

# Pulse Isolator

## NPFR-C1D

Single input, single output

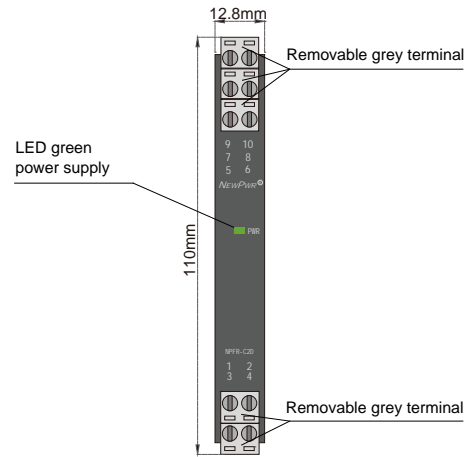
## NPFR-C2D

Single input, dual output

Input: Frequency

Output: 1:1

This pulse isolator converts the frequency signals to 1:1 frequency signals (configurable logic level default, open collector or emitter follower can be selected in ordering). It needs an independent power supply. The input, output, and power supply are galvanically isolated from each other.



## Parameters

Power supply:	18 V DC ~ 60 V DC (Reverse power protection)
Power dissipation:	0.9 W (single output, full-load) 1.8 W (double output, full-load)
Input signal:	frequency
Frequency range:	0.1 Hz ~ 100 kHz
Pulse width:	$\geq 5 \mu\text{s}$
Switching trigger point:	Low level: 0 V ~ 2 V, High level: 4 V ~ 30 V
Distribution voltage:	12 V DC: Distribution voltage $\geq 11 \text{ V}$ at 20 mA 24 V DC: Distribution voltage $\geq 22 \text{ V}$ at 20 mA
Output signal:	Open collector      High level: $V_{CC} (\leq 30 \text{ V})$ Low level: $\leq 2 \text{ V}$ drive current: $\leq 10 \text{ mA}$ Emitter follower    High level: $V_{CC} - 2 \text{ V}$ Low level: $\leq 0.5 \text{ V}$ drive current: $\leq 10 \text{ mA}$ Logic level (default) High level: $18 \text{ V} \leq V_H \leq 24 \text{ V}$ Low level: $V_L \leq 2 \text{ V}$ Load resistance: $\geq 2 \text{ k}\Omega$
Electromagnetic compatibility:	IEC 61326-3-1
Dielectric strength:	$\geq 1500 \text{ V AC}$ (Input /Output/Power supply)
Insulation resistance:	$\geq 100 \text{ M}\Omega$ (Input /Output/Power supply)
Operation temperature:	-20 °C ~ +60 °C
Storage temperature:	-40 °C ~ +80 °C
Dimension:	12.8 mm (W) × 110 mm (H) × 117 mm (D)

## Wiring diagram

