

Local control panel for VG9000H, LCP9H Series

Local Control Panel (LCP) is designed for controlling the emergency isolation valve (ESD or ESV) locally nearby the valve via Neles ValvGuard VG9000 intelligent solenoid valve.

LCP permits the emergency isolation valve to be closed (or opened) locally and permits the valve to be returned to the normal operating position when the trip initiators are normal (Manual Reset - function). There is also functional testing (Partial Stroke Testing, PST) possibility of the emergency isolation valve. Indicators (LEDs) for the valve position (open/ close), ready to reset, testing and alarm status are included too.

Communication between the LCP and VG9000 is handled by a current loop. LCP has two options for the supply power; external 24 VDC or loop powered. In the loop power version the supply power is taken from the input loop for VG9000H.



Technical specifications

VG9000H compatibility

- Externally powered (24 VDC) LCP versions are compatible with VG9000H with L2 option.
- Loop powered LCP versions are compatible with VG9000H with L3 option.
- See the LCP type coding for different LCP versions.

Power supply

- Loop powered version: Taken from VG9000H input signal. Min. input signal from safety system to VG is 8 mA.
- Externally powered version: 24 V DC (min. 11 V DC), 50 mA

Materials and enclosure protection class

- 316L stainless steel, IP66 (Ex i & e version)
- Low copper content aluminum alloy with epoxy coating, IP66 (Ex d -version)

Temperature range

- 20 to +85 °C (Ex i)
- 20 to +65 °C (Ex d & Ex e)

Approvals

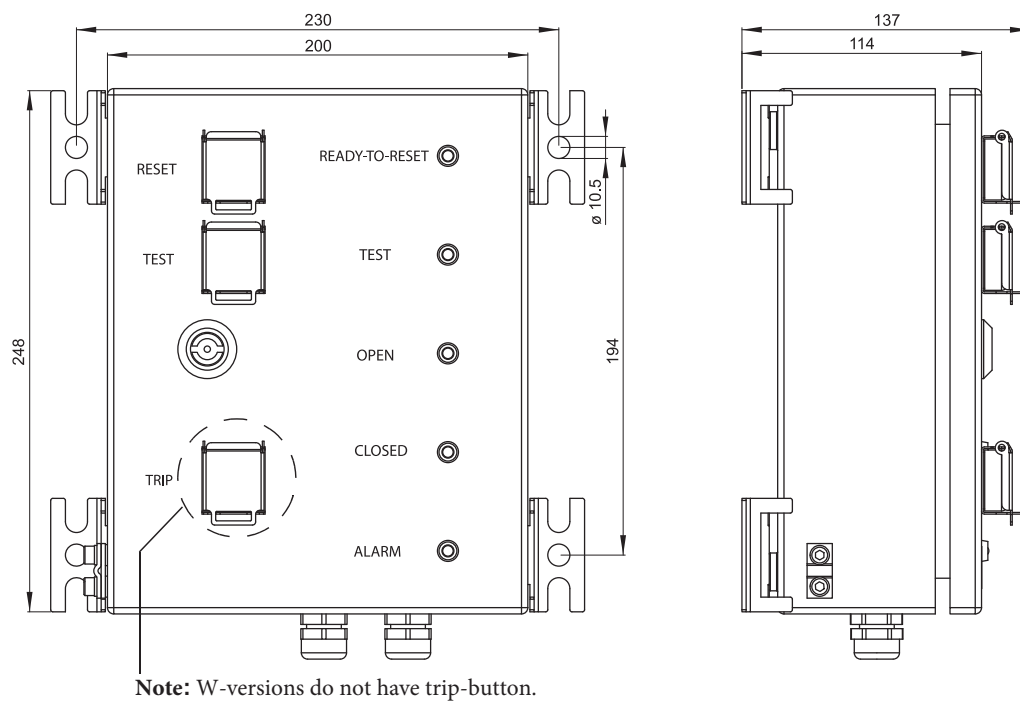
Intrinsically safe

- ATEX/ IECEx
 - Ex ia IIC T6...T4 Gb, Ex ic IIC T6...T4 Gc, Ex eb mb [ib] IIC T6...T4 Gb
- CCC
 - Ex ia IIC T4~T6 Gb
 - Ex ic IIC T4~T6 Gc
 - Ex e mb [ib] IIC T4~T6 Gb

Flameproof and explosion proof

- ATEX / IECEx
 - Exd IIB+H₂ T6 Gb, Ex tb IIIC T85 °C Db
- INMETRO
 - Ex d IIB+H₂ T6 Gb, Ex tb IIIC T85 °C Db
- CCC
 - Ex d IIB + H₂ T6 Gb, Ex tD A21 IP66 T85°C

Dimensions (Ex i & e version)



Full product details and Ex d versions' dimensions can be seen in the Installation, Maintenance and Operating Instructions (7LCP9H70EN)

Type coding

1.	2.	3.	4.	5.	6.
LCP	9	H	E	-	2

1. sign	PRODUCT GROUP
LCP	Local Control Panel For local control with Neles ValvGuard VG9000. All versions include LEDs, Manual Reset and PST buttons. Buttons are lockable in all versions.

2. sign	SERIES CODE
9	Suitable for Neles ValvGuard VG9000

3. sign	COMMUNICATION
H	Suitable for VG9000 HART communication version. Four wire serial communication between VG9000 and LCP.

4. sign	APPROVALS FOR HAZARDOUS AREAS
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Enclosure IP66 and stainless steel 316L if not otherwise mentioned.

-	<u>ATEX and IECEx certifications:</u> II 2 G Ex ia IIC T4/T5/T6 Gb Temperature range: T4; -20° to +65 °C, T5; < +65 °C, T6; < +50 °C. II 3 G Ex ic IIC T6...T4 Gc Temperature range: T4; -20° to +65 °C, T5; < +65 °C, T6; < +60 °C. II 2 G Ex eb mb [ib] IIC T6...T4 Gb Temperature range: T4; -20° to +65 °C, T5; < +63 °C, T6; < +48 °C <u>CCC (Chinese) certifications</u> Ex ia IIC T4~T6 Gb Ex ic IIC T4~T6 Gc Ex e mb [ib] IIC T4~T6 Gb Not applicable to 6. sign "L" <u>cETLus certification (PENDING):</u> Class I, Division 2, Groups A, B, C, D Tamb. T6: -20...+48 °C, T5: -20...+63 °C, T4: -20...+65 °C Applicable to 6. sign "-" (i.e. no 6. sign) Class I, Division 2, Groups A, B, C, D Tamb. T6: -20...+55 °C, T5: -20...+65 °C, T4: -20...+65 °C Applicable to 6. sign "L" Enclosure: 3RX / IP66 Enclosure material anodized aluminum.
U2	
E	<u>ATEX and IECEx certifications:</u> Ex d IIB + H2 T6 Gb Ex tb IIIC T85°C Db IP66 Ta -20° to +65 °C <u>INMETRO (DNV) certifications:</u> Ex d IIB + H2 T6 Gb Ex tb IIIC T85°C Db IP66 Ta -20° to +65 °C <u>ITRI (Taiwan) certifications:</u> Ex d IIB+H2 T6 Gb Ex tb IIIC T85°C Db <u>CCC (Chinese) certifications</u> Ex d IIB + H2 T6 Gb Ex tD A21 IP66 T85°C

5. sign	OPTIONS
-	None
W	LCP is provided without Close (trip) button

6. sign	SUPPLY POWER
-	24 VDC externally powered Power consumption 400 mW. Power supply 11-30 V DC, 50mA Note: 7. sign L2 needs to be selected for VG9000 type code option.
L	Loop powered Power taken from VG9000H input signal, 4 mA. Note: Minimum 8 mA is required for VG9000 input signal. 7. sign L3 needs to be selected for VG9000 type code option.

NOTE: Additional Y-code at the end of the LCP9H_ type coding, e.g. LCP9HY, means following: Y =

Special construction, to be specified. Does not affect the certification. For example, different button texts.

Valmet Flow Control Oy

Vanha Porvoontie 229, 01380 Vantaa, Finland.

Tel. +358 10 417 5000.

www.valmet.com/flowcontrol

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