HOW TO SELECT A VERSA VALVE

Every letter and digit in the product number of a has significant meaning. The product number shown below (VSG-4522-U-14-A120) indicates the following:

2 U 5 14 A120 G _ 4 PNEUMATIC SPRING SOLENOID PILOT- FOUR-WAY 1/2" NPT SIDE PORTS UPRIGHT STYLE | SOLENOID EXHAUST/DUST 120V60 COIL TWO SERVICE RETURN ACTUATED (INPILOT)

BASIC PRODUCT NUMBER

CV 11.1

*7 1" NPT

7 with suffix-12 provides

11/4" (32mm) capacity with

1"NPT sideports or 11/4" NPT

subplate ports CV 14.9

For sizes 1/8" TO 1/2": ISO

for availability.

*Basic valve size

228/1 "G" type threads are

suffix "-2B". Contact factory

indicated by additional use of

SELECTOR CHART

SUFFIX DETAILS

Suffix details indicate modifications or variations to the basic valve. When specifying simply add those suffix details required in alphanumeric order.

COIL CODE **SPOOL ACTUATING DEVICES FUNCTIONAL** VALVE VALVE **BODY DETAILS** TYPE OF **PORT OPTIONS/VOLTAGES/SUFFIX DETAILS SERIES** ON LEFT END OF VALVE ON RIGHT END OF VALVE **DETAILS** VALVE (Flow patterns) SIZE LOOKING AT INLET LOOKING AT INLET 0 SIDEPORTED-EXPILOT V Series "V" Valve Special actuator of any type. Letter indicates 2 Two-Way 2 1/8" NPT CV 1.4 TWO-WAY or Actuator Orientation: For Hazardous Service WITH INTEGRAL Junction Box: Solenoid actuated position of actuator relative to right and left Body with integral, pipe threaded -218A thru -218G. Hand Lever. -XDBS, -XDBT, (d)Flameproof, ATEX, IEC, CSA, INMETRO 3 Three-Way **THREE-WAY VALVES** Pneumatic service to valves require a Coil *3 1/4" NPT CV 1.8 -XIFA, -XIFE, -XIFF, (ib)Intrinsic Safe, ATEX -226. Cam actuator end of body. ports. This type of body is directly **Two Position** 200 psi (14 bar) 4 Four-Way Code that indicates -227A thru -227C, Pilot actuator -XMAA, -XMAE, -XMAF, (m) Encapsulation, (e) Increased Safety, ATEX Suffix detail is required to designate specific connected to pressure lines and Normally Closed (actuating 4 %" NPT CV 3.4 5 Five-Way (Dual the specific coil -XMFA, -XMFE, -XMFF, (m) Encapsulation, (e) Increased Safety, ATEX Combination Actuators: actuator is used for mechanical, manual device must be on frequency and T Series "T" Valve ***5** ½" NPT CV 4.0 Combination Reliability Options: -181D, Latching Resets and EXPilot* type solenoid or pilot right end of valve) Spring Centering (for 3 position manually -C366 Anti-Stiction Protection: voltage. Four-Way) Hydraulic service to 6 34" NPT CV 9.7 perated valves)

Spring Centering from one offset position only (for 3 position manually operated valves). Spring pushes spool to center **F** Pedal (for toe operation)

operated valves)

N valves — allows valve to be positioned anywhere without detents)

use suffix detail "-1")

Spring Return. Spring pushes valve spool

solenoid operated valves) Diaphragm-Pilot Spring Centering (for 3

position diaphragm operated valves)

7 Two-Outlet (Directiona Three-Way-Diverter)

8 Two-Inlet (Directional

Three-Way-Selector)

Cam

С

500 psi (35 bar)

Spring Centering from one offset position only (for 3 position manually operated valves). Spring pulls spool to center

G | Solenoid-Pilot/2 position

Hand Lever (offset lever)

Palm Button

Pilot-Spring Centering (for 3 position pilot

Differential Pilot Return

Hand Lever (centerline lever)

Non-return Device (for manually operated

Pressure Pilot/2 position (for bleed pilot also

Reverse Spring Return (for manually operated valves). Spring pulls valve spool

Treadle (for heel-toe operation)

Three-Detent (for manually operated valves)

W Diaphragm-Pilot/2 position

Solenoid-Pilot Spring Centering (for 3 position

Two-Detent (for manually operated valves)

actuated valves.

1 SUBPLATE MOUNTING- EXPILOT

Body-ported for subplate mounting. This type of body is screw connected to a subplate or manifold that is connected to pressure lines and is used for mechanical, manual and EXPilot* type solenoid or pilot actuated valves.

2 SIDEPORTED - INPILOT

Body same as "0" above, except it has an auxiliary internal passage to supply INPilot** type solenoid and pilot actuators.

3 SUBPLATE MOUNTING- INPILOT

Body same as "1" above, except it has internal auxiliary passage to supply INPilot** type solenoid and pilot actuators.

*Separate pressure line connection needed to supply solenoid-pilot. differential pilot return or to control pressure pilot.

**Internal auxiliary porting supplies pressurized medium being controlled to pilot, solenoid- pilot or differential pilot return.

Normally Open (actuating device must be on left end of valve)

THREE-WAY VALVES **Three Position**

All ports blocked in center position

FOUR-WAY VALVES Two Position

Standard flow pattern:

inlet alternately open to one cylinder port; opposite cylinder port alternately open to exhaust.

FIVE-WAY VALVES

Two Position

Standard flow pattern: each inlet port open (alternately) to one cylinder port; opposite cylinder port open (alternately) to

FOUR-WAY OR FIVE-WAY VALVES

Three Position

(Offset flows as standard flow patterns, above)

Center Position

All ports blocked Cylinder ports open to exhaust

Inlet(s) open to both cylinder ports

All ports open

DIVERTER & SELECTOR VALVES

2-position

All ports blocked in center

-DP, Dual pilot/solenoid piston actuator -PPG, Push pull dual solenoid (2 coils on a side)

Solenoid Options:

For General Purpose:

-243, Grommeted housing -HC. -HCC. DIN connector

-HT, Class H coil

-P, Plug-in coil

-PC, -PS, Potted coil For Hazardous Service:

-XC8, Hazardous locations, CSA, FM

-XX, Hazardous locations, UL & CSA -XV, World coil, Hazardous Location, CSA

-XT, World coil, (d) Flameproof, ATEX, IEC -XDB, World coil, Hazardous Location, CSA/ATEX

-LB, E5,Low Power, 1.8 Watt

-LX, E4, Low Power, 1.8 Watt, -HT, -ST

-LA, E5, Low Power, 0.85 Watt,-HT, -ST

-LV, E4, Low Power, 0.85 Watt,-HT, -ST

-LZ, E4, Low Power, 0.5 Watt, -HT, -ST -HT. Class H coil.

-PC, Potted coil

-ST, Stainless steel housing

-XISC. -XISX6 (ib)Intrinsic Safe. ATEX FM & CSA -HC, -HCC, Connector

Manual Override: -G. Guarded

-G5R, Guarded-locking

-M. Unguarded

-M5R, Unguarded-locking

Seals:

-3. Continuous duty solenoid FKM

-11, High nitrile NBR -31, U-cup pilot piston seal

-155, FKM Fluorocarbon seals

-EP, Ethylene propylene EPR

Special service/lubrication: -1. Bleed pilot

-10, Electroless nickel plating-internal

-14, Silencer/dustproof coil cover nut -20, Solenoid caps 1/8" npt communication port

-21, INPilot/EXPilot

-44, low temperature nitrile seals -55A, FDA approved silicone grease

-55M, Silicone grease

-167, Electroless nickel plating-external

-200, Plus pressure rating to 200 psi (14 bar) -407, Threaded port in spring cap for position

-H, Threaded solenoid exhaust -H500, Hydraulic solenoid rated to 450 psi (31 bar) -10 electroless nickel plating. Internal parts

-31. U-cup pilot piston seal

-155, seals, FKM Fluorocarbon -B894 Service Reliability Package

-10, electroless nickel plating. Internal parts

-31, U-cup pilot piston seal -155, seals FKM Fluorocarbon

-155C, Lubricant, Dupont Krytox GPL-202

-S, Strong spring -NGST Natural Gas Service Reliability Package

-10, electroless nickel plating. Internal parts

-31, U-cup pilot piston seal

-55M, Lubricant, Dow Corning Molykote 33 -155, seals FKM Fluorocarbon

-S, Strong spring Vent seals; solenoid exhaust

-C14, Water & dust excluder / silencer assembly (nylon plastic body)

-D14, Water & dust excluder / silencer assembly (stainless steel)

-E14, Dust excluder/silencer assembly (screw with sintered washer)

-H2, 1/8" NPT stainless steel hydraulic exhaust vent adapter

-H, 1/4" NPT stainless steel hydraulic exhaust vent adapter -HE, 1/4" NPT stainless steel hydraulic exhaust vent adapter

Opular Option Combinationss for Hazardous Service: -XXL4, Hazardous Location, UL/CSA (D14, -PC -XX)

-XXN4, Hazardous Location, UL/CSA (-D14, -LB, -PC,-XX) -XV1, Hazardous Location, 1.8 Watt solenoid, CSA (-HT, -LX, -XV)

-XV2, Hazardous Location, 1.8 Watt solenoid, CSA (-HT, -LX, -H2E -XV)

-XV3, Hazardous Location, 1.8 Watt solenoid, CSA (-HT, -LX, -HE -XV) -XV4, Hazardous Location, 1.8 Watt solenoid, CSA (-HT, -LX, -L14 -XV) -XV9, Hazardous Location, 1.8 Watt solenoid, CSA (-HT, -LX, -D14 -XV)

Combination Power Shift Options

-PWR, Power Shift

-DP, Dual pilot/solenoid piston actuator, (V&T, V-316, 1/8" - 1/2") size -SS, Strong spring (V&T, V-316, 1/8" - 1/2" size)

-PWRD. Power Shift -DG, Dustproof valve (plunger, drilled end to end) (V-316 1/8" TO 1/2" size only)

-DD, Dustproof valve (plunger, drilled end to end) (V & T 1/8" TO 1/2" size only)

-DP, Dual pilot/solenoid piston actuator (V&T, V-316, 1/8" - 1/2") size

-SS, Strong spring (V&T, V-316, 1/8" - 1/2") size

-PWRP. Power Shift (V-316 1/2" size only)

-DPP Dual pushing type pistons pilot actuator -SS, Strong spring size

The Coil Code consists of four characters: a letter to indicate the frequency and three

numbers to identify

voltage: Frequency:

A= 60Hz frequency **D**= Direct Current (DC

E= 50Hz frequency

Three numbers following the

indicate voltage: **Examples of Coil**

Code:

frequency letter

Coil <u>Voltage</u> Code 24V/60hz = A024120V/60hz = A120

24VDC = D024

220V/50hz = F220

