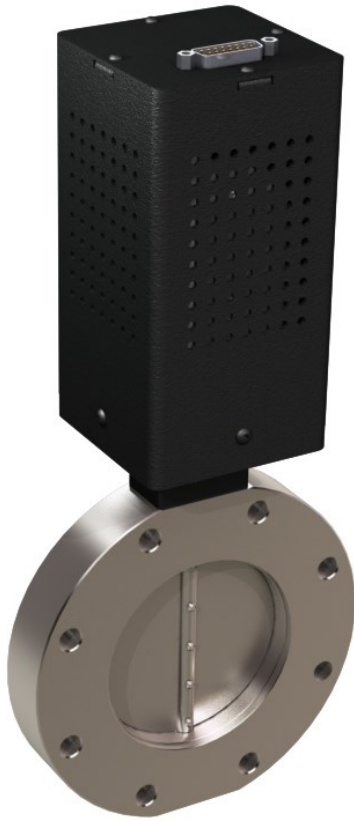


Downstream Pressure Control

THROTTLING BUTTERFLY VALVES



ISO Velocity Control Valve

- ◆ Direct Drive High Performance Butterfly Valves
- ◆ 90—250 mSec actuation for increased throughput and higher performance control
- ◆ High performance Analog I/O
- ◆ RTOS for guaranteed responsiveness
- ◆ NW 16 to ISO 160 Sizes Available
- ◆ ISO 200 & ISO 250 Available as geared-drive models
- ◆ Analog, RS232, RS485, USB, DeviceNet & Ethernet Interfaces.
- ◆ Industry Standard Connections/Connectors for easy retrofit and replacement.
- ◆ New Flexible System Interface **flex-SYS™**
 - ◆ Designed for Easy PLC Integration
 - ◆ MODBUS RTU RS232/485
 - ◆ MODBUS/TCP
 - ◆ Analog Velocity control

Mail:

Net Controls, LLC
PO Box 1481
Chico, CA 95927
530-894-3358 Office
530-894-8659 Fax

Shipping:

Net Controls, LLC
1070 marauder St.
Suite 115
Chico, CA 95973

Contact:

Paul Neumann—Sales
pjneumann@n-controls.com
Peter Coffey—Technical Support
pcoffey@n-controls.com

Downstream Pressure Control

THROTTLING BUTTERFLY VALVES

Key Specifications

CONSTRUCTION

Wetted Materials:

316 Stainless Steel.

Seals:

Viton Standard, Kalrez, Chemraz, Perlast options.

PERFORMANCE

Speed:

90-250 msec depending on size.

Motor Torque:

260 in-oz to 505 in-oz direct drive

Pressure Control:

Accuracy: 0.25% of reading

Repeatability: 0.12% of reading

Temperature:

0-60C @ 0-95% humidity, non-condensing

Optional Valve Temp to 150C.

Differential Pressure:

1 atm. 15 psig max

Leak Rate:

1 X 10⁻⁸ scc/sec He

RELIABILITY

Cycle Life:

Million cycles

MTBF:

>10,000 hours

Approvals:

CE electromagnetic compatibility

CE standard for process equipment

ELECTRICAL

Rated Input voltage:

24VDC +/-10%

Rated Input protection:

36VDC Max, reverse input protection with auto-reset PTC fuse

AC: 85-240VAC

Auto Thermal Shutdown

Power:

24VDC @ 3A peak, 1.5A nominal

Output Power:

+/-15VDC @ 600mA

COMMUNICATIONS

RS232 Standard

Optional:

USB

Ethernet

RS485

ANALOG

Signal Inputs:

0-5VDC, 0-10VDC software selectable for pressure/position

Outputs:

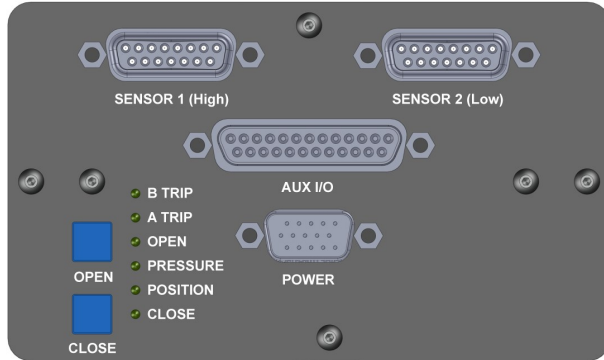
0-5VDC, 0-10VDC software selectable for pressure/position

SET POINTS

5 set points each with dedicated PID settings

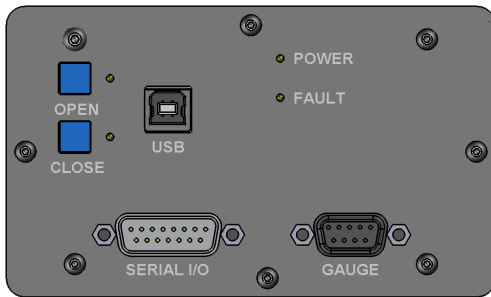
Downstream Pressure Control

THROTTLING BUTTERFLY VALVES



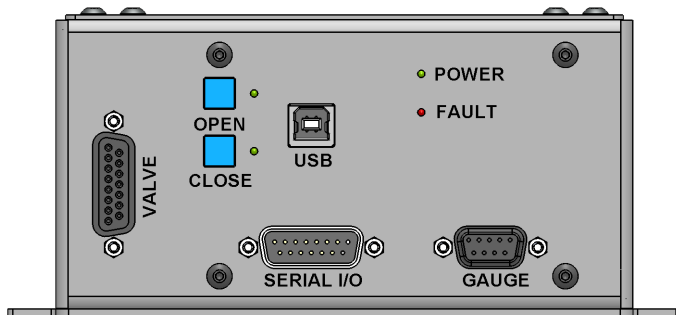
TBV-IA Series

- ◆ Industry Standard Connectors
- ◆ High Performance Analog Functions



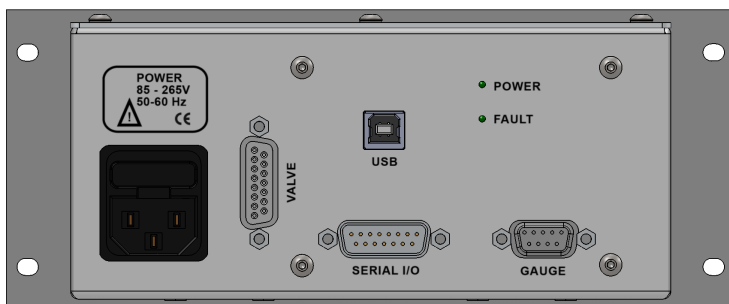
TBV-IB Series

- ◆ Industry Standard Connectors
- ◆ High Performance Digital Control



98-00 Series Controller

- ◆ Industry Standard Connectors
- ◆ High Performance Digital Control
- ◆ USB Standard

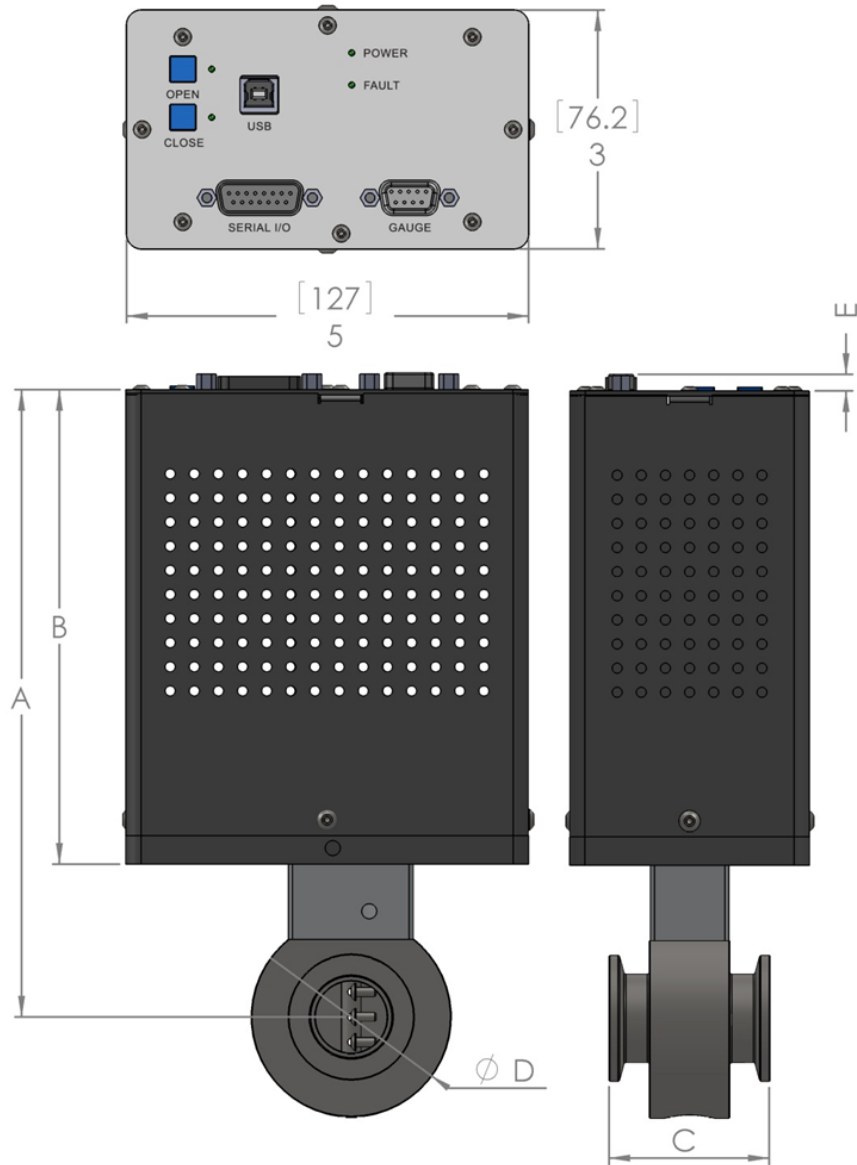


98-01/02 Series

- ◆ High Performance Digital Control
- ◆ USB Standard
- ◆ Universal Power Supply

Downstream Pressure Control

THROTTLING BUTTERFLY VALVES

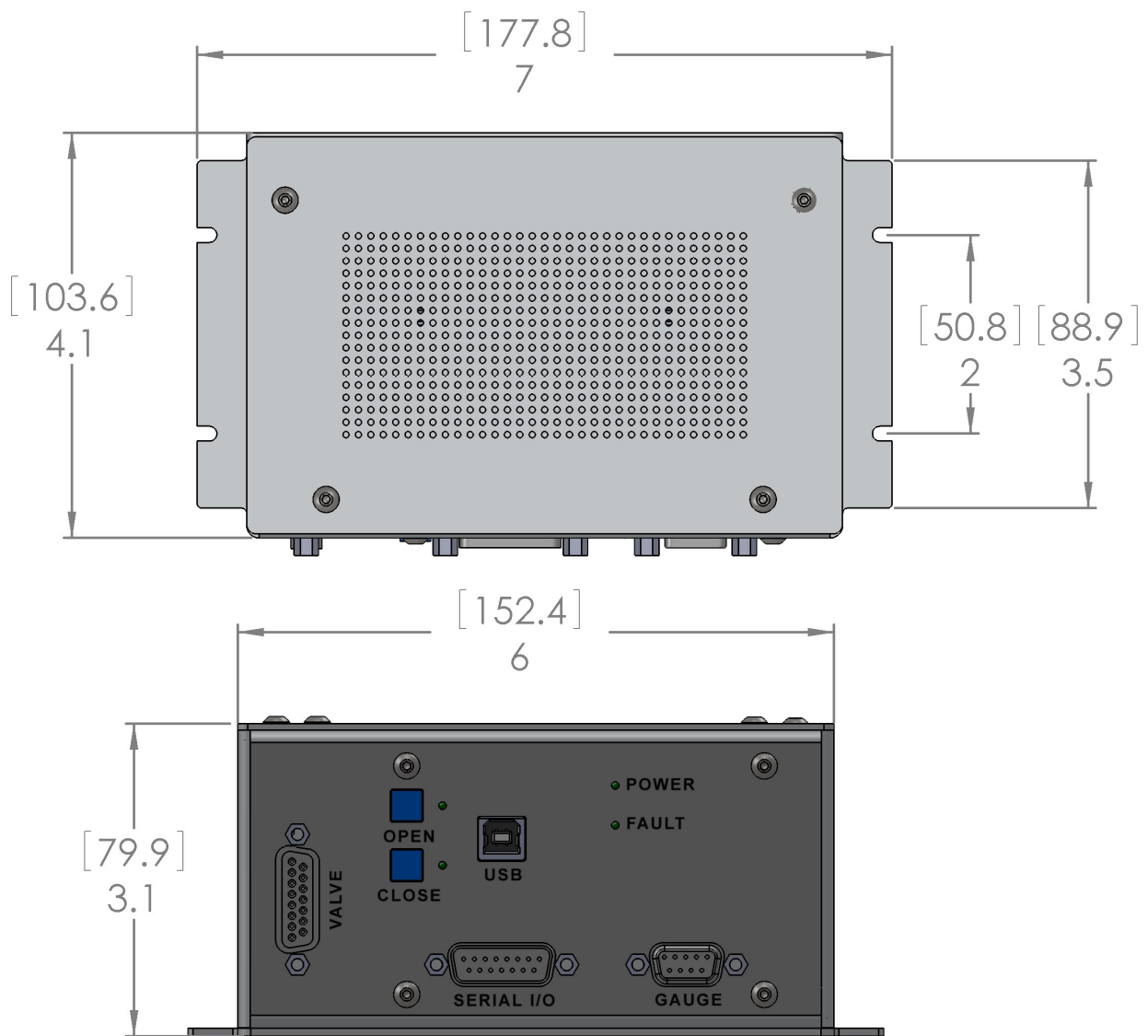


DIRECT DRIVE THROTTLING BUTTERFLY VALVES						
Model	Flange Size	Type	A	B	C	D
TBV-IB-NW-25	1.0	NW-25	8.08	5.9	2.25	2.75
TBV-IB-NW-40	1.5	NW-40	8.08	5.9	2.25	2.75
TBV-IB-NW-50	2.0	NW-50	8.39	5.9	2.00	3.36
TBV-IB-ISO-63	2.5	ISO-63	8.84	5.9	1.00	5.12
TBV-IB-ISO-80	3.0	ISO-80	9.16	5.9	1.00	5.71
TBV-IB-ISO-100	4.0	ISO-100	9.59	5.9	1.00	6.50

Downstream Pressure Control

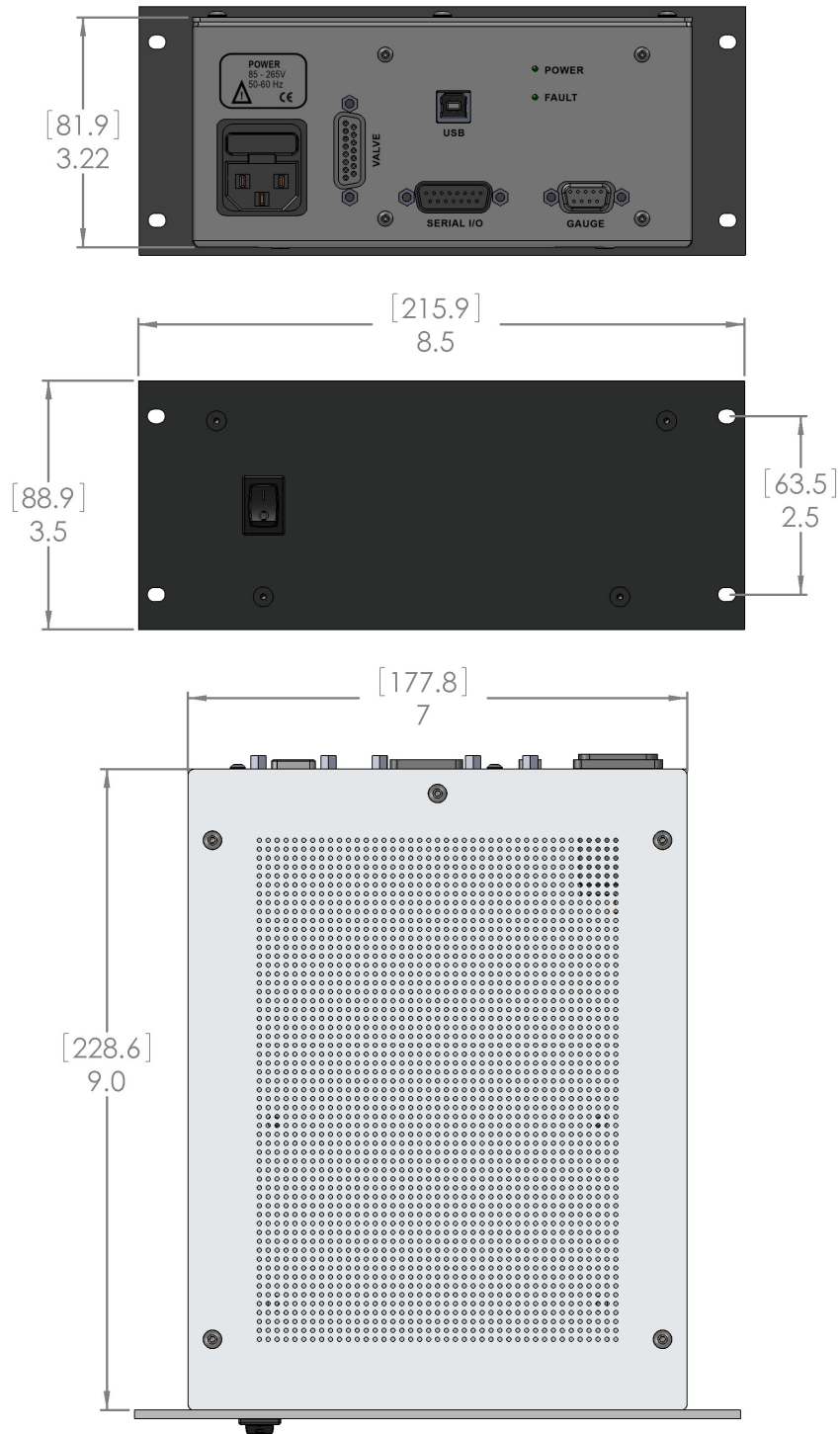
THROTTLING BUTTERFLY VALVES

DC Powered Remote Pressure Controller with Digital Interface



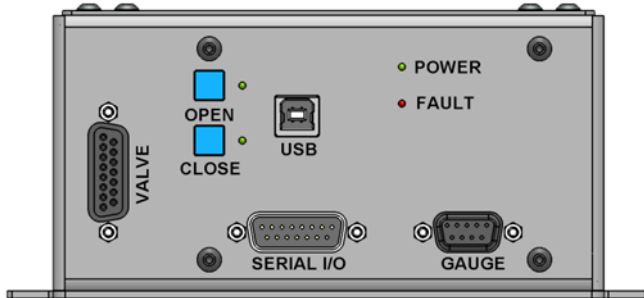
Downstream Pressure Control THROTTLING BUTTERFLY VALVES

AC Powered Remote Pressure Controller with Digital Interface



Downstream Pressure Control

THROTTLING BUTTERFLY VALVES



Remote Controllers & Cables

Controllers for Throttling Valve Products

Part Number	Description	Compatibility
98-00-9913	Pressure Controller, Advanced, 24VDC	TBV-RE/TBVi-RE Valves
98-01-9913	Pressure Controller, Advanced, 90-260VAC	TBV-RE/TBVi-RE Valves
98-02-9913	Touch Screen Pressure Controller, Advanced, 90-260VAC	TBV-RE/TBVi-RE Valves

Cables for Throttling Valve Products

Part Number	Description	Remarks/Use
70-01-0008	Cable, Motor Drive, 8', Standard Butterfly Valve	Standard motor drive cable for use with stand-alone controllers, i.e. 98-00-9913 and 98-01-9913.
70-10-0008	Cable, Gauge, 8', Standard Analog, Single	Capacitive Diaphragm Gauge interface cable for use with a majority of analog gauges
71-08-0915	Cable, RS232, 8'	Communications only cable for use with the AC powered controllers, i.e. 98-01-9913
71-08-5011	Cable, Gauge, 8', 24VDC	Capacitive Diaphragm Gauge interface cable for use with gauges that require 24VDC single supply, i.e. Inficon SKY 025D
71-08-5012	Cable, Integrated Power and RS232, 8'	Communications and power cable for use with the DC powered controllers, i.e. 98-00-9913
72-08-0915	Cable, Motor Drive, 8', Gate Valve	Gate Valve motor drive cable for use with stand-alone controllers, i.e. 98-00-9913 and 98-01-9913.

Downstream Pressure Control

THROTTLING BUTTERFLY VALVES

Ordering Guide:

TBV		RE	NW		50		V		
Series		Drive Type		Flange Type		Flange Size		Seal Material	
TBV	Non-Seal	RE	Remote	KF	NW	1.00"	25	Viton	V
TBVi	Sealing	IA	Integrated - Analog	ISO	ISO	1.50"	40	Kalrez	Kxx*
		IB	Integrated - RS232	CF	ConFlat	2.00"	50	Chemraz	Cxx*
		IC	Integrated - RS485			2.50"	63	Perlast	Pxx*
		ID	Integrated - DeviceNet			3.00"	80	*Specify Material	
		IE	Integrated - Ethernet			4.00"	100		
		IF	Integrated - EtherCAT			6.00"	160		
						8.00"	200		
						10.00"	250		