

Filter and Regulator

With or Without pressure gauge

DATA SHEET
7700 FRG

The filter and regulator is applied in nearly all pneumatic control circuits for supplying pneumatic control equipment with clean air at a constant pressure.

The inner valve parts have been designed to maintain the pressure at a constant level even at a high flow capacity.

This proven compact unit has the following excellent features :

HIGH FLOW CAPACITY

EXACT PRESSURE CONTROL

QUICK RESPONSE

SIMPLE INSTALLATION

TECHNICAL DATA

Adjustment range

FRG-7700-4

FRG-7700-6

FRG-7700-10

Flow capacity (with 7 bar upstream pressure and 1.4bar control pressure)

Discharge capacity (control pressure 0.35 bar above set-valve)

Adjustment accuracy

Sensitivity

Temperature range

Upstream pressure

Consumption at 1.4 bar control pressure

Filter material

Inlet & Outlet Sizes

Pressure gauges supplied (outlet side).

3 different Springs

:0 to 4 bar

:0 to 6 bar (Now Mostly Used)

:0 to 10 bar

:35Nm³/hr

:0.8Nm³/hr

:2.0 mbar

:<0.5mbar

:−50°C + 65°C

:Max. 20bar

:Max. 8NI/hr

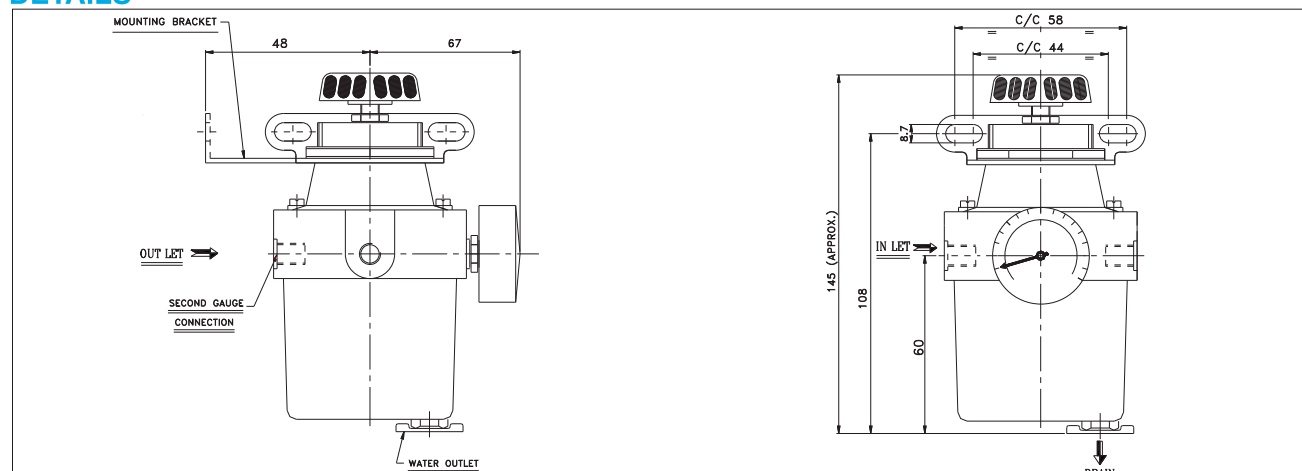
:Bronze; 5microns

:1/4" BSP/NPT

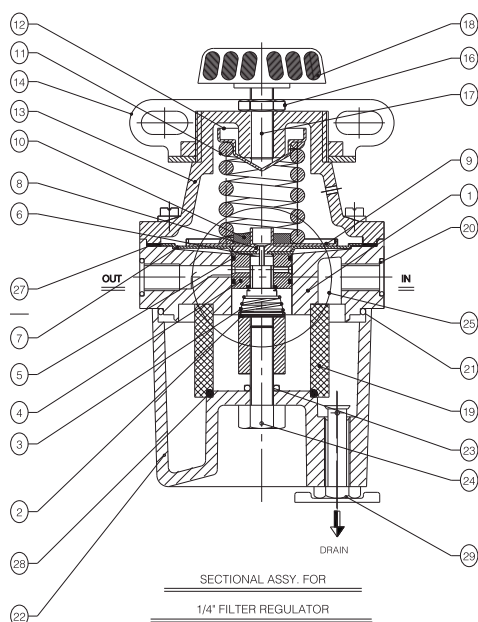
:50mmØ 1/4" BSP 0 to 10 bar.



DETAILS



OPERATING INSTRUCTIONS



INSTALLATION

The instrument has 4 connections 1/4" NPT. The air input 'IN' can be mounted at the left or right side. Then the air output 'OUT' is on the opposite right or left side. In the right angle to these connections there are 2 connections 'G' which are internally connected with the air output. Alternatively, according to place and position of installation, a gauge can be mounted.

The filter and regulator can be mounted to a wall by means of an angled bracket (17). If required, it can also be mounted into a front panel, with 2 hexagonal flat nuts (18). The hand wheel can be used for adjustment of pressure setting screw.

BILL OF MATERIAL

No.	Name	Qty.
1	Body	1
2	Spring rest dish	1
3	Spring	1
4	Piston assy.	1
5	'O' ring	2
6	Spool	1
7	Diaphragm plate	1
8	Seat insert	1
9	Backing plate	1
10	Diaphragm washer	1
11	Set point spring	1
12	Spring retainer	1
13	Bonnet	1
14	Mounting bracket	1
15	Hex. lock nut	1
16	Counter nut	1
17	Adjustment bolt	1
18	Knob assy.	1
19	Filter	1
20	'O' ring	2
21	'O' ring	1
22	Filter casing	1
23	'O' ring	1
24	Filter casing screw	1
25	Gauge	1
26	Filter casing screw	4
27	Diaphragm	1
28	'O' ring	1
29	Drain assy.	1
30	Plug (not shown)	1

OPERATION AND SERVICE

Before attempting maintenance stop air supply and drain the regulation off Air Pressure, to clean the filter, loosen the filter screw (15) and remove the filter casing (1). Then the filter cartridge (4) can be taken off. It can be cleaned with solvents like tetra, naphta, benzine, a.s.o. and should be blown out vigorously with clean air from inside. After each cleaning, examine O-rings (3, 5, 14) and change if necessary. Replace the filter and screw on the filter casing again. The water outlet has to be opened regularly. On continuous operation, the diaphragm has to be checked regularly and replaced if necessary. For this purpose, release adjusting screw (20), loosen casing screws (13) and spring casing (12), take spring plate (11) and spring off. Now the complete diaphragm unit (9) can be taken out and examined respectively replaced. Reassemble instrument in reverse order.

This is bleeding type Regulator and some small air leakage will be seen through bleed hole.

Note:

Technical specifications, details & dimensions are subject to change without prior notice. Dimensions in the table are approximate subject to final confirmation by AVCON.

WESTERN		
Mumbai Plot No. 65, Road No. 13, MIDC Marol, Andheri (East), Mumbai - 400 093 Tel.No.: 022-6915 6100 / 83909 17431 E-mail : acplmumbai.sales@avconcontrols.com	Pune Plot No. T - 108, MIDC Bhosari, Pune - 411 026. Maharashtra (INDIA). Tel.No.: 020-2712 0776 / 2712 0540 E-mail : acplmumbai.sales@avconcontrols.com	Baroda 307, Mangaldeep Complex, Sampatrao Colony, Productivity Road, Baroda - 390 005. Tel.No.: 022-6915 6100 / 83909 17431 E-mail : acplmumbai.sales@avconcontrols.com
SOUTHERN		
Chennai 249, First Floor, Tiny Sector Ambattur Industrial Estate, Chennai - 600 058 Tel.No.: 044-4807 4107 / 089393 12809 E-mail : acplmumbai.sales@avconcontrols.com	Hyderabad SSR ENCLAVE, Plot No. 81, Road No.4, Vasanth Nagar, Nizampet X Roads (Near JNTU College Metro Station), Hyderabad - 500085. Tel.No.: 7995086416 E-mail : acplmumbai.sales@avconcontrols.com	Bangalore Tel.No.: 084312 56574 E-mail : acplmumbai.sales@avconcontrols.com

EASTERN	
Kolkata 720, 7th Floor, 33/1, N.S. Road, Marshall House, Kolkata- 700 001. Tel.No.: 033-4068 1180 / 77109 00889 E-mail : acplmumbai.sales@avconcontrols.com	
NORTHERN	
New Delhi Unit No. 708, 7th Floor, 94 Meghdoot, Nehru Place, New Delhi - 110019 Tel.No.: 011-42639736 / 88282 69844 E-mail : acplmumbai.sales@avconcontrols.com	

avcon®
Manufactured by:

AVCON CONTROLS PVT. LTD.
Plot No. 65, Road No.13, MIDC Marol,
Andheri (East), Mumbai - 400 093 (INDIA).
Phone : +91-22-6915 6100.
E-mail : avcon@avconcontrols.com
acplmumbai.sales@avconcontrols.com
Website : www.avconcontrols.com