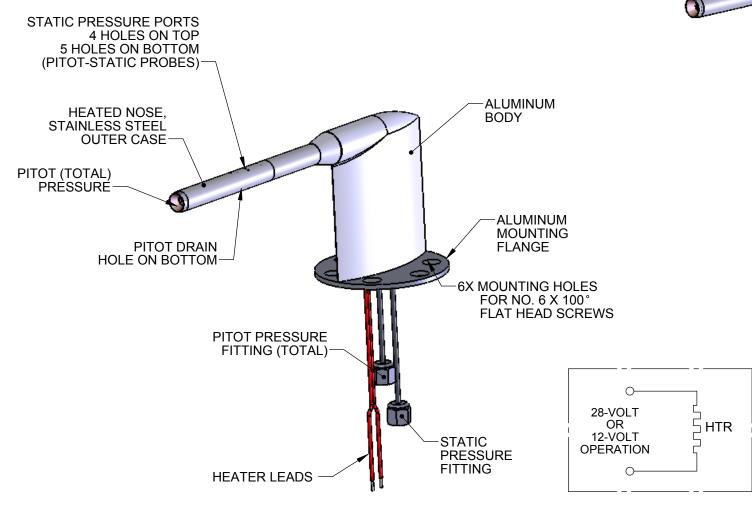
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# L-SHAPED PROBES WITH FLYING LEADS

SEE SHEET 2 FOR CONFIGURATIONS SEE SHEET 4 FOR DIMENSIONS



SCHEMATIC

#### NOTES (UNLESS OTHERWISE SPECIFIED):

- 1. DESCRIPTION: HEATED PITOT AND PITOT-STATIC PROBES, L-SHAPED AND STRAIGHT.
- 2. HEATER CHARACTERISTICS: 28-VOLT OR 12-VOLT OPERATION. HEATER IS SELF-REGULATING RESISTANCEINCREASES AS TEMPERATURE INCREASES. MAXIMUM POWER IS ACHIEVED IN HIGH AIRFLOW IN ICING CONDITIONS.
- 3. HEATER POWER CONSUMPTION:

MAX CONTINUOUS POWER: 42 - 55 WATTS DEPENDING ON CONFIGURATION (SEE SHEETS 2 AND 3) POWER IN STILL AIR CONDITIONS IS LESS THAN 60% OF MAX CONTINUOUS POWER INITIAL POWER SURGE (SHORT DURATION) NOT TO EXCEED 4 TIMES MAX CONTINUOUS POWER

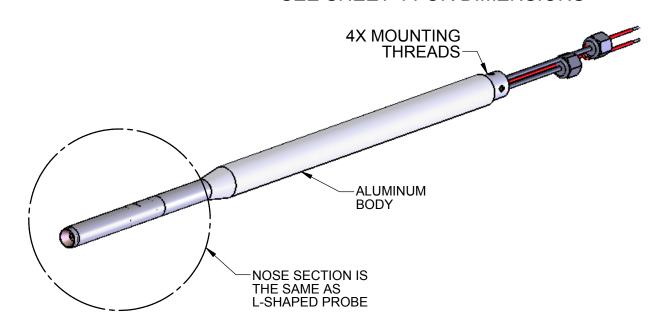
- 4. ANTI-ICING PERFORMANCE PER TSO-C16a (BSI2G-135) EXCEPT CERTAIN L-PROBE MODELS OFFERED WITHOUT A HEATED STRUT WHICH ARE SUITABLE FOR OPERATION IN CONTINUOUS ICING AT LOWER AIRSPEEDS SEE CONFIGURATIONS AND NOTE 7 ON SHEET 2.
- 5. WEIGHT: SEE SHEETS 2 AND 3, BY CONFIGURATION.
- 6. STANDARD SENSOR CONFIGURATIONS ARE SHOWN. CUSTOM MOUNTING, PNEUMATIC CONNECTIONS, DRAIN HOLE, OR STATIC PATTERN ORIENTATION AVAILABLE ON REQUEST.



STAINLESS STEEL PRESSURE FITTINGS

### STRAIGHT PROBES

SEE SHEET 3 FOR CONFIGURATIONS SEE SHEET 4 FOR DIMENSIONS



SEE SHEET 4
FOR
DIMENSIONS

### SPA PN 4207-XX

(WHERE "XX" IS DASH NO.)

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS ANGLES	PROJECT 170  DRAWN <b>B.P.</b> DATE 11-22-06	SpaceAge Control, Inc.
	D.F.   11-22-00	
	APPROVALS	HEATED PROBE,
DO NOT SCALE DRAWING	CHECKED	MINIATURE, PITOT
MATERIAL SEE NOTES	DIGITAL - ON FILE	OR PITOT-STATIC
	ENG	01(11101017(110
SEE NOTES	DIGITAL - ON FILE	SIZE   CAGE CODE   DWG. NO.   4207   REV.   F
CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE		SCALE CAD FILE: SHEET OF 4

7 / 6 / 5

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PROBE WITH CONNECTOR

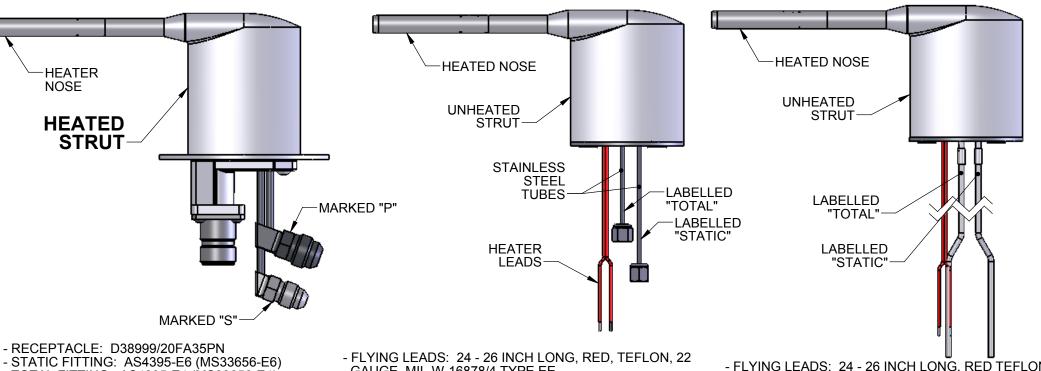
**AND AN / MS PRESSURE FITTINGS** 

### **\_-SHAPED PROBES**

### PROBE WITH FLYING LEADS AND SWAGELOK FITTINGS

### PROBE WITH FLYING LEADS AND FLEX NYLON LINES

## PROBE WITH FLYING LEADS, FLEX NYLON LINES, AND SWAGELOK FITTINGS



- TOTAL FITTING: AS4395-E4 (MS33656-E4) HEATED NOSE AND STRUT (PINS 1 AND 2)
- CONTINUOUS POWER: 110 WATTS MAX
- MAX WEIGHT: .40 LB MAX
- ICING: TSO-C16a

PART NO.	PROBE TYPE	HEATER
PART NO.	PROBLITE	VOLTAGE
4207-13	PITOT-STATIC	28 VOLTS
4207-14	PITOT	28 VOLTS
4207-15	PITOT-STATIC	12 VOLTS
4207-16	PITOT	12 VOLTS

- GAUGE, MIL-W-16878/4 TYPE EE
- STATIC PRESSURE FITTING: SWAGELOK PN SS-102-1
- TOTAL PRESSURE FITTING: SWAGELOK PN SS-102-1
- HEATED NOSE, UNHEATED STRUT
- CONTINUOUS POWER: 45 WATTS MAX
- WEIGHT: .24 LB MAX
- ICING: SEE NOTE 7 BELOW

	PART NO.	PROBE TYPE	HEATER
	PART NO.	FRODETTIFE	VOLTAGE
	4207-01	PITOT-STATIC	28 VOLTS
	4207-07	PITOT	28 VOLTS
	4207-17	PITOT-STATIC	12 VOLTS
	4207-18	PITOT	12 VOLTS

- FLYING LEADS: 24 26 INCH LONG, RED TEFLON, 22 GAUGE, MIL-W-16878/4 TYPE EE
- PRESSURE LINES: NYLON FLEX TUBE, 96 INCH LONG (MIN), .062 I.D. X .089 O.D. HEATED NOSE, UNHEATED STRUT
- CONTINUOUS POWER: 45 WATTS MAX
- WEIGHT: .24 LB MAX
- ICING: SEE NOTE 7 BELOW

PART NO.	PROBE TYPE	HEATER VOLTAGE
4207-03	PITOT-STATIC	28 VOLTS
4207-09	PITOT	28 VOLTS
4207-19	PITOT-STATIC	12 VOLTS
4207-20	PITOT	12 VOLTS

—HEATED NOSE	
UNHEATED— STRUT	
LABELLED	
"TOTAL"	
LABELLED "STATIC"——	

- FLYING LEADS: 24 26 INCH LONG, RED, TEFLON, 22 GAUGE, MIL-W-16878/4 TYPE EE
- PRESSURE LINES: NYLON FLEX TUBE, 96 INCH LONG (MIN), .062 I.D. X .089 O.D.
- STATIC PRÉSSURE FITTING: SWAGELOK PN SS-102-1 - TOTAL PRESSURE FITTING: SWAGELOK PN SS-102-1
- HEATED NOSE. UNHEATED STRUT
- CONTINUOUS POWER: 45 WATTS MAX
- WEIGHT: .25 LB MAX
- ICING: SEE NOTE 7 BELOW

		HEATER		
PART NO.	PROBE TYPE	VOLTAGE		
4207-04	PITOT-STATIC	28 VOLTS		
4207-10	PITOT	28 VOLTS		
4207-21	PITOT-STATIC	12 VOLTS		
4207-22	PITOT	12 VOLTS		

NOTE 7: FOR COMPLIANCE TO ICING REQUIREMENTS OF TSO-C16a, L-PROBES WITH UNHEATED STRUTS HAVE AIRSPEED LIMITS TO PREVENT ICE BUILDUP ON THE STRUT FROM AFFECTING PRESSURE MEASUREMENTS. LIMITS ARE AS FOLLOWS:

PITOT-STATIC PROBES: 200 KNOTS MAXIMUM

PITOT PROBES: 250 KNOTS

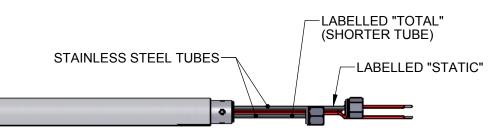
HIGHER AIRSPEEDS ARE PERMISSIBLE IN REDUCED LIQUID WATER CONTENT CONDITIONS OR REDUCED TIME / DURATION IN SEVERE CONDITIONS.

4207 B | 34851 SHEET OF 4

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### **STRAIGHT PROBES**



#### PROBE WITH FLYING LEADS **AND SWAGELOK FITTINGS**

- FLYING LEADS: 24 26 INCH LONG, RED, TEFLON, 22 GAUGE,
- MIL-W-16878/4 TYPE EE
- STATIC PRESSURE FITTING: SWAGELOK PN SS-102-1 TOTAL PRESSURE FITTING: SWAGELOK PN SS-102-1
- HEATED NOSE, UNHEATED STRUT
- **CONTINUOUS POWER: 45 WATTS MAX**
- WEIGHT: .20 LB MAX ICING: TSO-C16a

		HEATER
PART NO.	PROBE TYPE	VOLTAGE
4207-02	PITOT-STATIC	28 VOLTS
4207-08	PITOT	28 VOLTS
4207-23	PITOT-STATIC	12 VOLTS
4207-24	PITOT	12 VOLTS

### PROBE WITH FLYING LEADS AND FLEX NYLON LINES



- FLYING LEADS: 24 26 INCH LONG, RED, TEFLON, 22 GAUGE, MIL-W-16878/4 TYPE EE
- PRESSURE LINES: NYLON FLEX TUBE, 96 INCH LONG (MIN),
- .062 I.D. X .089 O.D.
- **HEATED NOSE**
- **CONTINUOUS POWER: 42 WATTS MAX**
- WEIGHT: .20 LB MAX
- ICING: TSO-C16a

		HEATER
PART NO.	PROBE TYPE	VOLTAGE
4207-05	PITOT-STATIC	28 VOLTS
4207-11	PITOT	28 VOLTS
4207-25	PITOT-STATIC	12 VOLTS
4207-26	PITOT	12 VOLTS

### PROBE WITH FLYING LEADS, FLEX NYLON LINES, AND SWAGELOK FITTINGS



- FLYING LEADS: 24 26 INCH LONG, RED, TEFLON, 22 GAUGE, MIL-W-16878/4 TYPE EE
- PRESSURE LINES: NYLON FLEX TUBE, 96 INCH LONG (MIN), .062 I.D. X .089 O.D.
- STATIC PRESSURE FITTING: SWAGELOK PN SS-102-1
- TOTAL PRESSURE FITTING: SWAGELOK PN SS-102-1
- HEATED NOSE, UNHEATED STRUT
- CONTINUOUS POWER: 45 WATTS MAX
- WEIGHT: .21 LB MAX
- ICING: TSO-C16a

		HEATER
PART NO.	PROBE TYPE	VOLTAGE
4207-06	PITOT-STATIC	28 VOLTS
4207-12	PITOT	28 VOLTS
4207-27	PITOT-STATIC	12 VOLTS
4207-28	PITOT	12 VOLTS

BIZE	CAGE O	85	1	DWG.	NO.	420	7		REV.	F
SCALE		CAD	FILE	:				SHEET 3	OF	4

LABELLED "TOTAL"

