

HYDRAULIC SEPARATOR

Application

The hydraulic separator 760 allows uncoupling the flow of the primary circuit from that of the secondary circuit, by allowing at the circulator pumps to work without reciprocal interferences. Additional features of the separator are the release of the air contained in the water flow, that it is expelled by the automatic air vent positioned on its top, and the settling of the impurities, that are expelled by flushing made by using the ball valve positioned on the bottom of it. Made of Stainless Steel, it is intended especially for the new installations with medium-small dimensions, equipped with condensing boiler and built with non-ferrous materials.

Operation

The principle of operation of a hydraulic separator is very simple, being it in substance a by-pass installed between supply and return. The possible scenarios are three, the first happens when the primary flow is bigger than the secondary flow, the second is when the secondary flow is bigger than the primary flow, and the third case is when the primary and the secondary flows are equal.

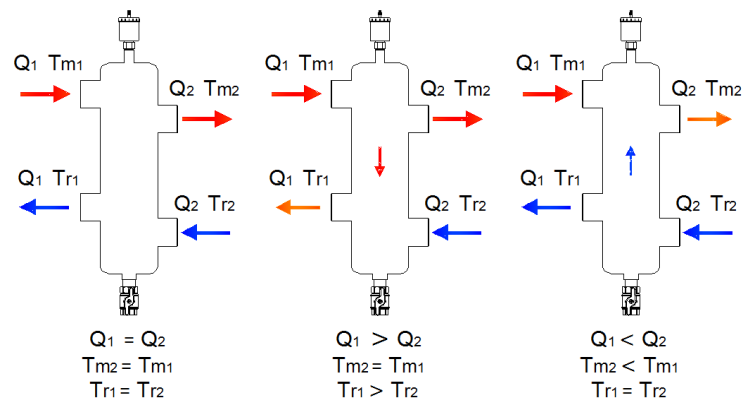
Depending on the scenario, and then, depending on quantity and direction of the water flow in the by-pass, there are different supply temperatures in the secondary circuit.

The deposition of the impurities, and the release of the air in circulation, are due to the enlargement of section in the body that produces a flow speed reduction, with consequently release of the particles carried.



Art. 760

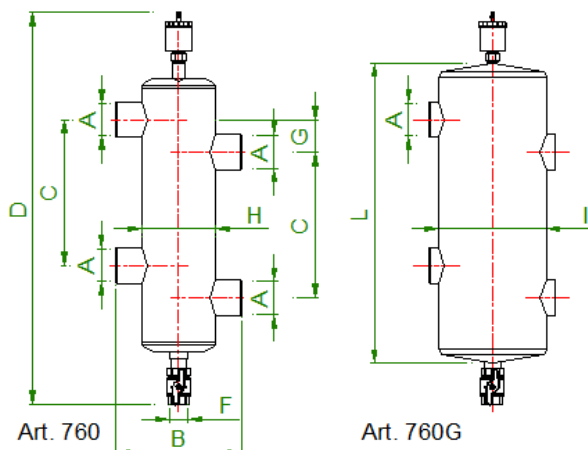
Art. 760G



Technical data

- Body made of Stainless Steel AISI 304
- Maximum service temperature 100°C
- Maximum service pressure 10 bar
- Female threaded connections out of centre between primary and secondary circuits
- Automatic air vent with isolation valve for maintenance
- Ball valve with tailpiece to drain impurities
- Version **760G** completed of insulation shield made of cross-linked expanded polyethylene at closed cell, thickness 20 mm ($\lambda=0,037$ W/mK at 40°C), coated with embossed aluminum. Reaction to Fire Class 1.

Dimensions



Art.	A	B	C	D	F	G	H	Q	V	KW
760-06	1"	160	200	590	1/2"	50	3"	2,5	2,2	43
760-07	1 1/4"	190	225	620	3/4"	50	4"	4,5	4	78
760-08	1 1/2"	190	225	620	3/4"	50	4"	6,3	4,1	109
760-09	2"	220	275	692	3/4"	52	5"	10	6,5	174

KW = Power in KW calculated with ΔT 15°C in primary circuit
Q = Suggested flow m³/h with loss of pressure Δp 150 daPa
V = Water liters contained

Art.	A	I	L
760G-06	1"	130	435
760G-07	1 1/4"	160	470
760G-08	1 1/2"	160	470
760G-09	2"	190	540