1”- 6” FLANGED MULTI-ORIFICE DIFFUSER
DATA SHEET (FLG– SERIES)
REMOVABLE MULTI-ORIFICE FLANGED DIFFUSER

Typical Installation in a pipeline held in place between two flanged ports located 180° apart.

Model Series	Nominal Diameter (in)	Recommended Max Flow Rate*	
		gpm	Liters/min
FLG10	1	4	15
FLG15	1-1/2	12	45
FLG20	2	26	98
FLG30	3	60	227
FLG40	4	93	352
FLG60	6	165	625

*Orifice hole quantity & size must be adequate for flow rate. A minimum flow rate is necessary to ensure that even distribution of chemicals across the hole pattern.

Contact Inyo Process for sizing assistance.

Designed to be held by 1”-6” schedule 40 pipe nozzle, flanged diffusers are an excellent choice for many water treatment chemicals.

The multi-orifice diffuser design significantly improves chemical diffusion over single point (bayonet or quill style injectors) in 6”-84” pipes.

Diffuser materials available include:

- PVC & CPVC
- Teflon (PTFE)
- Kynar (PVDF)
- Stainless Steel
- Hastelloy C-276
- Other materials available

Resists scaling. Thin wall tubing design prevents bridging of the orifice holes by providing limited surface for scale build-up to bridge across the hole. Large diameter injectors can contain many years of scale build-up before requiring clean-out.

Our Teflon injector is suitable for concentrated sulfuric acid injection. Capable of resisting all concentrations of this aggressive chemical at the elevated temperatures commonly found during acid dilution processes.

Complete flanged assemblies including tapped blind flanges and gaskets are available with the flanged injectors.

Diffusers for designed for larger systems are available.

MODEL NUMBER
EXAMPLE "FLG20K18-10-025"

FLG 20 P - 18 - 12 - 025

NOMINAL DIAMETER	
1"	10
1-1/2"	15
2"	20
3"	30
4"	40
6"	60

SOLUTION TUBE MAT'L	
PVC	P
STAINLESS STEEL	S
KYNAR	K
TEFLON	TF
HASTELLOY C-276	H
TITANIUM	T
CPVC	C
FIBER-GLASS	F

ORIFICE HOLE DIAMETER (in)	
012	1/8"
018	3/16"
025	1/4"
038	3/8"
050	1/2"
063	5/8"
075	3/4"
100	1"
Custom hole patterns are available	

QUANTITY OF ORIFICE HOLES

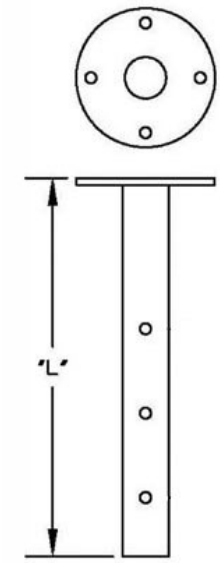
Example 12 holes would be "12"

LENGTH* - SOLUTION TUBE "L"

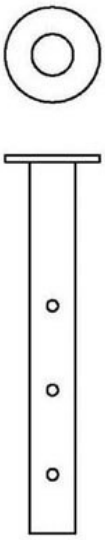
Example an 18" tube length L = 18 would be "18"

All lengths are available

Full face flange on polymer diffusers



Flange on metal diffusers sized to gasket surface on RFSO flange.



*PVC, KYNAR & TEFLON SOLUTION TUBES LONGER THAN 6" ARE NOT RECOMMENDED FOR PIPELINES UNLESS THERE IS SUPPORT ON BOTH ENDS OF THE INJECTOR. CONTACT INYO PROCESS FOR MORE DETAIL.

CHEMICAL INJECTION (FLANGED DIFFUSER) ASSEMBLY SPECIFICATION

Typical Specification (go to www.inyoprocess.com for additional specifications)

Flanged Diffuser - Chemical Injection Assembly
Section 11XXX

1. Type: Flanged Multi-Orifice Chemical Diffuser
2. Connection: Designed to fit inside a __ inch diameter schedule 40 flanged additive port. Diffuser flange to be sandwiched between additive port flange and drilled & tapped blind flange with 1/8" Teflon gaskets.
3. Construction:

Chemical diffuser assembly shall come complete with diffuser assembly and flange gaskets. Diffuser tube shall be constructed of (***material of construction)***. Diffuser tube shall have adequate length to extend across the pipe diameter and have additional length of ***(2 injector pipe diameters)*** . Chemical diffuser to be supported on the opposing side (180º) by an additional additive port with blind flange assembly & teflon gasket.

Both additive ports shall be in alignment to allow for easy insertion and withdrawal of the chemical diffuser without binding or bending of the diffuser. The nominal __ inch diameter diffuser solution tube should be a diffuser style with multiple holes for even distribution of the injected chemical. and situated at least (2 pipe diameters) inches from the pipeline walls. All wetted components shall be compatible with the chemical services. Model "_____" manufactured by Inyo Process or equal that has been preapproved by engineer before the bid.

TYPICAL FLANGED DIFFUSER INSTALLATIONS