PUMP SYSTEM

RETURN SYSTEM

WASH RETURN TANK

RINSE RETURN TANK

STEAM

MACHINE CONTROL

WASHER 1

WASHER 2

LID WASHER

DRUM WASHER

McBULK HOSE

McBULK TANK1

McBULK TANK2

McBULK RETURN TANK

WASH TANK

RINSE TANK

HOT WATER

CAUSTIC TANK

COLD WATER

PUMP SYSTEM SKID

CONDENSATE SYSTEM

CONDENSATE RETURN SYSTEM

CONDENSATE LINE

STRAINER

HEAT EX.

GENERAL NOTES:

1
2
3
4

LEGEND

AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DISCRETE INPUT
DO	DISCRETE OUTPUT
DP	DIFFERENTIAL PRESSURE SWITCH
FS	FLOW SWITCH
GE	CONDUCTIVITY ELEMENT
GT	CONDUCTIVITY TRANSMITTER
IP	CURRENT-PRESSURE TRANSDUCER
LP	LEVEL PROBE
MS	MOTOR STARTER
MV	MOTORIZED VALVE
PE	PRESSURE ELEMENT
PT	PRESSURE TRANSMITTER
SV	SOLENOID OPERATED VALVE
TE	TEMPERATURE ELEMENT
TS	TEMPERATURE SWITCH
TT	TEMPERATURE TRANSMITTER
TV	MODULATING VALVE

PIPING SYMBOLS

- MANUAL GLOBE VALVE (THD.)
- MANUAL GLOBE VALVE (FLG.)
- MANUAL BUTTERFLY VALVE (FLG.)
- MANUAL BALL VALVE (THD.)
- MANUAL GATE VALVE (THD.)
- PLC CONTROLLED VALVE (THD.)
- PLC CONTROLLED VALVE (FLG.)
- PRES. REGULATING VALVE (FLG.)
- CHECK VALVE (THD.)
- CHECK VALVE (FLG.)
- AIR ELIMINATOR (THD.)
- REDUCER (WELDED)
- DRAIN
- T STEAM TRAP
- CONNECTION POINT

REV	REVISION DESCRIPTION	ENGR	BY	AUTH	DATE
C	GENERAL-LAYOUT CHANGE	DAH			5/24/95
B	GENERAL	ENP			5/16/95
A	GENERAL	JTC	RDW		3/16/95

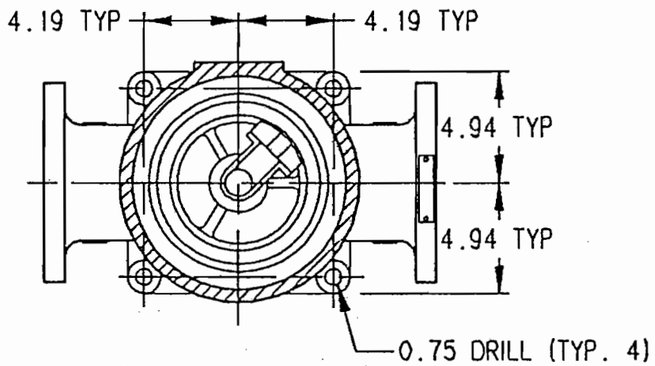
ABCO Automation, Inc.

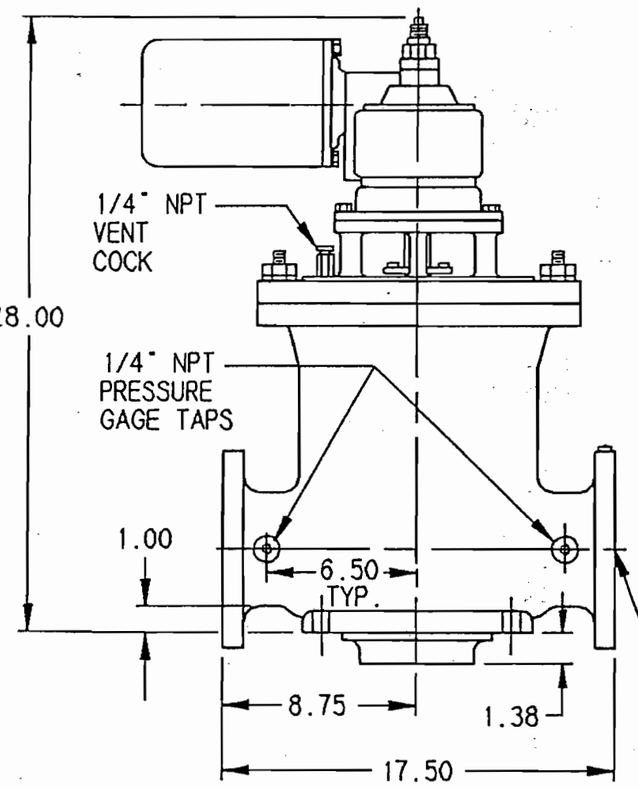
ENGINEER	DAH/ENP	DATE	3/22/95
DRAWN	DAH/ENP	DATE	3/22/95
CHECKED		DATE	
PROJECT	ATLANTA	JOB NO.	P5105

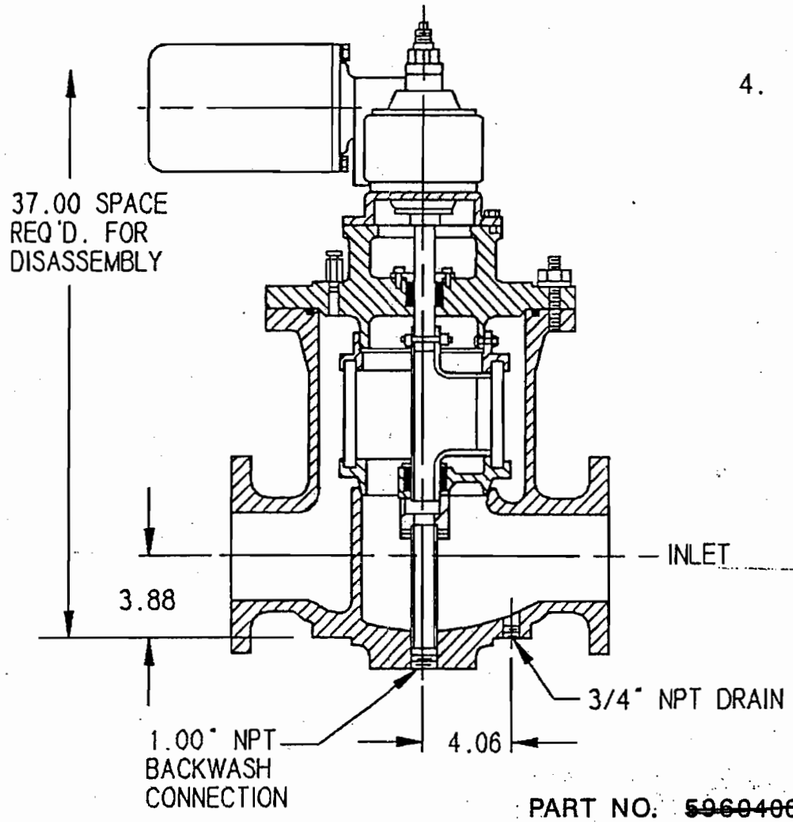
DESCRIPTION: ATLANTA FIGAL PUMP SYSTEM

DRAWING NO. ATPMPSYS | REVISION B | SCALE | DWG SIZE D

REV	DATE	CHANGE	ECR	BY	APP







NOTES:
1. FOR REPLACEMENT PARTS, MODEL NO., SIZE AND SERIAL NO. FROM THE STRAINER NAMEPLATE MUST BE FURNISHED.
2. FLANGED CONNECTIONS CONFORM TO ANSI STANDARDS.
3. ALL WEIGHTS IN POUNDS, ALL DIMENSIONS IN INCHES.
   SHIPPING WEIGHT: 290
   FLOODED WEIGHT: 325
   COVER WEIGHT: 125
4. DESIGN PRESSURE: 150 PSIG
   DESIGN TEMPERATURE: 150°F

CUSTOMER: ABCO
P.O. NO.: QUOTE: 95-0153
REG. NO.:
TAG NO.:
STRAINER MATERIALS: BODY, COVER & INTERNALS 316 ST. ST.

ELEMENT: 100 MESH EQUIV. DURAWEDGE 316 ST. ST.

PART NO. ~~5960400052~~

TOLERANCES UNLESS OTHERWISE SPECIFIED
DIMENSIONS: ±1/8" ANGLES: ±2°

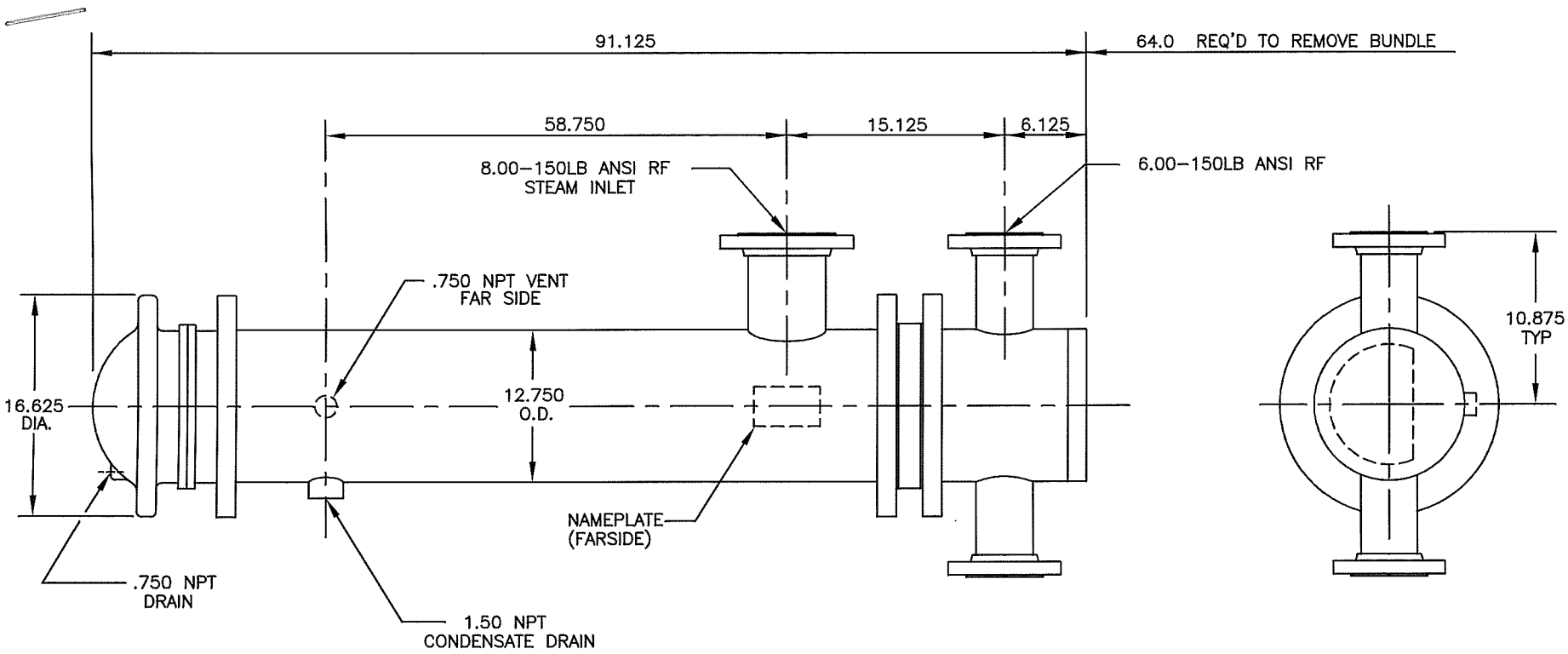
HAYWARD INDUSTRIAL PRODUCTS, INC.
900 FAIRMOUNT AVENUE, ELIZABETH, NEW JERSEY 07207

NAME
MODEL 596 STRAIN-O-MATIC
4" CAST ~~IRON~~ AUTOMATIC STRAINER

DRAWN	DATE	CHECKED	DATE
		REF DWG 596040CA 12/91	

DWG NO SD59642 REV --

CAD No. G:\5045\12075011	FACTORY ORDER NO. 95A86061-02	5-045-12-075-011	REV.



ASME CONSTRUCTED & STAMPED
SECTION VIII, DIV. 1

	D.P.	T.P.	MAX. TEMP.	MIN. TEMP.
TUBE SIDE	125PSI	250PSI	375°F	-20 °F
SHELL SIDE	150PSI	300PSI	375°F	-20 °F

REPLACEMENT PARTS	
DESCRIPTION/MATERIAL	PART NUMBER
BUNDLE KIT w / GSKT & PKNG	4-205-12-075-002
GASKET (2): COMP FIBER	3-298-8-00-925-12
GASKET: (1): COMP FIBER	3-299-8-00-928-12
PACKING: SYN FIBER	3-359-8-00-909-52

MATERIAL SPECIFICATION			
FRONT HEAD:	316SS	SHELL:	STEEL
REAR HEAD:	CAST 316SS	TUBESUPPORTS:	STEEL
TUBESHEET:	316SS		
TUBES:	(QTY 196)316SS .625 OD X 18 BWG		

REV#	REVISIONS	DATE	BY	APPD.

TITLE: HEAT EXCHANGER

MATERIAL

PART No.

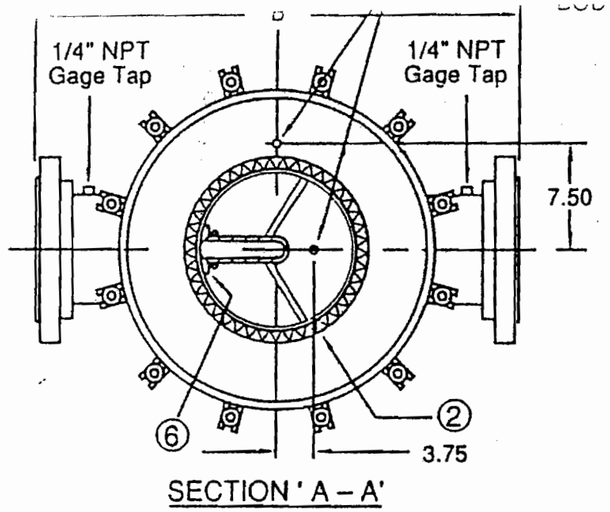
SALES No. QOC126-2

NAME	DATE	CK. BY	DATE
JRB	3/30/95		

TOLERANCES UNLESS OTHERWISE SPECIFIED

DEC.±	FRAC.±	ANGLE±	SCALE

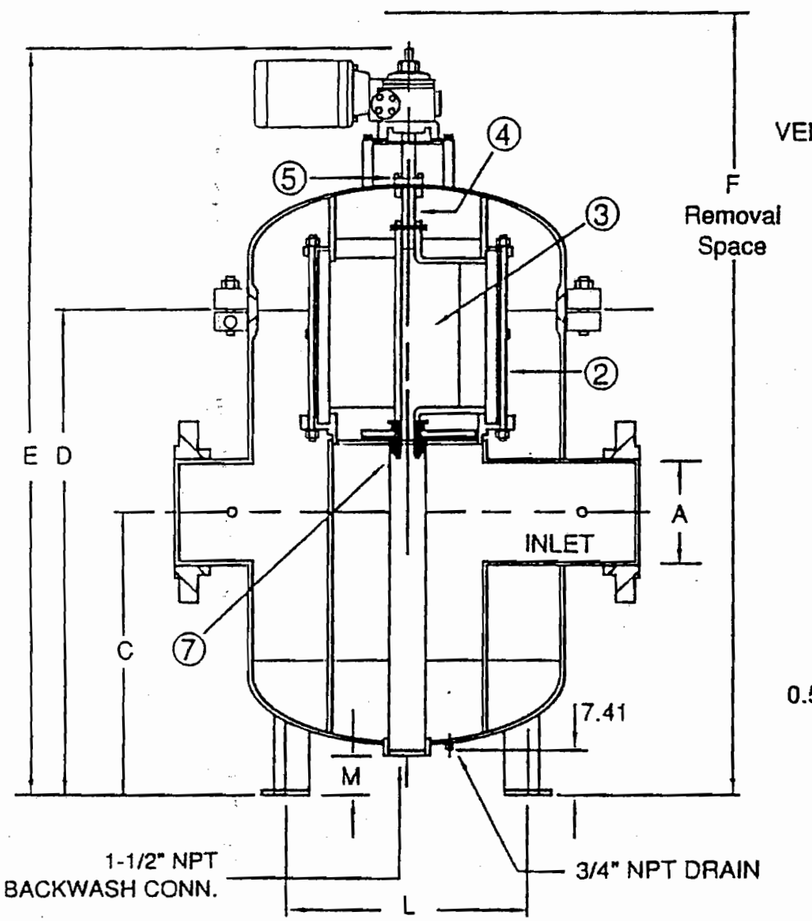
ITT Bell & Gossett
Buffalo, NY U.S.A.

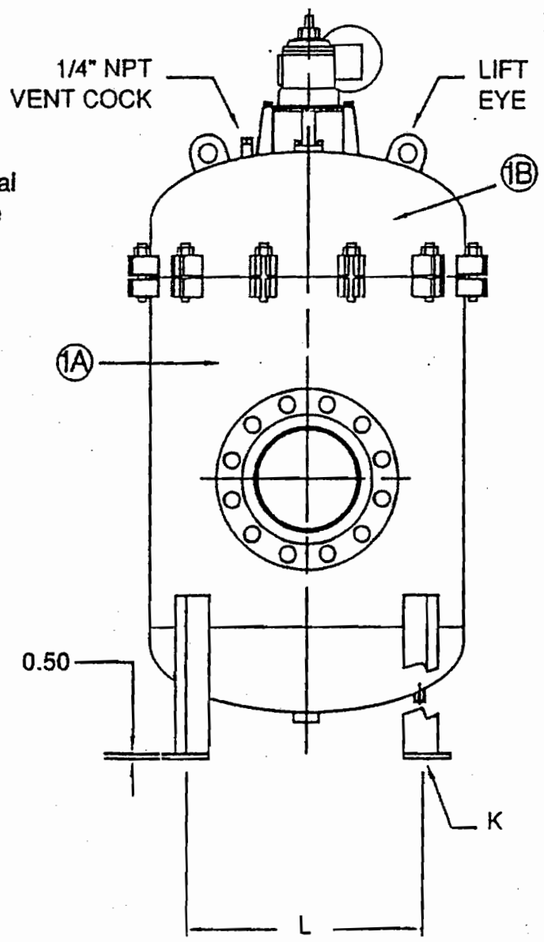


SECTION ' A – A'

A	B	C	D	E	F	K	L	M
in. / mm	in. / mm	in. / mm	in. / mm	in. / mm	in. / mm	in. / mm	in. / mm	in. / mm
6 / 152	26 / 660	20 / 508	30 / 762	51.69/1313	60 / 1524	.875/ 22	18 / 457	7 / 178
~~8 / 203~~	~~26 / 660~~	~~20 / 508~~	~~30 / 762~~	~~51.69/1313~~	~~60 1524~~	~~.875/ 22~~	~~18 / 457~~	~~7 / 178~~

NO.	PART NAME	MATERIAL
1A/1B	Body/Cover	Stainless Steel
2	Straining Element	316 Stainless Steel
3	Backwash Arm	Stainless Steel
4	Backwash Shaft	Stainless Steel
5	Packing Seal	Duck and Rubber
6	Port Seal	Urethane
7	Bearing	Composite





NOTES:

1. FOR REPLACEMENT PARTS, MODEL NO., SIZE AND SERIAL NO. FROM THE STRAINER NAMEPLATE MUST BE FURNISHED.
2. FLANGED CONNECTIONS CONFORM TO ANSI STANDARDS.
3. ALL WEIGHTS IN POUNDS, ALL DIMENSIONS IN INCHES.
   SHIPPING WEIGHT: 442 POUNDS
   FLOODED WEIGHT: 617 POUNDS
   COVER WEIGHT: 110 POUNDS

CERTIFIED FOR: ABCO
P.O. NO.: —
REG. NO.: — 27927
QUOTE NO.: 95-0153
TAG NO.:

ELEMENT: 100 MESH EQUIV. DURALOOGE

HAYWARD INDUSTRIAL PRODUCTS, INC.
900 FAIRMOUNT AVENUE, ELIZABETH, NJ 07207

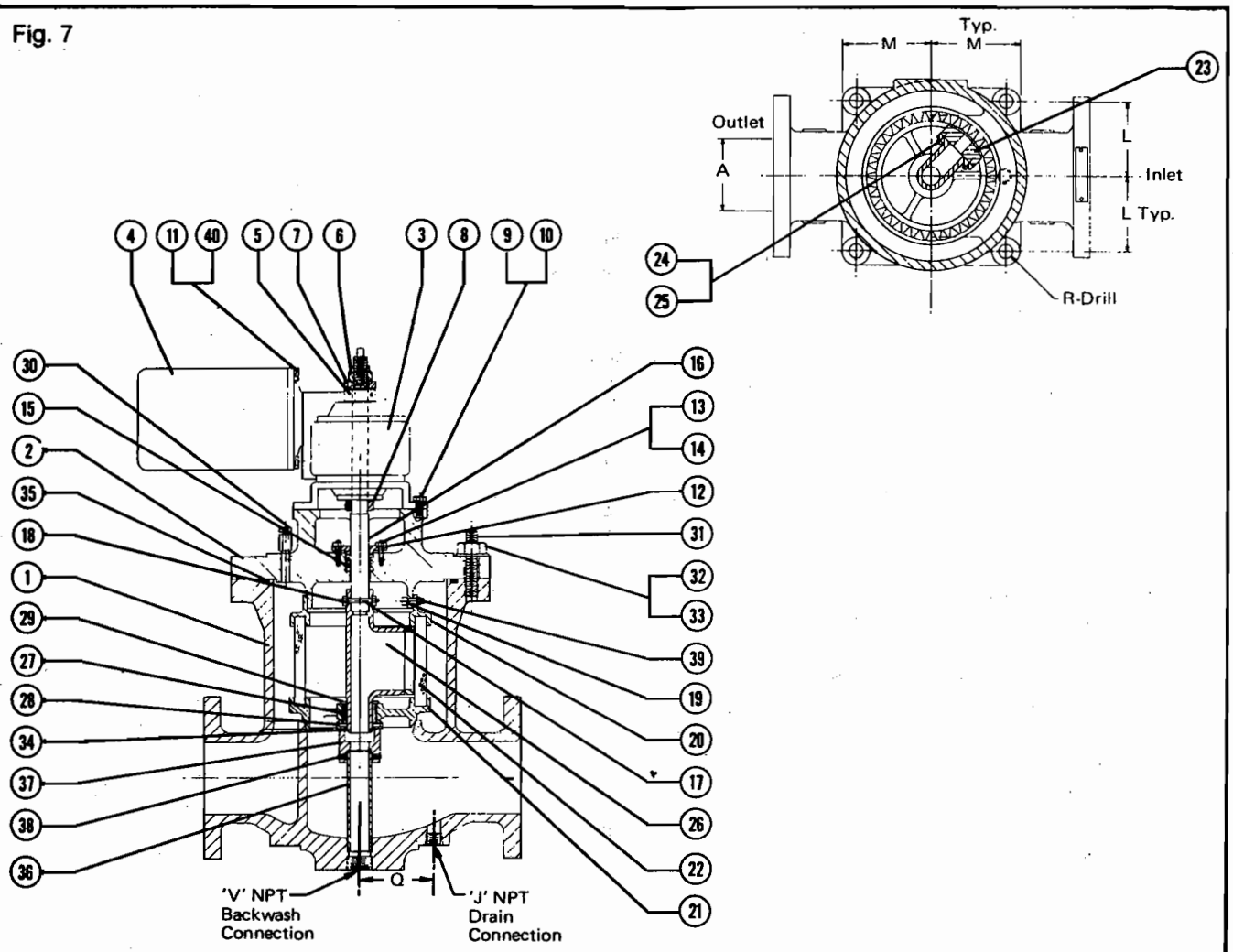
MODEL 596 STRAIN-O-MATIC®
6"-8" FABRICATED AUTOMATIC STRAINER

DRAWN BY	DATE	CERT. BY	DATE
DJR	4-13-92	GJL	4-13-92

DWG NO SD 596142 REV

HAYWARD®
Industrial Products, Inc.
900 Fairmount Avenue, Elizabeth, NJ 07207
Phone: (908) 351-5400 • Fax: (908) 351-7893

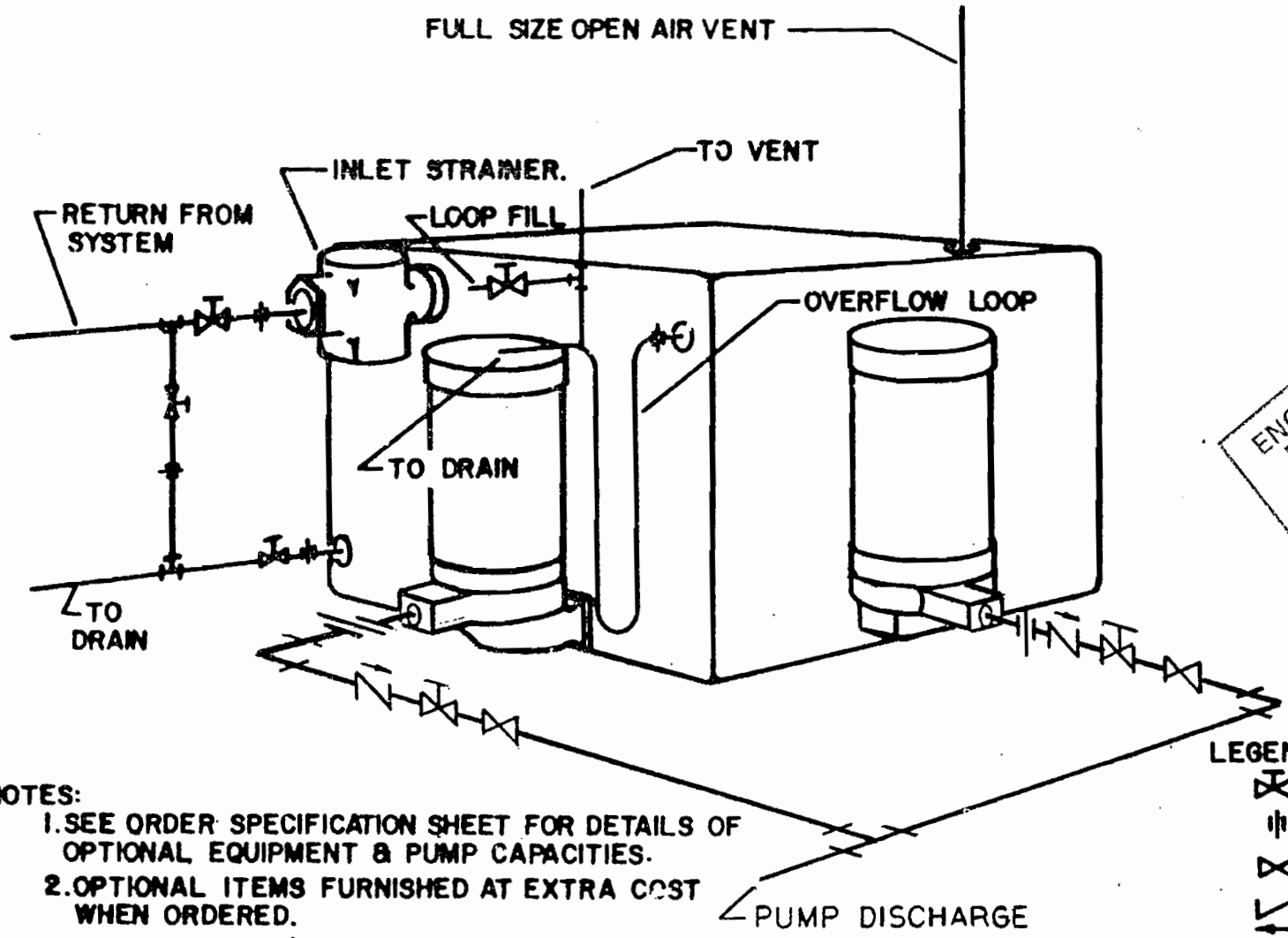
Fig. 7



PARTS LIST
2" Thru 8" Size

1 Body
2 Cover
3 Reducer
4 Motor
5 Drive Key
6 Locknut
7 Spacer
8 Thrust Collar
9 Hex Head Cap Screw
10 Lockwasher
11 Motor Mounting Bolt
12 Packing Gland
13 Stud
14 Hex Nut
15 Packing Set
16 Shaft
17 B/W Arm Pin
18 Locknut
19 Soc. Hd. Shldr. Screw
20 Seal Ring (Upper)
21 Seal Ring (Lower)
22 Straining Element Assy.
23 Port Seal
24 Lockwasher
25 Stainless Steel Cap Screw
26 Backwash Arm
27 Thordon Bearing
28 Bearing Housing Collar
29 Bearing Wear Control Ring
30 Vent
31 Cover Stud
32 Cover Nut
33 Washer
34 Retaining Ring
35 'O' Ring
36 Backwash Pipe
37 Coupling
38 Set Screw
39 Locknut
40 Lockwasher

IDPD 39



NOTES:

1. SEE ORDER SPECIFICATION SHEET FOR DETAILS OF OPTIONAL EQUIPMENT & PUMP CAPACITIES.
2. OPTIONAL ITEMS FURNISHED AT EXTRA COST WHEN ORDERED.

LEGEND:

- GATE VALVE
- UNION
- PLUG COCK
- CHECK VALVE

REVISION	DATE	BY	APP.
4			
3			
2			
1			

NAME: PIPING DIAGRAM TYPE CB CONDENSATE UNITS

PART NO. IDPD39

DWN. JHO | DATE 11-85 | CKD. | DATE

TOLERANCES UNLESS OTHERWISE SPECIFIED

DEC. ± | FRAC. ± | ANGLE ± | SCALE

BELL & GOSSETT ITT
8200 N. AUSTIN AVE. • MORTON GROVE, IL 60053
FLUID HANDLING DIVISION • ITT CORPORATION

JOHNSON CONTROLS

Johnson Controls, Inc.
Controls Group
507 E. Michigan Street
P.O. Box 423
Milwaukee, WI 53201

V-5464 Normally Closed 1-1/2 and 2 in. Cage Trim Steam or Water Valves Class 250 ANSI Body Rating

The V-5464 Normally Closed Valve is designed to accurately regulate the flow of steam or hot and cold water through coils and heat exchangers of all types. The valve is furnished with a factory installed 4R actuator which is equipped with a molded synthetic rubber diaphragm contained in a sturdy metal housing, protected from dirt and damage. The modulating valve plug includes a molded and bonded composition disc especially compounded for steam or water service.

The V-5464 features an encapsulated spring design which allows safe and simple maintenance. The self contained spring assembly is removed and replaced as a complete unit. The entire actuator can be easily removed to perform inline servicing to various parts of the valve. The actuator and valve provide a Push Down to Open (PDO) combination for normally closed applications.

Features

All V-5464 Valves feature a removeable cage trim design which provides valve plug guiding throughout the travel range and permits high rangeability. The cage also has an integral seat to facilitate convenient replacement. A modulating valve plug provides an equal percentage relationship between valve travel and flow at a constant pressure drop. A composition disc that provides tight shutoff is bonded and molded into the valve plug. The bonnet, cage, and the stem and plug assembly can be easily removed for servicing. A red arrow is stamped on one side of the valve body indicating normally closed valve style as well as the direction of flow for proper piping.

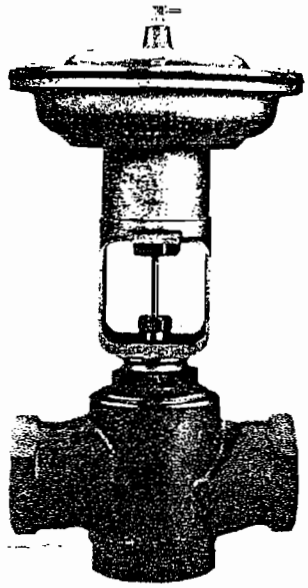


Fig. 1: V-5464 N.C. Valve

Specifications

Service			Steam or Hot and Cold Water
Body Style and Sizes			1-1/2 and 2 in. Threaded Ends (IPT)
Max Control Pressure			25 PSIG (175 kPa)
Control Air Connection			1/8 in NPT Barbed Elbow Fitting for 1/4 in O.D. Polytubing
Valve Body Pressure/Temperature Rating			Exceeds Requirements of ANSI B16.15, Class 250
Maximum Allowable Pressure/Temp		**Steam**	35 PSIG (245 kPa) Saturated
		Water	400 PSIG (2800 kPa) up to 150°F (66°C) Decreasing to 345 PSIG (2415 kPa) at 281°F (140°C)
Spring Range (Nominal)			9 to 13 PSIG (63 to 91 kPa)
Ambient Temp Limits			– 10 to 150°F (– 23 to 66°C)
Materials	**Actuator**		Cast Aluminum and Iron
	Trim	**Stem**	Stainless Steel
		Plug	Brass with Molded and Bonded Composition Disc
	Cage		Cast Brass Including Integral Seat
	Diaphragm		Molded Reinforced Synthetic Rubber
	Packing		Synthetic Elastomer U-Cups
Accessories (Order Separately)			V-9502-23 Valve Positioner Kit
			V-510-103 Valve Positioner Spring
			V-5252-100 Valve Position Indicator

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Operation

Air pressure from a pneumatic controller is applied to the diaphragm of the actuator which moves the diaphragm plate against the forces of the internal spring and the fluid. The diaphragm plate will move the valve plug to a position where the diaphragm pressure and the spring force balance against fluid forces. These fluid forces will cause the