

Spring Loaded Regulator

J53 & 54 are balanced valve, diaphragm or piston sensed, spring-loaded pressure regulators. They are compact & lightweight and used for quick control of outlet pressure. They incorporate an internal vent, making them very accurate and reliable through manual operation, ideal for high and low pressure applications.



Standard Features

Valve Size:	J53	J54	
	1/4" BALANCED	5/16" BALANCED	
Materials of construction:			
BODY - BRASS - BS EN 12164 CW614N			
SPRING HOUSING - ALUMINIUM - L168 T6511			
SEAT - STAINLESS STEEL - BS EN 10088 1.4305			
TRIM - PCTFE			
ELASTOMERS - HIGH NITRILE			
HANDWHEEL - ALUMINIUM			
Connections:	J53	J54	
	LINE 3/8" NPT, GAUGE 1/4" NPT (INLET & OUTLET)	LINE 1/2" NPT, GAUGE 1/4" NPT (INLET & OUTLET)	
Maximum Inlet Pressure:			
350 BAR (5075 PSI)			
Outlet Pressure Range:	J53	J53	J54
	0-10 BAR (0-145 PSI)	3-30 BAR (43.5-435 PSI)	7-70 BAR (101.6-1016 PSI)
Pressure Release for down stream venting:			
INTERNAL VENTING (NOT CAPTURED)			
Media:			
LIQUID AND GASES			
Weight:	J53	J54	
	1.8 Kg (4 lb)	2.5 Kg (5.5 lb)	

Additional Features

NON VENTING
 PANEL MOUNTING
 INTERNAL FILTER - 25 MICRON (J54 & GASES ONLY)

Options

Materials of construction:
 BODY - STAINLESS STEEL - ON REQUEST
 ELASTOMERS - FLUOROCARBON OR EPDM

Connections:

J53	BSPP CONNECTIONS
J54	BSPP CONNECTIONS

Applications

- Chemical processing
- Medical applications
- Oxygen service
- Portable diving panels
- Decompression chambers

Ordering Information

TYPE	VALVE SEAT SIZE	MATERIAL OPTION	CONNECTIONS	OUTLET PRESSURE	RELEASE OPTION	ELASTOMER
J53	C (1/4")	R1 (BRASS)	E2 (3/8" BSPP) A2 (3/8" NPT) E1 (1/4" BSPP) A1 (1/4" NPT)	P (0 - 10 BAR) T (3 - 30 BAR)	R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)
J54	D (5/16")	R1 (BRASS)	E3 (1/2" BSPP) A3 (1/2" NPT)	X (7 - 70 BAR)	R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)

ORDERING INFORMATION EXAMPLE:

J53CR1E2PRN

Notes

Technical Specifications

Pressure

	J53	J54
TEST (PROOF) PRESSURE	525 BAR (7615 PSI)	525 BAR (7615 PSI)
MAXIMUM INLET PRESSURE	350 BAR (5075 PSI)	350 BAR (5075 PSI)
REDUCED OUTLET PRESSURE RANGES	SEE TABLE BELOW	SEE TABLE BELOW

Outlet Pressure Ranges

J53		J54	
PRESSURE	SENSING	PRESSURE	SENSING
0-10 BAR (0-145 PSI)	DIAPHRAGM	7-70 BAR (101.5 - 1015 PSI)	PISTON
3-30 BAR (43.5-435 PSI)	PISTON		

Leakage

STANDARD ON REQUEST	BUBBLE TIGHT (TYPICALLY 10 ⁻⁶ AT CM ³ SEC ⁻¹) HELIUM LEAK TESTED TO 10 ⁻⁸ AT CM ³ SEC ⁻¹
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Temperature Range

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

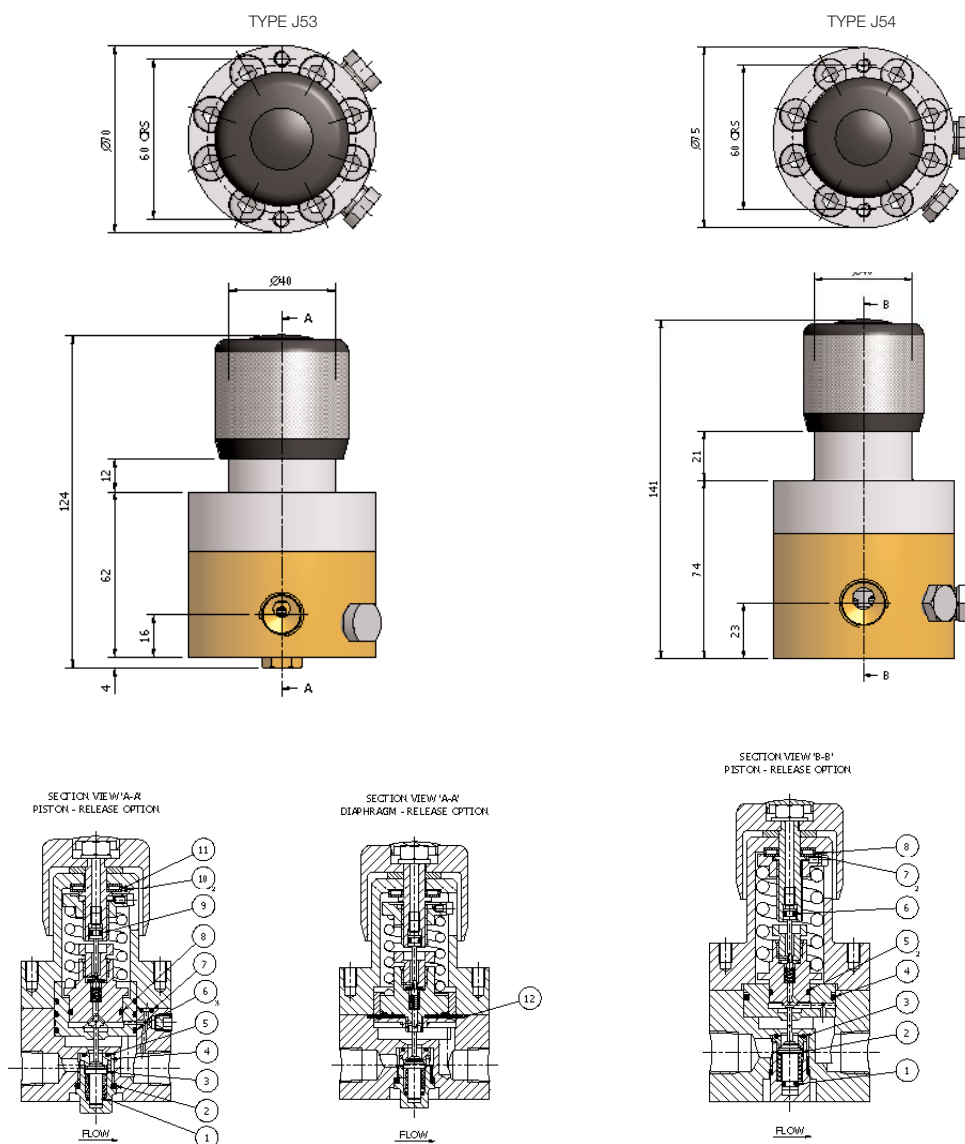
Valve Size and Flow Area

	J53	J54
NOMINAL SIZE	6.35mm (1/4")	7.8mm (5/16")
ORIFICE AREA A1	23.2mm ² (0.036 in ²)	41.7mm ² (0.067 in ²)
PORT AREA A2	90.3mm ² (0.140in ²)	208mm ² (0.322in ²)
FLOW COEFFICIENT	Kv = 0.55 (Cv = 0.64)	Kv = 0.98 (Cv = 1.0)

Spares Code

SPARES	OUTLET PRESSURE	RELEASE OPTION	ELASTOMER
J53S	P (0-10 BAR) T (3 - 30 BAR)	R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)
J54S		R (RELEASE) N (NO RELEASE)	N (NITRILE) V (FLUOROCARBON) E (EPDM)

Technical Specifications



Spares BOM

ITEM	DESCRIPTION	MATERIAL	QTY	REQUIRED			
1	'O' RING	Rubber	1	*	*	*	*
2	'O' RING	Rubber	1	*	*	*	*
3	VALVE	Various	1	*	*	*	*
4	SEAT	ST STI BS 10088 1.4401	1	*	*	*	*
5	'O' RING	Rubber	1	*	*	*	*
6	'O' RING	Rubber	3	*	*	*	*
7	'O' RING	Rubber	1	*	*	*	*
8	'O' RING	Rubber	1	*	*	*	*
9	'O' RING	Rubber	1	*	*	*	*
10	BEARING WASHER	Steel	2	*	*	*	*
11	NEEDLE ROLLER BEARING	Steel	1	*	*	*	*
12	DIAPHRAGM	Rubber	1			*	*

PISTON VARIANT - RELEASE

PISTON VARIANT - NON RELEASE

DIAPHRAGM VARIANT - RELEASE

DIAPHRAGM VARIANT - NON RELEASE