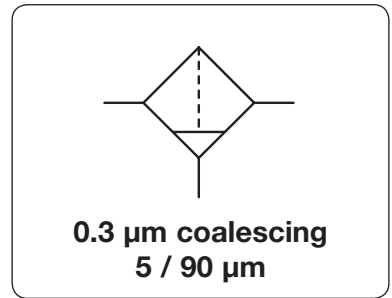


**Micro in-line filter F400**  
**Description** Micro in-line filters are widely used in medical and process technology for cleaning compressed air for use in instruments and pneumatic logic systems. The micro in-line filter removes particles, oil and mist from compressed air. Also suitable for vacuum.  
**Filter element** The borosilicate micro-filter is manufactured in a special vacuum process which reduces the adhesive properties of the borosilicate fibres down to a minimum in order to achieve outstanding filtering capability. When saturated with oil, the filter turns red to indicate that replacement is required.  
**Filtration efficiency** 99.999% based on 0.03 µm particle size  
**Operating pressure** max. 9 bar  
**Connection** Fitted with nipples able to take up hoses of 4.3 mm (11/16") or 6.3 mm (¼") internal diameter. Flow direction from INside to OUTside to be noted.

**Bronze in-line filter 137**  
**Description** Bronze in-line filter for compressed air with coarse impurities.  
**Filter element** 90 µm, optionally 5 µm, made of sintered bronze  
**Operating pressure** max. 21 bar  
**Drainage** with or without manual drain



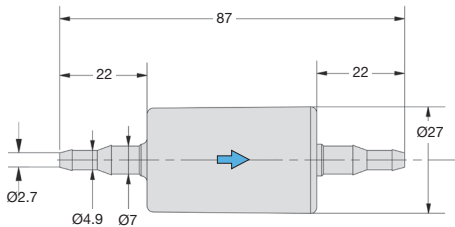
Dimensions			Description	Flow rate	Operating pressure	Filter element	Connection thread	Order number
A	B	C						
mm	mm	mm		m <sup>3</sup> /h*1	l/min*1	max. bar	µm	nipple / G

**Micro in-line filter** 99.999% at 0.3 µm, discolouration at saturation, max. 9 bar **F400**

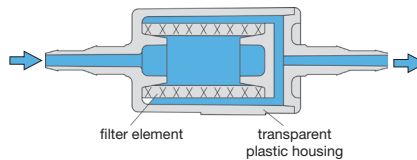
A	B	C	Description	Flow rate	Operating pressure	Filter element	Connection thread	Order number	
87	43	Ø 27	borosilicate micro filter	4.2	70	9	0.3	Ø 4 and Ø 6	<b>F400</b>



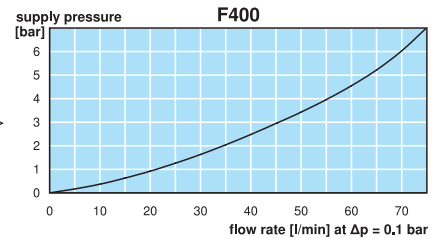
F400



F400



cross section



**Bronze in-line filter** operating pressure max. 21 bar **137**

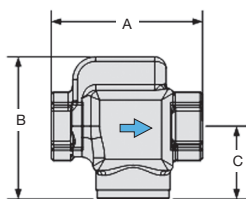
A	B	C	Description	Flow rate	Operating pressure	Filter element	Connection thread	Order number	
67	63	32	without manual drain	39	650	21	90	G¼	<b>137-02</b>
				42	700		G¾	<b>137-03</b>	
				44	740		G½	<b>137-04</b>	
			with manual drain	39	650	21	20	G¼	<b>137-02H</b>
				42	700		G¾	<b>137-03H</b>	
				44	740		G½	<b>137-04H</b>	
				19	320	21	5	G¼	<b>137-02V</b>
				21	350		G¾	<b>137-03V</b>	
				22	370		G½	<b>137-04V</b>	
67	79	48	with manual drain	39	650	21	90	G¼	<b>137-02A</b>
				42	700		G¾	<b>137-03A</b>	
				44	740		G½	<b>137-04A</b>	
			with manual drain	39	650	21	20	G¼	<b>137-02AH</b>
				42	700		G¾	<b>137-03AH</b>	
				44	740		G½	<b>137-04AH</b>	
				19	320	21	5	G¼	<b>137-02AV</b>
				21	350		G¾	<b>137-03AV</b>	
				22	370		G½	<b>137-04AV</b>	



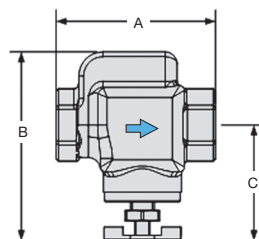
137-04



137-04A



137-...



137-...A.

\*1 at 7 bar operating pressure and 0.1 bar pressure drop