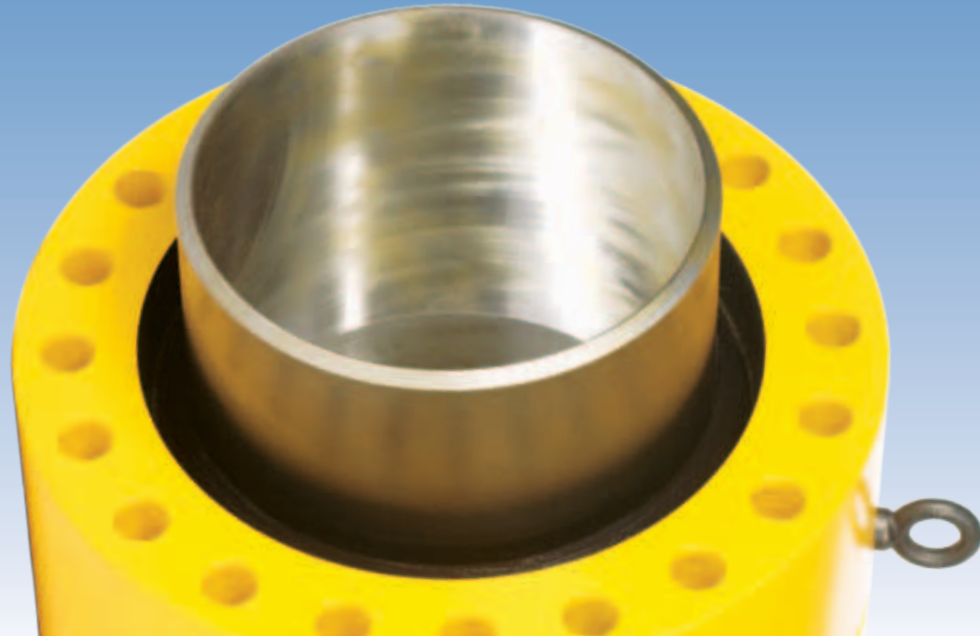


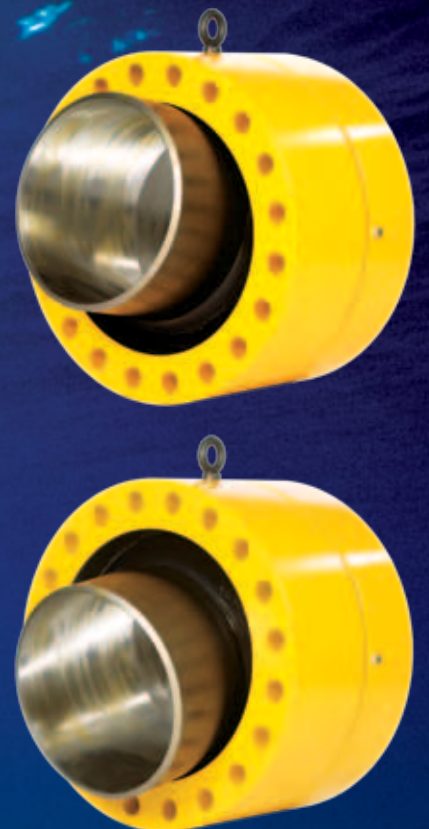
# FLANGEMATE™ MISALIGNMENT CONNECTOR



## FLANGEMATE™ (FMF)

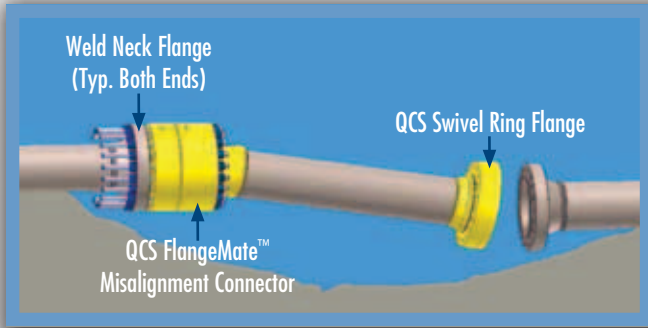
The Quality Connector Systems, LLC FlangeMate™ Misalignment Connector is a highly engineered ASME-compliant product which facilitates the connection of flanged tie-ins to underwater pipelines. The FlangeMate™ incorporates several design features which reduce both the time and cost to complete flanged subsea pipeline connections without sacrificing long term operational integrity.

QCS has installed hundreds of FlangeMate™ Misalignment Connectors in the 4" thru 42" size range, and currently stocks the connector in the 4" thru 24" size range. Inventory items are commonly shipped within twenty-four hours after receipt of order.



# FLANGEMATE™ MISALIGNMENT CONNECTOR

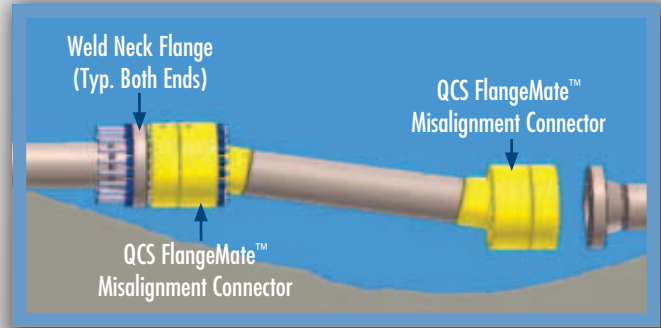
## TYPICAL SPOOL PIECE TIE-INS



### FlangeMate™ x Swivel Ring Spool

Provides bolt hole alignment and limited angular alignment.

## RECOMMENDED OPTION



### FlangeMate™ x FlangeMate™ Spool

Provides bolt hole alignment and maximum angular alignment.

## DESIGN FEATURES AND BENEFITS

- Angular adjustment of  $\pm 10^\circ$  ( $20^\circ$  included angle)
- Bolt hole rotation which aligns the bolt holes with those of the weld neck flange to facilitate rapid bolt insertion.
- Repeatable, integral metal-to-metal seal.
- Annulus test port and seal test feature.
- Enhanced wiper seal system to isolate the metal seal area from contaminants.
- Designed to accommodate high-capacity flange spreader loading.

