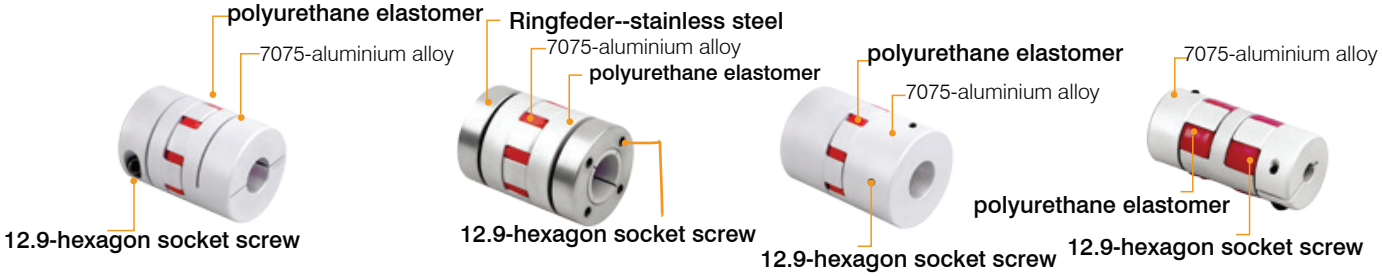
Jaw coupling :

Optional stainless steel HUB



Charasteristic :

- Light weight, moment of inertia small torque is high
- make the drive vibration get buffer, and absorption by motor's uneven operation generated by the impact
- Can effectively correct the axial and radial and angular installation deviation

Coupling selection :

一、coupling selection involves symbols and coefficient shows

Induction force: **Installation for the axial prestress by coupling specification, elastomer materials and manufacturing tolerance decision, Elastomer hardness low required axial prestress is small, large conversely.**

T_{KN}: **Coupling of the rated torque (N.m) ,In the set speed range continuous transferred moment.**

T_{kmax}: **Coupling of the maximum torque (N.m) In the work transfer more than 105 times dynamic load or 5 x 104 times alternating load of allowable torque.**

T_R: **Friction torque (N.m), Shaft and shaft sleeve clamping way connection transfer torque**

T_{AN}: **The active rated torque(N.m)**

T_{AS}: **Maximum driving moment(N.m)Ac motor produce peak moment, for example, Motor start or stop the time from the moment**

T_s: **Coupling peak moment(N.m)According to the maximum driving moment TAS rotational inertia mA or ml and impact factor SAL or SL calculation.**

S_t: **Temperature coefficient, Elastomer under stress especially in high temperature condition of the deformation work**

S_d: **Torsional rigidity coefficient,Need to consider different applications of torsional rigidity coupling the different requirements**

S_A: **Impact coefficient, in the drive end or driven end by shock when consider coefficient.**

$m_{A(L)}$: **Drive end (driven end) by impact or vibration to consider when quality distribution coefficient.**

Choose coupling is should first consider coupling rated torque than with equipment supporting the use of the motor rated torque.

1. **No alternating torque selection**

   Coupling selection should be considered when rated torque and maximum torque

2. **Rated torque calculation formula**

$$TN\ (N.m) = \frac{KW \times 9550}{rpm}$$

Condition Factor

Rature coefficient St				
	±30°C	40°C	60°C	80°C
St	1	1.2	1.4	1.4

Torsional rigidity Sd		
Machine tool spindle drive	Positioning drive	Encoder
2-5*	3-8*	10→

Impact load coefficient SA		
Machine tool spindle drive	Positioning drive	SA
Slight impact	⩽60	1.0
General impact	⩾60 ⩽300	1.4
Serious impact	⩽300	1.8

Calculation Formula

The selected coupling shall meet the following conditions:

$$T_{KN} \geq T_N . St . Sd \quad OR \quad T_{KN} \geq Ts . St . Sd$$

maximum moment : drive end by impact

$$Ts = TAs \times mA \times SA$$

Elastomer

elastomer：64/sh D
temperature range:-20～+120°C

elastomer：98/sh A
temperature range:-30～+120°C

elastomer：92/sh A
temperature range:-40～+90°C

Elastomer						
Rigidity	Colour	Material quality	Operating temperature°C		Optional specification	Application fields
			Moment	Continuation		
64/sh D	GR	Polyurethane	—30～+120	—20～+110	25-80	High Rigidity High pulling torque
98/sh A	RD	Polyurethane	—40～+120	—30～+90	14-135	Positioning drive Machine tool spindle drive
92/sh A	YL	Polyurethane	—50～+120	—40～+90	25-80	Underload Damping

Deviation compensation

Deviation compensation							
Specification	Elastomer rigity	Single deviation			Double deviation		
		Axial (mm)	lateral (mm)	Angular (°)	Axial (mm)	lateral (mm)	Angular (°)
14	92A	+0，6 -0，3	0.10	1.0°	+0，6 -0，6	0.21	1.0°
	98A		0.06	0.9°		0.19	0.9°
	64D		0.04	0.8°		0.17	0.8°
16	92A	+0，6 -0，3	0.11	1.0°	+0，6 -0，6	0.22	1.0°
	98A		0.07	0.9°		0.19	0.9°
	64D		0.04	0.8°		0.17	0.8°
20	92A	+0，8 -0，4	0.13	1.0°	+0，8 -0，8	0.26	1.0°
	98A		0.08	0.9°		0.24	0.9°
	64D		0.05	0.8°		0.21	0.8°
25	92A	+0，8 -0，4	0.14	1.0°	+0，9 -0，9	0.32	1.0°
	98A		0.08	0.9°		0.29	0.9°
	64D		0.05	0.8°		0.25	0.8°
30	92A	+1，0 -0，5	0.15	1.0°	+1，0 -1，0	0.37	1.0°
	98A		0.09	0.9°		0.33	0.9°
	64D		0.06	0.8°		0.29	0.8°
40	92A	+1，2 -0，5	0.10	1.0°	+1，2 -1，0	0.45	1.0°
	98A		0.06	0.9°		0.41	0.9°
	64D		0.04	0.8°		0.36	0.8°
55	92A	+1，4 -0，5	0.14	1.0°	+1，4 -1，0	0.59	1.0°
	98A		0.10	0.9°		0.53	0.9°
	64D		0.07	0.8°		0.47	0.8°
65	92A	+1，5 -0，7	0.15	1.0°	+1，5 -1，4	0.66	1.0°
	98A		0.11	0.9°		0.60	0.9°
	64D		0.08	0.8°		0.53	0.8°
80	92A	+1，8 -0，7	0.17	1.0°	+1，8 -1，4	0.77	1.0°
	98A		0.12	0.9°		0.69	0.9°
	64D		0.09	0.8°		0.61	0.8°
95	98A	+2,0 -1,0	0.14	0.9°	——		
	64D		0.10	0.8°			
105	98A	+2,1 -1,0	0.16	0.9°	——		
	64D		0.11	0.8°			
120	98A	+2,2 -1,0	0.17	0.9°	——		
	64D		0.12	0.8°			
135	98A	+2,6 -1,0	0.18	0.9°			
	64D		0.13	0.8°			

Ordering instruction

Optional stainless steel HUB

Position screw fixed

WJM

Binodal

WJDM Outside diameter 20-80

Clamping screw

WJM -C

Ringfeder

WJM -T

For eample :

WJM30 - RD - 8 - 8 Positioning screw fixed

WJM30	RD	8	8
Model	Elastomer	Aperture	Aperture

For eample :

WJM40C - RD - 16 - 19 Clamping screw

WJM40C	RD	16	19
Model	Elastomer	Aperture	Aperture

Jaw Coupling

Optional stainless steel HUB

May according to the customer request processing key and special aperture:

■ 1、Splined hole

We provide is rectangle spline hole processing, Continue to use GB/T1144-2001, Involute spline hole processing, Continue to use din DIN5480 5482 standard, Involute spline characteristic is manufacturability good manufacturing precision, Spline tooth roots high strength, Spline tooth roots high strength, Easy to constant heart, When transfer torque of larger by involute spline.. Rectangle spline characteristic is centering precision, Centering stability is good.

Spline hole code:H
for eample：

WJM40-GR-H16-H19

■ 2、Taper hole

We provide taper hole processing, Points 1:5 taper hole and 1:8 taper hole
Taper axis relative to the ordinary shaft convenient installation removeÿ
Key connection safe and reliable

Taper hole code:Z
for eample：

WJM55-RD-Z18-Z20

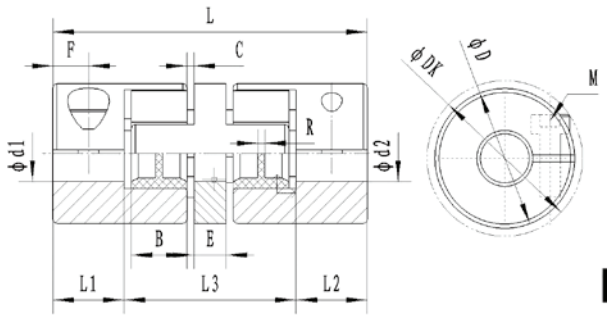
■ 3、Keyway

aperture 5-95 can process keyways

Standard aperture (mm)	Keyways (mm)				Keys (mm)
	b		t		Wide×Tall
	Standard keyway	JS9-Tolerances	Axial groove depth	Hub groove depth	
6～8	2	±0.012	1.2	1.0	2×2
9～10	3		1.8	1.4	3×3
11～12	4		2.5	1.8	4×4
14～16	5		3.0	2.3	5×5
18～22	6		3.5	2.8	6×6
24～30	8	±0.015	4.0	3.3	8×7
32～38	10		5.0		10×8
40～42	12	±0.018			12×8
45～50	14		5.5	3.8	14×9
55～56	16		6.0	4.3	16×10
60～65	18		7.0	4.4	18×11
70～75	20	±0.021	7.5	4.9	20×12
80～85	22		9.0	5.4	22×14
90～95	25		9.0	5.4	25×14

Double jaw coupling :

Optional stainless steel HUB



must be sure the distance of "C"

Dimension : (mm)

Model	Aperture				D	L	L1/L2	L3	F	E	B	C	R	DK	M	Tightening torque (N.M)
	d1		d2													
	MIN	MAX	MIN	MAX												
WJDM20C	4	10	4	10	20	45.0	10.0	25.0	5.0	10.0	8.0	1.0	1.2	24	M3	1.5
WJDM25C	4	12	4	12	25	52.0	11.0	30.0	5.0	12.0	10.0	1.0	2.0	26.5	M3	1.5
WJDM30C	5	16	5	16	30	56.0	11.0	34.0	5.0	13.0	10.0	1.5	2.0	31.4	M3	1.5
WJDM40C	6	24	6	24	40	92.0	25.0	42.0	12.0	16.0	12.0	2.0	4.0	47	M6	8.0
WJDM55C	8	28	8	28	55	112.0	30.0	52.0	10.5	18.0	14.0	2.0	4.0	60	M6	8.0
WJDM65C	10	38	10	38	65	128.0	35.0	58.0	11.5	20.0	15.0	2.5	4.0	72	M8	16
WJDM80C	12	45	12	45	80	158.0	45.0	68.0	15.5	24.0	18.0	3.0	4.0	80	M8	16

Example

WJDM	30	C	YL	8	10
Model	Outside diameter	Fixed mode	Elastomer	Aperture	Aperture