

Pilot type solenoid valves

Solenoid Valves 430, 630, 830 Series

Compact Design

Clean lines due to a compact body, and the lead wires connecting to the terminal block on the sub-base or manifold enable collective wiring for simplified wiring work. A design that fits well with compact units.

Quick Installation and Removal of Valves

A simple plug-in wiring system is used for connections between a solenoid valve and its sub-base, and solenoid valves and a manifold base. Valves can be replaced without disturbing wiring or piping.

Safe Wiring

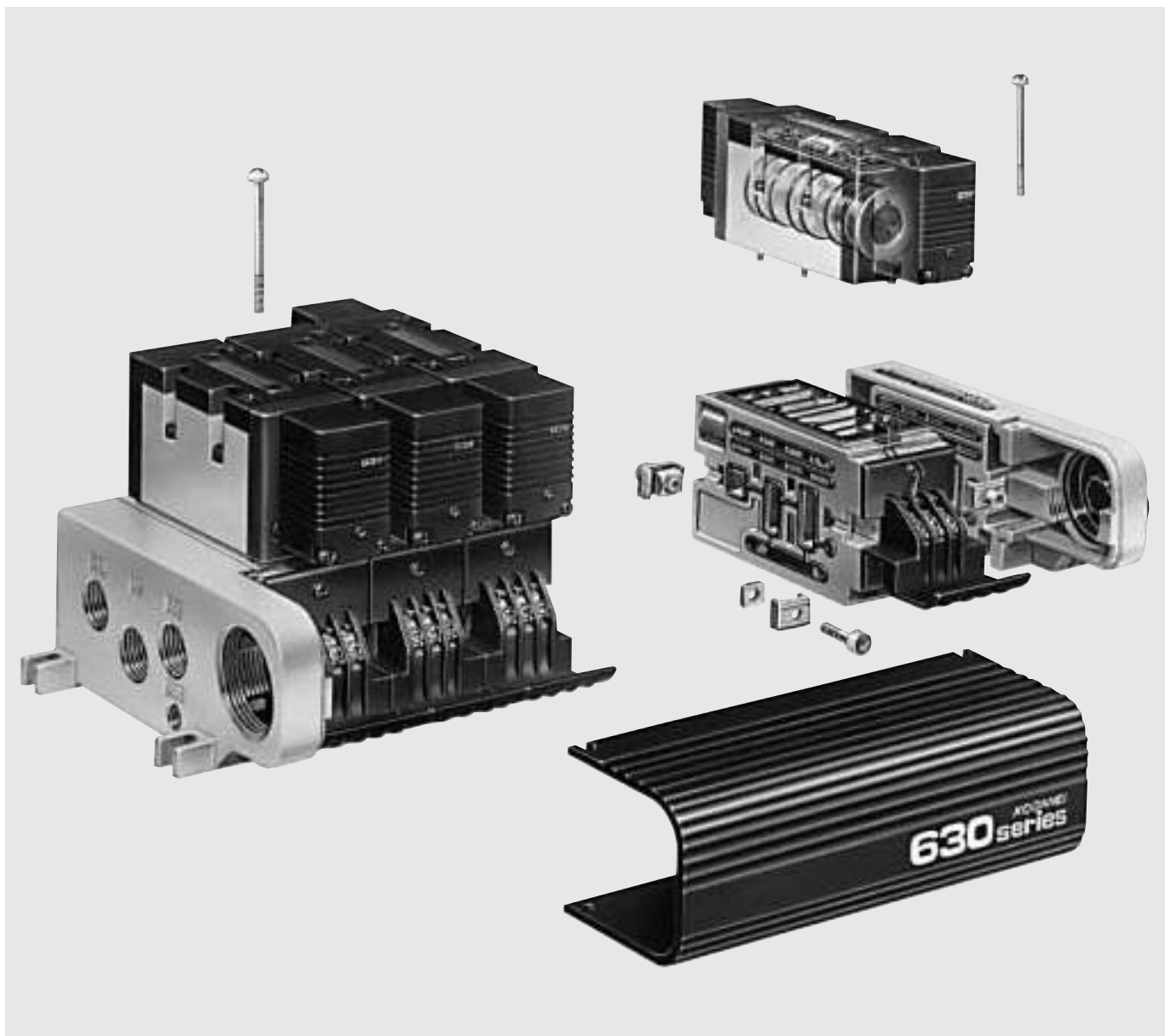
Bridge diodes are used for the DC24V specification internal circuits. As with AC types, wiring can be performed without concern for polarity.

Non-Neutral Structure

Uses a non-neutral structure to eliminate unstable operation arisen during flow direction changes in large valves.

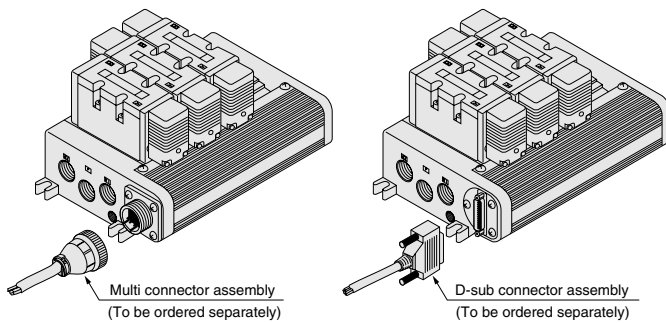
Long Life

Wear resistance of lip seals is improved for further durability.



Saves on Wiring (430, 630 series only)

Comes with multi-connector system for collective electrical wiring, or with rational and compatible D-sub connector. Both types include pre-wired common systems to save time in wiring work.



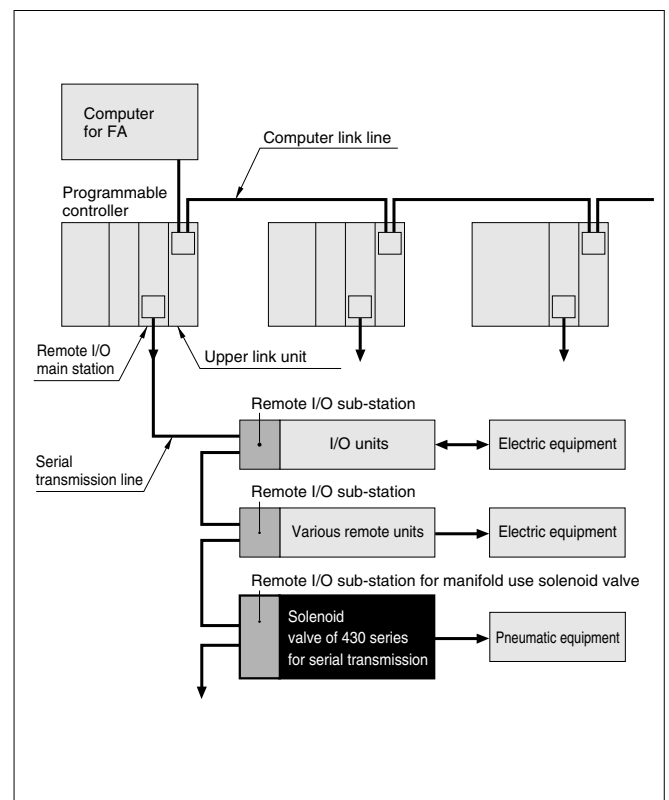
Easy Increase or Decrease of Manifold Units (430, 630 series only)

Since the manifold base is structurally independent from solenoid valves, increase or decrease of units is simple. It is also possible to stock the manifold bases as a single unit. Use of port isolators enables the supply of 2 different pressures on a single manifold.

Conforming Serial Transmission Systems

(430 series only)

Greatly reduces manhours required for wiring, and achieves cost reduction considering all factors in a pneumatic control system through prevention of wrong wiring, offering easier maintenance, etc.



SOLENOID VALVES 430, 630, 830 SERIES

Individual Wiring Manifold

(430, 630 series only)

Individual wiring is in each station. Comes with grommet terminal, conduit terminal and DIN connector. Select the choice of the wiring type.

Bottom Piping (made to order)

Depending on the installation requirements, piping direction can be selected from either the side or bottom surface.

External Pilot (made to order)

Offers stable switching from low to high pressure (0~0.9MPa {0~9.2kgf/cm²} [0~131psi.]).

Solenoid valves 430 series

- 5-port, 2-, 3-position
- Effective area
 - 2-position type : 40mm²/35mm² [Cv : 2.2/1.9]
 - 3-position type : 35mm²/30mm² [Cv : 1.9/1.7]
- Applicable cylinder bore sizes :
 - φ 50 [1.969in.] ~ φ 125 [4.921in.]

Manifold

A type (all ports) manifold



430M

Sub-base

5-port, 2-position
single solenoid



430-4E1

5-port, 2-position
double solenoid



430-4E2

5-port, 3-position
double solenoid



433-4E2

Solenoid valves 630 series

- 5-port, 2-, 3-position
- Effective area
 - 2-position type : 60mm²/55mm² [Cv : 3.3/3.1]
 - 3-position type : 50mm²/45mm² [Cv : 2.8/2.5]
- Applicable cylinder bore sizes :
 - φ 100 [3.937in.] ~ φ 180 [7.087in.]

Manifold

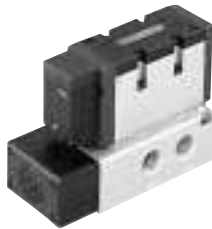
A type (all ports) manifold



630M

Sub-base

5-port, 2-position
single solenoid



630-4E1

5-port, 2-position
double solenoid



630-4E2

5-port, 3-position
double solenoid



633-4E2

Solenoid valves 830 series

- 5-port, 2-, 3-position
- Effective area
 - 2-position type : 120mm²/100mm² [Cv : 6.7/5.6]
 - 3-position type : 120mm²/100mm² [Cv : 6.7/5.6]
- Applicable cylinder bore sizes :
 - φ 125 [4.921in.] ~ φ 300 [11.811in.]

Sub-base

5-port, 2-position
single solenoid



830-4E1

5-port, 2-position
double solenoid



830-4E2

5-port, 3-position
double solenoid



833-4E2

Operating Principles ● The operating principles below are for the 630 series.

Energized state		Solenoid OFF		Solenoid ON							
Basic model		Solenoid 14(SA) OFF		Solenoid 12(SB) OFF		Solenoid 14(SA) ON		Solenoid 12(SB) ON			
2-position	5-port single solenoid	Solenoid OFF		Solenoid ON		Solenoid OFF		Solenoid ON			
2-position	5-port double solenoid	(De-energized condition after energizing solenoid SB)		Solenoid 14(SA) ON		Solenoid 14(SA) OFF		Solenoid 12(SB) ON			
		5-port Closed center		5-port Exhaust center		5-port Pressure center		5-port Closed center		5-port Exhaust center	

SOLENOID VALVES 430, 630, 830 SERIES

SOLENOID VALVES

430 SERIES

Basic Models and Valve Functions

Basic model	430-4E1	430-4E2	433-4E2
Item			
Number of positions	2 positions		3 positions
Number of ports	5 ports		
Valve function	—	—	Closed center (standard) Exhaust center (optional) Pressure center (optional)

Remark: For optional specifications and order codes, see p.731~733.

Specifications

Basic model	430-4E1	430-4E2	433-4E2
Media	Air		
Operation type	Pilot type		
Effective area ^{Note 1} mm ² [Cv]	Port size ^{Note 2} Rc3/8	40 [2.2]	35 [1.9]
	Rc1/4	35 [1.9]	30 [1.7]
Lubrication	Not required		
Operating pressure range MPa {kgf/cm ² } [psi.]	0.2~0.9 [2.0~9.2] [29~131]	0.1~0.9 [1.0~9.2] [15~131]	0.2~0.9 [2.0~9.2] [29~131]
Proof pressure MPa {kgf/cm ² } [psi.]	1.35 {13.8} [196]		
Response time ^{Note 3} ms	DC24V	25/25 or below	20/20 or below
ON/OFF	AC100V, AC200V	20/30 or below	15/15 or below
Maximum operating frequency	Hz	5	
Minimum time to energize for self holding	ms	—	50
Operating temperature range (atmosphere and media) °C [°F]	5~50 [41~122]		
Shock resistance	m/s ² [G]	294 [30]	
Mounting direction	Any		

Notes: 1. For details, see the effective area on p.730.

2. For details, see the port size on p.730.

3. Values when the air pressure is 0.5MPa {5.1kgf/cm²} [73psi.]. The values for **430-4E2** are when switching from the opposite position, and for **433-4E2** are those of closed center, when switching from the neutral valve position.

Solenoid Specifications

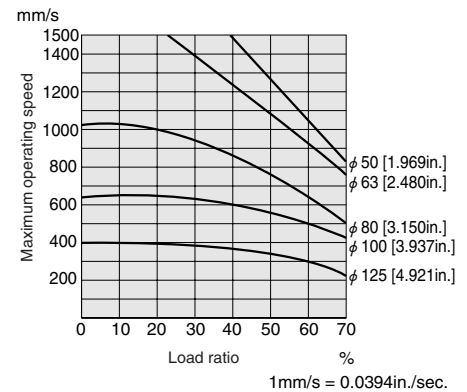
Rated voltage	DC24V	AC100V	AC200V
Item			
Operating voltage range	V	21.6~26.4 (24±10%)	90~110 (100±10%)
Rated frequency	Hz	—	50 60
Current (when rated voltage is applied)	Starting	—	68 58
	Energizing	72	42 32
Power consumption	W	1.7	—
Allowable leakage current	mA	4	6
Insulation resistance ^{Note}	MΩ	Over 100	
Color of LED indicator		Red	Yellow
Surge suppression (as standard)		Surge absorption transistor	Varistor

Note: Value at DC500V megger.

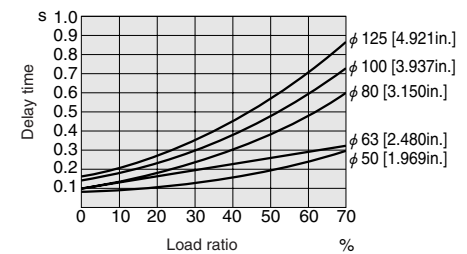
Cylinder Operating Speed

430-4E1-263

Maximum operating speed

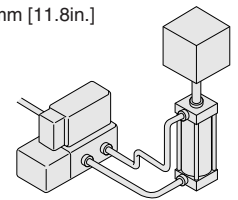


Delay time

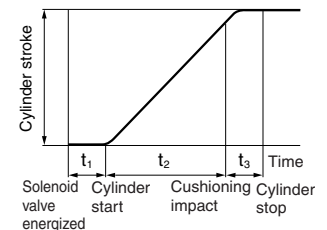


Measurement conditions

- Air pressure: 0.5MPa {5.1kgf/cm²} [73psi.]
- Piping inner diameter and length: φ7.5×1000mm [39in.]
- Fitting: Quick fitting (Model: TS10-03)
- Load ratio = $\frac{\text{Load}}{\text{Cylinder theoretical thrust}}$ (%)
- Cylinder stroke: 300mm [11.8in.]



How to obtain cylinder speed



t = Time required for the cylinder to complete 1 stroke

t₁ = Cylinder delay time

t₂ = Time moving at maximum speed

t₃ = Time required for cushioning (about 0.2s)

● Without cushion

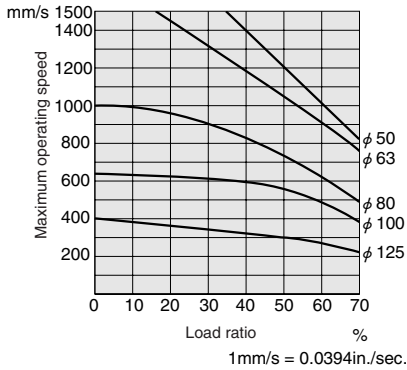
t = t₁+t₂

● With cushion

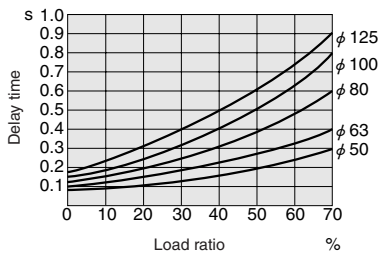
t = t₁+t₂+t₃

433-4E2-263

Maximum operating speed

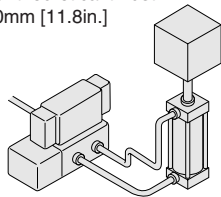


Delay time



Measurement conditions

- Air pressure: 0.5MPa {5.1kgf/cm²} [73psi.]
- Piping inner diameter and length: φ 7.5×1000mm [39in.]
- Fitting: Quick fitting (Model: TS10-03)
- Load ratio = $\frac{\text{Load}}{\text{Cylinder theoretical thrust}} (\%)$
- Cylinder stroke: 300mm [11.8in.]



Effective Area [Cv]

Model	Port size	Standard mm ² Note 1	Effective area mm ² Note 2	Fitting size
430-4E1 430-4E2	Rc3/8	40 (2.22)	34 [1.9]	TS 12-03
			30 [1.7]	TS 10-03
			22 [1.2]	TS 8-03
	Rc1/4	35 (1.94)	30 [1.7]	TS 12-02
			29 [1.6]	TS 10-02
			22 [1.2]	TS 8-02
433-4E2	Rc3/8	35 (1.94)	29 [1.6]	TS 12-03
			25 [1.4]	TS 10-03
			19 [1.1]	TS 8-03
	Rc1/4	30 (1.66)	26 [1.4]	TS 12-02
			25 [1.4]	TS 10-02
			19 [1.1]	TS 8-02

Notes: 1. Values for single valve unit.
2. Values when fittings are attached on 1(P), 4(A), and 2(B) ports. Fitting size is as shown in the table above.

Solenoid Valve Port Size

Model	Port specification	Sub-base port size
430-4E□-263 433-4E2-263	1 (P)	Rc 3/8
	4 (A), 2 (B)	
	3 (R2), 5 (R1)	
	PR	
430-4E□-262 433-4E2-262	1 (P)	Rc 1/4
	4 (A), 2 (B)	
	3 (R2), 5 (R1)	
	PR	

Manifold Connection Port Size

Manifold model	Port	Piping size
430M□A	1 (P)	Rc 1/2
	4 (A), 2 (B)	Rc 3/8
	3 (R2), 5 (R1)	Rc 1/2
	PR	Rc 1/8

Solenoid Valve Mass g [oz.]

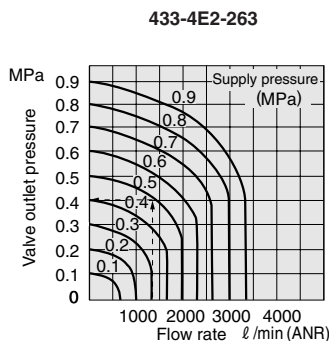
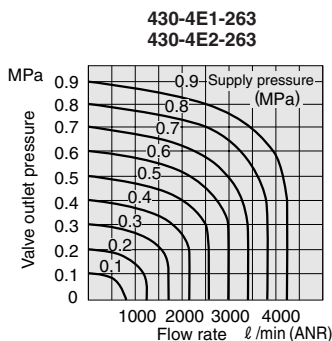
Basic model	Mass
430-4E1	390 [13.76] (800 [28.22])
430-4E2	490 [17.28] (900 [31.75])
433-4E2	540 [19.05] (950 [33.51])

Remark: Figures in parentheses () are the mass with sub-base.

Manifold Mass g [oz.]

Manifold model	Mass calculation of each unit (n=Number of units)	Block-off plate (Model: 430M-BP)
430M□A	(430×n)+830 [(15.17×n)+29.28]	100 [3.53]
430M□AT	(430×n)+630 [(15.17×n)+22.22]	
430M□ASR 430M□ASL	(430×n)+2000 [(15.17×n)+70.55]	

Flow Rate



1Mpa = 145psi., 1 l /min = 0.0353ft³/min.

How to read the graph

When the supply pressure is 0.5MPa [73psi.] and the flow rate is 1300 l /min [45.9ft³/min.] (ANR), the valve outlet pressure becomes 0.4MPa [58psi.].

430 Series Solenoid Valve Order Codes

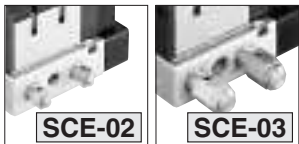


		3-position valve Valve function	Sub-base	Manual override	Wiring type
		Closed center Blank	Port size Rc1/4, side piping -262	Non-locking type Manual override Blank	Grommet type Blank
		Exhaust center -13	Port size Rc3/8, side piping -263	Locking type Manual lever override -84	Conduit type -37
		Pressure center -14	Port size Rc1/4, bottom piping (made to order) -282		DIN connector -39
			Port size Rc3/8, bottom piping (made to order) -283		
			●When ordering single valve units, omit this code from the order code. The single valve unit includes 4 mounting screws and 1 gasket.		
		Basic model			Voltage
Internal pilot sub-base	5-port, 2-position single solenoid	430-4E1	-262	-84	DC24V AC100V AC200V
	5-port, 2-position double solenoid	430-4E2	-263		
	5-port, 3-position double solenoid	433-4E2	-13, -14	-84	
External pilot sub-base (made to order)	5-port, 2-position single solenoid	432-4E1	-282	-84	-37 -39
	5-port, 2-position double solenoid	432-4E2	-283		

For made to order details, see p.759.

Additional Parts (To be ordered separately)

Speed controller



●For Rc1/4

●For Rc3/8

Muffler



●For Rc1/4

●For Rc3/8

Block-off plate



SOLENOID VALVES

630 SERIES

Basic Models and Valve Functions

Basic model	630-4E1	630-4E2	633-4E2
Item			
Number of positions	2 positions		3 positions
Number of ports	5 ports		
Valve function	—	—	Closed center (standard) Exhaust center (optional) Pressure center (optional)

Remark: For optional specifications and order codes, see p.743~745.

Specifications

Basic model	630-4E1	630-4E2	633-4E2		
Media	Air				
Operation type	Pilot type				
Effective area ^{Note 1} [Cv]	Port size ^{Note 2}	Rc1/2	60 [3.3]	50 [2.8]	
		Rc3/8	55 [3.1]	45 [2.5]	
Lubrication	Not required				
Operating pressure range	MPa {kgf/cm ² } [psi.]	0.2~0.9 [2.0~9.2] [29~131]	0.1~0.9 [1.0~9.2] [15~131]	0.2~0.9 [2.0~9.2] [29~131]	
Proof pressure	MPa {kgf/cm ² } [psi.]	1.35 {13.8} [196]			
Response time ^{Note 3}	ms	DC24V	25/45 or below	20/20 or below	25/40 or below
ON/OFF		AC100V, AC200V	20/45 or below	15/15 or below	20/40 or below
Maximum operating frequency	Hz	5			
Minimum time to energize for self holding	ms	—	50	—	
Operating temperature range (atmosphere and media)	°C [°F]	5~50 [41~122]			
Shock resistance	m/s ² [G]	294 [30]			
Mounting direction		Any			

Notes: 1. For details, see the effective area on p.742.

2. For details, see the port size on p.742.

3. Values when the air pressure is 0.5MPa {5.1kgf/cm²} [73psi.]. The values for 630-4E2 are when switching from the opposite position, and for 633-4E2 are those of closed center, when switching from the neutral position.

Solenoid Specifications

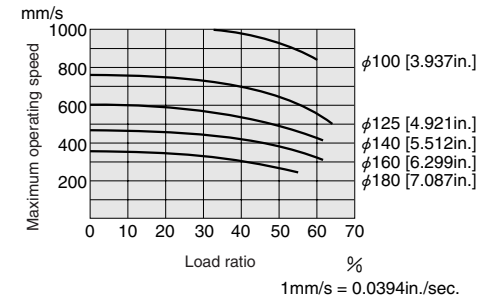
Rated voltage	DC24V	AC100V	AC200V				
Item							
Operating voltage range	V	21.6~26.4 (24±10%)	90~110 (100±10%)	180~220 (200±10%)			
Rated frequency	Hz	—	50	60			
Current (when rated voltage is applied)	mA (r.m.s)	Starting	68	58	34	27	
		Energizing	72	42	32	21	16
Power consumption	W	1.7	—	—			
Allowable leakage current	mA	4	6	3			
Insulation resistance ^{Note}	MΩ	Over 100					
Color of LED indicator		Red	Yellow	Green			
Surge suppression (as standard)		Surge absorption transistor	Varistor				

Note: Value at DC500V megger.

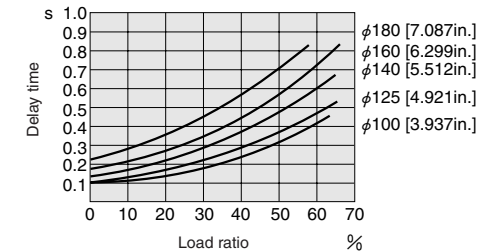
Cylinder Operating Speed

630-4E1-263

Maximum operating speed

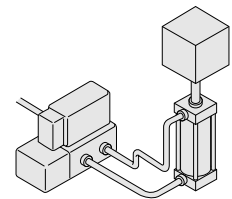


Delay time

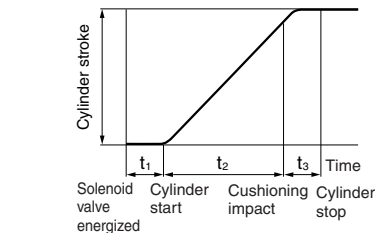


Measurement conditions

- Air pressure: 0.5MPa {5.1kgf/cm²} [73psi.]
- Piping inner diameter and length: φ7.5×1000mm [39in.]
- Fitting: Quick fitting (Model: TS10-04)
- Load ratio = $\frac{\text{Load}}{\text{Cylinder theoretical thrust}}$ (%)
- Cylinder stroke: 300mm [11.8in.]



How to obtain cylinder speed



t = Time required for the cylinder to complete 1 stroke

t₁ = Cylinder delay time

t₂ = Time moving at maximum speed

t₃ = Time required for cushioning (about 0.2s)

● Without cushion

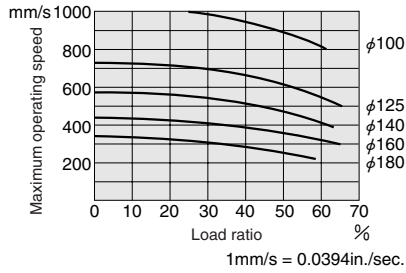
t = t₁ + t₂

● With cushion

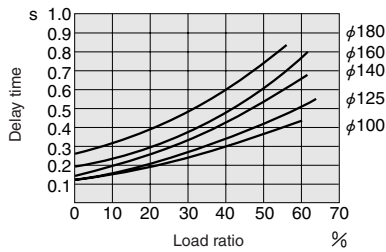
t = t₁ + t₂ + t₃

633-4E2-263

Maximum operating speed

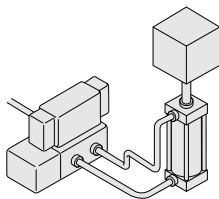


Delay time



Measurement conditions

- Air pressure: 0.5MPa {5.1kgf/cm²} [73psi.]
- Piping inner diameter and length: φ 7.5×1000mm [39in.]
- Fitting: Quick fitting (Model: TS10-04)
- Load ratio = $\frac{\text{Load}}{\text{Cylinder theoretical thrust}}$ (%)
- Cylinder stroke: 300mm [11.8in.]



Effective Area [Cv]

Model	Port size	Standard mm ² Note 1	Effective area mm ² Note 2	Fitting size
630-4E1 630-4E2	Rc1/2	60 (3.33)	53 [2.9]	TS 12-04
			38 [2.1]	TS 10-04
	Rc3/8	55 (3.05)	52 [2.9]	TS 12-03
			36 [2.0]	TS 10-03
633-4E2	Rc1/2	50 (2.77)	42 [2.3]	TS 12-04
			27 [1.5]	TS 10-04
	Rc3/8	45 (2.5)	38 [2.1]	TS 12-03
			27 [1.5]	TS 10-03
			17 [0.9]	TS 8-03

Notes: 1. Values for a single valve unit.

2. Values when fittings are attached on 1(P), 4(A), and 2(B) ports. Fitting size is as shown in the table above.

Solenoid Valve Port Size

Model	Port specification	Sub-base port size
630-4E□-264 633-4E2-264	1 (P)	Female thread Rc 1/2
	4 (A), 2 (B)	
	3 (R2), 5 (R1)	
	PR	
630-4E□-263 633-4E2-263	1 (P)	Female thread Rc 3/8
	4 (A), 2 (B)	
	3 (R2), 5 (R1)	
	PR	
		Rc 1/8
		Rc 1/8

Manifold Connection Port Size

Manifold model	Port	Piping size
630M□A	1 (P)	Rc1/2
	4 (A), 2 (B)	
	3 (R2), 5 (R1)	
	PR	
		Rc1/8

Solenoid Valve Mass g [oz.]

Basic model	Mass
630-4E1	490 [17.28] (1070 [37.74])
630-4E2	610 [21.52] (1190 [41.98])
633-4E2	590 [20.81] (1170 [41.27])

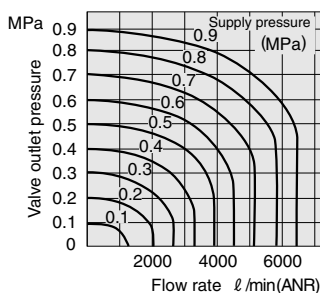
Remark: Figures in parentheses () are the mass with sub-base.

Manifold Mass g [oz.]

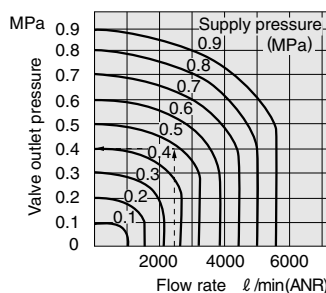
Manifold model	Mass calculation of each unit (n=Number of units)	Block-off plate (Model: 630M-BP)
630M□A	(590×n)+1040 [(20.81×n)+36.68]	130 [4.59]
630M□AT	(650×n)+830 [(22.93×n)+29.28]	

Flow Rate

630-4E1-263
630-4E2-263



633-4E2-263



1MPa = 145psi., 1 l / min = 0.0353ft.³/min.

How to read the graph

When the supply pressure is 0.5MPa [73psi.] and the flow rate is 2420 l / min [85.4ft.³/min.] (ANR), the valve outlet pressure becomes 0.4MPa [58psi.].

630 Series Solenoid Valve Order Codes



		3-position valve Valve function	Sub-base	Manual override	Wiring type	
		Closed center Blank	Port size Rc3/8, side piping -263	Non-locking type Manual override Blank	Grommet type Blank	
		Exhaust center -13	Port size Rc1/2, side piping -264	Locking type Manual lever override -84	Conduit type -37	
		Pressure center -14	Port size Rc3/8, bottom piping (made to order) -283		DIN connector -39	
			Port size Rc1/2, bottom piping (made to order) -284			
			● When ordering single valve units, omit this code from the order code. The single valve includes 4 mounting screws and 1 gasket.			
		Basic model			Voltage	
Internal pilot sub-base	5-port, 2-position single solenoid	630-4E1	-263 -264	-84	-37 -39	DC24V AC100V AC200V
	5-port, 2-position double solenoid	630-4E2				
	5-port, 3-position double solenoid	633-4E2		-13, -14		
External pilot sub-base (made to order)	5-port, 2-position single solenoid	632-4E1	-283	-84		
	5-port, 2-position double solenoid	632-4E2	-284			

For made to order details, see p.759.

Additional Parts (To be ordered separately)

Speed controller



●For Rc3/8

●For Rc1/2

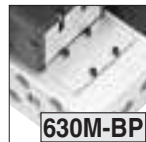
Muffler



●For Rc3/8

●For Rc1/2

Block-off plate



SOLENOID VALVES

830 SERIES

Basic Models and Valve Functions

Basic model	830-4E1	830-4E2	833-4E2
Item			
Number of positions	2 positions		3 positions
Number of ports	5 ports		
Valve function	—	—	Closed center (standard) Exhaust center (optional) Pressure center (optional)

Remark: For optional specifications and order codes, see p.755.

Specifications

Basic model	830-4E1	830-4E2	833-4E2
Media	Air		
Operation type	Pilot type		
Effective area ^{Note 1} mm ² [Cv]	Port size ^{Note 2} Rc3/4 Rc1/2	120 [6.7]	100 [5.6]
Lubrication	Not required		
Operating pressure range MPa {kgf/cm ² } [psi.]	0.2~0.9 [2.0~9.2] [29~131]	0.1~0.9 [1.0~9.2] [15~131]	0.2~0.9 [2.0~9.2] [29~131]
Proof pressure MPa {kgf/cm ² } [psi.]	1.35 {13.8} [196]		
Response time ^{Note 3} ms	DC24V AC100V, AC200V	30/60 or below 25/75 or below	20/20 or below 25/80 or below
Maximum operating frequency	Hz 5		
Minimum time to energize for self holding	ms — 50 —		
Operating temperature range (atmosphere and media) °C [°F]	5~50 [41~122]		
Shock resistance	m/s ² {G} 294 {30}		
Mounting direction	Any		

Notes: 1. For details, see the effective area on p.754.

2. For details, see the port size on p. 754.

3. Values when the air pressure is 0.5MPa {5.1kgf/cm²} [73psi.]. The values for **830-4E2** are when switching from the opposite position, and for **833-4E2** are those of closed center, when switching from the neutral position.

Solenoid Specifications

Rated voltage	DC24V	AC100V	AC200V
Item			
Operating voltage range	V 21.6~26.4 (24±10%)	90~110 (100±10%)	180~220 (200±10%)
Rated frequency	Hz —	50 60	50 60
Current (When rated voltage is applied) mA (r.m.s)	Starting Energizing	68 42	58 32
Power consumption	W 1.7	—	—
Allowable leakage current	mA 4	6	3
Insulation resistance ^{Note}	MΩ Over 100		
Color of LED indicator	Red	Yellow	Green
Surge suppression (as standard)	Surge absorption transistor	Varistor	

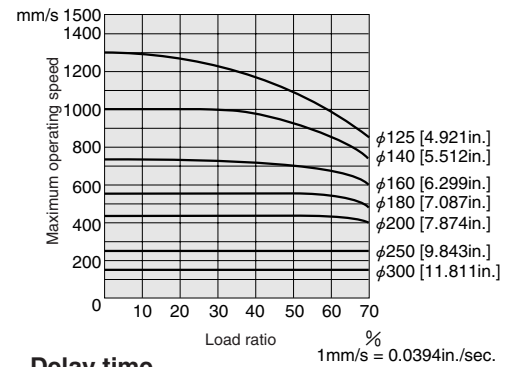
Note: Value at DC500V megger.

Cylinder Operating Speed

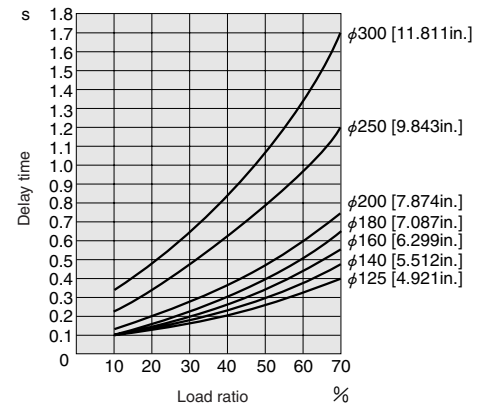
● For tube piping

830-4E□-264
833-4E2-264

Maximum operating speed

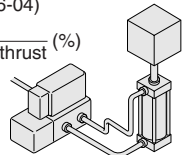


Delay time

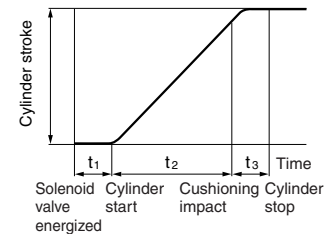


Measurement conditions

- Air pressure: 0.5MPa {5.1kgf/cm²} [73psi.]
- Piping inner diameter and length: φ13×1000mm [39in.]
- Fitting: Quick fitting (Model: TS16-04)
- Load ratio = $\frac{\text{Load}}{\text{Cylinder theoretical thrust}} (\%)$
- Cylinder stroke: 300mm [11.8in.]



How to obtain cylinder speed



t = Time required for the cylinder to complete 1 stroke

t₁ = Cylinder delay time

t₂ = Time moving at maximum speed

t₃ = Time required for cushioning (about 0.2s)

● Without cushion

t = t₁ + t₂

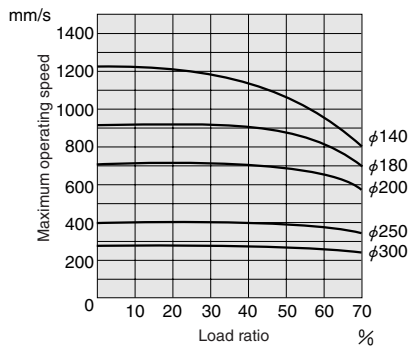
● With cushion

t = t₁ + t₂ + t₃

● For steel piping

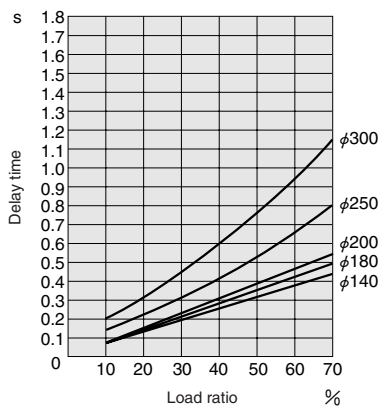
830-4E□-266
833-4E2-266

Maximum operating speed



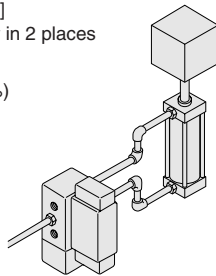
Delay time

1mm/s = 0.0394in./sec.



Measurement conditions

- Air pressure: 0.5MPa {5.1kgf/cm²} [73psi.]
- Piping length: 20A steel piping 2m, elbow in 2 places
- Fitting: R3/4 steel piping fitting
- Load ratio = $\frac{\text{Load}}{\text{Cylinder theoretical thrust}}$ (%)
- Cylinder stroke: 300mm [11.8in.]



Effective Area [Cv]

Model	Port size	Effective area mm ²				
		Standard (without fitting)	Tube piping		Steel piping	
			Inner diameter φ13×1m TS16-04 2 pcs.	Inner diameter φ13×2m TS16-04 2 pcs.	R3/4×2m Elbow 2 pcs.	R1/2×2m Elbow 2 pcs.
830-4E1 830-4E2	Rc3/4	120 [6.7]	72 [4.0]	68 [3.8]	105 [5.8]	77 [4.3]
833-4E2	Rc1/2	100 [5.6]	68 [3.8]	64 [3.6]	—	75 [4.2]

Solenoid Valve Port Size

Model	Port specification	Sub-base port size
830-4E□-266 833-4E2-266	1 (P)	Rc 3/4
	4 (A), 2 (B)	
	3 (R2), 5 (R1)	
	PR	
830-4E□-264 833-4E2-264	1 (P)	Rc 1/2
	4 (A), 2 (B)	
	3 (R2), 5 (R1)	
	PR	

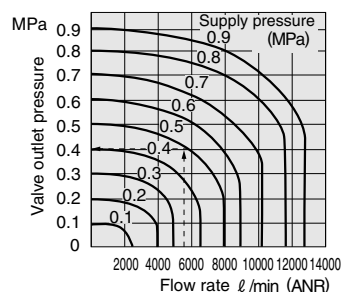
Solenoid Valve Mass g [oz.]

Basic model	Mass
830-4E1	760 [26.81] (1640 [57.85])
830-4E2	870 [30.69] (1760 [62.08])
833-4E2	850 [29.98] (1740 [61.38])

Remark: Figures in parentheses () are the mass with sub-base.

Flow Rate

830-4E1-266
830-4E2-266
833-4E2-266



1Mpa = 145psi., 1 l /min = 0.0353ft.³/min.

How to read the graph

When the supply pressure is 0.5MPa [73psi.] and the flow rate is 5800 l /min [205ft.³/min.] (ANR), the valve outlet pressure becomes 0.4MPa [58psi.].

830 Series Solenoid Valve Order Codes



		3-position valve Valve function	Sub-base	Manual override	Wiring type
		Closed center Blank	Port size Rc1/2, side piping -264	Non-locking type manual override Blank	Grommet type Blank
		Exhaust center -13	Port size Rc3/4, side piping -266		Conduit type -37
		Pressure center -14	Port size Rc1/2, bottom piping (made to order) -284		DIN connector -39
			Port size Rc3/4, bottom piping (made to order) -286		
			● When ordering single valve units, omit this code from the order code. The single valve includes 4 mounting screws and 1 gasket.		
	Basic model				Voltage
Sub-base	5-port, 2-position single solenoid	830-4E1	-264	-37 -39	DC24V AC100V AC200V
	5-port, 2-position double solenoid	830-4E2	-266 -284		
	5-port, 3-position double solenoid	833-4E2	-13, -14 -286		

For made to order details, see p.759.

Additional Parts (To be ordered separately)

Speed controller



● For Rc1/2

● For Rc3/4

Muffler



● For Rc1/2

● For Rc3/4