

# 2/2 Way Solenoid Valve

Series Brass Series, Direct Acting

## Features

1. Direct acting.
2. Quick response.
3. Timer for setting on/off time as optional accessory.
4. Ex-proof coil is available, please refer to page 5-9, 5-10.
5. Coil nut is available, please refer to page 5-1, 5-3.



## How to order

Brass	Diaphragm	Port size	Pressure	Thread	Voltage	Led	Ex-Proof coil
Direct acting	Blank:NBR V :VITON E :EPDM H :HNBR	01:1/8" 02:1/4" 03:3/8"	Blank:Standard 1:High pressure 2:Medium pressure <small>*High pressure &amp; Medium pressure are only available for PU220AR-01 &amp; PU220AR-02</small>	Blank:G N :NPT R :Rc	S1:110VAC S2:220VAC S6:24VAC S7:12VDC S9:24VDC	Blank:W/O LED L :W/I LED	Blank :DIN E1:EX-proof 22mm width E2:EX-proof 30mm width E3:EX-proof CSA standard E4:EX-proof 36mm width <small>PU220AR-03 is only available for E4 ex-proof coil.</small>

## Specifications

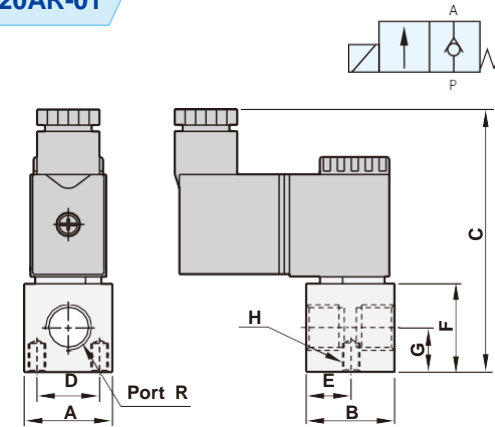
Model	PU220AR-01	PU220AR-011	PU220AR-012	PU220AR-02	PU220AR-021	PU220AR-022	PU220AR-03
Port size	1/8"			1/4"			3/8"
Fluid	Compressed air (light oil, water)						
Orifice	1.5mm	0.8mm	1.2mm	2.3mm	1.2mm	1.5mm	8.0mm
Effective area	1.8mm <sup>2</sup>			3.3mm <sup>2</sup>			20.64mm <sup>2</sup>
Acting	Direct acting						Assisted lift
Construction	Gasket						Diaphragm
Operating pressure range AC	0~8.5 kgf/cm <sup>2</sup>	0~20kgf/cm <sup>2</sup>	0~16kgf/cm <sup>2</sup>	0~8.5kgf/cm <sup>2</sup>	0~20kgf/cm <sup>2</sup>	0~16kgf/cm <sup>2</sup>	0~8.5kgf/cm <sup>2</sup>
Operating pressure range DC	0~7 kgf/cm <sup>2</sup>	0~13kgf/cm <sup>2</sup>	0~10kgf/cm <sup>2</sup>	0~7kgf/cm <sup>2</sup>	0~13kgf/cm <sup>2</sup>	0~10kgf/cm <sup>2</sup>	0~7kgf/cm <sup>2</sup>
Proof pressure	10 kgf/cm <sup>2</sup>						
Body material	Forged Brass						
Fluid temperature	-10°C ~ 90°C						
Ambient temperature	-10°C ~ 60°C						
Installation	Any direction (Horizontal is recommended)						
Duty cycle	100% ED						
Coil type	DIN						
Protection class	IP65 (DIN 40 050)						
Insulation class	F						
Voltage tolerance	±10%						
Standard voltage	220VAC, 110VAC, 24VDC, the other voltage is optional						
Power consumption	AC: 6.0VA, DC: 4.8W						AC110V:17.6VA, AC220V:18.1VA, DC: 15W
Net weight	175g			255g			510g

## Seal material selection guide

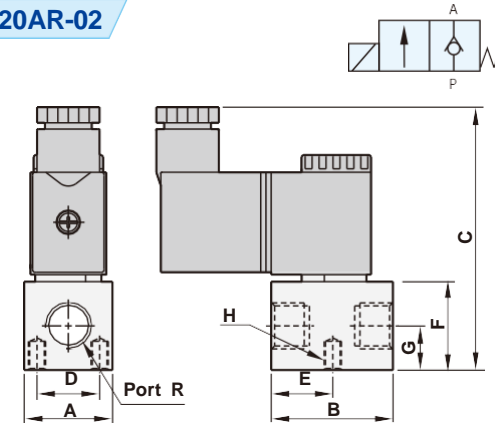
Seal	Temperature range	Suitable fluid	Unsuitable fluid
NBR	-15°C ~ 80°C	Air, Water, Neutral gases, Mineral oil	Fuel oil, Gasoline and Hi-test gasoline, Diesel fuel
HNBR	-40°C ~ 150°C	Air, Water, Gear oil, Engine oil	Pharmaceutical liquid, Gasoline and Hi-test gasoline, Light oil
VITON	-10°C ~ 180°C	Fuel oil, Gasoline and Hi-test gasoline, Diesel fuel	Hot water, Steam, Brake oil (ATE Blue)
EPDM	-5°C ~ 130°C	Hot water, Detergent liquid	Mineral oil, Gasoline

## Dimensions

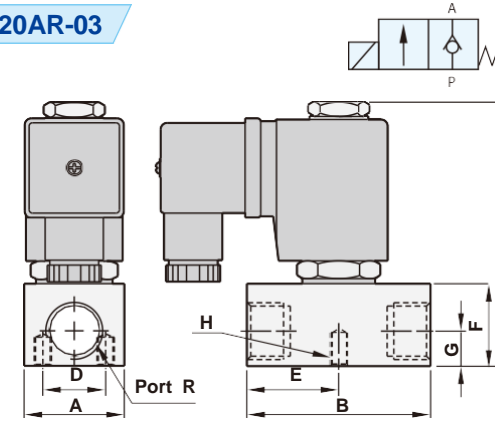
### PU220AR-01



### PU220AR-02

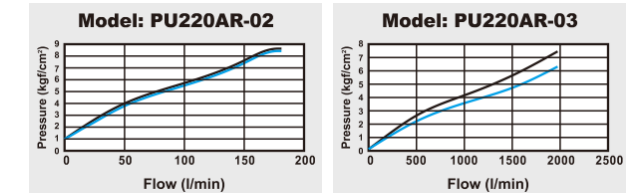


### PU220AR-03



Model	PU220AR-01	PU220AR-02	PU220AR-03
R	1/8"	1/4"	3/8"
A	22	25.4	30
B	22	35	55
C	72	75	79
D	15	18	18
E	11	17.5	27.5
F	22	25.4	25
G	7.5	12.7	11
H	M4xP0.7xL6.5	M5xP0.8xL7.0	M5xP0.8xL7.0

## Flow chart



## Explosion

