



EZ FEEDLINE

INSTALLATION AND MAINTENANCE PROCEDURES

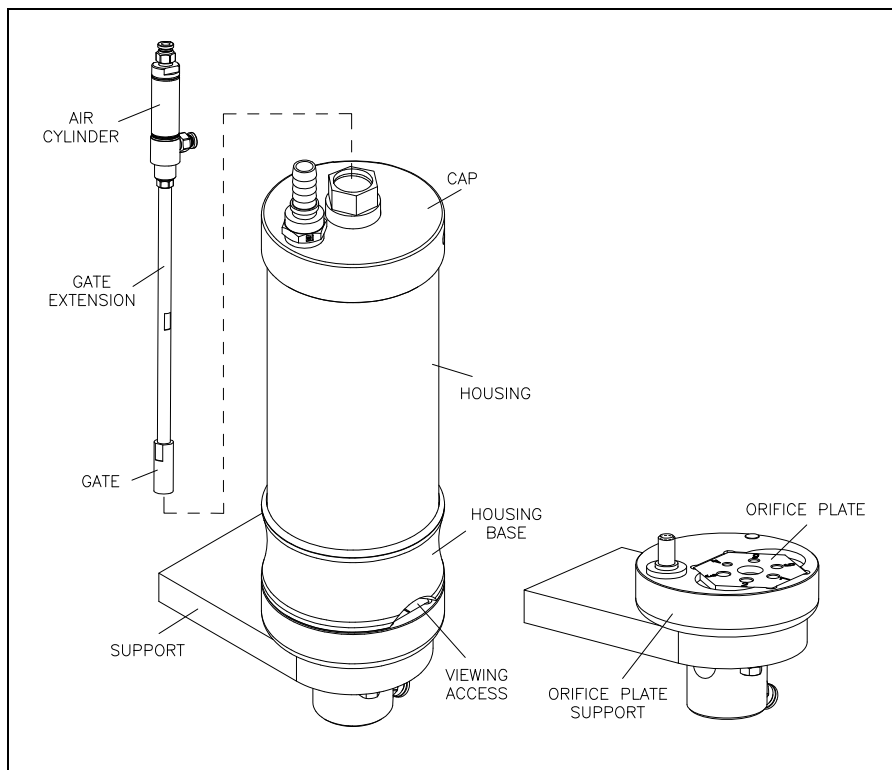
1. Overview

The EZ Feedline is designed especially for the abrasive cutting process, supplying a constant abrasive flow to the cutting head.

2. EZ Feedline Components

The EZ Feedline consists of a housing and base with access to view the current position of the orifice plate. The gate opens or closes to control the abrasive flow when air is supplied or removed from the air cylinder.

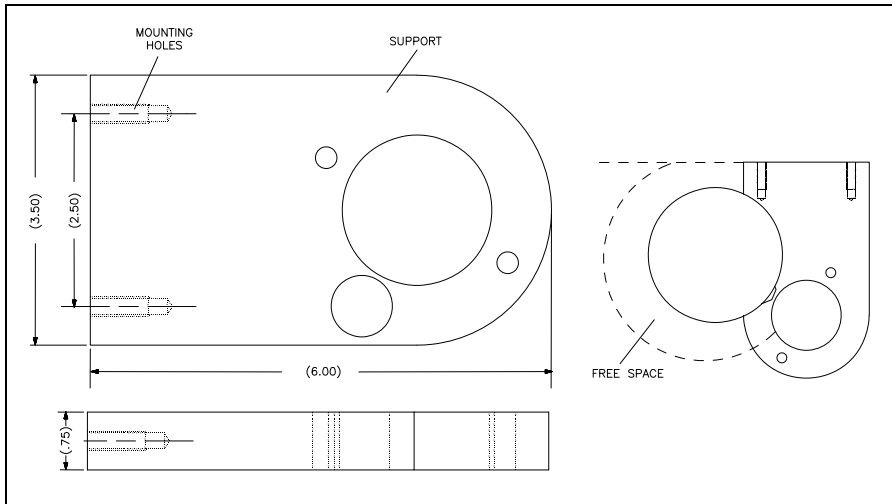
Figure 1: EZ Feedline Components



3. Installation

Attach the support to the travel unit of the cutting plant by using the two 1/4-20 threaded fastening holes on the back of the support. Position the EZ Feedline on the support and secure with the two lock washers and hex head screws supplied with the unit.

Figure 2: Mounting

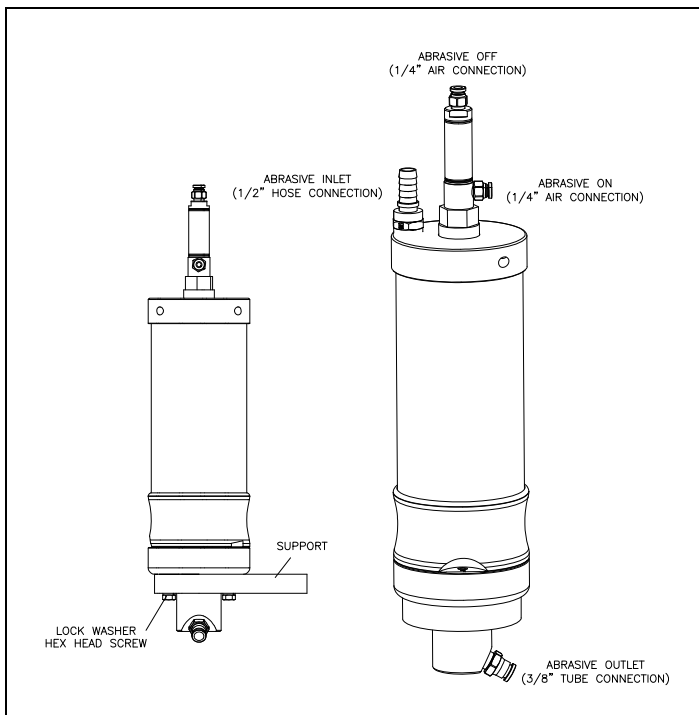


NOTE

When mounting the support be sure to allow enough free space for the housing base to rotate when the flow rate is changed.

Attach the air supply and abrasive lines as illustrated below.

Figure 3: Installation



4. Adjusting Abrasive Flow Rate

Abrasive flow rate is determined by the position of the orifice plate as detailed in Table 1, Abrasive Flow Rate. Rates are based on the customary grain size of 80-mesh.

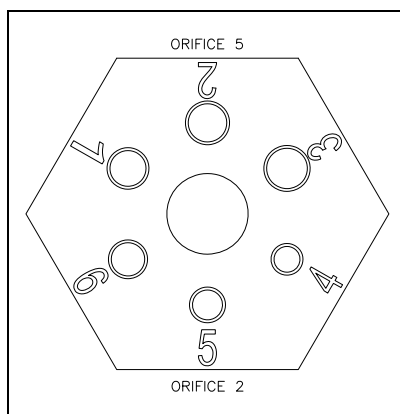
The standard orifice plate (P/N 20480396) incorporates the most common flow rates associated with operating pressures up to 60,000 psi (4,137 bar). The optional orifice plate (P/N 20487843) incorporates flow rates commonly associated with operating pressures up to 90,000 psi (6,205 bar). Flow rates in excess of those listed in Table 1 require custom orifice plates.

Table 1
Abrasive Flow Rate

	20480396	20487843
1	0.50 lb/min	0.75 lb/min
2	0.63 lb/min	1.00 lb/min
3	0.75 lb/min	1.25 lb/min
4	1.00 lb/min	1.50 lb/min
5	1.25 lb/min	1.75 lb/min
6	1.50 lb/min	2.00 lb/min

Each number on the orifice plate corresponds to the orifice on the opposite side of the plate. This allows the operator to view the orifice size during operation.

Figure 4: Orifice Plate

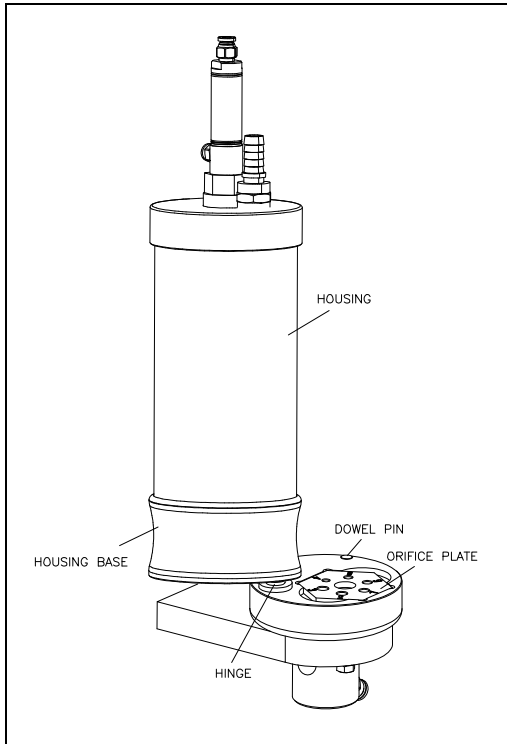


To adjust the abrasive flow rate simply lift up on the housing base and rotate the housing to access the orifice plate. Move the plate to the desired position, rotate the housing back to the original position and lock in place on the dowel pin.



Ensure the abrasive flow is turned off before changing orifice settings. Abrasive will continue to flow regardless of the position of the housing base.

Figure 5: Abrasive Flow Rate Adjustment





5. Troubleshooting

The troubleshooting guide will help identify the probable cause of a system malfunction and assist in providing corrective action.

Table 2
EZ Feedline Troubleshooting Guide

	Malfunction	Indication	Comments
1.	Supply vessel runs empty	Conveying pressure is too low in conveying system	Increase air conveying pressure via the control system.
		Inlet opening is blocked	Clean inlet opening.
2.	Erratic or insufficient abrasive flow	Using an orifice that is too small	
		Outlet opening is partially or completely blocked	Clean outlet opening.
		Gate is partially covering inlet holes even though air cylinder is retracted	Gate extension rod must be bottomed out on threaded air cylinder rod before tightening jam nut.
			Gate is not fully seated on gate extension rod.
3.	Abrasive will not turn off or on, or is slow and erratic	Gate is broken or worn	Replace the gate.
		Loss of or insufficient air signal to air cylinder	Ensure proper air supply to air cylinder, a minimum of 40 psi (2.8 bar).
4.	Abrasive on/off behavior is opposite of what is expected	Air signal tubes to air cylinder are reversed	Switch air signal tube position on air cylinder.
5.	Abrasive blows out between housing base and orifice plate support, and/or abrasive flow is significantly more than expected for the orifice being used	Air vent holes are obstructed	Remove obstruction.



6. Specifications

Technical specifications for the EZ Feedline are listed in Table 3.

Table 3
Technical Specifications

Length	4.00" (102 mm)
Width	6.25" (159 mm)
Height	19.06" (484 mm)
Weight, dry	5.4 lbs (2.4 kg)
Housing volume	.22 gal (.83 L)
Recommended air supply	40 psi (2.7 bar)

7. Parts List

This section contains a parts list for the EZ Feedline. To facilitate the ordering of replacement parts, item numbers in the Table 4 correspond to the identifying numbers in the accompanying figure.

Use the following information to contact the Customer Service Department at KMT Waterjet Systems.

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Baxter Springs, KS 66713-0231

Phone (800) 826-9274
Fax (620) 856-2242
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Fax +49-6032-997-270
Email order.spares@kmt-waterjet.com



Table 4
Parts List
EZ Feedline
20486762

Item	Part Number	Description	Quantity
1	20485151	Housing Base	1
2	20485159	Seat, Orifice Plate	1
3	20485398	Thread Insert	2
4	20480396	Orifice Plate	1
5	20453592	Dowel Pin	1
6	20480408	Sleeve Bearing	1
7	95648150	Lock Washer, .25	2
8	20480932	Shoulder Screw	1
9	20486010	Support	1
10	95252193	Hex Head Screw, 1/4-20 x 1-1/4	2
11	20485167	Gate	1
12	20485133	Housing Support	1
13	20485175	Gate Extension	1
14	20479788	Housing	1
15	49874423	O-Ring, 3.50 x 3.63 x .06	2
16	20485125	Cap	1
17	20480960	Hose Barb, .50	1
18	10197622	Hex Nut	1
19	20486786	Air Cylinder	1
20	20486794	Adapter, Pipe/Tube, .13 x .25	2
21	61126297	Adapter, Tube/Pipe, .38 x .25	1
22	49886542	Pipe Nipple, .50 x 1.50	1
23	20488967	Decal	1
	20487843	Optional Orifice Plate	

