

P&ID/PFD SYMBOLS (GENERAL INSTRUMENT OR FUNCTION SYMBOLS)

LINE TYPES			
FILE NAME	SYMBOL	LINE TYPE	DESCRIPTION
		CONTINUOUS .80MM	PRIMARY PROCESS FLOW LINE
		CONTINUOUS .35MM	SECONDARY PROCESS FLOW LINE
		CONTINUOUS .25MM	INSTRUMENT SUPPLY OR CONNECTION TO PROCESS
		HIDDENX2	ELECTRIC SIGNAL
P001		CONTINUOUS	ELECTROMAGNETIC OR SONIC SIGNAL ** (NOT GUIDED)
P002		CONTINUOUS	UNDEFINED DIGITAL
P003		CONTINUOUS	PNEUMATIC SIGNAL *
P004		CONTINUOUS	HYDRAULIC SIGNAL
P005		CONTINUOUS	CAPILLARY TUBE
P006		CONTINUOUS	ELECTROMAGNETIC OR SONIC SIGNAL ** (GUIDED)
P007		CONTINUOUS	INTERNAL SYSTEM LINK (SOFTWARE OR DATA LINK)
P008		CONTINUOUS	MECHANICAL LINK
OPTIONAL BINARY (ON-OFF) SYMBOLS			
P009		CONTINUOUS	PNEUMATIC BINARY SIGNAL
P009A		DASHED2	ELECTRIC BINARY SIGNAL
P010		NOT USED	
P011		CONTINUOUS	ELECTRICAL HEAT TRACING
P011A		CONTINUOUS/DASHED2	STEAM HEAT TRACING
		DASHED2	BURIED LINES
		PHANTOM	EXISTING
		CENTER	FP - FLOOR PENETRATION RP - ROOF PENETRATION WP - WALL PENETRATION SB - SYSTEM BREAK

NOTES:

OR MEANS USER CHOICE. CONSISTANCY IS RECOMMENDED.

* THE PNEUMATIC SIGNAL SYMBOL APPLIES TO A SIGNAL USING ANY GAS AS THE SIGNAL MEDIUM. IF GAS OTHER THAN AIR IS USED, THE GAS MAY BE IDENTIFIED BY A NOTE ON THE SIGNAL SYMBOL OR OTHERWISE.

** ELECTROMAGNETIC PHENOMENA INCLUDE HEAT, RADIO WAVES, NUCLEAR RADIATION, AND LIGHT.

INSTRUMENT/FUNCTION SYMBOLS				
	PRIMARY LOCATION NORMALLY ACCESSIBLE TO OPERATOR	FIELD MOUNTED	AUXILIARY LOCATION NORMALLY ACCESSIBLE TO OPERATOR	AUXILIARY LOCATION NORMALLY INACCESSIBLE TO OPERATOR
DISCRETE INSTRUMENTS	P012	P016	P020	P024
SHARED DISPLAY, SHARED CONTROL	P013	P017	P021	P025
COMPUTER FUNCTION	P014	P018	P022	P026
PROGRAMMABLE LOGIC CONTROL	P015	P019	P023	P027
FILE NAME	SYMBOL	DESCRIPTION		
P028		FLOW INDICATOR TO BE USED IN CONJUNCTION WITH P016		
P029		INSTRUMENTS SHARING COMMON HOUSING		
P030		PANEL MOUNTED PATCHBOARD POINT 12		

FILE NAME	SYMBOL	DESCRIPTION
P031		P=PURGE OR FLUSHING DEVICE R=RESET FOR LATCH-TYPE ACTUATOR I=UNDEFINED INTERLOCK LOGIC
P031A		SIGNAL DIRECTIONAL ARROW
P032		S=SOLENOID D=DIGITAL P=PILOT T=TRAP M=MAGNETIC FLOWMETER SP=SET POINT
P032A		ROOT EXTRACTION
P032B		BIAS
P032C		MULTIPLY
P032D		HIGH SELECTING
P032E		LOW SELECTING
P032F		HIGH LIMITING
P032G		LOW LIMITING
P032H		PROPORTIONAL
P032I		REVERSE PROPORTIONAL
P032J		SUMMING
P032K		DMDING
P033		EQUIPMENT TAG
P034		PIPING CLASS BREAK OR ML CLASSIFICATION CHANGE
P035		PIPE OR WIRE IS CONTINUED ON DRAWING X (INCLUDING SHEET NUMBER), GRID COORDINATE (Y-#); FLOW IS TO THAT DRAWING, OR REFERENCE POINT.
P036		PIPE OR WIRE IS CONTINUED ON DRAWING X (INCLUDING SHEET NUMBER), GRID COORDINATE (Y-#); FLOW IS FROM THAT DRAWING, OR REFERENCE POINT.
P037		PIPE OR WIRE IS CONTINUED ON DRAWING X (INCLUDING SHEET NUMBER), GRID COORDINATE (Y-#); FLOW IS IN BOTH DIRECTIONS.
P038		NOT USED

INSTRUMENTATION IDENTIFICATION TABLE	
J-1	COMPONENT FUNCTION NUMBER
J-2	COMPONENT SEQUENCE NUMBER
J-2A	COMPONENT SEQUENCE # CONT'D
J-3	VENDOR DESIGNATION
J-4	PANEL NUMBER
J-5	APPLICABLE NOTES
J-6	SYSTEM ACRONYM
J-7	ASME TEST SYMBOL FOR TEST ONLY OR TEST PLUS NORMAL USE
J-B	SET-POINT(S)
J-9	FUNCTION (SEE INSTRUMENT/FUNCTION SYMBOLS)
NOTE:	
INSTRUMENTATION FUNCTION IDENTIFIERS (J-1) AND FUNCTION SYMBOLS PER ANSI/ISA 5.1.	
P040	SEE APPENDIX G-2
P041 TO P049	NOT USED