

5/2, 5/3 ISO SOLENOID VALVES

A series of high performance ISO interface solenoid valves offering the following benefits:

- ✓ High flow 1.5 – 3.2 Cv
- ✓ Low power consumption
- ✓ Ease of maintenance
- ✓ Stainless steel spool and sleeve for long life
- ✓ Fast response
- ✓ Six voltage options
- ✓ Optional indicator light with voltage surge suppressor
- ✓ Many interface accessories

The ISO standard for valves does not cover flow rate, overall physical size or electrical entry.

TECHNICAL SPECIFICATIONS

Fluid	Air and Inert gas
Operating pressure	1~9.9 Bar
Ambient and fluid temperature	5~60°C
Manual override	Non-locking type
Electrical entry	DIN connector
Lubrication	Non-lube. If provided, use turbine oil (ISO VG32)
Applicable sub-plate	See accessories

SPECIFICATIONS ISO SERIES 1

No. Positions	Model	Effective orifice area (with 1/2" port sub-plate) mm ² (Cv factor)	Max operating rate cycle/sec	Response time sec
2 (Single)	VS7-6-FG-S-•	27 (1.5)	20	0.025 or less
2 (Double)	VS7-6-FG-D-•	27 (1.5)	20	0.015 or less
3 (Closed centre)	VS7-6-FHG-D-•	25.5 (1.4)	10	0.045 or less
3 (Exhaust centre)	VS7-6-FJG-D-•	27 (1.5)	10	0.045 or less
3 (Pilot check)	VS7-6-FPG-D-•	20 (1.1)	10	0.05 or less

TECHNICAL SPECIFICATIONS

ISO 1 & 2 Coil Specifications

Rated voltage V	100VAC 50/60Hz	200VAC 50/60Hz	24VDC	12VDC
Inrush current A	0.049/0.043	0.024/0.021	0.075	0.15
Holding current A	0.031/0.020	0.015/0.01		
Allowable voltage range V	85~110% of rated voltage			
Insulation	Class B or equivalent (130°C)			

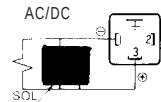
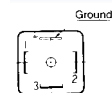
SPECIFICATION ISO SERIES 2

No. Positions	Model	Effective orifice area (with 1/2" port sub-plate)mm ² (Cv factor)	Max operating rate cycle/sec	Response time sec
2 (Single)	VS7-8-FG-S-•	58 (3.2)	15	0.040 and less
2 (Double)	VS7-8-FG-D-•	58 (3.2)	15	0.020 and less
3 (Closed centre)	VS7-8-FHG-D-•	58 (3.2)	10	0.05 and less
3 (Exhaust centre)	VS7-8-FJG-D-•	58 (3.2)	10	0.05 and less
3 (Pilot check)	VS7-8-FPG-D-•	40 (2.2)	8	0.06 and less



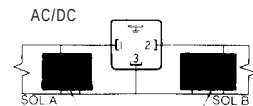
Valves

TECHNICAL SPECIFICATIONS



Indicator light and surge protector

(May be wired either polarity)



Indicator light and surge protector

SYMBOLS

	Single Solenoid (FG-S)	Double Solenoid (FG-D)
2-position		
3-position		

DIMENSIONS
SEE NEXT PAGE

HOW TO
ORDER
SEE NEXT PAGE



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CATALOGUE REFERENCE
E117

HOW TO ORDER VS7 SOLENOID VALVE

VS7 — — Q

VALVE SIZE

6ISO 1
8ISO2

VALVE TYPE

FG ...5/2

FHG ...5/3 Closed Centre
FJG ...5/3 Open Centre

SOLENOIDS

S ... Single
D ... Double

LAMP & SURGE VOLTAGE SUPPRESSOR

ZWith
NLamp only

- VOLTAGE

324V DC

412V DC
0(110V AC)

9 (110V AC)
9 (240V AC)

9(24V AC)

- OTHER VOLTAGE

Nil12 or 24vDC

(110VAC) ...110vAC
(240VAC) ... 240vAC

(240VAC) ... 240VAC
(24VAC) 24vAC

(24VAC) ...24VAC

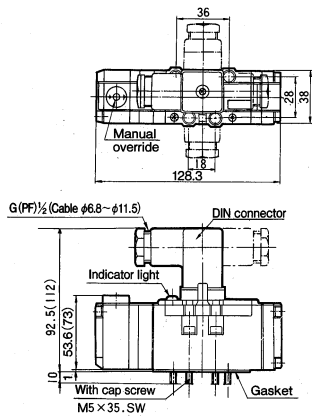


STOCKED PRODUCTS

FOR A LIST OF STOCKED PRODUCTS,
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DIMENSIONS

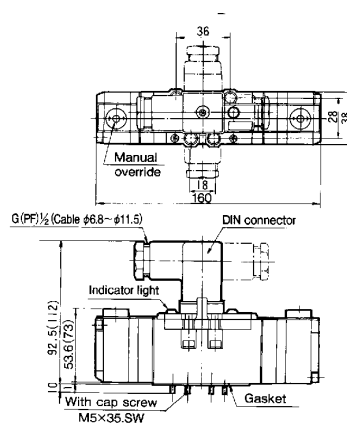
VS7 ISO 1 SINGLE SOLENOID



In parentheses are the dimensions with direct manual override.

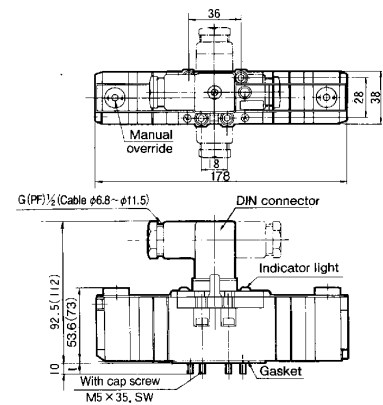
DIMENSIONS

VS7 ISO 1 DOUBLE SOLENOID



DIMENSIONS

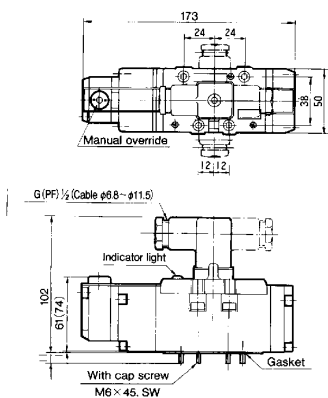
VS7 ISO 1 CLOSED/OPEN CENTRE



In parentheses are the dimensions with direct manual override.

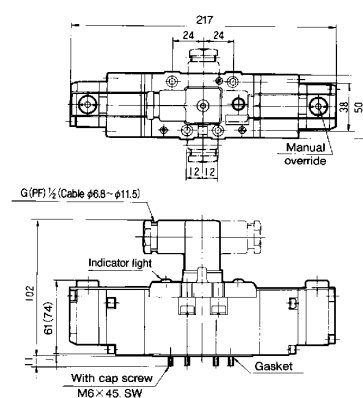
DIMENSIONS

VS7 ISO 2 SINGLE SOLENOID



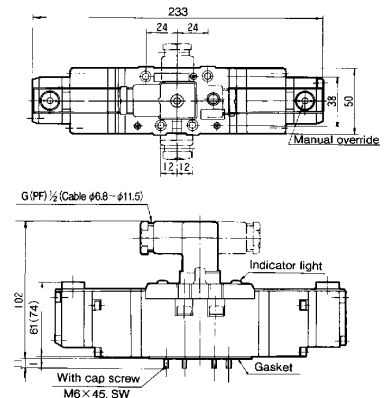
DIMENSIONS

VS7 ISO 2 DOUBLE SOLENOID



DIMENSIONS

VS7 ISO 2 CLOSED/OPEN CENTRE



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SINGLE SUB BASES FOR VS7 SERIES SOLENOID VALVES



How To ORDER

VS7 SERIES ISO SUB BASES

VS7 — ● — ●

SUB BASE SIZE

1ISO 1
2ISO2

PORTING

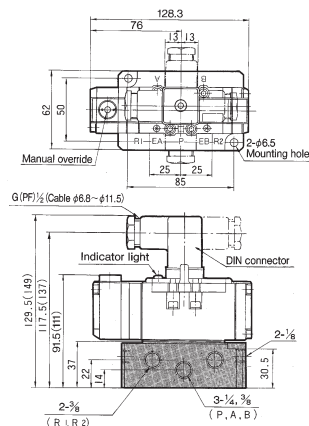
A02 ...Side 1/4 ISO 1 Only
A03 ...Side 3/8 ISO 1 & 2
A04 ...Side 1/2 ISO 2 Only
A06 ...Side 3/4 ISO 2 Only
B02 ...Bottom 1/4 ISO 1 Only
B03 ...Bottom 3/8 ISO 1 & 2
B04 ...Bottom 1/2 ISO 2 Only
B06 ...Bottom 3/4 ISO 2 Only

STOCKED PRODUCTS

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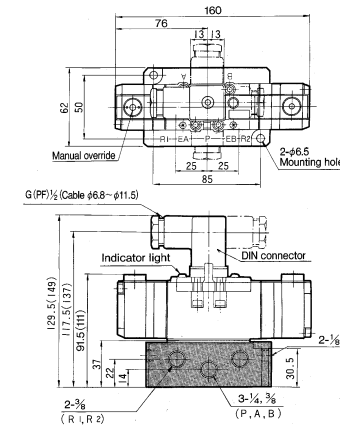
DIMENSIONS

SUB BASE FOR ISO 1 SINGLE SOLENOID



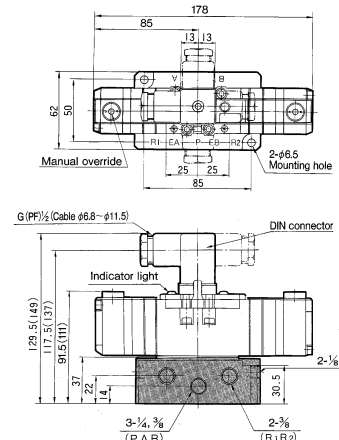
DIMENSIONS

SUB BASE FOR ISO 1 DOUBLE SOLENOID



DIMENSIONS

SUB BASE FOR ISO 1 CLOSED/OPEN CENTRE



ACCESSORIES

VS7 SERIES ISO 1 SUB BASE

ARB210-00-PInterface Regulator Kit (P Type)
ARB210-00-AInterface Regulator Kit (A Type)
ARB210-00-BInterface Regulator Kit (B Type)
AXT503-23AInterface Speed Controller
VV71-P-03AIndividual Supply Spacer
VV71-R-03AIndividual Exhaust Spacer
VV71-FPGCheck Valve Interface

STOCKED PRODUCTS

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ISO 2
DIMENSIONS
SEE NEXT PAGE

ISO 2
ACCESSORIES
SEE NEXT PAGE



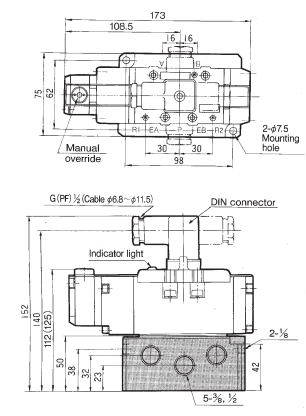
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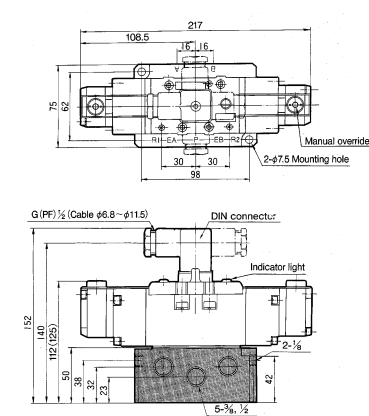
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Valves

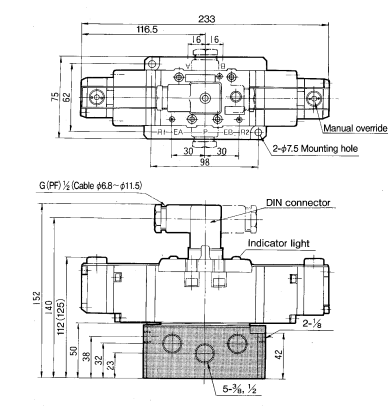
DIMENSIONS
SUB BASE FOR ISO 2 SINGLE SOLENOID



DIMENSIONS
SUB BASE FOR ISO 2 DOUBLE SOLENOID



DIMENSIONS
SUB BASE FOR ISO 2 CLOSED/OPEN CENTRE



ACCESSORIES
VS7 SERIES ISO 2 SUB BASE

- ARB310-00-PInterface Regulator Kit (P Type)
- ARB310-00-AInterface Regulator Kit (A Type)
- ARB310-00-BInterface Regulator Kit (B Type)
- AXT510-32AInterface Speed Controller
- VV72-P-04AIndividual Supply Spacer
- VV72-R-04AIndividual Exhaust Spacer
- VV72-FPGCheck Valve Interface

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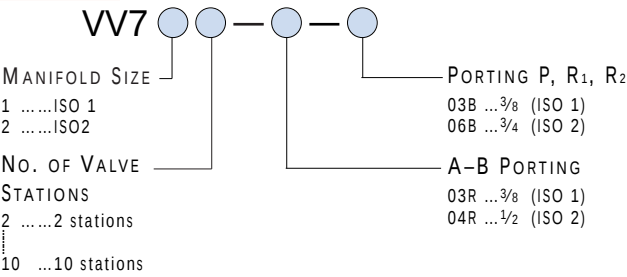
MANIFOLDS FOR SERIES VS7
ISO SOLENOID VALVES

A common exhaust type 2 – 10 station manifold allows for connecting a series of valves to a common air supply. As with the single sub base, a variety of accessories make this product range very versatile.



HOW TO
ORDER

VS7 SERIES ISO MANIFOLDS



STOCKED PRODUCTS
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DIMENSIONS
SEE NEXT PAGE

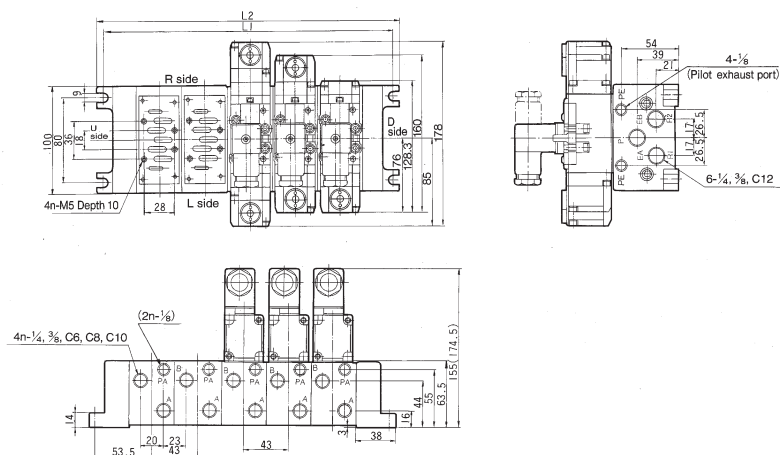
ACCESSORIES
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DIMENSIONS

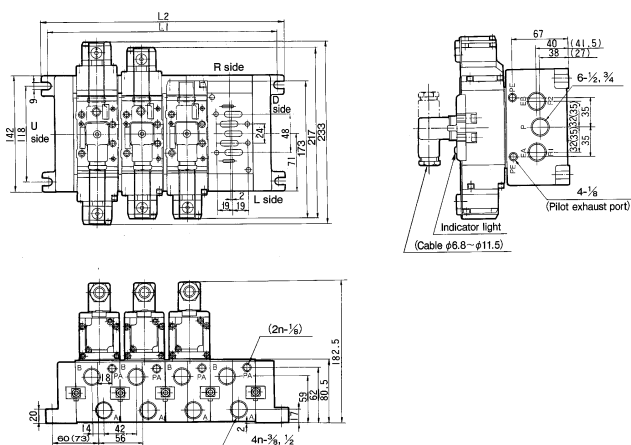
VS7 SERIES ISO 1 MANIFOLDS



Symbol \ n	1	2	3	4	5	6	7	8	9	10	Equation
L1	107	150	193	236	279	322	365	408	451	494	$L1=43n+64$
L2	119	162	205	248	291	334	377	420	463	506	$L2=43n+76$

DIMENSIONS

VS7 SERIES ISO 2 MANIFOLDS



Size	Symbol n	1	2	3	4	5	6	7	8	9	10	Equation
$\frac{1}{2}''$	L1	120	176	232	288	344	400	456	512	568	624	L1=56n+64
	L2	136	192	248	304	360	416	472	528	584	640	L1=56n+80
$\frac{3}{8}''$	L1	146	202	258	314	370	426	482	538	594	650	L1=56n+90
	L2	162	218	274	330	386	442	498	554	610	666	L2=56n+106

ACCESSORIES

VS7 SERIES ISO 1 MANIFOLDS

AXT502-9A	Blanking Plate
AXT502-17A	Air Release A plate
VAW-A	Filter Regulator Unit
AXT502-14	Gallery Isolating Seal
VV72-V-1	Adaptor Plate ISO2 to ISO1

STOCKED PRODUCTS

FOR A LIST OF STOCKED PRODUCTS,
PLEASE SEE THE CURRENT SMC PRICE LIST

ACCESSORIES

VS7 SERIES ISO 2 MANIFOLDS

AXT512-9ABlanking Plate
AXT512-17AAir Release A plate
AXT512-14-1AGallery Isolating Seal (Pressure Port)
AXT512-14-2AGallery Isolating Seal (Exhaust Port)

STOCKED PRODUCTS

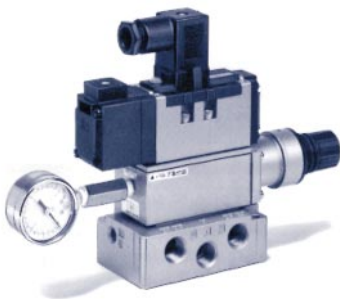
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INTERFACE REGULATOR

ISO SERIES VALVES

- ✓ Sub base or manifold mounting
- ✓ ISO 1 and ISO2 types available
- ✓ Regulated port options



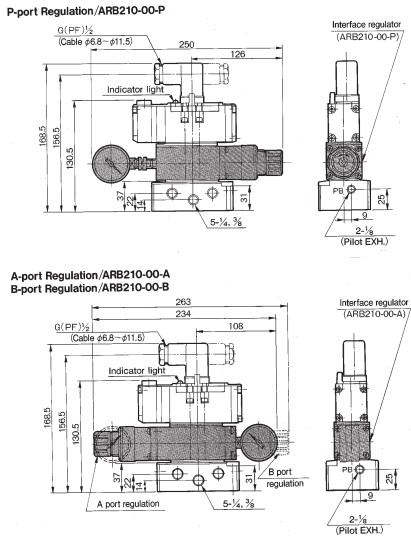
TECHNICAL

SPECIFICATIONS

ISO Valve Interface Regulators	
Max. working pressure	1.0MPa {10.2Kgf/cm ² }
Proof pressure	1.5MPa {15.3Kgf/cm ² }
Gauge port size	Rc(PT) 1/8"
Ambient & fluid temperature	5~60°C
Set pressure range	0.1~0.83MPa {1.0~8.5Kgf/cm ² }

DIMENSIONS

SERIES ARB2•



HOW TO

ORDER

ARB SERIES

ARB 10 — 00 —

VALVE SIZE

2ISO 1

3ISO 2

REGULATED PORT

AA port regulated

BB port regulated

PP port regulated

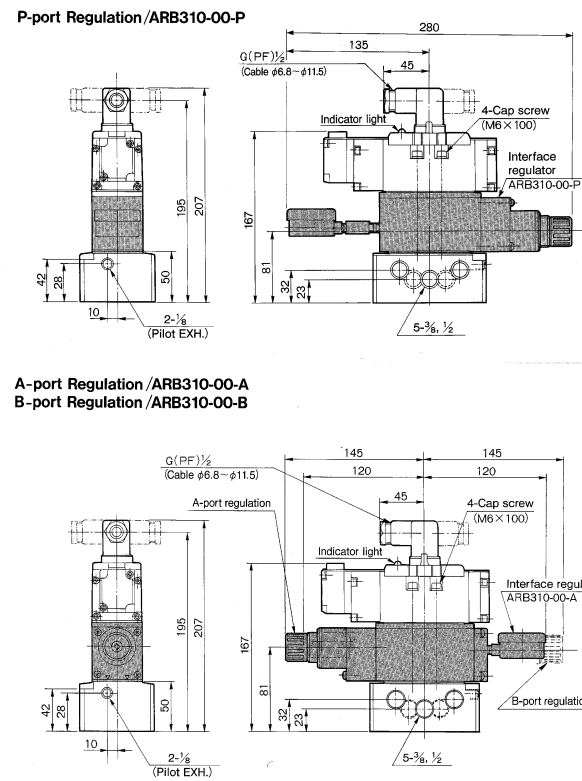
STOCKED PRODUCTS

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DIMENSIONS

SERIES ARB3•



SYMBOLS

