

SUCO - 0705/0710/0720 PRESSURE SENSOR

High performance series

070510241B007 0.5-4.5V, 0..100 bar, G1/4-E, AMP Superseal 1.5®

- Measuring range up to 600 bar
- Silicon-on-sapphire sensor
- Outstanding overpressure protection
- Outstanding repeatability



PRODUCT DESCRIPTION

The SUCO 0705/0710/0720 high performance series pressure sensor is an advanced pressure monitoring solution with unrivalled attributes. Offering ten standard pressure ranges with options of six different electrical connectors a thread of G1/4 (eight available in total) and 0.5-4.5 V ratiomateric, 0-10V or 4-20mA outputs. The 07 series uses silicon-on-sapphire technology in a titanium all welded design offering outstanding overpressure protection, media compatibility and the highest repeatability.

Common applications include mobile hydraulics, off-shore/marine, high pressure systems and more.

TECHNICAL DATA

Accuracy

Burst pressure

±0.5% FS

800 bar

ConnectionG1/4-EElectrical connectionAMP SupersealIP classIP67Long term stabilityG1/8/FS p.a.Material of bodyStainless steel 1.4305, TitaniumMaterial of wetted partsStainless steel 1.4305, TitaniumOverpressure protection400 barPressure range max100 barPressure range max0 barPressure referenceGaugePressure rise5 bar/msRepeatability0.1% FSReports time500 / s² 1.1m shaff sine wave; DIN EN 60089-2:27Signal type5.54 VatiometricSupply voltage de max5.54 VatiometricTemperature ambient from6.54 VatiometricTemperature ambient from4.0 °CTemperature ambient from4.0 °CTemperature ambient from4.0 °CTemperature andient form4.0 °CTemperature form form4.0 °CTemperature andient form4.0 °CTemperature and		
P classP67Iong term stability9.0% FS p.a.Material of bodyStainless steel 1.4305Material of wetted partsStainless steel 1.4305, TitaniumOverpressure protection400 barPressure range man00 barPressure referenceGaugePressure reference5.bar/mSRepetability0.0% f S1Reponse time5.0% f S1Signal type6.54.5 V ratiometricSupply voltage de man6.5 V DCTemperature ambient from6.0% f S1Temperature ambient from0.0% f S1Temperature ambient form6.0% f S1Temperature and from6.0% f S1Temperature and from0.0% f S1Temperature and from6.0% f S1Temperature of media from6.	Connection	G1/4-E
Long term stability±0.1% FS p.a.Material of bodyStainless steel 1.4305Material of wetted partsStainless steel 1.4305, TitaniumOverpressure protection400 barPressure range max100 barPressure range max0 barPressure range maxGaugePressure referenceGaugeResponse time2 msStock resistance500m / s², 11 ms half sine wave; DIN EN 60068-2-27Signal type0.54.5 V ratiometricSupply voltage dc max5 V DCTemperature ambient from400°CTemperature error400°CTemperature of media from40°CTemperature of media from40°CTemperature of media from80 g	Electrical connection	AMP Superseal
Material of bodyStainless steel 1.4305Material of wetted partsStainless steel 1.4305, TitaniumOverpressure protection400 barPressure range max100 barPressure range min0 barPressure referenceGaugePressure rise5 bar/msRepeatability201% FSShock resistance500m / s², 11 ms half sine wave; DIN EN 60068-2-27Signal type0.54 S VariometricSupply voltage dc max6.54 VDCTemperature ambient from100 °CTemperature ambient from100 °CTemperature of media from400 °CYengtature of media from400 °CYengtature of media from6.54 °CYengtature of media from100 °CYengtature of media from800 %S°Yengtature of media from800 %S° <th>IP class</th> <th>IP67</th>	IP class	IP67
Material of wetted partsStainless steel 1.4305, TitaniumMaterial of wetted partsStainless steel 1.4305, TitaniumOverpressure protection400 barPressure range max100 barPressure range max0 barPressure range maxStainless de la GaugePressure range max5 bar/msPressure rise5 bar/msRepeatability±0.1% FSResponse time2 msSignal type054-5V ratiometricSignal type0.54-5V ratiometricSupply voltage dc max6.5V DCTemperature ambient from400 °CTemperature ambient from100 °CTemperature of media from400 °CTemperature of media from400 °CYeight80 g	Long term stability	±0.1% FS p.a.
Overpressure protection400 barPressure range max100 barPressure range min0 barPressure referenceGaugePressure rise5 bar/msRepeatability40.1% FSResponse time00m / s²; 11 ms half sine wave; DIN EN 60068-2-27Signal type054.5 V ratiometricSupply voltage dc max5 V DCTemperature ambient from40.0% CTemperature ambient from100 °CTemperature of media from40.0% RS°CTemperature of media from80.9% CWeight80.9% C	Material of body	Stainless steel 1.4305
Pressure range max100 barPressure range min0 barPressure referenceGaugePressure rise5 bar/msRepeatability40.1% FSReponse time2 msShock resistance500m / s²; 11 ms half sine wave; DIN EN 60068-2:27Signal type0.54.5 V ratiometricSupply voltage dc max6.5 V DCTemperature ambient from40°CTemperature ambient form40.0°CTemperature of media from40.0°CTemperature of media from80.9	Material of wetted parts	Stainless steel 1.4305, Titanium
Pressure range min0 barPressure referenceGaugePressure rise5 bar/msRepeatability10.1% FSResponse time2 msShock resistance500m / s²; 11 ms half sine wave; DIN EN 60068-2-27Signal type0.5-4.5 V ratiometricSupply voltage dc max5 V DCTemperature ambient from40 °CTemperature of media from0.01% FS°CTemperature of media from125 °CWeight80 g	Overpressure protection	400 bar
Pressure referenceGaugePressure riseGaugePressure riseSbar/msRepeatability0.1% FSResponse time2 msShock resistanceSolm / s²; 11 ms half sine wave; DIN EN 60068-2-27Signal type0.54.5 V ratiometricSupply voltage dc max6.5 V DCTemperature ambient from4.0 °CTemperature ambient from0.01% FS°CTemperature of media from4.0 °CTemperature of media to2.5 °CWeight8.0 g	Pressure range max	100 bar
Pressure rise5 bar/msRepeatability±0.1% FSResponse time2 msShock resistance500m / s²; 11 ms half sine wave; DIN EN 60068-2-27Signal type0.5-4.5 V ratiometricSupply voltage dc max6.5 V DCTemperature ambient from-40 °CTemperature ambient to100 °CTemperature of media form-40 °CTemperature of media to25 °CWeight0.30 g	Pressure range min	0 bar
Repeatability±0.1% FSResponse time2 msShock resistance500m / s², 11 ms half sine wave; DIN EN 60068-2-27Signal type0.5-4.5 V ratiometricSupply voltage dc max6.5 V DCSupply voltage dc min5 V DCTemperature ambient from40 °CTemperature ambient fom100 °CTemperature ambient to100 °CTemperature of media from25 °CTemperature of media from20 °CWeight80 g	Pressure reference	Gauge
Response time2 msShock resistance500m / s²; 11 ms half sine wave; DIN EN 60068-2-27Signal type0.54.5 V ratiometricSupply voltage dc max6.5 V DCSupply voltage dc min5 V DCTemperature ambient from40 °CTemperature ambient form10.0 °CTemperature of media from40 °CTemperature of media from25 °CTemperature of media from25 °CTemperature of media from80 g	Pressure rise	5 bar/ms
Shock resistance500m / s²; 11 ms half sine wave; DIN EN 60068-2-27Signal type0.54.5 V ratiometricSupply voltage dc max6.5 V DCSupply voltage dc min5 V DCTemperature ambient from-40 °CTemperature ambient to100 °CTemperature error4.0 °CTemperature of media from-40 °CTemperature of media from-40 °CTemperature of media from-80 °CTemperature of media from-80 °CWeight80 g	Repeatability	±0.1% FS
Signal type0.5-4.5 V ratiometricSupply voltage dc max6.5 V DCSupply voltage dc min5 V DCTemperature ambient from-40 °CTemperature ambient to100 °CTemperature error±0.01% FS/°CTemperature of media from-40 °CTemperature of media to25 °CWeight80 g	Response time	2 ms
Supply voltage dc max6.5 V DCSupply voltage dc min5 V DCTemperature ambient from-40 °CTemperature ambient to100 °CTemperature error±0.01% FS/°CTemperature of media from-40 °CTemperature of media to125 °CWeight80 g	Shock resistance	500m / s ² ; 11 ms half sine wave; DIN EN 60068-2-27
Supply voltage dc minSV DCTemperature ambient from-40 °CTemperature ambient to100 °CTemperature error±0.01% FS/°CTemperature of media from-40 °CTemperature of media to125 °CWeight80 g	Signal type	0.5-4.5 V ratiometric
Temperature ambient from-40 °CTemperature ambient to100 °CTemperature error±0.01% FS/°CTemperature of media from-40 °CTemperature of media to125 °CWeight80 g	Supply voltage dc max	6.5 V DC
Temperature ambient to100 °CTemperature error±0.01% FS/°CTemperature of media from-40 °CTemperature of media to125 °CWeight80 g	Supply voltage dc min	5 V DC
Temperature error±0.01% FS/°CTemperature of media from-40 °CTemperature of media to125 °CWeight80 g	Temperature ambient from	-40 °C
Temperature of media from-40 °CTemperature of media to125 °CWeight80 g	Temperature ambient to	100 °C
Temperature of media to 125 °C Weight 80 g	Temperature error	±0.01% FS/°C
Weight 80 g	Temperature of media from	-40 °C
	Temperature of media to	125 °C
Vibration resistance20g: 42000 Hz sine wave, DIN EN 60068-2-6	Weight	80 g
	Vibration resistance	20g: 42000 Hz sine wave, DIN EN 60068-2-6







