7.375" 10,000 PSI In-Riser Latch (IA-0039)





The Subsea Test Tree latch is a hydraulically operated arrangement of locking elements which allows disconnection from the SSTT after well isolation.

The latch is orientated on the upper SSTT ball valve profile during relatch operations by a two-stage alignment prior to landing out. The helix aids orientation and rough alignment is provided by a castellation followed by fine alignment on a set of keys.

There is also secondary unlatch facility that can be activated by closing the BOP pipe ram and pressurising down the choke and kill line to an accurately pre-set burst disc and shuttle arrangement.

Features:

- ▷ Provides riser connection to SSTT
- ▷ Pre-loaded connection
- ▷ Re-orientation feature to allow quick re-connection to SSTT
- **Remains latched in the event of loss of hydraulic pressure**
- **Fully validated structural connections**
- **Fully validated to API 17G 3rd Edition**

DESIGN DATA	
Nominal Bore Diameter	7-3/8" (187.3 mm)
Design Pressure	Working: 10,000 psi (69.0 MPa) Test: 15,000 psi (103.4 MPa)
Design Standard	API 6A 21 st Edition 2018 (ISO 10423), API 17G 3 rd Edition 2019 (ISO 13628-7), NACE MR0175 2015 (ISO 15156)
Temperature Class (Design)	API 6A Class U (0°F to 250°F / -18°C to +121°C)
Service	CO ₂ , H ₂ S (NACE MR0175 / ISO 15156)
Material Class	EE
Product Specification Level	PSL 3G
Design Validation Level	API 17G 3 rd Edition SSL-Gas (Fully compliant)

PERFORMANCE DATA	
Maximum Hydraulic Pressure	10,000 psi (69.0 MPa)
Actuator Swept Volume (Latch)	0.16 U.S. Gallons (0.59 litres)
Actuator Swept Volume (Unlatch)	0.19 U.S. Gallons (0.72 litres)
Actuator Swept Volume (Interlock)	0.04 U.S. Gallons (0.14 litres)
Acceptable Hydraulic Fluid	Any water or oil based control fluid

WEIGHT AND DIMENSIONS	
Overall Height (Nominal)	19.245" (489 mm)
Overall Width (Nominal)	18.625" (473 mm)
Gross Dry Weight (Approx.)	1,416 lb (642 kg)

VALVE INTERFACES	
Design Standard	API 17G 3 rd Edition.
Upper End Connection	Interventek 7.375" Studded Flange
Lower End Connection	Interventek SSTT Latch Profile
Hydraulic Interface (Flange)	Upper Interface : 17 off – Interventek Hydraulic Stab Pockets
	Lower Interface : 16 off – Interventek Latch Stab - Female

FUNCTIONAL CAPACITIES	
Maximum Tension @ RWP	440 kip
Maximum Moment @ RWP	134 ft kip
Maximum Tension @ 0 ksi	1,031 kip
Maximum Moment @ 0 ksi	306 ft kip

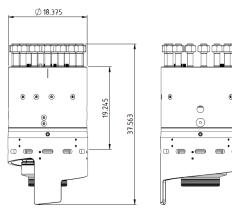
Note that these values are the limiting values, if GRA is conducted then greater localized values may be available

VALIDATION LEVEL	
Service Specification Level	API 17G SSL-Gas
Temperature Class (Operational)	27°F to 250°F / -3°C to +121°C
Design Water Depth (Max)	10,000 ft (3,048 m)

NOTES

Structural validation testing fully compliant with API 17G 3rd Edition – Annex E Validation testing of valve is fully compliant with API 17G 3rd Edition – Annex G

PRODUCT LAYOUT DRAWING







The information in this document is uncontrolled and subject to change without notice.

