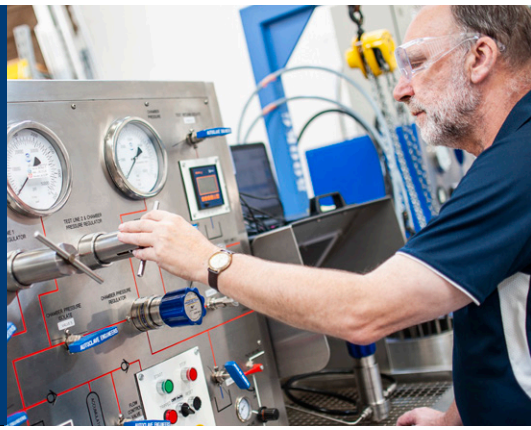
PRESSURE TECH

CELEBRATING 20 YEARS

Company Overview



www.pressure-tech.com

Welcome to Pressure Tech

Established in 2000, I am proud to say that Pressure Tech is a family-business with customer service and quality at the heart of our operation. Equally, we pride ourselves on having the technical know-how and professionalism typically associated with larger corporate companies.

Based in the North-West UK, our facilities house the entire process from design, manufacturing and assembly through to sales, purchasing and accounts. The Pressure Tech name is now recognised globally for manufacturing high-quality pressure regulators, and we are supported by a worldwide network of Authorised Resellers.

Steve Yorke-Robinson
Managing Director of Pressure Tech

We passionately believe that our products and all-round service represent a market-leading offering, and here's why:

EXPANDING OUR EXPERIENCE

Our team of over 30 people includes a combination of long-term employees offering extensive product experience and understanding of the applications they have been used on, with the more recent addition of employees who have added specialist knowledge in areas such as strategic business management. It is this blend that continues to add strength and value to our core business of designing and manufacturing high-quality pressure regulators.

PARTNERING WITH CUSTOMERS

Whether it's offering general advice or help finding a specific solution to an application, our close-working internal infrastructure allows us to respond to questions promptly and effectively to allow our customers to make quick decisions with confidence. Not every system is the same and sometimes 'off-the-shelf' products may not be suitable for some applications. Our sales and design teams work closely with customers to ensure products are designed to meet their exact needs.

GLOBAL REACH

Our products are used worldwide with 70% being exported for use on critical high-pressure control systems such as wellhead control panels, gas analyser systems, hyperbaric diving systems and the latest hydrogen fuel cell technology. We continually listen to customer feedback to ensure product realisation is achieved. Our products are supplied to an ever-increasing customer base ranging from family businesses like our own to blue chip multinationals, meaning we offer a personal touch combined with the capacity to fulfil larger projects.

In-House Capabilities...

QUALITY

As a company we have always understand the critical importance of maintaining quality throughout our business. We constantly aspire to provide products and services that not only meet, but exceed the requirements of our customers.

It is our long-term commitment to quality that has created a ‘quality culture’ here at Pressure Tech. When decisions are made, be it to the design of a product, the sourcing of raw materials, or the processes under which we operate, quality and the requirements of our customers are of primary consideration.

DESIGN

We take great pride in being able to design bespoke solutions to fulfil customer requirements. This in-house service is one of the many reasons why existing customers come back to us time and again, and why, off the back of recommendations, new customers approach Pressure Tech when an off-the-shelf product just won’t suffice.

MANUFACTURING

Our in-house machine shop is operated by an experienced team of machinists and is overseen by our Operations Manager. Regular investments in machinery ensure we have the capacity to maintain stock of ‘standard’ components for competitive lead times, and to provide the production flexibility to quickly respond to urgent customer requirements.

ASSEMBLY

Our in-house team of skilled assembly and testing engineers work closely with our design and manufacturing departments, whilst workload is strategically managed and scheduled by our Planning Manager using the latest shop-floor loading software. This strategic approach ensures customer orders are fulfilled on-time.

Product Range

ANALYSER & INSTRUMENTATION

Typically incorporating Inconel® X750 diaphragm-sensed elements to provide strength and flexibility, our Analyser and Instrumentation range includes options from gas cylinder regulators to ATEX certified (94/9/EC) heated regulators.

HIGH PRESSURE

Piston-sensed high pressure regulators, typically with ceramic seating. These include our hydraulic range with precision machined and fully supported sensor elements to cover pressure ranges up to 1,034 bar (15,000 psi). Port sizes from 1/8” to 3/8”.

MEDIUM-FLOW

Primarily for gas service with diaphragm-sensed elements to control up to 10 bar (145 psi), and piston-sensed elements covering up to 414 bar (6,000 psi). Ports 1/2” to 1”.

HIGH-FLOW

Diaphragm and piston-sensed with port sizes from 1/2” to 3” using threaded or flanged connections. Pressure control available up to 210 bar (3,045 psi).

BACK PRESSURE

Covering port sizes from 1/8” to 2” and controlling pressures from 0.1 bar (2 psi) to 690 bar (10,000 psi) on gas or liquid applications. Accurate and repeatable shut-off.

DIVING

Our brass regulators are cleaned and degreased within the guidelines of ASTM G93 for equipment used in oxygen-enriched enviroments, and intended for use on critical life support or hyperbaric diving applications.

HYDROGEN

From ultra-compact and lightweight regulators (0.2kg) to onboard vehicle regulators and high-pressure refuelling solutions with fast fill times, our products cover a wide range of hydrogen fuel cell applications.

SUBSEA

Designed to operate at depths of up to 3,000m (10,000ft), our subsea pressure regulators can either use external seawater pressure as a reference pressure, or, they can be sealed to operate at topside ambient pressure conditions.

Page...

MINI300
COMPACT

PISTON-SENSED | 316SS THREADED BONNET | OPTIONAL ADJUSTMENT METHODS | LIGHTWEIGHT & COMPACT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/8”	0.06	Gas	210 bar (3,045 psi)	PCTFE	100 bar (1,450 psi)	Piston	Non
			300 bar (4,350 psi)	PEEK™			

LF310
LOW-FLOW

INCONEL® X750 DIAPHRAGM | 316SS THREADED BONNET | 40 MICRON INLET FILTER | SOLID DISK SEAT DESIGN

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06 0.15	Gas or Liquid	50 bar (725 psi)	FEP	35 bar (510 psi)	Inconel® X750 Diaphragm	Non
			300 bar (4,350 psi)	PCTFE			
			414 bar (6,000 psi)	PEEK™			

LF240
LOW-FLOW

LARGE ELASTOMERIC DIAPHRAGM | LIGHTWEIGHT & COMPACT | LOW DECAYING PRESSURE EFFECT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE	10 bar (145 psi)	PTFE-Lined Elastomeric Diaphragm	Non
			414 bar (6,000 psi)	PEEK™			

TS310
TWO-STAGE

METAL-TO-METAL SEATING DIAPHRAGM | 0.04% DECAYING PRESSURE EFFECT | ‘INTERSTAGE’ RELIEF VALVE OPTION

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE	25 bar (360 psi)	Inconel® X750 Diaphragm	Non
			414 bar (6,000 psi)	PEEK™			

TS311
TWO-STAGE

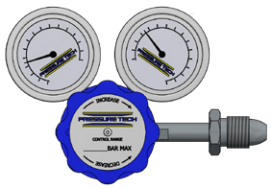
PISTON-SENSED | 0.04% DECAYING PRESSURE EFFECT | 'INTERSTAGE' RELIEF VALVE OPTION | 40 MICRON INLET FILTER

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE	20 bar (290 psi)	Piston	Non
			414 bar (6,000 psi)	PEEK™			

CYL310
CYLINDER ASSEMBLY

CUSTOMISABLE TO SUIT APPLICATION | INCONEL® X750 DIAPHRAGM | SOLID DISK SEAT DESIGN | 40 MICRON INLET FILTER

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE	35 bar (510 psi)	Inconel® X750 Diaphragm	Non
			414 bar (6,000 psi)	PEEK™			



CYL540
CYLINDER ASSEMBLY

COMPACT DESIGN | PISTON-SENSED | SELF OR NON-VENTING | 40 MICRON INLET FILTER

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.1	Gas	550 bar (7,975 psi)	PEEK™	35 bar (510 psi)	Piston	Non or Self

ACS310
AUTO-CHANGEOVER

MEDICAL / LAB APPLICATIONS | USER-FRIENDLY DESIGN | OPTIONAL SECOND-STAGE REGULATOR | STANDALONE OR WALL-MOUNTABLE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE or PEEK™	20 bar (290 psi)	Inconel® X750 Diaphragm	Non

Analyser & Instrumentation Regulators

ACU310
AUTO-CHANGEOVER

INCONEL® X750 DIAPHRAGM | USER-FRIENDLY DESIGN | SECOND-STAGE REGULATOR | 0.1% DECAYING PRESSURE EFFECT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE or PEEK™	20 bar (290 psi)	Inconel® X750 Diaphragm	Non

XHS310
ELECTRIC-HEATED

100W HEATER CARTRIDGE | SIDE-ENTRY OR IN-LINE | ATEX & IECEX CERTIFIED | INCONEL® X750 DIAPHRAGM

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE	35 bar (510 psi)	Inconel® X750 Diaphragm	Non
			414 bar (6,000 psi)	PEEK™			

XHS311
ELECTRIC-HEATED

100W HEATER CARTRIDGE | SIDE-ENTRY OR IN-LINE | ATEX & IECEX APPROVED | PISTON-SENSED

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE	150 bar (2,175 psi)	Piston	Non
			414 bar (6,000 psi)	PEEK™			

XHR310
ELECTRIC-HEATED

2 X 100W HEATER CARTRIDGES | ATEX & IECEX CERTIFIED | INCONEL® X750 DIAPHRAGM | OPTIONAL CABLE SUPPLY ENTRY POINTS

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas or Liquid	414 bar (6,000 psi)	PEEK™	35 bar (500 psi)	Inconel® X750 Diaphragm	Non

XHR311
ELECTRIC-HEATED

2 X 100W HEATER CARTRIDGES | ATEX & IECEX CERTIFIED | PISTON-SENSED | OPTIONAL CABLE SUPPLY ENTRY POINTS

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas or Liquid	414 bar (6,000 psi)	PEEK™	150 bar (2,175 psi)	Piston	Non

XHR310
STEAM-HEATED

STEAM-HEATED DESIGN | 40 MICRON INLET FILTER | INCONEL® X750 DIAPHRAGM | SOLID DISK SEAT DESIGN

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas or Liquid	414 bar (6,000 psi)	PEEK™	35 bar (500 psi)	Inconel® X750 Diaphragm	Non

XHM300
HEATER MANIFOLD

ATEX & IECEX CERTIFIED | ALTERNATIVE MATERIALS AVAILABLE | COMPACT DESIGN | 115V OR 230V POWER SUPPLY

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	NA	Gas or Liquid	300 bar (4,350 psi)	NA	NA	NA	NA

LF311 LOW-FLOW

PISTON-SENSED | 316SS THREADED BONNET | 40 MICRON INLET FILTER | SOLID DISK SEAT DESIGN

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4” 3/8”	0.06	Gas or Liquid	300 bar (4,350 psi)	PCTFE	180 bar (2,610 psi)	Piston	Non
			414 bar (6,000 psi)	PEEK™			

LF540 LOW-FLOW

COMPACT & ECONOMICAL | PISTON-SENSED | NON- OR SELF-VENTING | PRECISION-MACHINED SENSING ELEMENT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4” 3/8”	0.1	Gas or Liquid	690 bar (10,000 psi)	PEEK™	414 bar (6,000 psi)	Piston	Non or Self

LF792 LOW-FLOW

ENHANCED SEAT SUPPORT | PISTON-SENSED | SEGREGATED CAPTURED VENT | EASY ACCESS TO SEAT CARTRIDGE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4” 3/8”	0.1	Gas	1,034 bar (15,000 psi)	Tecasint®	1,034 bar (15,000 psi)	Piston	Non or Self (captured)

LGC690 LOGIC-CONTROL

40 MICRON INLET FILTER | PISTON-SENSED | SEGREGATED CAPTURED VENT | EASY ACCESS TO SEAT CARTRDIGE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.3	Liquid	414 bar (6,000 psi)	PEEK™	20 bar (290 psi)	Piston	Self (captured)

HYD691 HYDRAULIC

COMPACT & ECONOMICAL | CERAMIC SEAT | SEGREGATED CAPTURED VENT | MAIN VALVE CARTRIDGE DESIGN

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4” 3/8”	0.06	Liquid	690 bar (10,000 psi)	Ceramic	690 bar (10,000 psi)	Piston	Non or Self (captured)

LF690 LOW-FLOW

CERAMIC SEAT | FULLY SUPPORTED MAIN VALVE | SEGREGATED CAPTURED VENT | EASY ACCESS TO SEAT CARTRIDGE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4” 3/8”	0.1 0.3	Liquid	690 bar (10,000 psi)	Ceramic	690 bar (10,000 psi)	Piston	Non or Self (captured)

LF691 LOW-FLOW

CERAMIC SEAT | FULLY SUPPORTED MAIN VALVE | SEGREGATED CAPTURED VENT | EASY ACCESS TO SEAT CARTRIDGE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
3/8”	0.05	Liquid	1,380 bar (20,000 psi)	Ceramic	1,380 bar (20,000 psi)	Piston	Non or Self (captured)

MF414H MEDIUM-FLOW

PISTON-SENSED | BALANCED DESIGN | SEGREGATED CAPTURED VENT | HIGH FLOW COEFFICIENT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2” 3/4”	2.0	Liquid	414 bar (6,000 psi)	Ceramic	414 bar (6,000 psi)	Piston	Non or Self (captured)

Medium-Flow Regulators

MF101 MEDIUM-FLOW

LARGE PRECISION-MACHINED SENSING ELEMENT | NON- OR SELF-VENTING | LIGHTWEIGHT & COMPACT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.5	Gas or Liquid	100 bar (1,450 psi) Unbalanced	PCTFE	35 bar (510 psi) Self-Vent or 40 bar (580 psi) Non-Vent	Piston	Non or Self
				PEEK™			
			300 bar (4,350 psi) Balanced	PCTFE			
			414 bar (6,000 psi) Balanced	PEEK™			

MF230 MEDIUM-FLOW

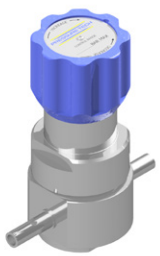
LARGE SENSITIVE ELASTOMERIC DIAPHRAGM | BALANCED DESIGN | LOW DECAYING PRESSURE EFFECT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2”	1.0	Gas or Liquid	50 bar (725 psi)	PTFE	10 bar (145 psi)	Diaphragm	Non
			230 bar (3,350 psi)	PCTFE or PEEK™			

MF231 MEDIUM-FLOW

LARGE SENSITIVE ELASTOMERIC DIAPHRAGM | BALANCED DESIGN | LOW DECAYING PRESSURE EFFECT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2”	1.0	Gas	35 bar (510 psi)	PTFE	100 bar (1,450 psi)	Piston	Non
			230 bar (3,350 psi)	PCTFE or PEEK™			



MF210 MEDIUM-FLOW

PTFE-LINED DIAPHRAGM | NO O-RINGS | RANGE OF END CONNECTORS | LARGE HANDWHEEL

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2” 3/4” 1”	1.8	Gas	40 bar (580 psi)	PCTFE	10 bar (145 psi)	PTFE-Lined Elastomeric Diaphragm	Non

MF301 MEDIUM-FLOW

PISTON-SENSED | BALANCED DESIGN | LOW DECAYING PRESSURE EFFECT | EASY ACCESS TO SEAT CARTRIDGE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2” 3/4”	2.0	Gas or Liquid	300 bar (4,350 psi)	PCTFE or PEEK™	300 bar (4,350 psi)	Piston	Non or Self

MF400 MEDIUM-FLOW

BALANCED DESIGN | OPTIONAL CONNECTION TYPES | DIAPHRAGM-SENSED | HIGH FLOW COEFFICIENT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2” 3/4”	2.0	Gas or Liquid	400 bar (5,800 psi)	PCTFE or PEEK™	10 bar (145 psi)	Diaphragm	Non

MF401 MEDIUM-FLOW

BALANCED DESIGN | OPTIONAL CONNECTION TYPES | PISTON-SENSED | HIGH FLOW COEFFICIENT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2” 3/4”	2.0	Gas or Liquid	400 bar (5,800 psi)	PCTFE or PEEK™	400 bar (5,800 psi)	Piston	Non

MF414G MEDIUM-FLOW

PISTON-SENSED | BALANCED DESIGN | SEGREGATED CAPTURED VENT | HIGH FLOW COEFFICIENT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2” 3/4”	2.0	Gas	414 bar (6,000 psi)	PEEK™	414 bar (6,000 psi)	Piston	Non or Self (captured)

High-Flow Regulators

HF300
HIGH-FLOW

BALANCED DESIGN | ELASTOMERIC DIAPHRAGM | HIGH FLOW COEFFICIENT | GAS OR LIQUID APPLICATIONS

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1”	4.0	Gas Liquid	300 bar (4,350 psi)	PEEK™ Vespel®	10 bar (145 psi)	Elastomeric Diaphragm	Non

HF301
HIGH-FLOW

BALANCED DESIGN | PISTON-SENSED | HIGH FLOW COEFFICIENT | GAS OR LIQUID APPLICATIONS

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1”	4.0	Gas Liquid	300 bar (4,350 psi)	PEEK™ Vespel®	300 bar (4,350 psi)	Piston	Non

HF250
HIGH-FLOW

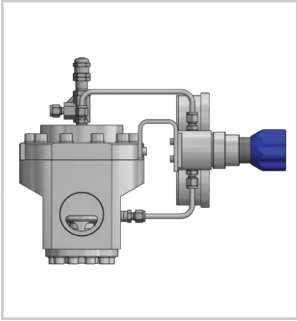
BALANCED DESIGN | DIAPHRAGM-SENSED | HIGH FLOW COEFFICIENT | GAS OR LIQUID APPLICATIONS

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION
1” 1 1/2”	7.0	Gas Liquid	250 bar (3,625 psi)	PCTFE PEEK™	10 bar (145 psi)	Diaphragm	Non

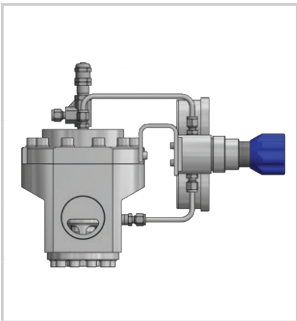
HF251
HIGH-FLOW

BALANCED DESIGN | PISTON-SENSED | HIGH FLOW COEFFICIENT | GAS OR LIQUID APPLICATIONS

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION
1” 1 1/2”	7.0	Gas Liquid	250 bar (3,625 psi)	PCTFE PEEK™	200 bar (3,625 psi)	Piston	Non



HF210 HIGH-FLOW	SPRING OR DOME-LOADED	DIAPHRAGM-SENSED	HIGH FLOW COEFFICIENT	GAS OR LIQUID APPLICATIONS			
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
2”	13.0	Gas Liquid	210 bar (3,045 psi)	PCTFE PEEK™	10 bar (145 psi)	Diaphragm	Non



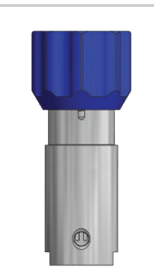
HF211 HIGH-FLOW	PILOT-OPERATED AS STANDARD	PISTON-SENSED	HIGH FLOW COEFFICIENT	GAS OR LIQUID APPLICATIONS			
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
2”	13.0	Gas Liquid	210 bar (3,045 psi)	PCTFE PEEK™	200 bar (2,900 psi)	Piston	Non

Back Pressure Regulators

BP010 BACK PRESSURE	ELASTOMERIC DIAPHRAGM	PTFE-LINED DIAPHRAGM	BOLTED BONNET	316SS THREADED BONNET		
PORT SIZE	**CV**	**SERVICE**	**MAX RATING**	**SEAT**	**CONTROL RANGE**	**SENSING ELEMENT**
1/4”	0.1	Gas	10 bar (145 psi)	PCTFE	5 bar (75 psi)	PTFE-Lined Elastomeric Diaphragm

BP300 BACK PRESSURE	INCONEL® X750 DIAPHRAGM	GAS OR LIQUID APPLICATIONS	LOW FLOW COEFFICIENT	LIGHTWEIGHT & COMPACT		
PORT SIZE	**CV**	**SERVICE**	**MAX RATING**	**SEAT**	**CONTROL RANGE**	**SENSING ELEMENT**
1/4”	0.1	Gas or Liquid	35 bar (510 psi)	FKM / FPM	20 bar (290 psi)	Inconel® X750 Diaphragm

BP301 BACK PRESSURE	PISTON-SENSED	GAS OR LIQUID APPLICATIONS	CHOICE OF LOW FLOW COEFFICIENTS	LIGHTWEIGHT & COMPACT		
PORT SIZE	**CV**	**SERVICE**	**MAX RATING**	**SEAT**	**CONTROL RANGE**	**SENSING ELEMENT**
1/4”	0.1	Gas	150 bar (2,175 psi)	PCTFE	150 bar (2,175 psi)	Piston
		Liquid		PCTFE or PEEK™		



BP-LF540 LOW-FLOW	PISTON-SENSED	GAS OR LIQUID APPLICATIONS	LOW FLOW COEFFICIENT	AIR-ACTUATED OPTION		
PORT SIZE	**CV**	**SERVICE**	**MAX RATING**	**SEAT**	**CONTROL RANGE**	**SENSING ELEMENT**
1/4”	0.1	Gas or Liquid	550 bar (7,795 psi)	PEEK™	414 bar (6,000 psi)	Piston

BP-LF690 LOW-FLOW	PISTON-SENSED	RANGE OF SEAT MATERIALS	LOW FLOW COEFFICIENT	AIR-ACTUATED OPTION		
PORT SIZE	**CV**	**SERVICE**	**MAX RATING**	**SEAT**	**CONTROL RANGE**	**SENSING ELEMENT**
1/4”	0.1	Gas	550 bar (7,975 psi)	PEEK™	414 bar (6,000 psi)	Piston
		Liquid		316SS		

BP-LF691
LOW-FLOW

PISTON-SENSED | RANGE OF SEAT MATERIALS | LOW FLOW COEFFICIENT | AIR-ACTUATED OPTION

PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
1/4”	0.1	Gas	1,034 bar (15,000 psi)	PEEK™	900 bar (13,050 psi)	Piston
		Liquid		316SS		

BP-MF690 (05)
MEDIUM-FLOW

PISTON-SENSED | PRECISION-MACHINED SENSING ELEMENT | AIR-ACTUATED OPTION | FLANGED OPTION

PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
1/2”	0.5	Gas	550 bar (7,975 psi)	PEEK™	414 bar (6,000 psi)	Piston
		Liquid		Hastelloy		

BP-MF690 (15)
MEDIUM-FLOW

PISTON-SENSED | CERAMIC SEATING | AIR-ACTUATED OPTION | FLANGED OPTION

PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
3/4”	1.5	Gas	690 bar (10,000 psi)	PEEK™	300 bar (4,350 psi)	Piston
		Liquid		Ceramic		

BP-MF400
MEDIUM-FLOW

ELASTOMERIC DIAPHRAGM | EASY ACCESS TO SEAT CARTRIDGE | FLANGE-TYPE BONNET

PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
1/2”	3.0	Gas	10 bar (145 psi)	PCTFE	10 bar (145 psi)	Diaphragm
		Liquid		PEEK™		

BP-MF401 MEDIUM-FLOW	ELASTOMERIC DIAPHRAGM | EASY ACCESS TO SEAT CARTRIDGE | FLANGE-TYPE BONNET | BALANCED DESIGN					
PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
1/2”	3.0	Gas	400 bar (5,800 psi)	PCTFE	200 bar (2,900 psi)	Piston
		Liquid		PEEK™		

LF310
LOW-FLOW

INCONEL® X750 DIAPHRAGM | 316SS THREADED BONNET | 40 MICRON INLET FILTER | SOLID DISK SEAT DESIGN

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06 0.15	Gas or Liquid	50 bar (725 psi)	FEP	35 bar (510 psi)	Inconel® X750 Diaphragm	Non
			300 bar (4,350 psi)	PCTFE			
			414 bar (6,000 psi)	PEEK™			

MF101
MEDIUM-FLOW

LARGE PRECISION-MACHINED SENSING ELEMENT | NON- OR SELF-VENTING | LIGHTWEIGHT & COMPACT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.5	Gas or Liquid	100 bar (1,450 psi) Unbalanced	PCTFE	35 bar (510 psi) Self-Vent or 40 bar (580 psi) Non-Vent	Piston	Non or Self
			300 bar (4,350 psi) Balanced	PCTFE			
			414 bar (6,000 psi) Balanced	PEEK™			

LF540
LOW-FLOW

COMPACT & ECONOMICAL | PISTON-SENSED | NON- OR SELF-VENTING | PRECISION-MACHINED SENSING ELEMENT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.1	Gas or Liquid	690 bar (10,000 psi)	PEEK™	414 bar (6,000 psi)	Piston	Non or Self

MF301
MEDIUM-FLOW

PISTON-SENSED | BALANCED DESIGN | LOW DECAYING PRESSURE EFFECT | EASY ACCESS TO SEAT CARTRIDGE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2”	2.0	Gas or Liquid	300 bar (4,350 psi)	PCTFE	300 bar (4,350 psi)	Piston	Non or Self
			414 bar (6,000 psi)	PEEK™			

MF300T
MEDIUM-FLOW

PISTON-SENSED | TRACKING DESIGN MAINTAINS CONSTANT PRESSURE DIFFERENTIAL

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/2”	2.0	Gas or Liquid	300 bar (4,350 psi)	PCTFE	25 bar (360 psi)	Piston	Self

BIBS100
NEGATIVE BIASED

LARGE SENSITIVE ELASTOMERIC DIAPHRAGM | EASY ACCESS TO SEAT CARTRIDGE | FINE ADJUSTMENT OF BIAS SPRING

PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
3/4”	2.0	Gas	50 bar (725 psi)	PCTFE	30 bar (435 psi)	Elastomeric Diaphragm

LW351
H2 DRONES

LIGHTWEIGHT & COMPACT | PISTON-SENSED | 0.15% DECAYING PRESSURE EFFECT | DIRECT MOUNTING TO CYLINDER

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/8”	0.06	Gas	350 bar (5,075 psi)	PCTFE	2 bar (29 psi)	Piston	Non

EC79 PENDING

AUTO438
H2 VEHICLES

DOUBLE O-RING | EASY ACCESS TO SEAT CARTRIDGE | IN-LINE VENT PORT | BALANCED DESIGN

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4” 3/8” SAE-4 SAE-6 SAE-8	0.5	Gas	438 bar (6,350 psi)	Devlon®	20 bar (290 psi)	Piston	Non

AUTO875
H2 VEHICLES

DOUBLE O-RING | EASY ACCESS TO SEAT CARTRIDGE | IN-LINE VENT PORT | HIGH PRESSURE

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.5	Gas	875 bar (12,690 psi)	PEEK™	20 bar (290 psi)	Piston	Non

RF1034
H2 REFUELLING

EASY TO ACCESS SEAT CARTRIDGE | PISTON-SENSED | OPTIONAL AUTO CONTROL | CV 0.3 FOR FAST REFUELLING

PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
3/8” 9/16”	0.3	Gas	1,034 bar (15,000 psi)	PEEK™	1,034 bar (15,000 psi)	Piston	Non

LW438
H2 FORKLIFT

LIGHTWEIGHT DESIGN | PISTON-SENSED | BALANCED DESIGN | FOR FORKLIFT APPLICATIONS

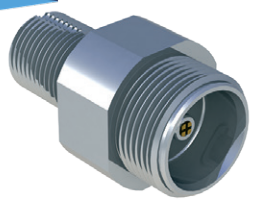
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
SAE-4	0.06	Gas	438 bar (6,350 psi)	PEEK™	20 bar (190 psi)	Piston	Non

LW-TS414
H2 TWO-STAGE

TWO-STAGE DESIGN | 0.04% DECAYING PRESSURE EFFECT | SOLID DISK SEAT DESIGN | LIGHTWEIGHT DESIGN

PORT SIZE	CV	SERVICE	MAX INLET	1ST STAGE SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.06	Gas	300 bar (4,350 psi)	PCTFE	1 bar (14.5 psi)	Piston	Non
			414 bar (6,000 psi)	PEEK™			

TPED PENDING



CV414-SC
CYLINDER VALVE

EASY DISCONNECT | CONTINUAL GAS SUPPLY | QUICK & EASY FILLING | LIGHTWEIGHT & COMPACT

PORT SIZE	CV	SERVICE	MAX INLET	SEAT
5/8” M18	0.06	Gas	350 bar (5,075 psi)	PCTFE
			414 bar (6,000 psi)	PEEK™

SS-COM301 SUBSEA	SUITABLE FOR DEEP WATERS	ANTI-TAMPER LOCKING CAP	MP35N SPRING	PRESSURE REDUCTION PLUS BACK PRESSURE CONTROL			
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4”	0.5	Gas or Liquid	300 bar (4,350 psi)	PCTFE	50 bar (725 psi)	Piston	Self

SS690 SUBSEA	SUITABLE FOR DEEP WATERS	ANTI-TAMPER LOCKING CAP	MP35N SPRING	OPTIONAL REMOTE OPERATION			
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
3/8”	0.1	Liquid	690 bar (10,000 psi)	Ceramic	690 bar (10,000 psi)	Piston	Non or Self

SS691 SUBSEA	SUITABLE FOR DEEP WATERS	ANTI-TAMPER LOCKING CAP	MP35N SPRING	OPTIONAL REMOTE OPERATION			
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
3/8”	0.1	Liquid	1,034 bar (15,000 psi)	Ceramic	690 bar (10,000 psi)	Piston	Non or Self

SS414 SUBSEA	SUITABLE FOR DEEP WATERS	ANTI-TAMPER LOCKING CAP	MP35N SPRING	OPTIONAL REMOTE OPERATION			
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
3/8”	2.0	Gas	414 bar (6,000 psi)	PEEK™	250 bar (3,625 psi)	Piston	Non or Self
		Liquid		Ceramic			

SS-BP400 SUBSEA	SUITABLE FOR DEEP WATERS	ANTI-TAMPER LOCKING CAP	MP35N SPRING			
PORT SIZE	CV	SERVICE	MAX RATING	SEAT	SENSING ELEMENT	VENTING OPTION
1/2”	2.0	Liquid	10 bar (145 psi)	PCTFE	Piston	Non

SS231 SUBSEA	SUITABLE FOR DEEP WATERS | ANTI-TAMPER LOCKING CAP | MP35N SPRING | OPTIONAL REMOTE OPERATION						
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
3/4”	1.0	Liquid	230 bar (3,335 psi)	PCTFE	35 bar (510 psi)	Piston	Non

ELECTRIC ACTUATOR FOR REMOTE CONTROL

For applications that are difficult to obtain access to, such as those in subsea environments, we also offer an optional compact electric actuator for remote regulator control.

Capable of operating at depths of up to 3,000m or 10,000ft, and at temperatures ranging from -20°C to 65°C (-4°F to 149°F), our remote solution features a fully closed loop servo motion system for precision control.

ASK FOR DETAILS

Get in Touch...

To make it as convenient as possible to make an enquiry or place an order, there are 3 different options to choose from:

DIRECT

Should you need any assistance, whether this is relating to a new enquiry, existing order or technical assistance, our Pressure Tech sales team will gladly assist. They are available Monday to Friday from 08:30 to 17:00.

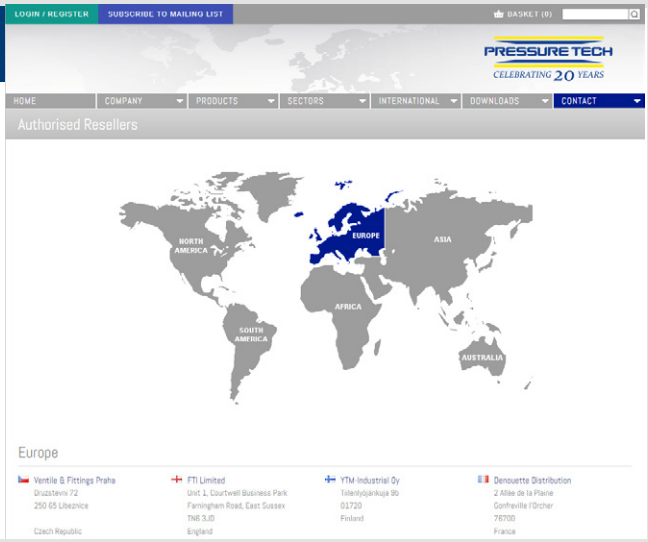
+44 (0)1457 899 307
sales@pressure-tech.com

AUTHORISED RESELLERS

We understand that it is sometimes more convenient to work with a local contact. To support our customers across the globe, we have a knowledgeable network of Pressure Tech 'Authorised Resellers'.

Please visit the Pressure Tech website and navigate to our 'Authorised Resellers' page to find the contact details of your nearest Pressure Tech reseller.

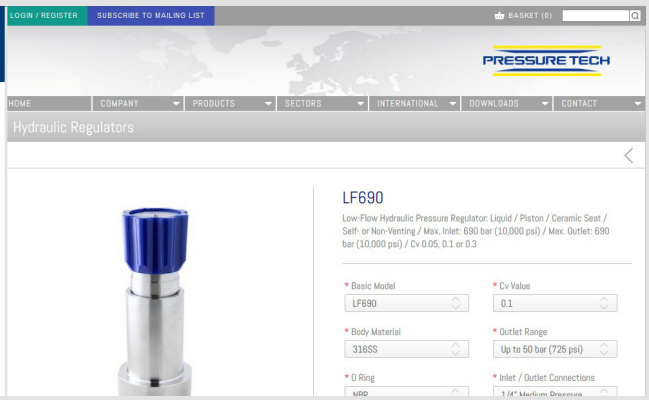
www.pressure-tech.com



ONLINE

If you would like to view pricing or order online, please visit the Pressure Tech website and register for an online account. Once approved, you will then be able to access pricing information and place orders 24/7, 7 days a week.

www.pressure-tech.com



Cv Formulae...

The Cv or flow capacity of a regulator is the maximum flow capability of a regulator (i.e. when the regulator is fully open) under a specific set of conditions. The Cv calculation varies based on the media used in your application.

Please refer to the relevant formula below to calculate the Cv for your application:

For Liquids (e.g. Water, Oil etc)

FORMULA	KEY	NOTES
$C_v = Q\sqrt{\frac{S}{\Delta P}}$	***Cv:*** Valve flow coefficient (US GPM with P=1 psi) ***Q:*** Fluid flow (US GPM) ***S:*** Specific gravity of fluid ***ΔP:*** P1 - P2 at maximum flow (psi)	Specific gravity correction is neglible for water below 93°C (200°F) - use S=1.0. Use actual specific gravity of other liquids at actual flow temperature.
$C_v = K_1 Q\sqrt{\frac{S}{\Delta P}}$	***Cv:*** Valve flow coefficient (US GPM with P=1 psi) ***K1:*** Viscosity correction factor for fluids ***Q:*** Fluid flow (US GPM) ***S:*** Specific gravity of fluid ***ΔP:*** P1 - P2 at maximum flow (psi)	Use this formula for fluids with viscosity correction factor. Use actual specific gravity of other liquids at actual flow temperature.

For Gases (e.g. Air, Natural Gas, Propane, etc)

FORMULA	KEY	NOTES
$C_v = \frac{Qa\sqrt{G(T+460}}{1360\sqrt{\Delta P(P_2)}}$	***Cv:*** Valve flow coefficient (US GPM with P=1 psi) ***Qa:*** Air or gas flow (SCFH) at 14.7 psi and 60°F ***G:*** Specific gravity of gas relative to air at 14.7 psi and 60°F ***T:*** Flow air or gas temperature (°F) ***ΔP:*** P1 - P2 at maximum flow (psi) ***P2:*** Outlet pressure at maximum flow (psi abs.)	Use this formula when P2 is *greater than* 50% of P1.
$C_v = \frac{Qa\sqrt{G(T+460}}{660\ P_1}$	***Cv:*** Valve flow coefficient (US GPM with P=1 psi) ***Qa:*** Air or gas flow (SCFH) at 14.7 psi and 60°F ***G:*** Specific gravity of gas relative to air at 14.7 psi and 60°F ***T:*** Flow air or gas temperature (°F) ***P1:*** Inlet pressure at maximum flow (psi abs.)	Use this formula when P2 is *less than* or equal to 50% of P1.

Information Required...

Should you need assistance with product selection, please provide the following information about your application:

01	Inlet Pressure
02	Outlet Pressure
03	Required Accuracy
04	Cv or Flow Rate
05	Media
06	Temperature
07	Non-Venting or Self-Venting
08	Connection Type and Size
09	Porting Configuration
10	Materials of Construction

Please note:
Pressure Tech supports with product selection recommendations only - it is the users responsibility to ensure the product is suitable for their specific application requirements.

Frequently Asked Questions...

What is your VAT number?
GB 776 740 883.

How do I check my order status?
Please contact the Pressure Tech sales team on +44 (0)1457 899 307 - they will be able to advise you on the current status of your order.

Can I view prices online?
You will require an online account to view pricing on our website. Please visit www.pressure-tech.com and then click 'Login / Register' to begin your application. Once approved, you will receive an email notification.

How do I apply for a credit account?
Please visit the 'Customer Resources' section of our website, download and complete our 'Trade Credit Account' application form and then email to accounts@pressure-tech.com.

What currencies do you accept?
We currently accept GBP (£), EUR (€) and USD ($).

How do I find my nearest Authorised Reseller?
Please visit the 'Contact' section of our website, navigate to the 'Authorised Resellers' page and then click on the world map to select your region.

PRESSURE TECH

CELEBRATING 20 YEARS

JAN 2021

PRESSURE TECH LTD
Unit 24, Graphite Way, Hadfield, Glossop, Derbyshire, UK, SK13 1QH
T +44 (0)1457 899 307
E sales@pressure-tech.com
W www.pressure-tech.com