

Qualtek

Electronics Corporation



High Performance Low Cost
Large Size Axial Fans



www.Qualtekusa.com





Fan-S
Division

All HPLC series fans use an external rotor motor. Heat is the number one contributor to the reduction of life in a motor structure. Most motor heat is produced in the rotor, by changing from an internal rotor to external rotor, the motor becomes more effective at cooling which increases reliability and extends the life of a motor.

The HPLC series motor structure has been designed to reduce copper windings, increase reliability and performance, and reduce costs.



MOTOR STRUCTURE



FAN IMPELLER

HPLC series axial fans feature a steel impeller and aluminum frame with a durable finish. The HPLC series impeller is a one piece forged part that allows better air flow performance, reduced noise, and long life in harsh environments. The frames have also been designed to reduce air resistance, manufacturing costs, and vibration. Plastic Impellers are available if the customer requires a higher static pressure and air quantity.

**Features:**

- Motor: External Rotor Capacitor-Run Induction Motor
- Motor Protection: Thermal Protected
- Bearing Type: Two Ball
- Connection: UL 1015 AWG 22, 300mm Wire Leads or Terminal
- Frame Material: Aluminum Alloy
- Impeller Material: Plastic UL94V-0, or Steel
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

**Fan-S Division**

Model No.	Volt.	Freq.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VAC)	(Hz)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDA2-17238NBH * ** F #	115	50/60	0.25/0.21	27.0/25.0	2700/3100	5.95/6.80	210/240	0.531/0.571	13.5/14.5	53.0/59.0	820
FDA2-17238QBH * ** F #	230	50/60	0.11/0.12	26.0/27.0	2700/3100	5.95/6.80	210/240	0.531/0.571	13.5/14.5	53.0/59.0	820

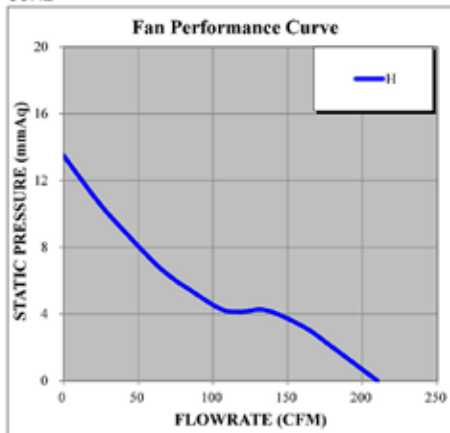
* Indicates "W" (Wire Leads) or "T" (Terminal)

** Indicates "3" (Metal Frame, Plastic Impeller) or "4" (Metal Frame and Impeller)

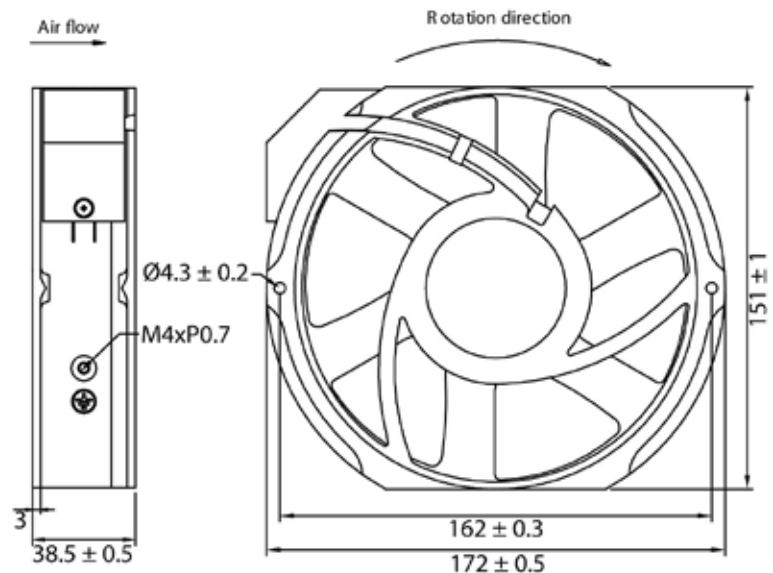
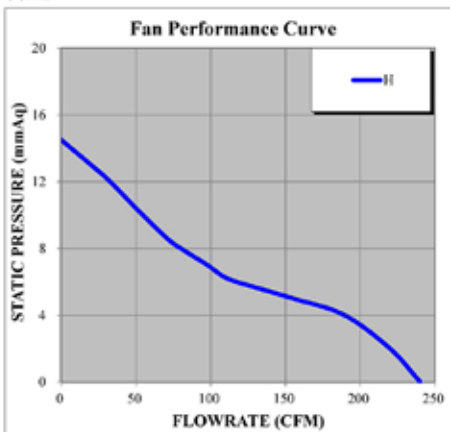
Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.

50Hz



60Hz



**Features:**

- Motor: External Rotor Capacitor-Run Induction Motor
- Motor Protection: Thermal Protected
- Bearing Type: Two Ball
- Connection: UL 1015 AWG 22, 300mm Wire Leads or Terminal
- Frame Material: Aluminum Alloy
- Impeller Material: Plastic UL94V-0, or Steel
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

**Fan-S Division**

Model No.	Volt.	Freq.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VAC)	(Hz)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDA2-17251NBK * 3F #	115	50/60	0.22/0.24	24.0/27.0	2800/3300	6.51/7.78	230/275	0.649/0.768	16.5/19.5	54.0/60.0	890
FDA2-17251QBK * 3F #	230	50/60	0.11/0.12	24.0/27.0	2800/3300	6.51/7.78	230/275	0.649/0.768	16.5/19.5	54.0/60.0	890
FDA2-17251NBH **F #	115	50/60	0.25/0.21	27.0/25.0	2700/3100	5.95/7.08	210/250	0.551/0.610	14.0/15.5	53.0/59.0	940
FDA2-17251QBH **F #	230	50/60	0.11/0.12	26.0/27.0	2700/3100	5.95/7.08	210/250	0.551/0.610	14.0/15.5	53.0/59.0	940

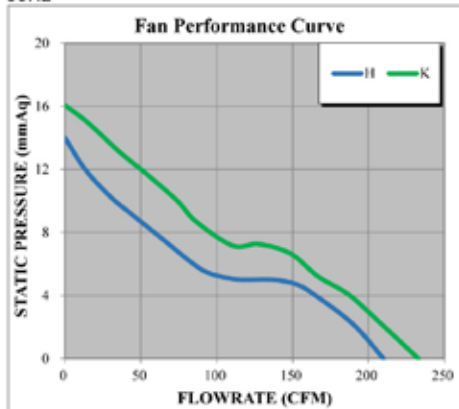
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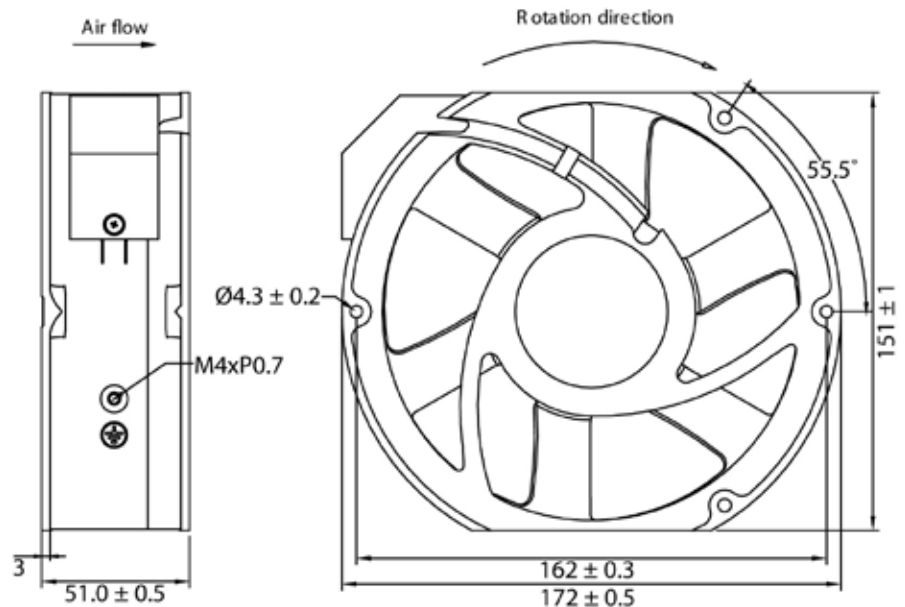
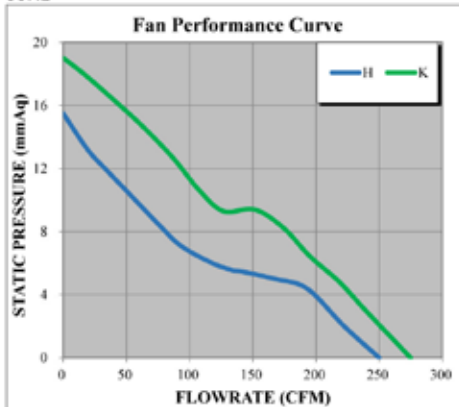
Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.

50Hz



60Hz



**Features:**

- Motor: External Rotor Capacitor-Run Induction Motor
- Motor Protection: Thermal Protected
- Bearing Type: Two Ball
- Connection: UL 1015 AWG 22, 300mm Wire Leads or Terminal
- Frame Material: Aluminum Alloy
- Impeller Material: Plastic UL94V-0, or Steel
- **IP55 Rated**
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

**Fan-S Division**

Model No.	Volt.	Freq.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VAC)	(Hz)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDA2-17251NBH * ** D #	115	50/60	0.25/0.21	27.0/25.0	2700/3100	5.95/7.08	210/250	0.551/0.610	14.0/15.5	53.0/59.0	940
FDA2-17251QBH * ** D #	230	50/60	0.11/0.12	26.0/27.0	2700/3100	5.95/7.08	210/250	0.551/0.610	14.0/15.5	53.0/59.0	940

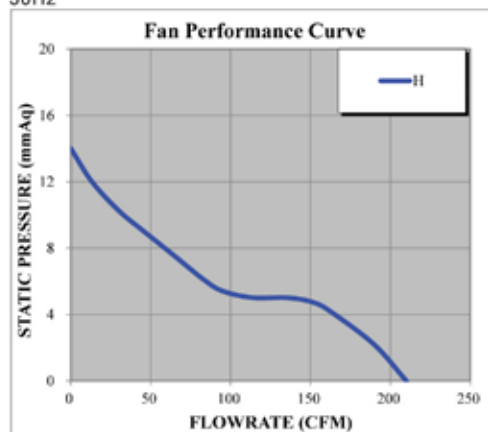
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** Indicates "3" (Metal Frame, Plastic Impeller) or "4" (Metal Frame and Impeller)

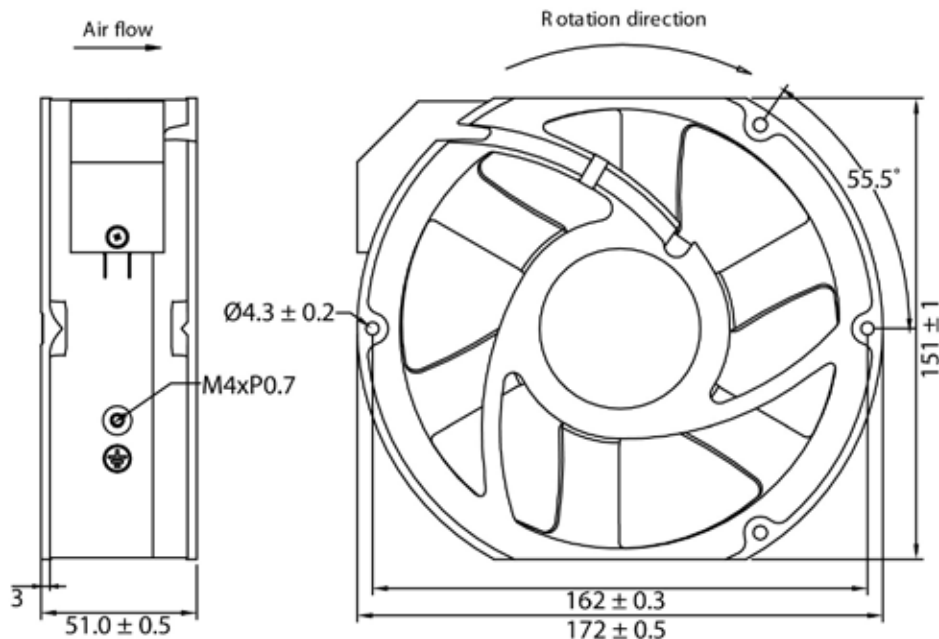
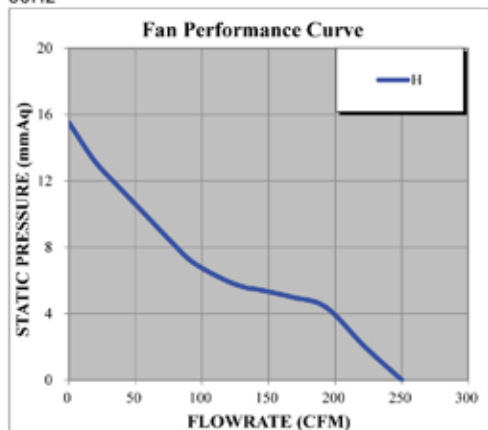
Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.

50Hz



60Hz



**Features:**

- Motor: External Rotor Capacitor-Run Induction Motor
- Motor Protection: Thermal Protected
- Bearing Type: Two Ball
- Connection: UL 1015 AWG 22, 360mm Wire Leads or Terminal
- Frame Material: Aluminum Alloy
- Impeller Material: Plastic UL94V-0, or Steel
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

**Fan-S Division**

Model No.	Volt.	Freq.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VAC)	(Hz)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDA2-17255NBH * ** F #	115	50/60	0.25/0.21	27.0/25.0	2700/3100	5.95/6.80	210/240	0.492/0.531	12.5/13.5	57.0/61.0	840
FDA2-17255QBH * ** F #	230	50/60	0.11/0.12	26.0/27.0	2700/3100	5.95/6.80	210/240	0.492/0.531	12.5/13.5	57.0/61.0	840

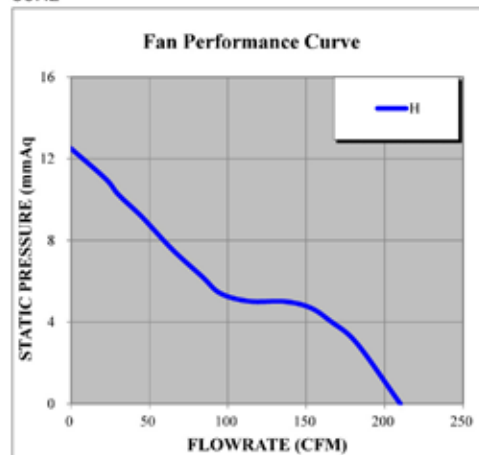
* Indicates "W" (Wire Leads) or "T" (Terminal)

** Indicates "3" (Metal Frame, Plastic Impeller) or "4" (Metal Frame and Impeller)

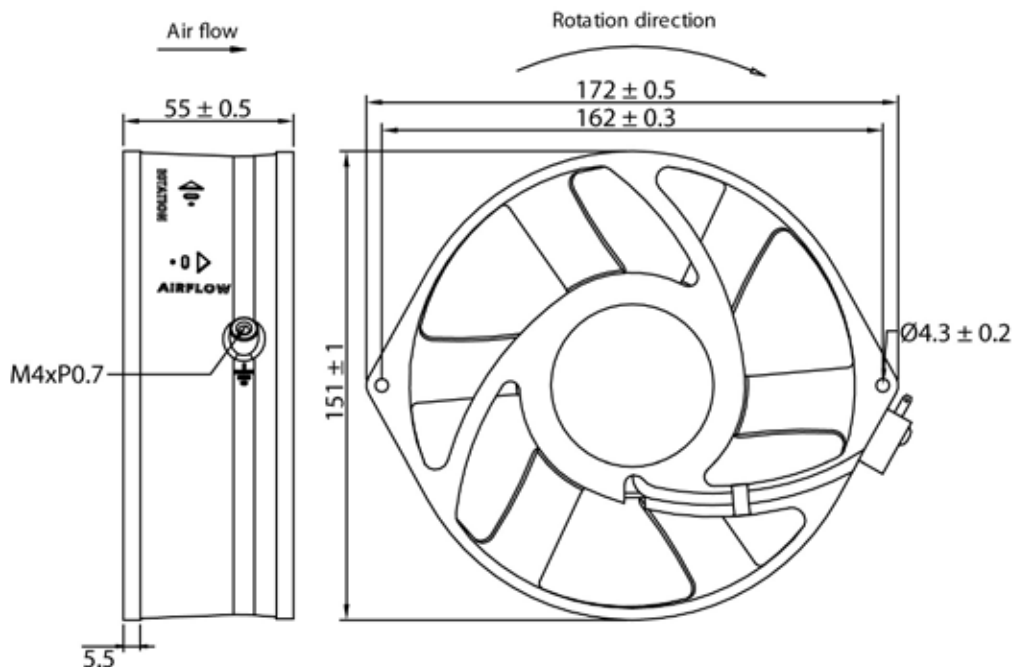
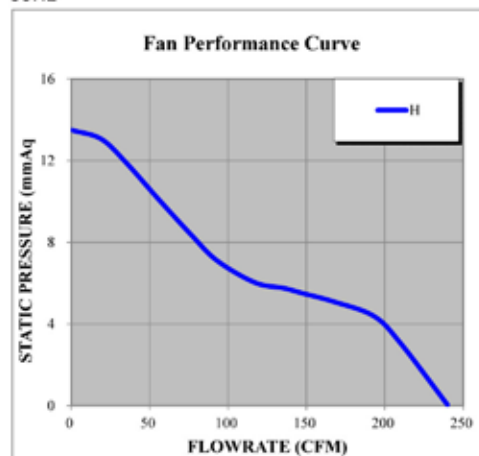
Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.

50Hz



60Hz



**Features:**

- Motor: External Rotor Capacitor-Run Induction Motor
- Motor Protection: Thermal Protected
- Bearing Type: Two Ball
- Connection: Terminal Block
- Frame Material: Aluminum Alloy
- Impeller Material: Steel
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

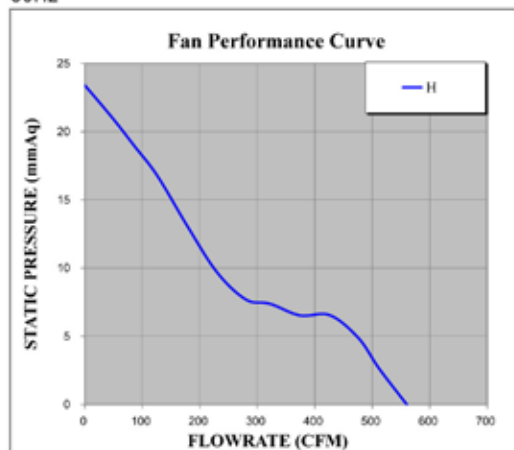
**Fan-S Division**

Model No.	Volt.	Freq.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VAC)	(Hz)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDA2-22580NBHK4F #	115	50/60	0.61/0.62	53.0/68.0	2800/3200	16.4/19.0	580/670	0.925/0.807	23.5/20.5	68.0/71.0	2750
FDA2-22580QBHK4F #	230	50/60	0.26/0.31	53.0/68.0	2800/3200	16.4/19.0	580/670	0.925/0.807	23.5/20.5	68.0/71.0	2750

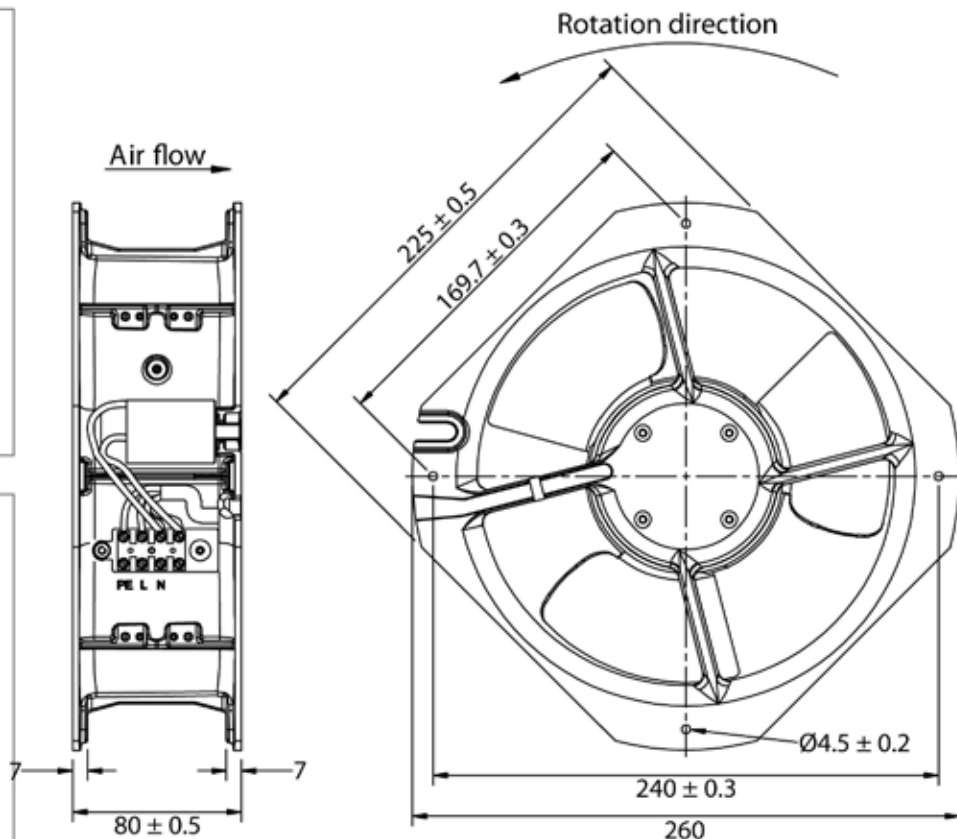
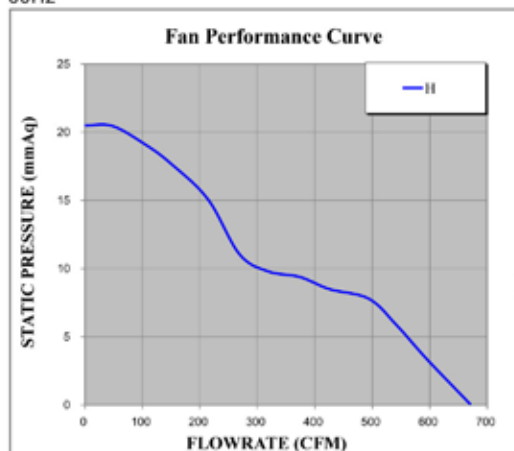
Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.

50Hz



60Hz



**Features:**

- Motor: External Rotor Capacitor-Run Induction Motor
- Motor Protection: Thermal Protected
- Bearing Type: Two Ball
- Connection: UL 1015 AWG 22, 300mm Wire Leads or Terminal
- Frame Material: Aluminum Alloy
- Impeller Material: Steel
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

**Fan-S Division**

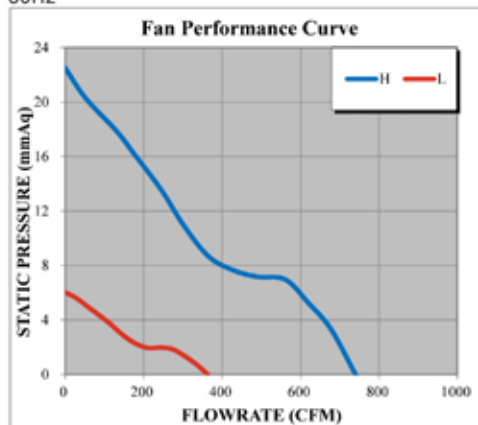
Model No.	Volt.	Freq.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VAC)	(Hz)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDA2-25489NBH * 4F #	115	50/60	0.58/0.88	66.0/97.0	2800/3200	20.94/24.34	740/860	0.886/0.846	22.5/21.5	66.0/68.0	2750
FDA2-25489QBH * 4F #	230	50/60	0.28/0.42	64.0/92.0	2800/3200	20.94/24.34	740/860	0.886/0.846	22.5/21.5	66.0/68.0	2750
FDA2-25489NBL * 4F #	115	50/60	0.34/0.28	30.0/29.0	1400/1650	9.54/12.45	337/440	0.240/0.307	6.1/7.8	50.0/52.0	2750
FDA2-25489QBL * 4F #	230	50/60	0.17/0.14	32.0/32.0	1400/1650	9.54/12.45	337/440	0.240/0.307	6.1/7.8	50.0/52.0	2750

* Indicates "W" (Wire Leads) or "T" (Terminal)

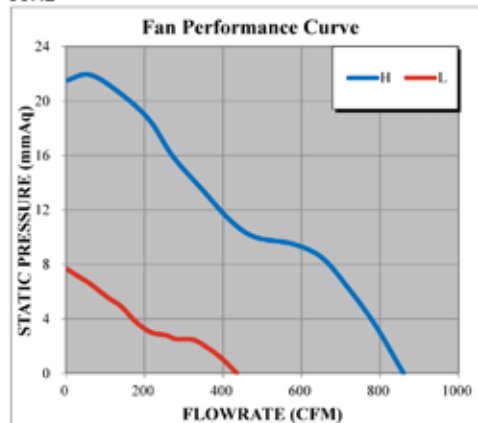
Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.

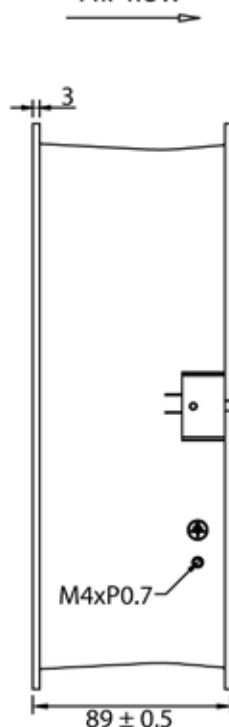
50Hz



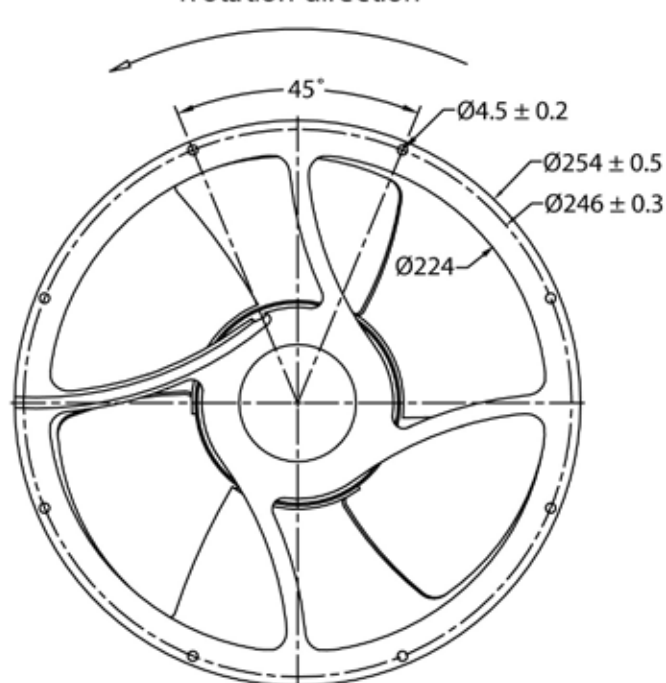
60Hz



Air flow



Rotation direction



**Features:**

- Motor: External Rotor Capacitor-Run Induction Motor
- Motor Protection: Thermal Protected
- Bearing Type: Two Ball
- Connection: Terminal Block
- Frame Material: Aluminum Alloy
- Impeller Material: Steel
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

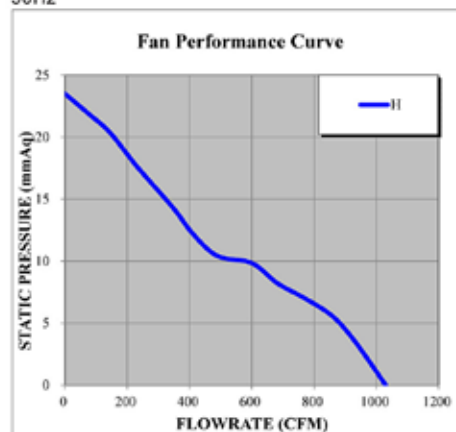
**Fan-S Division**

Model No.	Volt.	Freq.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VAC)	(Hz)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDA2-28080NBHK4F #	115	50/60	0.81/1.20	94.0/136.0	2650/2900	29.15/32.55	1030/1150	0.925/0.807	23.5/20.5	70.0/73.0	3050
FDA2-28080QBHK4F #	230	50/60	0.43/0.63	95.0/138.0	2650/2900	29.15/32.55	1030/1150	0.925/0.807	23.5/20.5	70.0/73.0	3050

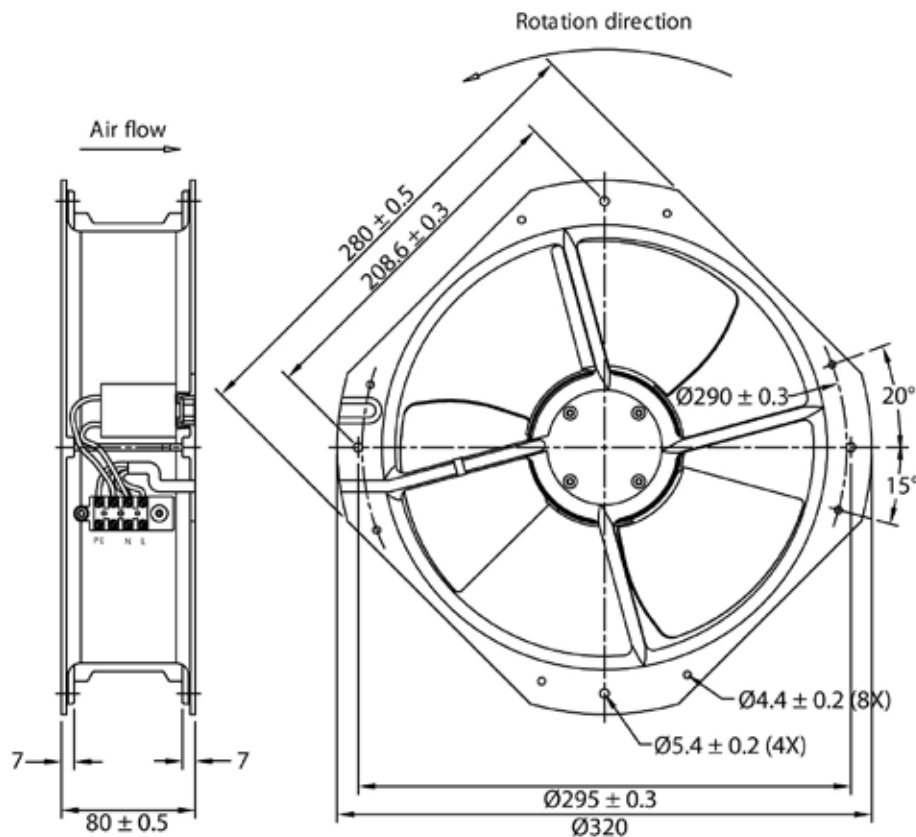
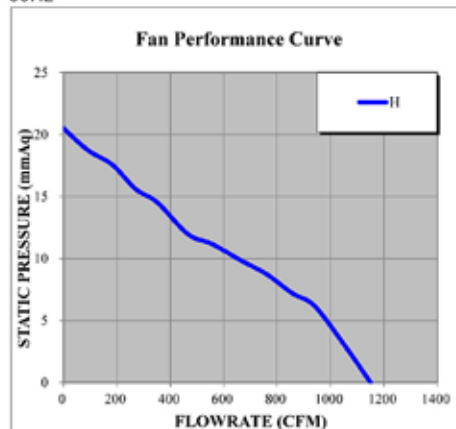
Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.

50Hz



60Hz



**Features:**

- Motor: Brushless DC
- Motor Protection: IC
- Bearing Type: Two Ball
- Connection: UL 1007 AWG 22, 360mm Wire Leads
- Frame Material: Aluminum Alloy
- Impeller Material: Steel
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

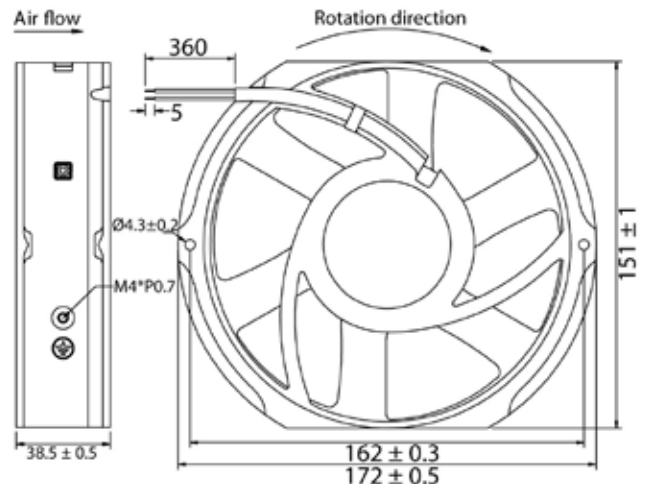
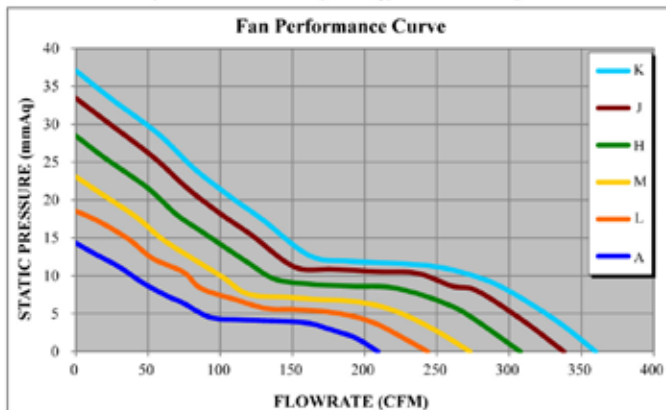
**Fan-S Division**

Model No.	Volt.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VDC)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDD1-17238CBAW4	12	1.10	13.20	2800	5.95	210	0.571	14.5	52.0	880
FDD1-17238CBLW4	12	1.59	19.08	3200	6.94	245	0.732	18.6	56.0	880
FDD1-17238CBMW4	12	2.34	28.08	3600	7.79	275	0.909	23.1	60.0	880
FDD1-17238CBHW4	12	3.33	39.96	4000	8.78	310	1.122	28.5	64.0	880
FDD1-17238DBAW4	24	0.54	12.96	2800	5.95	210	0.571	14.5	52.0	880
FDD1-17238DBLW4	24	0.78	18.72	3200	6.94	245	0.732	18.6	56.0	880
FDD1-17238DBMW4	24	1.08	25.92	3600	7.79	275	0.909	23.1	60.0	880
FDD1-17238DBHW4	24	1.38	33.12	4000	8.78	310	1.122	28.5	64.0	880
FDD1-17238DBJW4	24	1.91	45.84	4400	9.63	340	1.315	33.4	68.0	880
FDD1-17238DBKW4	24	2.34	56.16	4800	10.20	360	1.543	39.2	72.0	880
FDD1-17238EBAW4	48	0.28	13.44	2800	5.95	210	0.571	14.5	52.0	880
FDD1-17238EBLW4	48	0.37	17.76	3200	6.94	245	0.732	18.6	56.0	880
FDD1-17238EBMW4	48	0.52	24.96	3600	7.79	275	0.909	23.1	60.0	880
FDD1-17238EBHW4	48	0.68	32.64	4000	8.78	310	1.122	28.5	64.0	880
FDD1-17238EBJW4	48	0.90	43.20	4400	9.63	340	1.315	33.4	68.0	880
FDD1-17238EBKW4	48	1.13	54.24	4800	10.20	360	1.543	39.2	72.0	880

* Indicates "2" (No Special Function), "3" (Alarm), "4" (Speed Sensor), "9" (PWM),
"B" (PWM + Speed Sensor) or "C" (Alarm + Speed Sensor)

Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.



**Features:**

- Motor: Brushless DC
- Motor Protection: IC
- Bearing Type: Two Ball
- Connection: UL 1007 AWG 22, 360mm Wire Leads
- Frame Material: Aluminum Alloy
- Impeller Material: Plastic UL94V-0
- Operating Temp:
Two Ball: -20°C~70°C
- Life Expectancy:
Two Ball: 50,000 Hours
Two Ball: 100,000 Hours (-L)

**Fan-S Division**

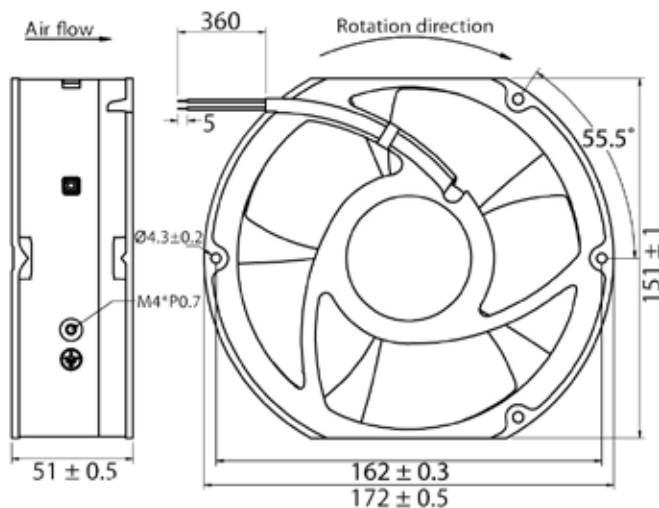
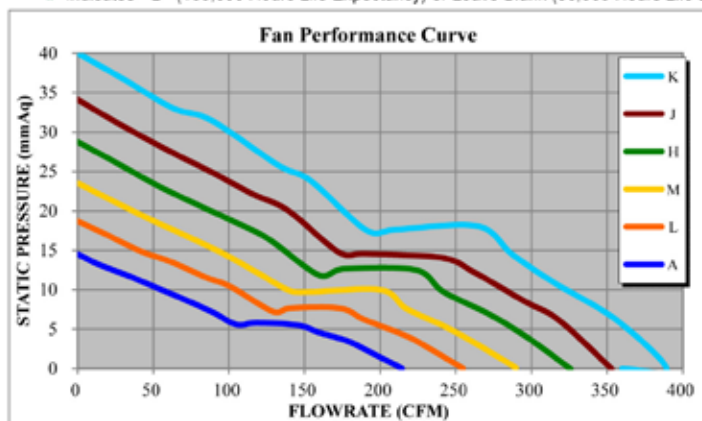
Model No.	Volt.	Current	Power	Rated Speed	Maximum AirFlow		Maximum Static Pressure		Noise Level	Weight
	(VDC)	(A)	(W)	(rpm)	(CMM)	(CFM)	(InAq)	(mmAq)	(dB/A)	(g)
FDD1-17251CBAW3	12	1.31	15.72	2800	6.23	220	0.571	14.5	52.0	1070
FDD1-17251CBLW3	12	1.88	22.56	3200	7.22	255	0.736	18.7	56.0	1070
FDD1-17251CBMW3	12	2.75	33.00	3600	8.21	290	0.925	23.5	60.0	1070
FDD1-17251CBHW3	12	3.73	44.76	4000	9.20	325	1.134	28.8	64.0	1070
FDD1-17251DBAW3	24	0.65	15.60	2800	6.23	220	0.571	14.5	52.0	1070
FDD1-17251DBLW3	24	0.89	21.36	3200	7.22	255	0.736	18.7	56.0	1070
FDD1-17251DBMW3	24	1.21	29.04	3600	8.21	290	0.925	23.5	60.0	1070
FDD1-17251DBHW3	24	1.69	40.56	4000	9.20	325	1.134	28.8	64.0	1070
FDD1-17251DBJW3	24	2.41	57.84	4400	10.10	355	1.343	34.1	68.0	1070
FDD1-17251DBKW3	24	2.94	70.56	4800	11.00	390	1.587	40.3	72.0	1070
FDD1-17251EBAW3	48	0.33	15.84	2800	6.23	220	0.571	14.5	52.0	1070
FDD1-17251EBLW3	48	0.45	21.60	3200	7.22	255	0.736	18.7	56.0	1070
FDD1-17251EBMW3	48	0.60	28.80	3600	8.21	290	0.925	23.5	60.0	1070
FDD1-17251EBHW3	48	0.79	37.92	4000	9.20	325	1.134	28.8	64.0	1070
FDD1-17251EBJW3	48	1.15	55.20	4400	10.10	355	1.343	34.1	68.0	1070
FDD1-17251EBKW3	48	1.48	71.04	4800	11.00	390	1.587	40.3	72.0	1070

* Indicates "2" (No Special Function), "3" (Alarm), "4" (Speed Sensor), "9" (PWM),

"B" (PWM + Speed Sensor) or "C" (Alarm + Speed Sensor)

Indicates "-L" (100,000 Hours Life Expectancy) or Leave Blank (50,000 Hours Life Expectancy)

Noise is measured at the distance of one (1) meter from the axis of intake.



PRODUCT PROFILE

FAN-S DIVISION

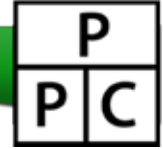


AC & DC Fans and Accessories

Low cost, high tech AC & DC axial fans with sizes ranging from 25mm - 280 mm, DC voltages from 3.3VDC - 60VDC and AC voltages from 115VAC - 230VAC and many special features such as IP55 and IP67 rated, speed sensors, alarm functions and much more upon request. Each fan is offered with a variety of bearing types : 2-ball, 1-ball 1-sleeve, sleeve only, and our newly developed hydro dynamic bearing with better performance than sleeve and lower cost than 2 ball bearings. Every fan is available with a wide range of speeds from ultra low to super high speed.

Our fan accessories are famous worldwide and consist of wire form and plastic guards, plastic air filters, aluminum and stainless steel air filters, fan cords, and our patented noise reduction vibration sleeves.

PRIMARY POWER COMPONENTS DIVISION



AC Receptacles

A complete line of inlets, outlets, multifunction modules with major international approval marks thus assuring high safety standards and help customers comply with international regulations. Modern production methods enable us to manufacture cost-effective and reliable components. A full range of products are maintained in inventory for quick on-time deliveries. Custom designs are available upon request.

Circuit Breakers

QLB and QMB series are compact and cost effective thermal circuit breakers with a wide range of amp ratings from 3A - 40A and offered in single pole and push-to-reset with safety agency certifications. We offer a large variety of bushing types, terminals, name plates, button colors and printing with custom configurations available.

EMI Filters

EMI/RFI power line filters are designed to meet most international safety agency requirements. These filters help customers meet FCC and VDE emission standards. Our line consists of many standard configurations such as block type, filter with power line connector, and various filters with multifunctional modules. Custom designs are available upon request.

Power Cords

A large selection of North American and International Power Cords that have been designed to comply with North American and international safety agency regulations to insure safe and reliable products. Offered in a wide selection of plugs and connectors available in various cable insulations, voltage ratings, colors, lengths, shielding and a full range of hospital grade certified power cords. Custom configurations and strain reliefs are available upon request.

Power Supplies

A full range of low cost, high reliability and energy saving switch mode AC/DC power supplies consisting of enclosed, open frame models and waterproof LED drivers; our enclosed versions are rated from 15W - 800W, open frame from 20W - 125W and LED drivers with constant current 25W - 200W and constant voltage 25W - 300W. All models have universal voltage input and a variety of output voltages ranging from 3.3V - 445V and some models include power factor correction to increase efficiency and reduce power losses. All of our power supplies meet or exceed the RoHS EU and the Chinese directives and are certified with worldwide safety agencies to ensure a safe and reliable product.

WIRE MANAGEMENT, CABLE ASSEMBLIES & INTERCONNECT DIVISION



Cable Assemblies

We offer a wide selection of standard and custom cable assemblies, specializing in DVI, HDMI, USB and Fiber Optic and also producing flat ribbon cables, monitor cables, networking cables and an extensive offering of custom cable assemblies and wire harnesses.

Cable Ties & Accessories

Our low cost, high reliability cable nylon ties are available in a variety of styles including miniature, intermediate, standard and heavy duty. Specialty cable ties include releasable pawl type, stainless steel ball lock, head mount, push mount, marker ties, double loop, beaded and 4-way cable tie mounts. Cable ties are available in various material types including ultraviolet, heat stabilized, fire retardant and also are available in a range of colors. Custom designs and colors available upon request.

Heat Shrink Products

Heat shrinkable products include thin wall, medium and heavy wall, adhesive lined, medium and high voltage insulation, molded parts and end caps, cold shrink, wide range of shrink tubing kits and heat shrinkable cable and wire identification tubing.

INTERNATIONAL PROCUREMENT SERVICES DIVISION



Procurement Services

With over 30 years of global business experience, Qualtek's IPS division provides a complete range of services from component sourcing to complete turnkey projects. With our extensive knowledge of the major global manufacturing regions, this enables us to have access to the newest technology, highest quality, and the most cost effective production methods.

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