

**BL AUTOTEC**

# **BL Rotary Joint** **PN-ZERO Series**

**Rotary Joint for Positioners and Turntables**

**Catalog**

**Model:PN-ZERO 2/6**

**Model:PN-ZERO 2/12**

**Model:PN-ZERO 2/24**

**Model:PN-ZERO 2/36**

**Model:PN-ZERO 2/D-5**

**Model:PN-ZERO 2/U-6**

**Model:PN-ZERO 2/C-4**



**BL-PN-E002**

**BL PN-ZERO Series** is a rotary joint developed for positioners and turntables. The lightweight and compact body is equipped with electrical signal contacts and pneumatic port utilities. There are no restrictions on the angle of rotation, so its endless 360 degree rotation eliminates problems associated with electrical wire wrapping and pneumatic pipe fittings. Please select a model based on the electrical signal contacts and number of contacts needed.

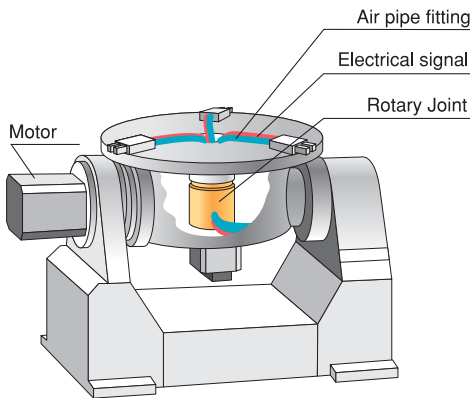
## Features

- Equipped with both electrical signal contacts and pneumatic port utilities
- Lightweight and compact body
- 360 degree endless rotation (Rated 50rpm)
- Supports three wire-saving models (DeviceNet, Uni-wire, CC-Link) and four analog signal models (6, 12, 24 and 36 electrical wires)
- CC-Link Partner Association approval (PN-ZERO 2/C-4)

## Usages

- Positioner turntable shafts
- Shafts for plural jigs by vertical and lateral rotation method
- Other forward/reverse rotation device shafts

## Usage example (Positioner)



**PN-ZERO 2/6**



**PN-ZERO 2/12**



**PN-ZERO 2/24**



**PN-ZERO 2/36**



**PN-ZERO 2/D-5** (DeviceNet spec.)



**PN-ZERO 2/U-6** (Uni-wire spec.)



**PN-ZERO 2/C-4** (CC-Link spec.)

## ■ Main specifications (Analog signal model)

Specifications		Model	PN-ZERO 2/6	PN-ZERO 2/12	PN-ZERO 2/24	PN-ZERO 2/36
Angle of rotation			360 degree endless rotation			
Outside dimension			φ89mm×H132mm	φ89mm×H152mm		φ89mm×H172mm
Product weight			2.6kg	2.8kg	2.9kg	3.0kg
Rotational torque			About 500N·cm			
Rotational speed	(Max)		100rpm			
	(Rated)		50rpm			
Connecting utilities	Electrical signals	Number of electrical wires	6 electrical wires	12 electrical wires	24 electrical wires	36 electrical wires
		Contact capacity (max)	2A sequential (AC100V/DC100V)			
		Stationary side	Cable with shield / Plug-in type pin terminal PC2005M (Nichifu)			
		Rotational side	Cable with shield / Plug-in type pin terminal PC2005M (Nichifu)			
	Pneumatic pressure	Number of ports	2 ports			
		Minimum conduit diameter	φ14.4mm			
		Pressure range for use	0~0.98MPa (0~10kgf/cm <sup>2</sup> )			
		Stationary side connection	Joint screw (Rc3/8)			
Rotational side connection	Joint screw (Rc3/8)					

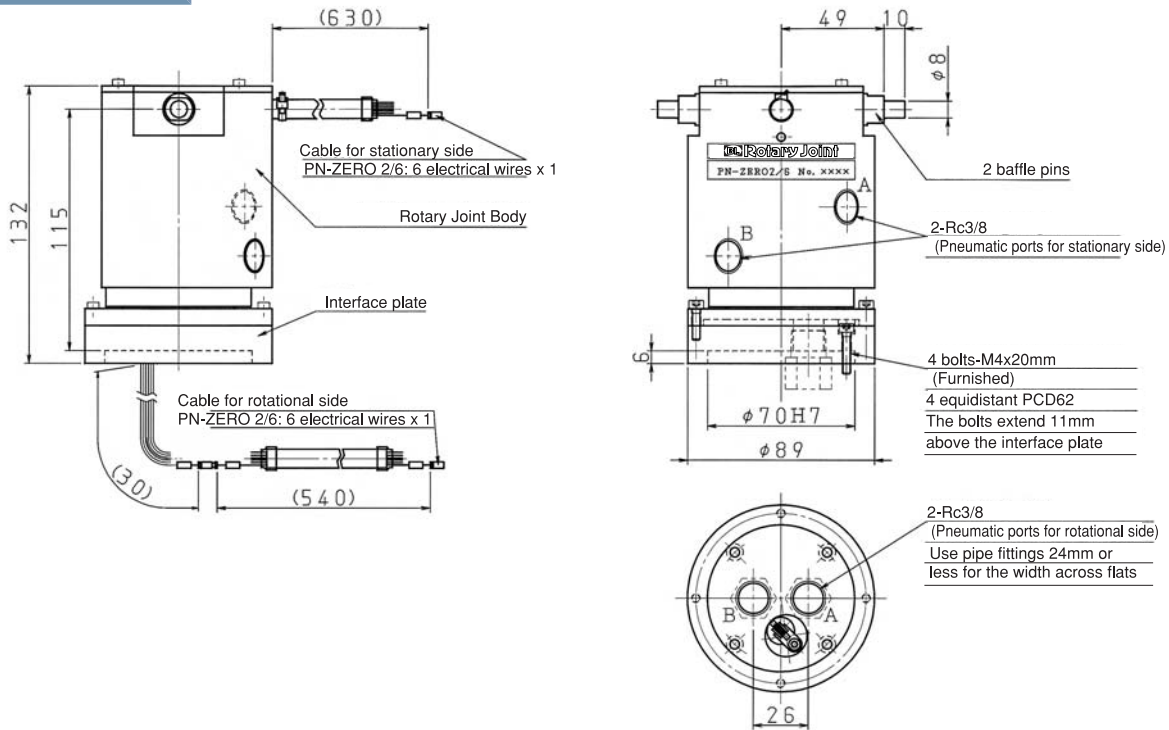
## ■ Main specifications (Wire-saving model)

Specifications		Model	PN-ZERO 2/D-5、2/U-6、2/C-4				
Angle of rotation			360 degree endless rotation				
Outside dimension			Refer to the main body outline drawing				
Product weight			About 3.0kg				
Rotational torque			About 500N·cm				
Rotational speed	(Max)		100rpm				
	(Rated)		50rpm				
Connecting utilities	Electrical signals	Number of electrical wires	Wire-saving	Standard number of wires for three models			
			Backup electrical wires	Model: PN-ZERO 2/D-5: 5 electrical wires Model: PN-ZERO 2/U-6: 6 electrical wires Model: PN-ZERO 2/C-4: 4 electrical wires			
		Contact capacity (max)		2A sequential (AC100V/DC100V)			
		Connection	Stationary side	Wire-saving	Unconnected (Connect to match user specifications)		
	Backup electrical wires			Plug-in type pin terminal with insert-type (Nichifu) PC-2005M (User provided: PC-2005F)			
	Rotational side		Wire-saving	Unconnected (Connect to match user specifications)			
			Backup electrical wires	Plug-in type pin terminal with insert-type (Nichifu) PC-2005M (User provided: PC-2005F)			
	Pneumatic pressure	Number of ports		2 ports			
Minimum conduit diameter		φ14.4mm					
Pressure range for use		0~0.98MPa (0~10kgf/cm <sup>2</sup> )					
Stationary side connection		Joint screw (Rc3/8)					
Rotational side connection		Joint screw (Rc3/8)					

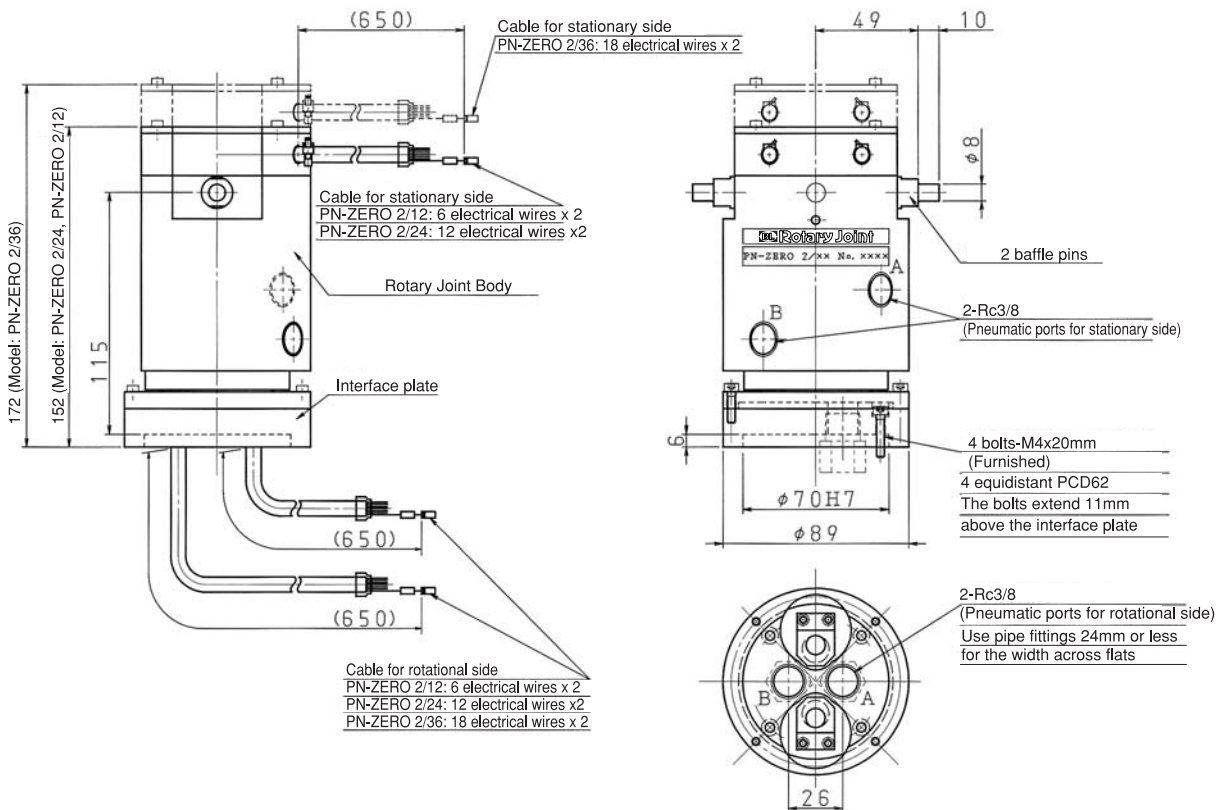
※  PN-ZERO 2/C-4 is approved by the CC-Link Partner Association.

**Main body dimensions (Analog signal model)**

**PN-ZERO 2/6**

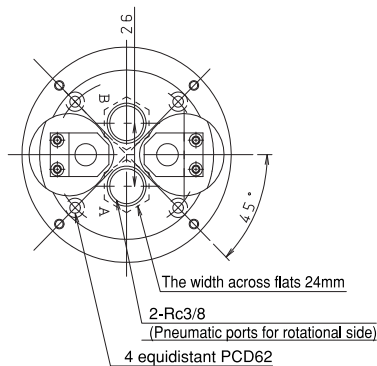
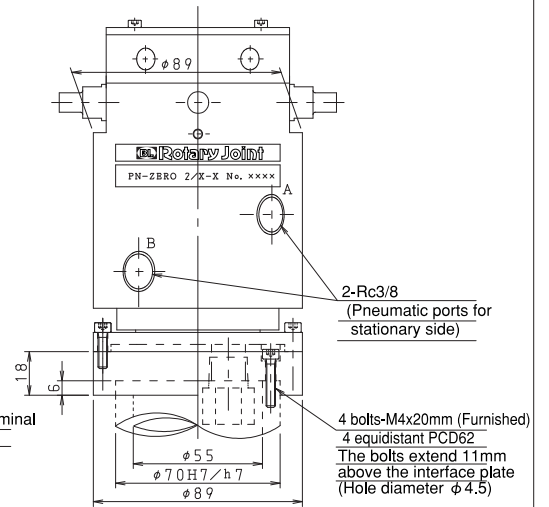
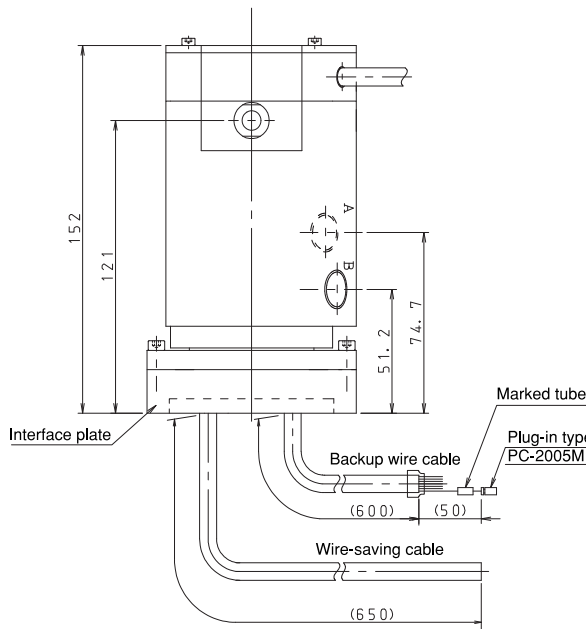
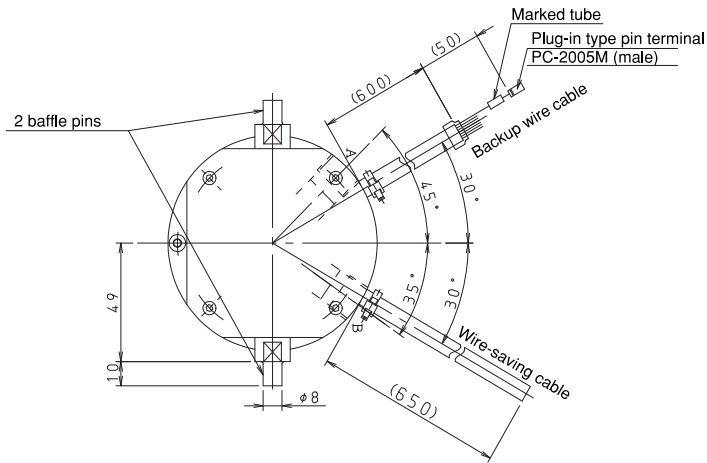


**PN-ZERO 2/12、2/24、2/36**



**Main body dimensions (Wire-saving model)**

**PN-ZERO 2/D-5、2/U-6、2/C-4**





<http://www.bl-autotec.co.jp>

**BANDO** BANDO GROUP  
**BL AUTOTEC, LTD.**



3-17, Meiwa-dori, 3-chome, Hyogo-ku, Kobe, 652-0883, Japan  
TEL: +81-78-682-2611 FAX: +81-78-682-2614  
E-mail: [info@bl-autotec.co.jp](mailto:info@bl-autotec.co.jp)

■ For orders, contact the following distributor:

**2010.03**

※ The contents of this catalog are subject to change without notice. Check with BL Autotec for updated catalog content if your catalog was issued more than one year ago.  
※ This catalog is not to be reproduced, in whole or in part, without the express permission of BL Autotec.



In consideration of the environment, this catalog was printed with soybean oil ink as a partial substitution for the petroleum-based solvent contained in conventional ink.