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Instrument Abbreviations Used in Instrumentation Diagrams (P&IDs) II



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We have already seen how the letters A - Z are combined in instrumentation diagrams to give process instruments unique function and identification in <u>Instrument Abbreviations Used in Instrumentation Diagrams (P&IDs)</u>. Since the subject of process instrumentation diagrams is versatile and at the heart of understanding key industrial processes, we present further examples of instrument abbreviations as defined in the ISA 5.1 standard for symbols used in P&IDs. In the table presented below, we have:

(a) A column for the first letter denoting the process variable

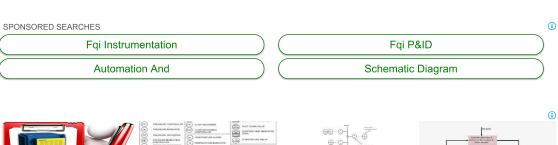
1 Air Cleaner Made in China

- (b) A second column denoting the initiating or measured variable
- (c) A third column for controllers of various degrees recording, indicating, blind (denotes a controller without a modifying function such as recording or indicating) and self-actuated control valves designed to regulate diverse process variables
- (d) A fourth column for readout devices which can either be recording or indicating as the case maybe.

The table for instrument abbreviations shows many possible combinations for any kind of instrument measuring the defined variables as denoted by the first letter in the first column.

First Letter	Initiating or Measured Variable	Controllers				Read out Devices	
		Recording	Indicating	Blind	Self-Acutated Control Valves	Recording	Indicating
Α	Analysis	ARC	AIC	AC		AR	Al
В	Burner/Combustion	BRC	BIC	BC		BR	BI
С	User's Choice						
D	User's Choice						
E	Voltage	ERC	EIC	EC		ER	EI
F	Flow Rate	FRC	FIC	FC	FCV, FICV	FR	FI
FQ	Flow Quantity	FQRC	FQIC			FQR	FQI
FF	Flow Ratio	FFRC	FFIC	FFC		FFR	FFI
G	User's Choice						
Н	Hand		HIC	HC			
1	Current	IRC	IIC			IR	II
J	Power	JRC	JIC			JR	JI
K	Time	KRC	KIC	KC	KCV	KR	KI
L	Level	LRC	LIC	LC	LCV	LR	LI
М	User's Choice						

N	User's Choice						
0	User's Choice						
Р	Pressure/Vacuum	PRC	PIC	PC	PCV	PR	PI
PD	Pressure, Differential	PDRC	PDIC	PDC	PDCV	PDR	PDI
Q	Quantity	QRC	QIC			QR	Ql
R	Radiation	RRC	RIC	RC		RR	RI
S	Speed/Frequency	SRC	SIC	SC	SCV	SR	SI
Т	Temperature	TRC	TIC	TC	TCV	TR	TI
TD	Temperature, Differential	TDRC	TDIC	TDC	TDCV	TDR	TDI
U	Multivariable						
V	Vibration/Machinery Analysis						
W	Weight/Force	WRC	WIC	WC	WCV	WR	WI
WD	Weight/Force, Differential	WDRC	WDIC	WDC	WDCV	WDR	WDI
Х	Unclassified	Cell	Cell	Cell	Cell	Cell	Cell
Υ	Event/State/Presence		YIC	YC		YR	ΥI
Z	Position/Dimension	ZRC	ZIC	ZC	ZCV	ZR	ZI
ZD	Gauging/Deviation	ZDRC	ZDIC	ZDC	ZDCV	ZDR	ZDI









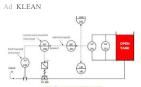
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