CHUKOH FLO™

Plastic conveyer rollers/related parts
Chukoh Chemical Industries, Ltd.

About Chukoh Chemical Industries

Since our establishment in 1963, we have founded a business rooted in the potential of fluoroplastic, and have since accumulated experience and technological capabilities as a comprehensive processor of high-performance resins. For injection molding products such as plastic rollers for transportation, we produce various super engineering plastics that are used across a myriad of fields such as semiconductors, automobiles, industrial equipment, and chemistry.

Reasons to choose Chukoh Chemical Industries

Wide variety of resins

Standard products sold without mold charges

Available from one piece
*Partly made-to-order

Products can be freely mixed and matched, with all products connecting to each other.

Quick delivery

You can choose resin and shape

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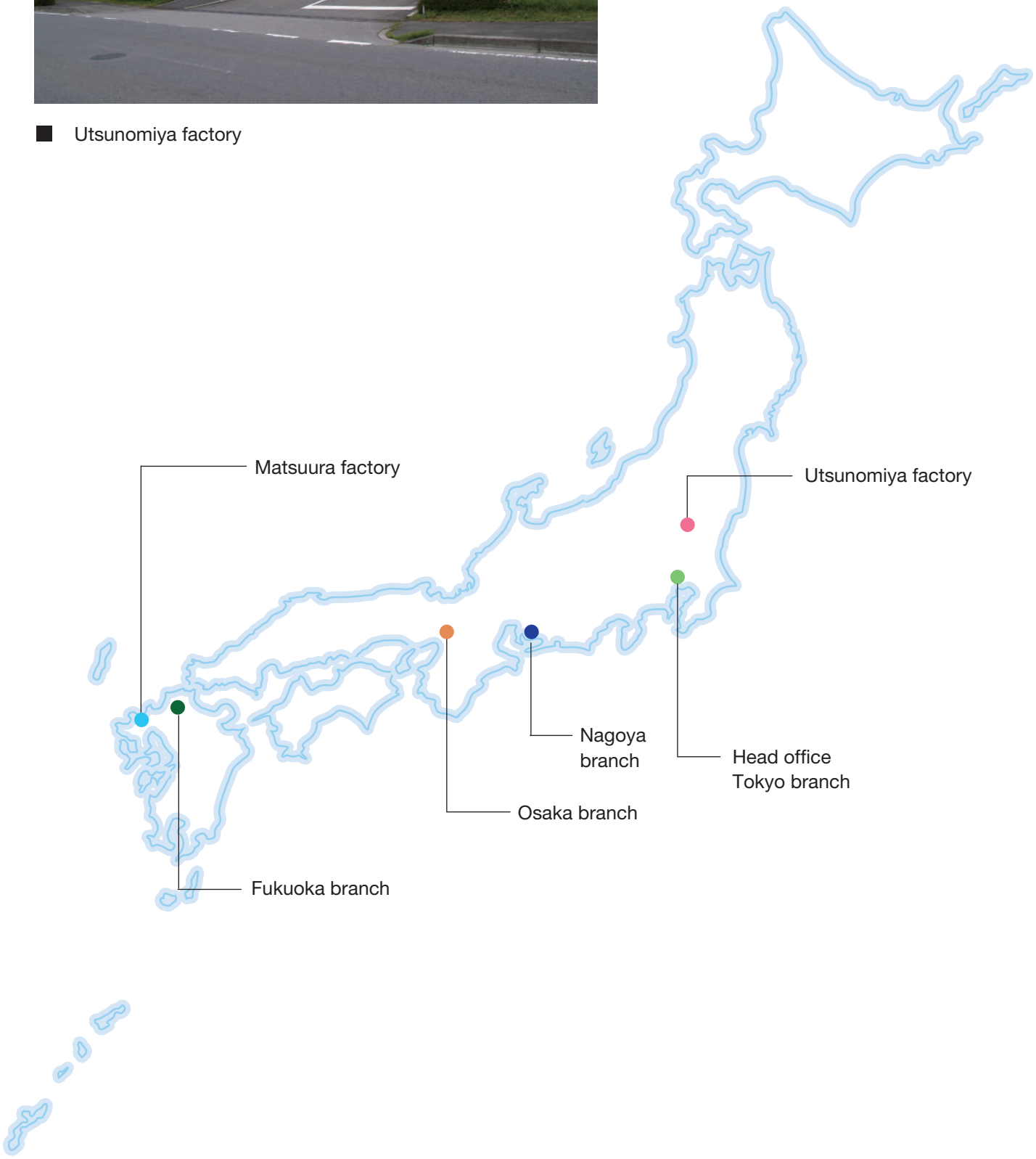
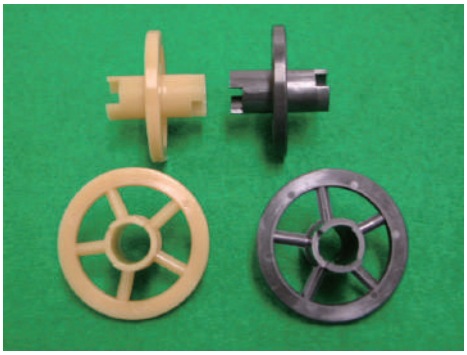
Sales offices/ factories

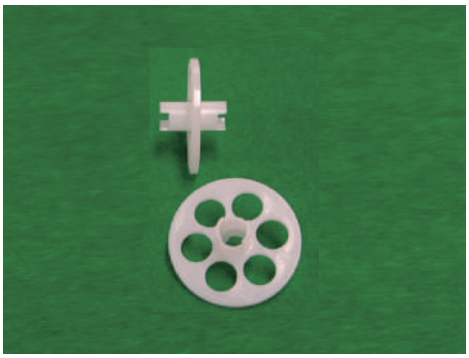
■ Utsunomiya factory



Conveyor rollers: CR



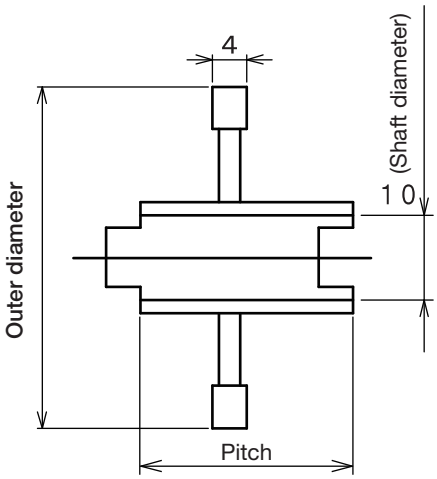
Spoke type



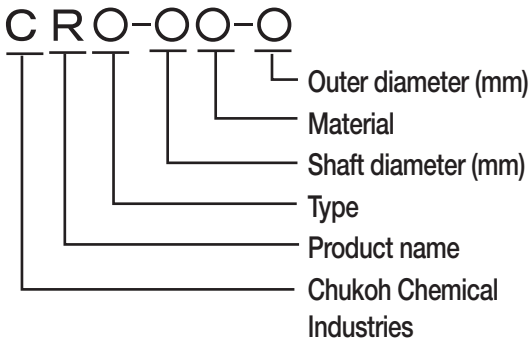
Circle-holed type

Circle-holed type
PE + TPO (Elastomer) Integrated Molding

Composition



Part number



Spoke type

Part number	Material	Shaft diameter	Outer diameter	Color	Pitch (mm)
CRS-10N-40	Nylon 46	ϕ10	ϕ40	Beige	25
CRS-10N-50	Nylon 46	ϕ10	ϕ50	Beige	25
CRS-10PP-20	Polypropylene	ϕ10	ϕ20	White	16
CRS-10PP-32	Polypropylene	ϕ10	ϕ32	White	16
CRS-10PE-40	Polyethylene	ϕ10	ϕ40	White	25
CRS-10PE-50	Polyethylene	ϕ10	ϕ50	White	25
CRS-10PFC-32	PPS + Fluororesin + Carbon	ϕ10	ϕ32	Black	16
CRS-10PFC-40	PPS + Fluororesin + Carbon	ϕ10	ϕ40	Black	25
CRS-10PFC-50	PPS + Fluororesin + Carbon	ϕ10	ϕ50	Black	25
CRS-10PK-32	PEEK	ϕ10	ϕ32	Light brown	16
CRS-10PK-40	PEEK	ϕ10	ϕ40	Light brown	25
CRS-10PK-50	PEEK	ϕ10	ϕ50	Light brown	25
CRS-10PFA-32	PFA	ϕ10	ϕ32	Semitransparent	25

Spoke type (Integrated molding)

Part number	Material	Shaft diameter	Outer diameter	Color	Pitch (mm)
CRS-10PEM-40	PE + TPO	ϕ10	ϕ40	White	25
CRS-10PEM-50	PE + TPO	ϕ10	ϕ50	White	25

Circle-holed type

Part number	Material	Shaft diameter	Outer diameter	Color	Pitch (mm)
CRR-8PFA-40	PFA	ϕ8	ϕ40	Semitransparent	25
CRR-10PFA-40	PFA	ϕ10	ϕ40	Semitransparent	25
CRR-10PFA-50	PFA	ϕ10	ϕ50	Semitransparent	25

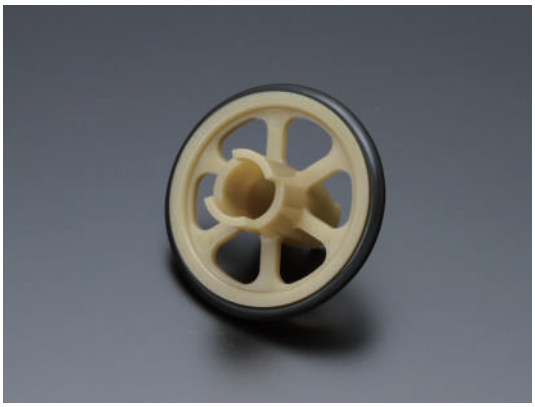
Circle-holed type (Integrated molding)

Part number	Material	Shaft diameter	Outer diameter	Color	Pitch (mm)
CRR-10PEM-40	PE + TPO	ϕ10	ϕ40	White	25

Example applications for each type of resin

Material	Application
Nylon 46	For drying machines
PPS + Fluororesin + Carbon	Conductivity
PFA	Chemical

Transport rings: CORS

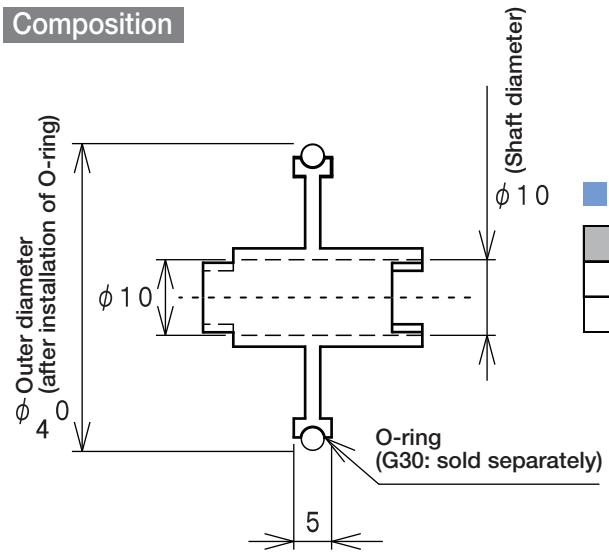


Part number

CORS-○○

- Material
- Shaft diameter (mm)
- Product name
- Chukoh Chemical Industries

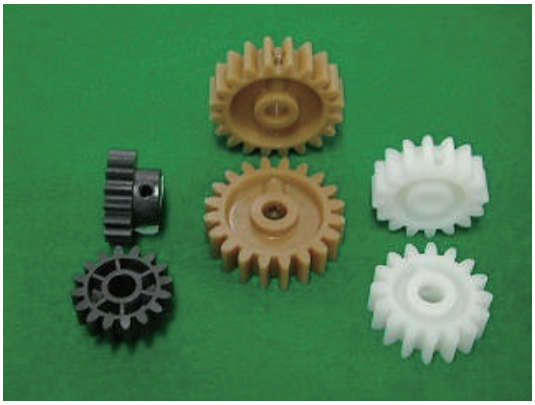
Composition



Plastic conveyor rings

Part number	Material	Shaft diameter	Outer diameter	Color
CORS-10N	Nylon 46	ϕ10	ϕ40	Beige
CORS-10PP	Polypropylene	ϕ10	ϕ40	White

Spur gear: CSG



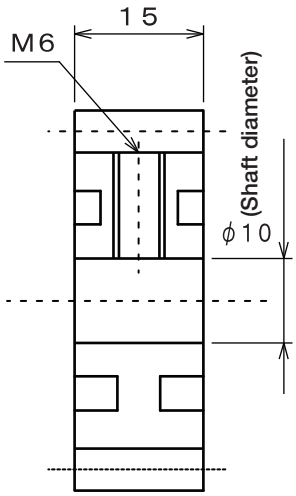
Part number

CSG O-OO

- Material
- Shaft diameter (mm)
- Type
- Product name
- Chukoh Chemical Industries

Composition

■ Type A/B spur gear



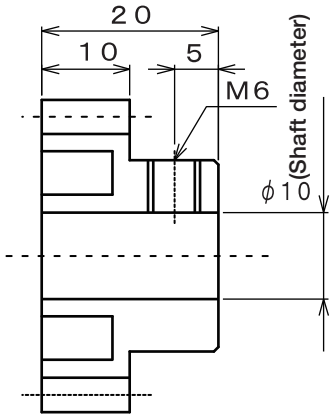
Type A

Part number	Material	Shaft diameter	Module	Number of cogs	Color
CSGA-10N	Nylon 46	ϕ10	2.5	16	Beige
CSGA-10S	Special polyethylene with high slidability	ϕ10	2.5	16	Milky white
CSGA-10PK	PEEK	ϕ10	2.5	16	Light brown
CSGA-10PKC	PEEK (Reinforced with carbon fiber)	ϕ10	2.5	16	Black

Type B

Part number	Material	Shaft diameter	Module	Number of cogs	Color
CSGB-10N	Nylon 46	ϕ10	2.5	20	Beige
CSGB-10S	Special polyethylene with high slidability	ϕ10	2.5	20	Milky white
CSGB-10PK	PEEK	ϕ10	2.5	20	Light brown
CSGB-10PKC	PEEK (Reinforced with carbon fiber)	ϕ10	2.5	20	Black

■ Type C spur gear



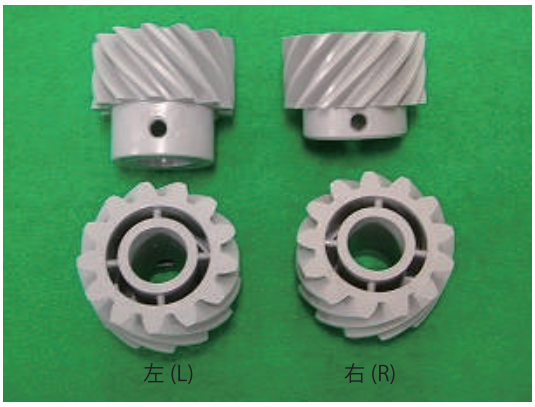
Type C

Part number	Material	Shaft diameter	Module	Number of cogs	Color
CSGC-10S	Special polyethylene with high slidability	ϕ10	2	16	Milky white

Example applications for each type of resin

Material	Application
Nylon 46	for drying machines
Special polyethylene with high slidability	High slidability
PEEK (Reinforced with carbon fiber)	Conductivity

Helical gears: CHG

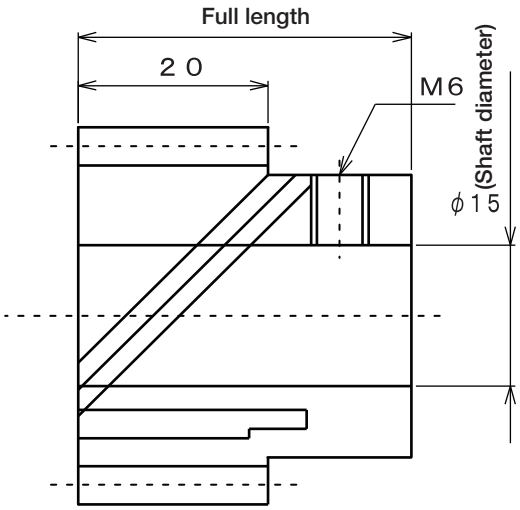


Part number

CHGO-OO-O

- Full length (mm)
- Material
- Shaft diameter (mm)
- Type
- Product name
- Chukoh Chemical Industries

Composition



■ Helix Angle: Right twist at an angle of 45° Modules: 2 Number of cogs: 13

Part number	Material	Shaft diameter	Full length	Color
CHGR-10S-28	Special polyethylene with high slidability	ϕ10	28	Milky white
CHGR-10S-35	Special polyethylene with high slidability	ϕ10	35	Milky white
CHGR-10EE-35	ETFE	ϕ10	35	White
CHGR-10PKC-28	PEEK (Reinforced with carbon fiber)	ϕ10	28	Black
CHGR-15PKC-35	PEEK (Reinforced with carbon fiber)	ϕ15	35	Black
CHGR-10N-28	Nylon 46	ϕ10	28	Beige
CHGR-10N-35	Nylon 46	ϕ10	35	Beige
CHGR-15N-28	Nylon 46	ϕ15	28	Beige
CHGR-15N-35	Nylon 46	ϕ15	35	Beige

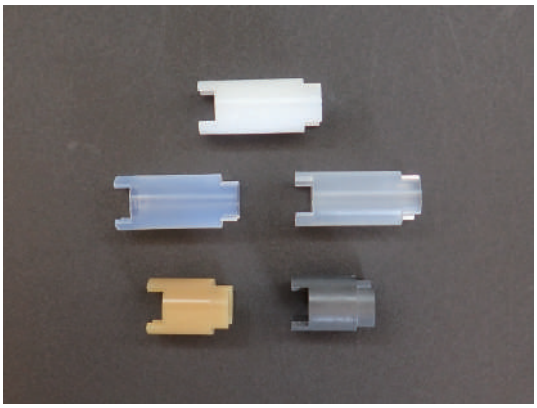
■ Helix Angle: Left twist at an angle of 45° Modules: 2 Number of cogs: 13

Part number	Material	Shaft diameter	Full length	Color
CHGL-10S-28	Special polyethylene with high slidability	ϕ10	28	Milky white
CHGL-10S-35	Special polyethylene with high slidability	ϕ10	35	Milky white
CHGL-10EE-35	ETFE	ϕ10	35	White
CHGL-10PKC-28	PEEK (Reinforced with carbon fiber)	ϕ10	28	Black
CHGL-15PKC-35	PEEK (Reinforced with carbon fiber)	ϕ15	35	Black
CHGL-10N-28	Nylon 46	ϕ10	28	Beige
CHGL-10N-35	Nylon 46	ϕ10	35	Beige
CHGL-15N-28	Nylon 46	ϕ15	28	Beige
CHGL-15N-35	Nylon 46	ϕ15	35	Beige

Example applications for each type of resin

Material	Application
Special polyethylene with high slidability	High slidability
PEEK (Reinforced with carbon fiber)	Conductivity

Spacer: CS

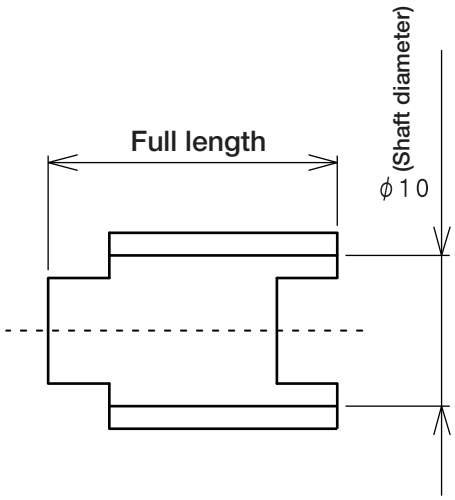


Part number

CS-OO-O

- Full length (mm)
- Material
- Shaft diameter (mm)
- Product name
- Chukoh Chemical Industries

Composition



Type with a full length of 19mm

Roller pitch changed from 25mm to 40mm

Type with a full length of 24mm

Roller pitch changed from 25mm to 45mm

Type with a full length of 29mm

Roller pitch changed from 25mm to 50mm

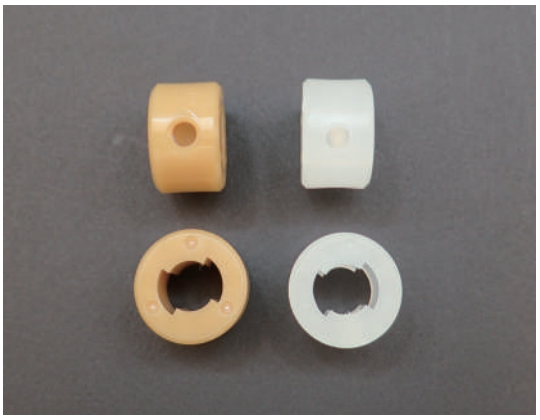
Spacer

Part number	Material	Shaft diameter	Full length	Color
CS-10N-19	Nylon 46	ϕ10	19	Beige
CS-10N-24	Nylon 46	ϕ10	24	Beige
CS-10N-29	Nylon 46	ϕ10	29	Beige
CS-10PE-19	Polyethylene	ϕ10	19	White
CS-10PE-24	Polyethylene	ϕ10	24	White
CS-10PE-29	Polyethylene	ϕ10	29	White
CS-10PP-19	Polypropylene	ϕ10	19	White
CS-10PP-24	Polypropylene	ϕ10	24	White
CS-10PP-29	Polypropylene	ϕ10	29	White
CS-10PFA-19	PFA	ϕ10	19	Semitransparent
CS-10PFA-24	PFA	ϕ10	24	Semitransparent
CS-10PFA-29	PFA	ϕ10	29	Semitransparent
CS-10PFC-19	PPS + Fluororesin + Carbon	ϕ10	19	Black
CS-10PFC-24	PPS + Fluororesin + Carbon	ϕ10	24	Black
CS-10PFC-29	PPS + Fluororesin + Carbon	ϕ10	29	Black
CS-10PK-19	PEEK	ϕ10	19	Light brown
CS-10PK-24	PEEK	ϕ10	24	Light brown
CS-10PK-29	PEEK	ϕ10	29	Light brown

Example applications for each type of resin

Material	Application
Nylon 46	For drying machines
PFA	Chemical resistance
PPS + Fluororesin + Carbon	Conductivity

Stopper: CM

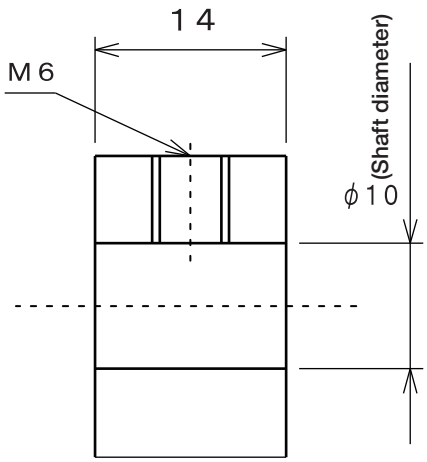


Part number

CM-OO

- Material
- Shaft diameter (mm)
- Product name
- Chukoh Chemical Industries

Composition



Spacer

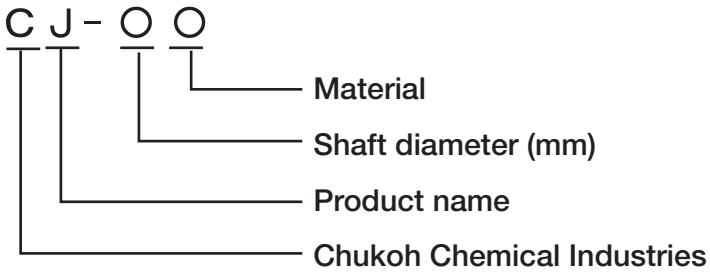
Part number	Material	Shaft diameter	Color
CM-10N	Nylon 46	ϕ10	Beige
CM-10PP	Polypropylene	ϕ10	White
CM-10PK	PEEK	ϕ10	Light Brown
CM-10PKC	PEEK (Reinforced with carbon fiber)	ϕ10	Black

Example applications for each type of resin

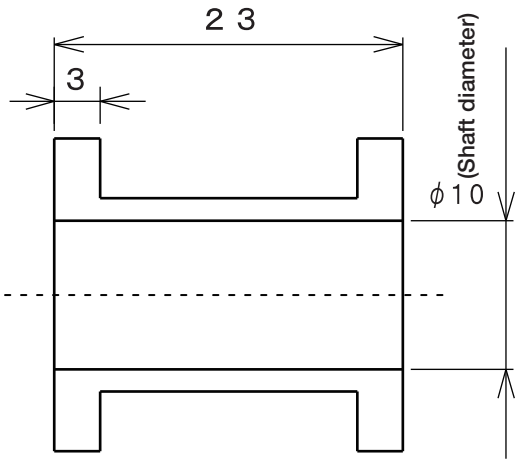
Material	Application
Nylon 46	For drying machines

Bearing: CJ

Part number



Composition



Bearing

Part number	Material	Shaft diameter	Color
CJ-10PE	Polyethylene	ϕ10	White
CJ-10N	Nylon 46	ϕ10	Beige

Characteristics of each type of resin

PE	Polyethylene is a general-purpose resin that is used in a wide range of applications such as films. It has low specific gravity, making it suitable for production of light products. It also boasts excellent impact resistance, and maintains flexibility even at low temperatures. There are high-density polyethylene and low-density polyethylene, with high-density polyethylene having excellent rigidity.
PP	Polypropylene, like polyethylene, is a typical general-purpose plastic. Its properties are similar to those of polyethylene, but its specific gravity is even smaller, meaning it has the lowest specific gravity among general-purpose plastics. It has excellent mechanical strength, especially bending fatigue resistance.
TPO	TPO is a thermoplastic elastomer made by mixing and dispersing EPDM or EPM rubber in polyolefin resin (polyethylene/polypropylene). It is a material that can be injection molded yet also has rubber elasticity. Its disadvantage being that it swells in non-polar solvents such as aromatic organic solvents and mineral oils
Nylon 46	Nylon is generally an engineering plastic excellent in mechanical strength and heat resistance, and nylon 46 has high heat resistance, even among nylons, and is highly adaptable to high temperature environments. It also has good chemical resistance but, as with all other nylons, has poor acid resistance.
PPS	PPS is material with high heat resistance and excellent strength. However, it has low toughness and is brittle, leading many brands to reinforce it with fillers such as glass fiber. The grade used in our products employs carbon fiber and Fluororesin as fillers, giving them high conductivity, strength, and slidability.
PFA	PFA is a Fluororesin with excellent properties equivalent to polytetrafluoroethylene (PTFE). It is also resistant to almost all chemicals, is non-stick, has low friction, and has very high heat resistance. Moreover, it is flexible with high crack resistance. However, under high loads, caution against deformation is required.
PEEK	PEEK is a super engineering plastic with extremely high heat resistance and excellent strength at high temperatures. It has good wear properties and very good chemical resistance, except for sulfuric acid.

			High density polyethylene	Polypropylene	Nylon 46	Polyphenylene sulfide	Perfluoroalkoxy alkane	Polyether ether ketone
			HDPE	PP	PA46	PPS (GF+PTFE)	PFA	PEEK
Melting point	℃	Measured by Differential Scanning Calorimeter	135	ND	295	ND	310	340
Density	g/cm^3	D 792	–	–	1.18	1.49	2.12 – 2.17	1.3
		JIS K6921-2 JIS K6922-2	0.96	0.9	–	–	–	–
Tensile strength	MPa	D 638	ND	ND	100	150	25 – 35	97
Tensile yield stress	MPa	JIS K6921-2 JIS K6922-2	27	20	–	–	–	–
Tensile elongation	%	D 638	–	–	>40	1.5	300 – 350	>60
		JIS K6921-2 JIS K6922-2	>400	>400	–	–	–	–
Bending strength	MPa	D 790	–	–	120	220	ND	170
Flexural modulus	GPa	D 790	–	–	2.9	18	0.54 – 0.64	4.2
	MPa	JIS K6921-2 JIS K6922-2	1000	500	–	–	–	–
Deflection temperature under load	℃ (1.81MPa)	D 648	–	–	160	>260	47	152
	℃ (0.45MPa)		–	–	275	ND	74	
		JIS K6921-2 JIS K6922-2	ND	60	–	–	–	–
Coefficient of linear expansion	10^-5／℃	D 696	ND	ND	TD:8/MD:10	TD:1.9/MD:3.5	12	4.7
Volume resistance	Ω.cm	IEC 93	ND	ND	10^15	10^0	>10^18	4.9
Rate of water consumption	% (24hr)	D 570	ND	ND	2.3	ND	0.01	0.5

Mold our passion into shape

chukoh

CHUKOH CHEMICAL INDUSTRIES,LTD.

Head office	ATT New Tower 10F, 2-11-7, Akasaka, Minato-ku, Tokyo TEL +81-3-6230-4414 / FAX+81-3-6230-4413
Tokyo branch	ATT New Tower 10F, 2-11-7, Akasaka, Minato-ku, Tokyo TEL +81-3-6230-4411 / FAX+81-3-6230-4412
A&E Dept. **(export sales)**	ATT New Tower 10F, 2-11-7, Akasaka, Minato-ku, Tokyo TEL +81-(0)3-6230-4424/+81-(0)3-6230-4417 / FAX +81-(0)3-6230-4446
Chukoh Chemical **(Shanghai)** **Trading, Ltd.**	Room 2806 Shanghai International Trade Center 2201, West Yan An Road, Changning District, Shanghai TEL +86-21-6235-1160 / FAX +86-21-6235-1140
Chukoh Chemical **(Thailand) Co., Ltd.**	One FYI Center, unit 1/1002, 10th Floor, 2525 Rama 4 Road, Khlongtoei, Khlongtoei, Bangkok 10110 Thailand TEL +66-(0)2-011-7144 / FAX +66-(0)2-011-7147

Contact Information

For inquiries on our products in general, please make inquiries by e-mail or through our WEB form, or contact the nearest sales branch, Please feel free to contact us.

support@chukoh.co.jp

Website address www.chukoh.com/

Corporate site

Japanese English Chinese Thai

⚠ Caution

- Do not use for medical applications or other usages involving a contact with human body.
- Observe the related laws and regulations for disposal. Do not incinerate in any case.
- Do not use at the temperature exceeding the maximum service temperature.
- Please read the catalogue and product safety data sheet (SDS) on our website to -maintain the original functions of product and ensure safe use.

2023.10.01