

# SINGLE-STAGE VACUUM GENERATORS 15 01 10 and 15 03 10

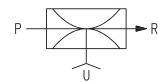
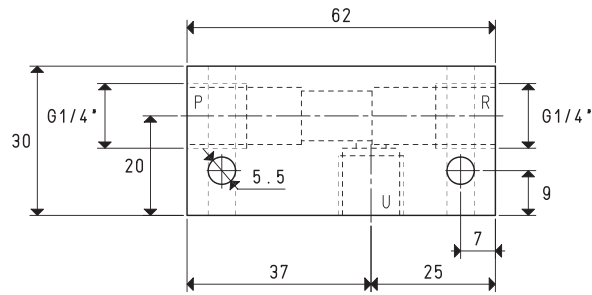
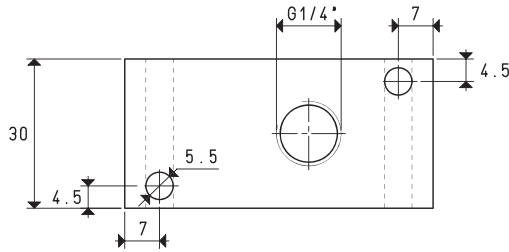
Single-stage vacuum generator operation is based on the Venturi principle.

Supplying the generator with compressed air in P, vacuum will be generated at connection U, while both the supply and the sucked air will be released through R.

By interrupting the air supply in P, the vacuum effect in U will also stop.

Vacuum generators 15 01 10 and 15 03 10 are generally used for controlling vacuum cups, for gripping and handling non-porous objects and equipment with low capacity requirements.

They are fully made with anodised aluminium.



P=COMPRESSED AIR CONNECTION      R=EXHAUST      U=VACUUM CONNECTION

| Art.                   | 15 01 10  |           |     |
|------------------------|-----------|-----------|-----|
| Quantity of sucked air | cum/h     | 2.7       | 2.8 |
| Max. vacuum level      | -KPa      | 55        | 70  |
| Final pressure         | mbar abs. | 450       | 300 |
| Supply pressure        | bar (g)   | 4         | 5   |
| Air consumption        | NI/s      | 0.7       | 0.8 |
| Working temperature    | °C        | -20 / +80 |     |
| Noise level            | dB(A)     | 63        |     |
| Weight                 | g         | 140       |     |

**Note:** All the vacuum data indicated in the table are valid at the normal atmospheric pressure of 1013 mbar and are obtained with a constant supply pressure.

8.04

Conversion ratio: inch =  $\frac{\text{mm}}{25.4}$ ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

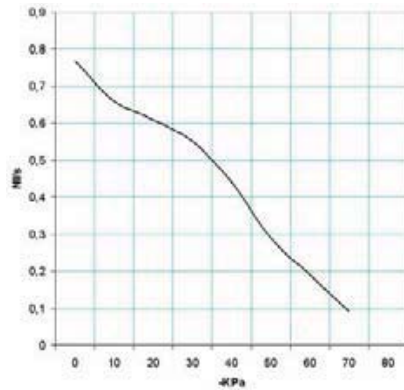
GAS-NPT thread adapters available at page 1.117



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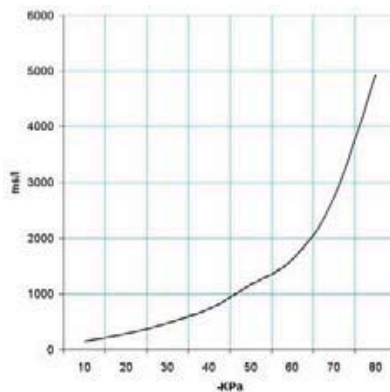


Air capacity (NI/s) at different vacuum levels (-Kpa)



| Generator art.  | Supply press. bar (g) | Air consumption NI/s | Air capacity (NI/s) at different vacuum levels (-KPa) |      |      |      |      |      |      |      | Max. vacuum level -KPa |    |
|-----------------|-----------------------|----------------------|---|------|------|------|------|------|------|------|------------------------|----|
|                 |                       |                      | 0   | 10   | 20   | 30   | 40   | 50   | 60   | 70   |                        | 80 |
| <b>15 01 10</b> | 6.0                   | 0.9                  | 0.77  | 0.66 | 0.61 | 0.55 | 0.44 | 0.29 | 0.19 | 0.09 | --                     | 83 |

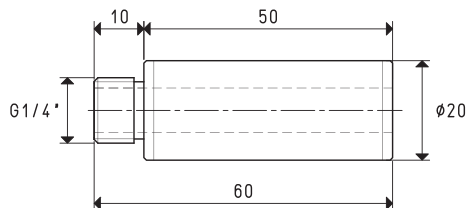
Evacuation time (ms/l=s/m<sup>3</sup>) at different vacuum levels (-Kpa)



| Generator art.  | Supply press. bar (g) | Air consumption NI/s | Evacuation time (ms/l = s/m <sup>3</sup> ) at different vacuum levels (-KPa) |     |     |     |      |      |      | Max. vacuum level -KPa |    |
|-----------------|-----------------------|----------------------|--|-----|-----|-----|------|------|------|------------------------|----|
|                 |                       |                      | 10   | 20  | 30  | 40  | 50   | 60   | 70   |                        | 80 |
| <b>15 01 10</b> | 6.0                   | 0.9                  | 139  | 278 | 472 | 727 | 1171 | 1628 | 2720 | 4928                   | 83 |

**Accessories upon request**

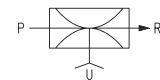
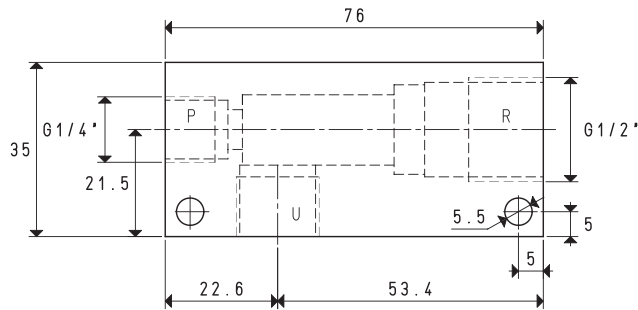
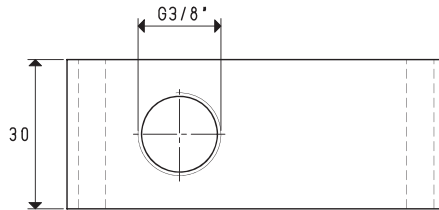
Silencer art. SSX 1/4"



3D drawings available at [www.vuototecnica.net](http://www.vuototecnica.net)



# SINGLE-STAGE VACUUM GENERATORS 15 03 10



P=COMPRESSED AIR CONNECTION    R=EXHAUST    U=VACUUM CONNECTION

| Art.                   | 15 03 10  |           |     |     |
|------------------------|-----------|-----------|-----|-----|
| Quantity of sucked air | cum/h     | 4.8       | 5   | 6   |
| Max. vacuum level      | -KPa      | 62        | 78  | 85  |
| Final pressure         | mbar abs. | 380       | 220 | 150 |
| Supply pressure        | bar (g)   | 4         | 5   | 6   |
| Air consumption        | NI/s      | 1.3       | 1.6 | 1.8 |
| Working temperature    | °C        | -20 / +80 |     |     |
| Noise level            | dB(A)     | 79        |     |     |
| Weight                 | g         | 179       |     |     |

**Note:** All the vacuum data indicated in the table are valid at the normal atmospheric pressure of 1013 mbar and are obtained with a constant supply pressure.

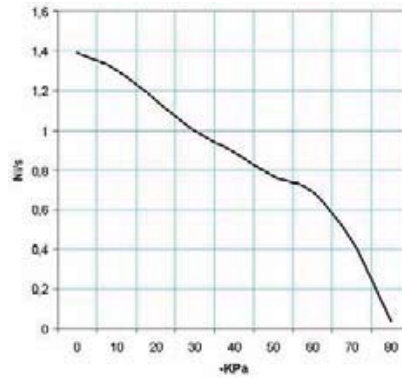
8.06

Conversion ratio: inch =  $\frac{mm}{25.4}$ ; pounds =  $\frac{g}{453.6} = \frac{Kg}{0.4536}$

GAS-NPT thread adapters available at page 1.117

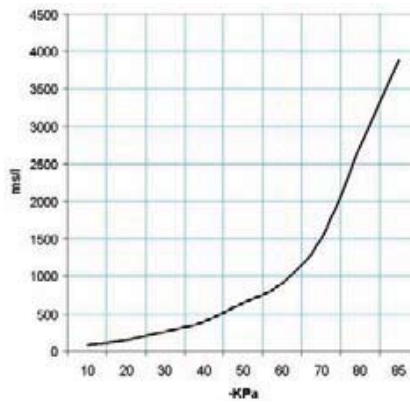


Air capacity (NI/s) at different vacuum levels (-Kpa)



| Generator art. | Supply press. bar (g) | Air consumption NI/s | Air capacity (NI/s) at different vacuum levels (-KPa) |      |      |      |      |      |      |      | Max. vacuum level -KPa |    |
|----------------|-----------------------|----------------------|---|------|------|------|------|------|------|------|------------------------|----|
|                |                       |                      | 0   | 10   | 20   | 30   | 40   | 50   | 60   | 70   |                        | 80 |
| 15 03 10       | 6.0                   | 1.8                  | 1.39  | 1.30 | 1.15 | 1.00 | 0.89 | 0.77 | 0.69 | 0.44 | 0.04                   | 85 |

Evacuation time (ms/l=s/m³) at different vacuum levels (-Kpa)



| Generator art. | Supply press. bar (g) | Air consumption NI/s | Evacuation time (ms/l=s/m³) at different vacuum levels (-KPa) |     |     |     |     |     |      |      | Max. vacuum level -KPa |    |
|----------------|-----------------------|----------------------|---|-----|-----|-----|-----|-----|------|------|------------------------|----|
|                |                       |                      | 10  | 20  | 30  | 40  | 50  | 60  | 70   | 80   |                        | 85 |
| 15 03 10       | 6.0                   | 1.8                  | 77  | 154 | 261 | 403 | 649 | 902 | 1506 | 2730 | 3876                   | 85 |

**Accessories upon req**

Silencer art. SSX 1/2"

