


M12S-H121-VS□

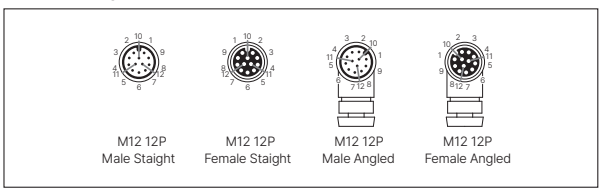


■ 결선도

* M12S-E121-VS□ / M12S-F121-VS□ / M12S-G121-VS□ / M12S-H121-VS□



■ Pin Assignment



M12 LED 장착형 센서 케이블

M12콘넥터에 LED 램프가 내장되어 있어 동작 Check가 용이



■ 특장점

- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지, 보수가 간편해짐
- LED램프가 내장되어 있어 동작 Check가 용이함
- 풀림방지 구조로 진동에 강하여 접속 신뢰성을 향상
- IP67에 적합한 M12표준규격 방수콘넥터
- 내유성 PVC/ 내유성 PUR / 내유성 가동용 PURケーブル의 구분생산

■ 모델선정 Model Selection

M12S - G 3 3 - V 010 / L N B

구분	Series
M12S	M12 콘넥터 일체형 케이블

구분	콘넥터 형태
G	Free end-Female Straight
H	Free end-Female Angled

구분	케이블 Core 수
3	3 Core
4	4 Core

구분	케이블 도체 크기
2	0.25SQ (Ø4.8)
3	0.34SQ (Ø6.0)

구분	LED 수
무표시	2 LEDs (Power/N.O)
B	3 LEDs (Power/N.O/N.C)

구분	Common 극성
N	NPN ⊕COM
P	PNP ⊖COM

구분	램프 내장형
L	램프 내장형

구분	표준 케이블 길이
020	2.0M
050	5.0M

구분	케이블 사양
V	UL / 내유성 케이블

■ 정격/사양 Rating and Specifications

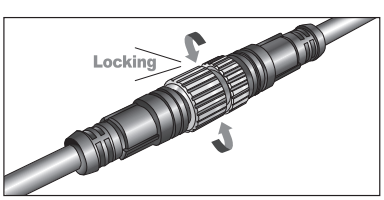
정격전압	DC 24V ~ 30V
정격전류	2A
절연저항	1,000MΩ이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Phosphor Bronze / Gold over Nickel plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

■ 진동에 강한 Locking형 M12콘넥터



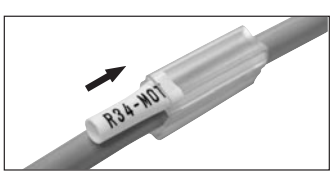


* 위와 같은 구조로 풀림 방지 기능이 있어 진동에 잘 풀리지 않아 접속 신뢰성이 높음

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





M12 LED 장착형 센서 케이블

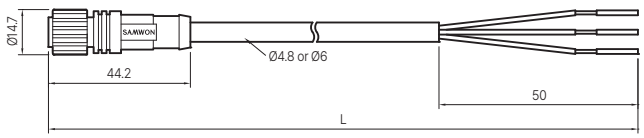
M12콘넥터에 LED 램프가 내장되어 있어 동작 Check가 용이

■ 제품일람

센서 / IO기기 접속용

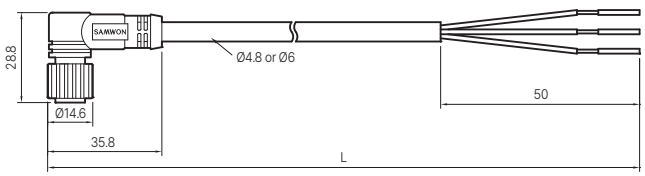
M12S-G□-□/LN□
M12S-G□-□/LP□

Female Straight



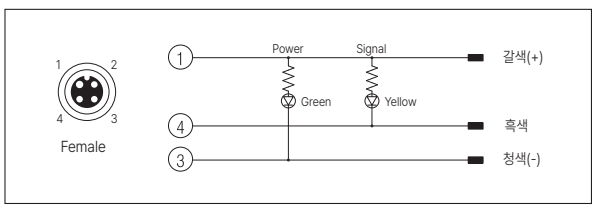
M12S-H□-□/LN□
M12S-H□-□/LP□

Female Straight

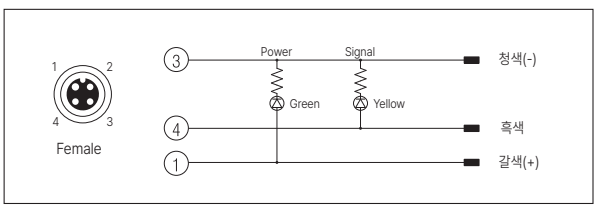


■ 결선도

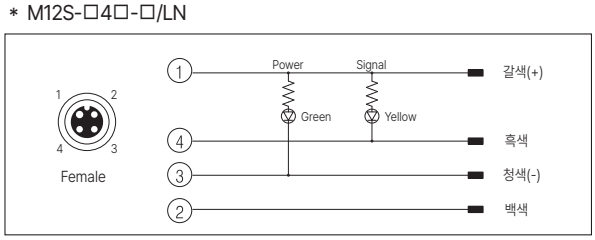
* M12S-□3□-□/LN



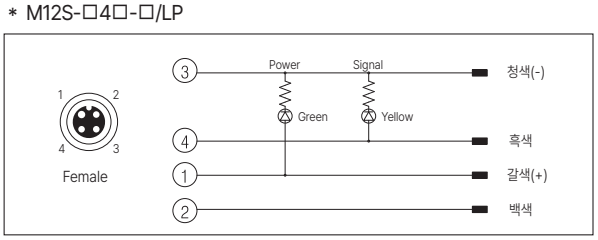
* M12S-□3□-□/LP



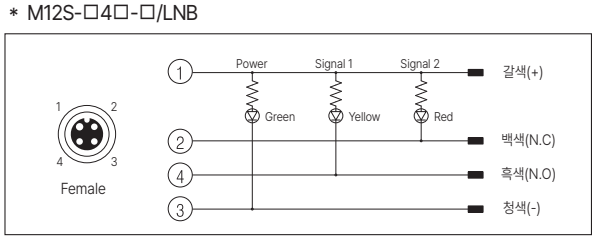
* M12S-□4□-□/LN



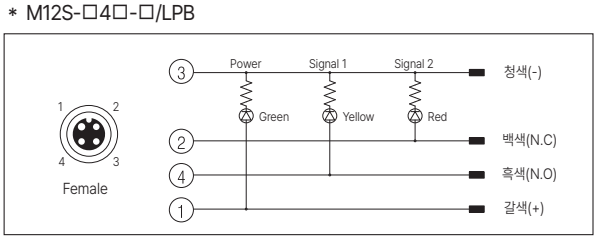
* M12S-□4□-□/LP



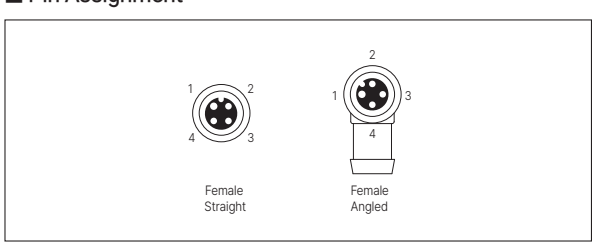
* M12S-□4□-□/LNB



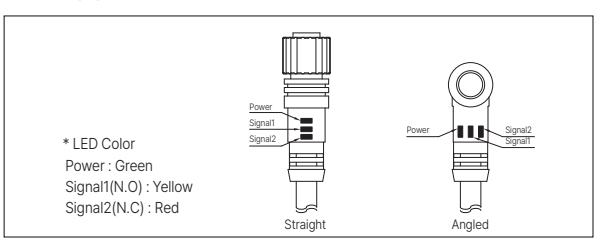
* M12S-□4□-□/LPB



■ Pin Assignment



■ 램프위치



M8 센서 접속용 케이블

M8 사용기기에 대응되는 표준형 M8 접속용 케이블



■ 특장점

- 국내 최초로 개발한 M8접속용 케이블
- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지 · 보수가 간편해짐
- IP67에 적합한 M8표준규격 방수콘넥터
- 소형화 되는 센서에 부착되어 있는 M8콘넥터 접속용 케이블
- M8형 광전센서, 근접센서 접속용으로 최적합
- 내구성 PVC / 내유성 PUR / 내유성 가동용 PUR케이블 구분 생산

■ 모델선정 Model Selection

M8S - A 3 3 - V 010

구분	Series
M8S	M8 콘넥터 일체형 케이블

구분	콘넥터 형태
A	Male Straight-Female Straight
B	Male Straight-Female Angled
C	Male Angled-Female Straight
D	Male Angled-Female Angled
E	Male Straight-Free end
F	Male Angled-Free end
G	Free end-Female Straight
H	Free end-Female Angled

구분	케이블 Core 수
3	3 Core
4	4 Core

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
V	UL / 내유성 케이블
U	UL / PUR / 내유강화형
H	UL / PUR / 가동용

구분	케이블 도체 크기
3	0.25SQ

■ 정격/사양 Rating and Specifications

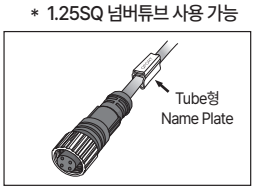
정격전압	DC 125V
정격전류	2A
절연저항	1,000MΩ이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

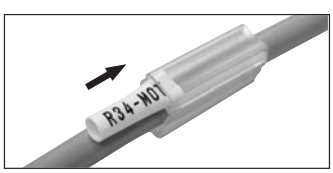
■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





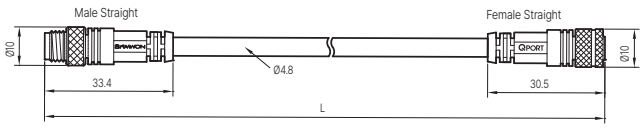
M8 센서 접속용 케이블

M8 사용기기에 대응되는 표준형 M8 접속용 케이블

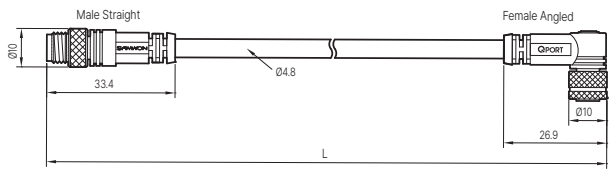
■ 제품일람

센서 / IO기기 접속용

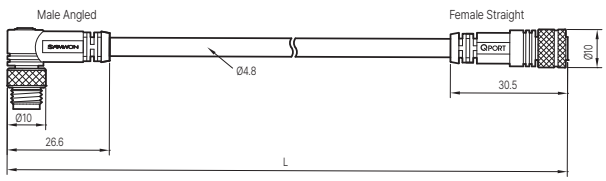
M8S-A33-□□
M8S-A43-□□



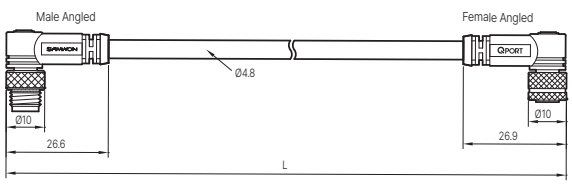
M8S-B33-□□
M8S-B43-□□



M8S-C33-□□
M8S-C43-□□

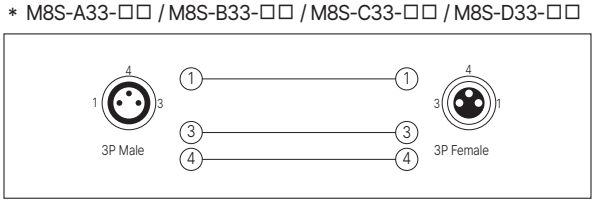


M8S-D33-□□
M8S-D43-□□

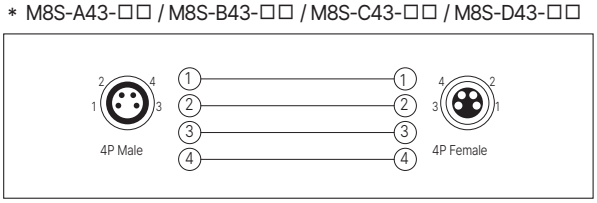


■ 결선도

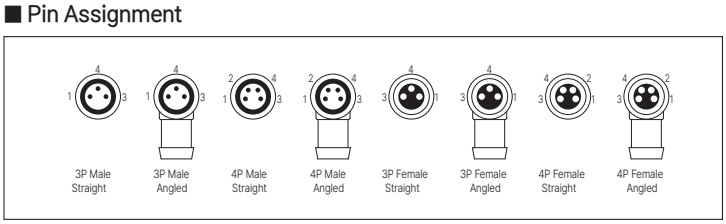
* M8S-A33-□□ / M8S-B33-□□ / M8S-C33-□□ / M8S-D33-□□



* M8S-A43-□□ / M8S-B43-□□ / M8S-C43-□□ / M8S-D43-□□



■ Pin Assignment



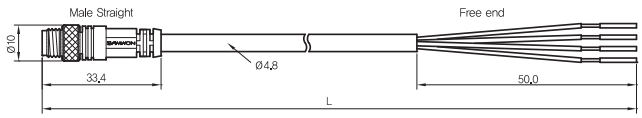
M8 센서 접속용 케이블

M8 사용기기에 대응되는 표준형 M8 접속용 케이블

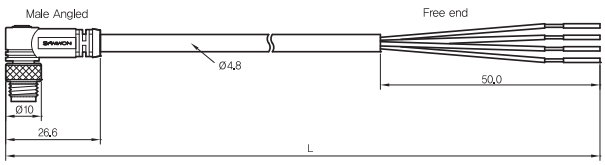
■ 제품일람

센서 / IO기기 접속용

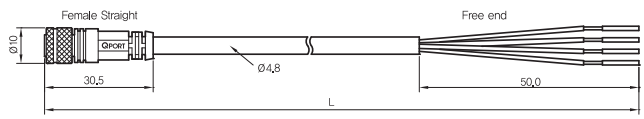
M8S-E33-□□
M8S-E43-□□



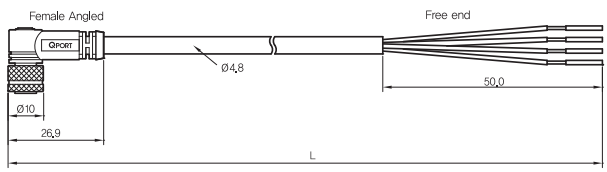
M8S-F33-□□
M8S-F43-□□



M8S-G33-□□
M8S-G43-□□

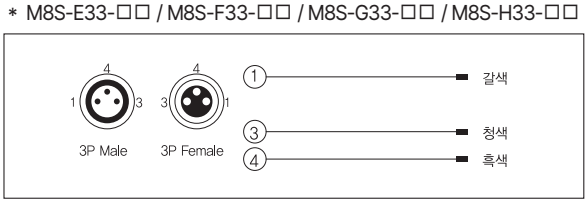


M8S-H33-□□
M8S-H43-□□

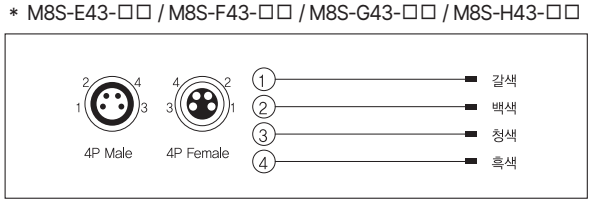


■ 결선도

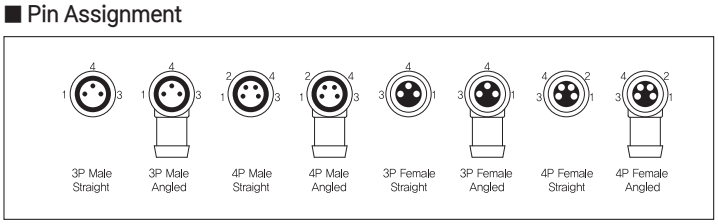
* M8S-E33-□□ / M8S-F33-□□ / M8S-G33-□□ / M8S-H33-□□



* M8S-E43-□□ / M8S-F43-□□ / M8S-G43-□□ / M8S-H43-□□

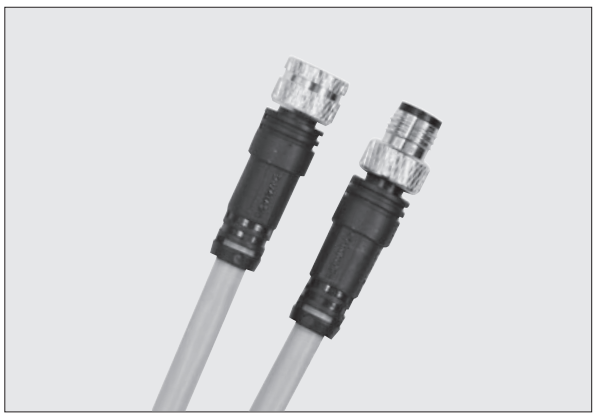


■ Pin Assignment



M8 B-Code 센서 접속용 케이블

M8 5Pole B-Code 적용기기 접속용 케이블



■ 특장점

- IEC 61076-2-104 규격으로 설계된 5Pole B-Code 콘넥터
- IP67에 적합한 M8 표준 규격 방수 콘넥터
- 전류용량 3A로 센서, 컴팩트 액츄에이터 등 M8 B-Code가 적용된 기기 접속용 케이블

■ 모델선정 Model Selection

M8SB - A 5 2 - V 010

구분	Series
M8SB	M8 B-Code 콘넥터 일체형 케이블

구분	콘넥터 형태
A	Male Straight - Female Straight
E	Male Straight - Free end
G	Free end - Female Straight

구분	케이블 Core 수
5	5 Core

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
V	UL / 내유성 케이블

구분	케이블 도체크기
2	0.25SQ

■ 정격/사양 Rating and Specifications

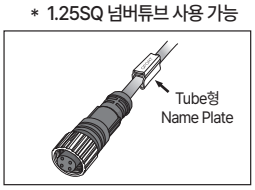
정격전압	30V DC/AC
정격전류	3A
절연저항	100MΩ 이상
내전압	100MΩ 이하
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

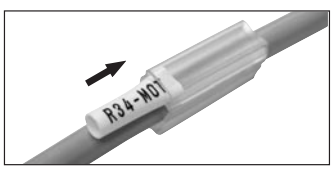
■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





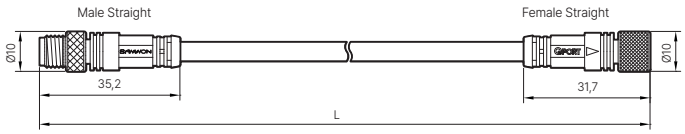
M8 B-Code 센서 접속용 케이블

M8 5Pole B-Code 적용기기 접속용 케이블

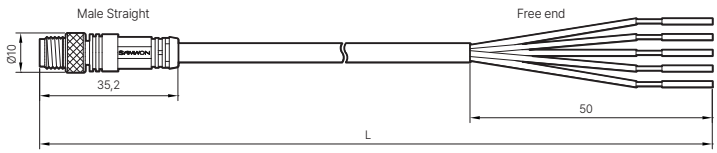
■ 제품일람

센서 / IO기기 접속용

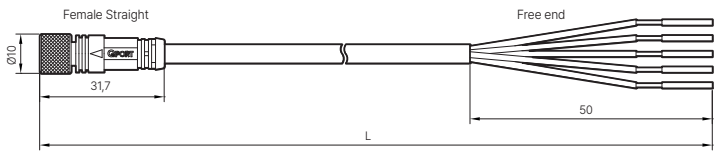
M8SB-A52-V□



M8SB-E52-V□

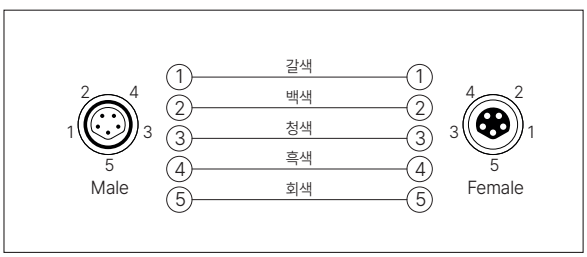


M8SB-G52-V□

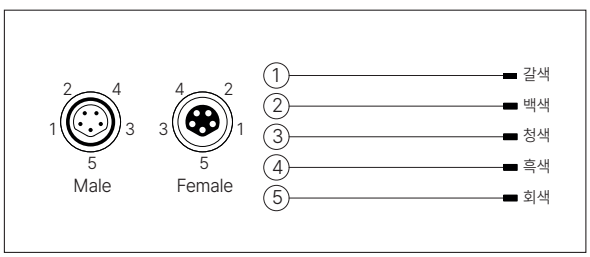


■ 결선도

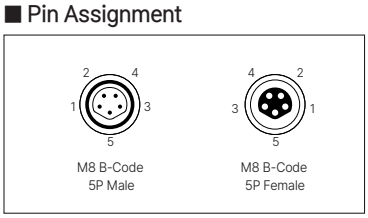
* M8SB-A52-V□



* M8SB-E52-V□ / M8SB-G52-V□



■ Pin Assignment



M12 분기박스 – M8 센서 접속용 케이블

M12 분기박스와 M8센서에 적용가능한 케이블



■ 특장점

- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지 · 보수가 간편해짐
- IP67에 적합한 M12, M8표준규격 방수콘넥터
- M8 센서를 사용하더라도 M12분기박스인 MPT, MPA, MPB등에 접속 가능한 M12/M8 콘넥터 복합형 케이블

■ 모델선정 Model Selection

M128S – A 4 3 – V 010

구분	Series
M128S	M12 Male / M8 Female 콘넥터 일체형 케이블

구분	콘넥터 형태
A	M12 Male Straight-M8 Female Straight
B	M12 Male Straight-M8 Female Angled
C	M12 Male Angled-M8 Female Straight
D	M12 Male Angled-M8 Female Angled

구분	케이블 Core 수
4	4 Core
3	3 Core

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
V	UL / 내유성 케이블
U	UL / PUR / 내유강화형
H	UL / PUR / 가동용

구분	케이블 도체 크기
3	0.25SQ

■ 정격/사양 Rating and Specifications

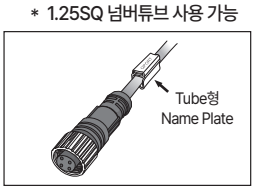
정격전압	DC 125V
정격전류	2A
절연저항	1,000MΩ 이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

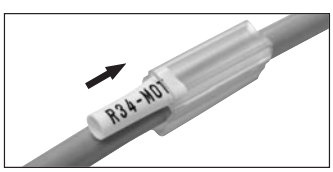
■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	M12 : Phosphor Bronze / Gold over Nickel plated
	M8 : Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





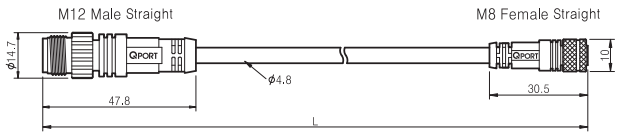
M12 분기박스 - M8 센서 접속용 케이블

M12 분기박스와 M8센서에 적용가능한 케이블

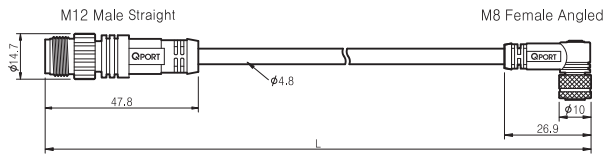
■ 제품일람

센서 / IO기기 접속용

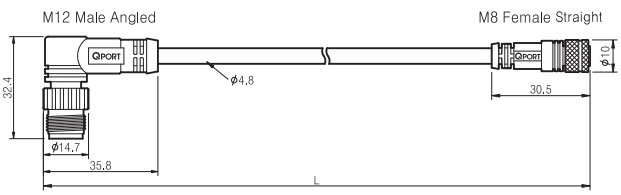
M128S-A43-□□
M128S-A33-□□



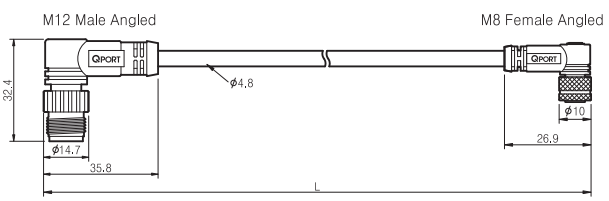
M128S-B43-□□
M128S-B33-□□



M128S-C43-□□
M128S-C33-□□

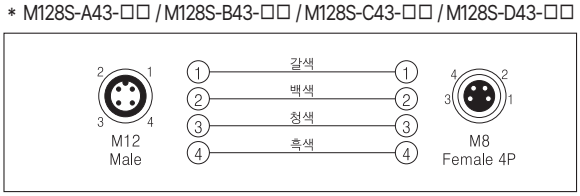


M128S-D43-□□
M128S-D33-□□

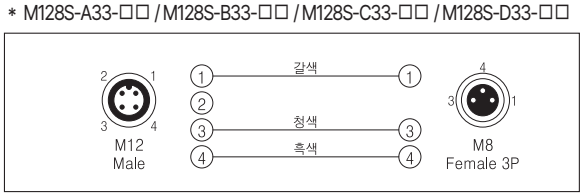


■ 결선도

* M128S-A43-□□ / M128S-B43-□□ / M128S-C43-□□ / M128S-D43-□□

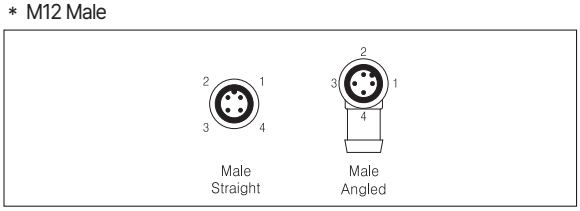


* M128S-A33-□□ / M128S-B33-□□ / M128S-C33-□□ / M128S-D33-□□

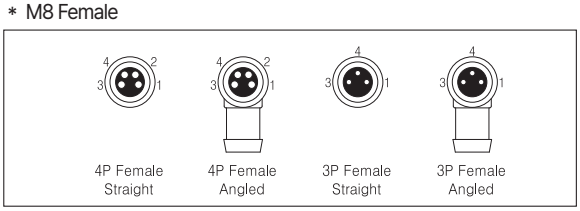


■ Pin Assignment

* M12 Male



* M8 Female



M8 분기박스 – M12 센서 접속용 케이블

M8 분기박스와 M12 센서에 적용 가능한 케이블



■ 특장점

- M8분기박스 MSA, MSB 시리즈을 사용하더라도 M12센서 접속 가능한 M8/M12 콘넥터 복합형 케이블
- IP67 등급에 적합한 M8, M12 표준 규격 방수콘넥터
- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지·보수가 간편해짐

■ 모델선정 Model Selection

M812S – A 4 3 – V 010

구분	Series
M812S	M8 Male / M12 Female 콘넥터 일체형 케이블

구분	콘넥터 형태
A	M8 Male Straight - M12 Female Straight
B	M8 Male Straight - M12 Female Angled
C	M8 Male Angled - M12 Female Straight
D	M8 Male Angled - M12 Female Angled

구분	케이블 Core 수
4	4 Core
3	3 Core

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
V	UL / 내유성 케이블
U	UL / PUR / 내유강화형
H	UL / PUR / 가동용

구분	케이블 도체 크기
3	0.25SQ

■ 정격/사양 Rating and Specifications

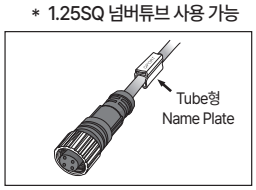
정격전압	DC 125V
정격전류	2A
절연저항	1,000MΩ 이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

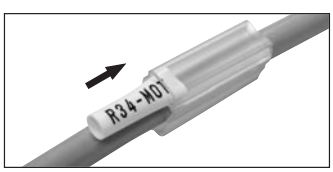
■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	M12 : Phosphor Bronze / Gold over Nickel plated
	M8 : Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





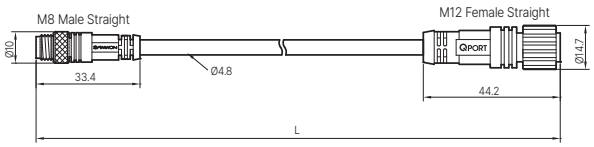
M8 분기박스 – M12 센서 접속용 케이블

M8 분기박스와 M12 센서에 적용 가능한 케이블

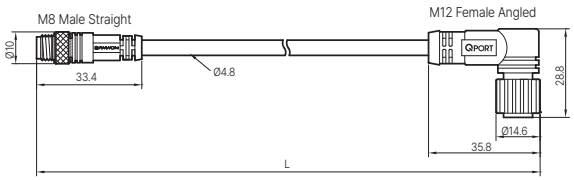
■ 제품일람

센서 / IO기기 접속용

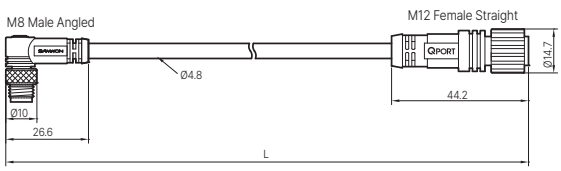
M812S-A43-□□
M812S-A33-□□



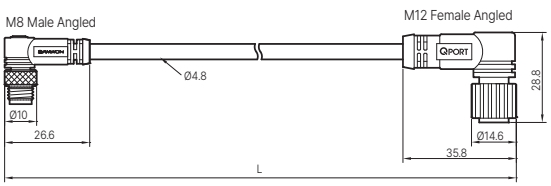
M812S-B43-□□
M812S-B33-□□



M812S-C43-□□
M812S-C33-□□

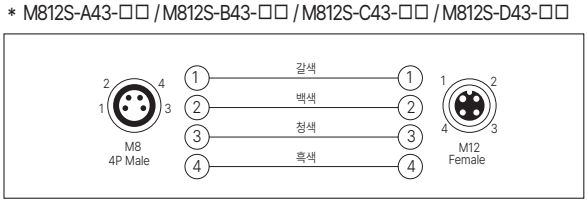


M812S-D43-□□
M812S-D33-□□

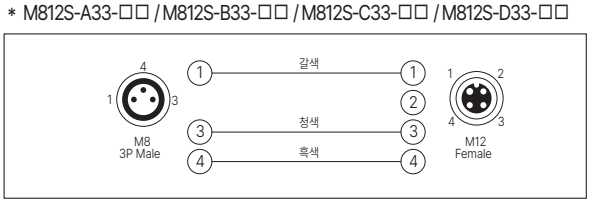


■ 결선도

* M812S-A43-□□ / M812S-B43-□□ / M812S-C43-□□ / M812S-D43-□□

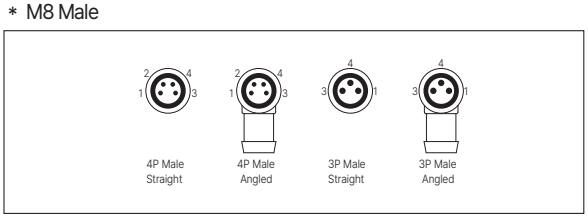


* M812S-A33-□□ / M812S-B33-□□ / M812S-C33-□□ / M812S-D33-□□

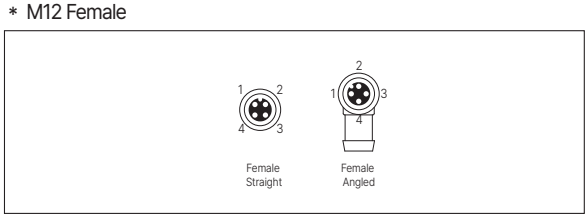


■ Pin Assignment

* M8 Male

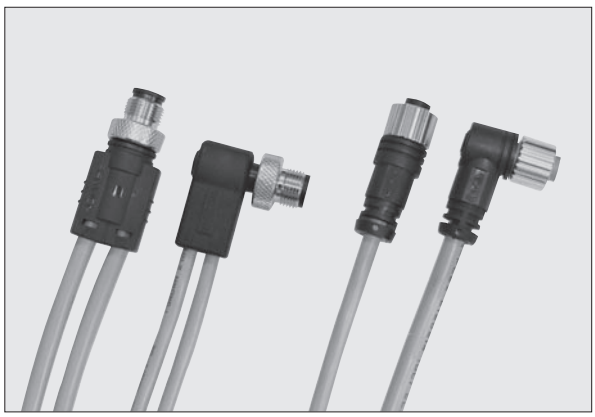


* M12 Female



M12 표준 분기형 케이블

2신호 접속용 M12 표준 분기형 콘넥터



■ 특장점

- 2신호용 Port접속 M12 표준 케이블
- MP□-K 사용시 1Port에서 2신호를 사용가능하게 함으로써 최대 16개의 센서 및 기기가 접속 가능함
- 풀림방지 구조로 진동에 강하여 접속 신뢰성을 향상
- IP67에 적합한 M12 표준규격 방수 콘넥터
- 다양한 액세서리 제공으로 솔레노이드 밸브, 리미트 스위치, 센서 등에 접속가능
- 내유성 PVC / 내유성 PUR / 내유성 가동용 PUR케이블의 구분 생산

■ 모델선정 Model Selection

Y12S - A 3 2 - V 010

구분	Series
Y12S	M12 분기형 케이블

구분	콘넥터 형태
A	Male Straight - Female Straight
B	Male Straight - Female Angled
C	Male Angled - Female Straight
D	Male Angled - Female Angled
E	Male Straight - Free end
F	Male Angled - Free end

구분	케이블 Core 수
3	3 Core
4	4 Core

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

구분	케이블 사양
V	UL / 내유성 케이블
U	UL / PUR / 내유강화형
H	UL / PUR / 가동용

구분	케이블 도체 크기
2	0.25SQ
3	0.34SQ

■ 정격/사양 Rating and Specifications

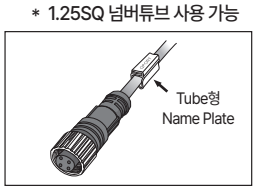
정격전압	DC 125V
정격전류	2A
절연저항	1,000MΩ 이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

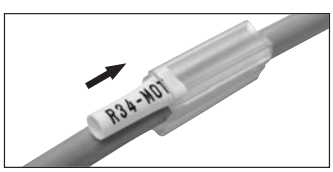
■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Female : Phosphor Bronze / Gold over Nickel plated
	Male : Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





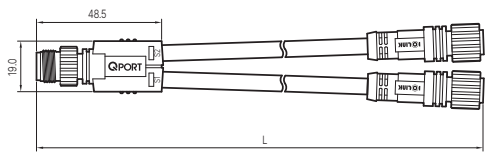
M12 표준 분기형 케이블

2신호 접속용 M12 표준 분기형 콘넥터

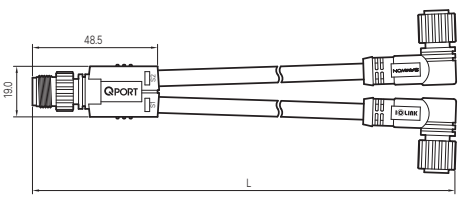
■ 제품일람

센서 / IO기기 접속용

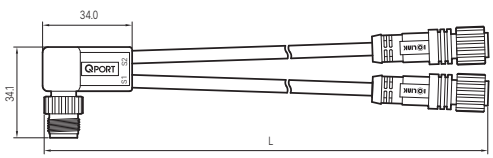
Y12S-A33-□□
Y12S-A43-□□



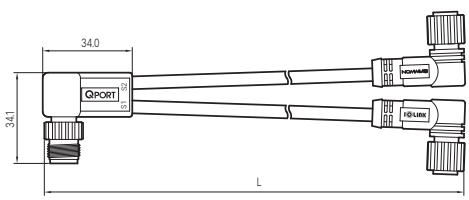
Y12S-B33-□□
Y12S-B43-□□



Y12S-C32-□□

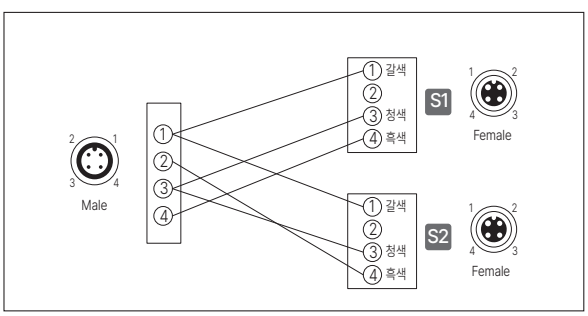


Y12S-D32-□□

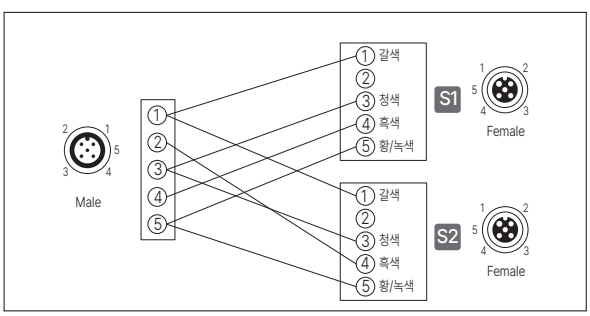


■ 결선도

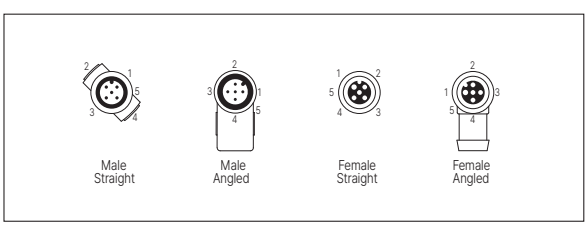
* Y12S-A33-□□ / Y12S-B33-□□ / Y12S-C32-□□ / Y12S-D32-□□



* Y12S-A43-□□ / Y12S-B43-□□



■ Pin Assignment



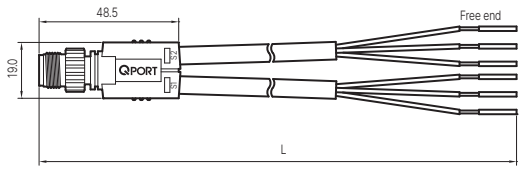
M12 표준 분기형 케이블

2신호 접속용 M12 표준 분기형 콘넥터

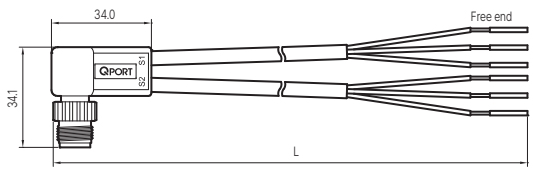
■ 제품일람

센서 / IO기기 접속용

Y12S-E33-□□
Y12S-E43-□□

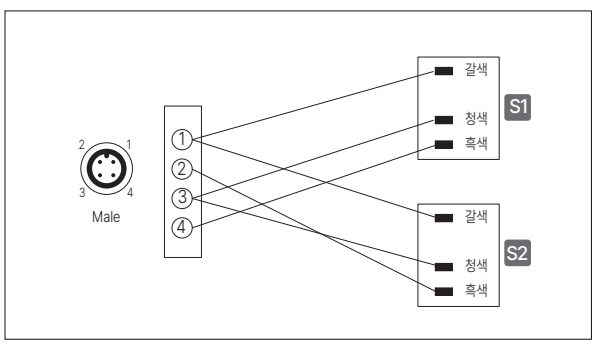


Y12S-F32-□□

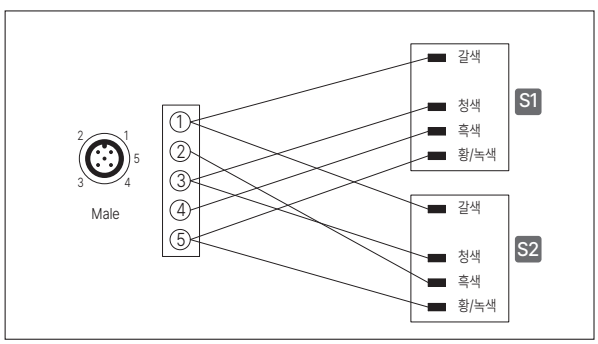


■ 결선도

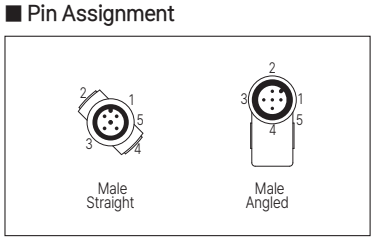
* Y12S-E33-□□ / Y12S-F32-□□



* M12S-E121-VS□ / M12S-G121-VS□

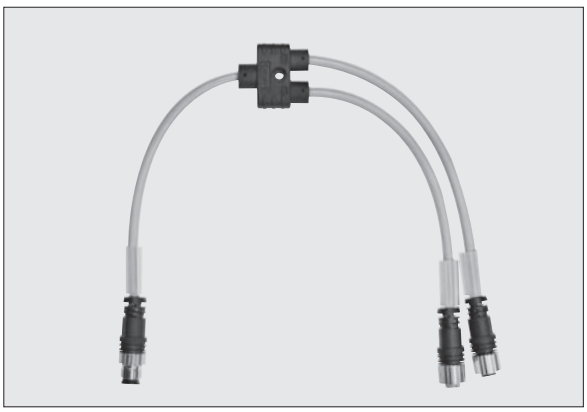


■ Pin Assignment



M12 중간 분기형 케이블

2신호 접속용 M12 중간 분기형 케이블



■ 특장점

- 콘넥터 일체형으로 배선작업이 불필요하고 기존배선을 표준화 함으로 설비의 유지 · 보수가 간편해짐
- 풀림방지 구조로 진동에 강하여 접속 신뢰성을 향상
- IP67에 적합한 M12 표준규격 방수 콘넥터
- 다양한 액세서리 제공으로 솔레노이드 밸브, 리미트 스위치, 센서 등에 접속가능
- 내유성 PVC / 내유성 PUR / 내유성 가동용 PUR케이블의 구분 생산

■ 모델선정 Model Selection

M12Y - A 3 3 - V 030 / 050

구분	Series
M12Y	M12 분기형 케이블

구분	콘넥터 형태
A	Male Straight - Female Straight
B	Male Straight - Female Angled
E	Male Straight - Free end

구분	케이블 Core 수
3	3 Core

구분	케이블 도체 크기
3	0.34SQ

구분	분기측 케이블 길이
010	1.0M
050	5.0M

구분	메인 케이블 길이
030	3.0M
050	5.0M

구분	케이블 사양
V	UL / 내유성 케이블
U	UL / PUR / 내유강화형

■ 정격/사양 Rating and Specifications

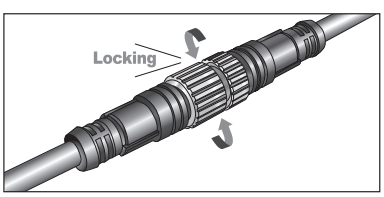
정격전압	DC 125V
정격전류	2A
절연저항	1,000MΩ이상 (DC500V)
내전압	AC 1,000V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

Cover	TPU
Contact Block	PA66
Contact	Female : Phosphor Bronze / Gold over Nickel plated
	Male : Brass / Gold-Plated
Coupling	Brass / Nickel-Plated
O-ring	고무 Rubber (Female)

■ 진동에 강한 Locking형 M12콘넥터

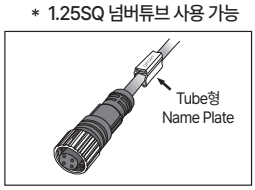


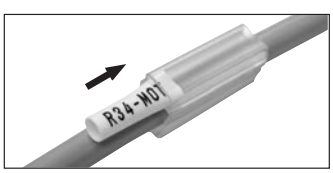


* 위와 같은 구조로 풀림 방지 기능이 있어 진동에 잘 풀리지 않아 접속 신뢰성이 높음

■ Tube형 Name Plate 장착

* 1.25SQ 넘버튜브 사용 가능





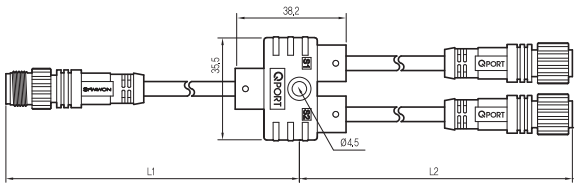
M12 중간 분기형 케이블

2신호 접속용 M12 중간 분기형 케이블

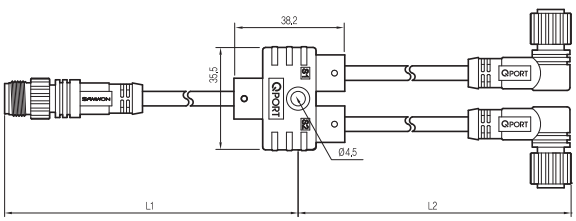
■ 제품일람

센서 / IO기기 접속용

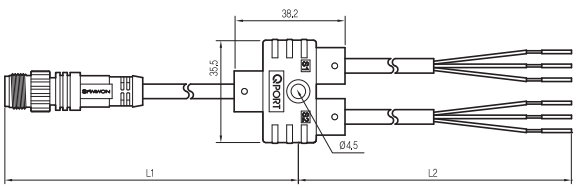
M12Y-A33-□/□



M12Y-B33-□/□

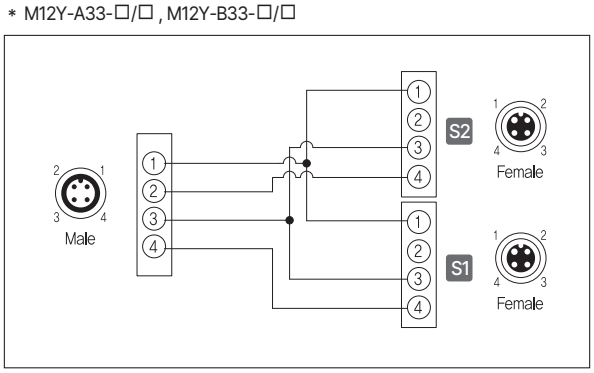


M12Y-E33-□/□

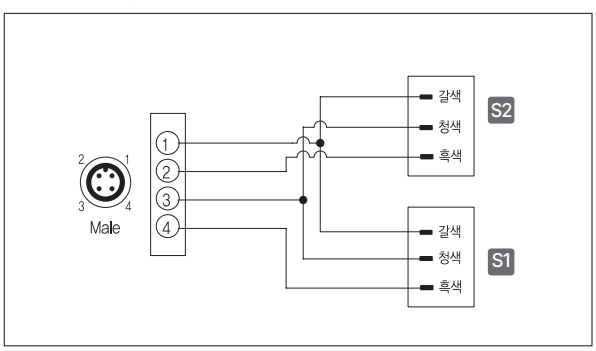


■ 결선도

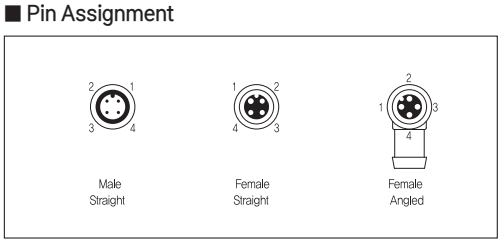
* M12Y-A33-□/□ , M12Y-B33-□/□



* M12Y-E33-□/□



■ Pin Assignment



Y12D 시리즈 (2신호 분기/변환 콘넥터)

2신호용 보드의 신호분기 및 근접센서의 NO, NC접점에 대응가능한 분기 콘넥터



■ 특장점

- Qport보드 및 현장 배선시 사용하는 분기 콘넥터
- 신호분기 및 병렬접속의 결선으로 배선작업이 편리함
- 2신호형 보드에서도 B접점의 근접센서 사용가능(Y12D-BR)
- IP67에 적합한 M12 표준규격 방수콘넥터

■ 모델선정 Model Selection

Y12D – ID

구분	접속형태
ID	2/4 신호분기
BR	2/4 브릿지
PD	병렬접속

구분	Series
Y12D	M12 분기 콘넥터

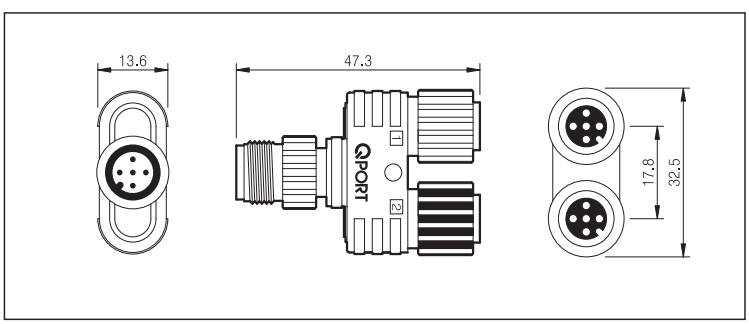
■ 정격/사양 Rating and Specifications

정격전압	DC 125V
정격전류	3A
절연저항	1,000MΩ이상 (DC300V)
내전압	AC 1,500V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

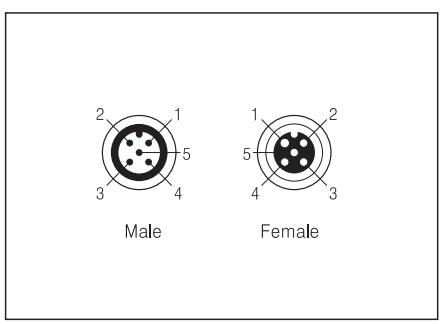
■ 재질 Materials and Finish

컨텍트 블럭		TPU
컨텍트	재질	Brass
	처리	Gold-Plated
커플링	재질	Brass
	처리	Nickel-Plated
커버		TPU
O-ring		고무 Rubber (Female)

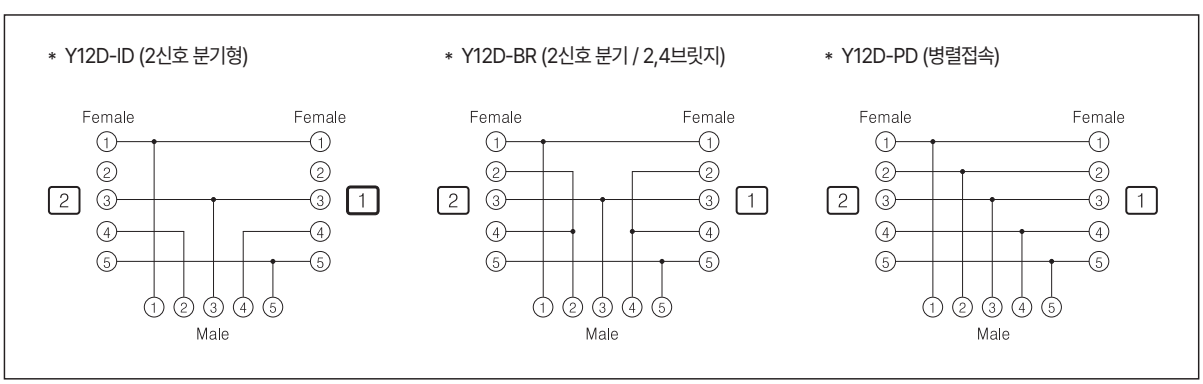
■ 외관도



■ Pin Assignment



■ 결선도



Y12W 시리즈 (2신호 분기/변환 콘넥터)

신호분기 및 근접센서의 NO, NC 접점에 대응가능한 분기 콘넥터



■ 특장점

- Qport보드 및 현장 배선시 사용하는 분기 콘넥터
- 신호분기 및 병렬접속의 결선으로 배선작업이 편리함
- 2신호형 보드에서도 B접점의 근접센서 사용가능(Y12W-BR)
- M12 폭 21mm 이하 콘넥터 장착이 가능한 분기 콘넥터
- 콘넥터 취부홀 적용으로 판넬 등에 고정 가능
- IP67에 적합한 M12 표준규격 방수콘넥터

■ 모델선정 Model Selection

Y12W – ID

구분	접속형태
ID	2/4 신호분기
BR	2/4 브릿지
PD	병렬접속

구분	Series
Y12W	M12 Wide 분기 콘넥터

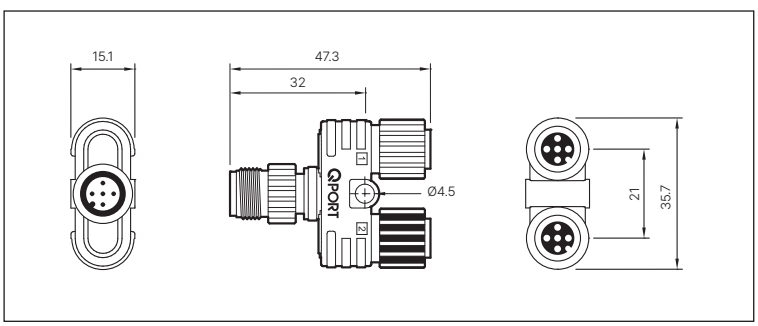
■ 정격/사양 Rating and Specifications

정격전압	DC 125V
정격전류	3A
절연저항	1,000MΩ이상 (DC300V)
내전압	AC 1,500V 1min
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

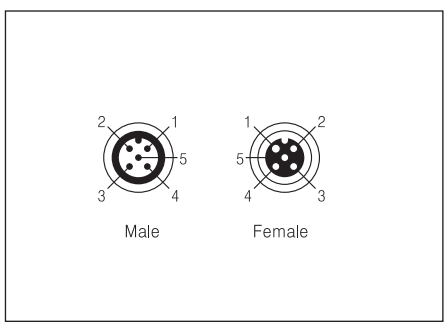
■ 재질 Materials and Finish

컨텍트 블럭		TPU
컨텍트	재질	Brass
	처리	Gold-Plated
커플링	재질	Brass
	처리	Nickel-Plated
커버		TPU
O-ring		고무 Rubber (Female)

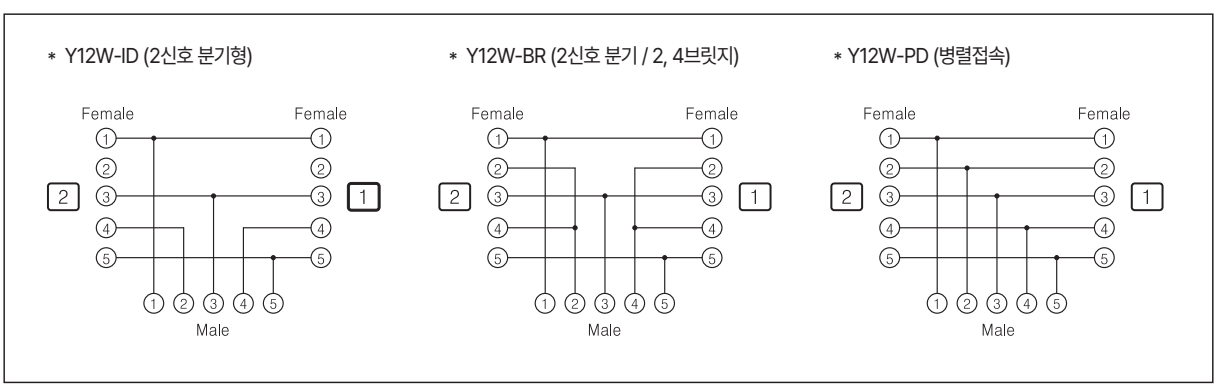
■ 외관도



■ Pin Assignment



■ 결선도



M12A-S 시리즈 (납땜형 M12콘넥터)

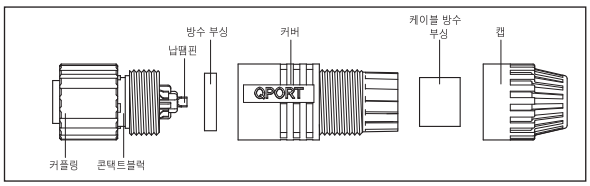
유지보수가 용이한 납땜형 M12 Free assembly 콘넥터



■ 특장점

- 사용자가 직접 납땜하여 사용할 수 있어 Pre-wired센서나 기존의 M12콘넥터의 유지보수등에 간편하게 작업가능함
- IP67을 만족하여 현장배선에 적합하며, 배선을 콘넥터화 함에 따라 유지보수의 간편화를 실현할 수 있음
- 3~7mm까지의 폭넓은 케이블 외경의 지원으로 사용자의 편의성 높음

■ 구조



■ 모델선정 Model Selection

M12 A - S 4 M - S 35

구분	Series
M12	M12 콘넥터

구분	Code 타입
A	A-coded

구분	작업 방법
S	납땜형 콘넥터

구분	Pole수
4	4 Pole
5	5 Pole

구분	적용 케이블 외경
35	3~4mm / 4~5mm
57	5~6mm / 6~7mm

구분	케이블 인출 방향
S	Straight

구분	암수구분
M	Male
F	Female

■ 정격/사양 Rating and Specifications

정격전압	DC 12~24V
정격전류	3A
절연저항	1,000MΩ이상 (DC500V)
내전압	AC 1,500V 1min
보호구조	IP67 (M12콘넥터 결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

■ 적합전선 사이즈

Model	적합케이블 외경	심선도체 사이즈
M12A-□-□□	Φ3~Φ7	0.5mm² (AWG20)이하

■ 재질 Materials and Finish

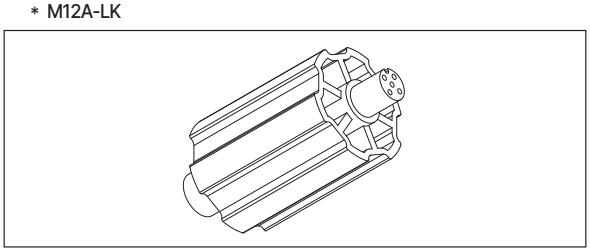
컨텍트 블럭		PA수지
컨텍트	재질	Brass
	처리	Gold-Plated
커플링	재질	Brass
	처리	Nickel-Plated
커버		PA66
캡		PA66
방수 부싱		고무
O-ring		고무 Rubber (Female)

■ 제품종류

Model	사양	적합케이블 외경	케이블 방수부싱 (내장품)
M12A-S4M-S57	4Pin / Male	Φ5~Φ7	Φ5~Φ6용 1ea Φ6~Φ7용 1ea
M12A-S5M-S57	5Pin / Male		
M12A-S4F-S57	4Pin / Female		
M12A-S5F-S57	5Pin / Female		
M12A-S4M-S35	4Pin / Male	Φ3~Φ5	Φ3~Φ4용 1ea Φ4~Φ5용 1ea
M12A-S5M-S35	4Pin / Male		
M12A-S4F-S35	4Pin / Female		
M12A-S5F-S35	5Pin / Female		

■ 잠금툴 (별매품)

* M12A-LK



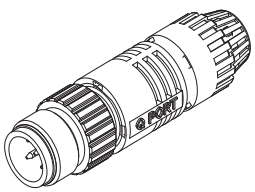
- 콘텍트 블럭과 커버조립시 사용하는 공구임
- 50ea단위 구매시 1ea 동봉

M12A-S 시리즈 (납땜형 M12콘넥터)

유지보수가 용이한 납땜형 M12 Free assembly 콘넥터

■ 외관도

* M12A-S4M-S57
  M12A-S5M-S57
  M12A-S4M-S35
  M12A-S5M-S35

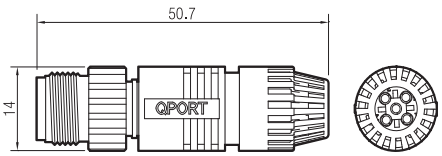




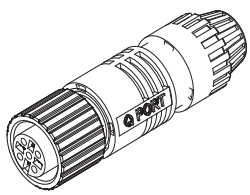
M12A-S4M-S□



M12A-S5M-S□

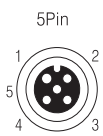


* M12A-S4F-S57
  M12A-S5F-S57
  M12A-S4F-S35
  M12A-S5F-S35

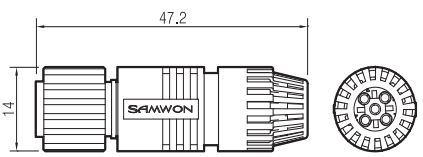




M12A-S4F-S□



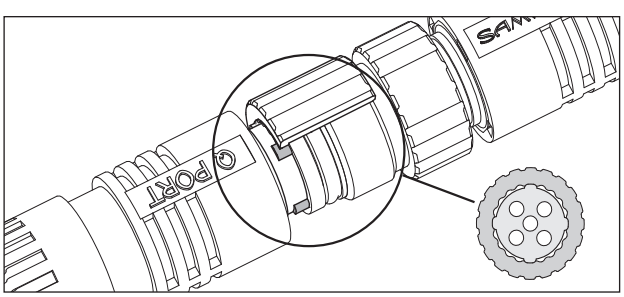
M12A-S5F-S□



■ 콘넥터 형상 (Front view)

DC용 4Pin		DC용 5Pin	
Male 수	Female 암	Male 수	Female 암
			

■ 진동에 강한 Locking형 M12콘넥터



* 위와 같은 구조로 풀림 방지 기능이 있어 진동에 잘 풀리지 않아 접속 신뢰성이 높음

M12A-B 시리즈 (Screw 조임형 M12콘넥터)

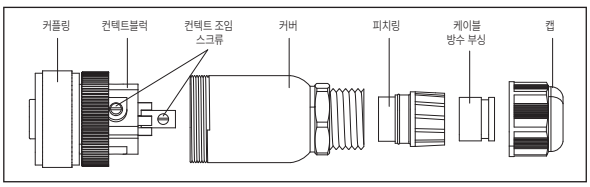
현장작업이 용이한 Screw 조임형 M12 Free assembly 콘넥터



■ 특장점

- Screw 조임형 콘넥터로 드라이버로 작업이 가능하며 현장작업 및 유지보수 등에 간편하게 작업가능함
- IP67을 만족하여 현장배선에 적합하며, 배선을 콘넥터화 함에 따라 유지보수의 간편화를 실현할 수 있음
- 3~8mm까지 폭넓은 케이블 외경의 지원으로 사용자의 편의성 높음

■ 구조



■ 모델선정 Model Selection

M12 A - B 4 M - S 46

구분	Series
M12	M12 콘넥터

구분	Code 타입
A	A-coded

구분	작업 방법
B	Screw 조임형 콘넥터

구분	Pole수
4	4 Pole
5	5 Pole
8	8 Pole
12	12 Pole

구분	암수구분
M	Male
F	Female

구분	케이블 인출 방향
S	Straight
A	Angle

구분	적용 케이블 외경
46	3~6.5mm
68	4~8.0mm

■ 제품종류

Model	사양	적합케이블 외경	최대 도체 사이즈
M12A-B4M-S46	4Pole / Male / Straight	Ø3~6.5	0.75mm²
M12A-B5M-S46	5Pole / Male / Straight		
M12A-B4M-A46	4Pole / Male / Angle		
M12A-B5M-A46	5Pole / Male / Angle		
M12A-B4F-S46	4Pole / Female / Straight		
M12A-B5F-S46	5Pole / Female / Straight		
M12A-B4F-A46	4Pole / Female / Angle		
M12A-B5F-A46	5Pole / Female / Angle		
M12A-B4M-S68	4Pole / Male / Straight	Ø4~8	0.75mm²
M12A-B5M-S68	5Pole / Male / Straight		
M12A-B8M-S68	8Pole / Male / Straight		0.5mm²
M12A-B12M-S68	12Pole / Male / Straight		0.25mm²
M12A-B4M-A68	4Pole / Male / Angle		0.75mm²
M12A-B5M-A68	5Pole / Male / Angle		
M12A-B8M-A68	8Pole / Male / Angle		0.5mm²
M12A-B4F-S68	4Pole / Female / Straight		0.75mm²
M12A-B5F-S68	5Pole / Female / Straight		
M12A-B8F-S68	8Pole / Female / Straight		0.5mm²
M12A-B12F-S68	12Pole / Female / Straight		0.25mm²
M12A-B4F-A68	4Pole / Female / Angle		0.75mm²
M12A-B5F-A68	5Pole / Female / Angle		
M12A-B8F-A68	8Pole / Female / Angle		0.5mm²

■ 정격/사양 Rating and Specifications

Pole 수	4	5	8	12
정격전류	4A		2A	1A
정격전압	250V	60V	60V	30V
정격 충격 전압	2,500V	1,500V	800V	500V
적합전선(Max.)	AWG18		AWG20	AWG24
탈착내구	100회			
보호구조	IP67 (M12콘넥터 결합시)			
접촉저항	3mΩ 이하			
사용주위온도	-25°C ~ +85°C			

■ 재질 Materials and Finish

컨텍트 블럭		PA 수지
컨텍트	재질	Brass
	처리	Gold-Plated
커플링	재질	Brass
	처리	Nickel-Plated
방수 부싱		고무
O-ring		고무 (Female)

■ 적합공구

* ⊖드라이버 2.6㎜



⊖ 2.6㎜*0.35t

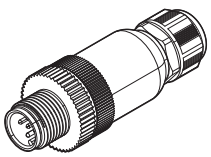
M12A-B 시리즈 (Screw 조임형 M12콘넥터)

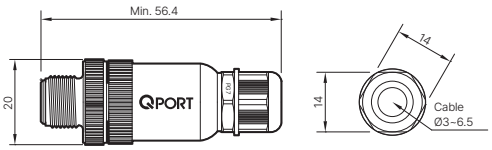
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현장작업이 용이한 Screw 조임형 M12 Free assembly 콘넥터

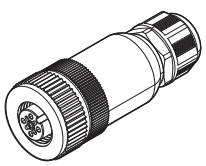
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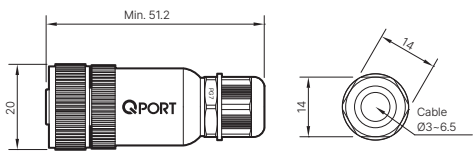
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  M12A-B5M-S46



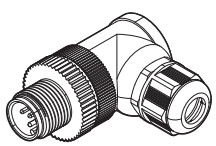


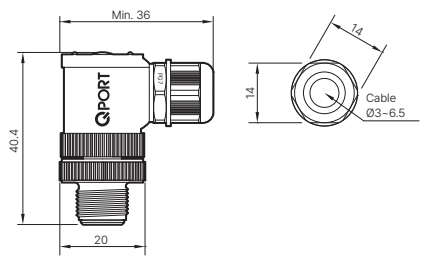
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  M12A-B5F-S46



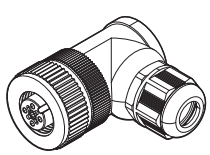


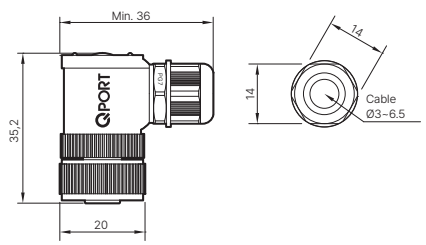
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  M12A-B5M-A46



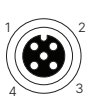


* M12A-B4F-A46
  M12A-B5F-A46





■ 콘넥터 형상 (Front view)

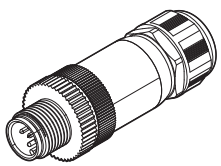
4 Pole		5 Pole	
Male 수	Female 암	Male 수	Female 암
			

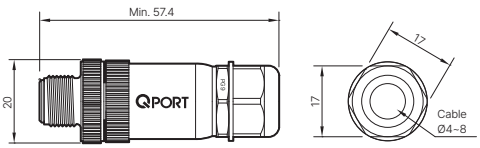
M12A-B 시리즈 (Screw 조임형 M12콘넥터)

현장작업이 용이한 Screw 조임형 M12 Free assembly 콘넥터

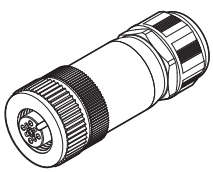
■ 외관도

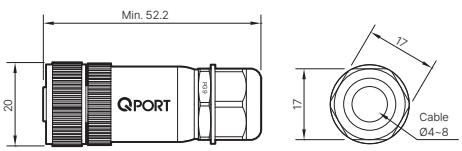
* M12A-B4M-S68
  M12A-B5M-S68
  M12A-B8M-S68
  M12A-B12M-S68



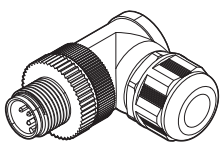


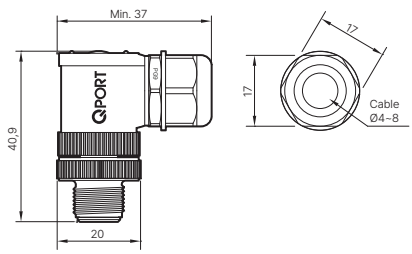
* M12A-B4F-S68
  M12A-B5F-S68
  M12A-B8F-S68
  M12A-B12F-S68



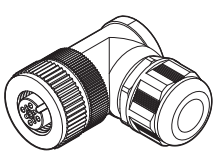


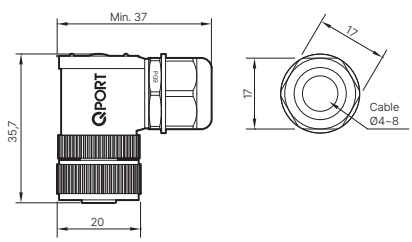
* M12A-B4M-A68
  M12A-B5M-A68
  M12A-B8M-A68



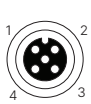
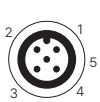
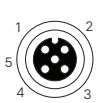
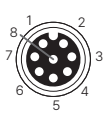
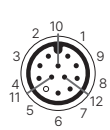
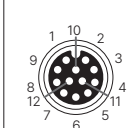


* M12A-B4F-A68
  M12A-B5F-A68
  M12A-B8F-A68





■ 콘넥터 형상 (Front view)

4 Pole		5 Pole		8 Pole		12 Pole	
Male 수	Female 암	Male 수	Female 암	Male 수	Female 암	Male 수	Female 암
							

M8A-B 시리즈 (Screw 조임형 M8콘넥터)

CE

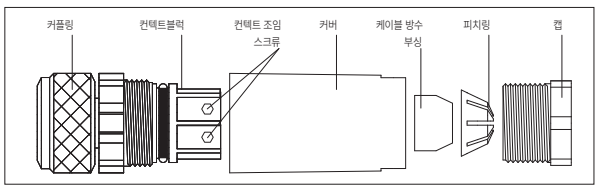
현장작업이 용이한 Screw 조임형 M8 Free assembly 콘넥터



■ 특장점

- Screw 조임형 콘넥터로 내장되어 있는 육각렌치로 작업이 가능하며 현장작업 및 유지보수등에 간편하게 작업가능함
- IP67을 만족하여 현장배선에 적합하며, 배선을 콘넥터화 함에 따라 유지보수의 간편화를 실현할 수 있음
- 3.5~5mm까지 케이블 외경의 지원으로 사용자의 편의성 높음

■ 구조



■ 모델선정 Model Selection

M8A - B 3 M - S 35

구분	Series
M8A	M8 콘넥터

구분	작업방법
B	Screw 조임형 콘넥터

구분	Pole수
3	3 Pole
4	4 Pole

구분	적용케이블 외경
35	3.5~5mm

구분	케이블 인출 방향
S	Straight

구분	암수구분
M	Male
F	Female

■ 제품종류

Model	사양	적합케이블 외경	심선도체사이즈
M8A-B3M-S35	3Pole / Male / Straight	Ø3.5~5	0.14~0.5mm²
M8A-B3F-S35	3Pole / Female / Straight		
M8A-B4M-S35	4Pole / Male / Straight		
M8A-B4M-S35	4Pole / Female / Straight		

■ 정격/사양 Rating and Specifications

Pole 수	3	4
정격전압	60V	30V
정격전류	4A	
절연저항	1,500V	800V
내전압	100회	
보호구조	IP67 (콘넥터 결합시)	
탈착내구	3mΩ 이하	
사용주위온도	-25 ~ +85°C	

■ 재질 Materials and Finish

컨택트 블럭		PA 수지
컨택트	재질	Brass
	처리	Gold-Plated
커플링	재질	Brass
	처리	Nickel-Plated
방수 부싱		고무
O-ring		고무 (Female)

■ 내장품

- 육각렌치(1ea)

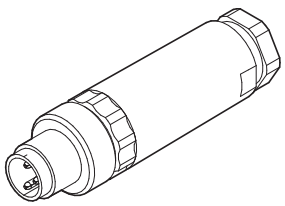


M8A-B 시리즈 (Screw 조임형 M8콘넥터)

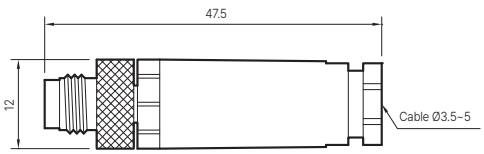
현장작업이 용이한 Screw 조임형 M8 Free assembly 콘넥터

■ 외관도

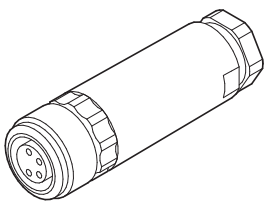
* M8A-B3M-S35 / M8A-B4M-S35



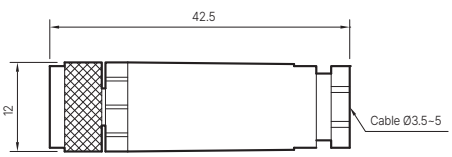




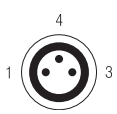
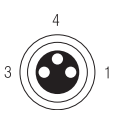
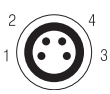
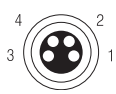
* M8A-B3F-S35 / M8A-B4F-S35







■ 콘넥터 형상 (Front view)

3 Pole		4 Pole	
Male 수	Female 암	Male 수	Female 암
			

M12A-I 시리즈 (M12 IDC 콘넥터)

현장작업이 용이한 M12 IDC 콘넥터



■ 특장점

- IDC(Insulation Displacement Connection) 콘넥터로 현장에서 작업이 용이하며, 유지보수 등에 간편하게 작업 가능함
- IP65/67을 만족하여 현장배선에 적합하며, 배선을 콘넥터화 함에 따라 유지보수의 간편화를 실현할 수 있음
- 3.5~8mm까지 폭넓은 케이블 외경의 지원으로 사용자의 편의성 높음

■ 모델선정 Model Selection

M12 A - I 4 M - S 46

구분	Series
M12	M12 콘넥터

구분	Code 타입
A	A-coded

구분	작업방법
I	IDC 콘넥터

구분	Pole수
4	4 Pole

구분	암수구분
M	Male
F	Female

구분	케이블 인출 방향
S	Straight

구분	적용케이블 외경
46	3.5~6.0mm (AWG26~22)
48	4.0~8.0mm (AWG22~18)

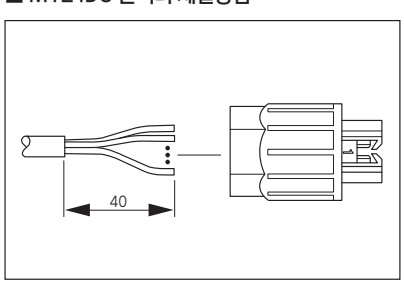
■ 정격/사양 Rating and Specifications

구 분	M12A-I4□-S46	M12A-I4□-S48
정격전압	125V	300V
정격전류	4A	
절연저항	100MΩ 이하	
탈착내구	100회 이하	
보호구조	IP65 / 67 (콘넥터 결합시)	
도체단면	AWG26~22 (0.14~0.34mm²)	AWG22~18 (0.34~0.75mm²)
절연체 외경	0.7 ~ 1.6mm	1.3 ~ 2.6mm
절연체 재질	PVC / PE / PP / rubber	
사용주위온도	-25 ~ +80°C	

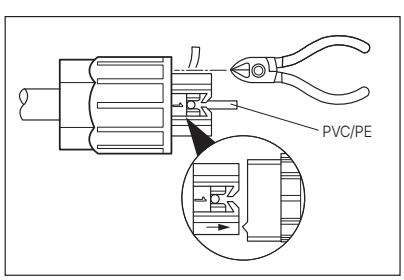
■ 재질 Materials and Finish

컨텍트 블럭		TPU
컨텍트	재질	Bronze (CuSn)
	처리	Nickel / Au-Plated
커플링	재질	Zinc die-cast
	처리	Nickel-Plated
몸체 / 커버		PA66
방수 부싱		고무
O-ring		고무 (Female)

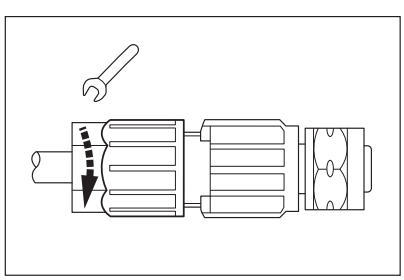
■ M12 IDC 콘넥터 체결방법



① 케이블을 40mm 탈피하여 M12A-I 커버에 삽입한다.



② 절연체를 해당 PIN에 삽입하여 공구를 사용하여 절연체를 절단 후, 커버의 화살표와 몸체의 표시부를 일치하여 결합한다.



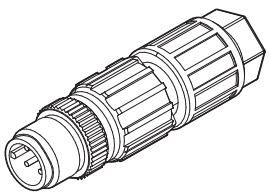
③ 커버를 시계 방향으로 끝까지 조인다.

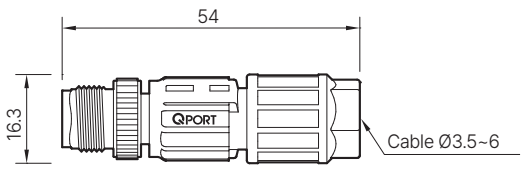
M12A-I 시리즈 (M12 IDC 콘넥터)

현장작업이 용이한 M12 IDC 콘넥터

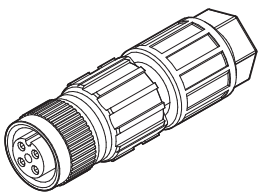
■ 외관도

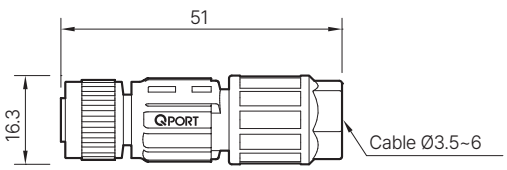
* M12A-I4M-S46



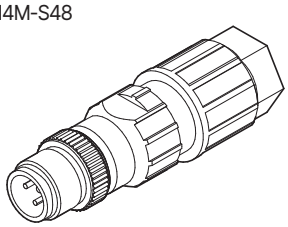


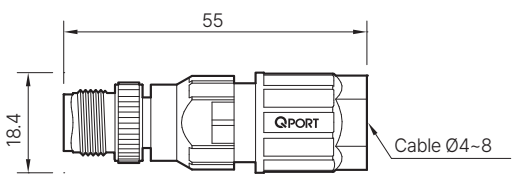
* M12A-I4F-S46



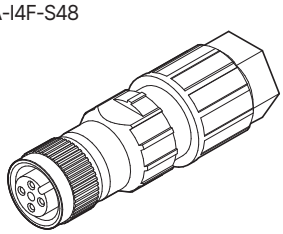


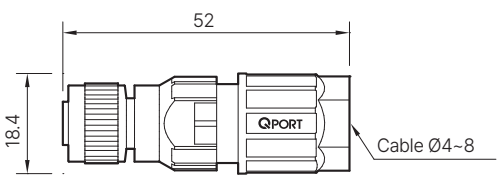
* M12A-I4M-S48



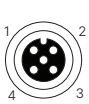


* M12A-I4F-S48





■ 콘넥터 형상 (Front view)

4 Pole	
Male 수	Female 암
	

밸브플러그 케이블 (유공압 솔레노이드밸브용 전원플러그)

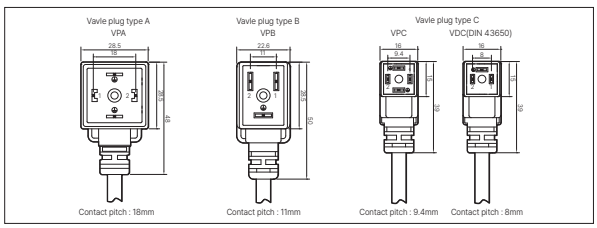
결선작업이 필요없는 케이블 일체형 밸브플러그



■ 특장점

- 밸브플러그 일체형으로 배선작업이 불필요하여 오결선이 없어지고 공수가 줄어듦
- LED램프가 내장되어 있어 동작 Check가 용이함
- M12콘넥터 일체형 제품도 구비되어 있어 M12분기박스 사용시 현장 배선이 불필요
- IP67에 적합한 방수콘넥터

■ 밸브플러그 종류



■ 모델선정 Model Selection

VPA - A 3 3 - P 010 / LD24

구분	Series
VPA	Valve plug type A 일체형 케이블
VPB	Valve plug type B 일체형 케이블
VPC	Valve plug type C 일체형 케이블
VDC	Valve plug type C 일체형 케이블

구분	콘넥터 형태
A	Valve plug - M12 Male Straight
C	Valve plug - M12 Male Angled
G	Valve plug - Free end

구분	케이블 Core수
3	3 Core

구분	케이블 도체 크기
3	0.34SQ
5	0.5SQ

구분	케이블 사양
P	표준 케이블(0.34SQ)
V	UL / 내유성 케이블(0.5SQ)

구분	내부회로	적용콘넥터형태
무표시	회로없음	G
N	NPN	A / C
P	PNP	A / C
LD24	DC24V / LED, Diode내장	G
LD24N	DC24V / LED, Diode내장 / NPN	A / C
LD24P	DC24V / LED, Diode내장 / PNP	A / C
L24	DC24V / LED내장 (Free end)	G
L24N	DC24V / LED / NPN	A / C
L24P	DC24V / LED / PNP	A / C
L220A	AC220V / LED내장 (Free end)	G
L110A	AC110V / LED내장 (Free end)	G

구분	표준 케이블 길이
010	1.0M
015	1.5M
020	2.0M
030	3.0M
050	5.0M
100	10.0M

■ 정격/사양 Rating and Specifications

* 밸브플러그

정격전압	DC 24V / AC 220V / AC 110V
정격전류	3A
보호구조	IP67 (결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

* M12

정격전압	DC 125V
정격전류	3A
보호구조	IP67 (M12콘넥터 결합시)
탈착내구	200회
사용주위온도	-25 ~ +75°C

■ 재질 Materials and Finish

* 밸브플러그

커버	TPU
컨텍트 블럭	PA 수지
커플링	Brass / Tin-Plated

* M12

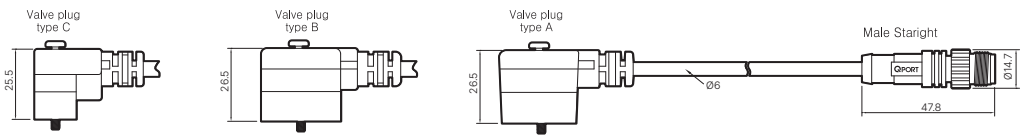
커버	TPU
컨텍트 블럭	PA 수지
컨텍트	Brass / Gold-Plated
커플링	Brass / Nickel-Plated

밸브플러그 케이블 (유공압 솔레노이드벨브용 전원플러그)

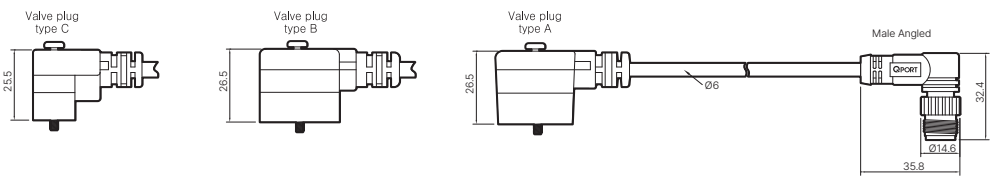
결선작업이 필요없는 케이블 일체형 밸브플러그

■ 외관도

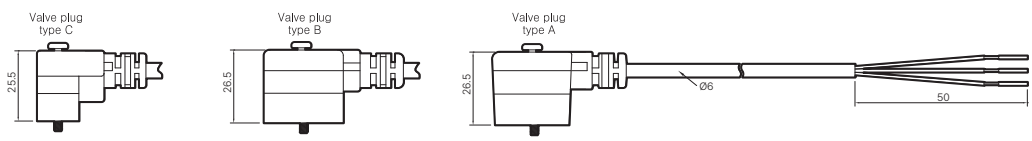
* Valve plug - M12 Male Straight (V□-A□-□/L□)



* Valve plug - M12 Male Angled (V□-C□-□/L□)

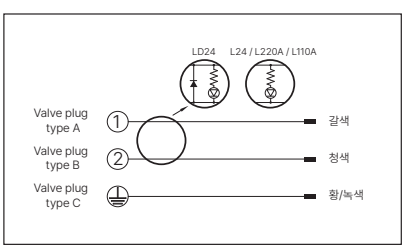


* Valve plug - Free end (V□-G□-□, V□-G□-□/L□)

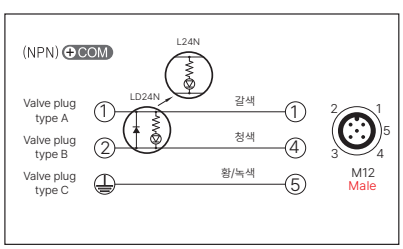


■ 결선도

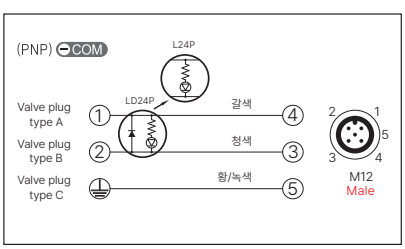
* V□-G□-□
  V□-G□-□ / LD24
  V□-G□-□ / L24
  V□-G□-□ / L220A
  V□-G□-□ / L110A



* V□-A□-□ / LD24N
  V□-A□-□ / L24N
  V□-C□-□ / LD24N
  V□-C□-□ / L24N



* V□-A□-□ / LD24P
  V□-A□-□ / L24P
  V□-C□-□ / LD24P
  V□-C□-□ / L24P



M12S / M8 접속용 케이블 악세사리

■ M12S 케이블 마운트 홀더



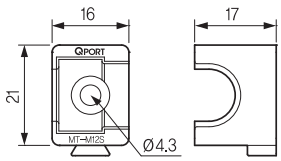
■ Model 선정

MT - M12S

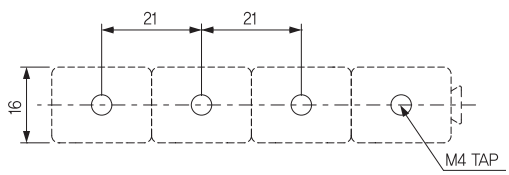
M12S 케이블 용

마운트 홀더

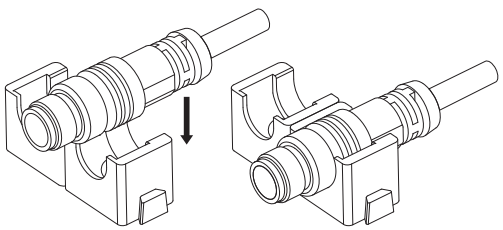
■ 외관도



■ 취부홀



■ M12S 결합도



■ M8S 케이블 마운트 홀더



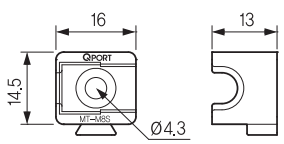
■ Model 선정

MT - M8S

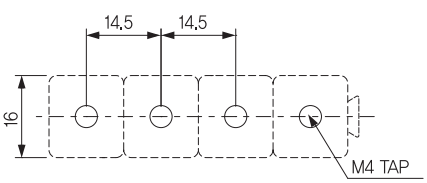
M8S 케이블 용

마운트 홀더

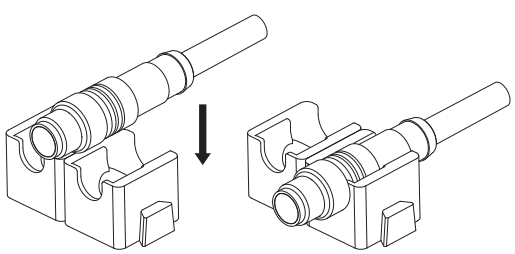
■ 외관도



■ 취부홀



■ M8S 결합도



M12 / M8 접속용 케이블 악세사리

■ M12 잠금 Tool

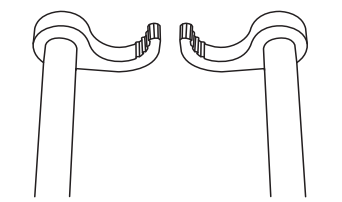


■ Model 선정

TL-M12

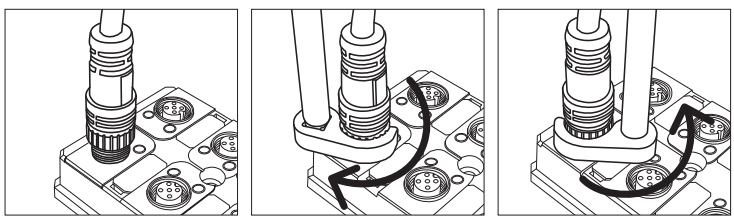
M12 잠금툴

■ Tool 부착



<잠금시 부착모습> <해체시 부착모습>

■ 사용방법



① 센서나 M12분기박스에 M12케이블 조립시 손으로 밀착될 때 까지 잠근다.

② 잠금툴을 이용하여 반바퀴정도 화살표 방향으로 돌림, 밀착이 된 느낌이 올때까지 반바퀴씩 반복하여 돌림

③ 해체시 잠금때의 역순으로 잠금툴로 반바퀴정도 화살표 방향(왼쪽)으로 돌린 후 손으로 해체한다.

※ 주의 : 너무 과다한 힘을 가하면 센서 및 M12분기박스가 파손될 우려가 있음

■ 리미트 스위치용 프리와이어 M12아답터



■ Model 선정

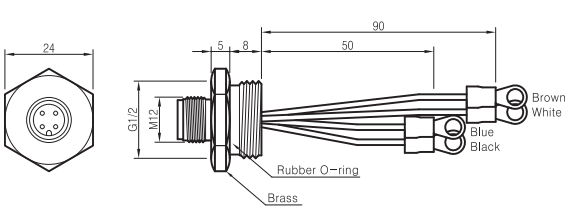
EAM12 - G - 4P

4Pole 결선

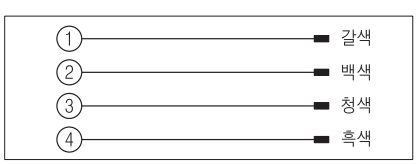
나사산 사양 : G1/2

M12변환 아답터

■ 외관도



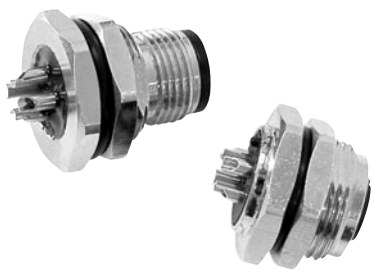
■ 결선도



M12 / M8 접속용 케이블 악세사리

CE

■ M12 판넬 취부형 콘넥터



■ Model 선정

PM12 - 4 M / R

구분	조임 방향
무표시	앞쪽 (Front)
R	뒤쪽 (Rear)

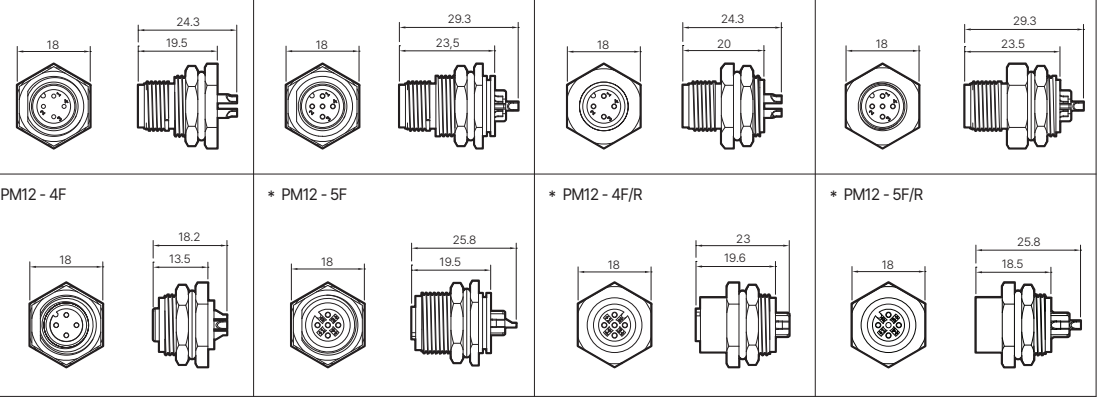
구분	암수구분
F	암
M	수

구분	Pole 수
4	4 Pole
5	5 Pole

구분	시리즈
PM12	판넬 취부형 M12 콘넥터

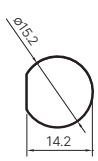
■ 외관도

Front 조임 방식		Rear 조임 방식	
* PM12 - 4M	* PM12 - 5M	* PM12 - 4M/R	* PM12 - 5M/R
* PM12 - 4F	* PM12 - 5F	* PM12 - 4F/R	* PM12 - 5F/R

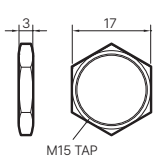


* 홈 방향은 도면과 상이할 수 있습니다.

■ 취부홀

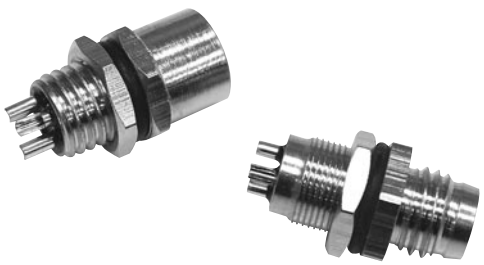


■ NUT



CE M12 / M8 접속용 케이블 악세사리

■ M8 판넬 취부형 콘넥터



■ Model 선정

PM8 – 3 M / R

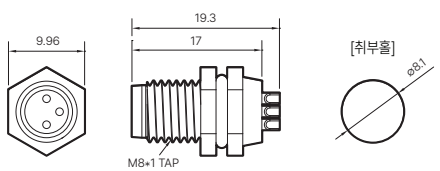
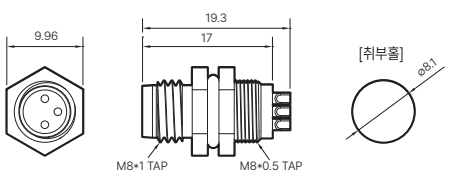
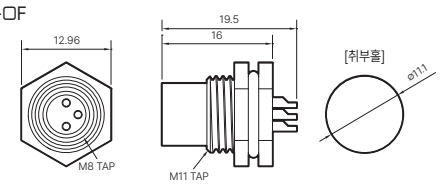
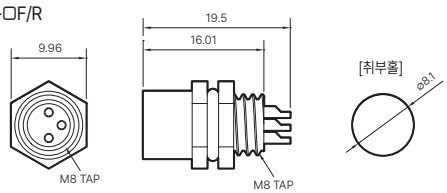
구분	조임 방향
무표시	앞쪽 (Front)
R	뒤쪽 (Rear)

구분	암수구분
F	암
M	수

구분	Pole 수
3	3 Pole
4	4 Pole
5	5 Pole

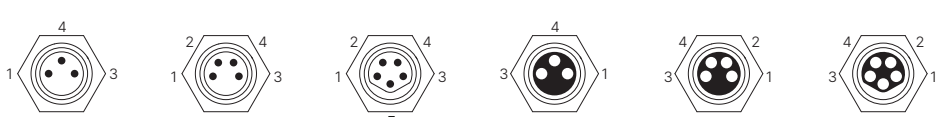
구분	시리즈
PM8	판넬 취부형 M8 콘넥터

■ 외관도

Front 조임 방식	Rear 조임 방식
* PM8-□M 	* PM8-□M/R 
* PM8-□F 	* PM8-□F/R 

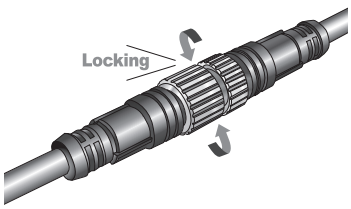
* 육각 너트의 위치가 도면과 상이할 수 있습니다.

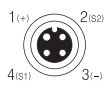
■ Pin Assignment



3Pin Male | 4Pin Male | 5Pin Male | 3Pin Female | 4Pin Female | 5Pin Female

M12 센서 케이블 선정 일람



				End Free			Female Connector M12 Straight					
												
												
			Cable / Material / Cable Length	PVC OIL	PUR OIL	PUR Moving	PVC OIL	PUR OIL	PUR Moving	PVC OIL	PUR OIL	PUR Moving
End Free			0.5M 1.0M 1.5M 2.0M 3.0M 5.0M Variable	***	***	***	***	***	***	M12S-G43-V005 M12S-G43-V010 M12S-G43-V015 M12S-G43-V020 M12S-G43-V030 M12S-G43-V050 M12S-G43-VXXX	M12S-G43-U005 M12S-G43-U010 M12S-G43-U015 M12S-G43-U020 M12S-G43-U030 M12S-G43-U050 M12S-G43-UXXX	M12S-G43-H005 M12S-G43-H010 M12S-G43-H015 M12S-G43-H020 M12S-G43-H030 M12S-G43-H050 M12S-G43-HXXX
Male Connector M12	Straight			0.5M 1.0M 1.5M 2.0M 3.0M 5.0M Variable	M12S-E43-V005 M12S-E43-V010 M12S-E43-V015 M12S-E43-V020 M12S-E43-V030 M12S-E43-V050 M12S-E43-VXXX	M12S-E43-U005 M12S-E43-U010 M12S-E43-U015 M12S-E43-U020 M12S-E43-U030 M12S-E43-U050 M12S-E43-UXXX	M12S-E43-H005 M12S-E43-H010 M12S-E43-H015 M12S-E43-H020 M12S-E43-H030 M12S-E43-H050 M12S-E43-HXXX	***	***	***	M12S-A43-V005 M12S-A43-V010 M12S-A43-V015 M12S-A43-V020 M12S-A43-V030 M12S-A43-V050 M12S-A43-VXXX	M12S-A43-U005 M12S-A43-U010 M12S-A43-U015 M12S-A43-U020 M12S-A43-U030 M12S-A43-U050 M12S-A43-UXXX	M12S-A43-H005 M12S-A43-H010 M12S-A43-H015 M12S-A43-H020 M12S-A43-H030 M12S-A43-H050 M12S-A43-HXXX
				0.5M 1.0M 1.5M 2.0M 3.0M 5.0M Variable	M12S-E53-V005 M12S-E53-V010 M12S-E53-V015 M12S-E53-V020 M12S-E53-V030 M12S-E53-V050 M12S-E53-VXXX	***	***	***	***	***	***	***	***
	Angle			0.5M 1.0M 1.5M 2.0M 3.0M 5.0M Variable	M12S-F43-V005 M12S-F43-V010 M12S-F43-V015 M12S-F43-V020 M12S-F43-V030 M12S-F43-V050 M12S-F43-VXXX	M12S-F43-U005 M12S-F43-U010 M12S-F43-U015 M12S-F43-U020 M12S-F43-U030 M12S-F43-U050 M12S-F43-UXXX	M12S-F43-H005 M12S-F43-H010 M12S-F43-H015 M12S-F43-H020 M12S-F43-H030 M12S-F43-H050 M12S-F43-HXXX	***	***	***	M12S-C43-V005 M12S-C43-V010 M12S-C43-V015 M12S-C43-V020 M12S-C43-V030 M12S-C43-V050 M12S-C43-VXXX	M12S-C43-U005 M12S-C43-U010 M12S-C43-U015 M12S-C43-U020 M12S-C43-U030 M12S-C43-U050 M12S-C43-UXXX	M12S-C43-H005 M12S-C43-H010 M12S-C43-H015 M12S-C43-H020 M12S-C43-H030 M12S-C43-H050 M12S-C43-HXXX
				0.5M 1.0M 1.5M 2.0M 3.0M 5.0M Variable	M12S-F53-V005 M12S-F53-V010 M12S-F53-V015 M12S-F53-V020 M12S-F53-V030 M12S-F53-V050 M12S-F53-VXXX	***	***	***	***	***	***	***	***
	Distributed connector			0.5M 1.0M 1.5M 2.0M 3.0M 5.0M Variable	Y12S-E33-V005 Y12S-E33-V010 Y12S-E33-V015 Y12S-E33-V020 Y12S-E33-V030 Y12S-E33-V050 Y12S-E33-VXXX	***	***	Y12S-A33-V005 Y12S-A33-V010 Y12S-A33-V015 Y12S-A33-V020 Y12S-A33-V030 Y12S-A33-V050 Y12S-A33-VXXX	***	***	***	***	***
				0.5M 1.0M 1.5M 2.0M 3.0M 5.0M Variable	Y12S-E43-V005 Y12S-E43-V010 Y12S-E43-V015 Y12S-E43-V020 Y12S-E43-V030 Y12S-E43-V050 Y12S-E43-VXXX	***	***	***	***	***	***	***	***

◆ 케이블의 설명 :
PVC OIL = 염화비닐쉬스 / 내유성
PUR OIL = 폴리우레탄쉬스 / 내유강화형
PUR moving = 폴리우레탄쉬스 / 내유강화형 / 가동용

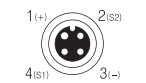
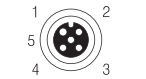
* M12S-□43-□

Diagram	Pole NO.	Cable color	Assinment
4pole Male  4pole Female 	1	Brown 갈색	+24V DC
	2	White 백색	I/O 2
	3	Blue 청색	0V DC
	4	Black 흑색	I/O 1

* M12S-□53-□

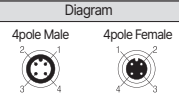
Diagram	Pole NO.	Cable color	Assinment
5pole Male  5pole Female 	1	Brown 갈색	+24V DC
	2	White 백색	I/O 2
	3	Blue 청색	0V DC
	4	Black 흑색	I/O 1
	5	Gray 회색	센서에 따라 별도 사용

M12 센서 케이블 선정 일람

Female Connector M12											
Straight			Angle								
											
											
PVC OIL	PUR OIL	PUR Moving	PVC OIL	PUR OIL	PUR Moving	PVC OIL	PUR OIL	PUR Moving	PVC OIL	PUR OIL	PUR Moving
M12S-G53-V005 M12S-G53-V010 M12S-G53-V015 M12S-G53-V020 M12S-G53-V030 M12S-G53-V050 M12S-G53-VXXX	***	***	***	***	***	M12S-H43-V005 M12S-H43-V010 M12S-H43-V015 M12S-H43-V020 M12S-H43-V030 M12S-H43-V050 M12S-H43-VXXX	M12S-H43-U005 M12S-H43-U010 M12S-H43-U015 M12S-H43-U020 M12S-H43-U030 M12S-H43-U050 M12S-H43-UXXX	M12S-H43-H005 M12S-H43-H010 M12S-H43-H015 M12S-H43-H020 M12S-H43-H030 M12S-H43-H050 M12S-H43-HXXX	M12S-H53-V005 M12S-H53-V010 M12S-H53-V015 M12S-H53-V020 M12S-H53-V030 M12S-H53-V050 M12S-H53-VXXX	***	***
***	***	***	***	***	***	***	***	M12S-B43-H005 M12S-B43-H010 M12S-B43-H015 M12S-B43-H020 M12S-B43-H030 M12S-B43-H050 M12S-B43-HXXX	***	***	***
M12S-A53-V005 M12S-A53-V010 M12S-A53-V015 M12S-A53-V020 M12S-A53-V030 M12S-A53-V050 M12S-A53-VXXX	***	***	***	***	***	***	***	***	M12S-B53-V005 M12S-B53-V010 M12S-B53-V015 M12S-B53-V020 M12S-B53-V030 M12S-B53-V050 M12S-B53-VXXX	***	***
***	***	***	***	***	***	M12S-D43-V005 M12S-D43-V010 M12S-D43-V015 M12S-D43-V020 M12S-D43-V030 M12S-D43-V050 M12S-D43-VXXX	M12S-D43-U005 M12S-D43-U010 M12S-D43-U015 M12S-D43-U020 M12S-D43-U030 M12S-D43-U050 M12S-D43-UXXX	M12S-D43-H005 M12S-D43-H010 M12S-D43-H015 M12S-D43-H020 M12S-D43-H030 M12S-D43-H050 M12S-D43-HXXX	***	***	***
M12S-C53-V005 M12S-C53-V010 M12S-C53-V015 M12S-C53-V020 M12S-C53-V030 M12S-C53-V050 M12S-C53-VXXX	***	***	***	***	***	***	***	***	M12S-D53-V005 M12S-D53-V010 M12S-D53-V015 M12S-D53-V020 M12S-D53-V030 M12S-D53-V050 M12S-D53-VXXX	***	***
***	***	***	Y12S-B33-V005 Y12S-B33-V010 Y12S-B33-V015 Y12S-B33-V020 Y12S-B33-V030 Y12S-B33-V050 Y12S-B33-VXXX	***	***	***	***	***	***	***	***
Y12S-A43-V005 Y12S-A43-V010 Y12S-A43-V015 Y12S-A43-V020 Y12S-A43-V030 Y12S-A43-V050 Y12S-A43-VXXX	***	***	***	***	***	***	***	***	Y12S-B43-V005 Y12S-B43-V010 Y12S-B43-V015 Y12S-B43-V020 Y12S-B43-V030 Y12S-B43-V050 Y12S-B43-VXXX	***	***

◆ Pin map (Front view)

* M12S-□33-□

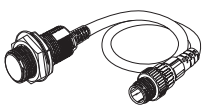
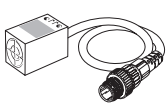
Diagram	Pole NO.	Cable color	Cable color (Female)	Assinment (Female)
	1	Brown 갈색 S1 S2	Brown 갈색	+24V DC
	2	White 백색 S2	N.C	I/O 2
	3	Blue 청색 S1 S2	Blue 청색	0V DC
	4	Black 흑색 S1	Black 흑색	I/O 1

* M12S-□43-□

Diagram	Pole NO.	Cable color	Cable color (Female)	Assinment (Female)
	1	Brown 갈색 S1 S2	Brown 갈색	+24V DC
	2	White 백색 S2	N.C	I/O 2
	3	Blue 청색 S1 S2	Blue 청색	0V DC
	4	Black 흑색 S1	Black 흑색	I/O 1
	5	Gray 회색 S1 S2	G/Y 황/녹색	센서에 따라 별도 사용

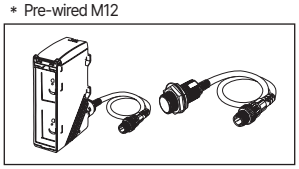
센서 메이커별 선정 일람

OMRON SENSOR

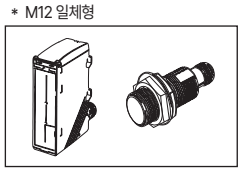
센서 종류		모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
근접센서 Proximity Sensor		E2E-X2D1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X3D1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X7D1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X10D1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X4MD1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X8MD1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X14MD1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X20MD1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X2D2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X3D2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X7D2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X10D2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X4MD2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X8MD2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X14MD2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X20MD2-M1G		M12	2 Wired	N.C	②	MP□-I□□□
		E2E-X3D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X7D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X10D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X8MD1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X14MD1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X20MD1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2E-X1R5E1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X2E1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X5E1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X10E1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X2ME1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X5ME1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X10ME1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X18ME1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2E-X1R5F1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2E-X2F1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2E-X5F1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2E-X10F1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2E-X2MF1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2E-X5MF1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2E-X10MF1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2E-X18MF1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2EM-X2C1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EM-X4C1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EM-X8C1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EM-X15C1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EQ-X3D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2EQ-X7D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2EQ-X10D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2FM-X1R5D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2FM-X2D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2FM-X5D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2FM-X10D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2FM-X1R5B1-M1	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E2FM-X2B1-M1	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E2FM-X5B1-M1	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E2FM-X10B1-M1	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E2EH-X3D1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2EH-X3B1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2EH-X3C1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EH-X7D1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2EH-X7B1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2EH-X7C1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EH-X12D1-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2EH-X12B1-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2EH-X12C1-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EH-X3D2-M1G		M12	2 Wired	N.O	①	MP□-I□□□
		E2EH-X3B2-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2EH-X3C2-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EH-X7D2-M1G		M12	2 Wired	N.O	①	MP□-I□□□

◆ Pin map (Front view)

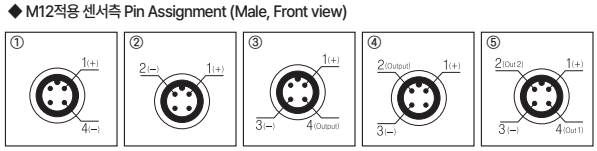
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)

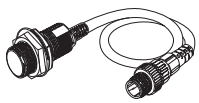
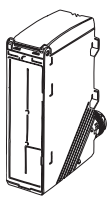
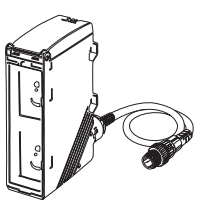


IEC 2Wired N.O | IEC 2Wired N.C | 3Wired NPN/PNP N.O | 3Wired NPN/PNP N.C | 4Wired NPN/PNP N.O

* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

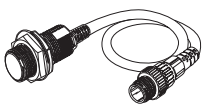
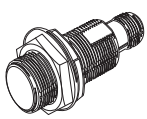
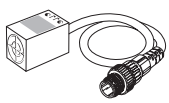
센서 메이커별 선정 일람

OMRON SENSOR

센서 종류		모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
근접센서 Proximity Sensor		E2EH-X7B2-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2EH-X7C2-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EH-X12D2-M1G		M12	3 Wired	N.O	③	MP□-I□□□
		E2EH-X12B2-M1	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E2EH-X12C2-M1	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E2EZ-X2D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2EZ-X4D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		E2EZ-X8D1-M1GJ		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
광전센서 Photoelectric switch		E3S-CD11-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CD12-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CD61-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CD62-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CT11-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CT61-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CR11-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CR61-M1J	N P	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-T61-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-T61K-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-T61A-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-T62-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-T62-GO-M1J	NPN	Pre-Wired M12	3 Wired	입력		MP□-J□□N
		E3Z-T81-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-T81K-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-T81A-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-T82-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-T82-GO-M1J	PNP	Pre-Wired M12	3 Wired	입력		MP□-J□□P
		E3Z-R61-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-R61K-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-D61-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-D61K-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-D62-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-D62K-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-R81-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-R81K-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-D81-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-D81K-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-D82-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-D82K-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3ZM-CT61-M1JT	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3ZM-CT62B-M1JT	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3ZM-CT81-M1JT	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3ZM-CT82B-M1JT	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3ZM-CR61-M1JT	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		E3ZM-CD62-M1JT	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		E3ZM-CR81-M1JT	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		E3ZM-CD82-M1JT	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		E3Z-LT61-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-LT81-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-LR61-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-LR81-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3Z-LL61-M1J	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		E3Z-LL63-M1J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3Z-LL81-M1J	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		E3Z-LL83-M1J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3G-R17	N P	M12	3 Wired	N.O	③	MP□-J□□N
		E3G-L77	N P	M12	3 Wired	N.O	③	MP□-J□□N
		F3C-AL14-M1J	NPN	Pre-Wired M12	4 Wired	N.O	⑤	MP□-K□□N
		F3C-AL44-M1J	PNP	Pre-Wired M12	4 Wired	N.O	⑤	MP□-K□□P
		E3S-CR67 (NPN)	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-CR67 (PNP)	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		E3S-R17	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E3S-R16	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		E3S-R36	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E3S-R66	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-R67	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		E3S-R86	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		E3M-VG11	NPN	M12	4 Wired	N.O	⑤	MP□-K□□N
		E3M-VG21	NPN	M12	4 Wired	N.O	⑤	MP□-K□□N
		E3M-VG16	PNP	M12	4 Wired	N.O	⑤	MP□-K□□P
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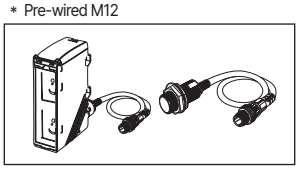
센서 메이커별 선정 일람

YAMATAKE SENSOR

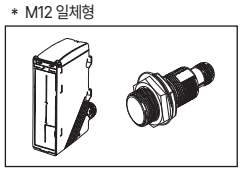
센서 종류		모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
근접센서 Proximity Sensor		FL7S-1A6W-CN08		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7S-1D6W-CN08		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7S-1W6W-CN03	NPN	Pre-Wired M12	3 Wired	N.O	①	MP□-J□□N
		FL7S-1W6W-CN03B	PNP	Pre-Wired M12	3 Wired	N.O	①	MP□-J□□P
		FL7S-2W6W-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7S-2W6W-CN03B		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7S-5W6W-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7S-5W6W-CN03B		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7S-8W6W-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7S-5W6W-CN03B		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-2J6AD-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-2K6A-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-4J6AD-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-4K6A-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-8J6AD-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-8K6A-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-2J6HD-CN03(Z)		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-2K6H-CN03(Z)		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-3J6HD-CN03(Z)		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-3K6H-CN03(Z)		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-7J6HD-CN03(Z)		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-7K6H-CN03(Z)		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-10J6HD-CN03(Z)		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-10K6H-CN03(Z)		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-3J6HD-CN(Z)		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-3K6H-CN(Z)		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-7J6HD-CN(Z)		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-7K6H-CN(Z)		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-10J6D-CN(Z)		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-10K6-CN(Z)		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-3J6HW-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-3K6HWE-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-7J6HW-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-7K6HWE-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-10J6HW-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-10K6HWE-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-3J6HW-CN03		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-3K6HWE-CN03		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-7J6HW-CN03		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-7K6HWE-CN03		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-10J6HW-CN03		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-10K6HWE-CN03		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-4J6ND-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-4K6N-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-8J6ND-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-8K6N-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-14J6ND-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-14K6N-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-24J6ND-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-24K6N-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-8J6ND-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-8K6N-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-14J6ND-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-14K6N-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-20J6ND-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-20K6N-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-4J6AD-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-4K6A-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL7M-8J6AD-CN		M12	2 Wired	N.O	①	MP□-I□□□
		FL7M-8K6A-CN		M12	2 Wired	N.C	②	MP□-I□□□
		FL2S-4J6AD-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL2S-4K6A-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL2S-4J6SD-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL2S-4K6S-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		FL2R-4J6HD-CN03		Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		FL2R-4K6H-CN03		Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□

◆ Pin map (Front view)

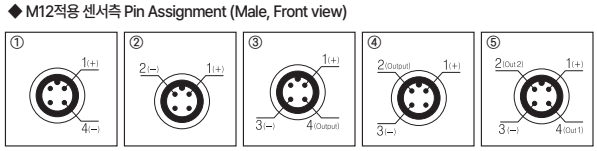
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)



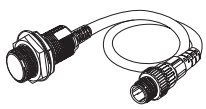
IEC 2Wired N.O | IEC 2Wired N.C | 3Wired NPN/PNP N.O | 3Wired NPN/PNP N.C | 4Wired NPN/PNP N.O

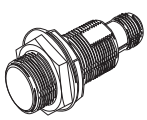
* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

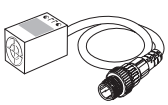
센서 메이커별 선정 일람

YAMATAKE SENSOR

센서 종류	모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
근접센서 Proximity Sensor	FL2R-4J6SD-CN03		Pre-Wired M12	2 Wired	N.O	①	
	FL2R-4K6S-CN03		Pre-Wired M12	2 Wired	N.C	②	
	FL2R-7J6HD-CN03		Pre-Wired M12	2 Wired	N.O	①	
	FL2R-7K6H-CN03		Pre-Wired M12	2 Wired	N.C	②	
	FL2R-7J6SD-CN03		Pre-Wired M12	2 Wired	N.O	①	
	FL2R-7K6S-CN03		Pre-Wired M12	2 Wired	N.C	②	
	FL2R-20J6HD-CN03		Pre-Wired M12	2 Wired	N.O	①	
	FL2R-20K6H-CN03		Pre-Wired M12	2 Wired	N.C	②	
	FL2R-20J6SD-CN03		Pre-Wired M12	2 Wired	N.O	①	
	FL2R-20K6S-CN03		Pre-Wired M12	2 Wired	N.C	②	
	FL7S-1A6W-CN08	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL7S-1D6W-CN08	PNP	Pre-Wired M12	3 Wired	N.O	③	
	FL7M-2A6-CN	NPN	M12	3 Wired	N.O	③	
	FL7M-2B6-CN	NPN	M12	3 Wired	N.C	④	
	FL7M-5A6-CN	NPN	M12	3 Wired	N.O	③	
	FL7M-5B6-CN	NPN	M12	3 Wired	N.C	④	
	FL7M-10A6-CN	NPN	M12	3 Wired	N.O	③	
	FL7M-10B6-CN	NPN	M12	3 Wired	N.C	④	
	FL7M-1P5A6-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL7M-1P5B6-CN03	NPN	Pre-Wired M12	3 Wired	N.C	④	
	FL7M-2A6-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL7M-2B6-CN03	NPN	Pre-Wired M12	3 Wired	N.C	④	
	FL7M-5A6-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL7M-5B6-CN03	NPN	Pre-Wired M12	3 Wired	N.C	④	
	FL7M-10A6-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL7M-10B6-CN03	NPN	Pre-Wired M12	3 Wired	N.C	④	
	FL7M-5A6-CN	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL7M-5B6-CN	NPN	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4A6H-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4B6H-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4D6H-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4E6H-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4A6S-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4B6S-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4D6S-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4E6S-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4A6QH-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4B6QH-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4D6QH-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4E6QH-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4A6QS-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4B6QS-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-4D6QS-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-4E6QS-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-7A6H-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-7B6H-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-7D6H-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-7E6H-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-7A6S-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-7B6S-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-7D6S-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-7E6S-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-20A6H-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-20B6H-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-20D6H-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-20E6H-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-20A6S-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-20B6S-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL2-20D6S-CN03	NPN	Pre-Wired M12	3 Wired	N.O	③	
	FL2-20E6S-CN03	PNP	Pre-Wired M12	3 Wired	N.C	④	
	FL7M-5A6P-CN	NPN	M12	4 Wired	N.O	⑤	
	FL7M-10A6P-CN	NPN	M12	4 Wired	N.O	⑤	
	FL7M-5A6P-CN03	NPN	Pre-Wired M12	4 Wired	N.O	⑤	
	FL7M-10A6P-CN03	NPN	Pre-Wired M12	4 Wired	N.O	⑤	

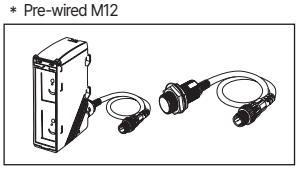




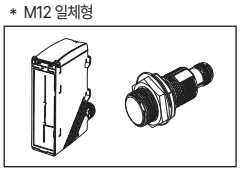


◆ Pin map (Front view)

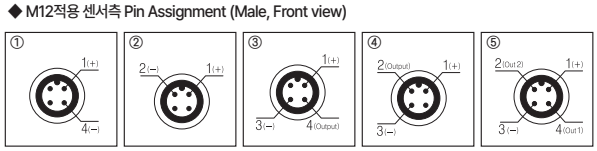
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)

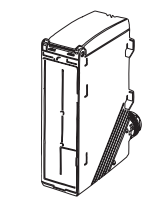
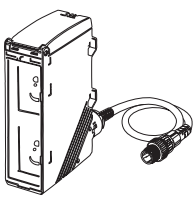


IEC 2Wired N.O　IEC 2Wired N.C　3Wired NPN/PNP N.O　3Wired NPN/PNP N.C　4Wired NPN/PNP N.O

* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

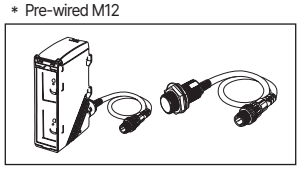
센서 메이커별 선정 일람

YAMATAKE SENSOR

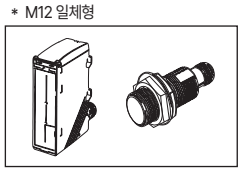
센서 종류		모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
광전센서 Photoelectric switch		HPA-T31	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-T32	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-P31	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-P32	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-D31	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-D32	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-A31	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-A32	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-T41	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-T42	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-P41	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-P42	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-D41	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-D42	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-A41	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		HPA-A42	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		HPA-T51	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-T52	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-P51	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-P52	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-D51	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-D52	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-A51	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-A52	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-T61	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-T62	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-P61	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-P62	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-D61	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-D62	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-A61	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		HPA-A62	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		HPA-T33	NPN	M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-T34	PNP	M12	4 Wired	N.O	⑤	MP□-J□□P
		HPA-P33	NPN	M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-P34	PNP	M12	4 Wired	N.O	⑤	MP□-J□□P
		HPA-T43	NPN	M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-T44	PNP	M12	4 Wired	N.O	⑤	MP□-J□□P
		HPA-P43	NPN	M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-P44	PNP	M12	4 Wired	N.O	⑤	MP□-J□□P
		HPA-T53	NPN	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-T54	PNP	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□P
		HPA-P53	NPN	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-P54	PNP	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□P
		HPA-T63	NPN	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-T64	PNP	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□P
		HPA-P63	NPN	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□N
		HPA-P64	PNP	Pre-Wired M12	4 Wired	N.O	⑤	MP□-J□□P

◆ Pin map (Front view)

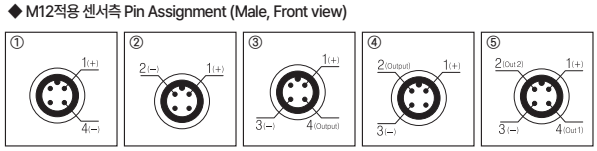
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)



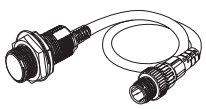
IEC 2Wired N.O | IEC 2Wired N.C | 3Wired NPN/PNP N.O | 3Wired NPN/PNP N.C | 4Wired NPN/PNP N.O

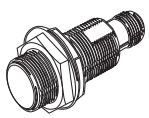
* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

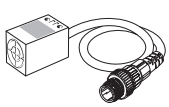
센서 메이커별 선정 일람

Autonics SENSOR

센서 종류	모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
근접센서 Proximity Sensor	PRCMT12-2DO-I	무극성	M12	2 Wired	N.O	①	MP□-I□□□
	PRCMT12-2DC-I	무극성	M12	2 Wired	N.C	②	MP□-I□□□
	PRCMT12-4DO-I	무극성	M12	3 Wired	N.O	③	MP□-I□□□
	PRCMT12-4DC-I	무극성	M12	3 Wired	N.C	④	MP□-I□□□
	PRAWT12-2DO-I	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
	PRAWT12-2DC-I	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
	PRCMT18-5DO-I	무극성	M12	2 Wired	N.O	①	MP□-I□□□
	PRCMT18-5DC-I	무극성	M12	2 Wired	N.C	②	MP□-I□□□
	PRCMT18-8DO-I	무극성	M12	2 Wired	N.O	①	MP□-I□□□
	PRCMT18-8DC-I	무극성	M12	2 Wired	N.C	②	MP□-I□□□
	PRAWT18-5DO-I	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
	PRAWT18-5DC-I	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
	PRCMT30-10DO	무극성	M12	2 Wired	N.O	①	MP□-I□□□
	PRCMT30-10DC	무극성	M12	2 Wired	N.C	②	MP□-I□□□
	PRCMT30-15DO	무극성	M12	2 Wired	N.O	①	MP□-I□□□
	PRCMT30-15DC	무극성	M12	2 Wired	N.C	②	MP□-I□□□
	PRAWT30-10DO-I	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
	PRAWT30-10DC-I	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
	PRW08-1.5DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
	PRW08-1.5DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
	PRW08-1.5DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
	PRW08-1.5DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
	PRW08-2DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
	PRW08-2DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
	PRW08-2DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
	PRW08-2DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
	PRWL08-1.5DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
	PRWL08-1.5DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
	PRWL08-1.5DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
	PRWL08-1.5DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
	PRWL08-2DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
	PRWL08-2DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
	PRWL08-2DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
	PRWL08-2DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
	PRCM12-2DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRCM12-2DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRCM12-2DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRCM12-2DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
	PRCM12-4DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRCM12-4DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRCM12-4DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRCM12-4DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
	PRW12-2DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
	PRW12-2DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
	PRW12-2DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
	PRW12-2DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
	PRW12-4DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
	PRW12-4DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
	PRW12-4DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
	PRW12-4DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
	PRCM8-5DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRCM8-5DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRCM8-5DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRCM8-5DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
	PRCM8-8DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRCM8-8DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRCM8-8DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRCM8-8DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
	PRCML18-5DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRCML18-5DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRCML18-5DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRCML18-5DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
	PRCML18-8DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRCML18-8DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRCML18-8DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRCML18-8DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P

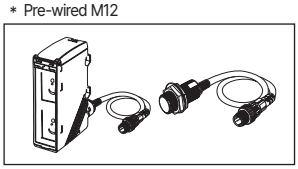




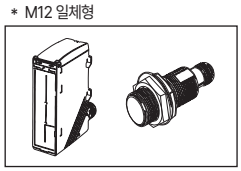


◆ Pin map (Front view)

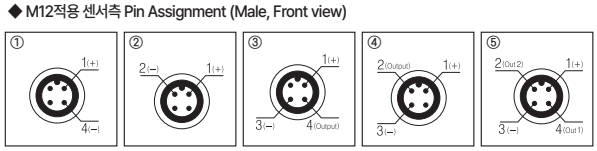
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)

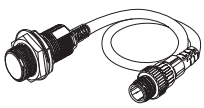
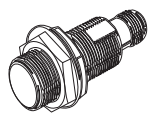
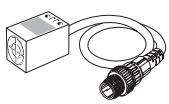


IEC 2Wired N.O | IEC 2Wired N.C | 3Wired NPN/PNP N.O | 3Wired NPN/PNP N.C | 4Wired NPN/PNP N.O

* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

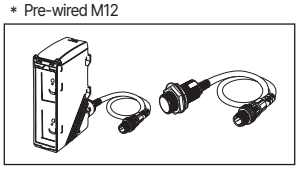
센서 메이커별 선정 일람

Autonics SENSOR

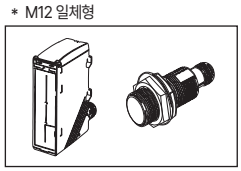
센서 종류		모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용
								Qport Board
근접센서 Proximity Sensor		PRCML18-8DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		PRCML18-8DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
		PRW18-5DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRW18-5DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRW18-5DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRW18-5DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRW18-8DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRW18-8DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRW18-8DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRW18-8DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRWL18-5DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRW1L8-5DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRWL18-5DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRW1L8-5DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRWL18-8DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRW1L8-8DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRWL18-8DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRW1L8-8DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRCM30-10DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		PRCM30-10DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
		PRCM30-10DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		PRCM30-10DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
		PRCM30-15DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		PRCM30-15DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
		PRCM30-15DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		PRCM30-15DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
		PRCML30-10DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		PRCML30-10DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
		PRCML30-10DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		PRCML30-10DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
		PRCML30-15DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		PRCML30-15DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
		PRCML30-15DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		PRCML30-15DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
		PRW30-10DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRW30-10DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRW30-10DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRW30-10DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRW30-15DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRW30-15DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRW30-15DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRW30-15DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRWL30-10DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRWL30-10DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRWL30-10DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRWL30-10DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRWL30-15DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRWL30-15DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRWL30-15DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRWL30-15DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRDW12-4DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRDW12-4DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRDW12-4DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRDW12-4DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRDW12-8DN	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		PRDW12-8DN2	NPN	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□N
		PRDW12-8DP	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		PRDW12-8DP2	PNP	Pre-Wired M12	3 Wired	N.C	④	MP□-J□□P
		PRDW18-7DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		PRDW18-7DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
		PRDW18-7DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		PRDW18-7DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
		PRDW18-14DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		PRDW18-14DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
		PRDW18-14DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
		PRDW18-14DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P

◆ Pin map (Front view)

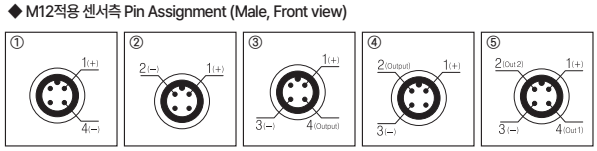
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)

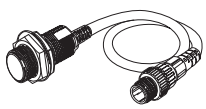


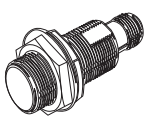
IEC 2Wired N.O | IEC 2Wired N.C | 3Wired NPN/PNP N.O | 3Wired NPN/PNP N.C | 4Wired NPN/PNP N.O

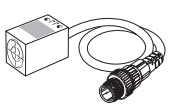
* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

센서 메이커별 선정 일람

센서 종류	모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
근접센서 Proximity Sensor	PRDWL18-7DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRDWL18-7DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRDWL18-7DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRDWL18-7DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P
	PRDWL18-14DN	NPN	M12	3 Wired	N.O	③	MP□-J□□N
	PRDWL18-14DN2	NPN	M12	3 Wired	N.C	④	MP□-J□□N
	PRDWL18-14DP	PNP	M12	3 Wired	N.O	③	MP□-J□□P
	PRDWL18-14DP2	PNP	M12	3 Wired	N.C	④	MP□-J□□P

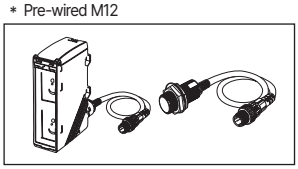




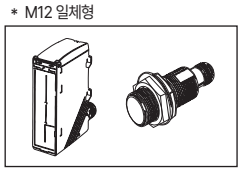


◆ Pin map (Front view)

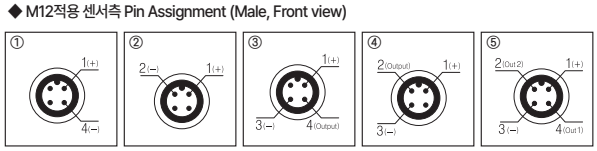
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)

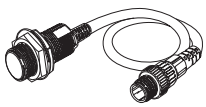
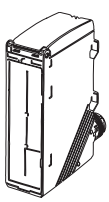
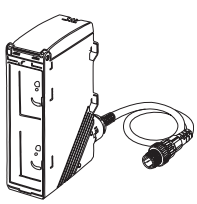


IEC 2Wired N.O　IEC 2Wired N.C　3Wired NPN/PNP N.O　3Wired NPN/PNP N.C　4Wired NPN/PNP N.O

* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

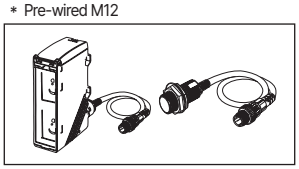
센서 메이커별 선정 일람

SUNX SENSOR

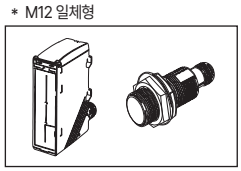
센서 종류		모델	극성	M12콘넥터 형식	Connection type	Connection mode	Connection	적용 Qport Board
근접센서 Proximity Sensor		GX-12MU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-12MUB-J	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		GX-18MU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-18MUB-J	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		GX-30MU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-30MUB-J	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		GX-12MLU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-12MLUB-J	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		GX-18MLU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-18MLUB-J	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		GX-30MLU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-30MLUB-J	무극성	Pre-Wired M12	2 Wired	N.C	②	MP□-I□□□
		GX-F12MU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-F18MU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-F30MU-J	무극성	Pre-Wired M12	2 Wired	N.O	①	MP□-I□□□
		GX-N12M-J	NPN	Pre-Wired M12	2 Wired	N.O	①	MP□-J□□N
		GX-N12MB-J	NPN	Pre-Wired M12	2 Wired	N.C	②	MP□-J□□N
		GX-N18M-J	NPN	Pre-Wired M12	2 Wired	N.O	①	MP□-J□□N
		GX-N18MB-J	NPN	Pre-Wired M12	2 Wired	N.C	②	MP□-J□□N
		GX-N30M-J	NPN	Pre-Wired M12	2 Wired	N.O	①	MP□-J□□N
		GX-N30MB-J	NPN	Pre-Wired M12	2 Wired	N.C	②	MP□-J□□N
		GX-N12ML-J	NPN	Pre-Wired M12	2 Wired	N.O	①	MP□-J□□N
		GX-N12MLB-J	NPN	Pre-Wired M12	2 Wired	N.C	②	MP□-J□□N
		GX-N18ML-J	NPN	Pre-Wired M12	2 Wired	N.O	①	MP□-J□□N
		GX-N18MLB-J	NPN	Pre-Wired M12	2 Wired	N.C	②	MP□-J□□N
		GX-N30ML-J	NPN	Pre-Wired M12	2 Wired	N.O	①	MP□-J□□N
		GX-N30MLB-J	NPN	Pre-Wired M12	2 Wired	N.C	②	MP□-J□□N
광전센서 Photoelectric switch		CX-411-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-411-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-412-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-412-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-491-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-491-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-493-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-493-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-481-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-481-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-482-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-482-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-424-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-424-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-421-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-421-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-422-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-422-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		CX-423-J	NPN	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□N
		CX-423-P-J	PNP	Pre-Wired M12	3 Wired	N.O	③	MP□-J□□P
		EQ-34-J	NPN	M12	3 Wired	N.O	③	MP□-J□□N
		EQ-34-PN-J	PNP	M12	3 Wired	N.O	③	MP□-J□□P

◆ Pin map (Front view)

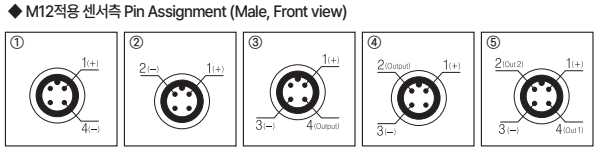
* Pre-wired M12



* M12 일체형



◆ M12적용 센서측 Pin Assignment (Male, Front view)

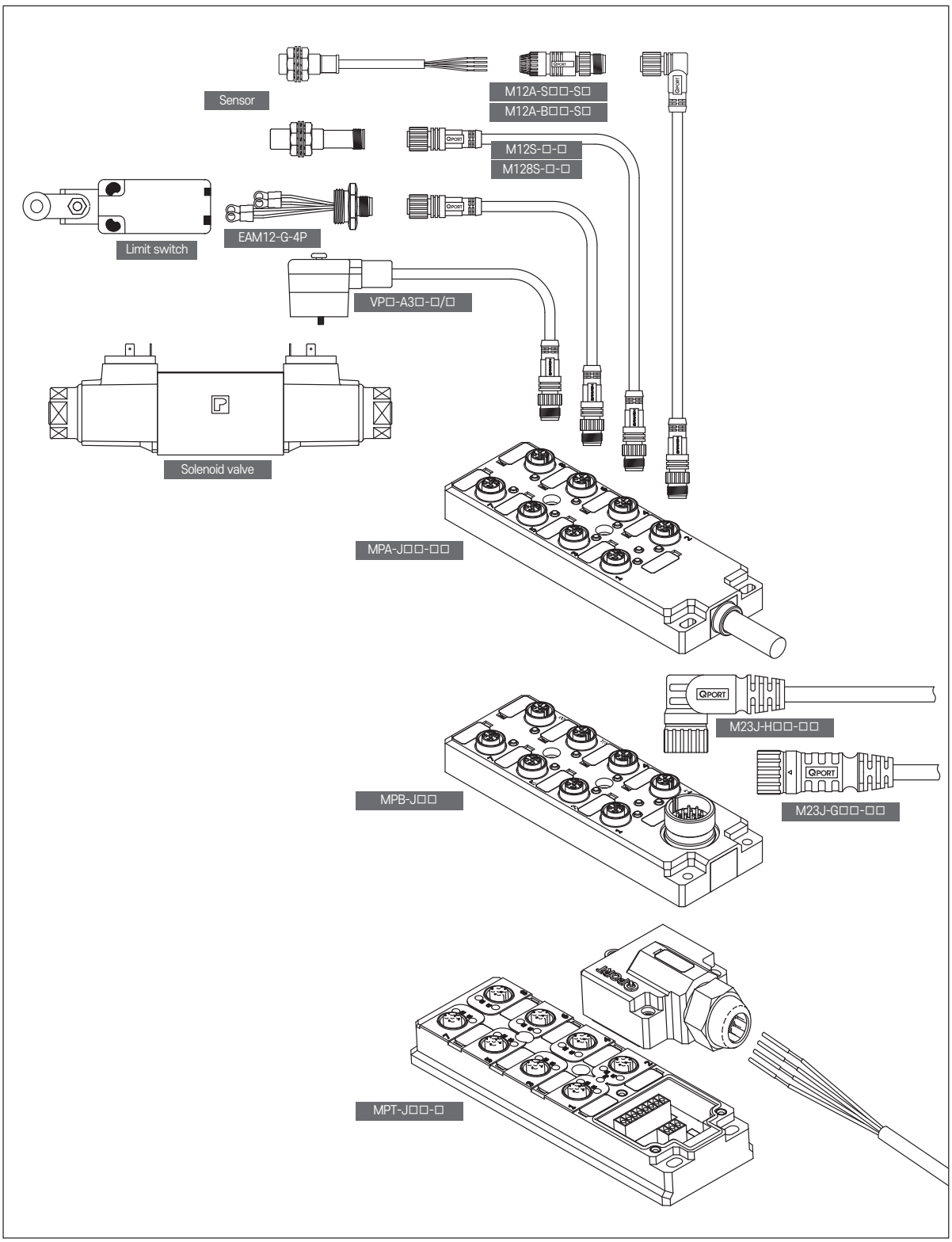


IEC 2Wired N.O　IEC 2Wired N.C　3Wired NPN/PNP N.O　3Wired NPN/PNP N.C　4Wired NPN/PNP N.O

* 센서메이커에 따라 위 형식을 N.C사양에도 적용함

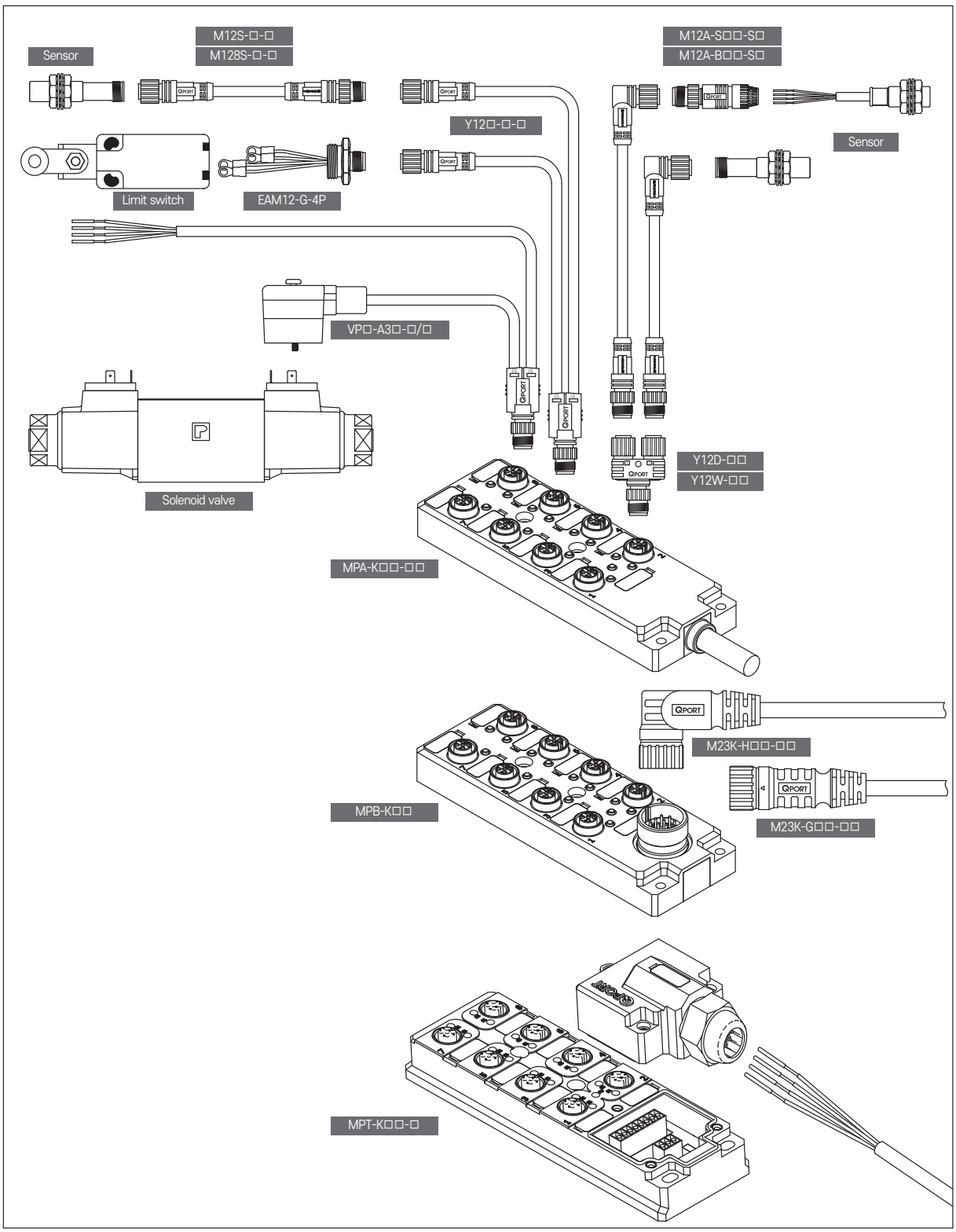
접속 Application

■ MPT 시리즈 / MPA 시리즈 / MPB 시리즈 1신호형 보드의 접속예



접속 Application

■ MPT 시리즈 / MPA 시리즈 / MPB 시리즈 2신호형 보드의 접속예



MEMO

MEMO

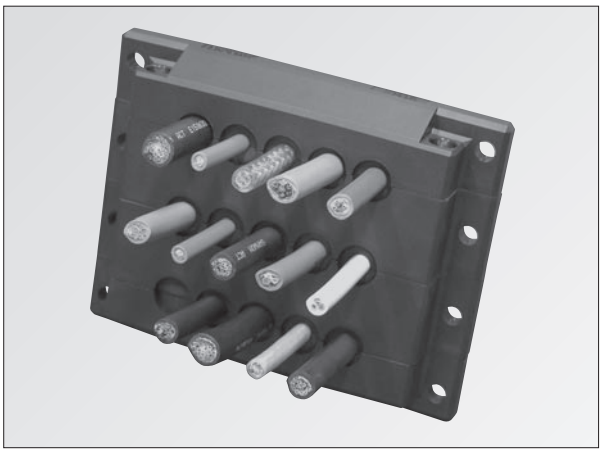
Cable entry system

Cable entry system

● Cable entry system	C - 84
● Cable entry ES14 시리즈 (외경 13.5mm이하/18.5mm이하 케이블적용)	C - 86
● Cable entry ES23 시리즈 (외경 22.5mm이하 케이블적용)	C - 88
● Cable entry ES28 시리즈 (외경 27.5mm이하 케이블적용)	C - 89

Cable entry system 케이블 엔트리

제어반 외부로 케이블 인출시 사용하는 케이블 엔트리 시스템



■ 특장점

- 본체가 분리 구조라 케이블에 콘넥터 처리 및 가공이 되어 있어도 조립이 가능하여 현장 하네스 작업이 불필요
- 케이블과 플레이트, 제어반의 방수등급은 IP54입니다
- 심플한 사이즈로 작은 면적에 다수의 케이블 및 Flexible 인출 가능
- 플레이트본체와 패킹은 별도 판매

■ 재질

Plate	PA6
Packing	EDPM
Plate pad	고무 Rubber
Bolt	Steel
Nut	Steel

"패킹의 조합으로 다수의 케이블이나
Flexible을 제어반에서 빼낼때 사용하는 케이블 인출 시스템"





■ Model 구성

- Body

ES14 – 05 B1 / V
❶ ❷ ❸ ❹

❶ 시리즈명
ES14 : 13.5/18.5mm이하 Cable entry
ES23 : 22.5mm이하 Cable entry
ES28 : 27.5mm이하 Cable entry

❷ 홀수
05 : 5홀 (ES14)
10 : 10홀 (ES14)
15 : 15홀 (ES14)
04 : 4홀 (ES23, ES28)
08 : 8홀 (ES23)
02 : 2홀 (ES28)

❸ 19mm홀수 (ES14만적용)
무표시 : 19mm 없음
B1 : 19mm 1ea 구성
B2 : 19mm 2ea 구성
B3 : 19mm 3ea 구성
＊ 19mm홀은 14mm홀 2ea를 차지함

❹ 색상
무표시 : 검정
V : 아이보리

- Packing

EP 14 00
❶ ❷ ❸

❶ 시리즈명
EP : Entry packing

❷ 적용 Body
14 : ES14 13.5mm이하 적용
19 : ES14 18.5mm이하 적용
23 : ES23 적용
28 : ES28 적용

❸ 적용가능 케이블 외경
＊ Model 선정 참조

Cable entry system 케이블 엔트리

제어반 외부로 케이블 인출시 사용하는 케이블 엔트리 시스템

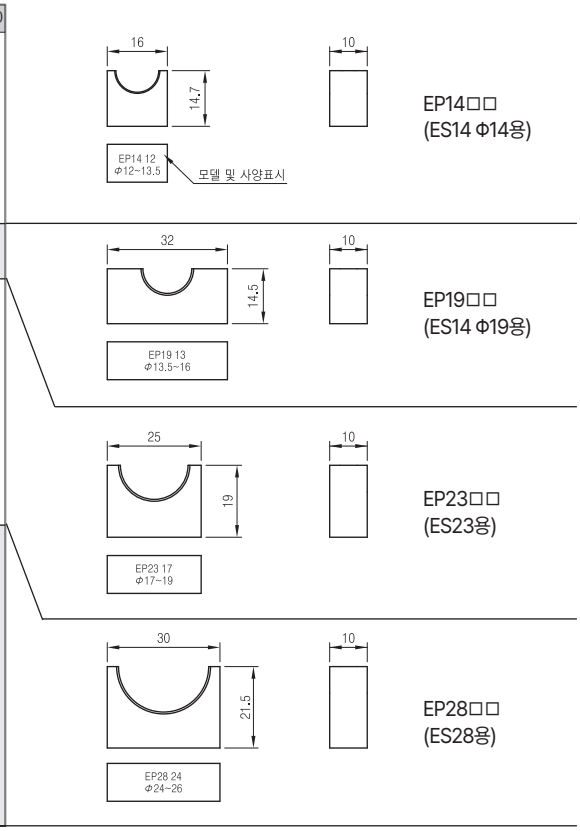
■ Model 선정

- Body

Model		케이블외경	Hole수	열수	열수	제품치수 (W * H mm)	취부치수(mm) W*H (H2*H3)
검정색	아이보리색						
ES14-05	ES14-05/V	13.5mm이하	5	1	EP14□□	142 * 50	128 * 30
ES14-10	ES14-10/V		10	2		142 * 80	128 * 30 * 60
ES14-15	ES14-15/V		15	3		142 * 110	128 * 30 * 60 * 90
ES14-05B1	ES14-05B1/V	13.5/18.5mm이하 (18.5mm 1hole)	4	1	13.5mm : EP14□□ 18.5mm : EP19□□	142 * 50	128 * 30
ES14-10B1	ES14-10B1/V		9	2		142 * 80	128 * 30 * 60
ES14-15B1	ES14-15B1/V		14	3		142 * 110	128 * 30 * 60 * 90
ES14-05B2	ES14-05B2/V	13.5/18.5mm이하 (18.5mm 2hole)	3	1		142 * 50	128 * 30
ES14-10B2	ES14-10B2/V		8	2		142 * 80	128 * 30 * 60
ES14-15B2	ES14-15B2/V		13	3		142 * 110	128 * 30 * 60 * 90
ES14-10B3	ES14-10B3/V	13.5/18.5mm이하 (18.5mm 3hole)	7	2		142 * 80	128 * 30 * 60
ES14-15B3	ES14-15B3/V		12	3		142 * 110	128 * 30 * 60 * 90
ES23-04	ES23-04/V	22.5mm이하	4	1	EP23□□	173 * 60	159 * 30
ES23-08	ES23-08/V		8	2		173 * 98	159 * 34 * 68
ES28-02	ES28-02/V	27.5mm이하	2	1	EP28□□	118 * 56	104 * 32
ES28-04	ES28-04/V		4	2		118 * 100	104 * 38 * 76

- Packing

Model	적용ES 시리즈	적용케이블 외경	포장단위 (pack)주)
EP1400	ES14 Φ14용	막음용	1pack (10set)
EP1404		Φ4 ~ Φ5	
EP1405		Φ5 ~ Φ6	
EP1406		Φ6 ~ Φ8	
EP1408		Φ8 ~ Φ10	
EP1410		Φ10 ~ Φ12	
EP1412		Φ12 ~ Φ13.5	
EP1913	ES14 Φ19용	Φ13.5~ Φ16	1pack (5set)
EP1916		Φ16 ~ Φ18.5	
EP2300	ES23	막음용	1pack (5set)
EP2307		Φ7 ~ Φ9	
EP2309		Φ9 ~ Φ11	
EP2311		Φ11 ~ Φ13	
EP2313		Φ13 ~ Φ15	
EP2315		Φ15 ~ Φ17	
EP2317		Φ17 ~ Φ19	
EP2319		Φ19 ~ Φ21	
EP2321		Φ21 ~ Φ22.5	
EP2800	ES28	막음용	1pack (5set)
EP2808		Φ8 ~ Φ10	
EP2810		Φ10 ~ Φ12	
EP2812		Φ12 ~ Φ14	
EP2814		Φ14 ~ Φ16	
EP2816		Φ16 ~ Φ18	
EP2818		Φ18 ~ Φ20	
EP2820		Φ20 ~ Φ22	
EP2822		Φ22 ~ Φ24	
EP2824		Φ24 ~ Φ26	
EP2826		Φ26 ~ Φ27.5	

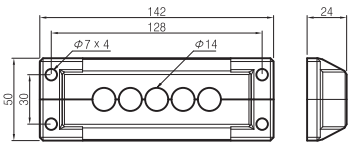


주) ● 도면과 같은 제품이 2개가 1set이며, 홀당 1set가 필요합니다.
● 판매는 포장단위로 판매합니다
● 패킹에 모델 및 적용가능 케이블 외경이 표시되어 있습니다.

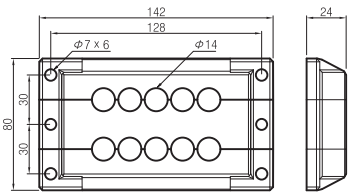
케이블 엔트리 ES14 시리즈

외경 13.5mm이하 / 18.5mm이하 케이블 적용

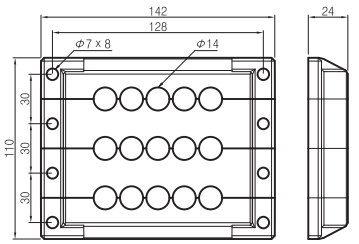
■ 외관도 (13.5㎜ / 18.5㎜이하 제품군)



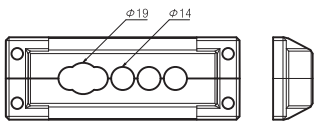
ES14-05



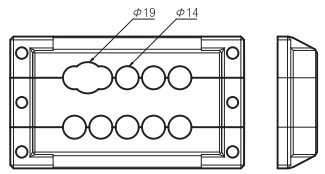
ES14-10



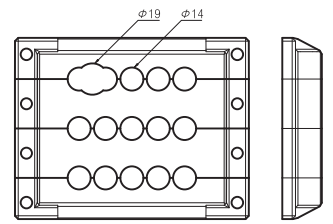
ES14-15



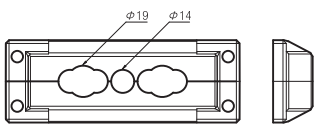
ES14-05 B1



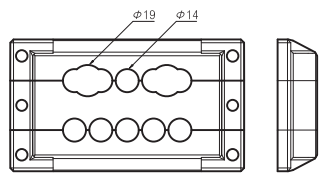
ES14-10 B1



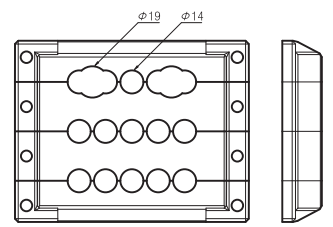
ES14-15 B1



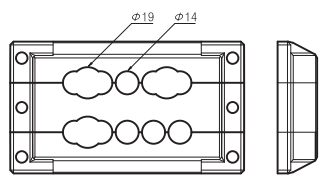
ES14-05 B2



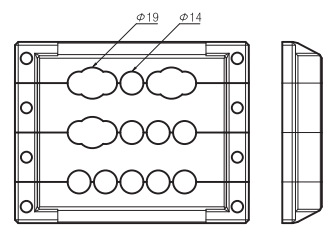
ES14-10 B2



ES14-15 B2



ES14-10 B3

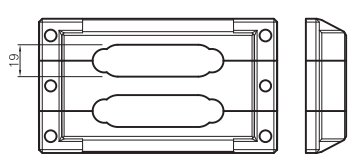


ES14-15 B3

■ ES14주문제작형

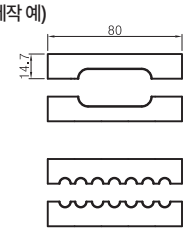
* ES14제품은 우측도면과 같이 홀과 홀사이의 칸막이가 없는 제품으로 가공하여 플렛케이블이나 외경이 적은 케이블 다수를 적용가능한 패킹을 주문제작형으로 제작이 가능합니다.

주문형식 > 1열 : ES14-05/OM
2열 : ES14-10/OM
3열 : ES14-15/OM
패킹 : 상담 후 주문제작



ES14-10/OM

제작 예)



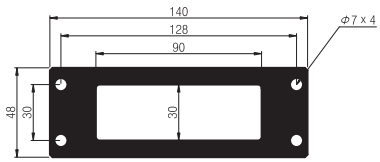
플렛케이블용

6mm 7ea용

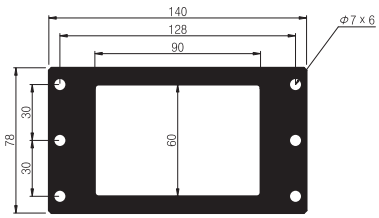
케이블 엔트리 ES14 시리즈

외경 13.5mm이하 / 18.5mm이하 케이블 적용

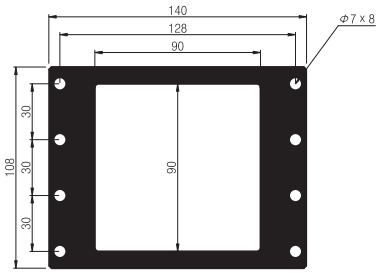
■ 플레이트 패드 치수도 (13.5㎜ / 18.5㎜이하 제품군)



ES14-05□

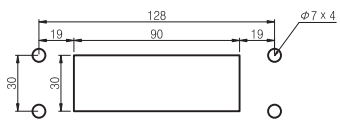


ES14-10□

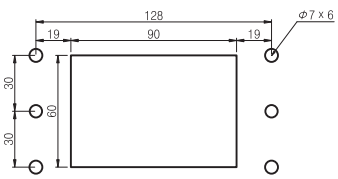


ES14-15□

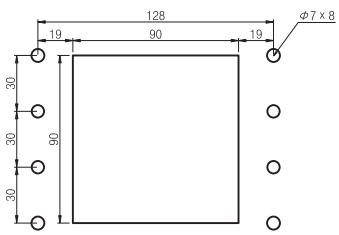
■ 가공 치수도 (13.5㎜ / 18.5㎜이하 제품군)



ES14-05□



ES14-10□

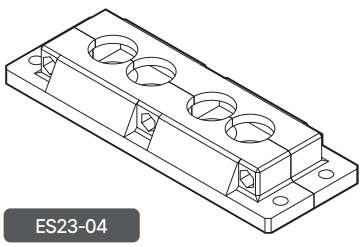


ES14-15□

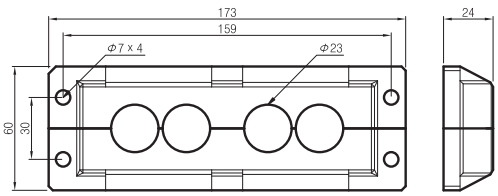
케이블 엔트리 ES23 시리즈

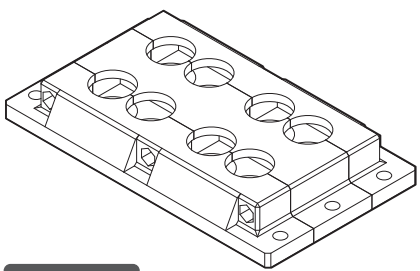
외경 22.5mm이하 케이블 적용

■ 외관도

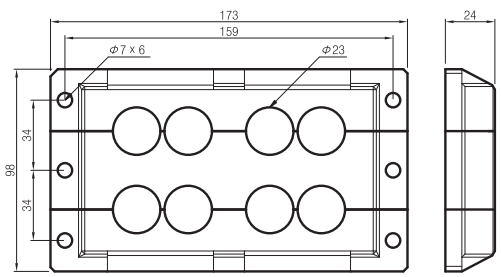


ES23-04

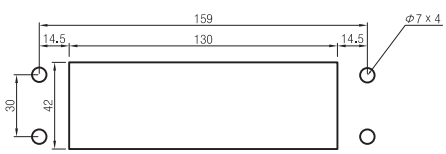




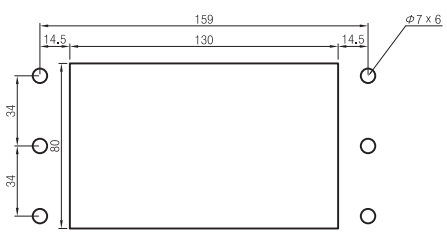
ES23-08



■ 가공 치수도

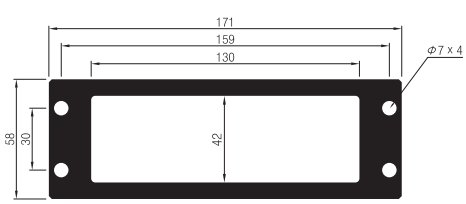


ES23-04

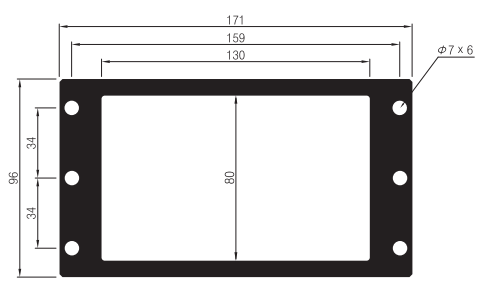


ES23-08

■ 플레이트 패드 치수도



ES23-04

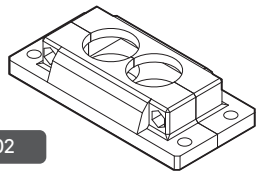


ES23-08

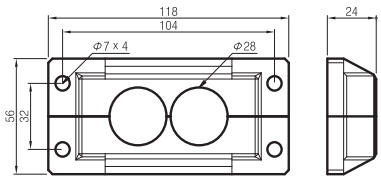
케이블 엔트리 ES28 시리즈

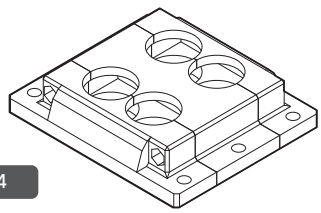
외경 27.5mm이하 케이블 적용

■ 외관도

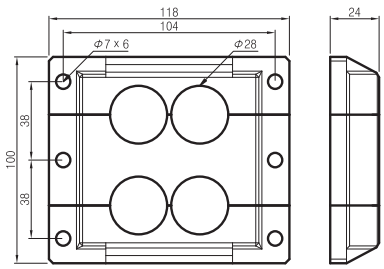


ES28-02

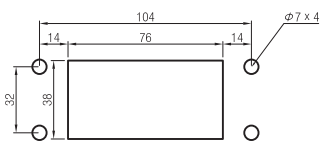




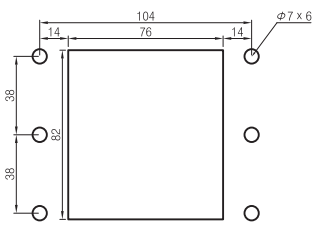
ES28-04



■ 가공 치수도

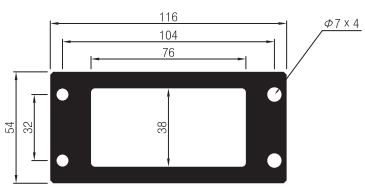


ES28-02

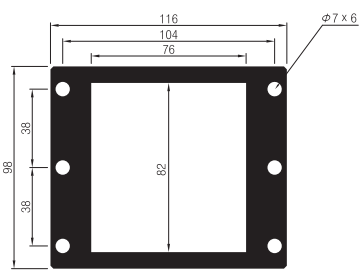


ES28-04

■ 플레이트 패드 치수도

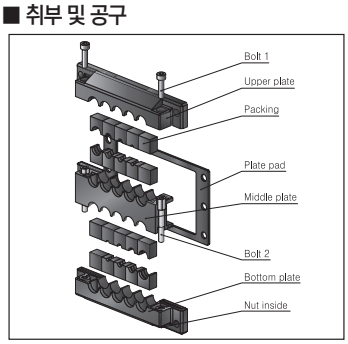


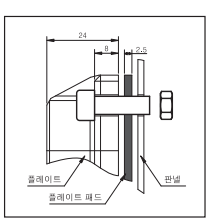
ES28-02



ES28-04

■ 취부 및 공구





※ 취부볼트는 M6을 사용하여 주시고 길이는 판넬의 두께를 참고하여 선정해 주십시요.
※ 조립을 위해서는 8mm 스패너 혹은 복스, 4mm렌치가 필요합니다.
※ ES14-05□, ES23-04, ES28-02는 4mm렌치 만으로 조립이 가능합니다.
(위의 취부 볼트, 너트, 조립공구는 제공되지 않습니다.)

MEMO