



TECHNICAL DATA

EASYPAC FLOOR CONTROL RISER MANIFOLD ASSEMBLIES 1-1/4" - 8" (DN32 - DN200)

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Telephone: 269-945-9501 Technical Services 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

1. DESCRIPTION

Viking EasyPac Floor Control Riser Manifold Assemblies are available in sizes 1-1/4", 1-1/2", 2", 2-1/2", 3", 4", 6" and 8" for commercial use, in high rise buildings requiring floor control assemblies. They are available with an AGF TESTanDRAIN valve, and/or pressure relief valve (PRV) to meet NFPA 13 requirements for gridded systems and any system requiring a pressure relief valve. This configuration eliminates the need to drain the system before installing the relief valve, while a built-in test port allows hydrostatic testing without draining the system.

EasyPac Floor Control Assemblies include pressure gauges, Potter flow switches, 3-way gauge control valve and appropriate drain valve. EasyPac assemblies are available in pipe sizes from 1-1/4" to 2-1/2" (DN32 to DN60), and are made with fabricated steel bodies. All EasyPac assemblies are available in grooved inlet and outlet connections 1-1/4"-2-1/2" using Schedule 10 steel pipe body. The 1-1/4" to 2" assemblies are also available with male NPT threaded inlets and outlets, or threaded inlets x grooved outlets using Schedule 40 steel pipe.

2. LISTINGS AND APPROVALS

Pressure Gauges: UL Listed, FM Approved

Waterflow Alarm Switch: UL Listed - Category USQT, cUL Listed, FM Approved - Waterflow Detectors, Vane Type, CSFM Listed

Ball Valve: UL Listed, FM Approved

AGF TestanDrain Model 1000: UL Listed - Category VEHZ, FM Approved - Sprinkler System Alarm Testers

AGF TestanDrain Model 1011 with Pressure Relief Valve: UL Listed - Category VEHZ, FM Approved - Sprinkler System Alarm Testers

3. TECHNICAL DATA

Specifications and Material Standards:

Available since 2007.

- Pressure Rating: 250 PSI (17.2 bar) maximum water working pressure.
- Fabricated steel pipe.
- Available in grooved inlet and outlet connections using Schedule 10 steel pipe.
- 1-1/4", 1-1/2", and 2" assemblies are also available with male NPT threaded inlet and outlet, or threaded inlet x grooved outlet using Schedule 40 steel pipe.
- Riser bodies coated with black Ecoat.
- Flow Switch: Two single-pole double-throw switches with Form C contacts rated at 15 Amps 125/250 V. AC, 2.5 Amp 0-30 V. DC. Each switch can be wired for open or closed circuit operation. See Figure 1.

Ordering Information:

There are three different options are available.

Basic Floor Control EasyPac Assemblies with Ball Valve Drain (See Figure 2)

Floor Control EasyPac Assemblies with TESTanDRAIN Valve (See Figure 3)

Floor Control EasyPac Assemblies with TESTanDRAIN and Pressure Relief Valve (PRV) (See Figure 4)

See Table 1 for Part Numbers.

Viking Technical Data may be found on
The Viking Corporation's Web site at
<http://www.vikinggroupinc.com>.
The Web site may include a more recent
edition of this Technical Data Page.

4. INSTALLATION

Refer to appropriate NFPA Installation Standards.

Note: EasyPac Floor Control Riser Manifold Assemblies can be installed horizontally with flow switch on top, or vertically with flow upward.

Viking EasyPac Riser Assemblies use Potter VSR flow switches. The literature that accompanies the VSR states that the switch should not be installed within 6" of a change of direction of pipe or within 24" of a valve. This is merely a recommendation to reduce the possibility of the switch not operating while minimal waterflow is occurring. This is a recommendation only, not a requirement.

5. TESTANDRAIN VALVE OPERATING INSTRUCTIONS

1. To Test: Turn valve handle counterclockwise from "Off" to "Test". The handle will stop automatically. After test is completed, return handle to "Off".
2. To Drain: Turn handle counterclockwise from "Off" to "Test". The handle will stop automatically. Depress "Push" button and turn handle to "Drain". When system is empty, return handle clockwise to "Off" position.

6. INSPECTIONS, TESTS AND MAINTENANCE

Refer to NFPA 25 for Inspection, Testing and Maintenance requirements.



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Table 1 - Commercial EasyPac Assemblies

Pipe Size	Inlet / Outlet Connections	Option	Pipe Size	Viking Part Number
1-1/4"	Thread / Thread	Ball Valve	Schedule 40	15267
		TESTanDRAIN		15268
		TESTanDRAIN and PRV		15269
	Groove / Groove	Ball Valve	Schedule 10	15270
		TESTanDRAIN		15271
		TESTanDRAIN and PRV		15272
	Thread / Groove	Ball Valve	Schedule 40	15273
		TESTanDRAIN		15274
		TESTanDRAIN and PRV		15275
1-1/2"	Thread / Thread	Ball Valve	Schedule 40	15276
		TESTanDRAIN		15277
		TESTanDRAIN and PRV		15278
	Groove / Groove	Ball Valve	Schedule 10	15279
		TESTanDRAIN		15280
		TESTanDRAIN and PRV		15281
	Thread / Groove	Ball Valve	Schedule 40	15282
		TESTanDRAIN		15283
		TESTanDRAIN and PRV		15284
2"	Thread / Thread	Ball Valve	Schedule 40	15285
		TESTanDRAIN		15286
		TESTanDRAIN and PRV		15287
	Groove / Groove	Ball Valve	Schedule 10	15288
		TESTanDRAIN		15289
		TESTanDRAIN and PRV		15290
	Thread / Groove	Ball Valve	Schedule 40	15291
		TESTanDRAIN		15292
		TESTanDRAIN and PRV		15293
2-1/2"	Groove / Groove	Ball Valve	Schedule 10	15297
		TESTanDRAIN		15298
		TESTanDRAIN and PRV		15299
3"	Groove / Groove	Ball Valve	Schedule 10	15300
		TESTanDRAIN		15301
		TESTanDRAIN and PRV		15302
4"	Groove / Groove	Ball Valve	Schedule 10	15303
		TESTanDRAIN		15304
		TESTanDRAIN and PRV		15305
6"	Groove / Groove	Ball Valve	Schedule 10	15294
		TESTanDRAIN		15295
		TESTanDRAIN and PRV		15296
8"	Groove / Groove	Ball Valve	Schedule 10	15261
		TESTanDRAIN		15262
		TESTanDRAIN and PRV		15263

TESTanDRAIN Option:

Includes a test orifice with size specified from 3/8" (K2.8) to 25K ESFR*, depending on the smallest sprinkler installed on the system. Must add suffix to the part number for the desired orifice size.

Orifice Suffix:

- A = 3/8" (K 2.8)
- B = 7/16" (K 4.2)
- C = 1/2" (K 5.6)
- D = 17/32" (K 8.0)
- E = K 11.2 ELO
- F = K14 ESFR
- G = K25 ESFR

TESTanDRAIN with PRV Option:

Includes test orifice and pressure relief valve. The test orifice must be specified based on the smallest sprinkler installed on the system for 3/8" (K2.8) to K25 ESFR*. The pressure relief valve is not factory assembled to the TestanDrain. Must add suffix to the part number for the desired orifice size and pressure setting of the pressure relief valve.

Orifice Suffix:

- A = 3/8" (K 2.8)
- B = 7/16" (K 4.2)
- C = 1/2" (K 5.6)
- D = 17/32" (K 8.0)
- E = K 11.2 ELO
- F = K14 ESFR
- G = K25 ESFR

PRV Suffix:

- 175
- 185
- 195
- 205
- 225
- 250

NOTE: It is important to note that the pressure rating of the relief valve indicates an operating range of pressure for both opening and closing of the valve. Standard relief valves are required to OPEN in a range of pressure between 90% and 105% of their rating. The valves are required to CLOSE at a pressure above 80% of that rating.

* ESFR TESTanDRAIN not available in 1-1/4", 1-1/2" or 2" Risers.

Table 2 - Pipe Diameters

	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
Pipe OD	1.660" (42 mm)	1.900" (48 mm)	2.375" (60 mm)	2.875" (73 mm)	3.5" (89 mm)	4.5" (114 mm)	6.625" (168 mm)	8.625" (219 mm)
Schedule 10 Pipe ID	1.45" (36.6 mm)	1.69" (42.7 mm)	2.16" (54.8 mm)	2.64" (66.9 mm)	3.26" (82.8 mm)	4.26" (108.2 mm)	6.36" (161.5 mm)	8.249" (209.5 mm)
Schedule 40 Pipe ID	1.38" (35.1 mm)	1.61" (40.9 mm)	2.07" (52.5 mm)	N/A	N/A	N/A	N/A	N/A

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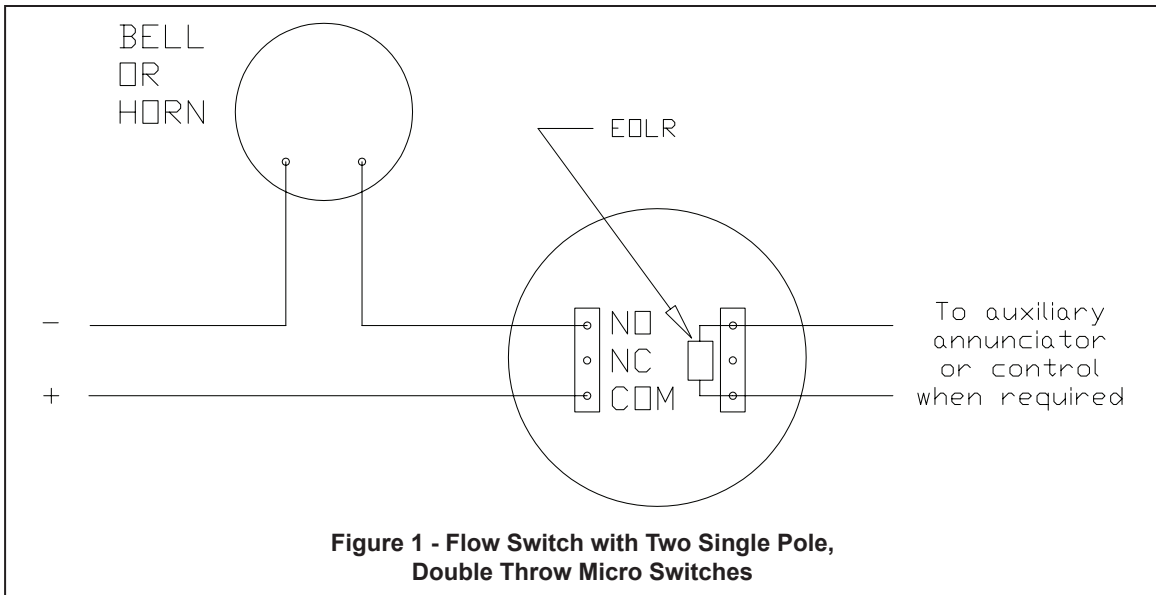
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7. AVAILABILITY

The Viking EasyPac Floor Control Riser Manifold Assemblies are available through a network of domestic and international distributors. See The Viking Corporation web site for the closest distributor or contact The Viking Corporation.

8. GUARANTEE

For details of warranty, refer to Viking's current list price schedule or contact Viking directly.





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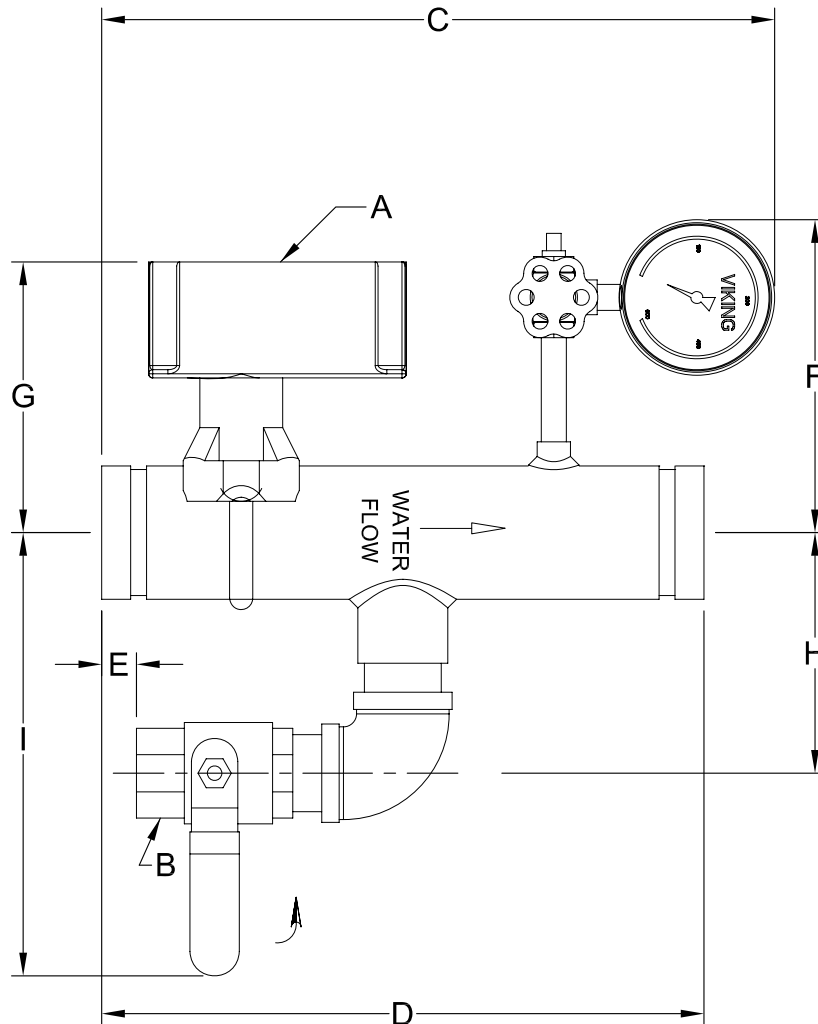


Figure 2 - Basic Floor Control EasyPac

Size	A	B	C	D	E	F	G	H	I
1-1/4" (DN32)	VSR-S Flow Switch ²	1" NPT	16-1/2" (419)	15" (381)	1-1/2" (38)	6-3/32" (155)	6-11/32" (161)	4-3/16" (107)	8-9/16" (218)
1-1/2" (DN40)	VSR-S Flow Switch ²	1" NPT	16-1/2" (419)	15" (381)	1-1/2" (38)	7-19/32" (193)	6-15/16" (164)	5-11/16" (144)	10-1/16" (256)
2" (DN50)	VSR Flow Switch ³	1" NPT	14-1/2" (369)	13" (330)	-15/32" (12)*	6-7/16" (164)	5-51/64" (148")	4-9/16" (116)	8-59/64" (227)
2-1/2" (DN65)	VSR Flow Switch ³	1-1/4" NPT	14-1/2" (369)	13" (330)	5/8" (16)	6-11/16" (170)	6-3/64" (154)	5-1/4" (133)	9-39/64" (244)
3" (DN80)	VSR Flow Switch ³	1-1/4" NPT	14-1/2" (369)	13" (330)	5/8" (16)	7" (178)	6-23/64" (162)	5-9/16" (141)	9-59/64" (252)
4" (DN100)	VSR Flow Switch ³	2" NPT	14-1/2" (369)	13" (330)	-1-3/4" (-44) ¹	7-1/2" (191)	6-25/32" (173)	7-3/4" (197)	13-5/16" (338)
6" (DN150)	VSR Flow Switch ³	2" NPT	14-1/2" (369)	13" (330)	-1-3/4" (-44) ¹	8-35/64" (217)	7-53/64" (199)	8-51/64" (223)	14-23/64" (365)
8" (DN200)	VSR Flow Switch ³	2" NPT	14-3/4" (375)	13" (330)	-1-3/4" (-44) ¹	9-1/2" (243)	8-3/4" (225)	9-3/4" (249)	15-1/2" (391)

¹ Dimension E is negative because the ball valve extends below the end of the manifold body.

² Mounted with included nipple (Not Shown)

³ Mounted with included U bolt (As shown above)



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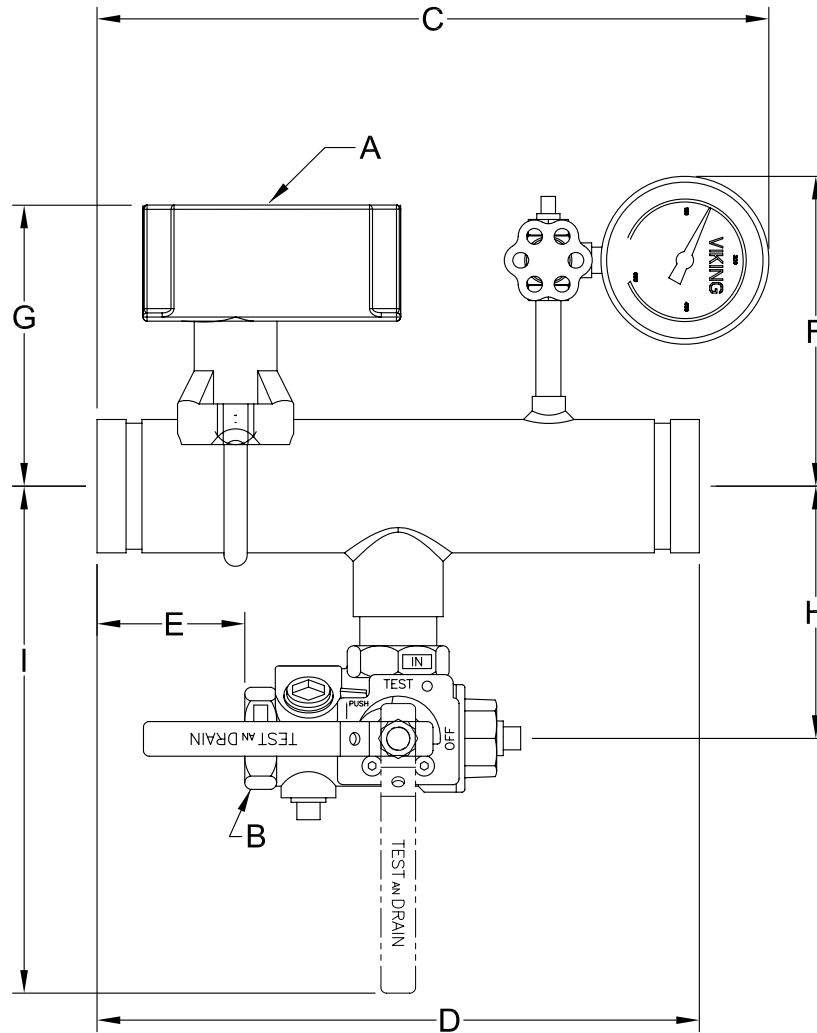


Figure 3 - Floor Control EasyPac with TESTanDRAIN

Size	A	B	C	D	E	F	G	H	I
1-1/4" (DN32)	VSR-S Flow Switch ¹	1" NPT	16-1/2" (419)	15" (381)	5-1/8" (131)	6-3/32" (155)	6-11/32" (161)	4-1/2" (114)	9-3/32" (231)
1-1/2" (DN40)	VSR-S Flow Switch ¹	1" NPT	16-1/2" (419)	15" (381)	5-1/8" (131)	7-19/32" (193)	6-15/16" (164)	4-3/4" (121)	9-7/32" (234)
2" (DN50)	VSR Flow Switch ²	1" NPT	14-1/2" (369)	13" (330)	3-1/16" (78)	6-7/16" (164)	5-51/64" (148")	4-49/64" (121)	9-33/64" (242)
2-1/2" (DN65)	VSR Flow Switch ²	1-1/4" NPT	14-1/2" (369)	13" (330)	3-1/4" (83)	6-11/16" (170)	6-3/64" (154)	6-1/4" (159)	10-61/64" (278)
3" (DN80)	VSR Flow Switch ²	1-1/4" NPT	14-1/2" (369)	13" (330)	3-1/4" (83)	7" (178)	6-23/64" (162)	5-5/8" (143)	11-17/64" (286)
4" (DN100)	VSR Flow Switch ²	2" NPT	14-1/2" (369)	13" (330)	2-5/8" (66)	7-1/2" (191)	6-25/32" (173)	8-3/16" (208)	16-3/8" (416)
6" (DN150)	VSR Flow Switch ²	2" NPT	14-1/2" (369)	13" (330)	2-5/8" (66)	8-35/64" (217)	7-53/64" (199)	9-15/64" (235)	17-27/64" (443)
8" (DN200)	VSR Flow Switch ²	2" NPT	14-3/4" (375)	13" (330)	2-3/4" (70)	9-1/2" (243)	8-3/4" (225)	10-1/4" (262)	18-1/2" (468)

¹ Mounted with included nipple (Not Shown)

² Mounted with included U bolt (As shown above)



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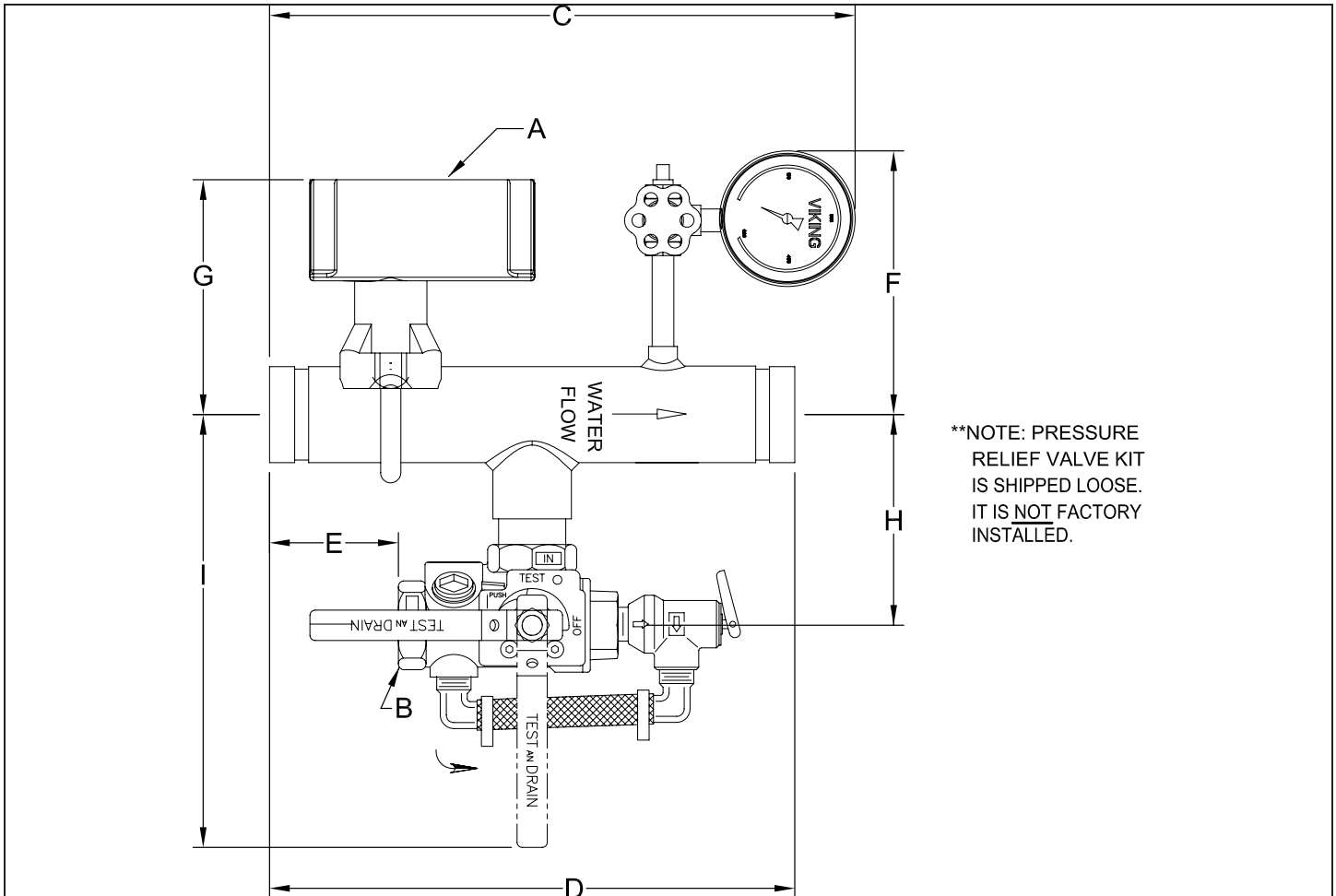


Figure 4 - Floor Control EasyPac with TESTanDRAIN and PRV

Size	A	B	C	D	E	F	G	H	I
1-1/4" (DN32)	VSR-S Flow Switch ¹	1" NPT	16-1/2" (419)	15" (381)	5-1/8" (131)	6-3/32" (155)	6-11/32" (161)	4-1/2" (114)	9-3/32" (231)
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2" (DN50)	VSR Flow Switch ²	1" NPT	14-1/2" (369)	13" (330)	3-1/16" (78)	6-7/16" (164)	4-51/64" (148")	4-49/64" (121)	10-17/64" (261)
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3" (DN80)	VSR Flow Switch ²	1-1/4" NPT	14-1/2" (369)	13" (330)	3-1/4" (83)	7" (178)	6-23/64" (162)	5-5/8" (143)	11-17/64" (286)
4" (DN100)	VSR Flow Switch ²	2" NPT	14-1/2" (369)	13" (330)	2-5/8" (66)	7-1/2" (191)	6-25/32" (173)	8-3/16" (208)	16-3/8" (416)
6" (DN150)	VSR Flow Switch ²	2" NPT	14-1/2" (369)	13" (330)	2-5/8" (66)	8-35/64" (217)	7-53/64" (199)	9-15/64" (235)	17-27/64" (443)
8" (DN200)	VSR Flow Switch ²	2" NPT	14-3/4" (375)	13" (330)	2-3/4" (70)	9-1/2" (243)	8-3/4" (225)	10-1/4" (262)	18-1/2" (468)

¹ Mounted with included nipple (Not Shown)

² Mounted with included U bolt (As shown above)