



aerospace climate control electromechanical filtration fluid & gas handling hydraulics pneumatics process control sealing & shielding





KSG Parker Sporlan WorldSeries™

Liquid Line Sight Glass with Moisture Indicator







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Liquid Line Sight Glass with Moisture Indicator

Parker Sporlan KSG liquid line sight glasses with moisture indicator allow a visual indication of colour, flow and quality of the refrigerant in refrigeration and air-conditioning systems.

KSG liquid line sight glasses with moisture indicator ensure visualization of refrigerant flow and inform of correct filling, subcooling, high pressure drop inside filter drier and moisture content.

KSG liquid line sight glasses with moisture indicator is perfectly adapted with HFC refrigerant and associated POE or PAG oils which are more hygroscopic than CFC or HCFC with mineral or alkyl benzene oils.

POE or PAG oils are able to form acid with a smallest quantity of moisture in a circuit (>75ppm).

It is now more important than ever to use sight glasses with greater sensitivity of moisture indication to ensure maximum system protection and perfect visual indication of refrigerant quality.

KSG liquid line sight glasses with moisture indicator is a combination of a brass body and a large diameter fused bezel fitted in the upper part and containing a moisture indicator.

KSG liquid line sight glasses with moisture indicator use a long copper connection to facilitate the brazing without removing the glass.

However we recommend to protect the glass by calorie discharger **TB2 Thermal Block**[™] or to wrap with a damp cloth.

The sight glass can be easily removed and replaced if necessary.





Specifications

Max Working Pressure	45bar (652psig)
Temperature Range	-40°C to +80°C

Leak Testing

100% tested with helium and pressurized nitrogen.

Approvals/Conformity

UL file no. SA 12574 (500 psig) PED 97/23/EC – article 3.3 RoHs Directive 2002/95/EC

Technical Data

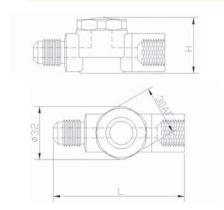
	Moisture Content – ppm									
KSG Colour Indication	R22		R134a		R404A R507		R407C		R410A	
	24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C	24°C	52°C
Green – Dry	60	120	30	60	40	85	30	70	75	135
Yellow – Wet	110	220	125	200	140	400	115	230	150	250



Technical Data

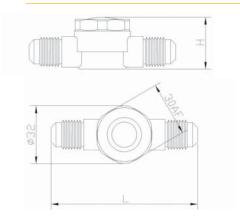
Part Number	Connection		Tube		L	Α	Н	Weight
	SAE	ODF	Inch	mm	mm	mm	mm	kg
KSG 2F	1/4"		1/4"	6	81		29	0.15
KSG 3F	3/8"		3/8"	10	81		29	0.18
KSG 4F	1/2"		1/2"	12	83		34	0.18
KSG 5F	5/8"		5/8"	16	93		36	0.36
KSG 6F	3/4"		3/4"	18	97		39	0.36
KSG 2MF	1/4"		1/4"	6	77		29	0.32
KSG 3MF	3/8"		3/8"	10	80		34	0.34
KSG 4MF	1/2"		1/2"	12	87		36	0.34
KSG 5MF	5/8"		5/8"	16	91		29	0.38
KSG 2S		1/4"			147	147	29	0.14
KSG 3S		3/8"			147	147	29	0.14
KSG 4S		1/2"			161	161	36	0.17
KSG 5S		5/8"			161	161	36	0.24
KSG 6S		3/4"			171	171	36	0.25
KSG 7S		7/8"			175	175	46	0.40
KSG 9S		1-1/8"			175	175	46	0.40
KSG 6mmS		6mm			147	147	29	0.14
KSG 10mmS		10mm			147	147	29	0.14
KSG 12mmS		12mm			161	161	36	0.17
KSG 5S		16mm			161	161	36	0.24
KSG ST5			5/8"	16			26	0.06
KSG ST7			7/8"	22			26	0.08
KSG ST9			1-1/8"	28			26	0.10
KSG ST11			1-3/8"	25			26	0.10
KSG ST13			1-5/8"	42			26	0.10
KSG ST17			2-1/8"	54			26	0.10

KSG-HF



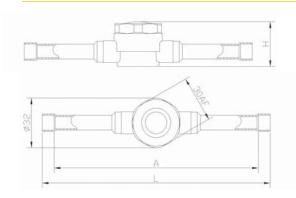


KSG-F



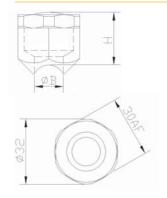


KSG-S





KSG-ST





Notes		



WARNING - USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.
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Parker's Motion & Control Technologies



Aerospace Key Markets

Aftermarket services

Commercial transports Engines General & business aviation Heliconters Launch vehicles Military aircraft Power generation Regional transports Unmanned aerial vehicles

Key Products

Control systems & actuation products Fngine systems & components Fluid conveyance systems & components Fluid metering, delivery & atomization devices Fuel systems & components Fuel tank inerting systems Hydraulic systems & components Thermal management Wheels & brakes



Climate Control

Key Markets

Agriculture Air conditioning Construction Machinery Food & beverage Industrial machinery Life sciences Oil & gas Precision cooling Process Refrigeration

Key Products

Transportation

Accumulators Advanced actuators CO2 controls Electronic controllers Filter driers Hand shut-off valves Heat exchangers Hose & fittings Pressure regulating valves Refrigerant distributors Safety relief valves Smart pumps Solenoid valves Thermostatic expansion valves



Electromechanical

Key Markets

Aerospace Factory automation Life science & medical Machine tools Packaging machinery Paper machinery Plastics machinery & converting Semiconductor & electronics Textile Wire & cable

Key Products

AC/DC drives & systems Electric actuators, gantry robots & slides Electrohydrostatic actuation systems Electromechanical actuation systems Human machine interface Linear motors Stepper motors, servo motors, drives & controls Structural extrusions



Filtration

Key Markets Aerospace

Food & beverage Industrial plant & equipment Life sciences Marine Mobile equipment Oil & gas Power generation & renewable energy Process Transportation Water Purification

Key Products

Analytical gas generators Compressed air filters & dryers Engine air, coolant, fuel & oil filtration systems Fluid condition monitoring systems Hydraulic & lubrication filters Hydrogen, nitrogen & zero air generators Instrumentation filters Membrane & fiber filters Microfiltration Water desalination & purification filters & system



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Fluid & Gas Handling

Key Markets

Aerial lift Agriculture Bulk chemical handling Construction machinery Food & beverage Fuel & gas delivery Industrial machinery Life sciences Marine Mining Mobile Oil & gas Renewable energy Transportation

Key Products

Connectors for low pressure fluid conveyance Deep sea umbilicals Diagnostic equipment Hose couplings Industrial hose Mooring systems & power cables PTFF hose & tubing Quick couplings Rubber & thermoplastic hose Tube fittings & adapters Tubing & plastic fittings



Hydraulics

Key Markets Aerial lift

Agriculture Alternative energy Construction machinery Forestry Industrial machinery Machine tools Marine Material handling Mining Oil & gas Power generation Refuse vehicles Renewable energy Truck hydraulics Turf equipment

Key Products

Accumulators Cartridge valves Electrohydraulic actuators Human machine interfaces Hybrid drives Hydraulic cylinders Hydraulic motors & pumps Hydraulic systems Hydraulic valves & controls Integrated hydraulic circuits Power units Rotary actuators Sensors



Pneumatics

Key Markets

Aerospace Conveyor & material handling Factory automation Life science & medical Machine tools Packaging machinery Transportation & automotive

Key Products Air preparation Brass fittings & valves

Manifolds

Pneumatic accessories Pneumatic actuators & grippers Pneumatic valves & controls Quick disconnects Rotary actuators Rubber & thermoplastic hose & couplings Structural extrusions Thermoplastic tubing & fittings Vacuum generators, cups & sensors



Process Control

Key Markets

Alternative fuels Biopharmaceuticals Chemical & refining Food & beverage Marine & shipbuilding Medical & dental Microelectronics Nuclear Power Offshore oil exploration Oil & gas Pharmaceuticals Power generation Pulp & paper Water/wastewater

Key Products Analytical Instruments Analytical sample conditioning products & systems Chemical injection fittings & valves Fluoropolymer chemical delivery fittings, valves & pumps High purity gas delivery fittings, valves, regulators & digital flow controllers Industrial mass flow meters/ controllers Permanent no-weld tube fittings Precision industrial regulators & flow controllers Process control double block & bleeds Process control fittings, valves, regulators & manifold valves



Sealing & Shielding

Key Markets

Aerospace Chemical processing Consumer Fluid power General industrial Information technology Life sciences Microelectronics Military Oil & gas Power generation Renewable energy Telecommunications Transportation

Key Products

Dynamic seals Elastomeric o-rings Electro-medical instrument design & assembly EMI shielding Extruded & precision-cut, fabricated elastomeric seals High temperature metal seals Homogeneous & inserted elastomeric shape: Medical device fabrication Metal & plastic retained composite seals Shielded ontical windows Silicone tubing & extrusions Thermal management

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