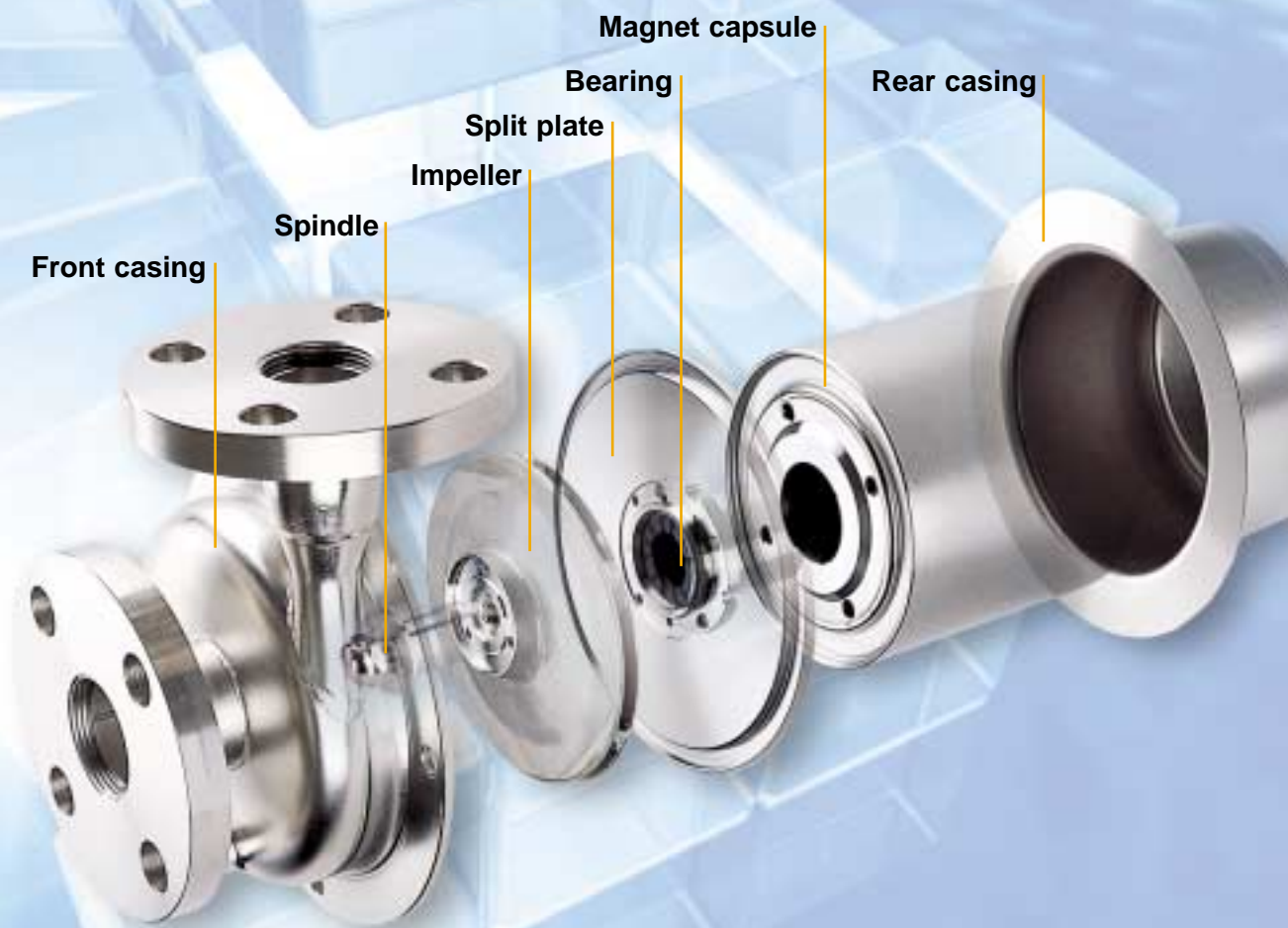


## Magnetic drive pumps YMD series



# Stainless steel magnet pumps with compact size and simple structure



Iwaki now offers our YMD series magnetic drive pumps, notable for their stainless steel construction. These innovative pumps were developed jointly by Iwaki, a general manufacturer of chemical pumps, and PACKO of Belgium. A combination of Iwaki's extensive expertise regarding magnet pumps and PACKO's advanced technology in stainless steel processing successfully reduced both the size and weight of the pump. In addition to the seal-less construction which eliminates liquid leakage, this compactness allows integration into existing systems or stand-alone plant installation.

**Compact and simple**

Compact design with a minimum number of components and powerful rare-earth magnets have simplified handling and maintenance. Ideal for building into other equipment eg. ultrasonic cleaning cabinets etc.

**Electrolytic polishing**

The casing is treated by electrolytic polishing to make its surface smooth and better resistant against corrosion.

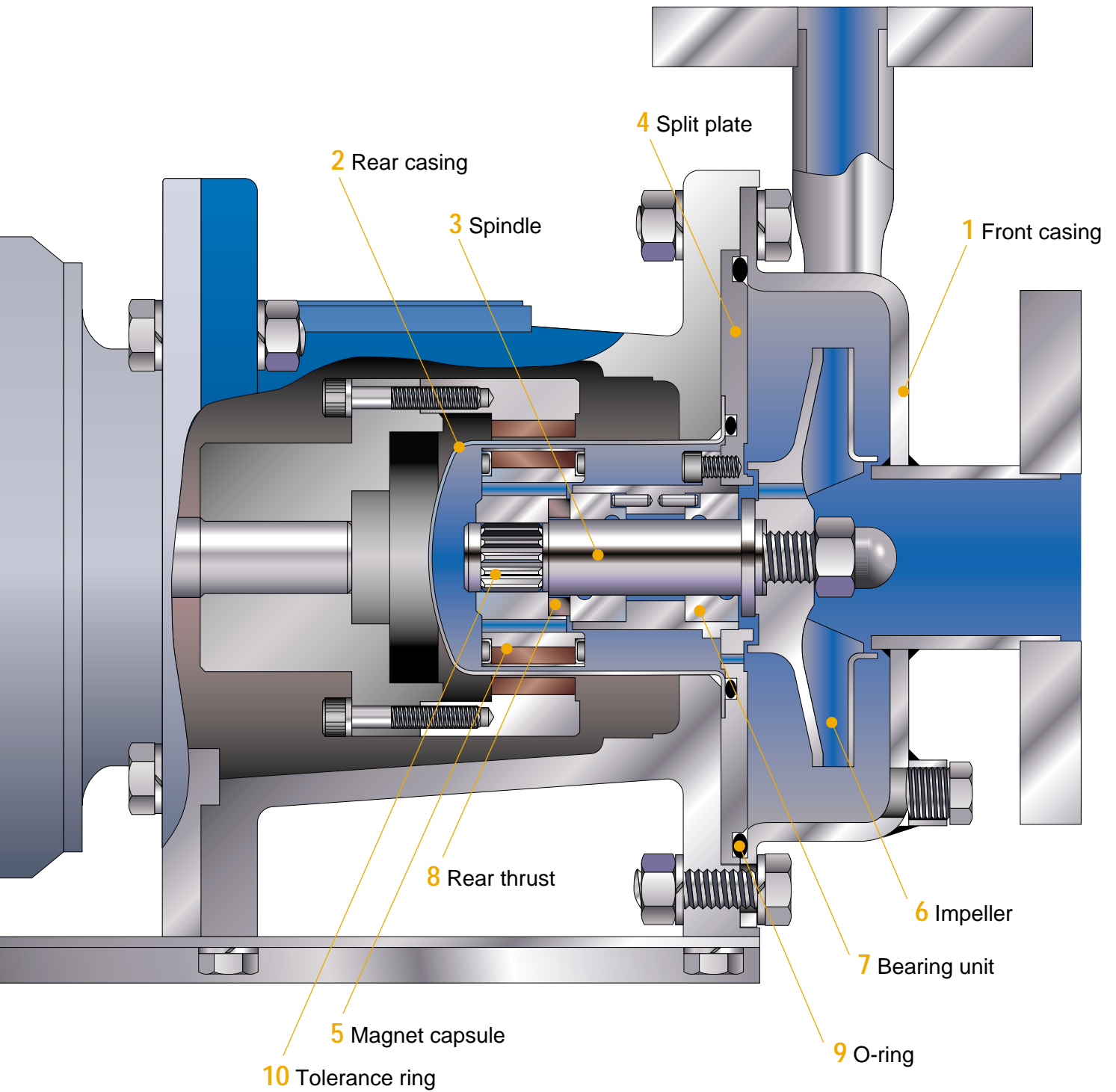
**Stainless steel base**

The pump base is made of stainless steel.



YMD-40

YMD-25



### 1. Front casing

The stainless steel casing is formed by advanced pressing techniques and receives an electrolytic finish. The suction and discharge flanges are to JIS dimensions as standard, with ANSI flanges also available.



### 2. Rear casing

The high-precision pressing of the rear casing minimises material composition changes and subsequent reduction in chemical corrosion resistance.



### 3. Spindle

A spindle made of SUS329 is employed for the carbon bearing. The SiC bearing is comprised by a spindle made by flame-coating an SUS316 base member with chromium oxide.



### 4. Split plate

The bearing support housing is bolted to the split plate to give adequate support to the rotating components.



### 5. Magnet capsule

(Driven magnet)  
The use of a high-torque, rare-earth magnet produces a smaller and lighter magnet capsule. The outside of the magnet capsule is covered with a thin layer of stainless steel plate for protection from corrosive chemicals.



### 6. Impeller

The closed impeller comprises a precision casting with a welded-on shroud to produce an integrated unit.



### 7. Bearing unit

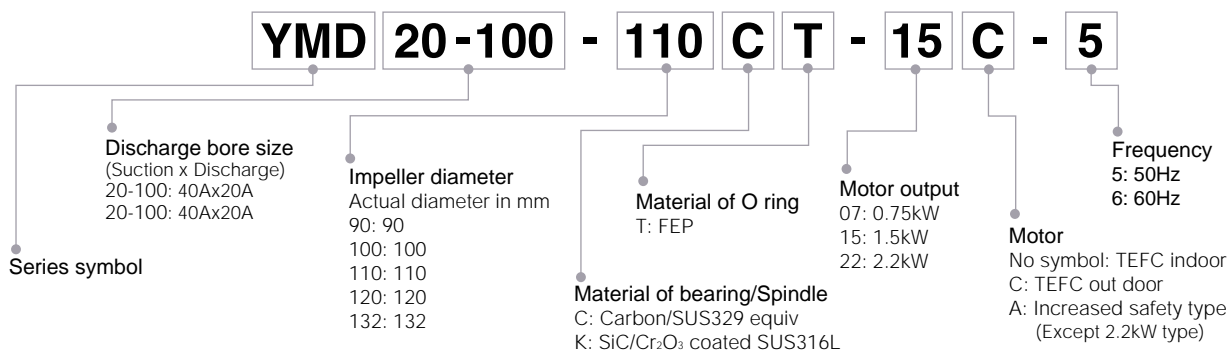
Either carbon or SiC bearings are available, depending on the liquid being used.



## Wet-end materials

Part name	CT	KT
1. Front casing	SUS316	
2. Rear casing	SUS316	
3. Spindle	SUS329	Cr <sub>2</sub> O <sub>3</sub> coated SUS316L
4. Split plate	SUS316L	
5. Magnet capsule	SUS329J1/SUS316L	
6. Impeller	SUS316L	
7. Bearing unit	SUS316/Carbon	SUS316/SiC
8. Rear thrust	SiC	
9. O-ring	FEP	
10. Tolerance ring	SUS301	

## Pump identification



## Specifications

50/60Hz

Model	Connection Suction X Discharge	Impeller diameter mm	Motor output kW	Specific gravity	Max. discharge capacity	Max. head m	Mass kg
<b>YMD20-100</b>	40A X 20A JIS10K	110/90	0.75	1.0	140/140	15/14	34
			1.5	1.3	170/170	15.5/14	37
<b>YMD32-125</b>	40A X 32A JIS10K	120/100	1.5	1.0	280/240	18/17	37
		120/100	2.2	1.3	320/300	18/17.5	40
		132/110	2.2	1.0	330/320	20.5/22	40

Note1: The above performance data were achieved with a liquid which is equivalent to clear water at 20°C.

Note2: The specific gravity limit shown above was with a viscosity of 1mPa·s and maximum power.

Note3: The mass was measured when a totally-closed, TEFC motor was mounted.

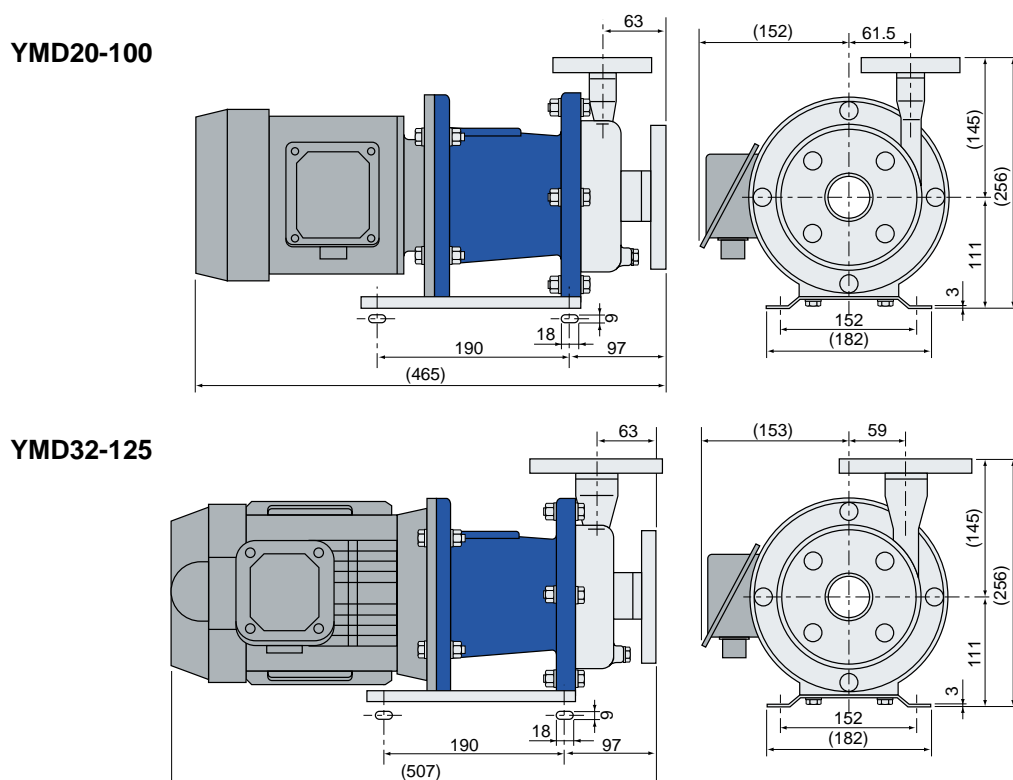
Note4: A magnetic drive pump is unable to run in a continuously closed state. Your plan should be designed so as to maintain a minimum discharge (20L/min.).

Temperature range of liquid to be handled: 0 to 120°C

Color of painting: RAL5002 (with the exception of the motor)

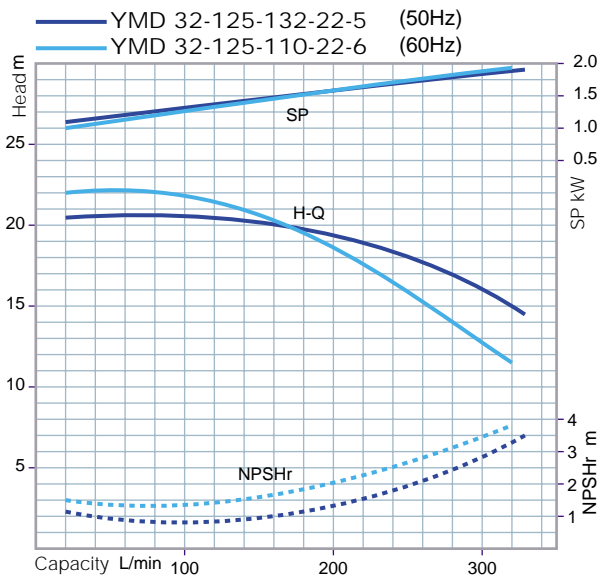
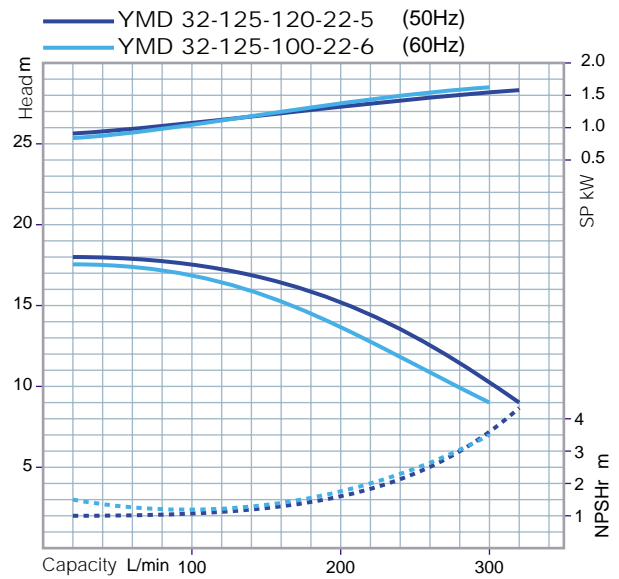
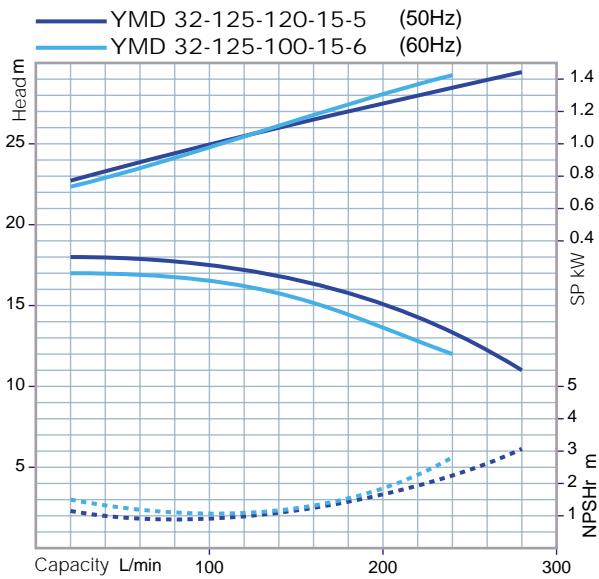
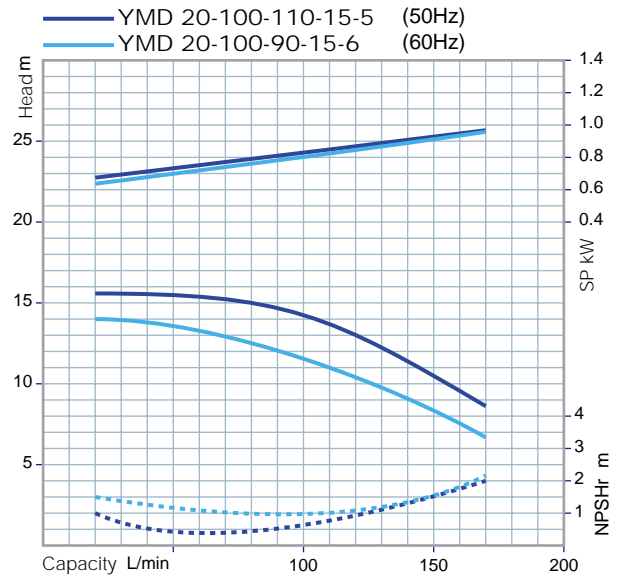
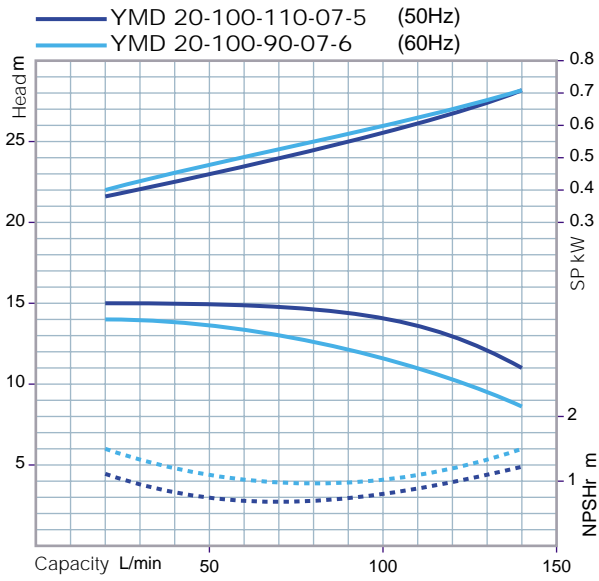
## Dimensions

in mm





## Performance curves



## Iwaki dry running protector DR series



DR-20

Model DR is electric current sensing type dry running protector. It detects the decreased load current (lower limit) to stop the pump when it runs dry or runs with air sucking in. It can detect over-load, too.

- Current figure to be set is indicated on LCD.
- Both top/bottom figures can be set.
  - Top:Over-load
  - Bottom:Dry running, air sucking-in operation, operation with suction side closed
- Built-in current transformer
- DIN rail mounting

### Specification

50/60Hz

Model	DR-10	DR-20
Motor power	200 to 240V three phase	380 to 440V three phase
Applied motor	0.75 to 15kW	0.75 to 15kW
Power control	100 to 240V shingle phase	
Power	V	200 to 240V ±10%shingle phase
	Input	3.5W
Detective current	0.5 to 32.0A	
Current transformer(CT)	Built-in	
Outer dimension	D80 X W153 X H122	