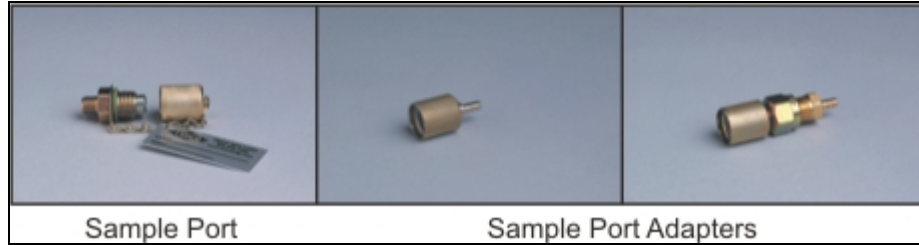


SAMPLE PORTS



APPLICATIONS:

Where and how oil samples are collected are two of the most important functions of the oil sampling process. Without a representative sample, further oil analysis efforts will be ineffective. That's why these sample ports are designed to draw samples from the most representative areas of industrial equipment. These sample ports are also designed to collect samples under the equipment's typical operating condition - another important factor.

The collection process is simple, fast and accurate way of sampling hydraulic, lubricating, and circulating systems. Access to systems is done through the use of a mating sample port adapter. The sample port adapter screws onto the sample port. Oil samples can then be drawn from the system and placed into a clean sampling bottle for analysis.

To guard against contaminating the sample and for superior leak protection, Sampling ports all feature a check valve and Viton o-ring seal cap.

Sample ports are available in several types and sizes to match the varying requirements of manufacturers. Please see below for a complete listing and specifications. To complement the sample ports, there are a number of sample port adapters available, as well.

FEATURES:

- Protective cap seals against dirt and moisture.
- Cap connected to sample port with a heavy brass chain to prevent loss.
- Sample directly from lubricating oil while equipment is running.
- Minimizes introduction of contamination to system.
- Used in conjunction with proper accessories sample ports are adaptable to pressure, static, and vacuum locations.

SPECIFICATIONS:

Maximum Working Pressure	9000 PSI (630 bar)
Connect Under Pressure	5800 PSI (400 bar)
Check Valve Ball	Stainless Steel
O-Ring	Viton®
Maximum Operating Temperature	-4°F to 392°F

MICRO-BORE TEST HOSE



APPLICATIONS:

The micro-bore test hose is used for remote or difficult to reach oil sampling locations that are too close to moving parts, making the task too dangerous. The micro-bore test hose is designed to make oil sampling safe and convenient. The hose assembly is available in various lengths for ease of installation. A bulkhead sample port is available for installations that require panel mounting.

SPECIFICATIONS:

Maximum Working Pressure	9000 PSI (630 bar)
Internal Dia	.08" (2 mm)
Minimum Bending Radius	.75"
Thread Connection	M16 x 2

PITOT TUBE SAMPLE PORT



APPLICATIONS:

Pitot Tube sampling ports are designed to provide a safe, simple and effective method of sampling fluids from sumps and non-flooded horizontal drain lines. They ensure oil samples are drawn from the most appropriate location of the sump reservoir, and that the sample is taken from the exact location inside the system each time, which is important for maintaining consistency in routine sampling. The thick wall tubing can be bended and directed to the ideal sampling location with the use of a swivel adapter.

FEATURES:

- Pitot Tubes are equipped with sample ports.
- Available in 12", 18", 24", and 72" lengths.
- Installs easily into drain, fill or sampling pipe ports.
- Swivel options available for bent tubes in confined locations.

SPECIFICATIONS:

Maximum Pressure	500 PSI (34.5 bar)
Material	Carbon Steel or Stainless Steel
Check Valve Ball	Stainless Steel
Seal	Viton®
Maximum Operating Temperature	-4°F to 392°F

VACUUM PUMPS



APPLICATIONS:

A necessary tool for extracting an oil sample from the sample port, The Vacuum Pump is compact for ease of transport. When used in combination with a sample port adapter, flexible tubing, and a 4-ounce sterilized sample bottle the user is able to connect to any sample port for contamination free oil sampling in the most representative locations.

Herguth also offers a heavy-duty Vacuum Pump model that includes a release valve.

FEATURES:

- Draws a vacuum of 27 inches of Hg (Mercury).
- Uses 3/16" to 5/16" tubing.

LIQUID LEVEL GAUGE SAMPLE PORTS



APPLICATIONS:

Liquid Level Gauge Sample Ports provide easy viewing of fluid levels and oil condition in many industrial applications. They are ideal for bearing housings and other non-pressurized applications. Liquid Level Gauge Sample Ports include a Pitot Tube for static sampling, which provides repetitive, representative oil sampling.

FEATURES:

- Guards are standard on all sights and may be rotated 360° for easy viewing of fluid level and condition.
- Liquid Level Gauge Sample Ports are equipped with Pitot Tubes in lengths of 12", 18", and 24".
- Level gauge sights are available in sizes from 1-3/8" to 7-1/2" in length.
- For use with non-pressurized systems.

SPECIFICATIONS:

Material (Level Gauge)	Brass
Material (Pitot Tube)	Carbon Steel
Sight	Glass
Seals	Viton®
Maximum Operating Temperature	250°F

SPACER FLANGE SAMPLE PORTS



APPLICATIONS:

In situations where flanged fittings provide the optimum and representative place for sampling, Spacer Flange Sampling Ports make it easy. The Code 61 O-ring flange, fitted with sample a port, allows you to pull your sample between any two standard flanges. Code 62 and stainless steel O-ring flanges are also available.

FEATURES:

- For use with high-pressure hydraulic applications.
- Meets Code 61 and Code 62 pressure ratings for four-bolt flanges.

SPECIFICATIONS:

Maximum Pressure	3000 PSI (274 bar) - Code 61 6000 PSI (548 bar) - Code 62
Connect Under Pressure	5800 PSI (400 bar) - Code 62
Material	Carbon Steel or Stainless Steel
Check Valve Ball	Stainless Steel
Seals	Viton®
Maximum Operating Temperature	-4°F to 392°F

CATCH PIPE SAMPLING PORTS



APPLICATIONS:

Catch Pipe Sample Ports are designed to provide a simple and effective method of sampling fluids from a non-flooded line. The internal trap has a drain hole for continuous trap flushing, providing a truly representative oil sample. The internal trap design is packaged in an extended piping nipple with a NPT or weld-end for simple installation. Equipped with a standard Trico Sample Port, the sampling method is further simplified for reduced chances of contamination.

FEATURES:

- For use in non-pressurized, non-flooded vertical lines.
- Internal trap has drain to avoid contamination build-up.

SPECIFICATIONS:

Material (Pipe)	Stainless Steel
Material (Sampling Port)	Carbon Steel or Stainless Steel
Check Valve Ball	Stainless Steel
Seals	Viton®
Maximum Operating Temperature	-4°F to 392°F

BREATHER KITS



APPLICATIONS:

Because airborne contaminants can quickly disrupt and negate your sample, we offer specially designed Breather Kits. These kits feature a two-stage breather system that utilizes a filter to block airborne particles and desiccant to remove, harmful, unwanted moisture. The system ensures a permanent closure on all hydraulic reservoirs and makes sure the lubricating fluid remains closed off from airborne contamination throughout the sampling process.

The kit's filter and desiccant are completely independent of one another and are replaceable. An optional filter reminder vacuum gauge can be used to indicate when the filter element on the breather has become clogged and needs replacing.

A male quick connect can be plumbed to the 6-bolt adapter plate (this plate replaces the standard filler/breather cap) to fit a down pipe for filling reservoirs with new oil through a filter cart without opening the system to the environment.

For static sampling of the oil from the system reservoir, the 6-bolt adapter plate can incorporate a sample port connected to a sample tube. The tube conveniently extends to the middle of the fluid level in the system reservoir to allow samples to be taken from the exact location inside the system every time.

FEATURES:

- The Watchdog Desiccant Breathers can be used instead of breathers DB93 & DB96.
- Three-micron replaceable filter element is used to prohibit the entry of particulate contamination. (only DB93 & DB96)
- Optional filter reminder indicates remaining life of filter element.
- Color coded desiccant changes colors indicating replacement is needed, when maximum adsorption is reached.
- Optional sample port is available with sampling drop tubes 12", 18", and 24" lengths.

SPECIFICATIONS:

Absolute Micron Rating (filter element)	3 microns
Air Flow Capacity (filter element)	135 gpm
Filtration Area (filter element)	109 sq in