

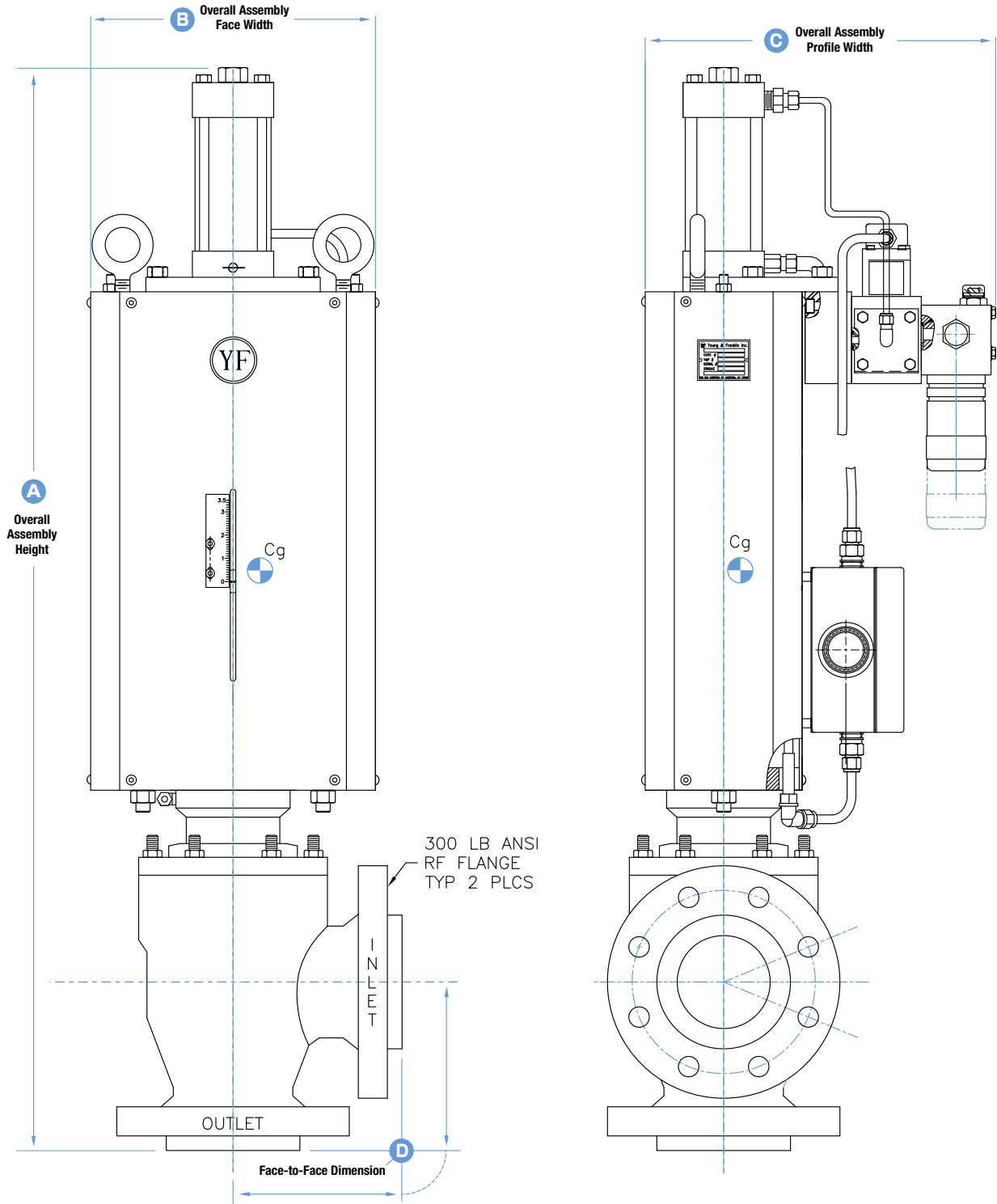


## 8580 Series Gas Control Valves



Hydraulically actuated choked-flow precision gas control valves



# 8580 Series Gas Control Valve Dimensions



Measurement Key	2" Valve	3" Valve	4" Valve	6" Valve	8" Valve
<b>A</b> Overall Assembly Height	42.56" (1081.02 mm)	44.38" (1127.25 mm)	44.94" (1141.48 mm)	47.94" (1217.68 mm)	54.76" (1390.90 mm)
<b>B</b> Overall Assembly Face Width	12.25" (311.15 mm)	12.25" (311.15 mm)	12.25" (311.15 mm)	12.25" (311.15 mm)	12.25" (311.15 mm)
<b>C</b> Overall Assembly Profile Width	15.07" (382.78 mm)	15.07" (382.78 mm)	15.07" (382.78 mm)	15.07" (382.78 mm)	15.07" (382.78 mm)
<b>D</b> Face-to-Face Dimension	5.25" (133.4mm)	6.25" (158.8 mm)	7.25" (184.2 mm)	9.31" ( 236.47 mm)	11.19" ( 284.23 mm)

For specific valve sizes, contact Y&F for details.

## 8580 Series GCV Technical Specifications

Line Size:	2" Valve	3" Valve	4" Valve	6" Valve	8" Valve
Flow Characteristics	Linear	Linear	Linear	Linear	Linear
Maximum Cg	1,200	2,900	4,300	6,600	13,000
Hydraulic Pressure	1200 to 1700 psig				
Maximum Operating Pressure	1700 psig				
Proof Pressure	2800 psig				
Maximum Rod Seal Drain Pressure	10 psig				
Maximum Return Pressure	30 psig				
Trip Valve	Independent electric or hydraulic trip valve				
Trip Time	< 100 ms for up to 6" valve, < 200 ms for 8" or larger valve				
Trip Relay: Low Pressure High Pressure Electric	100 psi 1600 psi 125 VDC				
Feedback	0.7 to 3.5 Vrms LVDT feedback with 7.0 Vrms input				
RVDT feedback	Available for rotary valves; limit switch standard for aux/stop valves				
Servo Command	+/- 8 mA servo command; +/- 60 mA servo command options available				
Typical slew time	0.7 +/- .03 second; 0.200 second slew time available for some models				
Failsafe	Close				
Overboard leakage	Zero leakage, as shipped				
Failure Mode	Spring type to drive valve to safe position with loss of signal (Fail Close)				
Component Certifications	  II 3 G T3, Ex nA IIC T3 Gc    CSA Class I, Division I and II, Groups B, C and D				

The Y&F 8580 Series Gas Control Valve Assemblies provide fast and reliable control of gas fuel flow to the combustion system of a large industrial or utility gas turbine.

The two-way valves provide variable flow control in applications requiring highly linear critical gas flow relative to valve stroke. The hydraulic actuator assemblies provide safe turbine fuel shutoff and reliable valve positioning. Control valve positioning is affected through a triple coil, two-stage servo valve that receives a +/- 8 mA command. Position feedback is measured using two LVDT's.

Y&F 8580 Series Valves utilize a common design for 1" to 10" line size applications.

Contact Young & Franklin, Inc. ([www.yf.com](http://www.yf.com)) for details.