



Your Pressure Switch tailor – made!



Quality for your competitive edge:

It is our declared intention to support you in your individual application with convenient components.

To achieve this aim we are at your disposal with our well-rehearsed team of sales, development and production in Herrenberg nearby Stuttgart in Germany. This area is known historically for precision workmanship used for watches or jewellery.

We have a board experience in specialized applications and we would gladly respond to your particular requirements.

HERION & RAU is your partner of choice for precision pressure switches and jointly engineered pressure switches including customized micro-systems.

Quality has top priority when selecting components for our products as well as the geographical closeness to our suppliers to ensure a personal contact. We react fast and on schedule to all our worldwide customer demands. You buy – we deliver:

Pressure Switches “Made in Germany”

Sincerely yours

A handwritten signature in blue ink that reads "Gotthard Rau". The signature is fluid and cursive.

Gotthard Rau

Managing Director



Membrane Pressure Switch AF24 – Type PDL:

- Snap action micro switch
- 48V / 2A, higher on request
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: 0,2...16bar
- Max. system pressure
- Preset ex works possible
- Small design
- E-connection Faston 6,3x0,8 alternative M12x1, Deutsch 2-pin or cable outlet

Order code

PDL - A - BBB - C - DE - F

A	Output	
	1	= SPDT
	6	= normally open NO
	7	= normally closed NC

BBB	Pressure adjustment range	
	002	= 0,2...2bar
	008	= 0,5...8bar
	016	= 1...16bar

C	Membrane	
	M	= NBR -20...+80°C
	T	= LowTemperature-NBR -40...+80°C
	E	= EPDM -40...+100°C
	F	= FVMQ -40...+100°C
	V	= Viton 0...+100°C
	S	= stainless steel on request

D	Fluid connection material	
	without	= zinc plated steel
	S	= Stainless steel 1.4305 / ANSI 303

E	Fluid connection	
	1	= G1/8"
	3	= G1/4"
	6	= 1/4NPT
	E	= 1/8NPT
	K	= 7/16-20 UNF
	9	= M10x1

F	Electrical connection	
	3	= Faston 3x6,3x0,8
	2	= plug M12x1
	4	= Deutsch DT04-2P
	5	= cable output

Options

xx,x bar	set point adjustment increasing or decreasing, factory preset
102296	rubber protection cap
011041	1,5m cable with socket M12x1

Order sample: PDL-1-016-V-3-2

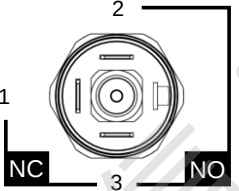
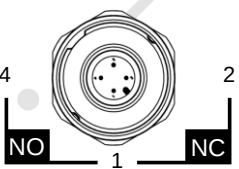
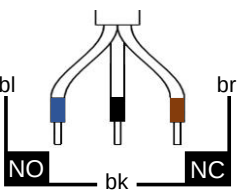
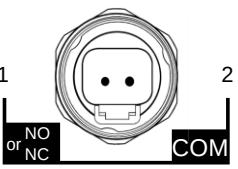
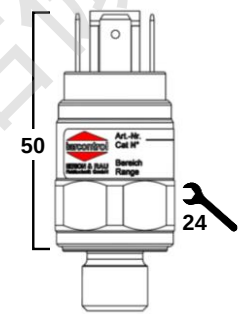
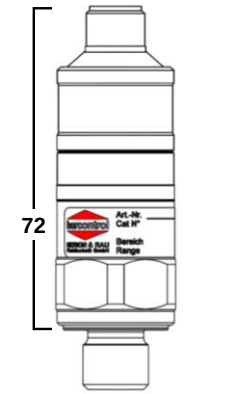
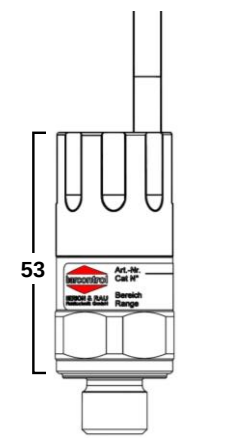
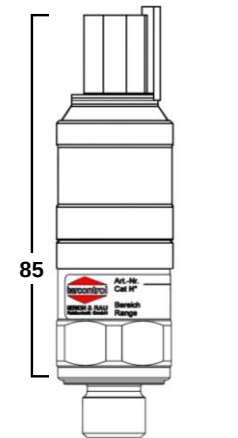
Pressure Switch PDL
Output: SPDT
Adjustment range: 1...16bar
Membrane: Viton
Fluid connection: male G1/4"
E-connection: M12x1

Technical Data

Construction:	snap action micro switch AF24
Operating fluid:	compressed air, neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	60bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 0,1bar + 5...10% of set point, not adjustable
Life cycles, mech.:	$> 1 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards: 2014/35/EU (LVD), 2011/65/EU (RoHS)
Protection class EN 60529:	IP00 using Faston 6,3x0,8 IP67 using plug M12x1, Deutsch / up to IP68 using cable outlet
Weight:	$\sim 0,1\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	Faston 6,3x0,8		M12x1		Cable outlet		Deutsch DT04-2P	
								
								
	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC
ohmic load	2A	2A	2A	2A	2A	2A	2A	2A
Inductive load	2A	1A	2A	1A	2A	1A	2A	1A



Piston Pressure Switch AF24 – Type HDL:

- Snap action micro switch
- 48V / 2A, higher on request
- Change over contact SPDT
- Piston with PTFE-sealing
- Adjustment range 10...320bar higher on request
- Max. system pressure 350bar higher on request
- Preset ex works possible
- Small design
- E-connection Faston 6,3x0,8 alternative M12x1, Deutsch 2-pin or cable outlet

Order code

HDL - A - BBB - C - DE - F

A	Output	
	1 = SPDT	
	6 = normally open NO	
	7 = normally closed NC	

D	Fluid connection material	
	without = zinc plated steel	
	S = Stainless steel 1.4305 / ANSI 303	

BBB	Pressure adjustment range	
	030 = 10...30bar	200 = 20...200bar
	080 = 10...80bar	250 = 20...250bar
	120 = 10...120bar	320 = 30...320bar
	160 = 10...160bar	

E	Fluid connection	
	1 = G1/8"	9 = M10x1
	3 = G1/4"	D = R1/8"
	6 = 1/4NPT	R = R1/4"
	E = 1/8NPT	Z = R3/8"
	K = 7/16-20 UNF	

C	Piston with PTFE + O-ring	
	K = NBR	-20...+80°C
	T = LowTemperature-NBR	-40...+80°C
	E = EPDM	-40...+100°C
	F = FVMQ	-40...+100°C
	V = Viton	0...+100°C

F	Electrical connection	
	3 = Faston 3x6,3x0,8	
	2 = plug M12x1	
	4 = Deutsch DT04-2P	
	5 = cable output	

Options

xxx bar	set point adjustment increasing or decreasing, factory preset
102296	rubber protection cap
011041	1,5m cable with socket M12x1

Order sample: HDL-1-160-K-3-3

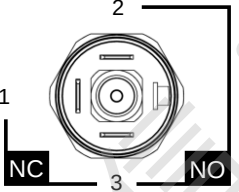
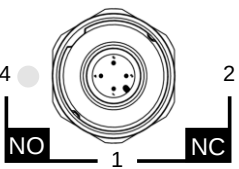
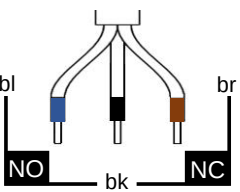
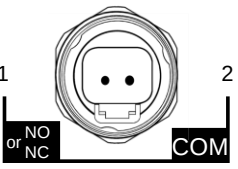
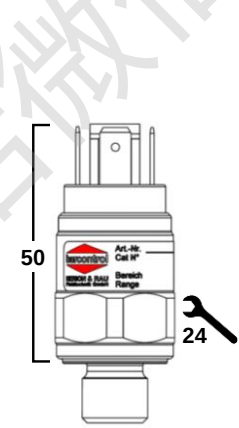
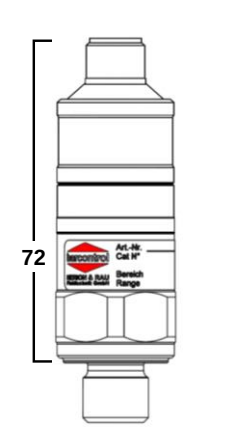
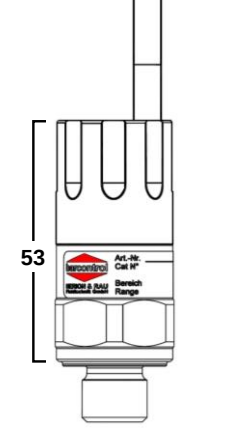
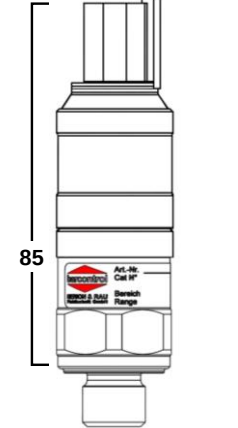
Pressure Switch HDL
Output: SPDT
Adjustment range: 10...160bar
Piston with sealing: PFTE/NBR
Fluid connection: male G1/4", incl. sealing ring
E-connection: Faston 3x6,3x0,8

Technical Data

Construction:	snap action micro switch AF24
Operating fluid:	selflubricating fluids (e.g. hydraulic oil), neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	350bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 5bar + 5...10% of set point, not adjustable
Life cycles, mech.:	$> 1 \times 10^6$
Max. switching frequency:	max. 100 cycles/min
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standard: 2014/35/EU (LVD), 2014/68/EU (PED), 2011/65/EU (RoHS)
Protection class EN 60529:	IP00 using Faston 6,3x0,8 IP67 using plug M12x1, Deutsch / up to IP68 using cable outlet
Weight:	$\sim 0,1\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	Faston 6,3x0,8		M12x1		Cable outlet		Deutsch DT04-2P	
								
								
	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC
ohmic load	2A	2A	2A	2A	2A	2A	2A	2A
Inductive load	2A	1A	2A	1A	2A	1A	2A	1A



Membrane Pressure Switch AF24 – Type MDL:

- Snap action micro switch
- 48V / 2A, higher on request
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: 1...10bar
- Max. system pressure 200 bar
- Preset ex works possible
- Mounted pressure damper 0,3mm
- Small design
- E-connection Faston 6,3x0,8 alternative M12x1, Deutsch 2-pin or cable outlet

Order code

MDL - A - BBB - C - DE - F

A	Output	
	1 = SPDT	
	6 = normally open NO	
	7 = normally closed NC	

BBB	Pressure adjustment range	
	005 = 1...10bar	
	other on request	

C	High Pressure Membran	
	P = NBR	-20...+80°C
	T = LowTemperatur-NBR	-40...+80°C
	V = Viton	0...+100°C

D	Fluid connection material	
	without = zinc plated steel	
	S = stainless steel 1.4305	

E	Fluid connection	
	1 = G1/8"	9 = M10x1
	3 = G1/4"	D = R1/8"
	6 = 1/4NPT	R = R1/4"
	E = 1/8NPT	Z = R3/8"
	K = 7/16-20 UNF	

F	Electrical connection	
	3 = Faston 3x6,3x0,8	
	2 = plug M12x1	
	4 = Deutsch DT04-2P	
	5 = cable output	

Options

xx,x bar	set point adjustment increasing or decreasing, factory preset
102296	rubber protection cap
011041	1,5m cable with socket M12x1

Order sample: MDL-1-005-P-3-2

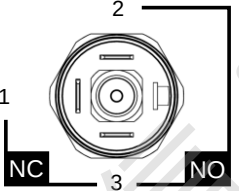
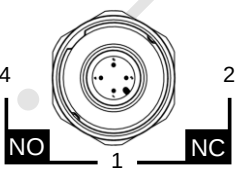
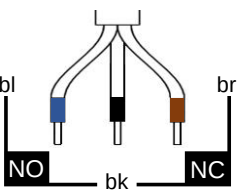
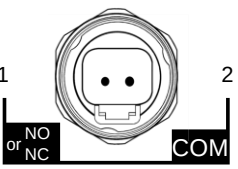
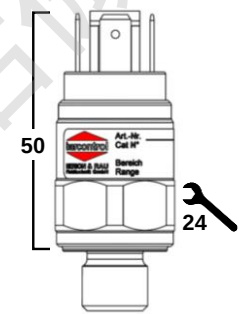
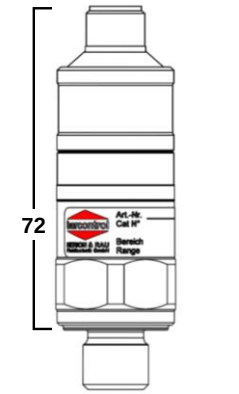
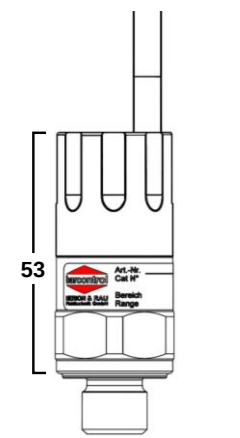
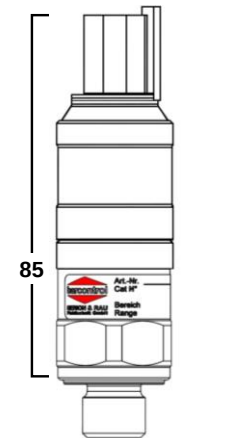
Pressure Switch MDL
Output: SPDT
Adjustment range: 1...10bar
High pressure membrane: NBR
Fluid connection: male G1/4"
E-connection: M12x1

Technical Data

Construction:	snap action micro switch AF24 with high pressure membrane
Operating fluid:	neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	200bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 0,1bar + 5...10% of set point, not adjustable
Life cycles, mech.:	$> 1 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +80^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards: 2014/35/EU (LVD), 2011/65/EU (RoHS)
Protection class EN 60529:	IP00 using Faston 6,3x0,8 IP67 using plug M12x1, Deutsch / up to IP68 using cable outlet
Weight:	$\sim 0,1\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	Faston 6,3x0,8		M12x1		Cable outlet		Deutsch DT04-2P	
								
								
	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC
ohmic load	2A	2A	2A	2A	2A	2A	2A	2A
Inductive load	2A	1A	2A	1A	2A	1A	2A	1A



Vaccum Switch AF24 – Type VDL:

- Snap action micro switch
- 48V / 2A, higher on request
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: -0,85... -0,15bar
- Preset ex works possible
- Small design
- E-connection Faston 6,3x0,8 alternative M12x1, Deutsch 2-pin or cable outlet

Order code

VDL - A - BBB - C - DE - F

A	Output	
	1 = SPDT	
	6 = normally open NO	
	7 = normally closed NC	
D	Fluid connection material	
	without = zinc plated steel	
E	Fluid connection	
	1 = G1/8"	
F	Electrical connection	
	3 = Faston 3x6,3x0,8	
C	Membrane	
	M = NBR	-20...+80°C
BBB	Pressure adjustment range	
	000 = - 0,85... - 0,15bar	
	T = LowTemperatur-NBR	-40...+80°C
D	Fluid connection material	
	S = Stainless steel 1.4305 / ANSI 303	
E	Fluid connection	
	3 = G1/4"	
F	Electrical connection	
	2 = plug M12x1	
C	Membrane	
	E = EPDM	-40...+100°C
BBB	Pressure adjustment range	
	F = FVMQ	-40...+100°C
D	Fluid connection material	
	V = Viton	0...+100°C
E	Fluid connection	
	5 = cable output	

Options

- 0,xx bar	set point adjustment increasing or decreasing, factory preset
102296	rubber protection cap
011041	1,5m cable with socket M12x1

Order sample: **VDL-1-000-E-3-3**

Vacuum Switch VDL
Output: SPDT
Adjustment range: -0,85...-0,15bar
Membrane: EPDM
Fluid connection: male G1/4" fixed
E-connection: spade terminals 3x6,3x0,8

Technical Data

Construction:	snap action micro switch AF24
Operating fluid:	neutral gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	20bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 250mbar, not adjustable
Life cycles, mech.:	$> 1 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards 2014/35/EU (LVD), 2011/65/EU (RoHS)
Protection class EN 60529:	IP00 using Faston 6,3x0,8 IP67 using plug M12x1, Deutsch / up to IP68 using cable outlet
Weight:	$\sim 0,1\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	Faston 6,3x0,8		M12x1		Cable outlet		Deutsch DT04-2P	
	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC	48 VAC	24 VDC
ohmic load	2A	2A	2A	2A	2A	2A	2A	2A
Inductive load	2A	1A	2A	1A	2A	1A	2A	1A



Membrane Pressure Switch AF27 – Type PDC:

- Snap action micro switch
- 250V / 4A
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: 0,2...16bar
- Max. system pressure 60bar
- Preset ex works possible
- Adjustable hysteresis
- Compact design
- E-connection DIN EN 175301-803A including socket, alternative plug M12x1 or cable outlet

Order code

PDC - A - BBB - C - DE - F

A	Output
1	SPDT

BBB	Pressure adjustment range
002	0,2...2bar
008	0,5...8bar
016	1...16bar

C	Membrane
M	NBR -20...+80°C
T	LowTemperature-NBR -40...+80°C
E	EPDM -40...+100°C
F	FVMQ -40...+100°C
V	Viton 0...+100°C

D	Fluid connection material
	without = zinc plated steel
S	stainless steel 1.4305

E	Fluid connection
1	G1/8" R = R1/4"
3	G1/4" D = R1/8"
H	G1/2" 9 = M10x1
E	1/8NPT K = 7/16-20 UNF
6	1/4 NPT

F	Electrical connection
1	DIN EN 175301-803A incl. socket
2	plug M12x1
5	cable outlet

Options

xx,x bar	set point adjustment increasing or decreasing, factory preset
011041	1,5m cable with socket M12x1

Order sample: PDC-1-008-M-3-1

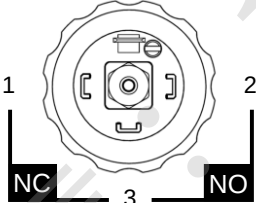
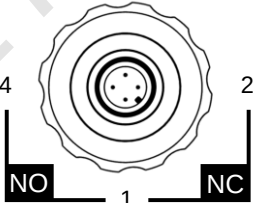
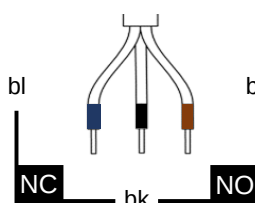
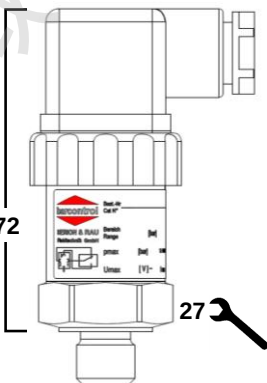
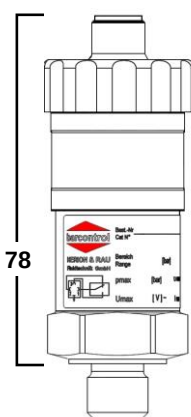
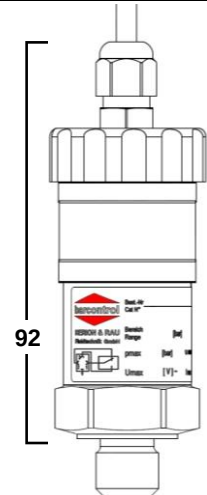
Pressure Switch PDC
Output: SPDT
Adjustment range: 0,5...8bar
Membrane: NBR
Fluid connection: male G1/4"
E-connection: DIN EN 175301-803A incl. socket

Technical data

Construction:	snap action micro switch SW27
Operating fluid:	compressed air, neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	60bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 0,1bar + 5...20% of set point, adjustable
Life cycles, mech.:	$> 2 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards: 2014/35/EU (LVD), 2011/65/EU (RoHS)
Protection class:	IP65 acc. to DIN EN 60529; IP67 using plug M12x1 or cable outlet
Weight:	$\sim 0,15\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	DIN EN 175301-803A		Plug M12x1		Cable output	
						
						
	250VAC	24VDC	48VAC	24VDC	250VAC	24VDC
Ohmic load	4A	4A	4A	4A	4A	4A
Inductive load	2A	2A	2A	2A	2A	2A



Piston Pressure Switch AF27 – Type HDC:

- Snap action micro switch
- 250V / 4A
- Change over contact SPDT
- Piston with PTFE-sealing
- Adjustment range 10...320bar higher on request
- Max. system pressure 350 bar higher on request
- Preset ex works possible
- Adjustable hysteresis
- Compact design
- E-connection DIN EN 175301-803A including socket, alternativ plug M12x1 or cable outlet

Order code

HDC- A - BBB - C - DE - F

A	Output	
	1 = SPDT	
BBB	Pressure adjustment range	
	030 = 10...30bar	200 = 20...200bar
	080 = 10...80bar	250 = 20...250bar
	120 = 10...120bar	320 = 30...320bar
	160 = 10...160bar	
C	Piston with PTFE + O-ring	
	K = NBR	-20...+80°C
	T = low temperature NBR	-40...+80°C
	E = EPDM	-40...+100°C
	F = FVMQ	-40...+100°C
	V = Viton	0...+100°C
D	Fluid connection material	
	without = zinc plated S = Stainless steel 1.4305 / ANSI 303	
E	Fluid connection	
	1 = G1/8"	R = R1/4"
	3 = G1/4"	D = R1/8"
	E = 1/8NPT	9 = M10x1
	6 = 1/4 NPT	K = 7/16-20 UNF
F	Electrical connection	
	1 = DIN EN 175301-803A incl. socket	
	2 = plug M12x1	
	5 = cable outlet	

Options

xxx bar	set point adjustment increasing or decreasing, factory preset
011041	1,5m cable with socket M12x1

Order sample: HDC-1-250-K-3-1

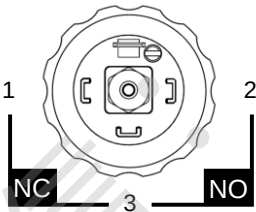
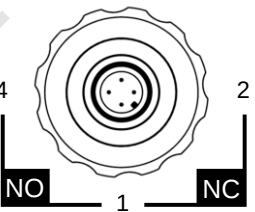
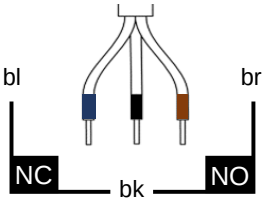
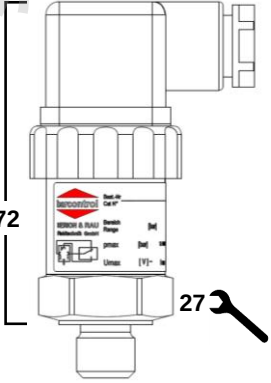
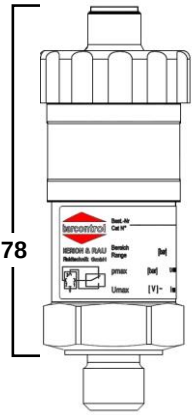
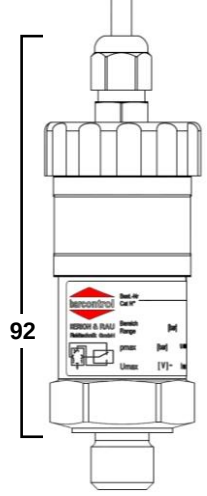
Pressure Switch HDC
Output: SPDT
Adjustment range: 20...250bar
Piston with sealing: PTFE/NBR
Fluid connection: male G1/4", incl. sealing ring
E-connection: DIN EN 175301-803A incl. socket

Technical data

Construction:	snap action micro switch AF27
Operating fluid:	selflubrication fluids (e.g. hydraulic oil), neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	350bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 5bar + 5... 15% of set point, adjustable
Life cycles, mech.:	$> 2 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards: 2014/35/EU (LVD); 2014/68/EU (PED), 2011/65/EU (RoHS)
Protection class:	IP65 acc. to DIN EN 60529; IP67 using plug M12 or cable outlet
Weight:	$\sim 0,15\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	DIN EN 175301-803A		Plug M12x1		Cable output	
						
						
	250VAC	24VDC	48VAC	24VDC	250VAC	24VDC
Ohmic load	4A	4A	4A	4A	4A	4A
Inductive load	2A	2A	2A	2A	2A	2A

Membrane Pressure Switch AF27 – Type MDC:

- Snap action micro switch
- 250V / 4A
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: 1...10bar
- Max. system pressure 200bar
- Preset ex works possible
- Mounted pressure damper 0,33mm
- Compact design
- E-connection DIN EN 175301-803A including socket, alternative plug M12x1 or cable outlet

Order code**MDC - A - BBB - C - DE - F**

A	Output
	1 = SPDT

BBB	Pressure adjustment range
	005 = 1...10bar other on request

C	Membrane	
	P = NBR	-20...+80°C
	T = LowTemperature-NBR	-40...+80°C
	V = Viton	0...+100°C

D	Fluid connection material	
	without = zinc plated steel	
	S = stainless steel 1.4305	

E	Fluid connection	
	1 = G1/8"	R = R1/4"
	3 = G1/4"	D = R1/8"
	6 = 1/4 NPT	9 = M10x1
	E = 1/8NPT	K = 7/16-20 UNF

F	Electrical connection	
	1 = DIN EN 175301-803A incl. socket	
	2 = plug M12x1	
	5 = cable outlet	

Options

xx,x bar	set point adjustment increasing or decreasing, factory preset
011041	1,5m cable with socket M12x1

Order sample: MDC-1-005-M-3-1

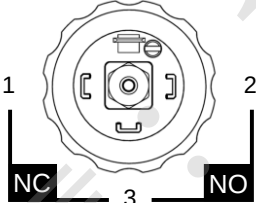
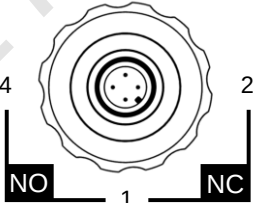
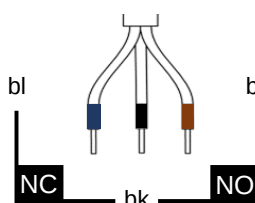
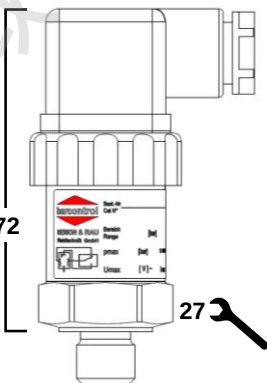
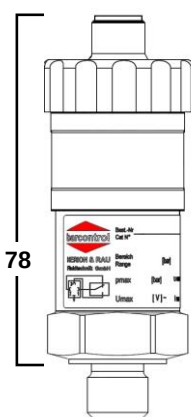
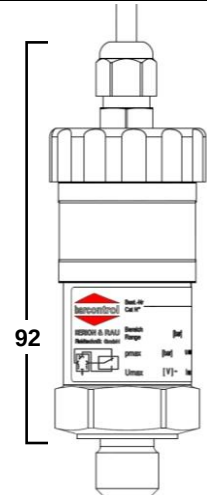
Pressure Switch MDC
Output: SPDT
Adjustment range: 1...10bar
High pressure membrane: NBR
Fluid connection: male G1/4"
E-connection: DIN EN 175301-803A incl. socket

Technical data

Construction:	snap action micro switch SW27 with high pressure membrane
Operating fluid:	neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	200bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 0,4bar + 5...20% of set point, adjustable
Life cycles, mech.:	$> 2 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +80^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards: 2014/35/EU (LVD), 2011/65/EU (RoHS)
Protection class:	IP65 acc. to DIN EN 60529; IP67 using plug M12x1 or cable outlet
Weight:	$\sim 0,15\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	DIN EN 175301-803A		Plug M12x1		Cable output	
						
						
	250VAC	24VDC	48VAC	24VDC	250VAC	24VDC
Ohmic load	4A	4A	4A	4A	4A	4A
Inductive load	2A	2A	2A	2A	2A	2A



Vacuum Switch AF27 – Type VDC:

- Snap action micro switch
- 250V / 4A
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: -0,85...-0,15bar
- Preset ex works possible
- Adjustable hysteresis
- Compact design
- E-connection DIN EN 175301-803A including socket alternative plug M12x1 or cable outlet

Order code

VDC - A - BBB - C - DE - F

A	Output
1	= SPDT

BBB	Pressure adjustment range
000	= - 0,85...- 0,15bar

C	Membrane
M	= NBR -20...+80°C
T	= low temperature-NBR -40...+80°C
E	= EPDM -40...+100°C
F	= FVMQ -40...+100°C
V	= Viton 0...+100°C

D	Fluid connection material
	without = zinc plated steel
S	= stainless steel 1.4305

E	Fluid connection
1	= G1/8"
3	= G1/4"

F	Electrical connection
1	= DIN EN 175301-803A incl. socket
2	= plug M12x1
5	= cable outlet

Options

-0,xxbar	set point adjustment increasing or decreasing, factory preset
011041	1,5m cable with socket M12x1

Order sample: VDC-1-000-E-3-1

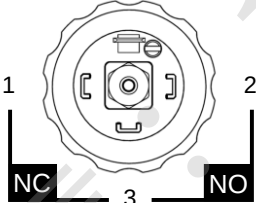
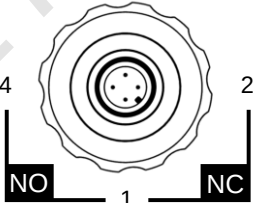
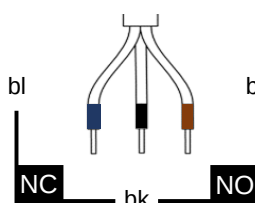
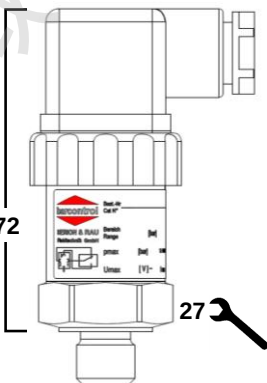
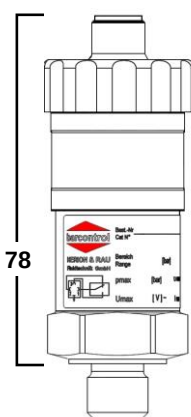
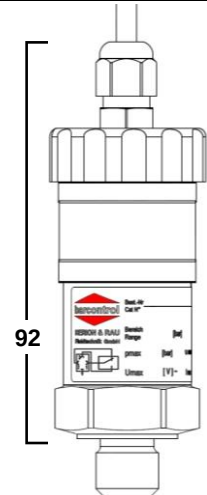
Vacuum-Switch VDC
Output: SPDT
Adjustment range: -0,85...-0,15bar
Membrane: EPDM
Fluid connection: male G1/4" fixed
E-connection: DIN EN 175301-803A incl. socket

Technical data

Construction:	snap action micro switch AF27
Operating fluid:	neutral gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	20bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 150...350mbar, adjustable
Life cycles, mech.:	$> 2 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards 2014/35/EU (LVD); 2011/65/EU (RoHS)
Protection class:	IP65 acc. to DIN EN 60529; IP67 using plug M12 or cable outlet
Weight:	$\sim 0,15\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	DIN EN 175301-803A		Plug M12x1		Cable output	
						
						
	250VAC	24VDC	48VAC	24VDC	250VAC	24VDC
Ohmic load	4A	4A	4A	4A	4A	4A
Inductive load	2A	2A	2A	2A	2A	2A



Membrane Pressure Switch AF30 - Type PDS:

- Snap action micro switch
- 250V / 6A
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: 0,2...16bar
- Max. system pressure 60bar
- Preset ex works possible
- Easy adjustment via adjustment knob
- Rugged design
- E-connection DIN EN 175301-803A or M12x1
- Female thread or flange connection

Order code

PDS - A - BBB - C - D - E

A	Output
1 =	SPDT

BBB	Pressure adjustment range
002 =	0,2...2bar
008 =	0,5...8bar
016 =	1...16bar

C	Membrane
M = NBR	-20...+80°C
T = low temperature-NBR	-40...+80°C
E = EPDM	-40...+100°C
F = FVMQ	-40...+100°C
V = Viton	0...+100°C

D	Fluid connection
2 =	female G1/4"
4 =	horizontal flange incl. M5x40, O-Ring 5x1,5
T =	female Rc1/4" fixed

E	Electrical connection
1 =	plug DIN EN 175301-803 A
2 =	plug M12x1

Options

xx,x bar	set point adjustment increasing or decreasing, factory preset
011000	socket DIN EN 175301-803A
011001	socket DIN EN 175301-803A with 2LED, 24V
011041	1,5m cable with socket M12x1

Order sample: PDS-1-016-V-2-1

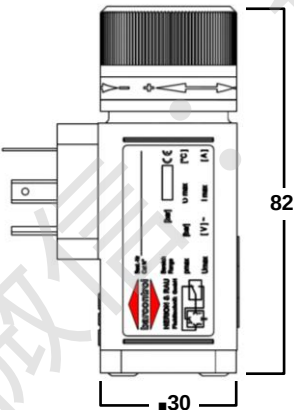
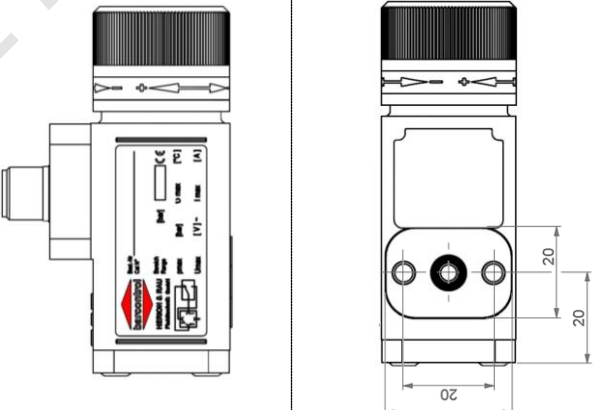
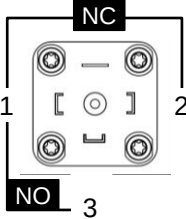
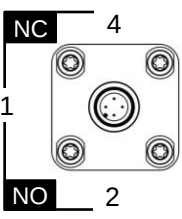
Pressure Switch PDS
Output: SPDT
Adjustment range: 1...16bar
Membrane: Viton
Fluid connection: female G1/4"
E-connection: plug DIN EN 175301-803A

Technical Data

Construction:	snap action micro switch AF30
Operating fluid:	compressed air, neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	60bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 0,1bar + 5...10% of set point, not adjustable
Life cycles, mech:	$> 5 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards 2014/35/EU (LVD); 2011/65/EU (RoHS)
Protection class EN 60529:	IP65 using DIN EN 175301-803A, IP67 using M12x1
Weight:	$\sim 0,3\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	Dimension: G1/4 female		Horizontale flange connection	
				
	DIN EN 175301-803A 		M12x1 	
	250VAC	24VDC	48VAC	24VDC
ohmic load	6A	3A	4A	3A
Inductive load	1A	1A	1A	1A



Piston Pressure Switch AF30 – Type HDS:

- Snap action micro switch
- 250V / 6A
- Change over contact SPDT
- Piston with PTFE-sealing
- Adjustment range 10...320bar higher on request
- Max. system pressure 350bar higher on request
- Preset ex works possible
- Easy adjustment via adjustment knob
- Rugged design
- E-connection DIN EN 175301-803A
- 360° turnable fluid connection

Order code

HDS - A - BBB - C - D - E

A	Output	
	1 = SPDT	
BBB	Pressure adjustment range	
	030 = 10...30bar	200 = 20...200bar
	080 = 10...80bar	250 = 20...250bar
	120 = 10...120bar	320 = 30...320bar
	160 = 10...160bar	
C	Piston with PTFE + O-ring	
	K = NBR	-20...+80°C
	T = low temperatur-NBR	-40...+80°C
	E = EPDM	-40...+100°C
	F = FVMQ	-40...+100°C
	V = Viton	0...+100°C
D	Fluid connection	
	2 = female G1/4" turnable	
	5 = vertical flange acc. to DIN ISO 16873	
	7 = male G1/4" turnable with sealing	
	8 = male M10x1 turnable with sealing	
	F = male 1/4NPT turnable	
	G = male 7/16-20 UNF turnable	
E	Electrical connection	
	1 = plug DIN EN 175301-803A	

Options

xxx bar	set point adjustment increasing or decreasing, factory preset
011000	socket DIN EN 175301-803A
011001	socket DIN EN 175301-803A with 2LED, 24V

Order sample: HDS-1-250-V-5-1

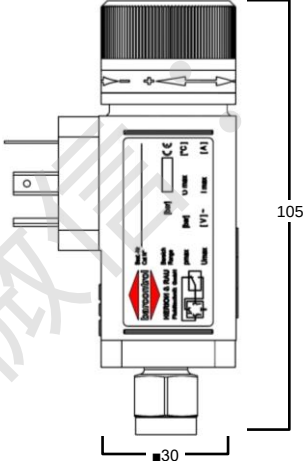
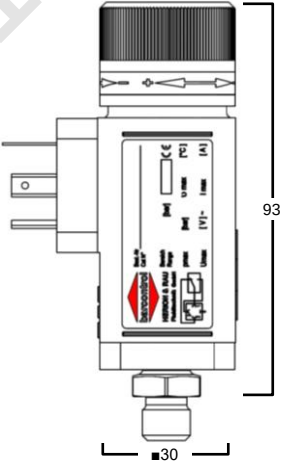
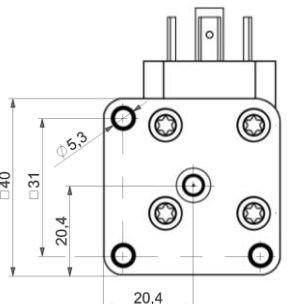
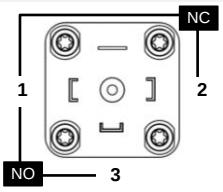
Pressure Switch HDS
Output: SPDT
Adjustment range: 20...250bar
Piston with sealing: Viton
Fluid connection: vertical flange acc. to DIN ISO 16873
E-connection: DIN EN 175301-803A

Technical data

Construction:	snap action micro switch AF30
Operating fluid:	selflubricating fluids (e.g. hydraulic oil), neutral fluids/gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	350bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 5bar + 5...10% of set point, not adjustable
Life cycles, mech:	$> 5 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards: 2014/35/EU (LVD); 2014/68/EU (PED); 2011/65/EU (RoHS)
Protection class:	IP65 acc. to DIN EN 60529
Weight:	$\sim 0,35\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	Dimensions G1/4 female turnable 	Dimensions: G1/4 male turnable 	Dimensions: Vertical flange 
	DIN EN 175301-803A		
			
	250VAC		24VDC
ohmic	6A		4A
inductive	6A		4A



Vacuum Switch AF30 – Type VDS:

- Snap action micro switch
- 250V / 6A
- Change over contact SPDT
- Elastomer membrane
- Adjustment range: - 0,85... - 0,15bar
- Preset ex works possible
- Easy adjustment via adjustment knob
- Rugged design
- E-connection DIN EN 175301-803A or M12x1
- Female thread or flange connection

Order code

VDS - A - BBB - C - D - E

A	Output
1	SPDT

BBB	Pressure adjustment range
000	- 0,85...- 0,15bar

C	Membrane
M	NBR -20...+80°C
T	low temperature-NBR -40...+80°C
E	EPDM -40...+100°C
F	FVMQ -40...+100°C
V	Viton 0...+100°C

D	Fluid connection
2	female G1/4"
4	horizontal flange incl. M5x40, O-Ring 5x1,5

E	Electrical connection
1	plug DIN EN 175301-803A
2	plug M12x1

Options

- 0,xxbar	set point adjustment increasing or decreasing, factory preset
011000	socket DIN EN 175301-803A
011001	socket DIN EN 175301-803A with 2LED, 24V
011041	1,5m cable with socket M12x1

Order sample: VDS-1-000-E-2-1

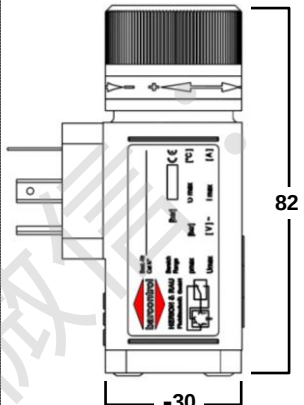
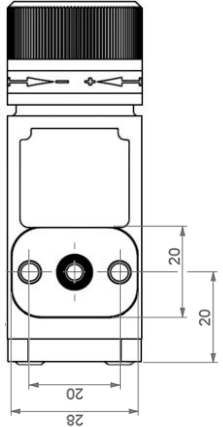
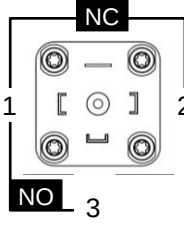
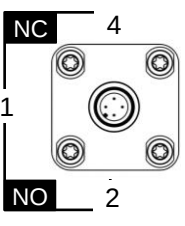
Vacuum Switch VDS
Output: SPDT
Adjustment range: -0,85...-0,15bar
Membrane: EPDM
Fluid connection: female G1/4"
E-connection: DIN EN 175301-803A

Technical data

Construction:	snap action micro switch AF30
Operating fluid:	neutral gases
Mechanical installation:	over fluid connection
Mounting position:	any
Max. system pressure:	20bar
Repeatability:	max. $\pm 2\%$ of full scale at room temperature
Hysteresis*:	guide value: 150...250mbar, not adjustable
Life cycles, mech.:	$> 5 \times 10^6$
Max. switching frequency:	$\sim 1\text{Hz}$
Temperature range*:	$-40 \dots +100^\circ\text{C}$ as a function of used elastomere
Vibration resistance:	10g (10 ... 2000Hz) sinus acc. to ISO 16750-3
Shock resistance:	30g, 14ms shaped sinus acc. to DIN 40046, T7
Switching element:	snap action micro switch with self cleaning pins
CE-mark:	acc. to EU-standards 2014/35/EU (LVD); 2011/65/EU (RoHS)
Protection class EN 60529:	IP65 using DIN EN 175301-803A, IP67 using M12x1
Weight:	$\sim 0,3\text{kg}$

* please contact the technical support for alternative or special requirements regarding hysteresis and temperature
Subject to technical alternations!

Electrical connection data – dimensions

	Dimension: G1/4 female screw-in thread max. 8mm		Horizontale flange connection	
				
	DIN EN 175301-803A 		M12x1 	
	250VAC	24VDC	48VAC	24VDC
Ohmic load	6A	3A	4A	3A
Inductive load	1A	1A	1A	1A



Electronic Pressure Sensor – Type HDT:

- Measuring ranges
from 0...1bar to 0...600bar
- Output: 4...20mA or 0...10V
- Non-linearity 0,5%
- Electrical connection: M12x1 or
DIN EN 175301-803A
- Fluid connection: G1/4 A DIN 3852-E
- Wetted parts stainless steel
- For general industrial applications

Order code

HDT - A - BBB - C - D - E

A	Output	
	4 = 4...20mA	2-wire
	5 = 0...10V	3-wire

C	Measuring principle	
	P = piezoresistiv	≤ 6bar
	A = thin film cell	≥ 10bar

BBB	Measuring range	
	001 = 0...1bar	pmax = 3bar
	006 = 0...6bar	pmax = 12bar
	010 = 0...10bar	pmax = 20bar
	100 = 0...100bar	pmax = 200bar
	250 = 0...250bar	pmax = 500bar
	400 = 0...400bar	pmax = 800bar
	600 = 0...600bar	pmax = 1.200bar

D	Fluid connection	
	3 = G1/4" DIN3852	

E	Electrical connection	
	1 = DIN EN 175301-803 A incl. plug	
	2 = plug M12x1	

Options

104315	2,0m shielded cable with socket M12x1, 4pin
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Order sample: HDT-4-010-A-3-2

Electronic Pressure Sensor HDT
Output: 4...20mA
Measuring range: 0...10bar
Measuring principle: thin film cell
Fluid connection: G1/4" A DIN3852
E-connection: plug M12x1

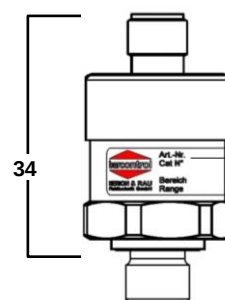
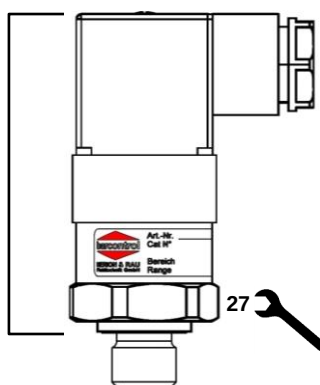
Technical Data

Construction:	gauge pressure measurement SW27	
Unit:	bar (psi, kPa, kg/cm ² on request)	
Overpressure limit:	2 x measurement range, vacuum resistant	
Service life:	100 Mio. load cycles	
Accuracy:	≤ 1% at room temperature incl. non-linearity, hysteresis, zero offset and end value deviation	
Output signal:	0...10V (3-wire)	4...20mA (2-wire)
Power supply:	14...30VDC	8...30VDC
Current consumption:	8mA	Signal current, max. 25mA
Load:	10V/1mA	(power supply – 8V) / 0,02A
Temperature range:	-30...+100°C	
Wetted parts:	stainless steel 316 (≤6bar also 13-8 PH)	
CE-Sign:	acc. to EU-standards 2014/68/EU (PED), 2014/30/EU (EMC)	
Protection class:	IP65 acc. to DIN EN 60529	DIN 175301-803 A
	IP67 acc. to DIN EN 60529	M12x1
Shock resistance:	500g acc. to IEC 60068-2-27	
Vibration resistance:	10g acc. to IEC 60068-2-6	
Weight:	0,15kg	

Please contact the technical support for alternatives or special requirement.
Subject to technical alternations!

Electrical connection data - dimensions

	DIN EN 175301-803 A		M12x1	
				
	2-wire	3-wire	2-wire	3-wire
UB Positive power supply	1	1	1	1
0V Negative power supply	2	2	3	3
S+ Analogue output	-	3	-	4





Electronic Pressure Switch AF27 – Type EPS:

- Two transistor switching outputs PNP
- 4-digit LED display, 4,5mm
- Adjustment range: 0,25...400bar
- Menu navigation according to VDMA
- Key programming
- Switching point or window function adjustable
- NO or NC function adjustable
- Switching delay function adjustable
- Multi-colour switch display
- Robust stainless-steel measurement cell
- Electrical connection M12x1

Order code

EPS - A - BBB - C - D - E

A	Output	
	2 = 2 switching outputs PNP	

C	Measuring principle	
	A = thin film cell	

BBB	Pressure adjustment range	
	V16 = -1,0...16bar	pmax = 80bar
	100 = 0...100bar	pmax = 200bar
	250 = 0...250bar	pmax = 500bar
	400 = 0...400bar	pmax = 800bar

D	Fluid connection	
	3 = G1/4" DIN3852	

E	Electrical connection	
	2 = plug M12x1	

Options

104206	Adaptor G1/4" female fix - G1/4" male turnable
104315	2,0m shielded cable with socket M12x1, 4pin

Order sample: EPS-2-250-A-3-2

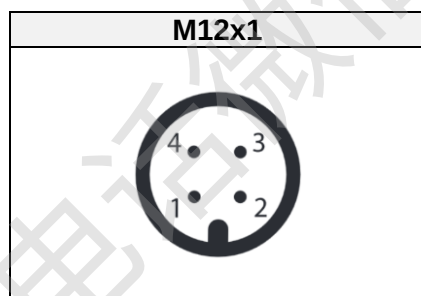
Electronic Pressure Switch EPS
Output: 2 switching outputs PNP
Pressure adjustment range: 0...250bar
Measuring principle: thin film cell
Fluid connection: male G1/4" DIN3852
E-connection: plug M12x1

Technical data

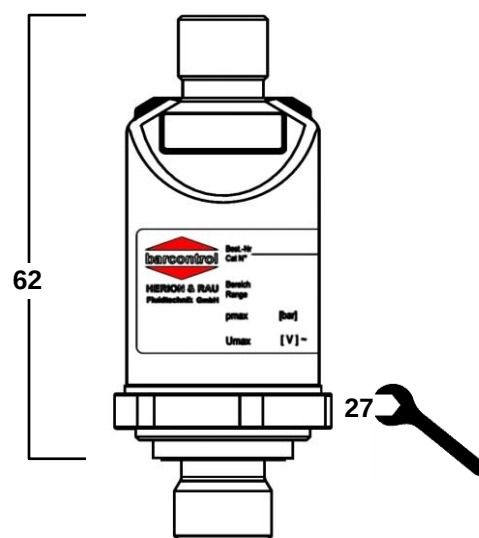
Construction:	electronic pressure switch SW27		
Unit:	bar, psi, MPa		
Service life:	100Mio. switching cycles, 10Mio cycles (0...100%)		
Accuracy:	≤ 1% at room temperature incl. non-linearity, hysteresis, zero offset and end value deviation		
Output signal:	2 transistor switching outputs PNP, adjustable		
Reaction time:	< 10ms		
Power supply:	9,6...32VDC		
Current consumption:	max. 0,535A total		
Switching current:	max. 250mA per output		
Ranges in bar:	Min. Hysteresis:	Increment:	
-1...16bar	0,25	0,05	
0...100bar	1,0	0,2	
0...250bar	2,5	0,5	
0...400bar	4	1	
Display:	4-digit, 7-segment LED		
Hight of display:	4,5mm		
Switch display	multi colour (red/green background)		
Temperature range:	-25...+85°C compensated		
Wtted parts:	stainless steel, FPM		
CE-Sign:	acc. to EU-standards 2014/30/EC		
Protection class:	IP67 acc. to DIN EN 40050		
Shock:	50g acc. to DIN EN 60068-2-6 (11 ms)		
Vibration:	10g acc. to DIN EN 60068-2-29 (500 Hz)		
Weight:	0,07kg		

Please contact the technical support for alternatives or special requirement.
Subject to technical alternations!

Electrical connection data - dimensions



Pin 1	Positive power supply UB+
Pin 2	Switching output 2
Pin 3	Negative power supply 0V
Pin 4	Switching output 1



Torque value: 20Nm



Common characteristic feature: Reliability

The outstanding features for all pressure switches from HERION & RAU are long-time stable switching-points, unvarying hysteresis and safe electric switching. These features are valid for all  models.



A sophisticated, use-oriented sealing technology combined with robust electronic micro-switches guarantee a maximum of reliability even when the application nears technical limitations.



HERION & RAU uses only sturdy and precise functioning snap-action micro-switches with optimized frictional characteristics. Both high switching load and very low electric voltage and current are no problem for these micro-switches.

- Design and production are carried out in Herrenberg in Baden-Württemberg (Germany). All sub-suppliers are producing in vicinity. This fact secures a high single component quality and a constant (precise) process reliability.



The result are pressure switches with a high quality standard, with short delivery times, exactly configured to fit every individual application.

Pressure switches
“Made in Germany”

OEM Pressure Switch AF22

- Switch point up to 8bar
- Elastomere-Membrane
- System pressure up to max. 20bar
- 48V/2A
- Application: lack monitoring



Ready made

- Installation of special cable and plugs
- Suitable for your application / Plug & Play
- Expansion of protection class
- Example: Railway applications



Expansion of possible applications

- Higher system pressure
- Lower current and voltage
- Traceability
- Other materials
-



Private Label

- Your Logo
- Your article number
- Your product
-



Subject to technical alternations!