

# CMR Series Low Torque Rotary Union

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The CMR series rotary union is structured for the equipment such as air, inert gas and so on, which are used in automation and robot equipment and need very low torque.



## Features:

- Continuous 360° rotation
- Available 2,4,6,8,12,16, 24 channel
- Allowable rpm: ≤300, high speed can be custom
- Operating pressure: -100 kPa to 1 MPa

## CMR SERIES MODEL#

Model#	Pneumatic Channel	Pressure	Connection Size	Speed
CMR2	2	-100 kPa ~ 1 MPa	M5, 1/8", 1/4", 3/8"	Max. 300 RPM
CMR4	4	-100 kPa ~ 1MPa	M5, 1/8", 1/4", 3/8"	Max. 300 RPM
CMR6	6	-100 kPa ~ 1MPa	M5, 1/8", 1/4", 3/8"	Max. 300 RPM
CMR8	8	-100kPa ~ 1MPa	M5, 1/8", 1/4", 3/8"	Max. 300 RPM
CMR12	12	-100kPa ~ 1MPa	M5, 1/8", 1/4", 3/8"	Max. 200 RPM
CMR16	16	-100kPa ~ 1MPa	M5, 1/8"	Max. 200 RPM
CMR24	24	-100kPa ~ 1MPa	M5, 1/8"	Max. 150 RPM

## CMR2 Series Overview

### Description

Cosmau CMR2 series multiple passage rotary unions with 2 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Very low torque



### Specifications

Item	
Pneumatic Channel	2
Pressure	-100kPa ~ 1MPa
Connection Szie	M5, 1/8" 1/4", 3/8"
Connection Type	NPT, BSPP
Operating Temperature	-5° C to 80° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM(reference value)
Material	AL alloy

All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note operational life is dependent upon both rotational speed and duty cycle.

### Options

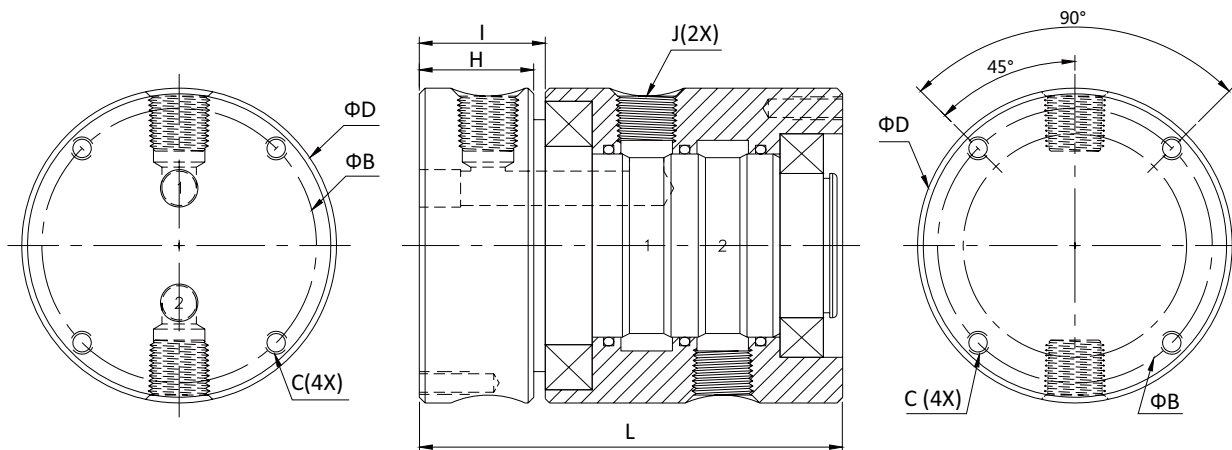
- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

## INTRODUCE

## CMR2

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## CMR2 Series Dimensions



Part#	J(BSPP/NPT)	ΦB	C	ΦD	H	I	L
CMR-200	M5	29	M3	35	13	14	50
CMR-201	1/8"	41	M4	49	18.5	19.5	65.5
CMR-202	1/4"	41	M4	49	21.5	22.5	70.5
CMR-203	3/8"	53	M5	62	27.5	28.5	85.5

## CMR4 Series Overview

### Description

Cosmau CMR4 series multiple passage rotary unions with 4 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Very low torque



### Specifications

Item	
Pneumatic Channel	4
Pressure	-100kPa ~ 1MPa
Connection Szie	M5, 1/8" 1/4", 3/8"
Connection Type	NPT, BSPP
Operating Temperature	-5° C to 80° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM (reference value)
Material	AL alloy

All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note operational life is dependent upon both rotational speed and duty cycle.

### Options

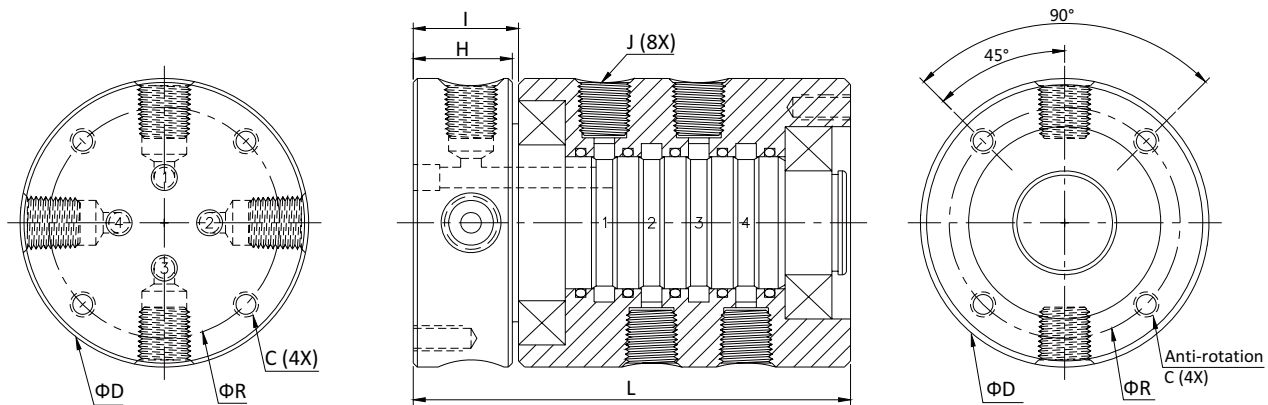
- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

## INTRODUCE

## CMR4

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## CMR4 Series Dimensions



Part#	J(BSPP/NPT)	ΦR	C	ΦD	H	I	L
CMR-400	M5	37	M4	44	14	15	70
CMR-401	1/8"	45	M5	54	18.5	19.5	86
CMR-402	1/4"	45	M5	54	21.5	22.5	93
CMR-403	3/8"	58	M6	68	27.5	28.5	115

## CMR6 Series Overview

### Description

Cosmau CMR6 series multiple passage rotary unions with 6 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Very low torque



### Specifications

Item	
Pneumatic Channel	6
Pressure	-100kPa ~ 1MPa
Connection Szie	M5, 1/8" 1/4", 3/8"
Connection Type	NPT, BSPP
Operating Temperature	-5° C to 80° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM (reference value)
Material	AL alloy

All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note operational life is dependent upon both rotational speed and duty cycle.

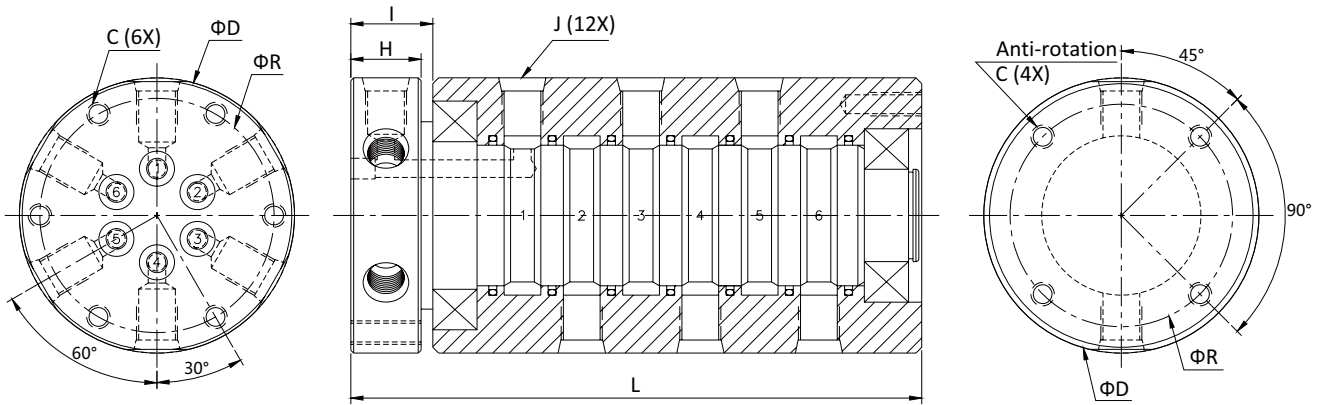
### Options

- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

## INTRODUCE

## CMR6

## CMR6 Series Dimensions



Part#	J(BSPP/NPT)	ΦR	C	ΦD	H	I	L
CMR-601	1/8"	45	M5	54	18.5	19.5	101.9
CMR-602	1/4"	53	M5	62	21.5	22.5	118.5
CMR-603	3/8"	64	M6	74	27.5	28.5	143.9

## CMR8 Series Overview

### Description

Cosmau cmr8 series multiple passage rotary unions with 8 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Very low torque



### Specifications

Item	
Pneumatic Channel	8
Pressure	-100kPa ~ 1MPa
Connection Szie	M5, 1/8" 1/4", 3/8"
Connection Type	NPT, BSPP
Operating Temperature	-5° C to 80° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM (reference value)
Material	AL alloy

All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note operational life is dependent upon both rotational speed and duty cycle.

### Options

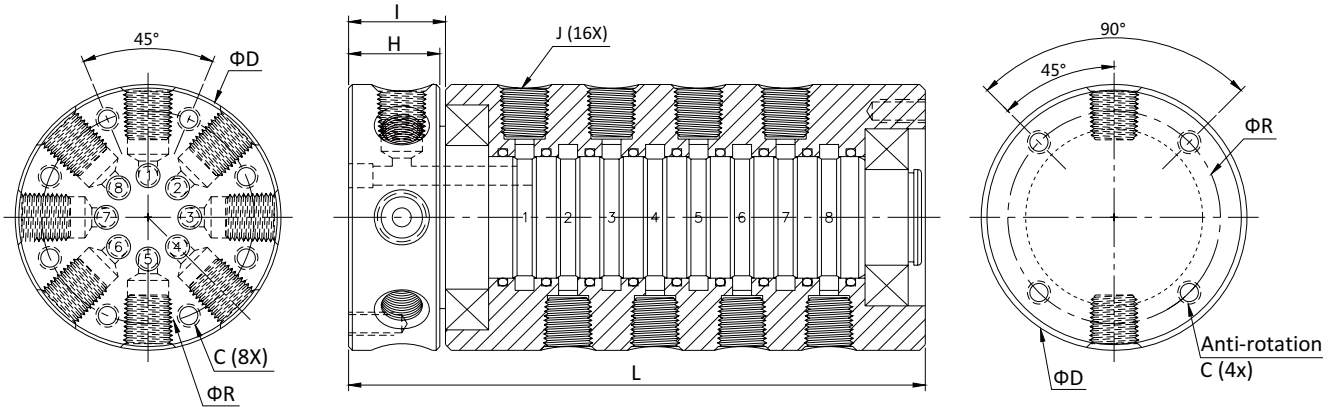
- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring



# INTRODUCE

## CMR8

### CMR8 Series Dimensions



Part#	J(BSPP/NPT)	$\Phi R$	C	$\Phi D$	H	I	L
CMR-800	M5	42	M4	49	15	16	105
CMR-801	1/8"	47	M5	56	18.5	19.5	118.5
CMR-802	1/4"	55	M5	64	21.5	22.5	137.8
CMR-803	3/8"	69	M6	79	27.5	28.5	168.5

## CMR12 Series Overview

### Description

Cosmau cmr12 series multiple passage rotary unions with 12 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Very low torque



### Specifications

Item	
Pneumatic Channel	12
Pressure	-100kPa ~ 1MPa
Connection Szie	M5, 1/8" 1/4", 3/8"
Connection Type	NPT, BSPP
Operating Temperature	-5° C to 80° C
Suitable Media	Air / Gas / Vacuum
Speed	150 RPM (reference value)
Material	AL alloy

All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note operational life is dependent upon both rotational speed and duty cycle.

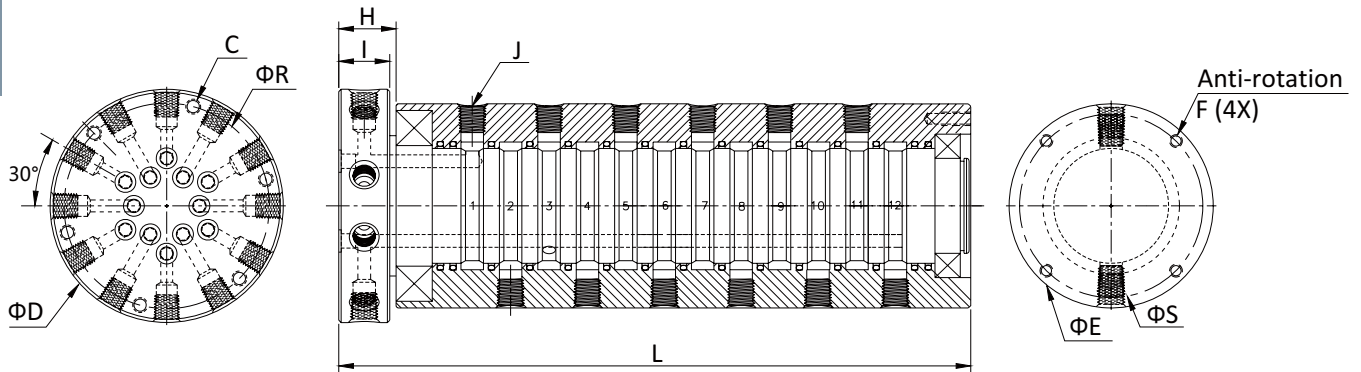
### Options

- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

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CMR12

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**CMR12 Series Dimensions**



Part#	A(BSPP/NPT)	ΦR	ΦS	C	ΦD	ΦE	H	I	L
CMR-1200	M5	47	46	M4	54	54	17	16	140
CMR-1201	1/8"	66.5	53	M5	74.5	62	21.5	22.5	155.1

## CMR16 Series Overview

### Description

Cosmau cmr16 series multiple passage rotary unions with 16 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Very low torque



### Specifications

Item	
Pneumatic Channel	16
Pressure	-100kPa ~ 1MPa
Connection Szie	M5, 1/8"
Connection Type	NPT, BSPP
Operating Temperature	-5° C to 80° C
Suitable Media	Air / Gas / Vacuum
Speed	120 RPM (reference)
Material	AL alloy

All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note operational life is dependent upon both rotational speed and duty cycle.

### Options

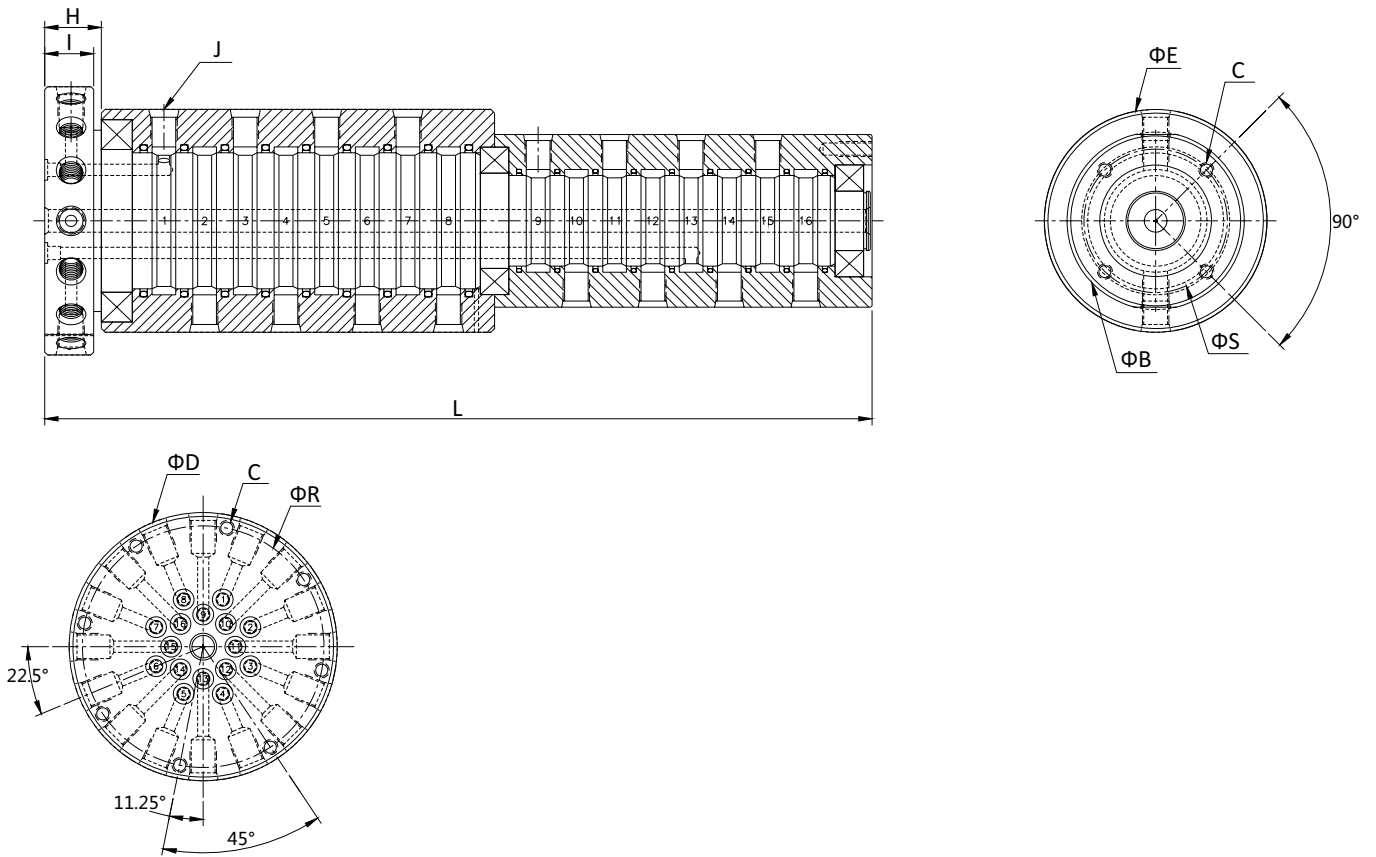
- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

# INTRODUCE

## CMR16

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### CMR16 Series Dimensions



Part#	J(BSPP/NPT)	ΦD	ΦE	ΦB	ΦR	ΦS	C	H	I	L
CMR-1600	M5	64	64	64	57	57	M4	17.5	16.5	187.5
CMR-1601	1/8"	89	74	56	81	47	M5	25.5	24.5	213.5

## CMR24 Series Overview

### Description

Cosmau cmr24 series multiple passage rotary unions with 24 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Very low torque



### Specifications

Item	
Pneumatic Channel	24
Pressure	-100kPa ~ 1MPa
Connection Szie	M5, 1/8"
Connection Type	NPT, BSPP
Operating Temperature	-5° C to 80° C
Suitable Media	Air / Gas / Vacuum
Speed	120 RPM (reference)
Material	AL alloy

All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note operational life is dependent upon both rotational speed and duty cycle.

### Options

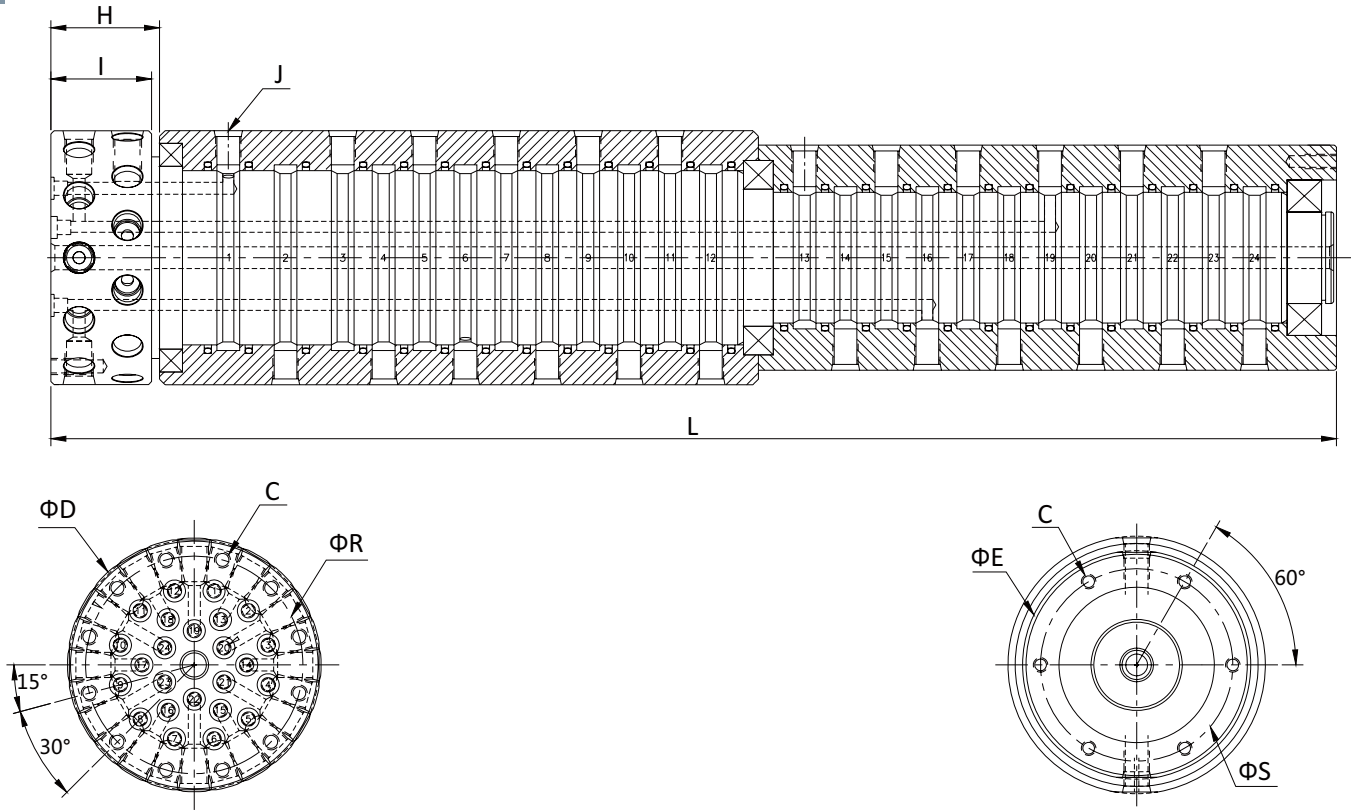
- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

# INTRODUCE

## CMR24

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### CMR24 Series Dimensions



Part#	J(BSPP/NPT)	$\Phi R$	$\Phi S$	C	$\Phi D$	$\Phi E$	H	I	L
CMR-2400	M5	71	53	M4	79	61	23.5	22.5	265
CMR-2401	1/8"	76	57	M5	84	66	32.5	31.5	302

# CMR-XT Series Low Torque Rotary Union

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The CMR-XT series rotary union is structured for the equipment such as air, inert gas and so on, which are used in automation and robot equipment and need low torque.



## Features:

- Continuous 360° rotation
- Available 2,4,6,8,12,16, 24 channel
- Allowable rpm: ≤400, high speed can be custom
- Operating pressure: -100 kPa to 1 MPa

## CMR SERIES MODEL#

Model#	Pneumatic Channel	Pressure	Connection Size	Speed
CMR2-XT	2	-100 kPa ~ 1 MPa	M5, 1/8", 1/4", 3/8"	Max. 400 RPM
CMR4-XT	4	-100 kPa ~ 1MPa	M5, 1/8", 1/4", 3/8"	Max. 400 RPM
CMR6-XT	6	-100 kPa ~ 1MPa	M5, 1/8", 1/4", 3/8"	Max. 300 RPM
CMR8-XT	8	-100kPa ~ 1MPa	M5, 1/8", 1/4", 3/8"	Max. 300 RPM



## CMR2-XT Series Overview

### Description

Cosmau CMR2-XT series multiple passage rotary unions with 2 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360° unrestricted rotation
- Combined with electrical slip ring, transfer power, control signal, data
- Through hole or flange structure optional
- Low torque



### Specifications

Item	
Pneumatic Channel	2
Pressure	-100kPa ~ 10bar
Connection Size	M5, 1/8" 1/4", 3/8"
Connection Type	BSP
Operating Temperature	-18° C to 120° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM (reference value)
Material	AL alloy housing, Carbon Steel Shaft
Service life	80 million rotations

**Note:** All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note service life is dependent upon both rotational speed and duty cycle.

### Options

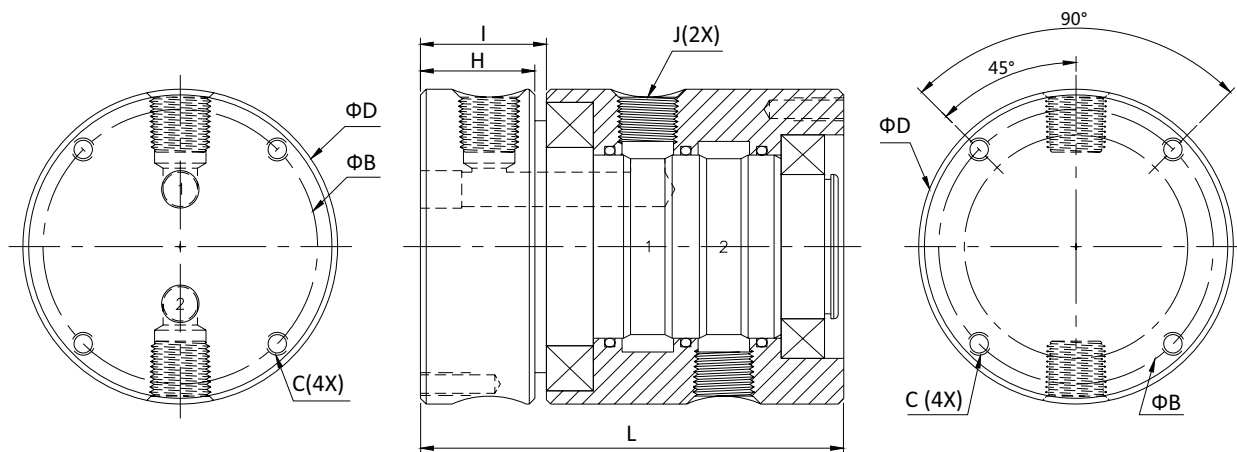
- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

## INTRODUCE

## CMR2-XT

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## CMR2-XT Series Dimensions



Part#	J(BSPP/NPT)	ΦB	C	ΦD	H	I	L
CMR-200-XT	M5	36	M4	44	14.5	15	63.6
CMR-201-XT	1/8"	45	M5	54	18.5	19.5	73.5
CMR-202-XT	1/4"	45	M5	54	21.5	22.5	78.9
CMR-203-XT	3/8"	59	M6	69	27.5	28.5	91.9

## CMR4-XT Series Overview

### Description

Cosmau CMR4-XT series multiple passage rotary unions with 4 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360° unrestricted rotation
- Combined with electrical slip ring, transfer power, control signal, data
- Through hole or flange structure optional
- Low torque



### Specifications

Item	
Pneumatic Channel	4
Pressure	-100kPa ~ 10bar
Connection Size	M5, 1/8" 1/4", 3/8"
Connection Type	BSP
Operating Temperature	-18° C to 120° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM (reference value)
Material	AL alloy housing, Carbon Steel Shaft
Service life	80 million rotations

**Note:** All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note service life is dependent upon both rotational speed and duty cycle.

### Options

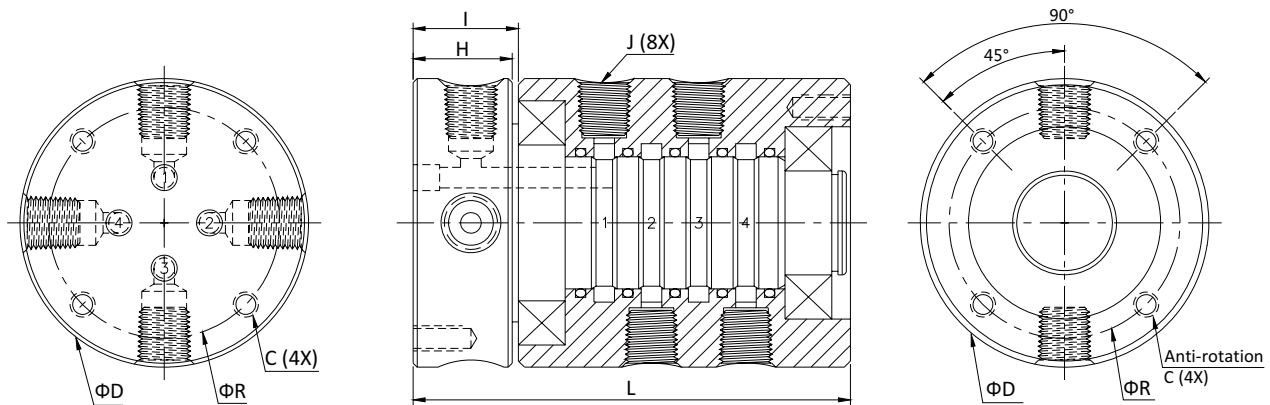
- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

## INTRODUCE

## CMR4-XT

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## CMR4-XT Series Dimensions



Part#	J(BSPP/NPT)	$\Phi R$	C	$\Phi D$	H	I	L
CMR-400-XT	M5	36	M4	44	14.5	15	82
CMR-401-XT	1/8"	45	M5	54	18.5	19.5	95.9
CMR-402-XT	1/4"	50	M5	59	21.5	22.5	102.9
CMR-403-XT	3/8"	59	M6	69	27.5	28.5	119.9

## CMR6-XT Series Overview

### Description

Cosmau CMR6 series multiple passage rotary unions with 6 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Low torque



### Specifications

Item	
Pneumatic Channel	6
Pressure	-100kPa ~ 10bar
Connection Szie	M5, 1/8" 1/4", 3/8"
Connection Type	BSPB
Operating Temperature	-18° C to 120° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM (reference value)
Material	AL alloy housing, Carbon Steel Shaft
Service life	80 million rotations

**Note:** All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note service life is dependent upon both rotational speed and duty cycle.

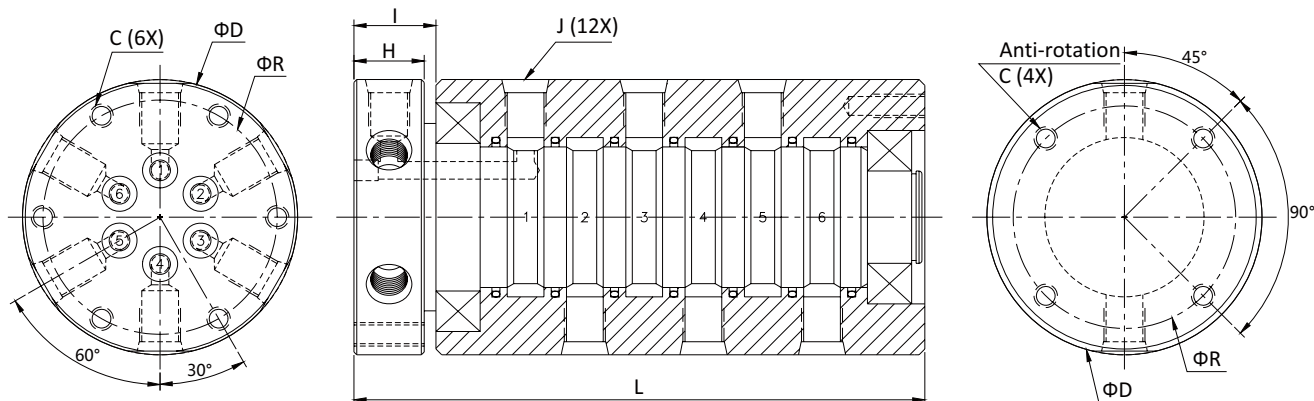
### Options

- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

## INTRODUCE

## CMR6-XT

## 7 CMR6-XT Series Dimensions



Part#	J(BSPP/NPT)	ΦR	C	ΦD	H	I	L
CMR-600-XT	M5	40	M5	49	14.5	15	101
CMR-601-XT	1/8"	50	M5	59	18.5	19.5	120.9
CMR-602-XT	1/4"	50	M5	59	21.5	22.5	130.9
CMR-603-XT	3/8"	64	M6	74	27.5	28.5	147.9

## CMR8-XT Series Overview

### Description

Cosmau cmr8-xt series multiple passage rotary unions with 8 channel for media transfer, design for compressed air, gas in rotating system.

- Transmit compressed air, gas when 360°unrestricted rotation
- Combined with electrical slip ring,transfer power,control signal, data
- Through hole or flange structure optional
- Low torque



### Specifications

Item	
Pneumatic Channel	8
Pressure	-100kPa ~ 10bar
Connection Szie	M5, 1/8" 1/4", 3/8"
Connection Type	BSPB
Operating Temperature	-18° C to 120° C
Suitable Media	Air / Gas / Vacuum
Speed	200 RPM (reference value)
Material	AL alloy housing, Carbon Steel Shaft
Service life	80 million rotations

**Note:** All values listed under Technical Specifications are dependent on a combination of all application parameters. Please note service life is dependent upon both rotational speed and duty cycle.

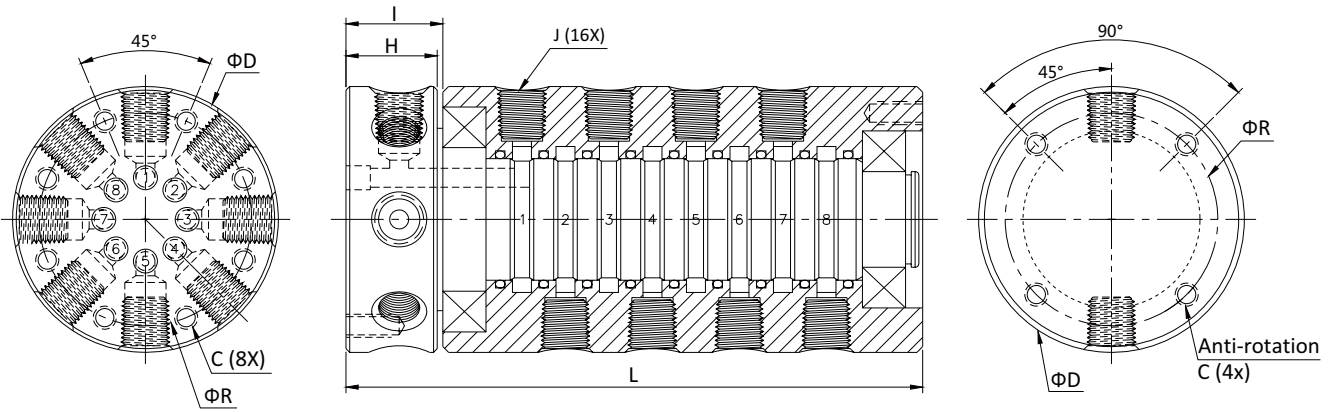
### Options

- Mounting Flange
- Connection Size
- Connection Type
- Material
- Pressure
- Media
- Optional Speed
- Combine with electrical slip ring

# INTRODUCE

## CMR8-XT

### CMR8-XT Series Dimensions



Part#	J(BSPP/NPT)	$\Phi R$	C	$\Phi D$	H	I	L
CMR-800-XT	M5	44	M5	54	14.5	15	120.9
CMR-801-XT	1/8"	50	M5	59	19.5	20.5	146.7
CMR-802-XT	1/4"	60	M5	69	21.5	22.5	154.9