



USEFUL FUNCTIONS SATISFY MANY  
KIND OF APPLICATIONS  
HIGH EFFICIENCY SOLENOID DRIVEN  
CHEMICAL INJECTION PUMP

# NIKKISO EIKO

## NF SERIES

Solenoid Driven Diaphragm  
Type Metering Pump NF Series



- Water treatment Chemical Injection
- Cooling Tower Chemical Injection
- Electro Plating Chemical Injection
- Sterilize, Coloring, Additive Chemical Injection

Max. capa <b>200ml/min</b>	Max. press <b>1.0MPa</b>	Max. Stroke <b>300spm</b>	<b>Energy Saving</b>	<b>IP65 Equivalent</b>	<b>Superior Chemical Stress</b>	<b>LCD Display</b>
			<b>Base Rotation</b>	<b>Key Lock</b>	<b>Free Power Source</b>	<b>Easy Operation</b>

**NF**   **F**   **30**   **-**   **D**   **C**   **F**   **-**   **M**  

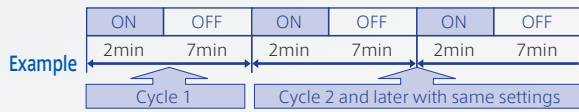
①   ②   ③   ④   ⑤   ⑥   ⑦   ⑧

<p><b>① Series</b></p> <p><b>NF</b> NF series</p>	<p><b>④ Diaphragm Head Material/Type</b></p> <p><b>D</b> PVDF (General chemicals)  <b>A</b> PMMA (Hypochlorite)  <b>J</b> PMMA (Hypochlorite) Auto Air Venting type (NFF30, 60, NFF80)  <b>M</b> 316 Stainless Steel  <b>T</b> PTFE</p>	<p><b>⑦ Power end/Control Style</b></p> <p><b>M</b> Standard Type Manual ON-OFF Interval Timer</p> <p><b>P</b> Multi-function Pulse Input Control Type Manual ON-OFF Interval Timer External contact input</p> <p><b>A</b> Multi-function Analog Input Control Type Manual ON-OFF Interval Timer External contact input</p>
<p><b>② Power consumption (Average)</b></p> <p><b>F</b> 14W (NFF30, 60)  <b>H</b> 22W (NFF80, 100, 200)</p>	<p><b>⑤ Ball Valve Material</b></p> <p><b>C</b> Ceramics  <b>M</b> 316 Stainless Steel</p>	<p><b>⑧ Special Specification</b></p>
<p><b>③ Pump size (Capacity)</b></p> <p><b>30</b> 30ml/min at 1.0MPa  <b>60</b> 60ml/min at 0.7MPa  <b>80</b> 80ml/min at 1.0MPa  <b>100</b> 100ml/min at 0.6MPa  <b>200</b> 200ml/min at 0.35MPa</p>	<p><b>⑥ O Ring/Valve Seat Material</b></p> <p><b>E</b> EPDM  <b>F</b> FPM  <b>T</b> SP Fluorine Rubber/PTFE</p>	

## Simple timer

M P A

Successive ON/OFF operations can be set between 1 and 9,999 min.



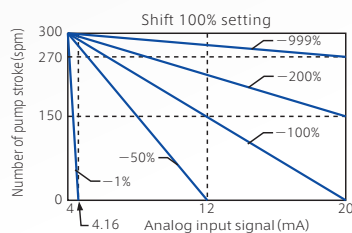
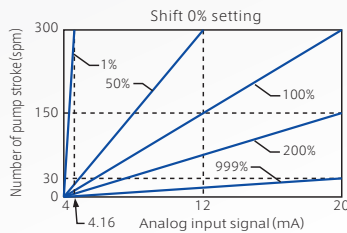
Note: ON and OFF times can be set for any period between 1 and 9,999 min, but the settings for Cycle 2 or later are the same as Cycle 1.

## Proportional flow rate control (via a flow meter with a pulse generator, or similar device) P

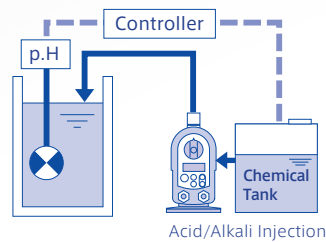
- (1) **Pulse dividing mode.** Pump operates for 1 stroke in response to a preset no-voltage pulse input (1/9999-1 pulse)
- (2) **Pulse magnifying mode.** Pump operates for a preset number of strokes (1-9999 strokes) in response to a single input of a no-voltage pulse.

## Analog (4-20mA) signal input control (Proportional gain setting, Shift setting) A

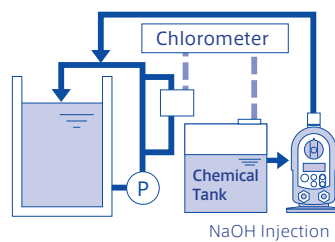
**Proportional gain setting** (Setting for a pump-strokes against an analog input signal)



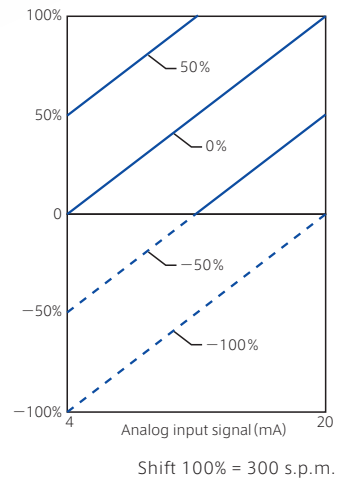
### pH control



### Residual chlorine control



**Shift setting**



Shift 100% = 300 s.p.m.

\*Please contact Nikkiso Eiko about control units

## Specification

Model	NFF30	NFF60	NFH80	NFH100	NFH200
Max. Discharge Capacity (mL/min) *1	30	60	80	100	200
Max. Discharge Pressure (MPa)	1.0	0.7	1.0	0.6	0.35
Diaphragm Dia.	φ37.5	φ44	φ44	φ51	φ58
Inlet & Outlet Hose Size	φ4xφ9 PVC Braid Hose *1		φ6xφ11 PVC Braid Hose *2		
Air Venting Hose Size	φ4xφ7 PVC Hose				
Number of Stroke	1-300 spm (LCD Digital Display)				
Stroke Length Adjusting Range	50~100%				
Power Supply	Single Phase AC 100- 240V ±10% 50/60Hz Free power supply				
Max. Electric Current	2.5A		3.7A		
Power Consumption (Average)	14W		22W		
Protection	Equivalent to IP65				

Remarks :

- 1) The discharge capacity is based on Max. discharge pressure/100% stroke length/300s.p.m.
- 2) Basic performance data are on last page.
- 3) Max. allowable viscosity : 50mPa-s
- 4) Optional size hoses available only change an union nut collar.

\*1 : Option : φ6xφ11, φ6xφ8  
\*2 : Option : φ6xφ8

**⚠** Notice for the safety operation : To use a pump for safety, be sure to read the instruction manual before your operation.

Product(s) (including parts, technical data or information thereto) described in this catalog shall be subject to export control laws and regulations of Japan or the US. You need to obtain the approval from appropriate government(s) when you export if such laws and regulations require.



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