

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.

ANALYSER & INSTRUMENTATION



Typically incorporating Inconel® X750 diaphragmsensed 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.





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05	ANALYSER & INSTRUMENTATION
05	MINI300, LF310, LF240, TS310, TS311, CYL310, CYL540, ACS310, ACU310, XHS310, XHS311, XHR310, XHR311, XHR310 (STEAM) and XHM300.
09	HIGH PRESSURE: GAS
•••	LF311, LF540 and LF792.
10	HIGH PRESSURE: LIQUID
	LGC690, HYD691, LF690, LF691 and MF414H.
11	MEDIUM-FLOW
	MF101, MF230, MF231, MF210, MF301, MF400, MF401 and MF414G.
13	HIGH-FLOW
	HF300, HF301, HF250, HF251, HF210 and HF211.
4.5	BACK PRESSURE
15	BP010, BP300, BP301, BP-LF540, BP-LF690, BP-LF691, BP-MF690 (05), BP-MF690 (15),
	BP-MF400, BP-MF401, BP-HF301 and BP-HF251.
18	DIVING
10	LF310, MF101, LF540, MF301, MF300T and BIBS100.
20	HYDROGEN
	LW351, AUTO438, AUTO875, RF1034, LW438, LW-TS414 and CV414-SC.
22	SUBSEA
	SS-COM301, SS690, SS691, SS414, SS-BP400, SS231 and Electric Actuator.
24	ORDERING
-	How to order, Cv formulae and what information we require.

	MINI300 COMPACT	PIST		S THREADED BONNET	-	PTIONAL MENT METHO	LIGHTW DS & COM	-
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	4 /0"	0.06	Car	210 bar (3,045 psi)	PCIEE	100 bar) Piston	Non
	1/8	1/8" 0.06	0.06 Gas	300 bar (4,350 psi)	PEEK™	(1,450 psi)		

LF310 LOW-FLOW	-	DNEL® X750 PHRAGM	316SS THRE BONNE		0 MICRON LET FILTER	SOLID DIS SEAT DESIG	
PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
			50 bar (725 psi)	FEP			
1/4"	0.06 0.15	Gas or Liquid	300 bar (4,350 psi)	PCTFE	35 bar (510 psi)	Inconel® X750 Diaphragm	Non
			414 bar (6,000 psi)	PEEK™			

LF240 LOW-FLOW		GE ELASTON DIAPHRAGN		TWEIGHT OMPACT	LOW DEC PRESSURE		
PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
1/4"	0.06	Can	300 bar (4,350 psi)	PCTFE	10 bar	PTFE-Lined	Non
1/4" 0.06	0.06 Gas	414 bar (6,000 psi)	PEEK™	(145 psi)	Elastomeric Diaphragm	Non	

	TS310 TWO-STAGE		TAL-TO-ME TING DIAPHR		% DECAYIN SURE EFFI		RSTAGE' RELII	EF
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION
errur (4 / 4 "	0.06	Can	300 bar (4,350 psi)	PCTFE	25 bar	Inconel®	Non
The second secon	1/4"	0.06	Gas	414 bar (6,000 psi)	PEEK™	(360 psi)	X750 Diaphragm	Non





Analyser & Instrumentation Regulators

	TS311 TWO-STAGE	PIST SENS		% DECAYING SURE EFFEC		STAGE' RELI	EF 40 MICF INLET FI	
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION
anur (1/4"	0.06	0.00	300 bar (4,350 psi)	PCTFE	20 bar	Piston	New
	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		
4 / 4 7	0.06	Cas	300 bar (4,350 psi)	PCTFE	35 bar	Inconel [®]	Non		
1/4	1/4" 0.06	.06 Gas	414 bar (6,000 psi)	PEEK™	(510 psi)	X750 Diaphragm	Non		

CYL540 CYLINDER ASSEMBLY	COMI DES	PACT PIST	TON- SEL SED NON-V	.F OR ENTING	40 MICRON	R	
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			ND- STAND OR WALL-M	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

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

Å	XHS310 ELECTRIC-HEATED			SIDE-ENTRY OR IN-LINE	ATEX & IEC CERTIFI		NEL [®] X750 PHRAGM	
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
ka ka	4/4"	0.00	0.00	300 bar (4,350 psi)	PCTFE	35 bar		Nor
IEC	1/4"	0.06	Gas	414 bar (6,000 psi)	PEEK™	(510 psi)	X750 Diaphragm	Non

Å	XHS311 ELECTRIC-HEATED			SIDE-ENTRY OR IN-LINE	ATEX & IE APPRO	ECEX PIST VED SEN		
L.	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
Ex)	0.06	Gas	300 bar (4,350 psi)	PCTFE	150 bar	Piston	Non
IEC		0.06	Gas	414 bar (6,000 psi)	PEEK™	(2,175 psi)	FISION	NOT

		XHR310 ELECTRIC-HEATED	-	00W HEATER RTRIDGES	ATEX & IEC CERTIFIE		DNEL® X750 APHRAGM	OPTIONA SUPPLY ENT	
		PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	⟨£x⟩ IEC	1/4"	0.06	Gas or Liquid	414 bar (6,000 psi)	PEEK™	35 bar (500 psi)	Inconel [®] X750 Diaphragm	Non





Analyser & Instrumentation Regulators

	XHR311 ELECTRIC-HEATED		00W HEATER RTRIDGES	ATEX & IEC CERTIFIE			PTIONAL CABL	
×3	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
IEC.	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 40 MICRON INCONEL® X750 SOLID DISK DESIGN INLET FILTER DIAPHRAGM SEAT DESIGN							
6	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		& IECEX RTIFIED	ALTERNA MATERIALS A	COMPACT DESIGN			
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
Ex IEC	1/4"	NA	Gas or Liquid	300 bar (4,350 psi)	NA	NA	NA	NA

LF311 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"	0.06	Gas or	300 bar (4,350 psi)	PCTFE	180 bar	Distan	Nez
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 ECONOMICAL SENSED SELF-VENTING 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		HANCED	PISTON- SENSED	SEGREG CAPTURED	ATED EAS VENT SEA	Y ACCESS TO T 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 PISTON- SEGREGATED EASY ACCESS TO INLET FILTER SENSED CAPTURED VENT 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	_	IPACT & NOMICAL	CERAMIC SEGREGATED MAIN VALVE SEAT CAPTURED VENT CARTRIDGE DESIGN					
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION	
4	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 FULLY SUPPORTED SEGREGATED EASY ACCESS TO SEAT 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 0.3	Liquid	690 bar (10,000 psi)	Ceramic	690 bar (10,000 psi)	Piston	Non or Self (captured)		

LF691 LOW-FLOW		CERAMIC FULLY SUPPORTED SEGREGATED EASY ACCESS TO SEAT MAIN VALVE CAPTURED VENT 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)	

Ŵ	MF414H 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	Liquid	414 bar (6,000 psi)	Ceramic	414 bar (6,000 psi)	Piston	Non or Self (captured)	

MF101 MEDIUM-FLOW		GE PRECISIO SENSING EI	DN-MACHINED LEMENT	NON- SELF-VE		GHTWEIGHT COMPACT	
PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
			100 bar (1.450 pai)	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	300 bar (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		LARGE SENS		BALANCED DESIGN	LOW DE PRESSUR	CAYING E EFFECT	
PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
4.07	1.0	Gas or	50 bar (725 psi)	PTFE	10 bar	Dianhaara	Nor
1/2"	1.0	Liquid	230 bar (3,350 psi)	PCTFE or PEEK™	(115 poi)	Diaphragm	Non

MF231 MEDIUM-FLOW		ARGE SENS	BITIVE APHRAGM	BALANCED DESIGN	LOW DE PRESSUR		
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	Picton	Non	
1/2	1.0	Gas	230 bar (3,350 psi)	PCTFE or PEEK™	(1 150 mai)	i) Piston	Non

MF210 MEDIUM-FLOW		-LINED HRAGM O		NGE OF ENI			
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	PIST(SENS			W DECAYING	G EASY CT SEAT (ACCESS TO 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

Ũ	MF400 MEDIUM-FLOW		BALANCED OPTIONAL DIAPHRAGM- HIGH FLOW DESIGN CONNECTION TYPES SENSED COEFFICIENT						
No. of the second second	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								
Contraction 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™	400 bar (5,800 psi)	Piston	Non	

W	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)	

High-Flow Regulators

	HF300 HIGH-FLOW		BALANCED ELASTOMERIC HIGH FLOW GAS OR LIQUID DESIGN DIAPHRAGM COEFFICIENT APPLICATIONS						
4540	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	Non		

	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	Gas	300 bar	PEEK™	300 bar (4,350 psi)	Piston	Non	
			Liquid		Vespel®			NOT	

I	HF250 HIGH-FLOW		BALANCED DIAPHRAGM- HIGH FLOW GAS OR LIQUID DESIGN SENSED COEFFICIENT APPLICATIONS						
a s p as	PORT SIZE	сv	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"	7.0	Liquid	(3,625 psi)	PEEK™	(145 psi)	Diaphragm	Non	

	HF251 HIGH-FLOW		BALANCED PISTON- HIGH FLOW GAS OR LIQUID DESIGN SENSED COEFFICIENT APPLICATIONS						
as E its	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENT OPTION	
. 0	1"	7.0	Gas	250 bar	PCTFE	200 bar	Piston	Non	
	1 1/2"	7.0	Liquid	(3,625 psi)	PEEK™	(3,625 psi)	FISION	NOT	





	HF210 HIGH-FLOW	-	PRING OR /IE-LOADED	DIAPHRAGI SENSED			AS OR LIQUID PPLICATIONS	
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	2"	12.0	Gas	210 bar	PCTFE	10 bar	Dianhragm	Non
	2" 13.0		Liquid	(3,045 psi)	PEEK™	(145 psi)	Diaphragm	Non

	HF211 HIGH-FLOW	-	T-OPERATED STANDARD) PISTON- SENSED	HIGH FL COEFFICI		OR LIQUID ICATIONS	
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	0"	12.0	Gas	210 bar	PCTFE	200 bar	Piston	Non
	2" 13.0		Liquid	(3,045 psi)	PEEK™	(2,900 psi)	FISION	INON

BP010 BACK PRESSURE	ELASTO DIAPHR		E-LINED BC PHRAGM BC		S 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 DIAPHR		S OR LIQUID PLICATIONS	LOW FLOW COEFFICIEN	LIGHTWEIG	
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		IQUID CH IONS FLOW	OICE OF LOW / COEFFICIEN		
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 SENSEI			W FLOW A	IR-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		E OF LC ERIALS COI		AIR-ACTUATED OPTION	
PORT SIZE	CV	SERVICE	MAX RATING	SEAT	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)	FISION





	BP-LF691 LOW-FLOW	PISTON- SENSED			OW FLOW EFFICIENT	AIR-ACTUATED OPTION	
	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
,	1/4"	0.1	Gas	1,034 bar	PEEK™	900 bar	Piston
	1/4	0.1	Liquid	(15,000 psi)	316SS	(13,050 psi)	FISION

	BP-MF690 (05) MEDIUM-FLOW	PISTON- SENSED		N-MACHINED	AIR-ACTUAT OPTION	ED FLANGED OPTION)
	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
,	1/0"	0.5	Gas	550 bar	PEEK™	414 bar	Piston
1/2"	1/2	0.5	Liquid	(7,975 psi)	Hastelloy	(6,000 psi)	FISION

BP-MF690 (15) MEDIUM-FLOW	PISTON- SENSED	CERAMIC SEATING				
PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
2//"	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								
The sums for	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT			
1	1/0"	3.0	Gas	10 bar	PCTFE	10 bar	Diophroam			
	1/2"		Liquid	(145 psi)	PEEK™	(145 psi)	Diaphragm			

	BP-MF401 MEDIUM-FLOW	ELASTOI DIAPHR		SY ACCESS TO T CARTRIDGE		YPE BALANC T DESIG	
The section of	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT
1	1/0"	3.0	Gas	400 bar	PCTFE	200 bar	Piston
	1/2" 3.	3.0	Liquid	(5,800 psi)	PEEK™	(2,900 psi)	FISION

Back Pressure Regulators

	BP-HF301 HIGH-FLOW	PISTON- GAS OR LIQUID HIGH FLOW BALANCED SENSED APPLICATIONS COEFFICIENT DESIGN									
	PORT SIZE		SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT				
	1"	4.0	Gas	300 bar	PEEK™	200 bar	Diston				
		4.0	Liquid	(4,350 psi)	Tecasint®	(2,900 psi)	Piston				

	BP-HF251 HIGH-FLOW		PISTON- GAS OR LIQUID HIGH FLOW BALANCED SENSED APPLICATIONS COEFFICIENT DESIGN								
	PORT SIZE	CV	SERVICE	MAX RATING	SEAT	CONTROL RANGE	SENSING ELEMENT				
G) 1"		Gas	300 bar	PEEK™	200 bar	Piston				
	1 1/2"	7.0	Liquid	(4,350 psi)	Tecasint®	(2,900 psi)	FISION				





	LF310 LOW-FLOW	-	ONEL® X750 PHRAGM	316SS THRE BONNE		0 MICRON LET FILTER	SOLID DISI SEAT DESIG	
	PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
				50 bar (725 psi)	FEP			
	1/4"	0.06 0.15	Gas or Liquid	300 bar (4,350 psi)	PCTFE	35 bar (510 psi)	Inconel® X750 Diaphragm	Non
				414 bar (6,000 psi)	PEEK™		. 0	

	MF101 MEDIUM-FLOW	LARC	GE PRECISIO SENSING EI	DN-MACHINED LEMENT				
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	1/4"			100 bar (1,450 psi) Unbalanced	PCTFE	35 bar (510 psi) Self-Vent		
		0.5	Gas or Liquid	300 bar (4,350 psi) Balanced	PCTFE	or	Piston	Non or Self
				414 bar (6,000 psi) Balanced	PEEK™	40 bar (580 psi) Non-Vent		

	LF540 LOW-FLOW	_		PISTON- SENSED SE	NON- OR LF-VENTIN		ON-MACHINE NG ELEMENT	D
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
2	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- BALANCED LOW DECAYING EASY ACCESS TO SENSED DESIGN PRESSURE EFFECT SEAT CARTRIDGE								
PORT SIZE	cv	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION			
1/2"	2.0	Gas or	300 bar (4,350 psi)	PCTFE	300 bar	Distan	Non or			
1/2	2.0	Liquid	414 bar (6,000 psi)	PEEK™	(4,350 psi)	Piston	Self			

Diving Regulators

	MF300T MEDIUM-FLOW		PISTON- TRACKING DESIGN MAINTAINS SENSED 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	
then with	BIBS100 NEGATIVE BIASED	-	ARGE SENS		EASY ACC SEAT CAR		NE ADJUSTM OF BIAS SPRI		
	PORT SIZE	cv	SERVI	CE MAX	S	FAT -	ONTROL RANGE	SENSING ELEMENT	
	3/4"	2.0	Gas	50 ba (725 p	P	TFE (30 bar 435 psi)	Elastomeric Diaphragm	





÷	LW351 H2 DRONES	-	LIGHTWEIGHT PISTON- 0.15% DECAYING DIRECT MOUNTING & COMPACT SENSED PRESSURE EFFECT TO CYLINDER								
P	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								
	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			ACCESS TO CARTRIDGE				
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		Y TO ACCES CARTRIDG		OPTIC AUTO CO		0.3 FOR FAS	т
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		ITWEIGHT DESIGN	PISTON- SENSED	BALANCEI DESIGN	D FOR FOR APPLICA		
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
MART DURING	SAE-4	0.06	Gas	438 bar (6,350 psi)	PEEK™	20 bar (190 psi)	Piston	Non

	LW-TS414 H2 TWO-STAGE		D-STAGE ESIGN	0.04% DECA PRESSURE E		DLID DISK AT DESIGN	LIGHTWEI	
0	PORT SIZE	cv	SERVICE	MAX INLET	1ST STAGE SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION
	4/4"	0.00	0	300 bar (4,350 psi)	PCTFE	1 bar	Piston	Non
	1/4"	0.06	Gas	414 bar (6,000 psi)	PEEK™	(14.5 psi)		
TPED	CV414-SC		EASY CONNECT	CONTINUA GAS SUPPL			GHTWEIGHT COMPACT	
PENDING	CYLINDER VALVE			MAX				
	PORT SIZE	cv	SERVICE	INLET	SEAT			
	5/8" M18	0.06	Gas	350 bar (5,075 psi)	PCTFE	_		
	IVI I O			414 bar				

414 bar

(6,000 psi)

PEEK™





Subsea Regulators

	SS-COM301 SUBSEA			ANTI-TAMPE LOCKING C/			RE REDUCTIO	
en	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 ANTI-TAMPER MP35N OPTIONAL DEEP WATERS LOCKING CAP SPRING REMOTE OPERATION						N
4 <u>-</u> 1	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 ANTI-TAMPER MP35N OPTIONAL DEEP WATERS LOCKING CAP SPRING REMOTE OPERATION						N
4 - 4	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
2/9"	2.0	Gas	414 bar	PEEK™	250 bar	Piston	Non or
3/8" 2	2.0 Liquid	Liquid	(6,000 psi) Ceran	Ceramic	(3,625 psi)	Piston	Self

(a) •	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

	SS231 SUBSEA			ANTI-TAMPE	ER MP35N OPTIONAL AP SPRING REMOTE OPERATION				
	PORT SIZE	CV	SERVICE	MAX INLET	SEAT	MAX OUTLET	SENSING ELEMENT	VENTING OPTION	
omr	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

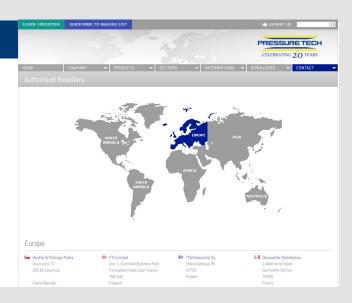


AUTHORISED RESELLERS

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							
$C_{v} = Q \sqrt{\frac{\mathrm{S}}{\Delta \mathrm{P}}}$	 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.							
$C_{v} = K_{1}Q \sqrt{\frac{\mathrm{S}}{\Delta \mathrm{P}}}$	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
$C_{\nu} = \frac{\mathrm{Qa}\sqrt{G(T+460)}}{1360\sqrt{\Delta P(P_2)}}$	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 <i>greater than</i> 50% of P1.
$C_{v} = \frac{Qa\sqrt{G(T+460)}}{660 P_{1}}$	 <i>Cv:</i> Valve flow coefficient (US GPM with P=1 psi) <i>Qa:</i> Air or gas flow (SCFH) at 14.7 psi and 60°F <i>G:</i> Specific gravity of gas relative to air at 14.7 psi and 60°F <i>T:</i> Flow air or gas temperature (°F) <i>P1:</i> Inlet pressure at maximum flow (psi abs.) 	Use this formula when P2 is <i>less than</i> 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 <u>www.pressure-tech.com</u> 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 <u>accounts@pressure-tech.com</u>.

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.



CELEBRATING **20** YEARS



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