Sliding Disc type	Universal / Lateral type	Double Loop type	Jaw Coupling	Universal Joints & Teleshafts	Friction Clutches	Bevel Gearboxes
Oldham Blind bored  Thru' bored  Thru' bored  Material Options: Aluminium Stainless Steel	**Uni-Lat**  	**Flex-P**   	**Jaw coupling** 	**Huco-Pol** Single joints  Double joints  Teleshafts 	**Vari-Tork, Polyclutch** Basic clutch  Basic clutch + Oldham coupling  Polyclutch 	**L-Box**  **T-Box** 
General description						
General purpose, robust, easy to use 3-part couplings with replaceable wear elements. Generous radial compensation and pull-apart / re-engage facility for blind assemblies.	Unique, general purpose light duty couplings with generous angular and radial misalignment compensation. Resist axial motion, can anchor unrestricted shafts and perform light push/pull duties.	Exceptional flexibility in all three directions, radial, angular and axial	High torque capacity and high speed are available from this naturally balanced coupling	Light duty plastic universal joints and extensible drive shafts (teleshafts). Low mass, corrosion resistant, ideal where conventional steel joints would be under-utilised.	Small, user-adjustable torque limiters for concentric or in-line mounting. Operate by friction using interleaved clutch plates.	Small 90° drives encased in molded housings providing electrical isolation between shafts and mounting surface. The L-Box is rated for intermittent use, the T box for continuous. 1:1 & 2:1 ratios are available with the T-Box.
Where to use						
Stepper drives for most applications including positioning slides, pumps, actuators, etc.	Encoder, resolver, tacho, potentiometer drives. Small positioning slides, dosing pumps, & light drives generally.	Light power drives, pumps and small generators	Light power drives where misalignment is small	Intermittent applications in business machines, instrumentation, lab equipment, analytical apparatus, etc., where steel joints would be under-utilised.	Friction clutches interrupt rotation when the load being transmitted reaches a pre-determined threshold. Used in all kinds of small drives to help protect personnel and equipment.	L-box offers a compact means to route drives thru' 90°. T-box offers 2 & 3 shaft configurations for multiple power offtake.
Speeds						
Up to 3000 rpm.	Up to 3000 rpm.	Up to 3000 rpm.	Up to 40,000 rpm.	Up to 1000 rpm	Up to 1000 rpm slipping speed	Up to 1500 rpm for T-box
Peak torque largest size						
44 Nm	12 Nm	18 Nm	133 Nm	10.7 Nm	60 Nm	0.68 Nm
Standard bores						
2 to 30	3 to 22	3 to 16	3 to 16	3 to 20	6 to 32	4 & 5 (shafts)
Temperature range						
–20 to +60°C	–20 to +60°C	–40 to +100°C	–40 to +80°C	–20 to +60°C	–10 to +80°C (when operating)	–20 to +60°C
Electrically isolating						
Yes	Yes	Yes	Yes	Yes	No	*See General Description above*
Connection						
Clamp or Set Screw	Clamp or Set Screw	Set Screw	Clamp or Set Screw	Set Screw, Bonding, or Cross-Pinning	Clamp or Set Screw	N/A
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plastic universal joints and teleshafts

- **Backlash-free up to 10^8 turns**
- **Low mass**
- **Low inertia**
- **Corrosion resistant**
- **Electrically isolating**
- **No maintenance**

Huco-Pol is a range of light duty, backlash-free universal joints and teleshafts manufactured of acetal and non-ferrous metals.

They are suitable for intermittent applications where low mass, corrosion resistance and electrical isolation are desirable.

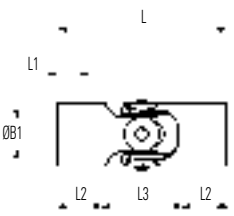
Huco-Pol joints and teleshafts have only a fraction of the torque capability of steel joints and are not intended to substitute for these in the normal way.

Huco-Pols are used in business machines, food processing plant, laboratory equipment and electro-medical apparatus among others.

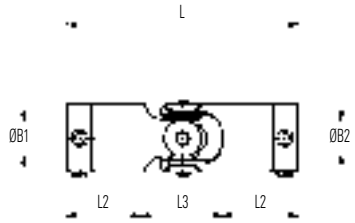
Alternative polymers are available for high temperature operation.







Type 101, 105, 601



Type 103, 603

SINGLE JOINTS - DIMENSIONS & ORDER CODES

Size	① Brass Cross-piece	② Plastic Cross-piece	Dimensions								Fasteners		
	Hub Ref		OD	L	L1	L2	L3	B1, B2 Max	Moment of inertia kgm2 x 10-8	Mass kg x 10-3	Size	Torque (Nm)	A/F (mm)
06	101.06	-	7.1	19.1	3.3	5.3	8.6	4.76	0.3	0.7	-	-	-
	-	601.06							0.2	0.4			
	103.06	-		27.2	-	9.3		3.18	1.1	3.1	M3	0.94	1.5
	-	603.06							1.0	2.8			
09	101.09	-	11.1	28.5	4.3	8.6	11.4	6.35	4.0	2.7	-	-	-
	-	601.09							4.0	1.5			
	103.09	-		37.6	-	13.1		5.0	13.5	9.3	M3	0.94	1.5
	-	603.09							12.6	8.1			
13	101.13	-	14.3	35.6	5.6	10.4	14.8	8.0	14.3	5.7	-	-	-
	-	601.13							11.9	3.6			
	103.13	-		46.2	-	15.7		6.35	44.6	17.7	M3	0.94	1.5
	-	603.13							38.0	15.6			
16	101.16	-	17.5	53.3	8.9	15.2	23.0	11.0	32.3	12.2	-	-	-
	-	601.16							18.3	5.0			
	103.16	-		67.6	-	22.3		10.0	136	35.0	M4	2.27	2.0
	-	603.16							122	31.4			
20	105.20	-	23.0	62.0	8.0	17.0	28.0	12.7	147	25.7	-	-	-
25	105.25	-	28.5	74.0	10.0	20.0	34.0	14	463	56	-	-	-
32	105.32	-	36.5	86.0	10.0	21.0	44.0	20	1339	103	-	-	-

SINGLE JOINTS - PERFORMANCE (at 20°C)

Size	Brass Cross-piece 101, 103, 105				Plastic Cross-piece 601, 603				Max angular compensation @ 1000 rev/min	Max axial loading N
	Peak Torque Nm	Static Break Torque Nm	Torsional Rate deg/Nm	Torsional Stiffness Nm/Rad	Peak Torque Nm	Static Break Torque Nm	Torsional Rate deg/Nm	Torsional Stiffness Nm/Rad		
06	0.11	0.45	19.7	2.9	0.09	0.3	22	2.6	45	18
09	0.36	1.9	6.8	8.4	0.6	1.5	6.8	8.4	45	38
13	0.85	4.5	3.2	18	0.7	2.5	3.6	16.0	45	67
16	1.6	6.8	1.7	34	1.0	5.0	2.8	20.0	45	98
20	2.8	17	0.94	61	-	-	-	-	40	138
25	5.6	34	0.51	112	-	-	-	-	40	222
32	10.7	72	0.25	229	-	-	-	-	40	334

FOR STANDARD BORES SEE FACING PAGE

Materials & Finishes

Bodies: Acetal

Cross-pieces: Brass BS 2874 CZ121,CZ122 (101, 103, 109, 111)
Nylon Glass filled (601, 603, 609, 611)

Bore Inserts: Brass BS 2874 CZ121 (103, 111, 603, 611)
Al. Alloy 2014A T6 (105)

Fasteners: Alloy steel, black oiled

Operating Temperature Range

- 20°C to +60°C

Maximum Rotational Speed

1000 rev/min