

Pressure Transmitters



- Wetted parts are all made of stainless steel for high resistance to chemicals
- Stainless steel diaphragm welded with casing
- No seals and thus low leakage rate even with difficult gases
- High overpressure safety especially suitable for use in mobile hydraulic systems
- Long working life even with high rates of pressure cycles
- Flexible voltage supply and current or voltage output signal for your control electronics
- High accuracy (0.5 % full scale) and reliability for secure process monitoring
- Very small size for compact subassemblies
- IP67 with robust connections for reliable wiring



Technical Data

Type	0605	0610	0620
Output signal:	0.5 – 4.5 V ratiometrically	0 – 10 V (3-wire)	4 – 20 mA (2-wire)
Supply voltage U_b :	5 VDC \pm 10 %	12 – 32 VDC	12 – 32 VDC
Maximum load:	\geq 4.7 k Ω	\geq 4.7 k Ω	$\leq (U_b - 12 \text{ V}) / 20 \text{ mA}$
Current consumption (without load):	\leq 10 mA	\leq 15 mA	–
Pressure ranges p_{range} :	-1 – 0 bar; 0 – 10 bar; 0 – 100 bar; 0 – 250 bar; 0 – 600 bar; 0 – 1000 bar -14.5 – 0 PSI; 0 – 145 PSI; 0 – 1450 PSI; 0 – 3625 PSI; 0 – 8700 PSI; 0 – 14500 PSI		
Accuracy:	\pm 0.5 % full scale at room temperature		
Response time (10 – 90 %):	max. 2 ms		
Temperature range:	-40 °C – +125 °C -40 °F – +257 °F	-40 °C – +105 °C -40 °F – +221 °F	-40 °C – +100 °C -40 °F – +212 °F
Temperature drift:	approx. \pm 0.2 % / 10 K		
Mechanical life expectancy:	10^7 pulses up to nominal p_{range}		
Overpressure safety ¹⁾ :	2 x p_{range} up to 350 bar; 1.5 x p_{range} up to 600 bar; 1.2 x p_{range} at 1000 bar; 2 x p_{range} up to 5100 PSI; 1.5 x p_{range} up to 8700 PSI; 1.2 x p_{range} at 14500 PSI		
Bursting pressure ¹⁾ :	3 x p_{range} up to 350 bar; 2 x p_{range} up to 600 bar; 1.5 x p_{range} at 1000 bar; 3 x p_{range} up to 5100 PSI; 2 x p_{range} up to 8700 PSI; 1.5 x p_{range} at 14500 PSI		
Materials:	body material: 1.4301 diaphragm: 1.4301 (<500 bar / 7250 PSI); 1.4542 (>500 bar / 7250 PSI)		
Reverse polarity protection:	built in		
Protection according to DIN EN 60 529:	IP67 for M12x1 and DIN 72585; IP65 for AMP and DIN EN 175301-803 (DIN 43650)		
Weight:	approx. 100 g (DIN EN 175301 approx. 120 g)		
Vibration resistance:	20 g at 4 – 2000 Hz sine		
Max. length of connection cable:	30 m / 100 ft		
EMC Standards:	DIN EN 61000-6-2, DIN EN 61000-6-3		

¹⁾ Static pressure, dynamic pressures should be 30 to 50% lower. These values refer to the hydraulic or pneumatic part of the pressure transmitter.

CE Marking

Directives of the European Council

**Machinery Directive,
EMC Directive
Low Voltage Directive
ATEX Directive**

Equipment that falls under these directives must have a declaration of conformity and carry the CE marking.

SUCO transmitters comply with the EMC Directive 89/336/EC.

An EC Declaration of Conformity has been prepared for all products that fall under these directives and is kept on our premises. The catalogue pages for the relevant products carry the CE marking.

0605/0610/0620

Technical Explanations



DIN EN 175301-803-A

0605 + 0610	0620
1: U _{out}	1: nc
2: Gnd	2: I _{out}
3: Uv+	3: Uv+

x ≈ 88 mm*

d = Ø22 mm

Order number: 001

M12

0605 + 0610	0620
1: Uv+	1: Uv+
2: U _{out}	2: nc
3: Gnd	3: I _{out}
4: nc	4: nc

x ≈ 72 mm

d = Ø22 mm

Order number: 002

AMP Junior-Timer

0605 + 0610	0620
1: Uv+	1: Uv+
2: U _{out}	2: nc
3: Gnd	3: I _{out}

x ≈ 57 mm

d = Ø22 mm

Order number: 003

DIN 72585-A1-4.1

0605 + 0610	0620
1: Uv+	1: Uv+
2: Gnd	2: nc
3: U _{out}	3: I _{out}
4: nc	4: nc

x ≈ 61 mm

d = Ø27 mm

Order number: 004

* incl. connector plug
(included in delivery)

Order number: 03

Order number: 41

Order number: 31

Order number: 13

Order number: 42

Order number: 20

Order number: 09

Order number: 04

Order number: 21

0605/0610/0620

Order Matrix for Pressure Transmitters

www.suco.de

Accessories
(not included)

Connector plugs
M12x1

	Type	Pressure range	Pressure connector	Dia-phragm	Electrical plug
Order number:	06XX	XXX	XX	0	XXX
Type					
0.5 – 4.5 V ratiometrically	0605				
0 – 10 V 3-wire	0610				
4 – 20 mA 2-wire	0620				
Pressure range					
-1 – 0 bar vacuum		356			
0 – 10 bar		480			
0 – 100 bar		481			
0 – 250 bar		482			
0 – 600 bar		483			
0 – 1000 bar		484			
Pressure connector					
G 1/4 - DIN 3852-A			03		
NPT 1/8			04		
NPT 1/4			09		
M 10 x 1 cyl.			13		
7 / 16 – 20 UNF			20		
9 / 16 – 18 UNF			21		
Female thread – 7 / 16 – 20 UNF			31		
G 1/4 - DIN 3852 - E			41		
M 14 x 1.5 – DIN 3852-E			42		
Electrical plug					
DIN EN 175301-803-A (DIN 43 650-A)					001
M 12					002
AMP – Junior-Timer					003
DIN 72585-A1- 4.1 (bayonet)					004



Order number:
1-6-00-652-016



Order number:
1-6-00-652-017

! Order number: **06XX** **XXX** **XX** **0** **XXX**

Customer specified versions on request.

Degree of protection IP65 / IP67

The type approval does not apply without restriction to all environmental conditions. It is the responsibility of the user to check whether the connection complies with regulations other than those stated, and whether it can be used for special applications which could not be foreseen by us in advance.

Electrical Data

Rated operating voltage U_e	Rated operating current I_e	Utilisation category	Model ranges:
250 volt AC 50 / 60 Hz	4 amp (2 amp)*	AC 12	<p>0140</p> <p>0141</p> <p>0180</p> <p>0181</p> <p>0183</p> <p>0184</p> <p>0185</p> <p>0186</p> <p>0187</p> <p>* Figures in brackets apply to types 0140 and 0141</p>
250 volt AC 50 / 60 Hz	1 amp	AC 14	
24 volt DC	4 / 2 amp (2 / 1 amp)*	DC 12 / DC 13	
50 volt DC	2 / 1 amp (1 / 0.5 amp)*	DC 12 / DC 13	
75 volt DC	1 / 0.5 amp (0.5 / 0.25 amp)*	DC 12 / DC 13	
125 volt DC	0.3 / 0.2 amp (0.2 / 0.1 amp)*	DC 12 / DC 13	
250 volt DC	0.25 / 0.2 amp (0.15 / 0.1 amp)*	DC 12 / DC 13	
Rated insulation voltage U_i :	300 volt		
Rated surge capacity U_{imp} :	2.5 kV (4 kV)*		
Rated thermal current I_{the} :	5 amp		
Switching overvoltage:	< 2.5 kV		
Rated frequency:	DC und 50 / 60 Hz		
Rated current of short-circuit protection:	Up to 5 amp (up to 3.5 amp)*		
Conditional short-circuit current:	< 350 amp		
IP degree of protection to EN60529:1991+A1:1999:	IP65 with plug		
Tightening torque of terminal screws:	< 0.35 Nm		
Conductor cross-section:	0.5 – 1.5 mm ²		
Rated operating voltage U_e	Rated operating current I_e	Utilisation category	
250 volt AC 50 / 60 Hz	5 amp	AC 12	<p>0150</p> <p>0161</p> <p>0162</p> <p>0175</p>
250 volt AC 50 / 60 Hz	1 amp	AC 14	
30 volt DC	3.5 / 3.5 amp	DC 12 / DC 13	
50 volt DC	2 / 1 amp	DC 12 / DC 13	
75 volt DC	1 / 0.5 amp	DC 12 / DC 13	
125 volt DC	0.3 / 0.2 amp	DC 12 / DC 13	
250 volt DC	0.35 / 0.2 amp	DC 12 / DC 13	
Rated insulation voltage U_i :	300 volt		
Rated surge capacity U_{imp} :	2.5 kV		
Rated thermal current I_{the} :	6 amp		
Switching overvoltage:	< 2.5 kV		
Rated frequency:	DC and 50 / 60 Hz		
Rated current of short-circuit protection:	Up to 6.3 amp		
Conditional short-circuit current:	< 350 amp		
IP degree of protection to EN60529:1991+A1:1999:	IP65 with plug		
Tightening torque of terminal screws:	< 0.35 Nm		
Conductor cross-section:	0.5 – 1.5 mm ²		
Rated operating voltage U_e	Rated operating current I_e	Utilisation category	
250 volt AC 50 / 60 Hz	2.5 amp	AC 12	<p>0159</p>
250 volt AC 50 / 60 Hz	1 amp	AC 14	
30 volt DC	2 / 2 amp	DC 12 / DC 13	
50 volt DC	1 / 0.5 amp	DC 12 / DC 13	
75 volt DC	0.75 / 0.4 amp	DC 12 / DC 13	
125 volt DC	0.3 / 0.2 amp	DC 12 / DC 13	
250 volt DC	0.3 / 0.2 amp	DC 12 / DC 13	
Rated insulation voltage U_i :	300 volt		
Rated surge capacity U_{imp} :	2.5 kV		
Rated thermal current I_{the} :	6 amp		
Switching overvoltage:	< 2.5 kV		
Rated frequency:	DC and 50 / 60 Hz		
Rated current of short-circuit protection:	Up to 2.5 amp		
Conditional short-circuit current:	< 350 amp		
IP degree of protection to EN60529:1991+A1:1999:	IP65 with plug		
Tightening torque of terminal screws:	< 0.5 Nm		
Conductor cross-section:	0.5 – 1.5 mm ²		

The utilisation category describes among other things the voltages and currents and the way of load for our pressure switches according DIN EN 60947-5-1
AC 12 : Drive of resistive loads and semiconductor input circuits of optoelectronic couplers (e.g. PLC inputs)
AC 14 : Drive of electromagnetic loads up to 72 VA
DC 12 : Drive of resistive loads and semiconductor input circuits of optoelectronic couplers (e.g. PLC inputs)
DC 13 : Drive of electromagnet

Utilisation category