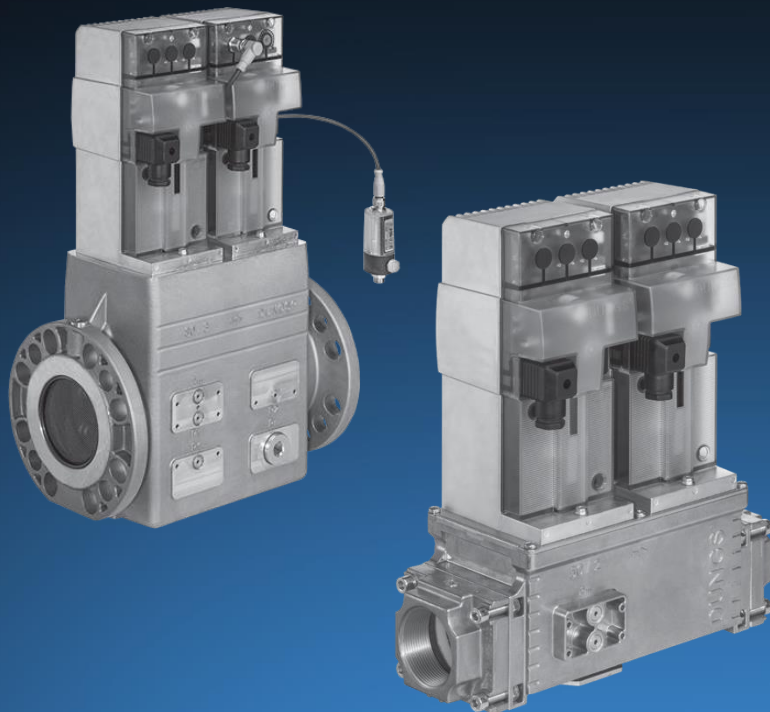


GasMultiBloc® Generation E



DUNGS ValveDrive Config App

The MBE multifunctional control combines the housing with two safety shutoff valves (ValveBody) and two electronic drives (ValveDrive) to actuate the safety valves and, optionally, to control the outlet pressure with a pressure sensor (PS).

DUNGS ValveDrive Config App Features

- Electronic outlet pressure setting
- Commissioning's / initial MBE installations support
- Regulation behaviour analysis and data logging
- Regulator parameter adjustments



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DUNGS ValveDrive Config App Features	Functionalities
Electronic outlet pressure setting	Pressure setting and deactivation of potentiometer of the MBE ValveDrive with regulation function. The potentiometer setting can be displayed electronically via Config App.
Commissioning's support	Electronic pressure setting, check of regulation behaviour, testing of different pressure sensor (PS) positions.
Regulation behaviour analysis and data logging	Visualized regulation behaviour (pressure and valve stroke) can support the optimal pressure setting. Data can be logged and exported for detailed analyses.
Regulator parameter adjustments	For sub-optimal regulation behaviour of the MBE with the standard regulator parameters the ValveDrive Config App can provide a regulator parameterisation functionality in an expert mode (only available after activation). Only recommended if the standard regulator parameters don't fulfil the specific regulation requirements.



The DUNGS ValveDrive Config App can be downloaded and installed via different channels:

- Installation via Microsoft App Store



- Direct link for MS App Store: <ms-windows-store://pdp/?productid=9PDWBFSX108H>
- Link to MS App Store via browser: <https://www.microsoft.com/store/apps/9PDWBFSX108H>
- Alternative:
 - Open the Microsoft Store on your Windows computer
 - Search for "DUNGS"
 - Install the DUNGS ValveDrive Config App



The DUNGS ValveDrive Config App can be downloaded via different channels:

- DUNGS website

<https://www.dungs.com/en/product/mbe-gasmultibloc/dungs-valvedrive-config-app>

Download Zip file: DUNGS_ValveDrive_Config_App_1.xx.zip

- Unpack the zip file to a destination of your choice
- After unpacking of the zip file install via Appxbundle-file (see page 6)

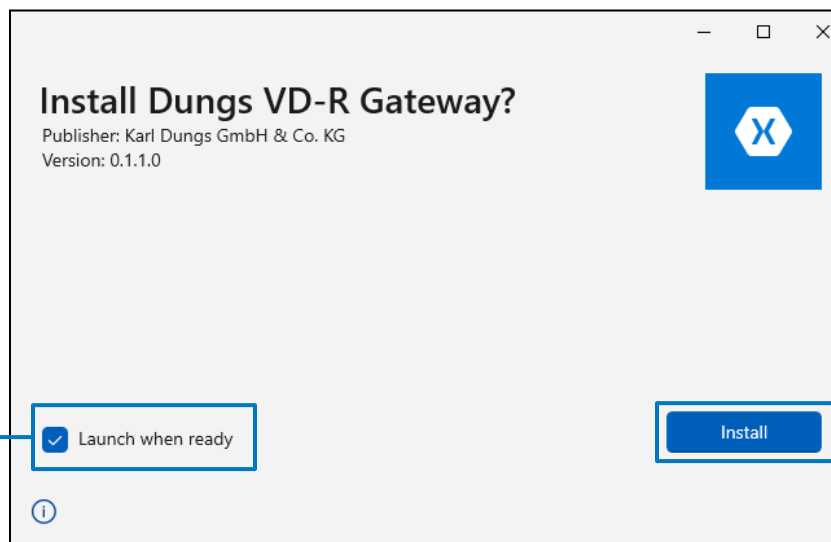


1. Double click and open the Appx-Bundle-file



Dungs_ValveDrive_Config.UWP.X.
X.X.X_x86_x64_arm.appxbundle

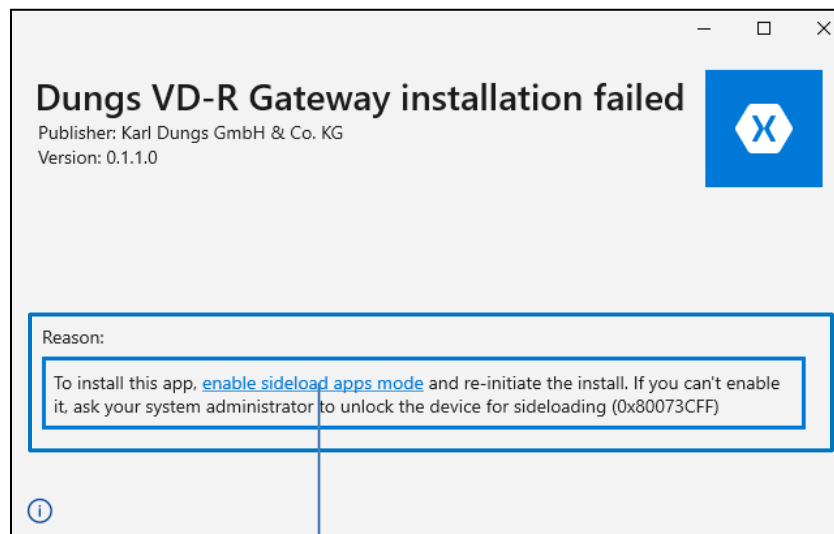
2. Click on „Install“ and follow the installation instructions



The app will launch after installation when this option is activated.

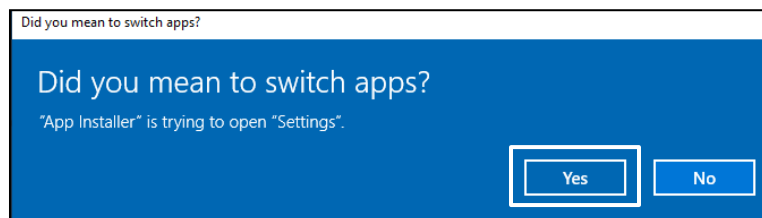


For failed installation the sideloading app mode has to be enabled

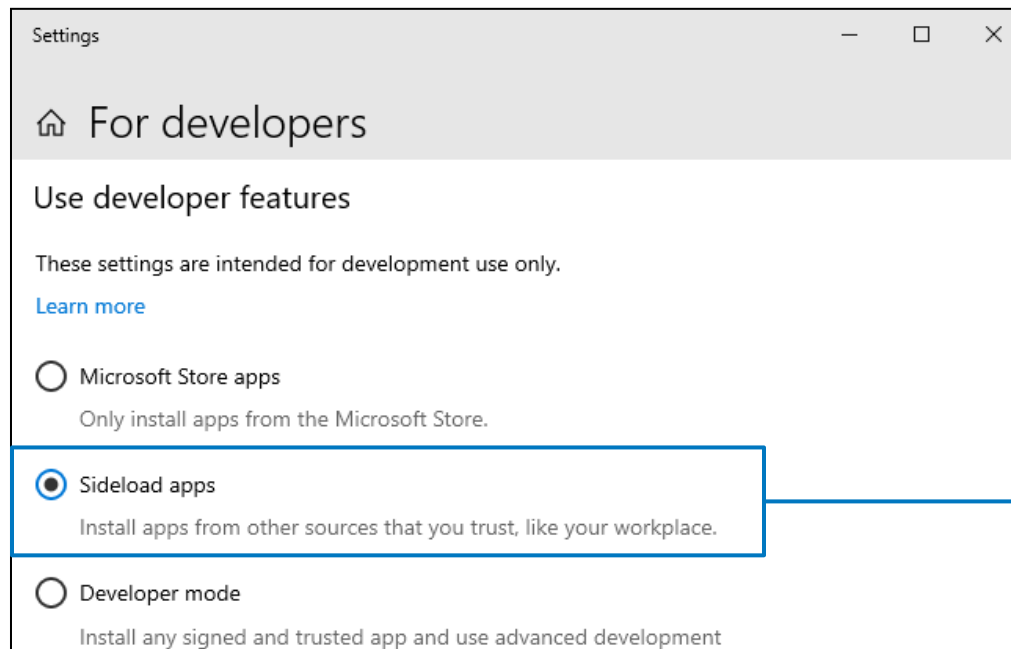


Please enable sideloading when required for the app installation.

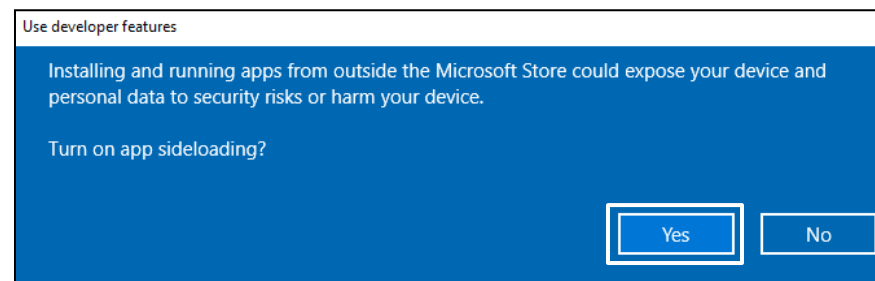
Click on link **„enable sideload apps mode“**. This step is only necessary when required from the installation tool.



Click on „Yes“



Activate „Sideload apps“



- Click on „Yes“ button
- Close the options window
- Restart the app installation with step 1.



If the installation fails, certain Microsoft software dependencies must be installed for the ValveDrive Config App.

The required software dependencies can be found in the installation folder "Dependencies". The tools needed for your computer depends on your Windows system architecture. You can determine this through the menu navigation in your Windows system:

Start > Settings > System > Info

Info e.g. for a 64-bit operating system

System type

64-bit operating system, x64-based processor

64-Bit-operating system (x64) dependencies



To install:
Microsoft.NET.Native.Framework
Microsoft.NET.Native.Runtime
Microsoft.UI.Xaml
Microsoft.VCLibs.x64

32-Bit-operating system (x86) dependencies



To install:
Microsoft.NET.Native.Framework
Microsoft.NET.Native.Runtime
Microsoft.UI.Xaml
Microsoft.VCLibs.x86



MBE Hardware:
ValveBody (VB)
ValveDrives(VD): VD-V + VD-R
PressureSensor (PS) & bus cable

CAN Adapter USB



M12 Sub Connector



T-Connector



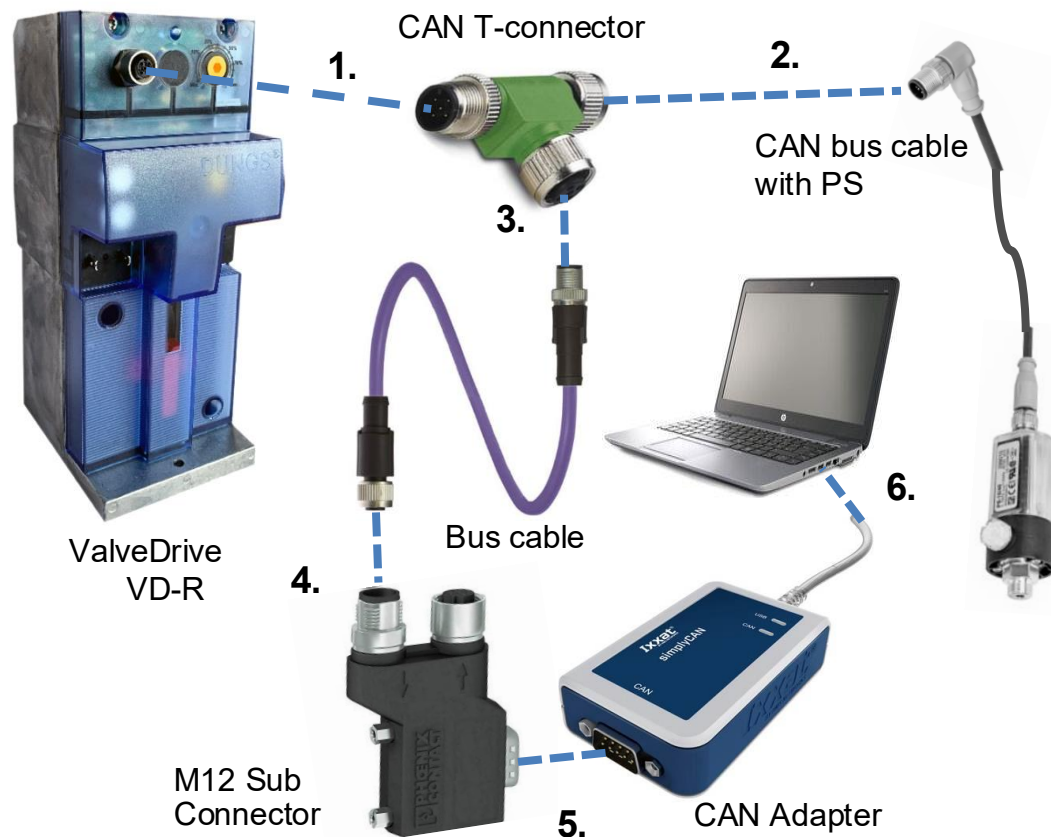
Bus Cable

Required Hardware Components Package

CAN Adapter USB	DUNGS Article Number 298570 The package includes the ValveDrive Config App (via download), required hardware, transport box and the user manual (via download and integrated in the ValveDrive Config App).
M12 Sub Connector	
T-Connector	
BUS Cable 3.0 m	



Only hardware approved by DUNGS may be used for the MBE ValveDrive Config App! No liability is accepted for the use of other hardware!



1. Mount the CAN T-connector directly on the ValveDrive VD-R
2. Connect the CAN bus cable of the PS with the CAN T-Connector
3. Connect the bus cable with the T-connector
4. Connect the bus cable with the input connection (flash symbol) of the M12 Sub Connector
5. Connect the M12 Sub Connector to the CAN Adapter and fix the screws
6. Connect the CAN Adapter to an USB port of your computer

Hint: 3., 4., and 5. can remain connected permanently for further use.



The basic settings of the ValveDrive Config App can be adjusted in the menu item "Settings". Setting options are: language and units for valve stroke, pressure and temperature.

☰ DUNGS ValveDrive Config

- 🔍 Status
- 📈 Data logging
- ⚙️ Settings**
- 📖 Manual
- 🗣️ Info & Support

Settings

General

Language

English (US) ▼

Unit system

Custom ▼

Individual units

Valve stroke

☒ mm

☐ inch

Pressure

☒ mbar

☐ Pa

☐ kPa

☐ "WC

☐ psi

Temperature

☒ °C

☐ °F



Adjustment of output pressure via MBE ValveDrive potentiometer with a 4 mm Allen key and electronic adjustment / display via ValveDrive Config App:

☰ DUNGS ValveDrive Config

🔍 Status

📈 Data logging

⚙️ Settings

📖 Manual

🗣️ Info & Support

Adjust on MBE



Please be aware that the target pressure can't be adjusted on the MBE as long as this parameter is turned off.



If the potentiometer is deactivated (electronic output pressure setting via ValveDrive Config App), the potentiometer on the ValveDrive remains deactivated until it is reactivated via Config App. It is recommended to adjust the potentiometer with electronic adjustment via Config App.

If deactivation of the output pressure via potentiometer is desired (e.g. to prevent adjustment by unauthorised persons), this can be realised by electronic adjustment via the ValveDrive Config App.



Electronic adjustment of the outlet pressure via ValveDrive Config App

DUNGS ValveDrive Config

Status

Data logging

Settings

Manual

Info & Support

Adjust on MBE



⚠ Please be aware that the target pressure can't be adjusted on the MBE as long as this parameter is turned off.

The setting on the potentiometer must be deactivated for an electronic pressure setting.

Target pressure

28,128 mbar



4 100

Set the target pressure either via keyboard and mouse or slider. Reset to the last stored value possible.

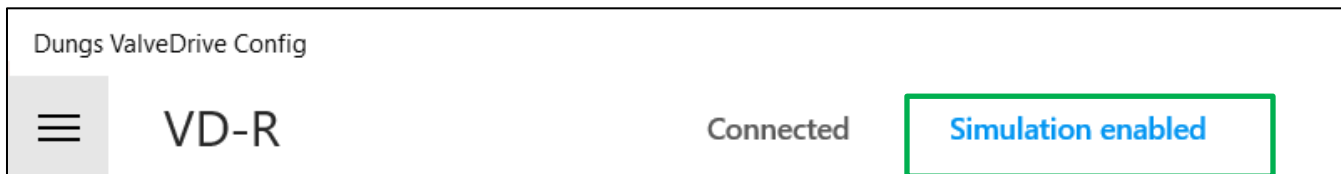
**Attention**

If the output pressure is set electronically, the setting via the MBE potentiometer is deactivated. Before closing the ValveDrive Config App, the setting of the output pressure via the MBE potentiometer should be reactivated and set to the required output pressure via potentiometer.



The simulation mode enables the simulation and demonstration of the ValveDrive Config App functionalities without connected hardware. An operation mode is simulated, which is visualised in the menu items "Status" and "Data Logging". The settings can be adjusted individually.

To start the simulation mode just click on the "Simulation disabled" text.



The simulation is now activated and can be stopped by clicking on "Simulation enabled".



The MBE ValveDrive regulator parameterisation is only intended for exceptional purposes. Normally, the standard regulator parameters should be suitable for the respective application and additional regulator parameterisation should not be necessary. The functionality of the regulator parameterisation of the ValveDrive Config App can only be activated via the DUNGS Customer Support Center. The regulator parameterisation requires expert knowledge in the area of PID controller settings. Proactive regulator parameterisation is not recommended and can lead to instability and deterioration of the control behaviour.

Parameterisation Activation Process

To activate the ValveDrive regulator parameterisation, please contact our Customer Support Center. Please open your ValveDrive Config App and the menu item “Activation” & connect your CAN Adapter to your computer before contacting our customer and sales support. The hardware ID number of your CAN Adapter is required for activation.

Telephone: +49 7181 804-804

E-Mail: supportcenter@dungs.com



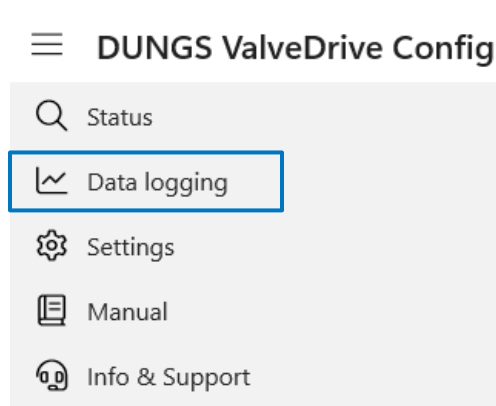
Attention

All modifications must comply with the requirements of the valid standards. DUNGS shall not assume any liability for material or personal damage that may result from improper use or parameterisation by the DUNGS ValveDrive Config App.



For detailed data analyses (pressure regulation, valve stroke) the ValveDrive Config app provides data logging functionalities. As soon as the “Data logging” menu point in the app is started the logging process will start. The logging can be set manually and stopped manually. After logging the data can be exported and saved in a CSV file for detailed analyses.

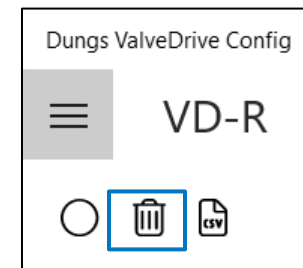
Start data logging



Stop data logging



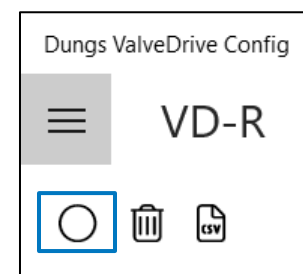
Delete logged data



Data export (CSV)



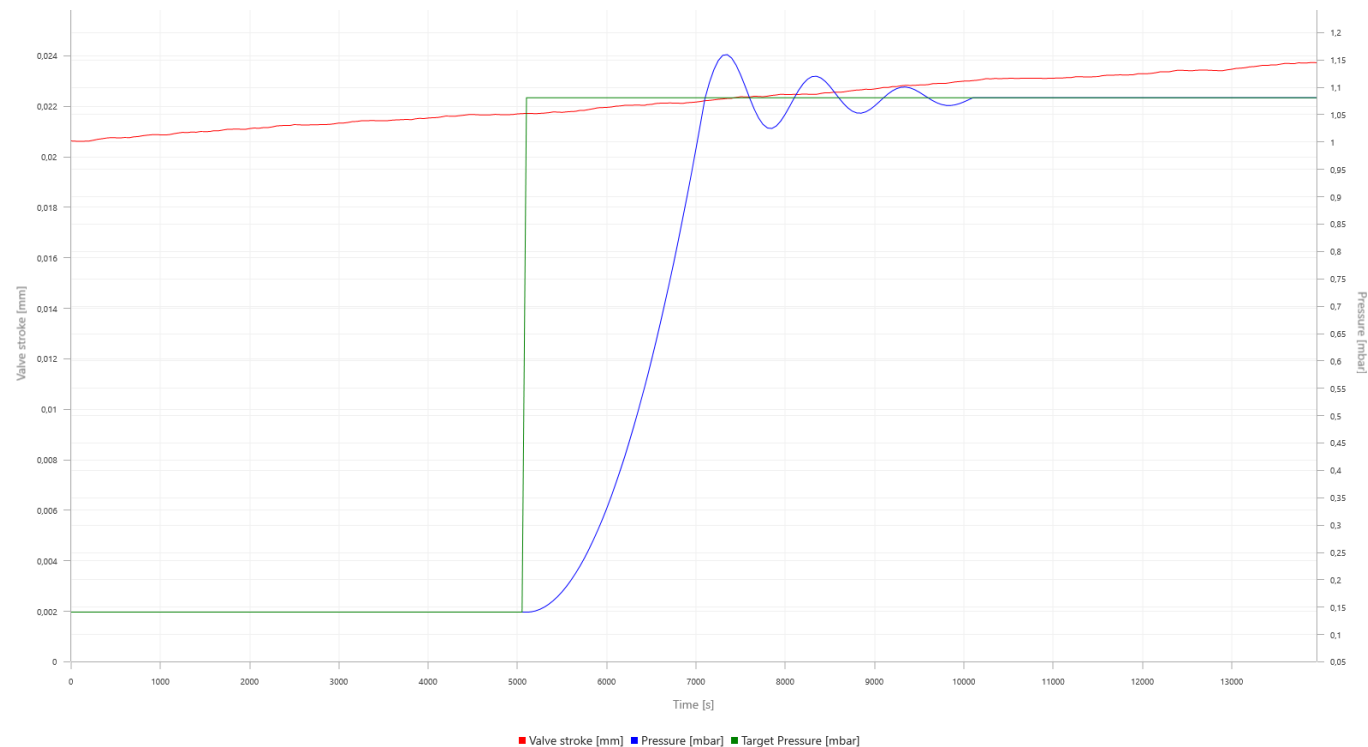
Start new data logging





Data Logging Analyses

Zoom into a specific area of the diagram by stopping the recording and marking it with mouse operation. To return to the overview screen simply double click in the diagram.



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