FIFE CORPORATION
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INSTALLATION INSTRUCTIONS

NOTES:

1. The SP-3, SP-4, SP-5, SP-11, and SP-12 sensors differ only as to the width and type of sensing band, as shown in the table below. The SP-11 and SP-12 sensors are anticlogging versions of SP-3 and SP-4 sensors, respectively. The SP-11 and SP-12 sensors are identical to the SP-3 and SP-4 sensors except for the signal recovery inserts.

SENSOR*	PROPORTIONAL BAND WIDTH IN INCHES (MM)	APPROXIMATE AIR CONSUMPTION IN CFM (L/S)
SP-3 SP-11	0.300 (7.62)	1.5 (0.71)
SP-4 SP-12	0.500 (12.7)	3.0 (1.42)
SP-5	0.300 (7.62) WITH 0.050 (1.27) DEADBAND	1.5 (0.71)

* THE SENSOR MODEL NUMBER IS SHOWN ON THE MODEL NUMBER TAG.

2. These sensors do not interchange directly with other Fife Air-Flow sensors. Substitution of SP-3, SP-5, or SP-11 sensors in place of other 0.312 inch (7.94 mm) gap sensors requires changing the servo valve orifice. Substituting the SP-4 or SP-12 sensors may require a change in the air pump size and/or the servo valve orifice.

3. All sensor bodies are made from black (gray on metric version), 30% glass-filled nylon. The air supply and signal recovery inserts are natural un-filled nylon. The model number tag is made from aluminum sheet, and the retaining screws are plated steel. The nylon is resistant to most sol-vents, such as esters, ketones, alcohols, and hy-drocarbons, as well as alkali and salt solutions. It is attacked by phenols, formic acid, strong mineral agents, and strong oxidizing agents. The maxi-mum recommended service temperature is 180° F (82° C).

4. All mounting brackets illustrated (see page 2) are to be supported on 1 inch (25 mm) or 1-1/4 inch (32 mm) square bars. The maximum length for a nonmovable bar is 72 inches (1,829 mm) for 1 inch (25 mm) square bar, and 96 inches (2,438 mm) for 1-1/4 inch (32 mm) square bare.

5. The standard SP-4 and SP-12 sensors have a sup-ply port of 1/4-18 NPT as shown above. For fixed-sensor center guiding with edge guide option, they have a 3/8-18 NPT supply port (see page 2).

6. For air pump sizes and air pressure settings, see Fife Power Unit Specification Figure Sheet.
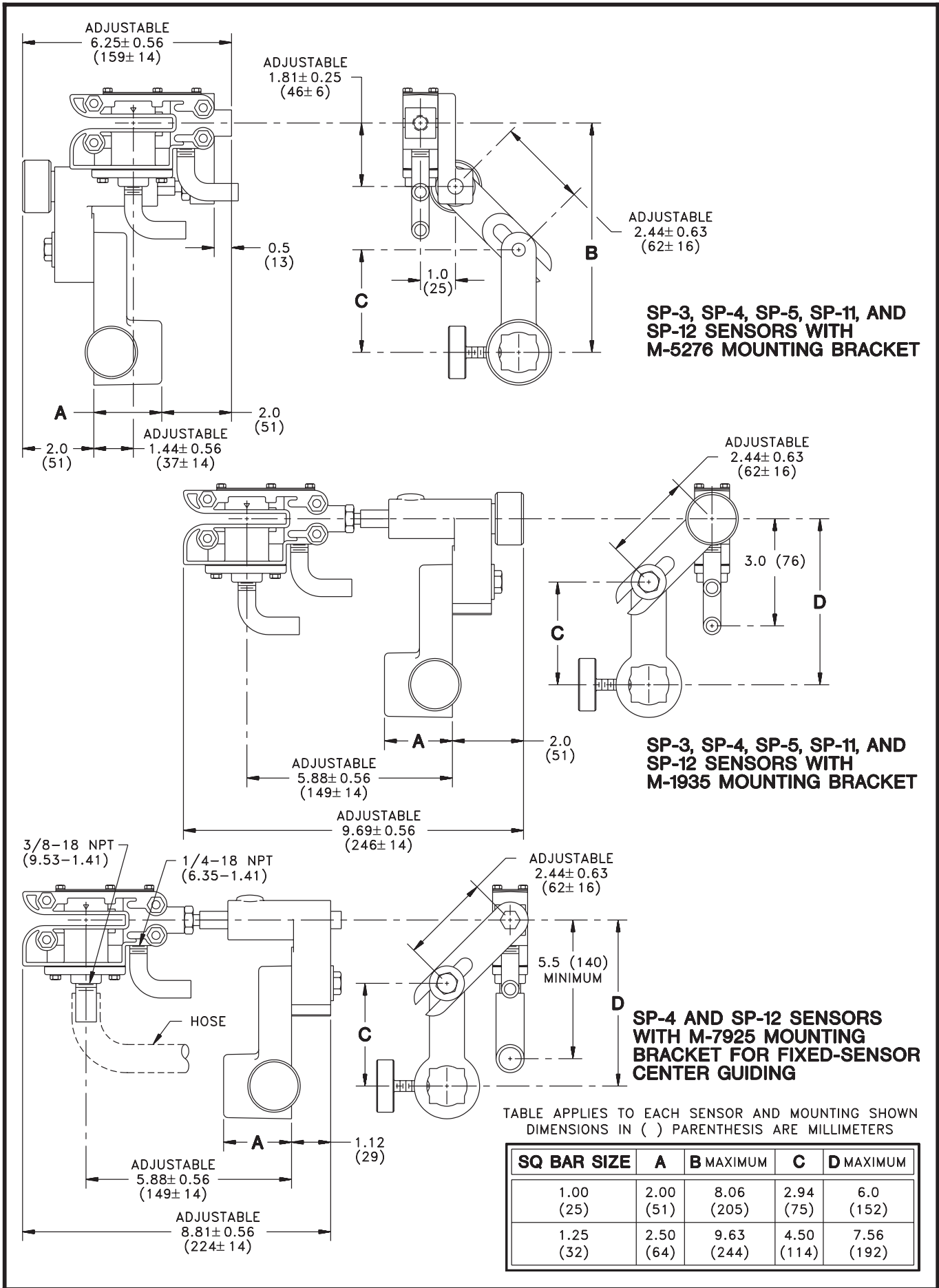
ADJUSTABLE
6.25± 0.56
(159± 14)

ADJUSTABLE
1.81± 0.25
(46± 6)

ADJUSTABLE
2.44± 0.63
(62± 16)

0.5
(13)

1.0
(25)

B

C

A

2.0
(51)

2.0
(51)

ADJUSTABLE
1.44± 0.56
(37± 14)

SP-3, SP-4, SP-5, SP-11, AND SP-12 SENSORS WITH M-5276 MOUNTING BRACKET

ADJUSTABLE
2.44± 0.63
(62± 16)

3.0 (76)

D

C

A

2.0
(51)

ADJUSTABLE
5.88± 0.56
(149± 14)

ADJUSTABLE
9.69± 0.56
(246± 14)

SP-3, SP-4, SP-5, SP-11, AND SP-12 SENSORS WITH M-1935 MOUNTING BRACKET

3/8−18 NPT
(9.53−1.41)

1/4−18 NPT
(6.35−1.41)

ADJUSTABLE
2.44± 0.63
(62± 16)

5.5 (140)
MINIMUM

D

C

HOSE

A

1.12
(29)

ADJUSTABLE
5.88± 0.56
(149± 14)

ADJUSTABLE
8.81± 0.56
(224± 14)

SP-4 AND SP-12 SENSORS WITH M-7925 MOUNTING BRACKET FOR FIXED-SENSOR CENTER GUIDING

TABLE APPLIES TO EACH SENSOR AND MOUNTING SHOWN
DIMENSIONS IN ( ) PARENTHESIS ARE MILLIMETERS

SQ BAR SIZE	A	B MAXIMUM	C	D MAXIMUM
1.00 (25)	2.00 (51)	8.06 (205)	2.94 (75)	6.0 (152)
1.25 (32)	2.50 (64)	9.63 (244)	4.50 (114)	7.56 (192)

FIG. 1-372
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MOUNTING DIMENSIONS, WITH MOUNTING BRACKET SP-3, SP-4, SP-5, SP-11, AND SP-12 SENSORS

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