

Monitoring devices



Overview of monitoring devices

Product finder							
Product	Function type	Description	Voltage		Without housing	Stand alone	Page
			VAC	V DC			
SP/SFE 30/5	pulse generator	standard version	0 - 30	0 - 30	–	•	60
SP/SFE 30/6 GL	pulse generator	GL approved	0 - 30	0 - 30	–	•	60
SP/SFE 30/3003	pulse generator	ATEX II2G .. and II2D ..	0 - 30	0 - 30	–	•	60
EWT2A	pulse monitor	for up to 3 pulse generators	115, 230	24	•	–	61
234-13161-5	digital pressure switch	pressure switch for extensive lubrication point monitoring	–	20-32	–	•	62
2340-00000108	analogue digital pressure switch	pressure switch for simple lubrication point monitoring	–	18-30	–	•	63

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SP/SFE 30



Product description

SP/SFE30 pulse generators are designed to monitor oil and grease volumetric flow rates. The switching pulses are generated at a rate proportional to the volumetric flow, and the pulses from the pulse generator are evaluated by a downstream control unit. SP/SFE30/6GL pulse generators have been approved by German Lloyd for use on ships. Explosion proofed versions (SP/SFE 30/3003 ATEX) for gas and dust are available as well.

Features and benefits

- For oil and grease up to NLGI 2
- Operating pressure of up to 600 bar (8 700 psi)
- Germanischer Lloyd-approved device available

Applications

- For small lubricant flow measurements, in general
- Reciprocating compressors
- Oil and gas industry
- Marine

NOTE



For further technical information, technical drawings, accessories, spare parts or product function descriptions, see the following publications available on [SKF.com/lubrication](https://www.skf.com/lubrication):
1-3009 EN, 1-3018 EN; 951-230-012 EN

Technical data

Function principle	pulse generator based on a progressive metering principle
Operating temperature	-15 to +70 °C; +5 to 158 °F
Operating pressure	4 to 600 bar; 58 to 8 700 psi
Lubricant	oil min. viscosity 12 mm ² /s grease up to NLGI 2
Volumetric flow range	0,1–50 cm ³ /min; 0.0061–3.0512 in ³ /min
Volume/pulse ¹⁾	0,34 cm ³ ; 0.021 in ³
Contact type	reed contact
Connection	SP/SFE 30/5: plug DIN 43650 SP/SFE 30/6 GL: cable 2 m, 6.56 ft
Switching voltage	0 to 30 V AC/V DC
Switching capacity	10 W with V AC/V DC
Standard	CE, GL (Germanischer Lloyd)
Protection class	IP 67
Dimensions	65 × 170 × 35 mm; 2.56 × 6.69 × 1.37 in

¹⁾ One pulse comprises the opening or closing of the reed contact. Volume/cycle = 0,68 cm³ when a pulse monitoring unit is used (opening until reopening or closing to reclosing of reed contact).

Order information

Order number	Designation
24-2583-2516	SP/SFE 30/5
24-2583-2517	SP/SFE 30/6 GL
	SP/SFE 30/3003
24-2583-2526	ATEX II2G ... and ATEX II2D ...

SP/SFE 30 accessories

Order number	Description
406-411	straight connector G 1/4 for Ø 6 mm tube
96-1108-0058	straight connector G 1/4 for Ø 8 mm tube

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EWT2A



Product description

The EWT2A series of universal pulse monitoring devices can be used in all standard SKF lubrication systems. The pulse, generated from a progressive metering valve sensor, a pulse generator or a rotary gear sensor, must be received within a pre-selected and defined value. Depending on the selected version, a minimum and a maximum value can be monitored simultaneously for two or three pulse inputs. The EWT2A pulse monitoring devices are available in two voltage versions and may be installed in a switching cabinet. All devices have custom-built functions integrated and can be set to meet system requirements.

Features and benefits

- Easy installation by top hat rail mounting
- Adjustable operating modes
- Monitoring time 6-90 seconds
- Settings possible from 0,01 to 2 500 pulses/minute

Applications

- In connection with a pulse generator for oil and grease to reliably monitor lubricant flow

Technical data

Function principle	universal electronic control and monitoring device
Operating temperature	0 to +60 °C +32 to 140 °F
Output voltage	24 V DC +10% /-15%
Dimensions	70 x 75 x 110 mm 2.7 x 3 x 4.3 in

Version + 471

Input voltage	100-120 V AC; 200-240 V AC
Input current rated	70 mA/35 mA
Power input	8 W
Frequency	50 - 60 Hz
Fuse	max. 6.3 A
Switching current	max. 5 A
Output voltage sensors	24 V DC

Version + 472

Input voltage	20 to 24 V DC; 20 to 24 V AC
Input current rated	75 mA at max. fan-out of 250 mA
Power input	5 W
Frequency	DC or 50 - 60 Hz
Fuse	max. 6.3 A
Switching current	max. 5 A
Output voltage sensors	24 V DC

Order information

Order number	Description
EWT2A01-S1-E+471	for up to 3 pulse generators, 115/230 V AC
EWT2A01-S1-E+472	for up to 3 pulse generators, 24 V DC
EWT2A04-S1-E+471	for up to 2 pulse generators, 115/230 V AC
EWT2A04-S1-E+472	for up to 2 pulse generators, 115/230 V AC



NOTE

For further technical information, technical drawings, accessories, spare parts or product function descriptions, see the following publications available on SKF.com/lubrication:
1-1700-5 EN, 951-180-001 EN

Monitoring devices

234-13161-5



Description

This compact, maintenance-free electronic pressure switch has a 3-digit, digital display, one switching output and an analog output signal for switching point and hysteresis. Both can be adjusted via push buttons. For optimum adaptation to a particular application, the instrument has many additional adjustment parameters, e.g. switching delay times, NO and NC function of the outputs.

Features and benefits

- Integrated pressure sensor with thin-film strain gauge on stainless steel membrane
- 3-digit, digital display
- Independently adjustable switch-back hysteresis and switching point
- Reverse polarity protection of the supply voltage, excess voltage, override and short-circuit protection are provided
- Password protected
- Directly installable via G 1/4 adapter into pressure line

Applications

- Marine and off-shore applications
- Steel and heavy industries
- Wind turbines
- Service vehicles



Technical data

Order number	234-13161-5
Function principle	digital pressure switch
Lubricant	oil, fluid grease and grease up to NLGI 2
Operating temperature	-25 to +80 °C; -13 to +175 °F
Operating pressure	max. 600 bar; max. 8 700 psi
Operating voltage	20-32 VDC
Output signal	1 x PNP, 4-20 mA
Current consumption	approx. 100 mA (without switching outlet)
Electrical connection	plug DIN 43650 (3pin+ PE) or plug 4-pin binder 714, M18 x 1
Pressure port	G1/4
Protection class	IP 65
Dimensions	35 x 119 x 48 mm 1.37 x 4.68 x 1.89 in
Mounting position	any



NOTE

Further technical information, technical drawings, accessories, spare parts or product function descriptions available on SKF.com/lubrication.

Monitoring devices

2340-00000108



Description

This maintenance-free analogue pressure sensors is suitable for pressure measurements for gases and fluids. It is user friendly and can be applied easily in standard or superior applications. The space-saving housing is pivotable up to 320° for optimal readability of the 4-digit, digital display. Switching output for analogue or digital signals incl. IO-Link. It comes with reverse polarity protection of the supply voltage, excess voltage, override and short circuit protection. Different value units such as bar, mbar, psi or MPa can be selected.

Features and benefits

- IO-link incl. counter for operating hours, pressure peaks and inner temperature
- Menu-guided adjustments via push buttons
- Pre-adjustable hysteresis
- Programmable parameters, password protected
- Compact housing with 320° pivot

Applications

- Marine and off-shore applications
- Steel and heavy industries
- Wind turbines
- Service vehicles

Technical data

Order number	2340-00000108
Function principle	analogue/digital pressure switch
Lubricant	oil, fluid grease and grease up to NLGI 2
Approval	CE, EAC, UL/CSA
Operating temperature	-40 to +85 °C; -40 to +185 °F
Operating pressure	max. 600 bar; max. 8 700 psi
Overload pressure	1 000 bar; 14 500 psi
Burst pressure	1 570 bar; 22 770 psi
Operating voltage	18-30 VDC
Operating current	max. 150 mA
Current draw	≤ 50 mA
Output signal	2x PNP/NPN (NO/NC) adjustable
Analogue Output	voltage 0 .. 10 V / current 4 .. 20 mA adjustable
Interface	IO-Link 1.1
Switching frequency	170 Hz
Switching cycles	100 Mio.
Material:	
Housing	PA6.6, stainless steel 1.4301, FKM
Measuring cell	Ceramics Al2O3
Apapter	stainless steel
Electrical connection	M12x1; 4-pole, A-coded
Pressure port	G1/4
Protection class	IP 67
Dimensions	95 x 34 x 49 mm 3.74 x 1.33 x 1.92 in
Mounting position	any



NOTE

Further technical information, technical drawings, accessories, spare parts or product function descriptions available on SKF.com/lubrication.