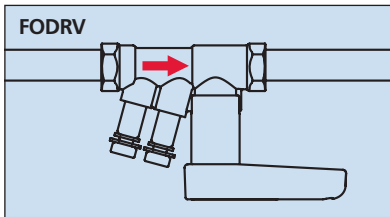
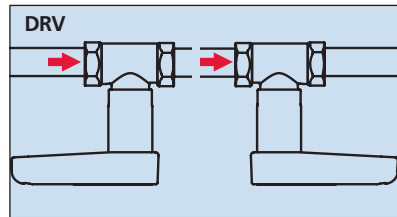


Installation guide and setting of balancing valves

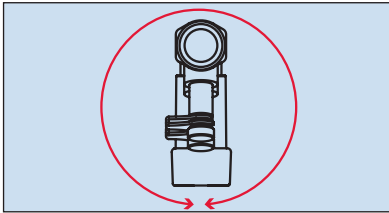
BALLOREX® VENTURI DN 15 - 50



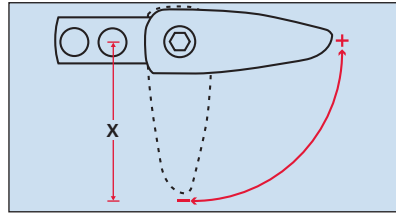
BALLOREX® VENTURI FODRV must be installed so that the flow direction is as indicated by the direction arrow on the valve body.



BALLOREX® VENTURI DRV can be installed regardless of the flow direction.



The valves can be installed with the valve spindle pointing in all directions.

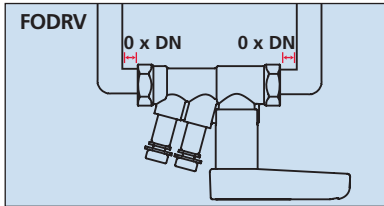


The isolation handle requires the following space to make a quarter turn (x):

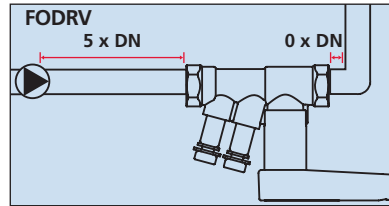
DN 15 – 25 = 75 mm

DN 32 – 50 = 122 mm

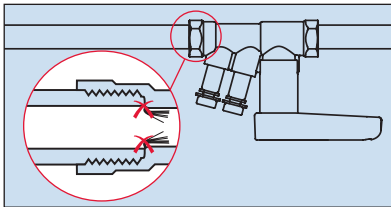
BALLOREX® VENTURI



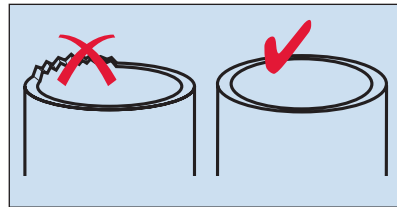
No requirements for straight pipe up- and downstream.



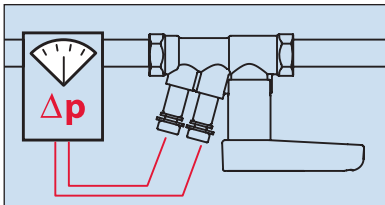
If a pump is installed immediately in front of the valve (commissioning valve installed on flow), a straight pipe of 5 x pipe diameter is required (upstream). No requirements for straight pipe sections after the valve (downstream).



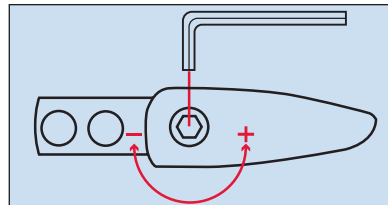
No impurities may enter the valve or pipes before and during the installation. Adapt the gland material in such a way that no part of it enters the pipe system.



All pipe ends should be smooth with all burrs removed prior to the installation of a valve.

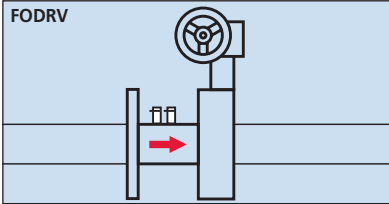


The flow rate through the BALLOREX® VENTURI FODRV can be measured with the BROEN FLOWMETER or other types of manometers. BALLOREX® VENTURI FODRV is supplied with two P/T plugs to measure the differential pressure across the Venturi. By measuring the differential pressure the flow rate can be calculated.

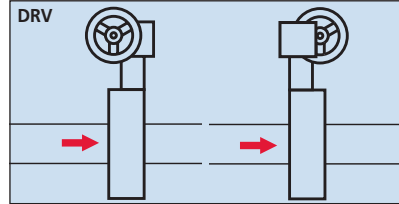


The flow rate can be regulated using an Allen key which engages the regulating spindle through the hole in the handle. If the Allen key is rotated to the left, the flow rate increases and it is reduced by turning to the right. The sizes of the Allen keys are 3mm for valves with the dimensions DN 15–25 and 5mm for DN 32–50.

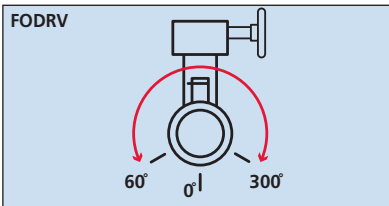
BALLOREX® VENTURI DN 65 - 300



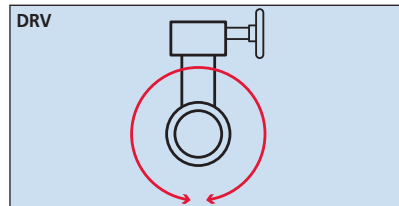
BALLOREX® VENTURI FODRV must be installed so that the flow direction is as indicated by the direction arrow on the valve body.



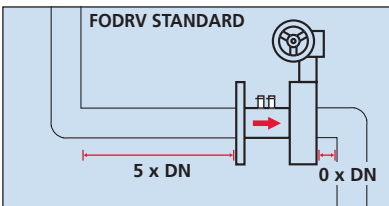
BALLOREX® VENTURI DRV can be installed regardless of the flow direction.



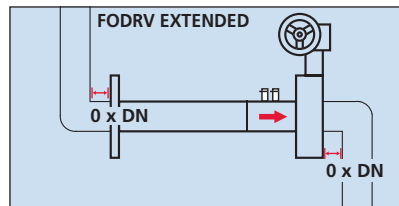
BALLOREX® VENTURI FODRV can be installed with the gearbox pointing in any direction. However, if the gearbox is mounted pointing down, it is assumed that there are no impurities in the system to affect the performance of the valve. If there is a risk of impurities, it is recommended to install the gearbox in an angle of 60 to 300 degrees.



BALLOREX® VENTURI DRV can be installed with the gearbox pointing in any direction.

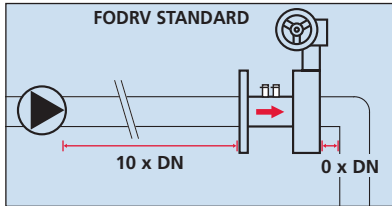


It is recommended to have a straight pipe length of minimum 5 x pipe diameter (DN) in front of the valve (upstream). There are no minimum requirements for straight lengths of pipe after the valve (downstream).

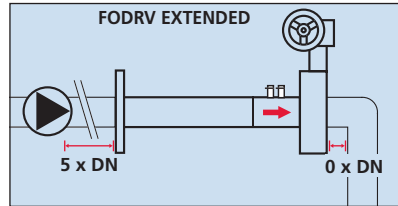


There are no minimum lengths of straight pipe in front of or after the BALLOREX® VENTURI FODRV model Extended.

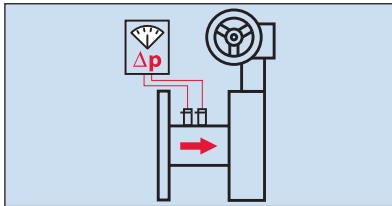
BALLOREX® VENTURI



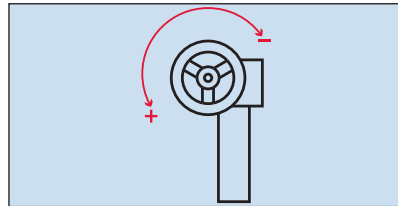
If a pump is installed immediately in front of the valve (commissioning valve installed on flow), a straight pipe of 10 x pipe diameter (DN) is required. No requirements for straight pipe sections after the valve.



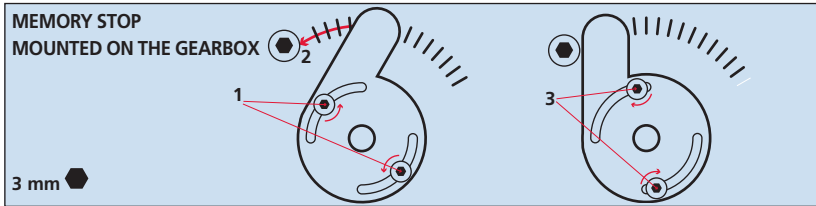
If a pump is installed immediately in front of the valve (commissioning valve installed on flow), a straight pipe of 5 x pipe diameter (DN) is required. No requirements for straight pipe sections after the valve.



The flow rate through the BALLOREX® VENTURI FODRV can be measured with the BROEN FLOWMETER or other types of manometers. BALLOREX® VENTURI FODRV is supplied with two P/T plugs to measure the differential pressure across the Venturi. By measuring the differential pressure the flow rate can be calculated.



The flow rate can be adjusted by rotating the handle of the gearbox. The flow rate increases by rotating the handle to the left (anti-clockwise) and is reduced by rotating it to the right (clockwise).



The valve isolates by turning the hand wheel to the right (clockwise) up to the "S" stamped on the gearbox. After the isolation has been completed, the valve is re-opened to the pre-set position when the indicator cam hits the stop post. The gearbox indication is in steps of 15°. The valve set point is best found by measuring the flow through the valve using the BROEN FLOWMETER and regulating the flow rate using the gearbox. The flow rate can be adjusted by rotating the handle

of the gearbox. The flow rate increases by rotating the handle to the left (anti-clockwise) and is reduced by rotating it to the right (clockwise). When the required flow rate has been achieved, the memory stop is locked. The memory stop is adjusted by loosening the screw (1) with a 3mm Allen key. The stop cam is then rotated to the stop post (2) and the screw (3) re-tightened. The memory stop is now locked.