

Universal Joints

Keyway / Tapped

■ **Features:** Shaft does not require pin hole machining, and keyway alone can tighten it.

UNKA (Single)

• Rubber Cover
CSC (for Single)

Operating Ambient Temperature: -20°C ~ 100°C

UNKW (Double)

JIS B1454 C Type (UNKA)
JIS B1454 CC Type (UNKW)

Type	Material	Surface Treatment
Single	UNKA	SCM415
Double	UNKW	(Carburized)
Rubber Cover	CSC	NBR

■ Universal Joints

Part Number	Type	d	D	Single			Double			ℓ	C	E	b	t	M (Coarse)	Unit Price	
				L	LD	A	UNKA	UNKW									
UNKA (Single)		10	19	42	67.5	25.5	21	12	6	3	1.4	M5					
		12	23	52	83	31	26	15	7.5	4	1.8	M5					
		14	26	59	94.5	35.5	29.5	17	8.5	5	2.3	M6					
UNKW (Double)		16	30	74	117.5	43.5	37	22	11	5	2.3	M6					
		20	36	87	139	52	43.5	25	12.5	6	2.8	M6					

Part Number	Type	d	UNKA, UNKW Common				UNKA				UNKW			
			Condition Variable	Allowable Rotational Speed (r/min)	Allowable Operating Angle (°)	Static Tensile Failure Load (N)	Allowable Torque (N·m)	Static Failure Torque (N·m)	GD ² (kg·cm ²)	Mass (g)	Allowable Torque (N·m)	Static Failure Torque (N·m)	GD ² (kg·cm ²)	Mass (g)
UNKA (Single)		10	80000	2000	30(°)	13000	27.4	83	0.13	55	20.1	61	0.21	95
		12	121000	1800		23000	46	140	0.35	110	33	100	0.55	180
		14	151000	1600		26000	66	200	0.67	155	46	140	1	250
UNKW (Double)		16	200000	1400		39000	102	310	1.5	260	76	230	2.3	410
		20	273000	1000		52000	175	530	3.6	465	129	390	5.7	690

⚠ * For Double Type, Allowable Operating Angle (°) on one end

■ Rubber Cover

Part Number	Type	d	KC	Unit Price
CSC (Single)		10	32	
		12	35	
		14	40	
		16	46	
		20	58	



Ordering Example

Part Number
UNKA16
CSC12

How to Select

① Conditional Variables (Formula)

$$\text{Calculation Condition Variable} = \text{Rotational Speed (r/min)} \times \text{Angle(°)} \times \text{Torque (N·m)}$$

$$\text{Calculation Condition Variable} < \text{Allowable Condition Variable}$$

② Rotational Speed (r/min)

$$\text{Rotational Speed} \times \text{Angle Factor} < \text{Allowable Speed}$$

=Angle Factor Table=

Angle	5° or Less	10°	15°	20°	25°	30°
Angle Coefficient	1.00	1.05	1.18	1.43	1.82	2.50