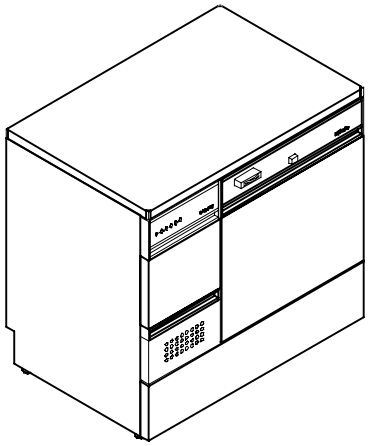
Specifications and Cut-out Dimensions
G 7835 Instrument/Laboratory Washer



Connection Locations

4” x 4” cutout recommended at lower right rear of cabinetry for water, drain, and electric pass through.

Electrical: 5 foot, 4-wire unterminated power cord at lower left rear

Water: Three 5 foot flexible water intake hoses, terminated with 3/4" female hose threads connect lower center rear

Drain: 5 foot flexible drain hose connects lower center rear
Second 5 foot flexible drain hose connects lower right rear

Electrical and Plumbing Specifications

Electrical

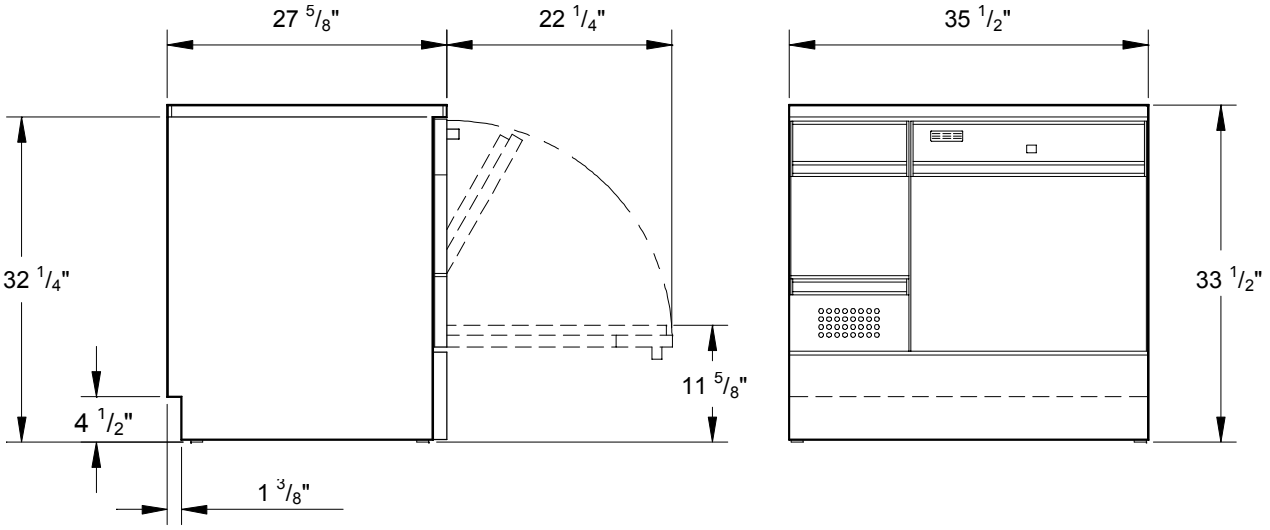
1. 5 foot long, 12 AWG, 4 wire, unterminated power cord
2. 208/220VAC, 60 Hz, 20 Amp, 3 phase supply, 6.0 kW total load. If 3 phase supply is not available, it is possible to convert the G 7835 for 208/220VAC, 60 Hz, 30 Amp single phase power.
   Contact Miele Technical Support for further information.

Water Inlets

1. One 5 foot long, 1/2" ID flexible water intake hose with 3/4" female hose thread connector, for wash cycle. Connect to Hot tap water via 3/4" male hose thread shutoff valve. Max. water inlet temperature = 160°F. Recommended inlet pressure = 25 - 145 PSI.
2. One 5 foot long, 1/2" ID flexible water intake hose with 3/4" female hose thread connector, for rinse cycles. Connect to cold tap water via 3/4" male hose thread shutoff valve. Max. water inlet temperature = 86°F. Recommended inlet pressure = 25 - 145 PSI.
3. One 5 foot long, 1/2" ID flexible water intake hose with 3/4" female hose thread connector for final rinse cycle. Connect to DI water via 3/4" male hose thread shutoff valve. Recommended inlet pressure = 25 - 145 PSI. If DI pressure is < 25 PSI an optional DI pump is available.

Drain

1. Two 5 foot long, 7/8" ID flexible drain hoses.
2. Maximum drain height = 3 feet.
3. Maximum drain length = 12 feet.



All plumbing and electrical work must be performed by licensed professionals and adhere to all applicable Local, State and Federal Codes. The G 7835 can be installed either undercounter or as a freestanding unit.

Miele Model G 7835 Instrument/Laboratory Washer
Abbreviated Specification

Description
Fully programmable instrument/laboratory washer/dryer. Capable of direct injection washing of narrow-necked glassware (with proper inserts) and providing a heated DI water final rinse cycle, acid neutralizer dispensing, and accepts a wide variety of baskets and inserts for various instruments and glassware types. System includes a built-in water softener and HEPA-filtered forced air drying system

Features
- Automatic Wash Programs include: Standard wash, Standard wash with DI rinse, Water softener regeneration, Pump primer, Unlimited programming potential
- Wash Water Temperature: Adjustable up to 95^{o}C (203^{o}F) maximum temperature
- Final Rinse Water Temperature: Adjustable up to 95^{o}C (203^{o}C) maximum temperature
- Dual pump system: Washer incorporates separate pumps for circulation and draining to eliminate cross-contamination and increase pump life
- Water softener: Built-in adjustable water hardness control, with separate water softener reactivation program and indicator light
- Detergent Dispenser: Automatic liquid detergent dispenser. Dispenses 30 ml per minute from 1.5L container integrated within washer
- Neutralizer Dispenser: Automatic liquid acid neutralizer dispenser. Dispenses 20 ml per minute from 1.5L container integrated within cabinet
- Circulation Pump: Rated at 106 gallons per minute, constructed with ABS plastic impeller and housing
- Heater rating: 6000 watts @ 220V for efficient, fast heating
- Drying System: HEPA filtered forced air drying cycle with adjustable temperatures and time. Hot air can be blown through optional injectors for thorough drying of interior of narrow-necked glassware
- Built-in steam condenser eliminates the need for hook-up to building ventilation system
- Accessories: Washer is supplied with upper and lower open stainless steel baskets
- One year parts and labor warranty included

Dimensions & Construction
- Exterior Overall: 33.5” high x 35.5” wide x 27.5” deep
- Interior useable space: 18.5” high x 20.5” wide x 20.5” deep
- Interior Construction: Chamber walls and ceiling are constructed of type 304 stainless steel. Chamber floor and door are constructed of type 316 stainless steel. All surfaces are electro-polished for increased corrosion-resistance
- Exterior cabinet. Constructed of type 304 brushed stainless steel for corrosion-resistance
- Washer is manufactured in a facility which is registered with ISO 9001 quality system

Plumbing & Electrical
- Electrical Requirements: 3 Phase, 208/220V, 60Hz, 20A, 6.8kW load or washer can be modified for Single Phase, 208/220V, 60Hz, 30A, 4.8kW total load.
- Hot Tap Water connection for wash cycle: One ½” ID pressure hose, 5 ft. long provided for connection to ¾” male hose thread. Maximum incoming water temperature 70^{o}C. Input pressure 25-145 PSI
- Cold Tap Water connection for rinse cycles and steam condenser: One ½” ID pressure hose, 5 ft. long provided for connection to ¾” male hose thread. Input pressure 25-145 PSI
- Final DI Rinse Water Connection: One ½” ID pressure hose, 5 ft long provided for connection to ¾” male hose thread. Maximum incoming water temperature 70^{o}C. DI water source input pressure must be 25-145 PSI. Optional DI pump kit is required for input pressure from 5-25 PSI
- Drain Connection: Two 7/8” ID flexible drain hoses, 5 ft long, provided for connection to separate or one combined standpipe. Maximum drain height is 3 ft, flow rate is 2.5 gallons per minute from wash chamber hose, 1 gallon per minute from steam condenser hose.

Section 11600
Glassware Washing & Drying Equipment

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fully programmable laboratory glassware washer/dryer

1.02 SYSTEM DESCRIPTION

A. Fully programmable laboratory glassware washer/dryer. Capable of direct injection washing of narrow-necked glassware (with proper inserts) and providing a heated DI water final rinse cycle, acid neutralizer dispensing, and accepts a wide variety of baskets and inserts for various laboratory glassware types. System includes a built-in water softener and HEPA-filtered forced air drying system

1.03 SUBMITTALS:

A. Product Data: Describes unit construction, size, finish and features

B. Operational and Maintenance Manual: Includes safety instructions, operating instructions, machine care, trouble shooting minor problems. Provided with washer

C. Installation instructions: For electrical, plumbing, drainage and ventilation requirements provided with washer

1.04 QUALITY ASSURANCE:

A. ISO 9001: Washer is manufactured in a facility which is registered with ISO 9001 quality system

1.05 DELIVERY

A. Delivery of complete washing system within 2 weeks from receipt of purchase order.

1.06 WARRANTY

A. One year parts and labor warranty included

PART 2 PRODUCTS

2.01 DESIGN STANDARD MANUFACTURER:

A. Miele Professional Products: Model G7835

2.02 GLASSWARE WASHER

A. Model: Miele Model G7835 under-the-counter or free-standing electrically heated model

B. General Description:

(1) Fully programmable laboratory glassware washer, accepts baskets and optional inserts designed to hold laboratory glassware, including baskets for direct injection cleaning of narrow-necked glassware on one or two levels. Includes HEPA-filter forced air drying system, built-in liquid detergent and neutralizer dispensers and integrated water softener

C. Dimensions:

(1) Exterior Overall: 33.5” high x 35.5” wide x 27.5” deep

(2) Interior useable space: 18.5” high x 20.5” wide x 20.5” deep

D. Construction:

(1) Interior: Chamber walls and ceiling are constructed of type 304 stainless steel. Chamber floor and door are constructed of type 316 stainless steel. All surfaces are electro-polished for increased corrosion-resistance

E Exterior cabinet. Constructed of type 304 brushed stainless steel for corrosion-resistance

F Automatic Wash Programs include

(1) Standard laboratory wash

(2) Standard laboratory wash with DI rinse

(3) Water softener regeneration

(4) Pump primer

(5) Unlimited programming potential

F. Dual pump system: Washer incorporates separate pumps for circulation and draining to eliminate cross-contamination and increase pump life

G. Water softener: Built-in adjustable water hardness control, with separate water softener reactivation program and indicator light

H. Detergent Dispenser: Automatic liquid detergent dispenser. Dispenses 30 ml per minute from 1.5L container integrated within washer

I. Neutralizer Dispenser: Automatic liquid acid neutralizer dispenser. Dispenses 20 ml per minute from 1.5L container integrated within cabinet

J. Circulation Pump: Rated at 106 gallons per minute, constructed with ABS plastic impeller and housing

K. Wash Water Temperature: Adjustable up to 95^{o}C (203^{o}F) maximum temperature

L. Final Rinse Water Temperature: Adjustable up to 95^{o}C (203^{o}C) maximum temperature

M. Heater rating: 6000W heater for efficient, fast heating

N. Drying System: HEPA filtered forced air drying cycle with adjustable temperatures and time Hot air can be blown through optional spindle injectors for thorough drying of interior of narrow-necked glassware

O. Steam Condenser: Integrated steam condenser eliminates the need for hook-up to building ventilation system

P. Accessories: Washer is supplied with upper and lower open stainless steel baskets

PART 3 EXECUTION

3.01 COORDINATION

A. Coordinate with mechanical and electrical trades for location, size and type of service required

3.02 PREPARATION

A. Electrical Requirements: 3 Phase, 208/220V, 60Hz, 20A, 6.8kW load or washer can be modified for Single Phase, 208/220V, 60Hz, 30A, 4.8kW total load.

B. Plumbing Connections:

(1) Hot Tap Water connection for wash cycle: One ½" ID pressure hose, 5 ft. long provided for connection to ¾" male hose thread. Maximum incoming water temperature 70°C. Input pressure 25-145 PSI

(2) Cold Tap Water connection for rinse cycles and steam condenser: One ½" ID pressure hose, 5 ft. long provided for connection to ¾" male hose thread. Input pressure 25-145 PSI

(3) Final DI Rinse Water Connection: One ½" ID pressure hose, 5 ft long provided for connection to ¾" male hose thread. Maximum incoming water temperature 70°C. DI water source input pressure must be 25-145 PSI. Optional DI pump kit is required for input pressure from 5-25 PSI

(4) Drain Connection: Two 7/8" ID flexible drain hoses, 5 ft long, provided for connection to separate or one combined standpipe. Maximum drain height is 3 ft, flow rate is 2.5 gallons per minute from wash chamber hose, 1 gallon per minute from steam condenser hose.

3.03 INSTALLATION

All plumbing and electrical work must be performed by licensed professionals and adhere to all Local, State and Federal Codes

3.04 DEMONSTRATION & INSTRUCTION

A. Manufacturer to provide a minimum of one hour of instruction on operation and maintenance of the washer

END OF SECTION