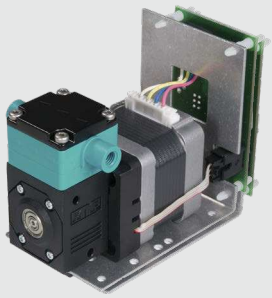
FEM 1.02
DIAPHRAGM DOSING PUMP

FEM 1.02 KP.27SM-2



FEM 1.02 KP.55RC

ADVANTAGES

- Excellent repeatability
- Constant results over a long period of time
- Large dosing range 1:100
- High chemical resistance
- Self priming
- Long life > 10'000 h
- Various control possibilities
- Available with integrated overpressure relief valve (version .27)
- .55RC version with integrated electronics for delivery of partial strokes and remote control

POSSIBLE AREAS OF USE

- Medical diagnostics
- Industrial dosing systems
- Fuel cells
- Semi conductor industry
- Water analysis

Please visit our website
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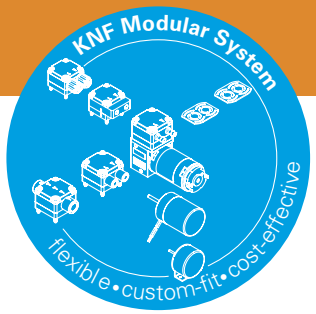
to get more information.



PERFORMANCE DATA				
Series model	**FEM 1.02 SM-2**			**FEM 1.02 .55RC**
Material options	**KP**	**KT**	**TT**	
Pump head	PP	PP	PVDF	
Diaphragm	PTFE	PTFE	PTFE	
Valves	EPDM	FFKM	FFKM	
Flow rate (ml/min)	0.2 - 20			0.2 - 20
Nominal stroke volume (µl)	180			5 - 180
Accuracy (%)	+/- 10			+/- 2
Repeatability (%)	+/- 1			+/- 1
Suction height (mWg)	4			4
Pressure head (mWg)	60			60
Permissible ambient air (°C)	+5 to +40			+5 to +40
Permissible liquid temperature (°C)	+5 to +80			+5 to +80
Weight (g)	340			390
IP protection factor	40			40
ELECTRICAL DATA				
Perating voltage (V)[1)]	5.52			12 - 24
Power consumption (W)	15			19
I load max. (A)	0.6			0.5

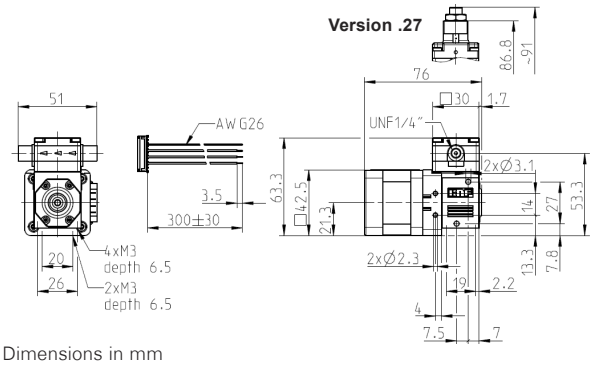
[1)] Depends on type of controlller

FEM 1.02 SM-2

PERFORMANCE DATA

Series model	Flow rate at atm. pressure (ml/min)	Max. suction height (mWg)	Max. pressure head (mWg)
FEM 1.02 SM-2	0.2 - 20	4	60

FEM 1.02 SM-2



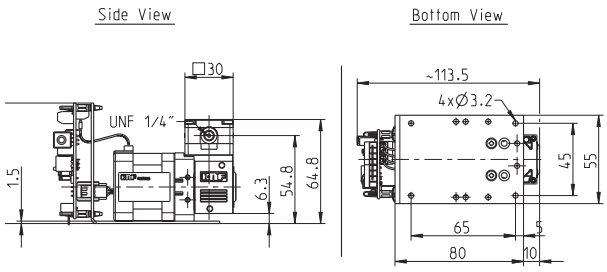
Dimensions in mm

FEM 1.02 .55RC

PERFORMANCE DATA

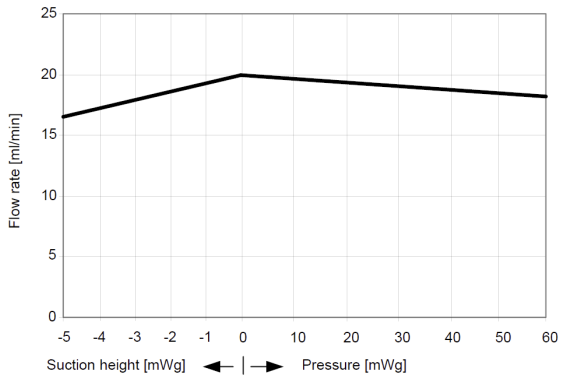
Series model	Stroke volume (µl)	Max. suction height (mWg)	Max. pressure head (mWg)
FEM 1.02 .55RC	5 - 180	4	60

FEM 1.02 .55RC

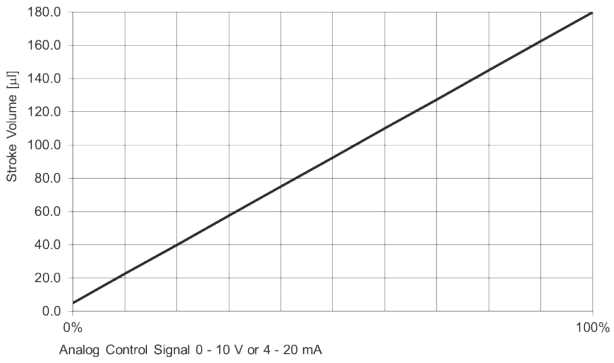


Dimensions in mm

FEM 1.02 SM-2 FLOW CURVE



FEM 1.02 .55RC STROKE VOLUME



OPTIONS

Description	Illustration	Details
Diaphragm pressure control valve (Version .27)		The pressure control valve can be used for a more accurate control of flow against a fluctuating back pressure, metering into a vacuum and from a pressurised system.
Hall Sensor - position recognition of the diaphragm		A Hall Sensor can be integrated into the pump so that it is possible to monitor the position of the diaphragm. This allows the pump to be controlled in different ways.
Different hydraulic connection types		Compression fittings, John Guest etc.

ACCESSORIES

Description	Illustration	Details
Control module		Especially in the development phase it is useful to try different options out without investing a lot of time programming. Due to this reason we offer a flexible controller which can be adapted for many different applications.
Filter		KNF filters protect both pumps and other upstream instrumentation and hydraulic circuits against particulate, crystals and fibres which can improve optimum operation.

The performance values for the series models shown on this data sheet were determined under test conditions.
The actual performance values may differ and depend in particular on the usage conditions and therefore on the specific application, on the parameters of the components involved in the user's system and on any technical modifications carried out which deviate from the standard configuration or the as delivered condition.

If individual designs have been created for specific customers on the basis of series models, other technical performance data may apply.
Before operation begins, the relevant operating instructions and/or assembly or installation instructions should be read and the safety information contained in these instructions should be noted.
KNF reserves the right to make changes to the product and the associated documentation without prior notice to the customer.

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