

DATA SHEET

INLET STABILIZERS



**Stainless Steel
Models:**

711500, 714500, 717500



SELECTION

Select an inlet stabilizer tube with a flow range to match the system flow and the pump inlet connection. Various adapters are available to accommodate the various pump inlet connections.

INSTALLATION

For optimum performance, install the inlet stabilizer directly into the inlet manifold of the pump and support it from the base plate. Select the correct adapter that matches the pump inlet size. Note: Bent fitting requires a standard adapter to properly connect to pump. Apply Liquid Gasket to the o-ring groove and press the flanged end of the adapter (o-ring and retaining ring come on the adapter) into the inlet stabilizer until completely seated. Secure the retaining ring in the groove of the inlet stabilizer. Apply sealant to the adapter threads. With a wrench thread assembly into pump inlet port. **CAUTION:** Do not over tighten. Because the adapter rotates within the inlet stabilizer end, there is no risk of twisting the internal hose.

OPERATION

The inlet stabilizer tube is designed to maintain consistent inlet pressure to the pump and prevent pressure fluctuations which may be present due to long feed lines, high temperature liquids or booster pumps. It will not eliminate or correct starvation (lack of sufficient liquid to the pump) and will not function with a suction lift.

MAINTENANCE

With each seal and valve change, check all fitting connections for any leaks. Low pressure, fluctuating pressure or vibration are often the result of poor connections. Use PTFE thread tape or pipe thread sealant, but stop before the last thread.

FEATURES

- Cat Pumps designed, Captive Acceleration Tubes absorbs energy from a positive head to increase liquid acceleration which significantly reduces cavitation and resulting potentially damaging system surges or hydraulic spikes.
- Eliminates wear producing shocks to the system components especially when high temperature, booster pump feed, long inlet lines or quick coupling valves exist.
- Maintains consistent inlet pressure and prolongs life of pump.
- Compact, simple design permits versatile, easy installation and requires minimal maintenance.

COMMON SPECIFICATIONS

	U.S.	Metric
Inlet Pressure Range	2 to 50 psi	0.14 to 3.4 bar
Temperature*	208° F	98° C

*Do not exceed rated pump temperature. See individual pump specification sheets for maximum temperature of each model.

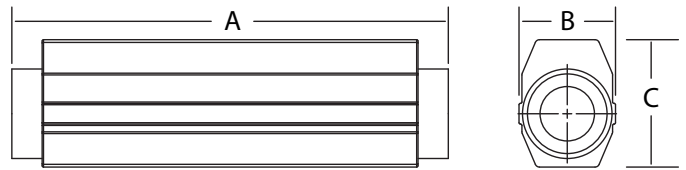
SPECIFICATIONS

	U.S.	Metric
711500		
Flow Range	up to 15 gpm	up to 57 lpm
Active Tube Fitting	1-1/2"	38 mm
Weight (Base Model)	1.3 lbs.	0.60 kg
714500		
Flow Range	up to 45 gpm	up to 170 lpm
Active Tube Fitting	2-1/2"	63.5 mm
Weight (Base Model)	4.0 lbs.	1.80 kg
717500		
Flow Range	up to 75 gpm	up to 284 lpm
Active Tube Fitting	3"	75 mm
Weight (Base Model)	4.8 lbs.	2.20 kg

INLET STABILIZER SELECTION AND DIMENSIONAL

All Measurements (in / mm)

Part Number	A	B	C
711500	9.44 / 239.75	2.21 / 56.06	2.85 / 72.36
714500	15.95 / 405.24	3.28 / 83.27	4.21 / 106.92
717500	19.07 / 484.31	3.55 / 90.13	4.59 / 116.50



711500 Inlet Stabilizer, Fitting Selection Chart

Description	Fitting (NPT)	Part #
Adapter, Straight	1/2"	711502
Adapter, Straight	3/4"	711503
Adapter, Straight	1"	711504
Adapter, Straight	1-1/4"	711505
Adapter, Straight	1-1/2"	711506
Elbow	N/A	701818

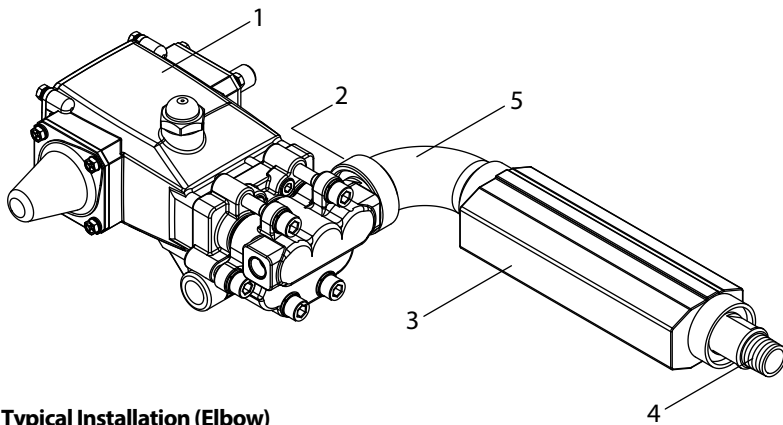
714500 Inlet Stabilizer, Fitting Selection Chart

Description	Fitting (NPT)	Part #
Adapter, Straight	1"	714504
Adapter, Straight	1-1/4"	714505
Adapter, Straight	1-1/2"	714506
Adapter, Straight	2"	714508
Elbow	N/A	701828

717500 Inlet Stabilizer, Fitting Selection Chart

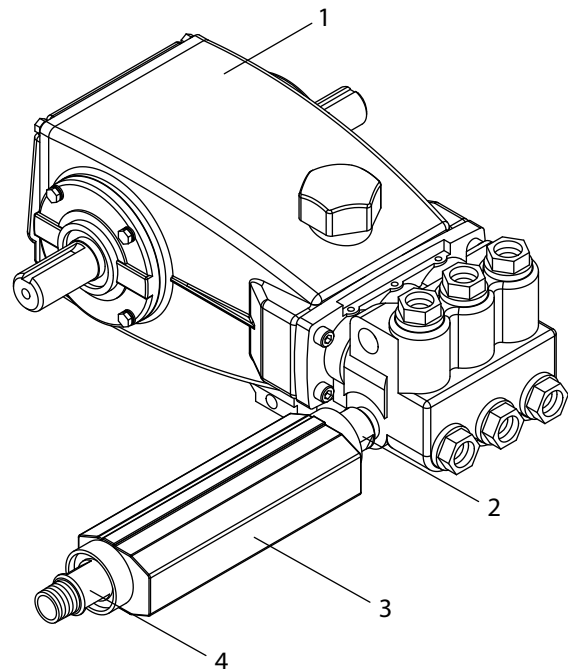
Description	Fitting (NPT)	Part #
Adapter, Straight	2"	717508
Elbow	N/A	701833

TYPICAL INSTALLATION



Typical Installation (Elbow)

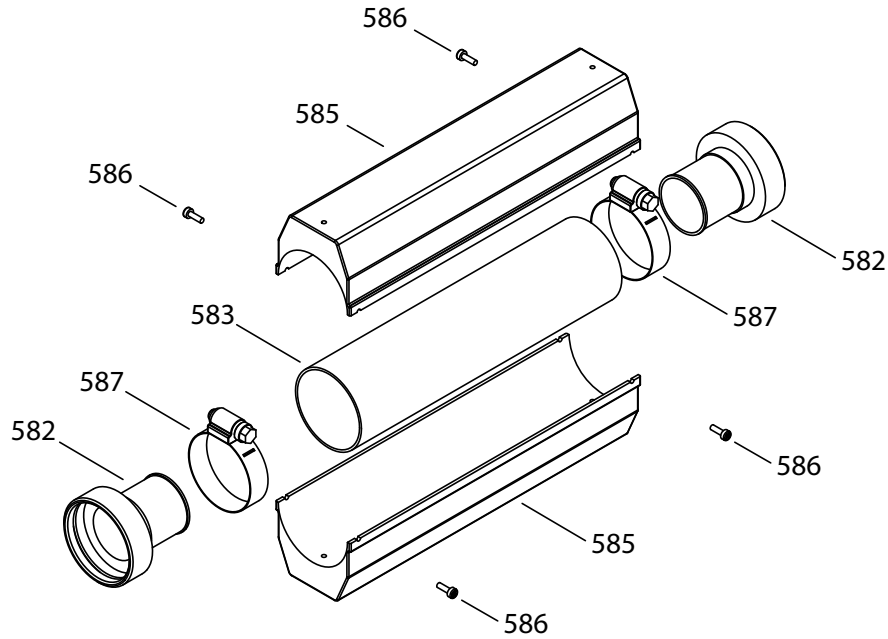
1. Plunger pump
2. Straight adapter – matching pump inlet
3. Inlet stabilizer
4. Straight adapter – matching system line
5. Elbow adapter



Typical Installation (Straight)

1. Plunger pump
2. Straight adapter – matching pump inlet
3. Inlet stabilizer
4. Straight adapter – matching system line

EXPLODED VIEW



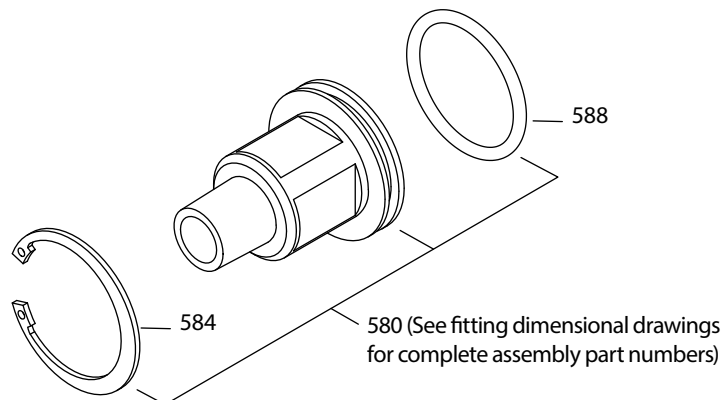
PARTS LIST

ITEM	DESCRIPTION	MODEL 711500	MATL	MODEL 714500	MATL	MODEL 717500	MATL	QTY
582	Barb, Hose, Internal	701816	SS	701826	SS	701831	SS	2
583	Hose, Internal (1.5" x 7.48")	701819	PPB	—	—	—	—	1
	Hose, Internal (2.5" x 12.87")	—	—	701829	PPB	—	—	1
	Hose, Internal (3.0" x 16.55")	—	—	—	—	701839	PPB	1
585	Cover, Pair	701815	PVC	701825	PVC	701830	PVC	1
586	Screw, Self Tap (M3x8, M3x10)	701766	SS	701877	SS	701877	SS	4
587	Hose Clamp	701810	S	701820	S	701840	S	2

Material Codes (Not Part of Part Number):

PPB=PVC+Polyester+Butyl PVC=Polyvinyl Chloride S=304SS SS=316SS Note: Elbow requires standard straight fitting to properly connect.

EXPLODED VIEW



PARTS LIST

ITEM	DESCRIPTION	MODEL 711500	MATL	MODEL 714500	MATL	MODEL 717500	MATL	QTY
584	Ring, Retainer	701767	STNP	701768	STNP	701769	STNP	2
588	O-Ring, Adapter	701817	NBR	701827	NBR	701832	NBR	2

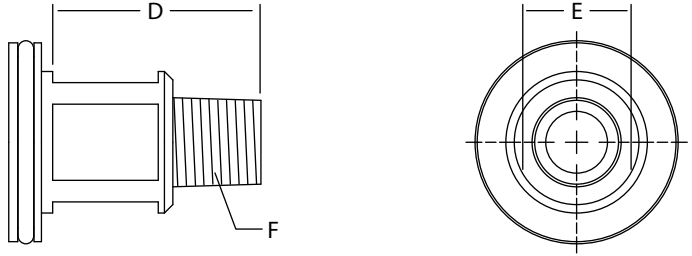
Material Codes (Not Part of Part Number):

NBR=Medium Nitrile (Buna-N) STNP=Steel/Nickel Plated

FITTING DIMENSIONAL DRAWINGS

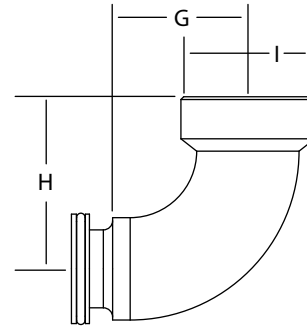
Nominal Dimensions (in / mm)

To Fit 711500	D	E	F
711502	1.6/40	1.1/27	1/2" NPT
711503	1.6/40	1.1/27	3/4" NPT
711504	1.6/40	1.1/27	1" NPT
711505	1.9/48	1.4/36	1-1/4" NPT
711506	1.9/48	1.4/36	1-1/2" NPT
To Fit 714500			
714504	2.0/50	1.8/46	1" NPT
714505	2.0/50	1.8/46	1-1/4" NPT
714506	2.0/50	1.8/46	1-1/2" NPT
714508	2.0/50	1.1/27	2" NPT
To Fit 717500			
717508	2.2/56	2.1/55	2" NPT
717510	2.2/56	2.4/60	2-1/2" NPT



Nominal Dimensions (in / mm)

To Fit 711500	G	H	I
701818	2.4/60	2.7/68	1.9/48
To Fit 714500			
701828	2.6/66	3.4/87	3.0/76
To Fit 717500			
701833	3.2/82	4.1/104	3.5/89



TROUBLESHOOTING

Water leaking at adapter connection	<ul style="list-style-type: none"> Worn or missing O-Ring.
Water leaking from the cover ends.	<ul style="list-style-type: none"> Cracked or worn hose or improperly tightened clamps.

⚠ CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.



CAT PUMPS

1681 - 94TH LANE N.E. MINNEAPOLIS, MN 55449-4324
 PHONE (763) 780-5440 — FAX (763) 780-2958
 e-mail: techsupport@catpumps.com
www.catpumps.com