

**REVISIONS**

R.LUCAS 2/20/97 02

REVISED NOTE #4 IN DETAIL "A", CHANGED SPEC. OR STD. FOR ITEMS 5, 6, 8, 10, 20  
REVISED NOTES #16 & #17.

A.F. 2/20/97

M.TURANCHIK 11/6/02 3

CHG'D. DIM. OF ITEM 6 NOTES 1, 8, & 9, ADDED NOTES 3b, 5, & 19  
C.W. 11/6/02

D. MILES 4/19/06 4

REMOVED REGULATOR VENT DETAIL. ADDED REFERENCE TO NEW VENT DETAIL DRAWING. REVISED NOTES & BILL OF MATERIAL

RAJ. 5/1/06

K. LOOK 5/23/07 5

CHANGED TITLE. REVISED TO INCLUDE 3" AND 4" EZR REGULATORS. REVISED NOTES AND TABLES.

P.L.S. 5/23/07

G. LUDWIG 3/31/11 6

ADDED AAT-90 175# AND AAT-57 175# TO TABLE 2. CORRECTED "F" DIM. IN TABLE 3. REVISED ITEM 4 DESCRIPTION.

D.R.J. 3/30/11

G. LUDWIG 5/22/12 7

ADDED NOTE 21.

H. D. 4/23/12

G. LUDWIG 7/15/14 8

REVISED NOTES 10, 11 & 13. REVISED ITEM 3 DESCRIPTION. ADDED REFERENCE TO YELLOW BOOK.

D.J. 6/27/14

G. LUDWIG 04/15/15 9

REVISED NOTE 10. ADDED NOTES 22 & 23

H.T. 04/15/15

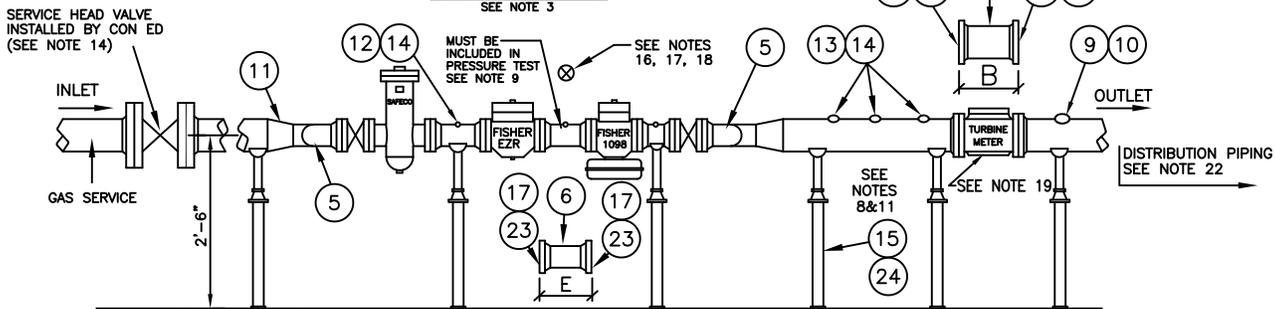
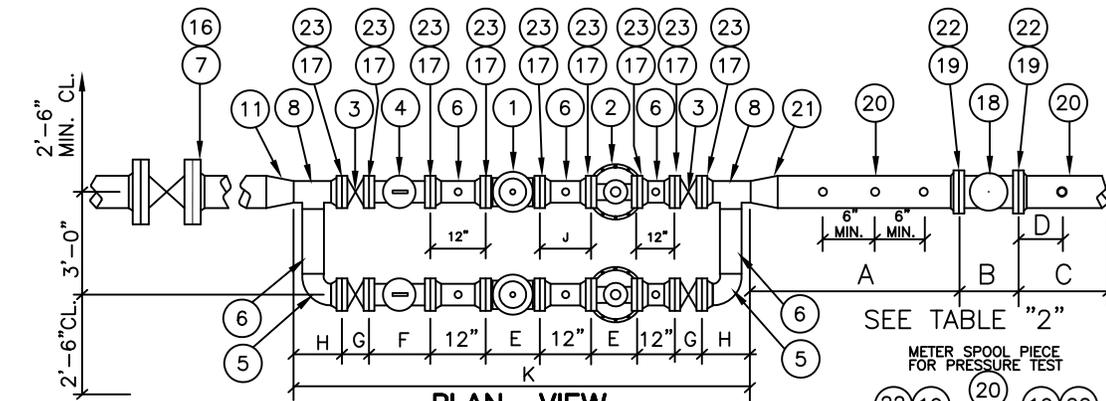
G. LUDWIG 03/14/19 10

ADDED NOTE 24

B.V. 02/11/19

ISSUED 04/12/19

METERING SPECIFICATIONS AND PROCEDURES VOLUME #3  
YELLOW BOOK



**REGULATOR SPOOL PIECE FOR PRESSURE TEST (4 REQUIRED)  
ELEVATION VIEW**

**TABLE 1 - DIMENSION "V", "R", "E", "M", "B" (SEE NOTES 6 & 7)**

SIZE OF HEAD OF SERVICE VALVE FLANGE & PIPING	V
SIZE OF REGULATOR FLANGE & PIPING	R
SIZE OF REGULATOR FLANGE TO FLANGE	E
SIZE OF METER FLANGE & PIPING	M
SIZE OF METER FLANGE TO FLANGE	B

**TABLE 2 - METERING DIMENSIONS "M", "A", "B", "C", "D"**

METER	AAT-57 175# OGTS 175#	AAT-90 175# OGTS 175#	AAT-140 175#	12GTS 175#
M	6"	8"	12"	12"
A	60"	80"	120"	120"
B	16"	21"	30"	29"
C	30"	40"	60"	60"
D	12"	18"	24"	24"

**TABLE 3 - REGULATOR DIMENSIONS "R", "E", "F", "G", "H", "J", "K"**

REGULATORS	2"-EZR & 2" 1098	3"-EZR & 3" 1098	4"-EZR & 4" 1098
R	2"	3"	4"
E	10.0"	11.75"	13.88"
F	11"	16"	18"
G	7"	8"	9"
H	7"	9"	15.125"
J	11"	11"	13.75"
K	8"-2"	9"-1.5"	10"-10"

**BILL OF MATERIALS**

ITEM	DESCRIPTION	SPEC. OR STD.	QUANTITY
1	R" FISHER EZR REGULATOR, 150 LB. SUPPLIED BY CON ED		2
2	R" FISHER 1098 REGULATOR, 150 LB. SUPPLIED BY CON ED		2
3	R" 150 LB. BALL VALVE (SEE TABLE 2, YELLOW BOOK)		4
4	R" GAS FILTER, SUPPLIED BY CON ED		2
5	R" SHORT RADIUS 90° ELBOW, SCH. 40	ASME B16.28	2
6	R" STEEL PIPE, SCH. 40	ASTM - A106 GRADE "B"	AS REQ'D.
7	V" STEEL FLANGE, 150 LB., FLAT OR RAISED FACE (TO MATCH VALVE FLANGE, V")	ASME B16.5	1
8	R" x R" x R" STEEL TEE SCH. 40	ASME B16.9	2
9	M" x 1" THREADOLET (SEE NOTE 5)	ASME B16.9	1
10	1" STEEL SQUARE HEAD PLUG		1
11	V" x R" STEEL REDUCER	ASME B16.9	1
12	R" x 1/2" THREADOLET		6
13	M" x 1/2" THREADOLET		3
14	1/2" STEEL SQUARE HEAD PLUG	ASME B16.14	9
15	PIPE SUPPORT	EO-7043	AS REQ'D.
16	FLANGE INSULATING KIT (TO MATCH VALVE FLANGE, V")		1
17	R" STEEL FLANGE, RAISED FACE, 150 LB.		24
18	M" TURBINE METER		1
19	M" STEEL FLANGE, FLAT FACE, 150 LB. (FOR 12" SEE NOTE 19)	ASME B16.5	4
20	M" STEEL PIPE, SCH. 40	ASTM - A106 GRADE "B"	AS REQ'D.
21	M" x R" STEEL REDUCER	ASME B16.9	1
22	M" x 1/16" 150 LB. FULL FACE GASKET (SEE NOTES 4 & 19)		2
23	R" x 1/16" 150 LB. RING GASKET (SEE NOTE 4)		26
24	BAKELITE, NEOPRENE, OR EQUIV. INSULATING MAT'L (SEE NOTE 8)		AS REQ'D.

**NOTES:**

- ALL MATERIAL SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER EXCEPT FOR THE FILTERS AND REGULATORS WHICH ARE FURNISHED BY THE COMPANY AND INSTALLED BY THE CUSTOMER, AND THE METER WHICH IS FURNISHED AND INSTALLED BY THE COMPANY.
- DO NOT INCLUDE REGULATORS OR METER IN PRESSURE TEST. USE SPOOL PIECES SHOWN ON DRAWING.
- IF THE INSTALLATION CANNOT BE MADE AS SHOWN, CONTACT GAS MEASUREMENT.
- ALL GASKET MATERIAL SHALL BE GARLOCK 3000 (1/16" THICK).
- ALL THREADOLETS MUST BE FULL BORE, FILLET WELDED AND PLUGGED. DO NOT WELD WITH METERS INSTALLED.
- THE LETTER V REPRESENTS THE SERVICE HEAD VALVE FLANGE SIZE, THE LETTER R REPRESENTS THE REGULATOR FLANGE SIZE, THE LETTER E REPRESENTS THE REGULATOR FLANGE TO FLANGE, THE LETTER M REPRESENTS THE REGULATOR FLANGE TO FLANGE DIMENSION, AND THE LETTER B REPRESENTS THE METER FLANGE TO FLANGE DIMENSION. SEE TABLE 1 FOR EXACT SIZES. IF TABLE 1 IS NOT COMPLETED, CONTACT THE ASSIGNED ENERGY SERVICE REPRESENTATIVE.
- TABLE 1 MUST BE COMPLETED BY ASSIGNED ENERGY SERVICE REPRESENTATIVE BEFORE PROVIDING TO CONTRACTOR.
- INSULATING MATERIAL MUST BE INSTALLED BETWEEN THE PIPE SUPPORTS AND THE PIPE, SO THAT THE PIPE NEVER MAKES CONTACT WITH THE PIPE SUPPORT.
- A PRESSURE TEST MUST BE CONDUCTED AT 200 PSIG.
- EXCEPT FOR WHERE FLANGED COMPONENTS ARE CALLED FOR, ALL METER PIPING (PIPING FROM THE HEAD OF SERVICE VALVE TO METER OUTLET) SHALL BE BUTT WELDED. ALL BUTT WELDS FROM THE HEAD OF SERVICE VALVE TO THE REGULATOR CLOSEST TO THE METER SHALL BE RADIOGRAPHED. FOR CUSTOMER DELIVERY PRESSURES EXCEEDING 5 PSIG, ALL BUTT WELDS ON METER PIPING SHALL BE RADIOGRAPHED.
- PIPE SUPPORT OR ANY BRACING SHALL NOT BE WELDED TO METER/DISTRIBUTION PIPING AND SHALL BE INSTALLED PER G-695.
- IF A DOMESTIC REGULATOR METER SET IS REQUIRED, IT SHALL BE INSTALLED IMMEDIATELY AFTER SERVICE HEAD VALVE WITH AN ISOLATION VALVE.
- REFER TO YELLOW BOOK FOR FURTHER INFORMATION.
- FOR WESTCHESTER, CUSTOMER'S CONTRACTOR SHALL INSTALL SERVICE HEAD VALVE WHERE APPLICABLE.
- ALL OUTDOOR PIPING SHALL BE PAINTED WITH SUITABLE NON-LEAD OUTDOOR PAINT FOR USE ON METAL SURFACES.
- REFER TO EO-17118 - "REGULATOR VENT INSTALLATION" FOR VENT PIPE INSTALLATION, CAPS AND TERMINUS LOCATION REQUIREMENTS. SINCE THESE REGULATORS DO NOT UTILIZE FULL CAPACITY RELIEF, VENT PIPING SHALL BE 2" IN DIAMETER.
- EACH REGULATOR SHALL BE SEPARATELY VENTED.
- FOR INSIDE REGULATOR INSTALLATIONS, THE CUSTOMER SHALL INSTALL 2" VENT PIPE FROM OUTDOOR VENT CAP ALONG INSIDE WALL TO A POINT WITHIN 2' OF EACH REGULATOR RUN. COMPANY TO MAKE FINAL CONNECTION TO VENT LINE.
- 12" TURBINE METERS HAVE RAISED FACED FLANGES. WHEN INSTALLING A 12" TURBINE METER, USE 12" 150 LB. RAISED FACE STEEL FLANGES AND 12" x 1/16" 150 LB. RING GASKETS (ITEM 23).
- FOR ANY DOWNSTREAM PIPING BELOW GRADE REFER TO SPEC G-8205.
- OUTDOOR METER SETS SHALL BE PROTECTED BY A 6 FOOT HIGH LOCKABLE FENCE, CHAIN-LINK OR EQUIVALENT. THE FENCE SHALL BE EQUIPPED WITH A DOUBLE HASP LOCK TO ALLOW ACCESS BY CON-EDISON AND THE CUSTOMER.
- DISTRIBUTION PIPING EXCLUDING METER PIPING MUST MEET ALL WELDING, SPECIAL INSPECTION, AND RADIOGRAPHY REQUIREMENTS OF THE NYC BUILDING CODE OR OTHER AUTHORITY HAVING JURISDICTION.
- FOR INSTALLATIONS HAVING BRANCH LINES THAT ARE SEPARATELY METERED AND/OR SEPARATELY REGULATED, REFER TO SPEC. G-703 FOR PIPE SIZING REQUIREMENTS.
- IF THERE IS ANY RISK OF VEHICLE DAMAGE, METER/REGULATOR BUMPERS SHALL BE INSTALLED IN ACCORDANCE WITH G-704.

**INSTALLATION OF PARALLEL FISHER 2", 3", & 4" EZR AND 1098 REGULATORS WITH TURBINE METER INDOORS AND OUTDOORS 50,000 CFH AND LARGER**

CONSOLIDATED EDISON COMPANY OF N.Y., INC.  
GAS ENGINEERING DEPT.

DATE 11/15/96  
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