



# Drive Couplings

- Flexible Double Loop
- Flexible Jaw (Spider)

General purpose couplings for light power drives.



# Flex-G

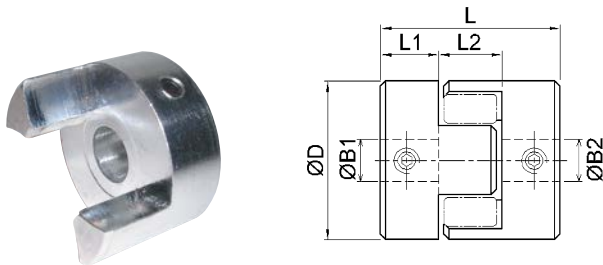
## Flexible Jaw Coupling

Huco Flexible Jaw Couplings utilize the flexibility and resilience of a polyurethane element between aluminium hubs. This combination allows high torque to be transmitted with little or no backlash, even where there is significant angular and/or parallel misalignment.

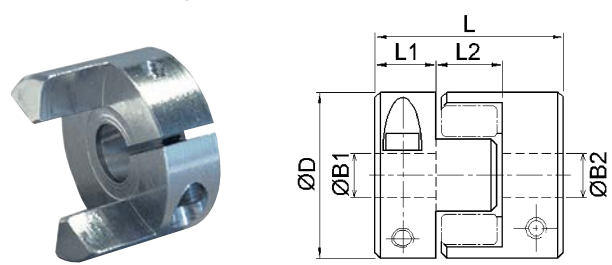
- Zero / Low backlash
- Rated up to 17Nm Torque
- Choice of 3 polyurethane elements



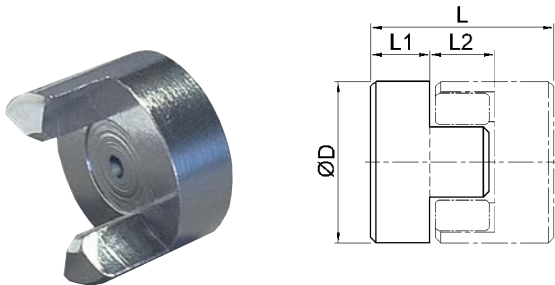
## Set Screw Hubs



## Thro' Clamp Hubs

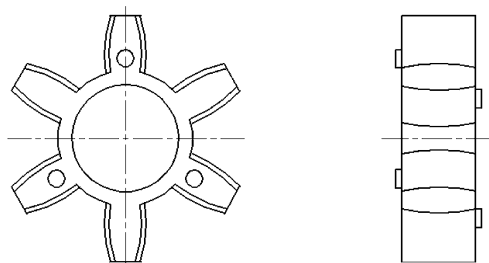


## Pilot Hubs



User-adaptable for special needs e.g. fitting within tubes. Blank hubs are supplied centered with no provision for fastening. External dimensions identical with blind hubs. Except size 40 which has 6.35mm pilot hole.

## Elements



Polyurethane elements are available with three hardness levels; hard, standard and soft which exhibit different operating characteristics. Other features of polyurethane are:

- Resistance to oils, grease and many solvents
- Good atmospheric and chemical resistance
- Excellent shock and vibration damping

## Flexible Jaw Coupling

### DIMENSIONS & ORDER CODES

Coupling Size	Set Screw Style	Clamping Style	Pilot Hub	ØD in. (mm)	L in. (mm)	L1 in. (mm) ①	L2 in. (mm)	ØB1 max in. (mm) ⑥	Fasteners			Moment of inertia kgm <sup>2</sup> x 10 <sup>-8</sup> ③	Mass kg x 10 <sup>-3</sup> ③	Soft (Blue)	Med (White)	Hard (Red)
									Screw	Torque lb.-in. (Nm)	Wrench in. (mm)					
HUB REF				ELEMENT REF												
14	802.14	-	-	0.55 (14.0)	0.87 (22.0)	0.28 (7.0)	0.31 (8.0)	0.25 (6.35)	M3	4.8 (0.9)	0.5 (1.5)	18.4	7.0	804.14	805.14	806.14
	-	803.14	-						M2.5	21.5 (1.3)	0.1 (2.5)					
	-	-	800.14						-	-	-					
20	802.20	-	-	0.79 (20.0)	1.18 (30.0)	0.39 (10.0)	0.39 (10.0)	0.35 (9.0)	M3	4.8 (0.9)	0.5 (1.5)	106.0	17.0	804.20	805.20	806.20
	-	803.20	-						M3	21.5 (2.4)	0.1 (2.5)					
	-	-	800.20						-	-	-					
30	802.30	-	-	1.18 (30.0)	1.38 (35.0)	0.43 (11.0)	0.51 (13.0)	0.55 (14.0)	M4	20 (2.2)	0.08 (2.0)	606.0	51.0	804.30	805.30	806.30
	-	803.30	-						M3	21.5 (2.4)	0.1 (2.5)					
	-	-	800.30						-	-	-					
40	802.40	-	-	1.57 (40.0)	2.60 (66.0)	0.98 (25.0)	0.63 (16.0)	0.63 (16.0)	M5	40 (4.6)	0.1 (2.5)	4230.0	108.0	804.40	805.40	806.40
	-	803.40	-						M4	50 (5.6)	0.12 (3.0)					
	-	-	800.40						-	-	-					

### PERFORMANCE AT 68°F (20°C)

Coupling Size	Spider Rigidity Duro ⑦	Misalignment		Speed R.P.M max	Torsional ⑤		Backlash Free Torque lb.-in. (Nm)	Torque Nominal lb.-in. (Nm) ④	Torque Max lb.-in. (Nm)
		Angular deg	Radial in. (mm)		Rate deg/Nm	Stiffness Nm/rad			
14	80 Blue	2	.003 (0.10)	40000	6.7	8.5	1.95 (0.22)	5.93 (0.67)	11.9 (1.34)
	92 White				3.9	14.7		9.91 (1.12)	19.8 (2.24)
	98 Red				2.29	25.0		16.8 (1.90)	33.6 (3.80)
20	80 Blue	2	.006 (0.15)	28000	3.37	17	3.98 (0.45)	15.9 (1.80)	31.9 (3.60)
	92 White				2.05	28		25.9 (2.93)	53.1 (6.00)
	98 Red				1.22	47		42.9 (4.85)	85.9 (9.70)
30	80 Blue	2	.008 (0.20)	19000	1.24	71	8.85 (1.00)	35.0 (3.95)	69.9 (7.90)
	92 White				0.40	143		64.9 (7.33)	129.2 (14.60)
	98 Red				0.25	228		109.8 (12.40)	219.5 (24.80)
40	80 Blue	2	.015 (0.38)	14000	0.34	170	21.2 (2.40)	42.9 (4.85)	85.9 (9.70)
	92 White				0.17	344		86.7 (9.80)	173.5 (19.60)
	98 Red				0.10	573		147.8 (16.70)	295.6 (33.40)

- ① Maximum permissible hub penetration
- ② Maximum recommended tightening torque
- ③ Values apply to complete couplings with max. bores
- ④ Nominal Torque. Select a size where Nominal Torque exceeds application torque x service factor (**see page 4**)
- ⑤ Values apply at 50% nominal torque, measured shaft to shaft with largest standard bores
- ⑥ Hubs can be provided with keyways or 'D' bores
- ⑦ Spider Durometer is shore 'A' hardness

### STANDARD BORES

Sizes indicated in parenthesis are metric (mm).

ØB1, ØB2 +0.0012/ -0 (+0.03mm/-0mm)																
Coupling Size	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	(8)	3/8"	(10)	(12)	1/2"	(14)	(15)	5/8"	(16)
14	●	●	●	●	●	●	●									
20			●	●	●	●	●									
30						●	●	●	●	●	●	●	●			
40								●	●	●	●	●	●	●	●	●
Bore ref.	14	16	18	19	20	22	24	28	31	32	35	36	38	40	41	42

### Materials & Finishes

**Hub sizes 14 - 30:** Al. Alloy 2024  
**Hub size 40:** Cast Aluminium LM9  
**Membranes:** Polyurethane  
**Fastener:** Alloy steel, black oiled

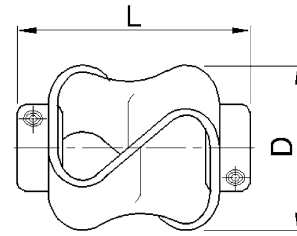
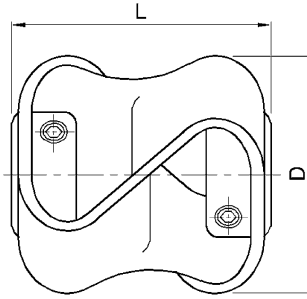
### Temperature Range

-40°F to +176°F (-40°C to +80°C)  
 For short durations up to 212°F (100°C)

Note: Larger sizes available. Please ask for details.

# Flex-P

## Double Loop Flexible Coupling



### DIMENSIONS & ORDER CODES

Size	Steel zinc plated hubs	Stainless steel hubs	Dimensions					Fasteners		
	Order Code		Max Diameter in. (mm)	Length L in. (+/- 1.0 mm)	Bore length in. (mm)	Max Bores	Mass kg x 10-3	Size	Torque lb.-in. (Nm)	A/F in. (mm)
10	047.10	-	1.06 (27)	1.06 (27)	0.31 (7.9)	9.53	25	M3	8.3 (0.9)	0.17 (1.5)
	-	049.10							2.8 (0.3)	
20	047.20	-	1.89 (48)	1.89 (48)	0.50 (12.7)	12.7	92	M4	19 (2.2)	0.23 (2.0)
	-	049.20							17 (2.0)	
30	047.30	-	2.13 (54)	2.17 (55)	0.63 (16.0)	16.0	124	M5	40 (4.6)	0.28 (2.5)
	-	049.30							18 (2.1)	
40	047.40	-	2.20 (56)	2.20 (56)	0.63 (16.0)	16.0	136	M6	67 (7.6)	0.34 (3.0)
	-	049.40							32 (3.7)	

### PERFORMANCE

Size	Max Torque 1 lb.-in. (Nm)	Max Torque 2 lb.-in. (Nm)	max misalignment/displacement		
			Angular deg	Radial in. (mm)	Axial in. (+/- mm)
10	4.43 (0.5)	7.08 (0.8)	10	0.10 (2.6)	0.18 (4.5)
20	15.9 (1.8)	26.6 (3)	15	0.13 (3.2)	0.30 (7.5)
30	44.3 (5)	70.8 (8)	15	0.13 (3.2)	0.33 (8.5)
40	88.5 (10)	159.3 (18)	15	0.13 (3.2)	0.43 (11)

Torque 1 = torque at maximum displacement

Torque 2 = torque at 1 deg. angular, 2mm axial and 0.5mm radial displacement

### Materials & Finishes

- Hubs:** Steel 230M07 pb Zn plated + clear passivate or  
Stainless Steel 303 S31 natural finish
- Flexing Element:** Hytrel
- Fastener:** Steel Hub: Alloy steel, black oiled  
Stainless Steel Hub: stainless steel

### Temperature Range

-40°F to +212°F (-40°C to +100°C)

### Maximum Rotational Speed

3000 rev/min

### STANDARD BORES\*

Sizes indicated in parenthesis are metric (mm).

Size	ØB1, ØB2 +0.002/ -0 (+0.05mm/-0mm)																
	(3)	1/8"	(4)	3/16"	(5)	(6)	1/4"	5/16"	(8)	3/8"	(10)	(12)	1/2"	(14)	(15)	5/8"	(16)
10	●	●	●	●	●	●	●	●	●	●							
20						●	●	●	●	●	●	S	S				
30										●	●	●	●	S	S	S	S
40										●	●	●	●	S	S	S	S
<b>Bore Ref</b>	14	16	18	19	20	22	24	27	28	31	32	35	36	38	40	41	42

\* Couplings with dissimilar bores are non-standard

S = Plain bore only, keyway no permissible size 10