

Pressure regulator for drinking water (1.5 - 6 bar), PN 16



Reference	Connection, inch	DN	Max. flow, l/min	Max. flow, m3/h	Pressure regulation range, bar	L1, mm	L2, mm
M27DN	R 1/2	15	33	2	1.5-6	90	156
M27DP	R 3/4	20	56	3.4	1.5-6	90	158
M27DQ	R 1	25	88	5.3	1.5-6	100	183
M27DR	R 1 1/4	32	143	8.6	1.5-6	130	227
M27DS	R 1 1/2	40	226	13.6	1.5-6	130	270
M27DT	R 2	50	256	16	1.5-6	125	259

ENGLISH

Version:

Pressure reducing valve, independent of upstream pressure, with built-in strainer (DVGW component tested) for use in domestic water systems and industry. Adjustment scale for set pressure integrated in the handle.

Materials:

Bodies: Brass, spring hood: plastic with adjustment scale for setpoint pressure**

Temperature range:

+5°C to +30°C

Input pressure:

0 to 16 bar

Media:

Drinking and industrial water as well as chemical-free water for the most diverse industrial applications (no circulation water)

NEDERLANDS

Uitvoering:

Voordrukafhankelijke drukreductor met ingebouwde vuilvanger (typekeuring door DVGW) voor inzet in huishoudelijke watervoorzieningen en in de industrie. Instelschaal voor streefdruk ingebouwd in de handgreep.

Materialen

Lichaam: Messing, veerkap: Kunststof met instelverdeling voor gewenste druk**

Temperatuurbereik:

+5°C tot +30°C

Ingangsdruk:

0 tot 16 bar

Media:

Drinkwater en proceswater en ook chemicalienvrij water voor de meest uiteenlopende industriële toepassingen (geen circulerend water)

DEUTSCH

Ausführung:

Vordruckunabhängiger Druckminderer mit eingebautem Schmutzfänger (DVGW bauteilgeprüft) für den Einsatz in Hauswasseranlagen und Industrie. Einstellskala für Solldruck im Handgriff integriert.

Werkstoffe:

Körper: Messing, Federhaube: Kunststoff mit Einstellskala für Solldruck**

Temperaturbereich:

+5°C bis +30°C

Eingangsdruck:

0 - 16 bar

Medien:

Trinkwasser und Betriebswasser sowie chemikalienfreies Wasser für verschiedenste industrielle Anwendungen (kein Kreislaufwasser)

FRANÇAIS

Modèle :

Détendeur indépendant de la pression en amont avec purgeur incorporé (composants conformes DVGW) pour une utilisation dans les installations sanitaires domestiques et l'industrie. Échelle de réglage pour la pression de consigne intégrée dans la poignée.

Matériaux:

Corps: laiton, capot à ressort: matière plastique avec échelle de réglage pour pression de consigne**

Plage de température:

+5°C à +30°C

Pression d'entrée:

0 à 16 bar

Fluides:

Eau potable et d'exploitation, ainsi que l'eau sans produits chimiques pour applications industrielles variées (pas d'eau de circuit)

Purpose

The pressure reducer is used to reduce pressure and regulate the desired outlet pressure, primarily in domestic water supply systems. It maintains the adjusted outlet pressure at a nearly constant level, even when the inlet pressure fluctuates between, for example, 16 bar and the set outlet pressure, such as 3 bar. A steady and not excessively high pressure safeguards fittings and devices throughout the entire domestic water installation.

Function

The pressure reducer operates based on the principle of a relieved single-seat valve. It is controlled by the outlet pressure using a large diaphragm and a compression spring, the tension of which – and hence the outlet pressure – can be adjusted using the rotary knob.

Installation requirements

Comply with local installation regulations, general guidelines (e.g., WVU, DIN, DVGW, ÖVGW, or SVG), and technical data. The installation location must be frost-proof. Pressure-sensitive devices downstream must be sealed with safety valves. The pressure reducer should always be installed between shut-off valves. Additionally, it is recommended to install a domestic water filter upstream of the pressure reducer.

Installation

The installation is carried out in the cold water pipe. It is advisable to position the pressure reducer downstream of the water meter system to ensure similar pressure conditions in the cold and hot water systems of the building. Installation can be either horizontal or vertical. Ensure proper installation by following the flow direction arrow on the housing.

Commissioning

Close the shut-off valve after the pressure reducer, then slowly open the shut-off valve before the pressure reducer. Next, slowly open the shut-off valve after the pressure reducer, and finally, vent the pipeline through the nearest outlet valve after the pressure reducer.

Pressure setting: The pressure reducer comes factory-set to a back pressure of approximately 4 bar. If you need to change the back pressure setting, follow these steps: Loosen the locking screw, turn the knob until the desired set value appears on the backpressure setting display. The back pressure should not exceed 80% of the response pressure of the water heater safety valve (DIN 1988). The value displayed for the backpressure setting is a reference value; precise pressure measurement can be achieved with a pressure gauge. During adjustment, briefly open and close an outlet valve downstream of the pressure reducer several times. Note that when water is withdrawn, the outlet pressure may temporarily drop.

Inspection/Maintenance

Every technical system requires regular maintenance, which should be carried out by qualified personnel who also replace worn parts. In case of malfunctions, follow these steps:

If back pressure drops significantly when water is drawn, check the upstream domestic water filter, and replace the filter element if necessary. Also, inspect the strainer inside the pressure reducer and clean it if required.

If back pressure rises above the set value, readjust the pressure setting. If the pressure continues to rise, replace the entire valve insert.