



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

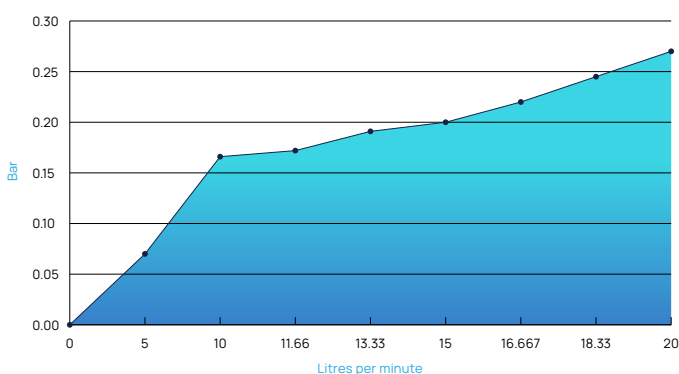
##### USA

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

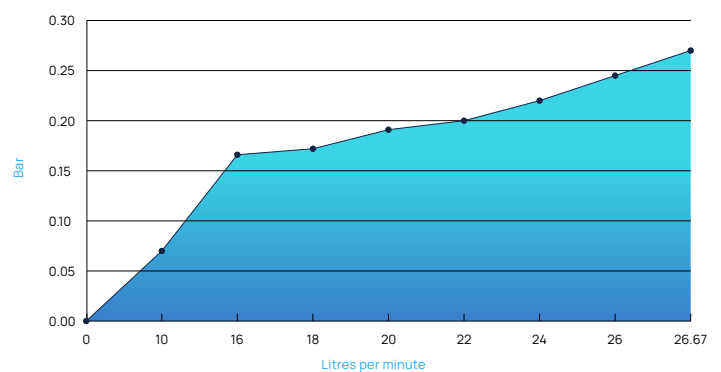
INSTALLATION: Our conditioners can be installed both vertically and/or horizontally

## PRESSURE LOSSES

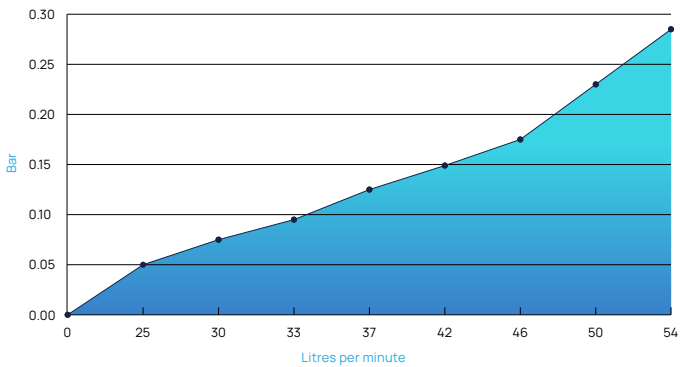
DN10 (¾") PRESSURE DROP GRAPH



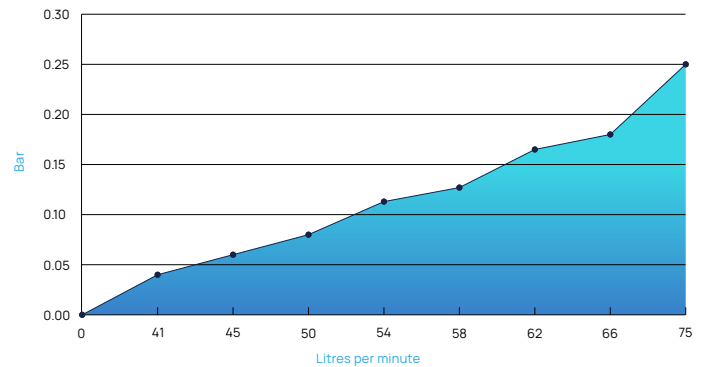
DN15 (½") PRESSURE DROP GRAPH



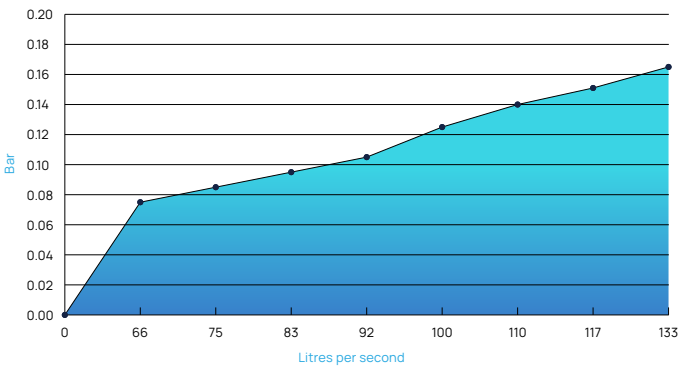
DN20 (3/4") PRESSURE DROP GRAPH



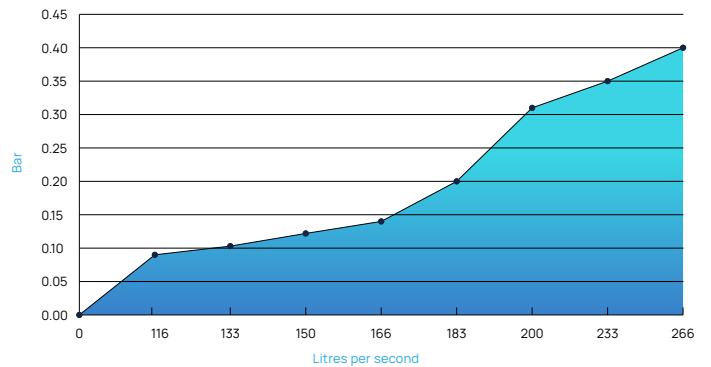
DN25 (1") PRESSURE DROP GRAPH



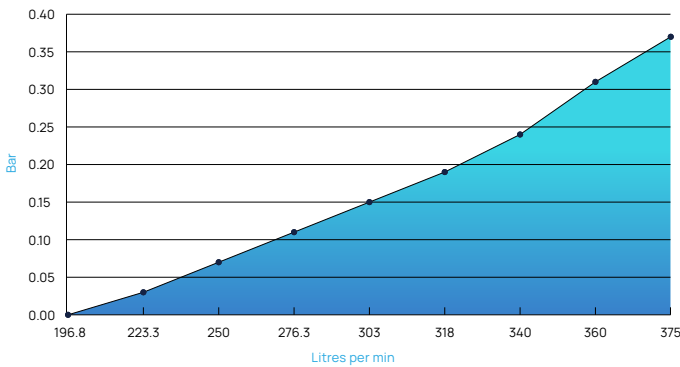
DN32 (1 1/4") PRESSURE DROP GRAPH



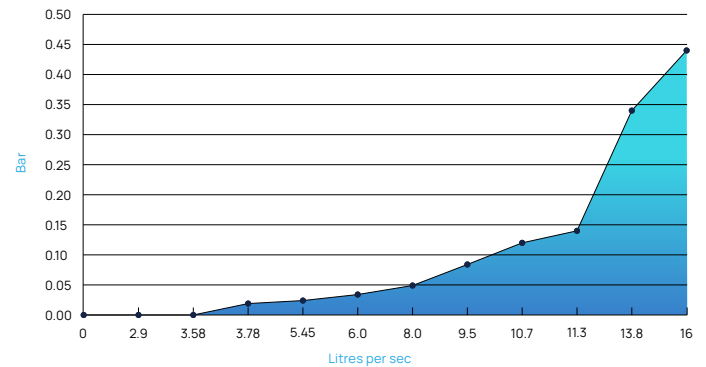
DN40 (1 1/2") PRESSURE DROP GRAPH



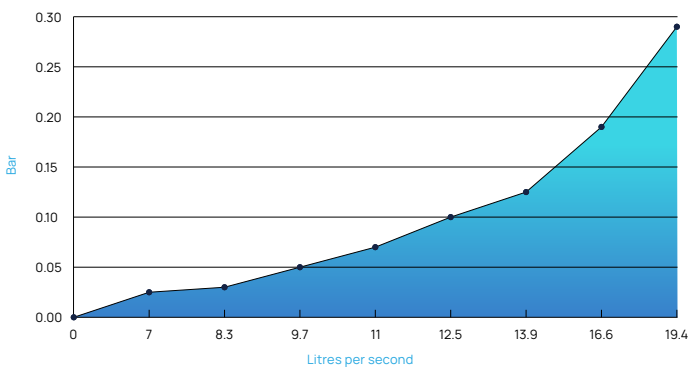
DN50 PRESSURE DROP GRAPH



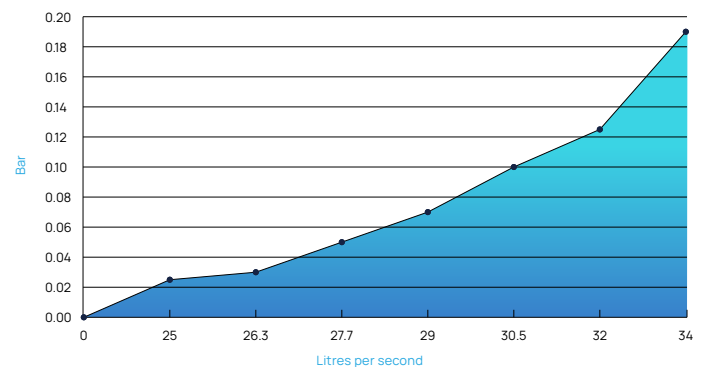
DN65 PRESSURE DROP GRAPH



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        | <b>External:</b> stainless steel housing & connections.<br>(Compression Fittings available)<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA15CC      | Scaletron 15 | 15mm compression fittings | 15mm                       | 100           | 10                 | 8-25                     | 254         | 0.2         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy                                     |
| SCA22CC      | Scaletron 22 | 22mm compression fittings | 22mm                       | 100           | 10                 | 24-54                    | 305         | 0.5         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy                                     |
| SCA28CC      | Scaletron 28 | 28mm compression fittings | 28mm                       | 100           | 10                 | 45-90                    | 305         | 0.6         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy                                     |
| SCA35CC      | Scaletron 35 | 35mm compression fittings | 35mm                       | 100           | 10                 | 85-120                   | 609         | 1.9         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy                                     |
| SCA42CC      | Scaletron 42 | 42mm compression fittings | 42mm                       | 100           | 10                 | 110-210                  | 609         | 2.2         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy                                     |
| SCA54CC      | Scaletron 54 | 54mm compression fittings | 54mm                       | 100           | 10                 | 170-330                  | 609         | 2.5         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy                                     |
| SCA10BS      | Scaletron 10 | 3/8" BSPT                 | 3/8" (DN10)<br>1/2" (DN15) | 100           | 16                 | 1-12                     | 215         | 0.15        | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy                                     |
| SCA15BS      | Scaletron 15 | 1/2" BSPT                 | 1/2" (DN15)<br>3/4" (DN20) | 100           | 16                 | 8-25                     | 215         | 0.2         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> 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      | Scaletron 20 | ¾" BSPT         | ¾" (DN20)<br>1" (DN25)     | 100           | 16                  | 24-54                    | 245         | 0.5         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA25BC      | Scaletron 25 | 1" BSPT         | 1" (DN25)<br>1¼" (DN32)    | 100           | 16                  | 45-90                    | 260         | 0.6         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA32BS      | Scaletron 32 | 1¼" BSPT        | 1¼" (DN32)<br>1½" (DN40)   | 100           | 16                  | 85-120                   | 550         | 1.9         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA40BS      | Scaletron 40 | 1½" BSPT        | 1½" (DN40)<br>2" (DN50)    | 100           | 16                  | 110-210                  | 550         | 2.2         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA50BS      | Scaletron 50 | 2" BSPT         | 2" (DN50)<br>2½" (DN65)    | 100           | 16                  | 170-330                  | 550         | 3.0         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA65BS      | Scaletron 65 | 2½" BSPT        | 2½" (DN65)<br>3" (DN80)    | 100           | 16                  | 310-675                  | 762         | 7           | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA80BS      | Scaletron 80 | 3" BSPT         | 3" (DN80)<br>4" (DN100)    | 100           | 16                  | 600-1175                 | 813         | 9.5         | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA10US      | Scaletron 10 | ¾" NPT          | ¾" (DN10)<br>½" (DN15)     | 100           | 16                  | 1-12                     | 254         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA15US      | Scaletron 15 | ½" NPT          | ½" (DN15)<br>¾" (DN20)     | 100           | 16                  | 8-25                     | 254         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA20US      | Scaletron 20 | ¾" NPT          | ¾" (DN20)<br>1" (DN25)     | 100           | 16                  | 24-54                    | 300         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA25US      | Scaletron 25 | 1" NPT          | 1" (DN25)<br>1¼" (DN32)    | 100           | 16                  | 45-90                    | 300         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA32US      | Scaletron 32 | 1¼" NPT         | 1¼" (DN32)<br>1½" (DN40)   | 100           | 16                  | 85-120                   | 609         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> 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      | Scaletron 40                      | 1½" NPT         | 1½"(DN40)<br>2"(DN50)      | 100           | 16                  | 110-210                  | 609         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA50US      | Scaletron 50                      | 2" NPT          | 2"(DN50)<br>2½"(DN65)      | 100           | 16                  | 170-330                  | 609         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA65US      | Scaletron 65                      | 2½" NPT         | 2½"(DN65)<br>3"(DN80)      | 100           | 16                  | 310-675                  | 913         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |
| SCA80US      | Scaletron with 3" NPT connections | 3" NPT          | 3"(DN80)<br>4"(DN100)      | 100           | 16                  | 600-1175                 | 913         |             | <b>External:</b> stainless steel housing & connections.<br><b>Internal:</b> FD catalytic galvanic alloy |

\*higher pressure units available upon request



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