

# Foot Switched For medical • beauty product

HRF Series



## Part Number Description

**HRF** - **1** **2** **3** **4**

<b>1</b> Type	M : Medium Duty Type	H : Heavy Duty Type	
<b>2</b> Material	No mark : Plastic	D : Die-Casting	X : Rolled Steel ( Only 1, 8 )
<b>3</b> Safety Cover (H type only)	N : top LX : top + side + safety kick lever	NX : top + side	NS : top + side + front
<b>4</b> Operator Type	No mark : Momentary	3: Maintained	

## General Specification

M type	M1	M2	M3	M5	M52	M53	M6	M8	MX1	MD2	MD3	MD4	
Contact Form	1N/O + 1N/C				2N/O + 2N/C	3N/O + 3N/C	2N/O + 2N/C	1N/O + 1N/C					
Maintained									O	O	O	O	
Material	Plastic								Rolled Steel	Aluminum Die-casting			
Rated Current	10A 250VAC												
Built-in Switch	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plate												
Cable Outlet	0.75mm <sup>2</sup> × 3 wire × 2m												

\* Option : USB type

\* M5 - M8 : Molding type Micro Switch

H type	H3N	HD3	HD3N	HD3NX	HD3NS	HD3LX	HD5N	HD5NX	HD5NS
Contact Form	1N/O + 1N/C						2N/O + 2N/C (2Pedals)		
Rated Current	15A 125/250VAC								
Built-in Switch	Z type Micro Switch (CE certified)								
Material	Plastic	Aluminum Die-casting							
Cable Outlet	By using 1/2 Inch Tap, the flexible cable can be attached (Zn connector 10 - 16)								

Human-Machine  
Interface

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## Product Selection

	Contact Form	Rated Load	Built-in Switch	Certification	Material	Cable outlet	Degree of Protection	Part Number
	1N/O	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	plastic	0.5mm <sup>2</sup> × 2Line Cable × 2m	IP54	HRF-M1
	1N/O + 1N/C	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	plastic	0.5mm <sup>2</sup> × 3Line Cable × 2m	IP54	HRF-M2
	1N/O + 1N/C	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	plastic	0.5mm <sup>2</sup> × 3Line Cable × 2m	IP54	HRF-M3
	1N/O	10A 250VAC	Molding type	CE CCC	plastic	0.5mm <sup>2</sup> × 2Line Cable × 2m	IP67	HRF-M5
	2N/O (2pedals)	10A 250VAC	Molding type	CE CCC	plastic	0.5mm <sup>2</sup> × 4Line Cable × 2m	IP68	HRF-M52
	3N/O (3pedals)	10A 250VAC	Molding type	CE CCC	plastic	0.5mm X 6Line cable X 2m	IP67	HRF-M53
	2N/O (2pedals)	10A 250VAC	Molding type	CE CCC	plastic	0.5mm <sup>2</sup> × 4Line Cable × 2m	IP67	HRF-M6

## Product Selection

	Contact Form	Rated Load	Built-in Switch	Certification	Material	Cable outlet	Degree of Protection	Part Number
	1N/O	10A 250VAC	Molding type	CE CCC	plastic	0.5mm <sup>2</sup> × 2Line Cable × 2m	IP68	HRF-M8
	1N/O + 1N/C	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	rolled steel sheets	0.5mm <sup>2</sup> × 3Line Cable × 2m	IP54	HRF-MX1
	1N/O + 1N/C	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	aluminum die-casting	0.5mm <sup>2</sup> × 3Line Cable × 2m	IP54	HRF-MD2 HRF-MD23 (Maintained)
	1N/O + 1N/C	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	aluminum die-casting	0.5mm <sup>2</sup> × 3Line Cable × 2m	IP54	HRF-MD2S
	1N/O + 1N/C	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	aluminum die-casting	0.5mm <sup>2</sup> × 3Line Cable × 2m	IP54	HRF-MD3
	1N/O + 1N/C	10A 250VAC	V type Micro Switch (UL, CUL, VDE, CE certified) + 24k gold plat	CE CCC	aluminum die-casting	0.5mm <sup>2</sup> × 3Line Cable × 2m	IP54	HRF-MD4











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### Product Selection

	Contact Form	Rated Load	Built-in Switch	Certification	Material	Cable outlet	Degree of Protection	Part Number
	1N/O + 1N/C	15A 125/250VAC	Z type micro switch (CE certified)	CE CCC	plastic	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP65	HRF-H3N
	1N/O + 1N/C	15A 125/250VAC	Z type micro switch (CE certified)	CE CCC cULUS	aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP65	HRF-HD3
	1N/O + 1N/C	15A 125/250VAC	Z type micro switch (CE certified)	CE CCC cULUS	aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP65	HRF-HD3N
	1N/O + 1N/C	15A 125/250VAC	Z type micro switch (CE certified)	CE CCC cULUS	aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD3NX
	1N/O + 1N/C	15A 125/250VAC	Z type micro switch (CE certified)	CE CCC cULUS	aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD3NS
	1N/O + 1N/C	15A 125/250VAC	Z type micro switch (CE certified)	CE CCC cULUS	aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD3LX

## Product Selection

	Contact Form	Rated Load	Built-in Switch	Certification	Material	Cable outlet	Degree of Protection	Part Number
	2N/O + 2N/C (2pedals)	15A 125/250VAC	Z type micro switch (CE certified)		aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD5N
	2N/O + 2N/C (2pedals)	15A 125/250VAC	Z type micro switch (CE certified)		aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD5NX
	2N/O + 2N/C (2pedals)	15A 125/250VAC	Z type micro switch (CE certified)		aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD5NS
	2N/O + 2N/C (2pedals)	15A 125/250VAC	Z type micro switch (CE certified)		aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD202P
	3N/O + 3N/C (3pedals)	15A 125/250VAC	Z type micro switch (CE certified)		aluminum die-casting	1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 - 16)	IP54	HRF-HD301P

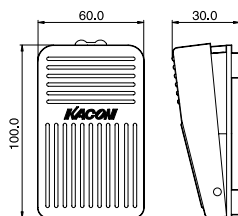
# Foot Switched For medical • beauty product

HRF Series

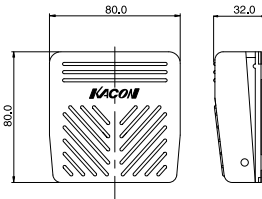
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Unit : mm

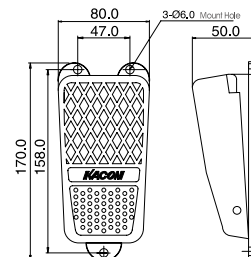
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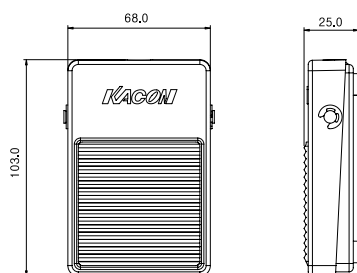
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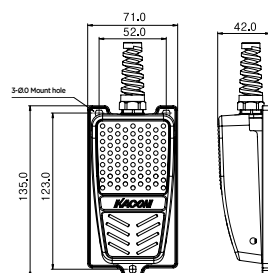
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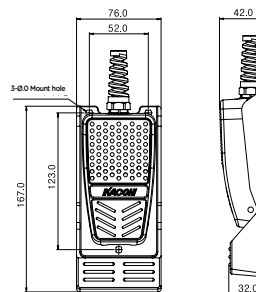
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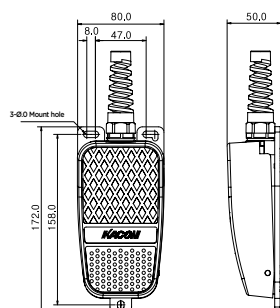
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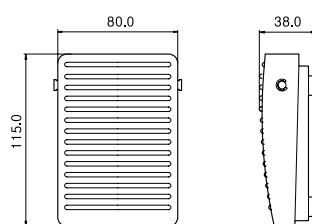
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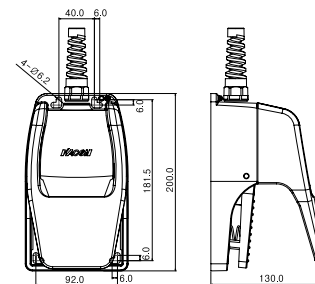
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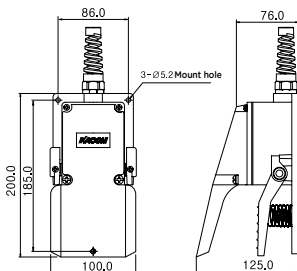
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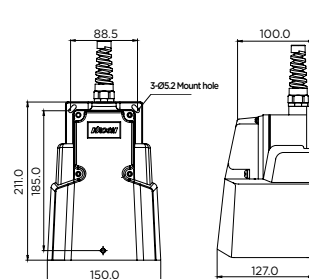
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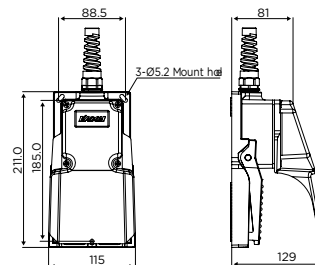
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HRF-HD3N



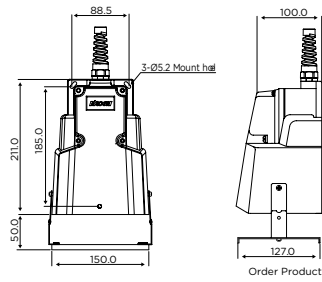
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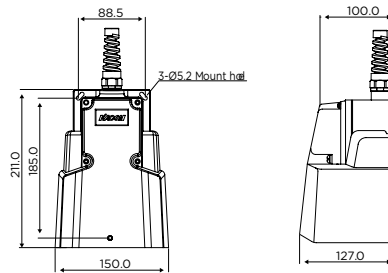
## Dimension

Unit : mm

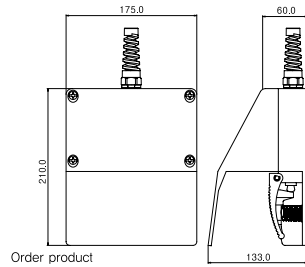
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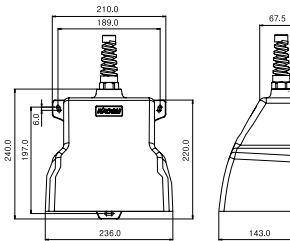
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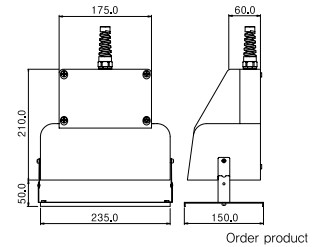
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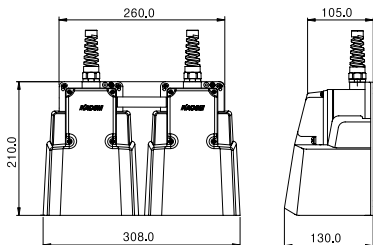
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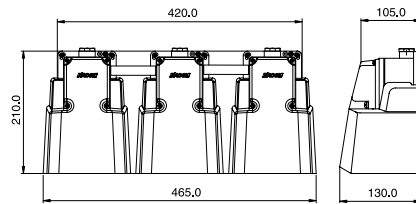
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HRF-HD202P

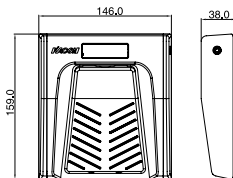


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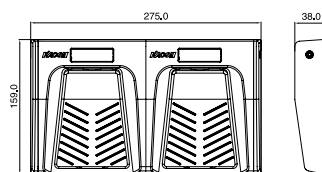


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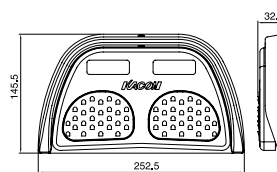
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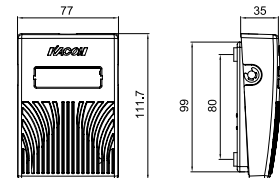
HRF-M52



HRF-M6



HRF-M8



# Foot Switched

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HRF Series

### Circuit Drawing



### Caution

- Use the large current breaker for the large current above the rating considering the load type.
- Use caution for short or open circuits when the product is transported or moved.
- Consider the ambient environment, e.g., water, oil and dirt.
- Severe impact or falling matters may cause operating errors.

### Caution

☞ Be sure to observe the safety precautions to prevent accidents and risks by using the product safely and properly.

☞ Precautions are classified into three categories: danger, warning, and caution.

⚠ **Danger** : Failure to observe this instruction may lead to an urgent situation including serious injury or significant damage.

⚠ **Warning** : Failure to observe this instruction may lead to serious injury or death.

⚠ **Caution** : Failure to observe this instruction may lead to light injury or damage to the product.

☞ The meaning of the symbol in the product and user's guide are as follows.

⚠ is the symbol that a specific condition may generate a danger, which must be avoided.

#### ⚠ **Danger**

Be sure to attach double safety lock to the product when using it for the devices that significantly influence human lives or properties (nuclear, control, healthcare, burning, processing and transport). Otherwise, it may lead to fire, injury and damage to properties.

#### ⚠ **Warning**

1. Do not connect the wire when the power is on
  - It may cause an electric shock.
2. Only the KACON's technician can modify the product.
  - It may cause electric shock or fire.
3. Do not use it as a safety device.
  - It may cause injury or damage to the product.

#### ⚠ **Caution**

1. Do not use the product outdoors.
  - It may be the cause of reduced life and lead to an electric shock.
2. Do not use the product in the flammable or explosive environment
  - It may lead to fire and explosion.
3. Use the product at the rated voltage.
  - Failure to use the rated voltage may lead to a reduced product life.
4. Do not use the product outside the operating voltage range nor apply AC power to the DC power product.
  - It may lead to the damage to the product.
5. Do not miswire (e.g., polarity)
  - It may lead to the damage to the product.
6. Do not use the product in the vibration environment.
  - It may lead to fire.
7. Do not use organic solvent for cleaning.
  - It may lead to electric shock and fire.
8. Do not short the load.
  - It may lead to the damage to the product.
9. For the disposal of this product, classify the product as industrial.