

# LEVER COUPLING

*The Confidence Brand*

The reliability of our products is recognized all over the world.



**OZAWA & CO.,LTD**

# OZC LEVER COUPLINGS

## OZC Lever Coupling give fast, positive, leak-proof connections for hoses and pipes

OZC Lever Couplings are multi-purpose couplings which are serviceable to various field of industry, Petroleum, Chemistry, Steel, Machines, Food, Beverage, Shipping and so on. OZC Lever Couplings are manufactured to US-MIL specification ( No. MIL-C-27487 ) and have passed severe and stringent inspection. Our excellent quality provides the experience that ensures many years of reliable performance.

### Thread

Tapered pipe thread as standard specification (JIS B 0203)  
We can manufacture many types of thread including NPT, BSPT, DIN etc.

### Thick wall construction

Precision machined to accurate tolerance.

### Cam lever

Unnecessary to use a tool, and easy and safety to operate.

### Cam lever pin

Strong and durable stainless steel cam lever pin will not rust or bind for greater safety.

### Cam

Designed for greater resistance to vibration more positive locking and added safety.

### Gasket

The standard gasket material is NITRILE RUBBER and provides a wide variety of both chemical and temperature resistance. Compression prevents leakage of fluid. Please contact us for details on standard and special materials.

### NUMBERRING SYSTEM MAKES ORDERING EASY

**OZ - C - AL - 3**  
Symbolic Mark      Type      Materials      Size  
1/2"~8"

### Type

A • F • E — Adapter  
D • B • C — Coupler  
DP • DC — Plug or Cap  
AF • DF — Flanged Adapter or Flanged Coupler  
ASF — Sanitary ferrule type

### Materials

AL — Aluminum  
ADC — Aluminum Die-cast  
BC — Bronze  
SST — Stainless Steel  
PP — Polypropylene

### Size

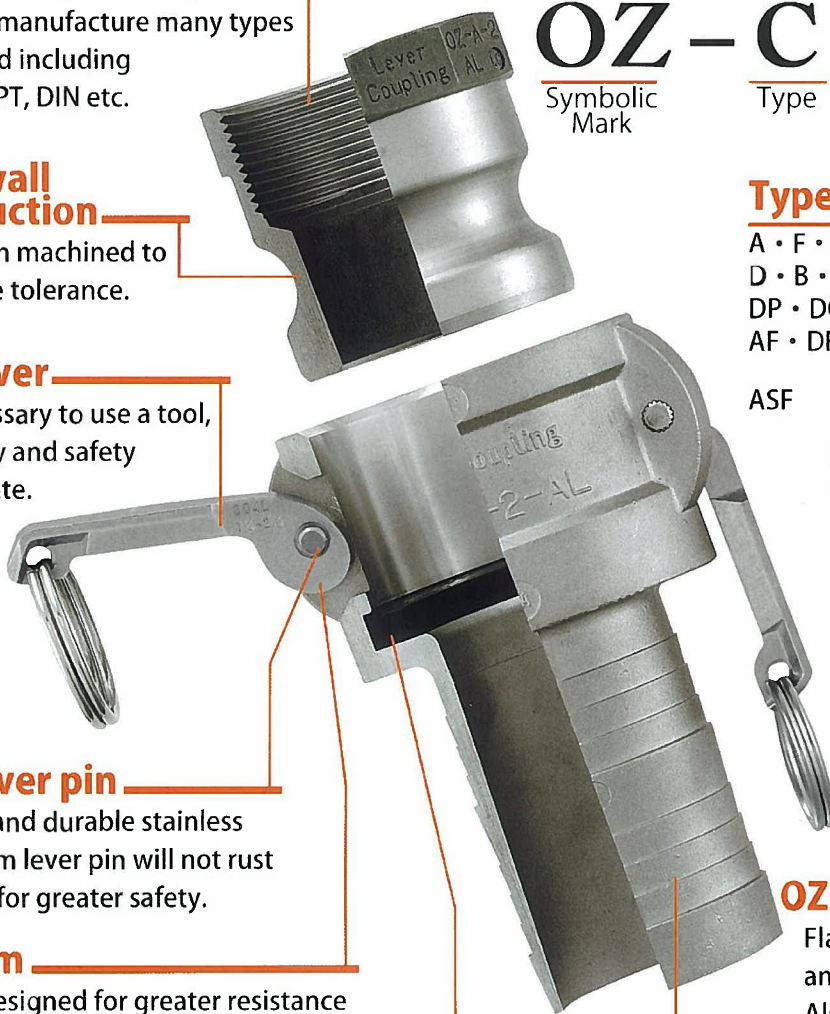
1/2" to 8"

### Miscellaneous OZC Lever Couplings

Flange type, weld neck type and couplings with valve. Also design modification are available for special requirement or condition. Please contact with OZAWA.

### Hose shank

It's designed so that it is easy to insert in a hose and to fasten proper by a hose bands or clamps.



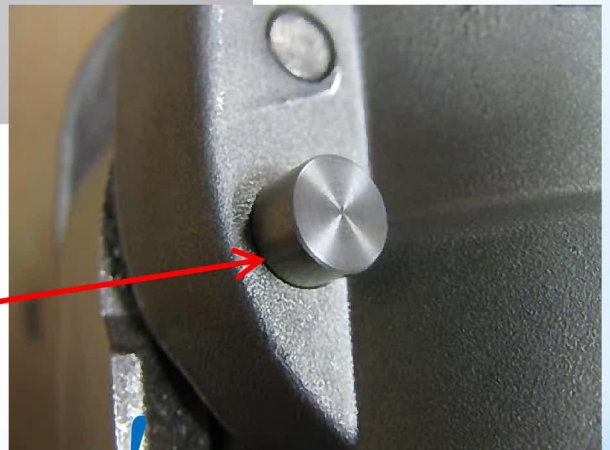
# Double (W) Lock



*New Products*



*\* Safety and easily !*



*Easy operating !*

**Push the small  
Buttons by  
thumb and lift  
cam arm up**



# Locks at two positions



Open position

**It's W-LOCK !**



Close position



Male Thread



Female Thread

**Size**

**1" ,1-1/2", 2" only**

**Aluminum, Stainless steel**

**Line up**



Hose Shank

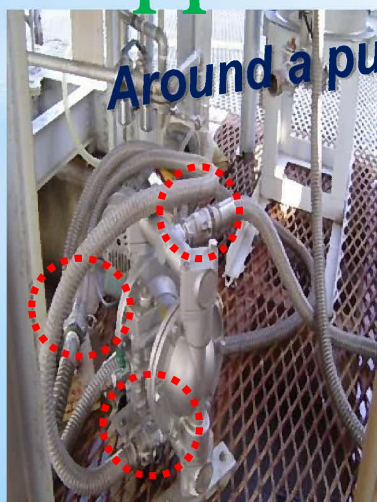


Dust Cap

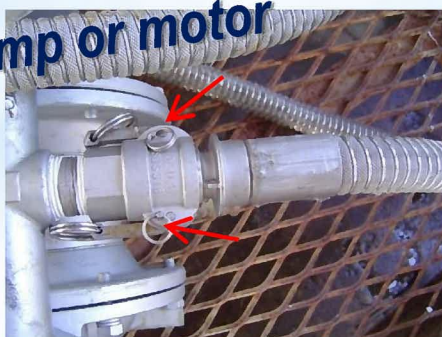


**No fall lever down**

## Application



**Around a pump or motor**



**For vibration place**



**Insert Easily by one hand !**



# Super PFA Seal *OZAWA Original goods*

“Super PFA Seal”  
encapsulated whole of  
Fluorine rubber (FKM) core  
by Fluorine carbon polymer  
(PFA).



Available for wide temperature range (  $-20^{\circ}\text{C} \sim 180^{\circ}\text{C}$  )  
Available for chemical liquid and solvent.  
It's strong for distortion.

Below pictures is after connect and disconnect for 100 times

**Press by adapter**



**No distortion and deform**



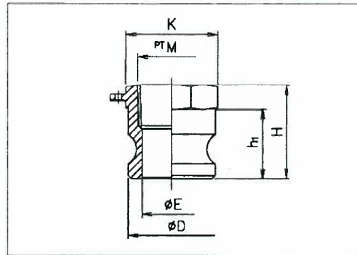
**Conventional type**





# LEVER COUPLINGS

## OZ-A ADAPTER FEMALE THREAD

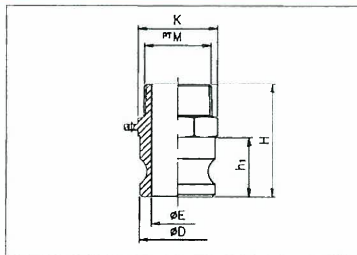


| SIZE |       | M      | ØD  | ØE  | K   | h1 | H   |  |  |  |
|------|-------|--------|-----|-----|-----|----|-----|--|--|--|
| mm   | inch  |        |     |     |     |    |     |  |  |  |
| 15   | 1/2   | 1/2"   | 32  | 14  | 33  | 26 | 40  |  |  |  |
| 20   | 3/4   | 3/4"   | 32  | 21  | 33  | 26 | 40  |  |  |  |
| 25   | 1     | 1"     | 37  | 24  | 38  | 34 | 49  |  |  |  |
| 32   | 1-1/4 | 1-1/4" | 45  | 28  | 48  | 40 | 54  |  |  |  |
| 40   | 1-1/2 | 1-1/2" | 53  | 36  | 55  | 41 | 56  |  |  |  |
| 50   | 2     | 2"     | 63  | 45  | 72  | 48 | 62  |  |  |  |
| 65   | 2-1/2 | 2-1/2" | 76  | 56  | 85  | 49 | 85  |  |  |  |
| 80   | 3     | 3"     | 92  | 72  | 96  | 51 | 70  |  |  |  |
| 100  | 4     | 4"     | 120 | 97  | 127 | 53 | 78  |  |  |  |
| 125  | 5     | 5"     | 146 | 122 | 154 | 55 | 79  |  |  |  |
| 150  | 6     | 6"     | 176 | 150 | 185 | 60 | 86  |  |  |  |
| 200  | 8     | 8"     | 241 | 204 | 246 | 83 | 111 |  |  |  |

UNIT: mm

- Designed to be serviceable for pipe with male thread or nipple with male thread for hose.
- Please use dust cap in order to prevent abrasion and provide all inside surface with complete protection from dust, dirt or other foreign matter.

## OZ-F ADAPTER MALE THREAD

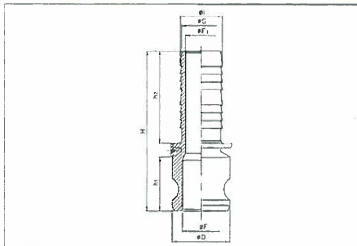


| SIZE |       | M      | ØD  | ØE  | K   | h1 | H   |  |  |  |
|------|-------|--------|-----|-----|-----|----|-----|--|--|--|
| mm   | inch  |        |     |     |     |    |     |  |  |  |
| 15   | 1/2   | 1/2"   | 32  | 14  | 33  | 26 | 60  |  |  |  |
| 20   | 3/4   | 3/4"   | 32  | 21  | 33  | 26 | 60  |  |  |  |
| 25   | 1     | 1"     | 37  | 24  | 38  | 34 | 71  |  |  |  |
| 32   | 1-1/4 | 1-1/4" | 45  | 28  | 48  | 40 | 78  |  |  |  |
| 40   | 1-1/2 | 1-1/2" | 53  | 36  | 55  | 41 | 79  |  |  |  |
| 50   | 2     | 2"     | 63  | 45  | 65  | 48 | 88  |  |  |  |
| 65   | 2-1/2 | 2-1/2" | 76  | 56  | 82  | 49 | 99  |  |  |  |
| 80   | 3     | 3"     | 92  | 72  | 96  | 51 | 102 |  |  |  |
| 100  | 4     | 4"     | 120 | 97  | 127 | 53 | 114 |  |  |  |
| 125  | 5     | 5"     | 146 | 121 | 154 | 55 | 122 |  |  |  |
| 150  | 6     | 6"     | 176 | 150 | 185 | 60 | 129 |  |  |  |

UNIT: mm

- Designed to be serviceable for pipe with female thread or socket.
- Please use dust cap in order to prevent abrasion and provide all inside surface with complete protection from dust, dirt or other foreign matter.

## OZ-E ADAPTER HOSE SHANK

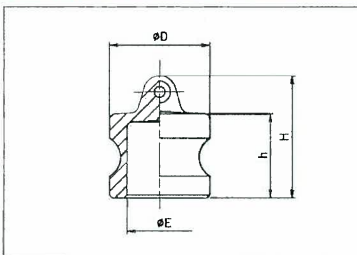


| SIZE |       | M      | ØD  | ØF  | ØF1 | ØG  | ØI  | h1 | h2  | H   |
|------|-------|--------|-----|-----|-----|-----|-----|----|-----|-----|
| mm   | inch  |        |     |     |     |     |     |    |     |     |
| 20   | 3/4   | 3/4"   | 32  | 21  | 14  | 19  | 21  | 27 | 51  | 89  |
| 25   | 1     | 1"     | 37  | 24  | 20  | 25  | 27  | 34 | 60  | 104 |
| 32   | 1-1/4 | 1-1/4" | 45  | 29  | 25  | 32  | 34  | 40 | 64  | 115 |
| 40   | 1-1/2 | 1-1/2" | 53  | 35  | 32  | 38  | 40  | 43 | 66  | 119 |
| 50   | 2     | 2"     | 63  | 45  | 43  | 50  | 53  | 46 | 77  | 135 |
| 65   | 2-1/2 | 2-1/2" | 76  | 56  | 56  | 67  | 67  | 50 | 94  | 159 |
| 80   | 3     | 3"     | 92  | 68  | 68  | 79  | 79  | 52 | 103 | 170 |
| 100  | 4     | 4"     | 120 | 97  | 92  | 105 | 105 | 55 | 112 | 183 |
| 125  | 5     | 5"     | 146 | 121 | 117 | 130 | 130 | 55 | 127 | 200 |
| 150  | 6     | 6"     | 176 | 147 | 142 | 155 | 155 | 60 | 142 | 221 |
| 200  | 8     | 8"     | 241 | 204 | 186 | 208 | 208 | 85 | 170 | 278 |

UNIT: mm

- This is designed with shank end which can be attached directly to uncoupled rubber hose or vinyl chloride hose with any type clamps or bands.
- Please use dust cap in order to prevent abrasion and provide all inside surface with complete protection from dust, dirt or other foreign matter.
- The hose barbs styles are subject to body material and size.

## OZ-DP ADAPTER DUST PLUG



| SIZE |       | M      | ØD  | ØE  | h  | H   |  |  |  |  |
|------|-------|--------|-----|-----|----|-----|--|--|--|--|
| mm   | inch  |        |     |     |    |     |  |  |  |  |
| 20   | 3/4   | 3/4"   | 32  | 21  | 23 | 34  |  |  |  |  |
| 25   | 1     | 1"     | 37  | 24  | 31 | 44  |  |  |  |  |
| 32   | 1-1/4 | 1-1/4" | 45  | 28  | 38 | 52  |  |  |  |  |
| 40   | 1-1/2 | 1-1/2" | 53  | 36  | 39 | 56  |  |  |  |  |
| 50   | 2     | 2"     | 63  | 45  | 43 | 63  |  |  |  |  |
| 65   | 2-1/2 | 2-1/2" | 76  | 56  | 47 | 65  |  |  |  |  |
| 80   | 3     | 3"     | 92  | 72  | 48 | 68  |  |  |  |  |
| 100  | 4     | 4"     | 120 | 97  | 50 | 72  |  |  |  |  |
| 125  | 5     | 5"     | 146 | 123 | 53 | 86  |  |  |  |  |
| 150  | 6     | 6"     | 176 | 150 | 60 | 95  |  |  |  |  |
| 200  | 8     | 8"     | 241 | 204 | 83 | 120 |  |  |  |  |

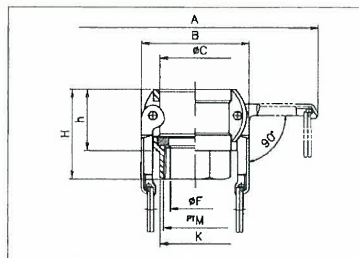
UNIT: mm

- Designed for couplers Type "OZ-D, OZ-C, OZ-B"
- This is used to protected female coupler from dust.
- Please use it without internal pressure.
- Size 1/2" and 3/4" are common dust plug.

Available NPT thread, Standard thread type is BSP

Drawings and dimensions are Stainless steel coupling as reference. Please request us the detail drawings if you need.

## OZ-D COUPLER FEMALE THREAD

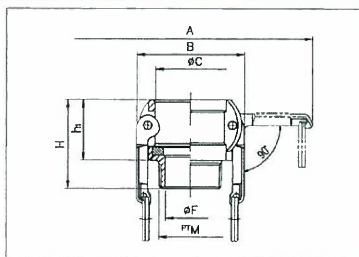


| SIZE |       | M      | A   | B   | ΦC  | ΦF  | K   | h  | H   |  |  |
|------|-------|--------|-----|-----|-----|-----|-----|----|-----|--|--|
| mm   | inch  |        |     |     |     |     |     |    |     |  |  |
| 15   | 1/2   | 1/2"   | 115 | 53  | 32  | 16  | 32  | 32 | 51  |  |  |
| 20   | 3/4   | 3/4"   | 115 | 53  | 32  | 21  | 32  | 32 | 51  |  |  |
| 25   | 1     | 1"     | 137 | 61  | 37  | 26  | 38  | 39 | 60  |  |  |
| 32   | 1-1/4 | 1-1/4" | 183 | 77  | 46  | 33  | 48  | 46 | 66  |  |  |
| 40   | 1-1/2 | 1-1/2" | 191 | 84  | 54  | 38  | 54  | 47 | 69  |  |  |
| 50   | 2     | 2"     | 201 | 94  | 64  | 50  | 64  | 52 | 78  |  |  |
| 65   | 2-1/2 | 2-1/2" | 213 | 108 | 76  | 60  | 82  | 58 | 84  |  |  |
| 80   | 3     | 3"     | 267 | 132 | 92  | 75  | 96  | 59 | 87  |  |  |
| 100  | 4     | 4"     | 296 | 164 | 120 | 95  | 124 | 61 | 95  |  |  |
| 125  | 5     | 5"     | 322 | 191 | 146 | 117 | 151 | 65 | 101 |  |  |
| 150  | 6     | 6"     | 454 | 238 | 177 | 142 | 185 | 70 | 115 |  |  |

UNIT: mm

- Designed to be serviceable for pipe with male thread or nipple with male thread for hose.
- Please use dust plug in order to prevent dust, dirt or other foreign matter.

## OZ-B COUPLER MALE THREAD

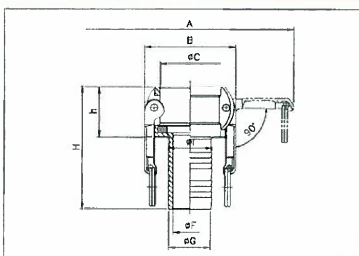


| SIZE |       | M      | A   | B   | ΦC  | ΦF | h  | H  |  |  |
|------|-------|--------|-----|-----|-----|----|----|----|--|--|
| mm   | inch  |        |     |     |     |    |    |    |  |  |
| 15   | 1/2   | 1/2"   | 115 | 53  | 32  | 14 | 32 | 52 |  |  |
| 20   | 3/4   | 3/4"   | 115 | 53  | 32  | 19 | 32 | 51 |  |  |
| 25   | 1     | 1"     | 137 | 61  | 37  | 25 | 39 | 61 |  |  |
| 32   | 1-1/4 | 1-1/4" | 183 | 77  | 46  | 31 | 46 | 70 |  |  |
| 40   | 1-1/2 | 1-1/2" | 191 | 84  | 54  | 37 | 47 | 70 |  |  |
| 50   | 2     | 2"     | 201 | 94  | 64  | 50 | 52 | 78 |  |  |
| 65   | 2-1/2 | 2-1/2" | 213 | 108 | 76  | 60 | 58 | 88 |  |  |
| 80   | 3     | 3"     | 267 | 132 | 92  | 75 | 59 | 91 |  |  |
| 100  | 4     | 4"     | 296 | 164 | 120 | 96 | 63 | 99 |  |  |

UNIT: mm

- Designed to be serviceable for pipe with female thread or socket.
- Please use dust plug in order to prevent dust, dirt or other foreign matter.
- There is only 2" size at the case of Bronze couplings

## OZ-C COUPLER HOSE SHANK

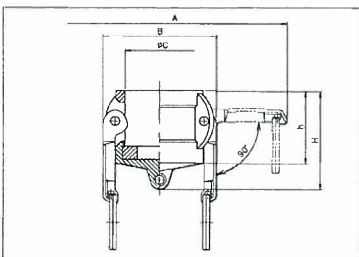


| SIZE |       | M      | A   | B   | ΦC  | ΦF  | ΦG  | ΦI  | h   | H   |
|------|-------|--------|-----|-----|-----|-----|-----|-----|-----|-----|
| mm   | inch  |        |     |     |     |     |     |     |     |     |
| 20   | 3/4   | 3/4"   | 115 | 53  | 32  | 13  | 19  | 21  | 32  | 83  |
| 25   | 1     | 1"     | 137 | 61  | 37  | 19  | 25  | 27  | 39  | 100 |
| 32   | 1-1/4 | 1-1/4" | 183 | 77  | 46  | 26  | 32  | 34  | 46  | 109 |
| 40   | 1-1/2 | 1-1/2" | 191 | 84  | 54  | 31  | 38  | 41  | 47  | 113 |
| 50   | 2     | 2"     | 201 | 94  | 64  | 44  | 50  | 53  | 52  | 139 |
| 65   | 2-1/2 | 2-1/2" | 213 | 108 | 76  | 56  | 63  | 67  | 56  | 142 |
| 80   | 3     | 3"     | 267 | 132 | 92  | 68  | 75  | 79  | 59  | 161 |
| 100  | 4     | 4"     | 296 | 164 | 120 | 92  | 101 | 105 | 61  | 171 |
| 125  | 5     | 5"     | 322 | 191 | 146 | 117 | 127 | 130 | 65  | 192 |
| 150  | 6     | 6"     | 454 | 238 | 177 | 142 | 152 | 155 | 70  | 213 |
| 200  | 8     | 8"     | 519 | 315 | 242 | 186 | 204 | 208 | 101 | 271 |

UNIT: mm

- This is designed with shank end which can be attached directly to uncoupled rubber hose or vinyl chloride hose with any type clamps or bands.
- Please use dust plug in order to prevent dust, dirt or other foreign matter.
- The hose barbs styles are subject to body material and size.

## OZ-DC COUPLER DUST CAP



| SIZE |       | M      | A   | B   | ΦC  | h  | H   |  |  |
|------|-------|--------|-----|-----|-----|----|-----|--|--|
| mm   | inch  |        |     |     |     |    |     |  |  |
| 20   | 3/4   | 3/4"   | 115 | 53  | 32  | 32 | 42  |  |  |
| 25   | 1     | 1"     | 137 | 61  | 37  | 39 | 51  |  |  |
| 32   | 1-1/4 | 1-1/4" | 183 | 77  | 46  | 46 | 60  |  |  |
| 40   | 1-1/2 | 1-1/2" | 191 | 84  | 54  | 47 | 60  |  |  |
| 50   | 2     | 2"     | 201 | 94  | 64  | 52 | 65  |  |  |
| 65   | 2-1/2 | 2-1/2" | 213 | 108 | 76  | 58 | 76  |  |  |
| 80   | 3     | 3"     | 267 | 132 | 92  | 59 | 79  |  |  |
| 100  | 4     | 4"     | 296 | 164 | 120 | 61 | 85  |  |  |
| 125  | 5     | 5"     | 322 | 191 | 146 | 65 | 95  |  |  |
| 150  | 6     | 6"     | 454 | 238 | 177 | 70 | 103 |  |  |

UNIT: mm

- Designed for adapter Type "OZ-A, OZ-F, OZ-E"
- This is used to protected male adapter from dust, dirt or other foreign matter.
- Please use it without internal pressure.
- Size 1/2" and 3/4" are common dust cap.

Available NPT thread, Standard thread type is BSP

Drawings and dimensions are Stainless steel coupling as reference. Please request us the detail drawings if you need.

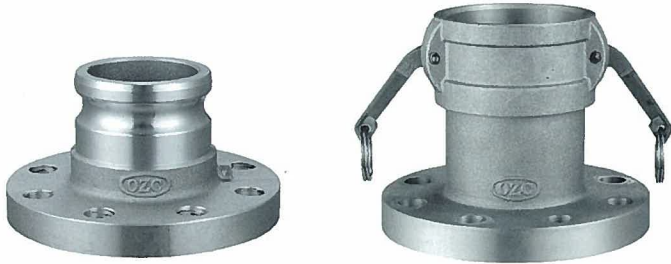


# LEVER COUPLINGS

## MISCELLANEOUS OZC LEVER COUPLING

### Flange Type

- Flange standard is JIS10K as stock products, Available ANSI or API standard flanges.



### Sanitary Type

- Sanitary type is IDF standard ferrule.



### PFA LINING COUPLING

- The inside of Couplings are lined with PFA.
- The liquid does not touch the metal material.
- Recommended for Chemical, food and Semiconductor factory.



### Adapter with Ball Valve

- Standard thread is BSP, Available NPT.
- We have succeeded to minimize cost and weight by manufacturing an integral valve and adapter in one body.
- Save the time to set an adapter and improved working efficiency.

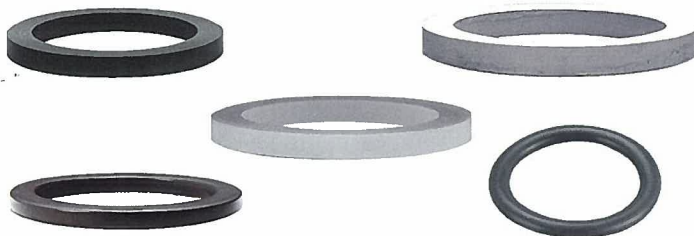


### Poly Ball Valve

### Nozzle

## REPLACEMENT PARTS

### GASKET



| GASKET NAME               | RECOMMENDED TEMPERATURE      |
|---------------------------|------------------------------|
| NITRILE RUBBER (Standard) | -30°C (-22F) ~ +70°C (158F)  |
| WHITE NEOPRENE            | -30°C (-22F) ~ +60°C (140F)  |
| FLUORO RUBBER (FKM)       | -20°C (-4F) ~ +180°C (356F)  |
| ETHYLENE PROPYLENE RUBBER | -30°C (-22F) ~ +110°C (230F) |
| PTFE                      | -20°C (-4F) ~ +100°C (212F)  |
| SUPER PFA SEAL            | -20°C (-4F) ~ +180°C (356F)  |

Please see P2

### LEVER LOCK

- The Lever Lock prevent that cam-lever might be opened suddenly.
- It's easy to able to fit with cam-lever.
- Recommended for place of vibration.



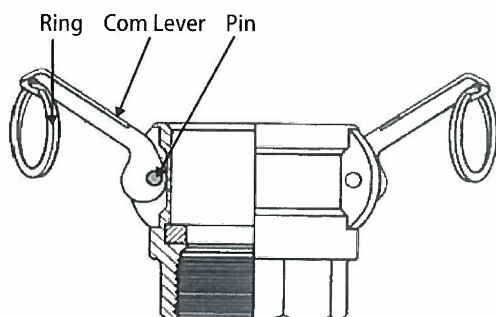
## Instructions

### ● Material of body and Gasket

Please choose the coupler, adapter and gasket depending on your liquid, pressure temperature and application.

### ● Caution for Cam Lever and pin

- The Cam Lever may be corroded by liquid, as it is made by sintered stainless steel.
- Do not strike cam levers with hammer when locking the cam levers.
- Please press them with normal hand pressure.
- Beware of placing your fingers between the lever and body as this is a hazard and may cause injury
- Please pay attention to damage on cam lever and adapter in case of high frequency attach or remove.
- The cam lever may open or may loosen pin up suddenly due to vibration.



### ● Caution for handling

- Please screw the thread type coupling by appropriate torque.
- Please wear work gloves or safety shoes occasion for operation.  
Do not touch with wet hands.
- Please pay attention for the whole weight when bronze or stainless steel couplings would be put with hoses.
- Do not drag a hose with couplings.  
The cam lever may be opened suddenly. When moving, please support not only the hose but also the coupling.
- Do not load at connection point between male adapter and female coupler.
- Please use The Double Lock or The Lever Lock as optional part in case of vibration or female coupler join downward.
- Do not touch the couplings when use for steam or hot liquid.
- Please confirm surely the pressure in the couplings is removed when disconnecting.
- Please change the gasket for periodically.  
Life of gasket differ from condition of usage.
- There may be damage on Polypropylene adapter more than metal adapter by cam lever.
- Caution for electric erosion/galvanic action in case of connecting with different kind metal material.  
Aluminum coupling may be corroded by electric erosion /galvanic action.

## Technical Data

### Working pressure as reference

| Material        | Size 1/2 ~ 2 |                     | 2-1/2 |                     | 3    |                     | 4    |                     | 5    |                     | 6    |                     | 8    |                     |
|-----------------|--------------|---------------------|-------|---------------------|------|---------------------|------|---------------------|------|---------------------|------|---------------------|------|---------------------|
|                 | Mpa          | kgf/cm <sup>2</sup> | Mpa   | kgf/cm <sup>2</sup> | Mpa  | kgf/cm <sup>2</sup> | Mpa  | kgf/cm <sup>2</sup> | Mpa  | kgf/cm <sup>2</sup> | Mpa  | kgf/cm <sup>2</sup> | Mpa  | kgf/cm <sup>2</sup> |
| Aluminum        | 1.76         | 18                  | 1.08  | 11                  | 0.88 | 9                   | 0.69 | 7                   | 0.49 | 5                   | 0.49 | 5                   | 0.39 | 4                   |
| Bronze          | 1.76         | 18                  | 1.08  | 11                  | 0.88 | 9                   | 0.69 | 7                   | 0.49 | 5                   | 0.49 | 5                   | -    | -                   |
| Stainless Steel | 1.76         | 18                  | 1.57  | 16                  | 1.37 | 14                  | 1.08 | 11                  | 0.69 | 7                   | 0.69 | 7                   | 0.49 | 5                   |
| Polypropylene   | 0.69         | 7                   | -     | -                   | 0.39 | 4                   | -    | -                   | -    | -                   | -    | -                   | -    | -                   |

The case of Ordinary temperature and NITRILE RUBBER gasket

### Maximum screwed torque

| Material        | Size | 1/2" | 3/4" | 1"   | 1-1/4" | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"   | 5"   | 6"   | 8"   |
|-----------------|------|------|------|------|--------|--------|------|--------|------|------|------|------|------|
| Aluminum        |      | 450  | 550  | 800  | 1300   | 1500   | 2700 | 3600   | 4200 | 4700 | 6000 | 6000 | 7200 |
| Bronze          |      | 450  | 550  | 800  | 1300   | 1500   | 2700 | 3600   | 4200 | 4700 | 6000 | 6000 | 7200 |
| Stainless Steel |      | 700  | 1100 | 1400 | 2100   | 2700   | 3600 | 4200   | 4800 | 6000 | 7500 | 7500 | 9000 |

Unit : kgf-cm



# OZAWA

**OZAWA & CO.,LTD** Machinery division

Homepage <http://www.ozawabussan.co.jp>

---

☆Please do not hesitate to contact us if we can be of any assistance.

---

Agency