

HEAVY DUTY ROV CONNECTOR

PRODUCT GROUP

SUBSEA DISTRIBUTION



PRODUCT DESCRIPTION

Our Heavy Duty (HD) Connectors enable the quick, secure and permanent connection of a hydraulic or chemical control lines between subsea infrastructure. Integrating our hydraulic and chemical couplers in an adaptable locking system enables a field proven system that allows for a high degree of misalignment during mating. This makes installation both quicker, easier and improves the general reliability.

The inboard section fitted to the subsea infrastructure is the male coupler. The outboard (flying) section is the female that contains the sealing elements. This makes change out, maintenance and repair incredibly easy.

Our robust design is to accommodate rough handling and to ensure a system that reduces both the risk of connection failure and reduces installation time. We offer a full range of parking positions, test and flushing as well as pressure compensated caps and protective caps.



RANGE

Product Name	HD1	HD2	HD3	HD4
Connector Size	1"	2"	3"	4"
Max Working Pressure	10,000psi	10,000psi	10,000psi	10,000psi
Max. Water Depth	3000m	3000m	3000m	3000m
Number of Full Pressure Cycles	10,000	10,000	10,000	10,000
Mass (Male/ Female)	9 kg/ 14,7 kg	22 kg/ 32.7 kg	61.7 kg/ 93.1 kg	114 kg/ 170 kg
Weight in Air (Male/ Female)	88.3 N / 144 N (9 kgf/ 14.6 kgf)	216 N/ 321 N (22 kgf/ 32.7 kgf)	605 N/ 913 N (61.7 kgf/ 93.1 kgf)	1118 N/ 1668 N (114 kgf/ 170 kgf)
Weight in seawater (Male/ Female)	76.5 N/ 104 N (7.8 kgf/ 10.6 kgf)	188 N/ 244 N (19.2 kgf/ 24.9 kgf)	525 N / 689 N (53.6 kgf/ 70.3 kgf)	971 N/ 1449 N (99 kgf/ 147.7 kgf)

Design Codes and Specifications

For all HD Series: ISO 10423 (API 6A) // ISO 13628-4 (API 17D) // PSL 3G (API 6A, API 17D)



^{*} Mass of outboard (female) excludes hose interface that will be determined by customer.



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OPERATION INFORMATION

Product Name	HD1	HD2	HD3	HD4
Mating Torque	500 Nm	2,500 Nm	8,000 Nm	17,000 Nm
Damage Torque	Application dependant	3,000 Nm	10,000 Nm	Application Dependant
Number of Turns to Mate	10 cw	12 cw	20 cw	12 cw
ROV Interface	ROV Bucket Class 3	ROV Bucket Class 4	ROV Bucket Class 6	ROV Bucket Class 7

ADDITIONAL INFORMATION

Flexible Sealing Solution

All seals are placed in the outboard (female) connector side, allowing these to be serviced if needed.

The HD connector utilizes a dual seal philosophy; a spring energized c-seal as the primary process seal and two heavy duty elastomer T-seals as secondary and seawater barriers.



 $01 \ /\!/$ The connector is installed in the inboard receptacle



02 // Rotate the ROV torque tool clockwise to lock



03 // Secondary seals are engaged



04 // First barrier metal seal is engaged