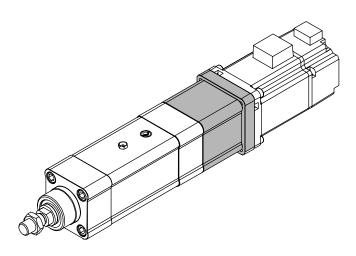
# **UNIMOTION** ASSEMBLY INSTRUCTIONS FOR VK S and IP65CR version



## MOUNTING

The maximum speed and the maximum torque of the motor must not exceed the limits of the electric cylinder - PNCE and coupling.

For the values of the speed and torque, please see our catalogue UNIMOTION Electric cylinder PNCE.

#### **Recommended tightening torques for screws**

8.8	M2	M2,5	M3	M4	M5	M6	M8	M10	M12
M <sub>max</sub> [Nm]	0,4	0,7	1,3	2,8	5,6	9,6	23	45	74

Table 1: Recommended tightening torques for screws of strength class 8.8.



#### PARTS LIST

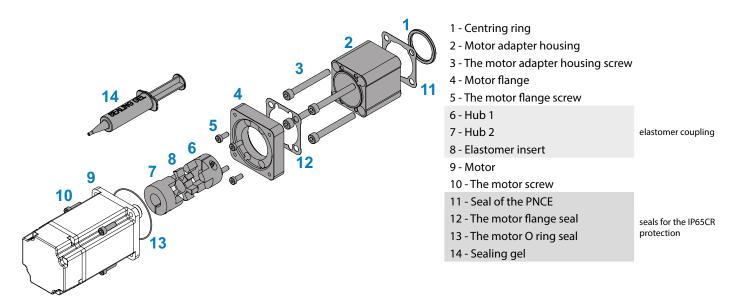


Figure 1: Parts list.

#### STEP 1, 2 and 3

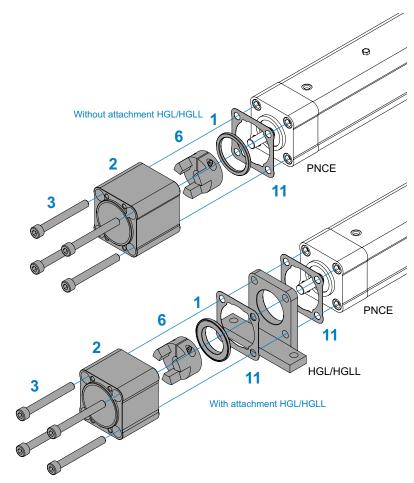


Figure 2: Step 1, 2 and 3.

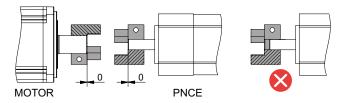


Figure 3: Coupling hubs and journals alignment.

**STEP 1 (without attachment HGL/HGLL):** In the case of the IP65CR protection the seal of the PNCE **11** must be placed on the drive cap of the electric cylinder - PNCE.

The centring ring **1** must be fitted on the drive cap of the electric cylinder - PNCE.

**STEP 1 (with attachment HGL/HGLL):** In the case of the IP65CR protection the seal of the PNCE **11** must be placed on the electric cylinder - PNCE drive cap. The attachment HGL/HGLL must be fitted on the drive cap of the electric cylinder - PNCE.

In the case of IP65CR protection the seal of the PNCE **11** must be placed on the attachment HGL/HGLL. The centring ring **1** must be fitted on the attachment HGL/HGLL.

Some motor adapters don't have the centring ring **1**.

**STEP 2:** Place the coupling hub 1 **6** on the drive journal of the PNCE.

Ensure that the coupling hub 1 **6** and the drive journal of the PNCE are correctly aligned, see Figure 3. Tighten the coupling hub screw 1 **6** with the coupling tightening torque.

For the coupling tightening torque please refer to our catalogue UNIMOTION Electric cylinder PNCE.

**STEP 3 (without attachment HGL/HGLL):** Mount the motor adapter housing **2** on the drive cap of the PNCE using the screws of the motor adapter housing **3**.

**STEP 3 (with attachment HGL/HGLL):** Mount the motor adapter housing **2** on the attachment HGL/HGLL using the screws of the motor adapter housing **3**.



For the tightening torques for the screws please refer to Table 1.

#### STEP 4 and 5

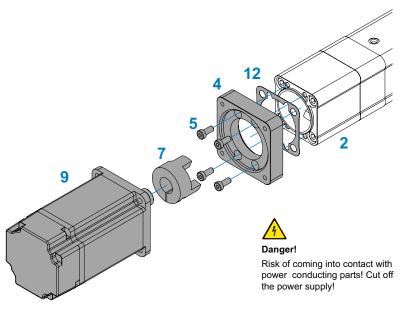


Figure 4: Step 4 and 5.

**STEP 4:** In the case of the IP65CR protection the seal of the motor flange **12** must be placed on the motor adapter housing **2**.

Mount the motor flange **4** onto the motor adapter housing **2** and tighten the screw of the motor flange **5**.

**STEP 5:** Place the coupling hub 2 **7** on the motor journal.

Ensure that the coupling hub 2 **7** and the motor journal are correctly aligned, see Figure 3.

Tighten the screw of the coupling hub 2 **7** with the coupling tightening torque.

**f** 

For the coupling tightening torque please refer to our catalogue UNIMOTION Electric cylinder PNCE.

#### STEP 6 and 7

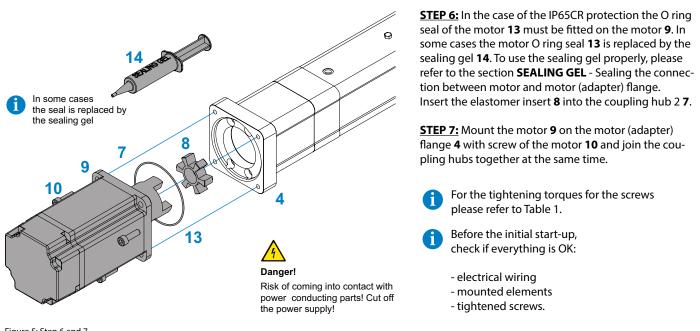


Figure 5: Step 6 and 7.

### **STEP 8 - DISMOUNTING**

**STEP 8:** To dismount the motor adapter - VK, take precautions, such as turning off the power supply and prevent the piston rod from dropping, if it is in a vertical position.

To dismount the VK properly, look at the mounting procedure.



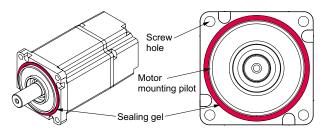


Figure 6: Sealing gel applied on the flange of the motor 9.

#### Sealing the connection between motor and motor (adapter) flange:

Apply the sealing gel 14 to the cleaned flange of the motor 9 as it is presented on the Figure 6 (the gel must be applied continuously in a closed loop around the motor mounting pilot on surface that comes into the direct contact with motor (adapter) flange 4 (make sure that the screw hole are outside the sealing gel); it should be noted that surface shape may vary depending on the motor manufacturer, model and size).

- Apply the sealing gel **14** to the thread on the screws of the motor **10**.

- Clean the motor (adapter) flange **4** and follow with STEP 6 in the section **STEP 6 and 7**. Note: once the contact between the flange of the motor **9** and the motor (adapter) flange **4** is ensured, the sealing gel is activated after 30 min.