

## Introduction & Features:

The Block & Bleed valve is a NAMUR mounted module for the Triac actuator. The BBV is used as a bypass valve for use with a manual override to shut off supply air and vent actuator ports. The BBV may also be used as a lockout valve which when properly implemented, will satisfy OSHA Standard 1910.47, "The Control of Hazardous Energy"

## Installation Instructions:

Triac sandwich NAMUR mount accessories are easily installed to the Triac pneumatic actuators, simply by stacking one on top of the other and bolting the entire stack to the actuator NAMUR mounting surface.

The BBV-NAMUR should be mounted to the actuator with NAMUR o-ring grooves toward the actuator. Refer to Drawing P1984 (page 3) for general arrangement drawing of all solenoid combinations.

1. Follow order of installation below in stacking accessories. If an accessory is not required, skip it and proceed to the next accessory.

Order of installation:

- a - BBV valve
- b - Flow control Modules
- c - NPT adapter block or solenoid valve

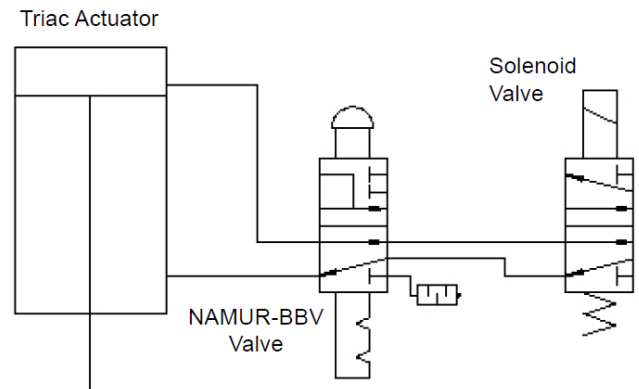
*Note:*

*The NPT block provides 1/4" NPT ports when the Triac solenoids are not being used*

2. Properly orient NAMUR accessories.
3. Insert o-rings into o-ring groove on the back face of each accessory.
4. Mount entire stack to the Triac actuator NAMUR mounting face, using appropriate bolt length as shown in chart.

## Operation

The BBV functions as a block & bleed valve for use as a manual override bypass valve. Under normal operation, air flows freely to the actuator. The spool is shifted to block pressure ports and exhaust actuator air pressure.



NAMUR-BBV Block & Bleed Valve in Automatic Operation

When used with Triac manual override, the BBV will exhaust internal actuator pressure to atmosphere, while blocking the supply pressure. Without internal pressure on the pistons, the actuator may be manually operated.

## Maintenance

The BBV module is factory lubricated for long life. Should any problems arise with the BBV, consult factory. If the valve is to be stored for extended periods of time, periodically operate the spool to keep seals from taking a set.

### How to Order

Order part number NAMUR-BBV with appropriate NAMUR bolt kit from chart at right.

Example: To order NAMUR-BBV to be sandwich NAMUR mounted with NAMUR-NPT adaptor plate, order

- NAMUR-BBV
- NAMUR-NPT
- NBK40

### Bill Of Material

Item	Material
Body	Aluminum, Anodized
Spool	Aluminum, Anodized
End Cap	Aluminum, Anodized
Seals	Nitrile, Buna
Knob	Plastic

### Specifications

Temperature Range: -20°F to +180°F  
 Pressure Range: 20 psig to 120 psig  
 Media: Dry or lubricated  
 (*non-corrosive gas compatible with nitrile seals*)  
 Flow Coefficient  $C_v = 1.75$

### NAMUR Accessory Bolt Chart

BBV	FC1	NPT	TVC5	TVCS	TVC6	Bolt Kit
✓		✓				NBK40
✓	✓	✓				NBK50
✓			✓			NBK60
✓				✓	✓	NBK55
✓	✓		✓			NBK70
✓	✓			✓	✓	NBK65
	✓		✓			NBK45
	✓			✓	✓	NBK40

### Other NAMUR accessories

FC1 - Sandwich mount flow control  
 NPT - 1/4" NPT adaptor plate  
 TVC5 - NAMUR mount solenoid valve  
 TVCS - NAMUR mount solenoid valve  
 TVC6 - NAMUR mount solenoid valve

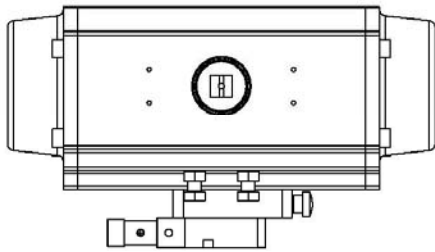
*Note: see appropriate IOM's for additional information on above NAMUR accessories*

### How to Specify

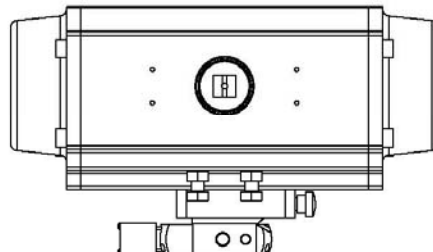
The lockable block & bleed valve shall be a Triac NAMUR-BBV module, capable of being sandwich NAMUR mounted with other NAMUR mount accessories. The body shall be anodized aluminum. Spool shall have extension shaft with knob and hole capable of accepting a standard lock. In normal position, valve shall allow free air flow. In locked position, valve shall block external pressure and vent actuator pressure during manual gear operation

P1984

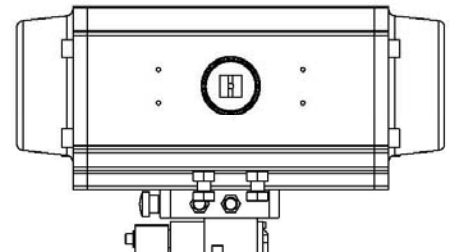
THE D20-106 BLOCK & BLEED HANDLE IS ON THE RIGHT SIDE FOR THE TVCS, TVC6 AND ON THE LEFT SIDE FOR THE TVC5



USE 2 EA M5 X 55 MM SOCKET HEAD CAP SCREWS

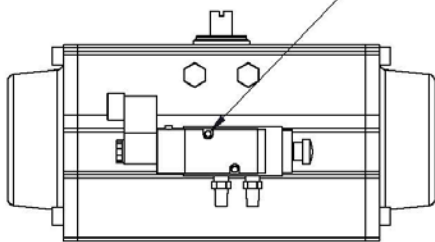


USE 2 EA M5 X 55 MM SOCKET HEAD CAP SCREWS

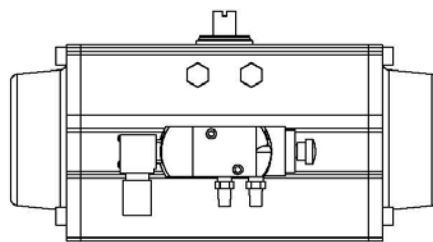


USE 2 EA M5 X 60 MM SOCKET HEAD CAP SCREWS

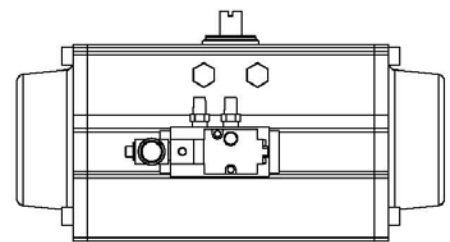
FOR PROPER ALIGNMENT INSERT SCREW INTO THIS HOLE FIRST THEN INSTALL THE LOWER SCREW TYP FOR ALL ACTUATORS



TRIAG TVCS SOLENOID WITH D20-106 BLOCK & BLEED



TRIAG TVC6 (ASCO) SOLENOID WITH D20-106 BLOCK & BLEED



TRIAG TVC5 (VERSA) SOLENOID WITH D20-106 BLOCK & BLEED

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DRAWN	CHS	CHECKED BY	NPM	APPROVED
DATE	1/14/2014	DATE	1/14/2014	DATE
DESCRIPTION				
GENERAL ARRANGEMENT DRAWING FOR 2R RACK AND PINION ACTUATORS WITH D20-106 BLOCK AND BLEED VALVE WITH THE TVCS, TVC5 AND TVC6 SOLENOIDS				



TOLERANCE UNLESS OTHERWISE SPECIFIED:  
TWO PLACE DECIMAL  
DIM: ±0.02  
THREE PLACE DECIMAL  
DIM: ±0.010  
ANGULAR DIM: ±0°-30°  
DO NOT SCALE DRAWINGS

ECN#      DATE      BY

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