

BALLUFF

sensors worldwide

BSP Pressure Sensors

Reliable solutions for the automation industry



more added value



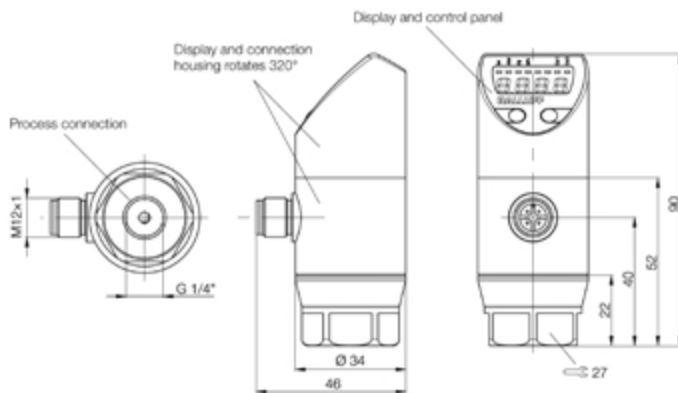
BSP Pressure Sensors
Standard Sensors

Standard Balluff pressure sensors offer an impressive price/performance ratio and are suitable for a wide variety of applications in factory automation. A large display and simple operating concept save time when configuring parameters. These Balluff pressure sensors are versatile and space-saving. The display and electrical output can be rotated independently of the flange. Other features of these sensors include:

- A compact housing design
- A local pressure indicator
- Digital switching outputs
- Analog output signals



Pressure sensors are found in many mechanical engineering applications. Different versions with switching points, an analog output and a variety of pressure ranges mean you are guaranteed to find the right sensor for your application.



Design	Relative nominal pressure	Overload pressure	Cracking pressure \geq	Permitted vacuum
Pressure sensors -1...2 bar	2 bar	4 bar	10 bar	vacuum proof
Pressure sensors -1...10 bar	10 bar	20 bar	35 bar	
Pressure sensors 0...2 bar	2 bar	4 bar	10 bar	
Pressure sensors 0...5 bar	5 bar	10 bar	15 bar	
Pressure sensors 0...10 bar	10 bar	20 bar	35 bar	
Pressure sensors 0...20 bar	20 bar	40 bar	75 bar	
Pressure sensors 0...50 bar	50 bar	100 bar	150 bar	
Pressure sensors 0...100 bar	100 bar	200 bar	250 bar	
Pressure sensors 0...250 bar	250 bar	400 bar	450 bar	
Pressure sensors 0...400 bar	400 bar	650 bar	700 bar	
Pressure sensors 0...600 bar	600 bar	750 bar	800 bar	

-1...2 bar	PNP	Ordering code		
-14.5...29 psi		Part number		
	NPN	Ordering code		
		Part number		
-1...10 bar	PNP	Ordering code		
-14.5...145 psi		Part number		
	NPN	Ordering code		
		Part number		
0...2 bar	PNP	Ordering code		
0...29 psi		Part number		
	NPN	Ordering code		
		Part number		
0...5 bar	PNP	Ordering code		
0...73 psi		Part number		
	NPN	Ordering code		
		Part number		
0...10 bar	PNP	Ordering code		
0...145 psi		Part number		
	NPN	Ordering code		
		Part number		
0...20 bar	PNP	Ordering code		
0...290 psi		Part number		
	NPN	Ordering code		
		Part number		
0...50 bar	PNP	Ordering code		
0...725 psi		Part number		
	NPN	Ordering code		
		Part number		
0...100 bar	PNP	Ordering code		
0...1450 psi		Part number		
	NPN	Ordering code		
		Part number		
0...250 bar	PNP	Ordering code		
0...3626 psi		Part number		
	NPN	Ordering code		
		Part number		
0...400 bar	PNP	Ordering code		
0...5802 psi		Part number		
	NPN	Ordering code		
		Part number		
0...600 bar	PNP	Ordering code		
0...8702 psi		Part number		
	NPN	Ordering code		
		Part number		

Operating voltage U_B
Output current max.
No-load supply current I_0 max.
Switching frequency f max.

Accuracy
Temperature error
Reverse polarity/short-circuit protected
Ambient/material temperature
Display/function indicators
Degree of protection per IEC 60529

Material
Housing
Measuring cell
Seal
Connection
Connectors
Process connection

BSP Pressure Sensors

Standard sensors



2 programmable switching points (NO or NC)



1 programmable switching point and analog output 0...10 V DC



1 programmable switching point and analog output 4...20 mA

BSP004F BSP V002-EV002-D00A0B-S4	BSP004J BSP V002-EV002-D00A0B-S4	BSP004L BSP V002-EV002-D00A0B-S4
BSP004N BSP V002-EV002-D01A0B-S4	BSP004R BSP V002-EV002-D00A0B-S4	BSP004U BSP V002-EV002-D00A0B-S4
BSP004H BSP V010-EV002-D00A0B-S4	BSP004K BSP V002-EV002-D00A0B-S4	BSP004M BSP V002-EV002-D00A0B-S4
BSP004P BSP V010-EV002-D01A0B-S4	BSP004T BSP V002-EV002-D00A0B-S4	BSP004W BSP V002-EV002-D00A0B-S4
BSP000F BSP B002-EV002-D00A0B-S4	BSP004T BSP B002-EV002-D00A0B-S4	BSP0014 BSP B002-EV002-D00A0B-S4
BSP003K BSP B002-EV002-D01A0B-S4	BSP004P BSP B002-EV002-A01A0B-S4	BSP004W BSP B002-EV002-D00A0B-S4
BSP000H BSP B005-EV002-D00A0B-S4	BSP004U BSP B005-EV002-D00A0B-S4	BSP0015 BSP B002-EV002-D00A0B-S4
BSP003L BSP B005-EV002-D01A0B-S4	BSP004R BSP B002-EV002-D00A0B-S4	BSP003Y BSP B002-EV002-D00A0B-S4
BSP000J BSP B010-EV002-D00A0B-S4	BSP004W BSP B002-EV002-D00A0B-S4	BSP0016 BSP B002-EV002-D00A0B-S4
BSP001F BSP B010-EV002-D01A0B-S4	BSP004M BSP B002-EV002-D00A0B-S4	BSP004U BSP B002-EV002-D00A0B-S4
BSP000K BSP B020-EV002-D00A0B-S4	BSP003Y BSP B002-EV002-D00A0B-S4	BSP0017 BSP B020-EV002-D00A0B-S4
BSP001H BSP B020-EV002-D01A0B-S4	BSP004N BSP B002-EV002-D00A0B-S4	BSP004W BSP B020-EV002-A03A0B-S4
BSP000L BSP B050-EV002-D00A0B-S4	BSP000Z BSP B050-EV002-A00A0B-S4	BSP0018 BSP B050-EV002-A02A0B-S4
BSP001J BSP B050-EV002-D01A0B-S4	BSP004P BSP B050-EV002-A01A0B-S4	BSP003Y BSP B002-EV002-D00A0B-S4
BSP000M BSP B100-EV002-D00A0B-S4	BSP0010 BSP B002-EV002-D00A0B-S4	BSP0019 BSP B100-EV002-D00A0B-S4
BSP001K BSP B100-EV002-D01A0B-S4	BSP004R BSP B002-EV002-D00A0B-S4	BSP000Z BSP B100-EV002-A03A0B-S4
BSP000N BSP B250-EV002-D00A0B-S4	BSP0011 BSP B002-EV002-D00A0B-S4	BSP001A BSP B002-EV002-D00A0B-S4
BSP001L BSP B250-EV002-D01A0B-S4	BSP004T BSP B002-EV002-D00A0B-S4	BSP0020 BSP B002-EV002-D00A0B-S4
BSP000P BSP B400-EV002-D00A0B-S4	BSP0012 BSP B002-EV002-D00A0B-S4	BSP001C BSP B002-EV002-D00A0B-S4
BSP003M BSP B400-EV002-D01A0B-S4	BSP004T BSP B002-EV002-D00A0B-S4	BSP000Z BSP B002-EV002-D00A0B-S4
BSP000R BSP B600-EV002-D00A0B-S4	BSP0013 BSP B600-EV002-D00A0B-S4	BSP001E BSP B002-EV002-D00A0B-S4
BSP003N BSP B600-EV002-D01A0B-S4	BSP004U BSP B600-EV002-A01A0B-S4	BSP0040 BSP B600-EV002-A03A0B-S4
18...36 V DC 500 mA ≤ 50 mA 200 Hz ± 0.5 % FSO BFSL ± 0.3 % FSO/10 K _{yp} Yes/yes -25...+85 °C/-25...+125 °C 7 segment display/LED IP 67 (when connected) PA 6.6, stainless steel Ceramic Fluoroelastomer M12 connector, 4-pin G 1/4"	18...36 V DC 500 mA ≤ 50 mA 200 Hz ± 0.5 % FSO BFSL ± 0.3 % FSO/10 K _{yp} Yes/yes -25...+85 °C/-25...+125 °C 7 segment display/LED IP 67 (when connected) PA 6.6, stainless steel Ceramic Fluoroelastomer M12 connector, 4-pin G 1/4"	18...36 V DC 500 mA ≤ 50 mA 200 Hz ± 0.5 % FSO BFSL ± 0.3 % FSO/10 K _{yp} Yes/yes -25...+85 °C/-25...+125 °C 7 segment display/LED IP 67 (when connected) PA 6.6, stainless steel Ceramic Fluoroelastomer M12 connector, 4-pin G 1/4"



Standard
Sensors
High-End
Sensors

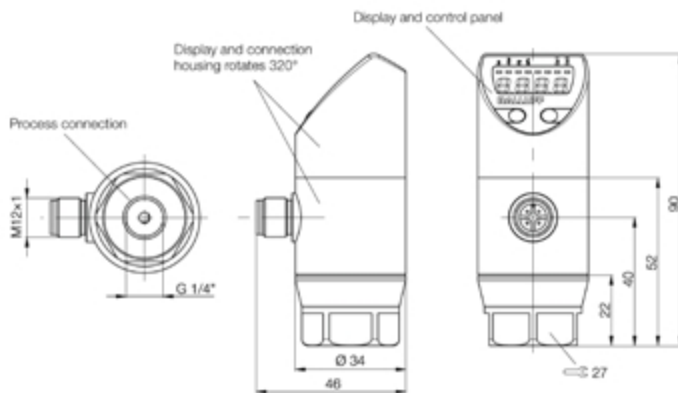
BSP Pressure Sensors
High-End Sensors

Balluff pressure sensors for high-end applications were designed for demanding requirements and extended temperature ranges. The high-end pressure sensor is ideal for harsh environments. The compact housing is manufactured entirely from hard-wearing stainless steel. Parameters are configured quickly and easily in line with VDMA standards. High-end applications include:

- Wind turbines
- Off-shore
- Refrigeration and air-conditioning systems



The high-end version of the Balluff BSP is enclosed in a two-way rotary housing for easier installation. Position the cable outlet as shown in the machine layout and turn the display in your viewing direction.



Design	Relative nominal pressure	Overload pressure	Cracking pressure \geq	Permitted vacuum
Pressure sensors -1...2 bar	2 bar	4 bar	10 bar	vacuum proof
Pressure sensors -1...10 bar	10 bar	20 bar	35 bar	
Pressure sensors 0...2 bar	2 bar	4 bar	10 bar	
Pressure sensors 0...5 bar	5 bar	10 bar	15 bar	
Pressure sensors 0...10 bar	10 bar	20 bar	35 bar	
Pressure sensors 0...20 bar	20 bar	40 bar	75 bar	
Pressure sensors 0...50 bar	50 bar	100 bar	150 bar	
Pressure sensors 0...100 bar	100 bar	200 bar	250 bar	
Pressure sensors 0...250 bar	250 bar	400 bar	450 bar	
Pressure sensors 0...400 bar	400 bar	650 bar	700 bar	
Pressure sensors 0...600 bar	600 bar	750 bar	800 bar	

-1...2 bar	PNP	Ordering code	
-14.5...29 psi	NPN	Ordering code	
-1...10 bar	PNP	Ordering code	
-14.5...145 psi	NPN	Ordering code	
0...2 bar	PNP	Ordering code	
0...29 psi	NPN	Ordering code	
0...5 bar	PNP	Ordering code	
0...73 psi	NPN	Ordering code	
0...10 bar	PNP	Ordering code	
0...145 psi	NPN	Ordering code	
0...20 bar	PNP	Ordering code	
0...290 psi	NPN	Ordering code	
0...50 bar	PNP	Ordering code	
0...725 psi	NPN	Ordering code	
0...100 bar	PNP	Ordering code	
0...1450 psi	NPN	Ordering code	
0...250 bar	PNP	Ordering code	
0...3626 psi	NPN	Ordering code	
0...400 bar	PNP	Ordering code	
0...5802 psi	NPN	Ordering code	
0...600 bar	PNP	Ordering code	
0...8702 psi	NPN	Ordering code	

Operating voltage U_B	
Output current max.	
No-load supply current I_0 max.	
Switching frequency f max.	
Accuracy	
Temperature error	
Reverse polarity/short-circuit protected	
Ambient/material temperature	
Display/function indicators	
Degree of protection per IEC 60529	
Material	Housing
	Measuring cell
	Seal
Connection	Connectors
	Process connection

BSP Pressure Sensors

High-End Sensors



2 programmable switching points (NO or NC)



1 programmable switching point and analog output 0...10 V DC



1 programmable switching point and analog output 4...20 mA

BSP004Y BSP V002-EV003-D00A0B-S4	BSP0050 BSP V002-EV002-D00A0B-S4	BSP0052 BSP V002-EV002-D00A0B-S4
BSP0054 BSP V002-EV003-D01A0B-S4	BSP0056 BSP V002-EV002-D00A0B-S4	BSP0058 BSP V002-EV002-D00A0B-S4
BSP004Z BSP V010-EV003-D00A0B-S4	BSP0051 BSP V002-EV002-D00A0B-S4	BSP0053 BSP V002-EV002-D00A0B-S4
BSP0055 BSP V010-EV003-D01A0B-S4	BSP0057 BSP V002-EV002-D00A0B-S4	BSP0059 BSP V002-EV002-D00A0B-S4
BSP0021 BSP B002-EV003-D00A0B-S4	BSP002A BSP B002-EV002-D00A0B-S4	BSP003N BSP B002-EV002-D00A0B-S4
BSP0041 BSP B002-EV003-D01A0B-S4	BSP0045 BSP B002-EV002-D00A0B-S4	BSP0049 BSP B002-EV002-D00A0B-S4
BSP0022 BSP B005-EV003-D00A0B-S4	BSP002C BSP B002-EV002-D00A0B-S4	BSP002P BSP B002-EV002-D00A0B-S4
BSP0042 BSP B005-EV003-D01A0B-S4	BSP0046 BSP B002-EV002-D00A0B-S4	BSP004A BSP B002-EV002-D00A0B-S4
BSP0023 BSP B010-EV003-D00A0B-S4	BSP002E BSP B002-EV002-D00A0B-S4	BSP000R BSP B002-EV002-D00A0B-S4
BSP0031 BSP B010-EV003-D01A0B-S4	BSP0036 BSP B002-EV002-D00A0B-S4	BSP003C BSP B002-EV002-D00A0B-S4
BSP0024 BSP B020-EV003-D00A0B-S4	BSP002F BSP B002-EV002-D00A0B-S4	BSP004T BSP B002-EV002-D00A0B-S4
BSP0032 BSP B020-EV003-D01A0B-S4	BSP0037 BSP B002-EV002-D00A0B-S4	BSP003E BSP B002-EV002-D00A0B-S4
BSP0025 BSP B050-EV003-D00A0B-S4	BSP002H BSP B002-EV002-D00A0B-S4	BSP004U BSP B002-EV002-D00A0B-S4
BSP0033 BSP B050-EV003-D01A0B-S4	BSP0038 BSP B002-EV002-D00A0B-S4	BSP002F BSP B002-EV002-D00A0B-S4
BSP0026 BSP B100-EV003-D00A0B-S4	BSP002J BSP B002-EV002-D00A0B-S4	BSP004W BSP B002-EV002-D00A0B-S4
BSP0034 BSP B100-EV003-D01A0B-S4	BSP0039 BSP B002-EV002-D00A0B-S4	BSP002H BSP B002-EV002-D00A0B-S4
BSP0027 BSP B250-EV003-D00A0B-S4	BSP002K BSP B002-EV002-D00A0B-S4	BSP004Y BSP B002-EV002-D00A0B-S4
BSP0035 BSP B250-EV003-D01A0B-S4	BSP003A BSP B250-EV002-D00A0B-S4	BSP002J BSP B002-EV002-D00A0B-S4
BSP0028 BSP B400-EV003-D00A0B-S4	BSP002L BSP B002-EV002-D00A0B-S4	BSP004Z BSP B002-EV002-D00A0B-S4
BSP0043 BSP B400-EV003-D01A0B-S4	BSP0047 BSP B002-EV002-D00A0B-S4	BSP004C BSP B400-EV002-D00A0B-S4
BSP0029 BSP B600-EV003-D00A0B-S4	BSP002M BSP B002-EV002-D00A0B-S4	BSP0030 BSP B002-EV002-D00A0B-S4
BSP0044 BSP B600-EV003-D01A0B-S4	BSP0048 BSP B002-EV002-D00A0B-S4	BSP004E BSP B002-EV002-D00A0B-S4
18...36 V DC 500 mA ≤ 50 mA 200 Hz ± 0.5 % FSO BFSL ± 0.3 % FSO/10 K _{yp} Yes/yes -40...+85 °C/-40...+125 °C 7 segment display/LED IP 67 (when connected) Stainless steel Ceramic Fluoroelastomer M12 connector, 4-pin G 1/4"	18...36 V DC 500 mA ≤ 50 mA 200 Hz ± 0.5 % FSO BFSL ± 0.3 % FSO/10 K _{yp} Yes/yes -40...+85 °C/-40...+125 °C 7 segment display/LED IP 67 (when connected) Stainless steel Ceramic Fluoroelastomer M12 connector, 4-pin G 1/4"	18...36 V DC 500 mA ≤ 50 mA 200 Hz ± 0.5 % FSO BFSL ± 0.3 % FSO/10 K _{yp} Yes/yes -40...+85 °C/-40...+125 °C 7 segment display/LED IP 67 (when connected) Stainless steel Ceramic Fluoroelastomer M12 connector, 4-pin G 1/4"



Standard
Sensors
High-End
Sensors