



# Drive Couplings

- Flexible Double Loop
- Flexible Jaw (Spider)

General purpose couplings for light power drives.



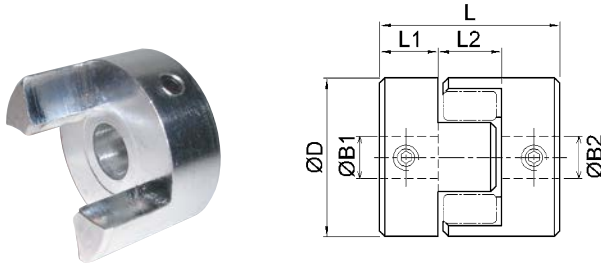
## Flexible Jaw Coupling

Huco Flexible Jaw Couplings utilise 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.

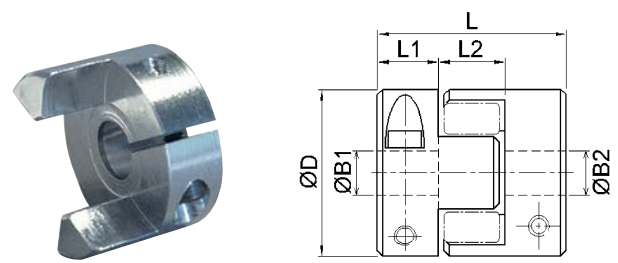
- Zero / Low backlash
- Rated up to 17Nm Torque
- Choice of 3 polyurethane elements



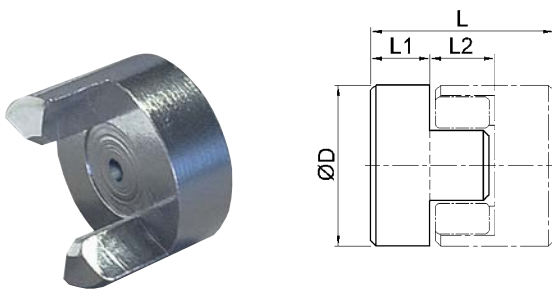
## Set Screw Hubs



## Thro' Clamp Hubs

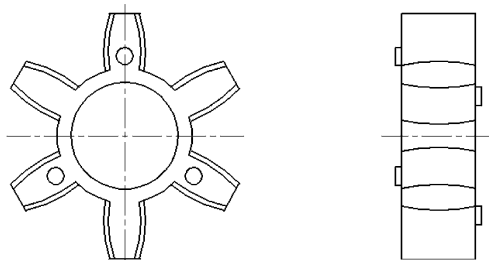


## Pilot Hubs



User-adaptable for special needs e.g. fitting within tubes. Blank hubs are supplied centred 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 mm	L mm	L1 mm	L2 mm	ØB1 max mm	Fasteners			Moment of inertia kgm <sup>2</sup> x 10 <sup>-8</sup>	Mass kg x 10 <sup>-3</sup>	Soft (Blue)	Med (White)	Hard (Red)
									Screw	Torque Nm	Wrench mm			ELEMENT REF		
	HUB REF			①	⑥											
14	802.14	-	-	14.0	22.0	7.0	8.0	6.35	M3	0.9	1.5	18.4	7.0	804.14	805.14	806.14
	-	803.14	-						M2.5	1.3	2.5					
	-	-	800.14						-	-	-					
20	802.20	-	-	20.0	30.0	10.0	10.0	9.0	M3	0.9	1.5	106.0	17.0	804.20	805.20	806.20
	-	803.20	-						M3	2.4	2.5					
	-	-	800.20						-	-	-					
30	802.30	-	-	30.0	35.0	11.0	13.0	14.0	M4	2.2	2.0	606.0	51.0	804.30	805.30	806.30
	-	803.30	-						M3	2.4	2.5					
	-	-	800.30						-	-	-					
40	802.40	-	-	40.0	66.0	25.0	16.0	16.0	M5	4.6	2.5	4230.0	108.0	804.40	805.40	806.40
	-	803.40	-						M4	5.6	3.0					
	-	-	800.40						-	-	-					

### PERFORMANCE (AT 20°C)

Coupling Size	Spider Rigidity Duro ⑦	Misalignment		Speed R.P.M max	Torsional ⑤		Backlash Free Torque Nm	Torque Nominal Nm ④	Torque Max Nm
		Angular deg	Radial mm		Rate deg/Nm	Stiffness Nm/rad			
14	80 Blue	2	0.10	40000	6.7	8.5	0.22	0.67	1.34
	92 White				3.9	14.7		1.12	2.24
	98 Red				2.29	25.0		1.90	3.80
20	80 Blue	2	0.15	28000	3.37	17	0.45	1.80	3.60
	92 White				2.05	28		2.93	6.00
	98 Red				1.22	47		4.85	9.70
30	80 Blue	2	0.20	19000	1.24	71	1.00	3.95	7.90
	92 White				0.40	143		7.33	14.60
	98 Red				0.25	228		12.4	24.80
40	80 Blue	2	0.38	14000	0.34	170	2.40	4.85	9.70
	92 White				0.17	344		9.80	19.60
	98 Red				0.10	573		16.70	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

ØB1, ØB2 +0.03mm/-0mm (+0.0012/ -0)																
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

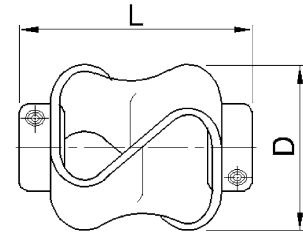
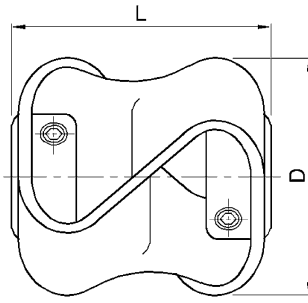
**Hub sizes 14 - 30:** Al. Alloy 2024  
**Hub size 40:** Cast Aluminium LM9  
**Membranes:** Polyurethane  
**Fastener:** Alloy steel, black oiled

### Temperature Range

-40°C to +80°C  
 For short durations up to 100°C

Note: Larger sizes available. Please ask for details.

## Double Loop Flexible Coupling



### DIMENSIONS & ORDER CODES

Size	Steel screws	Stainless steel screws	Dimensions					Fasteners		
	Order Code		Max Diameter mm	Length L +/- 1.0 mm	Bore length mm	Max Bores mm	Mass kg x 10-3	Size	Torque Nm	A/F mm
10	047.10	-	27	27	7.9	9.53	25	M3	0.9	1.5
	-	049.10							0.3	
20	047.20	-	48	48	12.7	12.7	92	M4	2.2	2.0
	-	049.20							2.0	
30	047.30	-	54	55	16.0	16.0	124	M5	4.6	2.5
	-	049.30							2.1	
40	047.40	-	56	56	16.0	16.0	136	M6	7.6	3.0
	-	049.40							3.7	

### PERFORMANCE

Size	Max Torque 1 Nm	Max Torque 2 Nm	max misalignment/displacement		
			Angular deg	Radial mm	Axial +/- mm
10	0.5	0.8	10	2.6	4.5
20	1.8	3	15	3.2	7.5
30	5	8	15	3.2	8.5
40	10	18	15	3.2	11

Torque 1 = torque at maximum displacement

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

### Materials & Finishes

**Hubs:** Stainless Steel 304 [1.4301] natural finish  
**Flexing Element:** Hytel  
**Fastener:** 047 Type: Alloy steel, black oiled  
 049 Type: Stainless steel

### Temperature Range

-40°C to +100°C

### Maximum Rotational Speed

3000 rev/min

### STANDARD BORES\*

Size	ØB1, ØB2 +0.05mm/-0mm (+0.002/-0)																
	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 not permissible size 10