

**1/2" - 6" FLANGED INJECTOR QUILL (REMOVABLE)  
DATA SHEET (FL- SERIES)**



Flanged Injection quills are designed to be installed in a 1/2" - 6" pipe nozzle and sandwiched between the pipe flange and a mating flange.

Flanged injection quills allow the injection of chemicals such as chlorine or concentrated sulfuric acid into a pipeline without the chemicals coming in contact with the sidewalls or nozzle of the pipeline, where they could corrode or damage the pipeline material. Quills permit injection into the turbulent center of a pipeline, where the injected chemicals can quickly be diluted and diffuse into the main flow.



Injector quill materials available include:

- PVC & CPVC
- Teflon (PTFE)
- Kynar (PVDF)
- Stainless Steel
- Hastelloy C-276
- FRP
- Reinforced Kynar & Teflon quills are available for longer, unsupported lengths. *(contact Inyo for more detail)*
- Other materials available

*Clockwise from top:*  
a) installation of injection quill in flanged port  
b) flange injector sandwiched between piping flanges  
c) internal view of a Teflon quill inside pipeline.



Our Teflon injector is suitable for concentrated sulfuric acid injection. Teflon is 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.

Larger Injectors are available. Contact Inyo Process for more details.

**SERIES IS DESIGNED FOR SCHEDULE 40 STEEL PIPE.  
FOR PVC OR OTHER PIPING SYSTEMS CONTACT INYO TO ASSURE PROPER FIT OF INJECTORS.**

Model	Nominal Flange Diameter*	Recommended Max Flow Rate	
		Plastic Material (gpm)	Metal Material (gpm)
Series	(in)		
FL5	1/2	2	3
FL7	3/4	3	6
FL10	1	5	10
FL15	1-1/2	13	27
FL20	2	35	65
FL30	3	65	150
FL40	4	110	230
FL60	6	185	370



InyoProcess

**MODEL NUMBER  
EXAMPLE "FL5 S 2B"**

**FL 5 S 2 B**

NOMINAL DIA. "Ø" in.	
1/2"	5
3/4"	7
1"	10
1-1/2"	15
2"	20
3"	30
4"	40
6"	60

END STYLE	
BAYONET	B
FLAT	F

LENGTH* - SOLUTION TUBE "L"
Example an 18" tube length L = 18 would be "18"
All lengths are available

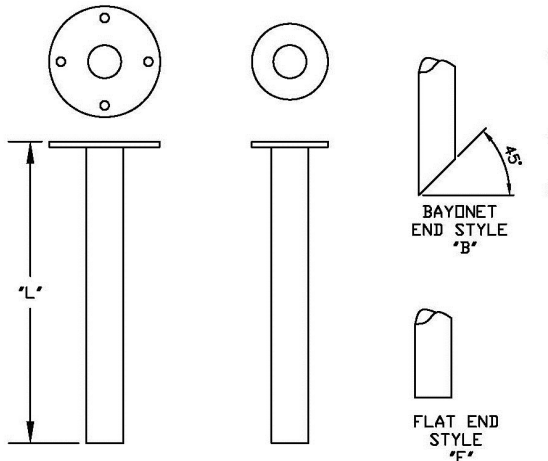
SOLUTION TUBE MAT'L	
PVC	P
STAINLESS STEEL	S
KYNAR	K
TEFLON (maximum diameter 2")	TF
HASTELLOY C-276	H
TITANIUM	T
CPVC	C
FIBERGLASS	F

PVC, KYNAR & TEFLON SOLUTION TUBES CAN BE DEFORMED IF TOO LONG AND NOT SUPPORTED. RECOMMEND THE FOLLOWING MAXIMUM LENGTHS FOR PLASTIC QUILLS:

NOMINAL DIA. "Ø"	RECOMMENDED MAXIMUM UNSUPPORTED LENGTH (in)
1/2"	2"
3/4"	3"
1"	4"
1-1/2"	6"
2"	7"
3"	10"
4"	12"
6"	12"

Full face flange on polymer diffusers.

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



INJECTORS ARE DESIGNED FOR SCHEDULE 40 STEEL PIPING. FOR INJECTORS THAT CAN BE USED WITH PVC PIPING, OR FOR GENERAL QUESTIONS, CONTACT INYO PROCESS TO ENSURE A PROPER FIT WITH OUR PIPING SYSTEMS.

# CHEMICAL INJECTION (FLANGED INJECTOR) ASSEMBLY SPECIFICATION



Typical Specification (go to [www.inyoprocess.com](http://www.inyoprocess.com) for additional specifications)

## Flanged Injector - Chemical Injection Assembly Section 11XXX

1. Type: Flanged Chemical Injector
2. Connection: Designed to fit inside a \_\_\_ inch diameter schedule 40 flanged additive port. Injector flange to be sandwiched between additive port flange and drilled & tapped blind flange with 1/8" Teflon gaskets.
3. Construction:  
Chemical injector assembly shall come complete with injector assembly and flange gaskets. Solution tube shall be constructed of (***material of construction***). Solution tube shall be \_\_\_ long.

Chemical Injector should be designed to allow for easy insertion and withdrawal without binding or bending of the diffuser. 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 INJECTOR INSTALLATIONS

