



Launched in 1982, the Scaleton is one of our flagship models designed **exclusively for the commercial and industrial sectors**. It's designed to **reduce and prevent limescale build-up** across a variety of commercial and industrial applications and settings - **improving efficiency and extending the lifespan of heating equipment**. Its versatility and effectiveness make it a favourite for our commercial customers, and having won an industry award, it provides complete peace of mind.

Benefits

- ✓ Prolongs the life of water using applications and heating systems
- ✓ Reduces limescale build-up in pipes, valves, pumps and heating elements
- ✓ 10 year pro-rata warranty
- ✓ Environmentally friendly - reduces energy consumption, carbon emissions & footprints
- ✓ Lower energy consumption = lower energy bills
- ✓ Stainless steel - corrosion resistant
- ✓ Easy to install - horizontally or vertically
- ✓ Cost effective, proven and sustainable

Materials of construction

- ✓ Stainless steel housing
- ✓ Non-sacrificial catalytic semi precious alloy (lead free) - WRAS approved
- ✓ Brass compression coupling fittings EN1254-2 or BSP Male Threads
- ✓ Blue plastic sleeve - approved to UL 224 VW-1 & ROHS Compliant

Life expectancy

- ✓ Dependant on use, a minimum of 10 years service can be expected, however it is not uncommon for our conditioners to last between 15-25 years +

Applications

- ✓ Whole house protection
 - ✓ Apartment blocks
 - ✓ Commercial offices
 - ✓ Schools
 - ✓ Universities & colleges
 - ✓ Leisure centres
 - ✓ Maritime transport
 - ✓ Cinemas
 - ✓ Retail parks / shopping centres
 - ✓ Restaurants
 - ✓ Farming / irrigation
 - ✓ Marine applications
- [Much more!](#)

Regulatory

- ✓ WRAS Approval No: 2209048



Green technology

- No power
- No electrical connections
- No chemicals
- No consumables
- No waste water



Peace of mind

- No maintenance
- No servicing
- No earthing or bonding required
- No control box to mount

INSTALLATION GUIDE

Sizing

- ✓ Size matters - selecting the right conditioner is critical
- ✓ Selecting the wrong size conditioner - including using a larger diameter than needed - can compromise water delivery and affect treatment quality
- ✓ Conditioner size should be selected based on **flow rate**
- ✓ In general applications where the flow rate is known to be low or there is relatively heavy scale build-up inside the pipe already. In this instance, a conditioner 1 size smaller than the pipe diameter is recommended.

Fitting options

Fluid Dynamics has a wide range of connection options available - please ask.

COMMON THREADS

🇬🇧 UK: BSPT CONNECTIONS (DN15 TO DN50)

½" to 2" BSPT (British Standard Pipe Tapered) threads
These conform to BSP (British Standard Tapered)

🇺🇸 USA: NPT CONNECTIONS (DN15 TO DN50)

½" to 2" NPT (National Pipe Taper) Male & Female Threads
These conform to ANSI / ASME Standard B1.20.1

FLANGES - DN65 UPWARDS (2.5" +)

A wide range of flanges can be specified as the fitting option required

🇬🇧 UK

Standard fitting in the UK is the BS4504 PN16 stainless steel flanges
Higher pressure ratings are available upon request
Maximum operating temperature = 120 degree celsius

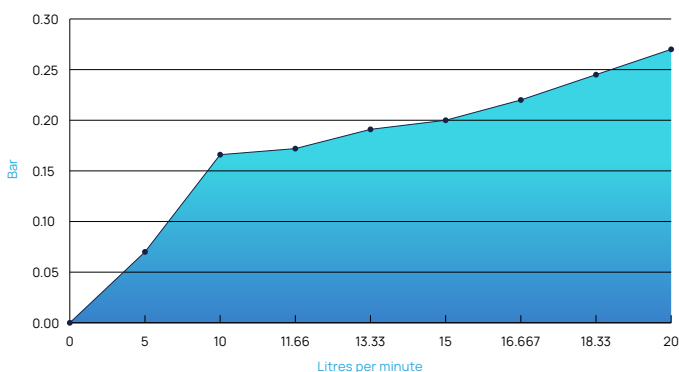
🇺🇸 USA

The standard flange fitting in the USA is ASA 150 stainless steel flanges
Higher pressure ratings are available upon request
Maximum operating temperature = 120 degree celsius

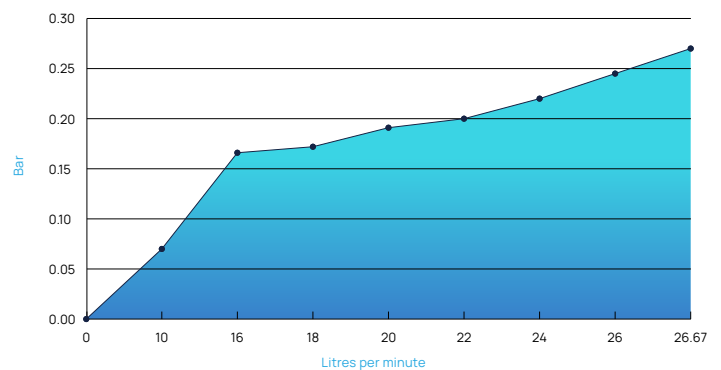
INSTALLATION: Our conditioners can be installed both vertically and/or horizontally

PRESSURE LOSSES

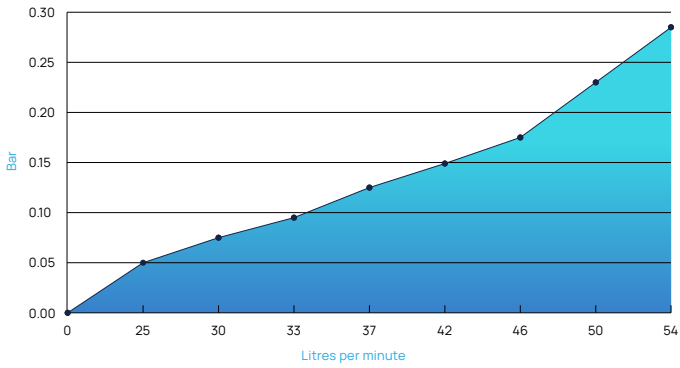
DN10 (¾") PRESSURE DROP GRAPH



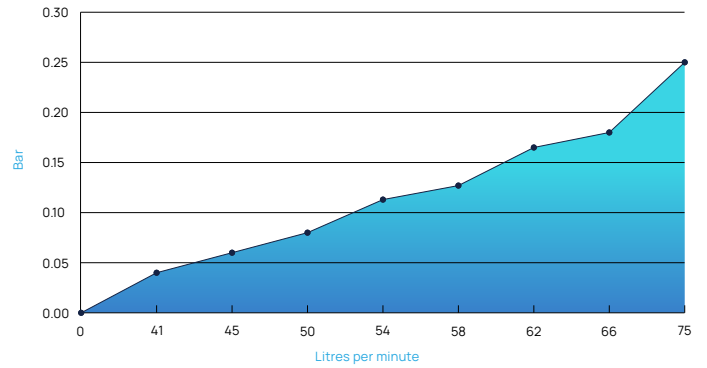
DN15 (½") PRESSURE DROP GRAPH



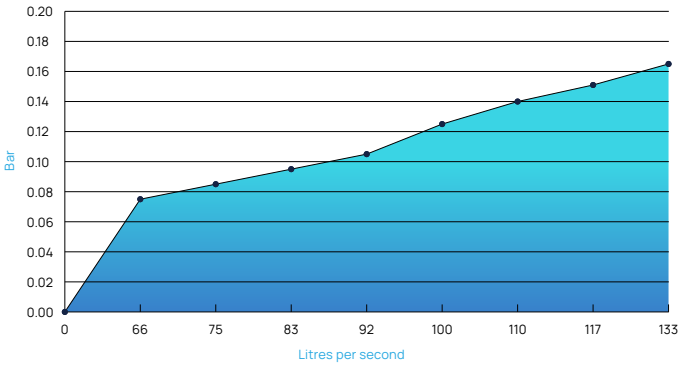
DN20 (3/4") PRESSURE DROP GRAPH



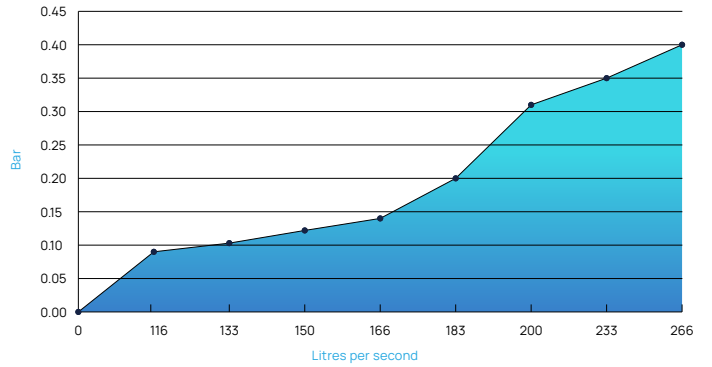
DN25 (1") PRESSURE DROP GRAPH



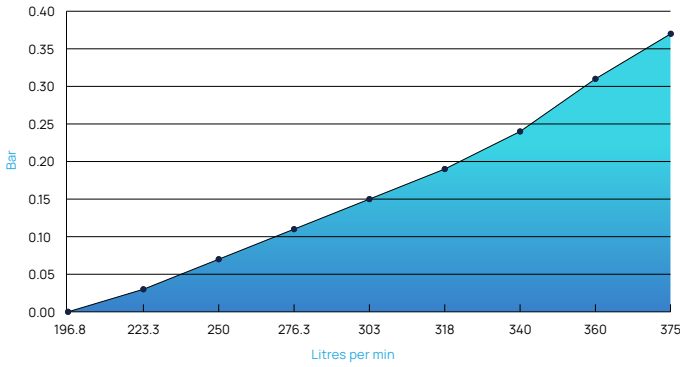
DN32 (1 1/4") PRESSURE DROP GRAPH



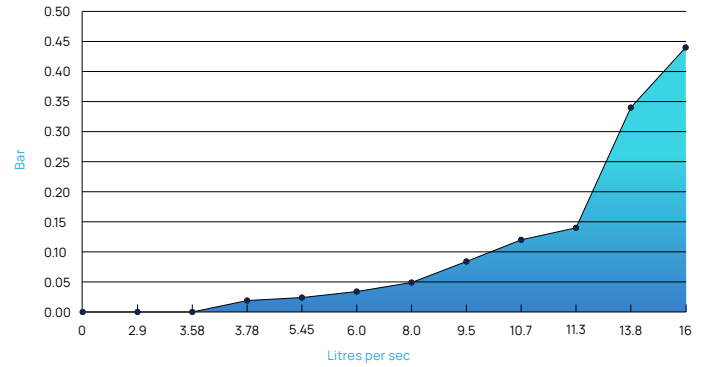
DN40 (1 1/2") PRESSURE DROP GRAPH



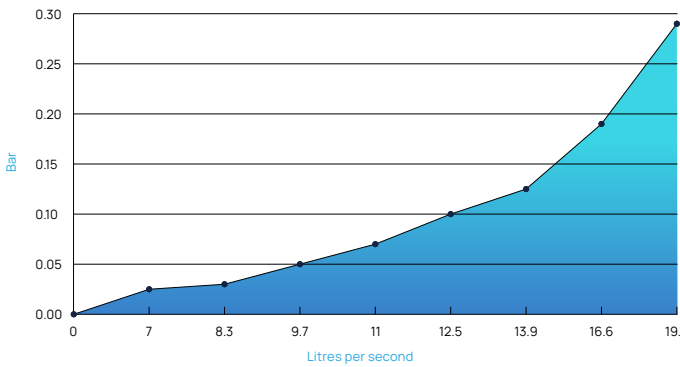
DN50 PRESSURE DROP GRAPH



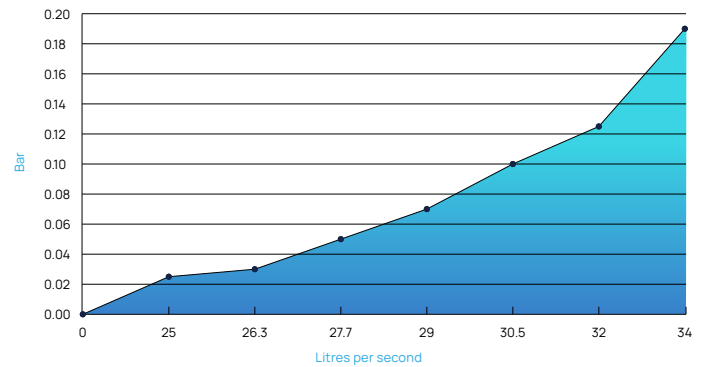
DN65 PRESSURE DROP GRAPH



DN80 (3") PRESSURE DROP GRAPH



DN100 (4") PRESSURE DROP GRAPH



- Both our catalytic and combination (dual) systems have internal components designed specifically to minimise resistance as water passes through
- Correctly installed conditioners will have a negligible impact on pressure drop - up to a maximum of 2%



DATA TABLE

Product code	Description	Connection type	Suitable for pipe diameter	Max temp (°C)	Max pressure (bar)	Optimal flow range (lpm)	Length (mm)	Weight (kg)	Housing materials
SCA10CC	Scaletron 10	10mm compression fitting	10mm	100	10	1-12	254	0.15	External: stainless steel housing & connections. (Compression Fittings available) Internal: FD catalytic galvanic alloy
SCA15CC	Scaletron 15	15mm compression fittings	15mm	100	10	8-25	254	0.2	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA22CC	Scaletron 22	22mm compression fittings	22mm	100	10	24-54	305	0.5	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA28CC	Scaletron 28	28mm compression fittings	28mm	100	10	45-90	305	0.6	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA35CC	Scaletron 35	35mm compression fittings	35mm	100	10	85-120	609	1.9	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA42CC	Scaletron 42	42mm compression fittings	42mm	100	10	110-210	609	2.2	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA54CC	Scaletron 54	54mm compression fittings	54mm	100	10	170-330	609	2.5	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA10BS	Scaletron 10	3/8" BSPT	3/8" (DN10) 1/2" (DN15)	100	16	1-12	215	0.15	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA15BS	Scaletron 15	1/2" BSPT	1/2" (DN15) 3/4" (DN20)	100	16	8-25	215	0.2	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy

Product code	Description	Connection type	Suitable for pipe diameter	Max temp (°C)	Max pressure* (bar)	Optimal flow range (lpm)	Length (mm)	Weight (kg)	Housing materials
SCA20BS	Scaleton 20	¾" BSPT	¾" (DN20) 1" (DN25)	100	16	24-54	245	0.5	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA25BC	Scaleton 25	1" BSPT	1" (DN25) 1¼" (DN32)	100	16	45-90	260	0.6	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA32BS	Scaleton 32	1¼" BSPT	1¼" (DN32) 1½" (DN40)	100	16	85-120	550	1.9	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA40BS	Scaleton 40	1½" BSPT	1½" (DN40) 2" (DN50)	100	16	110-210	550	2.2	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA50BS	Scaleton 50	2" BSPT	2" (DN50) 2½" (DN65)	100	16	170-330	550	3.0	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA65BS	Scaleton 65	2½" BSPT	2½" (DN65) 3" (DN80)	100	16	310-675	762	7	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA80BS	Scaleton 80	3" BSPT	3" (DN80) 4" (DN100)	100	16	600-1175	813	9.5	External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA10US	Scaleton 10	¾" NPT	¾" (DN10) ½" (DN15)	100	16	1-12	254		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA15US	Scaleton 15	½" NPT	½" (DN15) ¾" (DN20)	100	16	8-25	254		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA20US	Scaleton 20	¾" NPT	¾" (DN20) 1" (DN25)	100	16	24-54	300		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA25US	Scaleton 25	1" NPT	1" (DN25) 1¼" (DN32)	100	16	45-90	300		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA32US	Scaleton 32	1¼" NPT	1¼" (DN32) 1½" (DN40)	100	16	85-120	609		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy

Product code	Description	Connection type	Suitable for pipe diameter	Max temp (°C)	Max pressure* (bar)	Optimal flow range (lpm)	Length (mm)	Weight (kg)	Housing materials
SCA40US	Scaleton 40	1½" NPT	1½" (DN40) 2" (DN50)	100	16	110-210	609		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA50US	Scaleton 50	2" NPT	2" (DN50) 2½" (DN65)	100	16	170-330	609		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA65US	Scaleton 65	2½" NPT	2½" (DN65) 3" (DN80)	100	16	310-675	913		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy
SCA80US	Scaleton with 3" NPT connections	3" NPT	3" (DN80) 4" (DN100)	100	16	600-1175	913		External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy

*higher pressure units available upon request



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