

Strainers with flanged connections



Type 2 N · With standard strainer insert

Type 2 NI · With dual strainer insert

Application

The strainer is designed to protect downstream plants, aggregates as well as measuring and control devices against impurities. It strains and collects dirt particles carried along by the medium.

For **PN 6 to PN 40 · DN 15 to DN 250** · With flanged end connections · Suitable for liquids, steam and non-flammable gases up to **max. 450 °C**

The strainers consist of a Y-style body with flanges and a wide-meshed filter element (standard strainer insert) or a wide-meshed filter element with an additional fine-meshed filter element (dual strainer insert).

Special features

- Compact design with lengths according to DIN
- Easy removal of the collected dirt particles
- Easy replacement of the strainer insert

Versions

Type 2 N · With standard strainer insert

Type 2 NI · With dual strainer insert

- Y-style strainer body with flanges according to DIN
- Body made of cast iron for PN 6 to 16, DN 15 to 250
- Body made of spheroidal graphite iron for PN 16 and 25, DN 15 to 150
- Body made of cast steel for PN 16 to 40, DN 15 to 250
- Body made of stainless cast steel for PN 16 and 40, DN 15 to 100

Special versions

- With two holes for pressure gauge connection (G ¼ for DN 15 to DN 100 or G ½ for DN 125 to DN 250)
- Flanges with groove according to DIN 2512
- Additional support cage in cases where backflow may occur in vertical pipelines
- With tapped hole in the cover flange · On request
- With rinsing line connection ½" · On request
- Flanges with tongue/male face/female face · On request

Pressure-temperature diagram – according to DIN EN 12516-1 –

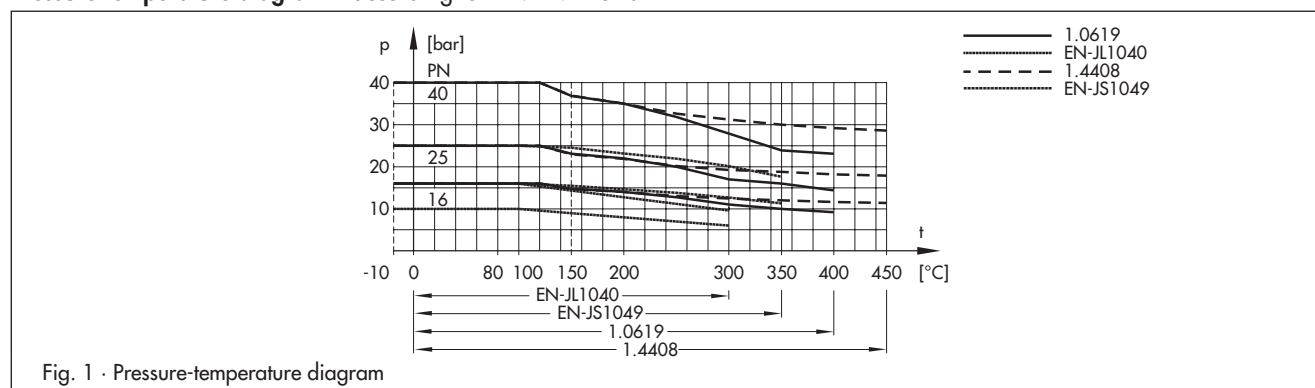


Fig. 1 · Pressure-temperature diagram



Principle of operation

The medium flows through the strainer in the direction indicated by the arrow on the strainer body. The uncleaned medium first contacts the inner side of the strainer insert (filter element). While it passes through the filter element, the dirt particles carried along by the medium are collected in the filter element. The particles can be removed after taking off the cover flange.

Installation instructions (see EB 1015 EN)

- Install the strainer in the direction of flow indicated by the arrow on the strainer body. Make sure ample space is available to remove and clean the strainer insert (refer to Table 3 for dimensions).
- In vertical pipelines—when the medium flows upward—install the strainer with the cover flange facing upward. In this case, however, the dirt particles are not collected, but retained.
- Install swing check valves or similar devices to prevent backflow.

Table 1 · Technical data – Version with standard strainer insert only –

Type	Connection size DN	15	20	25	32 ¹⁾	40 ¹⁾	50 ¹⁾	65 ¹⁾	80 ¹⁾	100 ¹⁾	125 ¹⁾	150 ¹⁾	200 ¹⁾	250 ¹⁾	
2 N	Δp_{max} at strainer insert bar	32	25	22	24	20	15	12	10	8	6	5.5	5.5	4.5	
	K_{VS} m ³ /h	6.3	10	16	25	40	63	100	160	250	400	630	1000	1600	
	Mesh size mm	0.5			0.8			1.25			2				
	Number of mesh per cm ²	150			59			28			12				
	Flow resistance coefficient ζ	2.5													
	Free filter area	Approx. 3 x Pipe cross-section						Approx. 2.75 x Pipe cross-section			Approx. 2.5 x Pipe cross-section				
2 NI	Δp_{max} at strainer insert bar	32	25	22	24	20	15	12	10	8	6	5.5	5.5	4.5	
	K_{VS} m ³ /h	5	8	12.5	20	32	50	80	125	200	320	500	800	1250	
	Mesh size mm	0.25													
	Number of mesh per cm ²	625													
	Flow resistance coefficient ζ	3													
	Free filter area	Approx. 3 x Pipe cross-section						Approx. 2.75 x Pipe cross-section			Approx. 2.5 x Pipe cross-section				

¹⁾ Special version with rinsing line connection 1/2"

Table 2 · Materials · Material numbers acc. to DIN EN

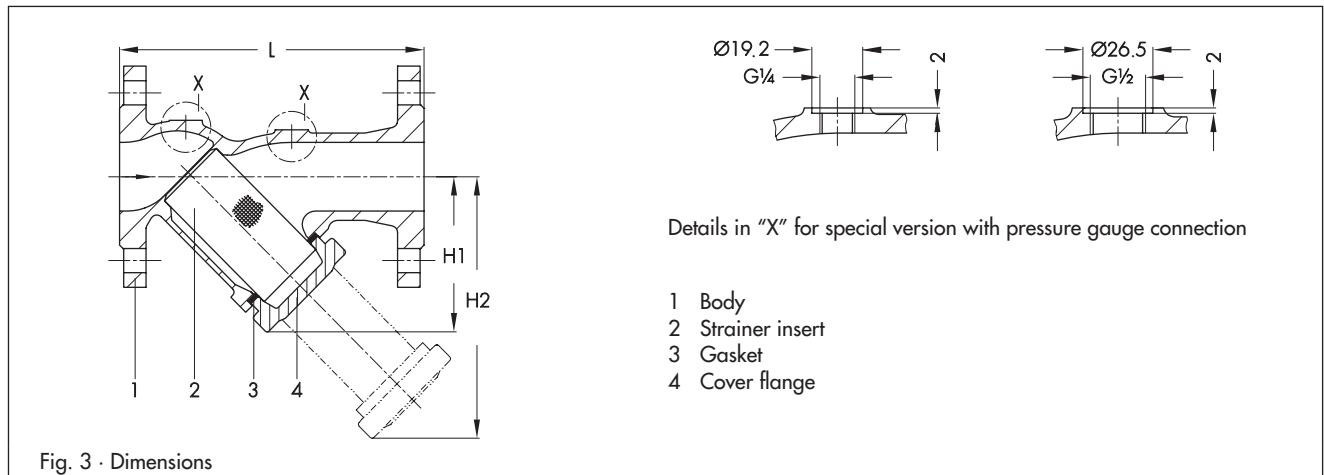
Connection size DN	15 to 250	15 to 150	15 to 250	15 to 100
Nominal pressure	PN 10 to 16	PN 16 and 25	PN 16 to 40	PN 16 to 40
Body	Cast iron EN-JL1040	Spheriodal graphite iron EN-JS1049	Cast steel 1.0619	Cast stainless steel 1.4408
Cover flange	EN-JL1040	1.0460	1.0460 ¹⁾	1.4571
Strainer insert (filter)	Stainless steel 1.4401			
Gasket	Graphite on metal core			

¹⁾ DN 200 and 250: 1.0619 (GS-C 25)

Dimensions

Table 3 · Dimensions in mm and weights

Connection size DN	15	20	25	32	40	50	65	80	100	125	150	200	250		
Length L	130	150	160	180	200	230	290	310	350	400	480	600	730		
Height H1	45	60	70	85	95	115	150	180	224	255	290	385	480		
Height H2 (insert pulled out)	75	90	110	135	160	195	225	295	343	420	485	640	790		
Weight, approx. kg	Spher. gr. iron/ cast iron		1.9	2.8	3.3	5.4	6.5	9.1	12	17	24	36	52	91	152
	Cast steel		2.2	3.2	4.0	5.8	7.2	10	14	19	28	42	60	130	195



Ordering text

Strainer Type 2 N or Type 2 NI, nominal size DN ...,
Nominal pressure PN ..., body material ... ,
Optionally, special version ...

Specifications subject to change without notice

