

AIR UNITS

Production Program



HEAT TREATMENT
TECHNOLOGY



HIGH
PROTECTION



SELF-LOCKING
MECHANISM



EFFICIENT WATER
REMOVAL



REMOTE
MONITORING



DIVERSE
MODULARIZATION



NEW ENERGY
INDUSTRY



MEDICAL
INDUSTRY



TEXTILE
INDUSTRY



SEMICONDUCTOR
INDUSTRY



MACHINE
TOOL



FOOD
INDUSTRY



INDUSTRY
4.0



air treatment units pressure regulators



AR*

Pressure regulators

| Model | Port size | Operating pressure [MPa]/[bar] | Regulated pressure [MPa]/[bar] | Repeatability |
|-------|---------------|--------------------------------|--------------------------------|---------------|
| ARB20 | 1/8, 1/4 | 1/10 | 0.05±0.85/0.5±8.5 | - |
| ARE30 | 1/4, 3/8, 1/2 | 1/10 | 0.05±0.85/0.5±8.5 | - |
| ARG40 | 1/4, 3/8, 1/2 | 1/10 | 0.05±0.85/0.5±8.5 | - |
| ARH40 | 1/4, 3/8, 1/2 | 1.5/15 | 0.1±0.85/1±8.5 0.1±1.5/1±15 | - |
| ARM40 | 1/4, 3/8, 1/2 | 1/10 | 0.1±0.85/1±8.5 | - |
| ARP50 | 3/4, 1 | 1.5/15 | 0.05±0.85/0.5±8.5 | ±7% F.S. |
| ARQ90 | 1 1/2 | 2.1/21 | 0.09±0.86/0.9±8.6 | - |
| ARR90 | 2 | 3.1/31 | max 1.75/max 17.5 | - |

air treatment units lubricators



AL*

Lubricators

| Model | Port size | Max operating pressure [MPa]/[bar] | Lubricating oil capacity [cc] | Min flow for oil drip [l/min] | Max flow rate [l/min] |
|--------|---------------|------------------------------------|-------------------------------|-------------------------------|-----------------------|
| ALB20 | 1/8, 1/4 | 1/10 | 20 | 35, 50 | - |
| ALB20L | 1/8, 1/4 | 1/10 | 35 | 35, 50 | - |
| ALE30 | 1/4, 3/8, 1/2 | 1/10 | 65 | 50, 60, 60 | - |
| ALG40 | 1/4, 3/8, 1/2 | 1/10 | 200 | 100, 200, 400 | 400, 1300, 2500 |
| ALH40 | 1/4, 3/8, 1/2 | 1.5/15 | 200 | 30, 65, 80 | 1200, 2000, 2100 |
| ALM40 | 1/4, 3/8, 1/2 | 1/10 | 200 | 30, 65, 80 | - |
| ALP50 | 3/4, 1 | 1.5/15 | 200 | 25, 33 | - |
| ALQ90 | 1 1/2 | 1.75/17.5 | 1000 | 204 | 12000 |



High pressure regulators

| Model | Type | Port size | Max operating pressure [MPa]/[bar] | Regulated pressure [MPa]/[bar] |
|--------|---------------|-----------|------------------------------------|--------------------------------|
| ARS20 | Standard | 1/4 | 3.5/35 | 0±1/0±10 |
| ARS20H | High pressure | 1/4 | 3.5/35 | 0±2.7/0±27 |

air treatment units filters



AF*

Filters

| Model | Port size | Operating pressure [MPa]/[bar] | Drain capacity [cm ³] | Removal ratio [%] | Rated flow [l/min] | Filter element [µm] |
|--------|---------------|--------------------------------|-----------------------------------|-------------------|--------------------|---------------------|
| AFB20 | 1/8, 1/4 | 0.05±1/0.5±10 | 9.5 | - | - | 40, 5 |
| AFB20L | 1/8, 1/4 | 0.05±1/0.5±10 | 25 | - | - | 40, 5 |
| AFE30 | 1/4, 3/8, 1/2 | 0.05±1/0.5±10 | 35 | - | - | 5, 40 |
| AFG40 | 1/4, 3/8, 1/2 | 0.05±1/0.5±10 | 100 | - | 1500±2200 | 40, 5 |
| AFH40 | 1/4, 3/8, 1/2 | 0.05±1.5/0.5±15 | 70 | - | 1500±2500 | 40, 5 |
| AFM40 | 1/4, 3/8, 1/2 | 0.05±1/0.5±10 | 75 | - | - | 40, 5 |
| AFP50 | 3/4, 1 | 0.05±1.5/0.5±15 | 70, 75 | - | - | 40 |
| AFQ90 | 1 1/2 | 0.05±1.75/0.5±17.5 | - | 99 | 20000 | 50 |
| AFR90 | 2 | 0.05±1.75/0.5±17.5 | - | - | 63000 | 50 |

air treatment units air, mist, micro mist filters



AS*

Air, mist, micro mist filters

| Model | Port size | Operating pressure [MPa]/[bar] | Drain capacity [cm ³] | Filter element [µm] |
|--------|---------------|--------------------------------|-----------------------------------|---------------------|
| ASB20 | 1/8, 1/4 | 0.05±1/0.5±10 | 6.5 | 0.3, 0.01 |
| ASB20L | 1/8, 1/4 | 0.05±1/0.5±10 | 20 | 0.3, 0.01 |
| ASH40 | 1/4, 3/8, 1/2 | 0.05±1.5/0.5±15 | 70 | 5, 0.3, 0.01 |
| ASM40 | 1/4, 3/8, 1/2 | 0.05±1/0.5±10 | 75 | 5, 0.3, 0.01 |
| ASP50 | 3/4, 1 | 0.05±1/0.5±10 | 75, 70 | 0.3, 0.01 |

air treatment units water, air, mist and micro mist filters



AST - ASU - ASW - ASX - ASY

Water, air, mist and micro mist filters.

- Absorbing the odor and removing oil mist with an activated carbon element in compressed air.
- The filter can be applied to requirement of high purity and oil-free, such as precision painting operations or food and medical equipment.

| Model | Body size | Filter Type | Port size | Operating pressure [MPa]/[bar] | Nominal flow capacity [l/min (0.7 MPa)] | Removal rate [%] | Compatible with modular | Notes |
|-------|-----------|---------------------|-----------|--------------------------------|---|--------------------|-------------------------|---|
| AST | 25 | Water Separator | 1/4, 3/8 | 0.05±1/0.5±10 | 650 | 99±1 | A*H40, A*M40 | Separating the water droplet with a special filtration in the compressed air (cannot remove moisture) |
| | 35 | | 3/8, 1/2 | 0.05±1/0.5±10 | 1350 | 99±1 | | |
| | 45 | | 1/2, 3/4 | 0.05±1/0.5±10 | 2100 | 99±1 | | |
| | 55 | | 3/4, 1 | 0.05±1/0.5±10 | 3600 | 99±1 | | |
| ASU | 25 | Main line filter | 1/4, 3/8 | 0.05±1/0.5±10 | 650 | 3 | A*H40, A*M40 | |
| | 35 | | 3/8, 1/2 | 0.05±1/0.5±10 | 1350 | 3 | | |
| | 45 | | 1/2, 3/4 | 0.05±1/0.5±10 | 2100 | 3 | | |
| | 55 | | 3/4, 1 | 0.05±1/0.5±10 | 3600 | 3 | | |
| ASW | 25 | Mist filter | 1/4, 3/8 | 0.05±1/0.5±10 | 650 | 0.3 | A*H40, A*M40 | Assembling a ASW series as pre-filter to extend the life of activated carbon. |
| | 35 | | 3/8, 1/2 | 0.05±1/0.5±10 | 1350 | 0.3 | | |
| | 45 | | 1/2, 3/4 | 0.05±1/0.5±10 | 2100 | 0.3 | | |
| | 55 | | 3/4, 1 | 0.05±1/0.5±10 | 3600 | 0.3 | | |
| ASX | 25 | Micro mist filter | 1/4, 3/8 | 0.05±1/0.5±10 | 500 | 0.01 | A*H40, A*M40 | |
| | 35 | | 3/8, 1/2 | 0.05±1/0.5±10 | 1000 | 0.01 | | |
| | 45 | | 1/2, 3/4 | 0.05±1/0.5±10 | 2000 | 0.01 | | |
| | 55 | | 3/4, 1 | 0.05±1/0.5±10 | 3600 | 0.01 | | |
| ASY | 25 | Odor removal filter | 1/4, 3/8 | 0.05±1/0.5±10 | 500 | 0.01+Deodorization | A*H40, A*M40 | |
| | 35 | | 3/8, 1/2 | 0.05±1/0.5±10 | 1000 | 0.01+Deodorization | | |
| | 45 | | 1/2, 3/4 | 0.05±1/0.5±10 | 2000 | 0.01+Deodorization | | |
| | 55 | | 3/4, 1 | 0.05±1/0.5±10 | 3600 | 0.01+Deodorization | | |



air treatment units
f.r. units

AU*

F.R. units

| Model | Port size | Operating pressure [MPa]/[bar] | Drain capacity [cm ³] | Filter element [µm] |
|--------|---------------|--------------------------------|-----------------------------------|---------------------|
| AUB20 | 1/8, 1/4 | 0.05÷1/0.5÷10 | 9,5 | 40, 5 |
| AUB20L | 1/8, 1/4 | 0.05÷1/0.5÷10 | 25 | 40, 5 |
| AUE30 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 35 | 5, 40 |
| AUG40 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 100 | 40, 5 |
| AUH40 | 1/4, 3/8, 1/2 | 0.05÷1.5/0.5÷15 | 70 | 40, 5 |
| AUM40 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 75 | 40, 5 |
| AUP50 | 3/4, 1 | 0.05÷1.5/0.5÷15 | 70, 75 | 40 |

air treatment units
soft start-up valves



AW*

Start-up valves for low speed air supply to gradually raise initial pressure in an air system and for quick exhaust by cutting off air supply.

- Combination with modular type air units (F.R.L. unit).
- Adaptor possess smooth pressure relief is optional.

| Model | Port size | Operating pressure [MPa]/[bar] | Effective orifice [mm ²] | Voltage | Compatible with modular (F.R.L) |
|-------|-----------|--------------------------------|--------------------------------------|-------------------|---------------------------------|
| AWB20 | 1/4 | 0.25÷1/2.5÷10 | 1(P)→2(A): 20, 2(A)→3(R): 24 | AC110V/220V DC24V | - |
| AWD30 | 3/8 | 0.25÷1/2.5÷10 | 1(P)→2(A): 37, 2(A)→3(R): 49 | AC110V/220V DC24V | A'E30 |
| AWG40 | 1/2 | 0.25÷1/2.5÷10 | 1(P)→2(A): 61, 2(A)→3(R): 76 | AC110V/220V DC24V | A'H40 - A'M40 |



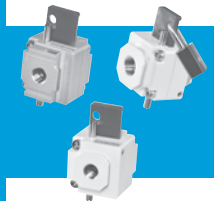
air treatment units
f.r.l. units

AP*

F.R.+L. units

| Model | Port size | Operating pressure [MPa]/[bar] | Lubricating oil capacity [cc] | Min. flow for oil drip [l/min] | Filter element [µm] |
|--------|---------------|--------------------------------|-------------------------------|--------------------------------|---------------------|
| APB20 | 1/8, 1/4 | 0.05÷1/0.5÷10 | 20 | 35, 50 | 40, 5 |
| APB20L | 1/8, 1/4 | 0.05÷1/0.5÷10 | 35 | 35, 50 | 40, 5 |
| APE30 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 65 | 50, 60, 60 | 5, 40 |
| APG40 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 200 | 100, 200, 400 | 40, 5 |
| APH40 | 1/4, 3/8, 1/2 | 0.05÷1.5/0.5÷15 | 200 | 30, 65, 80 | 40, 5 |
| APM40 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 200 | 30, 65, 80 | 40, 5 |
| APP50 | 3/4, 1 | 0.05÷1/0.5÷10 | 200 | 25, 33 | 40 |

air treatment units
shut-off valves



AJ*

Shut-off valves

| Model | Port size | Port/Position | Operating pressure [MPa]/[bar] | Model for F.R.L. |
|-------|---------------|---------------|--------------------------------|------------------|
| AJE30 | 1/4, 3/8, 1/2 | 2/2, 3/2 | 0÷1.5/0÷15 | A'E30 |
| AJG40 | 1/4, 3/8, 1/2 | 2/2, 3/2 | 0÷1.5/0÷15 | A'H40 - A'M40 |



AK*

Manual/Solenoid On-Off valves

| Model | Port size | Port/Position | Operating pressure [MPa]-[bar] | Voltage Solenoid Type | Model for F.R.L. |
|-------|---------------|---------------|--------------------------------|-----------------------------|------------------|
| AKE30 | 1/4, 3/8, 1/2 | 3/2 | 0.1÷1/1÷10 | AC110V/220V(50/60)Hz, DC24V | A'E30 |
| AKG40 | 1/4, 3/8, 1/2 | 3/2 | 0.1÷1/1÷10 | | A'H40 - A'M40 |



air treatment units
f.r.l. units

AT*

F.+R.+L. units

| Model | Port size | Operating pressure [MPa]/[bar] | Lubricating oil capacity [cc] | Min. flow for oil drip [l/min] | Filter element [µm] |
|--------|---------------|--------------------------------|-------------------------------|--------------------------------|---------------------|
| ATB20 | 1/8, 1/4 | 0.05÷1/0.5÷10 | 20 | 35, 50 | 40, 5 |
| ATB20L | 1/8, 1/4 | 0.05÷1/0.5÷10 | 35 | 35, 50 | 40, 5 |
| ATE30 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 65 | 50, 60, 60 | 5, 40 |
| ATG40 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 200 | 100, 200, 400 | 40, 5 |
| ATH40 | 1/4, 3/8, 1/2 | 0.05÷1.5/0.5÷15 | 200 | 30, 65, 80 | 40, 5 |
| ATM40 | 1/4, 3/8, 1/2 | 0.05÷1/0.5÷10 | 200 | 30, 65, 80 | 40, 5 |
| ATP50 | 3/4, 1 | 0.05÷1/0.5÷10 | 200 | 25, 33 | 40 |

air treatment units
precision regulators



AQ*

Precision regulators: can be used with mechanical or electronic digital pressure gauge.

- Convenient design, quick mounted bracket, can also be installed on the panel.

| Model | Port size | Max operating pressure [MPa]/[bar] | Regulated pressure [MPa]/[bar] | Repeatability [% F.S.] | Air consumption [l/min(ANR)F.S.] | Compatible with modular |
|-------|-------------------|------------------------------------|--------------------------------|------------------------|----------------------------------|-------------------------|
| AQA10 | 1/8 | 1/10 | 0.005÷0.8/0.05÷8 | ±0.5 | 4.4 | - |
| AQB20 | 1/4 | 1/10 | 0.005÷0.8/0.05÷8 | ±0.5 | 4.4 | A'E30 |
| AQD30 | 1/4 3/8 1/2 | 1/10 | 0.005÷0.8/0.05÷8 | ±0.5 | 11.5 | A'H40 A'M40 |



air treatment units
hand-held regulators

AND

Hand-held regulators with no convex shaft design, small size and high transportability.

- Anodized aluminium body for lightweight design (about 80g)
- The outlet pressure can be observed and adjusted through the scale of the knob. The lock mechanism can prevent rotation accidentally.
- The unique structure of adjustment knob enables the pressure regulation to be completed within one turning round.
- Outlet pressure can be directly exhausted by turning back the adjustment knob.



| Model | Port size | Max operating pressure [MPa]/[bar] | Regulated pressure [MPa]/[bar] | Proof pressure [MPa]/[bar] | Weight [g] |
|-------|-----------|------------------------------------|--------------------------------|----------------------------|------------|
| AND30 | 1/4 | 1.5/15 | 0.3-0.9/3-9 | 3.75/37.5 | 80 |

air treatment units
auto drainers

AD*

Auto drainers



| Model | Port size | Max operating pressure [MPa]/[bar] | Discharge per operation [cc] |
|-------|--|------------------------------------|---|
| ADG40 | 1/4, 3/8, 1/2 | 0.05-1/0.5-10 | - |
| ADH40 | 1/2 | 0.1-1.3/1-13 | - |
| ADL40 | 1/2 | 0.1-1.3/1-13 | - |
| ADN50 | 1/2 (Inlet), 3/8 (Outlet) | 0.13-1.3/1.3-13 | 60/ per on time. Max operation 25 times per minute. |
| ADP50 | 1/2 (Manual outlet) 3/8, 5/16 hose (Automatic outlet) | 0.05-1/0.5-10 | - |

air treatment units
high efficiency compressed air filters

AHA - AHB

Top quality pleated filters void 98% volume.

- **Filter media:** high performance borosilicate microfiber with 98% void volume. The pleated design assures the highest possible filtration area within the element geometry to provide low operating cost.
- **End cap:** an O-ring sealed alumina end cap for the highest possible operating temperature, together with tie rod construction, provides highest possible security against pressure spikes in the compressed air system.
- **Stainless steel support sleeves:** inner and outer SS support sleeves for supporting the filter media, including a mechanical pre-separation.



| Model | Port size | Operating pressure [MPa]/[bar] | Max capacity [Nm ³ /min] | Oil removal [mg/m ³] | Filter element [µm] |
|-------|--------------------|--------------------------------|-------------------------------------|----------------------------------|---------------------|
| AHA | 1/2-2 1/2 | 16/160 | 1.6-25 | 0.003-0.1 | 0.01, 1, 3 |
| AHB | 1/2-2 1/2, 3"-8"FL | 10/100 | 1.6-150 | 0.003-0.1 | 0.01, 1, 3 |

air treatment units
electro-pneumatic regulators

AE*

Electro-pneumatic regulators with stepless control of air pressure proportional to electrical signal.

- Simplify complex pipeline for controlling different pressure.
- Compatible with different modular.
- Pressure display unit MPa, kgf/cm², bar, psi, kPa.
- Achieve high precision pressure control with microcomputer PID.



| Model | Port size | Max operating pressure [MPa]/[bar] | Output pressure display [% F.S. ±1 digit] | Enclosure | Compatible with modular |
|-------|---------------|------------------------------------|---|-----------|-------------------------|
| AEB20 | 1/4, 3/8 | 1/10 | ±2 | IP65 | A'E30 |
| AED30 | 1/4, 3/8, 1/2 | 1/10 | ±2 | IP65 | A'H40 - A'M40 |

Communication type

| Model | Port size | Max operating pressure [MPa]/[bar] | Output pressure display [% F.S. ±1 digit] | Communication Protocol | Compatible with modular |
|-------|---------------|------------------------------------|---|------------------------|-------------------------|
| AEC20 | 1/4, 3/8 | 1/10 | ±2 | RS-232, RS-485 | A'E30 |
| AEF30 | 1/4, 3/8, 1/2 | 1/10 | ±2 | RS-232, RS-485 | A'H40 - A'M40 |

air treatment units
digital condensational removals with timer

AGA - AGB - AGC

Digital Condensation Removals with Timer are compact, modular timer valves combination specifically designed for air line condensation removal.

- Compatible with valves size to obtain an optimal system.
- Easily programmable by two press-keys and a LCD display.
- Timers are water and dust protected to IP65 when installed properly to a coil and connector with provided M3 screw.



| Model | Port size | Seal material | Flow rate [Nl/min] | Operating pressure [bar] | Coil power AC/DC |
|-------|--------------------|--------------------------------------|--------------------|--------------------------|---------------------------------|
| AGA | 1/8, 1/4 | NBR, EPDM, Viton, Teflon | 30-180 | AC: 1-30 DC: 0.1-30 | AC: 5.3-8 VA DC: 5.2-6.8 W |
| AGB | 1/4, 3/8, 1/2, 3/4 | NBR, EPDM, Viton, Teflon, Ruby, FFKM | 100-1300 | AC: 0.4-40 DC: 0.4-30 | AC: 8.6-24 VA DC: 10-18.5 W |
| AGC | 1/4, 3/8, 1/2 | NBR, Viton | 140-950 | AC: 1.5-25 DC: 1.5-20 | AC: 5.7-23 VA DC: 5.2-18.5 W |



| | |
|--------------------------------|---|
| Tempering treatment | Tempering treatment makes the inner case more solid and reduces fracture possibility when operating. |
| Protection | Body with SurTec 650 surface treatment enhance the resistance of oxidation from acidbase. |
| Self-locking | Pressed-in and self-locking mechanism to ensure stability. |
| Filter | Water removal rate 93%, 99% (Precision) |
| Precision regulator | Repeatability under ±0.5% F.S. |
| Remote monitoring | Achieve remote monitoring through the feedback of electric signal and stepless control of the thrust force. |
| Diversified combination | Diversified modular products can be applied in the different instances. |
| Flow rate | To 6 bar and Δp 1 bar |



Cy.Pag. is a **leading manufacturer of pneumatic cylinders** for industrial automation based in Italy, in an area of 4000 m² located in the province of Sondrio, in Morbegno, Valtellina.

It was founded in 1995 by **Adriano Pagni**, a pneumatics components designer since the 1960s who has worked in several multinational companies and contributed to the definition of the current ISO standards.

Custom cylinders are Cy.Pag.'s main strength: designed and built to meet specific customer requirements, they have fulfilled thousands of requests and found application in many sectors (automotive, packaging, railway, food...), guaranteeing extremely high levels of **precision and reliability**, increasing performance and reducing costs.

With 70% of its products sold abroad, Cy.Pag. has a strong export orientation, while also serving hundreds of customers in Italy.

In recent years it has begun a selecting process of manufacturers capable of meeting its quality standards, building partnerships that today allow Cy.Pag. to supply a **wide range of pneumatic automation components** of the highest standard quality.

In addition to pneumatic cylinders, Cy.Pag. can now offer its customers: **valves, air units** and components related to End of Arm Tooling (EOAT), such as **handling & grippers**.

Thanks to the passion, expertise and continuous improvement orientation that join people who work in the company, **Cy.Pag.** brand has become synonymous with excellence and reliability in the industrial automation sector, and its products are today exported to more than 40 countries worldwide.



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