Model RV-1A Pressure Relief Valve Pilot-Operated

IMPORTANT
Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

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General Description

The TYCO Model RV-1A Pressure Relief Valves, 2 in. to 8 in. (DN50 to DN200), are factory assembled and fully trimmed valve arrangements for relief of excess water pressure. These valves are typically used to automatically relieve excess pressure in a fire protection system that utilizes a fire pump.

The DV-5A Water Control Valve is the central component in the fully-trimmed assembly. For information on the DV-5A Valve assembly, see Figure 2.

Pilot-controlled, the Model RV-1A Valve maintains a relatively constant system pressure at the pump discharge as flow demands change.

The Model RV-1A valve is factory set to approximately 175 psi (12,1 bar). The valve may be field-set to a nominal relief "set pressure" of, UL approved, 100 to 250 psi (6,9 to 17,2 bar) or, FM approved, 30 to 250 psi (2,1 to 17,2 bar).

Features

- One-piece, one-moving-part diaphragm
- Epoxy-coated interior and exterior
- Accurate pressure control
- In-line service
- No need to bleed trapped air from the diaphragm chamber
- One pilot valve sub-assembly that provides for any outlet "set pressure"; that is; UL approved, 100 to 250 psi (6,9 to 17,2 bar) or, FM approved, 30 to 250 psi (2,1 to 17,2 bar).

NOTICE

The TYCO Model RV-1A Pressure Relief Valves described herein must be installed and maintained in compliance with this document and with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any authorities having jurisdiction. Failure to do so may impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Approvals
UL Listed
FM Approved

Field Relief "Set Pressure" Range
Approved ranges:
UL: 100 to 250 psi (6,9 to 17,2 bar)
FM: 30 to 250 psi (2,1 to 17,2 bar)

Temperature Range
50°F to 175°F (10°C to 80°C)

Maximum System Pressure
300 psi (20,6 bar)

Note: *The system pressure is the maximum pressure the valve is expected to be exposed to. The valve cannot be set to relieve at any pressure greater than 250 psi (17,2 bar).*



NFPA 20 Recommended Maximum Flow

2 in. (DN50) . . . . . .250 gpm (946 Lpm)
3 in. (DN80) . . . . . .500 gpm (1893 Lpm)
4 in. (DN100) . . . . . .1000 gpm (3785 Lpm)
6 in. (DN150) . . . . . .2500 gpm (9462 Lpm)
8 in. (DN200) . . . . . .5000 gpm (18925 Lpm)

See Graph A for inlet pressure versus flow characteristics.

End Connections
Flanged end connections are available as drilled per Table A.

Valve Materials of Construction
For assembly information, see Figure 2

- **Body**
  Epoxy-coated ductile iron per ASTM A536-77, Grade 65-45-12
- **Diaphragm Cover**
  Epoxy-coated, ductile iron per ASTM A536-77, Grade 65-45-12
- **Diaphragm**
  Polyester fabric-reinforced, TEFLON coated, EPDM rubber per ASTM D2000
- **Diaphragm Cover Fasteners**
  Aluminium-zinc coated steel

Trim Materials of Construction
For assembly information, see Figure 6

- **Pilot Valve**
  Cast bronze and stainless steel with fabric reinforced, EPDM rubber per ASTM D2000 diaphragm
- **Pressure Gauges**
  3 3/4 in. (95 mm) diameter, UL and FM listed, 0 to 300 psi (20,7 bar)
- **Strainer and Fittings**
  Brass
- **Tube**
  Copper

Item	Available End Connections					
	Nominal Valve Size in. (DN)					
	2 (DN50)	3 (DN80)	4 (DN100)	6 (DN150)	165,1 mm	8 (DN200)
Groove	✓	✓	✓	✓	✓	✓
Flange (ANSI)	N/A	✓	✓	✓	✓	✓
Flange (PN)[1]	N/A	✓	✓	✓	✓	✓

NOTES:
1. EMEA and APAC only.

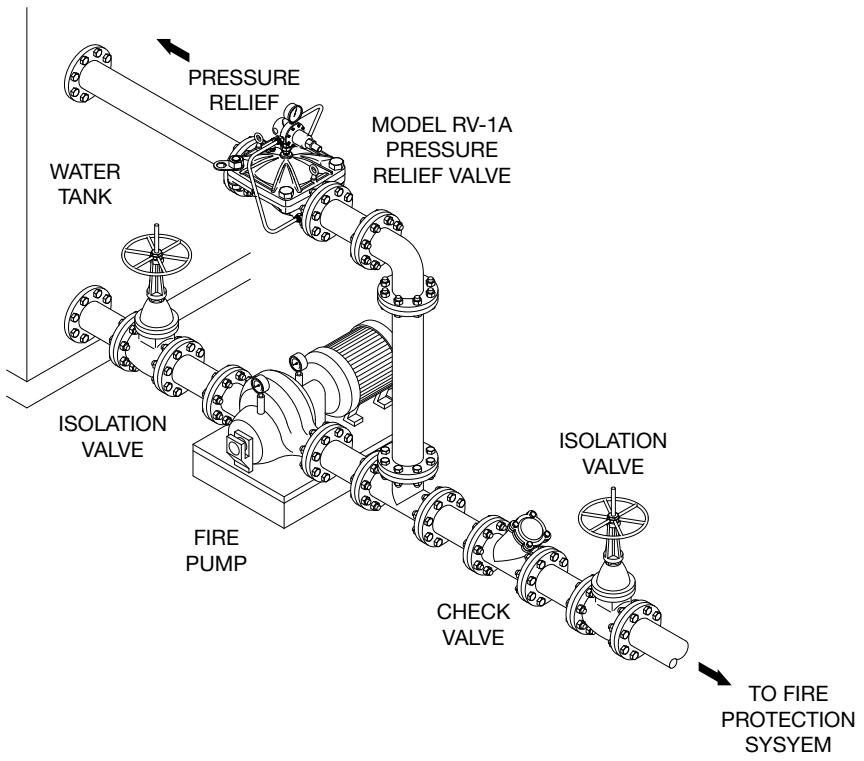
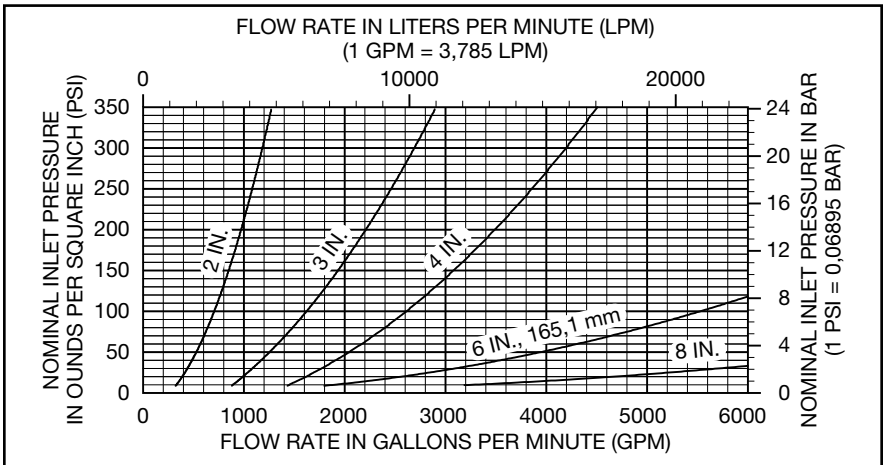


FIGURE 1
RV-1A PRESSURE RELIEF VALVES
TYPICAL APPLICATION



GRAPH A
MODEL RV-1A PRESSURE RELIEF VALVE
INLET PRESSURE VERSUS FLOW CHARACTERISTICS

Operation

The TYCO Model RV-1A Pressure Relief Valve is normally installed on-line in a tee configuration, as shown in Figure 1, after the fire pump and before the system's check valve.

When the Model RV-1A Pressure Relief Valve opens to permit excess flow and to relieve pressure to the atmosphere within the water tank, the fire protection system is accurately maintained at the desired preset pressure. In case the demand of the fire system completely stops, the Model RV-1A Pressure Relief Valve remains fully open, relieving 100% of the pump's capacity.

The check valve then closes, isolating the system from the pump. The pump shuts off safely, avoiding the risk of system surges. As the pump shuts, the Model RV-1A Pressure Relief Valve slowly closes.

The operation sequence, shown in Figure 3, is as follows:

- When inlet pressure is below the relief "set pressure", the Model RV-1A Pressure Relief Valve Diaphragm Seat is closed and the Pilot Valve Seat is closed. With the Pilot Valve Seat closed, pressure is trapped in the Diaphragm Chamber to seat the Diaphragm, and the Model RV-1A Pressure Relief Valve remains closed.
- When inlet pressure is above the relief "set pressure", the Pilot Valve Seat opens to relieve pressure from the Diaphragm Chamber faster than pressure can be re-established. Loss of pressure in the Diaphragm Chamber allows the Model RV-1A Pressure Relief Valve to open.
- Subsequent to relieving excess pressure, when the inlet pressure starts to fall below the relief "set pressure", the Pilot Valve Seat closes to allow the Diaphragm Chamber to re-pressurize automatically and close the Model RV-1A Pressure Relief Valve. The restriction orifice controls the speed at which the Model RV-1A Valve closes to provide a slow re-closure.

Item	Description	Qty.	Nominal Valve Size ANSI Inch (DN)				
			2 (DN50)	3 (DN80)	4 (DN100)	6 (DN150)[e]	8 (DN200)
			P/N	P/N	P/N	P/N	P/N
1	Valve Body	1	N/R	N/R	N/R	N/R	N/R
2	Diaphragm	1	545000020	545000030	545000040	545000060	545000080
3	Diaphragm Cover	1	N/R	N/R	N/R	N/R	N/R
4	Hex Bolt, Short	2[a]	545100001	545100002	545100003	545100004	545100003
5	Hex Bolt, Long	2	545100011	545100012	545100013	545100014	545100015
6	Lift Washer	2[b]	N/A	545100021	545100022	545100023	545100022
7	Hex Nut	2	545100031	545100032	545100033	545100034	545100033
8	Hoist Ring	2	545100041	545100041	545100041	545100041	545100041
9	Flat Washer	2	N/A	545100024	545100025	545100026	545100025

NOTES:
a. Hex Bolt, Short, Qty. 6 in 6 and 8 inch (DN150 and DN200) assemblies
b. Lift Washer not used in 2 inch (DN50) assembly
c. N/R = Not Replaceable
d. Order replacements parts only via Part Numbers given, do not replace Hex Bolt, Hex Nut, Lift Washer or Hoist Ring with common hardware parts
e. Also applicable to metric 165,1 mm size.

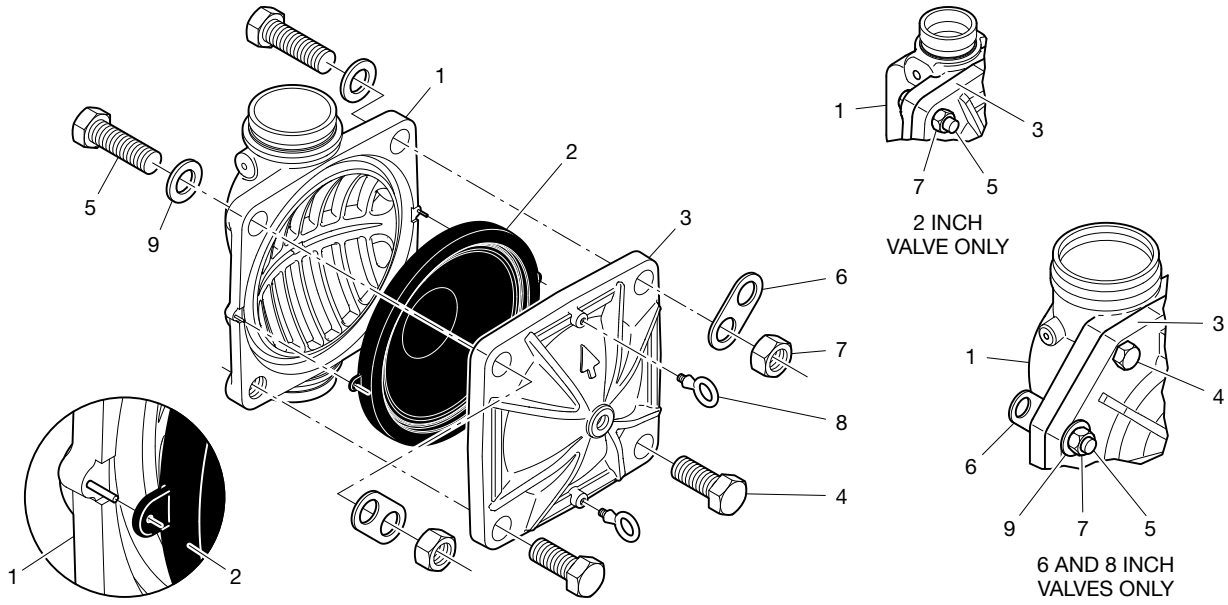
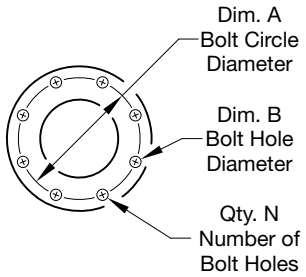


FIGURE 2
DV-5A VALVE ASSEMBLY AND REPLACEMENT PARTS
(See Figure 6 For RV-1A Trim Assembly)

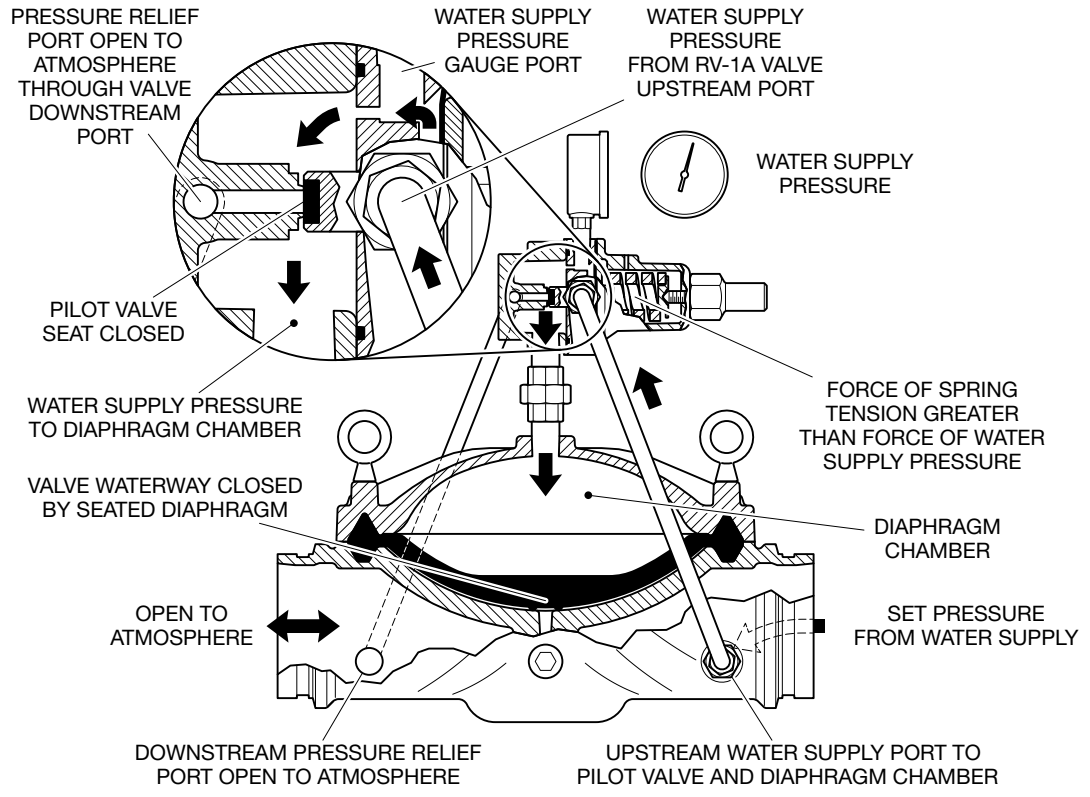
Nominal Valve Size ANSI in. (DN)	Flange Drilling Specification		
	Nominal Dimensions in. (mm)		
	ANSI B16.42[a] (Class 150)		
	A	B	N
3 (DN80)	6.00 (152,4)	0.75 (19,0)	4
4 (DN100)	7.50 (190,5)	0.75 (19,0)	8
6 (DN150)	9.50 (241,3)	0.88 (22,2)	8
8 (DN200)	11.75 (298,5)	0.88 (22,2)	8

Nominal Valve Size ANSI in. (DN)	Flange Drilling Specification		
	Nominal Dimensions in. (mm)		
	ISO 7005-2 (PN16)[b]		
	A	B	N
3 (DN80)	6.30 (160,0)	0.75 (19,0)	8
4 (DN100)	7.09 (180,0)	0.75 (19,0)	8
6 (DN150)	9.45 (240,0)	0.91 (23,0)	8
8 (DN200)	11.61 (295,0)	0.91 (23,0)	12

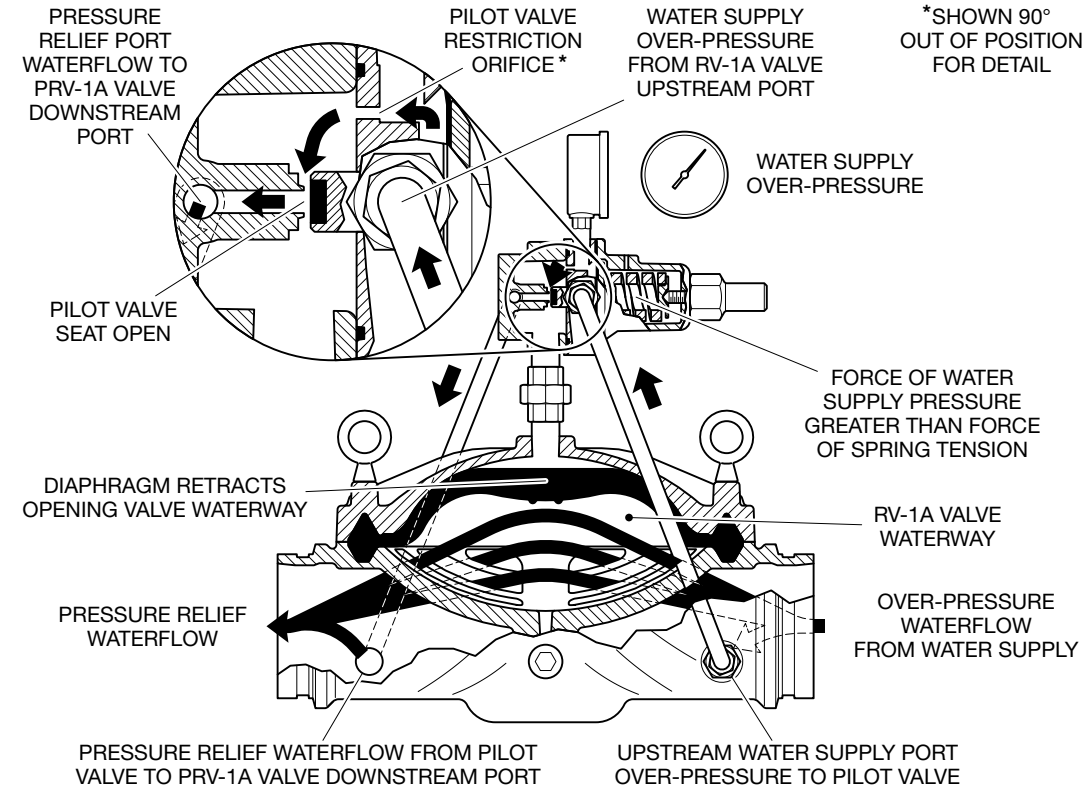


NOTES:
a. Flat face flange; Same drilling as for ANSI B16.1 (Class 125)
b. Same drilling as for BS 4504 Section 3.2 (PN16) and DIN 2532 (PN16)

TABLE A
FLANGE DRILLING SPECIFICATIONS



SET CONDITION



OPERATED CONDITION

FIGURE 3
MODEL RV-1A PRESSURE RELIEF VALVE OPERATION

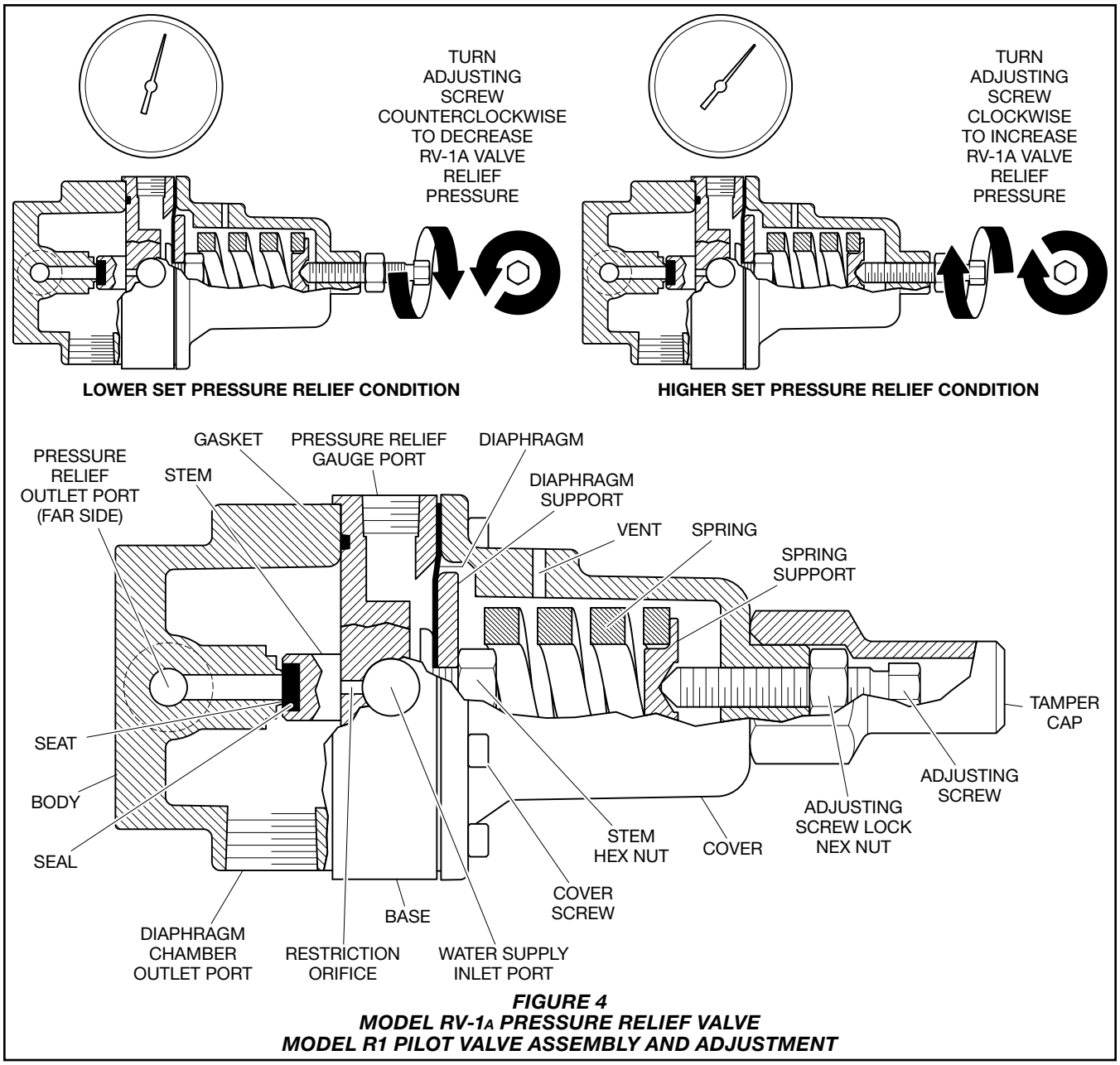


FIGURE 4
MODEL RV-1A PRESSURE RELIEF VALVE
MODEL R1 PILOT VALVE ASSEMBLY AND ADJUSTMENT

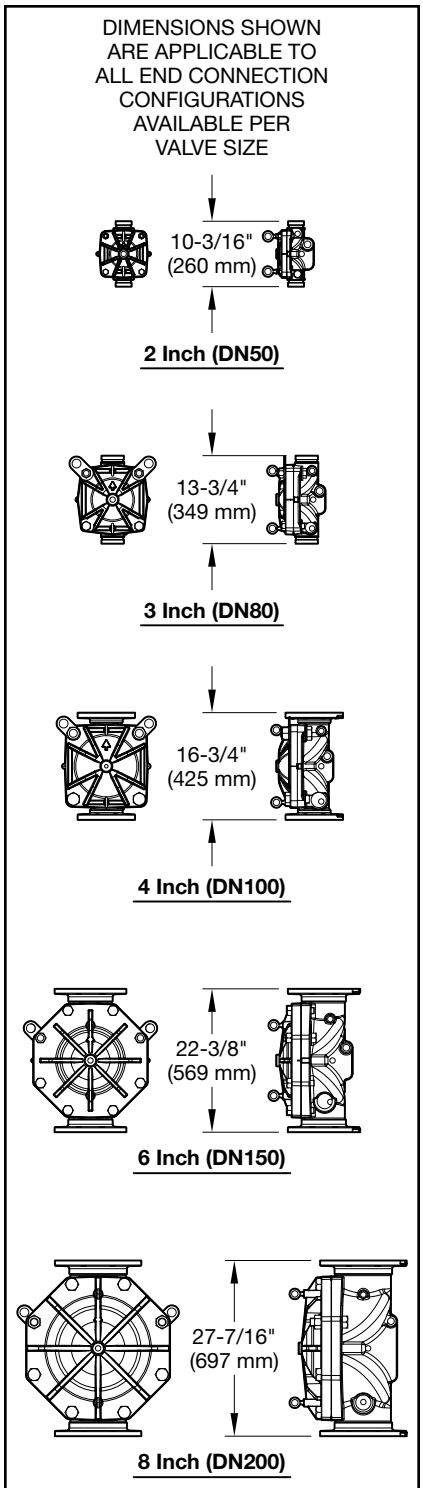


FIGURE 5
RV-1A VALVE
TAKE-OUT DIMENSIONS

Design Considerations

The following items must be considered and applied accordingly for an installation that will be using the TYCO Model RV-1A Pressure Relief Valve:

- When planning the positioning of the Model RV-1A Valve, it is recommended that consideration be given to the viewing of the pressure gauge. Consideration should also be given to positioning the Model RV-1A Valve so that the diaphragm cover is facing up. With the cover facing up, internal access is more easily achieved.
- The installation of an isolation valve in the inlet connection to the Model RV-1A Pressure Relief Valve is recommended to facilitate performing preventative maintenance on the Model RV-1A Valve. Isolating valves installed per Figure 1 will meet this recommendation in addition to providing isolation means for the fire pump, water tank, and fire protection system.
- The Model RV-1A Pressure Relief Valve must be in an area that is easily accessible for maintenance purposes, not subject to freezing temperatures, and not subject to physical damage.
- The Model RV-1A Pressure Relief Valve is designed for fresh water service. When corrosive atmospheres and/or contaminated water supplies are present, responsibility lies with owners to verify compatibility with the pressure relief valve, pilot valve, and trim.

Installation

Note: *The valve may be installed in any orientation (horizontal, diaphragm cover facing up, and vertical) provided the gauges are readable from a safe position and the valve can be adequately inspected in accordance with NFPA 25.*

When installing the valve in a corrosive environment, including outdoor locations, protection from moisture, chemicals or fumes is highly recommended. Galvanic corrosion can result from joining unprotected dissimilar metals. For example, exposed steel pipe threads can become corroded if unprotected by painting or other coating methods. Where coating such exposed surfaces is impractical or unwanted, construct a rain-resistant roof or enclosure over the valve and trim.

The TYCO Model RV-1A Pressure Relief Valve must be installed with the flow arrow located on the Diaphragm Cover pointing in the intended direction of flow. Installation dimensions are provided in Figures 7 and 8.

Before installing the Model RV-1A Pressure Relief Valve, flush pipe lines to remove all chips, scale, and foreign matter. Exercise care to assure that the trim is not damaged during installation.

NOTICE

Do not lift the valve by its trim. Otherwise, the trim may be damaged and impair system operation.

Make the inlet and outlet connections based on the direction of arrow provided on the Diaphragm Cover. The valve cannot operate if connected backwards.

Do not alter the trim. Altering the trim will render the valve ineffective and impair system operation.

ITEM	QTY	DESCRIPTION	CH	2 IN. (DN50)	3 IN. (DN80)	4 IN. (DN100)	6 IN. (DN150)[a]	8 IN. (DN200)
1	1	DV-5A AUTOMATIC WATER CONTROL VALVE						
2	1	R1 PILOT VALVE		545100069	545100069	545100069	545100069	545100069
3	1	WATER PRESSURE GAUGE, 300 PSI / 2000 kPa		92-343-1-005	92-343-1-005	92-343-1-005	92-343-1-005	92-343-1-005
4	1	TUBING ASSEMBLY, DV-5A R1 INTERCONNECT TUBE 1		545100087	545100088	545100089	545100090	545100091
5	1	TUBING ASSEMBLY, DV-5A R1 INTERCONNECT TUBE 2		545100092	545100093	545100094	545100095	545100097
6	1	FLARE FITTING REDUCER 1/2" TUBE x 1/4" NPT		545100086	545100086	545100086	545100086	545100086
7	1	FLARE FITTING STRAINER 1/2" NPT x 1/2" TUBE		545100073	545100073	545100073	545100073	545100073
8	1	FLARE FITTING 1/2" NPT x 1/2" TUBE		545100061	545100061	545100061	545100061	545100061
9	1	1/2" UNION	✓	1/2"	1/2"	1/2"	1/2"	1/2"
10	2	1/2" x CLOSE PIPE NIPPLE	✓	1/2" x CLOSE	1/2" x CLOSE	1/2" x CLOSE	1/2" x CLOSE	1/2" x CLOSE
11	1	1/2" SOCKET HEAD PIPE PLUG	✓	1/2"	1/2"	1/2"	1/2"	1/2"
12	2	3/4" SOCKET HEAD PIPE PLUG	✓	3/4"	3/4"	3/4"	3/4"	3/4"
13	1	PIPE PLUG	✓	3/4"	1 1/4"	2"	2"	2"
A1	1	SIGHT GLASS KIT		545100111	545100111	545100111	545100111	545100111

NOTES:
a. Also applicable to metric 165,1 mm size.

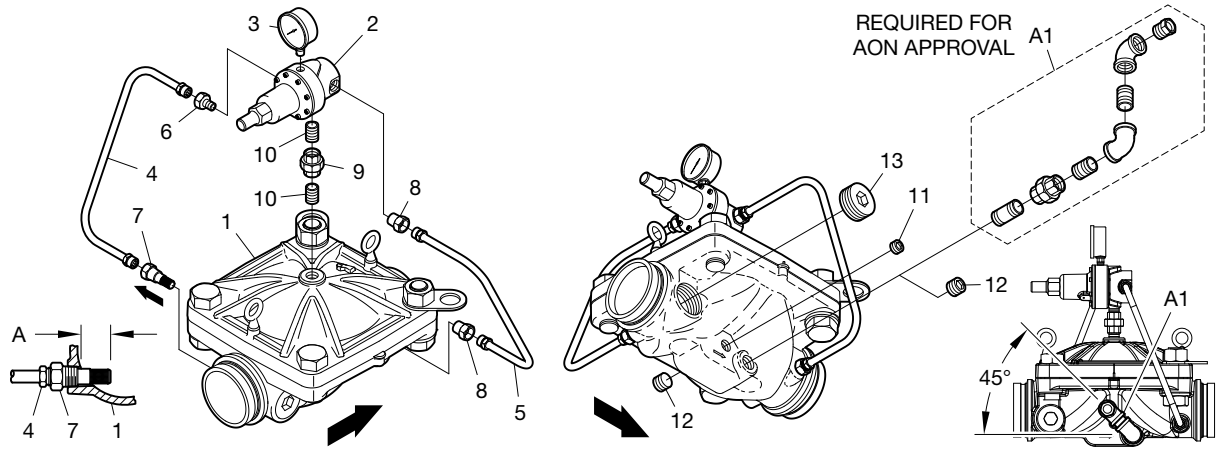


FIGURE 6
MODEL RV-1A PRESSURE RELIEF VALVE
TRIM ASSEMBLY

Placing the Valve in Service

Perform Steps 1 to 4 when placing the TYCO Model RV-1A Pressure Relief Valve in service.

NOTICE

Pressure relief adjustment is only to be performed by experienced personnel who understand the impact of adjusting the pressure relief setting and who take full responsibility of the relief setting.

Prior to pressurizing the Model RV-1A Pressure Relief Valve, make sure the necessary pressure gauges to measure pressure in the system are installed as required by the system designer.

Note: *If adjusting the set pressure, venting any trapped air from the Diaphragm Chamber is not necessary.*

If not adjusting the set pressure, air may need to be bled from the system by cracking the flare fittings on either side of the pilot valve (only necessary if valve is not shut when installed).

Step 1. Loosen the Pilot Valve Locknut, then completely loosen the Adjusting Screw. Tighten the Adjusting Screw three turns beyond the point at which spring resistance is encountered.

Step 2. Start the pump. One hundred percent of pump capacity will now flow through the Model RV-1A Pressure Relief Valve into the tank.

Step 3. Slowly tighten the Pilot Valve Adjusting Screw until the desired relief "set pressure" is achieved on the Pilot Valve Pressure Gauge. Make all pilot adjustments slowly and in small increments.

Step 4. Tighten the Locknut and shut off the pump.

Note: *After any pressure adjustment, the following items are to be recorded on a tag attached to the valve:*

- *Valve installation location*
- *Inlet static pressure*
- *Relief set pressure*

The tag is not to be removed until after the system has been accepted by the Authority Having Jurisdiction. It is recommended that the tag not be removed even after acceptance by the Authority Having Jurisdiction unless another means of record-keeping is maintained.

Nominal Valve Size Inches (DN)	O.D. Pipe Size in. (mm)	Nominal Installation Dimensions in. (mm)					Weight lb (kg)
		A	B	C	D	E	
2 (DN50)	2.88 (60,3)	10-3/16 (260)	2.80 (71,1)	11.17 (283,7)	5.93 (150,6)	6.53 (165,9)	34.0 (15,4)
3 (DN80)	3.50 (88,9)	13-3/4 (349)	2.95 (74,9)	12.84 (326,1)	8.05 (204,5)	8.05 (204,5)	71.0 (32,2)
4 (DN100)	4.50 (114,3)	16-3/4 (425)	3.00 (76,2)	14.11 (358,4)	8.93 (226,8)	9.53 (242,1)	106.0 (48,1)
6 (DN150)[a]	6.62 (168,3)	22-3/8 (569)	4.52 (114,8)	15.50 (393,7)	12.43 (315,7)	11.03 (280,2)	182.0 (82,6)
8 (DN200)	8.62 (219,1)	27-7/16 (697)	5.29 (134,4)	18.20 (462,3)	14.43 (366,5)	15.03 (381,8)	336.3 (152,5)

NOTES:
a. Also applicable to metric 165,1 mm size.

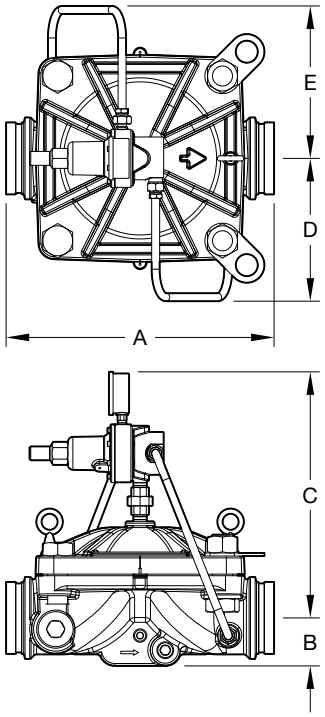


FIGURE 7
MODEL RV-1A PRESSURE RELIEF VALVE
GROOVE x GROOVE END CONNECTIONS
NOMINAL INSTALLATION DIMENSIONS

Nominal Valve Size Inches (DN)	Nominal Installation Dimensions in. (mm)					Weight lb (kg)
	A	B	C	D	E	
3 (DN80)	13-3/4 (349)	4.00 (101,6)	12.84 (326,1)	8.05 (204,5)	8.05 (204,5)	83.0 (37,6)
4 (DN100)	16-3/4 (425)	4.42 (112,3)	14.11 (358,4)	8.93 (226,8)	9.53 (242,1)	127.0 (57,6)
6 (DN150)[a]	22-3/8 (569)	5.41 (137,4)	15.50 (393,7)	12.43 (315,7)	11.03 (280,2)	209.0 (94,8)
8 (DN200)	27-7/16 (697)	6.76 (171,7)	18.20 (462,3)	14.43 (366,5)	15.03 (381,8)	374.3 (169,8)

NOTES:
a. Also applicable to metric 165,1 mm size.

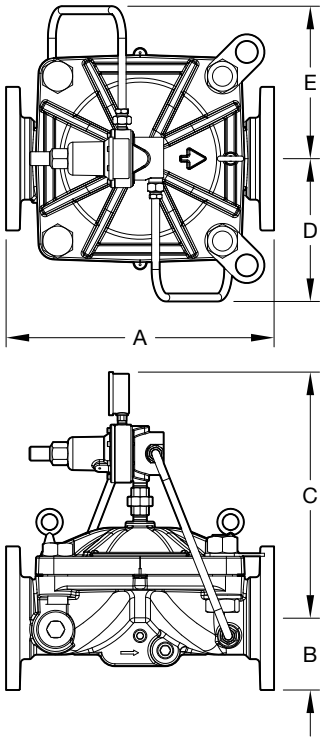


FIGURE 8
MODEL RV-1A PRESSURE RELIEF VALVE
FLANGE x FLANGE END CONNECTIONS
NOMINAL INSTALLATION DIMENSIONS

Care and Maintenance

Inspection, testing, and maintenance must be performed in accordance with the requirements of the NFPA. Any impairment must be immediately corrected. See Table C for information on troubleshooting valve problems.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of any authorities having jurisdiction. Contact the installing contractor or product manufacturer with any questions.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified Inspection Service in accordance with local requirements and/or national codes.

Note: *Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, obtain permission to shut down the affected fire protection systems from the proper authorities and notify all personnel who may be affected by this decision.*

The TYCO Model RV-1A Pressure Relief Valve requires no lubrication, packing or preventative maintenance. However, replacement of the diaphragm every ten years is recommended.

Inspections

- Inspect the Model RV-1A Pressure Relief Valve on a weekly basis.
- Check the valve under static conditions to assure that the Model RV-1A Pressure Relief Valve is not unnecessarily relieving pressure. If necessary, re-adjust the Model RV-1A Pressure Relief Valve by following the instructions in the section Placing the Valve in Service. If the desired pressure cannot be achieved, the Diaphragm and/or Pilot Valve should be replaced.
- During pump start-ups, check that the Model RV-1A Pressure Relief Valve relieves pressure as necessary. If necessary, re-adjust the Model RV-1A Pressure Relief Valve by following the instructions in the section Placing the Valve in Service. If the desired pressure cannot be achieved, the Diaphragm and/or Pilot Valve should be replaced.
- Check that the Model RV-1A Pressure Relief Valve, Pilot Valve, Tube, Fittings, and Pressure Gauge are in good condition and do not exhibit signs of damage or leakage.
- Make sure that the Pilot Valve Locknut is securely tightened.

Diaphragm Replacement

Prior to replacing the Diaphragm, the Model RV-1A Pressure Relief Valve must be taken out of service and completely drained.

When reinstalling the Diaphragm Cover, the Diaphragm Cover Fasteners must be uniformly and securely tightened using a cross-draw sequence. After tightening, double check to make certain that all Diaphragm Cover fasteners are securely tightened.

After cleaning and inspecting valve interior, and replacing parts as necessary, reinstall the Diaphragm Cover by completing the following steps to assure the Diaphragm Cover Fasteners are uniformly and securely tightened.

Step 1. Ensure that the Diaphragm is properly oriented and that the proper hardware arrangement is utilized when assembling the Diaphragm Covers. The hardware arrangements differ depending on the size of the DV-5A Valve.

Step 2. By first using the Long Hex Bolts, support of the Diaphragm Cover will be provided before installing the Short Hex Bolts. Align Diaphragm in proper orientation with Valve Body, and then align Diaphragm Cover in proper orientation with Valve Body. Hand-tighten all fasteners.

Step 3. Using crossdraw sequence to assure uniformity, wrench-tighten Long Hex Bolts and Short Hex Bolts to appropriate torque values. Repeat crossdraw sequence two to three times at incremental torque valves until reaching the torque valves found in Table B.

Step 4. Inspect to assure all Hex Bolts are securely tightened.

Step 5. Using the union, secure the RV-1A to the Diaphragm cover.

Step 6. Using the union, secure the RV-1A trim.

Step 7. Ensure that the unions and pipe nipples flare fittings are securely tightened.

Nominal Valve Sizes ANSI Inches (DN)	Torque lb-ft (N·m)	
	Nuts	Short Hex Bolts
2 (DN50)	44 (59,7)	35 (47,5)
3 (DN80)	125 (169,5)	125 (169,5)
4 (DN100)	150 (203,4)	150 (203,4)
6 (DN150)[a]	150 (203,4)	150 (203,4)
8 (DN200)	188 (254,9)	188 (254,9)

NOTES:
a. Also applicable to metric 165,1 mm size.

TABLE B
DIAPHRAGM COVER BOLTS MINIMUM TORQUE

Pilot Valve Replacement

Prior to removing the Pilot Valve, the Model RV-1A Pressure Relief Valve must be taken out of service and completely drained.

When installing the replacement Pilot Valve, the trim components must be replaced exactly as they were. After reinstalling the Pilot Valve and before returning the Model RV-1A Pressure Relief Valve into service, completely unscrew the Adjusting Screw. Then, to place the Model RV-1A Pressure Relief Valve in service, follow the instructions in the section Placing the Valve in Service.

NOTICE

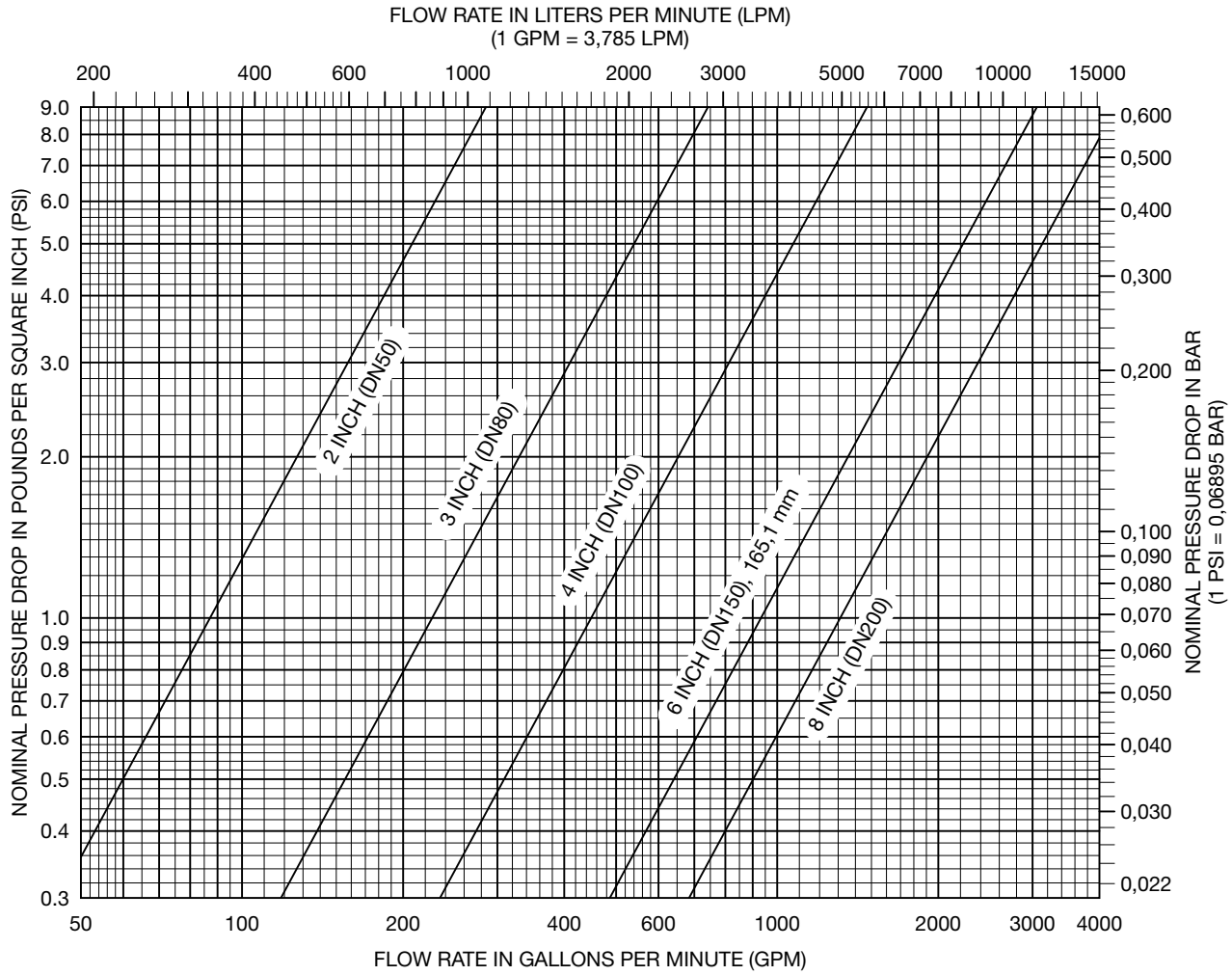
The Pilot Valve is not field repairable. Attempting to repair the Pilot Valve may render the valve ineffective and impair the system operation.

Completely unscrewing the Adjusting Screw of the replacement Pilot Valve will help to avoid an accidental over-pressurization of the system piping prior to achieving the desired relief "set pressure".

Problem	Cause	Solution
Valve fails to open	1. Water connections are blocked 2. Pilot adjustment is too high 3. Pilot diaphragm or seal is damaged	1. Dismantle and clean downstream tubing* 2. Reset pressure by turning pressure adjusting screw CCW 3. Replace pilot valve*
Valve fails to close	1. Water connections are blocked 2. Blocked finger filter 3. Foreign object stuck under valve diaphragm 4. Valve diaphragm is leaking 5. Pilot seal is damaged.	1. Dismantle and clean upstream tubing* 2. Dismantle and clean finger filter* 3. Loosen cover bolts, remove cover and diaphragm, and dispose of foreign object* 4. Loosen cover bolts and replace diaphragm* 5. Replace pilot valve*

NOTES:
* Prior to performing a solution, the Model RV-1A must be taken out of service and completely drained.

TABLE C
TROUBLESHOOTING PROCEDURES



GRAPH B
MODEL RV-1A PRESSURE RELIEF VALVE
NOMINAL PRESSURE LOSS VERSUS FLOW

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

North America
Pressure Relief Valve
Specify: Model RV-1A Valve, size (specify), Connection Type (specify Grooved or Flanged, including flange drilling specification from below), and P/N (specify):

- Valve Size

  2, 3, 4, 6, or 8 in.

- Connection Type - Grooved or Flanged

  For flanged, identify flange drilling specification as follows:

  ANSI B16-1 (Class 125)

Note: *See Table A for flange drilling dimensional specifications.*

2 in. G x G
2.37 in. (60,3 mm)
Grooved 55-001-3-020

3 in. G x G
3.50 in. (88,9 mm)
Grooved 55-001-3-030

4 in. G x G
4.50 in. (114,3 mm)
Grooved 55-001-3-040

6 in. G x G
6.62 in. (168,3 mm)
Grooved 55-001-3-060

8 in. G x G
8.62 in. (219,1mm)
Grooved 55-001-3-080

3 in. F x F
ANSI Flange 55-002-3-030

4 in. F x F
ANSI Flange 55-002-3-040

6 in. F x F
ANSI Flange 55-002-3-060

8 in. F x F
ANSI Flange 55-002-3-080

Replacement Valve Parts
See Figure 6 for replacement parts.

Specify: Model RV-1A Pressure Relief Valve, (specify size), (specify part description), P/N (specify, see Figures 2 and 6)

South America, Central America and Eastern Hemisphere
Pressure Reducing Valve
Specify: Model RV-1A Valve, size (specify), Connection Type (specify Grooved or Flanged, including flange drilling specification from below), and P/N (specify):

- Valve Size

  2, 3, 4, 6, or 8 in.

- Connection Type - Grooved or Flanged

  For flanged, identify flange drilling specification as follows:

  ANSI B16-1 (Class 125)

  ISO 7005-2 (PN16)

Note: *See Table A for flange drilling dimensional specifications.*

2 in. G x G
2.37 in. (60,3 mm)
Grooved 55-001-3-020

3 in. G x G
3.50 in. (88,9 mm)
Grooved 55-001-3-030

4 in. G x G
4.50 in. (114,3 mm)
Grooved 55-001-3-040

6 in. G x G
6.62 in. (168,3 mm)
Grooved 55-001-3-060

165,1 mm G x G
Grooved 55-001-3-066

8 in. G x G
8.62 in. (219,1mm)
Grooved 55-001-3-080

3 in. F x F
ANSI Flange 55-002-3-030

3 in. F x F
ISO (PN16) Flange 55-004-3-030

4 in. F x F
ANSI Flange 55-002-3-040

4 in. F x F
ISO (PN16) Flange 55-004-3-040

6 in. F x F
ANSI Flange 55-002-3-060

6 in. F x F
ISO (PN16) Flange 55-004-3-060

8 in. F x F
ANSI Flange 55-002-3-080

8 in. F x F
ISO (PN16) Flange 55-004-3-080

Valve Trim Accessories
Separately ordered Model RV-1A valve trim accessories.

Specify: Model RV-1A Sight Glass Kit for AON Approval, P/N 545100111

Note: *Sight Glass Kit required for AON Approved applications.*

Replacement Valve Parts
See Figure 6 for replacement parts.

Specify: Model RV-1A Pressure Relief Valve, (specify size), (specify part description), P/N (specify, see Figures 2 and 6)

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