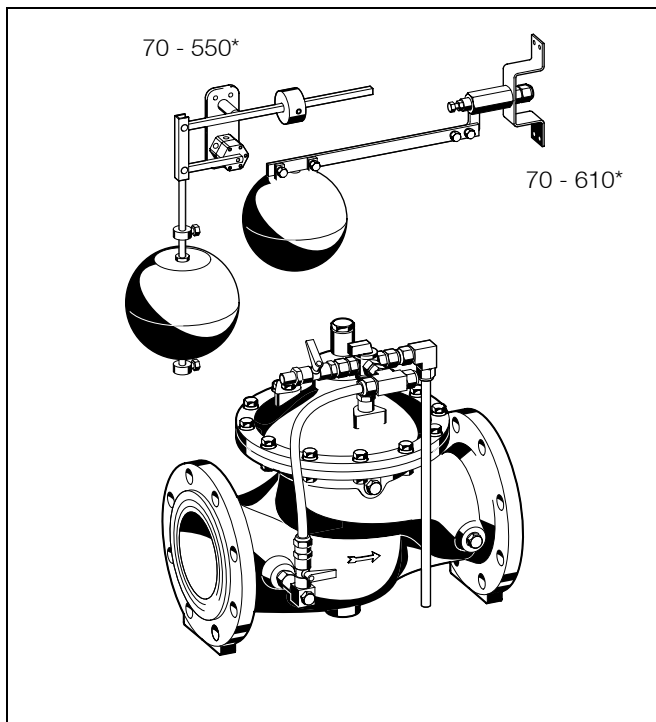


## FV300

### Filling valve

#### Product specification sheet



#### Construction

The filling valve comprises:

- Housing with PN16 flanges per ISO7005-2, EN1092-2
- Pilot float valve 70-550\*
- Pilot float valve 70-610\*
- Control circuit with ball valves on inlet and outlet
- Control circuit with integral rinsable filter insert

#### Materials

- Ductile iron housing, cover plate and diaphragm plate (ISO 1083), powder coated
- Red bronze/stainless steel regulating cone
- Stainless steel pressure spring and control rod
- Fibre-reinforced NBR diaphragm
- NBR and EPDM seals
- Stainless steel valve seat
- High quality synthetic material control circuits
- Brass compression fittings
- Brass float valve housing
- Stainless steel filter insert
- High quality synthetic material spherical float

\* not included in delivery

#### Application

Filling valve of this type can be used in water supplies and for industrial and commercial applications for the filling of reservoirs, tanks and cisterns. It is controlled by the main storage medium via a float valve and impulse link pipework.

Filling valve of this type is prevented from filling constantly by the use of a pilot valve, which can be adjusted to provide varying fill level differentials for opening and closing the valve.

#### Special Features

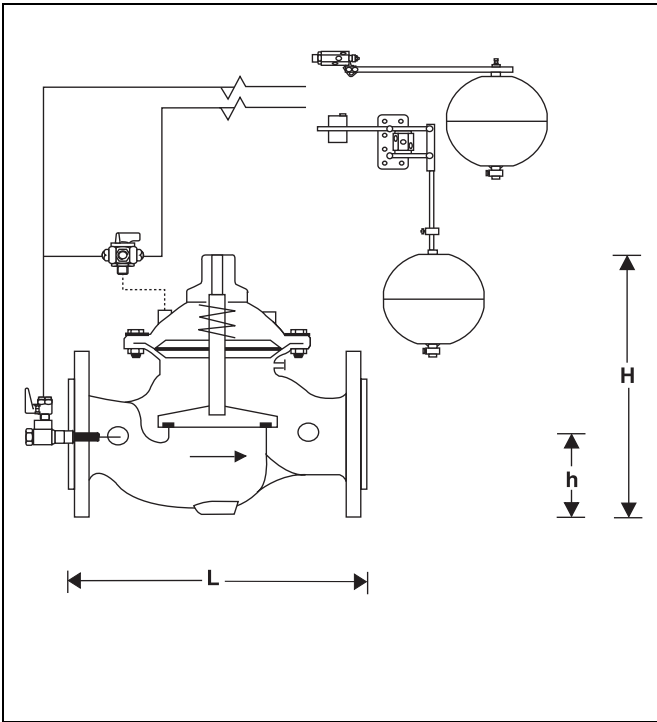
- High flow capacity
- Light weight
- Compact construction
- Powder coated inside and outside - Powder used is physiologically and toxicologically safe
- Integral control circuit and ball valves

#### Range of Application

Medium	Water
Operating pressure	Max. 16 bar
Switching level differential	5 - 40 cm with Pilot float valve 70-550 160 cm on request 5 - 40 cm with Pilot float valve 70-610

#### Technical Data

Operating temperature	Max. 80 °C
Nominal pressure	PN 16 PN 25 on request
Minimum pressure	0.7 bar + pressure resulting from differential in physical height of the impulse link pipe
Connection size	DN 50 - 450



**Method of Operation**

At zero pressure conditions the diaphragm valve is closed. If flow is opened to the filling valve of this type, water enters the inlet area and the increasing pressure opens the valve so that water in the outlet area can flow into the container. If the water level in the container reaches the preset level, then the float valve closes. The inlet pressure in the diaphragm chamber increases and closes the diaphragm valve. If the water level in the container falls, the float valve opens, the pressure in the diaphragm chamber falls and the inlet pressure opens the diaphragm valve for as long as the set water level in the container is not reached.

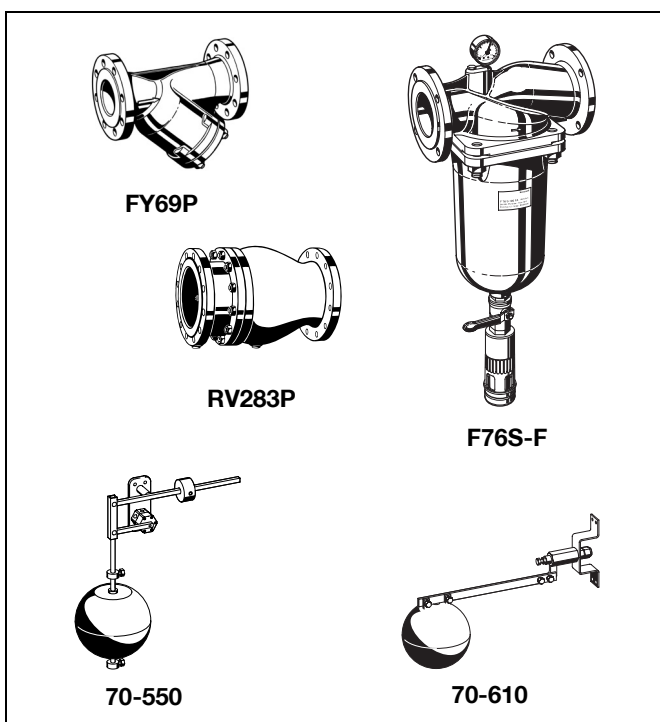
**Options**

FV300- ... A = Housing with flange, PN 16, ISO 7005, EN 1092-2

FV300- ... Z = PN 25, on request

↑ Please order pilot float valves separately  
Connection size

Connection size	DN	50	65	80	100	150	200	250	300	350	400	450
Weight	approx. kg	14	15	24	39	82	159	247	407	512	824	947
Dimensions	(mm)											
	L	230	292	310	350	480	600	730	850	980	1100	1200
	H	235	294	400	433	558	650	823	944	990	1250	1250
	h	83	93	100	110	143	173	205	230	260	290	310
Flow rate (Q <sub>max</sub> ) in m <sup>3</sup> /h - V=5.5 m/s		40	40	90	160	350	480	970	1400	1900	2500	3150
k <sub>vs</sub> -value	m <sup>3</sup> /h	43	43	103	167	407	676	1160	1600	1600	3300	3300



**Accessories**

**FY69P Strainer**

With double mesh, grey cast iron housing, powder coated inside and outside.

A = Mesh size approximately 0.5 mm

**F76S-F Reverse-rinsing filter**

Red bronze housing and filter bowl. Available in sizes DN 65 to DN 100, with filter mesh sizes 100 µm or 200 µm

**RV283P Check valve**

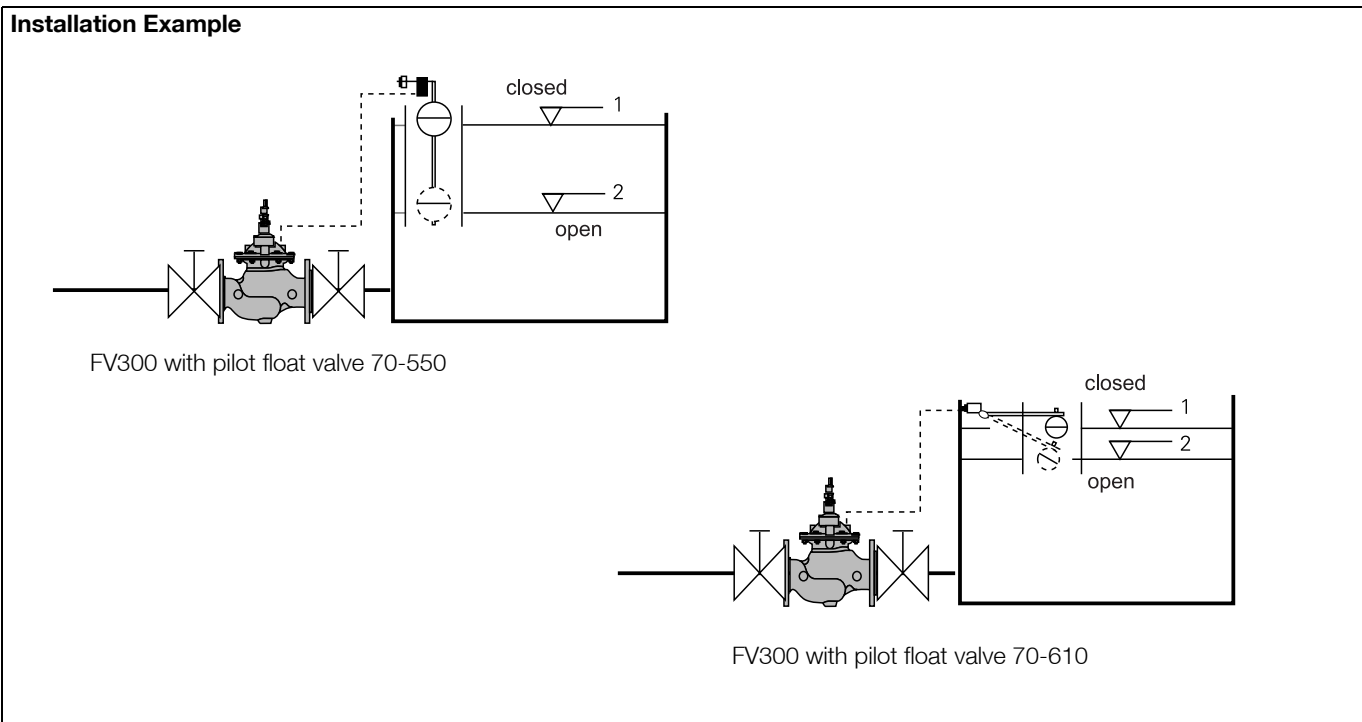
Grey cast iron housing, powder coated inside and outside. DIN/DVGW tested in compulsory test sizes DN 65, DN 80 and DN 100

**70-550 Pilot float valves**

Level switching differential 5 - 160 cm

**70-610 Pilot float valve**

Level switching differential 5 - 40 cm



#### Installation Guidelines

- Install shutoff valves on both sides of the pressure sustaining valves
- Install strainer upstream of filling valve
  - o Protects against damage from coarse dirt
- Note flow direction (indicated by arrow)
- Ensure good access
  - o Simplifies maintenance and inspection
- It is recommended that the pilot float valve be fitted with a stabiliser to prevent fluctuating water levels
- Install connectors for removal and refitting for maintenance

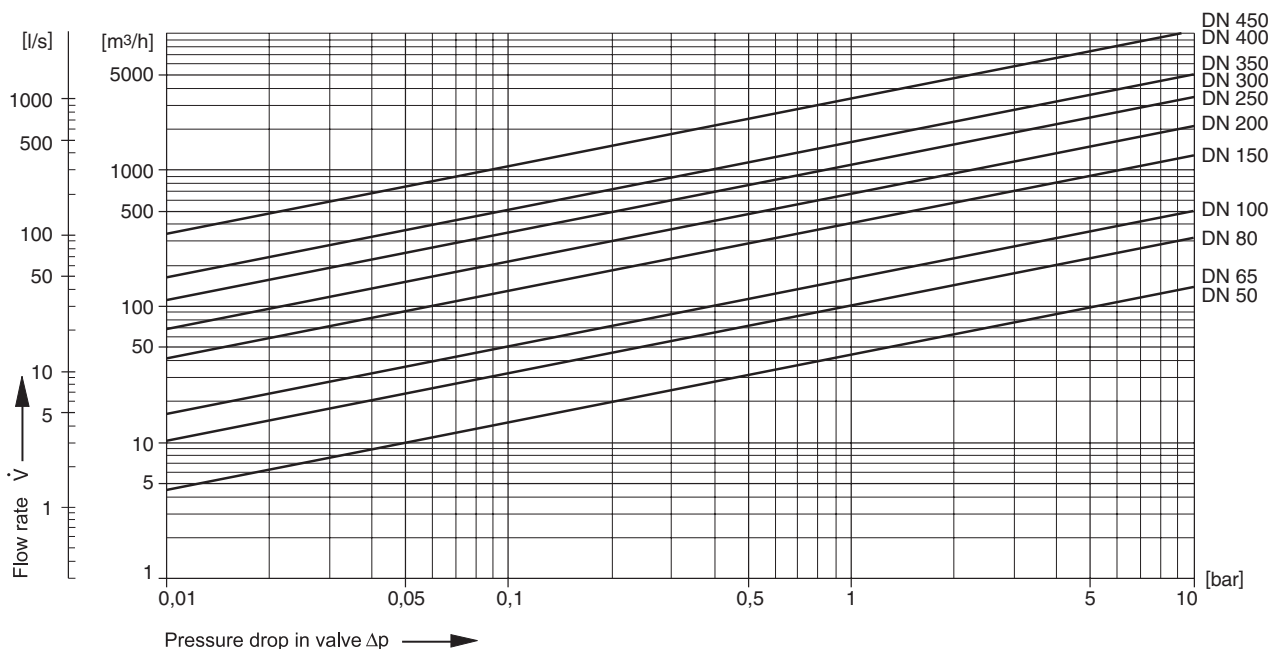
#### Typical Applications

Filling valves of this type, within the limits of their specifications, are suitable for installation in water supply systems, in residential buildings and in commercial and industrial installations.

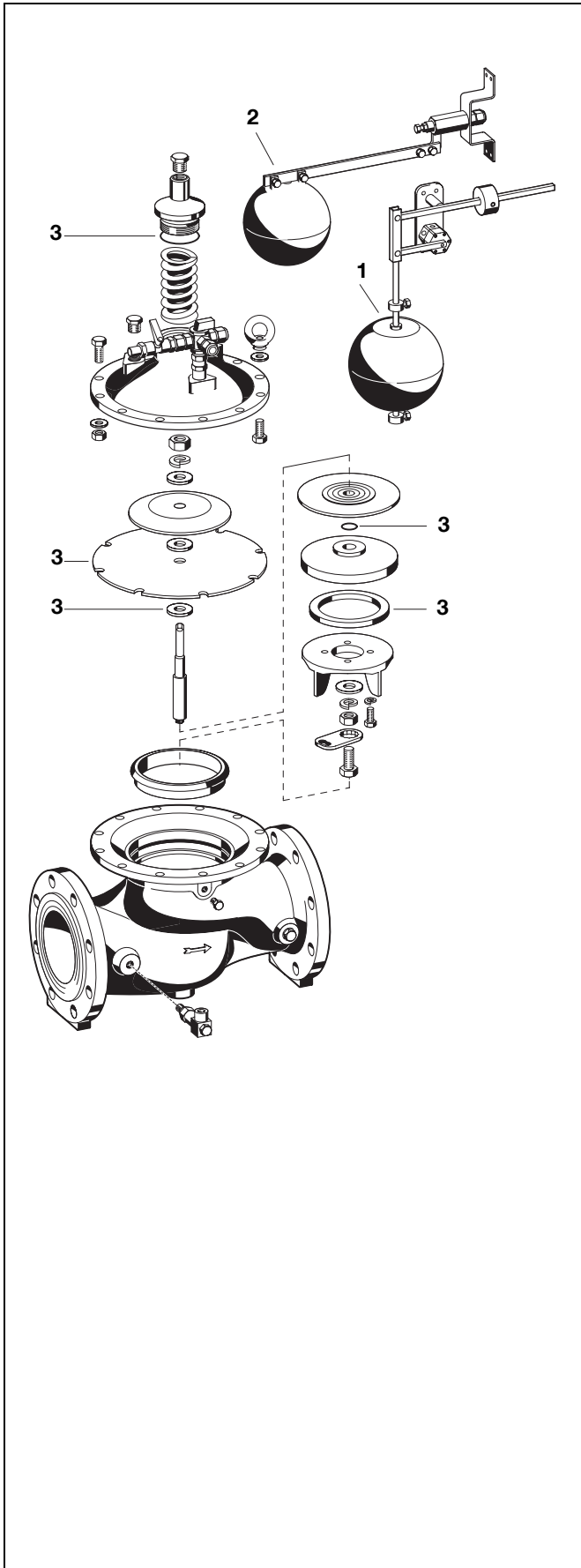
The following are some typical applications:

- Potable water supplies, for example water reservoirs etc.
- Swimming pools
- Firefighting systems - sprinkler installations
- Ship construction (fire tenders)
- Watering systems in market gardens and in agriculture
- Water supply networks in large building developments (eg. high rise blocks)
- Mining applications
- Gravel pits, concrete mixing plants etc.

#### Flow Diagram



EN0H-1328GEZ3 R0911 • Subject to change



**Spare Parts**

**Filling valve FV300, from 2002 onwards**

No.	Description	Dimension	Part No.
1	Pilot float valve Level switching differential 5 - 160 cm	DN 50 - 450	70-550
2	Pilot float valve Level switching differential 5 - 40 cm	DN 50 - 450	70-610
3	Set of seals	DN 50 DN 65 DN 80 DN 100 DN 150 DN 200 DN 250 DN 300 DN 350 DN 400 DN 450	0903750 0903751 0903752 0903753 0903754 0903755 0903756 0903757 0903758 0903759 0903760

**Automation and Control Solutions**

Honeywell GmbH  
 Hardhofweg  
 74821 MOSBACH  
 GERMANY  
 Phone: (49) 6261 810  
 Fax: (49) 6261 81309  
 www.honeywell.com

Manufactured for and on behalf of the  
 Environmental and Combustion Controls Division  
 of Honeywell Technologies Sàrl, Z.A. La Pièce 16,  
 1180 Rolle, Switzerland by its Authorised Representative Honeywell GmbH

EN0H-1328GE23 R0911  
 Subject to change without notice  
 © 2011 Honeywell GmbH

**Honeywell**