Curved-tooth Gear Coupling

RGF Size



Product Characteristics:

- Double-section type curved-tooth gear coupling
- Widely applicable in various mechanical & hydraulic fields
- Nylon & steel matched, maintenance-free
- > Able to offset axial, radial & angular misalignments
- > Axial plugging assembly, very convenient
- Fished product's bore tolerance as per ISO standard being H7, keyway width tolerance as per DIN6885/1 being JS9, additionally with taper bore & inch bore
 - Installation dimensions seen in following table:

Dimensions for Installation (mm)

Si	ze	Fini	shed Product B	ore d1,d2				Coupling W Max. Bore	Torque Rating						
Common Size	Length' d Size	Pre- made Bore		Max. Bore II, Diam'r I2		LO	L	M, N	E	Length'd Sleeve 11,12 max	D1	D	Nylon Sleeve Weight kg	Total Weight kg	N. m
RGF-14	RGF-14-L	-	Finished-	14	23	50	37	6.5	4	40	40	24	0. 02	0.14	10
RGF-19	RGF-19-L	-	product bores	19	25	54	37	<mark>8.</mark> 5	4	40	48	30	0. 03	<mark>0.</mark> 21	16
RGF-24	RGF-24-L	-	can be custom	24	26	56	41	7.5	4	50	52	36	0.04	0. 25	20
RGF-28	RGF-28-L	-	-made.	28	40	84	46	19	4	55	66	44	0. 07	0. 62	45
RGF-32	RGF-32-L	-		32	40	84	48	18	4	55	76	50	0. 09	0. 83	60
RGF-38	RGF-38-L	-		38	40	84	48	18	4	60	83	58	0. 11	1.04	80
RGF-42	RGF-42-L	-		42	42	88	50	19	4	60	92	65	0. 14	1. 41	100
RGF-48	RGF-48-L	-		48	50	104	50	27	4	60	95	67	0. 16	1. 43	140
RGF-55	RGF-55-L	-		55	52	108	58	25	4	65	114	82	0. 26	2.50	240
RGF-65	RGF-65-L	-		65	55	114	68	23	4	70	132	95	0. 39	3. 58	380

RGF···L Size

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	Finish	ed-product Bor	e d1, d2				Dimens	sion (mm)				Coupling N Bore	Neight at Max Diam'r	Torque Rating		
Size	Pre- made Bore	Finished- product	Max Bore Diam' r	1, 2	LO	L	M, N	E	Length 'd Sleeve 11, 12 max	D1	D	Nylon Sleeve Weight kg	Total Weight kg	N. m		
RGF-80	25	bores can be custom	80	90	186	93	46. 5	6	-	175	124	0. 91	10. 93	700		
RGF-100	35	Tilduc.	100	110	228	102	63	8	-	210	152	1. 36	19. 47	1200		
RGF-125	45		125	140	290	134	78	10	—	270	192	2.97	40. 73	2500		

Dimensions for Installation (mm)

Optional Bore Diameters Table (mm)

Crowned Gear	Pre-Center Bore					Во	ore [Dian	nete	er di	H7 (Ke	ywa	y D	IN6	885	/1(0	GB/	T10	95-	79)	JSS	and	d Ho	oldi	ng	Scr	ews	;)				Keyways with Bore
Size-1	BX/Y	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	60	#	Diam'r d (di
RGF-14-1	B2.5/8	*	*	*	*	*	*	*	*	*																							or d2)
RGF-19-1	B2.5/8			*	*	*	*	*	*	*	*	*	*	*	*																		bigger than 65 are
RGF-24-1	B3.15/10					*	*	*	*	*	*	*	*	*	*	*	*	*															specially
RGF-28-1	B3.15/10					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*													machined.
RGF-32-1	B3.15/10							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*											
RGF-38-1	B3.15/10									*	*	*	*	*	*	*	*	*	*	*	*	*	*	*									
RGF-42-1	B3.15/10															*	*	*	*	*	*	*	*	*	*	*							
RGF-48-1	B3.15/10															*	*	*	*	*	*	*	*	*	*	*	*	*					
RGF-55-1	B6.3/18																		*	*	*	*	*	*	*	*	*	*	*	*			
RGF-65-1	B6.3/18																		*	*	*	*	*	*	*	*	*	*	*	*	*	*	
RGF-80-1	Pre-bore 25																				*	*	*	*	*	*	*	*	*	*	*	*	$65^{\sim}80$
RGF-100-1	Pre-bore 35																								*	*	*	*	*	*	*	*	$65^{\sim}100$
RGF-125-1	Pre-bore 45																												*	*	*	*	$65^{\sim}125$

Ordering Illustration:

RGF-28	d1, φ25	d2,
Coupling Size & Specificat	on Finished Product Bore Diam'r DIN6885 (Keyway width tolerance JS9)	Finished Product Bore Diam'r DIN6885 (Keyway width tolerance JS9)

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Summery



Gear couplings are applied to wrapping connector driving, and have a strong axial, radial and angular ability to

rectify a deviation. Since the structure of a double-curve tooth can effectively prevent the occurrence of a local stress concentration caused by angular and radial deviation, gear couplings will produce nearly no wear.



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The double-curve-tooth gear coupling avoids the stress concentration with a bigger tooth contact surface when an angular, radial installation deviation occurs.

The matching of steel curved-tooth gear and nylon sleeve in different materials assures that the friction between the contact surfaces of teeth in a continuous drive is very slight, and no maintenance is needed.

As coupling is the double-division type in structure, the stress caused by angular and radial errors can be ignored, and the angular velocity will have no periodical fluctuation.

couplings can be installed horizontally and vertically, no special tools are necessary.

Nylon toothed sleeves have the following characteristics:

- Excellent mechanical performance
- High rigidity
- ■High temperature resistance (+100°C)
- Not embrittled at low temperature
- Good slippery & frictional behavior
- Excellent electrical insulation behavior
- Chemical corrosion endurable
- High accuracy of processing

Wear resistance of REACH nylon toothed sleeves:

The surface of a nylon composite material (crystal structure) is smooth, hard, tough, stable in high heat, and can endure the corrosion of lubricating oil, fuel, hydraulic oil, solvent etc, so it is the ideal material for manufacturing couplings. There is a mutual friction wear produced between metal parts when they move along each other without lubrication, whereas no wearing occurs between smooth nylon and steel even without lubrication and maintenance.

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