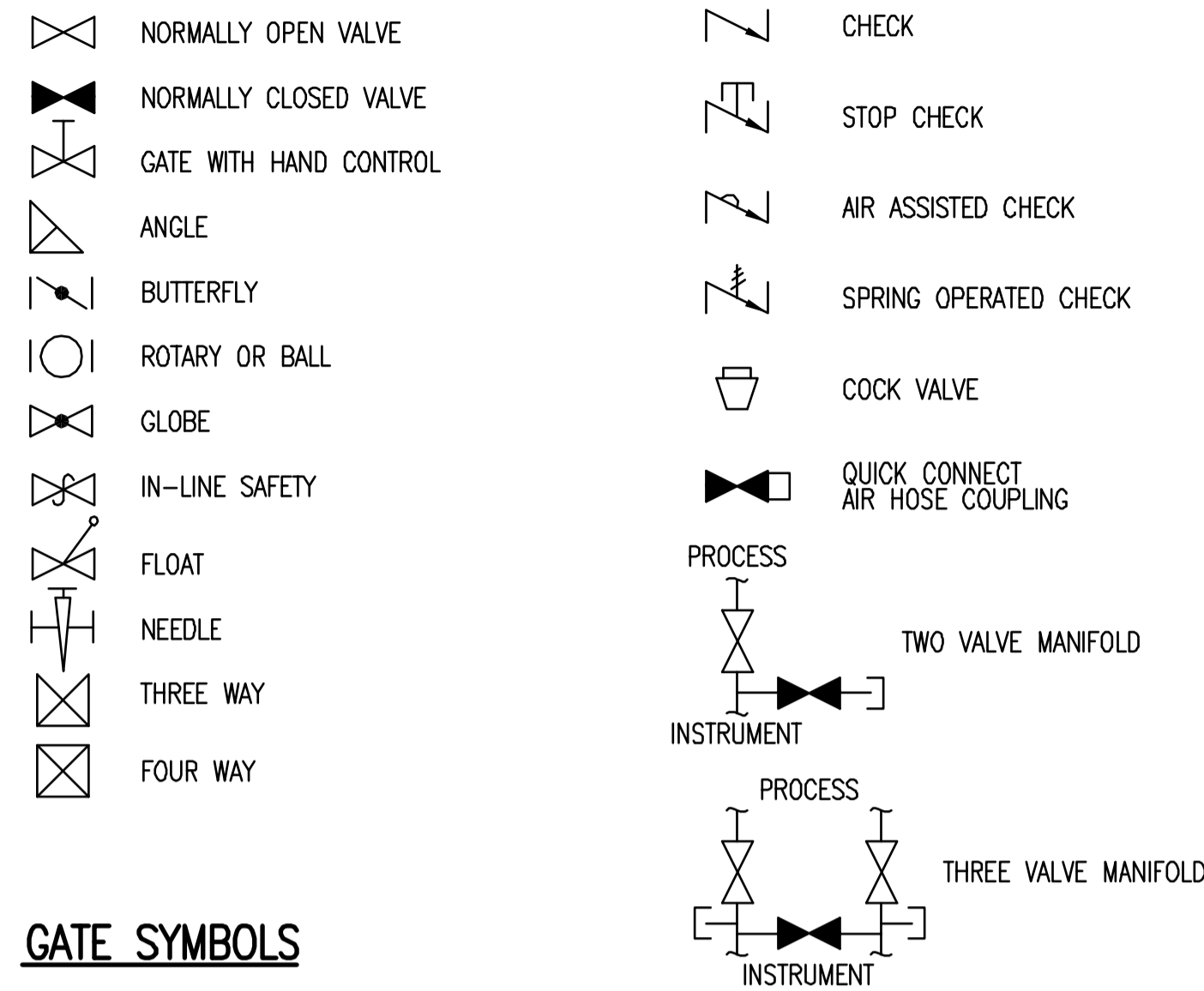
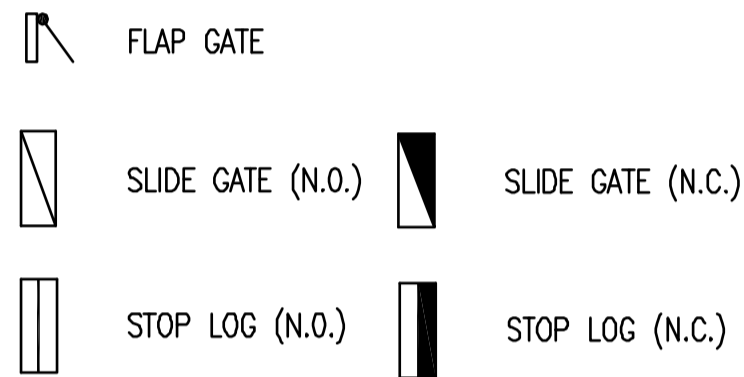


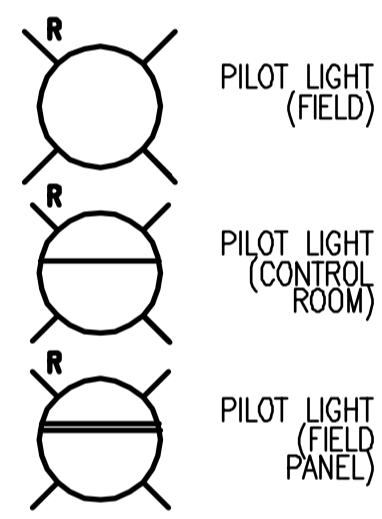
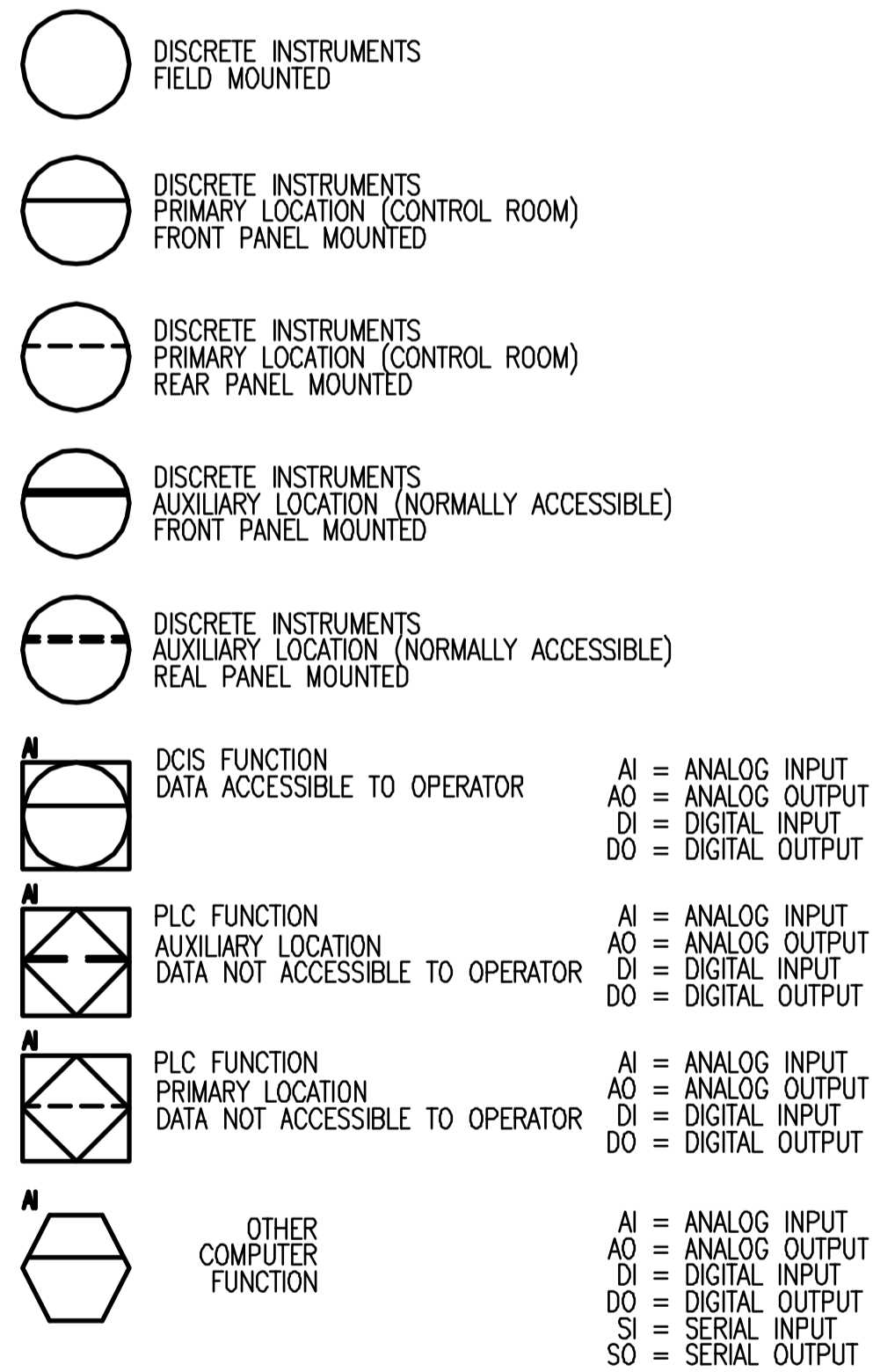
VALVE SYMBOLS



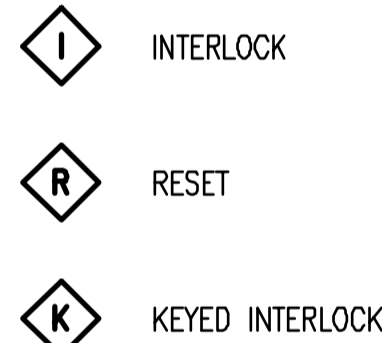
GATE SYMBOLS



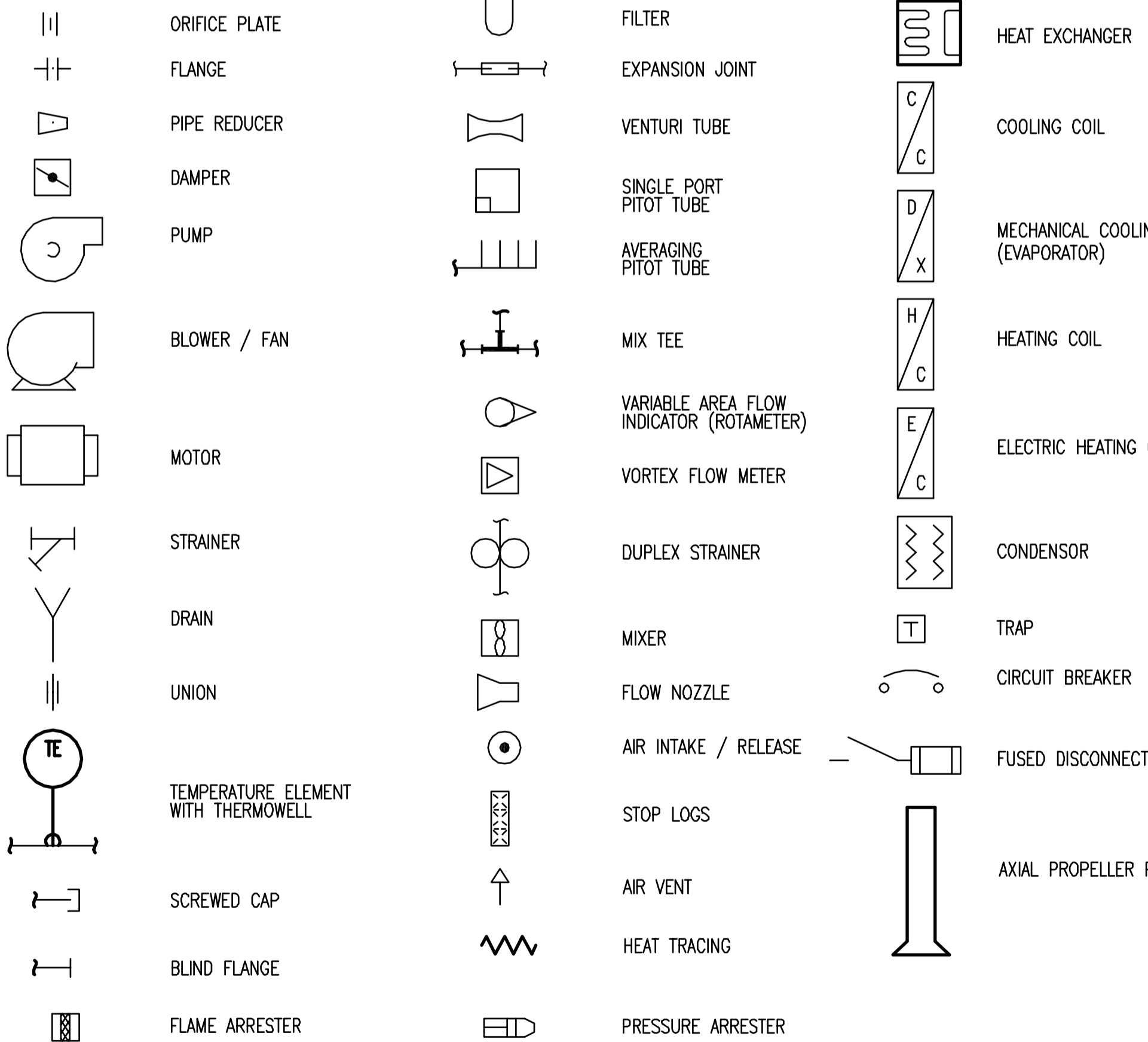
INSTRUMENT SYMBOLS



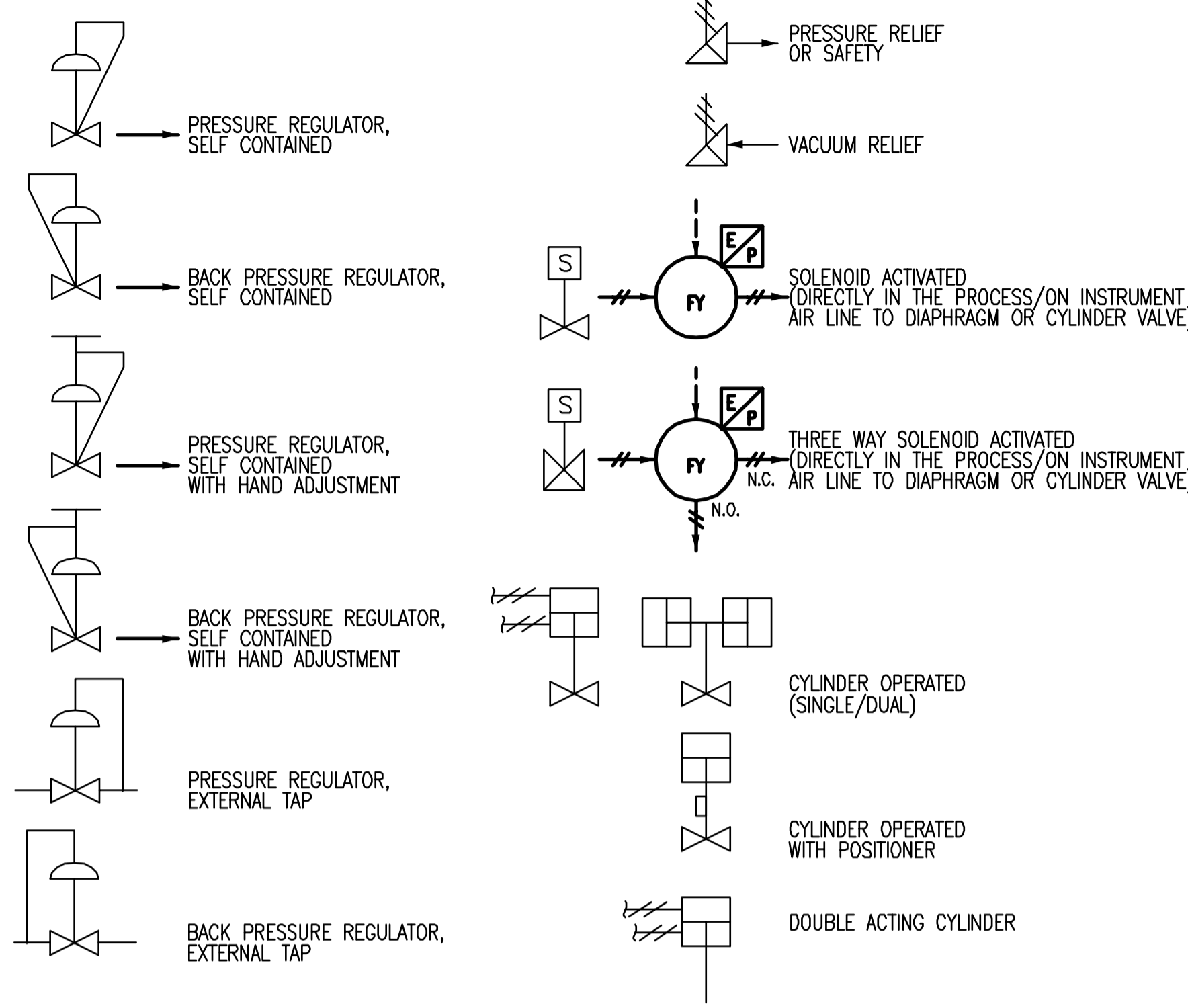
W = WHITE
 R = RED
 G = GREEN
 A = AMBER
 B = BLUE



ACCESSORY DEVICE SYMBOLS



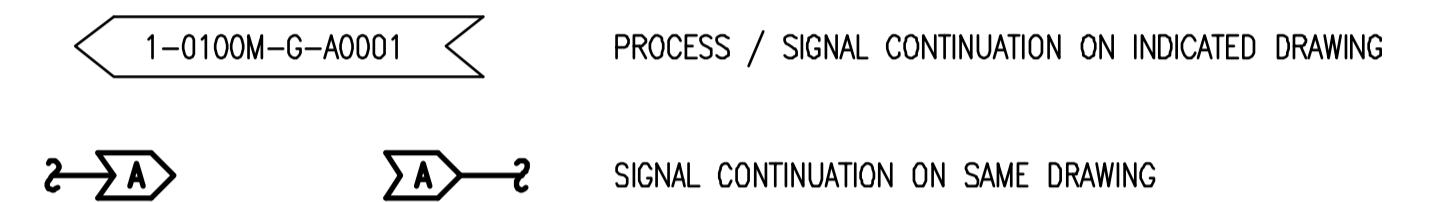
ACTUATOR SYMBOLS



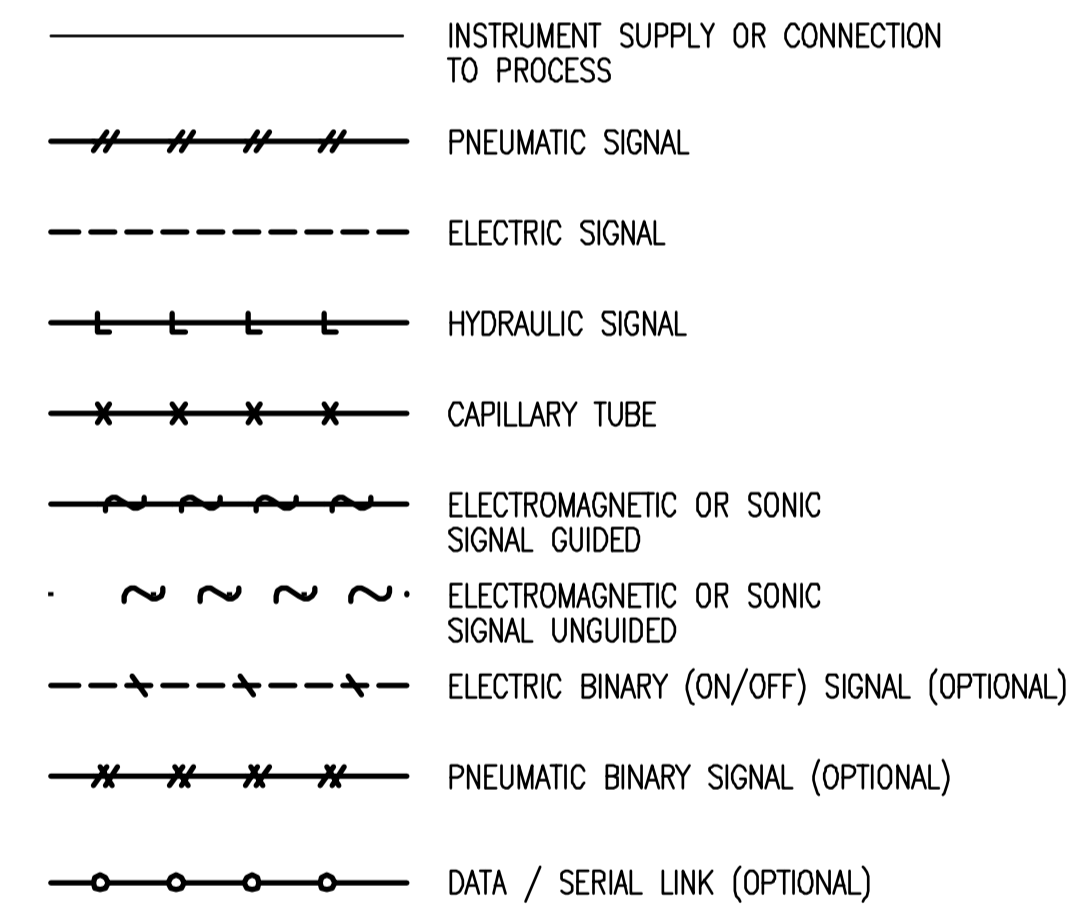
PID STANDARDS

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



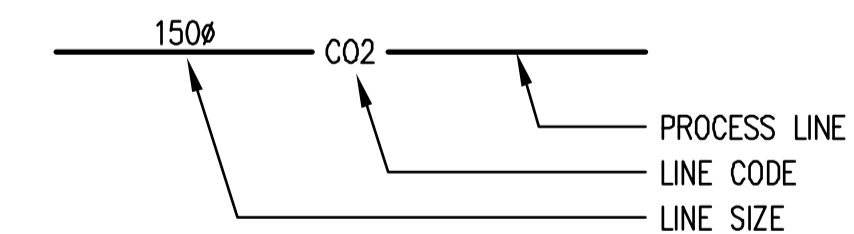
INSTRUMENT LINE SYMBOLS



IMPERIAL PIPE SIZE CHART (METRIC EQUIVALENT)

IN	MM	IN	MM
1/8	3	14	350
1/4	6	16	400
3/8	10	18	450
1/2	12	20	500
3/4	20	22	550
1	25	24	600
1 1/4	32	26	650
1 1/2	38	28	700
2	50	30	750
2 1/2	65	32	800
3	75	34	850
3 1/2	90	36	900
4	100	38	950
4 1/2	112	40	1000
5	125	42	1050
6	150	44	1100
7	175	46	1150
8	200	48	1200
9	225	50	1250
10	250	52	1300
11	275	54	1350
12	300		

PROCESS LINE DESIGNATION



B.M. ELEV.	FIELD BOOK #:	SNC • LAVALIN Engineers & Constructors		ENGINEER'S SEAL
POSTED TO LBS		DESIGNED BY ER	CHECKED BY	 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT NORTH END WATER POLLUTION CONTROL CENTRE PROCESS AND INSTRUMENT DIAGRAMS LEGEND AND DETAILS
		DRAWN BY DS	APPROVED BY	
03 REVISED BY EARTHTECH	05/01/21 DL	HOR. SCALE NTS	RELEASED FOR CONSTRUCTION	
02 ISSUED FOR REVIEW	04/11/25 CJR	VERTICAL	DATE	
01 ISSUED FOR REVIEW	04/10/14 CJR	DATE 2004 01 23	DATE	
00 ISSUED FOR REVIEW	04/06/01 CJR	FILENAME: 1-0100A-D-A001-001-030.dwg		
NO. REVISIONS	DATE BY			CITY DRAWING NUMBER 1-0100A-D-A001
				SHEET 001 REV. 03 SIZE D