



## DESCRIPTION

### 51FG

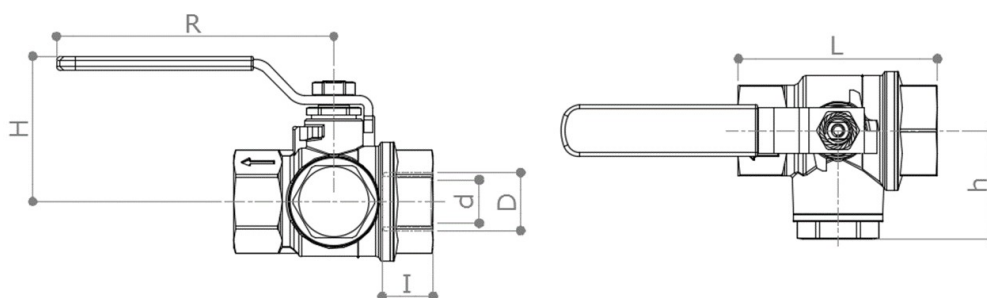
F x F heavy duty ball valve **FilterBall®** with integrated strainer FM28. Very easy to inspect and maintain.

Reversible green steel handle.

Made of corrosion resistant brass (ADZ or DZR) CW511L (Pb<0.1%).

Conform to **EN13828** standard.

## DIMENSIONS



Dimensions in **mm** – All threads are conform to ISO 7 or ISO 228 standards

| D          | d    | H    | h    | I    | L   | R   | Weight [g] |
|------------|------|------|------|------|-----|-----|------------|
| ½"         | 18   | 54   | 37   | 15   | 69  | 95  | 500        |
| ¾"         | 20   | 54   | 37   | 16   | 69  | 95  | 515        |
| 1"         | 28.5 | 65   | 46.5 | 19   | 95  | 120 | 918        |
| 1 ¼"       | 35.5 | 82   | 53.5 | 22   | 111 | 150 | 1565       |
| 1 ½"       | 45   | 89   | 74   | 23.5 | 127 | 150 | 2710       |
| 2" (51FGL) | 45   | 89.5 | 76.5 | 26   | 154 | 150 | 3025       |

## MATERIALS

|                     |                                                               |
|---------------------|---------------------------------------------------------------|
| <b>Body</b>         | CW511L (EN 12167) CuZn38 Pb< 0.1% (including fitting and cap) |
| <b>Ball</b>         | CW511L (EN 12167) CuZn38 Pb< 0.1% Chrome plated               |
| <b>Stem</b>         | Stainless steel AISI 316                                      |
| <b>Stuffing box</b> | CW614N (UNI EN 12164) CuZn39Pb3 Adjustable                    |
| <b>Strainer</b>     | Stainless steel AISI 304                                      |
| <b>Seeger</b>       | Phosphoric bronze CuSn08                                      |
| <b>Seat</b>         | 2 x PTFE on the ball + 1 x PTFE on the stem                   |
| <b>O-Rings</b>      | 2 x FKM on the stem + 1 x EPDM on the cap                     |
| <b>Handle</b>       | Delta Protect coated steel. PVC grip with "Pad Printing"      |

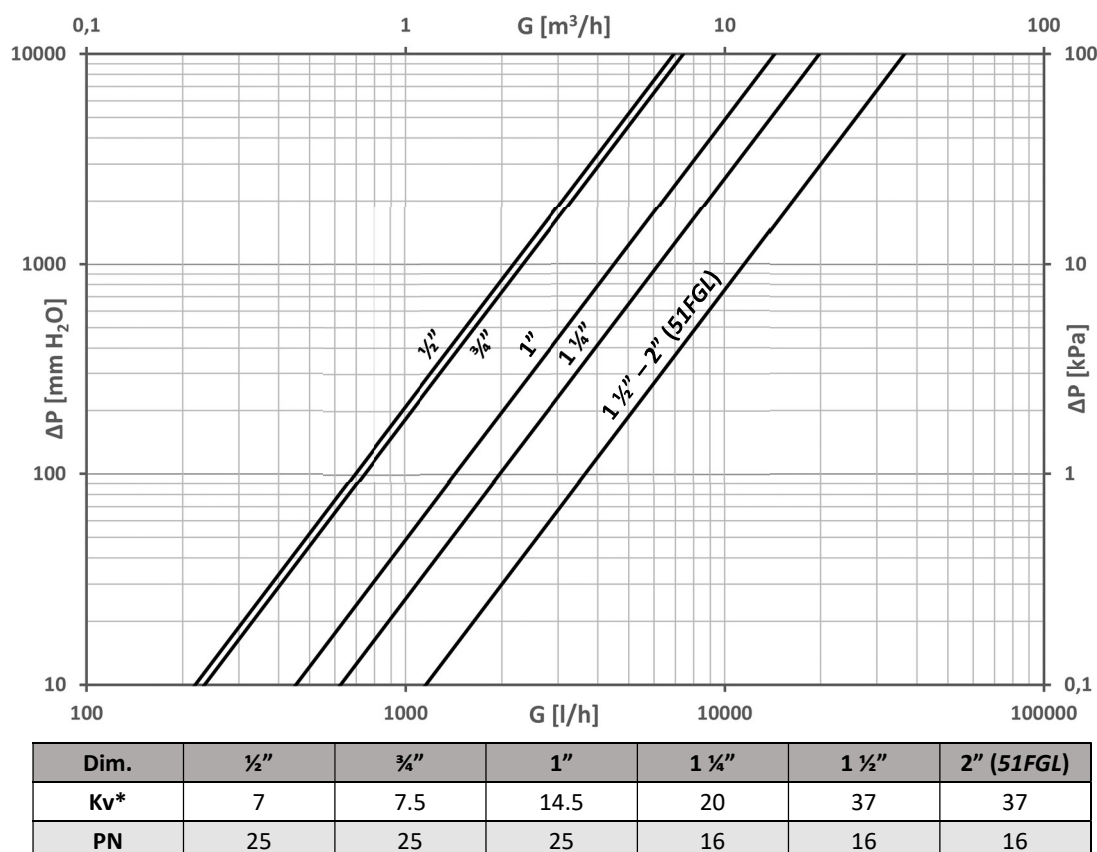
## APPROVALS

**W** LN WMKA00101  
lead free WMTS - 012

**GODKENDT  
TIL DRIKKEVAND**

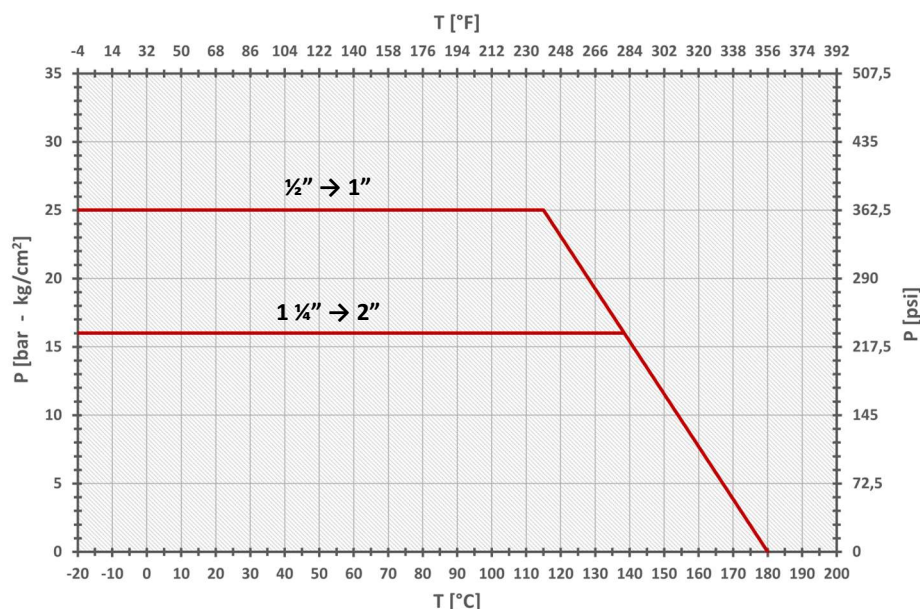
**STF**

## PRESSURE DROP DIAGRAM



\*Kv values got by using FM28 strainer.

## TEMPERATURE / PRESSURE DIAGRAM



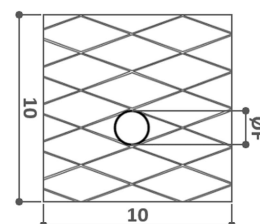
## RECOMMENDED WORKING TEMPERATURE / PRESSURE LIMITS

16 bar – 100°C – non shock  
 10 bar – 150°C – non shock  
 Max differential pressure: 10 bar  
 Lower temperature limit with 50% glycol: -20°C. No frost.

## AVAILABLE STRAINERS

The following table collects the main characteristics of the different types of strainers available:

| Type           | Mesh per linear 1" | Filtering capacity ØF | Casing |
|----------------|--------------------|-----------------------|--------|
| FM028 / FM028N | 28                 | Ø 700 µm (0,70 mm)    | Single |
| FM040 / FM040N | 40                 | Ø 300 µm (0,30 mm)    | Single |
| FM060 / FM060N | 60                 | Ø 230 µm (0,23 mm)    | Double |
| FM080 / FM080N | 80                 | Ø 180 µm (0,18 mm)    | Double |
| FM100 / FM100N | 100                | Ø 150 µm (0,15 mm)    | Double |

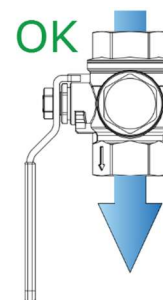
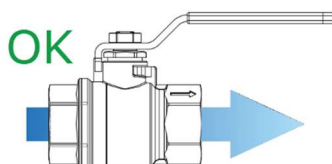
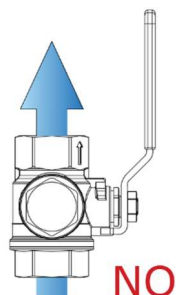
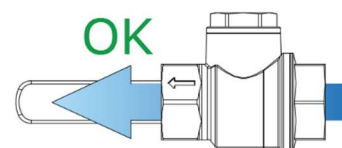
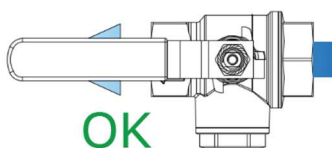
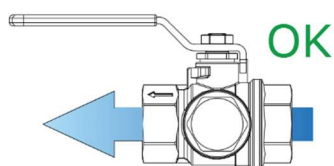


The type of strainer mesh with which the valve is equipped can vary based on the production batch considered. Particularly, as the filtering capacity of the device varies, the flow coefficient varies accordingly. Consult the following tables to verify the compatibility of the different filter models with the different sizes of valves available:

| Type  | 1/2" | 3/4" | 1"                               | 1 1/4"                           | 1 1/2" | 2"<br>(51FGL) |
|-------|------|------|----------------------------------|----------------------------------|--------|---------------|
| FM028 | ---- | ---- | 14.5                             | 20                               | ----   | ----          |
| FM040 | ---- | ---- | 12.1                             | 18.6                             | ----   | ----          |
| FM060 | ---- | ---- | 11.4                             | 18                               | 27     | 27            |
| FM080 | ---- | ---- | 11.4                             | 18                               | 25.5   | 25.5          |
| FM100 | ---- | ---- | 9                                | 17.7                             | 25     | 25            |
| Use   |      |      | Up to batch<br>2326LF (included) | Up to batch<br>2306LF (included) |        |               |

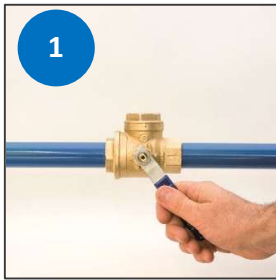
| Type   | 1/2" | 3/4" | 1"                              | 1 1/4"                          | 1 1/2" | 2"<br>(51FGL) |
|--------|------|------|---------------------------------|---------------------------------|--------|---------------|
| FM028N | 7    | 7.5  | 14.5                            | 20                              | 37     | 37            |
| FM040N | 5.2  | 5.4  | ----                            | 18.6                            | 28     | 28            |
| FM060N | 4.4  | 4.6  | ----                            | ----                            | ----   | ----          |
| FM080N | 4.8  | 5    | ----                            | ----                            | ----   | ----          |
| FM100N | 4.4  | 4.6  | ----                            | 17.7                            | ----   | ----          |
| Use    |      |      | From batch<br>2409LF (included) | From batch<br>2409LF (included) |        |               |

## INSTALLATION

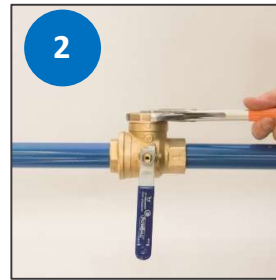


## MAINTENANCE

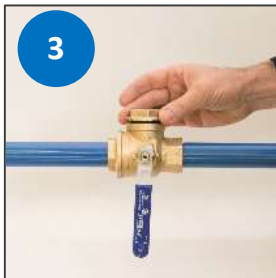
In order to avoid an increasing of pressure losses due to scales, a yearly strainer cleaning is suggested. Please follow the instruction below to carry out the strainer maintenance:



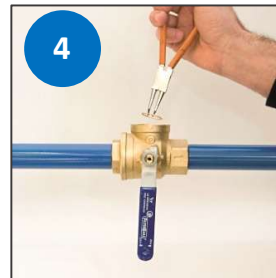
- Close the valve



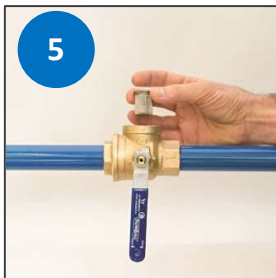
- Unscrew the inspection cap



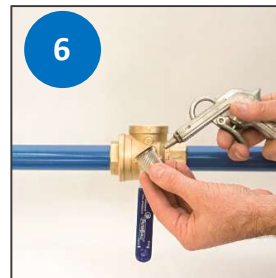
- Remove the inspection cap



- Remove the Seeger ring



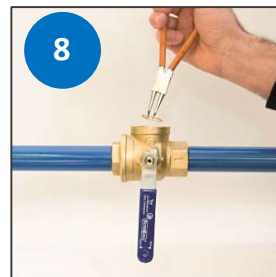
- Take the strainer out



- Clean or change the strainer



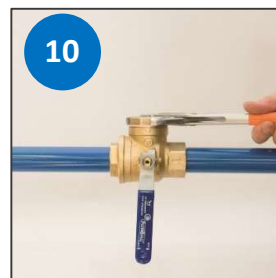
- Insert the strainer in



- Replace the Seeger ring,  
• checking that the strainer is locked



- Replace the inspection cap



- Screw the inspection cap



- Open the valve