



S7

Carbon Steel Separator DN65 to DN350

Description

The S7 is a carbon steel baffle type separator for the efficient removal of entrained liquids from steam, air and gas systems. A suitable steam trap (FT) or liquid drainer (CA) is required to drain the collected condensate/liquid depending on the application:

For steam service fit an FT ball float steam trap and AV air vent

For air/gas service fit a CA ball float liquid drainer

Standards

This product fully complies with the requirements of the European Pressure Equipment Directive (PED) and is designed and manufactured in accordance with EN 13445:2002 – 'Unfired Pressure Vessels'.

Certification

This product is available with material certification to EN 10204 3.1 as standard. A full data dossier is available at extra cost – consult Spirax Sarco.

Note: All certification/inspection requirements must be stated at the time of order placement.

Sizes and pipeline connections

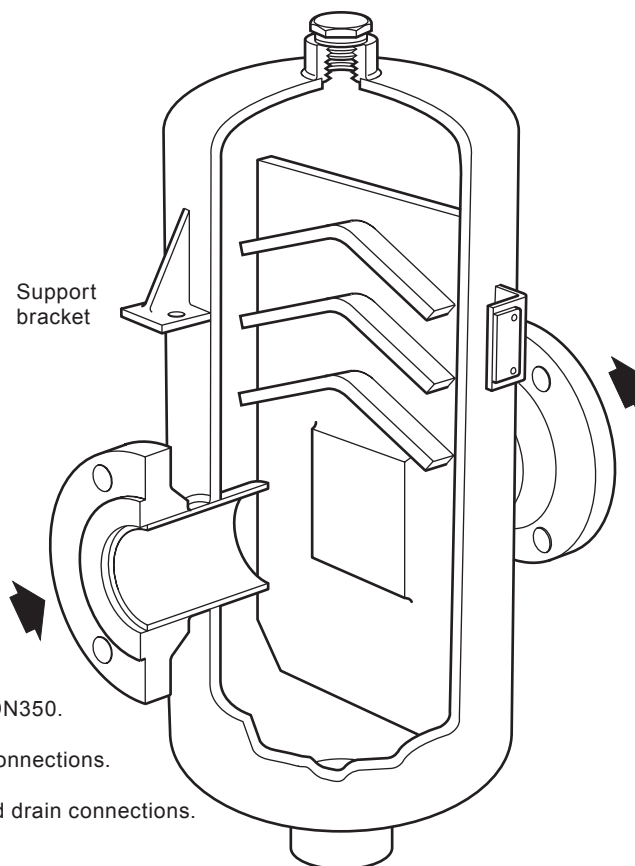
DN65, DN80, DN100, DN125, DN150, DN200, DN250, DN300 and DN350.

Flanged EN 1092 PN16 or PN40 with screwed BSP vent and drain connections.

Flanged ASME B16.5 Class 150 and 300 with screwed NPT vent and drain connections.

Flanged JIS/KS 20K with screwed BSP vent and drain connections.

Screwed, socket weld and other connections are available to special order – consult Spirax Sarco.



Materials

All components of the S7 are manufactured from carbon steel. For a complete stainless steel version (S8) see TI-P138-10.

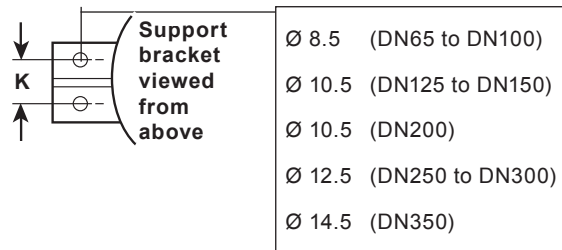
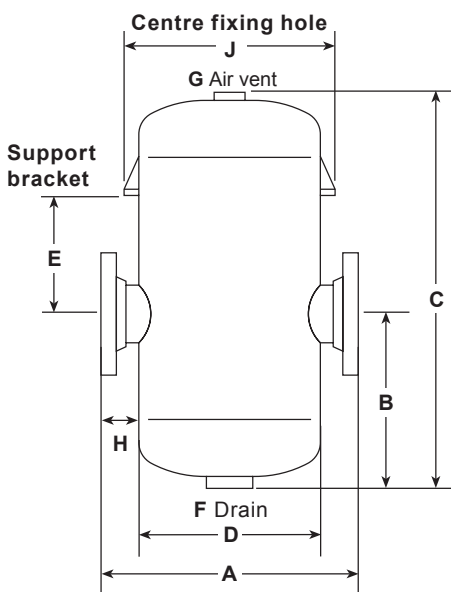
Pressure/temperature limits

Size	Flange standard	Design pressure bar g	Design temperature °C	Designed for maximum cold hydraulic test pressure according to EN13445-5 2016 bar g
DN65 to DN350	PN16	14	198	21.8
	ASME 150	20	213	31.9
	JIS/KS 20K	23	217	37.0
	PN40	25	225	40.8
	ASME 300	25	225	40.8

Please note: For pressures and temperatures that exceed these operating conditions please contact Spirax Sarco for a quotation.

Dimensions, weight and volume (approximate) in mm, kg and litres

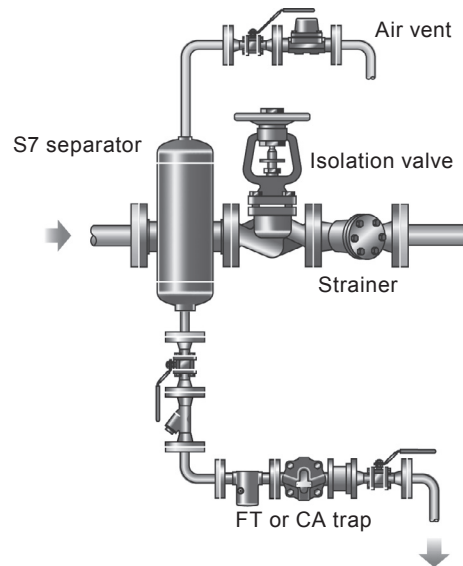
Size	Design pressure (bar g)	A	B	C	D	E	F	G	H	J	K	Weight (kg)	Volume (litres)
		(mm)				(inches)			(mm)				
DN65	14												
	20 and 23	420	252	638	219	181	1"	¾"	100.5	263	30	38	14
	25												
DN80	14												
	20 and 23	489	332	735	273	194	1"	¾"	108	318	30	58	31
	25												
DN100	14												
	20 and 23	574	337	795	324	180	2"	¾"	125	384	40	83	48
	25												
DN125	14												
	20 and 23	656	310	843	377	247	2"	¾"	139.5	436	44	118	66
	25												
DN150	14												
	20 and 23	706	347	935	426	273	2"	¾"	140	486	60	154	110
	25												
DN200	14												
	20 and 23	858	460	1200	530	372	2"	2"	164	585	60	292	223
	25												
DN250	14												
	20 and 23	950	615	1580	600	530	2"	2"	175	688	72	440	376
	25												
DN300	14												
	20 and 23	1010	740	1700	600	540	2"	2"	205	698	72	564	415
	25												
DN350	14												
	20 and 23	1100	754	1800	700	525	2"	2"	200	816	108	735	623
	25												



How to order

Example: 1 off Spirax Sarco DN80 S7 carbon steel separator with PN40 flanges. Suitable for pressures up to 25 bar (please specify design conditions).

Separator on a steam line



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P023-55) supplied with the product.

Installation note:

To ensure efficient drainage of condensate a suitable ball float trap and air vent should be installed. For air/gas applications a balance line is required between the CA trap and the main line or top of the separator – consult Spirax Sarco for further details.

Disposal

The product is recyclable. No ecological hazard is anticipated with disposal of this product providing due care is taken.

Spare parts

The S7 is non maintainable - No spare parts are available.