Model A
Pipe Line Strainer

General Description

TYCO Model A Pipe Line Strainers are designed for installation in the water supply connection to automatic sprinkler, water spray deluge, foam-water deluge, or standpipe fire protection systems. The strainers are used where it is necessary to protect spray nozzles, sprinklers, or other type discharge outlets from obstruction by debris that may be present in the water supply.

The Model A Pipe Line Strainer is a redesignation of the Gem Model A.

NOTICE

The Model A Pipe Line Strainers described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Always refer to Technical Data Sheet TFP700 for the "INSTALLER WARNING" that provides cautions with respect to handling and installation of sprinkler systems and components. Improper handling and installation can permanently damage a sprinkler system or its components and cause the sprinkler to fail to operate in a fire situation or cause it to operate prematurely.

Technical Data

Approvals
UL Listed
ULC Listed
FM Approved

Sizes
3, 4, 6, 8 & 10 Inch
(DN80, DN100, DN150, DN200 & DN250)

Maximum Working Pressure
175 psi (12,1 bar)

Friction Loss and Equivalent Lengths of Pipe
Refer to Graph A

Finish
Galvanized

Physical Characteristics

Body	Steel
Inlet Connection	Cast Iron
Outlet Connection	Cast Iron
Flushing Connection	Cast Iron
End Closure	Cast Iron
Nuts and Bolts	Zinc Plated, Carbon Steel
Ring Gaskets	SBR Rubber
Basket Assembly	Stainless Steel or MONEL

Strainer Basket Screen
Strainer basket screen is perforated by 1/8 inch (3,2 mm) diameter holes spaced to provide 40 percent open area.

Design Criteria

Install TYCO Model A Pipe Line Strainers horizontally with the flushing connection oriented down (Ref. Figure 1).

A saddle support accommodating the body nominal pipe size (Ref. Figure 1) must be located beneath the strainer on center with the outlet. If outlet Angle "J" is other than 180°, additional provisions must be made for separate support of the outlet piping.

The strainer must be located with adequate clearance to allow complete removal of the basket assembly for cleaning and maintenance (Ref. Figure 1).

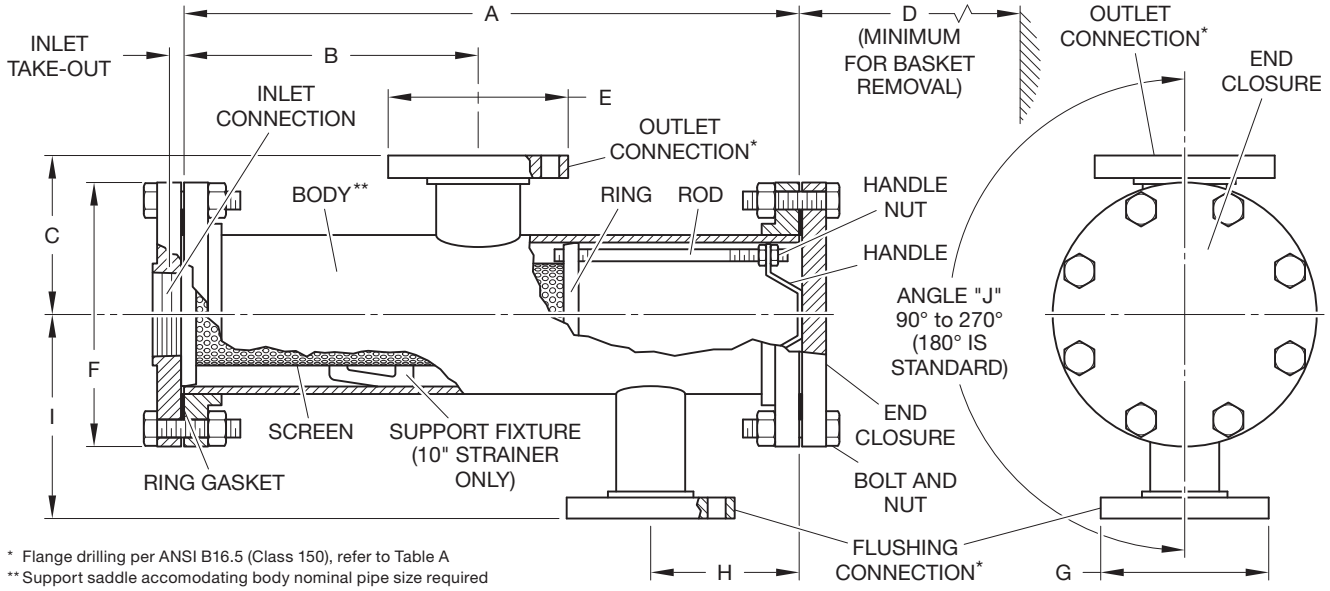
When planning installation, consideration must be given to disposal of the large quantities of water that may be required to ensure thorough cleaning of the basket assembly during flushing. Typically, the flushing connection is fitted with an appropriately sized, normally closed, valve and hose connection.

Installation

The TYCO Model A Pipe Line Strainer is shipped as an assembly. Threaded inlet and flanged outlet and flushing connections (Ref. Figure 1 and Table A) are to be made in accordance with accepted piping practices. Provisions for the pipe saddle, basket removal clearance, and strainer flushing must be made in accordance with the requirements described in the Design Criteria section.

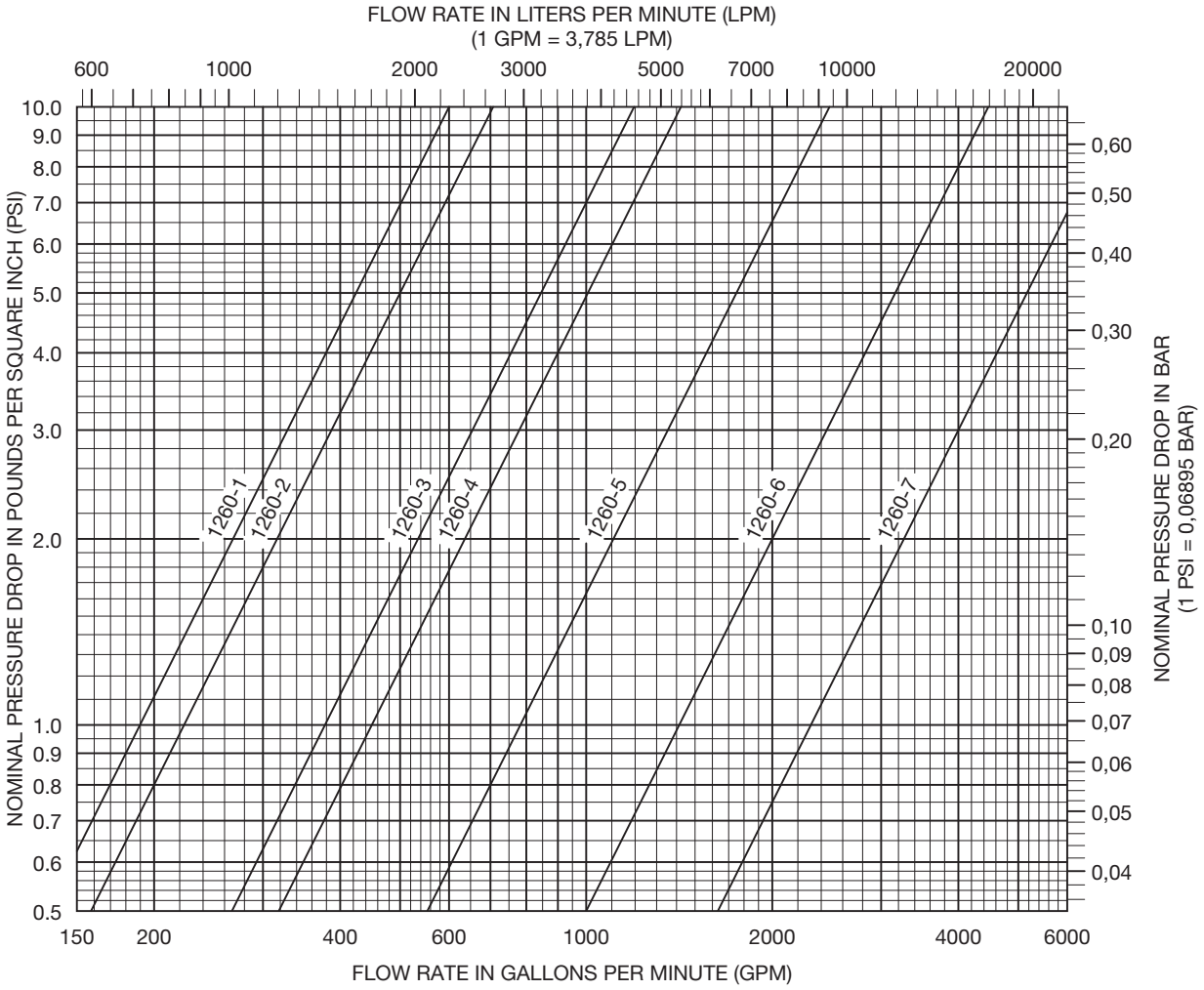
Strainer Figure Number	Inlet Connection Nominal Thread Size Inches NPT	Outlet Nominal Pipe Size ANSI Inches DN	Flushing Nominal Pipe Size ANSI Inches DN	Dimensions in Inches (mm)					
				Inlet Take-Out	A	B	C	D	E
1260-1	3 NPT	2-1/2 DN65	2-1/2 DN62	9/16 (14,3)	25-3/8 (644,5)	11-15/16 (303,2)	6-5/8 (168,3)	26 (660,4)	7 (177,8)
1260-2		3 DN80							7-1/2 (190,5)
1260-3	4 NPT	4 DN100	2-1/2 DN62	11/16 (17,5)	29-7/8 (758,8)	15-15/16 (404,8)	7-7/8 (200,0)	30 (762,0)	9 (228.6)
1260-4		6 DN150					8-3/8 (212,7)		11 (279,4)
1260-5	6 NPT	6 DN150	2-1/2 DN62	3/4 (19,1)	44-7/8 (1139,8)	24-5/16 (633,4)	9-7/16 (239,7)	45 (1143,0)	11 (279,4)
1260-6	8 NPT	8 DN200	4 DN100	13/16 (20,8)	65-1/4 (1657,4)	43-5/16 (1100,1)	10-15/16 (277,8)	66 (1676,4)	13-1/2 (342,9)
1260-7	10 NPT	10 DN250	4 DN100	3/8 (9,5)	83-7/8 (2130,4)	53-15/16 (1370,0)	13-1/4 (336,6)	84 (2133,6)	16 (406,4)

Strainer Figure Number	Inlet Connection Nominal Thread Size Inches NPT	Outlet Nominal Pipe Size ANSI Inches DN	Dimensions in Inches (mm)				Inlet and End Closure Flange Bolt and Nut Inches UNC x Length	Body Nominal Pipe Size** ANSI Inches Sch. DN	Nominal Weight lb (kg)
			F	G	H	I			
1260-1	3 NPT	2-1/2 DN65	11 (279,4)	7 (177,8)	6-1/4 (158,8)	8-1/2 (215,9)	3/4 x 3-1/2	6 Sch. 40 DN150	163 (73,9)
1260-2		3 DN80							
1260-3	4 NPT	4 DN100	13-1/2 (342,9)	7 (177,8)	6 (152,4)	8-1/2 (215,9)	3/4 x 3-1/2	8 Sch. 30 DN200	250 (113,3)
1260-4		6 DN150							
1260-5	6 NPT	6 DN150	16 (406,4)	7 (177,8)	8 (203,2)	11-1/8 (282,6)	7/8 x 3-3/4	10 Sch. 30 DN250	404 (183,2)
1260-6	8 NPT	8 DN200	19 (482,6)	9 (228,6)	8-5/8 (219,1)	12 (304,8)	7/8 x 3-3/4	12 Sch. 30 DN300	751 (340,6)
1260-7	10 NPT	10 DN250	23-1/2 (596,9)	9 (228,6)	12 (304,8)	12 (304,8)	1 x 5	16 Sch. 30 DN400	1200 (544,3)



* Flange drilling per ANSI B16.5 (Class 150), refer to Table A
** Support saddle accomodating body nominal pipe size required

FIGURE 1
MODEL A PIPE LINE STRAINERS
ASSEMBLY

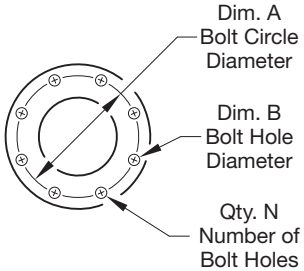


Hazen and Williams Coefficient	Strainer Figure Number Equivalent Length of Outlet Pipe, Feet (m)						
	1260-1	**1260-2**	**1260-3**	**1260-4**	**1260-5**	**1260-6**	**1260-7**
C = 100	6 (1,8)	13 (4,0)	18 (5,5)	91 (27,7)	29 (8,8)	45 (13,7)	53 (16,2)
C = 120	8 (2,4)	17 (5,2)	24 (7,3)	133 (40,5)	41 (12,5)	61 (18,6)	75 (22,9)

Note: The approximate friction losses are based on the Hazen and Williams formula and expressed in equivalent length of Schedule 40 pipe, calculated on the basis of flow rates typically used with each size strainer.

GRAPH A
MODEL A PIPE LINE STRAINERS
NOMINAL PRESSURE LOSS VS. FLOW AND EQUIVALENT LENGTH OF PIPE

Dim.	Flange Connection Size Nominal Dimensions*, Inches (mm)					
	2-1/2 Inch (DN65)	3 Inch (DN80)	4 Inch (DN100)	6 Inch (DN150)	8 Inch (DN200)	10 Inch (DN250)
A	5.50 (139,7)	6.00 (152,4)	7.50 (190,5)	9.50 (241,3)	11.75 (298,5)	14.25 (362,0)
B	0.75 (19,0)	0.75 (19,0)	0.75 (19,0)	0.88 (22,2)	0.88 (22,2)	1.00 (25,4)
Qty. N	4	4	8	8	8	12



• Flange drilling per ANSI B16.5 (Class 150)

TABLE A
MODEL A PIPE LINE STRAINERS
OUTLET AND FLUSHING CONNECTION FLANGE DRILLING DIMENSIONS

Care and Maintenance

The following procedure and inspections must be performed as indicated, in addition to any specific requirements of the NFPA. Any impairment must be immediately corrected.

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection system from the proper authorities and notify all personnel who may be affected by this action.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (e.g., NFPA 25), in addition to the standards of any other authorities having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

Automatic sprinkler systems should be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national code.

Maintenance Procedure
It is recommended that Model A strainers be flushed at least annually. More frequent flushing may be necessary where water supplies are non-potable and/or contain debris which could clog 1/3 or more of the basket open area.

Note: *Never disassemble or remove any strainer component without verifying that the system is depressurized and drained.*

Strainers should be thoroughly flushed clean after each system operation or flow test and during routine inspections as follows:

Step 1. Open flushing connection valve (Ref. Design Criteria) allowing flow until drain water runs clear. Close valve.

Note: *If heavy sediment in drain water persists or there are indications that all debris such as large stones may not have been removed, basket must be removed for cleaning; Proceed to Step 2.*

Step 2. Shut down and drain system.

Step 3. Remove end closure nuts and bolts, flange and ring gasket.

Step 4. Withdraw basket in slow, horizontal motion to minimize possibility of debris falling from open inlet end into body.

Step 5. Empty debris from basket and clean body interior.

Step 6. Insert basket into body until open inlet end is fully seated against inlet connection flange.

Step 7. Install end closure gasket, flange, and nuts and bolts. Gradually tighten all nuts and bolts in cross-draw sequence to apply uniform load around flange.

Step 8. Ensure flushing connection valve is closed.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name, including description and part number (P/N).

Standard Order Strainers
Specify: Standard Model A Pipe Line Strainer, (specify) Inlet Size, Figure No. (specify), P/N (specify):

1260-2	52-270-1-011
1260-3	52-270-1-013
1260-5	52-270-1-015
1260-6	52-270-1-016
1260-7	52-270-1-017

Note: *Standard order strainer features inlet and outlet connections equal in size, stainless steel basket assembly, and outlet connection located at Angle "J" 180° from flushing connection (Ref. Figure 1). Adjusted outlet connection available on request, refer to Special Order Strainers.*

Special Order Strainers
Specify: Standard Model A Pipe Line Strainer, Figure No. (specify), (specify Stainless Steel or MONEL) Basket Assembly, (specify) Inlet Size, (specify) Outlet Size, Outlet Angle "J" (specify degrees)

Notes: *Special order strainer features any of the following: MONEL basket assembly; inlet and outlet connections differing in size; outlet connection oriented at angle other than the standard 180° Angle "J" (90° to 270° counter-clockwise from flushing connection when viewing strainer from end closure). Ref. Figure 1.*

It is recommended that orders for strainers with special outlet locations or angles be accompanied by sketches.

Part numbers are not specified for special order strainers.

Replacement Parts
Specify: (specify inlet size) Model A Strainer (specify part description), P/N (specify):

Stainless Steel Basket Assembly

3 Inch	92-270-1-211
4 Inch	92-270-1-213
6 Inch	92-270-1-215
8 Inch	92-270-1-216
10 Inch	92-270-1-217

MONEL Basket Assembly

3 Inch	92-370-3-211
4 Inch	92-370-3-213
6 Inch	92-370-3-215
8 Inch	92-370-3-216
10 Inch	92-370-3-217

Ring Gasket

3 Inch	92-370-1-015
4 Inch	92-370-1-016
6 Inch	92-370-1-017
8 Inch	92-370-1-018
10 Inch	92-370-1-020

Note: *Ring gaskets are identified per strainer inlet size. Actual gasket sizes vary per Body Nominal Pipe Sizes given in Figure 1.*

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