



DESCRIPTION

51F

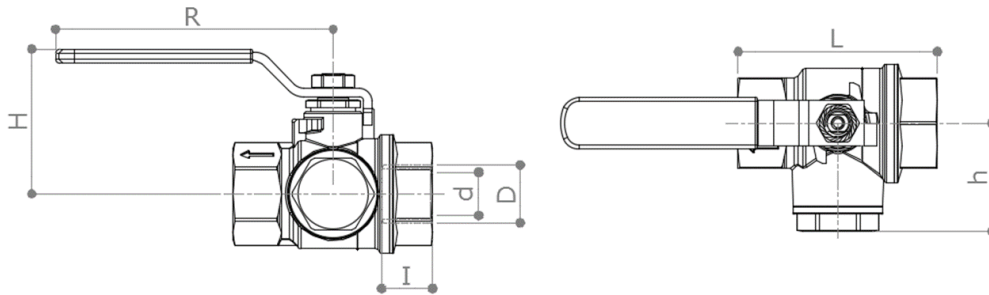
F x F heavy duty ball valve **FilterBall®** with integrated strainer FM28. Very easy to inspect and maintain.

Reversible blue steel handle.

Made of corrosion resistant brass (ADZ or DZR).

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	435
¾"	20	54	37	16	69	95	445
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	2800
2" (51FL)	45	89.5	76.5	26	154	150	3260
2" (51FH)	56	120	90	28	154	200	5390

MATERIALS

- Body** CW602N (UNI EN 12167) CuZn39Pb2As
- Ball** CW602N (UNI EN 12167) CuZn39Pb2As Chrome plated
- Stem** CW602N (UNI EN 12167) CuZn39Pb2As
- Stuffing box** CW614N (UNI EN 12164) CuZn39Pb3 Adjustable
- Strainer** Stainless steel
- Seeger** Phosphoric bronze
- Seat** 2 x PTFE on the ball + 1 x PTFE on the stem
- O-Rings** 2 x FKM on the stem + 1 x EPDM-X on the cap (51FH 2" → EPDM)
- Handle** Delta Protect coated steel. PVC grip with "Pad Printing"

APPROVALS



Certification valid for sizes from ½" to 1 ¼"

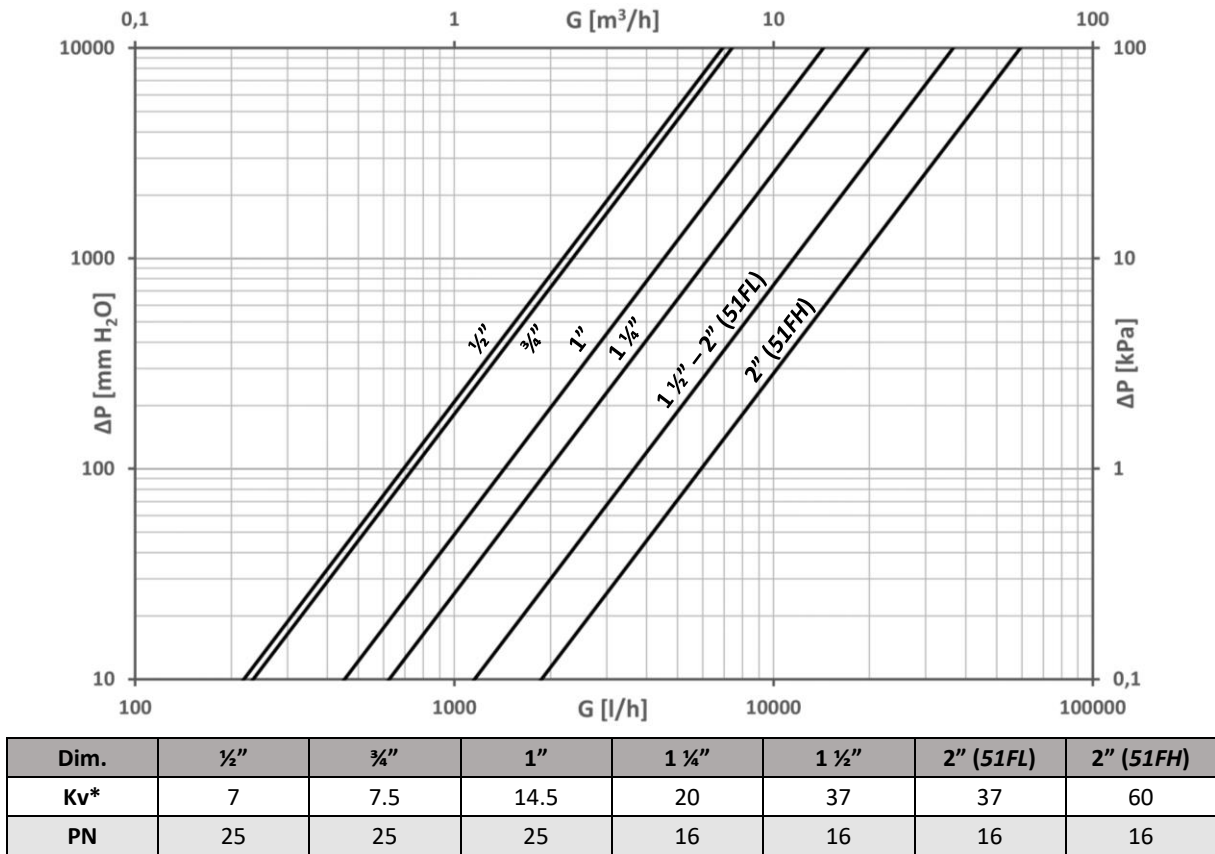


Certificate number 03/001622



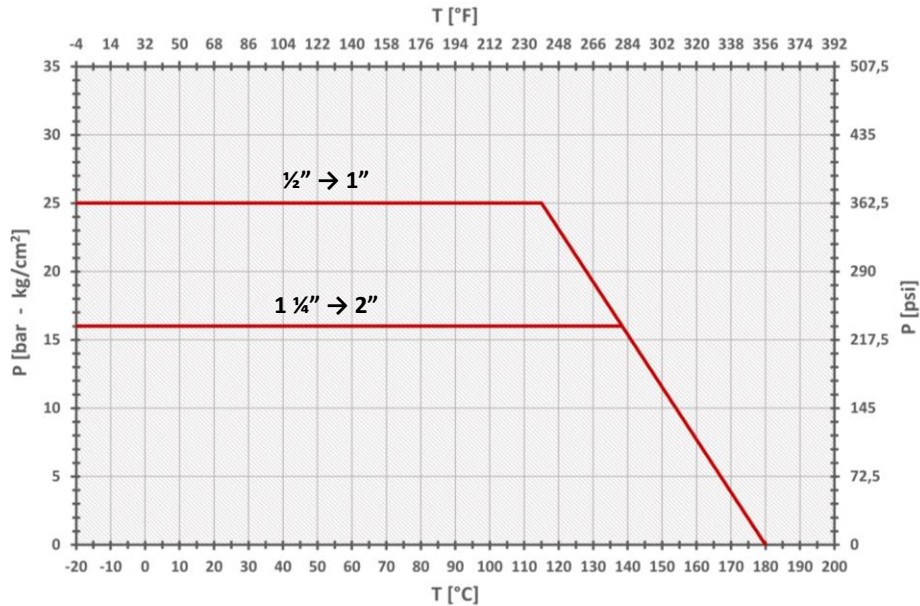
Certificate number: 19-006468-TH

PRESSURE DROP DIAGRAM



*Kv values got by using FM28 strainer.

TEMPERATURE / PRESSURE DIAGRAM



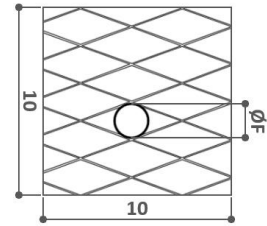
RECOMMENDED WORKING TEMPERATURE / PRESSURE LIMITS

- 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:

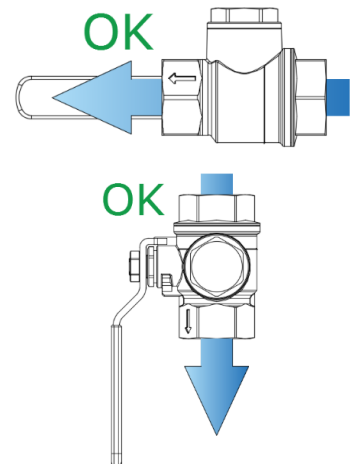
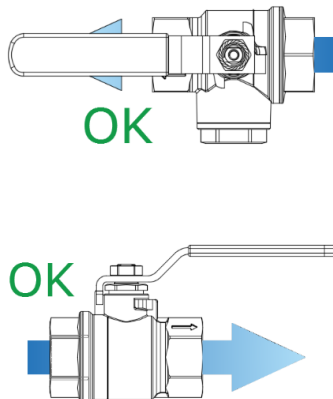
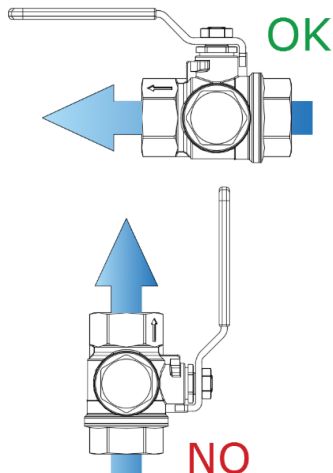
Type	1/2"	3/4"	1"	1 1/4"	1 1/2"	2" (51F o 51FL)*	2" (51F o 51FH)*
FM028	7	7.5	14.5	20	----	----	60
FM040	5.2	5.4	12.1	18.6	28	28	45
FM060	4.4	4.6	11.4	18	27	27	40
FM080	4.8	5	11.4	18	25.5	25.5	44
FM100	4.4	4.6	9	17.7	25	25	43
Use	Up to batch 1236 (included)	Up to batch 1236 (included)	Up to batch 2413 (included)	Up to batch 2421 (included)		From batch 2002 (included)	Up to batch 1916 (included)

*For batches prior to batch 1916 (included), the 2" model available was only the high flow model (article 51F). For batches between batch 1916 and batch 2001 (included), the 2" model available was only the low flow rate one (article 51F). For batches after batch 2002 (included) it was decided to make both models available, distinguishing them as: low flow model (article 51FL) and high flow model (article 51FH).

Type	1/2"	3/4"	1"	1 1/4"	1 1/2"	2" (51F o 51FL)*	2" (51F o 51FH)*
FM028N	7	7.5	14.5	20	37	37	----
FM040N	5.2	5.4	----	18.6	----	----	----
FM060N	4.4	4.6	----	----	----	----	----
FM080N	4.8	5	----	----	----	----	----
FM100N	4.4	4.6	----	17.7	----	----	----
Use	From batch 1237 (included)	From batch 1237 (included)	From batch 2426 (included)	From batch 2426 (included)		From batch 2002 (included)	Up to batch 1916 (included)

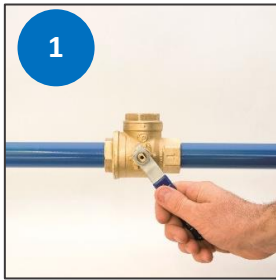
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INSTALLATION

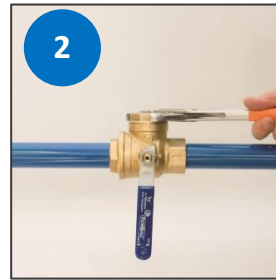


MAINTENANCE

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:



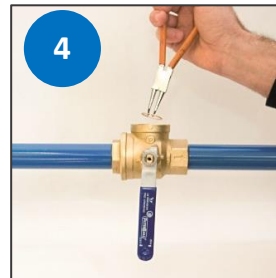
- Close the valve



- Unscrew the inspection cap



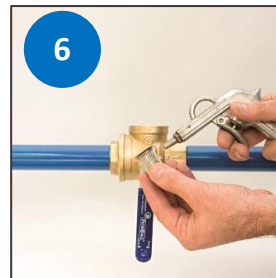
- Remove the inspection cap



- Remove the Seeger ring



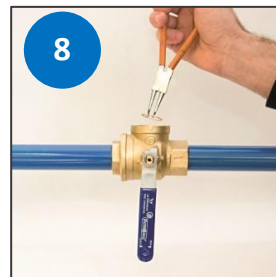
- Take the strainer out



- Clean or change the strainer



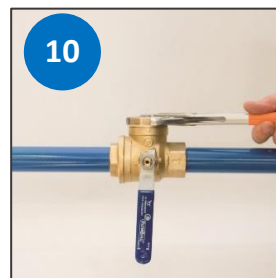
- Insert the strainer in



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



- Replace the inspection cap



- Screw the inspection cap



- Open the valve