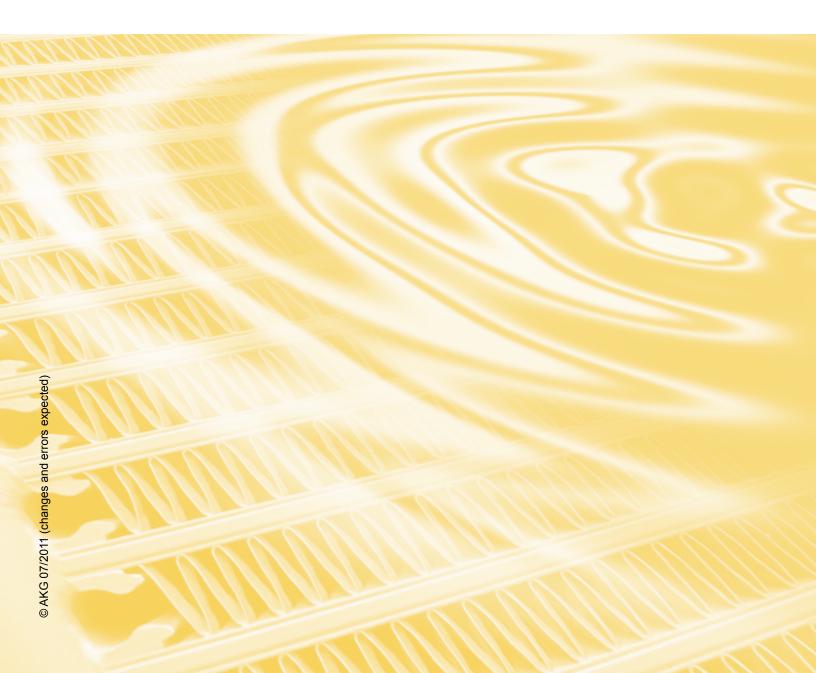


OFFLINE SERIES GLOBAL STANDARD COOLER COOL-Line



GLOBAL STANDARD Cool-Line AP



OIL-TO-AIR COOLING SYSTEMS

PRODUCT INFORMATION

AKG Offline Series, based on AKG Cool-Line Series, is a standard line of products from the market leader in high performance aluminum cooling systems. AKG is best known for it's world-wide presence, German engineering and extremely reliable product quality on the one hand and very competitive prices on the other hand.

The AKG Offline series consist of different offline cooler models to be used for cooling, filtration or lubrication circuits at low pressures in industrial or mobile applications. These Offline coolers are also available with noise-optimized models.

All of AKG's solutions have been developed with state-ofthe-art technology, produced in compliance with the highest quality standards and are comprehensively tested in the company's own research and test facility.

FEATURES OF THE AP-SERIES

- High-Performance Aluminum cooling assemblies complete with aluminum cooler, fan, guard, integrated gerotor pump/ motor and optional filter.
- The heat is transferred from the medium to be cooled to the ambient air.
- Ideal for systems with varying flow rates or pressure spikes in return lines. Applications include cooling gearboxes, lube oil, hydraulic presses, CNC machining, injection molding presses, etc.
- Suitable for low pressure applications with wide viscosity ranges (up to 2000 cSt)
- Optional filters available on all Offline cooler models.
- Integrated cooling system with pump flows ranging from 8.9 gpm up to 45.1 gpm.
- Cooler/pump combination can be exposed to operating pressures of up to 15 bar.

BENEFITS

- Highly flexible, ready-to-connect complete offline cooling package. Requires minimal space and installation effort.
- Compact and robust design, field-tested during many years of use in rugged real life conditions.
- Largest and most comprehensive series of Offline recirculation coolers.
- Best heat transfer results per given cooler size due to comprehensive research and development.
- Available from stock or at short notice.
- As a standard, equipped with AKG's patented double-life hollow sections designed to increase cooler service life.
- Noise-optimized models available (Low-noise APL series).

AP/APL OFFLINE SERIES FEATURES/BENEFITS

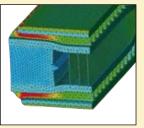
- New AKG Thermal Systems Offline Cooler series are available in cooler with integrated pump models as well as cooler with integrated pump and filter models.
- New AP optimized series offline coolers provides the best HEAT TRANSFER per given cooler size in the industry.
- New APL low noise series offline coolers offer slower fan speeds for reduced noise level & lower fan HP requirements.
- New AP/APL optimized series offline coolers have proprietary R & D designed, engineered and tested internal and external fins unique to AKG THERMAL SYSTEM coolers.
- All AP/APL series offline coolers are available with FILTER option.
- AP Series Offline Coolers available with 575V, Explosion proof, and custom motors. Contact factory for more information.
- AP Series Pump/Motor skid unit available as stand alone item. User can convert Standard Cooler to Offline Cooler using Pump/Motor skid unit. Contact factory for more information.
- New AP/APL optimized series offline coolers offer the largest, most comprehensive offline cooler size ranges with competitive pricing and deliveries from stock.

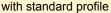
PATENTED FLEXIBLE AKG HOLLOW PROFILE

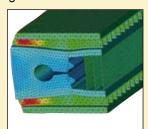


CooL-Line uses patented AKG hollow profiles to reduce local peak strains. This way the strength of heat exchangers is significantly increased and their service life time considerably prolonged.

- Reduced Strain:
 - Strength calculations show that when using AKG hollow profiles maximum strain is reduced by a factor of 2
- Prolonged Service Life Time:
 Extensive rig tests have shown that service life time increases by a factor ranging from 3 to 5





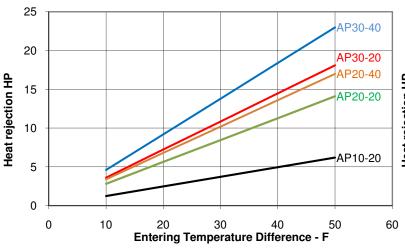


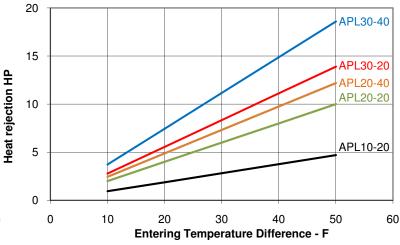
with hollow profile

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PERFORMANCE DATA AP/APL10 TO AP/APL30



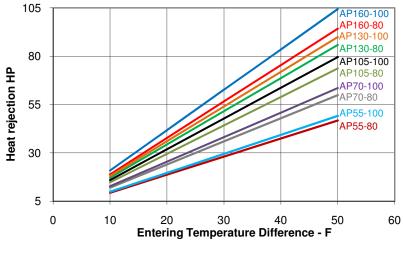


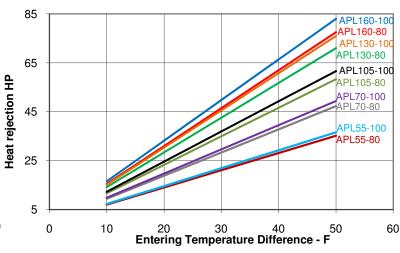


| Low-Pressure Gerotor, Fixed Displacement, Self-Priming |
|---|
| 208-230/460 @ 60 HZ 190/380 @ 50 HZ |
| Mineral Oil To DIN 51524 Part 2 |
| 225 PSI (15 BAR) |
| .7 TO 2.0 BAR |
| 10 TO 2000 cSt |
| -20 TO 80 C |
| 80 C (176 F) |
| |



PERFORMANCE DATA AP/APL 55 TO AP/APL160





GLOBAL STANDARD Gool-Line AP



AP/APL SERIES TECHNICAL DATA

| Model Number | Pump Size (CC) and Flow Rate (gpm) @ 60 HZ | | Fan Motor/Pump Operating Speed @ 60 HZ (RPM) | | Motor Output @ 60 HZ (HP) | | Approx Noise Level (dB(A), 1 m) | | Weight (lbs) |
|-----------------|--|----------|---|---------------------------|------------------------------|--------------------------|------------------------------------|-----|--------------|
| | AP | APL | AP | APL | AP | APL | AP | APL | |
| AP/APL10 | 20/8.9 | 20/5.9 | 1750 Pump/Fan | 1140 Pump/Fan | 2 Pump/Fan | 2 Pump/Fan | 73 | 71 | 125 |
| AP/APL20 | 20/8.9 | 20/5.9 | 1750 Pump/Fan | 1140 Pump/Fan | 3 Pump/Fan | 2 Pump/Fan | 83 | 74 | 145 |
| | 40/18.2 | 40/12.3 | 1750 Pump/Fan | 1140 Pump/Fan | 3 Pump/Fan | 2 Pump/Fan | 83 | 74 | 159 |
| AP/APL30 | 20/8.9 | 20/5.9 | 1750 Pump/Fan | 1140 Pump/Fan | 3 Pump/Fan | 2 Pump/Fan | 85 | 75 | 180 |
| AP/APL30 | 40/18.2 | 40/12.3 | 1750 Pump/Fan | 1140 Pump/Fan | 3 Pump/Fan | 2 Pump/Fan | 85 | 75 | 195 |
| 4D/4D/55 | 80/36.5 | 80/36.5 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 2 Pump - 7.5 | Fan - 0.5 Pump - 7.5 | 90 | 81 | 318 |
| AP/APL55 | 100/45.1 | 100/45.1 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 2 Pump - 7.5 | Fan - 0.5 Pump - 7.5 | 90 | 81 | 323 |
| AD/ADI 70 | 80/36.5 | 80/36.5 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 2 Pump - 7.5 | Fan - 0.75 Pump - 7.5 | 92 | 83 | 355 |
| AP/APL70 | 100/45.1 | 100/45.1 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 2 Pump - 7.5 | Fan - 0.75 Pump - 7.5 | 92 | 83 | 360 |
| AD/ADI 405 | 80/36.5 | 80/36.5 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 3 Pump - 7.5 | Fan - 1 Pump - 7.5 | 95 | 86 | 405 |
| AP/APL105 | 100/45.1 | 100/45.1 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 3 Pump - 7.5 | Fan - 1 Pump - 7.5 | 95 | 86 | 410 |
| | 80/36.5 | 80/36.5 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 5 Pump - 7.5 | Fan - 1.5 Pump - 7.5 | 97 | 88 | 530 |
| AP/APL130 | 100/45.1 | 100/45.1 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 5 Pump - 7.5 | Fan - 1.5 Pump - 7.5 | 97 | 88 | 535 |
| AP/APL160 | 80/36.5 | 80/36.5 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 7.5 Pump - 7.5 | Fan - 2 Pump - 7.5 | 98 | 89 | 675 |
| | 100/45.1 | 100/45.1 | Fan - 1750 Pump - 1750 | Fan - 1140 Pump - 1750 | Fan - 7.5 Pump - 7.5 | Fan - 2 Pump - 7.5 | 98 | 89 | 680 |

AP Coolers available with 575V, Explosion proof, and custom motors. Consult factory for more information.

AP/APL SERIES DIMENSIONS

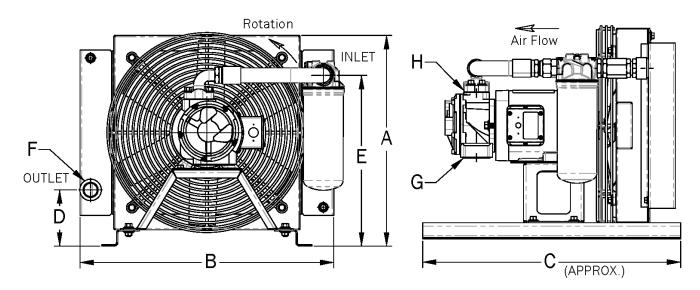
| Model Number | А | В | C (Aprox.) | D | E | F | G | Н |
|-----------------|-------|-------|---------------|-------|-------|----------------------------|------------------------------|---------------------------------|
| AP/APL10 | 15.20 | 17.70 | 24.00 | 4.50 | 11.50 | #16 SAE 1 5/16-12 UN-2B | Code 61 1 1/2" SAE FLANGE | Code 61 1" SAE FLANGE |
| AP/APL20 | 18.90 | 23.60 | 24.00 | 4.50 | 15.20 | #16 SAE 1 5/16-12 UN-2B | Code 61 1 1/2" SAE FLANGE | Code 61 1" SAE FLANGE |
| AP/APL30 | 23.40 | 27.60 | 24.00 | 4.50 | 19.70 | #16 SAE 1 5/16-12 UN-2B | Code 61 1 1/2" SAE FLANGE | Code 61 1" SAE FLANGE |
| AP/APL55 | 26.30 | 32.30 | 38.00 | 7.84 | 19.50 | #20 SAE 1 5/8-12 UN-2B | Code 61 2" SAE FLANGE | Code 61 1 1/4" SAE FLANGE |
| AP/APL70 | 31.40 | 38.20 | 38.00 | 10.70 | 23.00 | #20 SAE 1 5/8-12 UN-2B | Code 61 2" SAE FLANGE | Code 61 1 1/4" SAE FLANGE |
| AP/APL105 | 33.20 | 39.00 | 48.40 | 10.70 | 24.00 | #20 SAE 1 5/8-12 UN-2B | Code 61 2" SAE FLANGE | Code 61 1 1/4" SAE FLANGE |
| AP/APL130 | 37.60 | 40.90 | 50.70 | 9.80 | 29.30 | #20 SAE 1 5/8-12 UN-2B | Code 61 2" SAE FLANGE | Code 61 1 1/4" SAE FLANGE |
| AP/APL160 | 38.40 | 43.60 | 46.20 | 9.90 | 31.30 | #20 SAE 1 5/8-12 UN-2B | Code 61 2" SAE FLANGE | Code 61 1 1/4" SAE FLANGE |

All data based at nominal speed

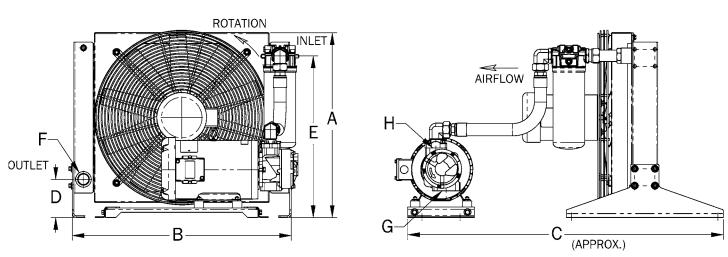
GLOBAL STANDARD Cool-Line AP



COOLER DIMENSIONS AP/APL10 TO AP/APL30



COOLER DIMENSIONS AP/APL55 TO AP/APL160



ORDERING INFORMATION

| MODEL CODE: | MODEL SIZE: | | PUMP CODE: | FILTER CODE: |
|-------------|-------------|---|------------|--------------|
| | | _ | | |
| | | | | |

MODEL CODE: AP = Standard APL = Low Noise

MODEL SIZE: Selected (AP10 to AP160)

PUMP CODE: 20 = 20CC, Standard 8.9 GPM, Low Noise 5.9 GPM (Model 10/20/30) 40 = 40CC, Standard 18.2 GPM, Low Noise 12.3 GPM (Model 20/30)

80 = 80CC, Standard/Low Noise 36.5 GPM (Model 55/70/105/130/160) **100** = 100CC, Standard/Low Noise 45.1 GPM (Model 55/70/105/130/160)

FILTER TYPE: 00 = No Filter, No Hoses or Connectors

41 = Spin-On, 9 Micron Media, 50 PSI Bypass, Visual Indicator, 35 GPM **51** = Spin-On, 9 Micron Media, 50 PSI Bypass, Visual Indicator, 50 GPM

NOTE: OTHER FILTERS AVAILABLE, CONSULT FACTORY FOR MORE INFORMATION

ORDER EXAMPLE: Offline AP20 Cooler, 17 HP, 18.2 GPM Pump, Spin-On Filter 35 GPM AP20-40-41





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USA

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AKG – A STRONG GLOBALLY INTEGRATED GROUP OF COMPANIES

AKG is a globally leading supplier of highperformance coolers and heat exchangers as well as customised system solutions, that comply with the highest quality standards.

On a world-wide scale, 2,800 employees work at 12 manufacturing facilities located in Germany, France, United Kingdom, Latvia, the U.S.A., China and India. Together with a number of additional oversea sales companies they are on duty around the clock.

The longstanding and competent partnership with global OEM customers from 22 lines of business such as construction machinery, compressed-air systems, agricultural and forestry machines, vehicle construction and many other fields of application give fresh and innovative impetus to the mobile and industrial standard type series.

AKG operates one of the world's largest research, development, measurement and validation centres for cooling solutions and customised applications.

For 90 years AKG's heat exchangers have stood for innovative solutions as well as highest engineering and manufacturing competence.

Your AKG-Partner