

## GENERAL

GAM **EDC Series** and **WDS Series** Distance Couplings are designed with an intermediate tube to span distances up to 6 meters. They can be used without additional intermediate bearings. The split-hub design gives a secure, frictional connection with easy operation. The design allows the coupling to be easily installed. Removal of the coupling can be done without moving the drive or output units (e.g. servo motor or gearboxes)

There are two types of GAM distance couplings:

- **EDC series** (elastomer type)
- **WDS series** (bellows-type)

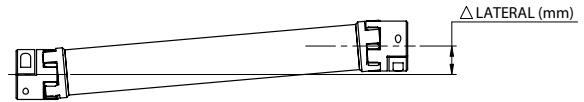


## ALIGNMENT

For best performance, misalignment of the distance coupling should be minimized

### Lateral Misalignment

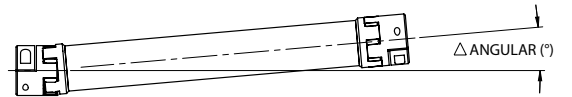
Lateral misalignment occurs when the axes of the couplings are parallel but not in line with each other. For best performance and life, lateral misalignment should not exceed the allowed maximum specified. Exceeding this value can result in a reduced life for coupling and bearings supporting the shafts. Use appropriate tools such as a laser alignment system to ensure lateral alignment.



*EDC and WDS Maximum Allowable Lateral Misalignment = 5 mm per meter of tubing*

### Angular Misalignment

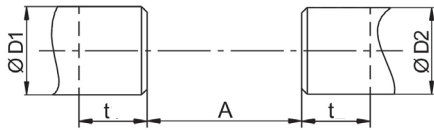
Angular misalignment occurs when the axes of the couplings are at an angle to each other. Angular misalignment should be avoided.



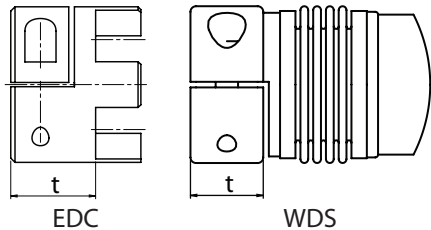
### Axial Misalignment

Axial misalignment occurs when the coupling is properly aligned but the shafts being connected are not properly spaced axially.

The axial distance between shafts, A, is calculated:



$A = L - 2t$   
 A = distance between shafts  $\pm 1$   
 L = overall length of coupling  
 t = plug-in depth (see chart at right)



### Coupling Plug-in Depth

Coupling	t ± 1 mm	Coupling	t ± 1 mm
EDC-25	25	WDS-15	18
EDC-35	30	WDS-50	26
EDC-80	35	WDS-100	26
EDC-110	45	WDS-200	28
		WDS-400	30
		WDS-800	45
		WDS-1600	64

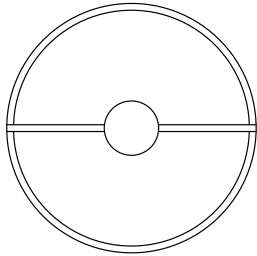
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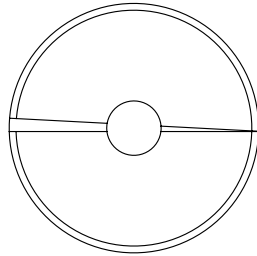
## Mounting the Coupling

**NOTE:** Before assembly, be sure the coupling bores are free of grease and debris

- One part of the split hub is connected to the coupling, the other is loose.
- When mounting the loose part of the split hub, tighten the screws evenly and according to the tightening torque listed for the coupling. The gap between the two parts of the split shub should be even.



GOOD



BAD

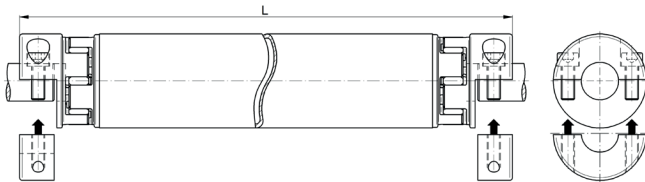
### Coupling Clamping Screw Tightening Torque

Coupling	Clamping Screws - Tightening Torque
EDC-25	2xM6 - 13 Nm
EDC-35	2xM6 - 13 Nm
EDC-80	2xM8 - 32 Nm
EDC-110	2xM8 - 32 Nm

Coupling	Clamping Screws - Tightening Torque
WDS-15	2xM5 - 8 Nm
WDS-50	2xM8 - 35 Nm
WDS-100	2xM10 - 65 Nm
WDS-200	2xM12 - 115 Nm
WDS-400	2xM14 - 180 Nm
WDS-800	4xM12 - 115 Nm
WDS-1600	4xM16 - 290 Nm

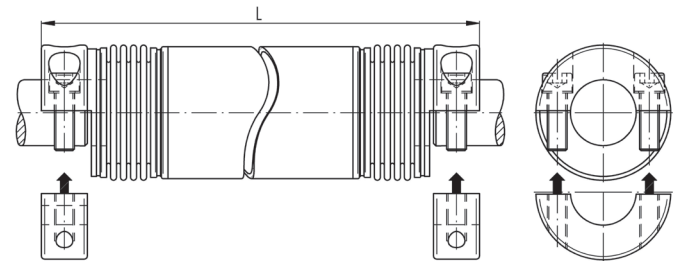
## EDC Series Elastomer Coupling

Operation temperature range: -30°C to +90°C (-22°F to 194°F)



## WDS Series Bellows Coupling

Operation temperature range: -40°C to +200°C (-40°F to 392°F)



GAM, a U.S. company, is your complete source for robotic and servo gear reducers, rack & pinion systems, servo couplings, linear mounting kits, and other precision mechanical drive solutions used in automation technology.

With one of the largest product offerings in the motion control industry as well as the engineering expertise and manufacturing capabilities to develop customized solutions, GAM can help with your application.

U.S. manufacturing, being flexible to meet the needs of customer requests, and great service are what set us apart from the rest.

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