

## Spring Loaded Regulator

J50 is a balanced valve, piston or diaphragm sensed spring-loaded pressure regulator used for quick control of outlet pressure. Heavy duty construction, accurate and reliable, ideal for high and low pressure applications.



### Standard Features

**Valve Size:**

- 1/4" BALANCED

**Materials of construction:**

- BODY - STAINLESS STEEL - BS EN 10088 1.4541
- SPRING HOUSING - STAINLESS STEEL - BS EN 10088 1.4401
- SEAT - STAINLESS STEEL - BS EN 10088 1.4401
- TRIM - PCTFE
- ELASTOMERS - HIGH NITRILE
- HANDWHEEL - PLASTIC OR ALUMINIUM

**Connections:**

- LINE 3/8" BSPP; GAUGE 1/4" BSPP (INLET & OUTLET)

**Maximum Inlet Pressure:**

- 750 BAR (10880 PSI)

**Outlet Pressure Range:**

- 0.1 - 550 BAR (1.5 - 7975 PSI)

**Pressure Release for down stream venting:**

- VENTING 1/8" BSPP CONNECTION

**Media:**

- LIQUID AND GASES

**Weight:**

- ST. STL. 3,6 Kg; ALU 2,2 Kg

### Additional Features

- NON VENTING
- LOCKING DEVICE
- PANEL MOUNTING BRACKET
- BASE MOUNTING
- FILTER - 25 MICRON (NOT HYDRAULIC VERSION)
- DIFFERENTIAL CONTROL

### Options

**Valve Size:**

- 1/16" UNBALANCED

**Materials of construction:**

- BODY - BRASS - BS EN 12164 CW614N (OXY ONLY)
- BODY - ALUMINIUM - L168 T6511
- ELASTOMERS - FLUOROCARBON OR EPDM

**Connections:**

- NPT LINE, GAUGE AND VENT CONNECTIONS

## Applications

- Marine industries
- Gas & Oil industries
- Off shore / aggressive environments
- Oxygen use approved
- CO<sub>2</sub> Blanketing
- Air Compressors
- Gas Analyser / Instrumentation
- Gas distribution / mixing
- Pressure test rigs
- Piloting for Dome loaded regulators
- Fire control systems
- Nace

## Ordering Information

TYPE	VALVE SEAT SIZE	MATERIAL OPTION	CONNECTIONS	OUTLET PRESSURE	RELEASE OPTION	ELASTOMER	OPTIONS	HYDRAULIC	2ND OPTIONS
J50	C (1/4") Y (1/16")	B9 (St. Stl.) T0 (ALUM.)	E2 (3/8" BSPP) A2 (3/8" NPT)	M (0.1-5 BAR) P (0.1-10 BAR) R (2-20 BAR) T (3.5-35 BAR) W (5.2-52 BAR) X (7-70 BAR) Y (10.3-103BAR) Z (15-150 BAR) 3 (25-250 BAR) 4 (25-275 BAR) 8 (55-550 BAR)	R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)	(BLANK NOT REQUIRED) F (FILTER) P (PANEL MOUNT) FP (FILTER & PANEL MOUNT)	(BLANK NOT REQUIRED) H (HYDRAULIC)	(BLANK NOT REQUIRED) 004 (SEALED HOUSING) 005 (LOCKING VERSION) 006 (TRAVEL STOP)

ORDERING INFORMATION EXAMPLE:

J50CT0E2MRNFP

## Notes

## Technical Specifications

### Pressure

	PRESSURE	BODY MATERIAL
TEST (PROOF) PRESSURE	1125 BAR (16310 PSI) 825 BAR (11960 PSI)	STAINLESS STEEL ONLY ALUMINIUM
MAXIMUM INLET PRESSURE	750 BAR (10880 PSI) 550 BAR (7975 PSI)	STAINLESS STEEL ONLY ALUMINIUM

### Outlet Pressure Ranges

PRESSURE	SENSING
0.1 - 5 BAR (1.5 - 72.5 PSI)	DIAPHRAGM
0.1 - 10 BAR (1.5 - 150 PSI)	DIAPHRAGM
2 - 20 BAR (30 - 300 PSI)	DIAPHRAGM
3.5 - 35 BAR (50 - 508 PSI)	PISTON
5.2 - 52 BAR (510 - 754 PSI)	PISTON
7 - 70 BAR (102 - 1015 PSI)	PISTON
10.3 - 103 BAR (150 - 1500 PSI)	PISTON
15 - 150 BAR (218 - 2175 PSI)	PISTON
25 - 250 BAR (362 - 3625 PSI)	PISTON
25 - 275 BAR (362 - 4000 PSI)	PISTON
55 - 550 BAR (798 - 7980 PSI) (STAINLESS STEEL BODY ONLY)	PISTON

### Leakage

STANDARD ON REQUEST	BUBBLE TIGHT (TYPICALLY 10 <sup>-6</sup> AT CM <sup>3</sup> SEC <sup>-1</sup> ) HELIUM LEAK TESTED TO 10 <sup>-8</sup> AT CM <sup>3</sup> SEC <sup>-1</sup>
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### Temperature Range

	TEMPERATURE	BODY MATERIAL
STANDARD	-10°C TO +100°C	ALL
OPTION	-40°C TO +150°C	CONSULT IVP

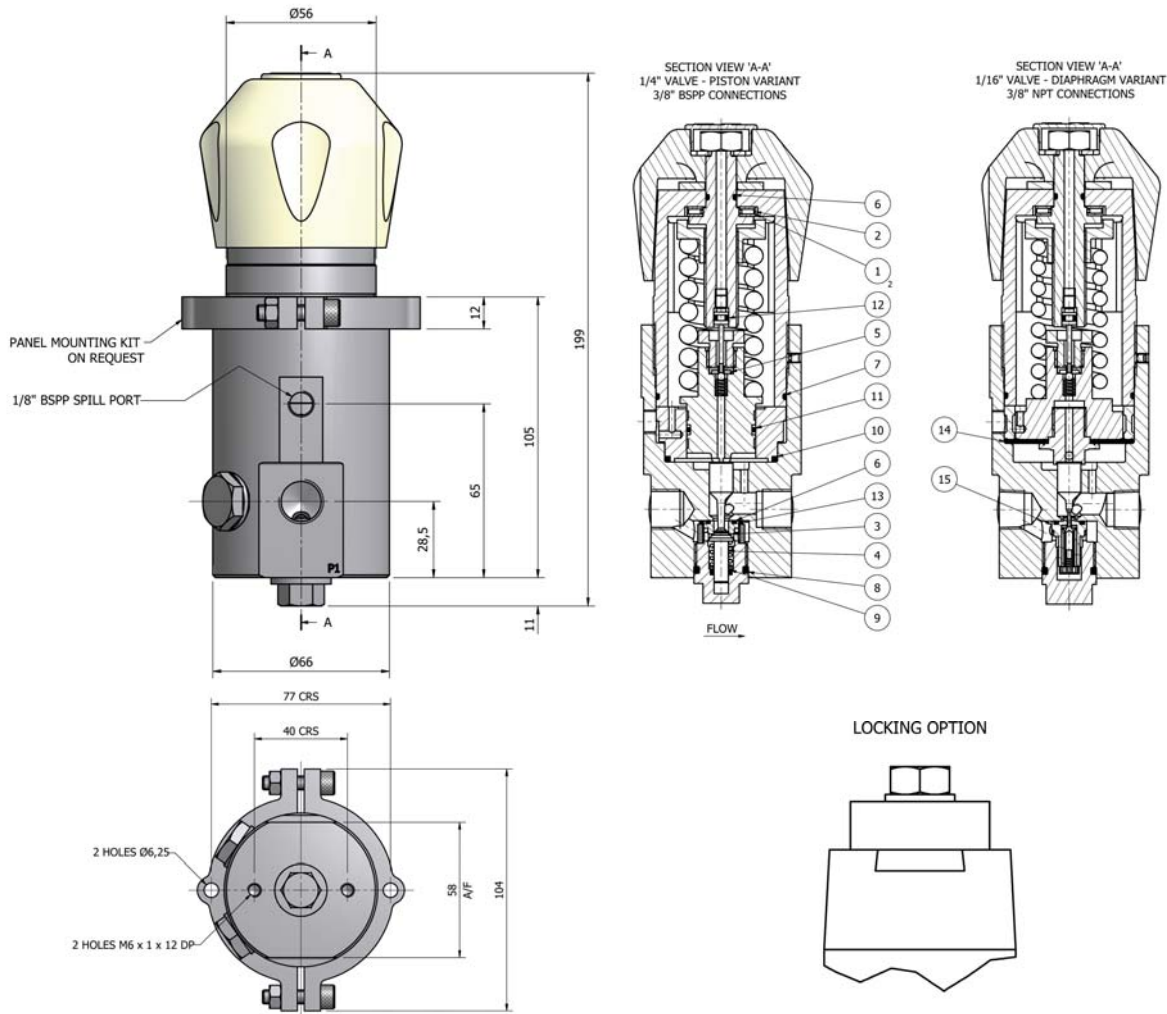
### Valve Size

	1/4"	1/16"
NOMINAL SIZE	6.35mm (1/4")	1.6mm (1/16")
ORIFICE AREA A1	24mm <sup>2</sup> (0.037 in <sup>2</sup> )	0.9mm <sup>2</sup> (0.014in <sup>2</sup> )
PORT AREA A2	49mm <sup>2</sup> (0.076in <sup>2</sup> )	49mm <sup>2</sup> (0.076in <sup>2</sup> )
FLOW COEFFICIENT	Kv = 0.72 (Cv = 0.84)	Kv = 0.025 (Cv = 0.03)

### Spares Code

SPARES	VALVE SEAT SIZE	OUTLET PRESSURE	RELEASE OPTION	ELASTOMER	HYDRAULIC
J50SPS	C (1/4") Y (1/16")	M (0.1-5 BAR) P (0.1-10 BAR) R (2-20 BAR) T (3.5-35 BAR) W (5.2-52 BAR) X (7-70 BAR) Y (10.3-103 BAR) Z (15-150 BAR) 3 (25-250 BAR) 4 (25-275 BAR) 8 (55-550 BAR)	R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)	(BLANK NOT REQUIRED) H (HYDRAULIC)

## Technical Specifications



## Spares BOM

ITEM	DESCRIPTION	MATERIAL	QTY	REQUIRED												
1	BEARING WASHER	Steel	2	*	*	*	*	*	*	*	*	*	*	*	*	*
2	NEEDLE ROLLER BEARING	Steel	1	*	*	*	*	*	*	*	*	*	*	*	*	*
3	SEAT	St Stl. 10088 1.4401	1	*	*	*	*	*	*	*	*	*	*	*	*	*
4	VALVE ASSY	Various	1	*	*	*	*	*	*	*	*	*	*	*	*	*
5	VALVE SEAT	PCTFE	1	*	*	*	*	*	*	*	*	*	*	*	*	*
6	'O' RING	Rubber	2	*	*	*	*	*	*	*	*	*	*	*	*	*
7	'O' RING	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
8	'O' RING	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
9	'O' RING	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
10	'O' RING	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
11	'O' RING	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
12	'O' RING	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
13	'O' RING	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
14	DIAPHRAGM	Rubber	1	*	*	*	*	*	*	*	*	*	*	*	*	*
15	VALVE ASSY	Various	1	*	*	*	*	*	*	*	*	*	*	*	*	*

1/4" VALVE - PISTON VARIANT- NO RELEASE

1/4" VALVE - PISTON VARIANT - RELEASE

1/4" VALVE - DIAPHRAGM VARIANT - NO RELEASE

1/4" VALVE - DIAPHRAGM VARIANT - RELEASE

1/16" VALVE - PISTON VARIANT - NO RELEASE

1/16" VALVE - PISTON VARIANT - RELEASE

1/16" VALVE - DIAPHRAGM VARIANT - NO RELEASE

1/16" VALVE - DIAPHRAGM VARIANT - RELEASE