

Air Filtration

CLEARPOINT® energy saving compressed air filtration

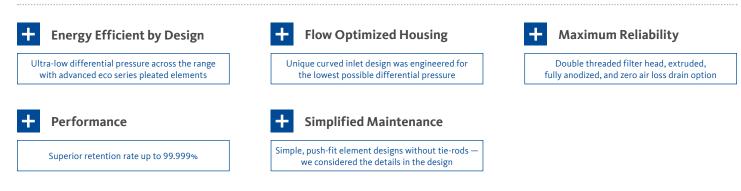


CLEARPOINT® Filters

At a Glance

During compressed air generation and distribution, contaminants are introduced to the air stream at various stages of the compressed air network. Compressed air filters, which come in various grades, remove these contaminants, as well as humidity and oil from the compressed air stream. This is a critical step as these can lead to a deterioration in quality, machine failure, or even to a loss of production or to products that must be disposed of.

Features and Benefits



How it Works

1 Compressed Air Inlet

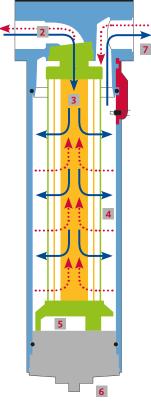
The compressed air enters the inlet of the CLEARPOINT[®] filter housing, which have all been designed to compliment the connections of the different compressor manufacturers making port-matching easier during installation.

2 Curved Inlet

Up to 75% less flow resistance is achieved through a unique curved inlet design as the compressed air flows into the physical medium of the filter element.

3 Filtration Process

The untreated compressed air that is laden with liquid oil, oil aerosols, dirt, scale, and other debris and particulate matter now passes through an innovative, high bed depth filter material designed so the maximum amount of particles are desposited in the material with maximum retention. The exterior of the soft pleat medium is an open cell, synthetic support mesh to ensure the required rigidity for the various filter systems without sacrificing any filter surface area.



4 Treated Compressed Air

The compressed air has now passed all the way through the filter medium and is considered as treated.

5 Condensate Collection Zone

A large condensate collection zone at the base of the housing coupled with the unique legs of the filter end cap create a generous void to prevent the entrainment of already separated condensate.

6 Condensate Removal

Any condensate present in the filter housing is drained either by a float drain or zero air loss BEKOMAT[®]. A hexagonal profile has also been included at the base of the filter housing allowing it to be easily opened for element changes and maintenance.

7 Compressed Air Outlet

The fully treated compressed air that is now free of fluids, solids, and other pollutants flows downstream to other inline components or the point-of-use.

Coalescing filtration flow (inside / out)

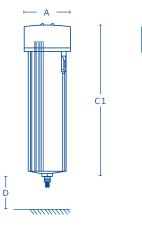
| CLEARPOINT [®] Filters Compare | | | | | | | | | | | | |
|--|---------------------|----------------------------|------------------------------|----------------------------|----------------------------|--|--|--|--|--|--|--|
| Ţ | | Ũ | Ī | | | | | | | | | |
| Threaded Series | Flanged Series | Activated Carbon Series | PN50 High Pressure Series | HP High Pressure Series | H In-line Heater Series | | | | | | | |
| Flow Rates | | | | | | | | | | | | |
| 25 - 1,900 scfm | 1,900 - 21,000 scfm | 80 - 330 scfm | 100 - 2,750 scfm | 25 - 2,000 scfm | 30 - 60 scfm | | | | | | | |
| Maximum Operatir | ng Pressure | | | | | | | | | | | |
| 232 psig | 200 psig | 232 psig | 725 psig | 1,450 - 7,250 psig | 232 psig | | | | | | | |
| itandard Pipe Conr | ection Sizes | | | | | | | | | | | |
| 3/8" - 3" NPT | 4" - 12" Flange | ½" - 1 ½" NPT | 3/8" - 2" NPT | 3/8" - 2" NPT | 3/8" - 2" NPT | | | | | | | |
| lousing Material | | | | | | | | | | | | |
| | Poweder coated | Anodized, powder | Anodized, powder | Stainless steel | Anodized, powder | | | | | | | |
| Anodized, powder coated aluminum | carbon steel | coated aluminum | coated aluminum | | coated aluminum | | | | | | | |
| Anodized, powder coated aluminum Available Options | | | coated aluminum | | coated aluminum | | | | | | | |

Product Family



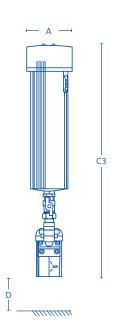
CLEARPOINT® Threaded Coalescing and Particulate Filters with float drain or BEKOMAT® and with or without differential pressure gauge and new eco series elements

- > Advanced CLEARPOINT[®] eco series elements
- > Validated in accordance with ISO 12500-1 and 3
- CRN approved
- > Filter for natural gas (CNG) on request
- > Max. operating pressure: 232 psig
- > Max. operating temperature: 140 °F



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C4

| CLEARPOINT® | S040 | S045 | S050 | S055 | S075 | S100 | M010 | M012 | M015 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Pipe size (NPT) | 3/8" | 1/2" | 1⁄2" | 1⁄2" | 3/4" | 1" | 1" | 1" | 1 1/2" |
| Flow rate (scfm) | 25 | 30 | 50 | 80 | 100 | 125 | 160 | 200 | 250 |
| Element Size | 04* | 04* | 05* | 06* | 07* | 07* | 10* | 12* | 15* |
| Dimension data | | | | | | | | | |
| A (inches) | 2.95 | 2.95 | 2.95 | 2.95 | 3.94 | 3.94 | 3.94 | 3.94 | 5.75 |
| C1 (inches) | 7.09 | 7.09 | 8.27 | 10.43 | 11.02 | 11.02 | 13.78 | 15.16 | 14.17 |
| C2 (inches) | 9.65 | 9.65 | 10.83 | 12.99 | 13.58 | 13.58 | 16.34 | 17.72 | 16.73 |
| C3 (inches) | 15.55 | 15.55 | 16.73 | 18.90 | 19.49 | 19.49 | 22.24 | 23.62 | 22.83 |
| C4 (inches) | 18.11 | 18.11 | 19.29 | 21.46 | 22.05 | 22.05 | 24.80 | 26.18 | 25.39 |
| D (inches) | 5.91 | 5.91 | 5.91 | 5.91 | 5.91 | 5.91 | 5.91 | 5.91 | 6.30 |
| Weight (lbs) | 1.65 | 1.65 | 1.87 | 2.65 | 3.75 | 4.18 | 4.63 | 4.85 | 9.04 |

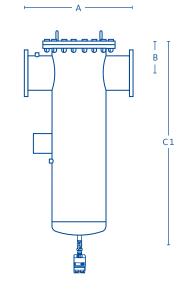
| CLEARPOINT® | M018 | M019 | M020 | M022 | M023 | M025 | M027 | M030 | M032 |
|--------------------|-------|--------|-------|-------|-------|--------|--------|-------|-------|
| Pipe size (NPT) | 1½" | 1 1/2" | 2" | 2" | 2" | 2 1⁄2" | 2 1⁄2" | 3" | 3" |
| Flow rate (scfm) | 330 | 450 | 500 | 600 | 800 | 1000 | 1300 | 1500 | 1900 |
| Element Size | 18* | 20* | 20* | 22* | 23* | 25* | 27* | 30* | 32* |
| Dimension data | | | | | | | | | |
| A (inches) | 5.75 | 5.75 | 5.75 | 5.75 | 5.75 | 10.24 | 10.24 | 10.24 | 10.24 |
| C1 (inches) | 16.46 | 18.43 | 18.43 | 22.24 | 26.89 | 26.42 | 30.51 | 35.24 | 41.14 |
| C2 (inches) | 19.02 | 20.99 | 20.99 | 24.80 | 29.45 | 29.98 | 33.07 | 37.80 | 43.70 |
| C3 (inches) | 24.92 | 26.89 | 26.89 | 30.71 | 35.35 | 34.88 | 38.98 | 39.76 | 49.61 |
| C4 (inches) | 27.48 | 29.45 | 29.45 | 33.27 | 37.91 | 37.44 | 41.54 | 42.32 | 52.17 |
| D (inches) | 6.30 | 6.30 | 6.30 | 6.30 | 6.30 | 7.87 | 7.87 | 7.87 | 7.87 |
| Weight (lbs) | 9.92 | 10.61 | 11.24 | 13.45 | 15.65 | 43.87 | 49.82 | 57.10 | 65.92 |

| * ELEMENT GRADE | ELEMENT TYPE | MICRON RATING | OIL CARRYOVER | DRY & PRESSURE (psid) | WET ∆ PRESSURE (psid) |
|-----------------|--------------------------|---------------|------------------------|-----------------------|-----------------------|
| Grade CX | Coarse | 25 µm | 5 mg/m³ | .44 | .73 |
| Grade FX | Fine | 1 µm | .1 mg/m³ | .73 | 2.17 |
| Grade SX | Superfine | .01 µm | .01 mg/m³ | .87 | 2.90 |
| Grade A | Activated Carbon Element | .01 µm | .003 mg/m ³ | - | 1.02 |

| Со | rrection Facto | r | | | | | | | | | | | | | |
|-----|-------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Ор | erating Pressure (psig) | 20 | 40 | 60 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 160 | 180 | 200 | 230 |
| Cor | rection Factor | .30 | .48 | .65 | .82 | .91 | 1.00 | 1.09 | 1.17 | 1.26 | 1.35 | 1.52 | 1.70 | 1.87 | 2.13 |

CLEARPOINT® Flange Coalescing and Particulate Filters with BEKOMAT® and connection kit with differential pressure gauge

- > Advanced CLEARPOINT[®] eco series elements
- > Validated in accordance with ISO 12500
- $\,$ > Designed according to ASME Sec. VII, Div. 1
- > UM stamp standard and CRN optional
- > Max. operating pressure: 232 psig
- > Max. operating temperature: 140 °F



| CLEARPOINT® | L100 | L102 | L150 | L156 | L200 | L204 | L254 | L304 |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Pipe size (ANSI) | 4" | 4" | 6" | 6" | 8" | 8" | 10" | 12" |
| Flow rate (scfm) | 1900 | 2800 | 3800 | 6500 | 7500 | 9300 | 13000 | 21000 |
| Element Size | | | | | 38* | | | |
| Dimension data | | | | | | | | |
| A (inches) | 21.25 | 21.25 | 23.50 | 23.75 | 28.00 | 30.31 | 34.65 | 38.98 |
| B (inches) | 6.88 | 7.13 | 8.00 | 8.25 | 9.50 | 9.75 | 9.88 | 10.87 |
| C1 (inches) | 46.50 | 47.38 | 46.88 | 50.38 | 53.00 | 56.34 | 60.18 | 64.26 |
| D (inches) | 13.00 | 18.00 | 18.00 | 18.00 | 18.00 | 18.00 | 18.00 | 18.00 |
| Weight (lbs) | 195 | 266 | 283 | 328 | 534 | 623 | 727 | 825 |

Τ D

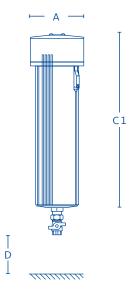
| * | ELEMENT GRADE | ELEMENT TYPE | MICRON RATING | OIL CARRYOVER | OIL VAPOR | DRY & PRESSURE (psid) | WET Δ PRESSURE (psid) | APPROVALS |
|---|---------------|------------------|------------------|---------------------|------------------------|--------------------------|--------------------------|--------------------|
| | Grade CX | Coarse | 25 µm | 5 mg/m ³ | - | .44 | .73 | ASME Coded Vessel |
| | Grade FX | Fine | 1μm | .1 mg/m³ | - | .73 | 2.17 | with "UM" Stamp as |
| | Grade SX | Superfine | .01 µm | .01 mg/m³ | - | .87 | 2.9 | standard |
| | Grade A | Activated Carbon | .01 µm | - | .003 mg/m ³ | 1.45 | - | (CRN Optional) |

| Correction Factor | r | | | | | | | | | | | | | |
|---------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|--|
| Operating Pressure (psig) | 20 | 40 | 60 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 160 | 180 | 200 | |
| Correction Factor | .30 | .48 | .65 | .82 | .91 | 1.00 | 1.09 | 1.17 | 1.26 | 1.35 | 1.52 | 1.70 | 1.87 | |

CLEARPOINT® Threaded Activated Carbon Cartridge Filters

with manual ball valve

- > With activated carbon filter cartridge
- > Removal of solid particles up to $1 \, \mu m$
- Residual oil vapor content down to .003 mg/m³
- CRN approved
- > Max. inlet moisture: 30% (dryer required upstream)
- > Max. operating pressure: 232 psig
- > Max. operating temperature: 140 °F



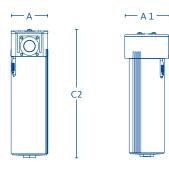
| CLEARPOINT® | S055 | M010 | M018 |
|------------------|-------|-------|-------|
| Pipe size (NPT) | 1/2" | 3/4" | 1 ½" |
| Flow rate (scfm) | 80 | 160 | 330 |
| Element Size | 06V | 10V | 18V |
| Dimension data | | | |
| A (inches) | 2.95 | 3.94 | 5.75 |
| C1 (inches) | 10.43 | 13.78 | 16.46 |
| D (inches) | 5.91 | 5.91 | 6.30 |
| Weight (lbs) | 2.65 | 4.63 | 9.92 |

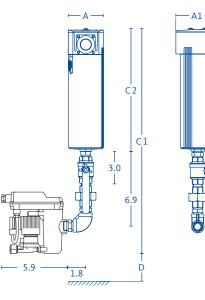
| ELEMENT GRADE | ELEMENT TYPE | MICRON RATING | OIL CARRYOVER | Δ PRESSURE (psid) |
|---------------|----------------------------|---------------|------------------------|-------------------|
| Grade V | Activated Carbon Cartridge | 1 µm | .003 mg/m ³ | .54 |

| Correction Factor | r | | | | | | | | | | | | | |
|---------------------------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Operating Pressure (psig) | 20 | 40 | 60 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 160 | 180 | 200 | 230 |
| Correction Factor | .30 | .48 | .65 | .82 | .91 | 1.00 | 1.09 | 1.17 | 1.26 | 1.35 | 1.52 | 1.70 | 1.87 | 2.13 |

CLEARPOINT® PN50 Threaded Coalescing and Particulate High Pressure Filters with open port or BEKOMAT® connection kit (drain sold separately) without pressure gauge

- > Advanced CLEARPOINT[®] eco series elements
- > Validated in accordance with ISO 12500-1 and 3
- > Max. operating temperature: 140 °F
- > Max. operating pressure: 725 psig





| CLEARPOINT® PN50 | HP50S040 | HP50S050 | HP50S055 | HP50S075 | HP50M010 | HP50M012 | HP50M015 | HP50M018 | HP50M020 | HP50M022 | HP50M023 |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Pipe size | 3/8" | 1/2" | 1⁄2" | 3⁄4" | 1" | 1" | 1½" | 1½" | 2" | 2" | 2" |
| Flow rate (scfm) | 100 | 190 | 300 | 440 | 600 | 710 | 1000 | 1210 | 1720 | 2065 | 2750 |
| Element Size | 04* | 05* | 06* | 07* | 10* | 12* | 15* | 18* | 20* | 22* | 23* |
| Dimension data | | | | | | | | | | | |
| A (inches) | 2.95 | 2.95 | 2.95 | 3.95 | 3.95 | 3.95 | 5.75 | 5.75 | 5.75 | 5.75 | 5.75 |
| A1 (inches) | 2.36 | 2.36 | 2.36 | 3.15 | 3.15 | 3.15 | 4.72 | 4.72 | 4.72 | 4.72 | 4.72 |
| C1 (inches) | 16.50 | 16.50 | 19.90 | 20.50 | 23.20 | 24.60 | 23.80 | 25.90 | 27.80 | 31.60 | 36.30 |
| C2 (inches) | 7.10 | 8.30 | 10.40 | 11.00 | 13.80 | 15.20 | 14.40 | 16.50 | 18.40 | 22.20 | 26.90 |
| D (inches) | 7.10 | 7.10 | 7.10 | 7.10 | 7.10 | 7.10 | 7.10 | 7.10 | 7.10 | 7.10 | 7.10 |
| Weight (lbs) | 1.65 | 1.85 | 2.65 | 3.75 | 4.63 | 4.85 | 9.04 | 9.92 | 11.24 | 13.45 | 15.65 |

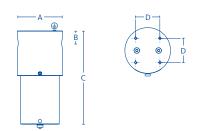
| * ELEMENT GRADE | ELEMENT TYPE | MICRON RATING | OIL CARRYOVER | OIL VAPOR | DRY & PRESSURE (psid) |
|-----------------|------------------|---------------|-----------------------|------------------------|-----------------------|
| Grade CX | Coarse | 25 µm | 5 mg/m³ | | .54 |
| Grade FX | Fine | 1 µm | .1 mg/m³ | | .86 |
| Grade SX | Superfine | .01 µm | .01 mg/m ³ | | 1.04 |
| Grade A | Activated Carbon | .01 µm | - | .003 mg/m ³ | .70 |

| Correction Factor | | | | | | | | | |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Operating Pressure (psig) | 60 | 90 | 100 | 150 | 200 | 300 | 450 | 600 | 725 |
| Correction Factor | .14 | .18 | .24 | .35 | .43 | .59 | .73 | .88 | 1.00 |

CLEARPOINT® HP High Pressure Filters

with open port without pressure gauge up to 7,250 psig

- > Stainless steel housing
- > Max. operating temperature: 140 °F (HP350S075 and HP350M010 only)
- > Max. operating temperature: 248 °F (all other models)
- > Max. inlet pressure: 1,450 7,250 psig



| CLEARPOINT [®] HP 100 | HP100S040 | HP100S045 | HP100S050 | HP100S055 | HP100S075 | HP100M010 | HP100M015 | HP100M020 | |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| Max. Operating Pressure (psig) | 1,450 | 1,450 | 1,450 | 1,450 | 1,450 | 1,450 | 1,450 | 1,450 | |
| Pipe size (NPT) | 3/ " | 3/8" | 1⁄2" | 1/2" | 3⁄4" | 1" | 11/2" | 2" | |
| Flow rate (scfm) | 25 | 60 | 160 | 270 | 400 | 700 | 1000 | 2000 | |
| Dimension data | | | | | | | | | |
| A (inches) | 2.36 | 3.11 | 3.07 | 3.07 | 4.49 | 4.49 | 6.85 | 6.85 | |
| B (inches) | .65 | .81 | .91 | .91 | 1.16 | 1.16 | 1.97 | 1.97 | |
| C (inches) | 4.61 | 5.51 | 8.43 | 10.39 | 10.63 | 16.54 | 18.94 | 30.87 | |
| D (inches) | .98 | 1.39 | 1.57 | 1.57 | 2.36 | 2.36 | 3.94 | 3.94 | |
| Weight (lbs) | 4.41 | 9.92 | 8.82 | 12.13 | 23.15 | 30.20 | 74.96 | 92.60 | |
| CLEARPOINT [®] HP 350 | HP350S030 | HP350S040 | HP350S045 | HP350S050 | HP350S075 | HP350M010 | HP350M012 | HP350M015 | |
| Max. Operating Pressure (psig) | 5,075 | 5,075 | 5,075 | 5,075 | 5,075 | 5,075 | 5,075 | 5,075 | |
| Pipe size (NPT) | 1/4" | 3/" | 3/" | 1⁄2" | 3⁄4" | 1" | 1" | 1½" | |
| Flow rate (scfm) | 30 | 75 | 205 | 350 | 520 | 920 | 1300 | 2600 | |
| Dimension data | | | | | | | | | |
| A (inches) | 2.36 | 3.11 | 3.46 | 3.46 | 5.47 | 5.47 | 6.65 | 6.65 | |
| B (inches) | .65 | .81 | .91 | .91 | 1.47 | 1.47 | 1.94 | 1.94 | |
| C (inches) | 4.61 | 5.51 | 8.43 | 10.39 | 11.26 | 17.17 | 18.90 | 30.83 | |
| D (inches) | .98 | 1.39 | 1.57 | 1.57 | 3.15 | 3.15 | 3.15 | 3.15 | |
| Weight (lbs) | 4.41 | 9.92 | 14.33 | 16.53 | 45.19 | 59.52 | 99.23 | 156.53 | |
| CLEARPOINT [®] HP 500 | HP50 | 005030 | HP500S040 | | HP500S045 | | HP500S050 | | |
| Max. Operating Pressure (psig) | 7,250 | | 7,250 | 7,250 | | 7,250 | | 7,250 | |
| Pipe size (NPT) | 1/4" | | 3/11 8 | | 3/8" | | 1/2" | | |
| Flow rate (scfm) | 30 | | 80 | | 220 | | 380 | | |
| Dimension data | | | | | | | | | |
| A (inches) | 2.36 | | 3.11 | | 4.45 | | 4.45 | | |
| B (inches) | .65 | | .81 | | .98 | | .98 | | |
| C (inches) | 4.61 | | 5.51 | | 8.70 | | 10.67 | | |
| D (inches) | .98 | | 1.39 | | 2.36 | | 2.36 | | |
| Weight (lbs) | 4.41 | | 9.92 | | 26.46 | | 28.66 | | |

| ELEMENT GRADE | ELEMENT TYPE | MICRON RATING | OIL CARRYOVER | OIL VAPOR | DRY & PRESSURE (psid) |
|---------------|---------------------|---------------|---------------------|------------|-----------------------|
| Grade CX | Coarse | 25 µm | 5 mg/m ³ | - | .54 |
| Grade FX | Fine | 1 µm | .1 mg/m³ | - | .86 |
| Grade SX | Superfine | .01 µm | .01 mg/m³ | - | 1.04 |
| Grade A | Activated Carbon | .01 µm | - | .003 mg/m³ | .70 |

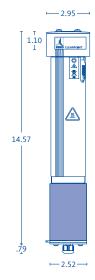
Correction Factor

| Operating Pressure (1,450 psig) | 300 | 450 | 600 | 725 | 9 | 00 | 1,100 | 1,200 | 1,300 | 1,450 | |
|---------------------------------|-------|-----------|-----|---------|-----|---------|-------|-------|-------|-------|--|
| Correction Factor | .45 | .56 | .64 | .71 | .7 | 78 | .84 | .90 | .95 | 1.00 | |
| Operating Pressure (5,075 psig) | 3,000 | | | 3,600 | | 4,500 | | | 5,075 | | |
| Correction Factor | | .84 | .89 | | .94 | | | 1.00 | | | |
| Operating Pressure (7,250 psig) | 4,50 | 4,500 5,0 | | 5,80 | | 300 6,5 | | 6,500 | i | 7,250 | |
| Correction Factor | .89 |) | .93 | .93 .91 | | .96 | | 6 .98 | | 1.00 | |

CLEARPOINT® H Compressed Air Heaters

with adjustable temperature control

- > For the adjustable heating of compressed air
- > Adjustable temperature from 86 °F to 140 °F
- > Ready for connection with a three-prong plug
- > Encapsulated corrosion-free stainless-steel heating cartridges
- Available touch protection option
- > Optional 250 VAC / 50 Hz power supply available
- > Max. operating pressure: 232 psig



| CLEARPOINT®H | 5040 | \$050 |
|---|-------------------------|-------------------------|
| Pipe size (NPT) | 3/8" | 1/2" |
| Max. volume flow at 100 psig | 30 scfm | 60 scfm |
| Setting range compressed-air outlet temperature (°F)* | +86 °F - +140 °F | +86 °F - +140 °F |
| Max. perm. operating overpressure (psig) | 232 | 232 |
| Pressure difference | < 2.18 psig | < 2.9 psig |
| Voltage** | 115 VAC / 60 Hz +/-10 % | 115 VAC / 60 Hz +/-10 % |
| Inlet temperature (°F) | +36°F - +122°F | +36 °F - +122 °F |
| Ambient temperature (°F) | +36°F - +122°F | +36 °F - +122 °F |
| Internal safety switch-off temperature (°F) | +183°F | +183°F |
| Max. housing temperature (°F) | +176°F | +176°F |
| Max. compressed-air outlet temperature (°F)* | +140°F | +140°F |
| Power (W) *** | 420 (750) | 420 (750) |
| Volume (I) | 0.42 | 0.42 |
| Weight (lbs) | 5.3 | 5.3 |
| Protection class | IP 54 | IP 54 |

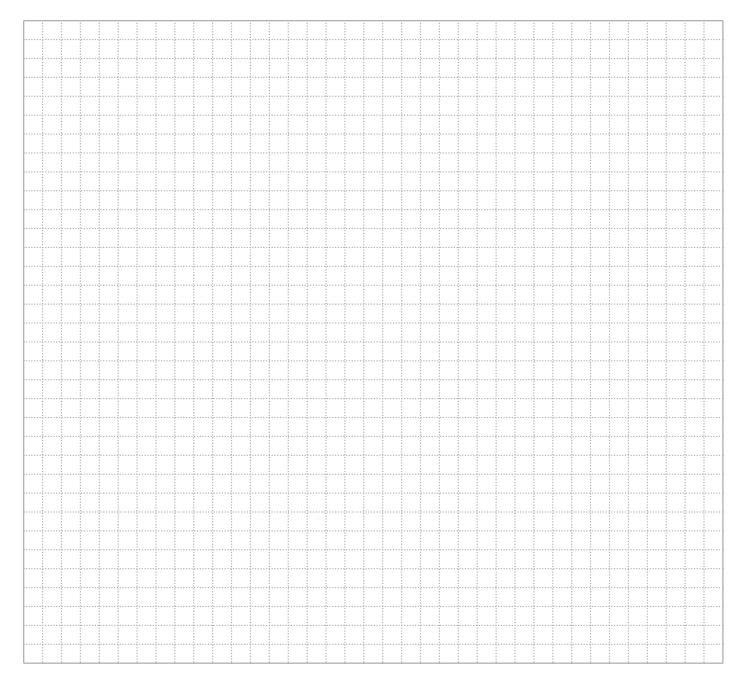
* Depending on volume flow

** Other voltages on request

*** At +68°F: making current max. 4 A, making capacity max. 750 W

Reliable | Efficient | Innovative

What can we do for you?





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