TABLE 1 - IDENTIFICATION LETTERS

	FIRST-LETTER (4)		SUCCEEDING-LETTERS (3)		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS (5, 19)		ALARM		
B	BURNER, COMBUSTION		USER'S CHOICE (1)	USER'S CHOICE (1)	USER'S CHOICE (1)
C	USER'S CHOICE (1)			CONTROL (13)	
D	USER'S CHOICE (1)	DIFFERENTIAL (4)			
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION) (4)			
G	USER'S CHOICE (1)		GLASS, VIEWING DEVICE (9)		
H	HAND				HIGH (7, 15, 16)
I	CURRENT (ELECTRICAL)		INDICATE (10)		
J	POWER	SCAN (7)			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE (4, 21)		CONTROL STATION (22)	
L	LEVEL		LIGHT (11)		LOW (7, 15, 16)
M	USER'S CHOICE (1)	MOMENTARY (4)			MIDDLE, INTERMEDIATE (7, 15)
N	USER'S CHOICE (1)		USER'S CHOICE (1)	USER'S CHOICE (1)	USER'S CHOICE (1)
O	USER'S CHOICE (1)		ORIFICE, RESTRICTION		
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY	INTEGRATE, TOTALIZE (4)			
R	RADIATION		RECORD (17)		
S	SPEED, FREQUENCY	SAFETY (8)		SWITCH (13)	
T	TEMPERATURE			TRANSMIT (18)	
U	MULTIVARIABLE (6)		MULTIFUNCTION (12)	MULTIFUNCTION (12)	MULTIFUNCTION (12)
V	VIBRATION, MECHANICAL ANALYSIS (19)			VALVE, DAMPER, LOUVER (13)	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED (2)	X AXIS	UNCLASSIFIED (2)	UNCLASSIFIED (2)	UNCLASSIFIED (2)
Y	EVENT, STATE OR PRESENCE (20)	Y AXIS		RELAY, COMPUTE, CONVERT (13, 14, 18)	
Z	POSITION, DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

NOTE: NUMBERS IN PARENTHESES REFER TO SPECIFIC EXPLANATORY NOTES IN ISA SECTION 5.1.

TABLE 2 - TYPICAL LETTER COMBINATIONS

		CONTROLLERS				READOUT DEVICES		SWITCHES AND ALARM DEVICES*			TRANSMITTER									
FIRST LETTERS	INITIATING OR MEASURED VARIABLE	RECORDING	INDICATING	BLIND	SELF-ACTUATED CONTROL VALVES	RECORDING	INDICATING	HIGH **	LOW	COMB	RECORDING	INDICATING	BLIND	SOLENOIDS, RELAYS, COMPUTING DEVICES	PRIMARY ELEMENT	TEST POINT	WELL OR PROBE	VIEWING DEVICE, GLASS	SAFETY DEVICE	FINAL ELEMENT
A	ANALYSIS	ARC	AIC	AC		AR	AI	ASH	ASL	ASHL	ART	AIT	AT	AY	AE	AP	AW			AV
B	BURNER/COMBUSTION	BRC	BIC	BC		BR	BI	BSH	BSL	BSHL	BRT	BIT	BT	BY	BE		BW	BG		BZ
C	USER'S CHOICE																			
D	USER'S CHOICE																			
E	VOLTAGE	ERC	EIC	EC		ER	EI	ESH	ESL	ESHL	ERT	EIT	ET	EY	EE					EZ
F	FLOW RATE	FRC	FIC	FC	FCV, FICV	FR	FI	FSH	FSL	FSHL	FRT	FIT	FT	FY	FE	FP		FG		FV
FQ	FLOW QUANTITY	FQRC	FQIC			FQR	FQI	FQSH	FQSL			FQIT	FQT	FQY	FQE					FQV
FF	FLOW RATIO	FFRC	FFIC	FFC		FFR	FFI	FFSH	FFSL						FE					
G	USER'S CHOICE																			
H	HAND		HIC	HC						HS										HV
I	CURRENT	IRC	IIC			IR	II	ISH	ISL	ISHL	IRT	IIT	IT	IY	IE					IZ
J	POWER	JRC	JIC			JR	JI	JSH	JSL	JSHL	JRT	JIT	JT	JY	JE					JV
K	TIME	KRC	KIC	KC	KCV	KR	KI	KSH	KSL	KSHL	KRT	KIT	KT	KY	KE					KV
L	LEVEL	LRC	LIC	LC	LCV	LR	LI	LSH	LSL	LSHL	LRT	LIT	LT	LY	LE		LW	LG		LV
M	USER'S CHOICE																			
N	USER'S CHOICE																			
O	USER'S CHOICE																			
P	PRESSURE/VACUUM	PRC	PIC	PC	PCV	PR	PI	PSH	PSL	PSHL	PRT	PIT	PT	PY	PE	PP			PSV	PV
PD	PRESSURE, DIFFERENTIAL	PDRC	PDIC	PDC	PDCV	PDR	PDI	PDSH	PDSL		PDRT	PDIT	PDT	PDY	PE	PP			PSE	PDV
Q	QUANTITY	QRC	QIC			QR	QI	QSH	QSL	QSHL	QRT	QIT	QT	QY	QE					QZ
R	RADIATION	RRC	RIC	RC		RR	RI	RSH	RSL	RSHL	RRT	RIT	RT	RY	RE		RW			RZ
S	SPEED/FREQUENCY	SRC	SIC	SC	SCV	SR	SI	SSH	SSL	SSHL	SRT	SIT	ST	SY	SE					SV
T	TEMPERATURE	TRC	TIC	TC	TCV	TR	TI	TSH	TSL	TSHL	TRT	TIT	TT	TY	TE	TP	TW		TSE	TV
TD	TEMPERATURE, DIFFERENTIAL	TDRC	TDIC	TDC	TDCV	TDR	TDI	TDSH	TDSL		TDRT	TDIT	TDT	TDY	TE	TP	TW			TDV
U	MULTIVARIABLE					UR	UI							UY						UV
V	VIBRATION/MACHINERY ANALYSIS					VR	VI	VSH	VSL	VSHL	VRT	VIT	VT	VY	VE					VZ
W	WEIGHT/FORCE	WRC	WIC	WC	WCV	WR	WI	WSH	WSL	WSHL	WRT	WIT	WT	WY	WE					WZ
WD	WEIGHT/FORCE, DIFFERENCIAL	WDRC	WDIC	WDC	WDCV	WDR	WDI	WDSH	WDSL		WDRT	WDIT	WDT	WDY	WE					WDZ
X	UNCLASSIFIED																			
Y	EVENT/STATE/PRESENCE		YIC	YC		YR	YI	YSH	YSL				YT	YY	YE					YZ
Z	POSITION/DIMENSION	ZRC	ZIC	ZC	ZCV	ZR	ZI	ZSH	ZSL	ZSHL	ZRT	ZIT	ZT	ZY	ZE					ZV
ZD	GAUGING/DEVIATION	ZDRC	ZDIC	ZDC	ZDCV	ZDR	ZDI	ZDSH	ZDSL		ZDRT	ZDIT	ZDT	ZDY	ZDE					ZDV

NOTE: THIS TABLE IS NOT ALL-INCLUSIVE.

*A, ALARM, THE ANNUNCIATING DEVICE, MAY BE USED IN THE SAME FASHION AS S, SWITCH, THE ACTUATING DEVICE.

**THE LETTERS "H" AND "L" MAY BE OMITTED IN THE UNDEFINED CASE.

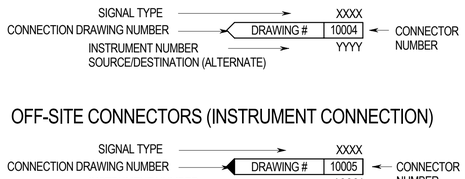
OTHER POSSIBLE COMBINATIONS:

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)

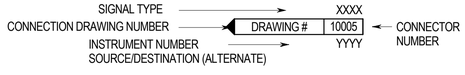
DRAWING CONNECTIONS

COMMON SIGNAL TYPES
- PRESSURE
- TEMPERATURE
- LEVEL
- FLOW
- DIFFERENTIAL PRESSURE
- ANALYZER

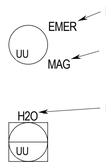
OFF-DRAWING CONNECTORS (INSTRUMENT CONNECTIONS)



OFF-SITE CONNECTORS (INSTRUMENT CONNECTION)



FUNCTION IDENTIFICATION



INSTRUMENT TYPE IDENTIFICATION

CAP	CAPACITANCE
D/P	POSITIVE DISPLACER
DISP	DIPLACER
LASER	LASER
GWR	GUIDED WIRE RADAR
MAG	MAGNETIC
RADAR	RADAR
RTD	RESISTANCE TEMPERATURE DETECTOR
SKIN	SKIN
T/C-K	THERMOCOUPLE TYPE K

PSV CASE

BLOCKED	BLOCKED
FIRE	FIRE
THERMAL	THERMAL

2oo3	2 out of 3
2 SPEED	2 SPEED
A	Active
ACB	Air Circuit Breaker
ACC	Accumulator
ACT	Actuator/Activated
AL	Aluminium
AMB	Ambient
AMP	Ampere
ANN	Annunciator
APC	Advanced Process Control
ATS	Auto Transfer System
AUTO	Automatic
AUTO/MAN	Automatic/Manual
AVL	AVL
BMS	Burner Management System
BN	Bentley Nevada
BT	Bus Tie
BYPASSED	Bypassed
C	Close
CALOR	Calorimeter
CCR	Central Control Room
CCT	Circuit
CCTV	Closed Circuit Television
CEMS	Continuous Emission Monitoring System
CLOSED	Closed
CMD	Command
CO	Carbon Monoxide
CO2	Carbon Dioxide
COMB	Combustible
COMMON	Common
CONC	Concentric
COND	Conductivity
CSP	Chloro Sulphonated Polyethylene
CTA	Common Trouble Alarm
CTL	Control
CURRENT	Current
DENS	Density
DEV	Deviation
DIAGNOSTIC	Diagnostic
DISC	Disconnect
DISCH	Discharge
DOWN	Down
E-STOP	E-Stop
EB	Ethylebenzene
EBV	Emergency Block Valve
EHM	Equipment Health Monitoring
ELECT	Electric, Electrical
EMER	Emergency
EMF	Electromotive Force
ENRG	Energized
EOS	Emergency Override Switch
ESD	Emergency ShutDown
ESD/F&G	ESD/F&G
Ex d	Flameproof
Ex e	Increased Safety
Ex i	Intrinsic
Ex n	Non-Sparking
EXH	Exhuast
F	F
FAILED	Failed
FAULT	Fault
FP	Fire Proof
G	Green
GC	Gas Chromatograph
GENERAL S/D	General S/D
H/A	Hand/Automatic
H2	Hydrogen Analysis
H2O	Moisture
H2S	Hydrogen Sulfide
HAND	Hand
HC	HydroCarbon
HDPE	High Density Polyethylene
HMI	Human Machine Interface
HOA	Hand-off-Automatic
IBP, x%BP	Initial Boiling Point, x% Boiling Point
L/R	Local Remote
LOCAL	Local
MeoH	Methyl Alcohol
Mo3	Middle of 3
MOS	Maintenance Override Switch
MR	Magnetostrictive
N2	Nitrogen
NH3	Ammonia
NOx	Oxides of Nitrogen
O	Open
O/C	Open/Close
O/C/S	O/C/S
O/L	Overload
O/R	Override
O2	Oxygen
OP	Opacity
OS	Override Switch
PB	Pushbotton
PC	Photo Cell
PERM	Permissives
pH	Acidity or Alkalinity
PHASE	Phase
POSITION	Position
PSD	PSD
R	Red
R/X	Reflex Type Gauge Glass
RAMAN	Laser Based Spectrometer
RD	Radar
REMOTE	Remote
RES	Resistor
RESET	Reset
REV	Reversed
RUN	Run
RVP	Reed Vapor Pressure
S/D	ShutDown
S/S	Start/Stop
SIL	Safety Integrity Level
SIS	Safety Instrumented System
SOx	Oxides of Sulfur
SP	Set Point
SP GR	Speed
SPEED	Specific Gravity
START	Start
STOP	Stop
SYNC	Synchronization
T/P	Transparent Type Gauge Glass
TC	ThermoCouple/Thermal Conductivity
TD	Time Delay
TDL	Moisture Analysis, Acetylene
TDR	Time Delay Relay
TEST	Test
THC	Total Hydrocarbon
TOC	Total Organic Carbon
TRIP	Trip
TRIPPED	Tripped
TSO	Tight Shut Off
VAC	Vacuum
VFD	Variable Frequency Drive
VIBR	Vibration
VSD	Variable Speed Driver

Σ	SUM
÷	DIVIDE
d/dt	DERIVATIVE
√	EXTRACT SQ RT
>	HIGH LIMITER
<	LOW LIMITER
x	MULTIPLY
Δ	DIFFERENCE
>	HIGH SELECTOR
<	LOW SELECTOR
I/P	INPUT/OUTPUT OF THE FOLLOWING

A	ANALOG
D	DIGITAL
E	VOLTAGE (EMF)
I	CURRENT
N	HYDRAULIC
O	ELECTROMAGNETIC
P	PNEUMATIC
R	RESISTANCE

ALL INSTRUMENTS ARE DEFAULTED TO CONVENTIONAL TYPE INSTRUMENTS, THE FOLLOWING WILL INDICATE FOUNDATION FIELD BUS OR HART

F	FOUNDATION FIELD BUS
H	HART

NOTES:

REV	DATE	DESCRIPTION	BY	CHK	ENG	PEM	PM
A	26-Jul-12	ISSUE FOR REVIEW	LB				

WorleyParsons
resources & energy

CLIENT/PROJECT TITLE
WORLEYPARSONS
MIMOSA

PROJECT NO.

PIPING AND INSTRUMENT DIAGRAM
LEGEND SHEET
INSTRUMENT LETTER DEFINITION CHART

SCALE
NONE

DWG. NO.
LEGEND-004

REVISION
A

FILE NAME: \General\UU\LEGEND-004.pid

A1 841x594

NOTE: THIS DRAWING AND THE DATA CONTAINED HEREIN ARE OF A CONFIDENTIAL NATURE AND SHALL BE USED ONLY FOR THE PURPOSE INTENDED BY WORLEYPARSONS. REPRODUCTION OR DISTRIBUTION OF THE ORIGINAL OR COPIES SHALL REQUIRE WRITTEN PERMISSION FROM THE DRAWING OWNER.