

CRYSTAL

FITTINGS FOR LIFE™

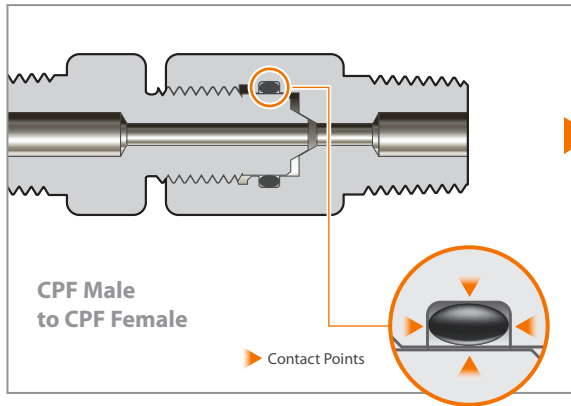


**ALWAYS** SEALS  
ALWAYS **SAFE**

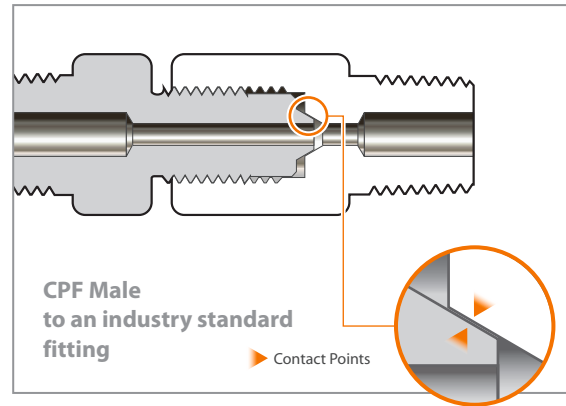


# Improving on an Industry Standard

## Now, **2** Ways to Seal: With Your Fingers, or with a Wrench



▶ **CPF to CPF O-Ring Seal**  
Finger-tight up to 10 000 PSI/  
700 bar/70 MPa (-20°C to 50°C)



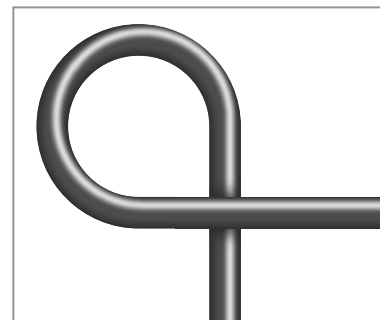
▶ **CPF to non-CPF Metal Seal**  
¼" medium pressure cone-type fittings lack an o-ring.  
Use a wrench to create a seal.

## Purpose Designed for Calibration and Testing

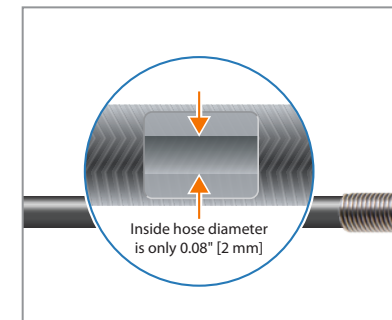


▶ Manufactured by the experts in pressure measurement.

## Super-Flexible, Lightweight Calibration Hose



Minimum 1" (2.5 cm) Bend Radius— even under pressure.



Small inner hose diameter reduces pumping effort and saves time.

Safe • Made to Last

**FITTINGS FOR LIFE™**

# 4 Ways CPF Fittings Keep You Safer

## Avoid Accidents



CPF Fittings and Hoses\* are machined in High-Strength 316 Stainless Steel to operate with a 4:1 Safety Factor at 10,000 PSI/700 bar/70 MPa. The Self-Venting Weep Hole alerts you, by leaking gas or test fluid, **BEFORE** you fully disconnect from a pressurized system. You'll never make *this mistake* again.

## No Leaks—Ever



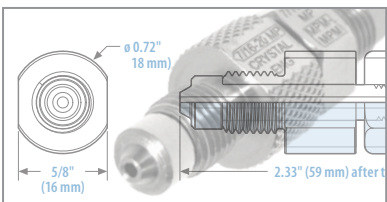
Should your O-ring leak in the field (due to chemicals or wear), simply pull it out and replace it, or use a wrench to create a metal-metal seal. Either way, you keep working safely.

## Clearly Marked—No Guessing



All CPF Fittings bear Laser Markings, indicating the thread type on both ends of the fitting, the part number, and the Maximum Allowable Working Pressure.

## Verified. Tested. Proven.



Experts assessed our design drawings and checked our calculations. An ASME Certified Inspector supervised our proof-pressure testing. The TSSA certified our compliance with ASME Pressure Vessel & Boiler Code. CPF is safe for you to use, **everyday**.

\*PATENT PENDING

## Have You Ever Done **This?**

**My test** had been running for the last 20 minutes. I started disconnecting my hoses and I was certain there was no pressure left in the system. I turned my wrench once – twice – three times... and bang! A jet of hot test fluid started spraying everywhere.

As I cranked the shut-off valve, I saw what had happened: I forgot to close one of my valves!

My clothes were soaked, and the equipment panel ten feet away showed a large dent, but no one was hurt.

*That could have been a lot worse!*

**CPF Fittings** feature an Early Warning Indicator to stop the next mistake before it starts.

CRYSTAL

Dear Fitting User,

Two years ago, I was working with a key customer at a tradeshow when the fitting I was using came apart, under pressure, in the middle of my test. It was embarrassing! And dangerous.

But when I walked over to the faulty fitting manufacturer's booth, they were not surprised or shocked at all. Instead, *they laughed!* Wrong answer. That following Monday, I made a decision.

After a year and a half of painstaking design and careful testing, I'm proud to present **The Safest Calibration & Test Pressure Fittings on the Market: Crystal Pressure Fittings**. Using just your fingers, you can make safe, *reliable* connections up to 10,000 PSI/ 700 bar/ 70 MPa — without tools.

Plus, CPF Fittings and Hoses come with an industry-first 4:1 Safety Factor and a Self-Venting Weep Hole that alerts you *before* you disconnect from a pressurized system. (No one should disconnect pressurized fittings, but it happens.)

CPF Fittings are the safest, most reliable fittings you can find. They are made with the highest quality available. And yet, they still connect to common fittings from other vendors.

We're not replacing products from HiP and Autoclave Engineers. We simply improved on their standard by adding features that make CPF Fittings excellent for temporary, high pressure connections.

*I invite you to see for yourself:*

CPF Fittings & Hoses will outlast and outperform every other calibration fitting on the market. Order a Sample Kit and use them, just once. You will see and feel the difference.

With Your Safety in Mind,



**Tom Halaczkiwicz**  
President  
Crystal Engineering

P.S. Our customers like CPF so much they constantly ask for adapters to other fitting types. We now offer the widest range of adapters available from one vendor. Tell us what you connect to, and let us assemble a custom kit of the fittings you need.

## Always Have the Right Fitting Within Reach



**Connect to any process or device.**

One of the widest adapter selections available.

**Mate with all of your existing fittings.**

Directly compatible with HiP, Autoclave Engineers, and others.

**Choose a Standard Kit... or create your own.**

PRESSURE in Our BUSINESS™

For detailed specifications go to  
[crystallengineering.net/cpf](http://crystallengineering.net/cpf)

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708 Fiero Lane, Suite 9,  
San Luis Obispo, California 93401-8701

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