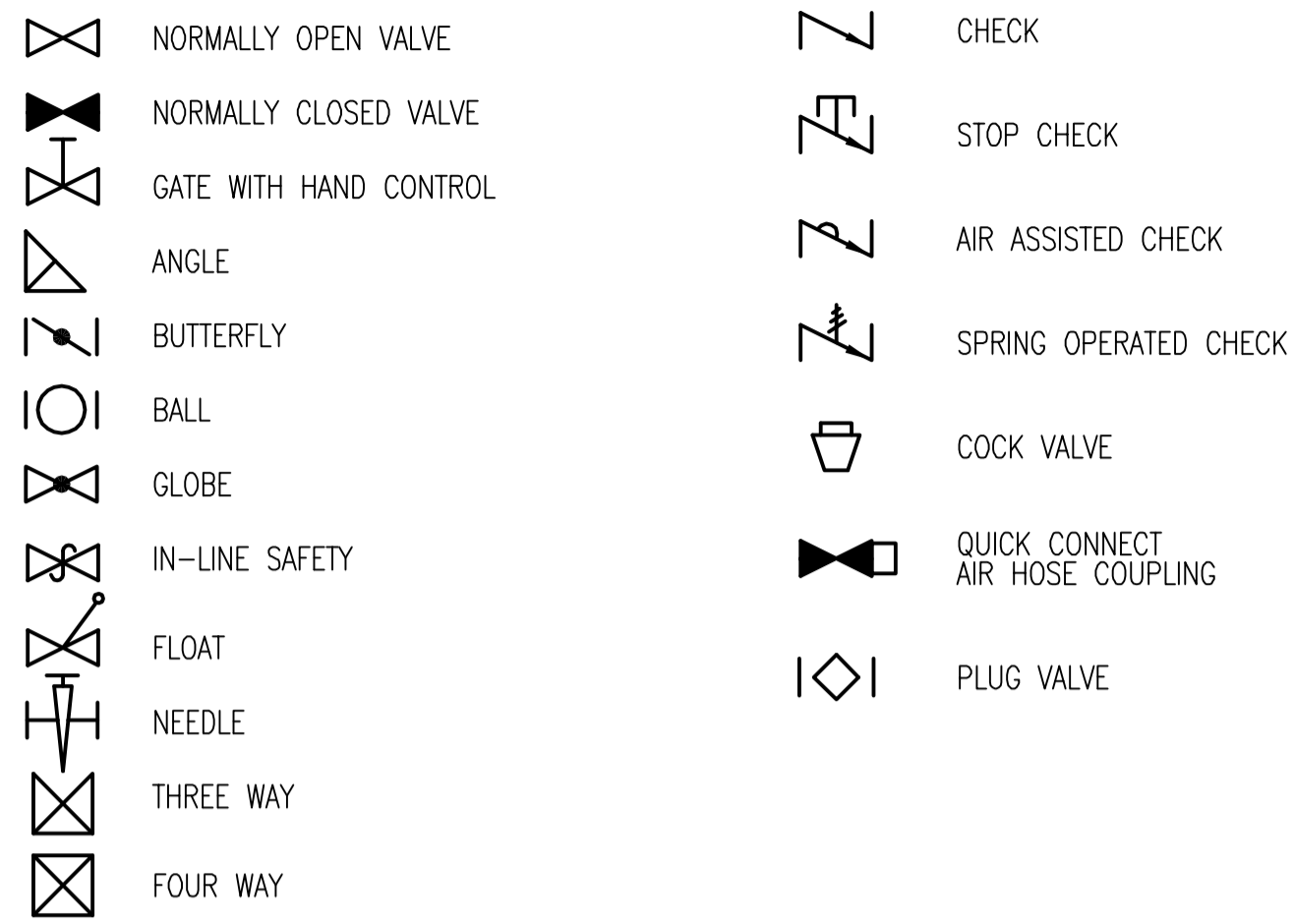
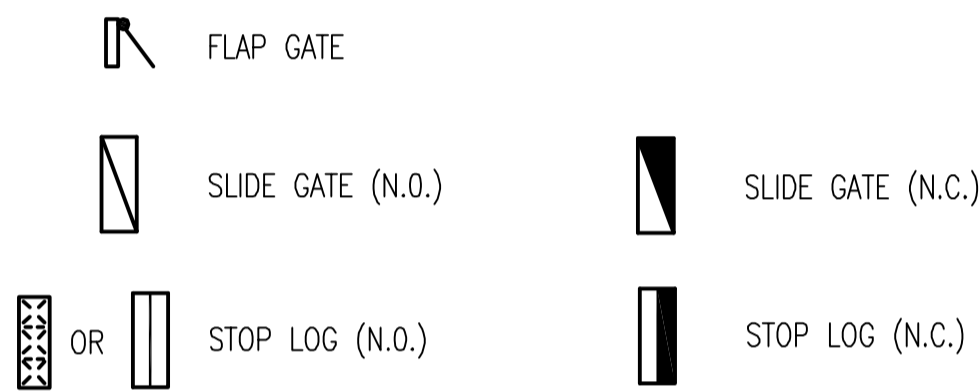


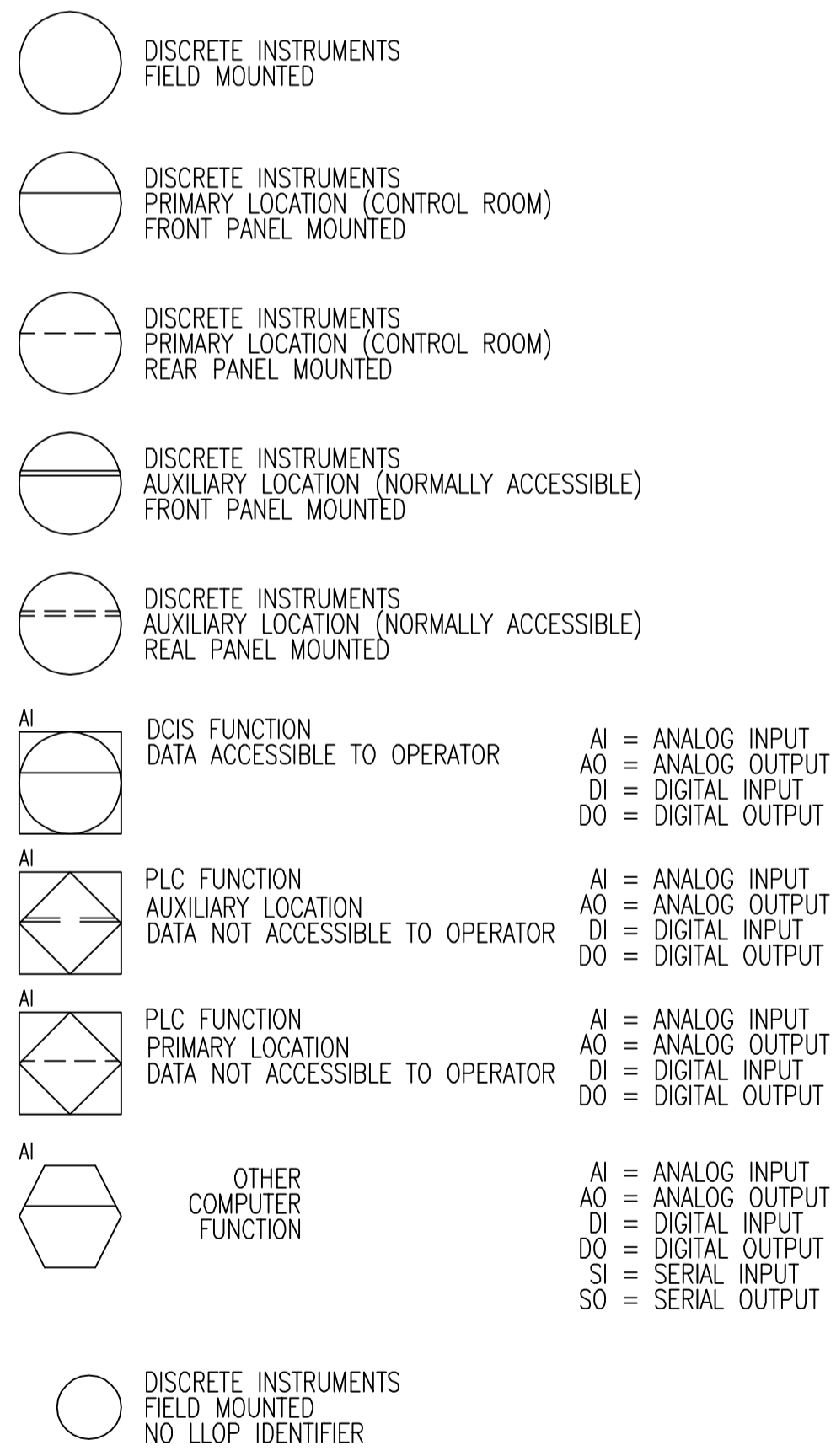
VALVE SYMBOLS



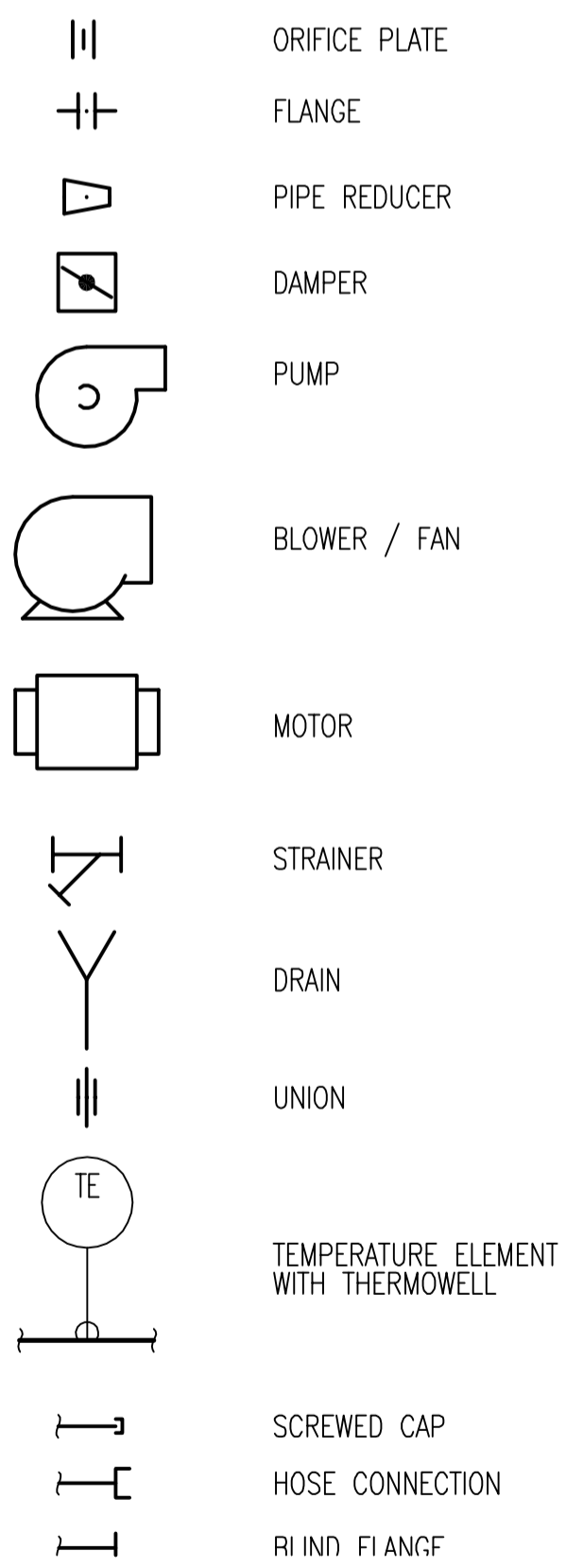
GATE SYMBOLS



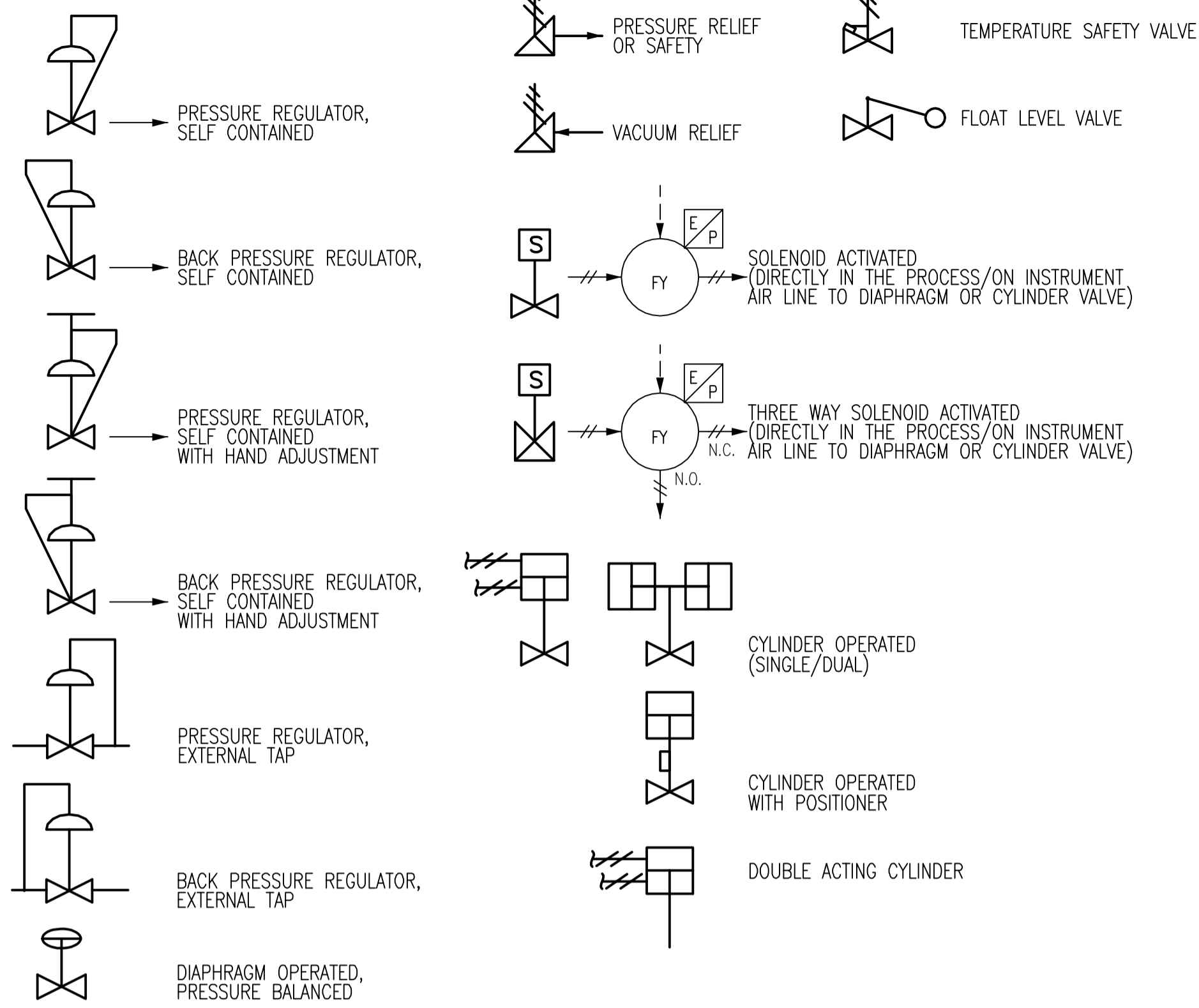
INSTRUMENT SYMBOLS



ACCESSORY DEVICE SYMBOLS



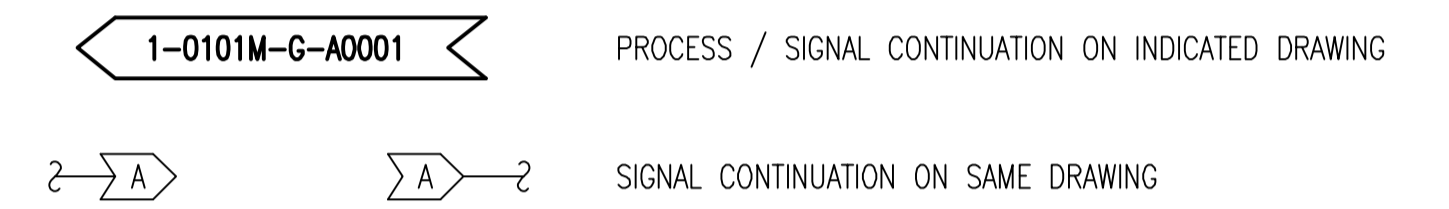
ACTUATOR SYMBOLS



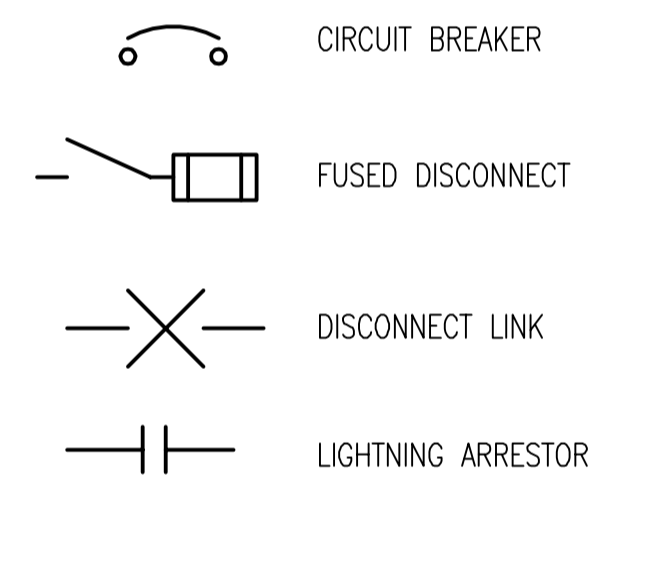
PID STANDARDS

1. DRAWINGS UTILIZE CITY OF WINNIPEG STANDARDS FOR BORDER AND TITLE BLOCK. ALL DRAWINGS ARE PRODUCED ON AUTOCAD (LATEST REV., R2000 OR LATER).
2. ALL UNITS ARE IN METRIC, EXCEPT AS NOTED OTHERWISE. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS (mm).
3. DRAWING CONTENT GENERALLY CONFORMS WITH TO ISA-5.1 STANDARD. AN EXCEPTION REGARDING EQUIPMENT TAGGING HAS BEEN MADE TO ALLOW BETTER CONFORMITY IN NAMING.
4. PID'S INDICATE MAJOR PROCESS PIPING AND EQUIPMENT AND ASSOCIATED LOCAL INSTRUMENTATION, DCS AND OTHER PROCESS I/O.
5. EQUIPMENT INCLUDING VESSELS, DRUMS, EXCHANGERS, HEATERS, PUMPS, COMPRESSORS, ETC. ARE ARRANGED IN SEQUENCE WITH PRINCIPLE FUNCTIONS AND FLOWS.
6. ALL MAJOR EQUIPMENT INCLUDING PUMPS, COMPRESSORS, TANKS, ETC. ARE LABELED AS TO FUNCTION WITH DESIGN SIZES AND RATINGS.
7. ALL PROCESS LINES ARE LABELED ACCORDING TO FUNCTION AND SIZE UTILIZING SYSTEM CODES DEFINED HEREIN.
8. EACH SYSTEM INTERCONNECTION POINT BETWEEN DRAWINGS IS LABELED WITH A SOURCE DRAWING NUMBER OR DESTINATION DRAWING NUMBER. ARROWS ON PROCESS PIPING INDICATE DIRECTION OF FLOW BETWEEN DRAWINGS.

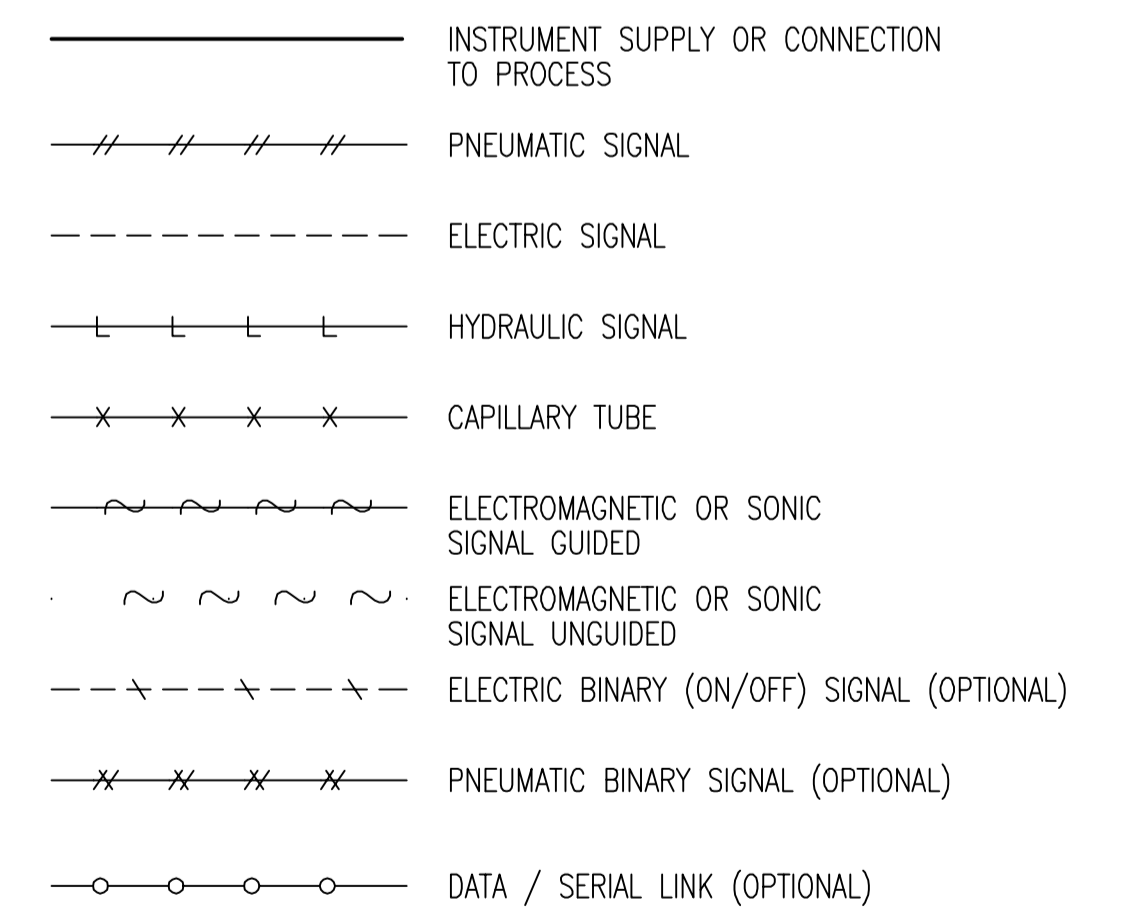
CONNECTING ARROWS



ELECTRICAL SYMBOLS



INSTRUMENT LINE SYMBOLS



B.M. ELEV.		FIELD BOOK #:	
POSTED TO LBIS			
06	RENUMBERED FACILITY CODE	2005/10/06	CJR
05	ISSUED FOR C.O.W. USE	2005/09/15	CJR
04	RELEASED FOR CUSTOMER REVIEW	2005/08/22	CJR
03	REVISED BY EARTHTECH	2005/01/21	DL
02	ISSUED FOR REVIEW	2004/11/25	CJR
01	ISSUED FOR REVIEW	2004/10/14	CJR
00	ISSUED FOR REVIEW	2004/06/01	CJR
NO.	REVISIONS	DATE	BY

SNC • LAVALIN Engineers & Constructors		SNC • LAVALIN 200-1600 Ness Avenue Winnipeg, Manitoba Canada R2J 3W7	
DESIGNED BY	EMR	CHECKED BY	CJR
DRAWN BY	DS	APPROVED BY	EMR
HOR. SCALE	NTS	RELEASED FOR CONSTRUCTION	
VERTICAL		DATE	2004/01/23
DATE	2004/01/23	FILENAME:	1-0101A-D-A0001-001-060.dwg

ENGINEER'S SEAL

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

Winnipeg

NORTH END WATER POLLUTION CONTROL CENTRE

PROCESS AND INSTRUMENT DIAGRAMS
LEGEND AND DETAILS

CITY DRAWING NUMBER: 1-0101A-D-A0001 | SHEET: 001 | REV: 06 | SIZE: D