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CML 19JPN1284X

Issue: 6

Type Examination Certificate

for Electrical Equipment used in Potentially Explosive Atmosphere

Issued by Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK		
Applicant	Valmet K.K. 2-5-8, Higashishinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan	
Manufacturer name	Valmet Flow Control Oy. Vanha Porvoontie 229, 01380 Vantaa, Finland	
Product name	Valve controller	
Type/model code	ND***** See attachment 1	
Type of protection	Flameproof, dust protection	
Group, Temperature Class and EPL	IIC T6 Gb IIIC T80°C Db	
The equipment shall be marked with the following	Ex d IIC T6 Gb Ex tb IIIC T80°C Db	
Ratings	DC 30V 4 – 20mA	
Special condition for safe use	See attachment 2	
Certificate number	CML 19JPN1284X	
Term of validity	From 20-06-2019 to 19-06-2022	
	From 20-06-2022 to 19-06-2025	
	From 20-06-2025 to 19-06-2028	

This is to certify that the equipment specified above complies with the requirements stipulated in Ordinance on Examination of Machines and Other Equipment of the Ministry of Health, Labour and Welfare, Japan.

Issue date: 16-02-2026

Signature of chief examiner:



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Attachment 1: Type/model

Product Type Ref:

AABCDDEFFG/HHH

AA Product Group

ND= Neles Digital, Intelligent Valve Controller.

B Series code

9 = Series 9000

7 = Series 7000

C Enclosure

2 = Aluminium IP66 enclosure.

3 = Stainless steel IP66 enclosure.

DD Spool valve and connections.

02 = Low Capacity

03 = Medium Capacity

06 = High capacity

E Communication/ input signal range

H = HART.

F = Foundation Fieldbus.

P = Profibus PA

FF Approvals

E4 = Japanese EX certification

G Options for valve controller

T= $U_i = 30\text{ V}$, P_{max} = device limits itself, external load resistance 0-780 ohm (position transmitter).

J = External junction box, 2 pcs M20x1.5 conduit entry.

ND_H_J: External junction box for all 4-20 mA wirings, including position transmitter, if applicable. Junction box is attached to the enclosure, 2 pcs M20x1.5 conduit entry.

ND_F_J, ND_P_J: External junction box for wirings, including option for parallel connection of external surge protector.

Junction box is attached to the enclosure, 2 pcs M20x1.5 conduit entry.

M = Special corrosion resistant finish. External aluminium surfaces protected by hard anodizing with PTFE.

Vxx = Branded for OEM distributors (V00...V099)

G (exhaust adapter)

Y (special construction to be specified)

HHH Options for valve controller (See table below)

2-wire, DC voltage proximity switches:		
Limit switch code	Electric data	No. of switches
I02	Ui: 16 V, li: 52 mA, Pi:169 mW	2
I03	Ui: 16 V, li: 52 mA, Pi 169 mW	2
I04	Ui: 16 V, li: 52 mA, Pi 169 mW	2
I09	Ui: 16 V, li: 52 mA, Pi 169 mW	2
I54	12-24 V DC, < 100 mA	2
I56	10-36 V DC, < 150 mA	2
I57	Ui: 16 V, li: 52 mA	2
I58	Ui: 16 V, li: 52 mA	2
I41	Ui: 16 V, li: 52 mA	2
3-wire, DC voltage proximity switches:		
Limit switch code	Electric data	No. of switches
I11	10-60 V DC, < 200 mA	2
I21	10-60 V DC, < 200 mA	2
I45	Ui: 16 V DC, li: 52 mA, Pi 169 mW	2
I59	U: 10-30 V DC, I _{max} : 200 mA	2
I60	U: 10-30 V DC, I _{max} : 200 mA	2
2-wire, AC voltage proximity switches:		
Limit switch code	Electric data	No. of switches
I32	24-240 V AC, < 200 mA	2
I34	24-240 V AC, < 200 mA	2

DC/AC voltage micro switches:		
Limit switch code	Electric data	No. of switches
K05	3 A - 250 V AC, 0.4 A - 125 V DC, 5 A - 30 V DC	2/4
K06	100 mA - 30 V DC / 125 V AC	2/4
K25	3 A - 250 V AC, 0.4 A - 125 V DC, 5 A - 30 V DC	2
K26	100 mA - 30 V DC / 125 V AC	2

K45	3 A - 250 V AC, 0.4 A - 125 V DC, 5 A - 30 V DC	4
K46	100 mA - 30 V DC / 125 V AC	4
B06	BUS POWERED, NO EXTERNAL POWER NEEDED	2
Reed type proximity switches:		
Limit switch code	Electric data	No. of switches
R01	300 mA, 24 V DC; 200 mA, 125 V AC	2
R02	150 mA, 24 V DC	2
R04	Vmax 24VDC, Imax 3A, Wmax 2.5W	2
R35	4 A - 120 V AC, 3 A - 24 V DC	2
Diagnostic signal position transmitters:		
Limit switch code	Electric data	No. of switches
T01	Vmax: 40 V DC, I: 4-20 mA	2

Electrical data

Type ND.....H..E4./...

Input current circuit $U_{nom} \leq 30$ V d.c.
 Terminals +/- $P_{nom} \leq 1.0$ W
 Position encoder, optional $U_{nom} \leq 30$ V d.c.
 Terminals +/- $I_{nom} \leq 20$ mA $P_{nom} \leq 1.0$ W

Type ND.....P..E4./...

Fieldbus $U_{nom} \leq 32$ V d.c.
 Terminals H1 +/- $I_{nom} \leq 380$ mA
 $P_{nom} \leq 5320$ mW



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Attachment 2: Special conditions of use

- i. Some external parts of the system are non-conducting and may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done with a damp cloth.
- ii. When the equipment is installed in a dust explosive environment the user shall ensure that an accumulation of excessive dust layers on the enclosure is prevented.
- iii. The full assembly is to have a maximum power draw of less than 2.5 W
- iv. Blanking elements shall not be used with an adapter.