

## Ejector Coupler Center Pull Back

# Manual to Automation! For Cycle Time Reduction / Toolless Setup / Setup Time Reduction / Product Improvement

**Ejector Coupler** 

Model PMC

Center Pull Back

Model PMD











## **Ejector Coupler**

### Center Pull Back

Model PMC



Model PMD





#### Manual to Automation!

Drastically reduce the setup time. Ball Lock Joint for Powerful Connection

- Advantages
  - One Touch to Connect Ejector Rods
  - Mold Change Time Reduction





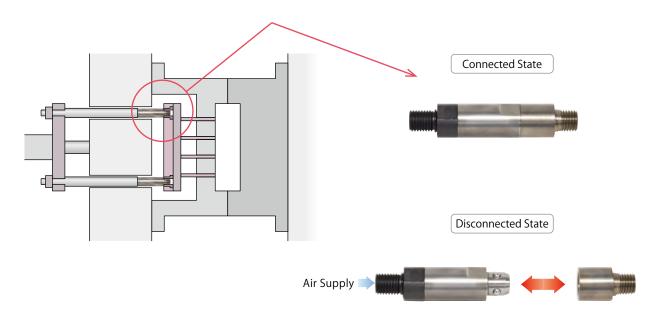


#### Ejector Coupler -

• Automatic connection of the extrusion plate and ejector rods reduces setup time.



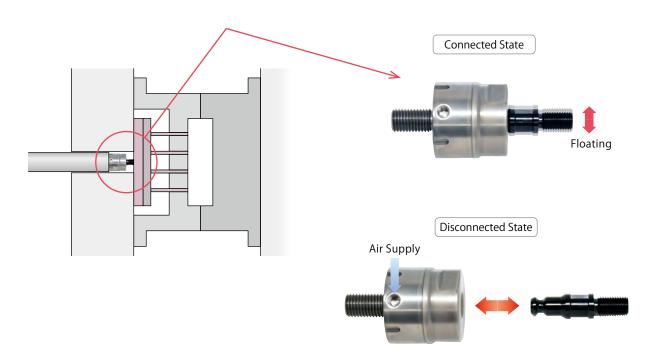
**Ejector Coupler** 



Connected and disconnected with air supply.

#### Center Pull Back —

- Automatic connection with the ejector plate reduces setup time.
- Compact body with large floating for smooth connection and disconnection.



Connected and disconnected with air supply.

Ejector Coupler model PMC

#### Model No. Indication

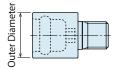


#### 1 Body Size

**025**: Outer Diameter  $\phi$  25mm **030**: Outer Diameter  $\phi$  30mm

**040**: Outer Diameter  $\phi$  40mm





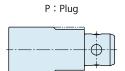
#### 2 Design No.

0 : Revision Number

#### Classification

**P**: Plug

**S**: Socket





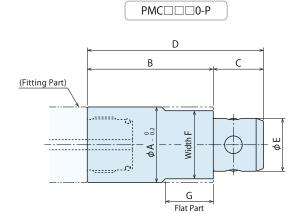
#### Specifications

| Model No.                          |     | PMC0250 | PMC0300 | PMC0400 |
|------------------------------------|-----|---------|---------|---------|
| Max. Allowable Stretching Force    | kN  | 10      | 16      | 25      |
| Max. Allowable Compressive Force I | kN  | 25      | 40      | 63      |
| Release Cylinder Capacity          | cm³ | 0.90    | 1.73    | 3.53    |
| Air Pressure                       | MPa | 0.3~1.0 |         |         |
| Withstanding Pressure              | MPa | 1.5     |         |         |
| Operating Temperature              | ℃   | 0~120   |         |         |

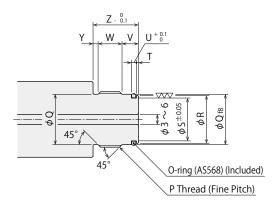
**Ejector Coupler** 

Center Pull Back PMD

#### External Dimensions: PMC



#### Fitting Edge Machining Dimensions Prepared by Customer

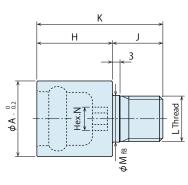


Accessory: Joint for PMC Model No. Indication



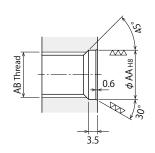






| ٨                                 | Aodel No.                | PMC0250        | PMC0300        | PMC0400        |  |
|-----------------------------------|--------------------------|----------------|----------------|----------------|--|
|                                   | А                        | 25             | 30             | 40             |  |
| ons                               | В                        | 45             | 50             | 55             |  |
| nsi                               | С                        | 17             | 20             | 26             |  |
| me                                | D                        | 62 70          |                | 81             |  |
| Plug Dimensions                   | E                        | 17.5 21        |                | 28             |  |
| Plug                              | F                        | 22 27          |                | 36             |  |
|                                   | G                        | 14             | 18             | 22             |  |
| ns                                | Н                        | 25             | 30             | 38             |  |
| oisc                              | J                        | 19             | 22             | 29             |  |
| mer                               | K                        | 44             | 52             | 67             |  |
| tΟ                                | L                        | M16 x 2        | M18 x 2.5      | M24 x 3        |  |
| Socket Dimensions                 | М                        | 16.5 - 0.016   | 18.5 - 0.020   | 24.5 - 0.020   |  |
| So                                | N                        | 8              | 10             | 12             |  |
|                                   | Р                        | M18 x 1.5      | M22 x 1.5      | M26 x 1.5      |  |
| ion                               | Q                        | 16             | 20             | 24             |  |
| sus                               | Qf8                      | 16 - 0.016     | 20 - 0.020     | 24 - 0.020     |  |
| Ë                                 | R                        | 15             | 19             | 23             |  |
| g D                               | S                        | 13             | 17             | 21             |  |
| nin                               | Т                        | 0.8            | 0.8            |                |  |
| ichi                              | U                        | 2 2            |                | 2              |  |
| ×                                 | V                        | 6.5 6.5        |                | 6.5            |  |
| dge                               | W                        | 9.5            | 9.5            | 10             |  |
| g<br>E                            | Υ                        | 2              | 2              | 2              |  |
| Fitting Edge Machining Dimensions | Z                        | 18             | 18             | 18.5           |  |
| Ë                                 | O-ring<br>(AS568 Series) | AS568-014 (75) | AS568-016 (75) | AS568-019 (75) |  |

|                    | <              | JB   | <b>→</b> |          |                  |
|--------------------|----------------|------|----------|----------|------------------|
| Air Release Port   | JE →           | JD > | JC       |          |                  |
|                    |                |      |          |          |                  |
| 1 2                |                |      |          | <u></u>  | <br>+            |
| Thread             |                |      |          | A Thread | <br>$\oplus$ $+$ |
| _  ≒↓              | ولاللا         |      |          | <u></u>  |                  |
| <u> ¥</u>          | —— <u>/</u> -l |      |          |          | <br>1            |
| O-ring (AS568) (Ir | ncluded)       |      |          |          |                  |



| ٨          | Nodel No.                | PMCZ251-J             | PMCZ301-J             | PMCZ401-J      |
|------------|--------------------------|-----------------------|-----------------------|----------------|
|            | JA                       | M18 x 1.5             | M22 x 1.5             | M26 x 1.5      |
|            | JB                       | 53 55                 |                       | 65.5           |
| 35         | JC                       | 18                    | 18                    | 18.5           |
| ior        | JD                       | 15                    | 15                    | 20             |
| Dimensions | JE                       | 20                    | 22                    | 27             |
| in         | JF                       | M16 x 2               | M18 x 2.5             | M24 x 3        |
|            | JG                       | 22                    | 27                    | 36             |
| Joint      | JH                       | 25                    | 30                    | 40             |
|            | O-ring<br>(AS568 Series) | AS568-014 (75)        | AS568-113 (75)        | AS568-117 (75) |
|            | Air Release Port         | M5x0.8 Thread Depth 6 | M5x0.8 Thread Depth 6 | Rc1/8 Thread   |
|            | AA                       | 16.5 + 0.027          | 19.5 + 0.033          | 25 + 0.033     |
|            | AB                       | M16 x 2               | M18 x 2.5             | M24 x 3        |

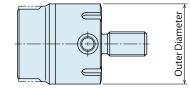
Center Pull Back model PMD

#### Model No. Indications



#### 1 Body Size

**053**: Outer Diameter φ53mm
 **063**: Outer Diameter φ63mm
 **078**: Outer Diameter φ78mm



#### 2 Design No.

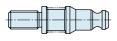
0 : Revision Number

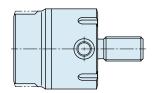
#### Classification

R : RodC : Coupler

R: Rod

C: Coupler





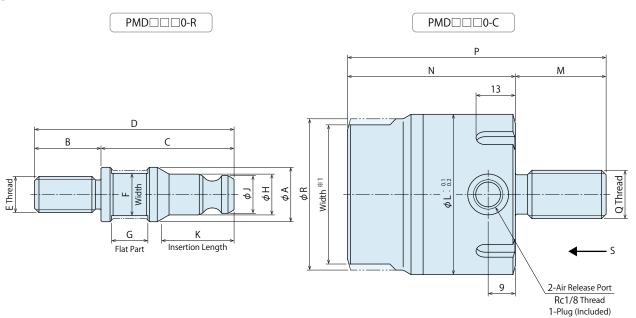
#### Specifications

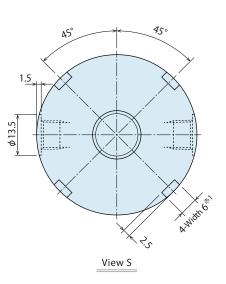
| Model No.                          |     | PMD0530   | PMD0630 | PMD0780 |  |
|------------------------------------|-----|-----------|---------|---------|--|
| Max. Allowable Stretching Force    | kN  | 10        | 16      | 25      |  |
| Max. Allowable Compressive Force k | kN  | 16        | 25      | 45      |  |
| Allowable Offset r                 | mm  | 1.0       | 1.2     | 1.5     |  |
| Release Cylinder Capacity C        | cm³ | 5.26      | 8.31    | 15.36   |  |
| Air Pressure                       | MPa | 0.3 ∼ 1.0 |         |         |  |
| Withstanding Pressure              | MPa | 1.5       |         |         |  |
| Operating Temperature °            | ℃   | 0 ~ 120   |         |         |  |

Ejector Coupler PMC

Center Pull Back

#### External Dimensions: PMD





| ٨                         | Nodel No. | PMD0530    | PMD0630   | PMD0780   |
|---------------------------|-----------|------------|-----------|-----------|
|                           | Α         | 18         | 21        | 28        |
|                           | В         | 22         | 28        | 35        |
| 15                        | С         | 44         | 52        | 70        |
| sior                      | D         | 66         | 80        | 105       |
| ien:                      | Е         | M12 x 1.75 | M16 x 2   | M20 x 2.5 |
| Dim                       | F         | 14         | 17        | 22        |
| Rod Dimensions            | G         | 12         | 14.5      | 19        |
|                           | Н         | 13.5       | 16.5      | 21.5      |
|                           | J         | 12.5       | 15.5      | 20.5      |
|                           | K         | 24         | 27.5      | 35.5      |
| suc                       | L         | 53         | 63        | 78        |
| nsic                      | М         | 30         | 35        | 45        |
| <b>Coupler Dimensions</b> | N         | 55.5       | 60        | 72.5      |
|                           | Р         | 85.5       | 95        | 117.5     |
| uple                      | Q         | M16 x 2    | M20 x 2.5 | M24 x 3   |
| <u> </u>                  | R         | 50         | 60        | 75        |

#### Note:

- %1. Use the slot of Width 6 to mount and remove a coupler with hook spanner.
  - If using flat part it may lead to damage or injury.

#### Cautions

#### Notes for Design

- 1) Check specifications. (PMC: Page 3, PMD: Page 5)
- The hydraulic machine/air compressor should be handled and maintained by qualified personnel.
- 2) Do not connect couplers when contaminants are adhered.
- If there are contaminants adhered on edge of each coupler, make sure to remove them with air blow. Otherwise it cannot be connected properly.

#### Installation Notes

- 1) Please supply clean dry air.
- Install an air filter/air dryer in order to prevent rust and dirt.
   Otherwise it may lead to malfunction.
- 2) Procedure before Piping
- The pipeline and piping connector should be cleaned by thorough flushing. The dust and cutting chips in the circuit may lead to air leakage and malfunction.

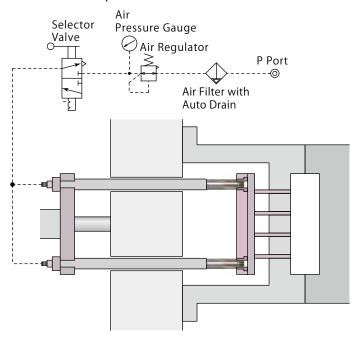
(The filter which removes contaminant in the air circuit is not provided.)

- 3) Applying Sealing Tape
- Wrap with tape 1 to 2 times following the screwing direction. When piping, be careful that contaminants such as sealing tape do not enter in products. Pieces of the sealing tape can lead to air leaks and malfunction.
- 4) Installation of the Product
- For installation of the plug (coupler) body and socket (rod), tighten them with tightening torque 100N • m.

#### Notes on Handling

- 1) It should be handled by qualified personnel.
- 2) Do not handle or remove the product unless the safety is ensured.
- ① The machine and equipment can only be inspected or prepared when it is confirmed that the preventive devices are in place.
- ② Before the product is removed, make sure that the abovementioned safety measures are in place.
- ③ After stopping the machine, do not remove the product until the temperature cools down.
- ④ Make sure there is no abnormality in the respective parts before restarting the machine or equipment.
- 3) Do not disassemble or modify.
- If the product is taken apart or modified, the warranty will be voided even within the warranty period.
- 4) Do not touch the product while it is working.
- Otherwise, your hands may be injured due to clinching.

#### [Air Circuit Example]



\* Select the selector valve according to customer's usage.



#### Maintenance/Inspection

- 1) Removal of the Machine and Shut-off of Air Source
- Before the product is removed, make sure that the above-mentioned safety measures are in place.
  Shut off the pressure source and power source and make sure no pressure exists in the air circuit. Also, make sure there is no abnormality in the bolts and respective parts before restarting.
- 2) Periodically ensure that piping, plug body and socket are securely tightened.
- 3) Periodically ensure that supply air pressure is a specified value.
- 4) Make sure to supply filtered clean dry air.
- 5) Make sure there is smooth action and no abnormal noise.
- Especially when it is restarted after being left unused for a long period, make sure it can be operated properly.
- 6) The products should be stored in the cool and dark place without direct sunshine or moisture.
- 7) Please contact us for overhaul and repair.

#### Warranty

- 1) Warranty Period
- The product warranty period is 18 months from shipment from our factory or 12 months from initial use, whichever is earlier.
- 2) Warranty Scope
- If the product is damaged or malfunctions during the warranty period due to faulty design, materials or workmanship, we will replace or repair the defective part at our expense.
   Defects or failures caused by the following are not covered.
- ① If the stipulated maintenance and inspection are not carried out.
- ② If the product is used while it is not suitable for use based on the operator's judgment, resulting in defect.
- ③ If it is used or handled in inappropriately by the operator.

  (Including damage caused by the misconduct of the third party.)
- ④ If the defect is caused by reasons other than our responsibility.
- ⑤ If repair or modifications are carried out by anyone other than Kosmek, or without our approval and confirmation, it will void warranty.
- ⑥ Other damages caused by natural disasters or calamities not attributable to our company.
- Parts or replacement expenses due to parts consumption and deterioration. (Such as rubber, plastic, seal material and some electric components.)

Damages excluding from direct result of a product defect shall be excluded from the warranty.

Ejector Coupler

PMD



#### Harmony in Innovation

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