

Mechanical Pipe Connectors

STATS DNV GL Type Approved Connectors provide a permanent mechanical pipe connection method replacing the need for welding. The slipover design and external gripping assembly enables quick and efficient installation, providing cost-effective piping repair, tie-in or capping of redundant pipe work.

Once installed the integrity of the Connector is verified with a simple pressure test. An integrated seal verification port provides access to the annulus void between the seals allowing a leak-test to be carried out.

A double block and bleed (DBB) valve can be fitted to the seal verification port to provide a means of periodically monitoring the integrity of the connection, as part of a routine maintenance or inspection programme. Mechanical connectors have been fitted to a variety of piping systems with a 100% leak-free service history.

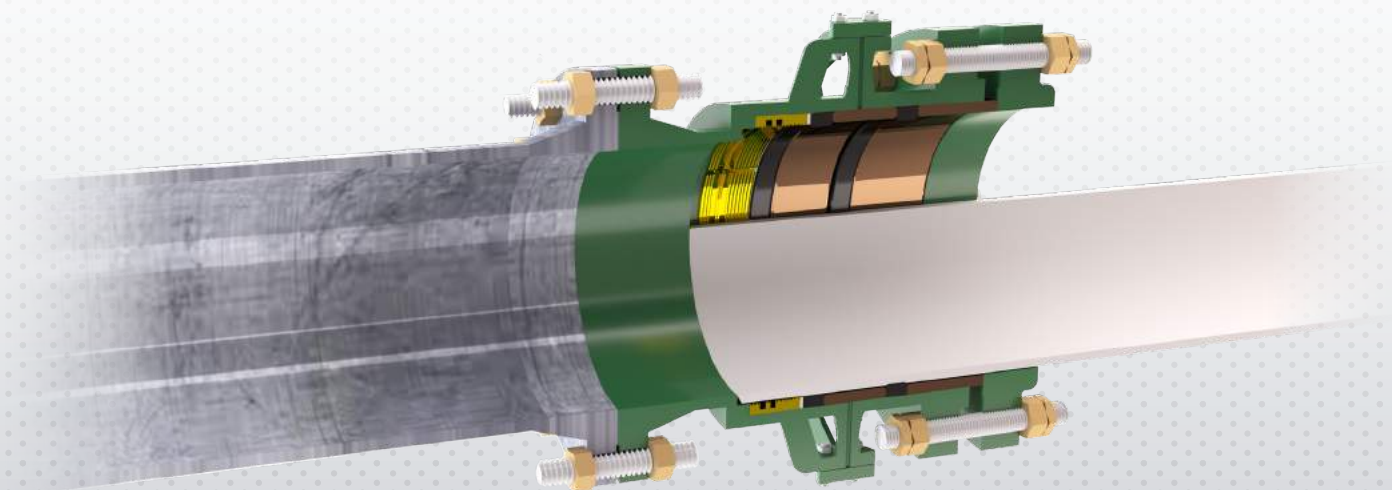
Connectors are suitable for topside, terminal, FPSO or subsea installation and compatible with processed water, air systems and hydrocarbon applications. Available to suit a wide range of pipe materials including carbon steel, stainless steel, duplex and super duplex.

Connectors conform to ISO 21329 Standard and are DNV GL Type Approved, compliant with DNV-OS-F101:2012 Submarine Pipeline Repair and DNV-RP-F113:2007, Pipeline Subsea Repair. (Cert No: TAP00000BE).

The Connector assembly and components are designed in accordance with API 6H requirements, with design strength verified in accordance with ASME B31.3 and other codes (ASME B31.4, B31.8, ASME VIII, etc.). Designed to fit standard pipe specification (ASME B36.10 & B36.19, API 5L, etc.) and fire tested to API 6 FA.

Connectors available in the following configurations:

- ◆ Flanged outlet for connecting plain-end pipe to a pre-flanged termination
- ◆ Coupling for connecting plain-end pipe to plain-end pipe
- ◆ End Cap for capping plain-end redundant pipe work



▲
Pipe to Flange Mechanical Connection

Operator Benefits

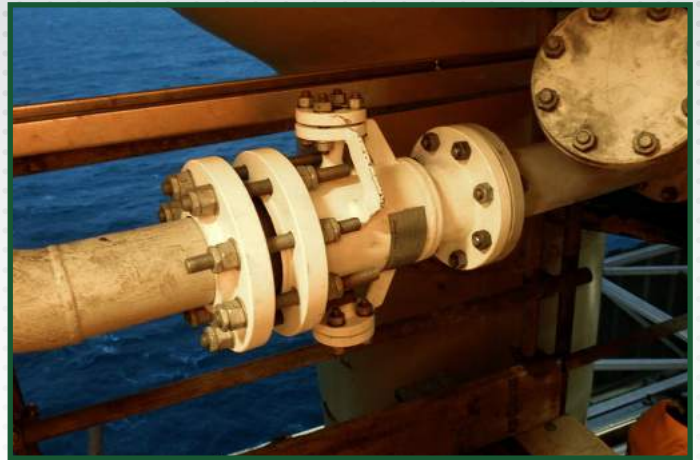
- ◆ No hot-work required, significantly reducing associated risk and costs
- ◆ Quick to install resulting in timely completion of maintenance activities
- ◆ Easily installed and commissioned with only basic pipework preparation
- ◆ Significantly reduces maintenance time and cost by eliminating the need for welding equipment and personnel
- ◆ External grip assembly applies even linear and circumferential load around the host pipe, eliminating localised material deformity and localised stress fractures
- ◆ External lock and seal assembly eliminates flow restriction or turbulence
- ◆ Removable and reusable with no damage to existing pipework

Specification

- ◆ Sizes 2" to 36" as standard, sizes out with this range available on request
- ◆ Maximum working pressure: up to ASME 300# (50 bar / 725 psi) as standard, up to ASME 1500# (256 bar / 3713 psi) available on request.
- ◆ Temperature range: -40°C to 300°C as standard
- ◆ Dual graphite seal arrangement with verification port to enable pre-commission leak-test
- ◆ Minimum design life 20 years

Key Features

- ◆ Maintenance free mechanical pipe connection in accordance with API Specification 6H and certified fire-safe to API 6FA
- ◆ Seal verification port can be fitted with a DBB valve to comply with specific operator inspection requirements
- ◆ Robust construction provides equivalent or greater design criteria than host pipework
- ◆ Coating provided to client specification
- ◆ Fabricated design provides a lightweight unit for topside applications



▲ 4" Mechanical Connector



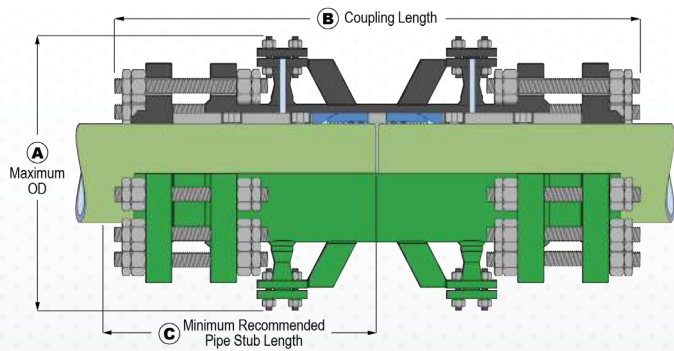
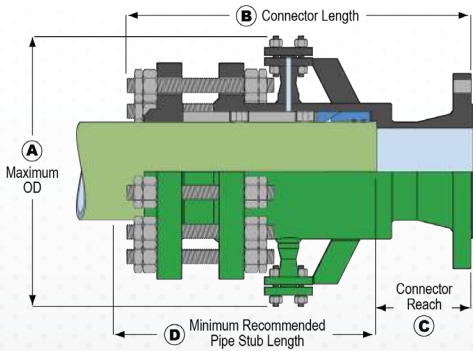
▲ 24" Mechanical Connector



▲ Stainless Steel Connector End Cap

Connector Weights & Dimensions

Nom Size	Max Design Pressure	A-OD	B-Length	C-Reach	D-Pipe Stub Length	Weight
2"	20 Bar / 290 psi	293mm	335mm	91mm	224mm	15kg
2"	50 Bar / 725 psi	293mm	347mm	97mm	224mm	15kg
3"	20 Bar / 290 psi	330mm	374mm	97mm	261mm	32kg
3"	50 Bar / 725 psi	329mm	387mm	107mm	261mm	33kg
4"	20 Bar / 290 psi	364mm	480mm	115mm	327mm	52kg
4"	50 Bar / 725 psi	363mm	490mm	124mm	327mm	51kg
6"	20 Bar / 290 psi	422mm	497mm	121mm	354mm	75kg
6"	50 Bar / 725 psi	422mm	506mm	130mm	354mm	86kg
8"	20 Bar / 290 psi	484mm	538mm	136mm	385mm	115kg
8"	50 Bar / 725 psi	484mm	548mm	146mm	385mm	128kg
10"	20 Bar / 290 psi	534mm	609mm	149mm	418mm	155kg
10"	50 Bar / 725 psi	534mm	621mm	166mm	414mm	185kg
12"	20 Bar / 290 psi	595mm	656mm	159mm	467mm	229kg
12"	50 Bar / 725 psi	595mm	675mm	178mm	467mm	263kg
14"	20 Bar / 290 psi	646mm	699mm	175mm	502mm	389kg
14"	50 Bar / 725 psi	646mm	715mm	191mm	501mm	438kg
16"	20 Bar / 290 psi	701mm	723mm	175mm	521mm	405kg
16"	50 Bar / 725 psi	701mm	742mm	195mm	522mm	466kg
18"	20 Bar / 290 psi	753mm	785mm	206mm	554mm	504kg
18"	50 Bar / 725 psi	753mm	804mm	225mm	552mm	576kg
24"	20 Bar / 290 psi	914mm	881mm	230mm	606mm	901kg
24"	50 Bar / 725 psi	915mm	898mm	245mm	611mm	1000kg



Coupling Weights & Dimensions

Nom Size	Max Design Pressure	A-OD	B-Length	C-Pipe Stub Length	Weight
2"	50 Bar / 725 psi	299mm	499mm	224mm	20kg
3"	50 Bar / 725 psi	337mm	554mm	263mm	43kg
4"	50 Bar / 725 psi	368mm	690mm	331mm	81kg
6"	50 Bar / 725 psi	423mm	780mm	365mm	130kg
8"	50 Bar / 725 psi	483mm	799mm	380mm	187kg
10"	50 Bar / 725 psi	535mm	890mm	418mm	255kg
12"	50 Bar / 725 psi	593mm	1000mm	470mm	370kg
14"	50 Bar / 725 psi	645mm	1091mm	521mm	408kg
16"	50 Bar / 725 psi	702mm	1138mm	540mm	682kg
18"	50 Bar / 725 psi	745mm	1190mm	573mm	804kg

All data correct at time of publication