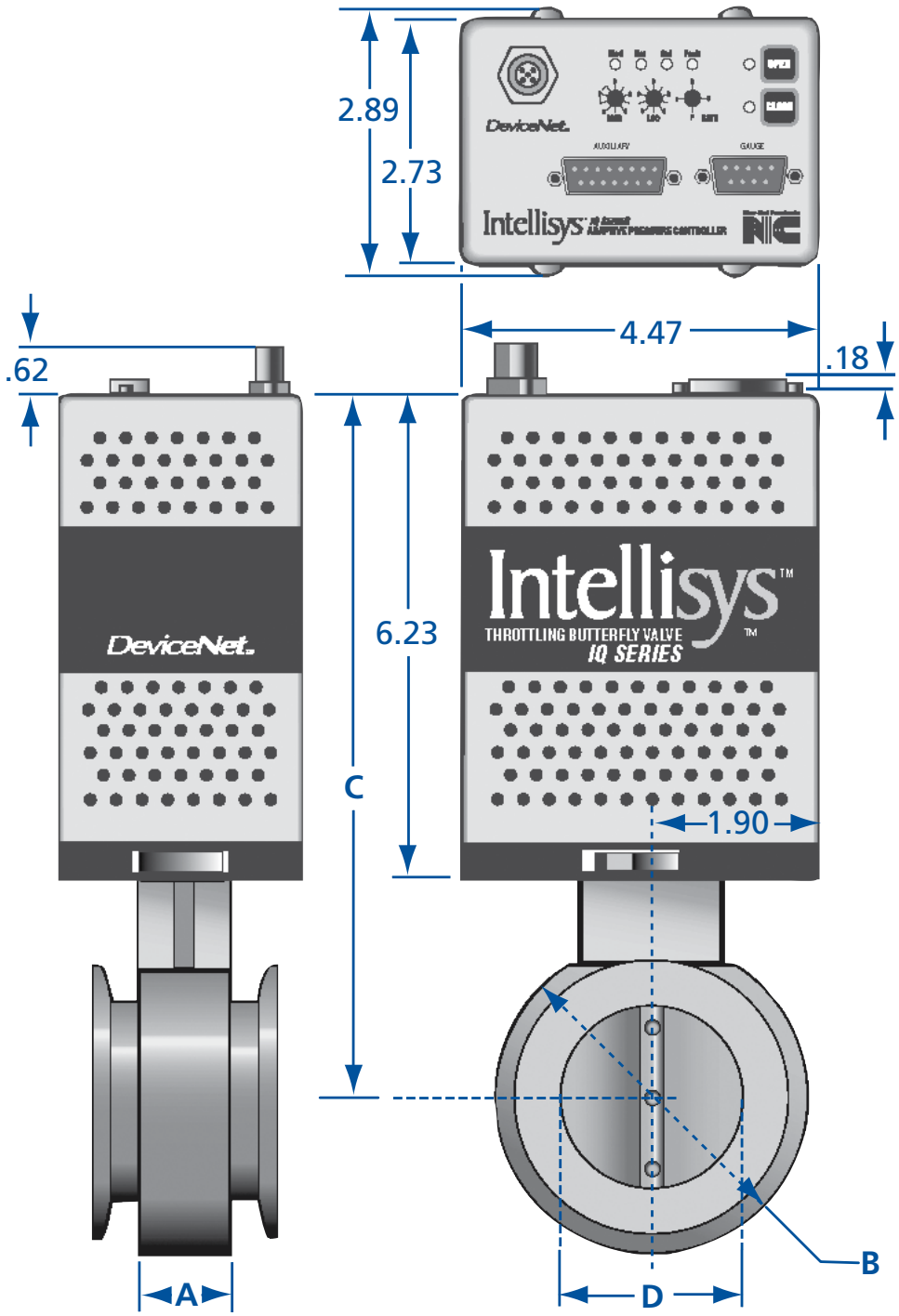
Downstream Pressure Control -
NW Flanged IQ Throttling Butterfly Valves

Nor-Cal Products

MODEL NUMBER	NOMINAL ID	DIMENSIONS A	B	C	D	WEIGHT
TBV-IQA-100-NW-25	1"	2.25 (57.2)	2.75 (69.9)	8.34 (212)	0.87 (212)	5.5 (2.5)
TBV-IQA-150-NW-40	1.5"	2.25 (57.2)	2.75 (69.9)	8.34 (212)	1.39 (35.3)	5.3 (2.4)
TBV-IQA-200-NW-50	2"	2.00 (50.8)	3.36 (85.3)	8.65 (220)	1.98 (50.3)	5.5 (2.5)

***NOTE:** IQA can be replaced with IQD, IQD2, IQE and IQR



SPECIFICATIONS

General

Controller Options:
IQA: Analog / TTL / RS232 interface
IQD: DeviceNet / RS232 interface
IQD2: DeviceNet / RS232 interface, no power via DN connector
IQE: Ethernet / RS232 interface
IQR: RS485 interface

Valve position: Visual indicator

Construction

Wetted materials: 316 stainless steel, seal material (see below)

Seals: Viton standard. Kalrez, Chemraz, Perlast and other materials available on request

Operation

Power input: +24 VDC

Differential pressure: 15 psi Maximum across valve plate

Forced heating capabilities: Valves may be heated up to 150°C with optional external heaters.

Process gas temperature capabilities: For process gas temperatures in excess of 100°C, please consult with Nor-Cal Intellisys technical support for proper design considerations.

Ambient operating conditions: 0 - 60°C @ 0 - 95% humidity

Leak rate: 1×10^{-9} atm•scc/sec He

Inherent Performance

Open to close speed: 125 msec

Control resolution: 3.2 arc second

Maximum torque: 280 in-oz

Pressure Control Performance

Accuracy: The greater of 5mV or 0.25% of reading

Repeatability: Within 2.5mV or 0.12% of reading Control range: 0.5% - 100% of the vacuum gauge range

Reliability (99% confidence level, in clean environment)

O-ring cycle life: 5 million open-close cycles

MTBF: >50,000 hours continuous

Approvals

CE (EMC and machinery directives)

REV 6/16