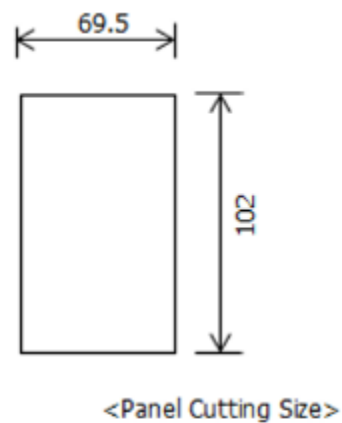
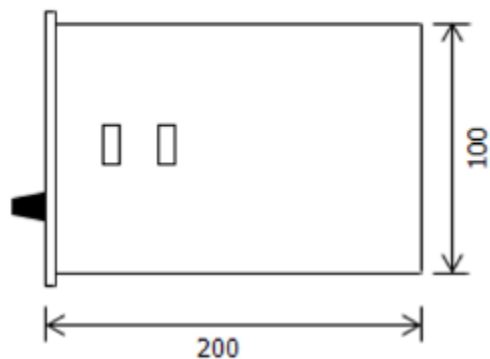
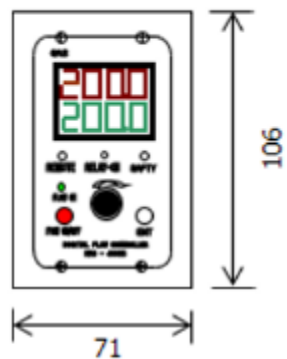
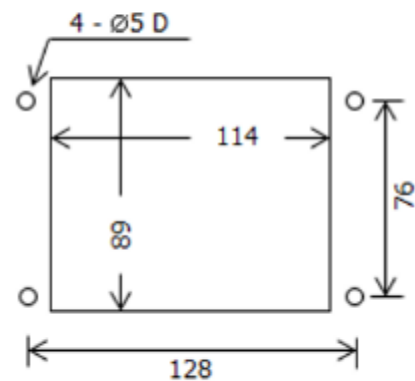
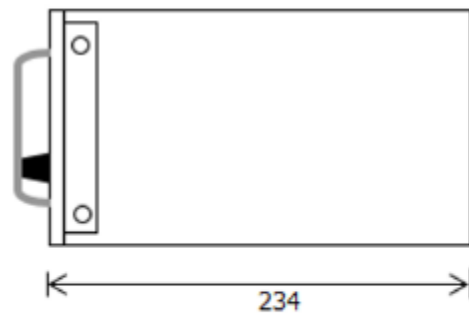
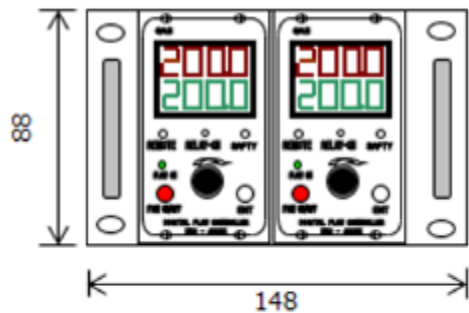


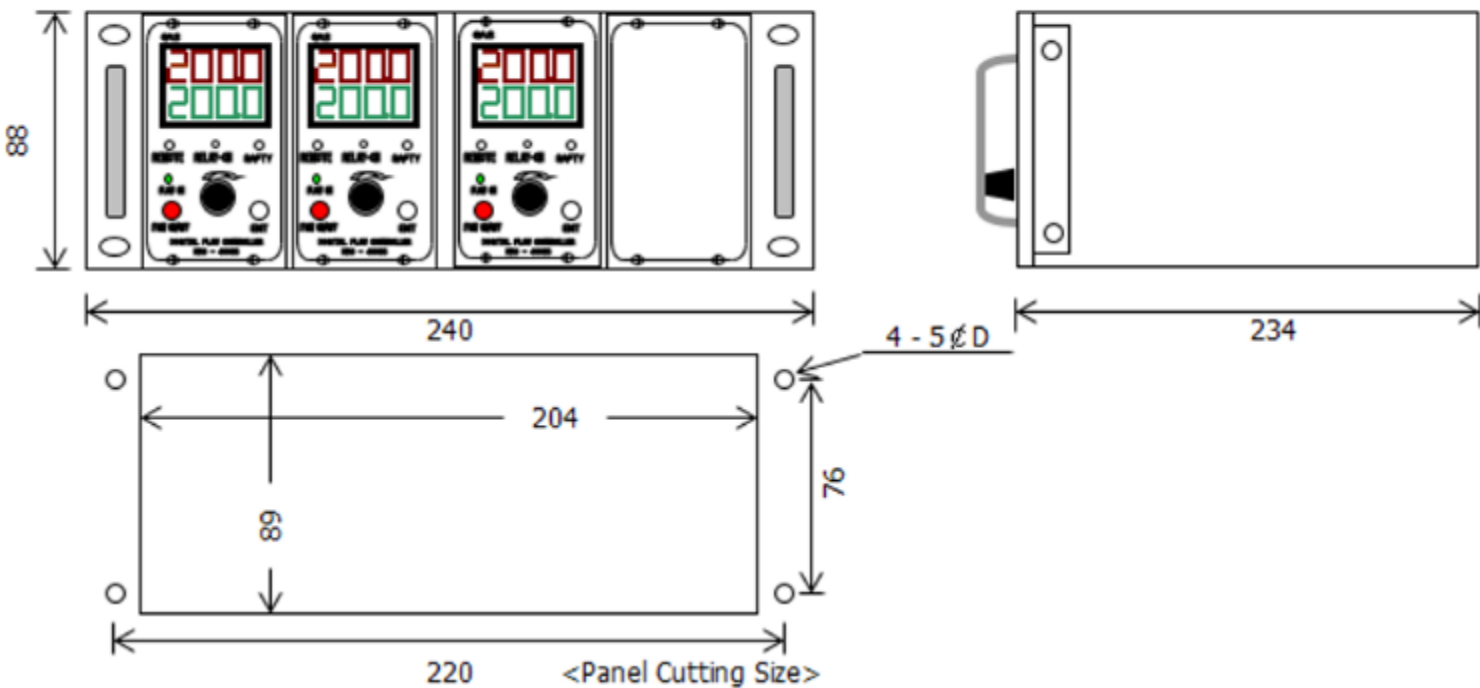
Model	KRO-4000 Series
Display Resolution	4Digit-7Segment, adjustable decimal point
Display Repeatability	$\leq \pm 1.0\%$ of Full Scale
Input to the KRO-4000S	0~5V of Full Scale of MFC
Output Signal	0~5V into $> 10K\Omega$
Output Power	$\pm 15VDC$ (0.5 amp)
Units of Display	SCCM,SLM,%
Decimal Point	User selectable range "0.0.0.0"
Remote Control Set_Point Control Flow on/off Control Flow on/off Reserved Flow Out_Signal Trip_Point	I/O - 9Pin D- Sub(Male) 0~5V for Full Scale of Analog Signal Digital Inout - TTL Digital Output - TTL(Open Collector) 0~5V for Full Scale of MFC 1 Relay Per Flow Channel(Standard)
RS-232C Input/Output(Optional)	9600 Baud, 8-N-1, Available Through the Accessory Connector
Ratio Control(Optional)	User Selectable Address, Rs-485C(Optional)
Sequence Control	3Program, 16 Step
Operating Voltage	220 VAC(50/60Hz)



**Figure 1 : Model KRO-4000S 1CH 전용**

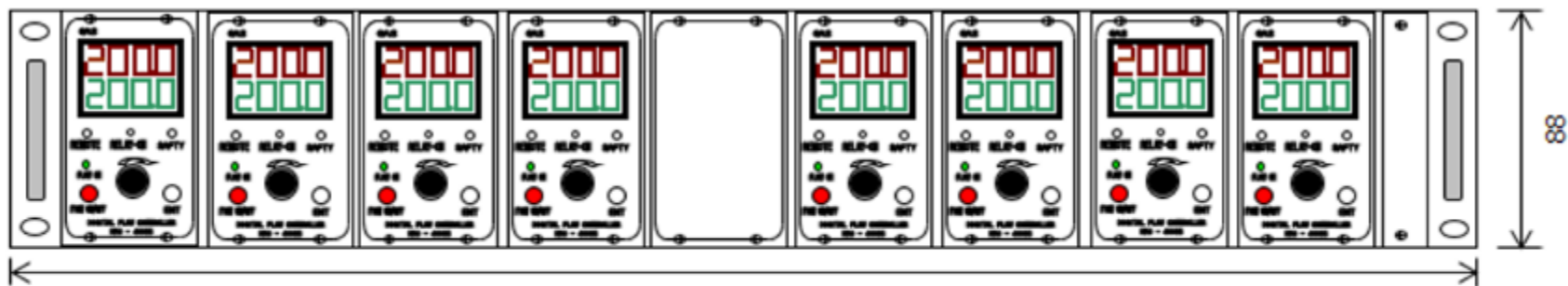


**Figure 2 : Model KRO-4000S 1/2 Half Rack (1~2CH)**



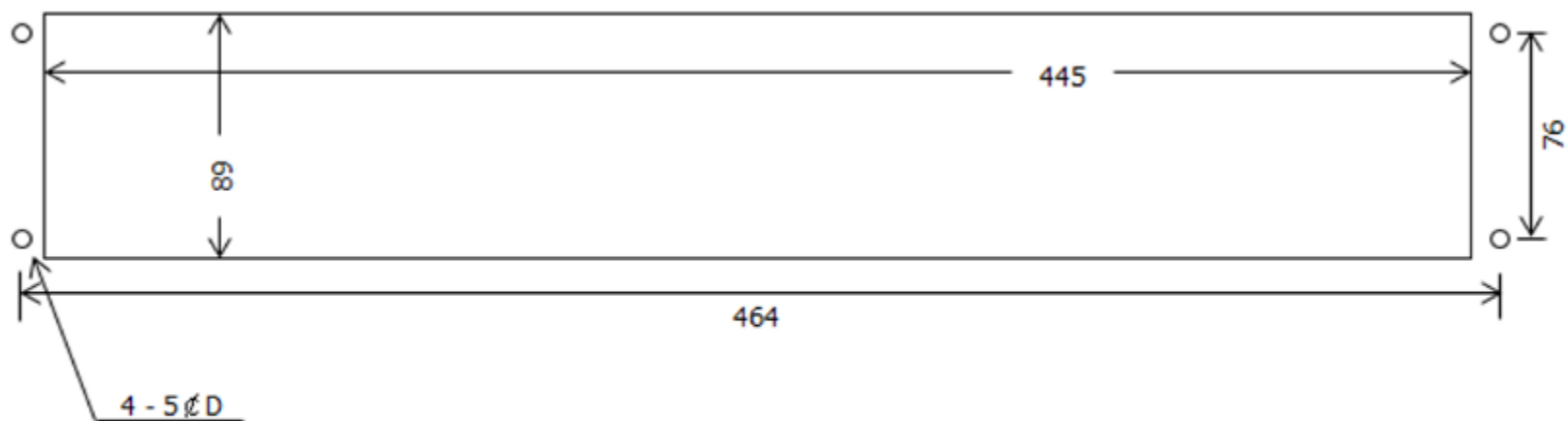
**Figure 3 : Model KRO-4000S Half Rack (1~4CH)**

(단위 : mm)

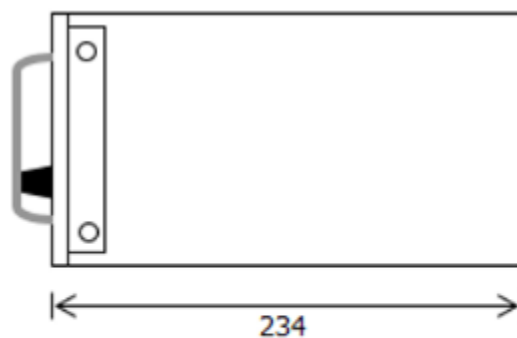


484

88



<Panel Cutting Size>



234

Figure 4 : Model KRO-4000S Full Rack (1~8CH)

KRO - 4 0 0  S -  CH -

Rack Type {  
F : Full Rack  
H : Half Rack  
1/2 H : 1/2 Half Rack  
S : Single (1 Channel)

Channel No. ( 1 to 8 )

- 0 : Standard
- 1 : Standard + RS232C
- 2 : Standard + RS485C
- 3 : Standard + Accumulation Control
- 4 : Standard + Ratio Control
- 5 : Standard + Sequence Control
- 6 : Standard + Input / Output Signal (4 - 20 mA)  
( No Power Loop)
- 7 : Standard + Other Function

**Note : Purge** 기능 추가 시 당사로 연락바랍니다.

## MFC Pin Assignment



Model KRO-4000S MFC Connector - 9 Pin Female D-Sub Connector

Name	Pin No	FUNCTION
GND	1. (Black)	Ground
GND	2.	Ground
-15 vdc	3. (White)	MFC -15VDC 전원출력
GND	4. (Gray)	Ground
+15 vdc	5. (Green)	MFC +15VDC 전원출력 (+24 VDC : Option)
Set-point Signal	6. (Orange)	Output 0-5 VDC (4-20mA:Option)
Flow Signal	7. (Red)	Input 0-5 VDC (4-20mA:Option)
GND	8.	Ground
GND	9.	Chassis Ground

## I/O Pin Assignment



Model KRO-4000S I/O Connector - 9 Pin Male D-Sub Connector

Name	Pin No	FUNCTION
N/C	1	N/C
TTL Input	2	MFC Switch (on "0 vdc - GND", Off "Open")
GND	3	GND
Relay N.O	4	Relay N.O (Max.: +24VDC @ 1A)
Relay common	5	Relay common (Max.: +24VDC @ 1A)
GND	6	Ground
Flow out	7	Flow out (0-5VDC)
Flow control	8	Input 0-5 vdc
Relay N.C	9	Relay N.C (Max.: +24VDC @ 1A)

**< Signal : 0-5VDC >**

Name	Pin No. & Color	FUNCTION
N/C	1	N/C
TTL Input	2	MFC Switch (on "0 vdc - GND", "off "Open")
GND	3	GND
Relay N.O	4	Relay N.O (Max.: +24VDC @ 1A)
Relay common	5	Relay common (Max.: +24VDC @ 1A)
GND	6	Ground
Flow Signal (+)	7	Output 4-20mA (+)
Flow control	8	Input Set-point (4-20mA)
Relay N.C	9	Relay N.C (Max.: +24VDC @ 1A)

**< Signal : 4-20mA >**

**PLC (AD)**

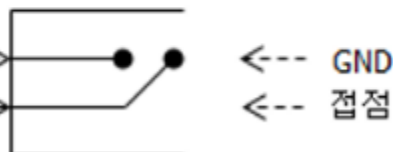
( CH 1 )

+	Flow signal (+)
-	Flow signal (-)

**PLC (DA)**

+	Output Set-point (4-2mA)
-	GND

**PLC (I/O 접점)**



\*\*\* 외부 Flow On/Off Switch  
(자동복귀 접점-푸시버튼 수위치 조작 접점)