SJC Series

Zero Backlash Jaw Coupling

Selection Method

SJC coupling has 2 different usages. One for transmitting angular rotation with zero backlash and another for transmitting extremely high torque. Choose the appropriate coupling because we have 2 different sleeves with different physical characteristics.

1. To transmit rotation with zero backlash mainly

In order to transmit angular rotation and control for the main purpose in low torque range, the same characteristic, metal spring coupling having zero backlash can be used. In addition, it can absorb torsional vibration which you cannot get from general couplings. To use for zero backlash, the operating torque is less than the rated torque on the table. (Refer to the table below) For zero backlash, the permissible torque is the same for 2 sleeves. However, for accurate transmission concerning necessary responsiveness, higher strength is required for sleeves.

2. To transmit extremely high torque mainly

SJC type coupling can be used for higher torque compared with metal coupling because it transmits torque by compressing sleeve. Therefore, it can be applied to general industrial machines such as pump that does not need zero backlash seriously. SJC couplings sleeves are offered in two different types, green sleeve which has lower strength is used in lower rated and maximum torque condition, while a red sleeve has higher values. On the contrary, the green sleeve's misalignment permissible value is higher than the red sleeve's and thus, this type of sleeve is more suitable for absorbing vibration or impact. So, select the proper sleeve for your use.

	Sleeve		Fastening way			
Hardness (Shore D)	Color	Material	SET SCREW TYPE	CLAMP TYPE		
55D (98A)	Green	Hytrel	SJC – ¤¤ – GR	SJC – ¤¤C – GR		
64D	Red	Hytrel	SJC – ¤¤ – RD	SJC – ¤¤C – RD		

Product Number		Sleeve Hardness	For Zero Backlash (N·m)	Rated Torque (N∙m)	Max Torque (N∙m)	Torsional Stiffness (N·m/rad)	Permissible Parallel Misalignment (mm)	Permissible Parallel Misalignment (°)	Permissible End-play (mm)
SJC-14 GF	GR	55D (98A)	0.2	1.6	3.6	20	0.05	1.0	+0.6 -0.2
	RD	64D		2	4	30	0.03		
SJC-20	GR	55D (98A)	0.2	4	8	40	0.07	1.0	+0.8 -0.3
	RD	64D		5	10	65	0.05		
SJC-25 GR RD	GR	55D (98A)	0.35	8	10	180	0.07	1.0	+1.0 -0.4
	RD	64D		10	20	220	0.05		
SJC-30 GR RD	GR	55D (98A)	0.5	10	20	180	0.08	1.0	+1.0 -0.5
	RD	64D		14	28	220	0.06		
SJC-40 GR RD	GR	55D (98A)	1.2	16	32	1,200	0.06	1.0	+1.2 -0.6
	RD	64D		18	36	2,000	0.04		
SJC-48	GR	55D (98A)	-	35	70	1,800	0.08	1.0	+1.3 -0.6
	RD	64D		45	90	3,600	0.05		
SJC-55	GR	55D (98A)	-	45	90	2,500	0.09	1.0	+1.4 -0.6
	RD	64D		60	120	4,000	0.06		
SJC-65 GR RD	GR	55D (98A)	-	120	240	4,000	0.1	1.0	+1.5 -0.6
	RD	64D		180	360	8,000	0.08		
SJC-80	GR	55D (98A)		240	480	10,000	0.1	1.0	+1.5 -0.6
	RD	64D	_	320	640	20,000	0.08		
SJC-100	GR	55D (98A)	-	300	600	20,000	0.15	1.0	+2.0
	BD	64D		600	1 200	10 000	0.1		

How to order product



** Please mark each inner diameter size. ** When you order 'penetrate-type sleeve', please mark 'penetrate-type'.

% The following is the size of the inner diameter of penetrate-type sleeves.

SJC-14 =Ø4.5, SJC-20=Ø7, SJC-25=Ø7.6, SJC-30=Ø9.6, SJC-40=Ø15.5, SJC-55=Ø25.3, SJC-65=Ø26.7, SJC-80=Ø30.8, SJC-100=Ø50.5

X Clamp split type is available for SJCB-30C, SJC-40C, SJC-55C, SJC-65C, SJC-80C and SJC-100C. Please mark 'W' right behind the bore diameter where you want to separate.