

BACKGROUND OF APPLICATION

CLEANROOMS ARE DYNAMIC SYSTEMS. PEOPLE AND GOODS ARE CONSTANTLY IN MOTION. INSTALLATIONS, PRODUCTION LINES AND MACHINES DO REQUIRE PERIODICAL ADJUSTMENT TO THE PRODUCTION OF DIFFERENT PRODUCTS. ACC. TO THE RELEVANT STANDARD ISO 14644-3 THE OPERATORS OF CLEANROOMS ARE OBLIGED TO GIVE PERIODICALLY EVIDENCE OF THE IN SITU AIR FLOW SITUATION BY AN AIR FLOW MAPPING SUPPORTED BY HIGH PURITY AIR FLOW MAPPERS (CLEAN ROOM FOGGERS).

AFM35 NEO

THE AFM35-NEO CLEANROOM FOGGER USES A HIGH PERFORMANCE TRASONIC MODULE OF 35 PIEZOELECTRIC CERAMICS TO GENERATE IN ITS CLASS UNMATCHED 1,25 CUBIC METERS OF PURE FOG PER MINUTE WITH 170 ML OF FOG DENSITY PER MINUTE TO PROVIDE 5 TO 7 M OF VISIBLE AIR FLOWS FOR SMOKE STUDIES IN CLEAN ROOMS, MEDICAL ROOMS, ISO SUITES, BARRIER ISOLATORS, FUME HOODS AND SIMILAR APPLICATIONS IN CLEAN ROOMS. THE AFM35-NEO IS THE ONLY ULTRASONIC BASED AIR FLOW MAPPER / CLEAN ROOM FOGGER THAT COMPETES IN FOG VOLUME AND FOG DENSITY (PURE WHITE) WITH ANY AVAILABLE LN2 BASED CLEAN ROOM FOGGER THIS AT THE ONLY EXCEPTION OF SISTEMA'S LN2 FOG MACHINE APOLLO.35 (AP.35). YET ITS UNIQUE CRITERION IN THIS COMPETITION IS THAT THE AFM35-NEO (ONLY NEEDS DI WATER OR WFI WATER TO PRODUCE THIS HIGHER VOLUME OF WHITE DENSE PURE FOG AND NOT A MEDIA OF TWO COMPONENTS LIKE LN2 AND DI WATER AS WITH THE LN2 FOGGERS.

FOG OUTPUT CHARACTERISTICS



DENSE PAPER WHITE PURE FOG

CYCLE TIME OF 80 MIN OF WHICH 50 MIN WITH PURE WHITE FOG

SUFFICIENT IN VOLUME FOR A VOLUME SPLIT INTO TWO HOSES BOTH PROVIDING PURE WHITE FOG SIMULTANEOUSLY
ATOMIZING UP TO UNMATCHED 170 ML OF DI-WATER PER MINUTE INTO 1,25 CUBIC METERS OF WHITE FOG PER MIN.

5 TO 7 M OF VISIBLE AIR FLOWS

HIGHEST FOG OUPUT RATE OF ALL ULTRASONIC PIEZOELECTRIC BASED CLEAN ROOM FOGGERS IN MARKET

TYPICAL APPLICATIONS



AIRFLOW RECOVERY TESTS GUIDED BY ISO 14644-3 ANNEX B12

AIRFLOW VISUALIZATION TESTS GUIDED BY ISO 14644-3 ANNEX B7

USP 797 IN-SITU AIRFLOW ANALYSIS

USP 800 COMPOUND PHARMACY AIRFLOW TESTS

AIRFLOW TESTS FOR NSF 49 AND BIO-SAFETY CABINETS

AIRFLOW REQUIREMENTS USING SEMICONDUCTOR CLEAN ROOM GUIDELINES, FEDERAL STANDARD 209E

CONTAINMENT TRANSPORT STUDIES ON PROCESS TOOLS

OPTIMIZATION OF EQUIPMENT LOCATIONS

TRACKING ROUTES OF AIR INFILTRATION INTO CLEANROOMS







PRESSURE BALANCING (ROOMS AND SPACES)

OPERATORS TRAININGS

SPECS AND FEATURES

CASING AND TANK IN ELECTROPOLISHED STAINLESS STEEL
 DIMENSIONS OF (L X H X W) 571 X 293 X 325 MM
 NET WEIGHT OF 20 KGS
 TANK CAPACITY OF 10 L
 MAX. CYCLE TIME OF 80 MIN OF WHICH 50 MIN ARE WITH PURE WHITE FOG.
 ULTRASONIC MODULE OF 35 PIEZOELECTRIC CERAMIC DISCS
 0 - 100 % ADJUSTMENT OF FOG INTENSITY AND DENSITY
 MICRO FAN, 24 V, IP 68
 FOG OUTLET Ø OF 80 MM)
 DOTMATRIX DISPLAY FOR INDICATION OF OPERATING STATE AND ALL OPERATING FUNCTIONS
 ELECTRONICAL WATER FILL LEVEL SURVEY VIA 3 CAPACITIVE SENSORS
 TEMPERATURE SURVEY FUNCTION
 ELAPSED TIME METER
 REDUNDANCY FUNCTION ENABLING THE SYSTEM FUNCTIONALITY EITHER WITH 3 OR 2 OR 1 ULTRASONIC BLOCS IN CASE OF SINGLE BLOC FAILURE
 SOFT START ELECTRONIC
 SELF MONITORING FUNCTIONALITY
 COMING WITH STANDARD ACCESSORIES INCLUDING
 90 – 264 VAC WIDE RANGE POWER SUPPLY COVERING 90 . . . 264 VAC, 47 . . . 63 HZ, 5 A @ 230 VAC, 3 A @ 115 VAC
 BUFFER FUNCTIONALITY IN CASE OF UNSTABLE POWER SUPPLY GRIDS
 650 MM STRAIGHT PATTERN TRANSPARENT FOG RAKE OF 80 MM IN Ø
 Y-PATTERN SPLITTER ENABLING SPLITTING OF ONE TUBE INTO TWO TUBES BOTH PROVIDING PURE WHITE FOG SIMULTANEOUSLY AND ENABLING WORKING SAME TIME ON TWO SEPARATE SPOTS
 2 SETS OF FLEXIBLE TUBE (L X Ø) OF 3.000 X 80 MM PLUS FITTINGS
 TUBE - TUBE CONNECTOR COUPLING TWO SINGLE TUBINGS
 POWER CABLE
 24 MONTHS WARRANTY
 CE-COMPLIANCE CERTIFICATE
 USER MANUAL

ACCESSORIES

LINE	ITEM #.	PICTURE	DESCRIPTION OF ACCESSORY
020	RC.AFM.AD		ADVANCED REMOTE CONTROL FOR ALL MAJOR SYSTEM & FUNCTIONS (ON/OFF, SWITCH & FLASH MODE, FAN UP/DOWN, 4-3-2-1 BLOCK RUN)
030	FL.650.80-STR		650 MM STRAIGHT PATTERN TRANSPARENT FOG RAKE OF 80 MM IN Ø
030	FL.1300.80-STR		1300 MM STRAIGHT PATTERN TRANSPARENT FOG RAKE OF 80 MM IN Ø
080	FL.1300.80-T		MEDIUM T-PATTERN FOG LANCE TRANSPARENT 1.300 X 80 mm (L x Ø)
110	NOZ.250		250 MM BROAD OUTPUT NOZZLE
110	NOZ.500		500 MM BROAD OUTPUT NOZZLE

LINE	ITEM #.	PICTURE	DESCRIPTION OF ACCESSORY
040	Y-SPLITTER		Y-PATTERN SPLITTER ENABLING SPLITTING OF ONE TUBE INTO TWO TUBES BOTH PROVIDING PURE WHITE FOG SIMULTANEOUSLY
050	TUBE.3000.80		3 m FLEXIBLE TUBE of 80 mm in Ø
090	TUBE.5000.80		5 m FLEXIBLE TUBE of 80 mm in Ø
100	TUBE.10000.80		10 m FLEXIBLE TUBE of 80 mm in Ø
060	TUBE.CON		TUBE - TUBE CONNECTOR COUPLING SINGLE TUBINGS
070	115 – 230 VAC-WR.PS		BUILT IN WIDE RANGE POWER SUPPLY COVERING 90 . . . 264 VAC, 47 . . . 63 HZ, 5 A @ 230 VAC, 3 A @ 115 VAC (EU – NA – PLUS POWER SUPPLY) BUFFER FUNCTIONALITY IN CASE OF UNSTABLE POWER SUPPLY GRIDS
120	LED.BOOST		LED LUMINAIRE W/ADJUSTABLE SPOT SIZE INCL. SPECIAL MULTI LENSE ARRAY (RECTANGULAR OR LINE PATTERNS) & HIGHER CONTRAST
130	LF.AFM.18-24-35		LAFETTE/CARRIAGE WITH STEERING HOLM FOR EASY AFN-NEO HANDLING ON THE JOB W/O LIFTING (FSUITABLE FOR AFM18, 24 AND 35)

REFERENCE EXTRACT



SANDOZ



octapharma

Alcon

janssen

Johnson-Johnson



ASML

OSRAM



Boehringer
Ingelheim

