Table 5.3.2 — Line symbols: instrument-to-instrument connections

Note: Numbers in parentheses refer to explanatory notes in Clause 5.3.3.

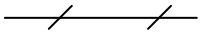
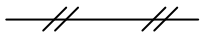
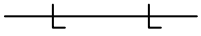
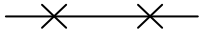
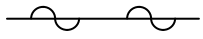
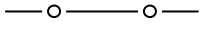
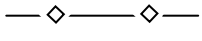
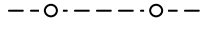
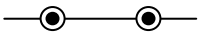
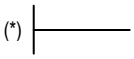
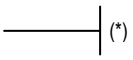
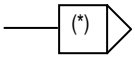
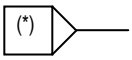
No	Symbol	Application
1	(1) IA ———	• IA may be replaced by PA [plant air], NS [nitrogen}, or GS [any gas supply]. • Indicate supply pressure as required, e.g., PA-70 kPa, NS-150 psig, etc.
2	(1) ES ———	• Instrument electric power supply. • Indicate voltage and type as required, e.g. ES-220 Vac. • ES may be replaced by 24 Vdc, 120 Vac, etc.
3	(1) HS ———	• Instrument hydraulic power supply. • Indicate pressure as required, e.g., HS-70 psig.
4	(2) 	• Undefined signal. • Use for Process Flow Diagrams. • Use for discussions or diagrams where type of signal is not of concern.
5	(2) 	• Pneumatic signal, continuously variable or binary.
6	(2)	• Electronic or electrical continuously variable or binary signal. • Functional diagram binary signal.
7	(2)	• Functional diagram continuously variable signal. • Electrical schematic ladder diagram signal and power rails.
8	(2) 	• Hydraulic signal.
9	(2) 	• Filled thermal element capillary tube. • Filled sensing line between pressure seal and instrument.
10	(2) 	• Guided electromagnetic signal. • Guided sonic signal. • Fiber optic cable.
11	(3) a)  b) 	• Unguided electromagnetic signals, light, radiation, radio, sound, wireless, etc. • Wireless instrumentation signal. • Wireless communication link.
12	(4) 	• Communication link and system bus, between devices and functions of a shared display, shared control system. • DCS, PLC, or PC communication link and system bus.
13	(5) 	• Communication link or bus connecting two or more independent microprocessor or computer-based systems. • DCS-to-DCS, DCS-to-PLC, PLC-to-PC, DCS-to-Fieldbus, etc. connections.
14	(6) 	• Communication link and system bus, between devices and functions of a fieldbus system. • Link from and to “intelligent” devices.
15	(7) 	• Communication link between a device and a remote calibration adjustment device or system. • Link from and to “smart” devices.

Table 5.3.2 — Line symbols: instrument-to-instrument connections

Note: Numbers in parentheses refer to explanatory notes in Clause 5.3.3.

No	Symbol	Application
16		• Mechanical link or connection.
17	(3) a) (#) (##) a) (#) (##) b) (#) (##) b) (#) (##)	• Drawing-to-drawing signal connector, signal flow from left to right. • (#) = Instrument tag number sending or receiving signal. • (##) = Drawing or sheet number receiving or sending signal.
18		• Signal input to logic diagram. • (*) = Input description, source, or instrument tag number.
19		• Signal output from logic diagram. • (*) = Output description, destination, or instrument tag number.
20		• Internal functional, logic, or ladder diagram signal connector. • Signal source to one or more signal receivers. • (*) = Connection identifier A, B, C, etc.
21		• Internal functional, logic, or ladder diagram signal connector. • Signal receiver, one or more from a single source. • (*) = Connection identifier A, B, C, etc.