SEPARATORS

SEPARATORS

AIR SEPARATOR

Design

YGHP's comprehensive range of commercial air separators are designed to remove trapped air inherent within sealed heating and cooling systems. By automatically venting trapped air, YGHP's air separators help reduce system corrosion, extend the working life of high cost component parts, reduce noise created through pipework and improve the overall efficiency of the system.

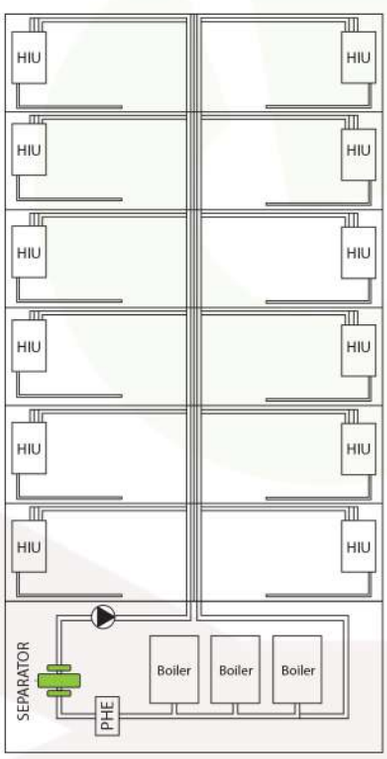
Operation

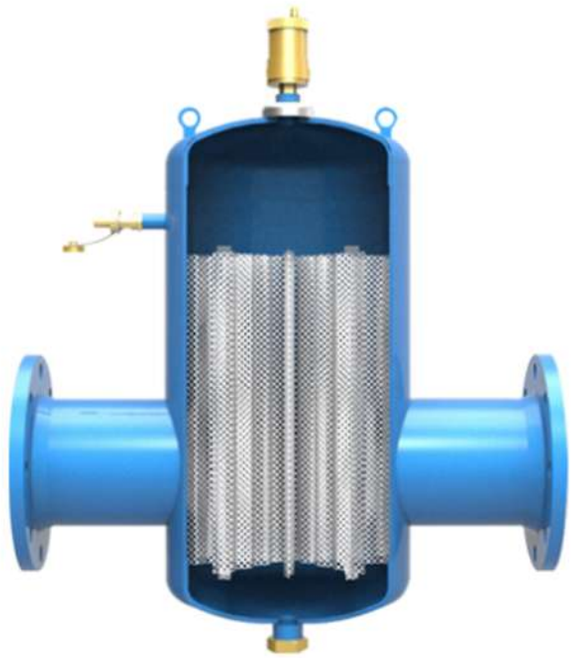
As circulating fluid flows through the large chamber within the air separator, small bubbles of air begin to adhere to a robust mesh gauze. More air bubbles begin to adhere to the mesh gauze, causing them to rise to the top of the chamber, where are then automatically released to atmosphere.

Installation

YGHP's air separators can be used in both heating and cooling systems. The air separators should be installed after the main central plant installation and before the suction side of the circulating pump. This is where the formation of air within a sealed system is often greatest. Provision of a commissioning valve is recommended to purge any trapped air during the filling of the system.

Typical location of a separator in a heat network:

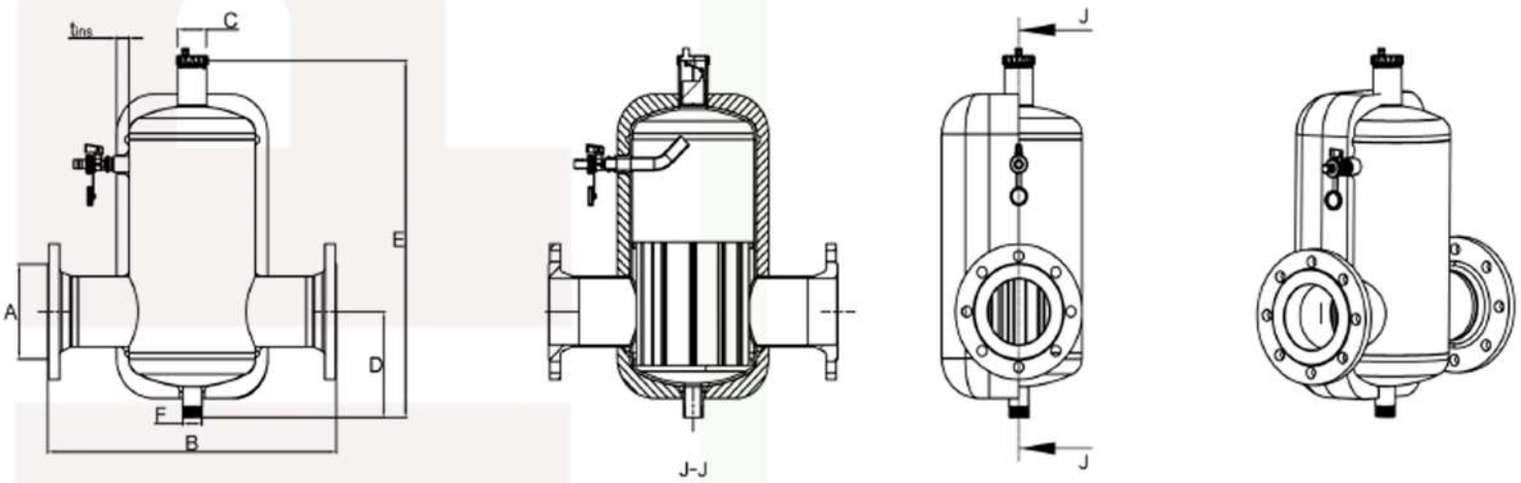




Features & Benefits

- Removes trapped air from sealed systems
- Ideal for both heating and cooling systems
- Reduces system noise and corrosion
- Improves working life of component parts
- Maintains optimum system performance
- Large range of sizes available – DN50 – DN300
- Available with flanged and welded connections
- Maximum working pressure 10 bar
- Maximum working temperature 110°C
- Hard wearing construction
- Simple to maintain

DIMENSIONS

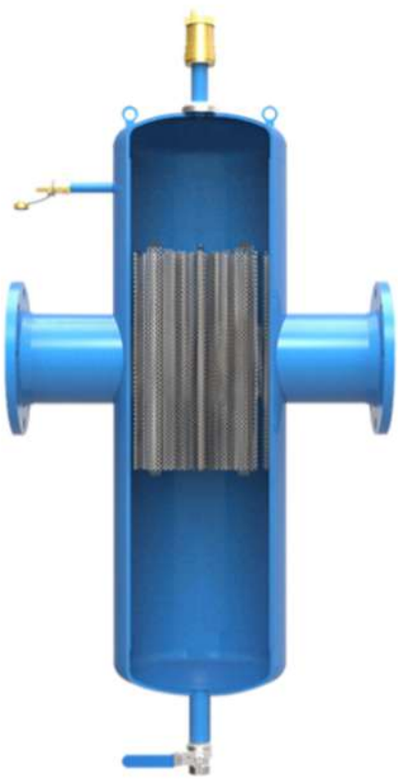


	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
FLANGED AIR SEPARATOR	131.11.16.1	DN50	2″	420	Special Thread	158	503	1″	EPP	20	13,08	75	5-15
	131.11.17.1	DN65	2 1/2″	420	Special Thread	158	503	1″	EPP	20	13,08	150	10-22
	131.11.18.1	DN80	3″	500	Special Thread	172	579	1″	EPP	20	19,78	180	15-30
	131.11.19.1	DN100	4″	504	Special Thread	172	579	1″	EPP	20	22,22	280	25-60
	131.11.20.1	DN125	5″	635	Special Thread	245	748	1″	EPP	20	37,10	450	35-83
	131.11.21.1	DN150	6″	635	Special Thread	245	748	1″	EPP	20	41,27	720	55-125

	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
WELDED AIR SEPARATOR	131.11.16.2	DN50	60,3	328	Special Thread	158	503	1″	EPP	20	8,65	75	5-15
	131.11.17.2	DN65	76,1	328	Special Thread	158	503	1″	EPP	20	8,53	150	10-22
	131.11.18.2	DN80	88,9	396	Special Thread	172	579	1″	EPP	20	11,36	180	15-30
	131.11.19.2	DN100	114,3	400	Special Thread	172	579	1″	EPP	20	12,44	280	25-60
	131.11.20.2	DN125	139,7	525	Special Thread	245	748	1″	EPP	20	24,01	450	35-83
	131.11.21.2	DN150	168,3	525	Special Thread	245	748	1″	EPP	20	24,17	720	55-125

SEPARATORS

AIR & DIRT SEPARATOR



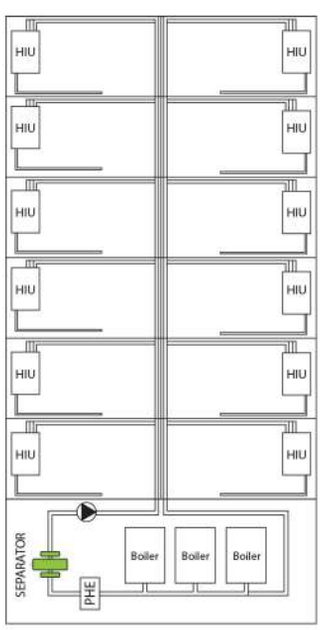
Design
YGHP's comprehensive range of commercial air and dirt separators are designed to remove trapped air and debris within sealed heating and cooling systems.

By automatically venting trapped air, in addition to collecting system debris, YGHP's dirt air separators help reduce system corrosion, extend the working life of high cost component parts, reduce noise created through pipework and improve the overall efficiency of the system.

Operation
As circulating fluid flows through the large chamber within the dirt and air separator, small bubbles of air and pieces of system debris come into contact with a robust mesh gauze. Bubbles begin to adhere to the mesh gauze, causing them to rise to the top of the chamber, where are then automatically released to atmosphere. As system debris comes into contact with the mesh gauze, it drops to the bottom of the dirt and air separator where it can then be drained.

Installation
YGHP's air and dirt separators can be used in both heating and cooling systems. The air and dirt separators should be installed before the suction side of the circulating pump to capture the maximum amount of air bubbles and system debris. Care should be taken to flush any system pipework prior to filling and the provision of a commissioning valve is recommended to purge any trapped air and debris during initial system commissioning.

Typical location of a separator in a heat network:

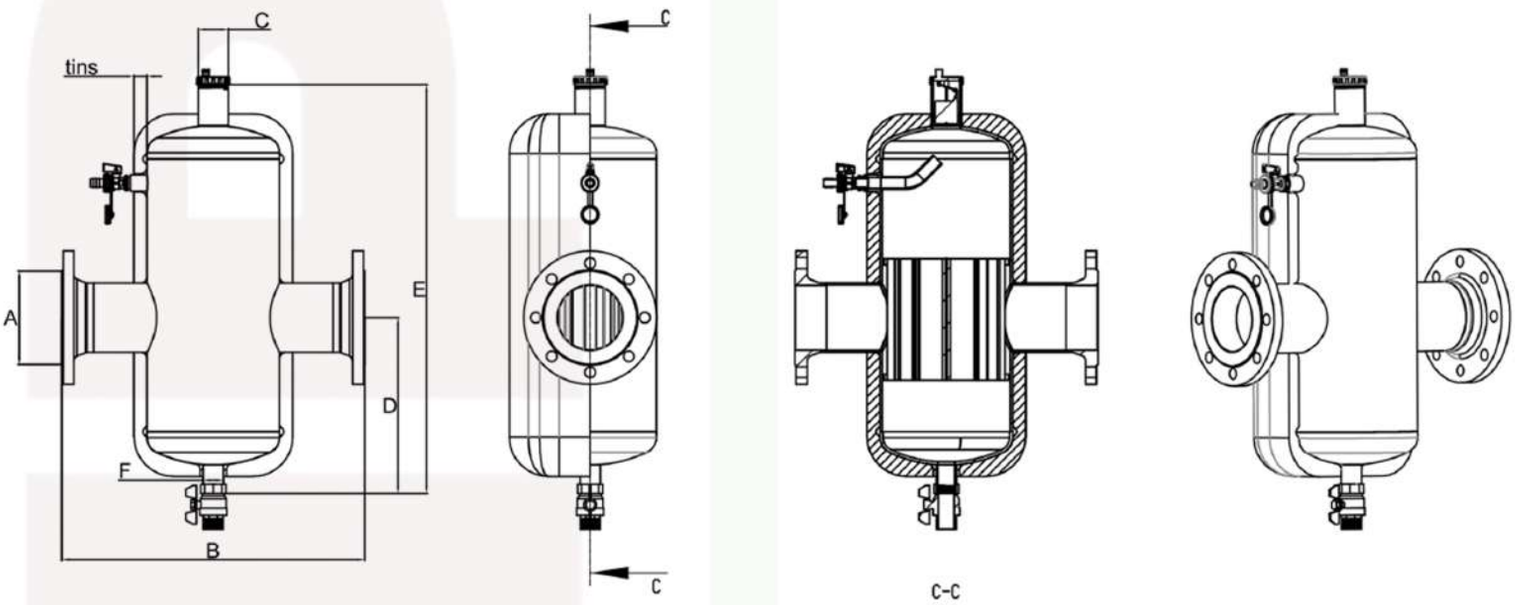


Features & Benefits

- Removes trapped air and dirt.
- Ideal for both heating and cooling systems
- Reduces system noise and corrosion
- Improves working life of component parts
- Maintains optimum system performance
- Large range of sizes available – DN50 – DN300
- Flanged and welded connections available.
- Maximum operating oressure 10 bar
- Large drain cock to remove system debris
- Maximum working temperature 110°C
- Hard wearing - easily maintained

SEPARATORS

DIMENSIONS



	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
FLANGED AIR&DIRT SEPARATOR	131.11.16.2	DN50	2″	420	Special Thread	258	578	1″	EPP	20	12,71	75	5-15
	131.11.17.2	DN65	2 1/2″	420	Special Thread	258	578	1″	EPP	20	14,30	150	10-22
	131.11.18.2	DN80	3″	500	Special Thread	292	683	1″	EPP	20	22,43	180	15-30
	131.11.19.2	DN100	4″	504	Special Thread	292	683	1″	EPP	20	24,67	280	25-60
	131.11.20.2	DN125	5″	635	Special Thread	401	903	1″	x	x	46,47	450	35-83
	131.11.21.2	DN150	6″	635	Special Thread	401	903	1″	x	x	47,25	720	55-125

	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
WELDED AIR&DIRT SEPARATOR	131.11.16.2	DN50	60,3	328	Special Thread	258	578	1″	EPP	20	8,65	75	5-15
	131.11.17.2	DN65	76,1	328	Special Thread	258	578	1″	EPP	20	8,53	150	10-22
	131.11.18.2	DN80	88,9	396	Special Thread	292	683	1″	EPP	20	11,36	180	15-30
	131.11.19.2	DN100	114,3	400	Special Thread	292	683	1″	EPP	20	12,44	280	25-60
	131.11.20.2	DN125	139,7	525	Special Thread	401	903	1″	x	x	24,01	450	35-83
	131.11.21.2	DN150	168,3	525	Special Thread	401	903	1″	x	x	24,17	720	55-125

E&OE (10/20)

SEPARATORS

MAGNETIC DIRT SEPARATOR

Design

YGHP's comprehensive range of steel commercial magnetic dirt separators are designed to remove both ferrous and non-ferrous system debris inherent within sealed heating and cooling systems. By removing and retaining system debris, YGHP's steel dirt separators can help to extend the working life of high cost component parts, reduce noise created through pipework, reduce ongoing maintenance and service costs and improve the overall efficiency of the system.

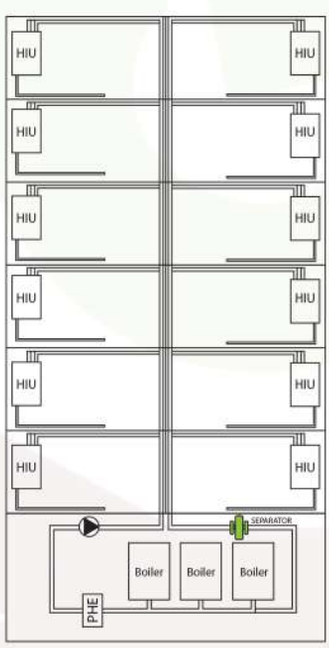
Operation

As circulating fluid flows through the large chamber within the magnetic dirt separator, it flows through a robust mesh gauze. As system debris comes into contact with the mesh gauze, it drops to the bottom of the dirt and air separator where it can then be drained. A high strength magnet in the base of the filter chamber allows any ferrous debris to be actively retained. A large drain cock allows system debris to be quickly and efficiently removed.

Installation

YGHP's steel magnetic dirt separators can be used in both heating and cooling systems. Dirt separators should ideally be installed on the return leg of the system, allowing any system debris to be trapped and retained before it enters the central plant installation, where it may foul the equipment. The YGHP steel magnetic dirt separator should only be installed on horizontal pipework.

Typical location of a separator in a heat network:

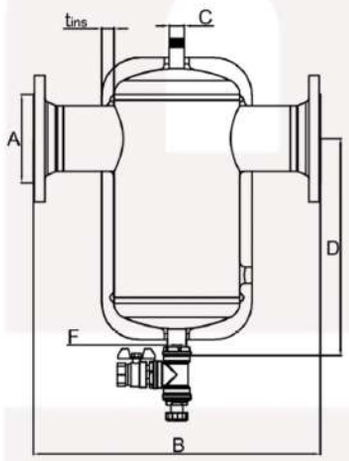


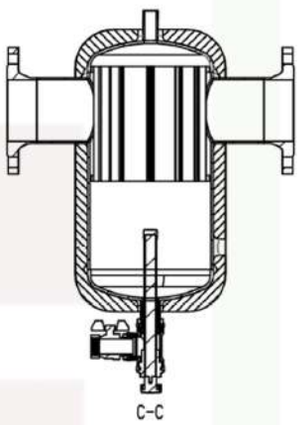
Features & Benefits

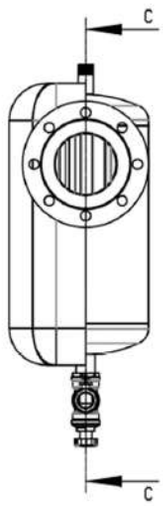
- Removes trapped dirt from sealed systems
- High strength magnet retains ferrous debris
- Convenient in line fitting
- Large drain cock for ease of servicing
- Ideal for both heating and cooling systems
- Reduces system noise and corrosion
- Improves working life of component parts
- Maintains optimum system performance
- Large range of sizes available – DN50 – DN300
- Flanged and welded connections available.
- Maximum working temperature 110°C

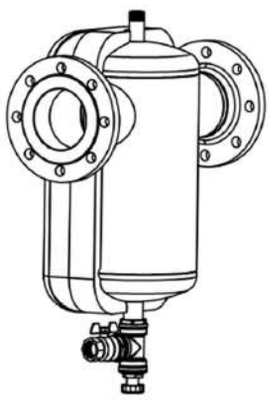
SEPARATORS

DIMENSIONS









	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
FLANGED MAGNETIC DIRT SEPARATOR	131.11.16.1	DN50	2″	420	3/4″	322	480	1″	EPP	20	8,65	75	5-15
	131.11.17.1	DN65	2 1/2″	420	3/4″	322	480	1″	EPP	20	8,53	150	10-22
	131.11.18.1	DN80	3″	500	3/4″	382	556	1″	EPP	20	11,36	180	15-30
	131.11.19.1	DN100	4″	504	3/4″	382	556	1″	EPP	20	12,44	280	25-60
	131.11.20.1	DN125	5″	635	3/4″	478	725	1″	EPP	20	24,01	450	35-83
	131.11.21.1	DN150	6″	635	3/4″	478	725	1″	EPP	20	24,17	720	55-125

	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
WELDED MAGNETIC DIRT SEPARATOR	131.11.16.2	DN50	60,3	328	3/4″	322	480	1″	EPP	20	8,65	75	5-15
	131.11.17.2	DN65	76,1	328	3/4″	322	480	1″	EPP	20	8,53	150	10-22
	131.11.18.2	DN80	88,9	396	3/4″	382	556	1″	EPP	20	11,36	180	15-30
	131.11.19.2	DN100	114,3	400	3/4″	382	556	1″	EPP	20	12,44	280	25-60
	131.11.20.2	DN125	139,7	525	3/4″	478	725	1″	EPP	20	24,01	450	35-83
	131.11.21.2	DN150	168,3	525	3/4″	478	725	1″	EPP	20	24,17	720	55-125

SEPARATORS

MAGNETIC DIRT & AIR SEPARATOR

Design

YGHP's comprehensive range of commercial magnetic dirt and air separators are designed to remove trapped air and both ferrous and non-ferrous system debris within sealed heating and cooling systems.

By automatically venting trapped air, in addition to collecting system debris, YGHP's air and dirt separators help reduce system corrosion, extend the working life of high cost component parts, reduce noise created through pipework and improve the overall efficiency of the system.

Operation

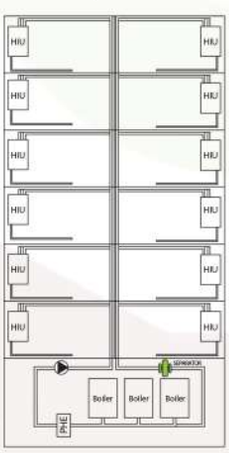
As circulating fluid flows through the large chamber within the magnetic dirt and air separator, small bubbles of air and pieces of system debris come into contact with a robust mesh gauze within the filter.

As fluid continues to circulate through the system, bubbles begin to adhere to the mesh gauze, causing them to rise to the top of the chamber, where they are then automatically released to atmosphere. As heavier system debris comes into contact with the mesh gauze, it drops to the bottom of the magnetic dirt and air separator, where it can then be drained. The addition of a high strength magnet in the base of the filter chamber allows any ferrous debris to be actively retained .A large drain valve at the base of the chamber allows system debris to be quickly and efficiently removed.

Installation

YGHP's magnetic dirt and air separators can be used in both heating and cooling systems. Dirt separators should ideally be installed on the return leg of the system, allowing any system debris to be trapped and retained before it enters the central plant installation where it may foul the equipment. The YGHP dirt separator should only be installed on horizontal pipework.

Typical location of a separator in a heat network:



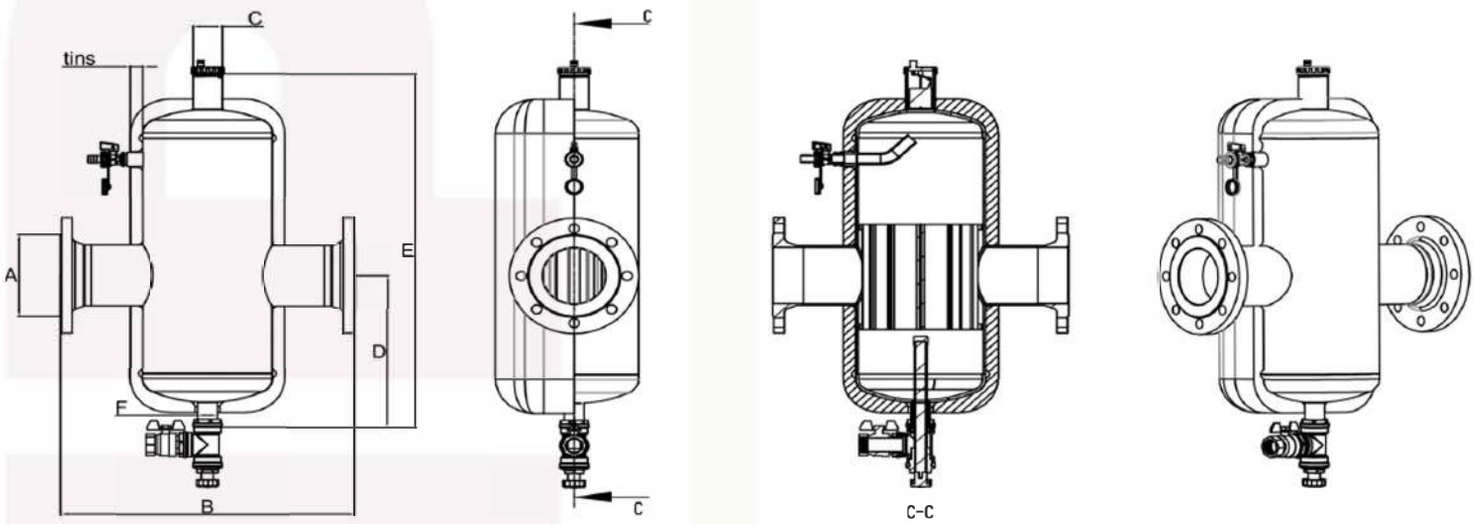
Features & Benefits

- Removes trapped air and dirt from sealed systems
- High strength magnet retains ferrous debris
- Convenient in line fitting
- Large drain cock for dirt removal
- Ideal for both heating and cooling systems
- Reduces system noise and corrosion
- Improves working life of component parts
- Maintains optimum system performance
- Large range of sizes available – DN50 – DN300
- Flanged and welded connections available.
- Maximum working pressure 10 bar
- Maximum working temperature 110°C

SEPARATORS

YGHP
YATES GROUP HEATING PRODUCTS

DIMENSIONS



	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
FLANGED MAGNETIC AIR&DIRT SEPARATOR	131.11.16.1	DN50	2″	420	Special Thread	258	578	1″	EPP	20	12,71	75	5-15
	131.11.17.1	DN65	2 1/2″	420	Special Thread	258	578	1″	EPP	20	14,30	150	10-22
	131.11.18.1	DN80	3″	500	Special Thread	292	683	1″	EPP	20	22,43	180	15-30
	131.11.19.1	DN100	4″	504	Special Thread	292	683	1″	EPP	20	24,67	280	25-60
	131.11.20.1	DN125	5″	635	Special Thread	401	903	1″	x	x	46,47	450	35-83
	131.11.21.1	DN150	6″	635	Special Thread	401	903	1″	x	x	47,25	720	55-125

	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
WELDED MAGNETIC AIR&DIRT SEPARATOR	131.11.16.2	DN50	60,3	328	Special Thread	258	578	1″	EPP	20	8,65	75	5-15
	131.11.17.2	DN65	76,1	328	Special Thread	258	578	1″	EPP	20	8,53	150	10-22
	131.11.18.2	DN80	88,9	396	Special Thread	292	683	1″	EPP	20	11,36	180	15-30
	131.11.19.2	DN100	114,3	400	Special Thread	292	683	1″	EPP	20	12,44	280	25-60
	131.11.20.2	DN125	139,7	525	Special Thread	401	903	1″	x	x	24,01	450	35-83
	131.11.21.2	DN150	168,3	525	Special Thread	401	903	1″	x	x	24,17	720	55-125

SEPARATORS

STEEL DIRT SEPARATOR

Design

YGHP's comprehensive range of commercial steel dirt separators are designed to remove non-ferrous system debris within sealed heating and cooling systems.

By removing and retaining non-ferrous system debris, YGHP's dirt separators improve the quality of circulating fluid, help extend the working life of high cost component parts, reduce noise created through pipework, improve the overall efficiency of the system and decrease the need for avoidable, expensive service calls.

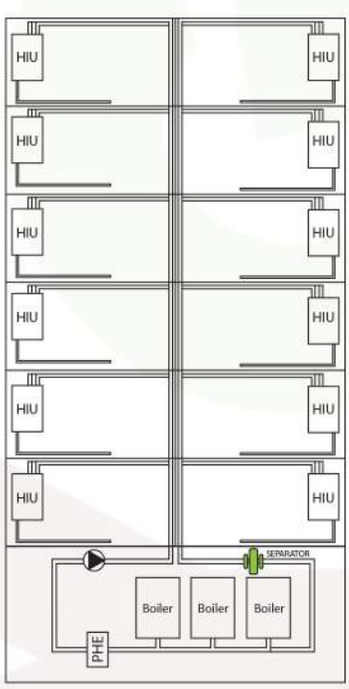
Operation

As system fluid flows through the large chamber within the dirt separator, circulating debris comes into contact with a robust mesh gauze. As it does so, debris falls to the bottom of the filter chamber where it can be easily removed by a large bore drain cock.

Installation

YGHP's steel dirt separators can be used in both heating and cooling systems. Dirt separators should ideally be installed on the return leg of the system, allowing any system debris to be trapped and retained before it enters the central plant installation where it may foul the equipment. The YGHP dirt separator should only be installed on horizontal pipework. Provision of a commissioning valve is recommended to purge any trapped air during the filling of the system.

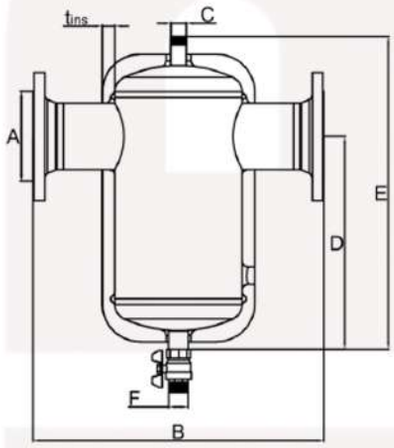
Typical location of a separator in a heat network:

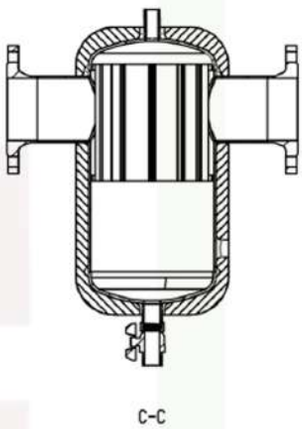


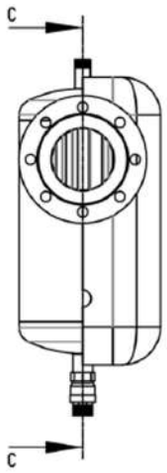
Features & Benefits

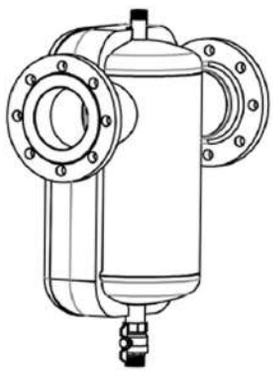
- Removes system debris from sealed systems
- Large drain cock for ease of servicing
- Convenient in-line fitting
- Ideal for both heating and cooling systems
- Improves working life of component parts
- Maintains optimum system performance
- Large range of sizes available – DN50 – DN300
- Flanged and welded connections available.
- Maximum working temperature 110°C

DIMENSIONS









	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
FLANGED DIRT SEPARATOR	131.11.16.1	DN50	2″	420	3/4″	322	480	1″	EPP	20	13,55	75	5-15
	131.11.17.1	DN65	2 1/2″	420	3/4″	322	480	1″	EPP	20	15,19	150	10-22
	131.11.18.1	DN80	3″	500	3/4″	382	556	1″	EPP	20	19,42	180	15-30
	131.11.19.1	DN100	4″	504	3/4″	382	556	1″	EPP	20	21,80	280	25-60
	131.11.20.1	DN125	5″	635	3/4″	478	725	1″	EPP	20	36,81	450	35-83
	131.11.21.1	DN150	6″	635	3/4″	478	725	1″	EPP	20	40,35	720	55-125

	Product Code	A		B	C	D	E	F	Insulation Type	tins (mm)	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
WELDED DIRT SEPARATOR	131.11.16.2	DN50	60,3	328	3/4″	322	480	1″	EPP	20	8,65	75	5-15
	131.11.17.2	DN65	76,1	328	3/4″	322	480	1″	EPP	20	8,53	150	10-22
	131.11.18.2	DN80	88,9	396	3/4″	382	556	1″	EPP	20	11,36	180	15-30
	131.11.19.2	DN100	114,3	400	3/4″	382	556	1″	EPP	20	12,44	280	25-60
	131.11.20.2	DN125	139,7	525	3/4″	478	725	1″	EPP	20	24,01	450	35-83
	131.11.21.2	DN150	168,3	525	3/4″	478	725	1″	EPP	20	24,17	720	55-125

SEPARATORS

STEEL HYDRAULIC SEPARATOR

Design

The YGHP steel hydraulic separator allows the connection of two hydraulic circuits but allows them to function independently. In systems where there are circulating pumps on each circuit, certain system conditions may present themselves where the flow from one circulating pump may influence the other. This can lead to the system being subject to pressures and flow rates outside of its design characteristic.

Operation

A hydraulic separator provides a low pressure chamber where two circuits can be connected but are then hydraulically independent of each other – flow in one circuit does not dictate flow in the other.

Installation

Installation of a hydraulic separator enables the system to maintain a constant flow rate in the primary circuit and a variable flow rate in a secondary circuit, enabling the system to more efficiently meet real time load requirements.

Typical location of a separator in a heat network:

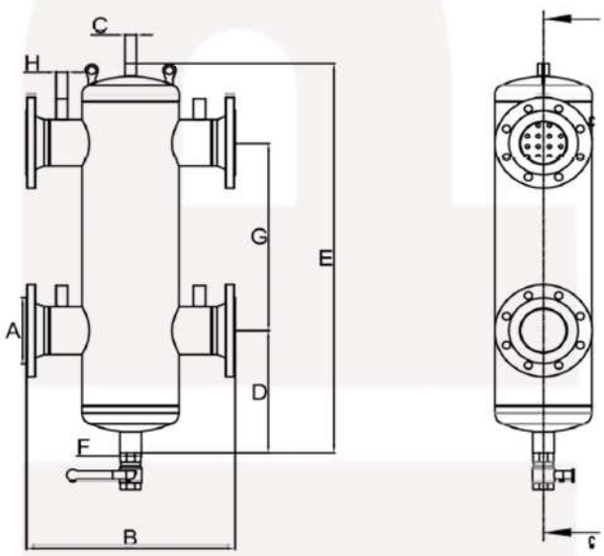
Features & Benefits

- Enables hydraulic separation between primary & secondary circuit
- Helps maintain efficient system operation
- Large range of sizes DN50 – DN150
- Supplied with drain cock – debris can be removed with the system live
- Reduces pipe work complexity and installation time
- Can be fitted with an automatic air vent

SEPARATORS

YGHP
YATES GROUP HEATING PRODUCTS

DIMENSIONS



	Product Code	A		B	C	D	E	F	G	H	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
FLANGED HYDRAULIC SEPARATOR	131.11.16.1	DN50	2″	450	3/4″	265	795	1″	330	1/2″	35	76	5-15
	131.11.17.1	DN65	2 1/2″	450	3/4″	265	795	1″	330	1/2″	39	150	10-22
	131.11.18.1	DN80	3″	470	3/4″	285	940	1″	450	1/2″	51	172	15-30
	131.11.19.1	DN100	4″	470	3/4″	285	940	1″	450	1/2″	55	304	25-60
	131.11.20.1	DN125	5″	635	3/4″	300	1160	1″	560	1/2″	105	451	35-83
	131.11.21.1	DN150	6″	635	3/4″	300	1160	1″	560	1/2″	108	663	55-125

	Product Code	A		B	C	D	E	F	G	H	Weight (kg)	Kv (m^3/h)	Min-Max Flow Rate (m^3/h)
WELDED HYDRAULIC SEPARATOR	131.11.16.2	DN50	60,3	360	3/4″	265	795	1″	330	1/2″	25	76	5-15
	131.11.17.2	DN65	76,1	360	3/4″	265	795	1″	330	1/2″	27	125	10-22
	131.11.18.2	DN80	88,9	370	3/4″	285	940	1″	450	1/2″	26	172	15-30
	131.11.19.2	DN100	114,3	370	3/4″	285	940	1″	450	1/2″	37	304	25-60
	131.11.20.2	DN125	139,7	580	3/4″	300	1160	1″	560	1/2″	80	451	35-83
	131.11.21.2	DN150	168,3	580	3/4″	300	1160	1″	560	1/2″	77	663	55-125

E&OE (10/20)