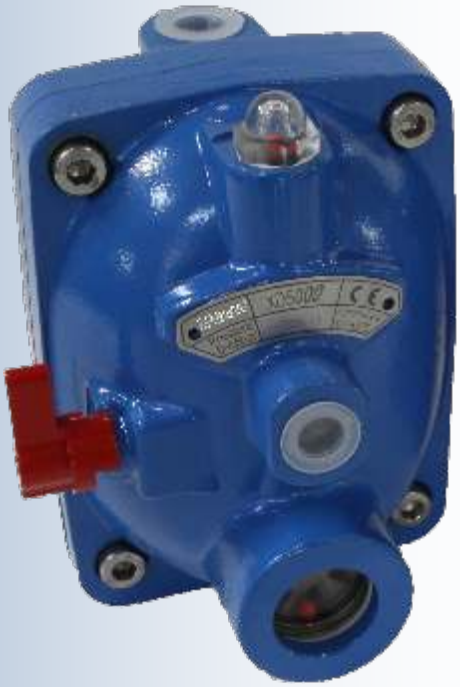
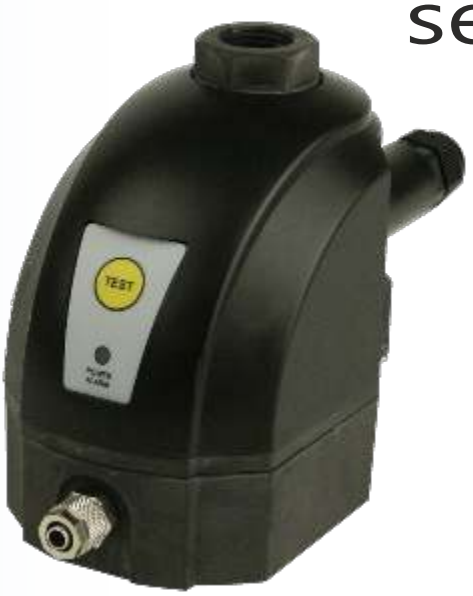
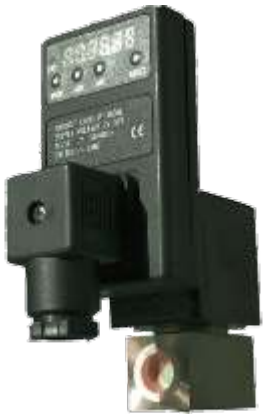
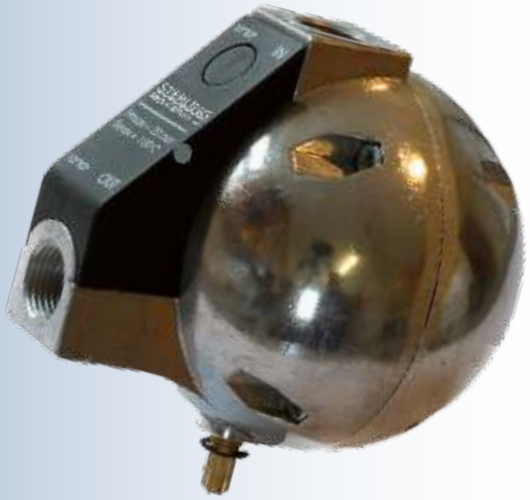
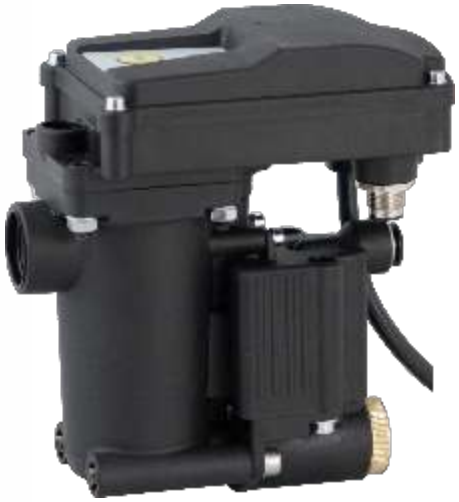
STERLING®
separation ltd

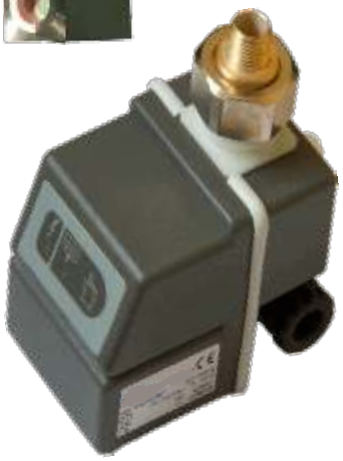






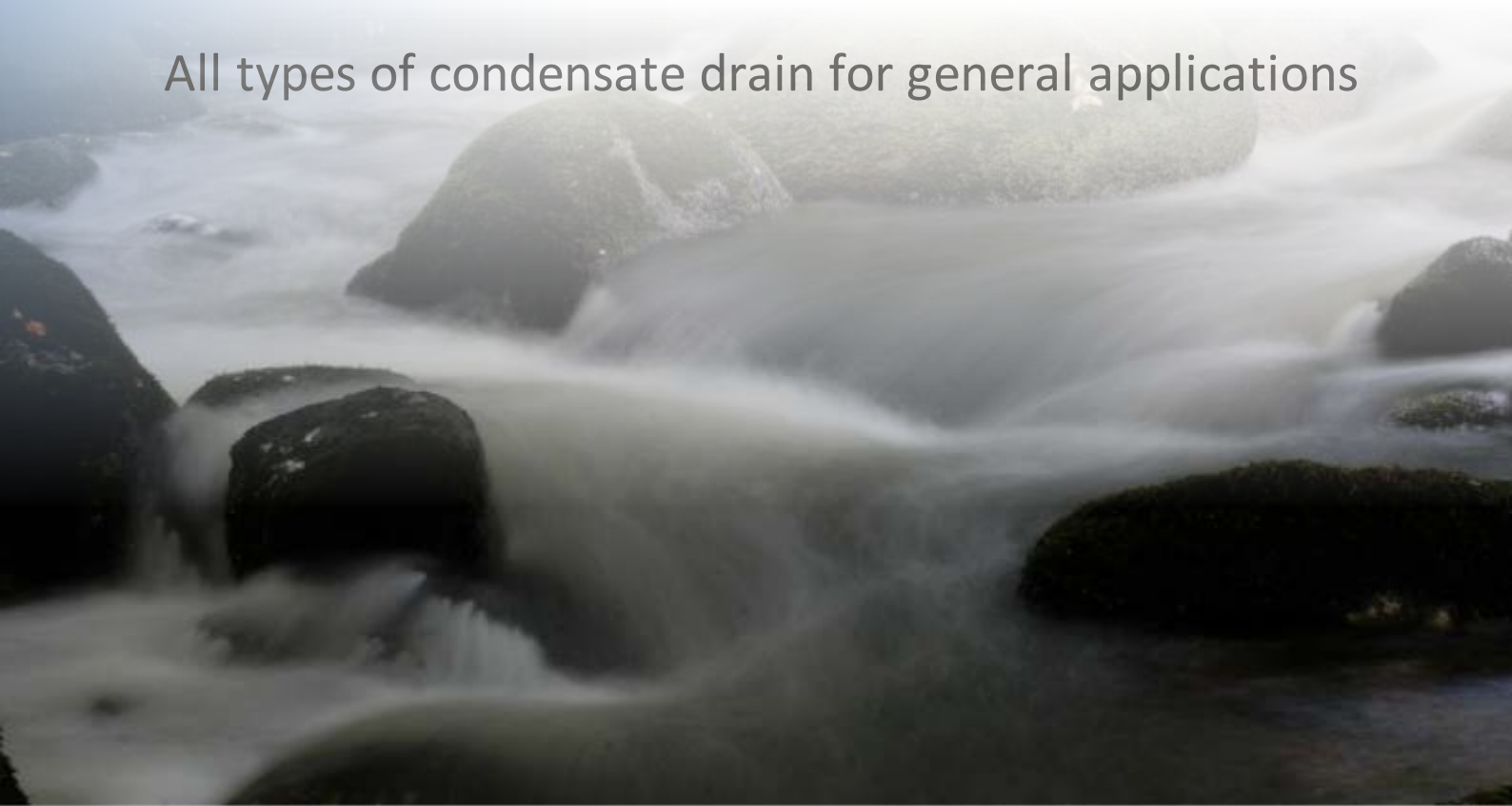




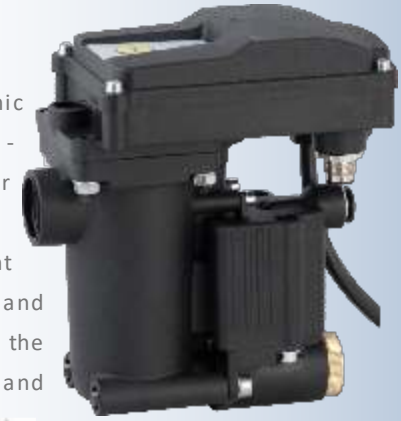


Condensate drains

All types of condensate drain for general applications



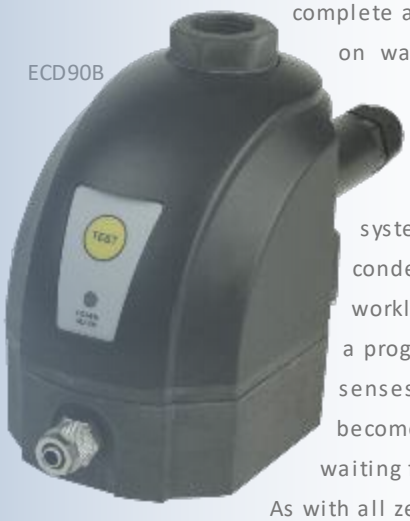
ZERO-loss electronic drains EMD, ECD



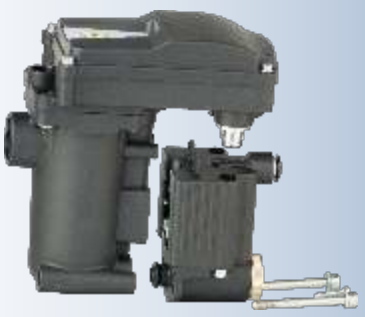
Electronic zero-loss technology is designed to save energy and improve reliability. Electronic monitoring allows the drain valve to open ONLY when there is condensate to discharge - avoiding wastage of valuable compressed air. Typically, the drain will incorporate other facilities such as local or remote alarms and intelligent self- diagnosis and remedial actions.

STERLING offers two ranges. The **EMD** drain was introduced in 2013 after extensive development and testing. Incorporating a quick-clean internal strainer, the ability to operate both upright and at 90 degrees rotation, and having a modular construction for rapid servicing EMD12 is the complete answer for any drain point in a small to medium system, and on water separators and filters up to 3000 cfm.

ECD90B



The **EMD12** and **EMD12A** can be fitted upright or sideways to simplify installation, and the modular build makes it quick and easy to clean and service



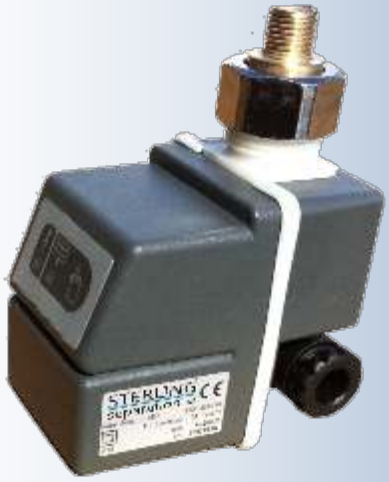
ECD90B and **ECD150B** are sized to handle condensate from larger systems. Generously proportioned condensate reservoirs reduce the workload on the valve gear - maximising service life. ECD also has a progressive alarm that reports potential clogging when the drain senses reduced outlet flow; it calls for help BEFORE a blockage becomes critical and initiates its self-cleaning sequence while waiting for a response.

As with all zero-loss drains, the operation of EMD and ECD will be greatly enhanced by careful installation. See our simple guide on the STERLING website.

Product	Compressor capacity - cfm / m^3/min			Inlet	Outlet	Protection	Alarm function	Internal strainer	Test function	Status lights
	Air receiver	Dryer	Filter							
EMD12	300 / 8.5	600 / 17	3000 / 85	1 x 1/2"	8mm push-fit	IP54	Local	Yes	Yes	Yes
EMD12A	300 / 8.5	600 / 17	3000 / 85	1 x 1/2"			Local + Remote	Yes	Yes	Yes
ECD90B	1050 / 30	2100 / 60	10500 / 30 0	2 x 1/2"	8mm quick-fit	IP54	Local + Remote	Yes	Yes	Yes
ECD150B	4000 / 110	8000 / 220	40000 / 1100	2 x 1/2"			Local + Remote	Yes	Yes	Yes
All these drains operate at maximum 16 bar and are available 230vac or 110vac. Operating temperature range 1.5C to 65C										

Low loss, intelligent timed drain AD950T

Simple and reliable as a timed drain, but far more economical to run



AD950T is a hybrid, having the best attributes of both timer operated solenoid drains and zero-loss drains.

Many installers are wary of zero-loss versions because of the difficulties sometimes encountered in adhering to specific rules of installation. **AD950T** allows the installer be more relaxed about routing pipe-work and positioning the drain.

Operationally, because the drain works on a timed cycle and doesn't depend upon sensing condensate in order to operate, it can never create an air-lock, and will operate reliably. However, when there is no condensate present during the operating cycle, the drain will open to atmosphere for a period as short as 1/10 sec, minimising the compressed air used in clearing condensate from the system.

AD950T is NOT limited to 'upright' operation, but can be rotated to work in any one of several orientations

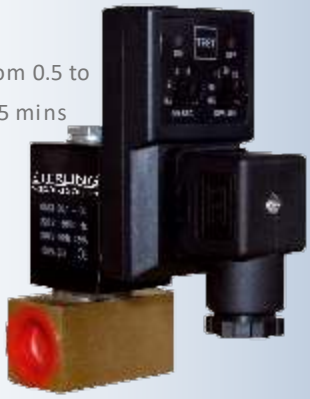
Product	Compressor capacity - cfm / m^3/min			Inlet	Outlet	Protection	Alarm function	Internal strainer	Test function	Status lights
	Air receiver	Dryer	Filter							
AD950T	2000 / 56	4000 / 112	20000 / 560	3/4"BSP	10mm hose tail	IP65	No	Yes	Yes	Yes
AD950T operates at maximum 16 bar and is available 230vac, 110vac and 24vdc. Operating temperature range 1.5C to 65C										

Timer controlled drain valves

Quality and choice

Our customers have come to rely upon this economical, versatile and reliable selection of timed drains. Featuring a high quality solid brass body, two-position direct acting large-orifice solenoid valve and multi-directional mounting, they promise long service life with minimum chance of blocking. However, we always recommend installing a protective isolating ball valve and strainer for peace of mind.
That's why we include a set by default with each drain valve.

CS711 timer (left) is a simple, single interval analog device. Valve open time is fixed at 2 seconds, while the interval time is adjustable



CS720 timer (right) has two adjustable intervals. Open from 0.5 to 10 seconds, and closed (or interval) from 30 seconds to 45 mins

CS3800 (left) is the flagship digital timer.
Basic operation for timed drain (repeat) operation allows open times from 1 second to 10 minutes and interval times from 1 second to 100 hours. For process control or other applications, single operation can also be set so that the timer will activate after a set time, then wait for input before repeating. Ths timer has a test function and an indicator light to signify the 'open' period.

Options: Default choices are marked *. This table is for general guidance and many other combinations are available

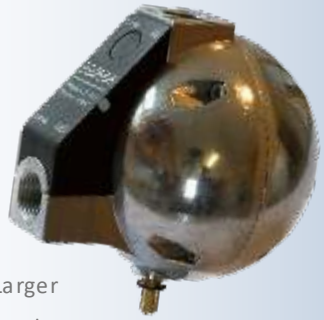
Range	Port sizes (BSP female)					Voltages						Max Pressure (barg)		Ball valve & strainer Supplied	Timer		Protection class
	1/4"	3/8"	1/2"*	3/4"	**1"**	**230 vac***	**110 vac**	48 vac	24 vac	24 vdc	**12 vdc**	**16 ***	80		Analog	Digital	
CS711-xx	√					√						√		Yes* on 16 bar drain	√		IP65
CS720-xx		√	√			√	√	√	√	√	√	√	√		√		IP65
CS3800-xx		√	√			√ (auto)			√ (auto)			√	√			√	IP65
CS220-xx				√	√	√						√		No	√		IP65

Mechanical zero-loss drains CS402, CS20B

No power connection needed

CS402 and CS20B are mechanical float operated condensate drains designed for easy installation and reliable operation in general purpose applications.. Requiring no power connection they are perfect for distributed sites (CS20B) or for quick installations to deal with trouble-spots in the compressed air system (CS402).

CS402 is ideal for quick installations, on drip-leg drains and accumulation points where high capacity isn't essential - however it deals with up to 20 l/hr. A sight glass indicates correct operation;



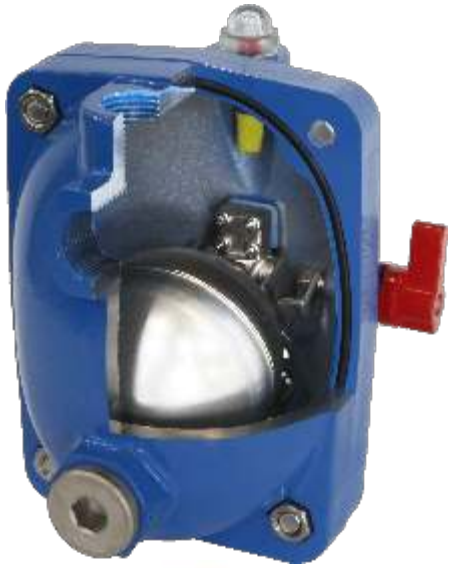
In larger applications, the CS20B is equipped to deal with much greater quantities of condensate - handling uo to 300 litres/hour. Larger orifices and a more robust internal mechanism equip it to work in systems where the build-up of rust and other particles is more likely to be encountered. Install at working pressures up to 20bar

STERLING offers a wide range of small float drains to fit various common filter housings from popular manufacturers. Please talk to the sales department to identify your particular needs

STERLING separation ltd

XD2500 and XD5000

Heavy duty float actuated ball valve



The complete answer to condensate discharge for larger systems

XD2500 and **XD5000** provide an innovative solution that's suitable for large, distributed sites where power is either unavailable or expensive to provide. However, unlike many other float drains, the heavy mechanism operates a ball valve. With such a generous port and by avoiding the use of soft seals this range of drains offers the ultimate in mechanical float drain reliability.
In addition, the following features mark it out from the crowd.

Auto compensation for partial blockage. Any back-up of condensate in the drain simply forces the ball valve to open wider, allowing discharge of stubborn particles.

Manual override lever. The maintenance engineer's cross check performs a test function while also ensuring the drain's mechanism gets regular exercise

Visual check sight glass. Verifies operation in both normal and override mode

Alarm indicator. Pop-up button offers a quick view should any malfunction occur.

Heavy duty coated construction. For durability and trouble-free life

Heater and strainer options. (see left) Avoid freeze-ups (where there's power available), and minimise the possibility of scale affecting performance.

Product	Compressor capacity - cfm / m^3/min			Inlet	Outlet	Alarm function	Test function
	Air receiver	Dryer	Filter				
XD2500	2500 / 70	5000 / 140	25000/1	3 x 1/2" BSP	1 x 3/8" BSP	Visual	Yes
XD5000	5000 / 140	10,000/280	50000 / 1400			Visual	Yes
XDheater	230vac 125W thermostatically controlled heater for XD2500/5000						
XDBVS25 or XDBVS50	Ball valve and strainer assembly to suit XD2500 or XD5000						
Both of these drains operate at up to 16 bar. Operating temperature range 2^0C to 65^0C							

Sterling Separation Ltd

Unit 24 Longford Ind Est
Longford Rd, Bridgtown
Cannock
Staffordshire WS11 0DG

Phone: +44 (0)1543 502010
Fax: +44 (0)1543 578202
www.sterlingsep.com
email: sales@sterlingsep.com

Sterling manufactures oil-water separators & OWS service kits. We are also a supplier of condensate drains, compressed air filters and related products for the compressed air industry

Your STERLING supplier: