IPSS

SPECIFICATION FOR AIR LINE FILTER

IPSS : 1-02-018-84

CORRESPONDING INDIAN STANDARD DOES NOT EXIST

0. Foreword

0.1 Interplant standardization activity in steel industry has been initiated under the aegis of the Indian Standards Institution (ISI) and the Steel Authority of India Limited (SAIL). This Interplant Standard, prepared by the Standards Committee on hydraulic, Pneumatic and Lubricating Equipment, IPSS 1 : 2, with the active participation of the representatives of all the steel plants and established manufacturers of air line filter, was adopted by the Approval Committee on Consumable Stores and General Equipment, IPSS 1, on 30 March 1984.

0.2 Interplant Standards for steel industry primarily aim at achieving rationalization and unification of parts and sub-assemblies used in steel plant equipment and accessories, and provide guidance in indenting stores or equipment for existing or new installations by individual steel plants. For exercising effective control on inventories, it is advisable to select a fewer number of sizes (or types) from among those mentioned in this standard for the purpose of company standards of individual steel plants. It is not desirable to make deviations in technical requirements.

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1. Scope — This Interplant Standard covers the main dimensions, operational features of permanently installed air line filters intended for use in the compressed air lines where solid particles like pipe scale, dirt, etc and liquids, such as water and oil present in the air supply are to be removed.

2. Dimensions — The main dimensions of air line filters shall be as indicated in Fig. 1.

3. Operational Features — The air line filter shall be designed to filter the compressed air having solid particles above 5 microns, moisture and oil.

3.1 The air line filter shall be operated at 40°C ambient temperature in compressed air lines in air pressure lines at the pressure ranges of :

a) Type A — 0 to 78 × 10 N/m² (0 to 8 kgf/cm²)

b) Type B — 0 to 176 × 10 N/m² (0 to 18 kgf/cm²)

Any other pressure may be specified while ordering.

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4. Constructional features

4.1 Bowl shall be safety transparent polycarbonate shatter-proof material for 0-8 kgf/cm² application and shall be of metallic construction for 0-18 kgf/cm². The capacity of bowl for air lubricator suitable for 0-8 kgf/cm² shall be 200 or 400 ml and shall be 500 ml or 1 litre for 0-18 kgf/cm². The bowl shall be threaded for leak proof joint and be easily removable.

4.2 Filter element shall be of sintered bronze in 5 micron mesh.

4.3 Inlet and outlet shall have taper pipe thread as per IS : 554-1975. 'Dimensions for pipe threads where pressure tight joints are required on the threads (*second revision*)'.

4.4 The air line filter shall have automatic drainage arrangement.

5. Designation — Air line filter shall be designated by the type, nominal bore and capacity of the bowl, for example:

Air line filter of nominal bore 15 mm (NB 15), pressure range 0-8 kgf/cm² (Type A) and having a bowl capacity of 400 ml shall be designated as:

Air line filter A 15 × 400 — IPSS : 1-02-018-84

Amendments Issued (*to be filled up by the user department*) :

No.	Date of Issue	No.	Date of Issue
1		3	
2		4	

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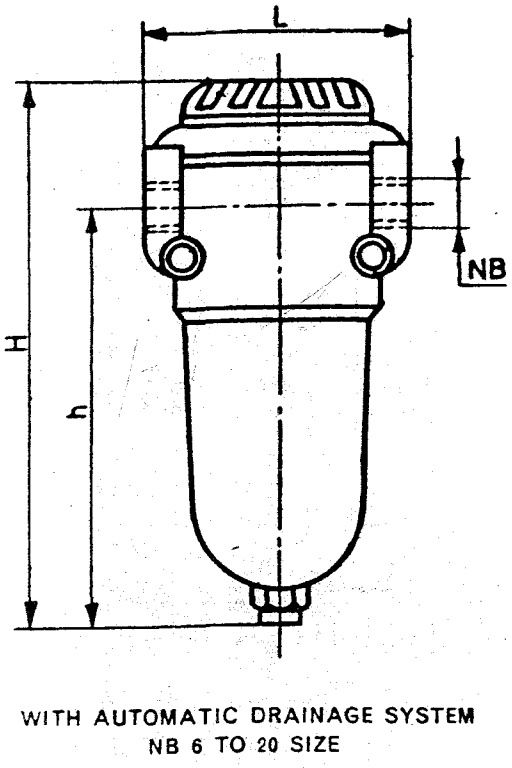
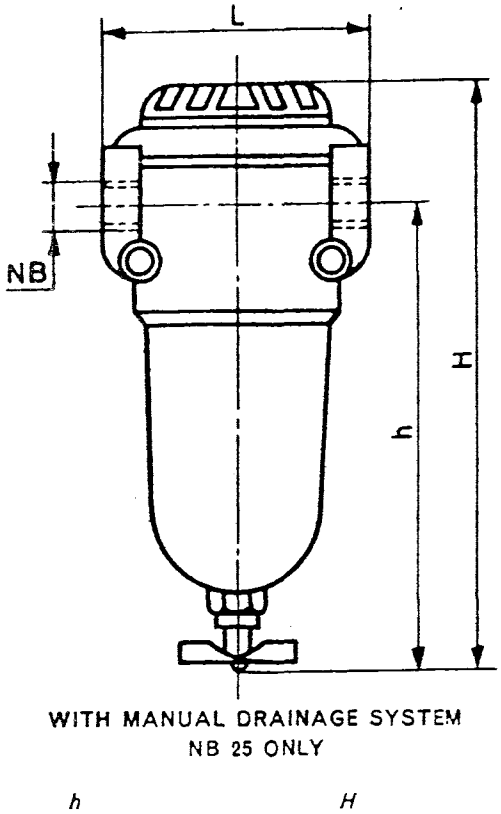


WITH AUTOMATIC DRAINAGE SYSTEM
NB 6 TO 20 SIZE



WITH MANUAL DRAINAGE SYSTEM
NB 25 ONLY

NB	*L*	*h*	*H*
6 ($\frac{1}{4}$ in)	85	150	195
10 ($\frac{3}{8}$ in)	85	150	195
15 ($\frac{1}{2}$ in)	85	150	195
20 ($\frac{3}{4}$ in)	85	150	195
25 (1 in)	130	190	225

All dimensions in millimetres.

FIG. 1 AIR LINE FILTERS

6. Test Certificate — The manufacturer shall provide a certificate with every air line filter for conformity to this standard.

7. Guarantee — The air line filter shall be guaranteed by the manufacturer for the period of one year after the date of despatch or six months from the date of commissioning whichever is earlier.

8. Marking — The air line filter shall be provided with a label affixed on the body giving the following information:

a) The name/trade-mark of the manufacturer,

b) Serial and batch number, and

c) Designation of the air filter (*see* **5**).

9. Packing — The air line filter shall be packed in accordance with best prevalent practices or as agreed to between the purchaser and the supplier.