

951x series



Fixed orifice for constant Cv and max. performance Fast & easy calibration

Venturi insert for optimal accuracy ±3%

PTFE seat guarantees positive shut-off function Integral Memory Stop

Can be used as shut off without resetting position Wide range of flow available

Intended for HVAC & domestic water use

Multi-turn adjustment (four full turns minimum)

DZR brass construction - corrosion resistant 300WOG max. pressure 300psi at ambient conditions to 160°F

150psi max. pressure rating at 260°F FNPT, MNPT, Solder, EzPress and PEX connections available Available in Lead Free configurations







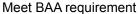






9517T-PP

9517





9517 --- FNPT ends

9519 --- Solder ends

9517AB --- FNPT ends LEAD FREE

9519AB --- Solder ends LEAD FREE

9517T-xx --- Union ends with tailpieces

9517IBV-xy --- Union ends with tailpiece and Isolation Ball Valve (IBV)

x can be ---- M: MNPT tailpiece

F: FNPT tailpiece

S: Solder tailpiece

P: EzPress tailpiece

E: PEX F1960 tailpiece

y can be ---- F: FNPT IBV

DZR

Dezincification Resistant

> Fixed orifice valve provides

greater efficiency

than

a variable orifice

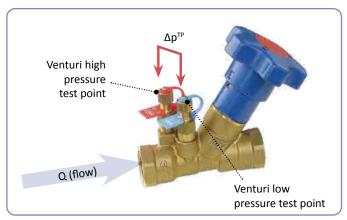
S: Solder IBV

P: EzPress IBV

E: PEX F1960 IBV



0.12 GPM - 55.63 GPM





Size	X-½"	U-½"	L-½"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Flow range (GPM)	0.12 - 0.36	0.27 - 0.71	0.49 - 1.17	0.98 - 2.35	2.19 - 5.15	4.09 - 9.56	8.56 - 19.81	12.84 - 29.80	24.09 - 55.63

1/2" - 2" --- 9517 & 9519

U-1/2" - 1" --- 9517T

952x series



Variable orifice terminal balancing valve Globe design

Can be used as shut off without resetting position Intended for HVAC & domestic water use

300WOG max. pressure 300psi at ambient conditions to 160°F 150psi maximum pressure rating at 260°F Threaded & Solder connections LEAD FREE standard Valve upstream and downstream test ports standard





9527AB --- Threaded connections LEAD FREE 9529AB --- Solder connections LEAD FREE

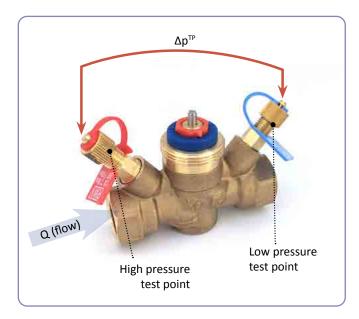








0.49 GPM - 55.63 GPM





The 9520 series can be utilized together with Vaurien series of linear actuators for ON/OFF operation. The actuator can be easily mounted to the valve for direct interface with the building management system.

Size	L-1/2"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Flow range (GPM)	0.49 - 1.17	0.98 - 2.35	2.19 - 5.15	4.09 - 9.56	8.56 - 19.81	12.84 - 29.80	24.09 - 55.63

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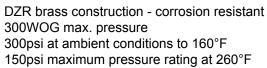
^{* 1/2&}quot; - 3/4" for 9529AB

9907 series



Automatically maintains desired flow rate Efficient "in-line" body design Interchangeable flow cartridges Stainless steel spring and piston Flow regulation accuracy ±5% Multiple connections

Available with integral isolation ball valve for positive shut-off Valve upstream and downstream test ports standard



FNPT, **MNPT**, **Solder**, **EzPress** and **PEX** connections available Cartridge is DZR brass with stainless steel spring and piston

Meet BAA requirement









9907T-**xx** --- Union ends with tailpieces 9907IBV-**xy** --- Union ends with tailpiece and isolation ball valve

x can be ---- M: MNPT tailpiece

F: FNPT tailpiece
S: Solder tailpiece
P: EzPress tailpiece
E: PEX F1960 tailpiece

y can be ---- F: FNPT IBV

S: Solder IBV P: EzPress IBV E: PEX F1960 IBV





 ½" - ¾"-L
 0.32 GPM - 3.17 GPM

 ¾" - 1-¼"L
 2.06 GPM - 15.1 GPM

 1-¼" - 2"
 7.29 GPM - 41.2 GPM

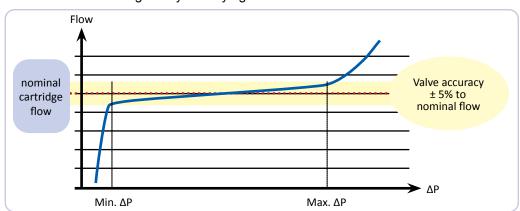
 2"-H
 25.4 GPM - 154 GPM





Cartridges available in different ranges of working differential pressure, the minimum and maximum working ΔP therefore depend on the specific cartridge model. A numeric code is marked on the cartridge body identifying it.





1/2" ¾"-L

Mini

RWV Code	Flow (GPM)	Range∆P (psi)
KRR991202.1880	0.32	2.2-25
KRR991203.1880	0.48	2.3-32
KRR991204.1880	0.63	2.3-32
KRR991205.1880	0.79	2.3-32
KRR991206.1880	0.95	2.3-32
KRR991207.1880	1.11	2.3-32
KRR991208.1880	1.27	2.3-32
KRR991209.1880	1.43	2.3-32
KRR991210.1880	1.59	2.3-32
KRR991211.1880	1.74	2.5-32
KRR991212.1880	1.90	2.5-32
KRR991213.1880	2.06	2.5-32
KRR991214.1880	2.22	2.5-32
KRR991215.1880	2.38	2.5-32
KRR991216.1880	2.54	2.5-32
KRR991218.1880	2.85	2.6-32
KRR991220.1880	3.17	2.8-32

3/4" 1" 1%"-L

Small (Standard Pressure Range)

RWV Code	Flow (GPM)	Range∆F (psi)
KRR992213.1880	2.06	2.5-35
KRR992215.1880	2.38	2.5-35
KRR992217.1880	2.69	2.5-35
KRR992219.1880	3.01	2.5-35
KRR992221.1880	3.33	2.6-35
KRR992224.1880	3.80	2.6-35
KRR992227.1880	4.28	2.6-35
KRR992230.1880	4.76	2.6-35
KRR992233.1880	5.23	2.6-35
KRR992236.1880	5.71	2.6-35
KRR992240.1880	6.34	2.6-35
KRR992245.1880	7.13	2.8-35
KRR992250.1880	7.93	2.8-35
KRR992255.1880	8.72	3.0-35
KRR992260.1880	9.51	3.2-35
KRR992266.1880	10.5	3.5-35
KRR992272.1880	11.4	3.5-35

1" 11/4"-L

Small (High Pressure Range)

Flow (GPM)	Range∆P (psi)
2.85	4.2-64
3.17	4.6-64
3.65	4.8-64
3.96	4.8-64
4.60	4.8-64
5.07	4.8-64
5.71	4.8-64
6.34	4.8-64
7.13	4.8-64
7.93	4.8-64
8.72	4.9-64
9.67	5.2-64
10.8	5.2-64
11.9	5.2-64
12.7	5.2-64
13.6	5.8-64
15.1	5.8-64
	(GPM) 2.85 3.17 3.65 3.96 4.60 5.07 5.71 6.34 7.13 7.93 8.72 9.67 10.8 11.9 12.7 13.6

1½" 2" 1¼"

Medium (Standard Pressure Range)

RWV Code	Flow (GPM)	Range∆P (psi)
KRR994246.1880	7.29	2.0-33
KRR994250.1880	7.93	2.0-33
KRR994255.1880	8.72	2.0-33
KRR994258.1880	9.19	2.0-33
KRR994262.1880	9.83	2.0-33
KRR994267.1880	10.6	2.2-33
KRR994274.1880	11.7	2.2-33
KRR994283.1880	13.2	2.2-33
KRR994290.1880	14.3	2.2-33
KRR994297.1880	15.4	2.2-33
KRR994210.1880	16.6	2.2-33
KRR994212.1880	19.0	2.2-33
KRR994213.1880	20.6	2.3-33
KRR994214.1880	22.8	2.5-33
KRR994216.1880	24.7	2.5-33
KRR994217.1880	26.6	2.6-33
KRR994218.1880	28.5	2.8-33
KRR994220.1880	31.1	2.8-33

11/4" 11/2" 2"

Medium (High Pressure Range)

RWV Code	Flow (GPM)	Range∆P (psi)
KRR994362.1880	9.83	3.9-61
KRR994368.1880	10.8	3.9-61
KRR994374.1880	11.7	3.9-61
KRR994379.1880	12.5	3.9-61
KRR994383.1880	13.2	3.9-61
KRR994391.1880	14.4	4.1-61
KRR994310.1880	15.9	4.1-61
KRR994311.1880	17.6	4.1-61
KRR994312.1880	19.0	4.2-61
KRR994313.1880	20.6	4.2-61
KRR994314.1880	22.0	4.2-61
KRR994316.1880	26.0	4.4-61
KRR994318.1880	27.7	4.5-61
KRR994319.1880	30.1	4.5-61
KRR994321.1880	32.7	4.6-61
KRR994322.1880	35.4	4.9-61
KRR994324.1880	38.0	5.1-61
KRR994326.1880	41.2	5.5-61

2"-H

Large

RWV Code	Flow (GPM)	Range∆P (psi)
KRR996216.1880	25.4	2.0-33
KRR996218.1880	28.5	2.0-33
KRR996220.1880	31.7	2.0-33
KRR996222.1880	34.9	2.2-33
KRR996224.1880	38.0	2.2-33
KRR996227.1880	42.8	2.2-33
KRR996230.1880	47.6	2.3-33
KRR996233.1880	52.3	2.3-33
KRR996236.1880	57.1	2.3-33
KRR996240.1880	63.4	2.5-33
KRR996245.1880	71.3	2.5-33
KRR996250.1880	79.3	2.8-33
KRR996255.1890	87.2	2.8-33
KRR996260.1880	95.1	3.0-33
KRR996266.1880	105	3.0-33
KRR996273.1880	116	3.6-33
KRR996280.1880	127	4.1-33
KRR996288.1880	139	5.1-33
KRR996297.1880	154	5.8-33





9707 series



Pressure independent control valve (PICV)
Threaded M/M for union ends (ASME B1.20.1 - NPSM)
Max. ΔP working pressure 60psi
100% full stroke modulation, independent of valve setting
M30x1.5 threads for linear actuator connection
Available with integral isolation ball valve for positive shut-off
Valve upstream and downstream test ports standard

DZR brass construction 300WOG

FNPT, MNPT, and Solder tailpieces available





9707R

Working conditions Water: 15°F - 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids

(Ethylene-glycolic and propylene-glycolic mixtures up to 50% may be used)



9707T



9707R --- PICV

9707T --- PICV with tailpieces

9707IBV --- PICV with Isolation Ball Valve & tailpiece



0.12 GPM - 15.9 GPM







The 9707 series can be utilized together with Vaurien series of linear actuators for ON/OFF or Modulating (0-10V) operations. The actuator can be easily mounted to the valve for direct interface with the building management system.

Vaurien-M



Modulating electromechanical linear actuator Suitable for RWV 9707 valve M30x1.5 threaded connection With 78in electric wire Enclosure protection IP54 Power supply 50Hz/60Hz, 24V AC/DC, power 1.5W Max stroke 0.236in, auto stroke detection Auto-zero self calibration Auto-stroke detection

Stroke time 2sec/0.01in, thrust 29lbf CE compliant

0-10V control signal (adjustable for 0-5VDC, 5-10VDC, 2-10VDC, 0-20mA or 4-20mA) Position feedback signal Linear characteristic (adjustable for equal-percentage characteristic) Working ambient temperature: 32° to +122°F





Vaurien-1 / Vaurien-2

Working temperature: 32°F to +140°F

Working fluid temperature: 32° to +203°F



ON/OFF linear actuator with threaded connection Suitable for RWV 952x series and RWV 9707 series valves M30x1.5 threaded nut with fast connection (*) With 40in electric wire Enclosure protection IP54/NEMA3 Power supply 50Hz/60Hz Normally closed (NC)

Model **Power supply Thrust** Stroke **Travel Time** Vaurien 1 24VDC 22.5lbf 0.15in ≈3.5min Vaurien 2 24VDC 28.1lbf 0.25in ≈4.5min











(*) Long nut





Coil Hook Up Kits

CKS - 9517/9519

Static, Fixed Orifice Balancing Valve (Venturi Insert)

CKA - 9907IBV

Automatic Balancing Valve

CKP - 9707IBV

Pressure Independent Control Valve (PICV)

CK - 92UBT/UBS/UBP

Union Ball Valve

Accessories:

92HS

Stainless Steel Braided Hoses (2)

92ST

Strainer with Shut off,

92UDT

Union Ball Valve

92UN

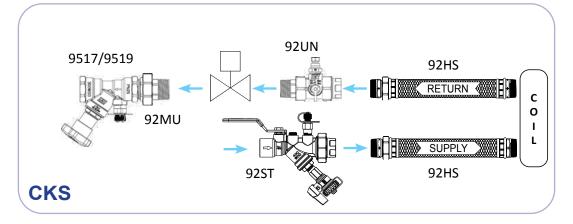
Union with Air Vent

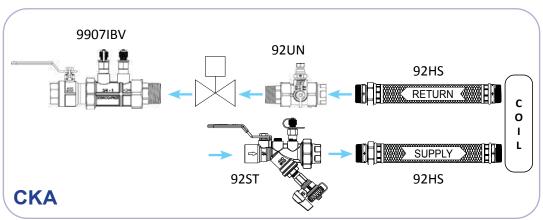
92MU

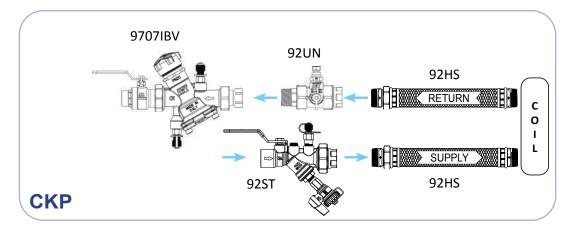
Male Micro Union

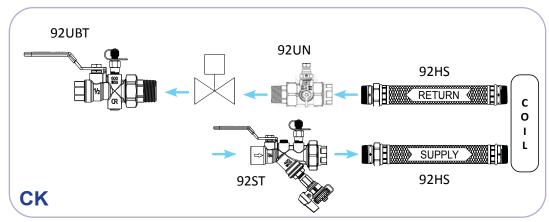
- * Additional components as required
- * Vacuum sealed to corrugated backing

Meet BAA requirement











T650RWV



Memory capacity up to 2,000 records
Anti-freeze media correction
Project measuring with the possibility of export and transfer projects via email
AAA battery type
Ergonomic device case
Interface to sensor through smart device
Dedicated app for iOS/Android
Simple valve detection by valve image
24-bit pressure sensor
IP65 cover

* Used with 951x Fixed Orifice Manual Balancing Valves enables flow rate reading in real time without the need of the charts











95INSL / 99INSL



Polyethylene Foam Insulation Self-sealing wrap

Working temperature: -76°F to 200°F







99INSL



9574P



Variable orifice cast iron balancing valve
Precision Adjustable Handwheel
Multi-turn adjustment (five full turns minimum)
Positive shut-off with memory stop
Flat face flange ends to ANSI B16.10
Flanges drilled according to ASME B16.1 class 125
Acrylic painted surface
Valve accuracy ±5% to nominal Cv value
Threaded and capped test ports
PT ports included with valves (not mounted)





24.09 GPM - 5072 GPM

Size	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"
Flow range	24.09 -	47.9 -	101 -	172 -	267 -	376 -	664 -	1055 -	1493 -	1521 -	1854 -
(GPM)	55.63	110	244	413	630	902	1593	2485	4057	4137	5072

9450A



Stainless steel wafer orifice plate For ANSI 125 or ANSI 150 flanges Design according to BS7350

The orifice plate can be installed together with the same size of 9574P.

Measurement accuracy ±5% (test according to BS7350)

Size: 2-1/2" - 12"



9407



DZR Brass metering station FNPT x MNPT Design according to BS7350

Venturi insert for optimal accuracy ±3% (test according to BS7350)

Size: 1/2" - 2"







9957W



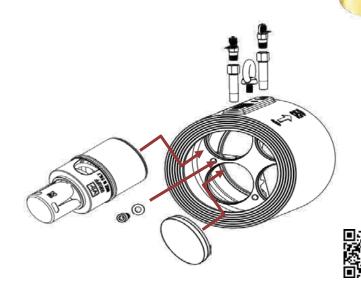
Ductile iron wafer automatic balancing valve
For ASME B16.42 class 150 flanges
Provided with eyebolt for DN≥4"
Wide range of flows available (see cartridge section)
Test points with extension included (not mounted)
Class 150



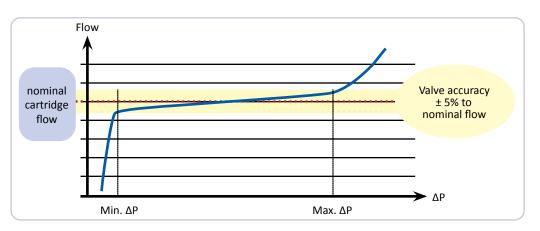
25.4GPM - 154GPM for 2½" & 3" (single cartridge)
Higher flows available with the multi cartridge system for DN≥4"
Minimum working △P depending on cartridge configuration

Size	2-1/2"	3"	4"	5"	6"	8"	10"	12"
Flow range (GPM)	25.4 - 154	25.4 - 154	25.4 - 308	25.4 - 462	25.4 - 616	25.4 - 1078	25.4 - 1540	25.4 - 2156

RWV Code	Flow	Range∆P
	(GPM)	(psi)
KRR996216.1880	25.4	2.0-33
KRR996218.1880	28.5	2.0-33
KRR996220.1880	31.7	2.0-33
KRR996222.1880	34.9	2.2-33
KRR996224.1880	38.0	2.2-33
KRR996227.1880	42.8	2.2-33
KRR996230.1880	47.6	2.3-33
KRR996233.1880	52.3	2.3-33
KRR996236.1880	57.1	2.3-33
KRR996240.1880	63.4	2.5-33
KRR996245.1880	71.3	2.5-33
KRR996250.1880	79.3	2.8-33
KRR996255.1880	87.2	2.8-33
KRR996260.1880	95.1	3.0-33
KRR996266.1880	105	3.0-33
KRR996273.1880	116	3.6-33
KRR996280.1880	127	4.1-33
KRR996288.1880	139	5.1-33
KRR996297.1880	154	5.8-33







92UN



DZR brass union body with manual air vent and test point Body available:

> **FNPT** (ASME B1.20.1 - NPT) Solder (ASME B16.22) **EzPress**

Tailpiece available:

FNPT (ASME B1.20.1 - NPT) **MNPT** (ASME B1.20.1 - NPT) Solder (ASME B16.22) **PEX** (ASME F1960)

400WOG

Working conditions:

Water: from 15°F to 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids



92MU



DZR brass union Body end MNPT (ASME B1.20.1) Tailpiece available:

> FNPT (ASME B1.20.1 - NPT) **MNPT** (ASME B1.20.1 - NPT) Solder (ASME B16.22) **PEX** (ASME F1960)

400WOG

Working conditions:

Water: from 15°F to 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids











EPDM hose, fire retardant stainless steel braided



92HS-MM --- MNPT end with swivel MNPT end 92HS-MS --- MNPT end with swivel Solder end

92HS-MF --- MNPT end with swivel FNPT end







DZR brass tee 400WOG @ 160°F











92UBT / 92UBS / 92UBP



DZR brass union ball valve Blow-out proof stem Adjustable packing nut Full port Three tapped 1/4" port

600WOG @ 160°F

Working conditions:

Water: from 15°F to 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids



92UDT / 92UDS / 92UDP



DZR brass union ball valve with drain Blow-out proof stem Adjustable packing nut Full port Blow down valve with capped 3/4" hose end One installed test point One additional tapped 1/4" port

600WOG @ 160°F

Working conditions:

Water: from 15°F to 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids





92UBT & 92UDT --- Threaded end (ASME B1.20.1 - NPT) with union end

FNPT tailpiece standard, MNPT, Solder, EzPress and PEX (F1960) options available

92UBS & 92UDS --- Solder end (ASME B16.22) with union end

Solder tailpiece standard, FNPT, MNPT, EzPress and PEX (F1960) options available

92UBP & 92UDP --- EzPress end with union end

EzPress tailpiece standard, FNPT, MNPT, Solder and PEX (F1960) options available



92ST / 92SS / 92SP



DZR brass ball valve - wye strainer combination Blow-out proof stem Adjustable packing nut Full port Y pattern strainer Stainless steel screen (20 mesh) Blow down valve with ¾" hose end One installed test point One additional tapped ¼" port

400WOG @ 160°F

Working conditions:

Water: from 15°F to 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids



92ST-BY / 92SS-BY / 92SP-BY



DZR brass ball valve - wye strainer combination ½" port for bypass
Blow-out proof stem
Adjustable packing nut
Full port
Y pattern strainer
Stainless steel screen (20 mesh)

400WOG @ 160°F

Working conditions:

Water: from 15°F to 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids







92ST & 92ST-BY --- Threaded end (ASME B1.20.1 - NPT) with union end

FNPT tailpiece standard, MNPT tailpiece option available

92SS & 92SS-BY --- Solder end (ASME B16.22) with union end

Solder tailpiece standard, **FNPT** and **MNPT** tailpiece options available

92SP & 92SP-BY --- EzPress end with union end

EzPress tailpiece standard, **FNPT** and **MNPT** tailpiece options available



DZR

Dezincification

92SEC



DZR brass ball valve - wye strainer combination Blow-out proof stem Adjustable packing nut Y pattern strainer Stainless steel screen (20 mesh) Blow down valve with 3/4" hose end

One installed test point

Two additional tapped 1/4" port

PEX end (F1960) with union end, PEX, FNPT or Solder tailpiece options available

400WOG @ 160°F

Working conditions:

Water: from 15°F to 260°F

below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids

8040



Models

DZR LEAD FREE brass drain 600WOG



8040F --- Threaded ends (ASME B1.20.1 - NPT)

8040S --- Solder ends (ASME B16.22)

8040P --- EzPress ends

8040P --- PEX ends (ASME F1960)







9380N



Cast iron high capacity automatic air vent 200 CWP / 125 WSP





241DV



Brass drain valve 400WOG









DZR brass manual air vent



9390N



Brass automatic air vent 150 CWP

















RWV Hydronic Controls®

