Energy products

Liquid metering valve
C236765

1½ inch tube size, 150 to 200 vdc, electromechanically actuated (EMA)

Meggitt's spool and sleeve style liquid fuel metering valves are in use on a variety of aero-derivative gas turbines. With many years of successful field operation, this design demonstrates the reliability of Meggitt EMA technology.

Specifications

Function:	Precision liquid fuel metering for aero-derivative turbine engine control
Physical size:	14.79" x 6.00" x 21.75" high
Weight:	60 pounds
Fluid connection type:	1.5" pipe, code 61, SAE J518
Line pressure:	100 to 1500 psig
Fluid temperature:	–4 to 176°F
Ambient temperature:	–40 to 158°F
Performance:	
Flow:	Linear trim, 0 to 85 gpm
Drain bypass flow:	125 gpm maximum
Operating speed:	Less than 200 msec full stroke response
Internal leakage:	0.425 gpm or less at 100 psid
Electrical:	
Motor:	Steady state, 150 to 200 VDC, 0.50 ampere; 10 amperes maximum transient for 100 msec
Resolver:	4 VAC, 25 to 60 ma maximum
Closed position indicating switch:	20 to 32 VDC, SPDT

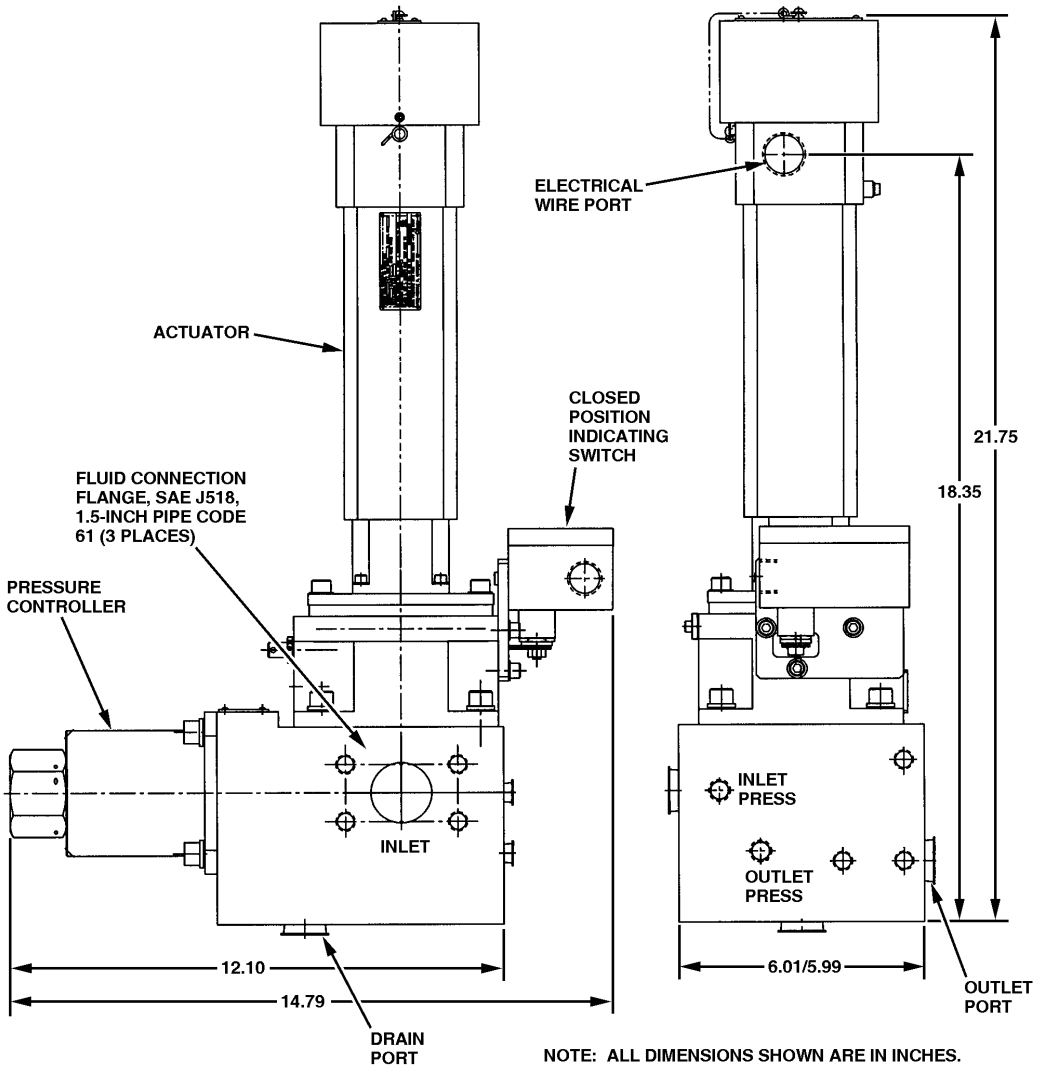
Key features

- Accuracy, ±5% at 3.0 to 85 gpm
- High speed brushless DC servo motor performance, 20 Hz frequency response
- 200 msec full stroke response time
- Used on SAC and dual fuel turbine engines
- UL certified for NEC class 1, division 1, groups C and D, temp code T4, CE-PED certified; ATEX zone 1, group IIB, EExd T4; IP54
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions

Energy products

Liquid metering valve
C236765

Key dimensions



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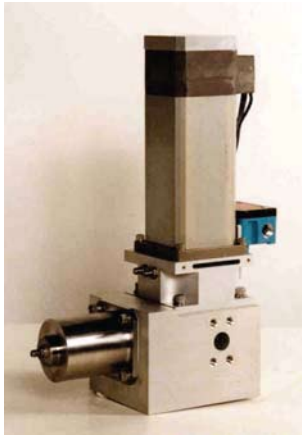
Energy products

Liquid metering valve
C236385

One-inch tube size, 150 to 200 vdc, electromechanically actuated (EMA)



Meggitt's one-inch spool and sleeve style liquid fuel metering valve is in use on several aero-derivative gas turbines. With many years of successful field operation, this design demonstrates the precision of Meggitt EMA technology.

Specifications

Function:	Precision liquid fuel metering for aero-derivative turbine engine control
Physical size:	12.1" x 6.00" x 19.33" high
Weight:	60 pounds
Fluid connection type:	1" pipe, code 61, SAE J518
Line pressure:	0 to 1440 psig
Fluid temperature:	32 to 176°F
Ambient temperature:	–40 to 180°F
Performance:	
Flow:	Linear trim, 0 to 57 gpm
Operating speed:	Less than 200 msec full stroke response
Internal leakage:	0.75 gpm or less at 100 psid
Electrical:	
Motor:	Steady state, 150 to 200 VDC, 0.50 ampere; 10 amperes maximum transient for 100 msec
Resolver:	4 VAC, 25 to 60 ma maximum
Closed position indicating switch:	20 to 32 VDC, SPDT

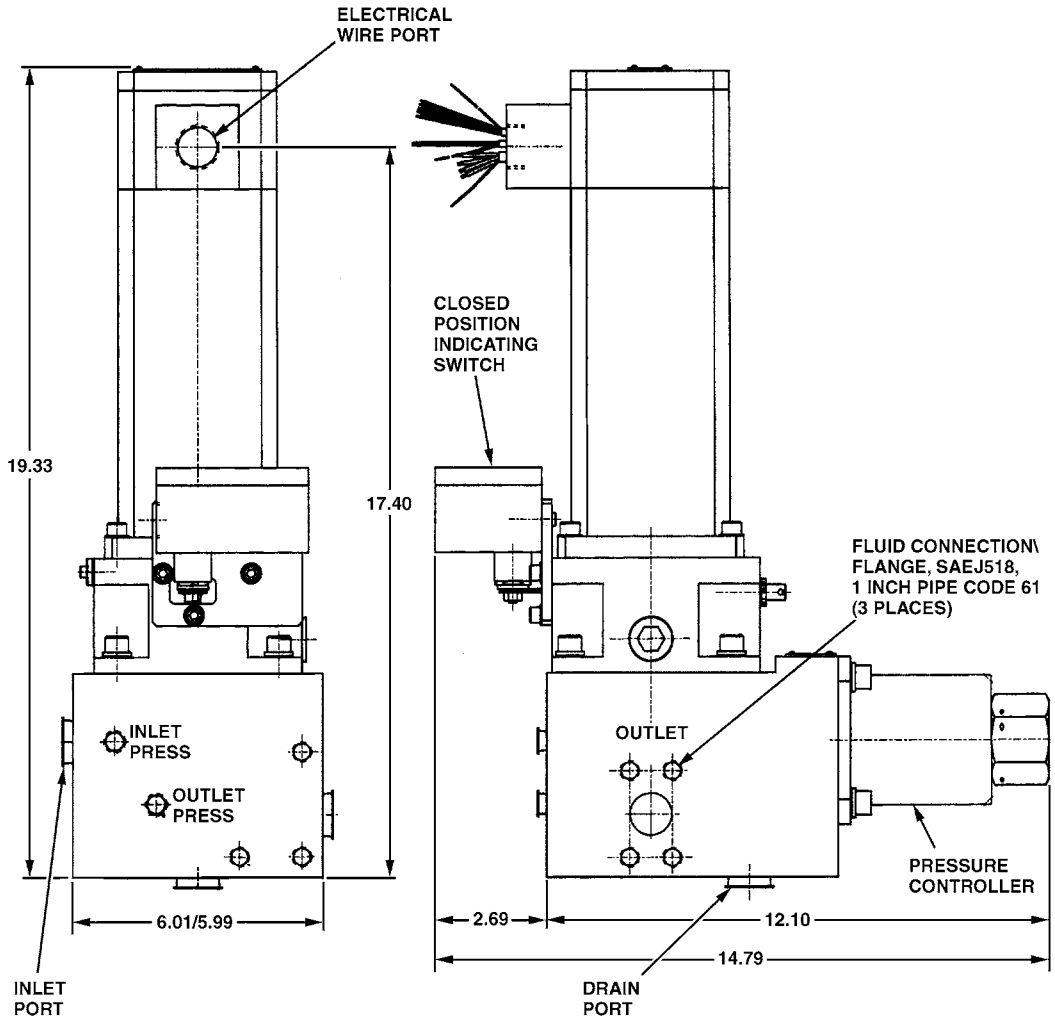
Key features

- Accuracy, ±5% at 3.0 to 57 gpm
- High speed brushless DC servo motor performance, 20 Hz frequency response
- 200 msec full stroke response time
- Used on SAC turbine engines
- UL certified for NEC class 1, division 1, groups C and D, temp code T4, CE-PED certified
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions

Energy products

Liquid metering valve
C236385

Key dimensions



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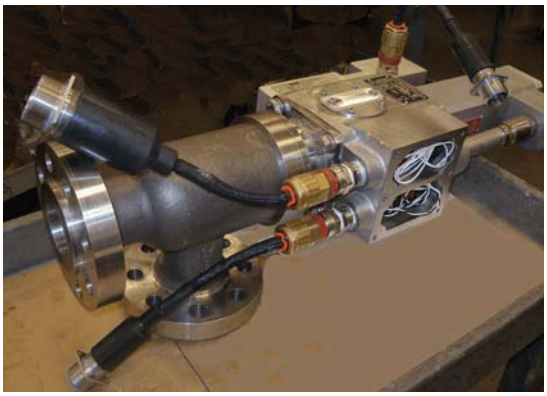
Gas metering valve (with cables for retrofit applications)
C520245

Two-inch flange, 90 to 140 vdc, electromechanically actuated (EMA)



Meggitt's two-inch right angle sleeve style gas metering valve is in use on a variety of large frame industrial gas turbine engines. With millions of field operating hours, this design continues to prove the reliability of Meggit EMA technology. Now available with quick change electrical cables and connectors.

Specifications

Function:	Precision fuel gas metering for aero-derivative turbine engine control
Physical size:	10.3" wide, 5.56" deep, 29.0" long
Weight:	95 pounds (estimated, dry)
Flange type:	2" ANSI B16.5 CL 600 raised face flanges
Line pressure:	200 to 700 psia
Fluid temperature:	–40 to 300°F
Ambient temperature:	–65 to 220°F, 350°F maximum transient
Performance:	
Internal leakage:	ANSI class IV
Operating time:	Less than 400 msec full stroke response, 300 msec fail-safe closed
Electrical:	
Motor:	Steady state, 90 to 140 VDC, 0.30 ampere steady state; 7.0 amperes maximum peak
Resolver:	4 VAC, 25 to 60 ma maximum
Thermostat:	Opens at 329 to 347°F; resets at 251 to 270°F
LVDT:	Excitation – 7.07 (±0.14) VRMS, 3000 (±300) Hz
Variations:	Outlet orientation direction optional, flow ranges from 80 to 22,000 pph

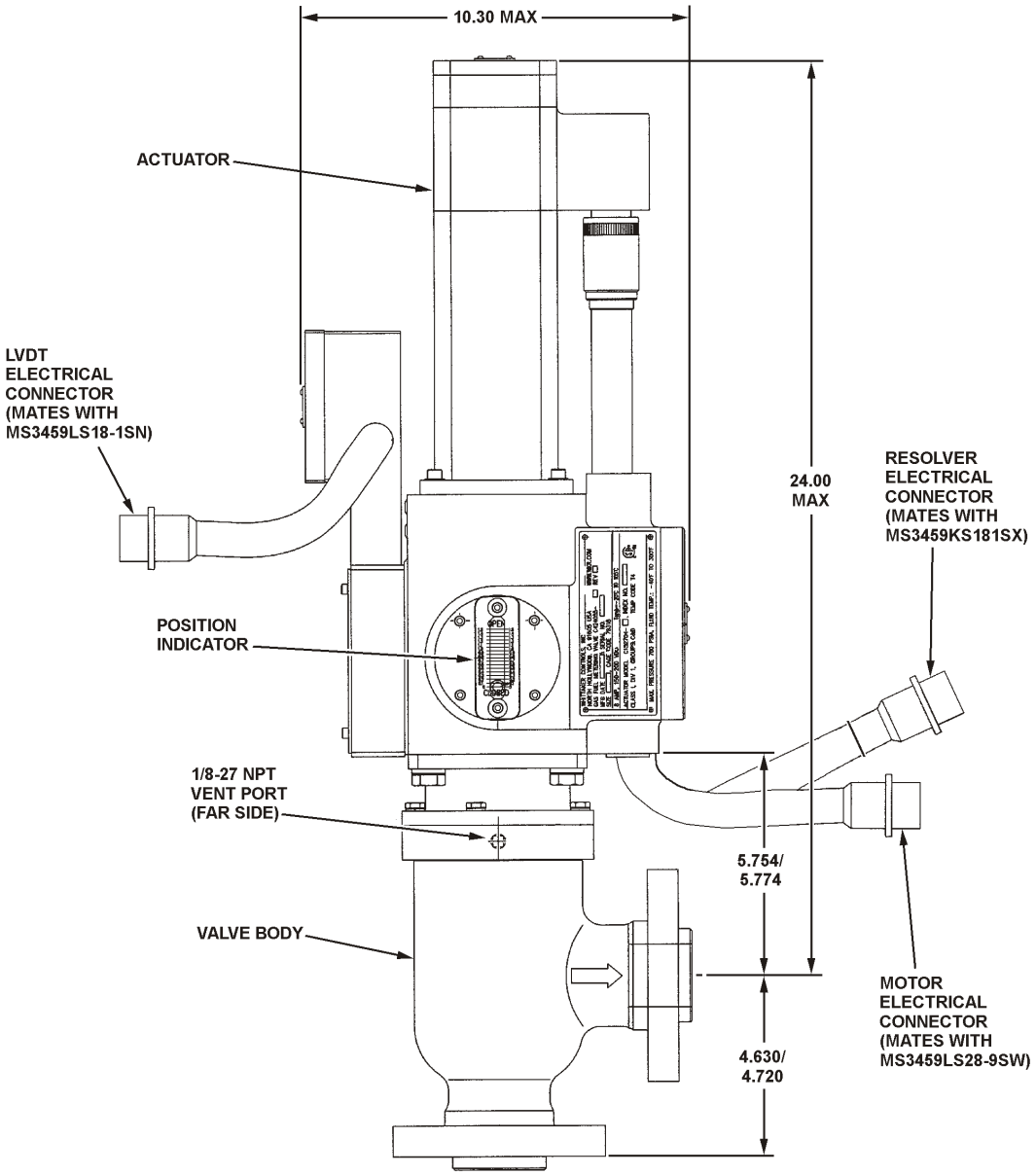
Key features

- Foolproof electrical cables and connectors
- Accuracy, ±1% of flow point
- High speed brushless DC servo motor performance, 20 Hz frequency response
- Less than 400 msec full stroke response time
- Used on both DLE and SAC turbine engines
- Explosion proof design, CSA/UL certified for NEC class 1, division 2, groups C and D, temp code T4, CE Eexd 11B, T4, zone 2. CE-ATEX and PED certified. (Cable certification ponding.)
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions

Energy products

Gas metering valve
C520245

Key dimensions



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Gas metering valve
C422855

1½-inch flange, 150 to 200 vdc, electromechanically actuated (EMA)

Meggitt's 1½-inch globe style gas metering valve is in use on a variety of industrial gas turbine engines. With millions of field operating hours, this design continues to prove the high reliability of Meggitt EMA technology.

Specifications

Function:	Precision Fuel Gas Metering for aero-derivative turbine engine control
Physical size:	9.88" flange to flange, 23" high
Weight:	75 pounds
Flange type:	1.5" ANSI B16.5 CL 600 raised face flanges
Line pressure:	100 to 1120 psig
Fluid temperature:	0 to 300°F
Ambient temperature:	–40 to 158°F

Performance:

Flow:	Linear trim, 0 to 4.0 pounds/sec natural gas, Cv = 40
Pressure drop:	25 psid maximum (3.5 pounds/sec, 500 psig)
Leakage:	ANSI class IV
Operating time:	100 msec full stroke response, 300 msec fail-safe closed

Electrical:

Motor:	Steady state, 75 watts, 150 to 200 VDC, 0.30 amperes; peak (100msec); 1200 watts, 8 amperes maximum
Resolver:	4 VAC, 25 to 60 ma maximum
Position switch:	20 to 32 VDC, SPDT

Actuator also available in 90 to 130 VDC version

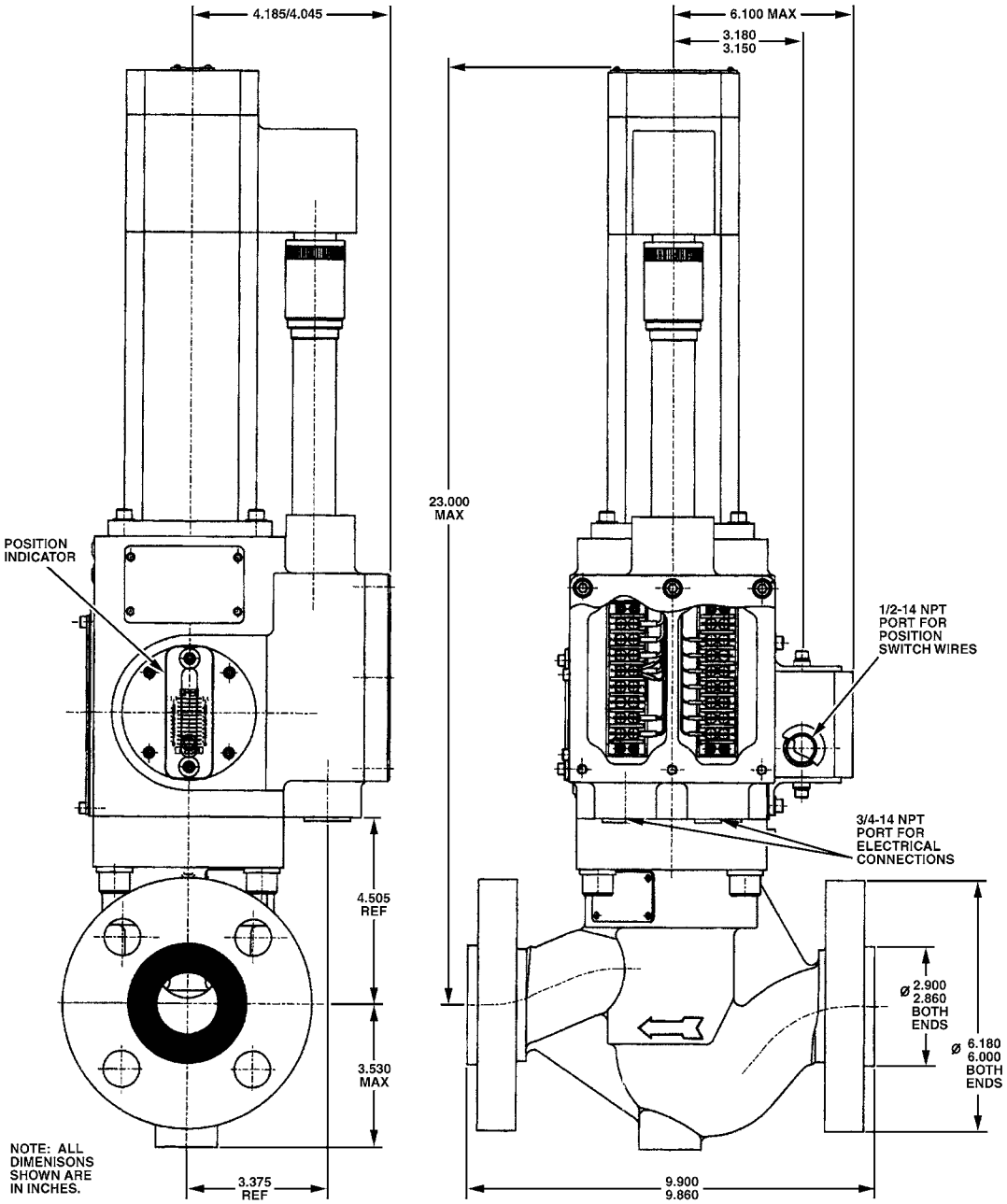
Key features

- Exceptional accuracy, ±1% of flow point
- High speed brushless DC servo motor performance, 20 Hz frequency response
- 100 msec full stroke response time
- Used on both DLE and SAC turbine engines
- Explosion proof design, CSA/UL certified for NEC class 1, division 1, groups C and D, temp code T4, CE zone 1, EExd IIB, CE-ATEX and PED certified
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions

Energy products

Gas metering valve
C422855

Key dimensions



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Gas metering valve
C422845

Two-inch flange, 90 to 140 vdc, electromechanically actuated (EMA)

Meggitt's two-inch right angle style gas metering valve is in use on a variety of aero-dirivative gas turbines. With millions of field operating hours, this design continues to prove the high reliability of Meggitt EMA technology.

Specifications

Function:	Precision fuel gas metering valve for aero-derivative, small and large frame turbine engine contro
Weight:	95 lbs maximum
Flange:	2" ANSI B16.5 CL 600
Line pressure:	0 to 700 psia
Fluid temperature:	-40 to 300°F
Ambient temperature:	–65 to 220°F
Performance:	
Internal leakage:	15 pph max at 700 psia
Operating time:	Less than 400 msec full stroke response, full open of fully closed
Electrical:	
Motor:	Steady state, 90 to 140 VDC, 0.30 ampere; 70 amperes maximum peak
Resolver:	4 VAC, 25 to 60 ma maximum
LVDT:	Excitation, 707 (±0.14) Vrms, 3000 (±300) Hz
Thermostat:	Opens at 329 to 347°F, resets at 251 tp 270°F

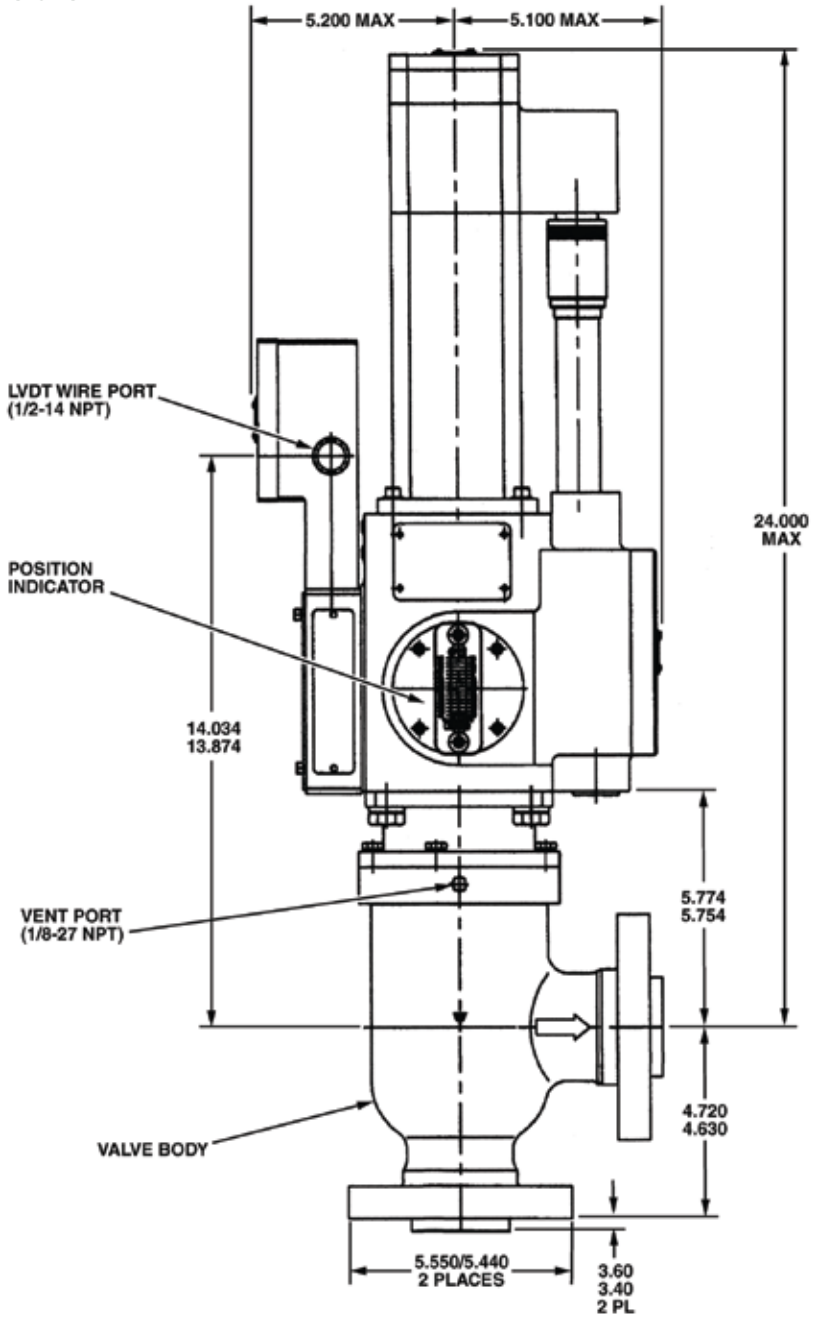
Key features

- Exceptional accuracy, ±1% of flow point
- Fail-safe closed
- High speed brushless DC servo motor performance
- Less than 400 msec full stroke response time
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions
- Explosion proof design, CSA/UL certified for NEC class 1, division 1, groups C and D, temp code T4, CE EExd IIB, T4, CE-ATEX and PED certified

Energy products

Gas metering valve
C422845

Key dimensions



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Gas metering valve
C421895

Three-inch flange, 90 to 140 vdc, electromechanically actuated (EMA)

Meggitt's three-inch globe style gas metering valve is designed for use on a variety of industrial gas turbines. This product utilizes the same high reliability features as all Meggitt electric gas metering valves.

Specifications

Function:	Precision fuel gas metering for aero-derivative turbine engine control
Physical size:	12.5" flange to flange, 9.78" wide, 28" high
Weight:	120 pounds
Flange type:	3" ANSI B16.5 CL 600 raised face flanges
Line pressure:	0 to 350 psia
Fluid temperature:	32 to 300°F
Ambient temperature:	–65 to 150°F
Performance:	
Flow:	Linearly proportional to valve stroke
Internal leakage:	ANSI class IV
Operating time:	175 msec full stroke response, 150 msec 50% step response, 300 msec fail-safe closed (power loss)
Electrical:	
Motor:	Steady state, 90 to 140 VDC, 0.50 amperes; 10 amperes maximum transient (100 msec)
Resolver:	4 VAC, 25 to 60 ma maximum
Closed position indicating switch:	SPDT
Thermostat:	Opens at 329 to 347°F; resets at 251 to 270°F

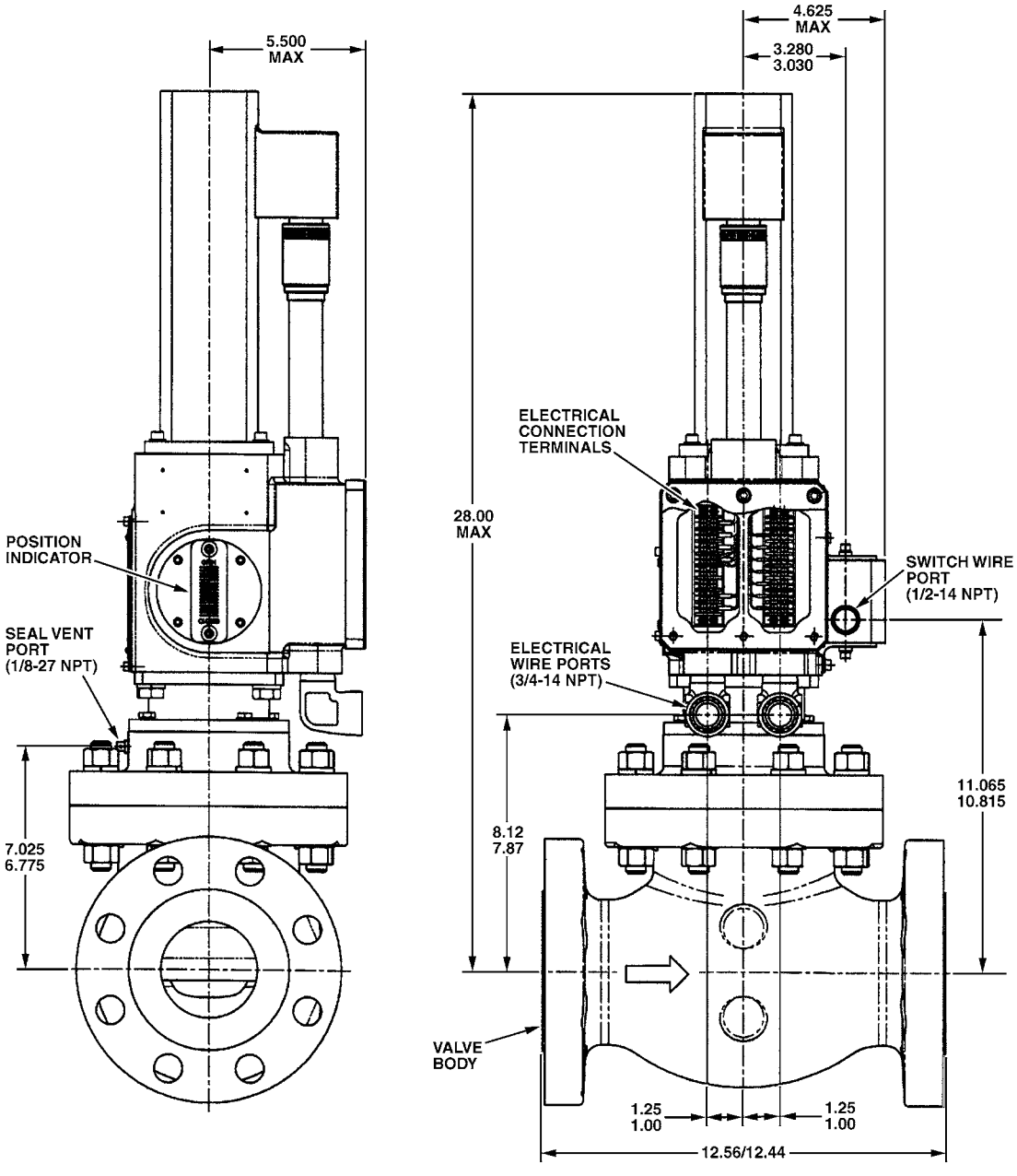
Key features

- Accuracy, ±3% of flow point
- High speed brushless DC servo motor perfor mance, 20 Hz frequency response
- 175 msec full stroke response time
- Used on both DLE and SAC turbine engines
- Explosion proof design, CSA/UL certified for NEC class 1, division 1, groups C and D, temp code T4, CE EExd IIB, Zone 1, CE-ATEX certified
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions

Energy products

Gas metering valve
C421895

Key dimensions



NOTE: DIMENSIONS SHOWN ARE IN INCHES

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Fuel trim valve
C327735

Three-inch flange, electro-hydraulic servo actuated (EHA)

Meggitt's three-inch right angle, sleeve style fuel trim valve is designed for use on industrial gas turbine engines.

Specifications

Function:	Precision fuel trim large frame turbine engine control, fail-safe open
Physical size:	11.0" wide, 10.0" deep, 33.0" long
Weight:	145 pounds (maximum, wet)
Flange type:	3" ANSI B16.5 CL 300 raised face flanges
Line pressure:	0 to 720 psig (natural gas); 0 to 440 psig (CDP air)
Actuation pressure (hydraulic fluid):	600 to 1000 psig, 70 to 200°F
Fluid temperature:	300°F maximum (natural gas); 1100°F maximum (CDP air)
Ambient temperature:	–65 to 350°F
Performance:	
Flow:	0 to 9460 pounds/hour normal; 11,000 pounds/hour maximum
Pressure drop:	Less than 5 psid at 515 psia, 300°F, 11,000 pounds/hour, fully open
Internal leakage:	Less than 50 pounds/hour at all operating pressures
Operating time:	250 msec opening or closing, fail-safe open within 5 seconds (electrical failure)
Electrical:	
Servo valve:	2 coils, 20 to 190 ma
LVDT:	Excitation, 7.07 (±0.14) volts rms, 3000 (±300) Hz
Position indicating switches:	Open and closed, 24 VDC

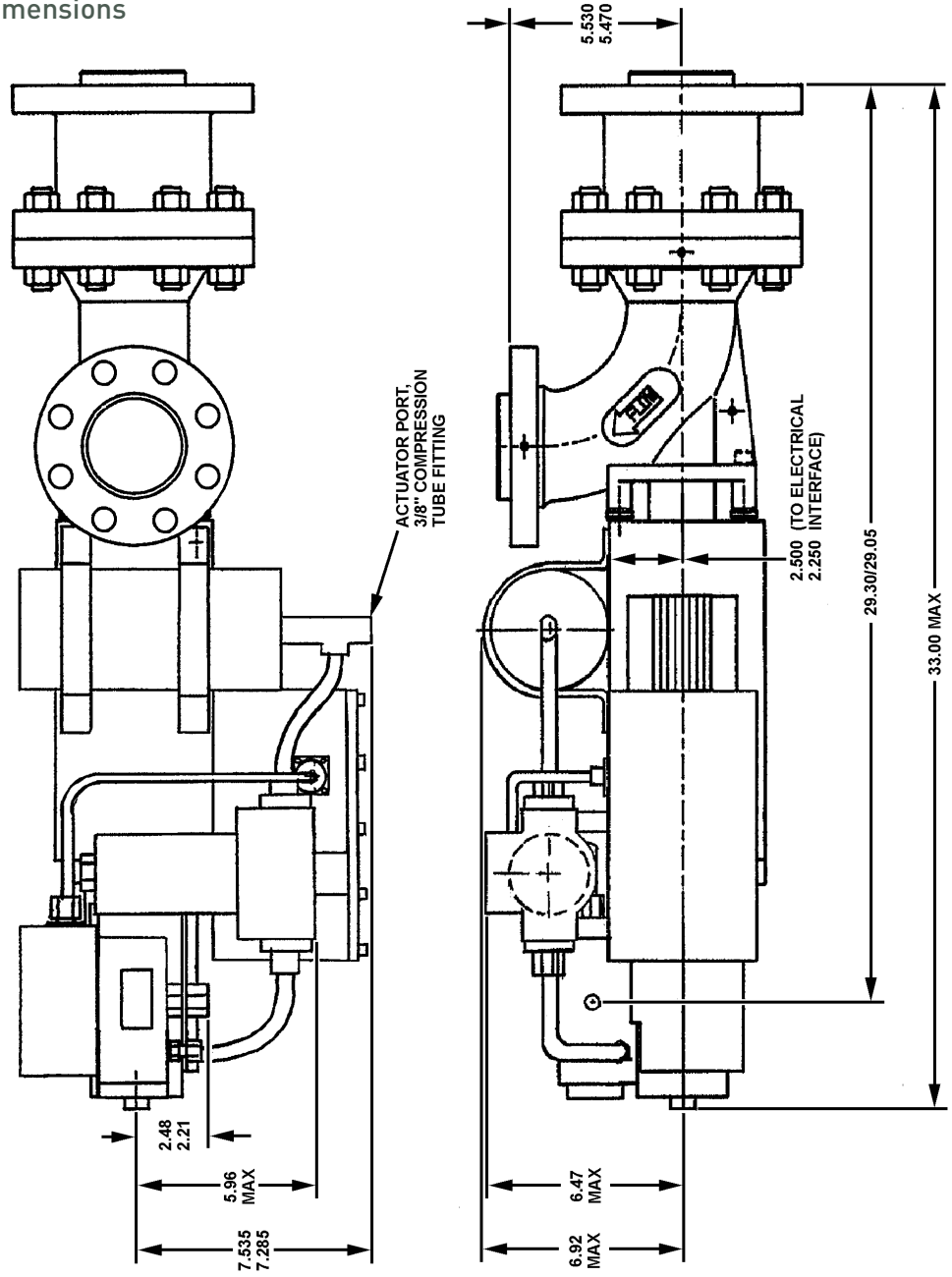
Key features

- Fail-safe open
- Hydraulic servo valve position control
- Open and closed position indicating switches
- LVDT position feedback
- For use on both DLE and SAC turbine engines
- High temperature gas control (1100°F)
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions

Energy products

Fuel trim valve
C327735

Key dimensions



NOTE: DIMENSIONS SHOWN ARE IN INCHES (MM).

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Gas metering valve
C422485

Two-inch flange, 150 to 200 vdc, electromechanically actuated (EMA)

Meggitt's two-inch globe style gas metering valve is in use on a variety of industrial gas turbine engines. With millions of field operating hours, this design continues to prove the high reliability of Meggitt EMA technology.

Specifications

Function:	Precision fuel gas metering for aero-derivative turbine engine control
Physical size:	11.23" flange to flange, 23" high
Weight:	85 pounds
Flange type:	2" ANSI B16.5 CL 600 raised face flanges
Line pressure:	100 to 1120 psig
Fluid temperature:	32 to 300°F
Ambient temperature:	–65 to 158°F

Performance:

Flow:	0 to 10.5 pounds/sec natural gas
Pressure drop:	20 psid maximum (10.5 pounds/sec, 500 psig)
Internal leakage:	ANSI class IV
Operating time:	120 msec full stroke response, 300 msec fail-safe closed

Electrical:

Motor:	Steady state, 75 watts, 150 to 200 VDC, 0.30 amperes; 8 amperes maximum peak (100 msec)
Resolver:	4 VAC, 25 to 60 ma maximum
Closed position indicating switch:	28 VDC, 2 wire SPDT
Thermostat:	Opens at 329 to 347EF; resets at 252 to 269EF Actuator also available in 90 to 130 VDC version

Contact your local Meggitt representative or Meggitt directly for technical information not listed in the technical section of this catalog.

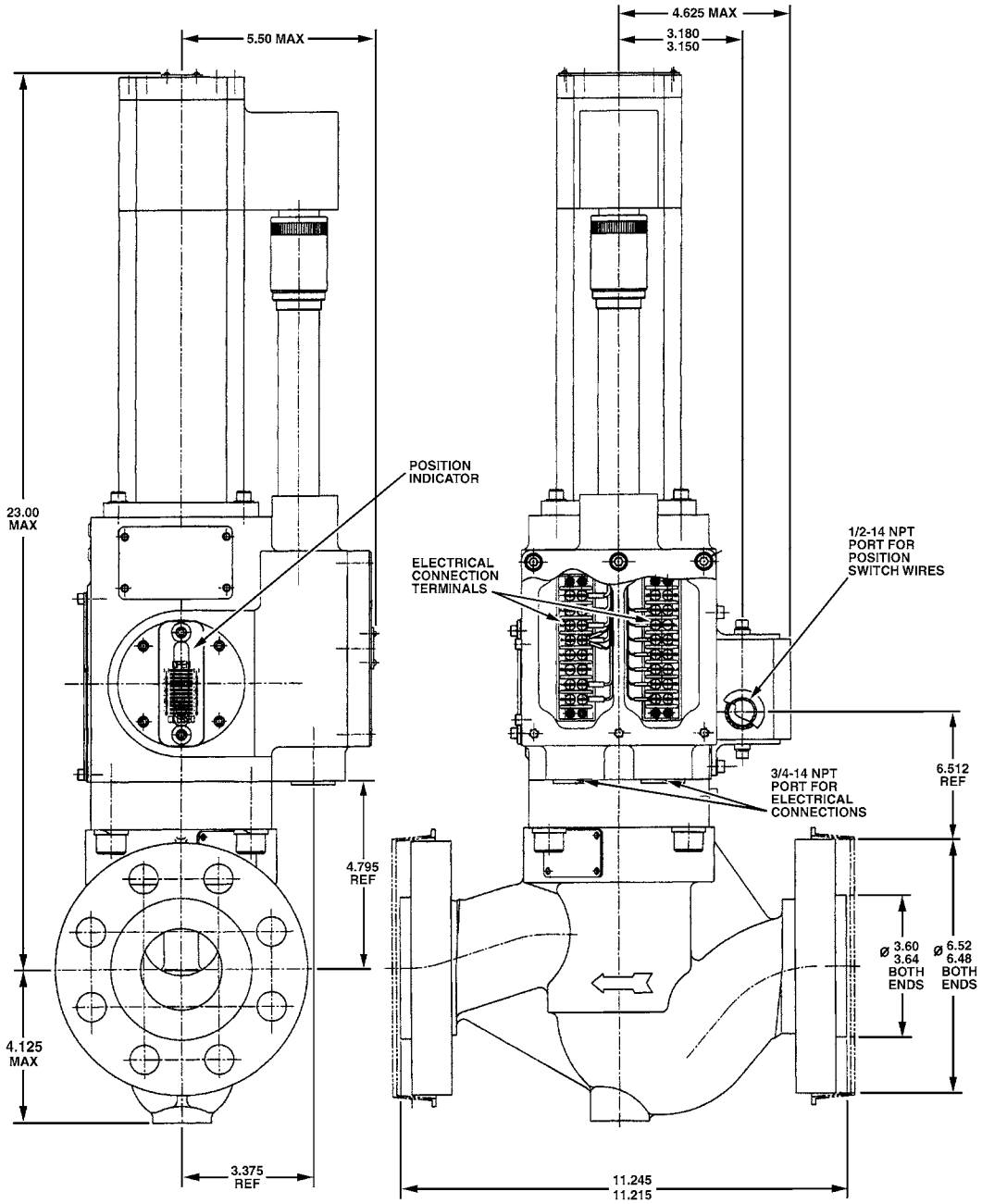
Key features

- Accuracy, ±3% of flow point
- High speed brushless DC servo motor performance, 20 Hz frequency response
- 120 msec full stroke response time
- Used on both DLE and SAC turbine engines
- Explosion proof design, CSA/UL certified for NEC class 1, division 1, groups C and D, temp code T4, CE, EExd IIB, Zone 1, ATEX and PED certified
- All stainless steel valve and yoke materials for NACE compliance
- No maintenance required under normal conditions

Energy products

Gas metering valve
C422485

Key dimensions



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Gas metering valve
C329465

Two-inch flange, electro-hydraulic servo actuated (EHA)

Meggitt's two-inch right angle style fuel control valve is in use on aero-derivative industrial gas turbine engines. With extensive on-turbine operating time, this design continues to prove the high reliability of Meggitt technology.

Specifications

Function:	Precision gas flow control for aero-derivative turbine engine control
Physical size:	6.5" wide, 8.23" deep, 26.48" long
Weight:	57 pounds maximum (dry)
Flange type:	2" ANSI B16.5 CL 300 raised face flanges
Line pressure:	0 to 700 psig
Fluid temperature:	–65 to 300°F
Ambient temperature:	–65 to 250°F
Performance:	
Flow:	300 to 22,000 pounds/hour, natural gas
Leakage:	ANSI class IV
Operating time:	200 msec full stroke response (opening or closing), 250 msec fail-safe closed
Electrical:	
Servo valve:	3 coils, 80 ma/coil for maximum flow
LVDT:	Excitation, 7.07 (±0.14) volts rms, 3000 (±300) Hz
Variations:	Outlet orientation direction optional (90E increments), fail open or fail closed

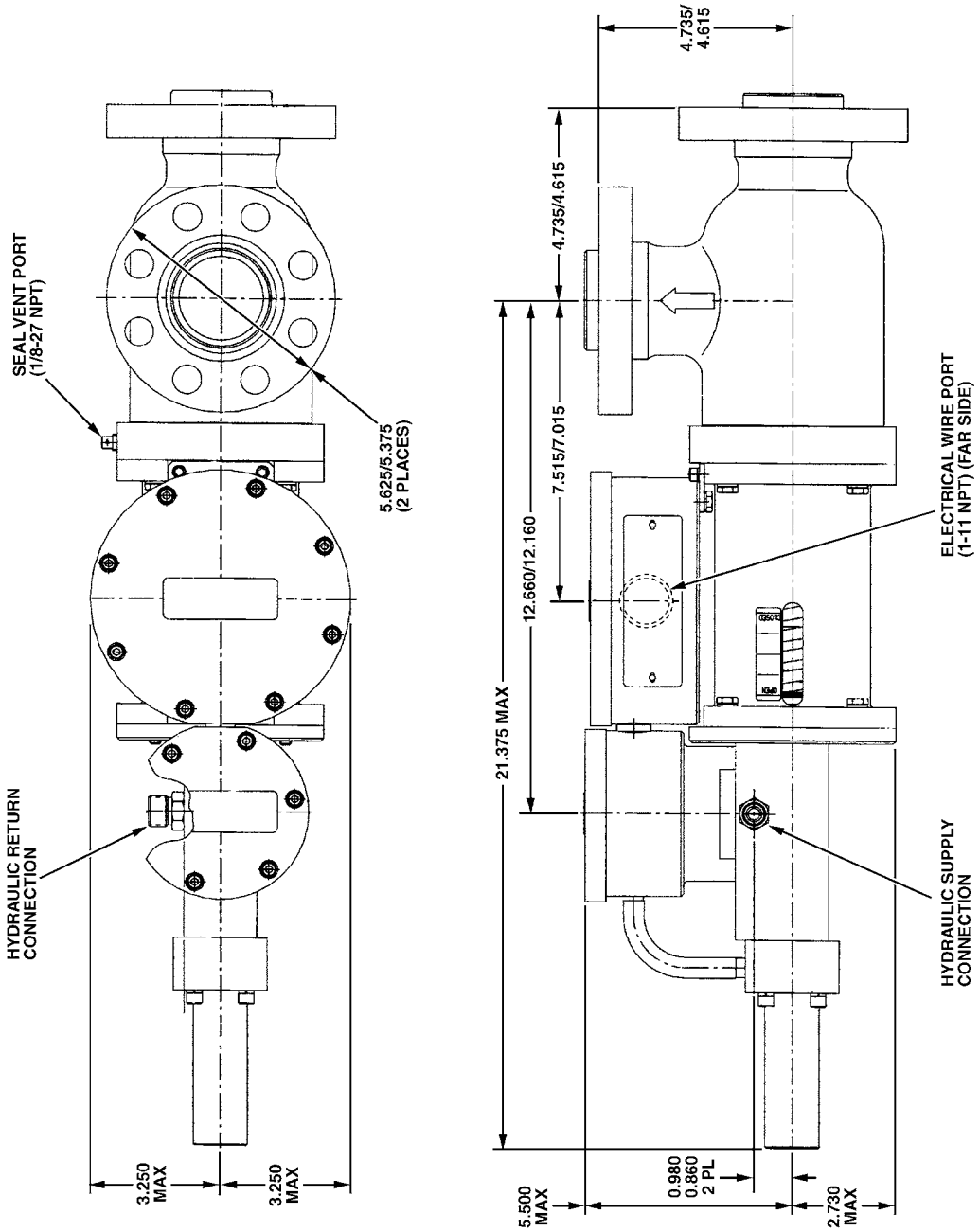
Key features

- Accuracy, ±2% of flow point
- Fail-safe open (C329465-1 and C329465-3; fail-safe closed (C329465-2 and C329465-4)
- Three-coil servo valve
- Used on both DLE and SAC turbine engines
- Explosion proof design, CSA/UL, and CENELEC zone1, EExd IIA
- All stainless steel valve and yoke materials for NACE compliance

Energy products

Gas metering valve
C329465

Key dimensions



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