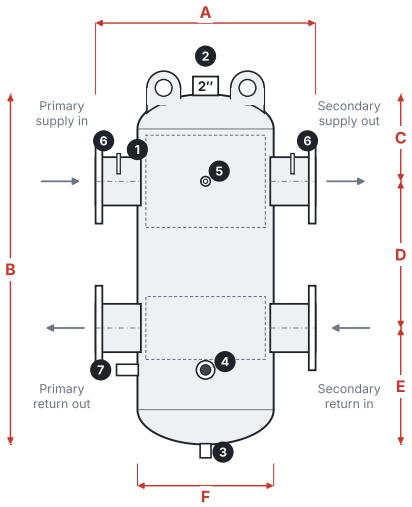
SUBMITTAL DATA

LLH400P

Hydraulic separator with dirt magnet

JOB NAME	JOB LOCATION	ENGINEER
MECHANICAL CONTRACTOR	CONTRACTOR'S P.O. NO.	REPRESENTATIVE
TAG NO.	QUANTITY	APPROVAL

DIMENSIONS



DIMENSIONS, MM / IN

	A	B	C	D	E	F
mm	525	836	208	350	278	325
in	20.7	32.9	8.2	13.8	10.9	12.8

A Width across the connection faces · **B** Overall height of the vessel · **C** Top of vessel to upper connections · **D** Between upper and lower connections · **E** Lower connections to bottom of vessel · **F** Vessel outside diameter. Heights exclude the air vent, drain valve and fittings.

CONNECTIONS

#	Port	Size and type
1	Primary and secondary connections (4)	4″ ASME B16.5 Class 150 flange
2	Air vent port	2″ GM
3	Drain	¾″ FNPT
4	Dirt magnet port	dry well with removable rod
5	Gauge port	¼″ FNPT
6	Temperature sensor wells (2)	Ø8 × 40 mm, one in the primary supply and one in the secondary supply connection
7	Fill / makeup water port, on the side (expansion tank or system fill)	¾″ FNPT

APPLICATION

The LLH400P hydraulically separates the primary (boiler or chiller) circuit from the secondary (system) circuit so each pump runs without disturbing the other, and removes air, dirt and ferrous particles in the same vessel. Water slows down in the large body; air rises to the automatic vent, dirt settles to the drain, and magnetite is held on the dirt magnet.

TECHNICAL DATA

Flow at 4 ft/s	185 gpm (41.9 m³/h)
Pressure drop at 4 ft/s	0.70 ft primary / 0.70 ft secondary
Max. operating pressure	150 psi (10 bar)
Operating temperature	32–210 °F (0–99 °C)
Fluids	Water, up to 50 % glycol
Body and internals	304 stainless steel
Coalescing element	Two wire cages of Ø25 mm stainless Pall rings
Dirt magnet	M50 neodymium rod, 12,000 gauss, in dry well
Weight	114 lb (51.7 kg)
Water volume	approx. 16.1 US gal
Warranty	2 years

TYPICAL SPECIFICATION

Furnish and install a Rhella LLH400P hydraulic separator, or approved equal, selected for 185 gpm (4 ft/s connection velocity). The separator shall combine hydraulic separation of the primary and secondary circuits with air, dirt and ferrous-particle removal in one vessel. The vessel shall be 304 stainless steel with 4″ ASME B16.5 Class 150 flange primary and secondary connections, internal two stainless steel wire cages filled with Ø25 mm 304 stainless steel Pall rings (6.8 kg), an automatic air vent at the top, a drain at the bottom, a fill port, and a removable 12,000 gauss neodymium rod magnet in an external dry well. Maximum working pressure 150 psi; working temperature 32–210 °F; suitable for water and glycol solutions up to 50 %.