



## **Company Overview**





# 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 understood 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**



Back pressure and forward reducing regulators for applications such as drones, forklifts, refuelling stations, buses/trucks and electrolysers. This range includes products with EC79 and TPED approvals.

## 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...

05 ANALYSER & INSTRUMENTATION

MINI300, LF310, LF240, TS310, TS311, CYL310, CYL540, ACS310, ACU310, XHS310, XHS311, XHR310, XHR311, XHR310 (STEAM) and XHM300.

HIGH PRESSURE: GAS

LF311, LF540 and LF792.

10 HIGH PRESSURE: LIQUID

LGC690, HYD690, HYD691, LF690, LF691 and MF414H.

12 MEDIUM-FLOW

MF101, MF230, MF231, MF210, MF301, MF400, MF401 and MF414G.

14 HIGH-FLOW

HF300, HF301, HF250, HF251, HF210 and HF211.

16 BACK PRESSURE

BP010, BP300, BP301, BP-LF540, BP-LF690, BP-LF691, BP-MF690 (05), BP-MF690 (15), BP-MF400 and BP-MF401.

19 DIVING

LF310, MF101D, LF540, MF301D, MF300T and BIBS100.

**94** HYDROGEN

LW351, CV414-SC, AUTO438, RF1034, LW438, BP301 and LW-TS414.

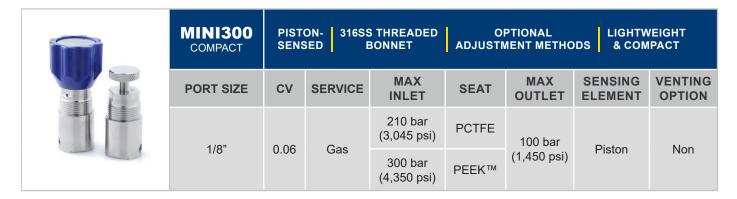
23 SUBSEA

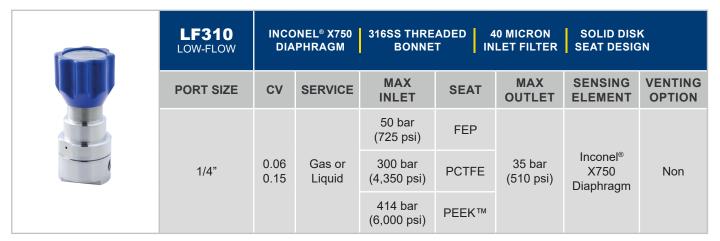
SS-COM301, SS690, SS691, SS414, SS-BP400, SS231 and Electric Actuator.

25 ORDERING

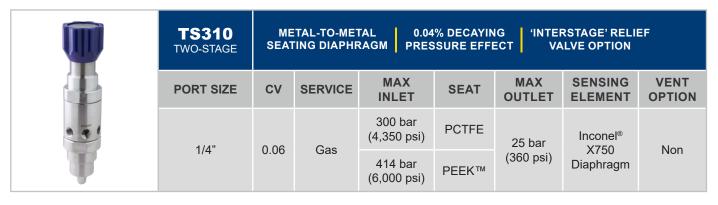
How to Order, Cv Formulae, What Information We Require and Notes Pages.

## **Analyser & Instrumentation Regulators**













	TS311 TWO-STAGE		PISTON- 0.04% DECAYING 'INTERSTAGE' RELIEF 40 MICRON SENSED PRESSURE EFFECT VALVE OPTION 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	Diaton	Nen		
	1/4	0.06	Gas	414 bar (6,000 psi)	PEEK™	(290 psi)	Piston	Non		

	CYL310 CYLINDER ASSEMBLY		CUSTOMISABLE TO   INCONEL® X750   SOLID DISK   40 MICRON SUIT APPLICATION   DIAPHRAGM   SEAT DESIGN   INLET FILTER							
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION		
	1/4"	0.06	300 bar (4,350 psi) PCTFE 35 bar	Inconel® X750	Non					
		0.06	Gas	414 bar (6,000 psi)	PEEK™	(510 psi)	Diaphragm	NOII		

PERSONAL TITLES OF THE PROPERTY OF THE PROPERT	CYL540 CYLINDER ASSEMBLY	COMI DES	PACT PIST	TON- SEL ISED NON-V	.F OR 'ENTING	40 MICRON INLET FILTEI		
	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		ICAL / LAB LICATIONS	USER-FRIEN DESIGN		ONAL SECON SE REGULAT		ALONE OR OUNTABLE
	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

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## **Analyser & Instrumentation Regulators**



ACU310 AUTO-CHANGEOVER		NEL® X750 PHRAGM	USER-FRIEN DESIGN		OND-STAGE GULATOR	0.1% DEC	
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   SIDE-ENTRY   ATEX & IECEX   INCONEL® X750   CARTRIDGE   OR IN-LINE   CERTIFIED   DIAPHRAGM										
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION					
4/4"	1/4" 0.06 Gas	300 bar (4,350 psi)	PCTFE	35 bar	Inconel® X750	Non						
1/4		Gas	414 bar (6,000 psi)	PEEK™	(510 psi)	Diaphragm	Non					



	XHS311 ELECTRIC-HEATED		HEATER TRIDGE	SIDE-ENTRY OR IN-LINE	ATEX & II					
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION		
<b>&gt;</b>	1/4"	4/4/1	300 bar (4,350 psi)	PCTFE	150 bar	Piston	Non			
	1/4	0.06	Gas	414 bar (6,000 psi) PEEK™		(2,175 psi)	FISIOII	Non		

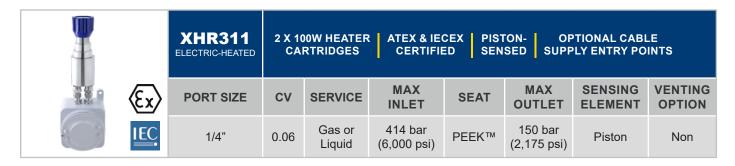




XHR310 ELECTRIC-HEATED		00W HEATER RTRIDGES	ATEX & IEC		ONEL® X750 IPHRAGM	OPTIONAI SUPPLY ENT	
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4"	0.06	Gas or Liquid	414 bar (6,000 psi)	PEEK™	35 bar (500 psi)	Inconel® X750 Diaphragm	Non







XHR310 STEAM-HEATED		M-HEATED ESIGN	40 MICRON INLET FILTE		EL® X750 HRAGM	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   ALTERNATIVE   COMPACT   115V OR 230V   CERTIFIED   MATERIALS AVAILABLE   DESIGN   POWER SUPPL					
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
⟨£x⟩ IEC	1/4"	NA	Gas or Liquid	300 bar (4,350 psi)	NA	NA	NA	NA

## **High-Pressure Regulators: Gas**

<b>LF311</b> LOW-FLOW	_	PISTON- 316SS THREADED 40 MICRON SOLID DISK SENSED BONNET INLET FILTER SEAT DESIGN						
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION	
1/4"	0.00	Gas or	Die	Dieter	Non			
3/8"	0.06	Liquid	414 bar (6,000 psi)	PEEK™	(2,610 psi)	Piston	Non	

	LF540 LOW-FLOW	-	COMPACT & PISTON- NON- OR PRECISION-MACHINED SENSING ELEMENT							
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION		
<b>→ ∢</b>	1/4" 3/8"	0.1	Gas or Liquid	690 bar (10,000 psi)	PEEK™	414 bar (6,000 psi)	Piston	Non or Self		

<b>LF792</b> LOW-FLOW	ENHANCED PISTON- SEGREGATED EASY ACCESS TO SEAT SUPPORT SENSED CAPTURED VENT 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	_			SEGREGATE APTURED V		ACCESS TO 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)

HYD690 HYDRAULIC	COMPACT & SEGREGATED MAIN VALVE ECONOMICAL CAPTURED VENT CARTRIDGE DESIGN						
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
-	0.06	Liquid	690 bar (10,000 psi)	Tecasint®	690 bar (10,000 psi)	Piston	Self (captured)

HYD691 HYDRAULIC	COM			GREGATED		N VALVE DGE DESIGN	VENTING OPTION			
PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT				
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		AMIC FU	ULLY SUPPORTED   SEGREGATED   EASY ACCESS TO   MAIN VALVE   CAPTURED VENT   SEAT CARTRIDGE					
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION	
1/4" 3/8"	0.1	Liquid	690 bar (10,000 psi)	Ceramic	690 bar (10,000 psi)	Piston	Non or Self (captured)	

<b>LF691</b> LOW-FLOW	CER. SE	EASY ACCES					
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)

## High Pressure Regulators: Liquid

W	MF414H MEDIUM-FLOW	PIST( SENS	- <u> </u>		REGATED URED VEN	and the second s		
	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)



	MF101 MEDIUM-FLOW		SE PRECISIO SENSING EI	N-MACHINED LEMENT	NON- SELF-VE	and the second s	SHTWEIGHT COMPACT	
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
				100 bar	PCTFE	35 bar		
				(1,450 psi) Unbalanced	PEEK™	(510 psi) Self-Vent		
	1/4"	0.5	Gas or Liquid	300 bar (4,350 psi) Balanced	4,350 psi) PCTFE or Piston Balanced	Piston	Non or Self	
				414 bar (6,000 psi) Balanced	PEEK™	40 bar (580 psi) Non-Vent		

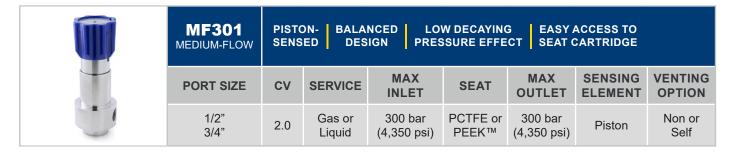
	MF230 MEDIUM-FLOW		ARGE SENS	SITIVE APHRAGM	BALANCED DESIGN	LOW DE PRESSUR	CAYING E EFFECT	
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	4/0"	1/2" 1.0	1.0 Gas or Liquid	50 bar (725 psi)	PTFE	10 bar	Diaphragm	Non
	1/2			230 bar (3,350 psi)	PCTFE or PEEK™	(145 psi)		Non

	MF231 MEDIUM-FLOW		ARGE SENS	SITIVE APHRAGM	BALANCED DESIGN	LOW DE PRESSUR		
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	4/0"	1/2" 1.0	Gas	35 bar (510 psi)	PTFE	100 bar	Piston	Non
	1/2	/2" 1.0		230 bar (3,350 psi)	PCTFE or PEEK™	(1,450 psi)	PISION	Non

MF210 MEDIUM-FLOW		PTFE-LINED NO RANGE OF END LARGE DIAPHRAGM O-RINGS CONNECTORS 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

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## **Medium-Flow Regulators**



	MF400 MEDIUM-FLOW	BALANCED OPTIONAL DIAPHRAGM- HIGH FLOW COEFFICIENT						
The same of the	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

Û	MF401 MEDIUM-FLOW		NCED CO	OPTIONAL INNECTION TY	PIST PES SEN		I FLOW FICIENT	
Carrie 1	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

Ŵ	MF414G MEDIUM-FLOW		PISTON- BALANCED SEGREGATED HIGH FLOW SENSED DESIGN CAPTURED VENT 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)		





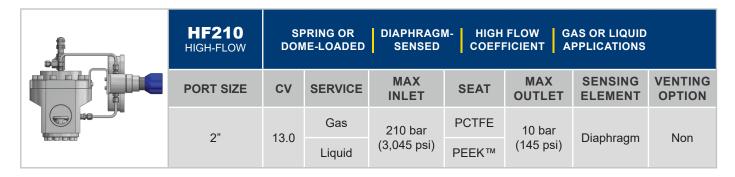
HF300 HIGH-FLOW		and the second s	ASTOMERIC APHRAGM	HIGH FLO COEFFICIE	taran da	R LIQUID CATIONS	
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1"	4.0	Gas	300 bar	PEEK™	10 bar	Elastomeric	Non
1" 4	4.0	Liquid	(4,350 psi)	Vespel®	(145 psi)	Diaphragm	NOII

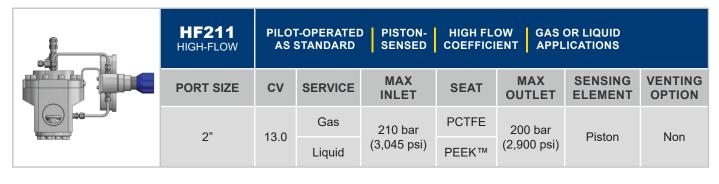
i	HF301 HIGH-FLOW		BALANCED PISTON- HIGH FLOW GAS OR LIQUID DESIGN SENSED COEFFICIENT APPLICATIONS							
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION		
	1" 4.0	4.0	Gas	300 bar	PEEK™	300 bar	Piston	Non		
		Liquid	(4,350 psi)	Vespel <sup>®</sup>	(4,350 psi)	FISION	NOIT			

	HF250 HIGH-FLOW		BALANCED DIAPHRAGM- HIGH FLOW GAS OR LIQUID COEFFICIENT APPLICATIONS							
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION		
. 0	1"	7.0	Gas	250 bar	PCTFE	10 bar	Diaphragm	Non		
	1 1/2"	Liquid	(3,625 psi)	PEEK™	(145 psi)	Diapriragiii	NOII			

	HF251 HIGH-FLOW		to the second		H FLOW FFICIENT	GAS OR LIQ APPLICATIO		
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION
. 0	1" 1 1/2"	7.0	Gas	250 bar (3,625 psi)	PCTFE	200 bar	Piston	Non
		7.0	Liquid		PEEK™	(3,625 psi)	FISION	NOII

## **High-Flow Regulators**











BP010 BACK PRESSURE		ELASTOMERIC PTFE-LINED BOLTED 316SS THREADED DIAPHRAGM DIAPHRAGM BONNET BONNET								
PORT SIZE	CV	SERVICE	MAX RATING	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 GAS OR LIQUID LOW FLOW LIGHTWEIGHT DIAPHRAGM APPLICATIONS COEFFICIENT & 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- GAS OR LIQUID CHOICE OF LOW LIGHTWEIGHT SENSED APPLICATIONS FLOW COEFFICIENTS & COMPACT								
PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT			
		Gas	150 bar	PCTFE	150 bar				
1/4" 0.1		Liquid	(2,175 psi)	PCTFE or PEEK™	(2,175 psi)	Piston			



BP-LF540 LOW-FLOW		PISTON- GAS OR LIQUID LOW FLOW AIR-ACTUATED SENSED APPLICATIONS COEFFICIENT 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- RANGE OF LOW FLOW AIR-ACTUATED SENSED SEAT MATERIALS COEFFICIENT OPTION							
PORT SIZE	CV	SERVICE MAX RATING SEA			CONTROL RANGE	SENSING ELEMENT			
1/4"	0.1	Gas	550 bar	PEEK™	414 bar	Piston			
1/4 0.1		Liquid	(7,975 psi)	316SS	(6,000 psi)	PISION			

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## **Back Pressure Regulators**



BP-MF690 (05) MEDIUM-FLOW	PISTON- SENSED		I-MACHINED ELEMENT	AIR-ACTUAT OPTION	ED FLANGED OPTION	
PORT SIZE	cv	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
1/2"	0.5	Gas	550 bar	PEEK™	414 bar	Piston
1/2	0.5	Liquid	(7,975 psi)	Hastelloy	(6,000 psi)	FISIOII

Ŵ	BP-MF690 (15) MEDIUM-FLOW	PISTON- SENSED	_	AIR-ACTUA OPTION	- I I I I I I I I I I I I I I I I I I I		
	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
	3/4"	1.5	Gas	690 bar	PEEK™	300 bar	Piston
	3/4	1.5	Liquid	(10,000 psi)	Ceramic	(4,350 psi)	PISION

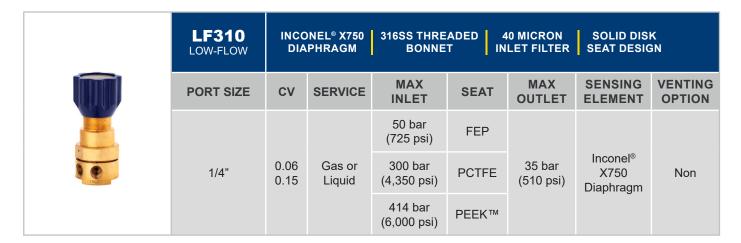
	BP-MF400 MEDIUM-FLOW	ELASTOMERIC EASY ACCESS TO FLANGE-TYPE DIAPHRAGM SEAT CARTRIDGE BONNET							
	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT		
1	1/0"	2.0	Gas	10 bar	PCTFE	10 bar	Dianbraam		
	1/2"	3.0	Liquid	(145 psi)	PEEK™	(145 psi)	Diaphragm		

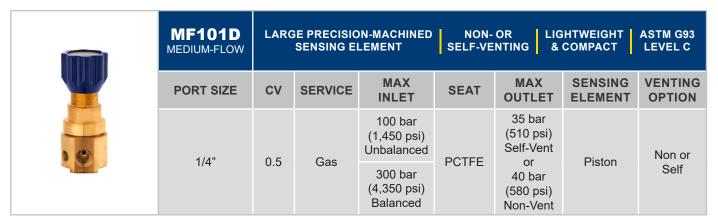




	BP-MF401 MEDIUM-FLOW	ELASTO DIAPHR		SY ACCESS TO T CARTRIDGE			
	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
1	1/2"	2.0	Gas	400 bar	PCTFE	200 bar	Dioton
		3.0	Liquid	(5,800 psi)	PEEK™	(2,900 psi)	Piston

## **Diving Regulators**



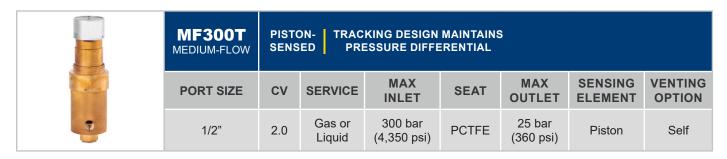


	<b>LF540</b> LOW-FLOW	_		PISTON- SENSED SE	NON- OR LF-VENTIN	The second se	ON-MACHINEI NG ELEMENT	D
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
•	1/4"	0.1	Gas or Liquid	690 bar (10,000 psi)	PEEK™	414 bar (6,000 psi)	Piston	Non or Self

	MF301D MEDIUM-FLOW	PIST( SENS	_		W DECAYIN		ACCESS TO CARTRIDGE	ASTM G93 LEVEL C
M	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
•	1/2"	2.0	Gas	300 bar (4,350 psi)	PCTFE	300 bar (4,350 psi)	Piston	Non or Self







BIBS100 NEGATIVE BIASED		GE SENSITIV MERIC DIAPH	E EAS` RAGM SEAT		FINE ADJUST OF BIAS SP	
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

## **Hydrogen Regulators**





CV414-SC CYLINDER VALVE		EASY CONNECT	CONTINUAL GAS SUPPLY	QUICK & E FILLIN	and the second s
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	APPROVAL
5/8"	0.06	Hydrogon	350 bar (5,075 psi)	PCTFE	TPED
M18	0.06	Hydrogen	414 bar (6,000 psi)	PEEK™	-



AUTO438 H2 BUSES & TRUCKS		EASY ACCESS TO IN-LINE BALANCED EC79 SEAT CARTRIDGE VENT PORT DESIGN APPROVED									
PORT SIZE	cv	SERVICE MAX MAX SENSING VENTING OPTION APPROVAL									
1/4" 3/8" 1/2" SAE-4 SAE-6 SAE-8	0.5	Hydrogen	438 bar (6,350 psi)	20 bar (290 psi)	Piston	Non	EC79				



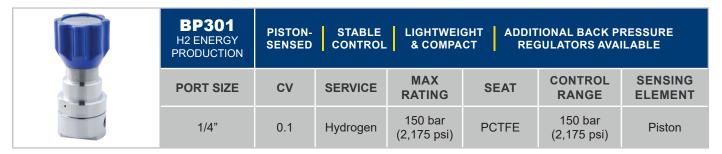
RF1034 H2 REFUELLING	_	Y TO ACCES T CARTRIDG		- I	ONAL ONTROL RE	FAST EFUELLING	
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
3/8" 9/16"	0.3	Hydrogen	1,034 bar (15,000 psi)	PEEK™	1,034 bar (15,000 psi)	Piston	Non



LW438 H2 MATERIAL HANDLING	_	HTWEIGHT DESIGN	PISTON- SENSED	BALANCEI DESIGN	)		
PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
SAE-4	0.06	Hydrogen	438 bar (6,350 psi)	PEEK™	20 bar (190 psi)	Piston	Non



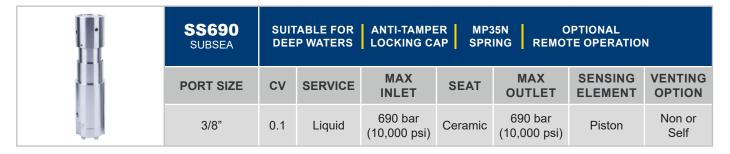




	LW-TS414 H2 TWO-STAGE		D-STAGE ESIGN	0.04% DEC PRESSURE I		OLID DISK AT DESIGN	LIGHTWEIG DESIGN	
E.P. INLET	PORT SIZE	CV	SERVICE	MAX INLET	1ST STAGE SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	1/4"	0.06	Hydrogon	300 bar (4,350 psi)	PCTFE	1 bar	Piston	Non
	1/4	0.00	Hydrogen	414 bar (6,000 psi)	PEEK™	(14.5 psi)		NOII

## **Subsea Regulators**





	SS691 SUBSEA			ANTI-TAMPE LOCKING CA		35N O ING REMOT	PTIONAL IE OPERATIOI	N
1 _ 1	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 ANTI-TAMPER MP35N OPTIONAL DEEP WATERS LOCKING CAP SPRING REMOTE OPERATION						
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	3/8" 2.	2.0	Gas	414 bar (6,000 psi)	PEEK™	250 bar (3,625 psi)	Piston	Non or
			Liquid		Ceramic		(3,625 psi)	FISION

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





ant	SS231 SUBSEA	SUITABLE FOR ANTI-TAMPER MP35N OPTIONAL DEEP WATERS LOCKING CAP SPRING 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 \( \Delta P: P1 - P2 \) 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				
$C_v = \frac{\mathrm{Qa}\sqrt{G(T+460)}}{1360\sqrt{\Delta P(P_2)}}$	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.				
$C_v = \frac{\text{Qa}\sqrt{G(T + 460)}}{660  P_1}$	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	06	Temperature
02	Outlet Pressure	07	Non-Venting or Self-Venting
03	Required Accuracy	08	Connection Type and Size
04	Cv or Flow Rate	09	Porting Configuration
05	Media	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 <a href="www.pressure-tech.com">www.pressure-tech.com</a> 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 <a href="mailto:accounts@pressure-tech.com">accounts@pressure-tech.com</a>.

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.



## **Notes**



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**Notes** 

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