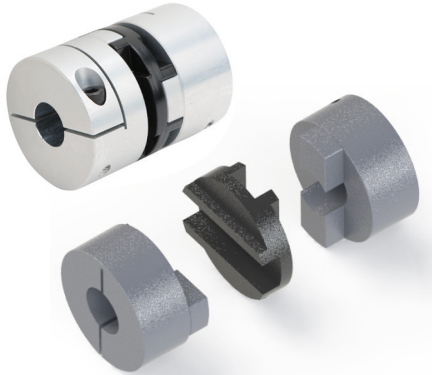


# Suremotion Drive Couplings

## Oldham Drive Couplings



### Features

- Large radial misalignment capability
- Hubs made of aluminum 2011 T8
- Center discs made of Delrin™
- Mechanical 'fuse' prevents damage to other components in over-torque conditions
- Zero backlash
- Corrosion-resistant
- Non-magnetic
- Operating temperature range: -20 to 60 °C (-4 to 140 °F)

- Electrical isolation
- Absorbs shock and isolates vibration
- Dampens resonance
- Speeds up to 3,000rpm
- Low inertia

### Applications

- General-purpose applications
- Medium-speed applications

Oldham Aluminum Clamp-Style Drive Coupling Hubs*											
Part Number*	Price	Size	Bore	Max rpm	Torque (lb-in [N·m])		Max Offset			Moment of Inertia (lb-in·s <sup>2</sup> x10 <sup>-5</sup> )	Weight (lb)
					Peak	Static Break	Radial (in [mm])	Axial (in [mm])	Angular (°)		
DC-DAC19-05M	\$14.25	19	5mm	3,000	15 [1.7]	71 [8.0]	0.016 [0.41]	0.004 [0.1]	1.5	0.518	0.032
DC-DAC19-04	\$14.25		1/4 in								0.032
DC-DAC19-08M	\$14.25		8mm								0.033
DC-DAC25-04	\$19.75	25	1/4 in	3,000	35 [4.0]	115 [13.0]	0.016 [0.41]	0.004 [0.1]	2.23	0.055	
DC-DAC25-08M	\$19.75		8mm							0.054	
DC-DAC25-06	\$19.75		3/8 in							0.050	
DC-DAC25-10M	\$19.75		10mm							0.050	
DC-DAC25-12M	\$19.75		12mm							0.051	
DC-DAC33-06	\$29.00	33	3/8 in	3,000	80 [9.0]	465 [52.5]	0.016 [0.41]	0.006 [0.15]	10.0	0.097	
DC-DAC33-10M	\$29.00		10mm							0.095	
DC-DAC33-12M	\$29.00		12mm							0.095	
DC-DAC33-08	\$29.00		1/2 in							0.093	
DC-DAC33-14M	\$29.00		14mm							0.091	
DC-DAC33-10	\$29.00		5/8 in							0.088	
DC-DAC33-16M	\$29.00		16mm							0.087	
DC-DAC41-08	\$32.00	41	1/2 in	3,000	150 [16.9]	500 [56.5]	0.020 [0.51]	0.008 [0.2]	28.1	0.186	
DC-DAC41-14M	\$32.00		14mm							0.181	
DC-DAC41-10	\$32.00		5/8 in							0.177	
DC-DAC41-16M	\$32.00		16mm							0.172	
DC-DAC41-19M	\$32.00		19mm							0.168	
DC-DAC41-12	\$32.00		3/4 in							0.163	
DC-DAC50-08	\$66.00	50	1/2 in	3,000	265 [29.9]	840 [94.9]	0.020 [0.51]	0.008 [0.2]	66.7	0.260	
DC-DAC50-14M	\$66.00		14mm							0.255	
DC-DAC50-10	\$66.00		5/8 in							0.249	
DC-DAC50-16M	\$66.00		16mm							0.244	
DC-DAC50-19M	\$66.00		19mm							0.238	
DC-DAC50-12	\$66.00		3/4 in							0.233	
DC-DAC50-16	\$66.00		1 in							0.227	
DC-DAC57-10	\$72.00	57	5/8 in	3,000	390 [44.1]	1325 [149.7]	0.020 [0.51]	0.008 [0.2]	109.7	0.457	
DC-DAC57-16M	\$72.00		16mm							0.439	
DC-DAC57-19M	\$72.00		19mm							0.422	
DC-DAC57-12	\$72.00		3/4 in							0.404	
DC-DAC57-16	\$72.00		1 in							0.386	

\* A complete Oldham coupling assembly consists of two hubs and one torque disc, each of the same "size" and each purchased separately. The two hubs can be of different "bore" diameters, if needed for the application.

# Suremotion Drive Couplings

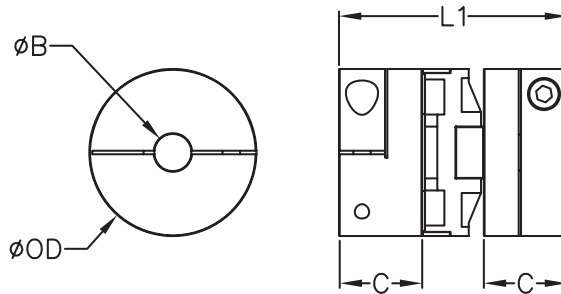
## Oldham Drive Couplings



Oldham Aluminum Clamp-Style Drive Coupling Torque Discs*			
Part Number*	Price	Size	Color
DC-DDS19	\$2.00	19	black
DC-DDS25	\$3.75	25	
DC-DDS33	\$7.25	33	
DC-DDS41	\$8.00	41	
DC-DDS50	\$17.50	50	
DC-DDS57	\$25.00	57	

\* A complete Oldham coupling assembly consists of two hubs and one torque disc, each of the same "size" and each purchased separately. The two hubs can be of different "bore" diameters, if needed for the application.

## Dimensions (in [mm])



Oldham Aluminum Drive Coupling Hub Bore Dimensions		
Hubs	Sizes	ØB
DC-DACxx-05M	19	5mm
DC-DACxx-04	19, 25	1/4 in
DC-DACxx-08M	19, 25	8mm
DC-DACxx-06	25, 33	3/8 in
DC-DACxx-10M	25, 33	10mm
DC-DACxx-12M	25, 33	12mm
DC-DACxx-08	33, 41, 50	1/2 in
DC-DACxx-14M	33, 41, 50	14mm
DC-DACxx-10	33, 41, 50, 57	5/8 in
DC-DACxx-16M	33, 41, 50, 57	16mm
DC-DACxx-12	41, 50, 57	3/4 in
DC-DACxx-19M	41, 50, 57	19mm
DC-DACxx-16	50, 57	1in

Oldham Aluminum Clamp-Style Drive Coupling Assembly Dimensions*					
Size	Components	Cap Screw	C	L1	ØOD
			(in [mm])		
19	(2) DC-DAC19-xxx + (1) DC-DDS19	#4-40	0.37 [9.4]	1.02 [25.9]	0.75 [19.1]
25	(2) DC-DAC25-xxx + (1) DC-DDS25	M3	0.46 [11.7]	1.28 [32.5]	1.00 [25.4]
33	(2) DC-DAC33-xxx + (1) DC-DDS33	M4	0.59 [15.0]	1.89 [48.0]	1.31 [33.3]
41	(2) DC-DAC41-xxx + (1) DC-DDS41	M4	0.70 [17.8]	2.00 [50.8]	1.63 [41.4]
50	(2) DC-DAC50-xxx + (1) DC-DDS50	M5	0.81 [20.6]	2.35 [59.7]	1.97 [50.0]
57	(2) DC-DAC57-xxx + (1) DC-DDS57	M6	1.12 [28.4]	3.07 [78.0]	2.25 [57.2]

\* Assembly dimensions are for any (2) hubs + (1) torque disc of the same "size" as assembled. Among components of the same "size," the only dimension that varies is the hub bore diameter (ØB), which is shown separately.  
See our website: [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

# Suremotion Drive Couplings

## Beam-Style Servo Stainless Steel Set-Screw Couplings



### Features

- Flexibility of bellows coupling plus torsional stiffness and strength of disc coupling
- Hubs made of 416 stainless steel
- Flex beams made of 420 stainless steel
- Zero backlash
- Corrosion-resistant
- Bore reducers available to fit a wide variety of bore combinations
- Very wide operating temperature range:
  - for 24/7 applications: -73 to 191 °C (-100 to 375 °F)
  - for intermittent applications (<8hr): -73 to 232 °C (-100 to 450 °F)
- Speeds up to 10,000rpm
- Torque up to 300 lb-in

### Applications

- High performance applications
- High-speed applications
- High-torque applications

**Beam-Style Servo Stainless Steel\* Set-Screw Drive Coupling Hubs**

Part Number	Price	Size	Bore**	Max rpm	Torsional Stiffness (lb-in/°)	Max Torque (lb-in [N·m])	Max Misalignment			Moment of Inertia (lb-in-s <sup>2</sup> x10 <sup>-5</sup> )	Weight (oz)
							Radial (in [mm])	Axial (in [mm])	Angular (°)		
DC-SBS19-0404	\$42.00	19	1/4 in	10,000	11	12 [1.4]	0.010 [0.25]	0.020 [0.51]	7	0.86	0.84
DC-SBS25-0808	\$53.00	25	1/2 in	7,500	27	24 [2.7]	0.015 [0.38]	0.025 [0.64]		3.75	1.60
DC-SBS32-1010	\$58.00	32	5/8 in		51	48 [5.4]		0.030 [0.76]		11.1	2.45
DC-SBS38-1212	\$65.00	38	3/4 in	5,000	89	75 [8.5]	0.020 [0.51]	0.040 [1.02]		28.2	4.94
DC-SBS44-1414	\$113.00	44	7/8 in		135	135 [15.3]		0.050 [1.27]		59.2	7.59
DC-SBS51-1616	\$132.00	51	1 in	3,750	205	180 [20.3]	0.025 [0.64]	0.060 [1.52]		115	11.26
DC-SBS63-2020	\$150.00	63	1-1/4 in		395	300 [33.9]		0.060 [1.52]		349	18.67

\* Hubs are 416 stainless; flex beams are 420 stainless.

\*\* Bore Reducers can be purchased separately from AutomationDirect and installed in DC-SBSxx-xxx hubs if different bore sizes are needed. (See page tPTR-33 for Bore Reducers.)

## Dimensions (in [mm])

**Beam-Style Servo Stainless Steel Drive Coupling Dimensions**

Size	Set Screw	L	L1	ØB1*	ØB2*	ØOD
		(in [mm])				
19	M3x0.5	0.75 [19.1]	0.240 [6.10]	0.250 [6.35]	0.75 [19.1]	0.75 [19.1]
25		1.00 [25.4]	0.345 [8.76]	0.500 [12.70]	1.00 [25.4]	1.00 [25.4]
32	M5x0.8	1.25 [31.6]	0.386 [9.80]	0.625 [15.88]	1.25 [31.6]	1.25 [31.6]
38		1.50 [38.1]	0.505 [12.83]	0.750 [19.05]	1.50 [38.1]	1.50 [38.1]
44		1.75 [44.5]	0.550 [13.97]	0.875 [22.23]	1.75 [44.5]	1.75 [44.5]
51		2.00 [50.8]	0.555 [14.10]	1.000 [25.40]	2.00 [50.8]	2.00 [50.8]
63	M6x1.0	2.50 [63.5]	0.615 [15.62]	1.250 [31.75]	2.50 [63.5]	2.50 [63.5]

\* Use bore reducers for additional bore sizes and bore combinations.

See our website: [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

