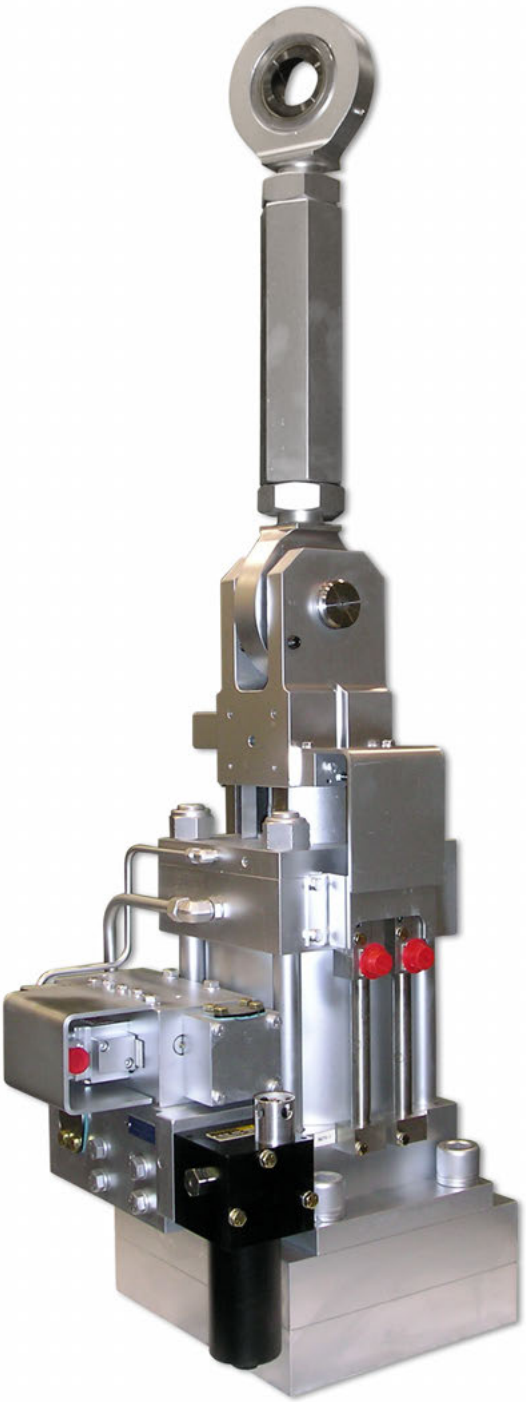
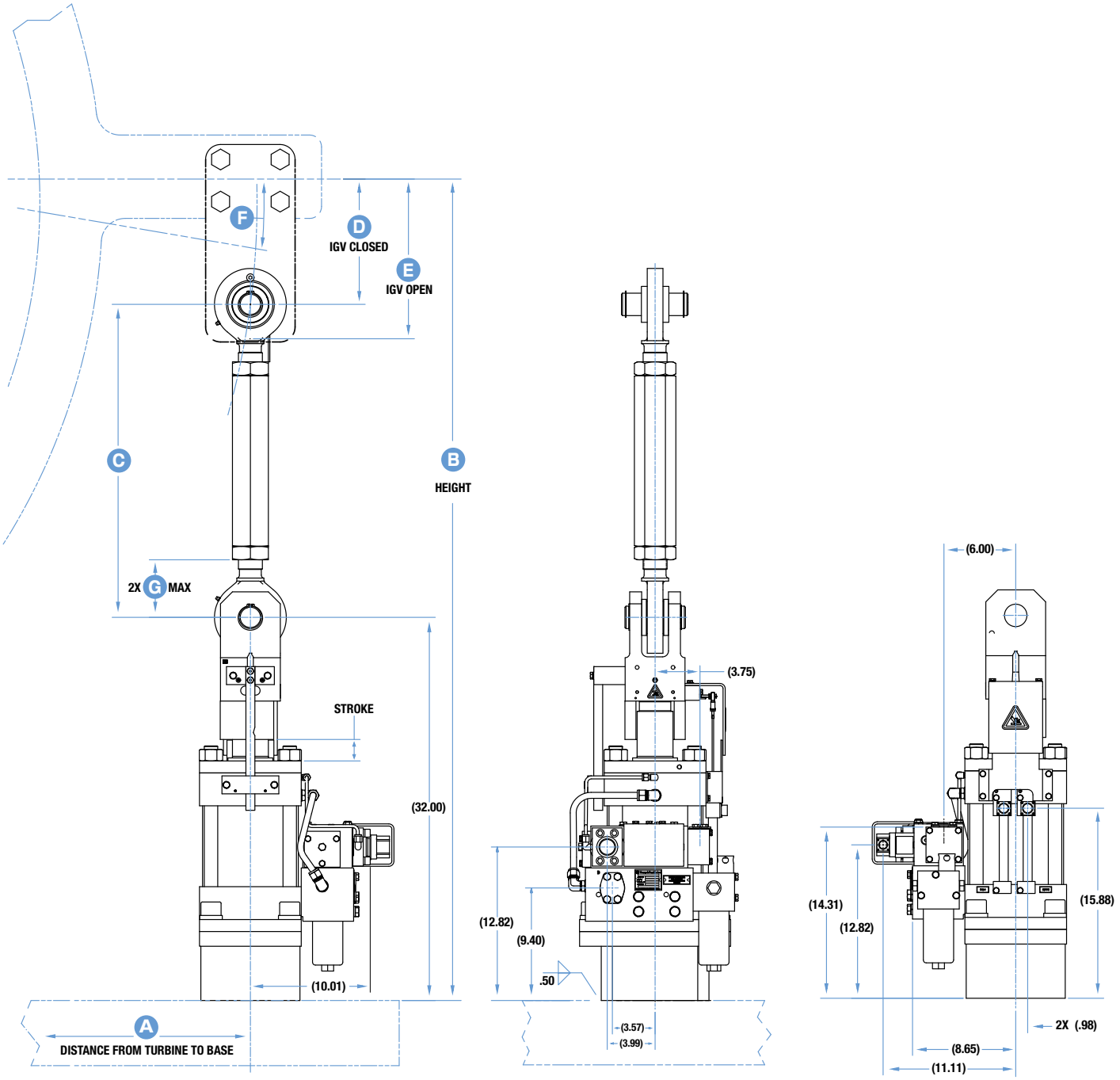
Young & Franklin Inc.

8277 Series Severe Service Inlet Guide Vane Actuator Assembly



Used for Inlet Guide Vane (IGV) positioning and control of industrial or utility large frame gas turbines, the 8277 Series Severe Service Hydraulic actuators will force the IGV's closed in the event of a turbine trip. Ruggedized and proven to withstand the harsh control conditions associated with high dither rates.

Dimensions: YF 8277 Severe Service Inlet Guide Vame Actuator



Group	Used on:	Stroke	Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F	Dimension G
1	7 FA	2.64	62.48	67.50	26.13	9.364	12.003	63.42	6.50
2	9 FA	3.50	76.00	81.00	37.90	11.100	14.600	77.08	8.63
3	7 FA	2.81	62.48	67.50	26.13	9.364	12.174	63.42	6.50
4	7 FA	2.73	62.48	67.50	26.13	9.364	12.094	63.42	6.50
5	9 FA	3.58	76.00	81.00	37.90	11.100	14.680	77.08	8.63
6	9 FA	3.58	76.00	81.00	37.90	11.100	14.680	77.08	8.63
7	9 FA+E	3.58	76.00	81.00	38.00	11.000	14.570	77.08	8.63
8	9 FA	3.58	76.00	81.00	38.00	11.000	14.570	77.08	8.63
9	9 FB	3.58	76.00	81.00	37.90	11.100	14.680	77.08	8.63
10	9 FB	3.58	76.00	81.00	37.90	11.100	14.680	77.08	8.63
11	7 FA	3.00	62.48	67.50	26.13	9.634	12.634	63.42	6.50
12	9 FA	3.90	76.00	81.00	37.90	11.100	15.000	77.08	8.63
13	9 FA	3.94	76.00	81.00	38.20	10.80	14.740	77.08	8.45
14	9 FA	3.58	76.00	81.00	37.90	11.100	14.680	77.08	8.63

Specifications: 8277 Series Hydraulic Inlet Guide Vane Actuator
Hydraulic servo actuator with dual LVDT's
Compact integrated manifold containing servo, trip and filter
1200 to 1700 PSI hydraulic pressure
Modular design for different cylinder sizes
Strokes from 1.698 - 3.580 inches
ANSI valve body rating: 300#
Slew time of 5 +/- 1 seconds
High force actuator: Force range from 20,000 lbf. to 40,000 lbf.
Fluid temperature: 50°F to 150°F
Certified to North American and European standards for use in hazardous locations.

Used for Inlet Guide Vane (IGV) positioning and control of industrial or utility large frame gas turbines. The 8277 Series actuators will force the IGV's closed in the event of a turbine trip. Ruggedized and proven to withstand the harsh control conditions associated with high dither rates.

DESCRIPTION OF OPERATION

The actuator incorporates a hydraulic trip mechanism. The trip valve mechanism consists of a two-position directional control spool valve in series between the servo valve and the hydraulic cylinder. The porting of the directional control valve is such that, in the trip position, the servo valve is isolated from the cylinder and hydraulic fluid is diected to extend the actuator, closing the IGV. The trip valve connects the servo valve ports to the cylinder ports, in the run position.

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