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June, 2022



**Instrument Specs and Index**

***INTEGRATED INSTRUMENT INDEX DATA LIST***

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1. **Instrument Specification Forms Integrated Data**

About 103 fields are automatically copied from the ISA TR20 style instrument specification Form to an Excel **Instrument Index s**preadsheet, whenever a specification document is saved.

|  |  |
| --- | --- |
|  **Property Title** | **Data Description** |
| **Document Identifications** |
| Document number | Specification Document number (**must be unique**) |
| Form\_rev | Specification form number plus revision |
| Latest revision | Document latest revision identification |
| Publish Date | Date of document publish |
| Status | Status of document issue |
| Spec Id attri1value | Specification Identifications section definable field name |
| Spec id attribute 1 value | Specification Identifications section definable field value |
| Subject | Specification form title (document Subject description) |
| Company | Responsible Organization company identification |
| Comments | Word/SharePoint document comment |
| Reference specification | External document that applies to device requirements |
| File Name | Document full path or file name |
| **Administrative Identifications** |
| Project number | Project number |
| Sub project no | Sub project number |
| Project | Project title |
| Enterprise | Enterprise identification |
| Site | Site name |
| Area | Area identification acronym |
| Unit | Unit identification acronym |
| Admin Def attribute 1 name | Administrative Identifications section definable field name |
| Admin Def attribute 1 value | Administrative Identifications section definable field value |
| **Service Identifications** |
| Keywords (Tag no/Functional ID) | Primary Tag no/Functional identification |
| Related equipment | Related equipment identification |
| Service | Service description |
| Application service | Service description using manufacturer’s terminology |
| P\_ID\_Reference\_dwg\_number | P&ID or Reference drawing number |
| Upstr Line\_Nozzle\_Number | Upstream line or nozzle number |
| Upstr line pipe spec | Upstream line pipe spec |
| Upstr line nom rating | Upstream line nominal rating |
| Upstr line conn type | Upstream line connection type |
| Upstr line termn style | Upstream line termination style |
| Upstr line material type | Upstream line material type |
| Primary construction material | Material of pressure containing shell component |
| **Safety Classifications** |
| Inline hazardous area cl | Inline or Local Hazardous Area Class |
| Inline hazardous Div\_Zone | Inline or Local Hazardous Area Division or Zone |
| Inline hazardous gr | Inline or Local Hazardous Area Group |
| Inline T Code | Inline or Local Hazardous Area Temperature Code |
| Environmental area | Description of environmental conditions at site of device |
| Testing/Listing agency | Suitable 3rd party listing agency identification |
| Criticality classification | Criticality classification |
| Safety Integrity level | Safety Integrity Level |
| Safety category | Safety Category |
| Signal loss failure mode | Signal loss failure mode |
| Supply loss failure mode | Supply loss failure mode |
| Material name | Process Material name |
| GHS health hazard | International ratings of material Health Hazards |
| Compliance standard | Compliance standard identification |
| Type of protection | Type of Protection |
| **Component Design Criteria** |
| Design Inlet press max | Design Inlet pressure maximum value |
| Design inlet press units | Design Inlet pressure maximum value units |
| PC Max press at design temp | Performance Characteristics Max pressure at design temp |
| PC Max press at design temp units | Performance Characteristics Max pressure at design temp units |
| Design Inlet temp max | Design Inlet temperature maximum value |
| Design inlet temp units | Design Inlet temperature maximum value units |
| PC Max design temp | Performance Characteristics Max design temp |
| PC Max design temp units | Performance Characteristics Max design temp units |
| Inlet temp min cond | Inlet temperature minimum flow condition |
| Inlet temp max cond | Inlet temperature max flow condition |
| Inlet temperature units | Inlet temperature units |
| PC Min working temp | Performance Characteristics Min working temperature |
| PC Min working temp units | Performance Characteristics Min working temperature units |
| PC Max working temp | Performance Characteristics Max working temperature |
| PC Max working temp units | Performance Characteristics Max working temperature units |
| Minimum ambient temp | Minimum ambient working temperature |
| Minimum ambient temp units | Minimum ambient working temperature units |
| PC Min ambient working temp | Performance Characteristics Min ambient working temperature |
| PC Min ambient working temp units | Performance Characteristics Min ambient working temperature units |
| Maximum ambient temp | Maximum ambient working temperature |
| Maximum ambient temp units | Maximum ambient working temperature units |
| PC Max ambient working temp | Performance Characteristics Max ambient working temperature |
| PC Max ambient working temp units | Performance Characteristics Max ambient working temperature units |
| Operating Def attribute 1 name | Operating Parameters section definable field name |
| Operating Def attribute 1 value | Operating Parameters section definable field value |
| Signal power source | Signal power source required for the device |
| Digital communication std | Digital communication standard for device |
| **Modeling Physical Data** |
| Estimated weight | Modeling Data Estimated weight |
| Estimated weight units | Modeling Data Estimated weight units |
| Face-to-face dimension | Modeling Data Face-to-face dimension |
| Face-to-face dimension units | Modeling Data Face-to-face dimension units |
| Overall width | Modeling Data Overall width |
| Overall width units | Modeling Data Overall width units |
| Overall height | Modeling Data Overall height |
| Overall height units | Modeling Data Overall height units |
| Overall depth | Modeling Data Overall depth |
| Overall depth units | Modeling Data Overall depth units |
| Removal clearance | Modeling Data Removal clearance |
| Removal clearance units | Modeling Data Removal clearance units |
| Mfr reference dwg | Identification of manufacturers drawing showing dimensional data |
| **Calibration and Test** |
| Prim Tag no Input\_Output | Tag number or functional identification of the primary input or output signal |
| Prim\_CAL\_Input\_Output Desc | Primary Calibration Input-Output Description |
| Prim\_CAL\_Input\_LRV | Primary Calibration Input LRV |
| Prim\_CAL\_Input\_LRV units | Primary Calibration Input LRV units |
| Prim\_CAL\_Action | Primary Calibration Action |
| Prim\_CAL\_Output LRV | Primary Calibration Output LRV |
| Prim\_CAL\_Output LRV units | Primary Calibration Output LRV units |
| Prim\_CAL\_Output URV | Primary Calibration Output URV |
| Prim\_CAL\_Output URV units | Primary Calibration Output URV units |
| Test pressure Input URV | Test pressure value |
| Test pressure Input URV units | Test pressure units |
| **Component Identifications** |
| Component type 1 | Primary Component type name |
| Component Manufacturer 1 | Primary Component Manufacturer name |
| Component Model number 1 | Primary Component Model number |

Note: Any additional Content Control property titles can be added to the Excel file columns and subsequent document savings will copy such additional data to the modified Instrument Index table.

1. **Manual Data Entry Properties of Instrument Index Table**

About 64 additional manual data entry properties can be managed in the **Instrument Index Data** table:

|  |  |
| --- | --- |
| **Extended Index Property Title** | **Data Description** |
| **Location Properties** |
| Relative instrument location | Relative location such as field, local panel, remote panel, I/O building, etc. |
| Building number | Location building number |
| Floor/Elevation | Location Floor/Elevation |
| Storage location | Storage Location identification |
| **Additional Loop or Tag Properties** |
| Component\_Symbol | Component symbol |
| Loop name | Loop name identifying parent common to all members of the loop |
| Sequence order | Loop sequence order of individual member of a loop |
| Identification\_Tag\_Number | Identification Tag Number |
| Functional\_Identification\_Letters | Functional Identification Letters |
| Alternate tag ID | Alternate tag identification of a device such as assigned by package equipment manufacturer, electrical interface equipment number or of a renamed device |
| Interlock number | Interlock number |
| Requires power supply | Requires power independent of their signal wiring |
| Installation package number | Installation package number |
| Loop check package | Loop check package |
| **Milestones and Status** |
| P&ID status | Status of P&ID activity such as future work, work on hold, pending deletion or pending scope change |
| P&ID Checked By | Initials of individual who checked the P&ID and Index data for completeness and consistency |
| Instrument status | Status of device such as existing, new, spare, abandoned in place, to-be-removed, etc. |
| Process data owner | Organization responsible for providing process data such as Process, Mechanical, Vessel, Electrical or packaged equipment |
| Process data required | Date for required process data specifications |
| Process data status | Status of process data |
| Requisition required | Date for issuing specification requisition |
| Specification package status | Status of specification package |
| Required on site | Date for receiving device on site |
| Purchase order status | Status of purchase order |
| Cause\_Effect diagram status | Cause & Effect diagram status |
| Logic diagram status | Logic diagram status |
| Junction box drawing status | Junction box drawing status |
| 3D model status | Status of 3D model activity |
| Location drawing status | Location drawing status |
| Loop diagram status | Status of loop diagram activity |
| Air Purge connection status | Air Purge connection status |
| Electrical Signal conn status | Electrical Signal connection status |
| Environmental protect status | Environmental protection status |
| Process connection status | Process connection status |
| Support Mounting status | Support Mounting status |
| Piping isometric status | Piping isometric status |
| Construction package status | Construction package status |
| **Procurement Properties** |
| Supply responsibility | Organization responsible to supply the device such as instrumentation. piping, electrical, packaged equipment, etc. |
| Requestion number | Requisition number |
| Purchase order number | Purchase order number |
| Specification package | Specification package ID |
| Expected delivery date | Date of expected delivery |
| Construction package date | Date of Construction package issue |
| **Drawing References** |
| 3D model drawing | 3D drawing number |
| Air/Purge connection | Air/Purge connection detail drawing |
| Cause and Effect diagram | Cause and Effect diagram |
| Control strategy diagram | Control strategy diagram |
| Electrical location drawing | Electrical location drawing |
| Electrical/Signal connection | Electrical/Signal connection detail drawing |
| Environmental protection | Environmental protection detail drawing |
| Instrument location drawing | Instrument location drawing |
| Junction box | Junction box detail drawing |
| Logic diagram | Logic diagram number |
| Loop diagram | Loop diagram drawing |
| Piping isometric | piping isometric drawing number  |
| Process connection | Process connection detail drawing |
| Process data sheet | Process data sheet |
| Process Flow Diagram | Process Flow Diagram |
| Support\_Mounting | Support/Mounting detail drawing |
| **System Properties** |
| Instrument system | Abbreviation for the digital system which the device signal is connected to, such as DCS, PLC, ANALYZER, ESD, etc. |
| Associated I/O type | Associated digital system I/O component such as AI. AO, DI. DO, HART®, etc. |
| Associated I/O location | Location of associated I/O component such as building number, cabinet/rack number, panel number, etc. |
| Turnover System | Data packaging identification for transfer to the owner |
| Commissioning system | Commissioning system |

Note: Any additional manual entry property titles can be added to the Excel file columns.

1. **Custom Views of Instrument Index Data Table**

About 19 basic custom views of the Instrument Index Data are provided and can be added to and configured:

* Add Components UserForm
* Additional Loop or Tag Properties
* Administrative Identifications
* Calibration Data
* Compare Design Conditions
* Component Identifications
* Document Identifications
* Drawing References
* Instrument Index Report Testing
* Instrument Specification Form Data
* Manual Data Entry of Index
* Modeling Physical Data
* Normal View (All for design)
* Process Data Comparison
* Process Specification Form Operating Parameters
* Procurement Properties
* Safety Classifications
* System Properties