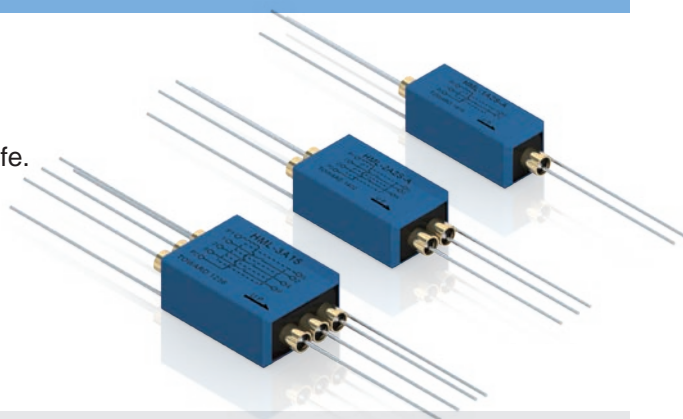


# HML Series

## 1a, 2a, 3a Hi-Voltage Wet Reed Relay

### Features

- Ultra High Insulation Resistance Relay.
- High Reliability, hermetically sealed contacts for long life.
- External magnetic and electrostatic shield.



### Order Code

HML- XX X X-X  
a b c d

a : Contact Form : 1A=1FormA, 2A=2FormA, 3A=3FormA  
b : Coil Voltage : 1=24VDC, 2=12VDC, 4=5VDC  
c : Nil=No Electrostatic Shield, S=Electrostatic Shield  
d : Switch Type : A=High Voltage, B=High current  
C=Non-Position, D=Standard

### Coil Data-Standard Type (at 20°C)

Part Number	Nominal Voltage DC $\pm 10\%$ [V]	Coil Resistance $\pm 10\%$ [ohm]	Nominal Current [mA]	Must Release Voltage MIN. [V] at 20°C	Must Operate Voltage MAX. [V] at 20°C
HML-1A HML-2A	05	100	50.0	0.5	4.0
	12	400	30.0	1.2	8.8
	24	1600	15.0	2.0	18.0
HML-3A	05	50	100.0	0.5	4.0
	12	300	40.0	1.2	8.8
	24	800	30.0	2.0	18.0

### Contact Specifications

Relay Model	HML-XXXS-A	HML-XXXS-B	HRR-XXXS-C	HRR-XXXS-D
Contact Rating Max DC/PEAK AC Resistance	50W	50W	50W	50W
Switching Voltage Max DC/PEAK AC Resistance	1500V	1000V	500V	500V
Max.Switching Current Max DC/PEAK AC Resistance	2.0A	1.0A	2.0A	2.0A
Max.Carry Current Max DC/PEAK AC Resistance	3.0A	5.2A (30°C ) 2.6A (60°C )	2.0A	3.0A

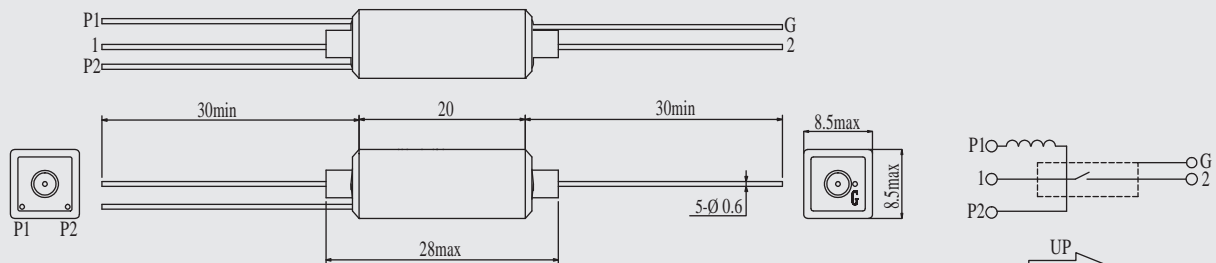


## Specification

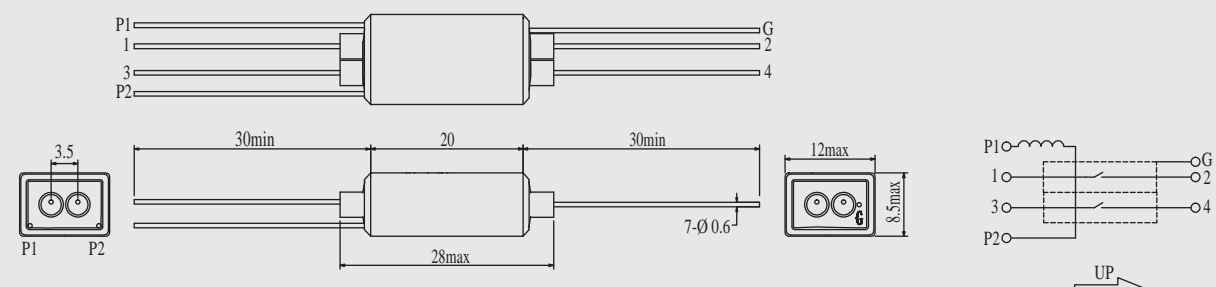
Relay Model	HML-XXXS-A	HML-XXXS-B	HRR-XXXS-C	HRR-XXXS-D
Contact Resistance	100mΩ			
Between contacts	2000VDC	3500VDC	1500VDC	2000VDC
Dielectric Strength(static): contacts to shield contact/shield to coil	2500VDC	3500VDC	2500VDC	2500VDC
	2500VDC	3500VDC	2500VDC	2500VDC
Insulation Resistance (except shields to coil)	$10^{12}\Omega$	$10^{13}\Omega$	$10^{12}\Omega$	$10^{12}\Omega$
Operate Time	2.0mS	2.0mS	2.0mS	2.0mS
Release Time	2.0mS	2.0mS	2.0mS	2.0mS
Vibration	10G (10HZ ~ 500HZ)	20G (1HZ0 ~ 2000HZ)	20G (10HZ ~ 500HZ)	10G (10HZ ~ 500HZ)
shock	30G	50G	50G	30G
Operating Temp	-10°C ~+60°C			
Storage Temp	-20°C ~+80°C			
Life Expectancy	1VDC-10mA $1 \times 10^9$ operations	1VDC-10mA $1 \times 10^9$ operations	1VDC-10mA $5 \times 10^8$ operations	1VDC-10mA $1 \times 10^9$ operations
	500VDC-100mA $5 \times 10^7$ operations	500VDC-100mA $5 \times 10^7$ operations	500VDC-100mA $5 \times 10^6$ operations	500VDC-100mA $5 \times 10^7$ operations

## Dimensions (Unit : mm)

### HML-1A



### HML-2A



### HML-3A

