PRODUCT NEWS

Product Discontinuation Notices

OMRON

March 2, 2009

Cam Positioners

No.2009075E

Discontinuation Notice of Cam Positioner Expansion Unit. 3F88L-E53

Product Discontinuation Cam Positioner Expansion Unit	Recommended Replacement Cam Positioner
3F88L-E53	**H8PS-32AF** **H8PS-32BF**

Discontinuation date : The end of March, 2010

Caution on recommended replacement

It is necessary to 2 unit "H8PS" for replacement of the set "3F88L-155" with "3F88L-E53".
Then, when two "H8PS" is used, a "Parallel Input Adapters" "Y92C-30" is necessary.
Cam output specification is max 64 used by two "H8PS".
And when Controller is replaced "3F88L-155" with "H8PS", the Sensor is required to change from Resolver to Encoder.

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
H8PS-32□F	**	--	--	--	--	--	--

** : Fully compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

OMRON Corporation
Industrial Automation Company

Product Discontinuation and recommended replacement

Product discontinuation		Recommended replacement	
Model	**Product code**	**Model**	**Product code**
3F88L-E53	3F881012F	H8PS-32AF H8PS-32BF Y92C-30	H8PS1020R H8PS1024A H8PS9000H

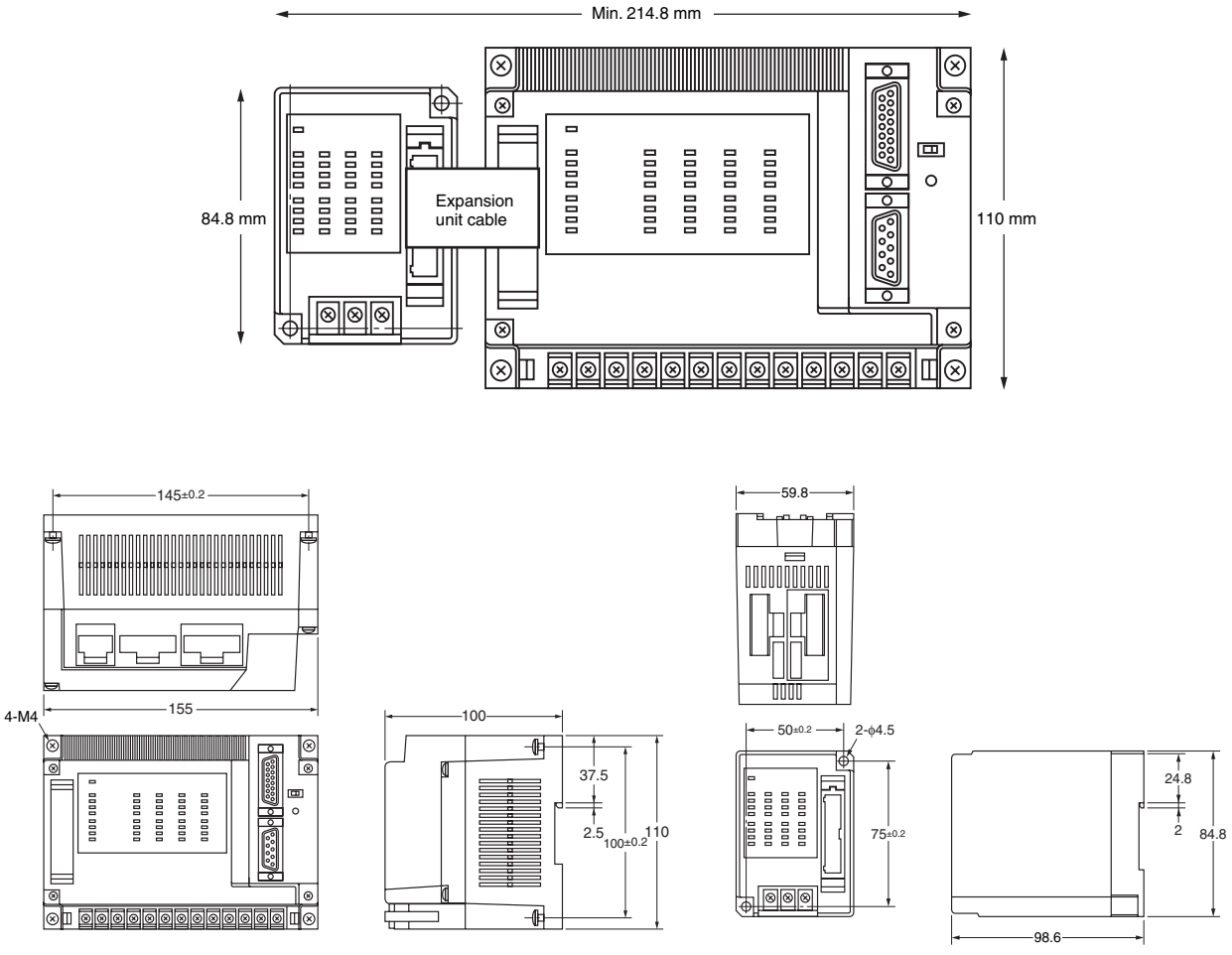
*1. Replacement of 3F88L-E53 is recommended H8PS Cam Positioner Controller set.
Then, required to share signals Parallel Input Adapter enables. When two H8PS Cam Positioners are used, the Parallel Input Adapter is necessary.

Mounting Dimensions

Product discontinuation
3F88L-E53

3F88L-155+3F88L-E53

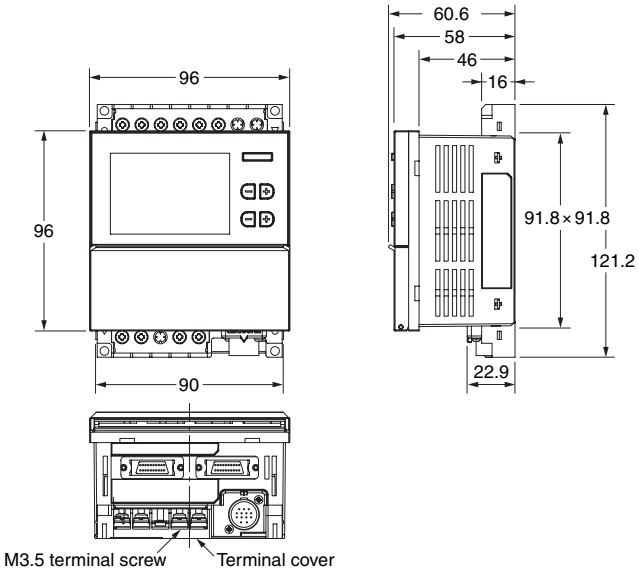
In the case of a cam output of 64 points, their space follow.



Mounting Dimensions

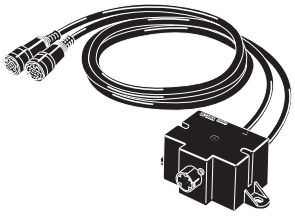
Recommended replacement
H8PS-32□F

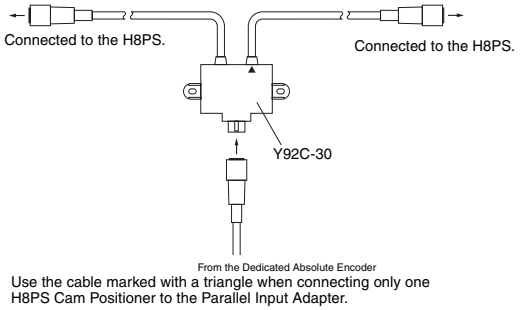
Surface Mounting H8PS-16□ F/32□F□ (16-/32-output models)



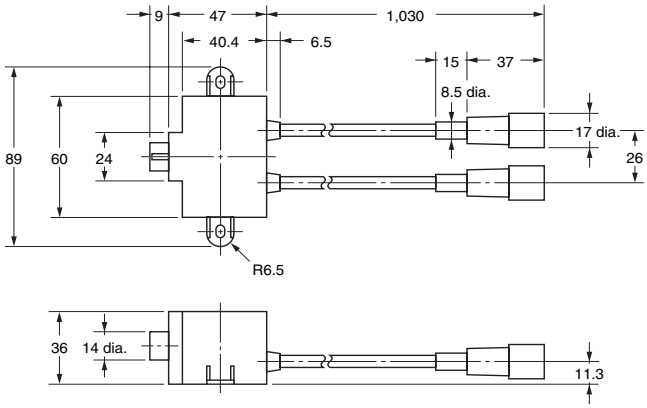
Parallel Input Adapters
Y92-C30

This Adapter enables two H8PS Cam Positioners to share signals from an Encoder.





Use the cable marked with a triangle when connecting only one H8PS Cam Positioner to the Parallel Input Adapter.



Characteristics

Product discontinuation
3F88L-E53

Performance specification

Expansion unit (3F88L-E53)
Specifications

Power supply voltage	24 VDC
Allowable power supply voltage	21.6 to 26.4 VDC (24 V + or - 10%)
Current consumption	5VA max.
Insulation resistance	20MΩ min. between external terminals and case (at 500 VDC mega)
Dielectric strength	1,000 VAC for 1 minute between power terminals and case
Noise immunity	DC power supply noise immunity: impulse noise 20 times of power supply voltage Pulse width 1s, 100-ns,
Vibration resistance	Range of vibration frequency:10 to 150 Hz Total amplitude: lesser of 1.0mm and acceleration 7G Test time: X,Y, and Z directions, each 16 min
Shock resistance	98 m/s^2, max. X, Y and Z directions
Ambient operating temperature	0 to 55°
Ambient operating humidity	35 to 85 %(with no condensation)
Ambient operating condition	No corrosive gasses
Ambient storage temperature	-25 to 65°
Degree of protection	Panel-mounting

Performance specifications

Number of outputs	32
Output form	With Transistor open collector photo isolation, Switch capacity 24 VDC max, 300m A/cam Conditions for use; 32 cam total and 3.2 A max.
Output display	LED display
Detector input terminal	Connector
Cable length	10 cm
Weight	500 g max

Characteristics

Recommended replacement
H8PS-□B

Specifications

■ Ratings and Characteristics

●Ratings

Item			H8PS-□B	H8PS-□BF	H8PS-□BP	H8PS-□BFP
Rated supply voltage			24 VDC			
Operating voltage range			85 % to 110 % of rated supply voltage			
Mounting method			Flush mounting	Surface mounting, track mounting	Flush mounting	Surface mounting, track mounting
Power consumption			Approx. 4.5 W at 26.4 VDC for 8-output models Approx. 6.0 W at 26.4 VDC for 16-/32-output models			
Inputs	Encoder input		Connections to a dedicated absolute encoder			
	External inputs	Input signals	8-output Models : None 16-/32-output Models : Bank inputs 1/2/4, origin input, start input			
		Input type	No voltage inputs: ON impedance:1 kΩ max. (Leakage current: Approx. 2 mA at 0 Ω) ON residual voltage: 2 V max., OFF impedance: 100 kΩ min., Applied voltage: 30 VDC max. Minimum input signal width: 20 ms			
Outputs	Cam outputs RUN output		NPN open-collector transistor outputs 30 VDC max., 100 mA max. (Do not exceed 1.6 A total for all cam outputs and the RUN output.), residual voltage: 2 VDC max.		PNP open-collector transistor outputs 30 VDC max. (26.4 VDC for 16-/32-output Models), 100 mA max. (Do not exceed 1.6 A total for all cam outputs and the RUN output.), residual voltage: 2 VDC max.	
	Pulse output		NPN open-collector transistor output 30 VDC max., 30 mA max., residual voltage: 0.5 VDC max.		PNP open-collector transistor output 30 VDC max. (26.4 VDC for 16-/32-output Models) 30 mA max., residual voltage: 2 VDC max.	
	Number of outputs		8-output Models: 8 cam outputs, 1 RUN output, 1 pulse output 16-output Models: 16 cam outputs, 1 RUN output, 1 pulse output 32-output Models: 32 cam outputs, 1 RUN output, 1 pulse output			
Number of banks			8 banks (for 16-/32-output Models only)			
Display method			7-segment, negative transmissive LCD (Main Display: 11 mm (red), Sub-display: 5.5 mm (green))			
Memory backup method			EEPROM (overwrites: 100000 times min.) that can store data for 10 years min.			
Ambient operating temperature			–10 to 55°C (with no icing or condensation)			
Storage temperature			–25 to 65°C (with no icing or condensation)			
Ambient humidity			25 % to 85 %			
Degree of protection			Panel surface: IP40, Rear case: IP20			
Case color			Light gray (Munsell 5Y7/1)			

● Characteristics

Setting unit		0.5° increments at a resolution of 720, 1° increments at a resolution of 256 or 360 (*1)
Number of steps		Up to 10 steps can be set for each cam to turn the output ON/OFF 10 times. (*2)
Inputs	Encoder input	Connections to a dedicated absolute encoder • Response rotation speed (in Run/Test Mode) 1600 r/min max. at a resolution of 256 or 360 (1200 r/min max. if angle advancement is set for 4 or more cams)(*3) 800 r/min max. at a resolution of 720 (600 r/min max. if angle advancement is set for 4 or more cams) • Includes error data detection
Encoder cable extension distance		256/360 resolution 100 m max. at 330 r/min or less 52 m max. at 331 to 1200 r/min (331 to 900 r/min if angle advancement is set for 4 or more cams) 12 m max. at 1201 to 1600 r/min (901 to 1200 r/min if angle advancement is set for 4 or more cams) 720 resolution 100 m max. at 330 r/min or less 52 m max. at 331 to 600 r/min (331 to 450 r/min if angle advancement is set for 4 or more cams) 12 m max. at 601 to 800 r/min (451 to 600 r/min if angle advancement is set for 4 or more cams)
Output response time		0.3 ms max.
Insulation resistance		100 MΩ min. (at 500 VDC) between current-carrying terminals and exposed non-current-carrying metal parts, between all current-carrying parts and the USB connector
Dielectric strength		1000 VAC, 50/60 Hz for 1 min between current-carrying terminals and exposed non-current-carrying metal parts 500 VAC, 50/60 Hz for 1 min between current-carrying section and USB connector, and between current-carrying terminals and non-current-carrying metal part of output connector
Impulse withstand voltage		1 kV between power terminals 1.5 kV between current-carrying terminals and exposed non-current-carrying metal parts
Noise immunity		±480 V between power terminals, ±600 V between input terminals Square-wave noise by noise simulator (pulse width: 100 ns/1 μs, 1-ns rise)
Static immunity		8 kV (malfunction), 15 kV (destruction)
Vibration resistance	Destruction	10 to 55 Hz with 0.75-mm single amplitude each in 3 directions for 2 hours each
	Malfunction (*4)	10 to 55 Hz with 0.5-mm single amplitude each in 3 directions for 10 minutes each
Shock resistance	Destruction	300 m/s^2 3 times each in 3 directions
	Malfunction (*4)	200 m/s^2 3 times each in 3 directions
Weight		Approx. 300 g (Cam Positioner main unit only)

*1. Cam output precision, however, is 2° max. for Encoder with 256 resolution (P/R).

*2. All 32-output Models have a maximum of 160 steps total for all cam outputs.

*3. 1000 r/min max. when an E6CP-AG5C-C Encoder is connected.

*4. Excluding USB communications.

Operation methods

Product discontinuation	Recommended replacement
a. Program with the separate Programming console type.	a. Program with operation keys on the front panel. Setting from the optional Support Software is also possible with USB communications.