



DMS

Pressure measurement system – optimises the filling process

A winner in combination with the hot runner controller

Since 2018 in our assortment the pressure measurement system DMS boasts high filling study precision and enables optimum cycle times during the filling process. The automatic detection of good / bad parts ensures a high degree of automation. The pressure curve indicates whether the temperature for melting the raw material should be increased or reduced in order to achieve an optimised filling of the cavity. The settings for the mould cavity pressure are stored in just one mould data set. The visualisation occurs via the connected temperature controller. DMS can be used irrespective of the sensor brand.

The main features in brief:

- ✓ Compact add-on device
- ✓ For 4 to 32 zones in steps of 4
- ✓ Additional analogue input 0-10V
- ✓ Operation via hot runner control devices
- ✓ Automatic pressure point switching

Technical data

Housing:

Aluminum, colour RAL 5010 gentian blue, special colours available upon request

Dimension/weight:

According to „Equipment designs“ table (see below)

Channels (pressure inputs):

4 to 32 in 4 steps with 6 pin connection, measuring range 0 - 2000 bar,

Sensitivity 1.5pC/bar to 10pC/bar
 1 analog pressure input 0-10V / 12-Bit
 1 analog pressure input 0-10V / 12-Bit

Operation / Visualisation:

Any hot runner control units of the “TP” or “VARIO” series (From program version 3.3)

Control inputs:

1 contact input 24VDC for cycle start
 1 contact input 24VDC for future expansions

Switching outputs:

1 potential-free contact input (1A/24V) for future expansions

Interfaces:

1x Ethernet connection to the “TP” or “VARIO” control interface (LAN1),
 1x Ethernet connection for external use (LAN2)

Pressure transducer connection:

See diagram of the equipment

Power supply:

110...240 VAC +10...-10%, 50...60 Hz, 1P / N / PE

Control fuse:

Fusible cut-out MT 6.3 A, 5 x 20 mm

Power supply:

Mains cable with schuko plug length 4m

Ambient temperature:

Operation 0...+50°C, storage -30...+70°C

Climatic application class:

According to DIN 40 040, relative humidity $\leq 75\%$ in the annual average, no condensation

Protective system:

IP20

Protection class:

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User interface



1. Hot runner controller
2. Visualisation
3. Pressure measurement system

Device rear view



1. Connection 0-10V input
2. Pressure transducer connection
3. 2x Ethernet connection
4. Controlling signal from and to the machine
5. Power supply

Depending on specification, the rear view may differ from this picture.

Device models

Type	Channels	Item no.	Size (mm) B x H x T	Weight app. (kg)
DMS 4	4	1700-0001-04	341 x 175 x 250	5
DMS 8	8	1700-0001-08		
DMS 12	12	1700-0001-12		
DMS 16	16	1700-0001-16		
DMS 20	20	1700-0001-20		
DMS 24	24	1700-0001-24		
DMS 28	28	1700-0001-28		
DMS 32	32	1700-0001-32		

0000: will be replaced by a custom version number in the case of special equipment

Properties

- Additional analog input 0-10V (for e.g. pressure measurement at the screw) is available as standard.
- Control, operation and tool management takes place via the hot runner control units of series „TP“ or „VARIO“ (from programme version 3.2)
- Three pressure curves per channel are administered (current, last, next to last)
- Applicable regardless of brand
- Clear graphic process description
- Contact input for „injection start“ is available as standard.
- The specifications for the cavity pressure and hot runner temperature are stored on mould data records and are compatible with all „TP“ or „VARIO“ series devices.

Accessories

Product

Pressure transducer 2.5 mm	on request
Pressure transducer 4.0 mm	910-00-40
Pressure transducer 5.0 mm	on request
Customer-specific connection cable	on request
Proximity sensor for calculation of the cycle start	910-00-10



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Do you have any questions about our products?

Our service advisors will be happy to help.