



OPERATING MANUAL

Robot Flange Adapter

Introduction

Only qualified personnel of electrical and mechanical engineering should work with the product.
The product described in this document is designed and manufactured to be incorporated in general industrial equipment. Do not use for any other purpose. Oriental Motor Co., Ltd. is not responsible for any compensation for damage caused through failure to observe this warning.

Preparation

■ Checking the product

Verify that the items listed below are included. Report any missing or damaged items to the Oriental Motor sales office from which you purchased the product.

Description	Number of pieces			
	P3F1	P3F2	P5F1	P5F2
Flange adapter (robot side)	1	1	1	1
Flange adapter (end effector side)	1	1	1	1
Positioning pin (ø3 mm, 8 mm)	3	3	3	3
Positioning pin (ø5 mm, 8 mm)	1	1	–	–
Positioning pin (ø6 mm, 8 mm)	1	–	2	1
Hexagonal socket head screw (M3, 8 mm)	4	–	4	–
Hexagonal socket head screw (M4, 8 mm)	4	8	4	8

■ How to identify the product model

P 3 F 1
1 2 3 4

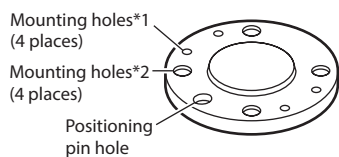
1	Identification code	P
2	ISO Standards-compliant of flange adapter (robot side)	3: ISO 9409-1-31.5-4-M5 compliant 5: ISO 9409-1-50-4-M6 compliant
3	Type	F: Flange adapter
4	Products possible to combine	1: EH3 2: EH4

■ Names of parts

The figure shows the **P5F1**.

● Flange adapter (robot side)

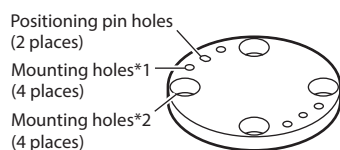
• Robot face



*1 Used when the flange adapter (robot side) and the flange adapter (end effector side) are fixed.

*2 Used when the flange adapter (robot side) is fixed to a robot.

• Flange adapter (end effector side) face



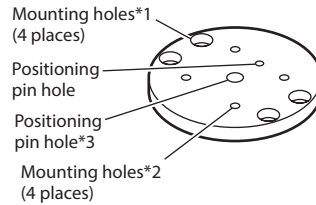
Thank you for purchasing an Oriental Motor product.

This Operating Manual describes product handling procedures and safety precautions.

- Please read it thoroughly to ensure safe operation.
- Always keep the manual where it is readily available.

● Flange adapter (end effector side)

• End effector face

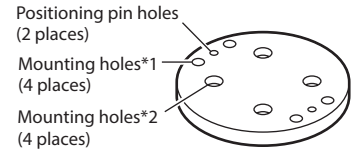


*1 Used when the flange adapter (robot side) and the flange adapter (end effector side) are fixed.

*2 Used when the flange adapter (end effector side) is fixed to an end effector.

*3 **P3F1** and **P5F1** only

• Flange adapter (robot side) face



Installation

Install the flange adapters in the following steps.

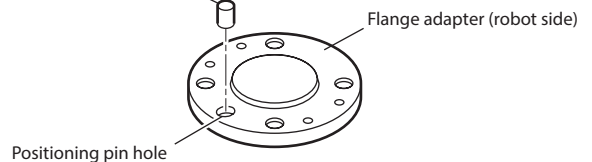
The figure shows the **P5F1**.



The fitting of the positioning pin and the positioning pin hole have a relation of clearance fit. Make sure not to drop the positioning pin when installing.

1. Install the positioning pin to the positioning pin hole of the flange adapter (robot side).

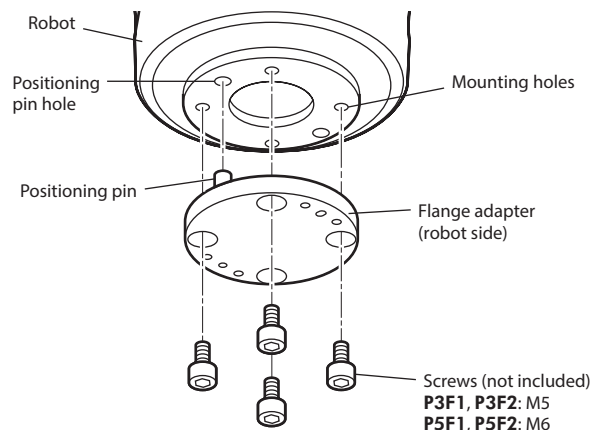
Positioning pin
P3F1, P3F2: ø5 mm
P5F1, P5F2: ø6 mm



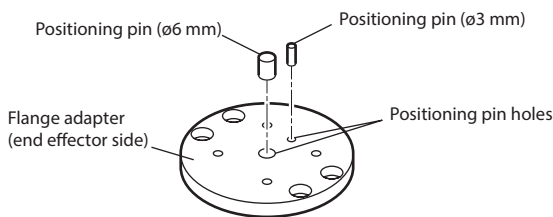
2. Insert the positioning pin installed in Step 1 into the positioning pin hole on the robot, and fix the flange adapter with screws (not included).



Check the effective thread depth on the robot side and provide suitable screws by the user side.

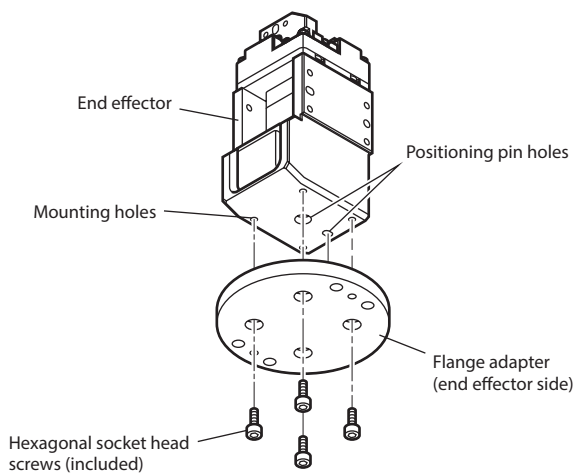


3. Install the positioning pins into the positioning pin holes on the flange adapter (end effector side).

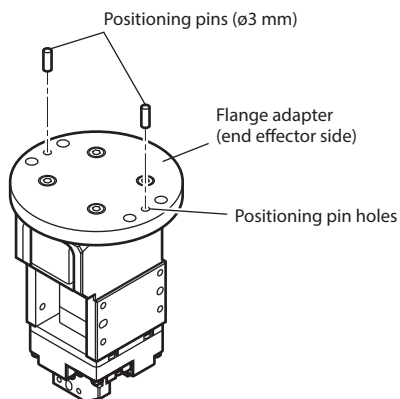


4. Insert the positioning pins installed in Step 3 into the positioning pin holes on the end effector, and fix the flange adapter with the included hexagonal socket head screws.

Flange adapter model	Screw size	Tightening torque [N·m (oz-in)]
P3F1, P5F1	M3	1.0 (142)
P3F2, P5F2	M4	2.0 (280)

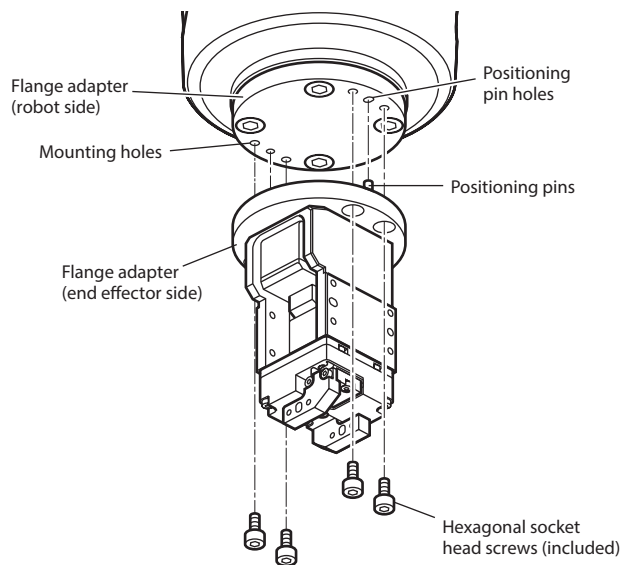


5. Install the positioning pins into the positioning pin holes on the flange adapter (end effector side).



6. Insert the positioning pins installed in Step 5 into the positioning pin holes on the flange adapter (robot side), and fix the flange adapters to each other with the included hexagonal socket head screws.

Screw size	Tightening torque [N·m (oz-in)]
M4	2.0 (280)



Regulations and standards

■ RoHS Directive

This product does not contain the substances exceeding the restriction values.

Orientalmotor is a registered trademark or trademark of Oriental Motor Co., Ltd., in Japan and other countries.

© Copyright ORIENTAL MOTOR CO., LTD. 2022

Published in October 2022

• Please contact your nearest Oriental Motor office for further information.

ORIENTAL MOTOR U.S.A. CORP.
Technical Support Tel:800-468-3982
8:30am EST to 5:00pm PST (M-F)
www.orientalmotor.com

ORIENTAL MOTOR (EUROPA) GmbH
Schiesstraße 44, 40549 Düsseldorf, Germany
Technical Support Tel:00 800/22 55 66 22
www.orientalmotor.de

ORIENTAL MOTOR (UK) LTD.
Unit 5 Faraday Office Park, Rankine Road,
Basingstoke, Hampshire RG24 8QB UK
Tel:+44-1256347090
www.orientalmotor.co.uk

ORIENTAL MOTOR (FRANCE) SARL
Tel:+33-1 47 86 97 50
www.orientalmotor.fr

ORIENTAL MOTOR ITALIA s.r.l.
Tel:+39-02-93906347
www.orientalmotor.it

ORIENTAL MOTOR CO., LTD.
4-8-1 Higashiueno, Taito-ku, Tokyo 110-8536
Japan
Tel:+81-3-6744-0361
www.orientalmotor.co.jp

ORIENTAL MOTOR ASIA PACIFIC PTE. LTD.
Singapore
Tel:1800-842-0280
www.orientalmotor.com.sg

ORIENTAL MOTOR (MALAYSIA) SDN. BHD.
Tel:1800-806-161
www.orientalmotor.com.my

ORIENTAL MOTOR (THAILAND) CO., LTD.
Tel:1800-888-881
www.orientalmotor.co.th

ORIENTAL MOTOR (INDIA) PVT. LTD.
Tel:1800-120-1995 (For English)
1800-121-4149 (For Hindi)
www.orientalmotor.co.in

TAIWAN ORIENTAL MOTOR CO., LTD.
Tel:0800-060708
www.orientalmotor.com.tw

SHANGHAI ORIENTAL MOTOR CO., LTD.
Tel:400-820-6516
www.orientalmotor.com.cn

INA ORIENTAL MOTOR CO., LTD.
Korea
Tel:080-777-2042
www.inaom.co.kr