

3. DEFINITIONS

3.1 STROKE LENGTH

The total distance traveled by the piston in completing one-half cycle.

3.2 CYCLE

The movement of the piston and rod from its starting point and return to its original position for a specified test stroke length.

3.3 CYCLE RATE

The number of cycles per unit of time.

3.4 DRIFT

Rod movement while holding a constant load.

3.5 DYNAMIC LEAKAGE

The volume of fluid leaking past a seal under cycling conditions.

3.6 DYNAMIC LEAKAGE COEFFICIENT

A measure of dynamic leakage volume per unit of swept area.

K_a = dynamic leakage coefficient for piston end to rod end leakage

K_b = dynamic leakage coefficient for rod end to piston end leakage

K_c = dynamic leakage coefficient for external leakage

3.7 EXTERNAL SEAL

A seal or seal set configuration which restricts leakage flow to the outside of a cylinder.

3.8 INTERNAL SEAL

A seal or seal set configuration which restricts leakage flow when pressurized fluid is applied on either side of the piston.

3.9 "N"

The number of cycles measured to determine dynamic coefficients K_a , K_b , or K_c .

3.10 RATED PRESSURE

The continuous duty operating pressure specified by the manufacturer.

4. TESTING CONDITIONS

4.1 Accuracy of Measurement

The accuracy of measurements unless otherwise stated shall be: Temperature ± 3 °C, pressure $\pm 2\%$, leakage $\pm 2\%$, time $\pm 2\%$, and length $\pm 2\%$.

4.2 Test Fluid

The test fluid shall be per SAE J1276 unless otherwise specified.