Flow Check Adaptor

A rotatable connecting adaptor used with static pressure measuring instruments which, in the event of the instrument rupturing, closes automatically as a result of the process medium flow

General Application

The FCA is designed for flow prevention, pressure snubbing, as a gauge siphon for steam service and for hazardous service including toxic, flammable and high pressure duties, providing extra protection for personnel and the environment.

TECHNICAL DATA

Materials:

316 SS, Monel®

Seats:

Metal

Connections:

1/2" NPT

Pressure (max):

1,000 psig (690 barg)

Temperature (max):

1000°F (538°C)



Features

- Seals off the flow when activated by escaping gas or liquid.
- Automatically resets when flow conditions cease or the instrument is replaced.
- Integral restricted orifice acts as a pulsation damper reducing damage to sensitive instruments.
- Rotatable adapter option allows 360° positioning of gauges and instruments.
- Integral siphon for steam service provides a protective condensate barrier to prevent live steam from damaging instruments.
- Robust and compact design allows rigid installation of gauges and instruments.



FCA SERIES

Flow Check Adaptor

Product Description

The FCA is available in 316 SS with the option of Monel®. Connections are available ½-inch NPT male x female as standard. Suitable for pressures up to 10000 psig (690 barg) and temperatures 1000°F (538°C), the FCA is available with trim to meet the requirements of NACE.

Installation[1]

Pressure gauges or instruments may be installed directly onto the flow check adapter which in turn can be connected to the gauge/isolation valve. Alternatively, the adapter can be installed directly onto the primary/root isolation valve providing complete protection for the impulse line and subsidiary instruments and gauges.

3.89 (98.8)

Dimension, inches (mm)

Standard Materials

Adapter	Body
316 SS	A479 316
Monel®	Monel® 400

Pressure and Temperature

Pressure and Temperature Ratings

Standard - metal seat (maximum)	Soft seat option (maximum)		
10000 psig 1000°F	464°F		
(690 barg)(538°C)	(240°C)		

Selection Guide

FCA	S -4		-4	х4		-SG		
BASIC SERIES			GAUGE CONNECTION		PROCESS CONNECTION		OPTIONS	
FCA	S	316 SS	4	½-inch FNPT	4	½-inch MNPT	OC00	Oxygen cleaning
	M	Monel®					SG	(Sour Gas) meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions ≤ 50 mg/l [ppm]) and NACE MR0103-2005

NOTES

- 1. The FCA should be used in the vertical position, placing the gauge connection above the process connection.
- 2. Minimal leakage will occur to equalize the pressure to enable resetting the FCA when instrument has been replaced.
- 3. Approximate adapter weight: 0.66 lb (0.3 kg).