

Data sheet

# Strainer

## Type FIA



FIA strainers are a range of angleway and straightway strainers, which are carefully designed to give favourable flow conditions. The design makes the strainer easy to install, and ensures quick strainer inspection and cleaning.

FIA strainers are used ahead of automatic controls, pumps, compressors etc., for initial plant start-up and where permanent filtration of the refrigerant is required. The strainer reduces the risk of undesirable system breakdowns and reduces wear and tear on plant components.

FIA strainers are equipped with a screen mesh of stainless steel, available in sizes 100, 150, 250 and 500 $\mu$  (microns\*), (US 150, 100, 72, 38 mesh\*).

\* Mesh is the number of threads per inch.  
 $\mu$  (microns) is the distance between two threads  
(1 $\mu$  = 1/1000 mm).

### Features

- Applicable to HCFC, HFC, R717 (Ammonia), R744 (CO<sub>2</sub>) and all flammable refrigerants.
- Modular Concept:
  - Each valve housing is available with several different connection types and sizes.
  - Possible to convert FIA strainers to any other product in the Flexline™ SVL family (shut-off valve, hand operated regulating valve, check & stop valve or check valve) just by replacing the complete top part.
- Fast and easy overhaul service. It is easy to replace the top part and no welding is needed.
- Filter net of stainless steel mounted direct without extra gaskets means easy servicing.
- Two types of strainer inserts are available:
  - A plain insert of stainless steel.
  - A pleated insert (DN 15-200) with extra large surface, which ensures long intervals between cleaning and low pressure drop.
- FIA 15-40 (½ – 1 ½ in.):  
A special insert (50 $\mu$ ) can be used in combination with a standard version when cleaning a plant during commissioning.
- FIA 50-200 (2 - 8 in.):  
A large capacity filter bag (50 $\mu$ ) can be inserted for cleaning plant during commissioning.
- FIA 80-200 (3 - 8 in.) can be equipped with a magnetic insert for detention of iron particles and other magnetic particles.
- Each strainer clearly marked with type, size and performance range
- Housing and bonnet of low temperature steel in accordance with the requirements of the Pressure Equipment Directive and those of other international classification authorities
- Temperature range: -60/+150°C (-76/+302°F)
- Max. working pressure: 52 bar g (754 psi g)
- Classification: DNV, CRN, BV, EAC etc.  
To get an updated list of certification on the products please contact your local Danfoss Sales Company.

**Design**
**Connections**

Available with the following connections:

- Butt-weld ANSI (B 36.10 Schedule 80), DN 15 - 40 (½ - 1½ in.)
- Butt-weld ANSI (B 36.10 Schedule 40), DN 50 - 200 (2 - 8 in.)
- Socket Weld (ANSI B 16.11), DN 15 - 50 (½ - 2 in.)
- FPT Female Pipe Thread, NPT (ANSI/ASME B 1.20.1), DN 15 - 32 (½ - 1¼ in.)

**Strainer Insert**

A filter grid and filter net of stainless steel ensure long element life. The filter net offers a very high degree of cleanability.

**Housing**

The strainer housing is made of special, cold resistant steel.

**Pressure Equipment Directive (PED)**

FIA strainers are approved in accordance with the European standard specified in the Pressure Equipment Directive and are CE marked. For further details / restrictions - see Installation Instruction



|                       |                        |                          |                         |
|-----------------------|------------------------|--------------------------|-------------------------|
| <b>Nominal bore</b>   | DN ≤ 25 (1 in.)        | DN 32-80 mm (1¼ - 3 in.) | DN 100-200 mm (4-8 in.) |
| <b>Classified for</b> | Fluid group I          |                          |                         |
| <b>Category</b>       | Article 3, paragraph 3 | II                       | III                     |

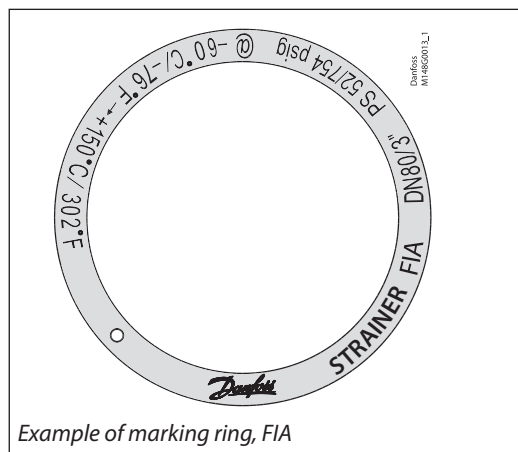
**Installation/Maintenance**

The strainer is designed to resist high internal pressures. However, the piping system in general should be designed to avoid liquid traps and reduce the risk of hydraulic pressure caused by thermal expansion.

Danfoss recommends replacement/cleaning of the strainer when the differential pressure loss >0.5 bar (7.3 psi) in the liquid line and >0.05 bar (0.7 psi) in the suction line. The max. permissible differential pressure is 1 bar (15 psi).

Install the strainer with the cover in downward position.

For further information refer to installation instruction for FIA.

**Identification:**


Example of marking ring, FIA

**Technical data**

- **Refrigerants**  
Applicable to HCFC, HFC, R717 (Ammonia), R744 (CO<sub>2</sub>) and all flammable refrigerants.
- **Temperature range**  
-60°C/+150°C (-76°F/+302°F).
- **Max. working pressure:**  
52 bar g (754 psi g).

## Data sheet | Strainer, type FIA

### Selection of strainer size

The mesh aperture size of the strainer must satisfy the requirements stated by the suppliers of the equipment to be protected.

The following recommendations of aperture size apply in general to refrigeration installations:

#### All lines

First start up: ..... **50μ**  
 (Use strainer insert with removable insert for FIA DN15-40 or separate filter bag for FIA DN 50-200. 50μ insert should normally be removed after the first 24 hours of operation)

#### Liquid Lines

Ahead of pumps: ..... **500μ** [38 mesh]  
 After pumps: ..... **150μ** [100 mesh] / 250μ [72 mesh]  
 In front of AKVA valves ..... **100μ** [150 mesh]

#### Protection of automatic regulation equipment

Generally ..... **150μ** [100 mesh] / 250μ [72 mesh]  
 Sensitive equipment, e.g. suction regulators with low temperature ..... **250μ** [72 mesh]

#### Definition

Mesh is the number of threads per inch. μ (microns) is the distance between two threads (1μ = 1 / 1000 mm).

#### Suction Lines

Ahead of screw compressor ..... **250μ** [72 mesh]  
 Ahead of piston compressor ..... **150μ** [100 mesh]

#### Flow coefficient (DIN/ANSI)

| Connection size (DN)<br>FIA | μ   | mesh | wire<br>mm | wire<br>in. | free<br>space<br>% | screen area     |                 |                 |                 |
|-----------------------------|-----|------|------------|-------------|--------------------|-----------------|-----------------|-----------------|-----------------|
|                             |     |      |            |             |                    | Plain inserts   |                 | Pleated inserts |                 |
|                             |     |      |            |             |                    | cm <sup>2</sup> | in <sup>2</sup> | cm <sup>2</sup> | in <sup>2</sup> |
| 15 - 20<br>(½" - ¾")        | 100 |      | 0.068      | 0.003       | 35                 | 25              | 3.9             | 45              | 7.0             |
|                             | 150 | 100  | 0.10       | 0.004       | 36                 | 25              | 3.9             | 45              | 7.0             |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 25              | 3.9             | 45              | 7.0             |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 25              | 3.9             | 45              | 7.0             |
| 25 - 40<br>(1" - 1½")       | 100 |      | 0.068      | 0.003       | 35                 | 71              | 11              | 160             | 25.0            |
|                             | 150 | 100  | 0.10       | 0.004       | 36                 | 71              | 11              | 160             | 25.0            |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 71              | 11              | 160             | 25.0            |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 71              | 11              | 160             | 25.0            |
| 50 (2")                     | 100 |      | 0.068      | 0.003       | 35                 | 71              | 11              | 200             | 31.2            |
|                             | 150 | 100  | 0.10       | 0.004       | 36                 | 87              | 13.5            | 200             | 31.2            |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 87              | 13.5            | 200             | 31.2            |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 87              | 13.5            | 200             | 31.2            |
| 65 (2½")                    | 150 | 100  | 0.10       | 0.004       | 36                 | 127             | 19.7            | 305             | 47.6            |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 127             | 19.7            | 305             | 47.6            |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 127             | 19.7            | 305             | 47.6            |
| 80 (3")                     | 150 | 100  | 0.10       | 0.004       | 36                 | 205             | 31.8            | 450             | 70.2            |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 205             | 31.8            | 450             | 70.2            |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 205             | 31.8            | 450             | 70.2            |
| 100 (4")                    | 150 | 100  | 0.10       | 0.004       | 36                 | 370             | 57.4            | 790             | 123.2           |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 370             | 57.4            | 790             | 123.2           |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 370             | 57.4            | 790             | 123.2           |
| 125 (5")                    | 150 | 100  | 0.10       | 0.004       | 36                 | 510             | 79.1            | 1105            | 172.4           |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 510             | 79.1            | 1105            | 172.4           |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 510             | 79.1            | 1105            | 172.4           |
| 150 (6")                    | 150 | 100  | 0.10       | 0.004       | 36                 | 726             | 112.5           | 1600            | 249.6           |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 726             | 112.5           | 1600            | 249.6           |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 726             | 112.5           | 1600            | 249.6           |
| 200 (8")                    | 150 | 100  | 0.10       | 0.004       | 36                 | 1315            | 203.8           | 2900            | 453.1           |
|                             | 250 | 72   | 0.10       | 0.004       | 51                 | 1315            | 203.8           | 2900            | 453.1           |
|                             | 500 | 38   | 0.16       | 0.006       | 57.6               | 1315            | 203.8           | 2900            | 453.1           |

**Selection of strainer size**  
(Continued)

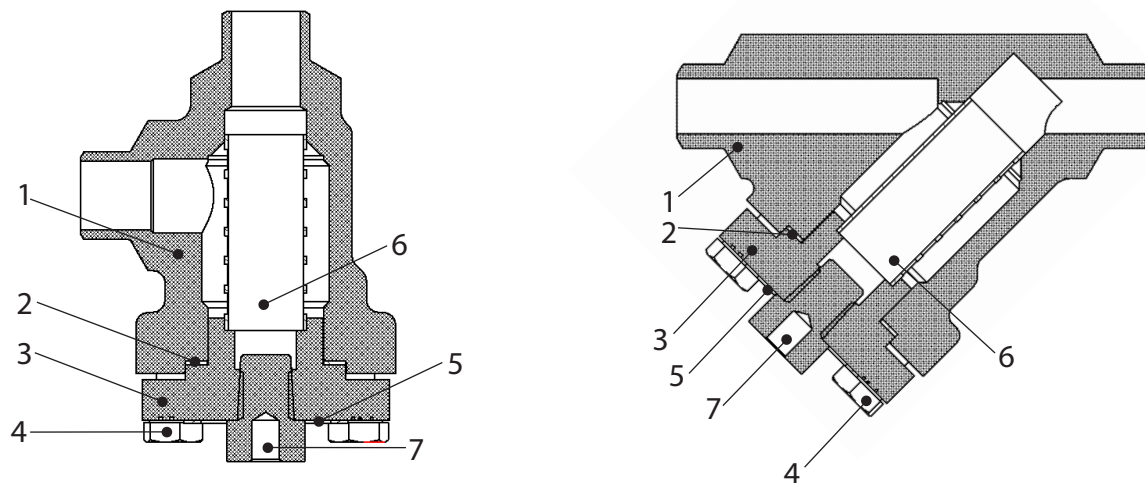
*K<sub>v</sub> values*

| DN  | FIA angle - plain filter net |       |       |       | FIA angle - pleated filter net |       |       |
|-----|------------------------------|-------|-------|-------|--------------------------------|-------|-------|
|     | μ100                         | μ150  | μ250  | μ500  | μ150                           | μ250  | μ500  |
| 15  | 3.3                          | 3.4   | 3.5   | 3.7   | 4.2                            |       |       |
| 20  | 6.9                          | 7.1   | 7.3   | 7.7   | 8.8                            |       |       |
| 25  | 13.8                         | 14.0  | 14.5  | 15.2  | 17.2                           | 17.9  |       |
| 32  | 23.0                         | 23.8  | 24.7  | 25.5  | 29.2                           | 30.5  |       |
| 40  | 25.1                         | 25.5  | 26.4  | 28.1  | 31.4                           | 32.6  |       |
| 50  | 45.1                         | 45.9  | 47.6  | 50.2  | 56.7                           | 58.8  | 62.0  |
| 65  |                              | 56.1  | 57.8  | 60.4  | 69.3                           | 71.4  | 74.6  |
| 80  |                              | 104.6 | 108.0 | 113.1 | 129.2                          | 133.4 | 139.7 |
| 100 |                              | 162.4 | 167.5 | 176.0 | 200.6                          | 206.9 | 217.4 |
| 125 |                              | 275.4 | 283.9 | 298.4 | 340.2                          | 350.7 | 368.6 |
| 150 |                              | 362.1 | 373.2 | 391.9 | 447.3                          | 462.9 |       |
| 200 |                              | 572.9 | 590.8 | 620.5 | 704.9                          | 730.0 |       |

| DN  | FIA straight - plain filter net |       |       |       | FIA straight - pleated filter net |       |       |
|-----|---------------------------------|-------|-------|-------|-----------------------------------|-------|-------|
|     | μ100                            | μ150  | μ250  | μ500  | μ150                              | μ250  | μ500  |
| 15  | 2.5                             | 2.6   | 2.7   | 2.8   | 3.3                               |       |       |
| 20  | 5.3                             | 5.4   | 5.6   | 5.9   | 6.9                               |       |       |
| 25  | 10.5                            | 10.7  | 11.1  | 11.6  | 13.8                              | 14.5  |       |
| 32  | 17.6                            | 18.2  | 18.9  | 19.5  | 23.9                              | 24.7  |       |
| 40  | 19.2                            | 19.5  | 20.2  | 21.5  | 25.5                              | 26.4  |       |
| 50  | 34.5                            | 35.1  | 36.4  | 38.4  | 45.9                              | 47.6  | 50.2  |
| 65  |                                 | 42.9  | 44.2  | 46.2  | 56.1                              | 57.8  | 60.4  |
| 80  |                                 | 80.0  | 82.6  | 86.5  | 104.6                             | 108.0 | 113.1 |
| 100 |                                 | 124.2 | 128.1 | 134.6 | 162.4                             | 167.5 | 176.0 |
| 125 |                                 | 210.6 | 217.1 | 228.2 | 275.4                             | 283.9 | 298.4 |
| 150 |                                 | 276.9 | 285.4 | 299.7 | 362.1                             | 374.0 |       |
| 200 |                                 | 438.1 | 451.8 | 474.5 | 570.8                             | 587.3 |       |

Material specification

FIA 15 - 40 (½ in. - 1 ½ in.)

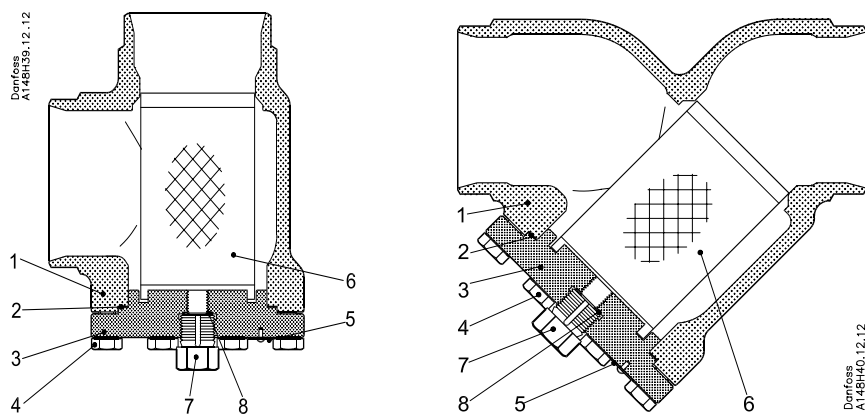


FIA 15-40 (½ in. - 1 ½ in.)

| No. | Part                         | Material            | DIN   | ISO   | ASTM                            |
|-----|------------------------------|---------------------|---|-------|---------------------------------|
| 1   | Housing                      | Steel               | G20Mn5QT, 10213-3<br>-----<br>P285QH+QT, 10222-4    |       | LCC, A352<br>-----<br>LF2, A350 |
| 2   | Gasket                       | Fibre, Non-asbestos |   |       |                                 |
| 3   | Cover                        | Steel               | P285QH EN10222-4<br>-----<br>P275NL1 or 2 EN10028-3 |       | LF2, A350<br>-----<br>A, A662   |
| 4   | Bolts                        | Stainless steel     | A2-70   | A2-70 | Type 308                        |
| 5   | Marking label                | Aluminium           |   |       |                                 |
| 6   | Strainer insert              | Stainless steel     |   |       |                                 |
| 7   | Pressure relief screw NPT ¼" | Stainless steel     |   |       |                                 |

Material specification

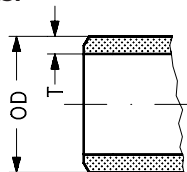
FIA 50 - 200 (2 in. - 8 in.)



FIA 50-200 (2 in. - 8 in.)

| No. | Part                      | Material            | DIN   | ISO   | ASTM                            |
|-----|---------------------------|---------------------|---|-------|---------------------------------|
| 1   | Housing                   | Steel               | G20Mn5QT, 10213-3<br>-----<br>P285QH+QT, 10222-4    |       | LCC, A352<br>-----<br>LF2, A350 |
| 2   | Gasket                    | Fibre, Non-asbestos |   |       |                                 |
| 3   | Cover                     | Steel               | P285QH EN10222-4<br>-----<br>P275NL1 or 2 EN10028-3 |       | LF2, A350<br>-----<br>A, A662   |
| 4   | Bolts                     | Stainless steel     | A2-70   | A2-70 | Type 308                        |
| 5   | Marking label             | Aluminium           |   |       |                                 |
| 6   | Strainer insert           | Stainless steel     |   |       |                                 |
| 7   | Pressure relief screw G½" | Stainless steel     |   |       |                                 |
| 8*  | Packing washer            | Aluminium           |   |       |                                 |

\* pos 8 used in FIA 50-200

**Connections**
**ANSI**


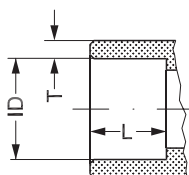
| Size<br>mm | Size<br>in. | OD<br>mm | T<br>mm | OD<br>in. | T<br>in. |
|------------|-------------|----------|---------|-----------|----------|
|------------|-------------|----------|---------|-----------|----------|

*Butt-weld ANSI (B 36.10 Schedule 80)*

|    |    |      |     |       |       |
|----|----|------|-----|-------|-------|
| 15 | ½  | 21.3 | 3.7 | 0.839 | 0.146 |
| 20 | ¾  | 26.9 | 4.0 | 1.059 | 0.158 |
| 25 | 1  | 33.7 | 4.6 | 1.327 | 0.181 |
| 32 | 1¼ | 42.4 | 4.9 | 1.669 | 0.193 |
| 40 | 1½ | 48.3 | 5.1 | 1.902 | 0.201 |

*Butt-weld ANSI (B 36.10 Schedule 40)*

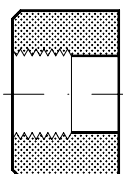
|     |    |       |     |      |      |
|-----|----|-------|-----|------|------|
| 50  | 2  | 60.3  | 3.9 | 2.37 | 0.15 |
| 65  | 2½ | 73.0  | 5.2 | 2.87 | 0.20 |
| 80  | 3  | 88.9  | 5.5 | 3.50 | 0.22 |
| 100 | 4  | 114.3 | 6.0 | 4.50 | 0.24 |
| 125 | 5  | 141.3 | 6.6 | 5.56 | 0.26 |
| 150 | 6  | 168.3 | 7.1 | 6.63 | 0.28 |
| 200 | 8  | 219.1 | 8.2 | 8.63 | 0.32 |

**SOC**


| Size<br>mm | Size<br>in. | ID<br>mm | T<br>mm | ID<br>in. | T<br>in. |
|------------|-------------|----------|---------|-----------|----------|
|------------|-------------|----------|---------|-----------|----------|

*Socket welding ANSI (B 16.11)*

|    |    |      |     |       |       |
|----|----|------|-----|-------|-------|
| 15 | ½  | 21.8 | 6.0 | 0.858 | 0.235 |
| 20 | ¾  | 27.2 | 4.6 | 1.071 | 0.181 |
| 25 | 1  | 33.9 | 7.2 | 1.335 | 0.284 |
| 32 | 1¼ | 42.7 | 6.1 | 1.743 | 0.240 |
| 40 | 1½ | 48.8 | 6.6 | 1.921 | 0.260 |
| 50 | 2  | 61.2 | 6.2 | 2.41  | 0.24  |

**FPT**


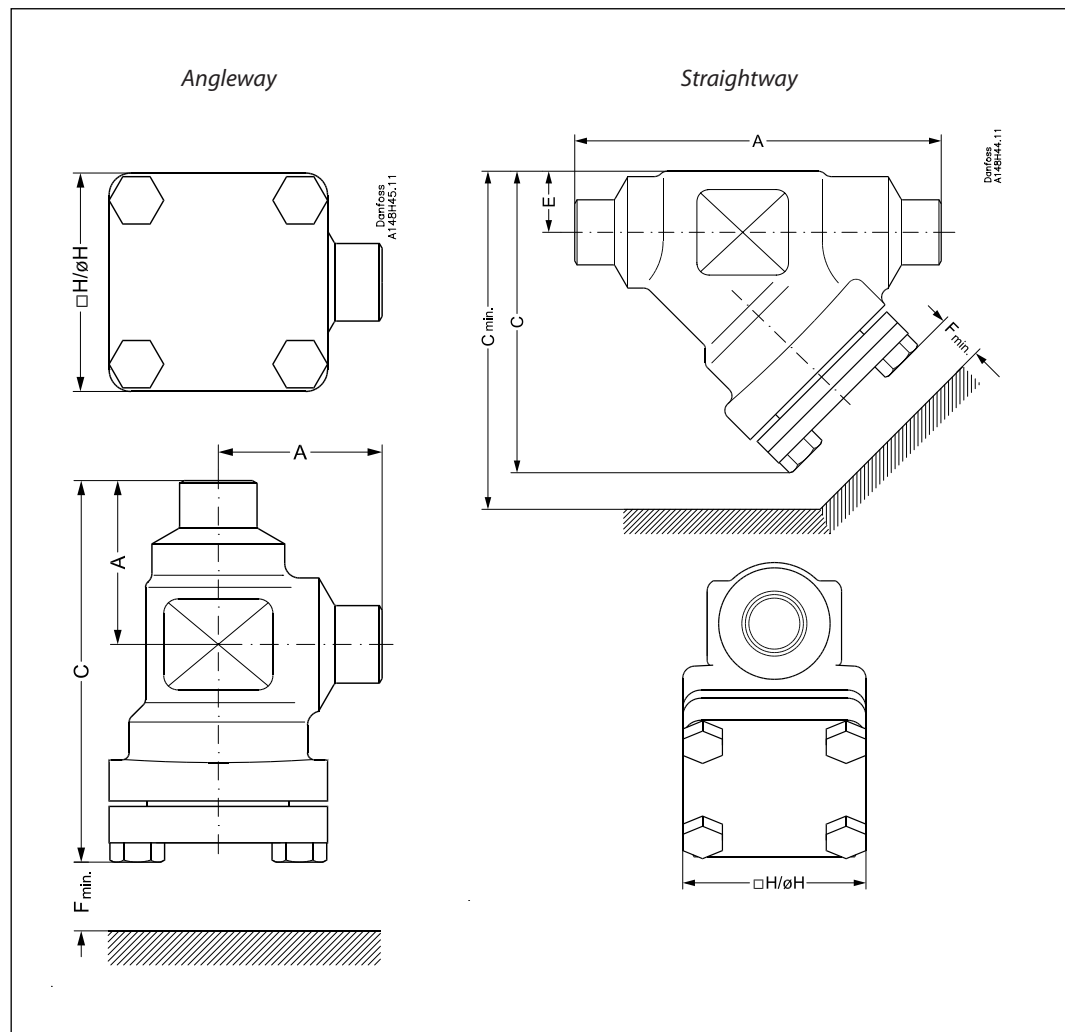
| Size<br>mm | Size<br>in. | Inside pipe tread |
|------------|-------------|-------------------|
|------------|-------------|-------------------|

*FPT inside pipe thread, NPT (ANSI/ASME B 1.20.1)*

|    |    |                 |
|----|----|-----------------|
| 15 | ½  | (½ × 14 NPT)    |
| 20 | ¾  | (¾ × 14 NPT)    |
| 25 | 1  | (1 × 11.5 NPT)  |
| 32 | 1¼ | (1¼ × 11.5 NPT) |

Dimensions and weights

FIA 15 - 65



Angleway

| Strainer size           |     | A    | C    | H    | F <sub>min.</sub> | Weight  |
|-------------------------|-----|------|------|------|-------------------|---------|
| FIA 15-20<br>(½" - ¾")  | mm  | 45   | 105  | 60   | 68                | 1.1 kg  |
|                         | in. | 1.77 | 4.13 | 2.36 | 2.68              | 2.4 lbs |
| FIA 25-40<br>(1" - 1½") | mm  | 55   | 132  | 70   | 95                | 1.7 kg  |
|                         | in. | 2.17 | 5.20 | 2.76 | 3.74              | 3.7 lbs |
| FIA 50<br>(2")          | mm  | 60   | 132  | 77   | 92                | 2.8 kg  |
|                         | in. | 2.36 | 5.20 | 3.03 | 3.62              | 6.2 lbs |
| FIA 65<br>(2½")         | mm  | 70   | 152  | 90   | 107               | 3.8 kg  |
|                         | in. | 2.76 | 5.98 | 3.54 | 4.21              | 8.4 lbs |

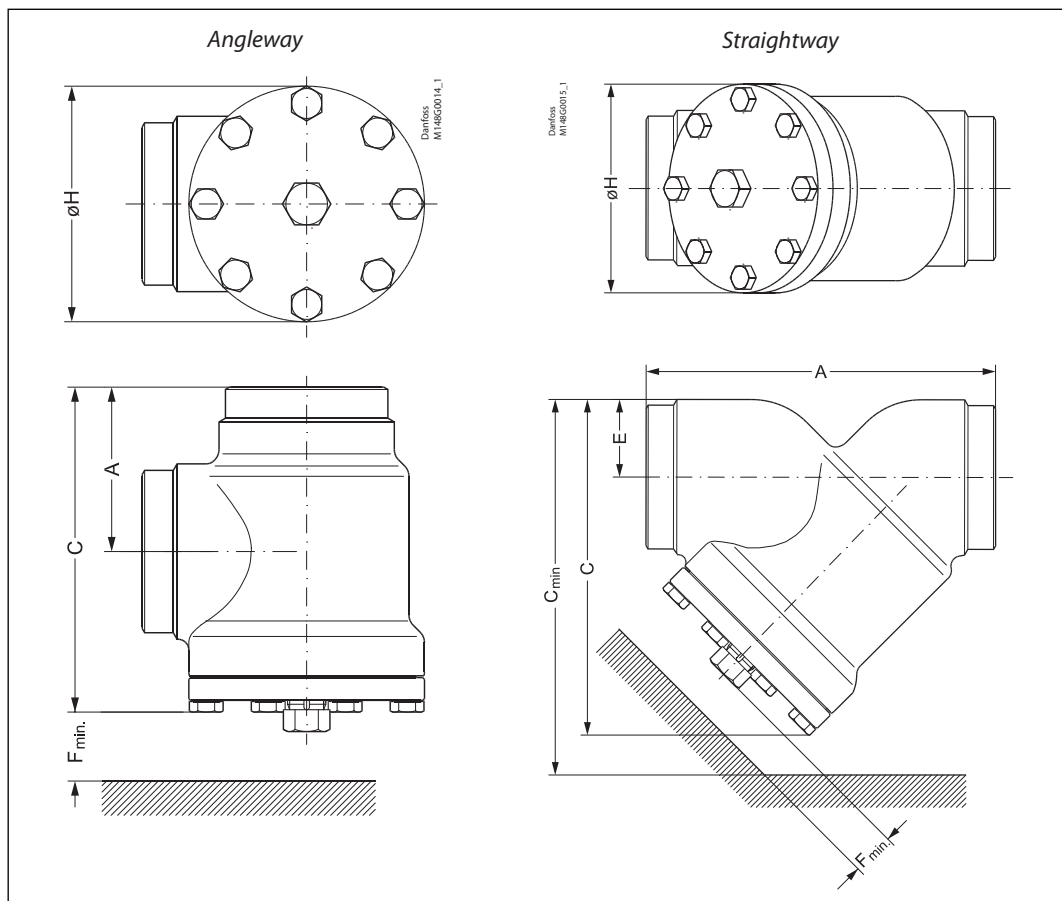
Straightway

| Strainer size           |     | A    | C    | C <sub>min.</sub> | H    | E    | F <sub>min.</sub> | Weight   |
|-------------------------|-----|------|------|-------------------|------|------|-------------------|----------|
| FIA 15-20<br>(½" - ¾")  | mm  | 120  | 99   | 133               | 60   | 20   | 68                | 1.4 kg   |
|                         | in. | 4.72 | 3.90 | 5.24              | 2.36 | 0.79 | 2.68              | 3.1 lbs  |
| FIA 25-40<br>(1" - 1½") | mm  | 155  | 129  | 177               | 70   | 26   | 95                | 2.4 kg   |
|                         | in. | 6.10 | 5.08 | 6.97              | 2.76 | 1.02 | 3.74              | 5.3 lbs  |
| FIA 50<br>(2")          | mm  | 148  | 138  | 184               | 77   | 32   | 92                | 3.5 kg   |
|                         | in. | 5.83 | 5.43 | 7.24              | 3.03 | 1.26 | 3.62              | 7.7 lbs  |
| FIA 65<br>(2½")         | mm  | 176  | 165  | 219               | 90   | 40   | 107               | 5.3 kg   |
|                         | in. | 6.93 | 6.50 | 8.62              | 3.54 | 1.57 | 4.21              | 11.7 lbs |



Dimensions and weights

FIA 80 - 200



Angleway

| Strainer size   |     | A    | C     | H     | F <sub>min.</sub> | Weight   |
|-----------------|-----|------|-------|-------|-------------------|----------|
| FIA 80<br>(3")  | mm  | 90   | 189   | 129   | 133               | 7.3 kg   |
|                 | in. | 3.54 | 7.44  | 5.08  | 5.24              | 16.1 lbs |
| FIA 100<br>(4") | mm  | 106  | 223   | 156   | 163               | 11.9 kg  |
|                 | in. | 4.17 | 8.78  | 6.14  | 6.42              | 26.2 lbs |
| FIA 125<br>(5") | mm  | 128  | 268   | 192   | 190               | 21.2 kg  |
|                 | in. | 5.04 | 10.6  | 7.56  | 7.48              | 46.7 lbs |
| FIA 150<br>(6") | mm  | 145  | 303   | 219   | 223               | 30.5 kg  |
|                 | in. | 5.71 | 11.93 | 8.62  | 8.78              | 67.2 lbs |
| FIA 200<br>(8") | mm  | 180  | 372   | 276   | 280               | 68 kg    |
|                 | in. | 7.09 | 14.65 | 10.87 | 11.02             | 150 lbs  |

Straightway

| Strainer size   |     | A     | C     | C <sub>min.</sub> | H     | E    | F <sub>min.</sub> | Weight   |
|-----------------|-----|-------|-------|-------------------|-------|------|-------------------|----------|
| FIA 80<br>(3")  | mm  | 216   | 204   | 271               | 129   | 48   | 133               | 8.6 kg   |
|                 | in. | 8.50  | 8.03  | 10.67             | 5.08  | 1.89 | 5.24              | 19 lbs   |
| FIA 100<br>(4") | mm  | 264   | 256   | 337               | 156   | 60   | 163               | 14.9 kg  |
|                 | in. | 10.39 | 10.08 | 13.27             | 6.14  | 2.36 | 6.42              | 32.8 lbs |
| FIA 125<br>(5") | mm  | 322   | 313   | 408               | 192   | 74   | 190               | 26.9 kg  |
|                 | in. | 12.68 | 12.32 | 16.06             | 7.56  | 2.91 | 7.48              | 59.3 lbs |
| FIA 150<br>(6") | mm  | 370   | 370   | 482               | 219   | 91   | 223               | 51 kg    |
|                 | in. | 14.57 | 14.57 | 18.98             | 8.62  | 3.58 | 8.78              | 112 lbs  |
| FIA 200<br>(8") | mm  | 464   | 465   | 605               | 276   | 117  | 280               | 95 kg    |
|                 | in. | 18.27 | 18.31 | 23.82             | 10.87 | 4.61 | 11.02             | 209 lbs  |

## Data sheet | Strainer, type FIA

### Ordering

The table below is used to identify the strainer required. Please note that you have to order **FIA strainer without insert, a strainer insert and accessories.**

| Size |     | Type | FIA Without strainer insert | Strainer insert       | Strainer insert       | Strainer insert      | Strainer insert      | Pleated Strainer insert | Pleated Strainer insert | Pleated Strainer insert |
|------|-----|------|-----------------------------|-----------------------|-----------------------|----------------------|----------------------|-------------------------|-------------------------|-------------------------|
| mm   | in. |      |                             | 100 $\mu$<br>150 mesh | 150 $\mu$<br>100 mesh | 250 $\mu$<br>72 mesh | 500 $\mu$<br>38 mesh | 150 $\mu$<br>100 mesh   | 250 $\mu$<br>72 mesh    | 500 $\mu$<br>38 mesh    |

#### Butt-weld ANSI (B 36.10 Schedule 80) - Angleway

| 15 | 1/2   | FIA 15 A ANG | 148B5244 |
|----|-------|--------------|----------|
| 20 | 3/4   | FIA 20 A ANG | 148B5344 |
| 25 | 1     | FIA 25 A ANG | 148B5444 |
| 32 | 1 1/4 | FIA 32 A ANG | 148B5545 |
| 40 | 1 1/2 | FIA 40 A ANG | 148B5644 |

|          |          |          |          |          |          |   |
|----------|----------|----------|----------|----------|----------|---|
| 148H3122 | 148H3124 | 148H3126 | 148H3128 | 148H3303 | 148H3363 | - |
| 148H3123 | 148H3125 | 148H3127 | 148H3129 | 148H3304 | 148H3269 | - |

#### Butt-weld ANSI (B 36.10 Schedule 80) - Straightway

| 15 | 1/2   | FIA 15 A STR | 148B5247 |
|----|-------|--------------|----------|
| 20 | 3/4   | FIA 20 A STR | 148B5347 |
| 25 | 1     | FIA 25 A STR | 148B5447 |
| 32 | 1 1/4 | FIA 32 A STR | 148B5552 |
| 40 | 1 1/2 | FIA 40 A STR | 148B5644 |

|          |          |          |          |          |          |   |
|----------|----------|----------|----------|----------|----------|---|
| 148H3122 | 148H3124 | 148H3126 | 148H3128 | 148H3303 | 148H3363 | - |
| 148H3123 | 148H3125 | 148H3127 | 148H3129 | 148H3304 | 148H3269 | - |

#### Butt-weld ANSI (B 36.10 Schedule 40) - Angleway

| 50  | 2     | FIA 50 A ANG  | 148B5714 |
|-----|-------|---------------|----------|
| 65  | 2 1/2 | FIA 65 A ANG  | 148B5814 |
| 80  | 3     | FIA 80 A ANG  | 148B5907 |
| 100 | 4     | FIA 100 A ANG | 148B6008 |
| 125 | 5     | FIA 125 A ANG | 148B6107 |
| 150 | 6     | FIA 150 A ANG | 148B6204 |
| 200 | 8     | FIA 200 A ANG | 148B6304 |

|          |          |          |          |          |           |          |
|----------|----------|----------|----------|----------|-----------|----------|
| 148H3157 | 148H3130 | 148H3138 | 148H3144 | 148H3179 | 148H3184  | 148H3189 |
| -        | 148H3131 | 148H3139 | 148H3145 | 148H3180 | 148H3185  | 148H3190 |
| -        | 148H3119 | 148H3120 | 148H3121 | 148H3181 | 148H3186  | 148H3191 |
| -        | 148H3132 | 148H3140 | 148H3146 | 148H3182 | 148H3187  | 148H3192 |
| -        | 148H3133 | 148H3141 | 148H3147 | 148H3183 | 148H3188  | 148H3193 |
| -        | 148H3134 | 148H3142 | 148H3148 | 148H3226 | 148H3293* | -        |
| -        | 148H3135 | 148H3143 | 148H3149 | 148H3297 | 148H3294* | -        |

#### Butt-weld ANSI (B 36.10 Schedule 40) - Straightway

| 50  | 2     | FIA 50 A STR  | 148B5716 |
|-----|-------|---------------|----------|
| 65  | 2 1/2 | FIA 65 A STR  | 148B5815 |
| 80  | 3     | FIA 80 A STR  | 148B5908 |
| 100 | 4     | FIA 100 A STR | 148B6009 |
| 125 | 5     | FIA 125 A STR | 148B6108 |
| 150 | 6     | FIA 150 A STR | 148B6205 |
| 200 | 8     | FIA 200 A STR | 148B6305 |

|          |          |          |          |          |           |          |
|----------|----------|----------|----------|----------|-----------|----------|
| 148H3157 | 148H3130 | 148H3138 | 148H3144 | 148H3179 | 148H3184  | 148H3189 |
| -        | 148H3131 | 148H3139 | 148H3145 | 148H3180 | 148H3185  | 148H3190 |
| -        | 148H3119 | 148H3120 | 148H3121 | 148H3181 | 148H3186  | 148H3191 |
| -        | 148H3132 | 148H3140 | 148H3146 | 148H3182 | 148H3187  | 148H3192 |
| -        | 148H3133 | 148H3141 | 148H3147 | 148H3183 | 148H3188  | 148H3193 |
| -        | 148H3134 | 148H3142 | 148H3148 | 148H3226 | 148H3293* | -        |
| -        | 148H3135 | 148H3143 | 148H3149 | 148H3297 | 148H3294* | -        |

A = Butt-weld ANSI

ANG = Angleway

STR = Straightway

\* 60 mesh

## Data sheet | Strainer, type FIA

### Ordering (continued)

| Size |     | Type | FIA Without strainer insert | Strainer insert       | Strainer insert       | Strainer insert      | Strainer insert      | Pleated Strainer insert | Pleated Strainer insert | Pleated Strainer insert |
|------|-----|------|-----------------------------|-----------------------|-----------------------|----------------------|----------------------|-------------------------|-------------------------|-------------------------|
| mm   | in. |      |                             | 100 $\mu$<br>150 mesh | 150 $\mu$<br>100 mesh | 250 $\mu$<br>72 mesh | 500 $\mu$<br>38 mesh | 150 $\mu$<br>100 mesh   | 250 $\mu$<br>72 mesh    | 500 $\mu$<br>38 mesh    |

#### FPT inside pipe thread, NPT (ANSI/ASME B 1.20.1) - Angleway

| 15 | 1/2   | FIA 15 FTP ANG | 148B5246 | 148H3122 | 148H3124 | 148H3126 | 148H3128 | 148H3303 | 148H3363 | - |
|----|-------|----------------|----------|----------|----------|----------|----------|----------|----------|---|
| 20 | 3/4   | FIA 20 FTP ANG | 148B5346 | 148H3123 | 148H3125 | 148H3127 | 148H3129 | 148H3304 | 148H3269 | - |
| 25 | 1     | FIA 25 FTP ANG | 148B5446 |          |          |          |          |          |          |   |
| 32 | 1 1/4 | FIA 32 FTP ANG | 148B5547 |          |          |          |          |          |          |   |

#### FPT inside pipe thread, NPT (ANSI/ASME B 1.20.1) - Straightway

| 15 | 1/2   | FIA 15 FTP STR | 148B5249 | 148H3122 | 148H3124 | 148H3126 | 148H3128 | 148H3303 | 148H3363 | - |
|----|-------|----------------|----------|----------|----------|----------|----------|----------|----------|---|
| 20 | 3/4   | FIA 20 FTP STR | 148B5349 | 148H3123 | 148H3125 | 148H3127 | 148H3129 | 148H3304 | 148H3269 | - |
| 25 | 1     | FIA 25 FTP STR | 148B5449 |          |          |          |          |          |          |   |
| 32 | 1 1/4 | FIA 32 FTP STR | 148B5549 |          |          |          |          |          |          |   |

#### Socket welding ANSI (B 16.11) - Angleway

| 15 | 1/2   | FIA 15 SOC ANG | 148B5245 | 148H3122 | 148H3124 | 148H3126 | 148H3128 | 148H3303 | 148H3363 | -        |
|----|-------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 20 | 3/4   | FIA 20 SOC ANG | 148B5345 | 148H3123 | 148H3125 | 148H3127 | 148H3129 | 148H3304 | 148H3269 | -        |
| 25 | 1     | FIA 25 SOC ANG | 148B5445 |          |          |          |          |          |          |          |
| 32 | 1 1/4 | FIA 32 SOC ANG | 148B5546 |          |          |          |          |          |          |          |
| 40 | 1 1/2 | FIA 40 SOC ANG | 148B5643 | 148H3157 | 148H3130 | 148H3138 | 148H3144 | 148H3179 | 148H3184 | 148H3189 |
| 50 | 2     | FIA 50 SOC ANG | 148B5715 |          |          |          |          |          |          |          |

#### Socket welding ANSI (B 16.11) - Straightway

| 15 | 1/2   | FIA 15 SOC STR | 148B5248 | 148H3122 | 148H3124 | 148H3126 | 148H3128 | 148H3303 | 148H3363 | -        |
|----|-------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 20 | 3/4   | FIA 20 SOC STR | 148B5348 | 148H3123 | 148H3125 | 148H3127 | 148H3129 | 148H3304 | 148H3269 | -        |
| 25 | 1     | FIA 25 SOC STR | 148B5448 |          |          |          |          |          |          |          |
| 32 | 1 1/4 | FIA 32 SOC STR | 148B5548 |          |          |          |          |          |          |          |
| 40 | 1 1/2 | FIA 40 SOC STR | 148B5645 | 148H3157 | 148H3130 | 148H3138 | 148H3144 | 148H3179 | 148H3184 | 148H3189 |
| 50 | 2     | FIA 50 SOC STR | 148B5717 |          |          |          |          |          |          |          |

- SOC = Socket welding
- FPT = Inside pipe thread
- ANG = Angleway
- STR = Straightway

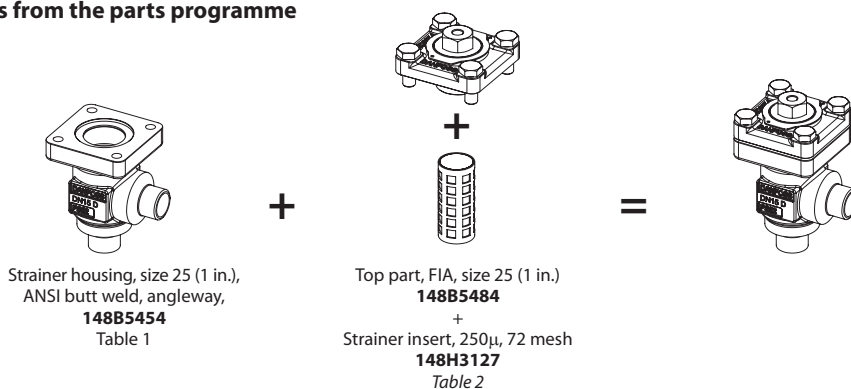
### Accessories

| Part  | Accessory for | Code number |
|---|---------------|-------------|
| Magnet insert   | FIA 80-100    | 148H3447    |
|   | FIA 125-200   | 148H3448    |
| Strainer insert $\mu$ 150 with removable insert $\mu$ 50 for the first start up | FIA 15-20     | 148H3301    |
|   | FIA 25-40     | 148H3302    |
| Filter bag  | FIA 50        | 148H3150    |
|   | FIA 65        | 148H3151    |
|   | FIA 80        | 148H3152    |
|   | FIA 100       | 148H3153    |
|   | FIA 125       | 148H3154    |
|   | FIA 150       | 148H3155    |
|   | FIA 200       | 148H3156    |

## Data sheet | Strainer, type FIA

### Ordering FIA strainers from the parts programme

**Example**  
(select from  
table 1 and 2)



**Table 1**  
SVL valve housings  
w/different  
connections

| Sizes [DN] |     | DN 15-65 mm (½ - 2½ in.) |          |          |          | DN 80-125 mm (3 - 5 in.) |          |  |  |
|------------|-----|--------------------------|----------|----------|----------|--------------------------|----------|--|--|
|            |     | ANSI-Butt weld           |          | SOC      |          | FPT                      |          |  |  |
| mm         | in. | ANG                      | STR      | ANG      | STR      | ANG                      | STR      |  |  |
| 15         | ½   | 148B5254                 | 148B5255 | 148B5256 | 148B5257 | 148B5258                 | 148B5259 |  |  |
| 20         | ¾   | 148B5354                 | 148B5355 | 148B5356 | 148B5357 | 148B5358                 | 148B5359 |  |  |
| 25         | 1   | 148B5454                 | 148B5455 | 148B5456 | 148B5457 | 148B5458                 | 148B5459 |  |  |
| 32         | 1¼  | 148B5578                 | 148B5579 | 148B5580 | 148B5581 | 148B5582                 | 148B5583 |  |  |
| 40         | 1½  | 148B5654                 | 148B5655 | 148B5656 | 148B5657 |                          |          |  |  |
| 50         | 2   | 148B5743                 | 148B5744 | 148B5745 | 148B5746 |                          |          |  |  |
| 65         | 2½  | 148B5818                 | 148B5819 |          |          |                          |          |  |  |
| 80         | 3   | 148B5914                 | 148B5915 |          |          |                          |          |  |  |
| 100        | 4   | 148B6016                 | 148B6017 |          |          |                          |          |  |  |
| 125        | 5   | 148B6114                 | 148B6115 |          |          |                          |          |  |  |

**Table 2**  
FIA complete top  
part including  
gaskets and bolts

| Sizes [DN] |     | FIA 15-65                |  | FIA 80-125 |  |  |  |                                       |                                       |   |  |  |
|------------|-----|--------------------------|--|------------|--|--|--|---------------------------------------|---------------------------------------|---|--|--|
|            |     | Complete top part<br>FIA |  |            |  |  |  |                                       |                                       |   |  |  |
| mm         | in. |                          |  |            |  | Strainer<br>insert<br>100µ<br>150 mesh | Strainer<br>insert<br>150µ<br>100 mesh | Strainer<br>insert<br>250µ<br>72 mesh | Strainer<br>insert<br>500µ<br>38 mesh | Pleated<br>Strainer<br>insert<br>150µ<br>100 mesh | Pleated<br>Strainer<br>insert<br>250µ<br>72 mesh | Pleated<br>Strainer<br>insert<br>500µ<br>38 mesh |
| 15         | ½   | 148B5284                 |  |            |  | 148H3122                               | 148H3124                               | 148H3126                              | 148H3128                              | 148H3303  | -  | -  |
| 20         | ¾   |                          |  |            |  | 148H3123                               | 148H3125                               | 148H3127                              | 148H3129                              | 148H3304  | 148H3269   | -  |
| 25         | 1   | 148B5484                 |  |            |  | 148H3157                               | 148H3130                               | 148H3138                              | 148H3144                              | 148H3179  | 148H3184   | 148H3189   |
| 32         | 1¼  |                          |  |            |  | -                                      | 148H3131                               | 148H3139                              | 148H3145                              | 148H3180  | 148H3185   | 148H3190   |
| 40         | 1½  |                          |  |            |  | -                                      | 148H3119                               | 148H3120                              | 148H3121                              | 148H3181  | 148H3186   | 148H3191   |
| 50         | 2   | 148B5748                 |  |            |  | -                                      | 148H3132                               | 148H3140                              | 148H3146                              | 148H3182  | 148H3187   | 148H3192   |
| 65         | 2½  |                          |  |            |  | -                                      | 148H3133                               | 148H3141                              | 148H3147                              | 148H3183  | 148H3188   | 148H3193   |
| 80         | 3   | 148B5922                 |  |            |  | -                                      | -                                      | -                                     | -                                     | -   | -  | -  |
| 100        | 4   |                          |  |            |  | -                                      | -                                      | -                                     | -                                     | -   | -  | -  |
| 125        | 5   | 148B6122                 |  |            |  | -                                      | -                                      | -                                     | -                                     | -   | -  |  |







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