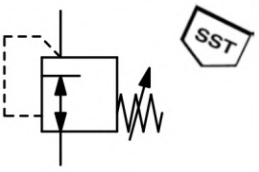
# R3100 - Mano-détendeur basse pression en acier inoxydable, compatible avec air, ammoniaque, Co2, argon, azote, helium, hydrogène, méthane, gaz naturel, etc...

| | |
|---|---|
| **Description** | Precision low pressure regulator with large diaphragm, completely made of stainless steel. |
| **Media** | compressed air or gases |
| **Supply pressure** | max. 15 bar, min. 1 bar |
| **Air consumption** | without constant bleed |
| **Adjustment** | by adjusting screw |
| **Relieving function** | non-relieving |
| **Gauge port** | G¼ on both sides of the body, one screw plug supplied |
| **Mounting position** | any |
| **Temperature range** | 0 °C bis 80 °C / 32 °C to 176 °F, FKM or EPDM<br>0 °C bis 130 °C / 32 °C to 266 °F, high temperature version,<br>for appropriately conditioned compr. air down to -20 °C / - 4 °F, or low temperature down to -40 °C/-40°F |
| **Material** | Body: stainless steel 316L, material no. 1.4404 O-rings: FKM<br>Diaphragm: NBR/Buna-N with PTFE coating Inner valve: stainless steel 316L / 1.4404 |

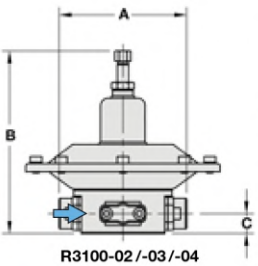



**G¼ up to G2**
**5…45/1500 mbar**

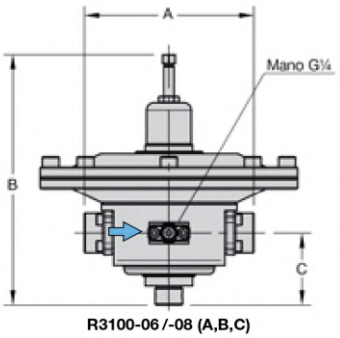
| Dimensions A mm | B mm | C mm | $K_v$-value ($m^3/h$) | Flow rate $m^3/h$*1 | l/min*1 | Connection-thread G | Pressure range mbar | Order number |
|---|---|---|---|---|---|---|---|---|
| **Low pressure regulator** | | | | | | made of SST, supply pressure max. 15 bar, non-relieving **diaphragm** NBR/Buna-N with PTFE coating, **FKM o-ring** | | **R3100** |
| 109 | 181 | 39 | 1.4 | 84 | 1400 | G¼ | 5… 45 | R3100-02A |
| | | | | | | | 10… 400 | R3100-02C |
| | | | | | | | 20…1000 | R3100-02D |
| | | | | | | | 50…1500 | R3100-02E |
| 109 | 181 | 39 | 1.4 | 84 | 1400 | G⅜ | 5… 45 | R3100-03A |
| | | | | | | | 10… 400 | R3100-03C |
| | | | | | | | 20…1000 | R3100-03D |
| | | | | | | | 50…1500 | R3100-03E |
| 109 | 181 | 39 | 1.4 | 84 | 1400 | G½ | 5… 45 | R3100-04A |
| | | | | | | | 10… 400 | R3100-04C |
| | | | | | | | 20…1000 | R3100-04D |
| | | | | | | | 50…1500 | R3100-04E |
| 161 | 234 | 69 | 1.4 | 84 | 1400 | G¾ | 5… 45 | R3100-06A |
| | | | | | | | 10… 120 | R3100-06B |
| | | | | | | | 10… 400 | R3100-06C |
| 161 | 296 | 53 | 8.4 | 576 | 9600 | | 15… 700 | R3100-06D |
| | | | | | | | 200…1200 | R3100-06E |
| 161 | 234 | 69 | 1.4 | 84 | 1400 | G1 | 5… 45 | R3100-08A |
| | | | | | | | 10… 120 | R3100-08B |
| | | | | | | | 10… 400 | R3100-08C |
| 161 | 296 | 53 | 8.4 | 576 | 9600 | | 15… 700 | R3100-08D |
| | | | | | | | 200…1200 | R3100-08E |

R3100-02/-03/-04

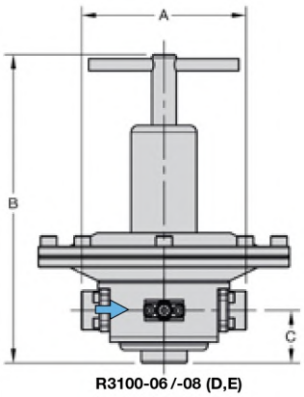
R3100-06/-08



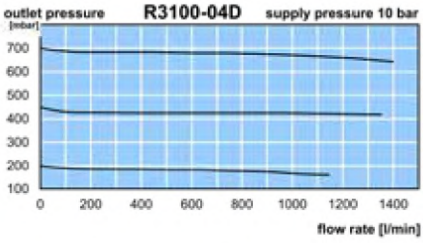

R3100-02/-03/-04

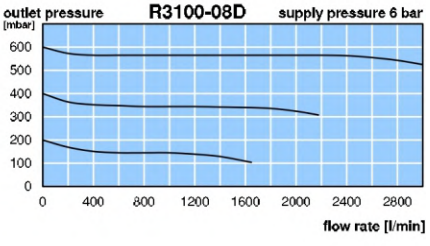



R3100-06/-08 (A,B,C)




R3100-06/-08 (D,E)




*1 at 6 bar supply pressure and max. outlet pressure

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# R3100 - Mano-détendeur basse pression en acier inoxydable, compatible avec air, ammoniaque, Co2, argon, azote, helium, hydrogène, méthane, gaz naturel, etc...

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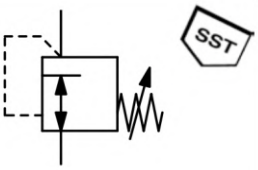
|---|---|
| **Description** | Precision low pressure regulator with large diaphragm, completely made of stainless steel. |
| **Media** | compressed air or gases |
| **Supply pressure** | max. 15 bar, min. 1 bar |
| **Air consumption** | without constant bleed |
| **Adjustment** | by adjusting screw |
| **Relieving function** | non-relieving |
| **Gauge port** | G¼ on both sides of the body, one screw plug supplied |
| **Mounting position** | any |
| **Temperature range** | 0 °C bis 80 °C / 32 °C to 176 °F, FKM or EPDM<br>0 °C bis 130 °C / 32 °C to 266 °F, high temperature version,<br>for appropriately conditioned compr. air down to -20 °C / - 4 °F, or low temperature down to -40 °C/-40°F |
| **Material** | Body: stainless steel 316L, material no. 1.4404 O-rings: FKM<br>Diaphragm: NBR/Buna-N with PTFE coating Inner valve: stainless steel 316L / 1.4404 |

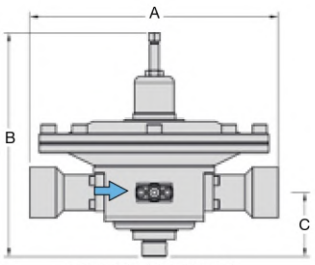



**G¼ up to G2**
**5…45/1500 mbar**

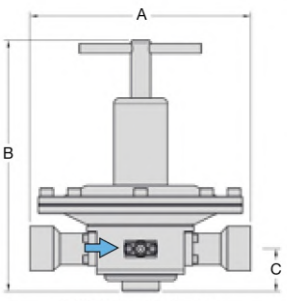
| Dimensions A mm | B mm | C mm | $K_v$-value ($m^3/h$) | Flow rate $m^3/h$*1 | l/min*1 | Connection-thread G | Pressure range mbar | Order number |
|---|---|---|---|---|---|---|---|---|
| **Low pressure regulator** | | | | | | made of SST, supply pressure max. 15 bar, non-relieving diaphragm NBR/Buna-N with PTFE coating, FKM o-ring | | **R3100** |
| 265 | 234 | 69 | 1.4 | 84 | 1400 | G1¼ | 5… 45 | **R3100-10A** |
| | | | | | | | 10… 120 | **R3100-10B** |
| | | | | | | | 10… 400 | **R3100-10C** |
| 265 | 296 | 53 | 8.4 | 576 | 9600 | | 15… 700 | **R3100-10D** |
| | | | | | | | 200…1200 | **R3100-10E** |
| 265 | 234 | 69 | 1.4 | 84 | 1400 | G1½ | 5… 45 | **R3100-1AA** |
| | | | | | | | 10… 120 | **R3100-1AB** |
| | | | | | | | 10… 400 | **R3100-1AC** |
| 265 | 296 | 53 | 8.4 | 576 | 9600 | | 15… 700 | **R3100-1AD** |
| | | | | | | | 200…1200 | **R3100-1AE** |
| 171 | 431 | 97 | 6.2 | 420 | 7000 | G1½ | 20… 50 | **R3100-12A** |
| | | | | | | | 50… 150 | **R3100-12B** |
| 171 | 467 | 97 | | | | | 150… 300 | **R3100-12D** |
| 171 | 430 | 97 | 25 | 1470 | 24500 | | 100…1000 | **R3100-12E** |
| 171 | 431 | 97 | 6.2 | 420 | 7000 | G2 | 20… 50 | **R3100-16A** |
| | | | | | | | 50… 150 | **R3100-16B** |
| 171 | 467 | 97 | | | | | 150… 300 | **R3100-16D** |
| 171 | 430 | 97 | 25 | 1470 | 24500 | | 100…1000 | **R3100-16E** |

R3100-10/-1A

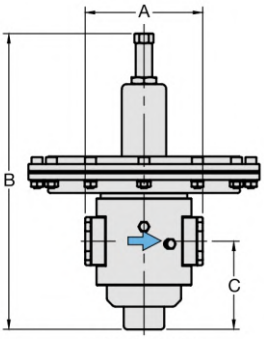
R3100-12/-16



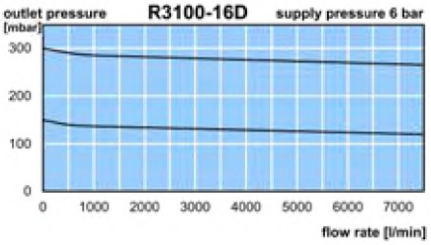

R3100-10/-1A (A,B,C)




R3100-10/-1A (D,E)




R3100-12/-16




*1 at 6 bar supply pressure and max. outlet pressure

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| **Relieving function** | non-relieving |
| **Gauge port** | G¼ on both sides of the body, one screw plug supplied |
| **Mounting position** | any |
| **Temperature range** | 0 °C bis 80 °C / 32 °C to 176 °F, FKM or EPDM<br>0 °C bis 130 °C / 32 °C to 266 °F, high temperature version,<br>for appropriately conditioned compr. air down to -20 °C / - 4 °F, or low temperature down to -40 °C/-40°F |
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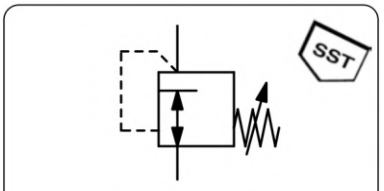



**G¼ up to G2**
**5…45/1500 mbar**

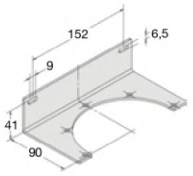
| Dimensions A mm | B mm | C mm | $K_v$-value ($m^3$/h) | Flow rate $m^3$/h*1 | l/min*1 | Connection-thread G | Pressure range mbar | Order number |
|---|---|---|---|---|---|---|---|---|

## Special options, add the appropriate letter

| | | | |
|---|---|---|---|
| **NPT** | connection thread | | R3100-. . . **N** |
| **EPDM o-ring** | | | R3100-. . . **E** |
| **EPDM o-ring** | FDA-approval | | R3100-. . . .**TD** |
| **down to -40 °C/-40 °F** | low temperature version | | R3100-. . . .**X51** |
| **up to 130 °C/266 °F** | high temperature version | | R3100-. . . .**X54** |
| **ammonia** | $NH_3$ | | R3100-. . . .**02** |
| **carbon dioxide** | $CO_2$ | | R3100-. . . .**03** |
| **argon** | Ar | | R3100-. . . .**05** |
| **nitrogen** | $N_2$ | | R3100-. . . .**07** |
| **helium** | He | | R3100-. . . .**09** |
| **hydrogen** | $H_2$ | | R3100-. . . .**11** |
| **methane** | $CH_4$ | | R3100-. . . .**13** |
| **natural gas** *2 | | | R3100-. . . .**14** |
| **oxygen** | $O_2$ | | R3100-. . . .**15** |
| **propane** | $C_3H_8$ | | R3100-. . . .**16** |
| **nitrous oxide** | $N_2O$ | | R3100-. . . .**17** |
| **flance connection** | according to EN-1092-1 or ASME B16.5 | on request | R3100-. . . .**F.** |

## Accessories, enclosed

| | | | |
|---|---|---|---|
| **pressure gauge** | Ø 63 mm, 0…*3 mbar, G¼, capsule type | up to 600 mbar | **MS6302-. .** *3 |
| | Ø 63 mm, 0…*4 bar, G¼, Bourdon tube | from 1 bar on | **MS6302-. .** *4 |
| **mounting bracket** | | for G¼ to G½ | **BW00-26S** |




**BW00-26S**

*1 at 6 bar supply pressure and max. outlet pressure
*2 without DVGW-approval
*3 **B6** = 0…60 mbar, **C3** = 0…250 mbar, **C4** = 0…400 mbar, **C6** = 0…600 mbar
*4 **02** = 0…2 bar, **04** = 0…4 bar, **06** = 0…6 bar

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