

FLOW-LIN CORPORATION

P.O. BOX 171197

ARLINGTON, TX 76003-1197

TEL 817-572-0411 FAX 817-478-7954

Packing Slip

Number: 19511A

Date: February 11, 2005

Bill To:

MILLER ENERGY INCORPORATED
505 GORDON DRIVE
EXTON, PA 19341-1252

Ship To:

INTERSTATE HARDWOOD
ATTN: AFS TROY SCHUPP
ROUTE 250 AND 92
BARTOW, WV 24920

PO Number	Terms	Sales Rep	F.O.B.	Ship Via	Date Shipped
147567PA	NET 30	*	FACTORY	UPS <i>Blue</i>	

Item #	Description	Quantity
1	12" LINE-TYPE C/S STRAIGHTENING VANE WITH TWO INSTALLATION KITS <i>Inside the center tube</i>	1.00

Flow-Lin CORPORATION

Manufacturer Of Primary Flow Elements

P. O. Box 171197

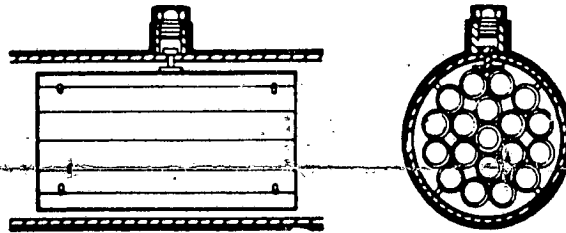
Arlington, Texas 76003

Phone (817) 572-0411

FAX (817) 478-7954

For 12"
two 1" HALP CPLG
with 1/2" bolts
16" apart

Straightening Vane Locking Pin Line Model



Flow-Lin straightening vanes are used to eliminate swirls and cross-currents set up by pipe fittings and valves preceding the meter tube, orifice flange union or flow nozzle. The use of these vanes will reduce considerably the length of straight pipe required preceding the measuring device.

Installation Instructions

1. Remove from crate and inspect for shipping damage. If any damage is found, contact Flow-Lin for instruction.
2. Refer to drawings to locate the unit in the line. If a drawing has not been provided, refer to "Fluid Meters" Sixth Edition, Figure II-II-1 as published by ASME.
3. Center punch the location of the mounting point of the locking pin. *two places, 16" apart*
4. Drill a pilot hole at this point. Over this hole weld into place a 1" Half Coupling.
5. Drill 27/64" hole thru pipe and tap this hole with a 1/2-13 NC tap.
6. Install the vane with locking plate holes aligned with the tapped holes. Install the 1/2-13 bolt so that it will go thru the hole in the mounting plate and not bare against the tubes.
7. Install 1" pipe plugs into the half couplings to seal and the installation is complete.

To Remove Straightening Vanes

Reverse steps 5 & 6 above.