

CORROSIVENESS AND OXIDATION STABILITY

Corrosiveness and Oxidation Stability of Hydraulic Oils, Aircraft Turbine Engine Lubricants, and Other Highly Refined Oils

Test Method

Evaluates the ability of a lubricant to resist oxidation and the formation of corrosive acid compounds by subjecting a sample to accelerated oxidation conditions in a catalytic environment. The sample is maintained at elevated temperature and subjected to a controlled air flow while in the presence of a series of test specimens made of metals commonly found in actual service conditions.

Corrosiveness and Oxidation Stability Test Apparatus

- Models for ASTM, Federal and IHC test methods
- Six-sample testing capability
- Solid aluminum block design
- Microprocessor temperature control with digital display and overtemperature protection

Constant temperature block baths for corrosivity and oxidation stability determinations on hydraulic oils, aircraft turbine lubricants, transmission fluids and other highly refined oils. Insulated aluminum block provides safe, efficient performance at operating temperatures of up to 750°F (399°C). Microprocessor temperature control has °C/°F switchable digital setpoint and display. Operator and equipment are protected by an overtemperature control circuit which automatically interrupts power to the unit should block temperature exceed a programmed cut-off point. *Communications software (RS232, etc.), ramp-to-set and other enhanced features are available as extra cost options. Contact your Koehler representative for information.* Air flow is controlled at the specified rate by six individually adjustable flowmeters mounted on a common manifold. Includes inlet valve and outlet fitting for condenser water supply and support rack for glassware.



K35100 FTM 791-5307 Model with accessory glassware

Specifications

Conforms to the specifications of:

ASTM D4636, D5968, D6594; FTM 791-5307, 791-5308;
IHC BT-10; DIN 51394

Capacity: 6 test cells

Temperature Range: 125 to 750°F (51.7 to 399°C)

Temperature Control Stability: ±1°F (±0.5°C)

Air Flow Rate: ASTM D4636/FTM 791-5307: 10L/h

FTM 791-5308: 3L/h and 5L/h (dual range flowmeters)

IHC BT-10: 3L/h (50mL/min.)

Electrical Requirements: 220-240V 50/60Hz, Single Phase, 15.9A C €

Dimensions l x w x h, in. (cm)

32½ x 14½ x 41½ (83 x 37 x 105)

Net Weight: 271 lbs (122.9kg)

Shipping Information

Shipping Weight: 375 lbs (170.1kg)

Dimensions: 18.5 Cu. ft.

Ordering Information

Catalog No.		Order Qty
K35100	ASTM D4636, D5968 and FTM 791-5307 Model, 220-240V 50/60Hz	1
K35000	FTM 791-5308 Model, 220-240V 50/60Hz	
K35300	IHC BT-10 Model, 220-240V 50/60Hz	
Thermometers		
250-000-08F	ASTM 8F Thermometer Range: 30 to 760°F	
250-000-08C	ASTM 8C Thermometer Range: -2 to +400°C	

For NIST traceable certified thermometers, please refer to the ASTM Thermometers sections on pages 184 through 191.



Digital Flowmeter option
is available for this unit.



Software compatible, inquire
with Customer Service.

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Glassware, Test Specimens and Accessories		Metal Test Specimens	
Catalog No.		Order Qty	Catalog No.
ASTM D4636, D5968, D6594 and FTM 791-5307			Washer Shaped Specimens for ASTM D4636 Standard Procedure and for FTM 791-5307
K351-0-1	Sample Tube	6	K35110 Bronze
K351-0-2	Sample Tube Head	6	K35120 Mild Steel
K351-0-3	Air Tube	6	K35130 Aluminum Alloy
K351-0-4	Thermocouple Tube	6	K35140 Magnesium
K351-0-5	Condenser, Allihn Type	6	K35150 Steel M50
K351-0-6	Oil Sampling Tube (for D4636)	6	K35160 Silver
K351-0-7	Spacer	36	K35170 Titanium
K351-0-8	PTFE Adapter	6	
K351-0-13	Oil Sampling Tube (for D5968 and FTM 791-5307)		Square Shaped Specimens for ASTM D4636 Alternate Procedure and for FTM 791-5308
K351-0-14	Specimen Hanger (for D6594)		K35010 Copper
K293-0-12	Thermocouple, Type J	6	K35020 Mild Carbon Steel
K29319	Digital Thermometer, 220-240V Microprocessor based digital thermocouple thermometer with ten-channel input. Monitors Type J thermocouples from sample tubes.	1	K35030 Aluminum Alloy
K35090	Test Panel Assembly Fixture Holds square-shaped metal specimens for tying with cord (for ASTM D4636 Alternate Procedure and FTM 791-5308)	1	K35040 Magnesium Alloy
K35095	Test Panel Assembly Fixture Holds square-shaped metal specimens for tying with cord (for ASTM D5968)	1	K35050 Cadmium Plated Steel
			K35060 Silver
			K35070 Solid Cadmium (non standard)
			K35080 Titanium (non standard)
			Square Shaped Specimens for ASTM D5968 and D6594
FTM 791-5308			K35010 Copper
K350-0-23	Test Tube	6	K35011 Lead
K350-0-24	Air Tube	6	K35012 Tin
K350-0-25	Condenser	6	K35013 Phosphor Bronze
K35090	Test Panel Assembly Fixture Holds square-shaped metal specimens for tying with cord.	1	Rectangular Shaped Specimens for IHC BT-10
			K353-0-5 Aluminum
			K353-0-6 Copper
			K353-0-7 Steel
			K353-0-8 Brass
IHC BT-10			Polishing Materials
K353-0-1	Test Cell	6	380-150-001 Silicone Carbide Paper, 150-grit, Pack of 50 sheets
K353-0-2	Condenser	6	380-240-001 Silicone Carbide Paper, 240-grit, Pack of 50 sheets
K353-0-3	Air Tube	6	380-150-000 Silicone Carbide Grain, 150-grit, 1 lb package
K353-0-4	Ring Rod	6	