

# AIR PREPARATION UNITS

## REGULATOR Series R1N ( with built in Non Return Valve )

Cat No R1N - 02 - 01

### AIR REGULATOR ( with built in Non Return Valve ) - 1/8, 1/4, 3/8, 1/2

#### Features

- Conforms to ISO 6953 - 1
- Suitable for panel and modular mountings
- Non raising ' Press to Lock ' adjusting knob for locking at any set pressure
- Diaphragm operated, relieving type
- Pressure compensated by Balanced poppet.
- Flow compensated in models R14 and R15 ( with venturi ) for faster response
- Good flow and regulating characteristics.
- Built in non return valve allows free air flow in reverse direction. When the inlet air is reduced by and below the setup pressure.



#### Application

Apart from its basic regulating characteristics in forward direction, this regulator with a built in non return valve allows free air flow in reverse direction, thus enabling to be used in applications requiring cylinders to exert two different force during extending and retracting strokes.

#### Technical Specification

Model	R13...N	R14...N	R15...N
Medium	Compressed air - Filtered		
Port size	NPT 1/8 (G1/8) NPT 1/4 (G1/4)	NPT 1/4 (G1/4) NPT 3/8 (G3/8)	NPT 1/4 (G1/4) NPT 3/8 (G3/8) NPT 1/2 (G1/2)
Pressure gauge port size	NPT 1/8 (G1/8)	NPT 1/8 (G1/8)	NPT 1/8 (G1/8)
Flow rate in scfm (NI / min) @	11.03 (315) 21 (600)	61.25 (1750) 87.5 (2500)	79.8 (2280) 166.74 (4764) 140 (4000)
Max supply pressure in psi (bar)	225 (15)		
Regulating Pressure Range in psi (bar) #	3 - 30 (0.2 - 2), 3 - 60 (0.2 - 4), 7 - 100 (0.5 - 7), 7 - 140 (0.5 - 10) (Standard)		
Ambient / Medium temperature	41° - 140° F (5° - 60° C)		
Installation	Any position		
Materials of construction	Aluminium, Brass, Steel, Acetal, SS, Nitrile		
Optional accessories *	Clamp, Modular mounting kit, Pressure gauge		
Weight in lb (Kg)	0.33 (0.15)	0.88 (0.40)	1.98 (0.90)

@ Supply pressure 100 psi (7 bar) , Set pressure 85 psi (6 bar), Pressure drop  $\Delta p = 14.5$  psi (1bar) ( For standard models )

# For details see " How to order "

\* For details refer optional accessories Cat No APA - 02 - C

#### Precautions

1. Note the direction of flow before installation and connect piping accordingly.
2. Flush pipings for dirt, dust, rust and other foreign particles.
3. Install in clean atmosphere.
4. Nipples with taper threads ( R ) to be used with teflon tape. Ensure Teflon tape doesnot enter the unit during tightening.  
Nipples with straight threads ( G ) to be used with sealing washer.

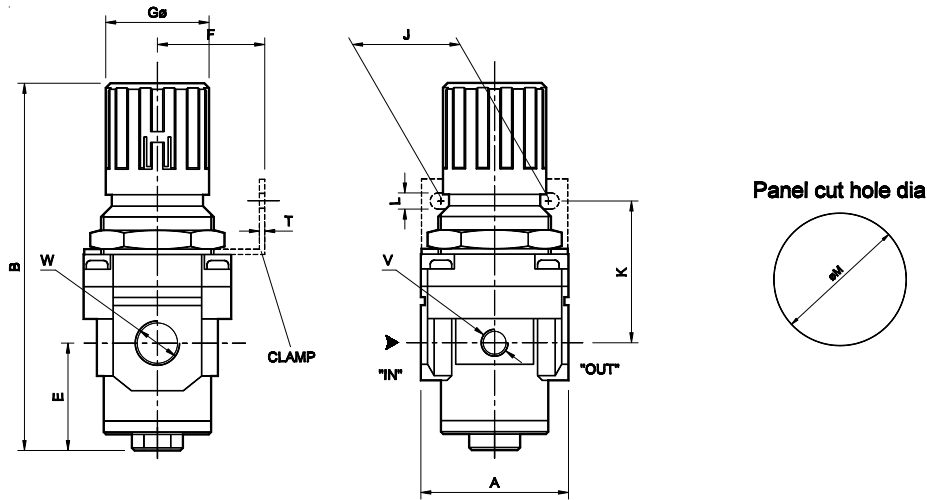
#### Pressure Setting

Pull the knob and adjust by turning the knob clockwise to increase the pressure. Push the knob back to its locked position. ( Turning the knob counter clockwise will reduce the pressure )

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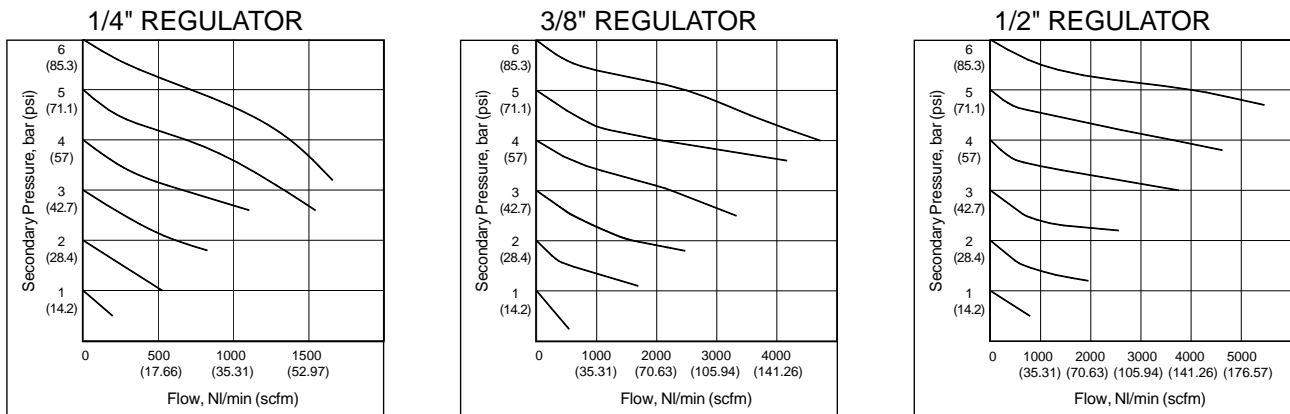
Cat No R1N - 02 - 01



Model	W	V		A	B	E	F	GØ	J	K	L	T	ØM
R13	NPT 1/8 (G1/8) NPT 1/4 (G1/4)	NPT 1/8 (G1/8)	Inch (mm)	SQ 1.575 (40)	3.189 (81)	0.512 (13)	1.181 (30)	1.102 (28)	1.102 (28)	1.771 (45)	0.216 (5.5)	0.079 (2)	1.22 (31)
R14	NPT 1/4 (G1/4) NPT 3/8 (G3/8)	NPT 1/8 (G1/8)	Inch (mm)	SQ 2.165 (55)	5.315 (135)	1.575 (40)	1.574 (40)	1.574 (40)	1.574 (40)	2.087 (53)	0.256 (6.5)	0.079 (2)	1.693 (43)
R15	NPT 1/4 (G1/4) NPT 3/8 (G3/8) NPT 1/2 (G1/2)	NPT 1/8 (G1/8)	Inch (mm)	SQ 2.756 (70)	6.496 (165)	1.575 (40)	1.968 (50)	2.008 (51)	2.165 (55)	2.441 (62)	0.335 (8.5)	0.079 (2)	2.087 (53)

For Details of Clamp see optional accessories Cat No APA - 02 - C

### Flow Graphs



### How to order

**R1**    ○ ○ ○    ---    ○ **N**

Body & Port size		Pressure range in psi (bar)		with Non Return Valve
390 (360)	NPT1/8 (G1/8)	1	3 - 30 (0.2 - 2)	with Non Return Valve
391 (361)	NPT1/4 (G1/4)	2	3 - 60 (0.2 - 4)	
491 (461)	NPT1/4 (G1/4)	3	7 - 100 (0.5 - 7)	
492 (462)	NPT3/8 (G3/8)	4	7 - 140 (0.5 - 10) Standard	
591 (561)	NPT1/4 (G1/4)			
592 (562)	NPT3/8 (G3/8)			
593 (563)	NPT1/2 (G1/2)			

**Ordering Example** :- Regulator - 3/8 size (with NPT 3/8 (G3/8) port), with pressure range 7 - 100 psi with Non Return Valve  
Ordering No: R1492 (1462) 3-N.

If ordered as NPT 3/8 Regulator, our standard model R1492 (1462) 4, G3/8 with pressure range 7 - 140 psi will be supplied.

- For safety instructions, please refer instruction manual IS - R1N - 2 - 01

Subject to change