



AFP7MXY32DWDH | Multi input/output unit



※Photo may vary from actual product.

To Be Discontinued

Last time buy

September 30, 2022

Product Number	AFP7MXY32DWDH
Part Number	AFP7MXY32DWDH
Product	FP7 Multi Input/Output Unit
Details	Positioning type
Product name	Multi input/output unit

Substituta

FP7

Sub Prod No.

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Sub Part No.

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Remark

Suggested alternative products may be different under the conditions of use. Contact us
For recommended substitutes, please use the combination of FP7 multi input / output unit (AFP7MXY32DWD) and FP7 positioning unit (AFP7PP0□□).
*The program is not compatible.

Spec Detail

As of May 30, 2021

Specifications and design of the products are subject to change without notice for the product improvement.

Item	Specifications
Product Number	AFP7MXY32DWDH
Part Number	AFP7MXY32DWDH
[[Function specifications]]Basic input and output : Number of occupied I/O points	Input/Output : 96 points each (6 words)
[[Function specifications]]Basic input and output : Number of external I/O points	Input: 16 points, Output: 16 points
[[Function specifications]]Basic input and output : Input time constant setting	None, 0.5 μs, 1 μs, 2 μs, 4 μs, 8 μs, 16 μs, 32 μs, 64 μs, 96 μs, 128 μs, 256 μs, 2 ms, 4 ms, 8 ms Setting possible in 2-point units
[[Function specifications]]Basic input and output : Output polarity setting	No output, N channel, P channel, Both channels (push pull output), Differential output Setting possible in 4-point units
[[Function specifications]]Interrupt : Number of points	8 points/unit (Max. of 8 units can be used with FP7 system.)
[[Function specifications]]Interrupt : Mode	Non-interrupt unit, Interrupt unit (Set using DIP switches)
[[Function specifications]]Interrupt : Interrupt condition setting	Terminal input, Comparison match
[[Function specifications]]Counter : Counter type	Ring counter Linear counter
[[Function specifications]]Counter : Input mode	Direction distinction, Individual input, Phase input
[[Function specifications]]Counter : Number of channels	4 channels (Note): When using elapsed value hold function, number of channels will be limited.
[[Function specifications]]Counter : Counting range	Signed 32 bit (-2,147,483,648 to +2,174,483,647) Setting possible of upper and lower limits
[[Function specifications]]Counter : Max. counting speed	5 V input voltage: 500 kHz 12 V input voltage: 500 kHz (350 kHz with phase input)

	24 V input voltage: 250 kHz (180 kHz with phase input) (Note): With 50 % duty input pulse.
[[Function specifications]]Counter : Min. input pulse width	0.5 μ s
[[Function specifications]]Counter : Comparison output setting	Max. 8 points Terminal input counter: 4 channels
[[Function specifications]]Counter : Others	Transfer multiplication function ($\times 1$, $\times 2$, $\times 4$) Elapsed value offset / preset function Elapsed value hold function, setting of upper / lower count limits Input pulse frequency measurement Overflow / underflow detection
[[Function specifications]]Pulse output : Number of channels	4 channels
[[Function specifications]]Pulse output : Output mode	Direction distinction, Individual output, Phase output, Comparison match stop
[[Function specifications]]Pulse output : Output terminals : Pulse output function	2 terminals / channel (B11 to B18 terminals)
[[Function specifications]]Pulse output : Output terminals : PWM output function	1 terminal / channel (B11, B13, B15 and B17 terminals)
[[Function specifications]]Pulse output : Output frequency : Pulse output function	1 to 500 kHz (Note) (Settable by 1 Hz) (Note): When push pull setting or output current is 0.1 A. Varies according to load.
[[Function specifications]]Pulse output : Output frequency : PWM output function	1 to 100 kHz (Note) (Settable by 1 Hz) (Note): When push pull setting or output current is 0.1 A. Varies according to load.
[[Function specifications]]Pulse output : Duty ratio : Pulse output function	50 % approx. (Fixed)
[[Function specifications]]Pulse output : Duty ratio : PWM output function	0 to 100 % (Settable by 0.1%)
[[Function specifications]]Pulse output : Other functions	Pulse number measurement function (dedicated pulse counter 4 channels)
[[Positioning function specifications]]Number of axes controlled	Max. 4 axes
[[Positioning function specifications]]Common specifications : Position setting mode	Increment, Absolute
[[Positioning function specifications]]Common specifications : Output interface	Transistor open collector output, Push-pull, Line driver (Note): The number of axes is reduced when setting Line driver.
[[Positioning function specifications]]Common specifications : Pulse output method	Pulse + Sign, CW + CCW
[[Positioning function specifications]]Common specifications : Max. output frequency	500 kHz
[[Positioning function specifications]]Common specifications : Output pulse duty ratio	When using table setting mode : 50 % (Fixed)
[[Positioning function specifications]]Common specifications : Control unit	Pulse
[[Positioning function specifications]]Position control : Position setting range	-1,073,741,824 to +1,073,741,823 pulses
[[Positioning function specifications]]Position control : Speed command range	Pulse : 1 to 500,000 Hz
[[Positioning function specifications]]Position control : Max. operation speed	500 kHz
[[Positioning function specifications]]Position control : Acceleration/deceleration method	Linear acceleration/deceleration

[[Positioning function specifications]]Position control : Acceleration time	1 to 10,000 ms (Settable by 1 ms)
[[Positioning function specifications]]Position control : Deceleration time	1 to 10,000 ms (Settable by 1 ms)
[[Positioning function specifications]]Position control : Number of positioning tables	20 tables for each axis (Up to 2 tables can be executed consecutively.)
[[Positioning function specifications]]Position control : Control method (Single axis)	PTP control (E point control, C point control), CP control (P point control), Speed control (J point control) (Note 1): The J point control is executable only for the two axes of CH0 and CH1. (Note 2): When performing the J point control or JOG operation, the speed can be changed after the startup.
[[Positioning function specifications]]Position control : Control method (2-axis linear interpolation)	E point, P point, C point controls, Composite speed or Long axis speed setting
[[Positioning function specifications]]Position control : Dwell time	0 to 32,767 ms (Settable by 1 ms)
[[Positioning function specifications]]JOG operation : Speed command range	Pulse : 1 to 500,000Hz (Note): When performing the J point control or JOG operation, the speed can be changed after the startup.
[[Positioning function specifications]]JOG operation : Acceleration/deceleration method	Linear acceleration/deceleration
[[Positioning function specifications]]JOG operation : Acceleration time	1 to 10,000 ms (Settable by 1 ms)
[[Positioning function specifications]]JOG operation : Deceleration time	1 to 10,000 ms (Settable by 1 ms)
[[Positioning function specifications]]Home return : Speed command range	Pulse : 1 to 500,000 Hz
[[Positioning function specifications]]Home return : Acceleration/deceleration method	Linear acceleration/deceleration
[[Positioning function specifications]]Home return : Acceleration time	1 to 10,000 ms (Settable by 1 ms)
[[Positioning function specifications]]Home return : Deceleration time	1 to 10,000 ms (Settable by 1 ms)
[[Positioning function specifications]]Home return : Return method	DOG methods (3 types), Home position method, Data set method
[[Positioning function specifications]]Stop function : Deceleration stop	Performs deceleration stop in the deceleration time of a running operation for each axis.
[[Positioning function specifications]]Stop function : Emergency stop	Stops in a deceleration time specified for the emergency stop for each axis.
[[Positioning function specifications]]Stop function : Limit stop	Stops in a deceleration time specified for the limit input for each axis.
[[Positioning function specifications]]Stop function : System stop	Stops all axes immediately.
[[COMMON GENERAL SPECIFICATIONS]]Ambient temperature	0 to +55 °C +32 to +131 °F, Storage: -40 to +70 °C -40 to +158 °F
[[COMMON GENERAL SPECIFICATIONS]]Ambient humidity	10 to 95 % RH (at +25 °C +77 °F, no condensation), Storage: 10 to 95 % RH (at +25 °C +77 °F, no condensation)
[[COMMON GENERAL SPECIFICATIONS]]Breakdown	500 V AC for 1 minute

voltage

[[COMMON GENERAL SPECIFICATIONS]]Insulation resistance	100 MΩ or more (at 500 V DC)
[[COMMON GENERAL SPECIFICATIONS]]Vibration resistance	5 to 8.4 Hz, single amplitude of 3.5 mm 0.138 in, 1 sweep/min. (IEC 61131-2) ; 8.4 to 150 Hz, constant acceleration of 9.8 m/s ² , 1 sweep/min. (IEC 61131-2), 10 times each in X, Y, and Z directions
[[COMMON GENERAL SPECIFICATIONS]]Shock resistance	147 m/s ² or more , 3 times each in X, Y, and Z directions (IEC61131-2)
[[COMMON GENERAL SPECIFICATIONS]]Noise immunity	1,000 V [p-p] with pulse width 50 ns and 1 μs (using a noise simulator)
[[COMMON GENERAL SPECIFICATIONS]]Operating condition	Free from corrosive gasses and excessive dust
[[INDIVIDUAL GENERAL SPECIFICATIONS]]Rated voltage range	-
[[INDIVIDUAL GENERAL SPECIFICATIONS]]Current consumption	100 mA or less
[[INDIVIDUAL GENERAL SPECIFICATIONS]]Net weight	100 g approx.