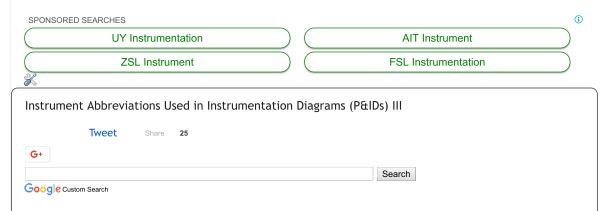
Learning Instrumentation And Control Engineering

We Provide Tools and Basic Information for Learning Process Instrumentation and Control Engineering.



MPU-9250 DataSheet PDF - InvenSen

Motion Tracking Device datasheetspdf.com

To further understand instrument abbreviations used in instrumentation and process diagrams, we have presented more examples of the common combinations of instrument abbreviations you may likely come across. They include abbreviations for switches and alarm devices, transmitters, solenoids, relays, computing devices, primary elements, test points, well or probe, viewing devices e.g glass, safety devices as well as final elements.

The main objective of bringing many possible combinations of these process instruments is to drive home the understanding of how they are formed such that once you see them being used in a process or instrumentation diagram or even conceptual or flow diagrams, you will immediately be in a position to identify them and know what they are being used for.

| First Letters | Initiating, Measured, | Switches & Alarm Devices* | | | Transmitters | | | Solenoids, Relays, Computing | Primary Flement | Point | 01 | Viewing Device, | Safety | Final Element |
|------------------|--------------------------|------------------------------|------|------|--------------|------------|-------|------------------------------------|--------------------|-------|-------|--------------------|---------|------------------|
| Letters | Variable | High** | Low | Comb | Recording | Indicating | Blind | Devices | Licinciic | 0c | Probe | Glass | Je 11cc | Liemene |
| A | Analysis | ASH | ASL | ASHL | ART | AIT | AT | AY | AE | AP | AW | | | AV |
| В | Burner/ Combustion | BSH | BSL | BSHL | BRT | ВІТ | вт | BY | BE | | BW | BG | | BZ |
| С | User's Choice | | | | | | | | | | | | | |
| D | User's Choice | | | | | | | | | | | | | |
| E | Voltage | ESH | ESL | ESHL | ERT | EIT | ET | EY | EE | | | | | EZ |
| F | Flow Rate | FSH | FSL | FSHL | FRT | FIT | FT | FY | FE | FP | | FG | | FV |
| FQ | Flow Quantity | FQSH | FQSL | | | FQIT | FQT | FQY | FQE | | | | | FQV |
| FF | Flow Ratio | FFSH | FFSL | | | | | | FE | | | | | |
| G | User's Choice | | | | | | | | | | | | | |
| Н | Hand | | | HS | | | | | | | | | | HV |
| I | Current | ISH | ISL | ISHL | IRT | IIT | IT | ΙΥ | IE | | | | | IZ |
| J | Power | JSH | JSL | JSHL | JRT | JIT | JT | JY | JE | | | | | JV |
| K | Time | KSH | KSL | Cell | KSHL | KIT | KT | KY | KE | | | | | KV |
| L | Level | LSH | LSL | LSHL | LRT | LIT | LT | LY | LE | | LW | LG | | LV |
| М | User's Choice | | | | | | | | | | | | | |
| N | User's Choice | | | | | | | | | | | | | |
| 0 | User's Choice | | | | | | | | | | | | | |

| Р | Pressure/ Vaccum | PSH | PSL | PSHL | PRT | PIT | PT | PY | PE | PP | | PSV, PSE | PV |
|----|-------------------------------------|------|------|------|------|------|-----|-----|-----|----|----|-------------|-----|
| PD | Pressure, Differential | PDSH | PDSL | | PDRT | PDIT | PDT | PDY | PE | PP | | | PDV |
| Q | Quantity | QSH | QSL | QSHL | QRT | QIT | QT | | QE | | | | QZ |
| R | Radiation | RSH | RSL | RSHL | RRT | RIT | RT | RY | RE | | RW | | RZ |
| S | Speed/ Frequency | SSH | SSL | SSHL | SRT | SIT | ST | SY | SE | | | | SV |
| Т | Temperature | TSH | TSL | TSHL | TRT | TIT | TT | TY | TE | TP | TW | TSE | TV |
| TD | Temperature, Differential | TDSH | TDSL | | TDRT | TDIT | TDT | TDY | TE | TP | TW | | TDV |
| U | Multivaraible | | | | | | | UY | | | | | UV |
| ٧ | Vibration/ Machinery Analysis | VSH | VSL | VSHL | VRT | VIT | VT | VY | VE | | | | VZ |
| W | Weight/ Force | WSH | WSL | WSHL | WRT | WIT | WT | WY | WE | | | | WZ |
| WD | Weight/ Force, Differential | WDSH | WDSL | | WDRT | WDIT | WDT | WDY | WE | | | | WDZ |
| Χ | Unclassified | | | | | | | | | | | | |
| Υ | Event/State/ Presence | YSH | YSL | | | | | YY | YE | | | | YZ |
| Z | Position/ Dimension | ZSH | ZSL | ZSHL | ZRT | ZIT | ZT | ZY | ZE | | | | ZV |
| ZD | Gauging/ Deviation | ZDSH | ZDSL | | ZDRT | ZDIT | ZDT | ZDY | ZDE | | | | ZDV |

^{*}A, Alarm, the annuciating device, may be used in the same way as S, switch, the switching device.

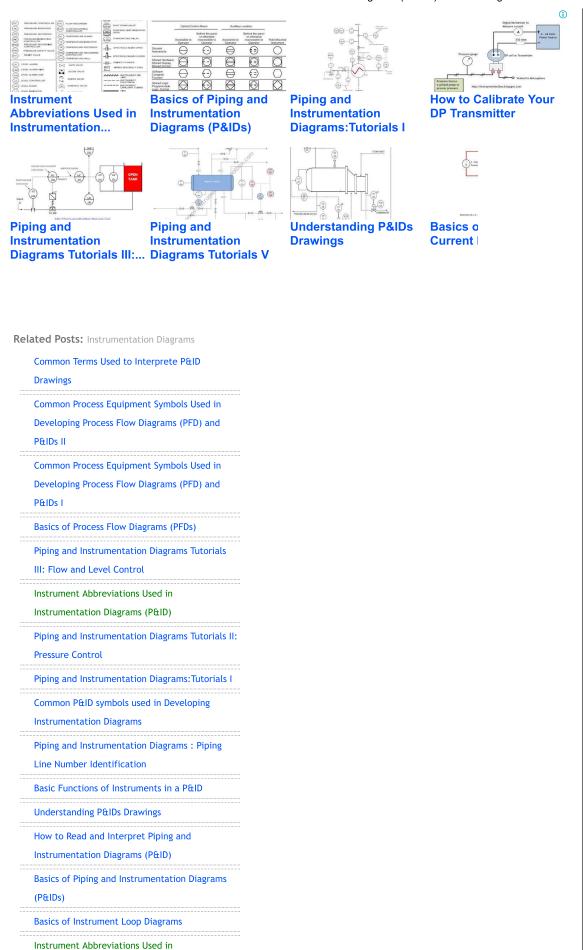
The table above is a guide. It does not cover all possible combinations of instrument abbreviations that one may encounter in the process industry.

Note that apart from the combinations above, there are some other possible combinations when it comes to instrument abbreviations. Some combinations which might not be common in your process plant are shown in the table below:

| Instrument Abbreviation | Meaning or Designation Used to Qualify Instrument |
|-------------------------|---|
| FO | Restriction Orifice |
| FRK, HIK | Control Stations |
| FX | Accessories |
| TJR | Scanning Recorder |
| LLH | Pilot Light |
| PFR | Ratio |
| KQI | Running Time Indicator |
| QQI | Indicating Counter |
| WKIC | Rate-of-Weight-Loss Controller |
| HMS | Hand Momentary Switch |

| FSL Instrumentation | UY Instrumentation | |
|---------------------|--------------------|--|
| AIT Transmitter | Hik P&ID | |

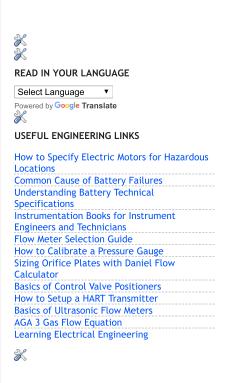
^{**} The letters H and L may be omitted in the undefined case.



Instrumentation Diagrams (P&IDs) III



Newer Post Older Post Home





SUBSCRIBE AND GET INSTANT UPDATES

Email address... Si

Submit





CATEGORIES

Control Valves (32) Flow meters (22) Temperature sensors (22) Calibration (19) Instrumentation Diagrams (19) Level Measurement (15) DP Transmitters (14) Orifice Plates (11) Thermocouples (11) Transmitters (11) Pneumatic Systems (10) Pressure Switch (10) RTD (9) pressure sensors (9) Process Control (7) Electrical Noise (6) Electricals (6) HART Protocol (6) Pressure Gauges (6) 4 - 20mA Signals (4) Basics of Instrumentation (4) Digital or Analog Multimeters (2) Fluke pressure calibrator (2) Instrumment Engineers (2) Thermowells (2) Electric Motors (1) Instrument Engineers (1) Measurement terminology (1) Motor Nameplate (1)

EXPLORE WWW.INSTRUMENTATIONTOOLBOX.COM

How a Current to Pressure Transducer Works

Common Symbols Used in Process and Instrumentation Diagrams

How to Calibrate Your DP Transmitter

How to Calibrate a Pressure Gauge

How to Zero a Pressure Transmitter

How to Size an Orifice Flow meter

Basics of DP Valve Manifolds

How to Measure Electric Motor Insulation Resistance

Basics of AC Motor Service Factor

NEMA Three phase AC Motor Designs

How to Test 3-phase AC Motor Windings with an Ohmeter

How to Read Torque Speed Characteristics of AC Motors

Instrument Abbreviations Used in Instrumentation Diagrams

How a Pressure Switch Works

How to Convert Thermocouple Milivolts to Temperature

How Ultrasonic Flow meters Work

How Turbine Flow meters Work

Principles & Formulas for Flow Measurement

How a Temperature Control Valve Works

How a Valve Positioner Works



© 2009 - 2018 instrumentationtoolbox.com. All Rights Reserved. Powered by Blogger.