

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

### Specifications

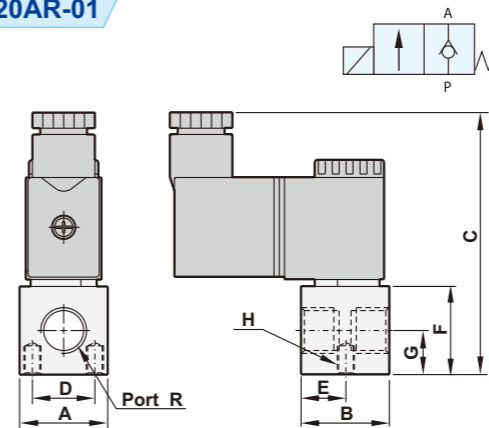
Model	PU220AR-01	PU220AR-011	PU220AR-012	PU220AR-02	PU220AR-021	PU220AR-022	PU220AR-03
Port size	1/8"			1/4"			3/8"
Fluid	Compressed air (light oil, water)						
Orifice	1.5mm	0.8mm	1.2mm	2.3mm	1.2mm	1.5mm	8.0mm
Effective area	1.8mm <sup>2</sup>			3.3mm <sup>2</sup>			20.64mm <sup>2</sup>
Acting	Direct 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

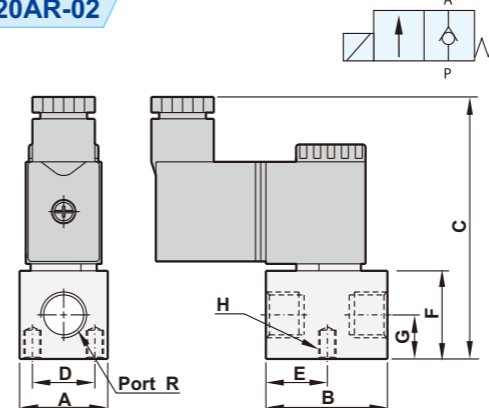
Seal	Temperature range	Suitable fluid	Unsuitable fluid
NBR	-15°C ~ 80°C	Air, Water, Neutral gases, Mineral oil	Fuel oil, Gasoline and Hi-test gasoline, Diesel fuel
HNBR	-40°C ~ 150°C	Air, Water, Gear oil, Engine oil	Pharmaceutical liquid, Gasoline and Hi-test gasoline, Light oil
VITON	-10°C ~ 180°C	Fuel 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

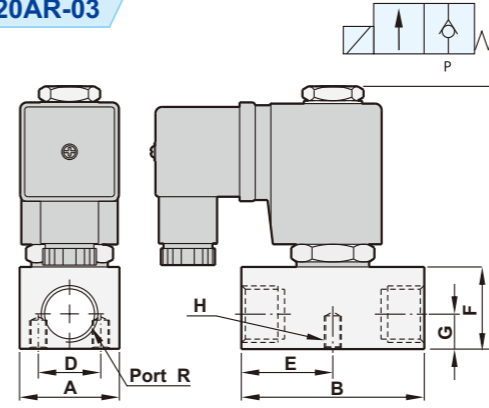
#### PU220AR-01



#### PU220AR-02

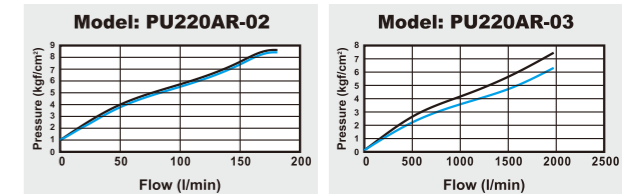


#### PU220AR-03



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

