

Equalizing Subs

APPLICATION

- Sweet to moderately corrosive applications from 40 degF to 300 degF [4 degC to 149 degC]

BENEFITS

- Offers a versatile solution.
- Provides an unobstructed flow path and reliable production.
- Design is cost effective and easy to run.
- Allows fewer potential leak paths.

FEATURES

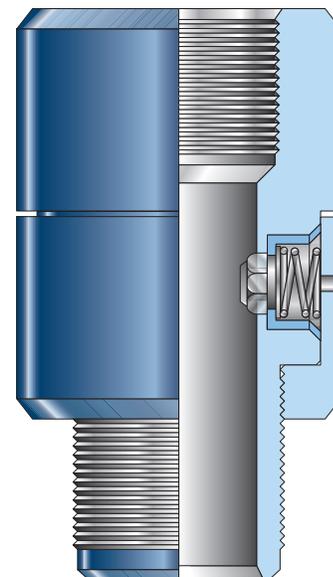
- Unlimited setting depths
- Straight-through bore design
- Designed in accordance with API and ISO criteria
- Compact design
- Minimum number of seals

General-service equalizing subs with working pressures to 5,000 psi [34,475 kPa]

The Camco* A-1, B-1, and C-1 equalizing subs equalize differential pressures across slickline-retrievable, subsurface controls prior to retrieving the controls from the tubing string. These subs all feature compact construction and simple design. The only difference between the subs is the size of their internal bore.

The A-1, B-1, or C-1 equalizing sub is made up as an assembly with a Camco C- or M-series lock, an O-sub, and a control device. The equalizing sub is attached between the O-sub and the control device.

These equalizing subs have a spring-loaded dart that protrudes into the bore of the sub. When a prong attached to the pulling tool is run into the sub, the dart is pushed off its seat. This permits pressures to equalize across the assembly before unsetting the lock.



C-1 equalizing sub.

Engineering Data for Equalizing Subs

Tubing OD [†] (in [mm])	Type	Max. OD (in [mm])	Min. ID (in [mm])
1.900 [48.3]	C-1	1.406 [35.7]	0.562 [14.3]
	A-1		
2.375 [60.5]	B-1	1.750 [44.5]	0.687 [17.4]
	C-1		0.875 [22.2]
	A-1		
2.875 [73.0]	B-1	2.156 [54.8]	0.718 [18.2]
	C-1		0.875 [22.2]
	A-1		1.062 [27.0]
3.500 [88.9]	C-1	2.718 [69.0]	1.515 [38.5]

[†] The engineering data provided illustrate the scope of this product offering and are not all inclusive. Additional sizes and pressure ratings are available upon request.