

# Conduit System

Model 491

**Focal Technologies Corporation, a Moog Inc. company, has over 30 years of expertise in supplying standard and custom marine products for harsh environment applications and is a leading manufacturer of high performance and high quality swivel. Contact Focal for any assistance in selecting the best solution for your requirements.**

## Description

The Model 491 Cable Conduit System is designed for routing electrical and optical cables through high temperature areas. Cables used in FPSO swivels are being exposed to ever increasing temperatures, at times over 100°C. Multi-core cables are generally not available for use at these temperatures. Individual cable elements are available for high temperatures. The conduit system provides the necessary physical protection.

The conduit is a flexible stainless steel tube with fittings at each end. The fittings are typically certified flameproof glands, suitable for use with individual conductors.

The conduit system is usually supplied as part of a swivel, in which case it will be hazardous area certified as part of that swivel certification. Ingress protection is IP66/IP68-20 m. As such, it is suitable for ingress protection for cables run below the waterline or in the vicinity of harsh chemicals. It is also suitable as mechanical protection for unarmoured cables or hoses.

All 400 series products are intended for use in Floating Production Systems (FPS). They are well suited for any application requiring a product that can withstand harsh marine conditions or require long life with minimal maintenance intervals. Designed and manufactured in our ISO 9001 facility under our project management system, products have a two year warranty and are provided with a complete document package.

All products can be modified to meet specific requirements. Installation, commissioning and service is available. Contact the factory for details.

[www.moog.com/marine](http://www.moog.com/marine)

## Features

- 316 stainless steel
- Hazardous area certified as part of a swivel certification
- ABS Certificate of design assessment
- IP66 / IP68-20 m
- Temperature depends on wire/fiber used

## Options

- Custom conduit size
- Custom lengths

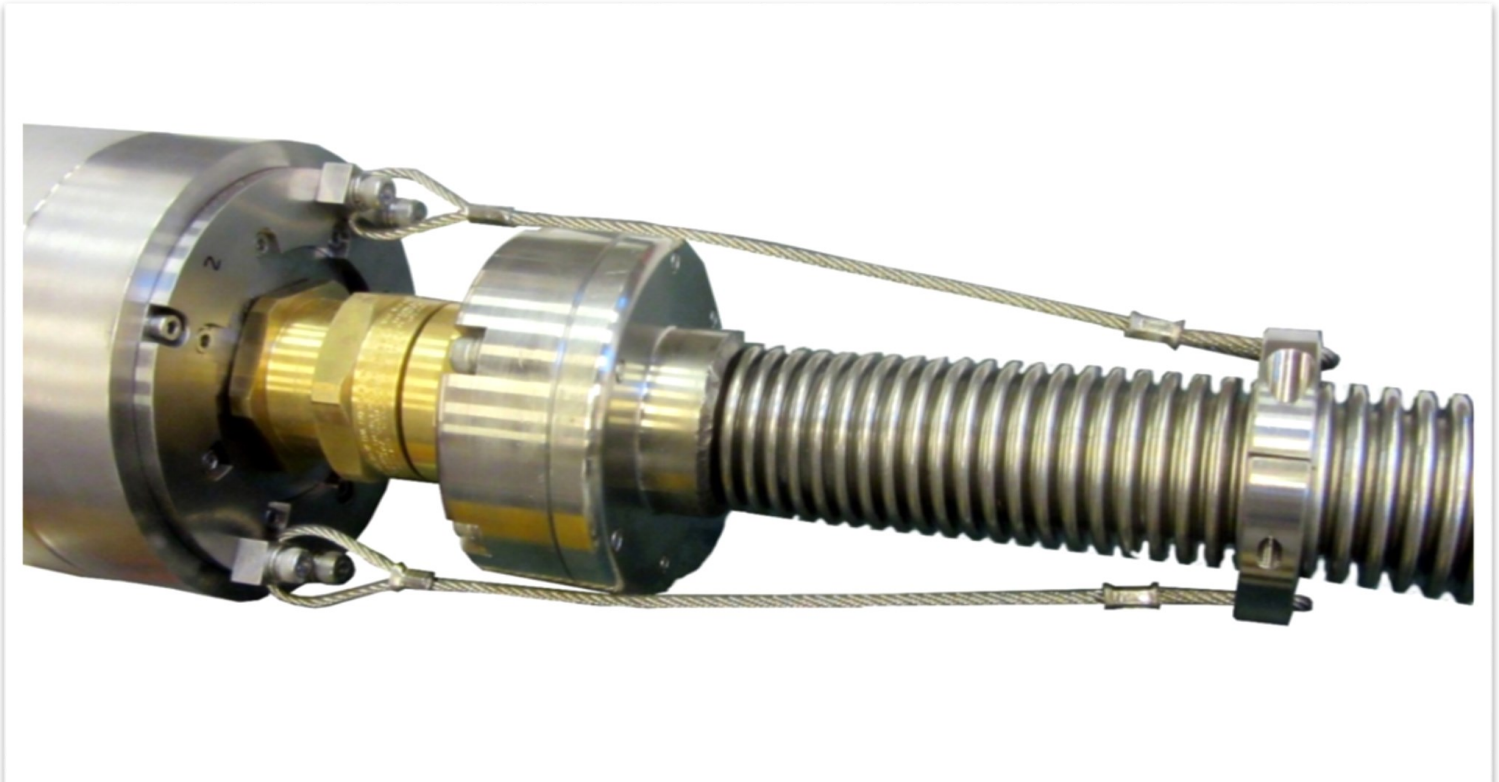


# FOCAL™

# Specifications

Conduit	
Size	25 mm to 75 mm
Material	316 stainless steel
Bend Radius	10x outside diameter
Maximum Fill	40% (for standard compliance)
Maximum Length	None
Electrical	
Conductors	High temperature cores/cables
Type	Single cores, or sub-cables (twisted pairs, quads, etc)
Temperature	180 °C maximum
Termination	None
Optical	
Fibers	High temperature fiber
Type	Individual fibers (900 μm) Fiber sub-cables (1.8-2.2 mm typical)
Temperature	150 °C maximum
Termination	Individual optical connectors

Interface	
Threaded Entry	M25 to M75
Strain Relief	Individual conductors strain relieved in the conduit Conduit strain relief, rated to 4x the conduit weight
Certifications	
Marine	ABS
Environmental	
Temperature	-40 °C to + 180°C (operational) -40 °C to + 60 °C (storage)
Ingress	IP66 / IP68-20m
Options	
Connectors	Multi-contact connectors for electrical or optical
Empty Conduit	The conduit with terminations at each end can be supplied without electrical or fiber cables where ingress protection or protection from harsh chemicals or mechanical damage is required



All specifications and information are subject to change without notice. Please contact Focal for the latest updates.

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