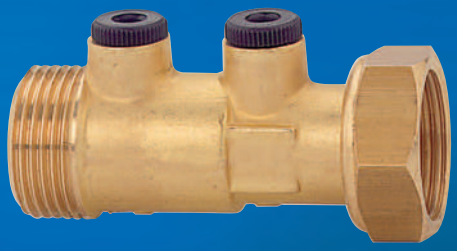
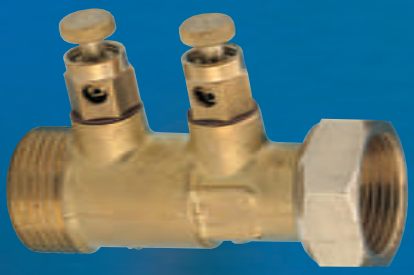
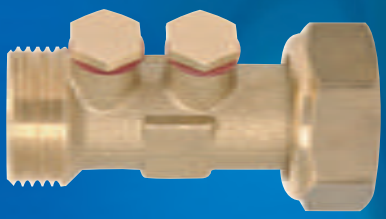
E.A. anti-pollution check valves
W.F. and B.B. Series



WF



WF



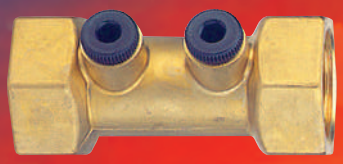
WF compact



BB



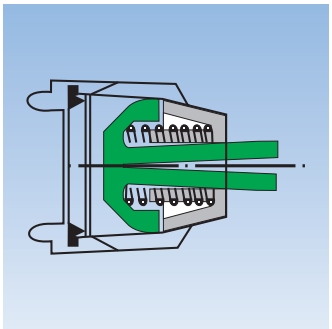
WF



BB

• For all drinking water networks: building, water distribution, pumping.
The WF check valve is fitted directly at the outlet of the water meters.
It protects against all water backflow problems and prevents metering errors, backflows of hot water into the cold water supply system and damages caused by water hammer.

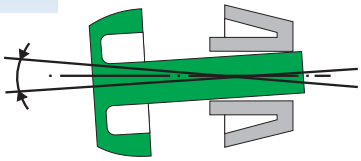
WATTS®



Unique design:
Inventor of the modern check valve in Europe, WATTS has put all its experience into the production of this model, whose design offers major benefits:

- The hydraulic characteristics are of the highest order due to the general design of the device, and in particular to the internal insert valve, in which the shape of the disc is calculated to ensure ideal penetration of fluid.
- Operation is quiet, even at very low flow rates, because the WATTS internal insert valve has a proportional-tension guide stem, which prevents vibration and consequent noise.

Conventional insert valve stem guide system

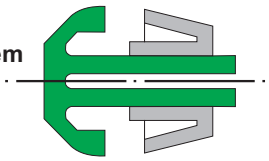


Vibration can occur at low flow rates (flushing the toilet at night).

This vibration is generated by lateral movements of the check valve.

Until now, it has not been possible to avoid this defect without altering the hydraulic characteristics.

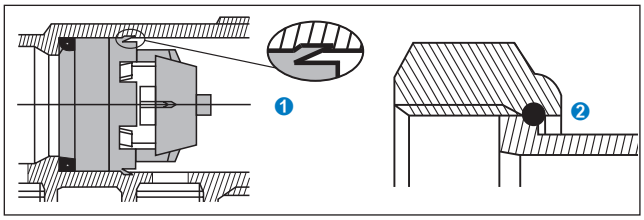
Insert valve stem guide system (WATTS Ocean patent)



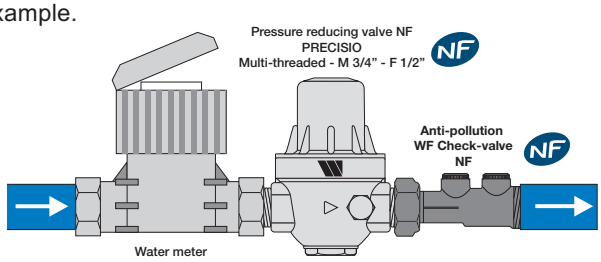
The exclusive split stem guiding system eliminates space lag, and the optimum hydraulic profile suppress vibration.

This guide system without space lag avoids vibration and the build-up of limescale, thus ensuring quiet, fault-free operation for years.

- The insert valve is made practically inseparable from the body by a patented coupling system ❶ that withstands even abnormally high flow rates.
- Total tightness even with very low counter-pressure.
- Perfect operation in all positions.
- In the WF model, the union nut offers very high tightening strength because it is fixed by a steel band ❷.
  This process prevents the metal from being exposed to internal tensions or poorly controllable deformations, as in the case of crimping, for example.



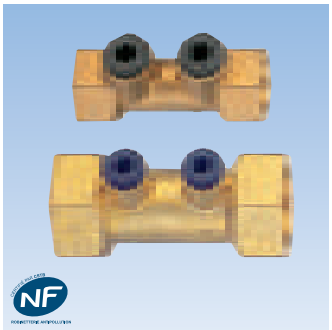
Applications:
For all drinking water networks: building, water distribution, pumping.
The WF check valve is fitted directly at the outlet of the water meters. It protects against all water backflow problems and prevents metering errors, the backflow of hot water into the cold water and deterioration caused by water hammer.



CERTIFIÉ PAR CSTB NF ROBINETTERIE ANTIPOLLUTION

NF EN 13959 approved (compliant with EN 1717), the WF and BB Series check valves correspond to EA type sanitary protection.

They must be installed in accordance with articles 16-8, 16-2 and 4 of French sanitary regulations.
WF models with captive nut can be fitted directly after the water meter.



BB check valve Female/Female

Controllable anti-pollution check valve, EA type.

Quiet operation, low pressure drops.

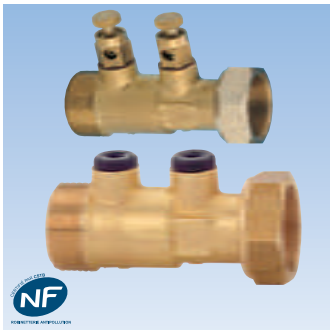
Total tightness even with very low counter-pressure.

F/F brass body with two F 8x13 bosses with black PA (polyamide) plugs.

POM (polyacetal) disc, stainless steel spring, NBR (nitrile) seal.

Max. temperature: 90°C.
Max. pressure: 10 bar.
Approval: NF EN 13959, complies with EN 1717.

diameter		weight	type	Part Number	packaging
F/F 1/2"	(15x21)	0,13	EA BB 015	2224100	25
F/F 3/4"	(20x27)	0,20	EA BB 020	2224101	25
F/F 1"	(26x34)	0,35	EA BB 025	2224102	10
F/F 1"1/4	(33x42)	0,60	EA BB 032	2224106	5
F/F 1"1/2	(40x49)	0,80	EA BB 040	2224107	5
F/F 2"	(50x60)	1,50	EA BB 050	2224129	1



WF check valve with swivel nut

Controllable anti-pollution check valve, EA type.
For all drinking water networks: building, water distribution, pumping. Model with swivel nut for fitting directly after the water meter.
Quiet operation, low pressure drops.
Total tightness even with very low counter-pressure.
Brass body with two F 8x13 bosses,
*except part number 2224110: F 1/8" (5x10) with PA (polyamide) plugs, POM (polyacetal) disc, stainless steel spring, NBR (nitrile) seal.

Max. temperature: 90°C.
Max. pressure: 10 bar.
Approval: NF EN 13959, complies with EN 1717.
Very high flow rates, fitting in all positions.

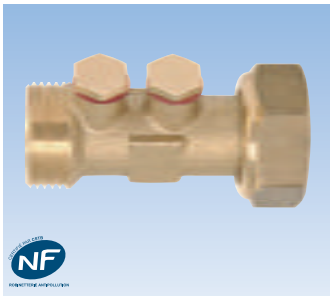
for water meter		valve thread	type	Part Number	packaging
calibre 15	F/M 3/4"	(20x27)	EA WF 020	2224110*	25
calibre 15	F/M 3/4" with captive drain cocks	(20x27)	EA WF 020	2224132	25
calibre 20	F/M 1"	(26x34)	EA WF 025	2224111	10
calibre 25	F/M 1"1/4	(33x42)	EA WF 032	2224112	5
calibre 30	F/M 1"1/2	(40x49)	EA WF 040	2224116	5
calibre 40	F/M 2"	(50x60)	EA WF 050	2224117	1
2 brass drain cock 1/4" (8x13)		for all WF check valves	bag of 2	2242222	1



WF check valve with swivel nut and brass plugs

Controllable anti-pollution check valve, EA type.
2 drain cocks with male-female swivel nut.
Same features as the WF model, but with 2 brass plugs.

for water meter		valve thread	type	Part Number	packaging
calibre 15	F/M 3/4"	(20x27)	EA WF	2224119	25
calibre 20	F/M 1"	(26x34)	EA WF	2224125	10
calibre 25	F/M 1"1/4	(33x42)	EA WF	2224126	5
calibre 30	F/M 1"1/2	(40x49)	EA WF	2224127	5
calibre 40	F/M 2"	(50x60)	EA WF	2224128	1



WF Compact check valve with swivel nut - length 58 mm

Controllable anti-pollution check valve, EA type.
2 drain cocks with male-female swivel nut.
Same features as the WF model except for length of 58 mm and 1/8" (5x10) pressure test points.
Supplied with brass plugs or captive drain cocks.

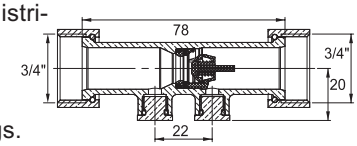
for water meter		valve thread	1/8" bosses	Part Number	packaging
size 15	F/M 3/4"	(20x27)	brass plugs	2224181	25
size 15	F/M 3/4"	(20x27)	captive drain cocks	2224182	25



WF Compact check valve with twofold swivel nut

Controllable anti-pollution check valve, EA type.
Model with twofold swivel nut for fitting directly after the water meter. For all drinking water networks: building, water distribution, pumping. Quiet operation, low pressure drops.
Total tightness even with very low counter-pressure.
Supplied with brass plugs.
Reduced implementation time to ensure tightness fittings.

Approval: NF EN 13959, complies with EN 1717.



for water meter		valve thread	1/8" bosses	Part Number	packaging
size 15	F/F 3/4"	(20x27)	brass plugs	2224120	1



WH angle check valve with swivel nut

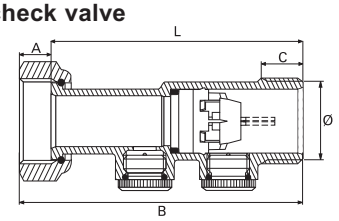
Controllable anti-pollution angle check valve, EA type.
4 drain cocks with brass plugs (two by side).
Quiet operation, low pressure drops.
Total tightness even with very low counter-pressure.
Model with swivel nut for fitting directly after the water meter.

1 model stored answers at left or right angle installation.
Approval: NF EN 13959, complies with EN 1717.

for water meter		valve thread	1/8" bosses	Part Number	packaging
size 15	F/M 3/4"	(20x27)	brass plugs	2224160	25
size 20	F/M 1"	(26x34)	brass plugs	2224161	25

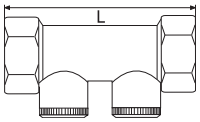
part	material	part	material
Body	forged brass CuZn40 Pb2	Sping	stainless steel ASTM 302
Nut	machined brass CuZn39 Pb2	Band	galvanized steel
Insert	POM	Plug	polyamide
O-ring	NBR NITRILE	Captive drain cocks	brass

W.F. check valve



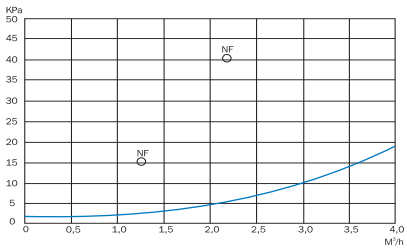
water meter	size 15	size 20	size 25	size 30	size 40
Ø	20 x 27	26 x 34	33 x 42	40 x 49	50 x 60
part numb.	2224110/2224119	2224111/2224125	2224112/2224126	2224116/2224127	2224117/2224128
L (mm)	78	81	100	100	105
A (mm)	10	11,5	13	15	15
C (mm)	13	15	17	13	14
B (mm)	88	92	113	115	120
weight (kg)	0,17	0,25	0,43	0,59	0,85

B.B. check valve

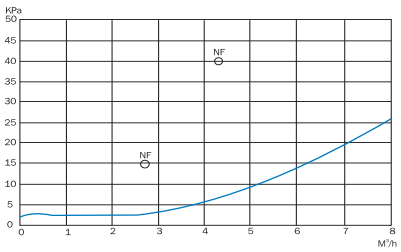


diameter	15 x 21	20 x 27	26 x 34	33 x 42	40 x 49	50 x 60
part numb.	2224100	2224101	2224102	2224106	2224107	2224129
L (mm)	66	76	91	111	121	151
weight (kg)	0,13	0,20	0,35	0,61	0,80	1,52

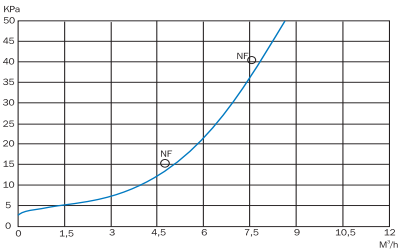
WF and BB check valves DN 15



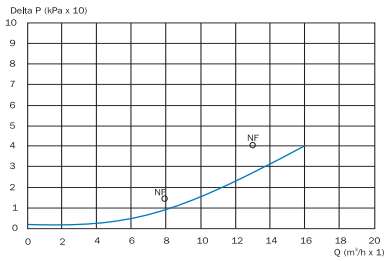
WF and BB check valves DN 20



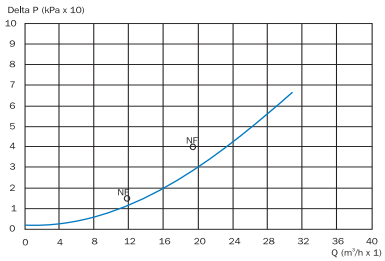
WF and BB check valves DN 25



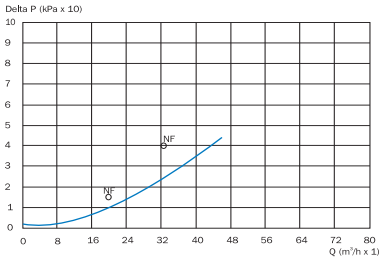
WF and BB check valves DN 32



WF and BB check valves DN 40

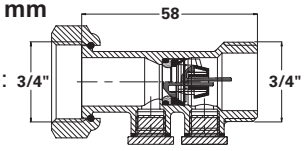


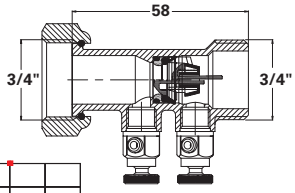
WF and BB check valves DN 50



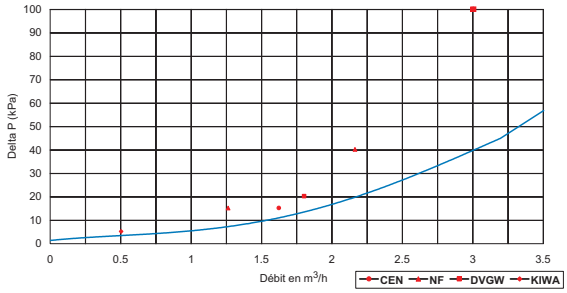
W.F. Compact check valve length 58 mm

ref. code: 2224181



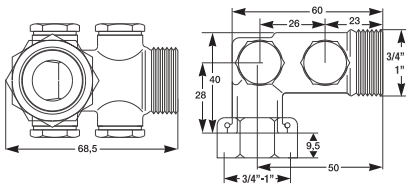


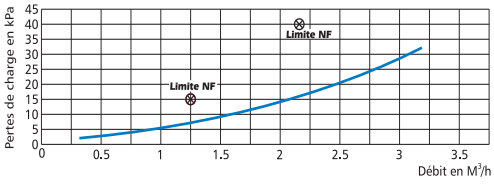
ref. code: 2224182



WH angle check valve with swivel nut

ref. code: 2224160 and 2224161





« The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding. Watts Industries reserves the right to carry out any technical and design improvements to its products without prior notice. Warranty: All sales and contracts for sale are expressly conditioned on the buyer's assent to Watts terms and conditions found on its website at www.wattswater.eu -Watts hereby objects to any term, different from or additional to Watts terms, contained in any buyer communication in any form, unless agreed to in a writing signed by an officer of Watts. »

WATTS INDUSTRIES France
1590 avenue d'Orange CS 10101 SORGUES
84275 VEDENE cedex - FRANCE
Phone 33 (0)4 90 33 28 28 - Fax 33 (0)4 90 33 28 29/39
E-mail : contact@wattswater.com
www.wattswater.fr

Re-order no. 52(2)-UK-18/07