

ORDERING INFORMATION

MODEL : M6xXF2

PLEASE FILL IN THIS SECTION



Model
Company
Name
P/O No.

FACTORY USE ONLY



Job No.	Approved by (Sales office)
Ser No.	Issued by (Sales office)
Sales	Approved by (Factory)
	Set by (Factory)
Ser No.	

Specify the items you want to change. Default setting will be used if not specified.

DEFAULT shows values in case of nothing specified.

SETTING

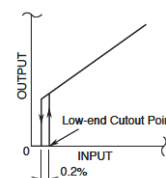
PARAMETER	AVAILABLE VALUE	DEFAULT VALUE	SET VALUE	Factory Internal check	
Input 1	Low-end cutout *1	0.0000 ~ 99.9999 %	0.000 % (Low-end cutout function is cancelled.)	%	<input type="checkbox"/> Checked
	Input high limit *2	90.0000 ~ 102.0000 %	102.0000 %	%	<input type="checkbox"/> Checked
	Input low limit *2	-2.0000 ~ 10.0000 %	-2.0000 %	%	<input type="checkbox"/> Checked
Input 2	Low-end cutout *1	0.0000 ~ 99.9999 %	0.0000 % (Low-end cutout function is cancelled.)	%	<input type="checkbox"/> Checked
	Input high limit *2	90.0000 ~ 102.0000 %	102.0000 %	%	<input type="checkbox"/> Checked
	Input low limit *2	-2.0000 ~ 10.0000 %	-2.0000 %	%	<input type="checkbox"/> Checked
Equation	Equation(See Table 1.)	·Temperature compensation ·Temperature compensation (square root) ·Pressure compensation ·Pressure compensation (square root) ·Addition / Subtraction ·Multiplication ·Division ·High selector ·Low selector	Addition / Subtraction	<input type="checkbox"/> Temperature compensation <input type="checkbox"/> Temperature compensation (square root) <input type="checkbox"/> Pressure compensation <input type="checkbox"/> Pressure compensation (square root) <input type="checkbox"/> Addition / Subtraction <input type="checkbox"/> Multiplication <input type="checkbox"/> Division <input type="checkbox"/> High selector <input type="checkbox"/> Low selector	<input type="checkbox"/> Checked
	K0	-29.9999 ~ 29.9999	1.0000		<input type="checkbox"/> Checked
	K1	-29.9999 ~ 29.9999	1.0000		<input type="checkbox"/> Checked
	K2	-29.9999 ~ 29.9999	1.0000		<input type="checkbox"/> Checked
	A0	-299.9999 ~ 299.9999 %	0.0000 %	%	<input type="checkbox"/> Checked
	A1	-299.9999 ~ 299.9999 %	0.0000 %	%	<input type="checkbox"/> Checked
	A2	-299.9999 ~ 299.9999 %	0.0000 %	%	<input type="checkbox"/> Checked
	Linearization *3	0:Disable 1:Enable	0:Disable	<input type="checkbox"/> 0:Disable <input type="checkbox"/> 1:Enable(Use the LINEARIZATION table.)	<input type="checkbox"/> Checked
Filter time constant *4	0 (No filter) 0.5 ~ 30 sec.	0 (No filter)	Sec.	<input type="checkbox"/> Checked	

*1. Low-end cutout

The input signals below the low end cutout point are handled as 0%.

The point has 0.2% hysteresis (deadband). The low-end cutout is applied exactly at the point when an increasing signal passes through the point, while it is applied at -0.2% of the point when a decreasing signal passes through it.

Set between 0.0000% and 99.9999%. With 0.0000% setting, the low-end cutout function is cancelled.



When the output low limit is set to a value higher than 0%, the input below the low-end cutout point is forced to the value, not 0%.

***2. Input high limit, Input low limit**

The output signal is limited within the range between the high limit and the low limit.

For example, when the high limit is set to 90% and the low limit to 10%, the input signal between 90% and 102% is converted as 90%, while the input between -2% and 10% is converted as 10%.

***3. Linearization**

Choose among the following:

0:Disable

1:Enable

With '0:Disable' selected, the output % is proportional to the input %.

With '1:Enable' selected, the calculation result is converted into the output % according a user specified table.

When you choose 1:Enable, use the LINEARIZATION table.

***4. Filter time constant**

First order lag filter used. Time constant, time required for an step input to track and reach approx. 63% of the full-scale, is selectable from 0.5 to 30 seconds. No filter is applied when set to 0.

Table 1.

The following functions and parameters are selectable for the two-input function module. Input1 (X₁) and input2 (X₂) are applied with the selected function and converted Output (X₀).

Gains K₀, K₁ and K₂ are selectable within -29.9999 to 29.9999, while biases A₀, A₁ and A₂ are selectable within -299.9999 and 299.9999%.

Function	Equation
1 Temperature compensation	$X_0 = \frac{K_1 X_1}{\sqrt{K_2 X_2 + A_2}}$ when $\sqrt{K_2 X_2 + A_2} = 0$, $X_0 = +102$ with $K_1 X_1 > 0$ $X_0 = 0$ with $K_1 X_1 = 0$ $X_0 = -2$ with $K_1 X_1 < 0$
2 Temperature compensation (square root)	$X_0 = \frac{K_1 \sqrt{X_1}}{\sqrt{K_2 X_2 + A_2}}$ when $\sqrt{K_2 X_2 + A_2} = 0$, $X_0 = +102$ with $K_1 X_1 > 0$ $X_0 = 0$ with $K_1 X_1 = 0$ $X_0 = -2$ with $K_1 X_1 < 0$
3 Pressure compensation	$X_0 = K_1 X_1 \sqrt{K_2 X_2 + A_2}$
4 Pressure compensation (square root)	$X_0 = K_1 \sqrt{X_1} \sqrt{K_2 X_2 + A_2}$
5 Addition / Subtraction	$X_0 = K_0 \{K_1 (X_1 + A_1) + K_2 (X_2 + A_2)\} + A_0$
6 Multiplication	$X_0 = K_0 (K_1 X_1 + A_1) (K_2 X_2 + A_2) + A_0$
7 Division	$X_0 = \frac{K_0 (K_1 X_1 + A_1)}{(K_2 X_2 + A_2)} + A_0$ when $(K_2 X_2 + A_2) = 0$, $X_0 = +102$ with $K_0 (K_1 X_1 + A_1) > 0$ $X_0 = A_0$ with $K_0 (K_1 X_1 + A_1) = 0$ $X_0 = -2$ with $K_0 (K_1 X_1 + A_1) < 0$
8 High selector	$X_0 = X_1$ when $X_1 \geq X_2$ $X_0 = X_2$ when $X_1 < X_2$
9 Low selector	$X_0 = X_2$ when $X_1 \geq X_2$ $X_0 = X_1$ when $X_1 < X_2$

-n is applied without root extraction with $n < 0$ in $\sqrt[n]{n}$.

■ LINEARIZATION

Specify the input & output values and the units.

$X[n]$ = Input Value of n-th (mA, V, %)

$Y[n]$ = Output Value of n-th (mA, V, %)

$-2\% \leq X[n] \leq 102\%$, $-2\% \leq Y[n] \leq 102\%$, $X[n] < X[n+1]$

Factory Internal check
<input type="checkbox"/> Checked

n	X (UNIT:)	Y (UNIT:)	n	X	Y
0			25		
1			26		
2			27		
3			28		
4			29		
5			30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
n	X	Y	n	X	Y

50			75		
51			76		
52			77		
53			78		
54			79		
55			80		
56			81		
57			82		
58			83		
59			84		
60			85		
61			86		
62			87		
63			88		
64			89		
65			90		
66			91		
67			92		
68			93		
69			94		
70			95		
71			96		
72			97		
73			98		
74			99		
			100		