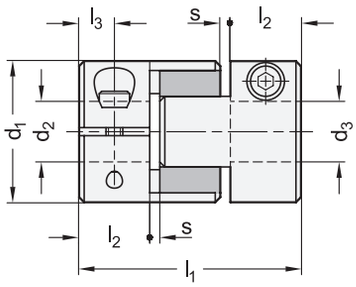
GN 2240 | Elastomer Jaw Couplings

Aluminum, with Clamping Hub

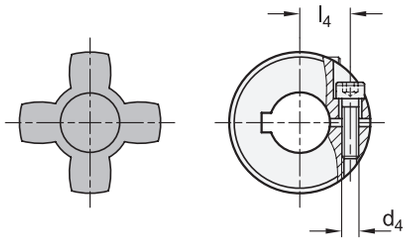
JW WINCO® A Ganter Company

Inch | Metric

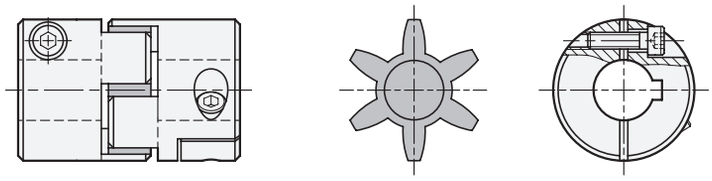
d_1 = 14...30



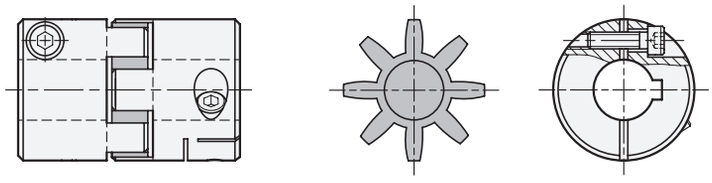
Coupling spider



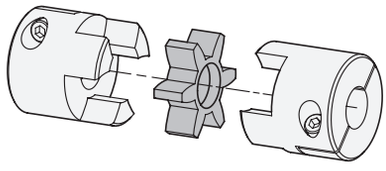
d_1 = 40



d_1 = 55



Assembly instruction



2 Bore code

B Without keyway
K With keyway (from d_1 = 30)

Specification

- Hub
  Aluminum — **AL**
  Anodized finish, natural color
- Coupling spider
  Thermoplastic Polyurethane (TPU)
  Temperature resistant up to 140 °F (60 °C)
  Hardness
  80 shore A, blue — **BS**
  92 shore A, white — **WS**
  98 shore A, red — **RS**
- Socket cap screws DIN 912
  Steel, blackened finish
- Temperature range from: -4 °F up to +140 °F (-20 °C up to +60 °C)
- *Keyways WN / DIN 6885 → page XYZ / QVX*
- *ISO Fundamental Tolerances → page QVX*
- *Elastomer Characteristics → page QVX*
- RoHS compliant

Accessory

- Coupling spiders GN 2240.1 → *page QVX*

Information

Elastomer jaw couplings GN 2240 can transmit very high torques while compensating for shaft misalignments and runout tolerances. They are preferred in applications where the focus lies on pure torque and power transmission.

The choice of three coupling spiders with different hardness values allows the properties of the coupling to be optimally matched to the specific requirements. The clamping hubs and simple plug-in installation make jaw couplings very easy to assemble.

With the bore code K, the keyway is always integrated into both bores d_2 and d_3.

see also...

- *Elastomer Jaw Couplings GN 2241 (with Set Screw) → page QVX*
- *Oldham Couplings GN 2242 (with Clamping Hub) → page QVX*
- *Installation Information on Couplings → page XYZ*
- *Technical Information on Couplings → page XYZ*

How to order

GN 2240-14-B3/16-3/16-AL-RS

1	Outside diameter d_1
2	Bore code
3	Bore d_2-d_3
4	Material
5	Hardness

Jaw couplings with inch-inch bore

Dimensions in: inches - *millimeters*

d_1	d_2 - d_3 +0.001 Bore (in-in) Recommended shaft tolerance –0.001									
0.55 *14*	3/16-3/16	3/16-1/4	1/4-1/4	-	-	-	-	-	-	-
0.79 *20*	3/16-3/16	3/16-1/4	3/16-5/16	3/16-3/8	1/4-1/4	1/4-5/16	1/4-3/8	5/16-5/16	5/16-3/8	3/8-3/8
1.18 *30*	5/16-5/16	5/16-3/8	5/16-1/2	5/16-5/8	3/8-3/8	3/8-1/2	3/8-5/8	1/2-1/2	1/2-5/8	5/8-5/8
1.57 *40*	3/8-3/8	3/8-1/2	3/8-5/8	3/8-3/4	1/2-1/2	1/2-5/8	1/2-3/4	5/8-5/8	5/8-3/4	3/4-3/4
2.17 *55*	1/2-1/2	1/2-5/8	1/2-3/4	1/2-7/8	5/8-5/8	5/8-3/4	5/8-7/8	3/4-3/4	3/4-7/8	7/8-7/8

d_1	d_4 Thread	l_1	l_2 Recommended shaft insertion depth	l_3	l_4	s Recommended installation spacing
0.55 *14*	M 2 / M 1.6*	0.87 *22*	0.28 *7*	0.14 *3.5*	0.16 / 0.20* *4 / 5*	0.04 *1*
0.79 *20*	M 2.5 / M 2**	1.18 *30*	0.39 *10*	0.20 *5*	0.26 / 0.30** *6.5 / 7.5*	0.04 *1*
1.18 *30*	M 4 / M 3***	1.38 *35*	0.43 *11*	0.22 *5.5*	0.39 / 0.43*** *10 / 11*	0.06 *1.5*
1.57 *40*	M 5	2.60 *66*	0.98 *25*	0.33 *8.5*	0.55 *14*	0.08 *2*
2.17 *55*	M 6	3.07 *78*	1.18 *30*	0.41 *10.5*	0.79 *20*	0.08 *2*

* for bore d_2 / d_3 = 1/4 ** for bore d_2 / d_3 = 3/8 *** for bore d_2 / d_3 ≥ 1/2

Jaw couplings with metric-metric bore

Dimensions in: millimeters - *inches*

d_1	d_2 - d_3 H8 Bore (mm-mm) Recommended shaft tolerance h7									
14 *0.55*	3-3	3-4	3-5	3-6	4-4	4-5	4-6	5-5	5-6	6-6
20 *0.79*	5-5	5-6	5-8	6-6	6-8	8-8	-	-	-	-
30 *1.18*	8-8	8-10	8-12	8-14	10-10	10-12	10-14	12-12	12-14	14-14
40 *1.57*	12-12	12-14	12-15	12-16	14-14	14-15	14-16	15-15	15-16	16-16
55 *2.17*	18-18	18-19	18-20	18-25	19-19	19-20	19-25	20-20	20-25	25-25

d_1	d_4 Thread	l_1	l_2 Recommended shaft insertion depth	l_3	l_4	s Recommended installation spacing
14 *0.55*	M 2 / M 1.6*	22 *0.87*	7 *0.28*	3.5 *0.14*	4 / 5* *0.16 / 0.20*	1 *0.04*
20 *0.79*	M 2.5	30 *1.18*	10 *0.39*	5 *0.20*	6.5 *0.26*	1 *0.04*
30 *1.18*	M 4 / M 3**	35 *1.38*	11 *0.43*	5.5 *0.22*	10 / 11** *0.39 / 0.43*	1.5 *0.06*
40 *1.57*	M 5	66 *2.60*	25 *0.98*	8.5 *0.33*	14 *0.55*	2 *0.08*
55 *2.17*	M 6	78 *3.07*	30 *1.18*	10.5 *0.41*	20 *0.79*	2 *0.08*

* for bore d_2 / d_3 = 6 ** for bore d_2 / d_3 = 14

Jaw couplings with metric-inch bore

Dimensions in: millimeters - *inches*

d_1	d_2 - d_3 H8 Bore (mm-in) Recommended shaft tolerance h7															
14 *0.55*	3-3/16	3-1/4	4-3/16	4-1/4	5-3/16	5-1/4	6-3/16	6-1/4	-	-	-	-	-	-	-	-
20 *0.79*	5-3/16	5-1/4	5-5/16	5-3/8	6-3/16	6-1/4	6-5/16	6-3/8	8-3/16	8-1/4	8-5/16	8-3/8	-	-	-	-
30 *1.18*	8-5/16	8-3/8	8-1/2	8-5/8	10-5/16	10-3/8	10-1/2	10-5/8	12-5/16	12-3/8	12-1/2	12-5/8	14-5/16	14-3/8	14-1/2	14-5/8
40 *1.57*	12-3/8	12-1/2	12-5/8	12-3/4	14-3/8	14-1/2	14-5/8	14-3/4	15-3/8	15-1/2	15-5/8	15-3/4	16-3/8	16-1/2	16-5/8	16-3/4
55 *2.17*	18-1/2	18-5/8	18-3/4	18-7/8	19-1/2	19-5/8	19-3/4	19-7/8	20-1/2	20-5/8	20-3/4	20-7/8	25-1/2	25-5/8	25-3/4	25-7/8

d_1	d_4 Thread	l_1	l_2 Recommended shaft insertion depth	l_3	l_4	s Recommended installation spacing
14 *0.55*	M 2 / M 1.6*	22 *0.87*	7 *0.28*	3.5 *0.14*	4 / 5* *0.16 / 0.20*	1 *0.04*
20 *0.79*	M 2.5 / M 2**	30 *1.18*	10 *0.39*	5 *0.20*	6.5 / 7.5** *0.26 / 0.30*	1 *0.04*
30 *1.18*	M 4 / M 3***	35 *1.38*	11 *0.43*	5.5 *0.22*	10 / 11*** *0.39 / 0.43*	1.5 *0.06*
40 *1.57*	M 5	66 *2.60*	25 *0.98*	8.5 *0.33*	14 *0.55*	2 *0.08*
55 *2.17*	M 6	78 *3.07*	30 *1.18*	10.5 *0.41*	20 *0.79*	2 *0.08*

* for bore d_2 = 6 ** for bore d_3 = 3/8 *** for bore d_2 = 14
* for bore d_3 = 1/4 *** for bore d_3 = 1/2
*** for bore d_3 = 5/8

Dimensions in: millimeters - *inches*

d_1	Coupling spider	Shore hardness coupling spider	Rated torque in Nm	Max. torque in Nm	Max. speed (min^{-1})	Moment of inertia in kgm^2	Static torsional stiffness in Nm/rad	Max. shaft misalignment Lateral	Axial	Angular in °
14 *0.55*	BS	80A	0.7	1.4	45,000	2.0×10^{-7}	8	0.15 *0.006*	0.6 *0.024*	1
	WS	92A	1.2	2.4	45,000	2.0×10^{-7}	14	0.1 *0.004*	0.6 *0.024*	1
	RS	98A	2	4	45,000	2.0×10^{-7}	22	0.1 *0.004*	0.6 *0.024*	1
20 *0.79*	BS	80A	1.8	3.6	31,000	1.1×10^{-6}	16	0.2 *0.008*	0.8 *0.031*	1
	WS	92A	3	6	31,000	1.1×10^{-6}	29	0.15 *0.006*	0.8 *0.031*	1
	RS	98A	5	10	31,000	1.1×10^{-6}	55	0.1 *0.004*	0.8 *0.031*	1
30 *1.18*	BS	80A	4	8	21,000	6.2×10^{-6}	46	0.2 *0.008*	1 *0.039*	1
	WS	92A	7.5	15	21,000	6.2×10^{-6}	73	0.15 *0.006*	1 *0.039*	1
	RS	98A	12.5	25	21,000	6.2×10^{-6}	130	0.1 *0.004*	1 *0.039*	1
40 *1.57*	BS	80A	4.9	9.8	15,000	3.7×10^{-5}	380	0.15 *0.006*	1.2 *0.047*	1
	WS	92A	10	20	15,000	3.7×10^{-5}	570	0.1 *0.004*	1.2 *0.047*	1
	RS	98A	17	34	15,000	3.7×10^{-5}	1200	0.1 *0.004*	1.2 *0.047*	1
55 *2.17*	BS	80A	17	34	11,000	1.6×10^{-4}	1400	0.2 *0.008*	1.4 *0.055*	1
	WS	92A	35	70	11,000	1.6×10^{-4}	1600	0.15 *0.006*	1.4 *0.055*	1
	RS	98A	60	120	11,000	1.6×10^{-4}	2600	0.1 *0.004*	1.4 *0.055*	1