

FEATURE

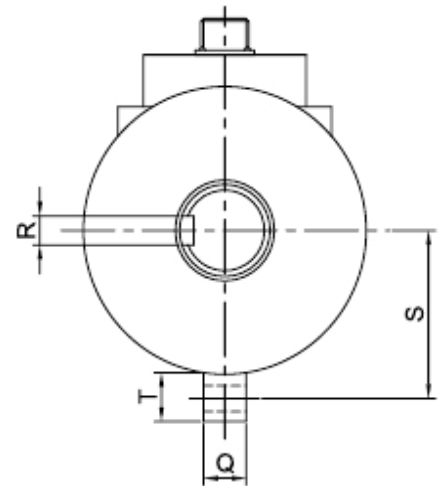
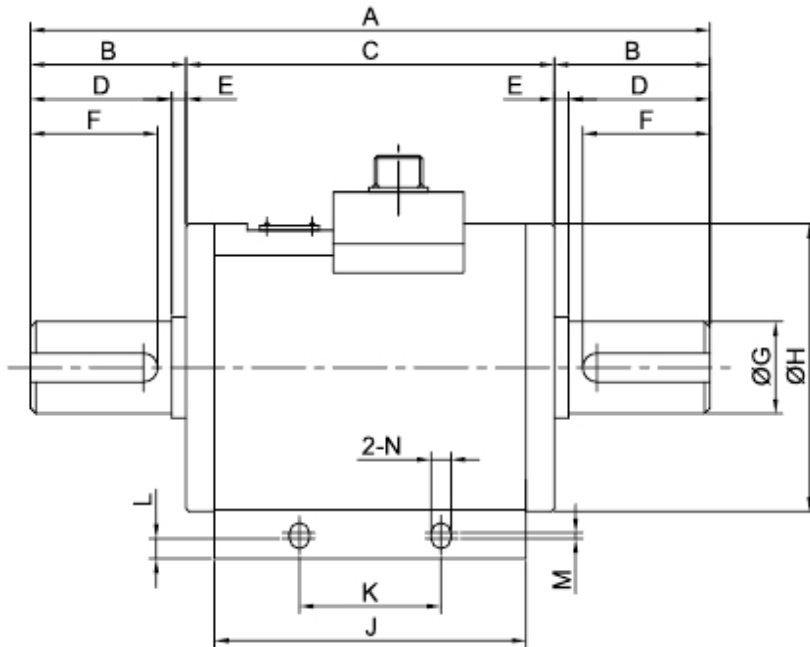
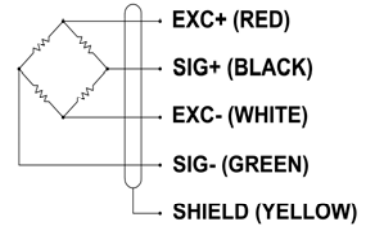
- .샤프트 타입의 회전형 접촉식 토크센서
- .회전하는 기기의 정적,동적 토크측정 및 RPM(옵션) 측정
- .모터 부하테스트, 볼트 체결력, 감속기, 자동차 부품등의 토크측정
- .고용량 주문제작 가능 : 1000kg'f.m, 2000kgf.m, 3000kgf.m

SPECIFICATION

MODEL	TCR
Rated capacity (R.C.)	1, 2, 5, 10, 20, 50, 100, 200, 300, 500kgf·m
Rated output (R.O.)	1.5 ± 0.4mV/V
Non-linearity	≤ 0.3% R.O.
Hysteresis	≤ 0.3% R.O.
Non-repeatability	≤ 0.3% R.O.
Terminal resistance, input	350Ω ± 1%
Terminal resistance, output	350Ω ± 1%
Insulation resistance	> 1000MΩ@30V DC
Temp. effect on rated output	≤ 0.1% LOAD/10℃
Temp. effect on zero balance	≤ 0.1% R.O./10℃
Temp. range compensated	-10 to +60℃
Excitation Voltage	5V,10V DC
Safe overload	150% R.C.
Cable	φ 7 shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	D	E	F	φG	φH	J	K	L	M	N	Q	R	T	S	R.P.M
1, 2, 5kgf·m	203	43	117	38	5	35	18	84	101	50	7	2	7	15	5x5	17	50.4	4500
10, 20 kgf·m	240	55	130	50	5	45	32	100	110	50	7	2	7	15	10x8	17	58.5	4000
50, 100kgf·m	340	95	150	90	5	85	47	118	130	60	8	2	9	17	12x8	20	69.5	3000
200, 300kgf·m	360	106	148	100	6	95	63	131	128	90	8	2	9	17	18x11	20	76	2900
500kgf·m	430	125	180	115	10	105	73	160	150	70	11	3	10.5	20	20x12	25	92	2000

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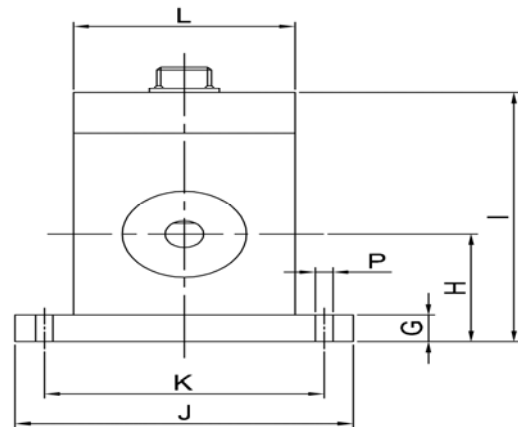
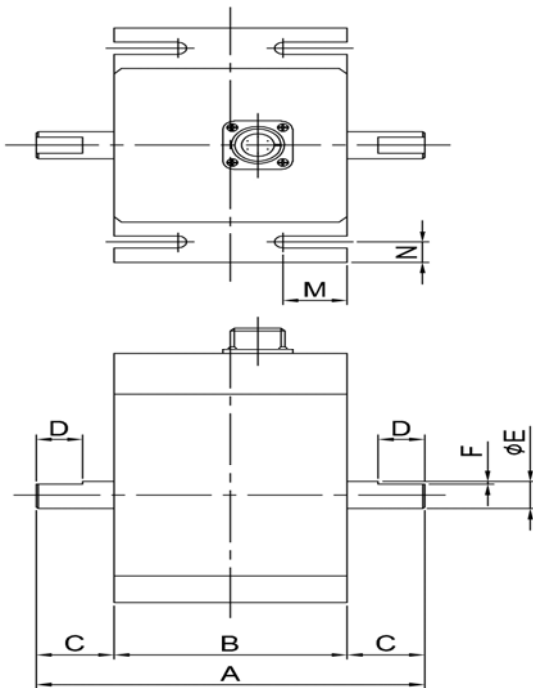
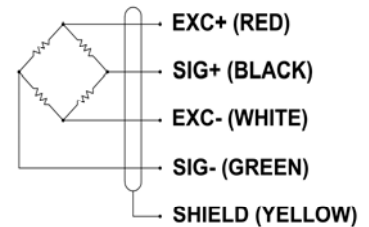
- 샤프트 타입의 회전형 소형 접촉식 토크센서
- 회전하는 기기의 정적, 동적 토크측정
- 컴팩트한 디자인으로 미세 토크측정
- 모터 부하테스트, 볼트 체결력, 스프링, 힌지 등 토크측정

SPECIFICATION

MODEL	TCS
Rated capacity (R.C.)	5, 10, 20, 50, 100, 200, 500, 1000 kgf·cm
Rated output (R.O.)	1.5 ± 0.4mV/V (5,10KC : 1.0±0.2mV/V)
Non-linearity	≤ 0.3% R.O.
Hysteresis	≤ 0.3% R.O.
Non-repeatability	≤ 0.3% R.O.
Terminal resistance, input	350Ω ± 1%
Terminal resistance, output	350Ω ± 1%
Insulation resistance	> 1000MΩ@30V DC
Temp. effect on rated output	≤ 0.1% LOAD/10℃
Temp. effect on zero balance	≤ 0.1% R.O./10℃
Temp. range compensated	-10 to 60℃
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	φ 7 shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	D	φE	F	G	H	I	J	K	L	M	N	P
5, 10kgf·cm	96	60	18	12	8	1	10	40	92.5	87	72	57	16.5	7.5	4.5
20, 50 kgf·cm	100	60	20	12	10	1	10	40	92.5	87	72	57	16.5	7.5	4.5
100, 200kgf·cm	120	76	22	15	18	5x5	10	40	92.5	87	72	57	20	7.5	4.5
500, 1000kgf·cm	146	76	35	20	20	6x6	10	40	92.5	97	82	67	20	7.5	5.5

FEATURE

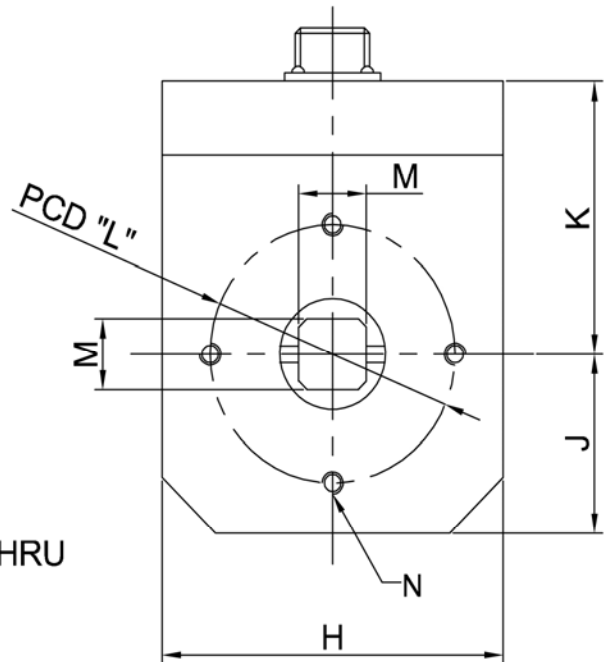
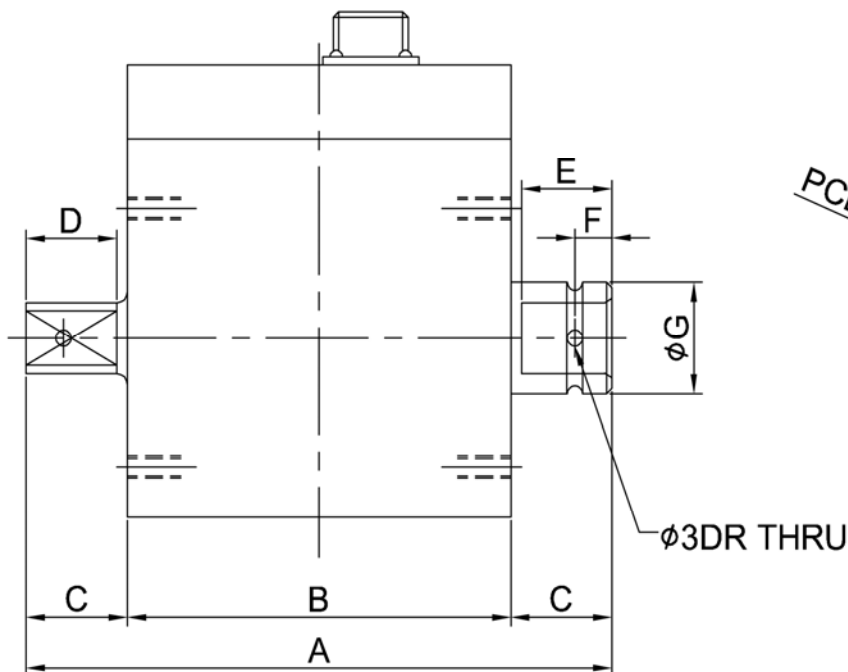
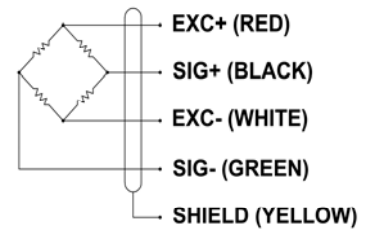
- . 소켓렌치 타입 회전형 토크센서
- . 볼트 또는 너트의 조임과 풀림 토크측정
- . 토크렌치 교정에 사용

SPECIFICATION

MODEL	TCSW
Rated capacity (R.C.)	20, 50, 100, 200, 500, 1000, 2000 kgf·cm
Rated output (R.O.)	$1.5 \pm 0.4\text{mV/V}$
Non-linearity	$\leq 0.3\%$ R.O.
Hysteresis	$\leq 0.3\%$ R.O.
Non-repeatability	$\leq 0.3\%$ R.O.
Terminal resistance, input	$350\Omega \pm 1\%$
Terminal resistance, output	$350\Omega \pm 1\%$
Insulation resistance	$> 1000\text{M}\Omega @ 30\text{V DC}$
Temp. effect on rated output	$\leq 0.1\%$ LOAD/ 10°C
Temp. effect on zero balance	$\leq 0.1\%$ R.O./ 10°C
Temp. range compensated	-10 to 60°C
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	$\phi 7$ shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	Socket size	A	B	C	D	E	F	ϕG	H	J	K	ϕL	M	N
20, 50 kgf·cm	1/4"	85	60	12.5	11	11	4	14	57	30	52.5	42	6.35	2x4-M4TAP DP8
100, 200 kgf·cm	3/8"	93	63	15	13	13	5.5	17	57	30	52.5	42	9.53	2x4-M4TAP DP8
500 kgf·cm	1/2"	110	72	19	17	17	7	20	64	32	48.5	46	12.7	2x4-M4TAP DP8
1000, 2000 kgf·cm	3/4"	123	75	24	21	21	10	34	84	41	57.5	68	19.1	2x4-M5TAP DP10

FEATURE

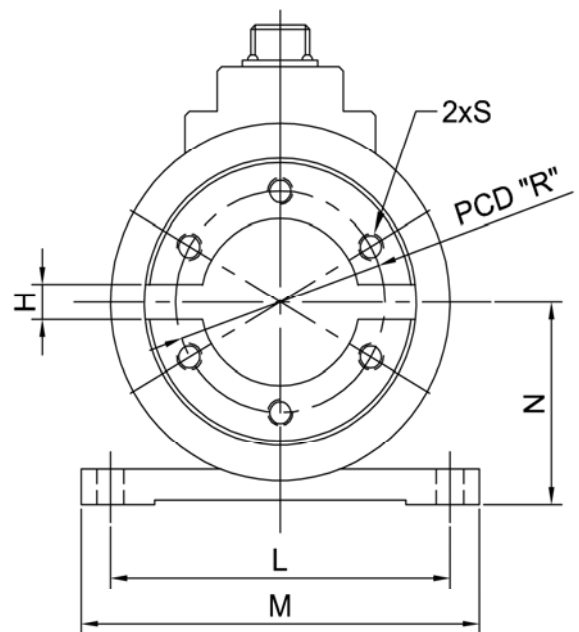
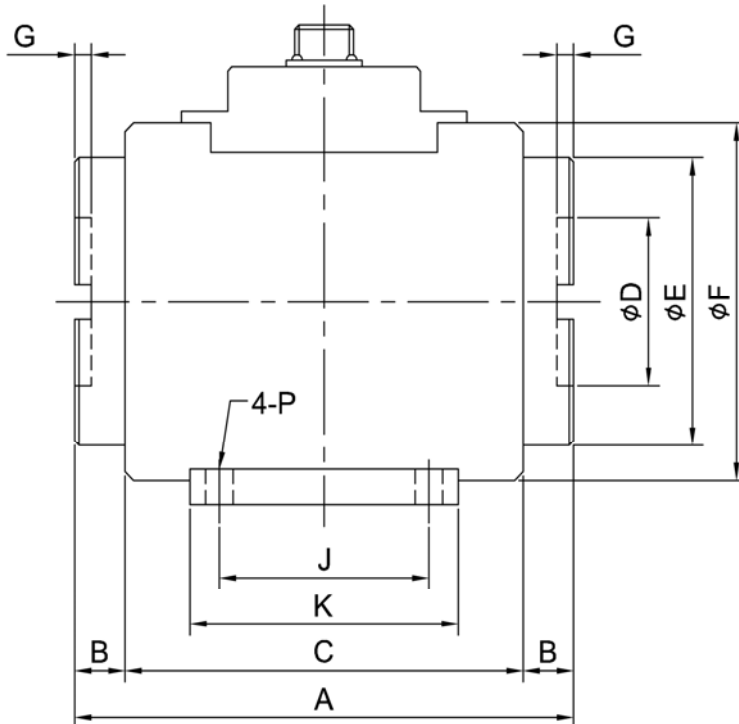
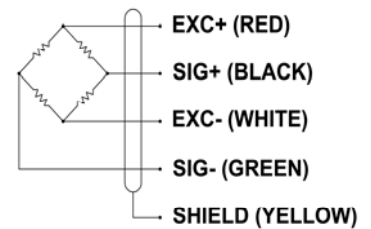
- 플랜지 타입의 회전식 토크센서
- 회전 장비의 정적 및 동적 토크 측정
- 자동차 부품 생산라인의 토크측정, 교반기, 볼트 체결력

SPECIFICATION

MODEL	TRF
Rated capacity (R.C.)	5, 10, 20kgf·m
Rated output (R.O.)	1.5 ± 0.4mV/V
Non-linearity	≤ 0.3% R.O.
Hysteresis	≤ 0.3% R.O.
Non-repeatability	≤ 0.3% R.O.
Terminal resistance, input	350Ω ± 1%
Terminal resistance, output	350Ω ± 1%
Insulation resistance	> 1000MΩ@30V DC
Temp. effect on rated output	≤ 0.1% LOAD/10°C
Temp. effect on zero balance	≤ 0.1% R.O./10°C
Temp. range compensated	-10 to +60°C
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	φ7 shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	φD	φE	φF	G	H	J	K	L	M	N	φP	φR	S
5, 10, 20kgf·m	119	12	95	38	65	81	2.5	8	50	64	81	95	46	6.5	50	6-M6 DP15

FEATURE

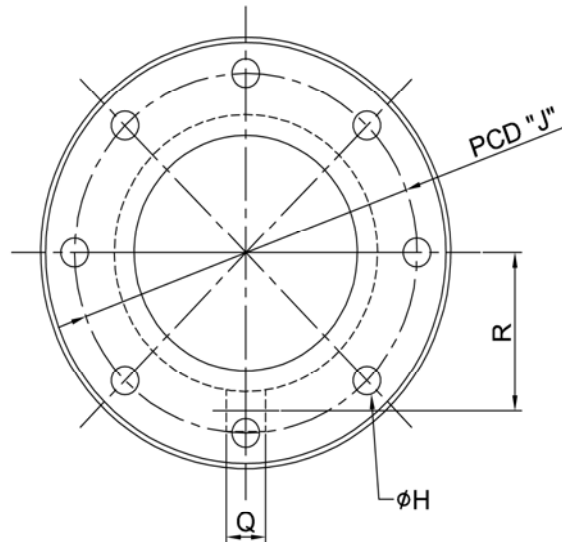
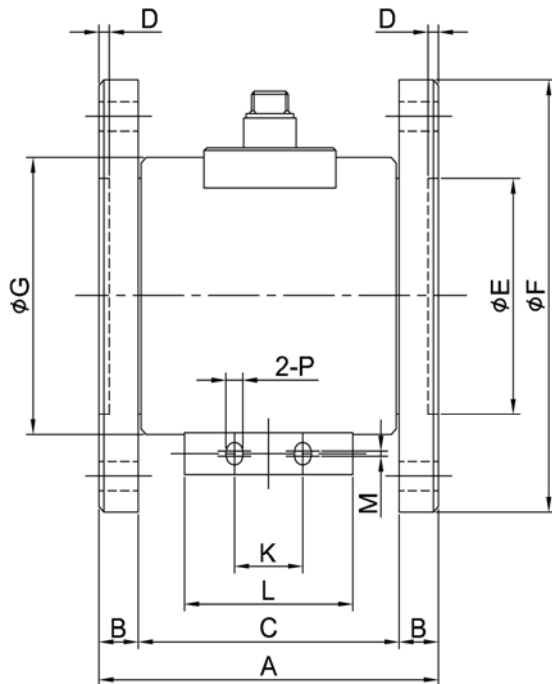
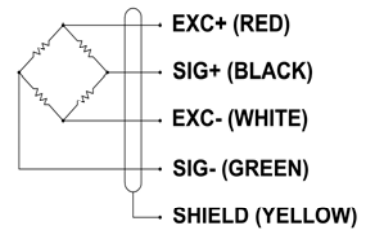
- . 플랜지 타입의 회전형 토크센서
- . 회전하는 기기의 정적, 동적 토크 측정
- . 자동차 부품 생산라인, 교반기, 볼트 체결력 등 토크측정

SPECIFICATION

MODEL	TRFF
Rated capacity (R.C.)	20kgf·m
Rated output (R.O.)	$1.5 \pm 0.4\text{mV/V}$
Non-linearity	$\leq 0.3\% \text{ R.O.}$
Hysteresis	$\leq 0.3\% \text{ R.O.}$
Non-repeatability	$\leq 0.3\% \text{ R.O.}$
Terminal resistance, input	$350\Omega \pm 1\%$
Terminal resistance, output	$350\Omega \pm 1\%$
Insulation resistance	$> 1000\text{M}\Omega @ 30\text{V DC}$
Temp. effect on rated output	$\leq 0.1\% \text{ LOAD}/10^\circ\text{C}$
Temp. effect on zero balance	$\leq 0.1\% \text{ R.O.}/10^\circ\text{C}$
Temp. range compensated	$-10 \text{ to } 60^\circ\text{C}$
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	$\phi 7$ shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	D	ϕE	ϕF	ϕG	ϕH	J	K	L	M	P	Q	R
20kgf·m	129	15	99	4	65	128	85	6- $\phi 6.6$	105	26	64	2	6.5	12	49.5

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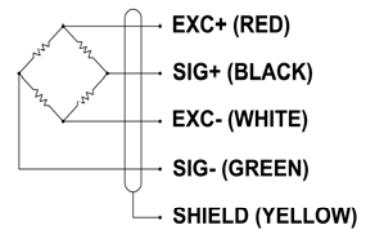
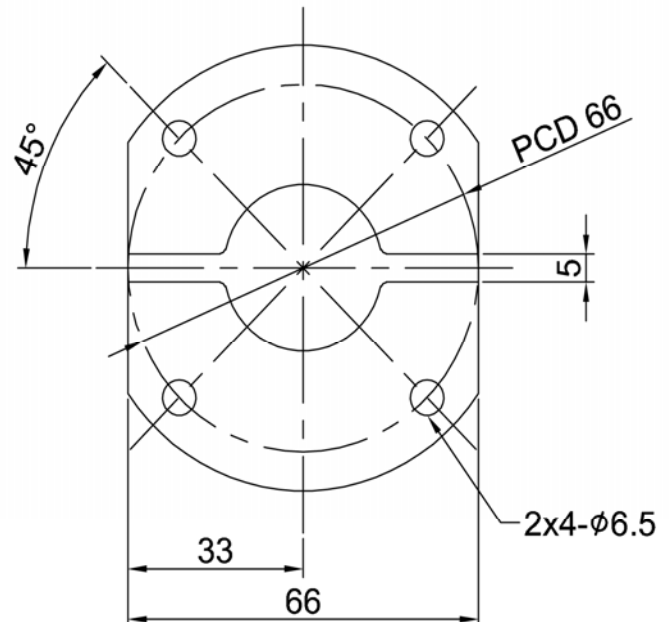
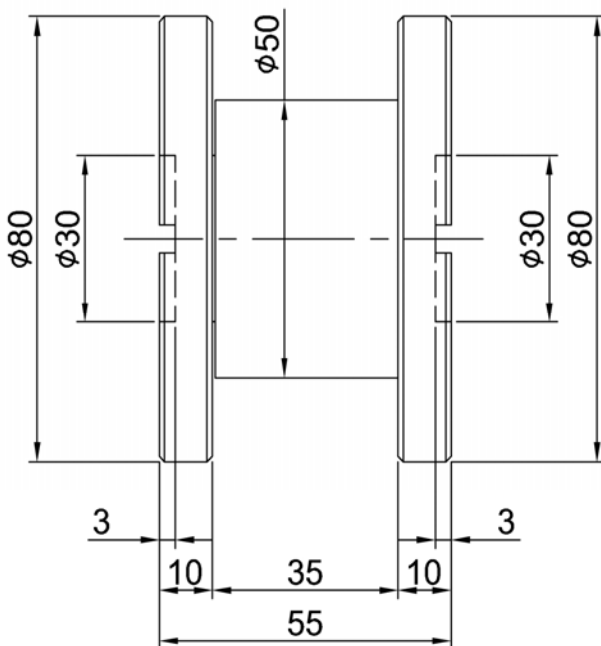
- 플랜즈 타입의 비회전형 토크센서
- 컴팩트한 디자인이며 설치가 간편
- 고정된 기기 또는 0~90도 각도내에서 토크측정
- 제품 파단시험, 감속기, 각종 액츄에이터 토크측정

SPECIFICATION

MODEL	TFC
Rated capacity (R.C.)	50, 100, 200, 500, 1000 kgf·cm
Rated output (R.O.)	1.5 ± 0.4mV/V
Non-linearity	≤ 0.3% R.O.
Hysteresis	≤ 0.3% R.O.
Non-repeatability	≤ 0.3% R.O.
Terminal resistance, input	350Ω ± 1%
Terminal resistance, output	350Ω ± 1%
Insulation resistance	> 1000MΩ @30V DC
Temp. effect on rated output	≤ 0.1% LOAD/10°C
Temp. effect on zero balance	≤ 0.1% R.O./10 °C
Temp. range compensated	-10 to 60°C
Excitation Voltage	5V,10V DC
Safe overload	150% R.C.
Cable	ϕ 7 shield 5m



WIRING INFORMATION

**DIMENSION (mm)**

FEATURE

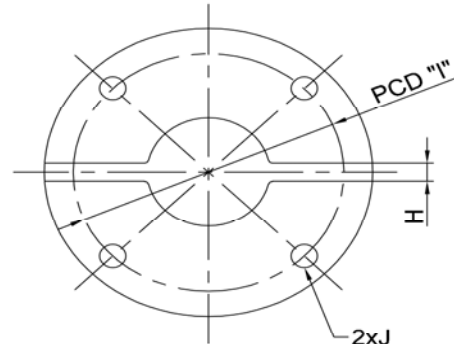
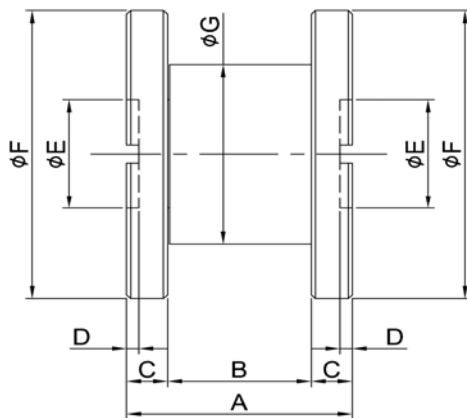
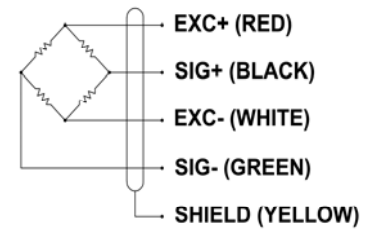
- 플랜즈 타입의 비회전형 토크센서
- 컴팩트한 디자인이며 설치가 간편
- 고정된 기기 또는 0~90도 각도내에서 토크측정
- 제품 파단시험, 감속기, 각종 액츄에이터 토크측정
- 주문제작 가능 : 1000kgf.m, 2000kgf.m

SPECIFICATION

MODEL	TFF
Rated capacity (R.C.)	50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000 kgf.cm
Rated output (R.O.)	1.5 ± 0.4mV/V
Non-linearity	≤ 0.3% R.O.
Hysteresis	≤ 0.3% R.O.
Non-repeatability	≤ 0.3% R.O.
Terminal resistance, input	350Ω ± 1%
Terminal resistance, output	350Ω ± 1%
Insulation resistance	> 1000MΩ@30V DC
Temp. effect on rated output	≤ 0.1% LOAD/10℃
Temp. effect on zero balance	≤ 0.1% R.O./10℃
Temp. range compensated	-10 to 60℃
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	φ7 shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	D	φE	φF	φG	H	I	J
10, 20, 50kgf·cm	55	35	10	3	30	80	50	5	66	4-φ6.5
100, 200kgf·cm	55	35	10	3	30	80	50	5	66	4-φ6.5
500, 1000kgf·cm	55	35	10	3	30	80	50	5	66	4-φ6.5
2000kgf·cm	80	50	15	3	40	98	50	10	78	6-φ10.5
5000kgf·cm	120	80	20	5	60	118	75	12	95	6-φ10.5
10000kgf·cm	130	90	20	6	60	146	75	16	115	6-φ14
20000kgf·cm	140	90	25	7.5	60	166	88	20	130	6-φ18
50000kgf·cm	170	100	35	10	80	197	98	28	155	6-φ20

FEATURE

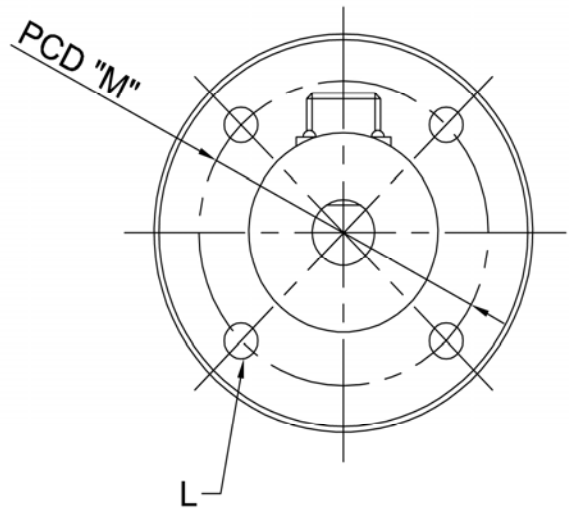
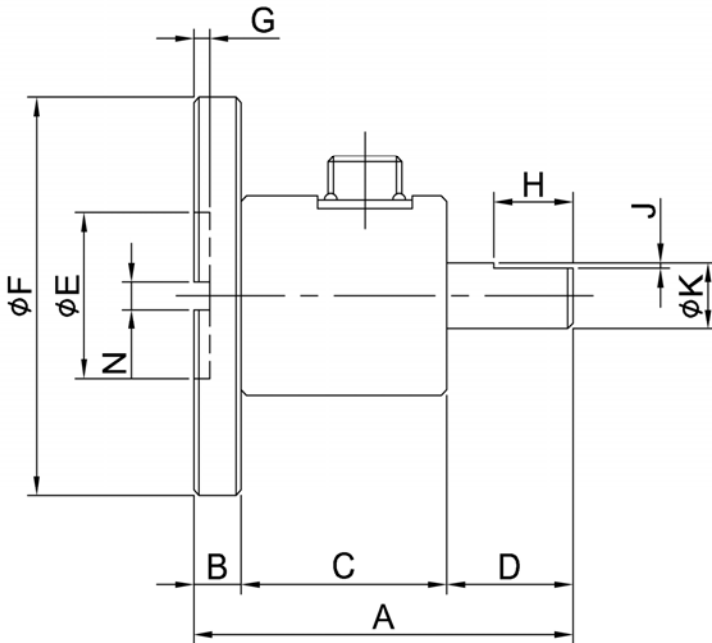
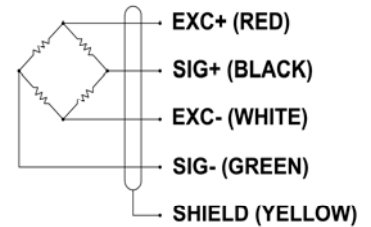
- 플랜지 & 샤프트 타입의 비회전형 토크센서
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- 고정된 기기 또는 0~90도 각도내에서 토크측정
- 제품 파단시험, 감속기, 각종 액츄에이터 토크측정

SPECIFICATION

MODEL	TFS
Rated capacity (R.C.)	50, 100, 200, 500, 1000, 2000 kgf.cm
Rated output (R.O.)	1.5 ± 0.4mV/V
Non-linearity	≤ 0.3% R.O.
Hysteresis	≤ 0.3% R.O.
Non-repeatability	≤ 0.3% R.O.
Terminal resistance, input	350Ω ± 1%
Terminal resistance, output	350Ω ± 1%
Insulation resistance	> 1000MΩ @30V DC
Temp. effect on rated output	≤ 0.1% LOAD/10°C
Temp. effect on zero balance	≤ 0.1% R.O./10°C
Temp. range compensated	-10 to 60°C
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	φ 7 shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	D	φE	φF	G	H	J	φK	M	N	L
50 kgf·cm	72	9	39	24	30	72	3	15	1	12	55	5	4-φ6.5
100 kgf·cm	72	9	39	24	30	72	3	15	6 x 6	18	55	5	4-φ6.5
200, 500 kgf·cm	83	12	43	28	40	88	3.5	15	8 x 7	24	70	6	4-φ6.5
1000, 2000 kgf·cm	90	12	46	32	50	95	4	22	10 x 8	32	76	8	4-φ9

FEATURE

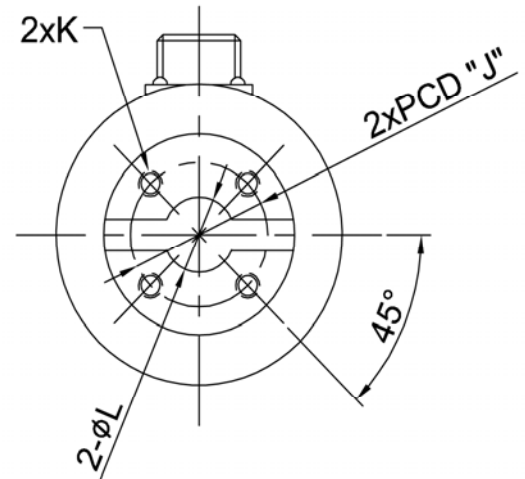
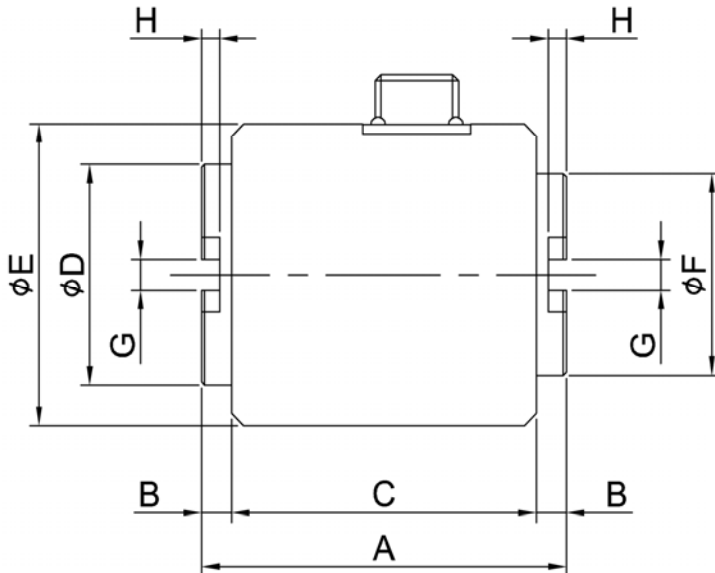
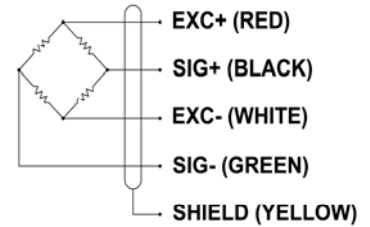
- 플랜즈 타입의 비회전형 토크센서
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- 고정된 기기 또는 0~90도 각도내에서 토크측정
- 제품 파단시험, 감속기, 각종 액츄에이터 토크측정

SPECIFICATION

MODEL	TNN
Rated capacity (R.C.)	20, 50, 100, 200, 500, 1000, 2000 kgf·cm
Rated output (R.O.)	$1.5 \pm 0.4 \text{ mV/V}$
Non-linearity	$\leq 0.3\% \text{ R.O.}$
Hysteresis	$\leq 0.3\% \text{ R.O.}$
Non-repeatability	$\leq 0.3\% \text{ R.O.}$
Terminal resistance, input	$350\Omega \pm 1\%$
Terminal resistance, output	$350\Omega \pm 1\%$
Insulation resistance	$> 1000\text{M}\Omega @ 30\text{V DC}$
Temp. effect on rated output	$\leq 0.1\% \text{ LOAD}/10^\circ\text{C}$
Temp. effect on zero balance	$\leq 0.1\% \text{ R.O.}/10^\circ\text{C}$
Temp. range compensated	$-10 \text{ to } 60^\circ\text{C}$
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	$\phi 7$ shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	ϕD	ϕE	ϕF	G	H	J	K	ϕL
20, 50, 100 kgf·cm	54	4	46	26	38	23	4	2.5	16.5	4-M3 TAP DP 7	8
200, 500 kgf·cm	61	5	51	35	48	32	5	3	23	4-M4 TAP DP 10	12
1000, 2000 kgf·cm	70	6	58	45	58	42	6	3.5	30	4-M5 TAP DP 10	15

FEATURE

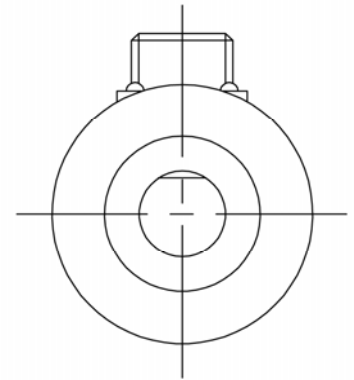
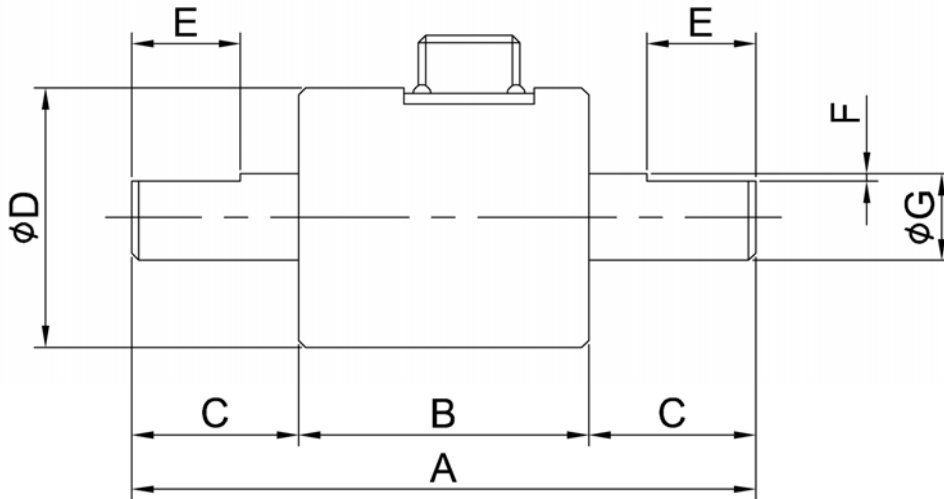
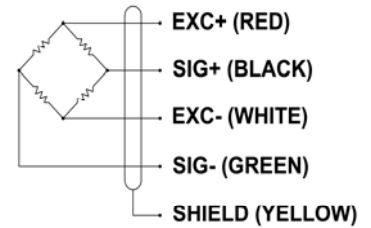
- 샤프트 타입의 비회전형 토크센서
- 컴팩트한 디자인이며 설치가 간편
- 고정된 기기 또는 0~90도 각도내에서 토크측정
- 제품 파단시험, 감속기, 각종 액츄에이터 토크측정
- 미세한 토크 조절과 핸들 장치의 토크 측정에 적합
- 고용량 주문제작 가능 : 300kgf.m

SPECIFICATION

MODEL	TSS
Rated capacity (R.C.)	10, 20, 50, 100, 200, 500, 1000, 2000, 5000, 10000 kgf·cm
Rated output (R.O.)	1.5 ± 0.4mV/V
Non-linearity	≤ 0.3% R.O.
Hysteresis	≤ 0.3% R.O.
Non-repeatability	≤ 0.3% R.O.
Terminal resistance, input	350Ω ± 1%
Terminal resistance, output	350Ω ± 1%
Insulation resistance	> 1000MΩ@30V DC
Temp. effect on rated output	≤ 0.1% LOAD/10℃
Temp. effect on zero balance	≤ 0.1% R.O./10℃
Temp. range compensated	-10 to 60℃
Excitation Voltage	5V, 10V DC
Safe overload	150% R.C.
Cable	φ7 shield 5m



WIRING INFORMATION



DIMENSION (mm)

Rated Capacity	A	B	C	φD	E	F	φG
10, 20, 50 kgf·cm	86	40	23	36	15	1	12
100 kgf·cm	86	40	23	38	15	6 x 6	18
200, 500 kgf·cm	89	43	23	48	15	8 x 7	24
1000, 2000 kgf·cm	110	46	32	58	22	10 x 8	32
5000, 10000 kgf·cm	145	55	45	84	30	16 x 10	58

FEATURE

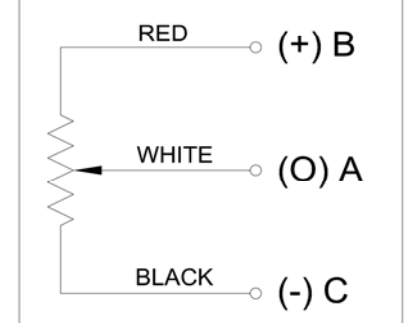
- . Potentiometer 타입의 스프링 복귀 타입 변위센서
- . 저항 출력방식 이며, 입력 전압 대 전압비로 출력
- . 컴팩트한 형상으로 취급이 용이

SPECIFICATION

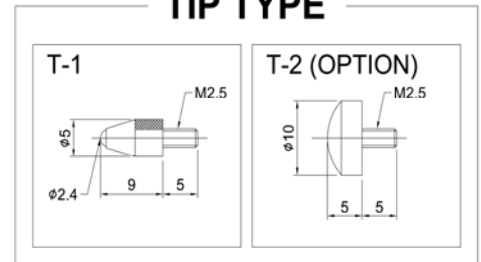
MODEL	LPS		
Rated capacity	10mm	30, 50mm	80, 100 mm
Non-linearity	± 0.3% F.S.	± 0.2% F.S.	± 0.3% F.S.
Hysteresis	± 0.15% F.S.	± 0.15% F.S.	± 0.1% F.S.
Non-repeatability	± 0.15% F.S.	± 0.15% F.S.	± 0.1% F.S.
Total resistance(±15%)	2kΩ(stroke10mm)	5kΩ(stroke30~100mm)	
Temperature range compensated	-10℃ ~ 70℃		
Temperature range safe	0℃ ~ 60℃		
Excitation Voltage	10V DC		
Cable	φ4 Shield 5m		



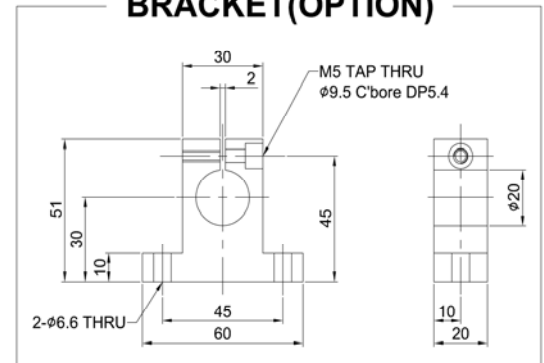
CIRCUIT DIAGRAM



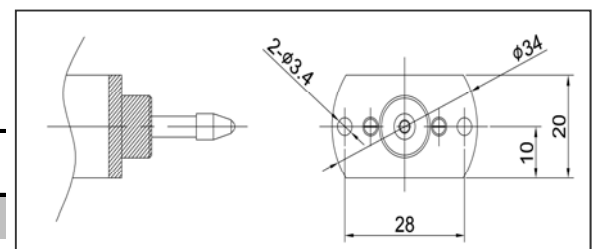
TIP TYPE



BRACKET(OPTION)



◆ SPECIAL TYPE



DIMENSION (mm)

Stroke	A	B	C
10 mm	83.5	63.5	Useful Stroke +0.5 / -0
30 mm	123.5	83.5	Useful Stroke +0.5 / -0
50 mm	163.5	103.5	Useful Stroke +0.5 / -0
80 mm	245	155	Useful Stroke +0.5 / -0
100 mm	265	155	Useful Stroke +0.5 / -0

FEATURE

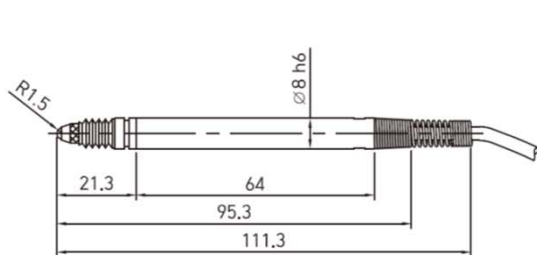
- . 고정밀도, 저렴한 가격
- . 반복 정밀도가 우수하여 양산 라인의 반복 측정용으로 적합
- . 측정 포인트 수에 따라 다양한 측정기 사용가능

SPECIFICATION

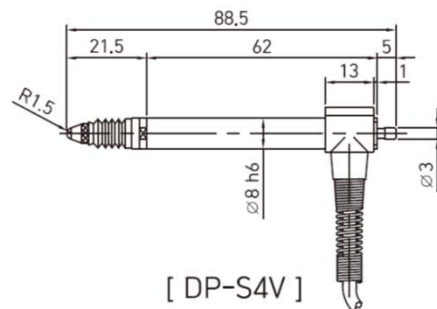
MODEL	DP-S4	DP-S4V	DP-10	DP-10V
Plunger retraction	Standard	Vacuum	Standard	Vacuum
Moving Stroke (mm)	4.95		10.45	
Measuring Range (mm)	4		10	
Linearity Error (%)	± 0.1 (±1.0mm)		± 0.1 (±3.0mm)	
Measuring Force (g)	4~90g		30~80g	
Cable Length (m)	2.2		3	
Outside Diameter (mm)	ø8			
Weight (g)-except cable	about 17	about 22	about 20	about 26
Temperature Range (℃)	0~40			



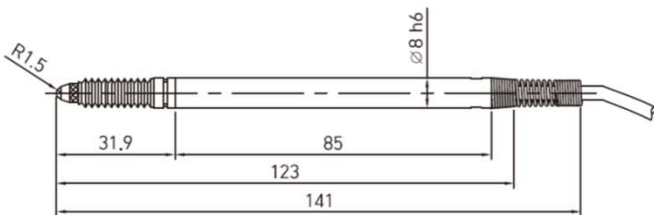
DIMENSION (mm)



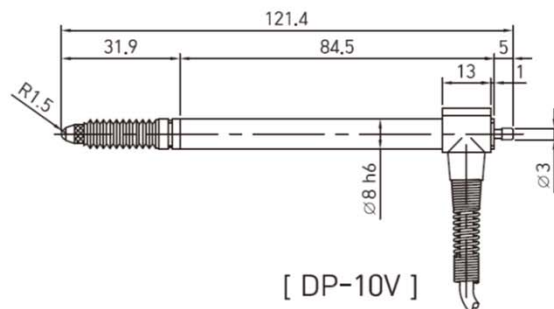
[DP-S4]



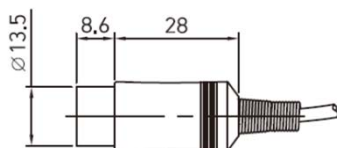
[DP-S4V]



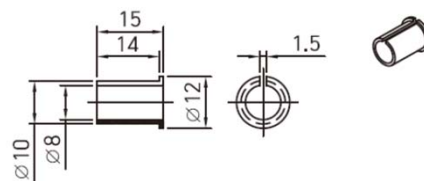
[DP-10]



[DP-10V]



[Connector detail]



[Bushing]

FEATURE

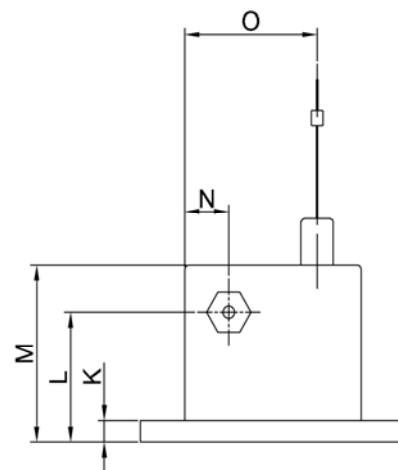
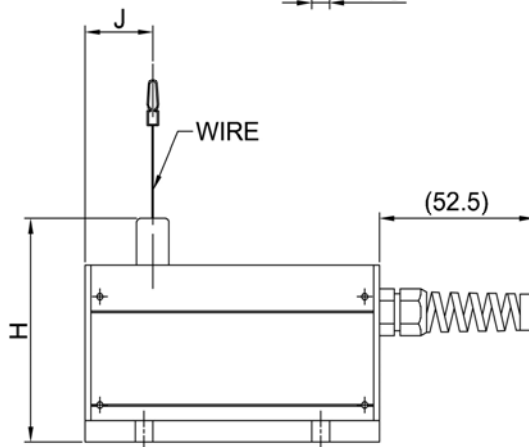
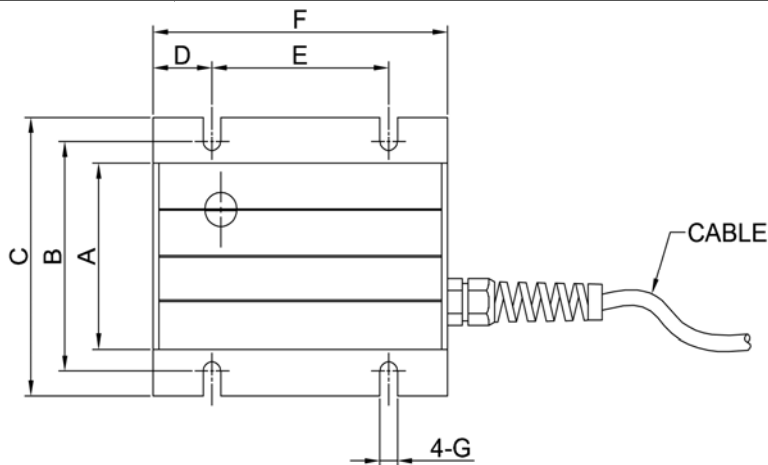
- . Wire를 이용한 이동거리, 위치, 회전각 수위 측정
- . 각종설비 및 구조물의 위치 제어에 폭넓게 적용
- . 엔코더 출력

SPECIFICATION

MODEL	CTE
Full stroke ranges	0.5, 1, 2m
Output signal	voltage divider (encoder)
Accuracy	$\pm 0.05\%$ F.S
Repeatability	$\pm 0.02\%$ F.S
Measuring cable	$\phi 0.45$ stainless steel
Power supply	5V, 12V, 24V, DC+5~+24V (Ripple: P-P Max 5%)
Current consumption	less than 80mA (at no load condition) less than 150mA (line driver output at no load condition)
Operation temperature	-10°C ~ +70°C (line driver 0°C ~ 70°C)
Operating humidity	35 ~ 85% RH
Cable	4P(AWG26) Shield cable



CABLE COLOR	Voltage Output Open Collector	Line Driver
RED	DC+5~12V, 24V	DC+5V
BLACK	Ground	Ground
GREEN	A	A
BLUE	—	A
WHITE	B	B
PINK	—	B
YELLOW	Z	Z
ORANGE	—	Z
SHIELD	Case Shield	



DIMENSION (mm)

Stroke	A	B	C	D	E	F	G	H	J	K	L	M	N	O
0.5m ~ 1m	60	74	90	20	60	100	6	72	23	7	42	57	15	45
2m	100	119	135	25	65	115	8.5	120.8	26.5	9	74	106	25	87

FEATURE

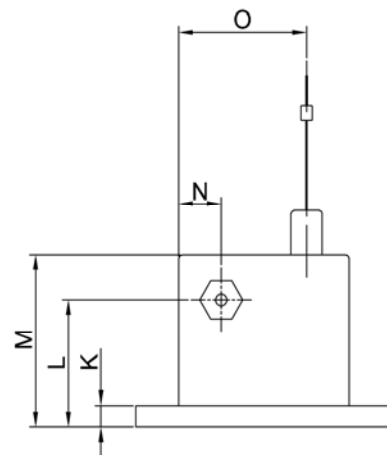
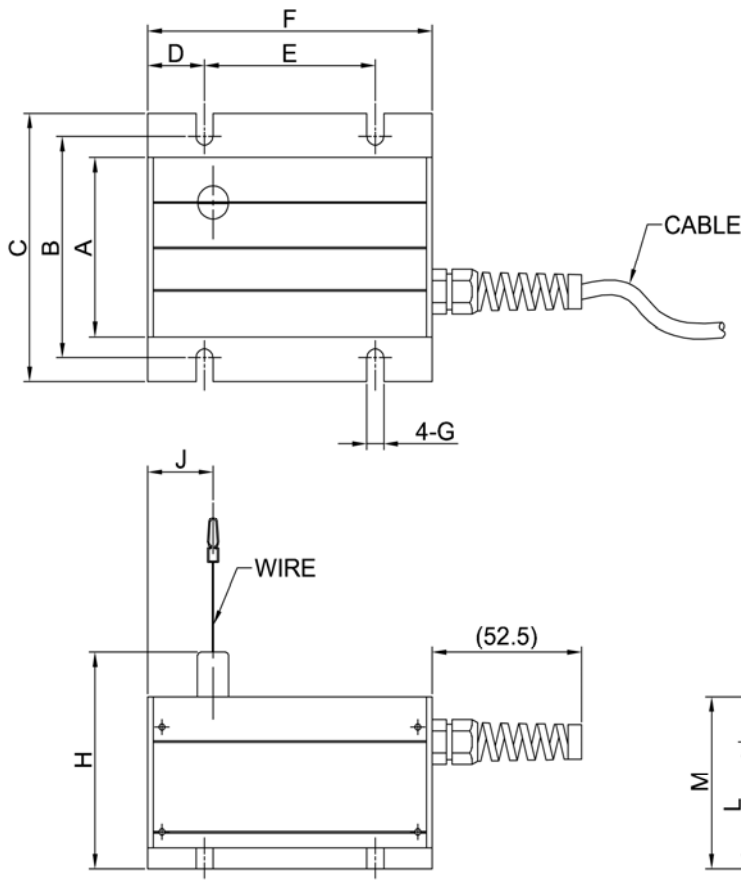
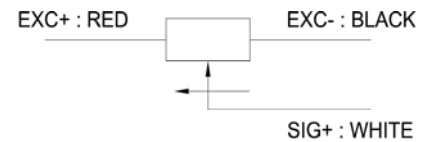
- . Wire를 이용한 이동거리, 위치, 회전각 수위측정
- . 각종설비 및 구조물의 위치 제어에 폭넓게 적용
- . 저항 출력방식 이며 입력전압 대 출력 전압비로 출력

SPECIFICATION

MODEL	CTP
Full stroke ranges	0.5, 1, 2m
Output signal	voltage divider (Potentiometer)
Accuracy	±0.25% F.S
Repeatability	±0.02% F.S
Measuring cable	φ0.45 stainless steel
Power supply	5V, 10V (max 24V)
Resistance range	0.5m (0~2.5kΩ) , 1m (0~5kΩ) , 2m (0~10kΩ)
Min.practical independent linearity	±0.15%, < 300Ω , ±0.075%, ≥300Ω
Dielectric strength	1,000V rms
Min.insulation resistance	1000MΩ
Maximum noise	100Ω
Max. end voltage	0.25% of input voltage
Cable	φ4 Shield 3m



WIRING INFORMATION



DIMENSION (mm)

Stroke	A	B	C	D	E	F	G	H	J	K	L	M	N	O
0.5m ~ 1m	60	74	90	20	60	100	6	72	23	7	42	57	15	45
2m	100	119	135	25	65	115	8.5	120.8	26.5	9	74	106	25	87

FEATURE

- .고강도 알루미늄 소재로서 산업용 및 상업용 전자저울에 사용.
- .가격이 저렴하며 고정밀도.
- .가벼운 무게를 측정하는데 있어서 편리함

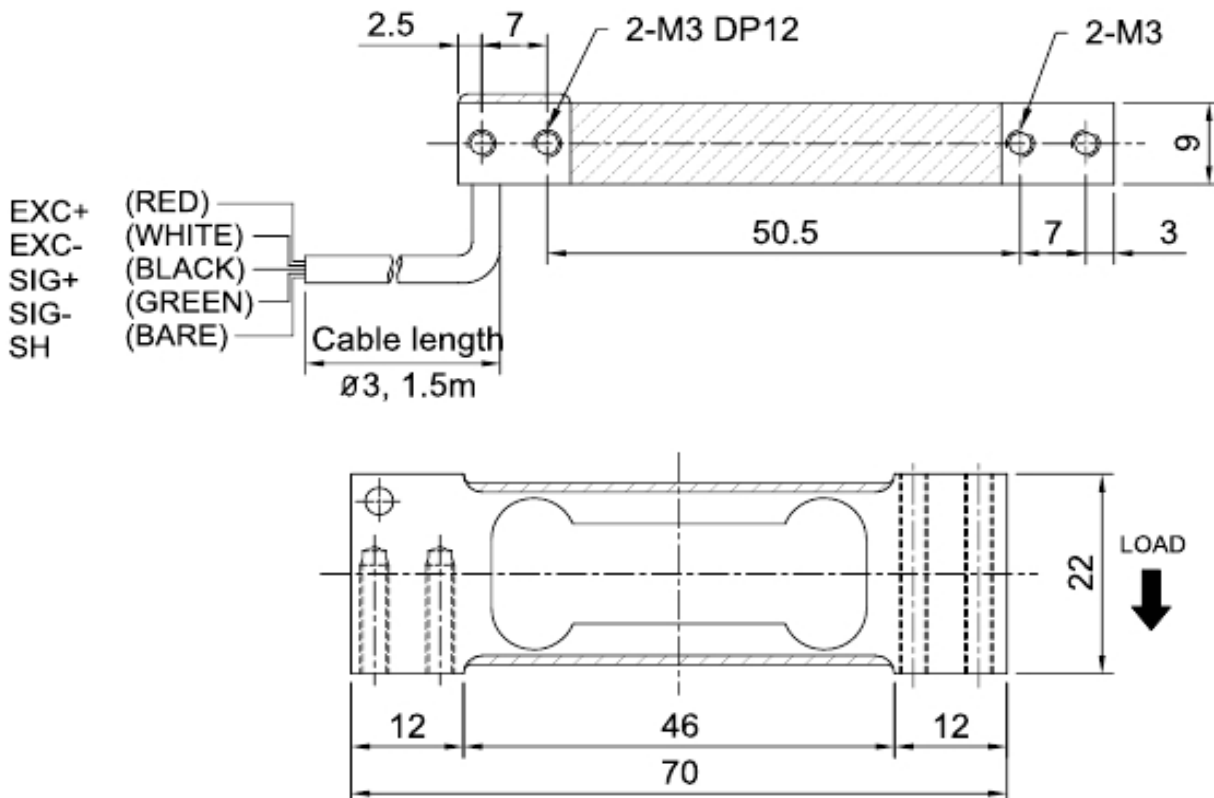
SPECIFICATION

MODEL	CBC
Rated capacity (R.C.)	200, 300gf
Rated output (R.O.)	1.2mV/V $\pm$ 1%
Zero balance	$\pm$ 5% R.O
Combined error	0.02% R.O.
Repeatability	0.02% R.O.
Creep for 30 min	0.02% R.O.
Temp. effect on zero value	0.06% / 10 $^{\circ}$ C
Temp. effect on output value	0.04% / 10 $^{\circ}$ C
Excitation recommended	5V DC
Excitation maximum	10V DC
Terminal resistance, input	400 $\pm$ 30 Ω
Terminal resistance, output	350 $\pm$ 2 Ω
Insulation resistance	> 2000M Ω @50V DC
Compensated temperature range	-10 to +40 $^{\circ}$ C
Operating temperature range	-10 to +50 $^{\circ}$ C



- Material
Anodized aluminum
- Cable
Braided shield 4-wire round cable with PVC-jacket

DIMENSION (mm)



FEATURE

- .고강도 알루미늄 소재로서 산업용 및 상업용 전자저울에 사용.
- .가격이 저렴하며 고정밀도.
- .가벼운 무게를 측정하는데 있어서 편리함

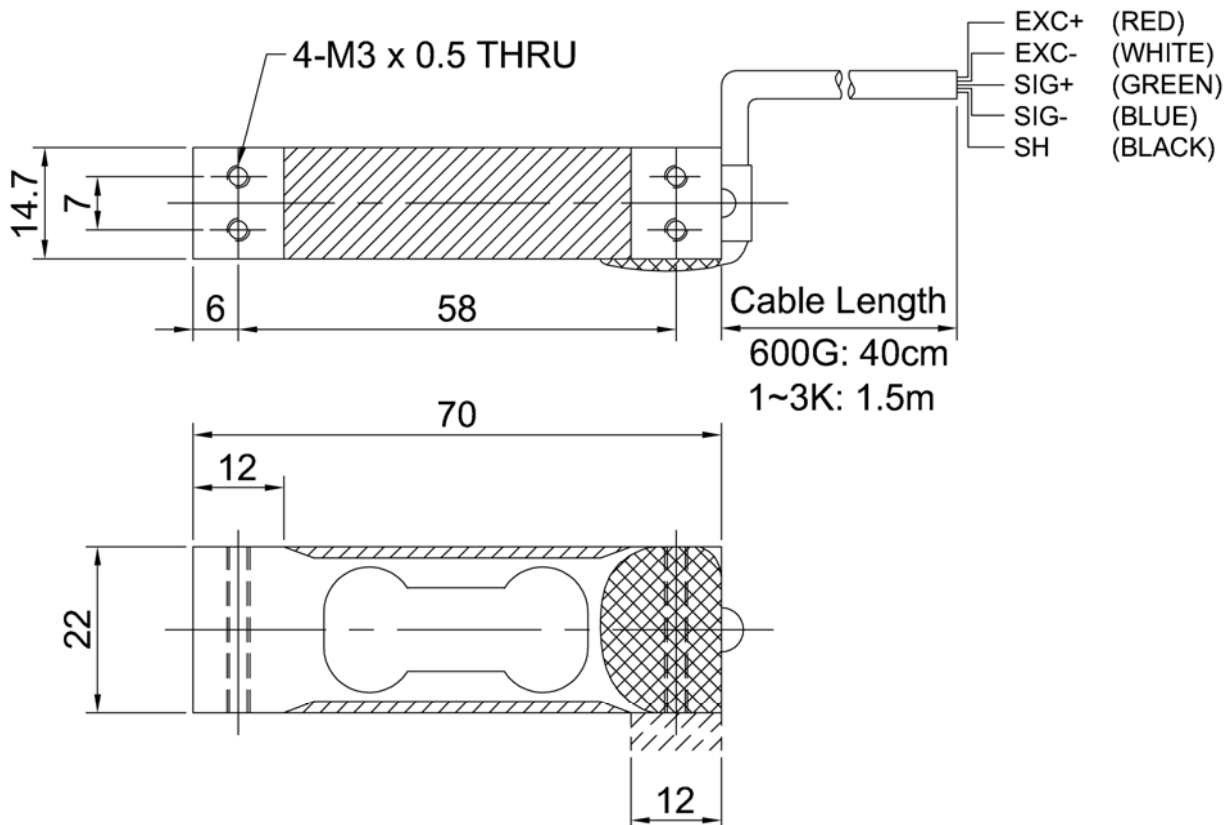
SPECIFICATION

MODEL	CBCL
Rated capacity (R.C.)	1, 2, 3kgf (special type: 600gf)
Rated output (R.O.)	1.0 ± 0.2 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10°C
Temp. effect on output value	0.014% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$400 \pm 20\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000\text{M}\Omega$ @50V DC
Compensated temperature range	-10 to $+40^{\circ}\text{C}$
Operating temperature range	-20 to $+80^{\circ}\text{C}$



- Mounting
Socket-head cap screw M3 x 1.0(10.9)
Tightening torque : 1.5Nm
- Maximum Platform Size
200 x 200mm
- Material
Anodized Aluminum
- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- .고강도 알루미늄 소재로서 산업용 및 상업용 전자저울에 사용
- .가격이 저렴하며 고정밀도
- .가벼운 무게를 측정하는데 있어서 편리함

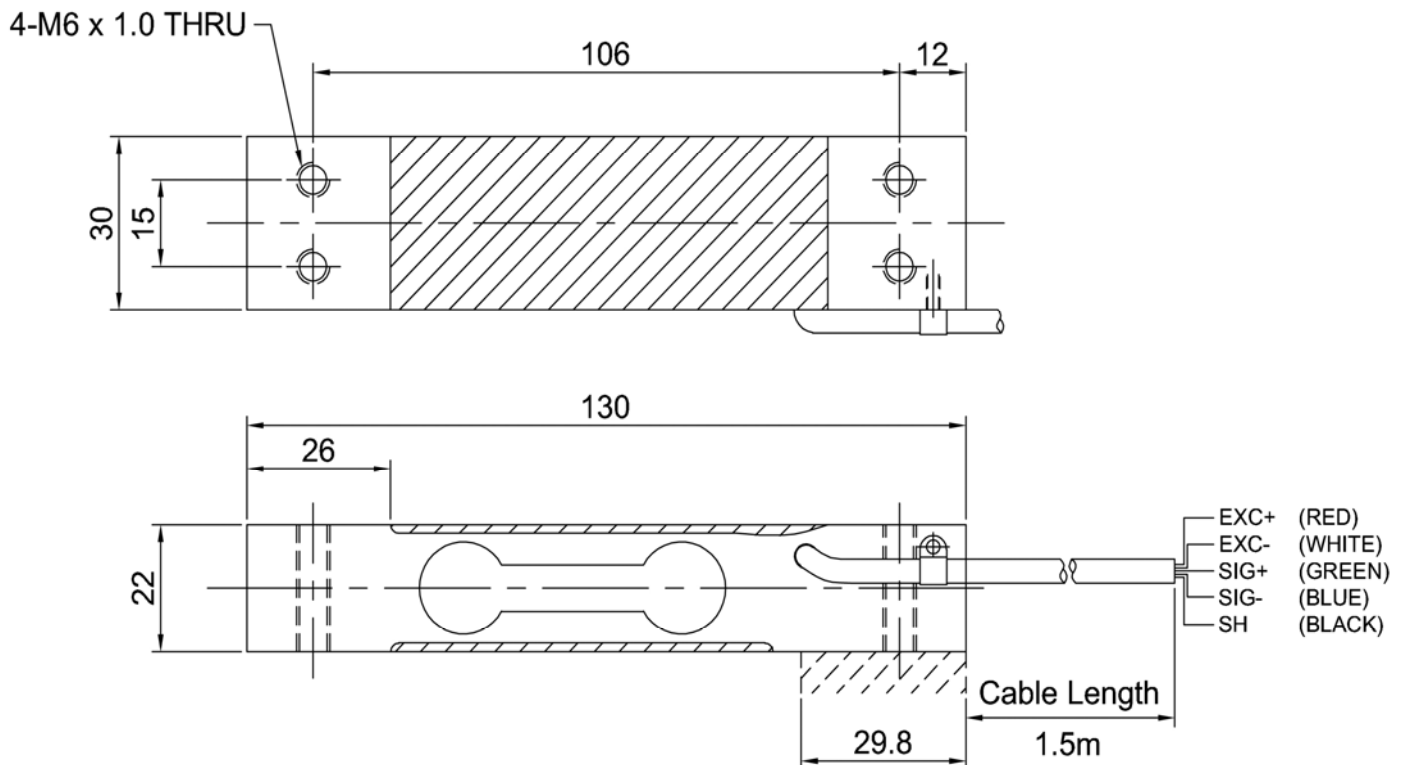
SPECIFICATION

MODEL	CBCL
Rated capacity (R.C.)	6, 10, 15, 20, 30 kgf
Rated output (R.O.)	2.0 ± 0.2 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10°C
Temp. effect on output value	0.014% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$400 \pm 20\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega$ @50V DC
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +80°C



- Mounting
Socket-head cap screw M6 x 1.0(10.9)
Tightening torque : 14Nm
- Maximum Platform Size
300 x 300mm
- Material
Anodized Aluminum
- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)

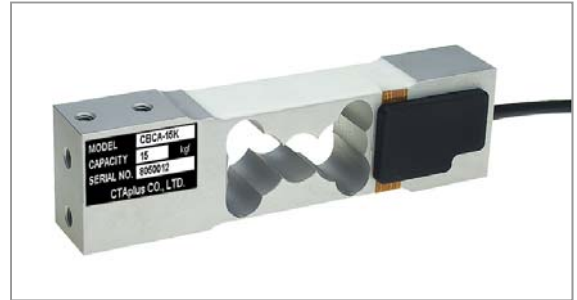


FEATURE

- . 저가형 싱글 포인트 로드셀
- . 편심 하중보장
- . 방진, 방수등급 : IP65

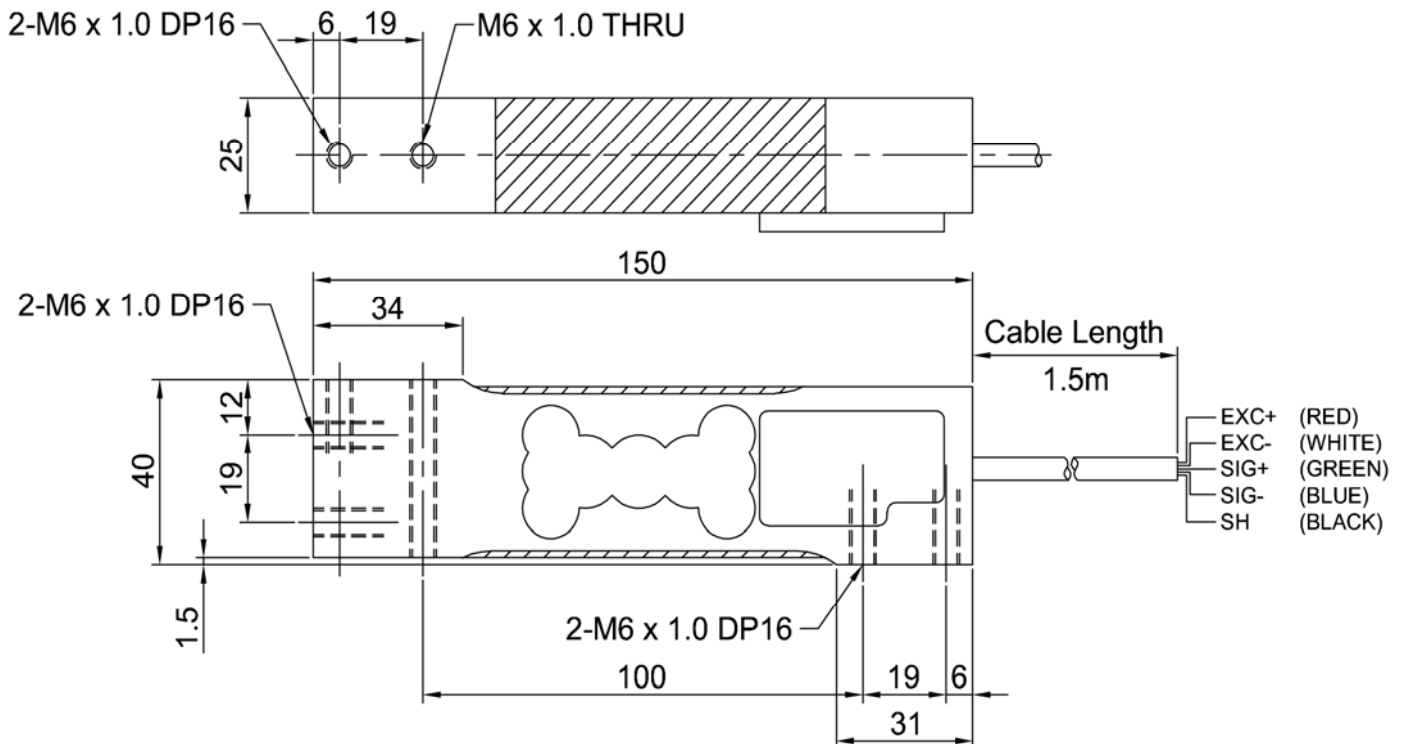
SPECIFICATION

MODEL	CBCA
Rated capacity (R.C.)	5, 10, 15, 20, 30, 50, 75, 100 kgf
Rated output (R.O.)	2.0 ± 0.2 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.03% / 10℃
Temp. effect on output value	0.03% / 10℃
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	400 ± 20Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-20 to +80℃



- Mounting
Socket-head cap screw M6 x 1.0(10.9)
Tightening torque : 14Nm
- Maximum Platform Size
400 x 400mm
- Material
Anodized Aluminum
- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- . 저가형 싱글 포인트 로드셀
- . 편심 하중보장
- . 방진, 방수등급 : IP65

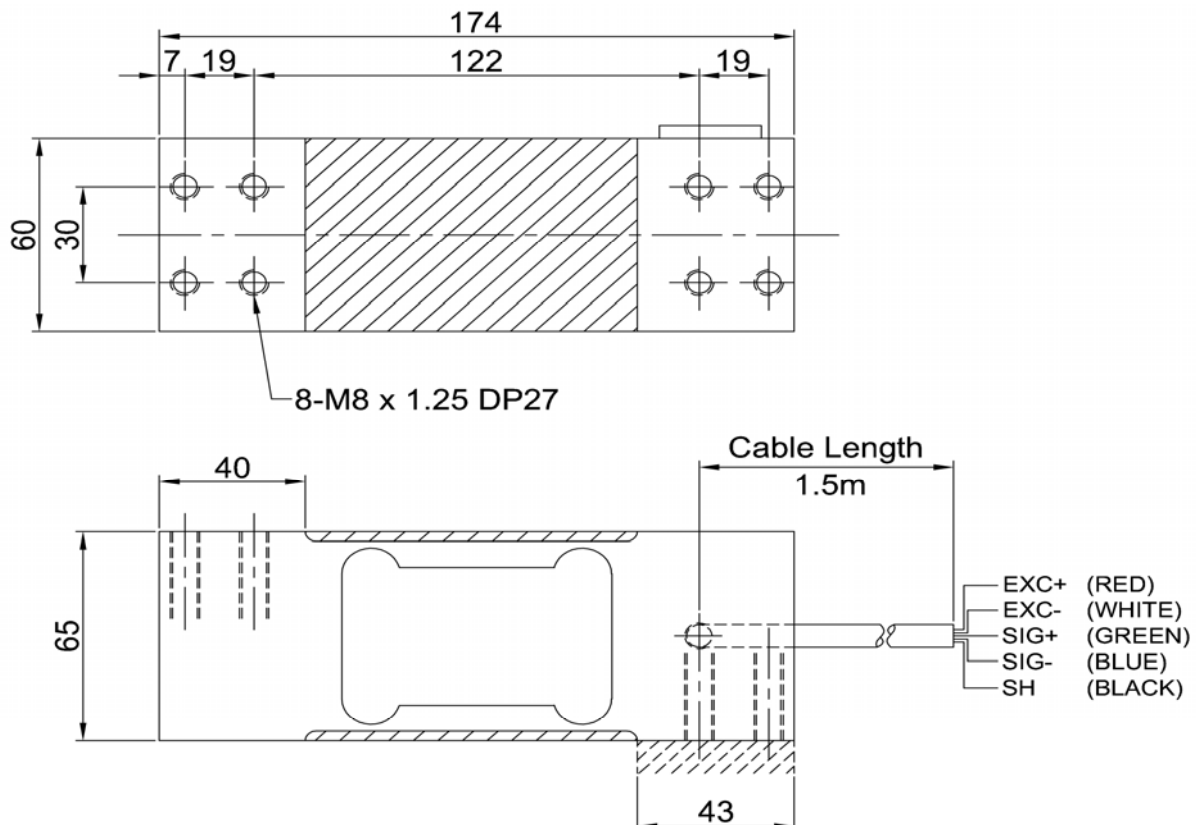
SPECIFICATION

MODEL	CBCD
Rated capacity (R.C.)	30, 50, 100, 150, 250, 300, 500 kgf
Rated output (R.O.)	2.0 ± 0.2 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10°C
Temp. effect on output value	0.014% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$400 \pm 20\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-20 to +80 °C



- Mounting
Socket-head cap screw M8 x 1.25(10.9)
Tightening torque : 29Nm
- Maximum Platform Size
400 x 600mm (W x L)
- Material
Anodized Aluminum
- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- . 저가형 싱글 포인트 로드셀
- . 편심 하중보장
- . 방진, 방수등급 : IP65

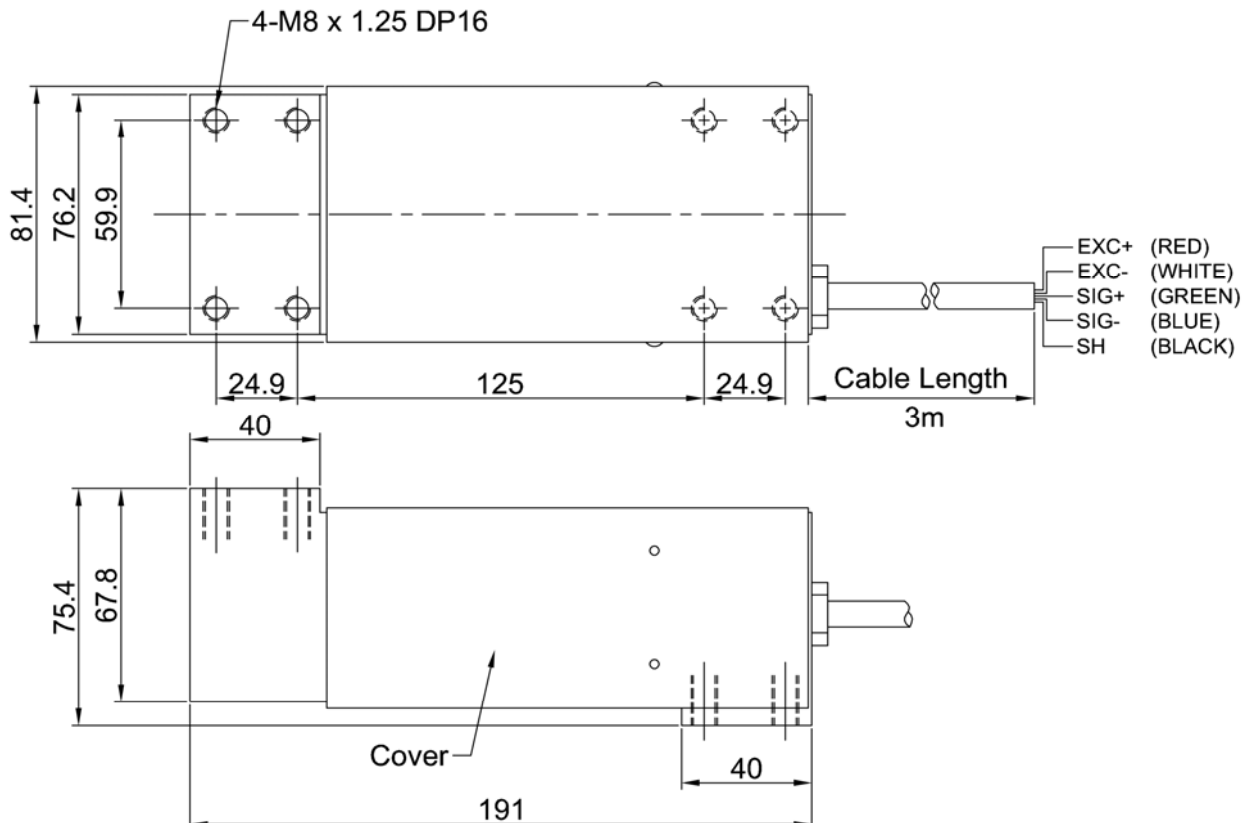
SPECIFICATION

MODEL	CBCM
Rated capacity (R.C.)	50, 75, 100, 150, 200, 300, 500 kgf
Rated output (R.O.)	2.0 ± 0.2 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10 °C
Temp. effect on output value	0.014% / 10 °C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	400 ± 20Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-20 to +70 °C



- Mounting
Socket-head cap screw M8 x 1.25(10.9)
Tightening torque : 29Nm
- Maximum Platform Size
600 x 600mm
- Material
Anodized Aluminum
- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- . 싱글포인트 로드셀
- . 편심 하중보장
- . 방진, 방수등급 : IP65

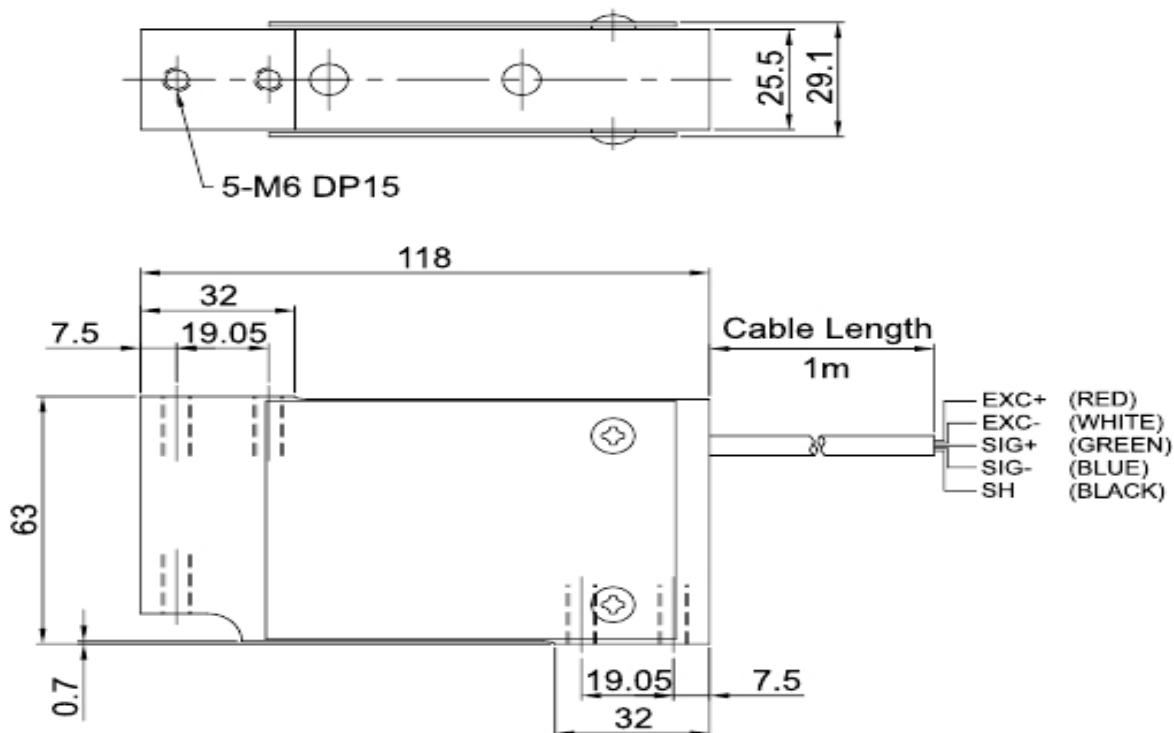
SPECIFICATION

MODEL	CBCC
Rated capacity (R.C.)	3, 5, 7, 10, 15 kgf
Rated output (R.O.)	2.0 ± 0.2 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.02% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.017% R.O.
Temp. effect on zero value	0.014% / 10°C
Temp. effect on output value	0.014% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$400 \pm 20\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +70°C



- Mounting
Socket-head cap screw M6 x 1.0 (10.9)
Tightening torque : 14Nm
- Maximum Platform Size
400 x 400mm
- Material
Anodized Aluminum
- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- . 밴딩빔형 로드셀
- . Stainless steel 구조
- . 방진, 방수등급 : IP67

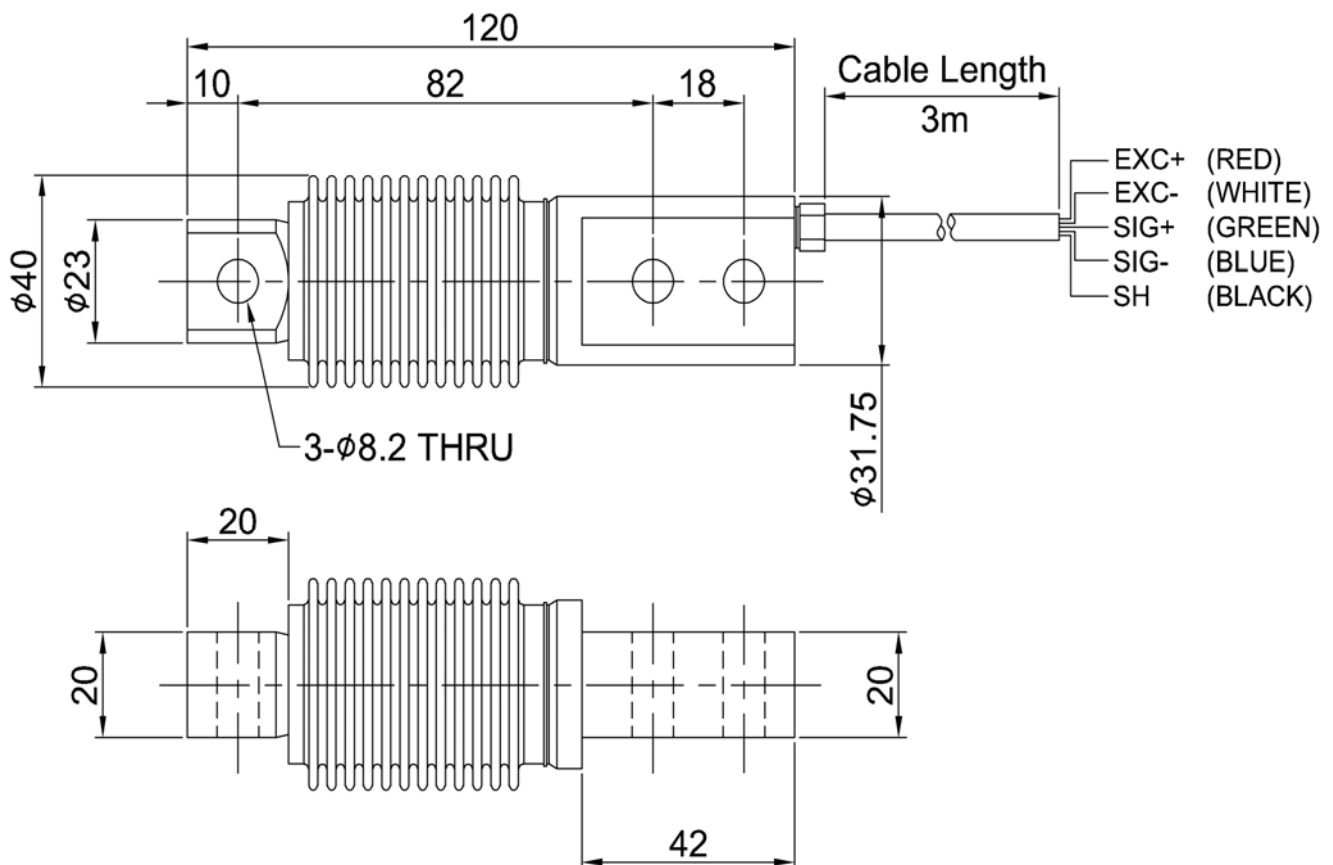
SPECIFICATION

MODEL	CHBS
Rated capacity (R.C.)	20, 50, 100, 200, 500 kgf
Rated output (R.O.)	2.0 ± 0.005 mV/V
Zero balance	0 ± 0.2 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10°C
Temp. effect on output value	0.015% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$400 \pm 50\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-20 to +70 °C



- Mounting
Socket-head cap screw M8 x 1.25(10.9)
Tightening torque : 29Nm
- Material
Stainless steel
- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

. 주문제작

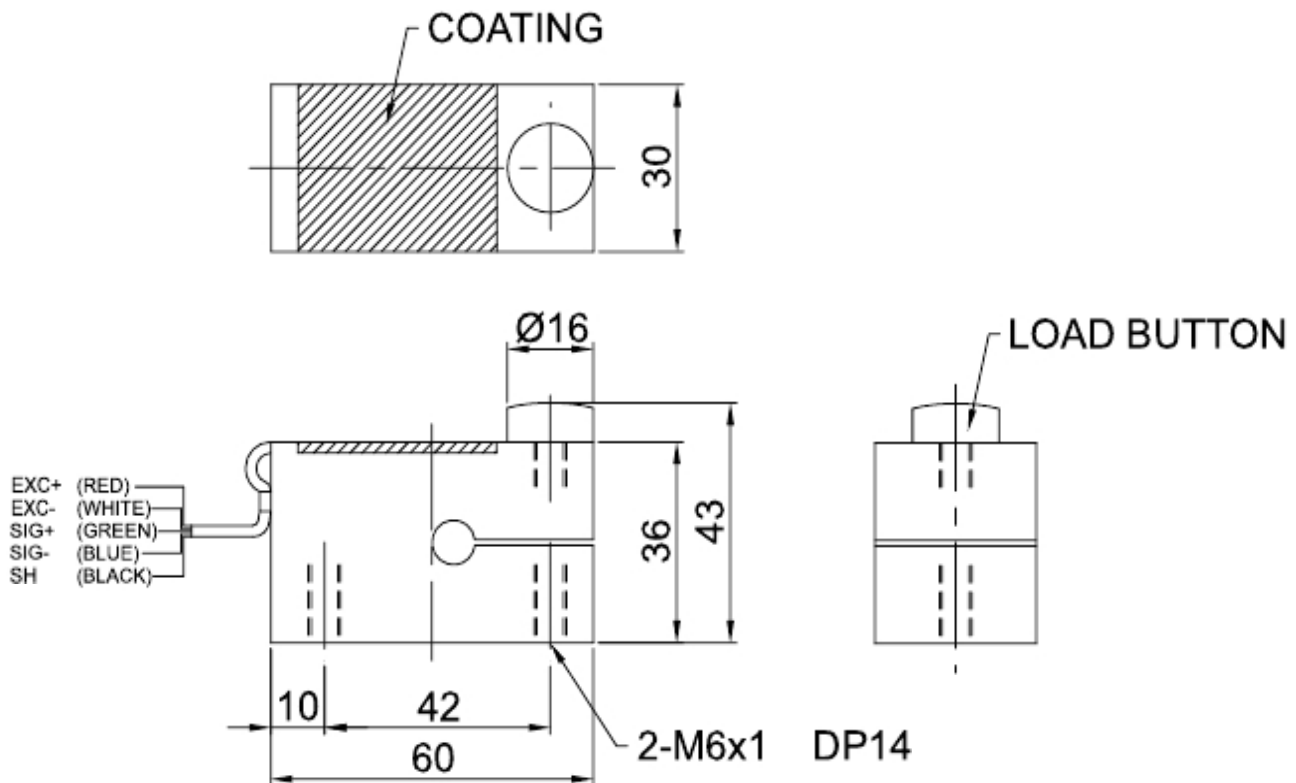
SPECIFICATION

MODEL	CBB
Rated capacity (R.C.)	1, 2tf
Rated output (R.O.)	1.5 ± 0.005 mV/V
Zero balance	0 ± 0.15 mV/V
Combined error	2.0% R.O.
Repeatability	0.3% R.O.
Creep for 30 min	0.1% R.O.
Temp. effect on zero value	0.05% / 10°C
Temp. effect on output value	0.05% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$400 \pm 50\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +80°C



- Material
Stainless steel
- Cable
Braided shield 4-wire round cable with PVC-jacket

DIMENSION (mm)



FEATURE

- Shear beam load cell
- Optimal for platform scale of tank and hopper
- Protection class : IP66

SPECIFICATION

MODEL	CBSA
Rated capacity (R.C.)	250, 500 kgf, 1, 2, 3, 5 tf
Rated output (R.O.)	3.0 ± 0.0075 mV/V
Zero balance	0 ± 0.03 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10°C
Temp. effect on output value	0.015% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$350 \pm 3.5\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-30 to +80 °C



– Mounting

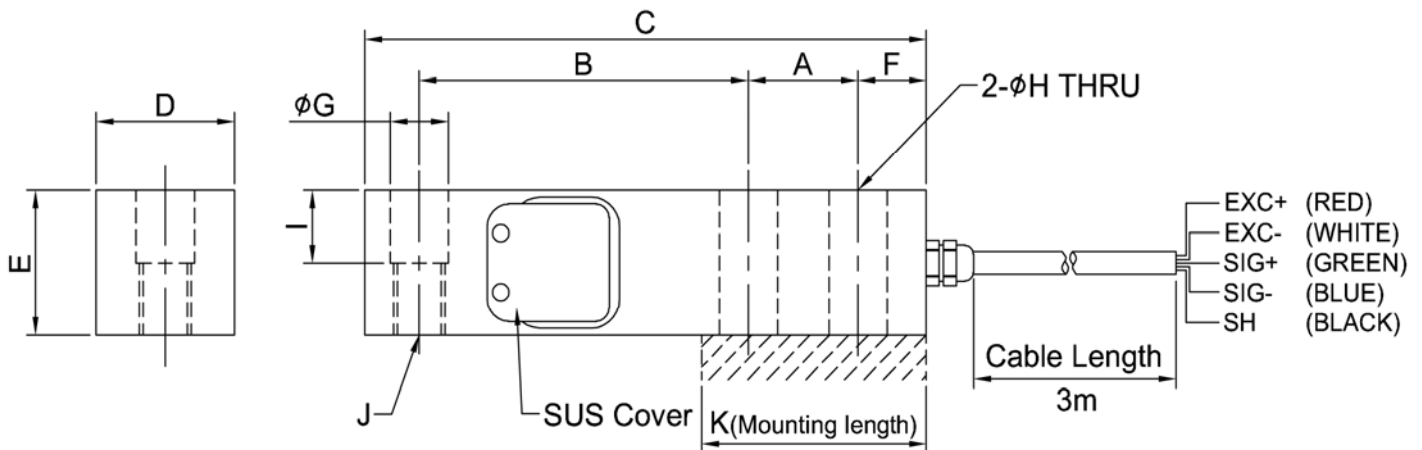
Capacity	Hexagon head-Bolt	Tightening torque
250kgf ~2tf	M12 x 1.75(10.9)	100Nm
3tf ~ 5tf	M18 x 1.5(10.9)	350Nm

– Material

Nickel plated steel

– Cable

Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

Rated Capacity	A	B	C	D	E	F	φG	φH	I	J	K
250, 500kgf 1, 2tf	25.4	76.2	130	32	32	15.8	13.5	13.5	16	M12x1.75	52
3, 5tf	38.1	95.3	171.5	38	38	19	20	20	19	M18x1.5	76.2

FEATURE

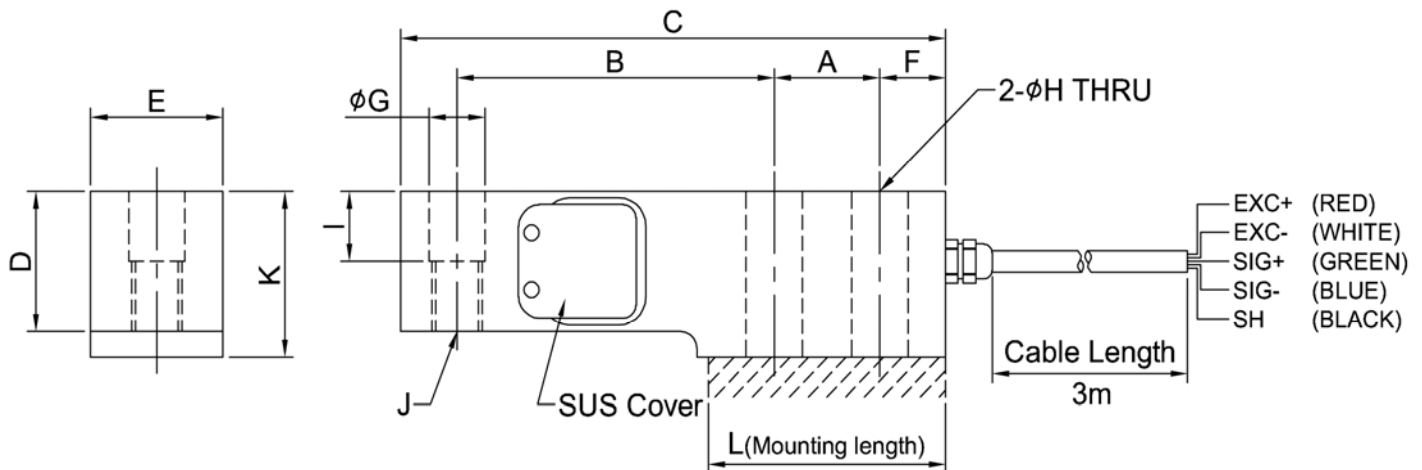
- . Mounting 일체형 시어빔형 로드셀
- . 탱크, 호퍼의 플랫폼 스케일에 최적
- . 방진, 방수 등급 : IP66

SPECIFICATION

MODEL	CBSB
Rated capacity (R.C.)	150, 250, 300, 500 kgf 1, 2, 3, 5, 10 tf
Rated output (R.O.)	3.0 ± 0.0075 mV/V 150kgf:1.5mV/V, 300kgf: 2.0mV/V
Zero balance	0 ± 0.03 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10℃
Temp. effect on output value	0.015% / 10℃
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	350 ± 3.5Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-30 to +80℃



- Mounting		
Capacity	Hexagon head-Bolt	Tightening torque
150kgf ~ 2tf	M12 x 1.75(10.9)	100Nm
3tf ~ 5tf	M18 x 1.5(10.9)	350Nm
10tf	M24 x 2.0(10.9)	860Nm
- Material		
Nickel plated steel		
- Cable		
Braided Shield 4-wire round cable with PVC-jacket		



DIMENSION (mm)

Rated Capacity	A	B	C	D	E	F	φG	φH	I	J	K	L
150, 250, 300, 500 kgf 1, 2tf	25.4	76.2	131	32	31.8	15.8	13.5	13.5	16	M12x1.75	38	57
3, 5tf	38.1	95.3	171.5	38	38	19	20	20	19	M18x1.5	44.5	76
10tf	50.8	120.7	222.3	50.8	50.75	25.4	26.2	26.2	25.4	M24x2.0	57.2	108

FEATURE

- . 슬림 시어빔형 로드셀
- . 방진, 방수 등급 : IP66

SPECIFICATION

MODEL	CBSM
Rated capacity (R.C.)	100, 250, 500kgf, 1tf
Rated output (R.O.)	2.0 ± 0.005 mV/V
Zero balance	0 ± 0.2 mV/V
Combined error	0.03% R.O.
Repeatability	0.015% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.03% / 10℃
Temp. effect on output value	0.015% / 10℃
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	400 ± 50Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-20 to +70℃



- Mounting

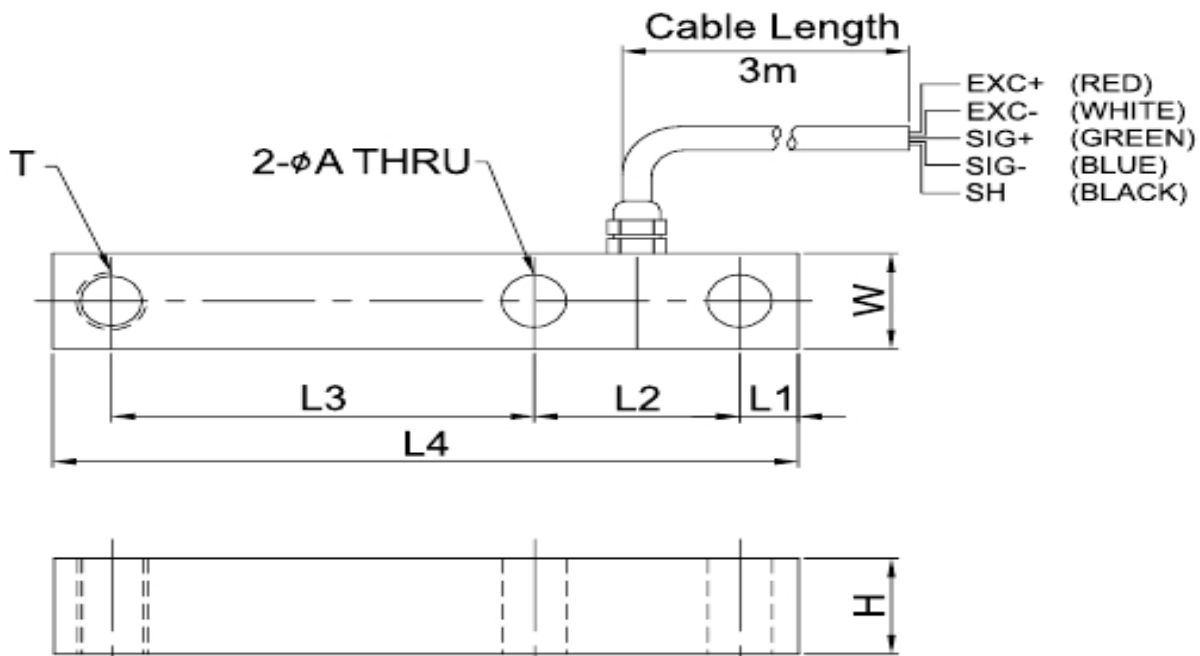
Socket-head cap screw M10 × 1.5 (10.9)
Tightening torque : 29Nm

- Material

Nickel plated steel

- Cable

Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	φ A	T	H	W	L1	L2	L3	L4
100, 250kgf	11	M12 × 1.75	20	20	10	35	72	127
500kgf, 1tf	11	M12 × 1.75	24	20	10	35	72	127

FEATURE

- . Mounting 일체형 시어빔형 로드셀
- . 탱크, 호퍼의 플랫폼 스케일에 최적
- . 방진, 방수등급 : IP66

SPECIFICATION

MODEL	CBSU
Rated capacity (R.C.)	250, 500kgf, 1, 2tf
Rated output (R.O.)	3.0 ± 0.007 mV/V
Zero balance	0 ± 0.05 mV/V
Combined error	0.02% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.01% R.O.
Temp. effect on zero value	0.03% / 10℃
Temp. effect on output value	0.03% / 10℃
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	350 ± 3.5Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-20 to +80℃



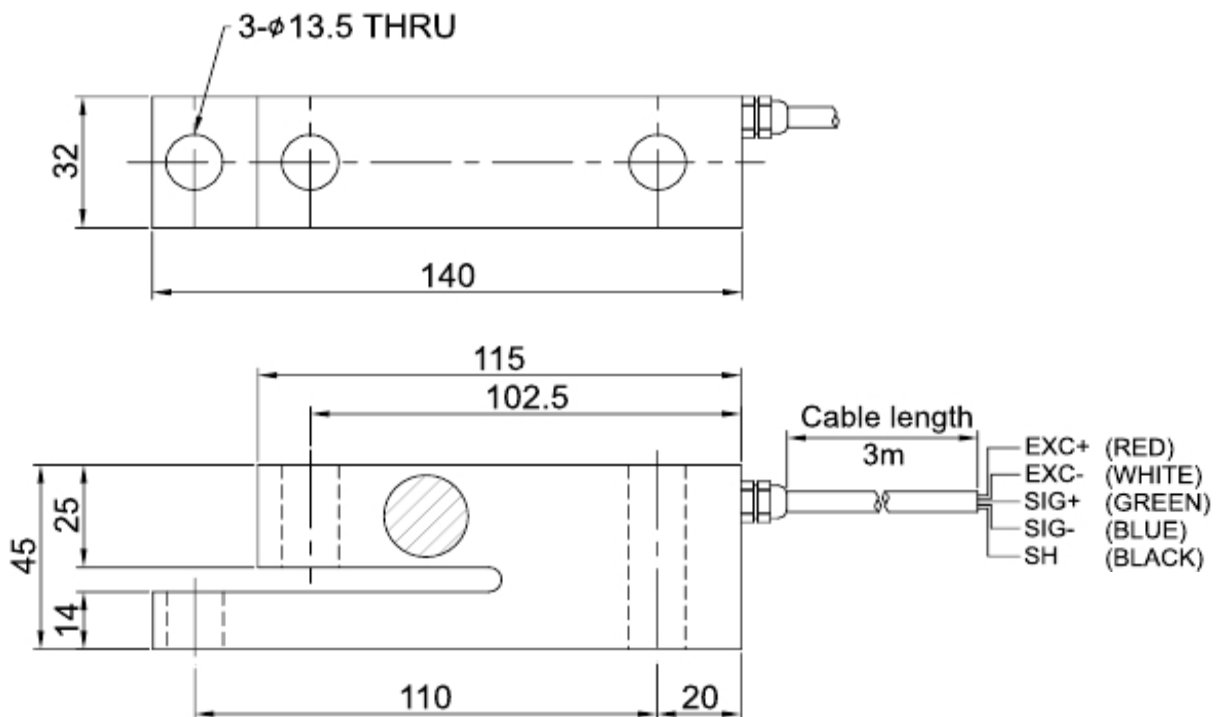
- Material

Nickel plated steel

- Cable

Braided Shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- . Stainless steel 구조
- . 방진, 방수등급 : IP67

SPECIFICATION

MODEL	CBSS
Rated capacity (R.C.)	500 kgf, 1, 2, 3, 5 tf
Rated output (R.O.)	2.0 ± 0.005 mV/V
Zero balance	0 ± 0.02 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10℃
Temp. effect on output value	0.014% / 10℃
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	350 ± 3.5Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-30 to +80℃



- Mounting

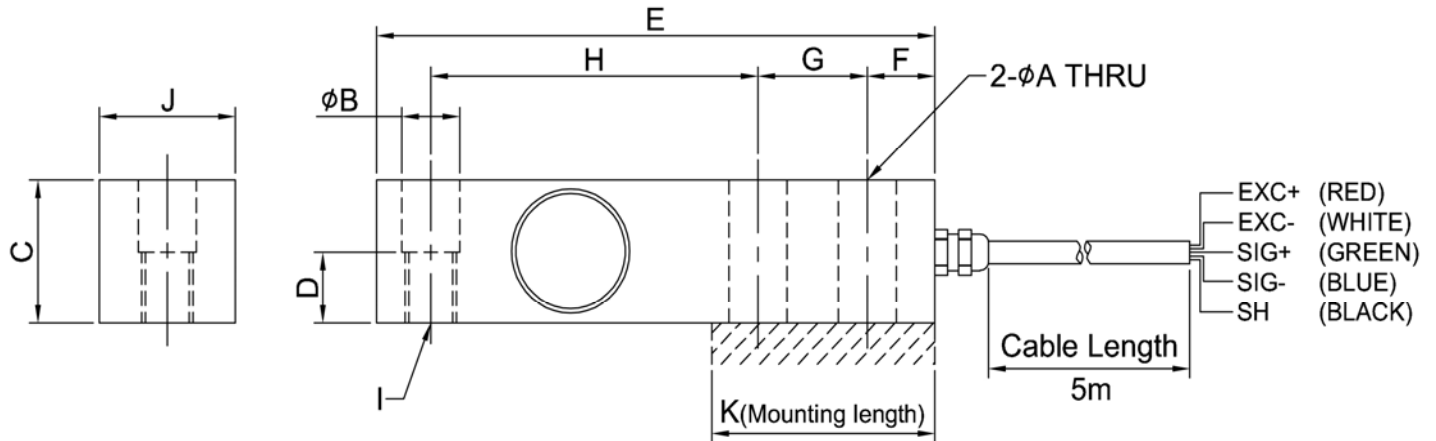
Capacity	Hexagon head-Bolt	Tightening torque
500kgf ~ 2tf	M12 x 1.75(10.9)	100Nm
3tf ~ 5tf	M18 x 1.5(10.9)	350Nm

- Material

Stainless steel

- Cable

Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

Rated Capacity	φA	φB	C	D	E	F	G	H	I	J	K
500kgf, 1, 2tf	13.5	13.5	31.7	15.8	130	15.8	25.4	76.2	M12x1.75	31.7	52
3, 5tf	20	20	38.1	19.1	171.5	19	38.1	95.3	M18x1.5	38	76.2



Canister Load Cell (200kgf ~ 20tf)

FEATURE

- . 압축 & 인장 로드셀
- . 완전 밀폐구조
- . 이중 다이어프램 구조로 신뢰성 강화

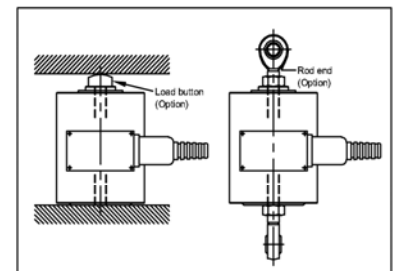
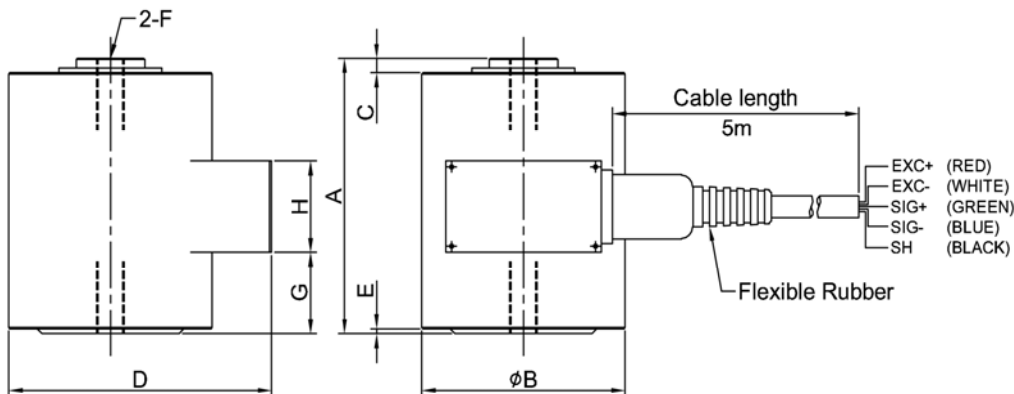
SPECIFICATION

MODEL	CCC
Rated capacity (R.C.)	200, 500 kgf, 1, 2, 3, 5, 10, 20 tf
Rated output (R.O.)	3.0 ± 0.003 mV/V
Zero balance	0 ± 0.03 mV/V
Combined error	0.05% R.O.
Repeatability	0.02% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.03% / 10°C
Temp. effect on output value	0.03% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$350 \pm 3.5\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-20 to +80 °C



– Material
Paint finished steel

– Cable
Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

Rated Capacity	A	φB	C	D	E	F	G	H
200, 500kgf, 1tf	115	89	6	115	2	M12 x 1.25	34	38
2, 3, 5tf	148	89	9	115	2	M24 x 2.0	55	38
10tf	215	127	12	152	2	M39 x 2.0	75	38
20tf	290	165	15	193	2	M50 x 2.0	80	38

FEATURE

- 밀폐구조의 압축로드셀
- 충격에 강한 견고한 디자인과 쉬운설치

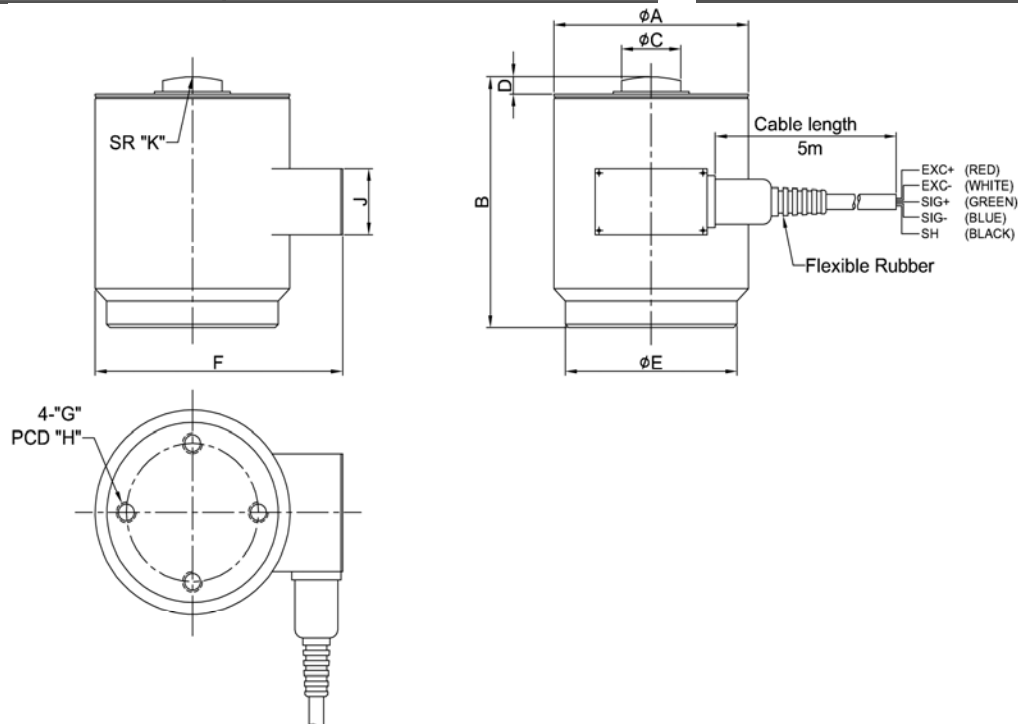
SPECIFICATION

MODEL	CHC
Rated capacity (R.C.)	20, 30, 50, 100, 200 tf
Rated output (R.O.)	2.0 ± 0.002 mV/V
Zero balance	0 ± 0.02 mV/V
Combined error	0.15% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.03% / 10°C
Temp. effect on output value	0.03% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$350 \pm 3.5\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +80°C



– Material
Paint finished steel

– Cable
Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

Rated Capacity	phi A	B	phi C	D	phi E	F	G	H	J	K
20, 30tf	118	145	36	10	104	150	M12 x 1.75	80	38	150
50tf	118	160	50	20	104	170	M12 x 1.75	80	38	200
100tf	158	190	70	20	144	190	M16 x 2.0	100	38	200
200tf	214	230	95	30	188	249	M16 x 2.0	130	38	300

FEATURE

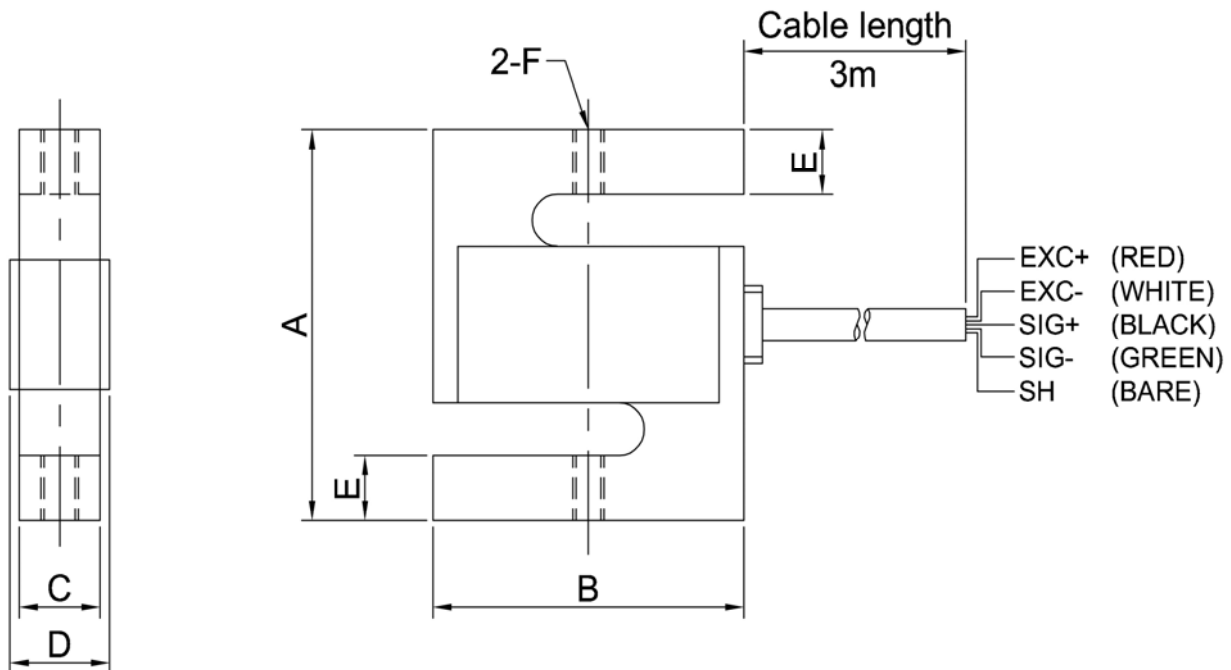
- . 압축 & 인장겸용 S-빔형 로드셀
- . 매달림 계측장비에 최적
- . 방진, 방수등급 : IP66

SPECIFICATION

MODEL	CUU
Rated capacity (R.C.)	2, 5, 10, 20 kgf
Rated output (R.O.)	2.0 mV/V $\pm$ 1% (2,5kgf : 1.5mV)
Zero balance	$\pm$ 2% R.O.
Combined error	0.03% R.O.
Repeatability	0.02% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.1% / 10 $^{\circ}$ C
Temp. effect on output value	0.05% / 10 $^{\circ}$ C
Excitation recommended	5V DC
Excitation maximum	10V DC
Terminal resistance, input	350 $\pm$ 50 Ω
Terminal resistance, output	350 $\pm$ 2 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +50 $^{\circ}$ C
Operating temperature range	-20 to +70 $^{\circ}$ C



- Material
Nickel plated steel
- Cable
Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

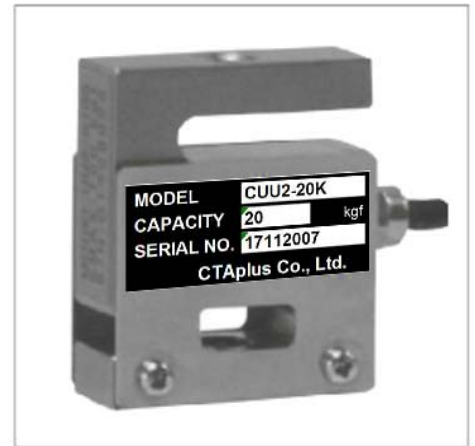
Rated Capacity	A	B	C	D	E	F
2, 5kgf	60	50	13	16	10	M6 x 1.0
10, 20kgf	70	52	13	18	13	M6 x 1.0

FEATURE

- . 압축 & 인장겸용 초소형 고정밀도 로드셀
- . 방진, 방수등급 : IP65

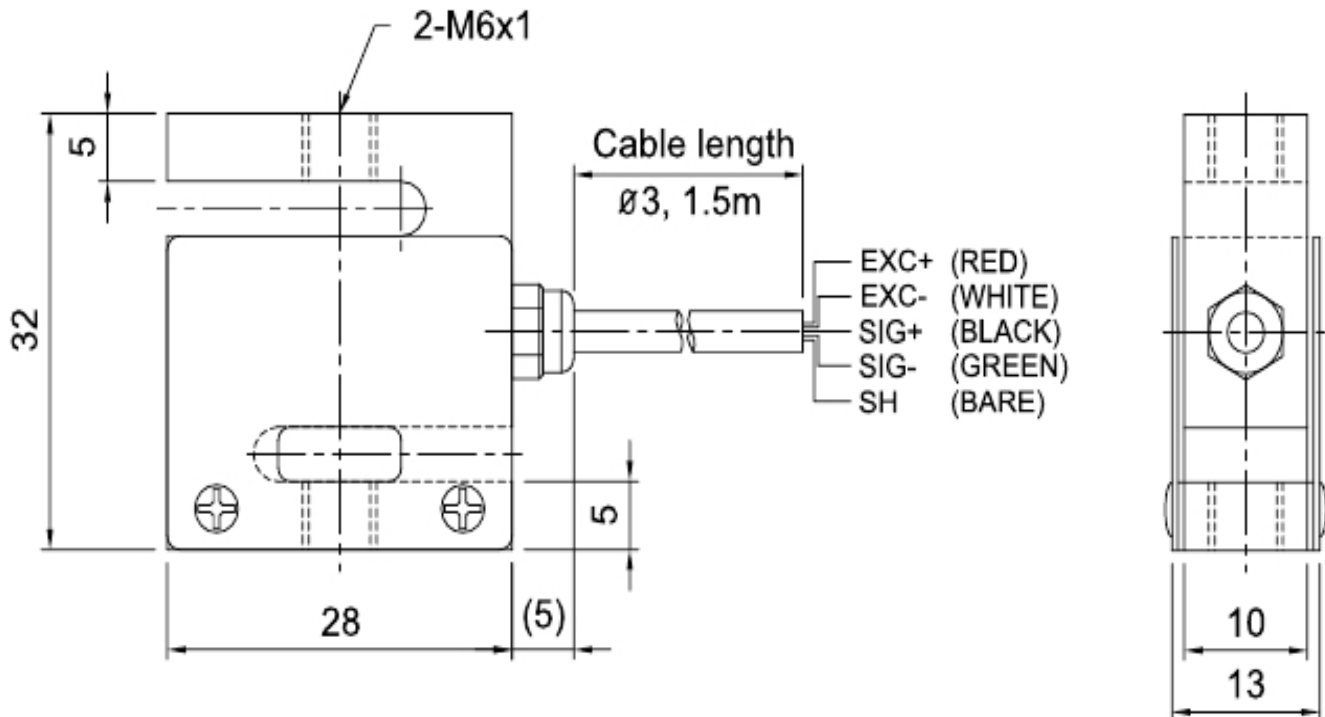
SPECIFICATION

MODEL	CUU2
Rated capacity (R.C.)	10, 20, 30, 50, 100kgf
Rated output (R.O.)	2.0 mV/V $\pm$ 1%
Zero balance	$\pm$ 1% R.O.
Combined error	0.05% R.O.
Repeatability	0.03% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.05% / 10 $^{\circ}$ C
Temp. effect on output value	0.05% / 10 $^{\circ}$ C
Excitation recommended	5V DC
Excitation maximum	10V DC
Terminal resistance, input	350 $\pm$ 80 Ω
Terminal resistance, output	350 $\pm$ 2 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +50 $^{\circ}$ C
Operating temperature range	-20 to +70 $^{\circ}$ C



- Material
10~30kgf : Aluminum
50~100kgf : Steel
- Cable
Braided Shield 4-wire round cable with PVC-jacket

DIMENSION (mm)



FEATURE

- . 압축 & 인장겸용 초소형 고정밀도 로드셀
- . 방진, 방수등급 : IP65

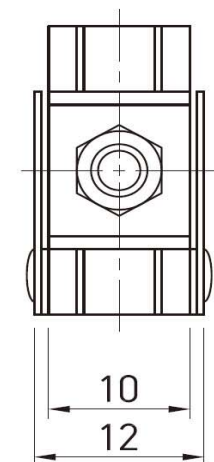
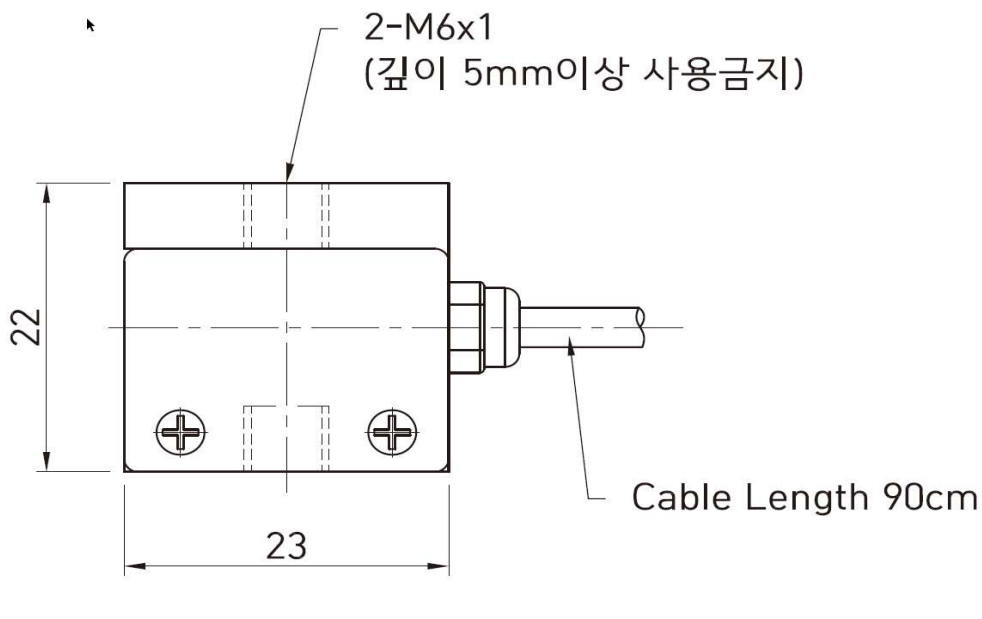
SPECIFICATION

MODEL	CUU3
Rated capacity (R.C.)	5, 10, 20, 50, 100kgf
Rated output (R.O.)	2.0 mV/V $\pm$ 1%
Zero balance	$\pm$ 2% R.O.
Combined error	0.05% R.O.
Repeatability	0.03% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.1% / 10 $^{\circ}$ C
Temp. effect on output value	0.05% / 10 $^{\circ}$ C
Excitation recommended	5V DC
Excitation maximum	10V DC
Terminal resistance, input	350 $\pm$ 80 Ω
Terminal resistance, output	350 $\pm$ 2 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +50 $^{\circ}$ C
Operating temperature range	-20 to +70 $^{\circ}$ C



- Material
5~20kgf : Aluminum
50~100kgf : Steel
- Cable
Braided Shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- . 압축 & 인장겸용 S-빔형 로드셀
- . 매달림 계측장비에 최적
- . 방진, 방수등급 : IP66

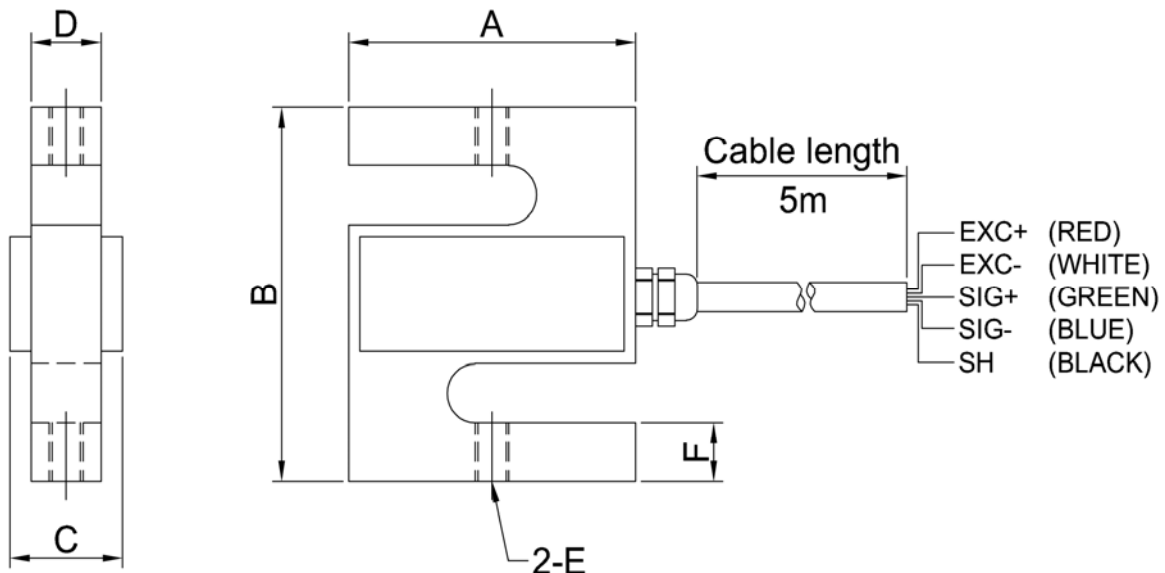
SPECIFICATION

MODEL	CSBA
Rated capacity (R.C.)	50, 100, 200, 500kgf, 1, 2, 3, 5tf
Rated output (R.O.)	3.0 ± 0.03 mV/V
Zero balance	0 ± 0.03 mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10℃
Temp. effect on output value	0.015% / 10℃
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	400 ± 50Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-20 to +80℃



– Material
Nickel plated steel

– Cable
Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

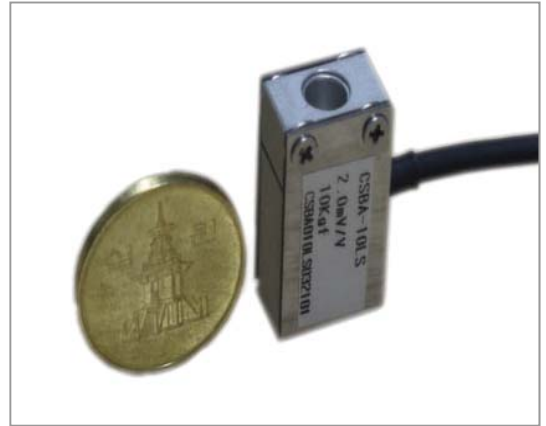
Rated Capacity	A	B	C	D	E	F
50, 100kgf	51	63.5	16.7	12.7	M6 x 1.0	10
200, 500kgf	51	76	27	19	M12 x 1.75	12.6
1tf	51	76	33	25.4	M12 x 1.75	12.6
2, 3tf	77	108	33	25.4	M18 x 1.5	19
5tf	88.9	120.7	38	32	M24 x 2.0	22.1

FEATURE

- . 압축 & 인장겸용 S-빔형 로드셀
- . 매달림 계측장비에 최적
- . 소형 사이즈
- . 방진, 방수등급 : IP65

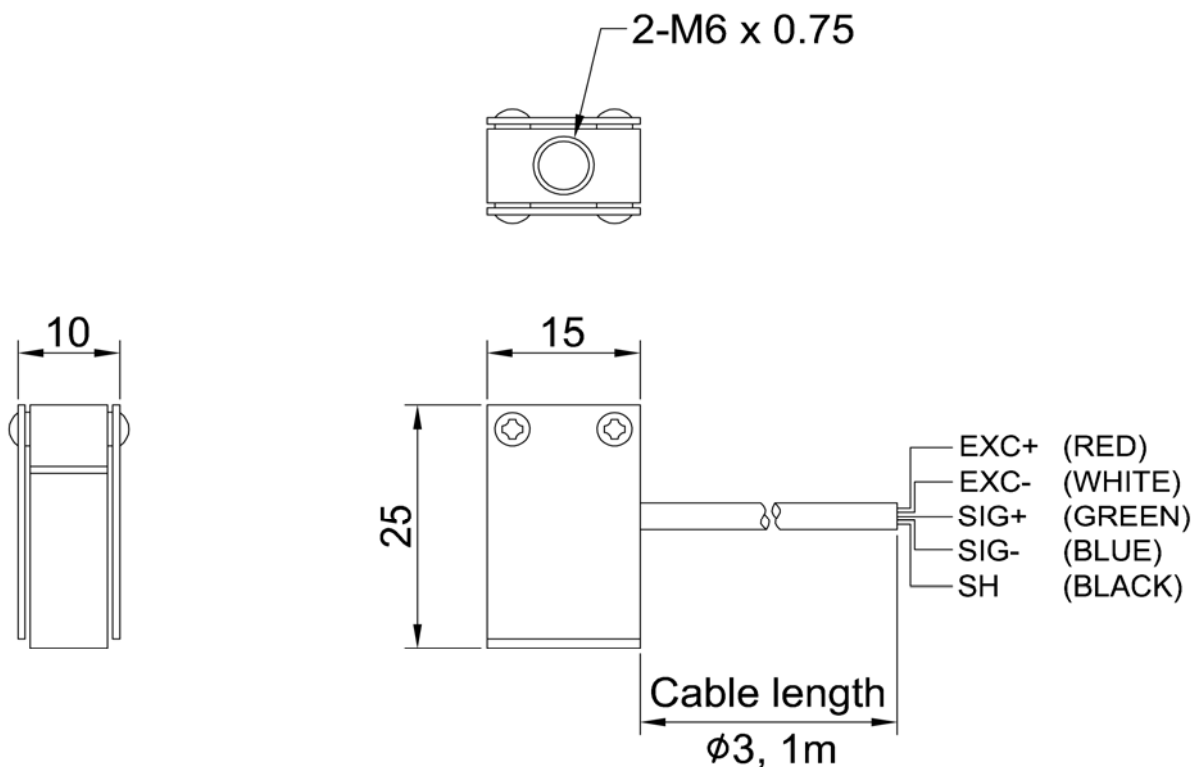
SPECIFICATION

MODEL	CSBAS
Rated capacity (R.C.)	10, 20 kgf
Rated output (R.O.)	2.0 ± 0.1 mV/V
Zero balance	0 ± 0.03 mV/V
Combined error	0.1% R.O.
Repeatability	0.05% R.O.
Creep for 30 min	0.1% R.O.
Temp. effect on zero value	0.05% / 10°C
Temp. effect on output value	0.05% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$350 \pm 3.5\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +70°C



- Material
Anodized Aluminium
- Cable
Braided Shield 4-wire round cable with PVC-jacket

DIMENSION (mm)



FEATURE

- . 소형 압축 로드셀
- . 협소한 공간에 적용

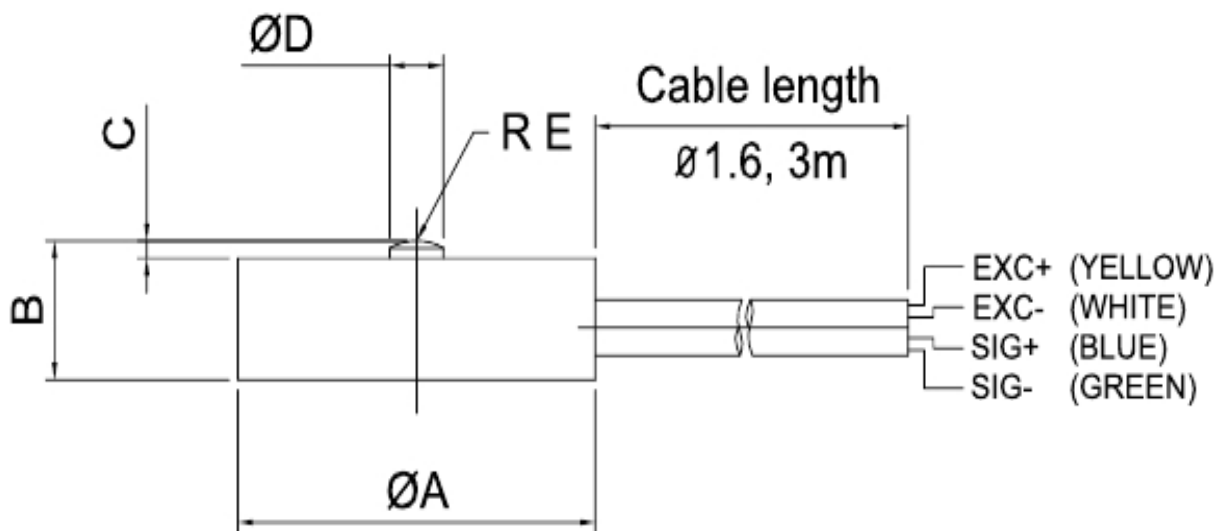
SPECIFICATION

MODEL	CMM92
Rated capacity (R.C.)	1, 2, 5, 10, 20kgf
Rated output (R.O.)	0.7mV/V to 1.2 mV/V
Zero balance	± 5% R.O.
Combined error	1.0% R.O.
Repeatability	1.0% R.O.
Creep for 30 min	0.1% R.O.
Temp. effect on zero value	2.0% / 10℃
Temp. effect on output value	2.0% / 10℃
Excitation maximum	5V DC
Terminal resistance, input	350Ω ± 2.5%
Terminal resistance, output	350Ω ± 2.5%
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-10 to +60℃



– Material
Stainless steel

– Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	Ø A	B	C	Ø D	E
1, 2, 5kgf	12	4	0.5	1.8	2
10, 20kgf	15	4	0.5	2.5	4

FEATURE

- . 소형 압축 로드셀
- . 협소한 공간에 적용

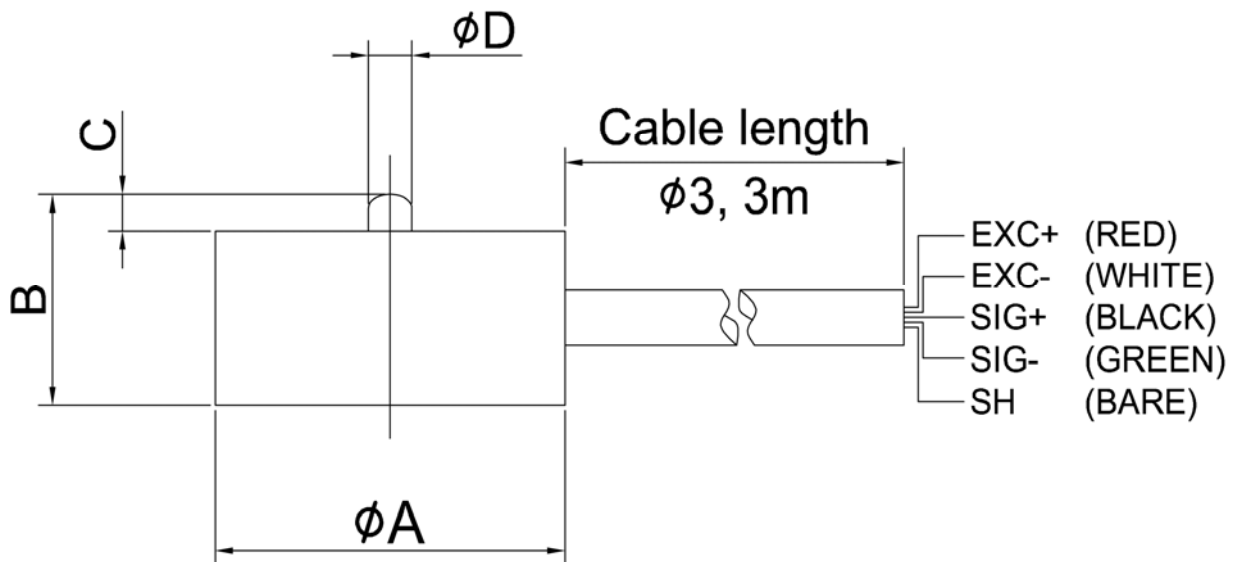
SPECIFICATION

MODEL	CMM
Rated capacity (R.C.)	1, 2, 5, 10, 20, 50, 100 200, 300, 500kgf, 1, 2tf
Rated output (R.O.)	0.7mV/V to 1.2 mV/V
Zero balance	± 5% R.O.
Combined error	1.0% R.O.
Repeatability	1.0% R.O.
Creep for 30 min	0.1% R.O.
Temp. effect on zero value	0.1% / 10 °C
Temp. effect on output value	0.1% / 10 °C
Excitation maximum	5V DC
Terminal resistance, input	350Ω ± 35%
Terminal resistance, output	350Ω ± 5%
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-20 to +60 °C



– Material
Stainless steel

– Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	A	B	C	D
1, 2, 5kgf	16	12	2	2.5
10, 20, 50, 100, 200kgf	20	11.5	2	2.5
300, 500kgf, 1,2tf	20	14	0.7	4

FEATURE

- . 소형 압축 로드셀
- . 협소한 공간에 적용

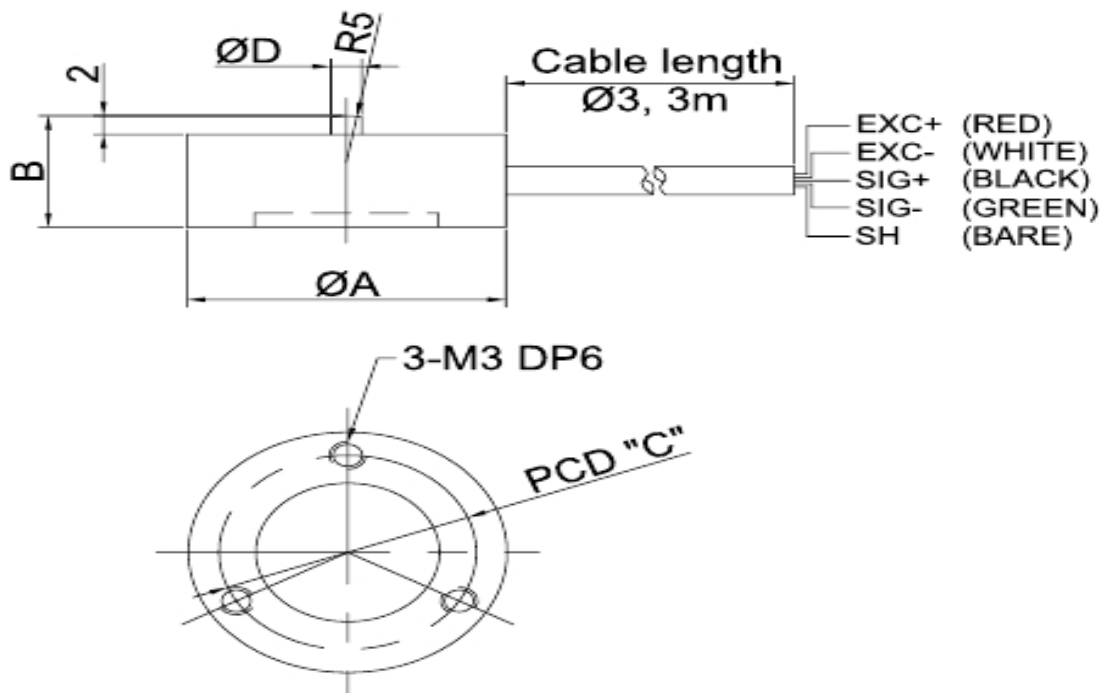
SPECIFICATION

MODEL	CMM2
Rated capacity (R.C.)	1, 2, 5, 10, 20, 50, 100, 200, 300, 500kgf, 1,2tf
Rated output (R.O.)	0.7mV/V to 1.2 mV/V
Zero balance	± 5% R.O.
Combined error	1.0% R.O.
Repeatability	1.0% R.O.
Creep for 30 min	0.1% R.O.
Temp. effect on zero value	0.1% / 10℃
Temp. effect on output value	0.1% / 10℃
Excitation maximum	5V DC
Terminal resistance, input	350Ω ± 35Ω
Terminal resistance, output	350Ω ± 5Ω
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-20 to +60℃



– Material
Stainless steel

– Cable
Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

Rated Capacity	A	B	C	Ø D
1, 2, 5kgf	21	12	17	2.5
10, 20, 50, 100, 200kgf	26	12	21	2.5
300, 500kgf, 1, 2tf	26	14	21	4

FEATURE

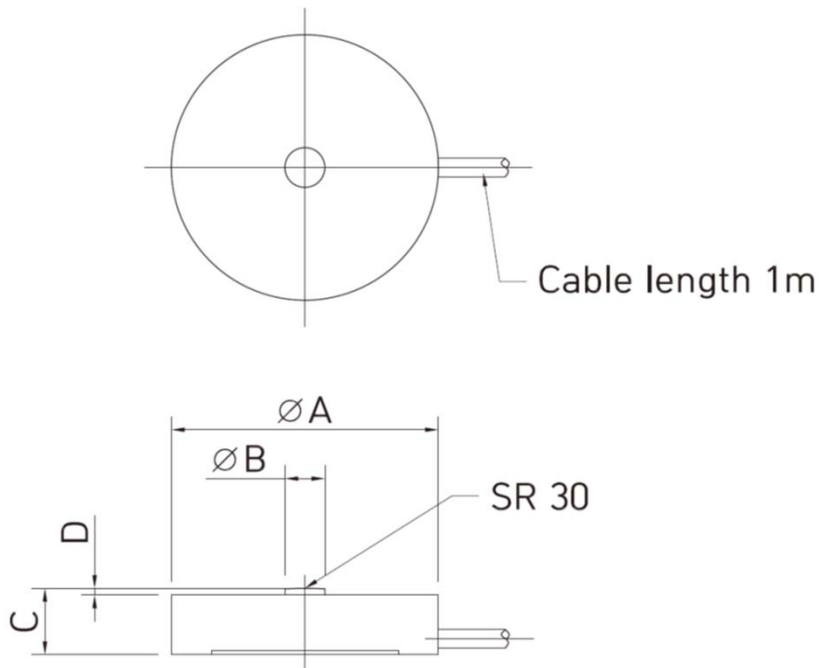
- . 소형 압축 로드셀
- . 협소한 공간에 적용

SPECIFICATION

MODEL	CLMN
Rated capacity (R.C.)	1, 2, 5, 10, 20, 30, 50, 100kgf
Rated output (R.O.)	About 0.5mV/V, 1.0mV/V (10~100kgf)
Zero balance	0.0 ± 0.1mV/V
Combined error	2.0% R.O.
Repeatability	1.0% R.O.
Creep for 30 min	1.0% R.O.
Temp. effect on zero value	0.5% / °C
Temp. effect on output value	0.5% / °C
Excitation Recommended	5V DC
Excitation maximum	10V DC
Terminal resistance, input	350Ω ± 3.5%
Terminal resistance, output	350Ω ± 3.5%
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-20 to +80 °C



- Material
- Anodized Aluminum (1~10Kgf)
- Stainless steel (20~100Kgf)
- Cable
- Thin 4-wire cable of 36 AWG standa



DIMENSION (mm)

Rated Capacity	Ø A	ØB	C	D
1, 2, 5, 10, 20kgf	20	3	3.5	0.5
30, 50kgf	20	3	4	0.5
100kgf	20	3	5	0.5

FEATURE

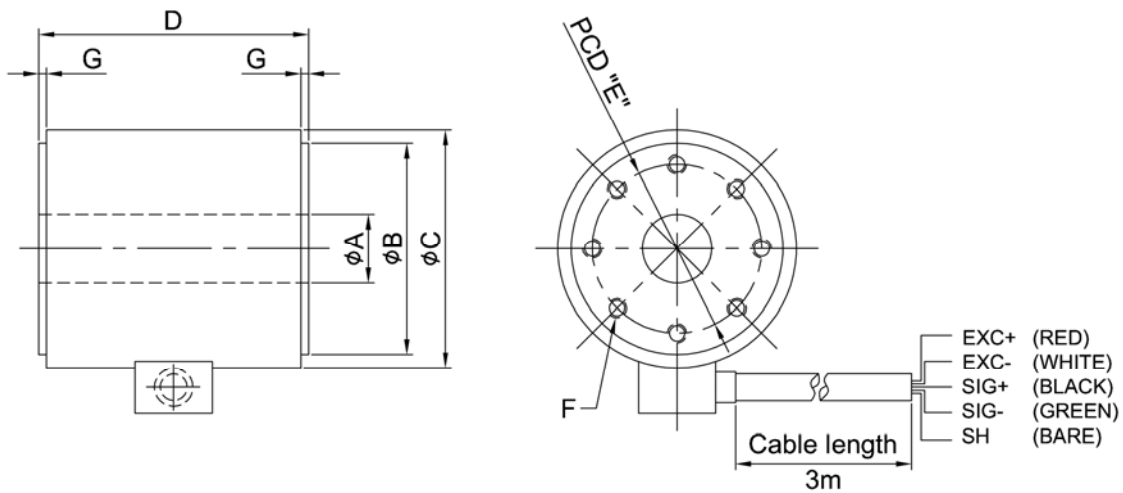
- . Center hole type 압축 로드셀
- . 프레스의 압입 하중관리, 터널, 교량 등의 압력측정용으로 사용
- . 방진, 방수등급 : IP64

SPECIFICATION

MODEL	CWH
Rated capacity (R.C.)	500kgf, 1, 2, 3, 5, 10 tf 20, 50, 100, 200 tf
Rated output (R.O.)	1.0 mV/V $\pm$ 0.4%
Zero balance	$\pm$ 2% R.O.
Combined error	1.0% R.O.
Repeatability	0.2% R.O.
Creep for 30 min	0.1% R.O.
Temp. effect on zero value	0.1% / 10 $^{\circ}$ C
Temp. effect on output value	0.05% / 10 $^{\circ}$ C
Excitation maximum	10V DC
Terminal resistance, input	700 $\pm$ 50 Ω (500kgf:350 Ω)
Terminal resistance, output	750 $\pm$ 2 Ω (500kgf:350 Ω)
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +60 $^{\circ}$ C
Operating temperature range	-20 to +70 $^{\circ}$ C



- Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	ϕ A	ϕ B	ϕ C	D	E	F	G
500kgf	10	24	40	50	18	2x4-M4 DP10	1
1, 2, 3, 5tf	18	55	62	70	44	2x8-M5 DP10	2
10tf	18	55	62	80	44	2x8-M5 DP10	2
20tf	43	68	96	80	56	2x8-M6 DP10	3
50tf	80	112	130	110	96	2x6-M8 DP10	3
100tf	85	118	158	110	102	2x6-M12 DP10	3
200tf	120	162	240	120	140	2x6-M12 DP12	3

FEATURE

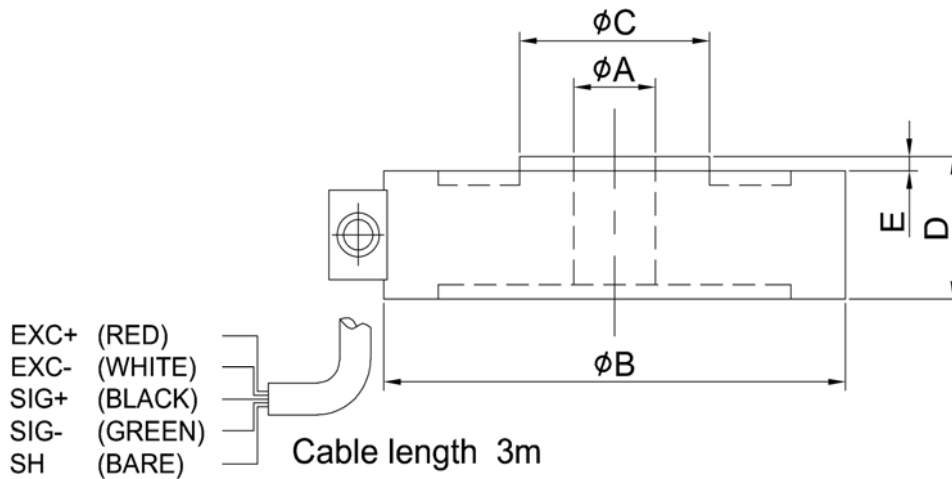
- . Center Hole Type 압축 로드셀
- . 견고한 구조, 고강도 합금강 사용
- . 터널, 교량 등 압력 측정용으로 사용

SPECIFICATION

MODEL	CWW
Rated capacity (R.C.)	50, 100, 200, 500 kgf, 1, 2, 3, 5 tf 10, 20, 30, 50, 100, 150, 200 tf
Rated output (R.O.)	1.5 mV/V $\pm$ 0.4%
Zero balance	$\pm$ 0.5% R.O.
Combined error	1.0% R.O.
Repeatability	0.5% R.O.
Creep for 30 min	0.1% R.O.
Temp. effect on zero value	0.1% / 10 °C
Temp. effect on output value	0.05% / 10 °C
Excitation maximum	10V DC
Terminal resistance, input	700 $\pm$ 10 Ω
Terminal resistance, output	700 $\pm$ 5 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +60 °C
Operating temperature range	-20 to +70 °C



– Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	φA	φB	φC	D	E
50, 100, 200, 500kgf	10	55	22	15	2
1, 2, 3, 5tf	12	68	28	20	1.5
10tf	50	148	80	37	5
20, 30, 50tf	70	155	99	43	5
100tf	110	198	129	43	5
150tf	165	278	200	50	8
200tf	170	308	212	65	10

FEATURE

- . Center Hole Type 압축 로드셀
- . 견고한 구조, 고강도 합금강 사용
- . 터널, 교량 등 압력 측정용으로 사용

SPECIFICATION

MODEL	CWW1
Rated capacity (R.C.)	50, 100, 200, 500 kgf 1, 2, 3, 5, 10tf
Rated output (R.O.)	1.5 mV/V $\pm$ 0.4%
Zero balance	$\pm$ 0.5% R.O.
Combined error	1.0% R.O.
Repeatability	0.5% R.O.
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.1% / 10 °C
Temp. effect on output value	0.05% / 10 °C
Excitation maximum	10V DC
Terminal resistance, input	700 $\pm$ 10 Ω
Terminal resistance, output	700 $\pm$ 5 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +60 °C
Operating temperature range	-20 to +70 °C

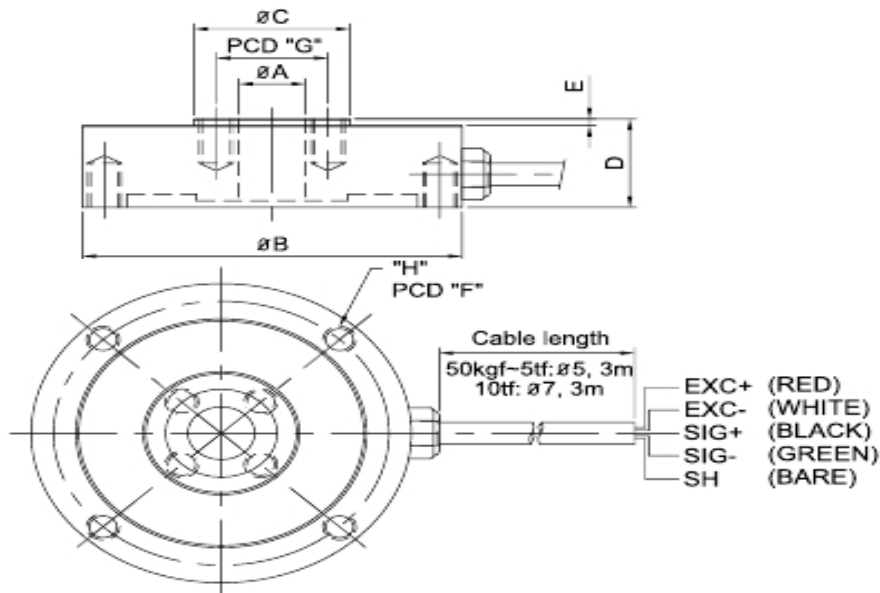


- Cable

Braided Shield 4-wire round cable with PVC-jacket

50kgf~5tf : ϕ 5mm, 4core 3m

10tf : ϕ 7mm, 4core 3m



DIMENSION (mm)

Rated Capacity	ϕ A	ϕ B	ϕ C	D	E	F	G	H
50, 100, 200, 500kgf	10	55	22	15	2	48	16	2 $\times$ 4-M4DP6
1, 2, 3, 5tf	12	68	28	20	1.5	60	20	2 $\times$ 4-M4DP10
10tf	50	148	80	37	5	132	35	2 $\times$ 6-M8DP15

FEATURE

- . 소형 압축 로드셀
- . 협소한 공간에 적용
- . 방진, 방수등급 : IP67

SPECIFICATION

MODEL	CMNC
Rated capacity (R.C.)	50, 100, 200, 500kgf, 1, 2, 5, 10, 20tf
Rated output (R.O.)	2.0 ± 0.02 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.15% R.O.
Repeatability	0.05% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.05% / 10℃
Temp. effect on output value	0.01% / 10℃
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	420 ± 50Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +40℃
Operating temperature range	-20 to +80℃

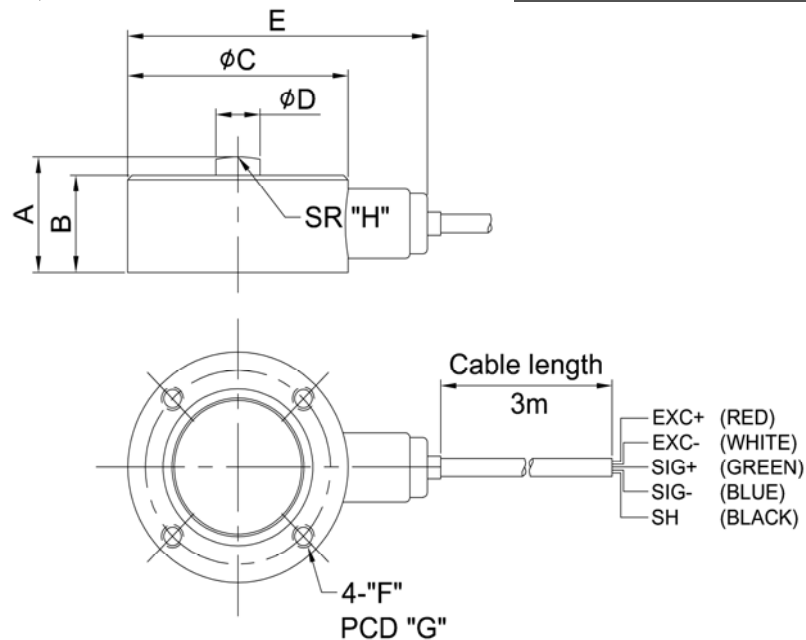


◆ Material

Stainless steel (50kgf~2tf)
Paint finished steel (5tf ~ 20tf)

◆ Cable

Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	A	B	φC	φD	E	F	G	H
50, 100, 200, 500kgf	25	21	50	10	65	M5 x 0.8 DP7	42	50
1, 2tf	25	21	50	10	65	M5 x 0.8 DP7	42	50
5tf	40	35	98	20	113	M6 x 1.0 DP8	72	150
10tf	45	40	98	20	113	M6 x 1.0 DP8	72	150
20tf	50	45	118	20	132	M8 x 1.25 DP10	90	250

FEATURE

- . 소형 압축 로드셀
- . Stainless steel 구조
- . 협소한 공간에 적용
- . 방진, 방수등급 : IP67

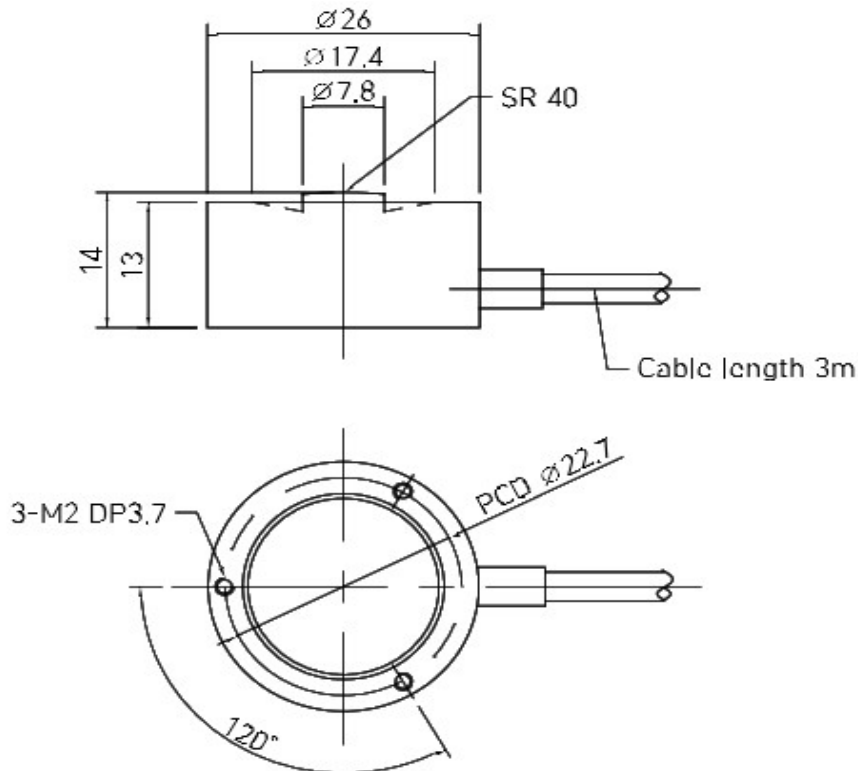
SPECIFICATION

MODEL	CMNS
Rated capacity (R.C.)	50, 100, 200, 500kgf, 1, 2, 3tf
Rated output (R.O.)	1.0±0.1 mV/V
Combined error	0.5% R.O.
Repeatability	0.1% R.O.
Creep for 30 min	0.5% R.O.
Zero Balance	0±0.1 mV/V
Temp. effect on zero value	0.028% / 10℃
Temp. effect on output value	0.015% / 10℃
Excitation Recommended	10V DC
Terminal resistance, input	400Ω ± 20Ω
Terminal resistance, output	350Ω ± 3.5Ω
Insulation resistance	> 2000MΩ
Safe Overload	150% R.C
Compensated temperature range	-10 ~ 40℃
Operating temperature range	-20 ~ 70℃



- Material
- Stainless steel
- Cable
- Braided shield 4-wire round cable with PVC - jacket

DIMENSION (mm)



FEATURE

- . 압축로드셀
- . 고강도 합금강을 사용하여 완전 밀폐구조
- . 하중시험기, 계량시스템 등에 적합
- . 방진, 방수등급 : IP67

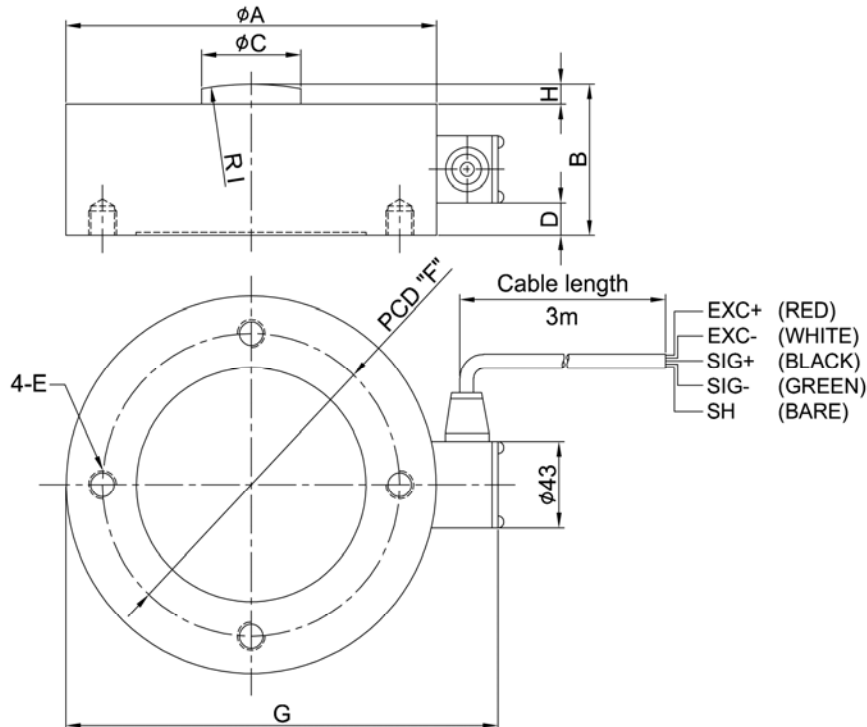
SPECIFICATION

MODEL	CCL
Rated capacity (R.C.)	30, 50, 100, 200, 300 tf
Rated output (R.O.)	2.0 mV/V $\pm$ 0.1%
Zero balance	$\pm$ 2% R.O.
Combined error	0.05% R.O. (100, 200tf: 0.1%)
Repeatability	0.03% R.O. (100, 200tf: 0.05%)
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.05% / 10 $^{\circ}$ C
Temp. effect on output value	0.05% / 10 $^{\circ}$ C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	700 $\pm$ 30 Ω
Terminal resistance, output	700 $\pm$ 3 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +60 $^{\circ}$ C
Operating temperature range	-20 to +80 $^{\circ}$ C



– Material
Paint finished steel

– Cable
Braided Shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

Rated Capacity	ϕA	B	ϕC	D	E	F	G	H	I
30, 50tf	187	75	50	16	M12 x 1.75 DP20	150	218	10	140
100tf	278	120	74	37	M12 x 1.75 DP20	240	309	15	160
200tf	320	170	100	63.5	M16 x 2.0 DP20	270	351	15	250
300tf	396	195	140	68.5	M16 x 2.0 DP20	330	427	15	320

FEATURE

- . 소형 압축 & 인장 로드셀
- . 방진, 방수등급: IP65

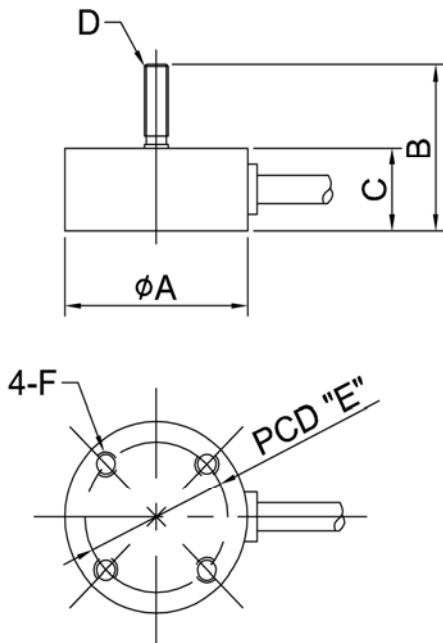
SPECIFICATION

MODEL	CUM
Rated capacity (R.C.)	1, 2, 5, 10, 20, 50, 100, 200 kgf
Rated output (R.O.)	0.7mV/V to 1.2 mV/V
Zero balance	± 2% R.O.
Combined error	0.1% R.O.
Repeatability	0.1% R.O.
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.05% / 10℃
Temp. effect on output value	0.1% / 10℃
Excitation maximum	5V DC
Terminal resistance, input	350 ± 30Ω
Terminal resistance, output	350 ± 2Ω
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +50℃
Operating temperature range	-10 to +60℃

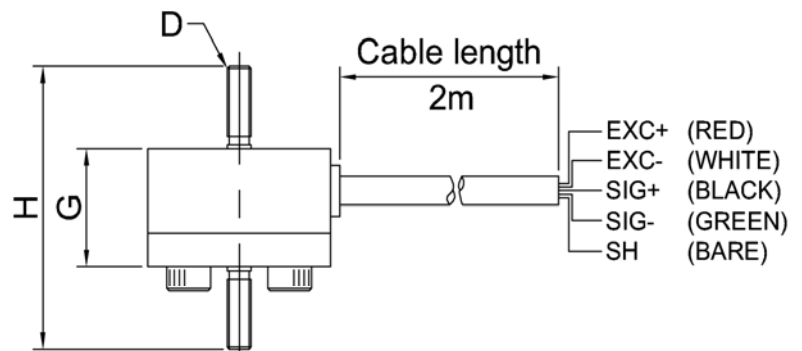


– Material
Stainless steel

– Cable
Braided Shield 4-wire round cable
with PVC-jacket



TENSION PLATE (OPTION)



DIMENSION (mm)

Rated Capacity	φA	B	C	D	E	F	G	H
1, 2, 5kgf	23	20	10	M3 x 0.5	18	M3 DP5	14	34
10, 20, 50, 100, 200kgf	27	21	11	M6 x 1.0	22	M3 DP5	17	37

FEATURE

- . Small compression & tension load cell
- . Protection class : IP65

SPECIFICATION

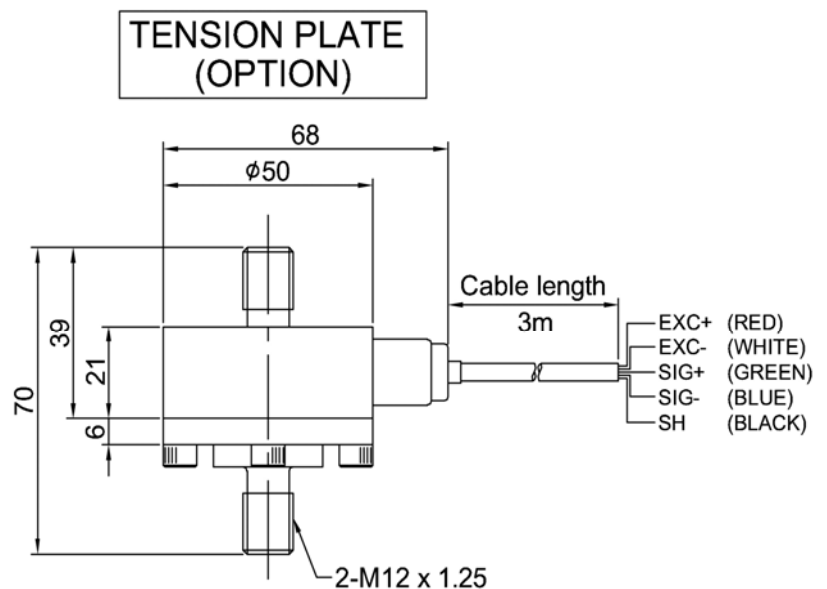
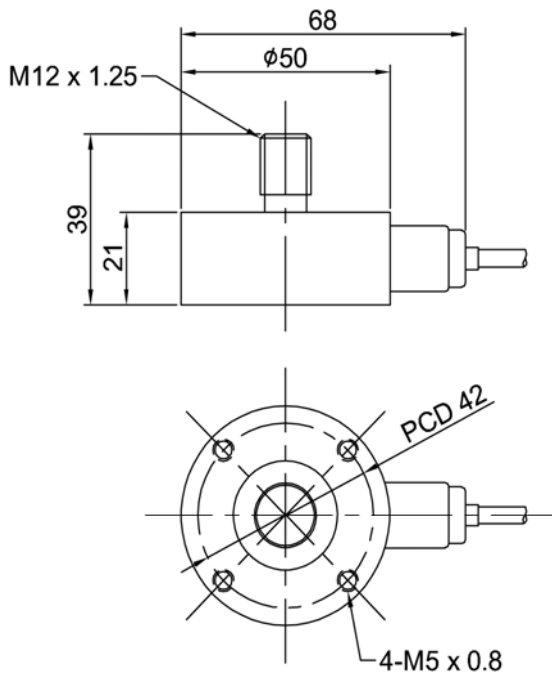
MODEL	CMNT
Rated capacity (R.C.)	50, 100, 200, 500kgf
Rated output (R.O.)	2.0 ± 0.02 mV/V
Zero balance	0 ± 0.1 mV/V
Combined error	0.15% R.O.
Repeatability	0.05% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.05% / 10°C
Temp. effect on output value	0.1% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$420 \pm 50\Omega$
Terminal resistance, output	$350 \pm 3.5\Omega$
Insulation resistance	$> 2000M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +80°C



– Material
Stainless steel

– Cable
Braided Shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



FEATURE

- . 고정밀의 압축 & 인장 로드셀
- . 계량시스템, 압입 하중 관리용이나 정밀한 하중 시험기에 적합

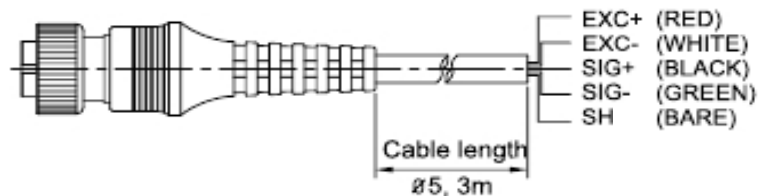
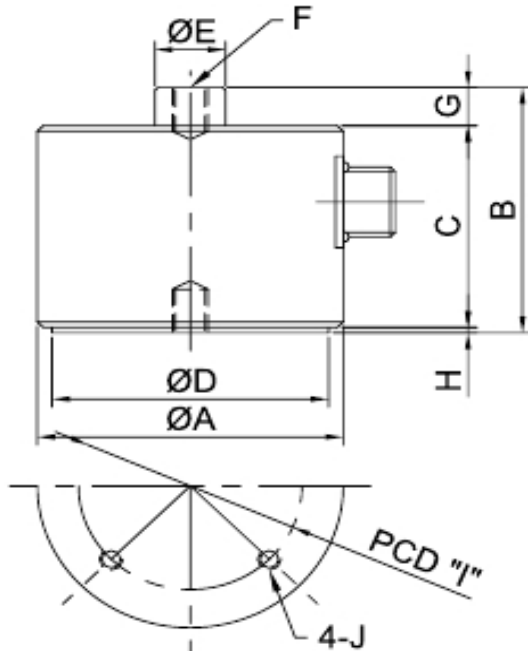
SPECIFICATION

MODEL	CUMI
Rated capacity (R.C.)	1, 2, 5, 10, 20, 50, 100, 200 500kgf, 1, 2tf
Rated output (R.O.)	2.0mV/V $\pm$ 1% (1~5kg=1.0mV/V)
Zero balance	$\pm$ 2% R.O.
Combined error	0.03% R.O.
Repeatability	0.03% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.1% / 10 $^{\circ}$ C
Temp. effect on output value	0.05% / 10 $^{\circ}$ C
Excitation maximum	10V DC
Terminal resistance, input	350 $\pm$ 3.5 Ω
Terminal resistance, output	350 $\pm$ 3.5 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +50 $^{\circ}$ C
Operating temperature range	-20 to +70 $^{\circ}$ C



– Material
Anodized aluminum

– Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	ØA	B	C	ØD	ØE	F	G	H	I	J
1kgf	52	45	37	47	10.5	M6 $\times$ 1.0 DP8	7	1	38	4-M4 DP6
2,5kgf	52	45	37	47	12	M6 $\times$ 1.0 DP8	7	1	38	4-M4 DP6
10,20,50,100,200,500kgf,1tf	60	80	73	50	20	M12 $\times$ 1.75 DP15	5	2	40	4-M5 DP10
2tf	88	110	102	80	35	M18 $\times$ 1.5 DP22	2	3	55	4-M6 DP12

FEATURE

- . 완전 밀폐구조의 압축 & 인장 로드셀
- . 우수한 내피 특성
- . 축하중에 강한 구조
- . 방진, 방수등급 : IP67

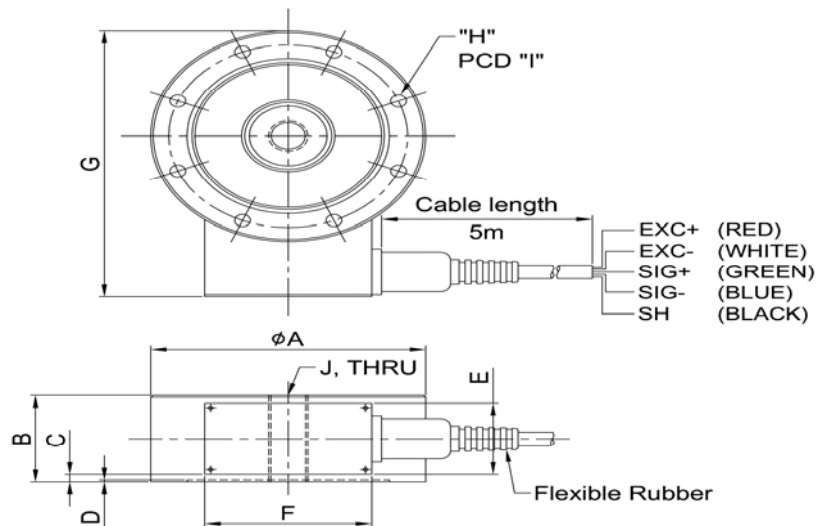
SPECIFICATION

MODEL	CLS
Rated capacity (R.C.)	1, 2, 3, 5, 10, 20, 50, 100, 200 tf
Rated output (R.O.)	2.0 ± 0.005 mV/V
Zero balance	0 ± 0.02 mV/V
Combined error	0.05% R.O.
Repeatability	0.02% R.O.
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.03% / 10 °C
Temp. effect on output value	0.03% / 10 °C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	350 ± 3.5Ω
Terminal resistance, output	350 ± 3.5Ω
Insulation resistance	> 2000MΩ@ 50V DC
Compensated temperature range	-10 to +40 °C
Operating temperature range	-20 to +80 °C



– Material
Paint finished steel

– Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	φA	B	C	D	E	F	G	H	I	J
1, 2, 3tf	110	46	4	1	38	68	139.5	8-φ6.6	97.2	M16 x 2.0
5tf	120	46	4	1	38	68	149.5	8-φ9	103.2	M18 x 1.5
10tf	138	60	11	1	38	68	167.5	8-φ11	117.6	M24 x 2.0
20tf	184	80	21	1	38	68	213.5	8-φ14	157.6	M39 x 2.0
50tf	200	60	11	1	38	68	229.5	12-φ14.3	170	M45 x 3.0
100tf	278	90	26	1	38	68	307.5	16-φ16.3	229	M70 x 3.0
200tf	355	108	35	1	38	68	384.5	12-φ26	298	M90 x 3.0

FEATURE

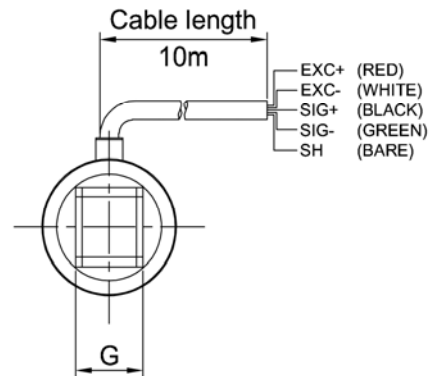
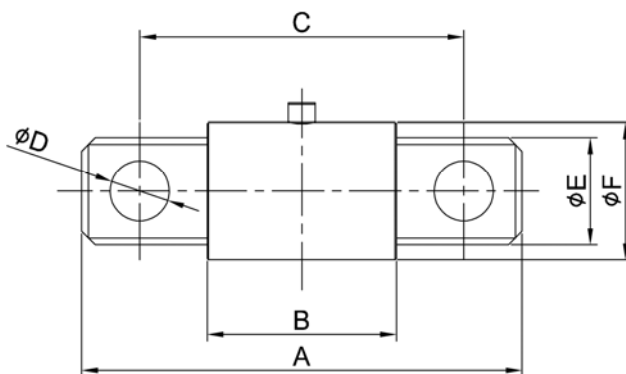
- . 인장형 로드셀
- . 중고 중량의 인장시험에 적합

SPECIFICATION

MODEL	CTS
Rated capacity (R.C.)	1, 2, 3, 5, 10, 20, 30, 50, 70 tf
Rated output (R.O.)	1.0 mV/V $\pm$ 0.5%
Zero balance	$\pm$ 1.0% R.O.
Combined error	0.5% R.O.
Repeatability	0.1% R.O.
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.05% / 10 $^{\circ}$ C
Temp. effect on output value	0.1% / 10 $^{\circ}$ C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	350 $\pm$ 10 Ω
Terminal resistance, output	350 $\pm$ 5 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +60 $^{\circ}$ C
Operating temperature range	-20 to +80 $^{\circ}$ C



– Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

Rated Capacity	A	B	C	ϕ D	ϕ E	ϕ F	G
1tf	140	70	110	18	32	50	20
2tf	163	70	120	22	39	50	25
3tf	180	63	128	27	49	60	30
5tf	234	80	168	37	59	70	40
10tf	310	100	210	37	89	100	40
20tf	400	120	285	62	120	135	70
30tf	428	128	288	64	120	135	75
50tf	508	148	342	75	145	160	98
70tf	620	150	410	100	170	210	100

FEATURE

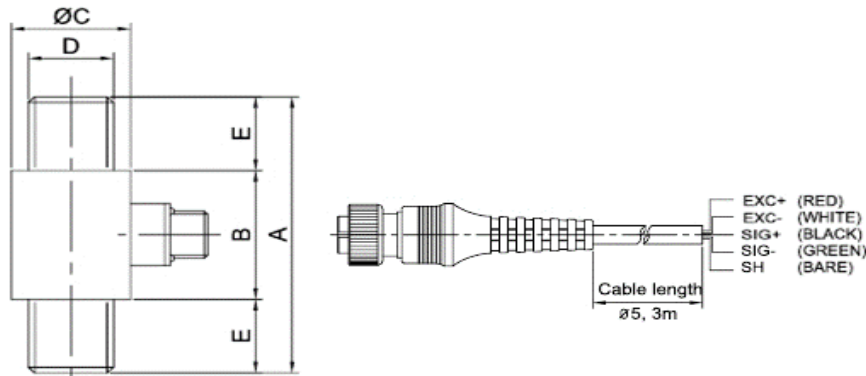
- . 인장, 압축형 로드셀
- . 중고 중량의 인장시험에 적합

SPECIFICATION

MODEL	CTX
Rated capacity (R.C.)	100, 200, 500kgf, 1, 2, 3, 5, 10, 20, 50, 100, 200, 300tf
Rated output (R.O.)	1.0mV/V $\pm$ 1%
Nonlinearity	0.15% R.O.
Hysteresis	0.15% R.O.
Repeatability	0.1% R.O.
Creep for 30 min	0.05% R.O.
Zero balance	$\pm$ 1%
Temp. effect on rated output	$\pm$ 0.01% LOAD/10 $^{\circ}$ C
Temp. effect on zero balance	$\pm$ 0.02% R.O / 10 $^{\circ}$ C
Temperature range.compensated	-10 ~ 60 $^{\circ}$ C
Temperature range. Safe	-20 ~ 80 $^{\circ}$ C
Terminal resistance, input	350 $\pm$ 5%
Terminal resistance, output	350 $\pm$ 5%
Insulation resistance	2000M Ω
Excitation recommended	10V
Safe overload	120% R.C
Cable length	$\varnothing$ 5, 4core, 3m



– Cable
Braided Shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

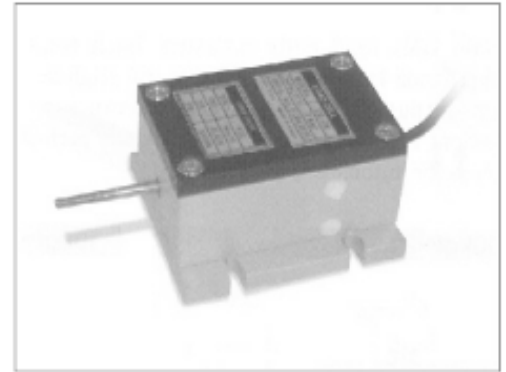
Rated Capacity	A	B	Ø C	D	E
100, 200, 500kgf	75	35	28	M16 $\times$ 1.5	20
1, 2tf	75	35	28	M20 $\times$ 1.5	20
3tf	75	35	28	M20 $\times$ 1.5	20
5tf	75	35	33	M24 $\times$ 2.0	20
10tf	170	100	62.5	M39 $\times$ 2.0	35
20tf	190	100	63	M39 $\times$ 2.0	50
50tf	245	105	85	M64 $\times$ 2.0	70
100tf	340	140	115	M80 $\times$ 2.0	100
200tf	390	160	150	M110 $\times$ 2.0	115
300tf	450	194	169	M125 $\times$ 4.0	128

FEATURE

- . 낮은 용량의 인장 & 압축 로드셀
- . 저용량의 푸쉬풀 시험기에 적합

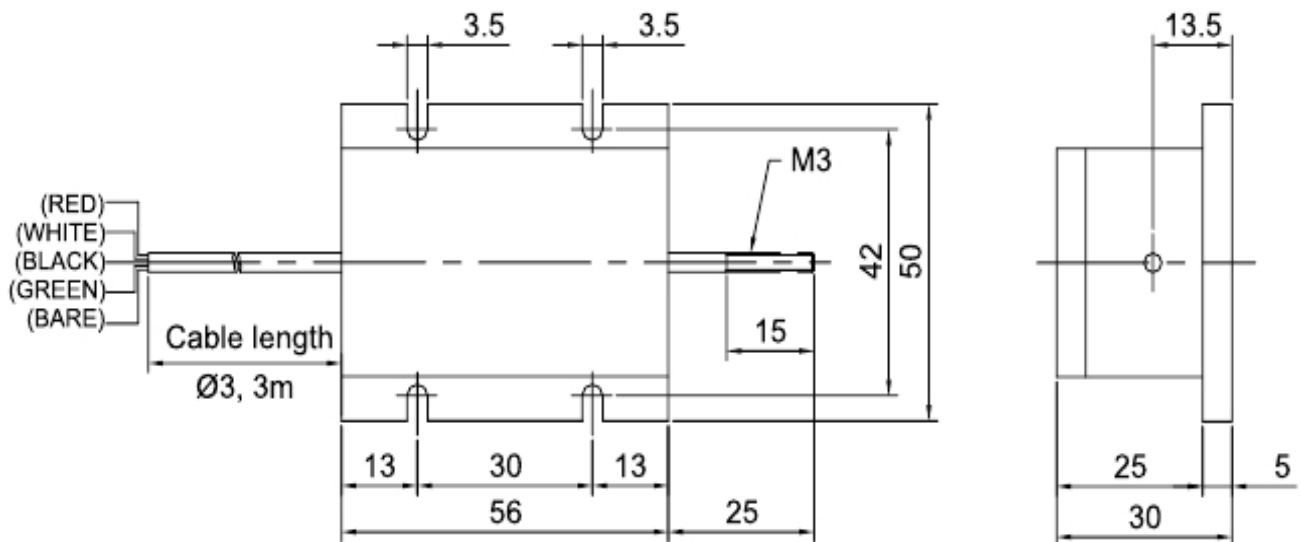
SPECIFICATION

MODEL	CUS
Rated capacity (R.C.)	500gf to 2kgf
Rated output (R.O.)	1.2 ~ 1.5 mV/V
Zero balance	± 0.2 mV/V
Combined error	0.2% R.O.
Repeatability	0.2% R.O.
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.5% / 10°C
Temp. effect on output value	0.5% / 10°C
Excitation recommended	5V DC
Terminal resistance, input	$350 \pm 40\Omega$
Terminal resistance, output	$350 \pm 40\Omega$
Insulation resistance	$> 1000M\Omega @ 50V$ DC
Compensated temperature range	0 to +50°C
Operating temperature range	-10 to +60°C



- Cable
Braided shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)

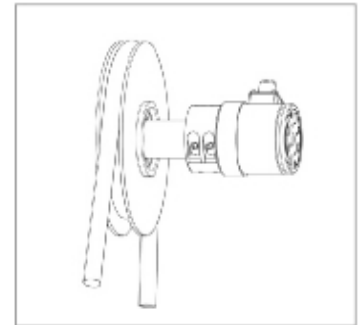


FEATURE

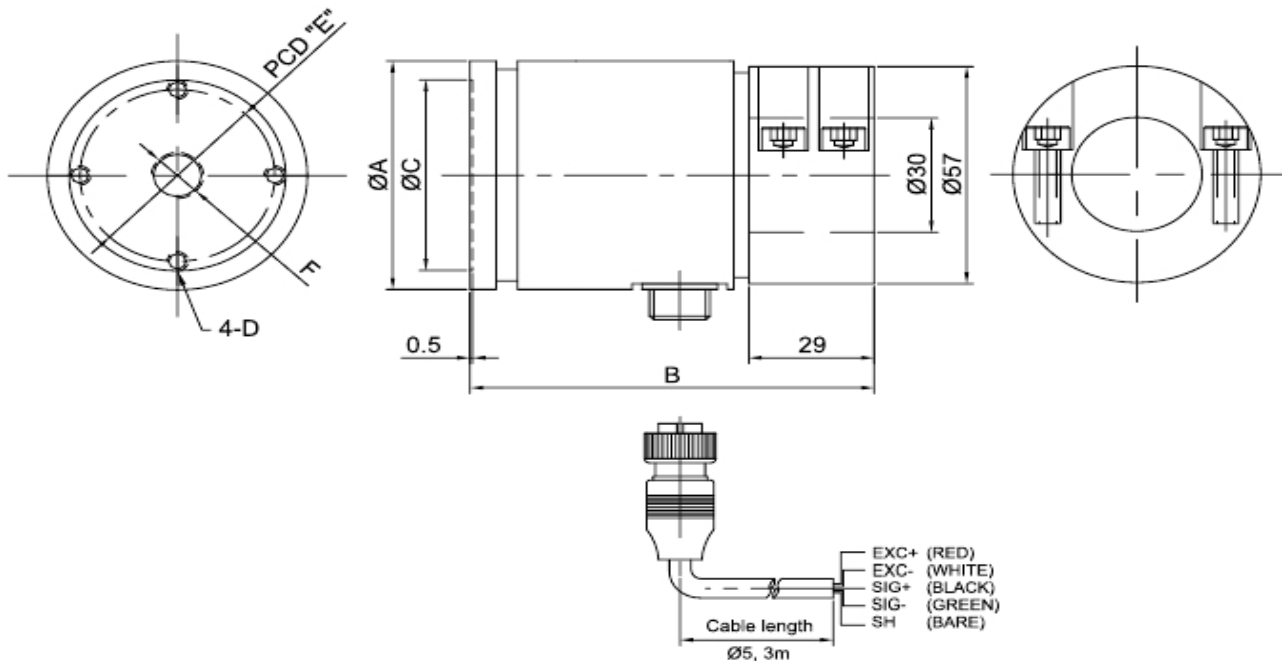
- . 웹테션 로드셀
- . 와이어나 롤의 장력을 측정하는데 적합

SPECIFICATION

MODEL	CRTB4
Rated capacity (R.C.)	10, 20, 50, 100, 200kgf
Rated output (R.O.)	1.0 ± 0.05 mV/V
Zero balance	0 ± 0.02 mV/V
Combined error	0.05% R.O.
Repeatability	0.05% R.O.
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.05% / 10℃
Temp. effect on output value	0.1% / 10℃
Excitation recommended	10V DC
Terminal resistance, input	350 ± 30Ω
Terminal resistance, output	350 ± 2Ω
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +60℃
Operating temperature range	-10 to +80℃



- Cable
Braided shield 4-wire round cable
with PVC-jacket



DIMENSION (mm)

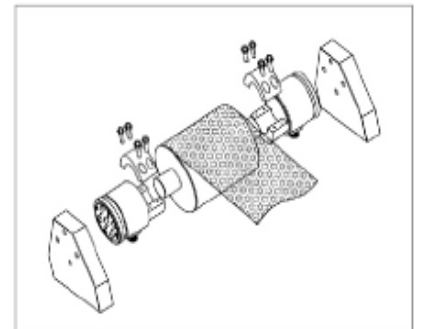
Rated Capacity	Ø A	B	Ø C	D	E	F
10, 20, 50kgf	60	80	50	M5 DP15	45	M12
100, 200kgf	66.5	85	60	M8 DP15	51	M16

FEATURE

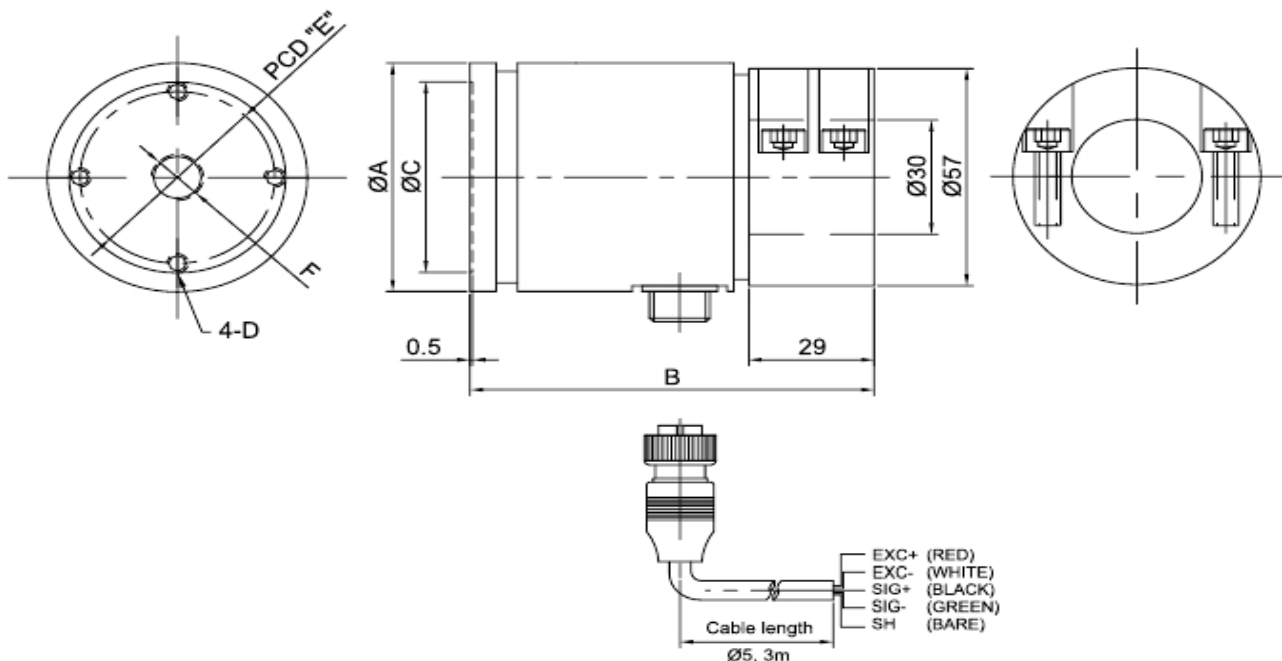
- . 웹테션 로드셀
- . 와이어나 롤의 장력을 측정하는데 적합

SPECIFICATION

MODEL	CRTB5
Rated capacity (R.C.)	10, 20, 50, 100, 200kgf
Rated output (R.O.)	1.0 ± 0.05 mV/V
Zero balance	0 ± 0.02 mV/V
Combined error	0.05% R.O.
Repeatability	0.05% R.O.
Creep for 30 min	0.05% R.O.
Temp. effect on zero value	0.05% / 10°C
Temp. effect on output value	0.1% / 10°C
Excitation recommended	10V DC
Terminal resistance, input	350 ± 30Ω
Terminal resistance, output	350 ± 2Ω
Insulation resistance	> 2000MΩ @ 50V DC
Compensated temperature range	-10 to +60°C
Operating temperature range	-10 to +80°C



- Cable
Braided shield 4-wire round cable with PVC-jacket



DIMENSION (mm)

Rated Capacity	Ø A	B	Ø C	D	E	F
10, 20, 50kgf	60	93.5	50	M5 DP15	45	M12
100, 200kgf	66.5	102	60	M8 DP15	51	M16

FEATURE

- . 강건한 디자인 과 설치하기 쉬움
- . 충격에 강함
- . 트럭 스케일 및 대용량 저울에 적합
- . 방진, 방수등급 : IP67

SPECIFICATION

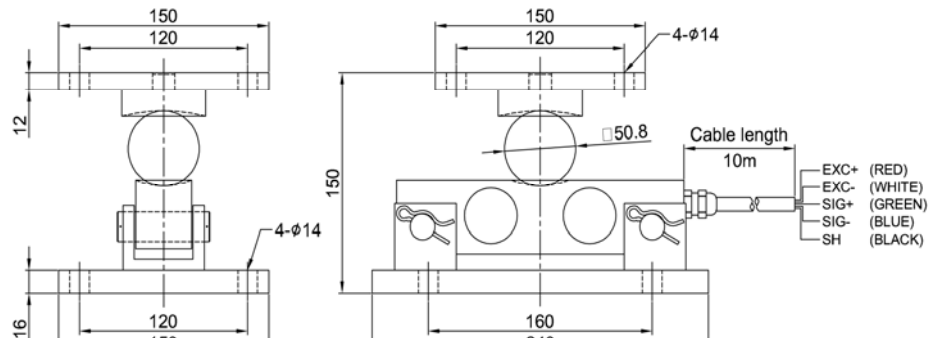
MODEL	CDSBB
Rated capacity (R.C.)	10, 15, 25 tf
Rated output (R.O.)	2.0 ± 0.004 mV/V
Zero balance	0 ± 0.03 mV/V
Combined error	0.03% R.O.
Repeatability	0.02% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.03% / 10°C
Temp. effect on output value	0.015% / 10°C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	$820 \pm 50 \Omega$
Terminal resistance, output	$700 \pm 7 \Omega$
Insulation resistance	$> 2000 M\Omega @ 50V$ DC
Compensated temperature range	-10 to +40°C
Operating temperature range	-20 to +80°C



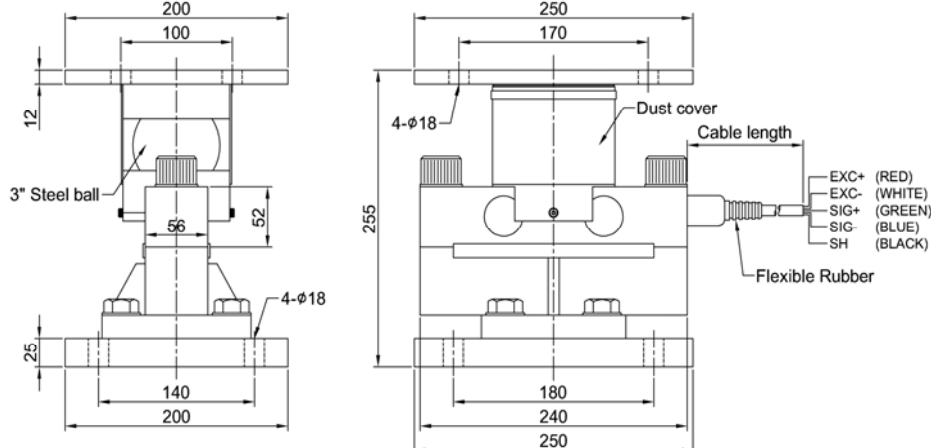
- Material
Nickel plate steel (10,15tf)
Paint finished steel (25tf)
- Cable
Braided Shield 4-wire round cable with PVC-jacket

DIMENSION (mm)

10, 15tf



20tf



FEATURE

- . 압축 & 인장겸용 S-type 로드셀
- . 시험기, TEST 용에 적합
- . 고정밀 로드셀

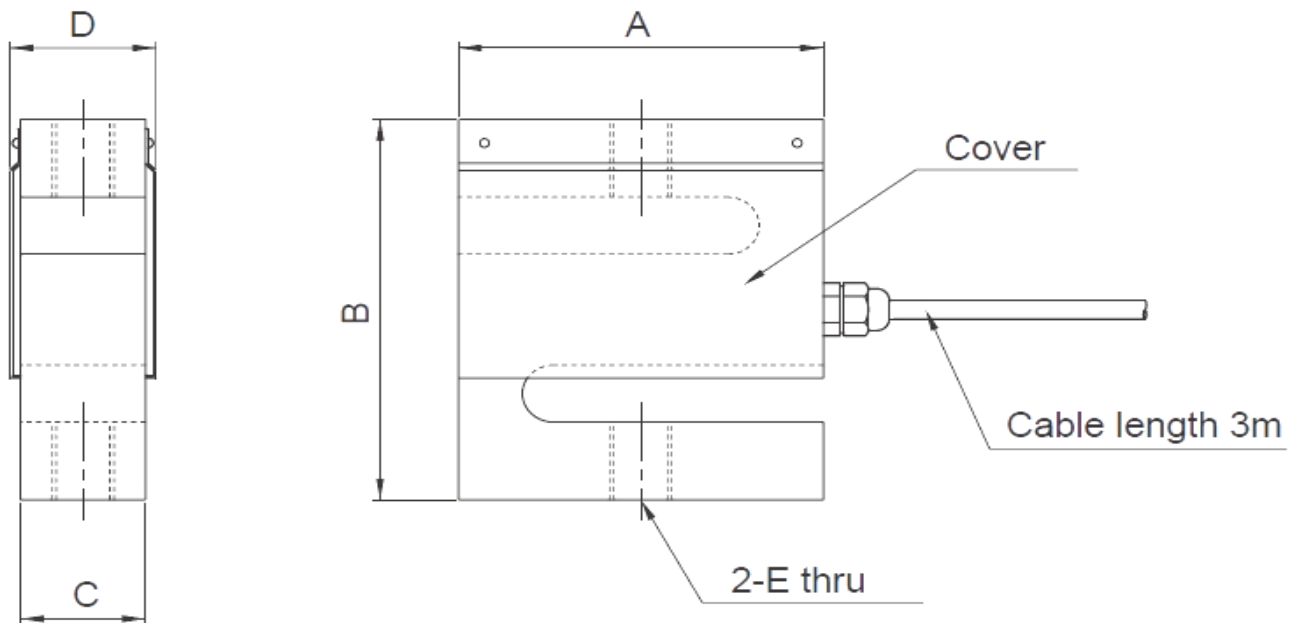
SPECIFICATION

MODEL	CSB
Rated capacity (R.C.)	20,50,75,100, 200, 250, 500kgf, 1, 2tf
Rated output (R.O.)	2.0mV/V $\pm$ 0.005
Zero balance	0.0 $\pm$ 0.2mV/V
Combined error	0.03% R.O.
Repeatability	0.01% R.O.
Creep for 30 min	0.03% R.O.
Temp. effect on zero value	0.028% / 10 $^{\circ}$ C
Temp. effect on output value	0.015% / 10 $^{\circ}$ C
Excitation recommended	10V DC
Excitation maximum	15V DC
Terminal resistance, input	430 $\pm$ 40 Ω
Terminal resistance, output	350 $\pm$ 3.5 Ω
Insulation resistance	> 2000M Ω @ 50V DC
Compensated temperature range	-10 to +40 $^{\circ}$ C
Operating temperature range	-20 to +80 $^{\circ}$ C



- Material
Anodized aluminium (20kgf ~ 250kgf)
Nickel plated steel (500kgf ~ 2tf)
- Cable
Braided Shield 4-wire round cable
with PVC-jacket

DIMENSION (mm)



DI-201A

Digital Indicator

FEATURE

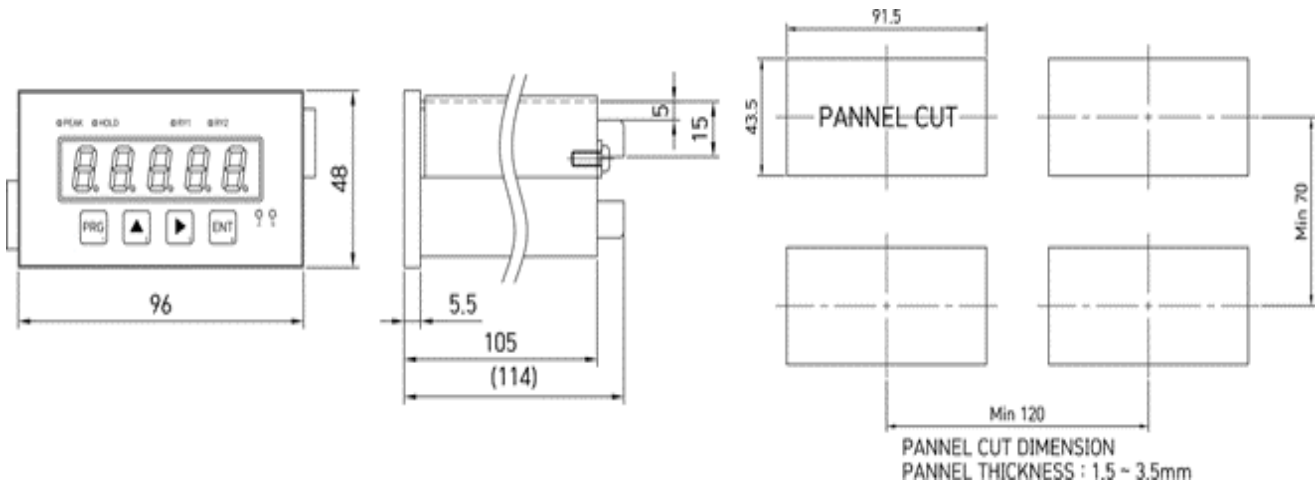
본 제품은 스트레인 게이지를 응용하여 물리량을 측정하는 센서류(하중, 토크, 변위, 압력 등)와 미소 직류전압으로 출력되는 센서류의 사용에 적합한 모델로서 디지털 표시, 아날로그 및 릴레이 출력등의 기능을 가짐.

- 미소전압 출력용 센서(하중, 토크, 압력) 측정용으로 최적
- 샘플링 속도: 최대 15회
- 비직선성 0.02% F.S 이상
- 실하중 및 센서출력값으로 교정
- Filtering: 10Hz, 100Hz, 1kHz, W/B
- Peak & Hold 기능
- Data Protection (key lock) 기능
- Auto Zero : 전면키 또는 뒷면 단자대 외부 신호로 작동
- Auto Calibration 기능
- Offset 기능

SPECIFICATION

Application Sensor	Strain gauge type sensor
Sensor authorized Voltage	DC 5V, DC10V
Signal input range	0.5 ~ 3.5 mV/V
CPU	32 bit
Resolution	1/18000
Display Range	-19999 ~ + 99999
Character height	5 digit 7 segment FND
Zero variation	Within 0.5 μ V/°C
Sensitivity variation	Within 0.01%/°C
Output	DC $\pm$ 10V (4~20mA)
Relay mode	Hysteresis, Range function
Contact capacity	AC 125V-0.5A, DC 24V-1A
Power	AC 220V 50/60Hz (AC 110V, DC 24V: option)
Weight	About 400g

DIMENSION (mm)



OPTION

- OP-C1: RS232C serial interface
- OP-C2: RS485 multi drop interface
- OP-C3: BCD paralle out

DI-201B

Digital Indicator

FEATURE

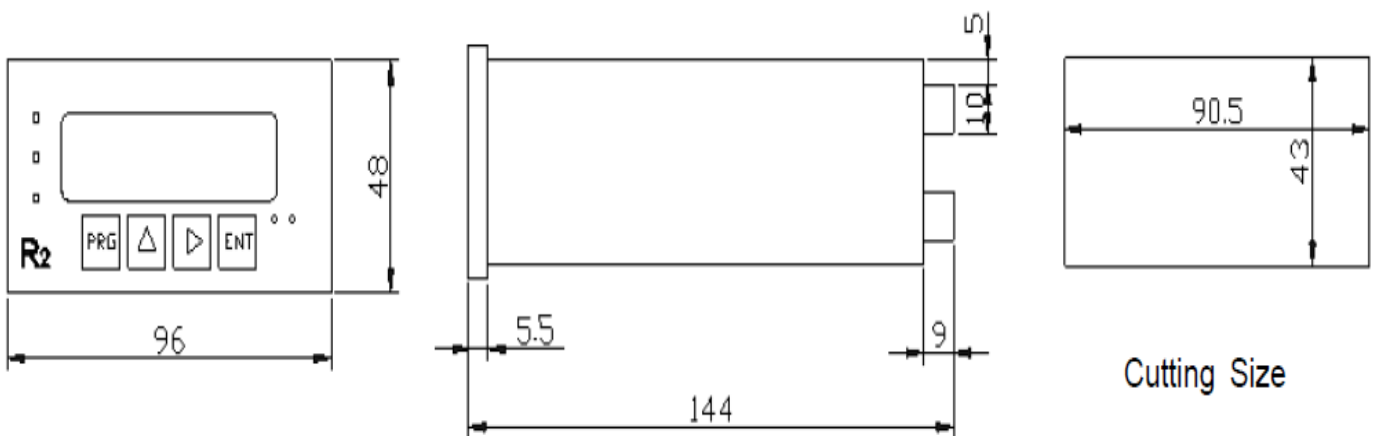
본 제품은 전압 출력형 및 전류 출력형 센서류중 특히 압력센서에 적합한 모델로서 디지털 표시, 아날로그 출력 및 릴레이 출력등의 기능을 가집니다.

- 압력 측정용으로 최적
- 샘플링 속도: 최대 15회
- 비직선성 0.02% F.S 이상
- 실하중 및 센서출력값으로 교정
- Filtering: 10Hz, 100Hz, 1kHz, W/B
- Peak & Hold 기능
- Data Protection (key lock) 기능
- Auto Zero : 전면키 또는 뒷면 단자대 외부 신호로 작동
- Auto Calibration 기능
- Offset 기능

SPECIFICATION

Application Sensor	Voltage & Current output sensor
Sensor authorized Voltage	DC 24V (DC 12V: option)
Signal input range	DC0~10V, 0~20mA, 4~20mA
CPU	32 bit
Resolution	1/18000
Display Range	-19999 ~ + 99999
Character height	5 digit 7 segment FND
Zero variation	Within 0.5μV/℃
Sensitivity variation	Within 0.01%/℃
Output	DC 0~10V (4~20mA : Dip s/w adjust)
Relay mode	Hysteresis, Range function
Contact capacity	AC 125V-0.5A, AC 24V-1A
Power	AC 220V 50/60Hz (AC 110V, DC 24V: option)
Weight	About 700g

DIMENSION (mm)



OPTION

- OP-C1: RS232C serial interface
- OP-C2: RS485 multi drop interface
- OP-C3: BCD paralle out

DI-201P

Digital Indicator

FEATURE

본 제품은 당사 LPS 모델 전용 인디게이터로서 디지털 표시, 아날로그 출력, 릴레이 출력 등의 기능을 가짐.

- 샘플링 속도: 최대 15회
- 비직선성 0.02% F.S 이상
- 실하중 및 센서출력값으로 교정
- Filtering: 10Hz, 100Hz, 1kHz, W/B
- Peak & Hold 기능
- Data Protection (key lock) 기능
- Auto Zero : 전면키 또는 뒷면 단자대 외부 신호로 작동
- Auto Calibration 기능
- Offset 기능



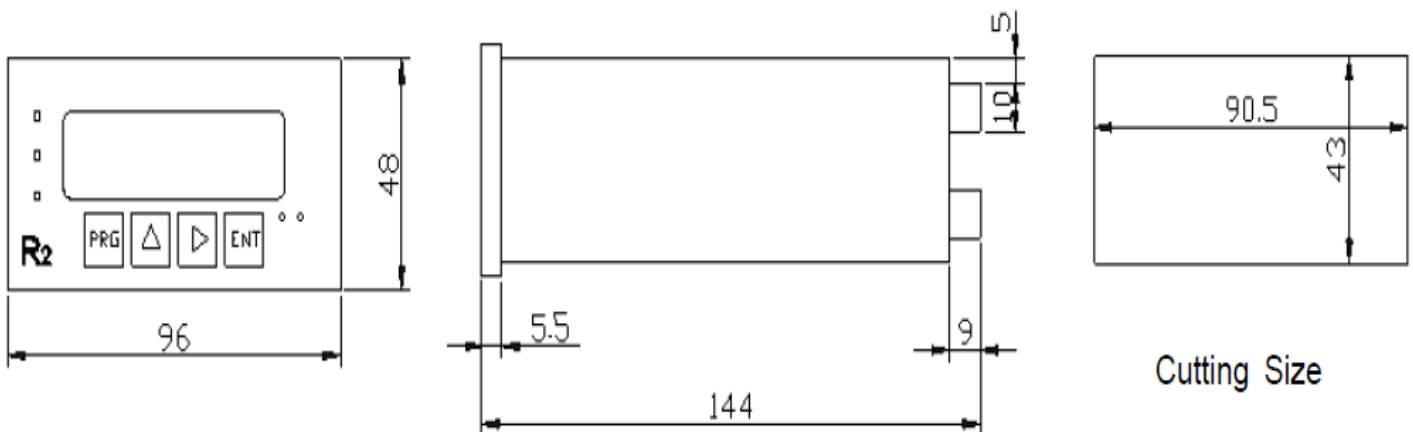
SPECIFICATION

Application Sensor	Resistance type sensor
Sensor authorized Voltage	DC 10V (DC 5V: Option)
Signal input range	Potentiometer
CPU	32 bit
Resolution	1/18000
Display Range	-19999 ~ + 99999
Character height	5 digit 7 segment FND
Zero variation	Within 0.5 μ V/°C
Sensitivity variation	Within 0.01%/°C
Output	DC 0~10V (4~20mA : Dip s/w adjust)
Relay mode	Hysteresis, Range function
Contact capacity	AC 125V-0.5A, AC 24V-1A
Power	AC 220V 50/60Hz (AC 110V, DC 24V: option)
Weight	About 700g

OPTION

- OP-C1: RS232C serial interface
- OP-C2: RS485 multi drop interface
- OP-C3: BCD paralle out

DIMENSION (mm)



FEATURE

본 제품은 스트레인 게이지를 응용하여 물리량을 측정하는 센서류(하중,토크 변위,압력 등)와 미소 직류전압으로 출력되는 센서류의 사용에 적합한 모델로서 디지털 표시, 아날로그 출력, 릴레이 출력등의 기능을 가진것으로 소형이면서 비교적 빠른 응답성과 높은 정밀도를 가집니다.

- 미소전압 출력용 센서(하중, 토크, 압력) 측정용으로 최적
- 중고속 변환 A/D (100회/초)
- 고정밀도 (0.02% F.S 이상)와 안정성
- One touch Auto zero (Display & Analog out zero)
- 실하중 및 센서 출력값으로 교정
- 시스템 오류 자동복귀



SPECIFICATION

Application sensor	Strain gauge type sensor
Sensor authorized volta	DC 5V
Zero adjustment range	100% F.S (Auto zero)
Signal input range	0.5 ~ 3.0 mV/V
Display range	-19999 ~ +99999
Character height	7 segment LED 14mm
A/D Converter	16bit 100times/sec
D/A Converter	12bit
Zero variation	Within 0.5μV/°C
Sensitivity variation	Within 0.01%/°C
Output	DC 0~10V (4~20mA: option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10°C ~ 60°C
Humidity	Less than 80% RH
Power	AC 220V 50/60Hz (AC 110V, DC 24V: Option)
Weight	About 800g

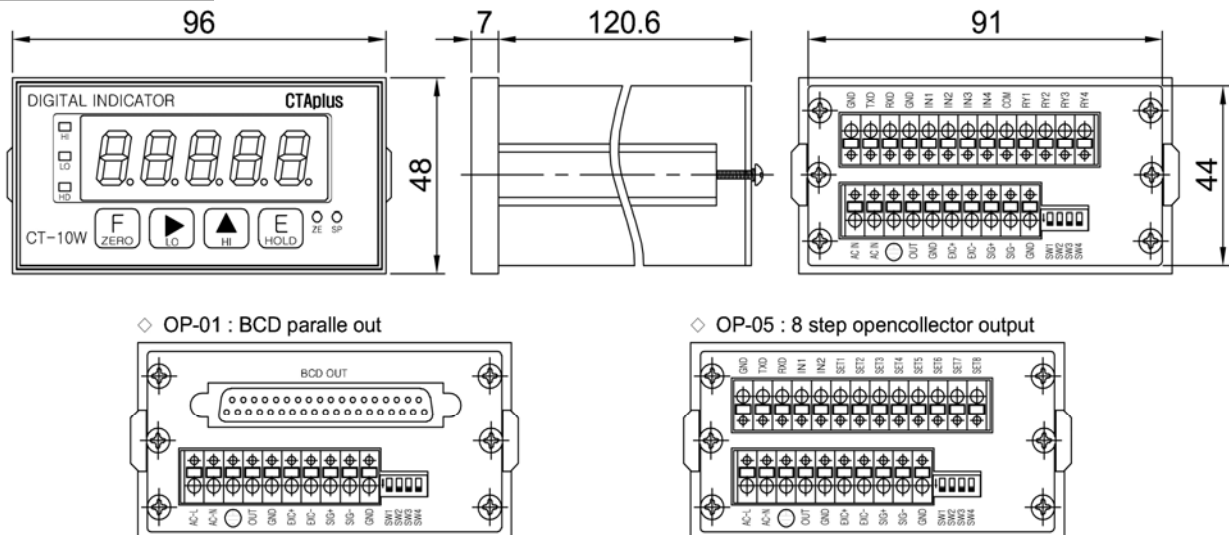
FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- NG, OK 판정기능
- 4Relay 접점출력
- Analog out (DAC)

OPTION

- OP-01: BCD paralle out
- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface
- OP-05: 8 step open collector output

DIMENSION (mm)



FEATURE

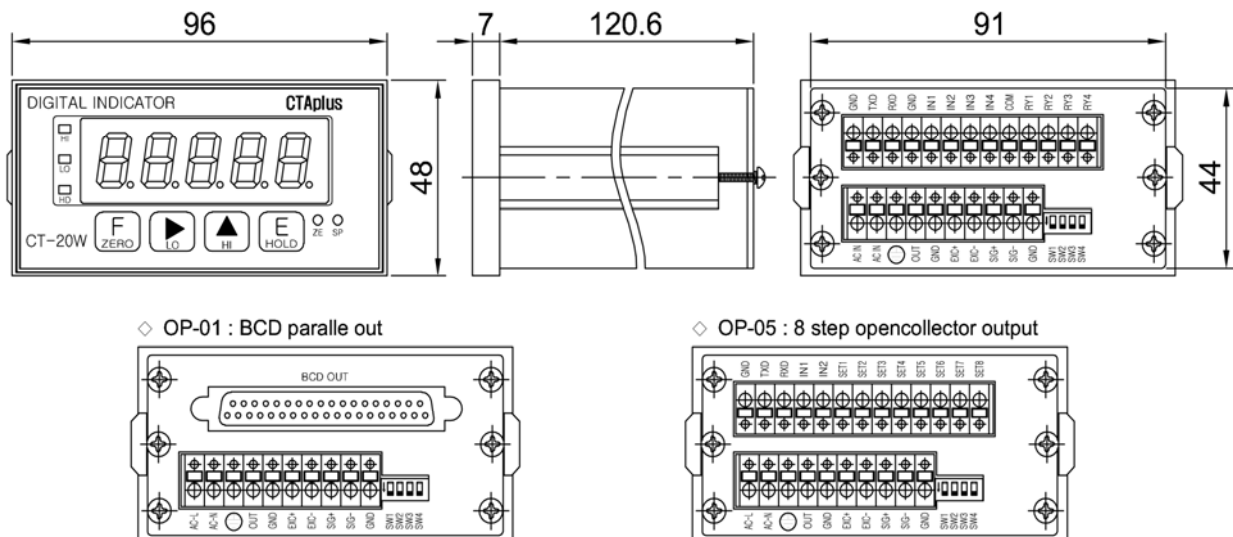
본 제품은 전압 출력형 및 전류 출력형 센서류 중 특히 압력과 변위 측정용 센서에 적합한 모델로서 디지털 표시, 아날로그 출력, 릴레이 출력등의 기능을 가진 것으로 소형이면서 비교적 빠른 응답성과 높은 정밀도를 가집니다.

- 압력, 변위 측정용으로 최적
- 중고속 변환 A/D (100회/초)
- 고분해능 (16bit A/D)
- 고정밀도 (0.02% F.S 이상)와 안정성
- One touch Auto zero (Display & Analog out zero)
- 표준기 및 센서 출력값으로 교정
- 시스템 오류 자동복귀

SPECIFICATION

Application sensor	Voltage & Current output sensor Potentiometer type sensor
Sensor authorized voltage	DC 10V, 24V
Zero adjustment range	100% F.S (Auto zero)
Signal input range	DC 0~5V, 0~10V, 4~20mA
Display range	-19999 ~ +99999
Character height	7 segment LED 14mm
A/D Converter	16bit 100times/sec
D/A Converter	12bit
Zero variation	Within 0.5μV/°C
Sensitivity variation	Within 0.01%/°C
Output	DC 0~10V (4~20mA: option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10°C ~ 60°C
Humidity	Less than 80% RH
Power	AC 220V 50/60Hz (AC 110V, DC 24V: Option)
Weight	About 800g

DIMENSION (mm)



FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- NG, OK 판정기능
- 4Relay 접점출력
- Analog out (DAC)

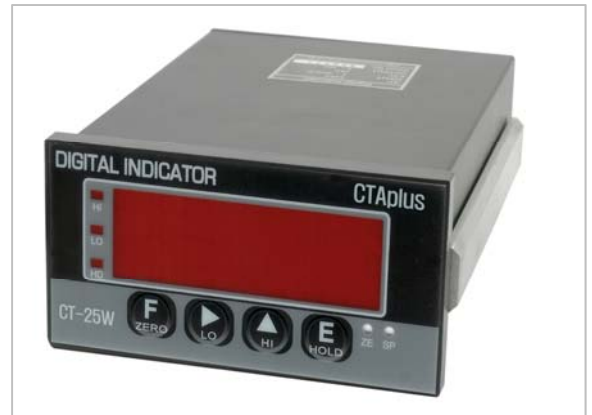
OPTION

- OP-01: BCD parallel out
- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface
- OP-05: 8 step open collector output

FEATURE

본 제품은 차동 트랜스형 변위센서 (LVDT)에 적합한 제품으로서 센서에 정전압 교류 전원을 공급하며, 미소 교류전압으로 출력되는 센서의 신호를 증폭하여 디지털 표시, 아날로그 출력, 릴레이 출력형의 기능을 가진 것으로 비교적 빠른 응답성과 높은 정밀도를 가집니다.

- Transformer형 변위센서 (LVDT) 측정요로 최적
- 중고속 변환 A/D (100회/초)
- 고정밀도 (0.02% F.S 이상)와 안정성
- One touch Auto zero (Display & Analog out zero)
- 시스템 오류 자동복귀



SPECIFICATION

Application sensor	Differential trans displacement sensor
Sensor authorized voltage	2Vrms/5kHz
Zero adjustment range	100% F.S (Auto zero)
Display range	-19999 ~ +99999
Character height	7 segment LED 14mm
A/D Converter	16bit 100times/sec
D/A Converter	12bit
Zero variation	Within 0.5μV/°C
Sensitivity variation	Within 0.01%/°C
Output	DC 0~10V (4~20mA: option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10°C ~ 60°C
Humidity	Less than 80% RH
Power	AC 220V 50/60Hz (AC 100V : option)
Weight	About 800g

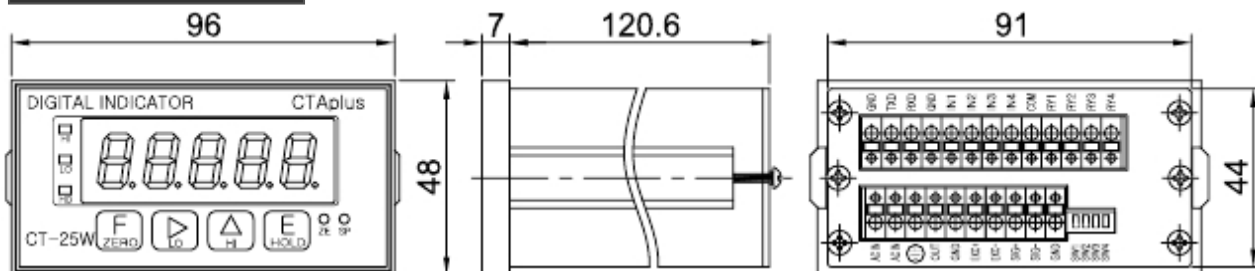
FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- NG, OK 판정기능
- 4Relay 접점출력
- Analog out (DAC)

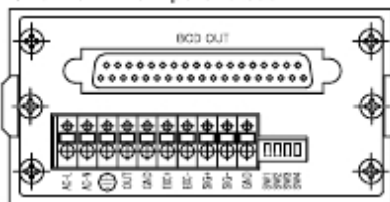
OPTION

- OP-01: BCD paralle out
- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface
- OP-05: 8 step open collector output

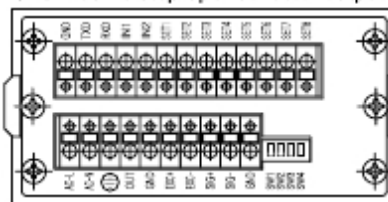
DIMENSION (mm)



◇ OP-01 BCD paralle out



◇ OP-05 8 step opencollector output



CT-30W

Digital Indicator

FEATURE

본 제품은 회전체의 센서 (근접스위치 MP-981) 신호를 RPM (revolutions per minute)으로 환산하여 디지털 표시 및 아날로그 출력, 릴레이 출력 등의 기능을 수행하는 것으로서 소형이면서 비교적 빠른 응답성과 높은 정밀도를 가집니다.

- RPM 측정용으로 최적
- Pulse / circle 입력으로 교정
- 시스템 오류 자동복귀



SPECIFICATION

Application sensor	Proximity (MP-981)
Sensor authorized voltage	DC 12V
Measuring range	Input frequency 5kHz, 1~350 pulse/circle
Measuring accuracy	0.05%
Display range	0 ~ 60000
Minimum unit	1 RPM
Character height	7 segment LED 14mm
Output	DC 0~10V (4~20mA:option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10℃ ~ 60℃
Humidity	Less than 80% RH
Power	AC 220V 50/60Hz (AC 110V, DC 24V: option)
Weight	About 800g

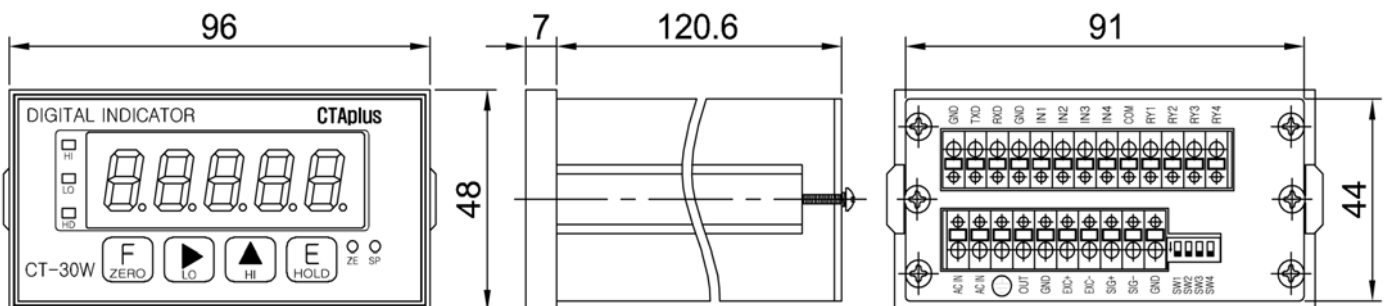
FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- 4Relay 접점출력
- Analog out (DAC)

OPTION

- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface

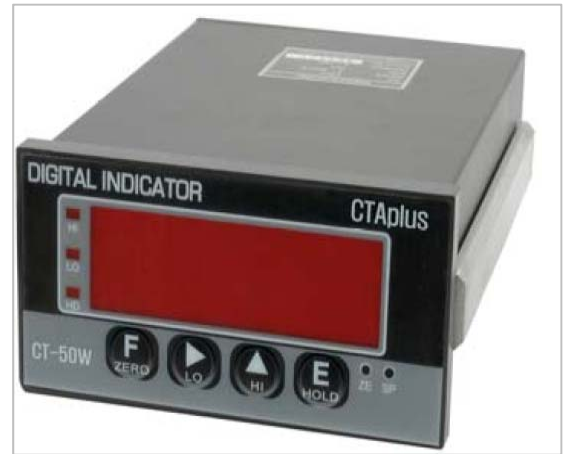
DIMENSION (mm)



FEATURE

본 제품은 스트레인 게이지를 사용한 센서 및 미소전압 출력 센서의 신호를 디지털 표시 및 아날로그 출력하는 인디게이터로서, 1000회/초의 고속 샘플링 및 비교출력이 가능한 제품입니다.

- 고분해능 : 24bit ADC, 16bit DAC
- 높은 정밀도 (0.02% F.S 이상)와 안정성
- 단위환산 기능 (Kg, N, lb, kg/cm², bar, Mpa)
- Analog peak hold
- 실하중 및 센서 출력값으로 교정
- Auto zero 기능 (디지털 표시 및 아날로그 출력 동시 Zero)
- 시스템 오류 자동복귀



SPECIFICATION

Application sensor	Strain gauge type sensor
Sensor authorized voltage	DC 5V
Zero adjustment range	100% F.S (Auto zero)
Signal input range	0.5 ~ 3.0 mV/V
Display range	-19999 ~ +99999
Character height	7 segment LED 14mm
A/D Converter	24bit 1000times/sec
D/A Converter	16bit 1000times/sec
Zero variation	Within 0.5μV/°C
Sensitivity variation	Within 0.01%/°C
Output	DC ±10V (4~20mA: option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10°C ~ 60°C
Humidity	Less than 80% RH
Power	AC 90V ~ 240V 50/60Hz
Weight	About 450g

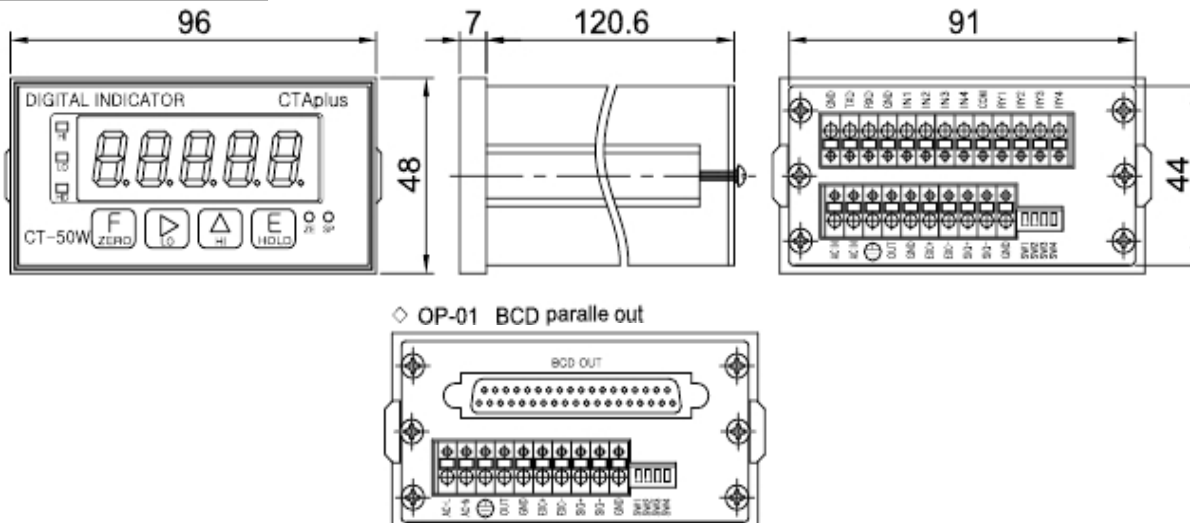
FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- NG, OK 판정기능
- 4Relay 접점출력
- Analog out (DAC)

OPTION

- OP-01: BCD parallel out
- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface
- OP-05: 8 step open collector output

DIMENSION (mm)



CT-100

Digital Indicator

FEATURE

본 제품은 스트레인 게이지를 응용하여 물리량을 측정하는 센서류(하중, 토크, 변위, 압력 등)와 미소 직류전압으로 출력되는 센서류의 사용에 적합한 모델로서 디지털 표시, 아날로그 출력, 릴레이 출력 등의 기능을 가지며, 고속측정이 필요한 곳(압입하중관리, 충격시험 등)에 사용됩니다. 고속의 응답성과 높은 정밀도를 가지며, 상한 하한 설정값이 Display 됩니다.

- 초고속 변환 A/D (5000회/초)
- 높은 정밀도 (0.02% F.S 이상)와 안정성
- 단위 환산 기능 (kg, N, lb, kg/cm², bar, Mpa)
- 실하중 및 센서 출력값 교정
- Auto zero 기능 (디지털 표시 및 아날로그 출력 동시 Zero)
- 시스템 오류 자동복귀



SPECIFICATION

Application sensor	Strain gauge type sensor
Sensor authorized voltage	DC 5V
Zero adjustment range	100% F.S (Auto zero)
Signal input range	0.5 ~ 3.0 mV/V
Display range	-19999 ~ +99999
Character height	7 segment LED 14mm
A/D Converter	16bit 5000times/sec
D/A Converter	16bit 1000times/sec
Zero variation	Within 0.5μV/°C
Sensitivity variation	Within 0.01%/°C
Output	DC ±10V (4~20mA: option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10°C ~ 60°C
Humidity	Less than 80% RH
Power	AC 90V ~ 240V 50/60Hz
Weight	About 600g

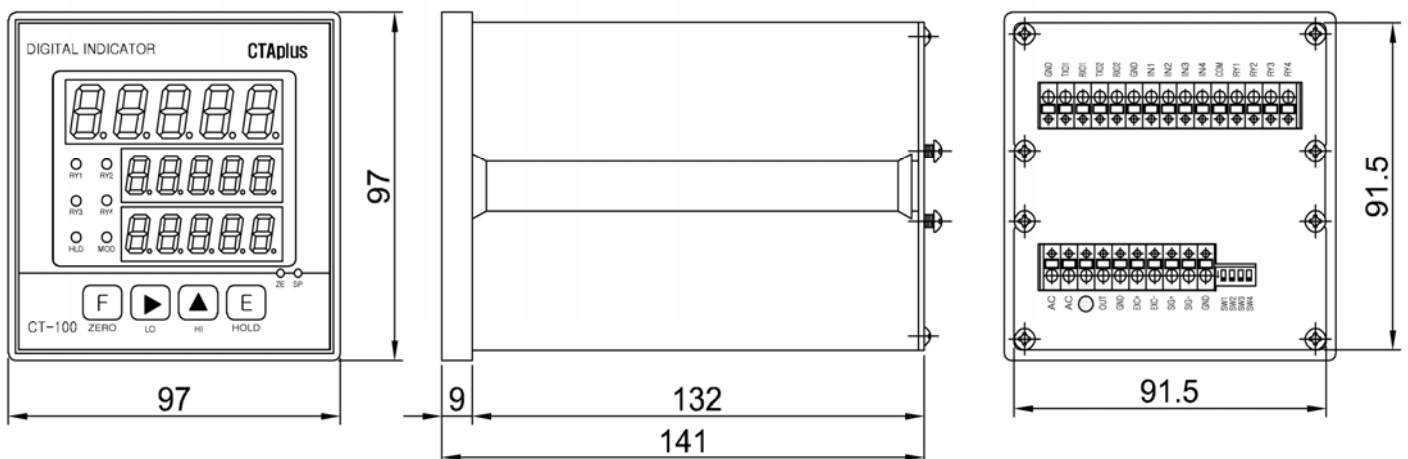
FUNCTION

- Peak & Sample hold, Average hold
- 상한, 하한 비교출력
- NG, OK 판정기능
- 4Relay 접점출력
- Analog out (DAC)

OPTION

- OP-01: BCD parallel out
- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface

DIMENSION (mm)



FEATURE

본 제품은 스트레인 게이지를 응용하여 물리량을 측정하는 센서류(하중, 토크, 변위, 압력 등)와 미소 직류전압으로 출력되는 센서류의 사용에 적합한 모델로서 디지털 표시, 아날로그 출력, 릴레이 출력 등의 기능을 가지며, 주로 동적 측정이 필요한 곳(나사 체결, 액체 충전 등)에 사용됩니다. 빠른 응답성과 높은 정밀도를 가지며 상한 하한 설정값이 Display 됩니다.

- 고분해능 : 24bit ADC, 16bit DAC
- 높은 정밀도 (0.01% F.S 이상)와 안정성
- 단위 환산 기능 (kg, N, lb, kg/cm², bar, Mpa)
- 실하중 및 센서 출력값 교정
- Auto zero 기능 (디지털 표시 및 아날로그 출력 동시 Zero)
- 시스템 오류 자동복귀



SPECIFICATION

Application sensor	Strain gauge type sensor
Sensor authorized voltage	DC 5V
Zero adjustment range	100% F.S (Auto zero)
Signal input range	0.5 ~ 3.0 mV/V
Display range	-19999 ~ +99999
Character height	7 segment LED 14mm
A/D Converter	24bit 1000times/sec
D/A Converter	16bit 1000times/sec
Zero variation	Within 0.5μV/°C
Sensitivity variation	Within 0.01%/°C
Output	DC ±10V (4~20mA: option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10°C ~ 60°C
Humidity	Less than 80% RH
Power	AC 90V ~ 240V 50/60Hz
Weight	About 600g

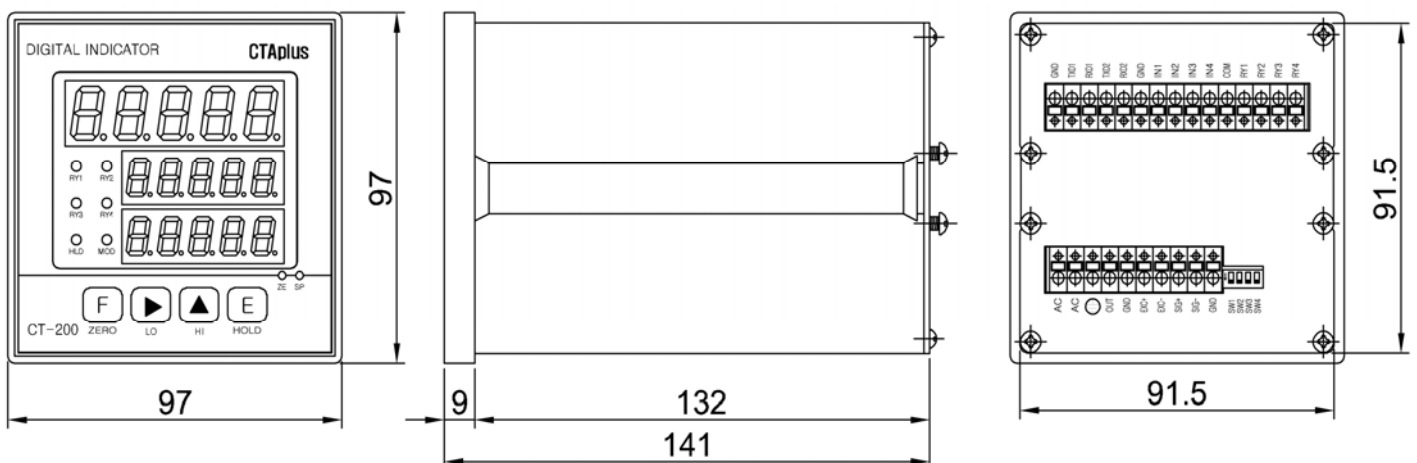
FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- NG, OK 판정기능
- 4Relay 접점출력
- Analog out (DAC)

OPTION

- OP-01: BCD parallel out
- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface

DIMENSION (mm)



FEATURE

본 제품은 스트레인 게이지를 응용한 토크센서와 근접센서형(당사의 MP-981)에서 펄스 신호를 입력받아 각각으로 2개의 디지털 표시, 아날로그 출력, 릴레이 출력 등의 기능을 수행하는 것으로서 비교적 빠른 응답성과 높은 정밀도를 가집니다.

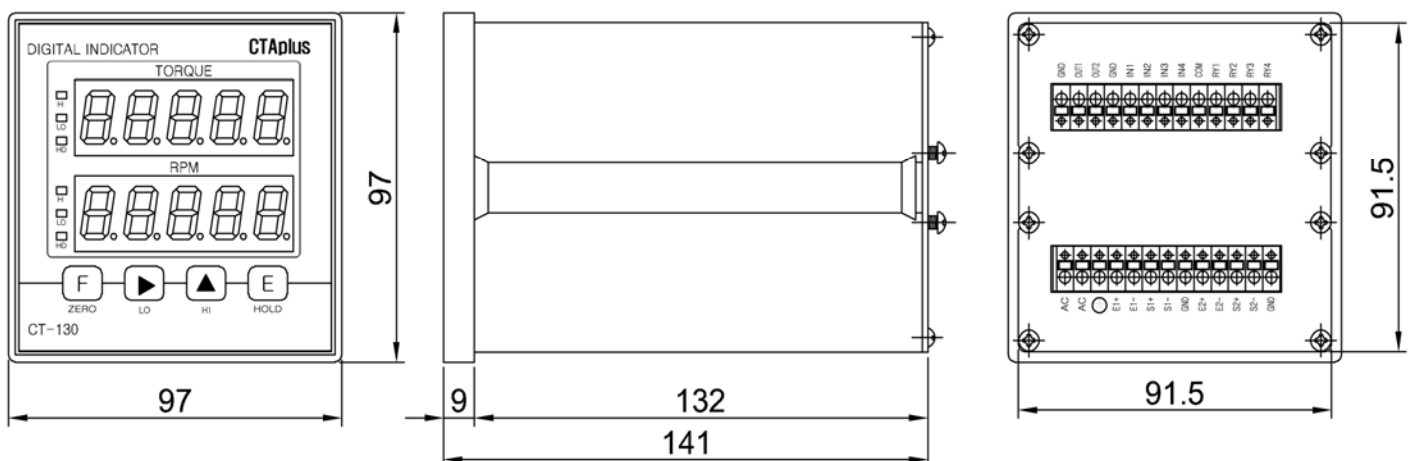
- Torque & RPM 동시 측정 및 표시
- 고분해능 : 24bit ADC, 16bit DAC
- 높은 정밀도 (0.01% F.S 이상)와 안정성
- 단위 환산 기능 (kg, N, lb, kg/cm², bar, Mpa)
- 실하중 및 센서 출력값 교정
- Auto zero 기능 (디지털 표시 및 아날로그 출력 동시 Zero)
- 시스템 오류 자동복귀



SPECIFICATION

	TORQUE	RPM
Application sensor	Strain gauge type torque sensor	Proximity (MP-981)
Sensor authorized Voltage	DC 5V	DC 12V
Zero adjustment range	100% F.S (Auto zero)	
Signal input range	0.5 ~ 3.0 mV/V	1~350 pulse/circle
Display range	-19999 ~ +99999	0 ~ 60000
Character height	7 segment LED 14mm	
A/D Converter	24bit 1000times/sec	
D/A Converter	16bit 1000times/sec	
Zero variation	Within 0.5μV/°C	
Sensitivity variation	Within 0.01%/°C	
Output	DC 0~10V (4~20mA:option)	
Contact capacity	AC 250V 5A	
Relay life span	Over 5 million times	
Usage temperature range	-10°C ~ 60°C	
Humidity	Less than 80% RH	
Power	AC 90 ~ 240V 50/60Hz	
Weight	About 600g	

DIMENSION (mm)



FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- Analog out (DAC)

OPTION

- OP-02: RS232C serial interface
- OP-03: RS485C multi drop interface

CT-130D

Digital Indicator

FEATURE

본 제품은 스트레인 게이지를 응용하여 물리량을 측정하는 센서류(하중, 토크, 변위, 압력 등)의 사용에 적합하며, 특히 동일하거나 다른 전류의 센서를 동시에 2개 설치하여 비교측정 할때 편리합니다.

디지털 표시, 아날로그 출력, 릴레이 출력 등의 기능을 가진 것으로 전면부에 2개의 표시창을 가진것이 특징입니다.

- 2 channel 인디케이터
- 고분해능 : 24bit ADC, 16bit DAC
- 높은 정밀도 (0.01% F.S 이상)와 안정성
- 단위 환산 기능 (kg, N, lb, kg/cm², bar, Mpa)
- 실하중 및 센서 출력값 교정
- Auto zero 기능 (디지털 표시 및 아날로그 출력 동시 Zero)
- 시스템 오류 자동복귀



SPECIFICATION

Application sensor	Strain gauge type sensor
Sensor authorized voltage	DC 5V
Zero adjustment range	100% F.S (Auto zero)
Signal input range	0.5 ~ 3 mV/V
Display range	-19999 ~ +99999
Character height	7 segment LED 14mm
A/D Converter	24bit 200times/sec
D/A Converter	16bit
Zero variation	Within 0.5μV/°C
Sensitivity variation	Within 0.01%/°C
Output	DC 0~10V (4~20mA:option)
Contact capacity	AC 250V 5A
Relay life span	Over 5 million times
Usage temperature range	-10°C ~ 60°C
Humidity	Less than 80% RH
Power	AC 90 ~ 240V 50/60Hz
Weight	About 600g

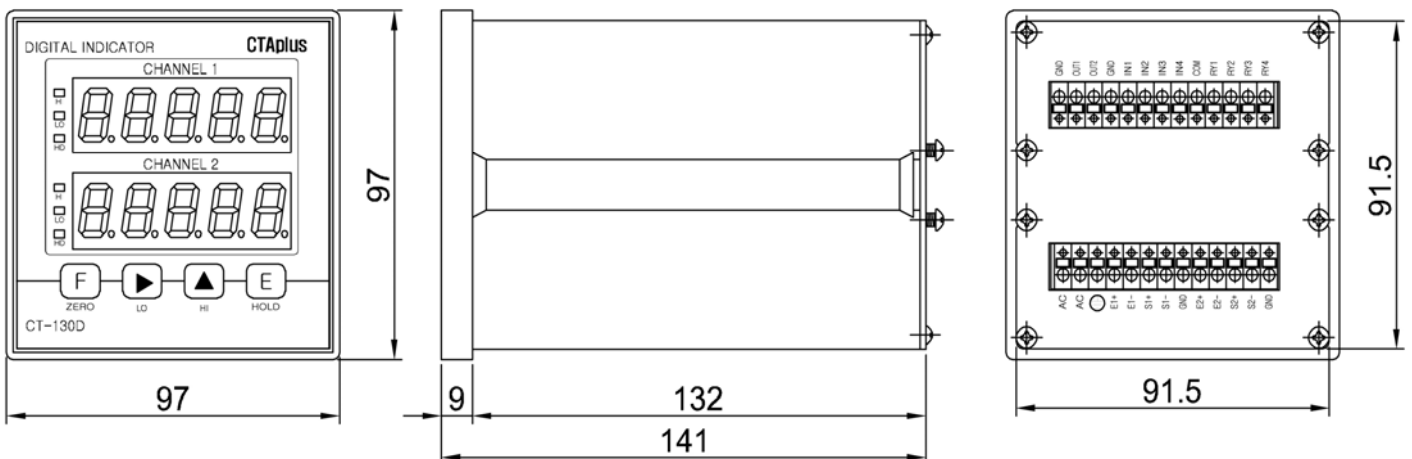
FUNCTION

- Peak & Sample hold
- 상한, 하한 비교출력
- Analog out (DAC)

OPTION

- OP-02: RS232C serial interface
- OP-03: RS485 multi drop interface

DIMENSION (mm)



FEATURE

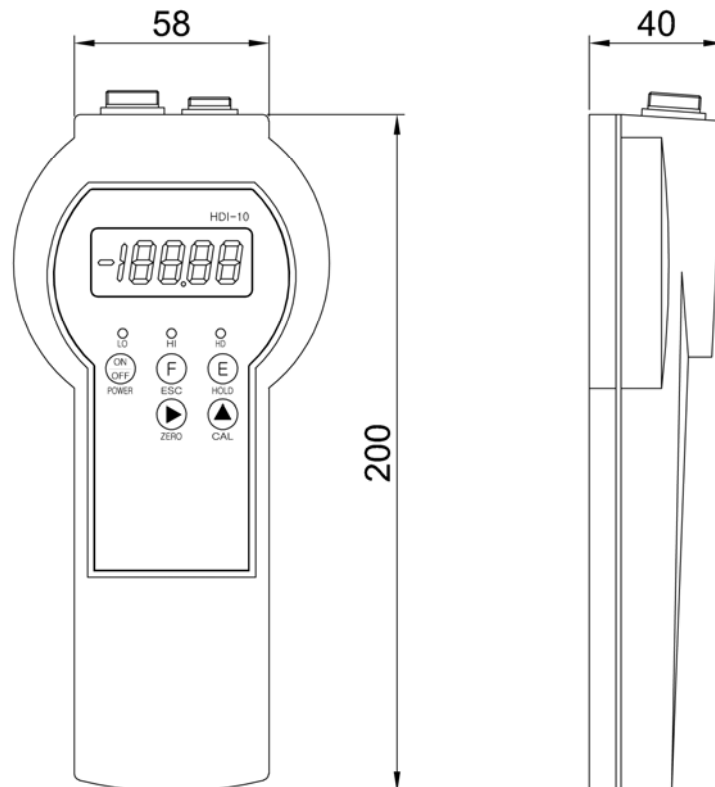
본 제품은 스트레인 게이지를 사용한 센서(미소전압 출력센서) 및 Potentiometer(변위계)의 신호를 디지털로 표시하는 휴대용 인디케이터로서 전원은 건전지를 사용합니다.

- 측정 Data 저장 (최대 500개)
- Peak hold
- Auto zero
- 상한,하한 비교 lamp 표시

SPECIFICATION

Usage voltage	DC 1.5V × 4EA (AAA size) battery
Current consumption	15mA
Input signal	Load cell: 1.0 ~ 3.0 mV/V Potentiometer: 100 ~ 10kΩ
Load display	4 ½ digit LCD
Display range	+19999
Display speed	About 10 times/sec
Decimal point	Random setting available
A/D sampling speed	100 times/sec
A/D resolution	16bit
Zero adjustment range	100% F.S (Auto zero)
Data storage	Measuring data storage (Max 500 EA)
Data output	RS232C Serial interface

DIMENSION (mm)



ST-AM100

Dynamic Strain Amplifier

FEATURE

본 제품은 Dynamic strain amplifier로서 저가이며, 계장용 제어판에 적합하도록 설계 및 제작 되었습니다.

사용 용도로는 스트레인 게이지 응용 센서류의 증폭에 활용 됩니다.

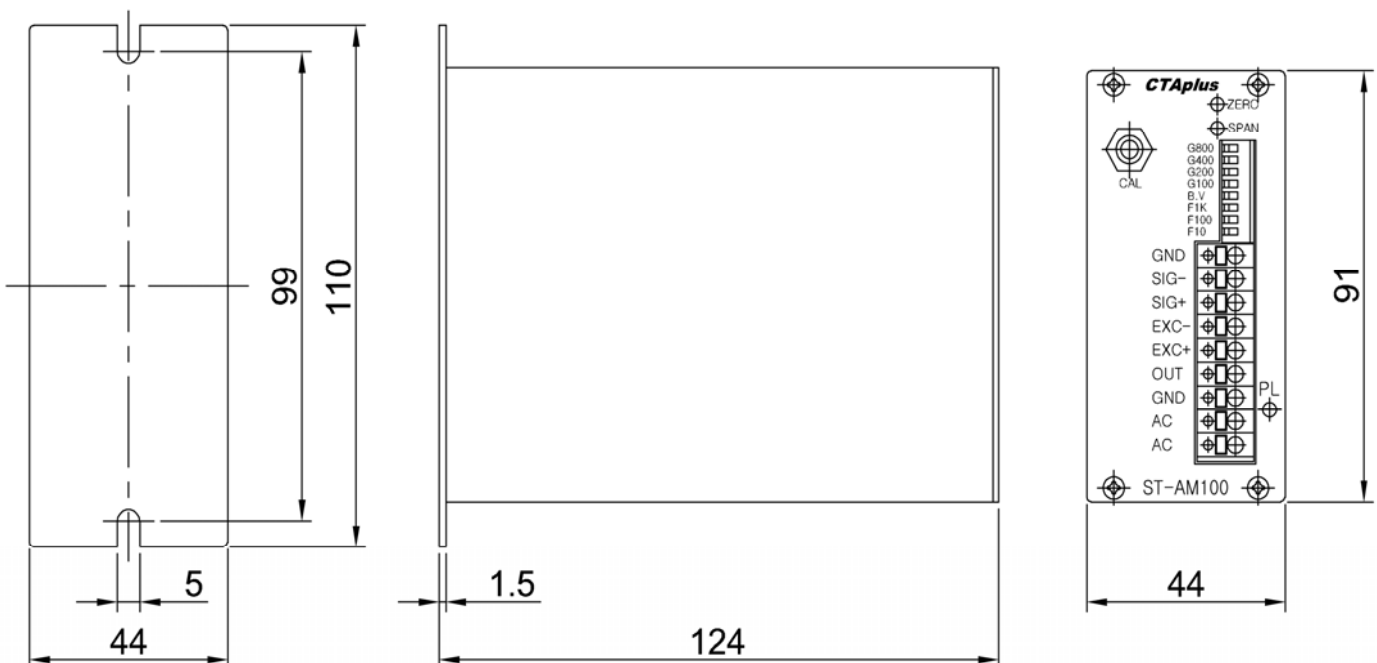
- 단계별 필터링 기능 내장
- 자동온도 보상회로 내장
- Volume에 의한 Zero, Span 조절이 용이
- 응답 주파수 DC~20kHz

SPECIFICATION

Bridge voltage	Constant voltage DC 5V, 10V
Application bridge resistance	100Ω ~ 1kΩ
Rated output	Voltage ±10V (load resistance more than 200Ω) Current 4~20mA (load resistance less than 300Ω)
Zero adjustment range	10%, 10 rotations
Sensitivity adjustment range	1500 multiplier
S/N rate	51dB
Frequency response	DC ~20kHz (-3dB)
Low pass filter	10Hz, 100Hz, 1kHz, Pass
Non-linearity	0.02% F.S
Usage temperature range	-10℃ ~ 60℃
Humidity	Less than 80% RH
POWER	AC 220V 50/60Hz (AC 110V:Option)



DIMENSION (mm)



ST-AM210

Dynamic Strain Amplifier

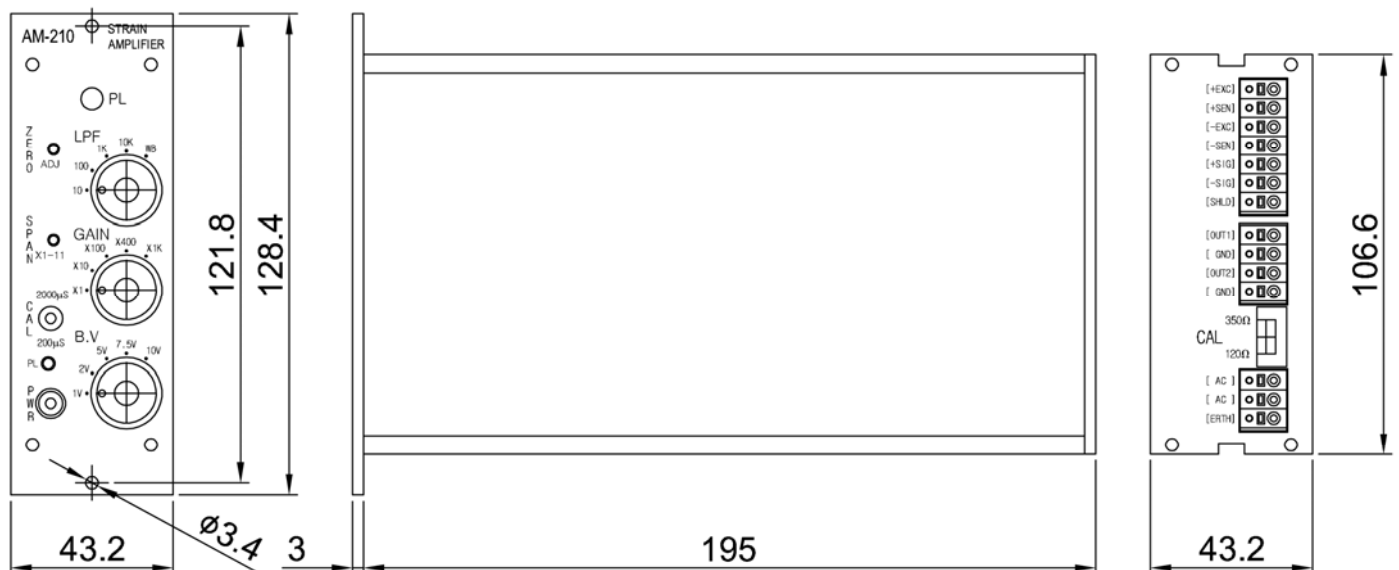
FEATURE

- 본 제품은 Dynamic strain amplifier로서 단독, 또는 Sub Rack Case를 사용하여 Multi-Channel로 사용할 수 있습니다.
- 사용 용도로는 스트레인 게이지 응용 센서류와 LVDT 및 mV 출력용 센서의 증폭에 사용됩니다.
- 자동온도 보상회로 내장
 - Volume에 의한 Zero, Span 조정이 용이
 - Rotary switch에 의한 Gain, LPF의 단계별 조정기능 내장
 - Bridge 공급전원 선택 switch 외부장착
 - One touch auto zero 기능
 - 자체 Calibration 기능 내장

SPECIFICATION

Bridge voltage	Constant voltage DC 1V, 2V, 5V, 7.5V, 10V
Application bridge resistance	100Ω ~ 1kΩ
Rated output	Voltage $\pm 10V$ (load resistance more than 200Ω) OP:Current 4~20mA (load resistance less than 300Ω)
Zero adjustment range	10%, 10 rotations
Gain (Max 1000)	Switcho: 1, 10, 100, 400, 1000 Span: x1 ~ x10, FINE: x1 ~ x0.9
S/N rate	54dB
Frequency response	DC ~20kHz (-3dB)
Low pass filter	10Hz, 100Hz, 1kHz, WB
Non-linearity	$\pm 0.01\%$ F.S
Stability (Temp. Spec)	Sensitivity $\pm 0.03\%/^{\circ}C$
Usage temperature range	-10 $^{\circ}C$ ~ 60 $^{\circ}C$
Humidity	Less than 80% RH
POWER	AC 220V 50/60Hz (AC 110V:Option)
Correction value	200 $\mu\epsilon$, 2000 $\mu\epsilon$ 0.5mV/V=1000 μ Strain

DIMENSION (mm)



ST-AM310

Dynamic Strain Amplifier

FEATURE

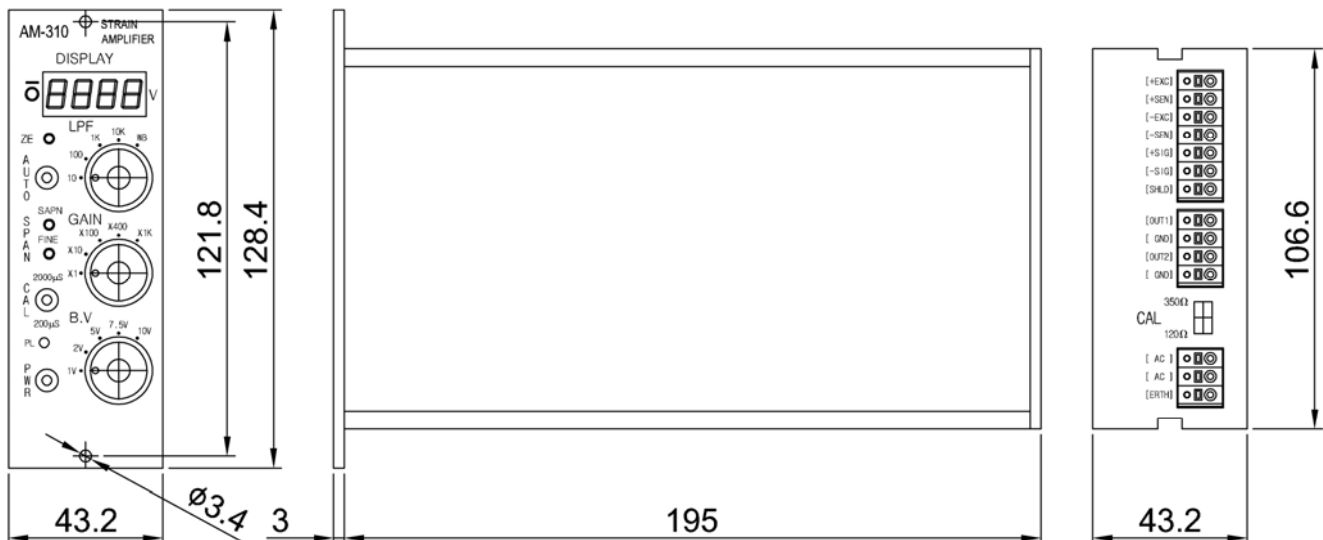
본 제품은 Dynamic strain amplifier로서 단독, 또는 Sub Rack Case를 사용하여 Multi-Channel로 사용이 가능하며, 각 Util 별로 전압출력이 LED로 표시되어 사용자가 관측을 하면서 측정할수 있습니다. 사용 용도로는 스트레인 게이지 응용 센서류와 Half 및 Full bridge의 Strain 측정에 활용이 가능한 고급형 모델입니다.

- 자동온도 보상회로 내장
- Volume에 의한 Zero, Span 조정이 용이
- Rotary switch에 의한 Gain, LPF의 단계별 조정기능 내장
- Bridge 공급전원 선택 switch 외부장착
- LED에 의한 전압출력 관측기능
- One touch auto zero 기능
- 자체 Calibration 기능 내장

SPECIFICATION

Bridge voltage	Constant voltage DC 1V, 2V, 5V, 7.5V, 10V
Application bridge resistance	120Ω ~ 350Ω
Rated output	Voltage $\pm 10V$ (load resistance more than 200Ω) OP: Current 4~20mA (load resistance less than 300Ω)
Zero adjustment range	10%, 10 rotations
Gain (Max 1000)	Switc: 1, 10, 100, 400, 1000 Span: x1 ~ x10, FINE: x1 ~ x0.9
S/N rate	54dB
Display part	4 digit
Frequency response	DC ~20kHz (-3dB)
Low pass filter	10Hz, 100Hz, 1kHz, 10kHz, WB
Non-linearity	$\pm 0.01\%$ F.S
Stability (Temp. Spec)	Sensitivity $\pm 0.03\%/^{\circ}C$
Usage temperature range	-10 $^{\circ}C$ ~ 60 $^{\circ}C$
Humidity	Less than 80% RH
POWER	AC 220V 50/60Hz (AC 110V:Option)
Correction value	200 $\mu\epsilon$, 2000 $\mu\epsilon$ 0.5mV/V=1000 μ Strain

DIMENSION (mm)



ST-CN100

Signal Conditioner

FEATURE

본 제품은 Signal conditioner로서, 계장용 제어판에 적합하도록 설계 및 제작 되었습니다.

Potentiometer, 직류전류잔압 출력형 Transducer의 신호 변환에 사용됩니다.

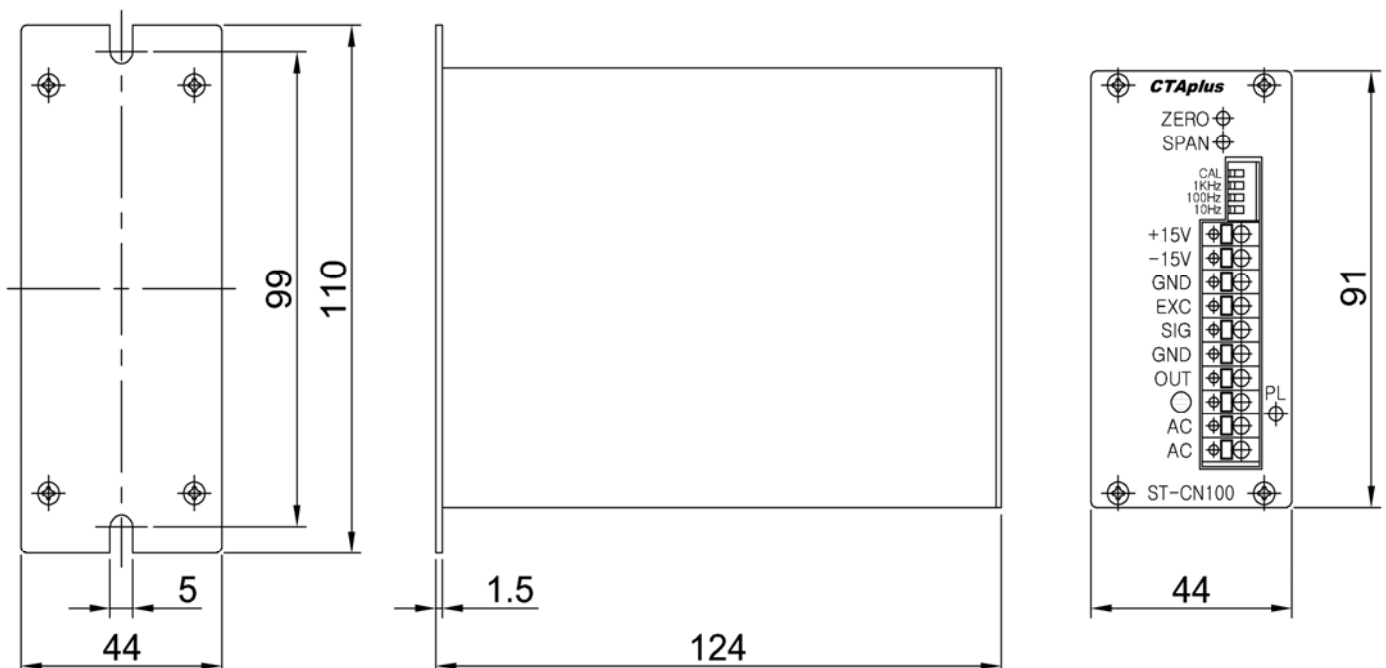
- 단계별 필터링 기능 내장
- Volume에 의한 Zero, Span 조정이 용이
- 응답 주파수 DC ~10kHz

SPECIFICATION

Sensor authorized voltage	DC 10V, $\pm 15V$
Potentiometer resistance	1k Ω ~ 100k Ω
Rated output	Voltage $\pm 10V$ (load resistance more than 200 Ω) OP :Current 4~20mA (load resistance less than 300 Ω)
Zero adjustment range	20%, 10 rotations
Sensitivity adjustment range	20%, 10 rotations
Frequency response	DC ~10kHz (-3dB)
Low pass filter	10Hz, 100Hz, 1kHz, Pass
Non-linearity	0.02% F.S
Usage temperature range	-10 $^{\circ}C$ ~ 60 $^{\circ}C$
Humidity	Less than 80% RH
Power	AC 220V 50/60Hz (AC 110V:Option)



DIMENSION (mm)



G1000

Graphic Multimeter

FEATURE

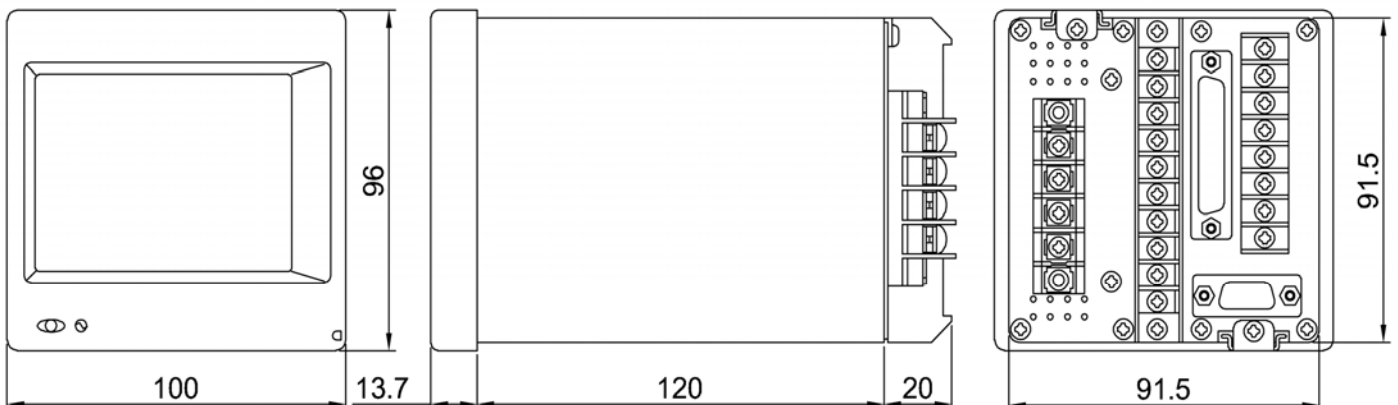
- 하중 및 변위 2채널 인디케이터
- 초당 4000회 고속 샘플링 속도
- 칼라 그래픽 LCD 터치스크린
- 고정도 시그널 컨디셔너
- 다양한 하중 관리 모드

SPECIFICATION

	A-채널 (로드셀)	B-채널 (거리센서)
센서 인가전압	DC 10/5V, 120mA	N/A
입력 신호범위	0 ~ ±40 mV	0~±10V, 4~20mA, 0~20mA
비직선성	±0.02% F.S + 1digit	±0.02% F.S + 1digit
입력 감도	1.0μV/Digit	1.0mV/Digit (0~10V)
변환 속도	4,000회/초	2,000회/초
입력 임피던스	10MΩ	1MΩ / 50Ω
온도 계수	± 0.005% of rdg + 0.5 digit/°C	
아날로그 필터	10, 30, 300, 600 Hz	
표시부	STN color LCD, 74(W)x55(H)mm	
디지트	0 ~ ±99999	
사용온도 범위	0 ~ 40°C	
전원	AC 100~240V, 50/60Hz	
소비전력	약 32VA	
출력	표준	릴레이 출력 (HH, HI, GO, LO, LL)
	옵션	1) RS232C serial output 2) RS485 serial output 3) ±0~10V or 4~20mA analog output 4) BCD parallel output 5) SD memory card
제품 무게	약 1.0kg	

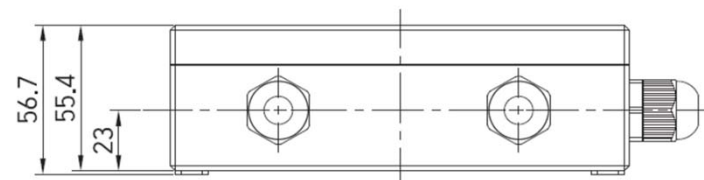
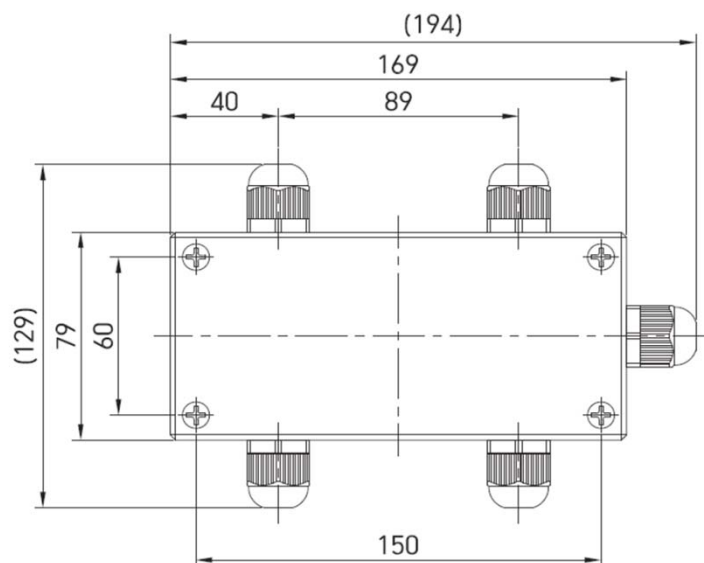


DIMENSION



CJB-4P

(Summing Box)

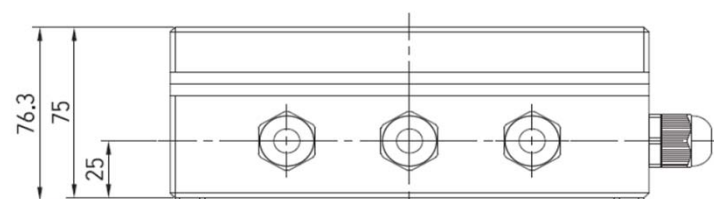
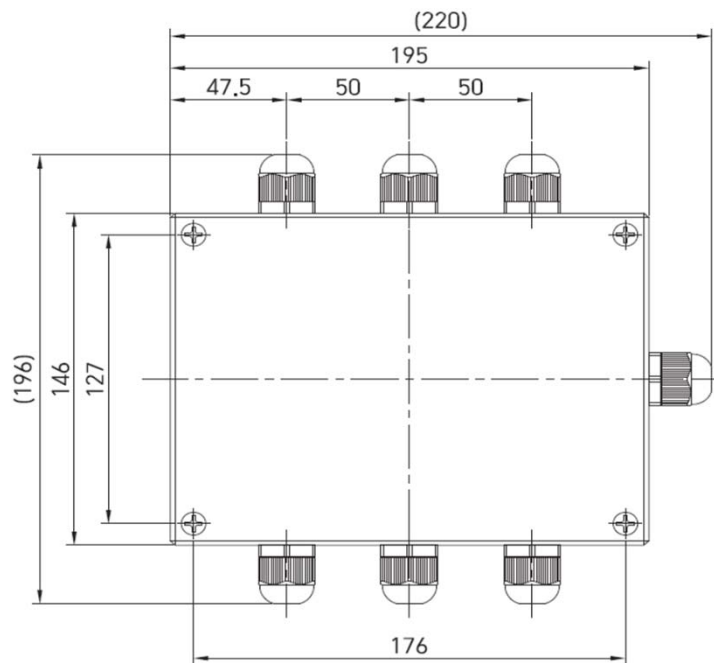


SPECIFICATION

- . 4ch summing box
- . 170(W) x 80(D) x 60(H)
- . Adjust 4Point

CJB-6P

(Summing Box)



SPECIFICATION

- . 6ch summing box
- . 200(W) x 150(D) x 80(H)
- . Adjust 6Point

PT-100

Data Printer

FEATURE

본 프린터는 당사 인디게이터 (CT-10W-RS232C, CT-100-RS232C, CT-200-RS232C)의 계측 및 계량 데이터를 프린터하는 산업용 초소형 프린터로서 열전사 방식의 고속 프린터입니다.

- 초소형 Pannel type
- 편리한 용지 교체형 (Clamshell 구조)
- 조용하고 빠른 프린팅 속도 (50mm/sec)
- 간편한 헤드청소

SPECIFICATION

Header	203 dpi (8.0 dots/mm) 2" (48mm/384 dots) / 40 column
Parallel port	RS232C (300bps ~ 12kbps)
Paper	Thermal transfer label paper
Paper size	57mm wide, roll
Power	AC 90 ~ 240V 50/60Hz
Operating temperature	0 ~ 40℃
Operating humidity	20 ~ 80%
Print head duration	50km
Weight	About 800g



► Protocol

- Data bit : 8 bit
- Parity : no parity
- Stop bit : 1 bit

► Data format

<EX> IDNO : 00021, DATA : +0622.5

Byte	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Data	N	0	:	0	0	0	2	1	SPACE	M	E	A	S	:	*	0	6	2	2	.	5	CR	LF
ASC II	4E	4F	3A	30	30	30	32	31	20	4D	45	41	53	3A	2B	30	36	32	32	2E	35	0D	0A

DIMENSION (mm)

