

## STANDARD FILTER-REGULATOR

NC-401 July, 1972 Supersedes November, 1970

TYPE B02

## 1/4"- 3/4" FOR COMPRESSED AIR SERVICE

#### SPECIFICATIONS

PIPE SIZES: 1/4", 3/8", 1/2", 3/4" FILTER SECTION: FILTER ELEMENTS: 50 MICRON (STANDARD) 5 AND 25 MICRON (OPTIONAL) AUTOMATIC OR MANUAL DRAIN REGULATOR SECTION: RELIEVING OR NON-RELIEVING

GAUGE PORTS: TWO (2), FULL FLOW, 1/4"

PRIMARY PRESSURE: UP TO 250 PSIG

\*SECONDARY (REGULATED) PRESSURE RANGES:

3 - 150 PSIG (STANDARD) 1 - 50 PSIG (OPTIONAL)

5 - 250 PSIG (OPTIONAL)

MAXIMUM RECOMMENDED OPERATING CONDITIONS:

SAFETY-GREEN BOWLS -> IRANSPARENT 150 PS, 2 125°F 250 PSIG AT 120°F. AMBIENT L 100 PSIG AT 175°F. AMBIENT

METAL BOWLS 250 PSIG AT 175°F, AMBIENT

\*Can be adjusted to 0 psig.

#### **FEATURES**

Non-rising, low torque pressure adjustment throughout the entire range of pressure.

Regulator adjustment easily locked in place with a finger-operated friction lock.

Large valve area provides for effective control.

Built-in mounting provision.

Full flow 1/4" gauge ports may be used for outlets.

Interchangeable automatic drain or manual drain.

Safety-Green, polycarbonate, transparent or metal bowl is threaded for easy removal, no clamp ring.

Rapid response to circuit-induced overshoot.

No appreciable pressure decay over a wide range of air flows.

Can be disassembled and serviced without tools and without removal from air line.

#### **OPERATION**

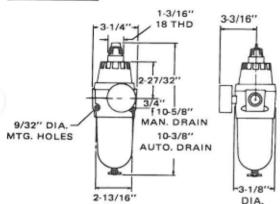
Flow through the directional louvers (A) forces air into a swirling pattern. Liquids and heavy solids in the air stream are directed away from the filter element and held against the inside of the bowl by centrifugal force. They move down the bowl wall into the quiet zone (B) below the baffle. The baffle (C) maintains the quiet zone in the lower part of the bowl to prevent air turbulence from picking up the liquid and returning it to the air stream. Air then flows inward and passes through the filter element (D) which further cleans the air and removes the fine solids.

Clean air flows from the filter element directly to the regulator valve (E). Desired secondary pressure is adjusted by a low torque, non-rising adjusting knob (F). The secondary pressure is sensed by the regulator piston (G) which moves the valve pin (H) opening or closing the regulator valve to maintain the desired outlet pressure.

Liquids accumulated in the filter quiet zone are drained off through the manual drain (J) or an automatic drain.



### DIMENSIONS

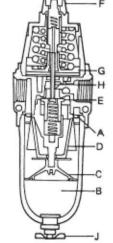


#### PARTS

	ontair	ns: '	·oʻ	rin	ig, v	vash	er,	sea	ls, v	valve	ass	, sem	bly,			3034-01
ga	sket)															
Spring:	50	lb.						×						٠.		2757-02
	100	lb.												0		2757-01
	150	lb.														2654-01
	250	lb.						-0					2654	-01	e.	2757-01
Filter ele			incl	uel	es n	ae ke	re l		•	•		*	.004	-01	CX	2/5/-01
		mic		-	4	aane	1637									
														*		2992-04
		mic														2992-03
		mic														2992-02
Transpare	ent bo	wl a	sse	mbl	y (r	man	ual	dra	in)							2487-51
Automati																3000-03
Automati	c drai	n fl	nat	0								•	•			3003-50
Metal boy				ma.	arrel	de	inl	•	•	•					٠	
Wetai Doi	AI GPPE	OILIE	IY (	mai	nuai	ara	iin /	٠.					-			3047-50
(Bowl	assen ain co	nblie ck)	es in	clu	de i	nse	rt, g	gask	et,	bov	vi re	etai	ner,			
Bowl only	/															
Transp					v											2487-02
Metal							•			ř	v					3047-01

#### CAUTION

THIS FILTER-REGULATOR SHOULD NOT BE USED WHERE PRESSURE OR TEMPERATURE MAY EXCEED SPECIFIED MAXIMUM RECOMMENDED OPERATING CON-DITIONS, USE WITH MEDIA OTHER THAN COMPRES-SED AIR SERVICE IS NOT RECOMMENDED. USE ONLY CLEAN, WARM WATER OR KEROSENE POLYCARBONATE BOWL







#### RDER TABLE

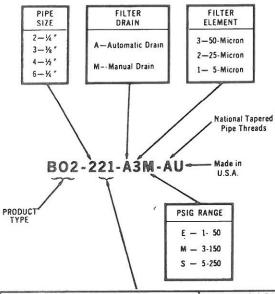
ne standard B02 units are: Safety-Green bowl, 50-micron filter eleent, automatic or manual drain, 3-150 psig range, relieving type, th gauge. They are normally available from distributor stock.

PIPE	AUTOMATIC DRAIN	MANUAL DRAIN
и"	BO2-221-A3M-AU	BO2-221-M3M-AU
ж.	BO2-321-A3M-AU	BO2-321-M3M-AU
14°	BO2-421-A3M-AU	BO2-421-M3M-AU
₩.,	BO2-621-A3M-AU	BO2-621-M3M-AU

verported \_

#### OPTIONAL MODELS

Optional models may be ordered as follows:



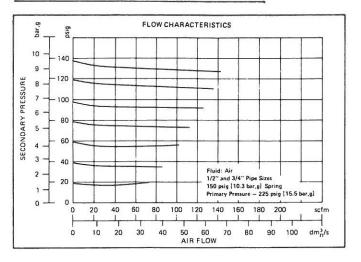
	5th and 6th DIGIT IN MODEL NUMBER				
FILTER BOWL	REGULATOR MODEL	GAUGE	SHOULD READ:		
SAFETY- GREEN	RELIEVING	, NO ,	. 00		
	KELIEVING	YES	21		
		NO	22		
	HON-RELIEVING	YES	23		
	RELIEVING	NO	24		
METAL	KELIEVING	YES	25		
	NON-RELIEVING	NO	26		
	NON-KELIEVING	YES	27		
	RELIEVING	NO	17		
BOWL GUARD	KELIEVING	YES	18		
	NON-RELIEVING	NO	19		
	NUN-KELIEVING	YES	20		

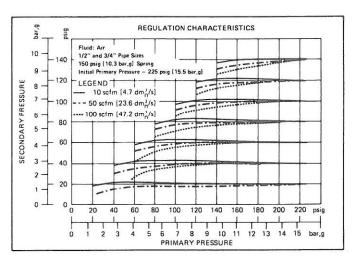
#### ACCESSORIES

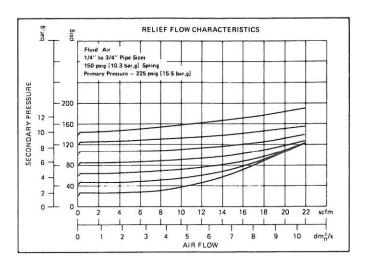
(1)	BOWL GUARD (With Bowl & Drain)	Ordered with Unit See Table Above Ordered Separately Manual Automatic 18-012-010 18-012-014			
15	Perforated metal gives positive protection, yet allows section, visibility.				
- 4-	MOUNTING KIT Consists of bolt, lock washer and spacer. Fils built-in mounting holes.	Ordered With Unit 18-001-051 Ordered Separately 18-001-052 Ordered With Unit 18-021-003 Replacement Only 18-021-004 For Field Conversion 18-021-007			
	TAMPER-PROOF CAP Metal cap fits over adjusting knob after regulator is set. Field conversion cap includes bonnet.				
0	GAUGES Black metal case with plastic crystal, center-back ¼ " connection. Dual scale.	0- 60 psig 0-160 psig 0-300 psig	18-013-208 18-013-209 18-013-210		
	CONVERSION KITS				

# Convert manual to automatic drain 3000-01 Convert RO2 to BO2 Auto Drain Manual Drain 50 Micron 3046-07 3046-03 25 Micron 3046-08 3046-04 5-Micron 3046-09 3046-05

#### PERFORMANCE CHARACTERISTICS







# C.A. NORGREN CO. LITTLETON, COLORADO 80120 / 303-794-2611