

NR8000-v3 – Option valvegata control



Fig.: NR8024-v2 for
24 zones



Fig.: NR7064 for
64 zones

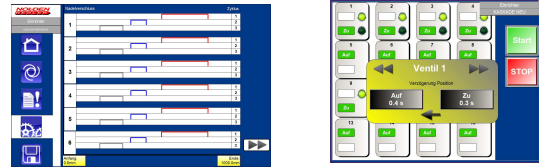


Fig.: Examples touchscreen operation

- **Valvegata operation directly from the hotrunner temperature controller**
- **Solenoid valves for hydraulic and pneumatic cylinders can be used**
- **Signal exchange with the injection press via interface, e.g. EUROMAP**
- **Comfortable, easy to understand touch-screen operation**
- **Available for all controllers NR8000 (tower or high casing), can also be retrofitted**

Application :

Hotrunner diagnosis and process devices series NR8000 with touchscreen operation can be fitted with integrated valvegata operation as an option. All types of motorization can be controlled, such as solenoid valves, servomotors and steppers with and without encoder. The option described hereunder concerns solenoid valves for pneumatic od hydraulic cylinders, this is an easy and economic way to realise any sequential control operation for your hotrunner.

All necessary control hardware is mounted directly into the casing of the hotrunner controller, this makes operation and wiring of the system very easy and space-saving. All operation menus of the touchscreen system follow a similar logic, this makes work with the system intuitive and easy to learn. Common functions such as loading the mould data from the memory only need to be done once.

For operation without injection press such as testing or maintenance work, a manual control unit with emergency stop comes standard..

Mounting of the valvegata option can also be done later on any NR8000 controller. The only detail to be watched is casing space for all desired options in the future. Thus, buying a smaller system in a bigger casing (e.g. medium or big tower for NR8000 Tower, high casing for NR8000 desktop) might be a smart solution. This also permits to install additional heating zones later on.

Solenoid valve operation :

Standard control equipment permits to operate up to 18 valves (NR8000 Tower) or 12 valves (NR8000 desktop), more valve control channels are available. Please indicated the desired type of valves (pneumatic or hydraulic), as the power supply is different.

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The following operation modes are possible :

Automatic sequential / synchronous mode:

- Time controlled :

All valves are opened and closed individually, an own delay time for open and close movements with regard to the injection press signals can be set for each valve. Synchronous movement of all needles is also possible.

- Screw position based control :

All valves are opened and closed individually, but opening and closing time depends on the screw position the injection press. To do so, an appropriate interface must be available, this is analogue 0-10V DC on most presses.

In both automatic control modes, 1 up to 4 movements of each needle per injection cycle can be set. Furthermore, inputs for 2 proximity switches for every valve (cylinder) come standard. Finally, an internal or external temperature interlock can be set. This prevents damaging of the valvegata control elements in case of a cold hotrunner.

Manual operation mode (test) :

Each valve can be opened and closed individually for test purposes, this allows also to check the proximity switches for every position, if activated.

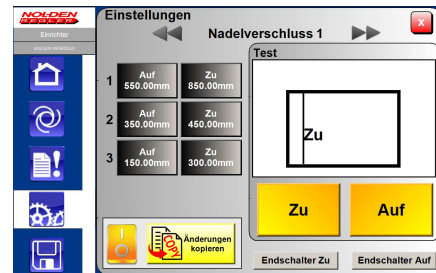


Fig.: Touchscreen for manual operation



Fig.: Manual operation unit / Emergency-STOP

Specification :

Solenoid valves

- Solenoid valve type 5/2-way monostable, e.g. FESTO MFH-5-1/4-B (pneumatic)
- Solenoid 24V DC, 167mA, 4W, e.g. FESTO MSFG-24/42-50/60
- Alternatively : 24V DC, 1.500mA for hydraulic cylinders

- Proximity switch type Reed 5...30V DC, PNP, e.g. FESTO SMT / SME

Other types solenoid valves and proximity switches on demand

Please check also the specification of the hotrunner-controller, for which the option is intended !

Product overview

Product :

- Option valvegata control solenoid valve NR8000 18 valves pneumatic
- Option valvegata control solenoid valve NR8000 12 valves pneumatic
- Option valvegata control solenoid valve NR8000 10 valves **hydraulic**

Art.-number :

836xx.x4x
836xx.x4x12
836xx.x4xH