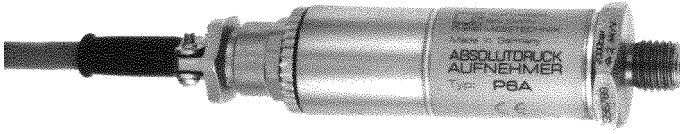


# P6A

## Absolute Pressure Transducers



Version with cable connection



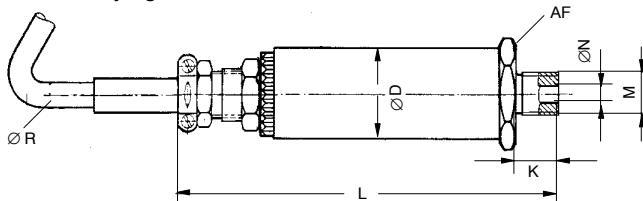
Version with plug connection

### Special features

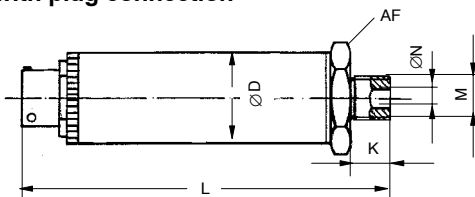
- For static and dynamic pressure measurements in gases and fluids
- Measuring ranges from 0...10 bar to 0...500 bar
- Ideal for test-rig applications
- Specially resistant for operation on alternating loads
- Protection class IP67 according to EN 60 529
- Conforms to EG EMC guidelines

### Dimensions (in mm; 1 mm= 0.03937 inches)

Version with cable connection  
3m cable, flying leads



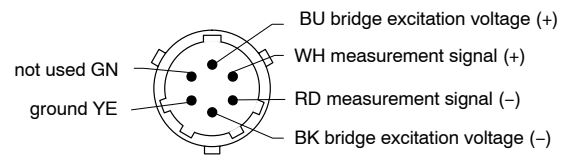
Version with plug connection



#### Cable connection coding

- |                 |   |                                 |
|-----------------|---|---------------------------------|
| 2 - BK (black)  | } | bridge excitation voltage $U_B$ |
| 3 + BU (blue)   |   |                                 |
| 2' - GY (grey)  | } | sense lines                     |
| 3' - GN (green) |   |                                 |
| 1 + WH (white)  | } | measurement signal $U_A$        |
| 4 - RD (red)    |   |                                 |
| 5 YE (yellow)   |   | cable screen (ground)           |

#### Plug connection coding (optional)



P6A		$\varnothing D$	K	L	M	$\varnothing N$	$\varnothing R$	AF
with cable connection	10 bar... 50 bar	25	12	approx. 112	M12x1.5	5	6.5	27
with plug connection	10 bar... 500 bar	25	12	approx. 97	M12x1.5	5	-	27

# Specifications (to DIN 16 086)

Type		P6A					
Accuracy class		0.2					
Measuring range, 0bar...	bar	10	20	50	100	200	500
Natural frequency of measuring element	kHz	13	15	26	38	65	> 100
Mechanical values to VDI/VDE 2600, related to full scale value							
Operating range at +23 °C [+73.4 °F]	%	0...200					0...150
Overload limit at +23 °C [+73.4 °F]	%	250					200
Test pressure	%	250					200
Destruction range	%	> 250					> 200
Materials of of the parts in contact of the measurement medium of the parts in contact with environment		1.4301/1.4542 1.4301, 1.4541, nickel-plated brass, rubber, silicone rubber					1.4542 1.4542/ 1.4541
Nominal range of excitation voltage	V	0,5...12					
Input resistance at +23 °C [+73.4 °F]	Ω	350 ± 5					
Output resistance at +23 °C [+73.4 °F]	Ω	350 ± 5					
Nominal sensitivity	mV/V	2					
Sensitivity tolerance (deviation of the sensitivity from nominal sensitivity)	%	≤ ± 0.2					
Temperature coefficient of sensitivity in nominal range of excitation voltage per 10 K, related to the actual value in the nominal temperature range in the operating temperature range							≤ ± 0.1 ≤ ± 0.2
Temperature coefficient of the zero signal in the nominal range of excitation voltage per 10 K, related to the nominal sensitivity in the nominal temperature range in the operating temperature range							≤ ± 0.15 ≤ ± 0.2
Deviation from characteristic (origin setting)	%	≤ ± 0.2					
Repeatability to DIN 1319	%	≤ ± 0.05					
Nominal temperature range	°C[°F]	-10...+80 [+14...+176]					
Service temperature range	°C[°F]	-40...+100 [-40...+212] (...+120 °C [+248 °F] ..up to 24 hours)					
Storage temperature range	°C[°F]	-50...+100[-58...+212] (...+120 °C [+248 °F] ..up to 24 hours)					
Weight without cable, approx.	g	200					

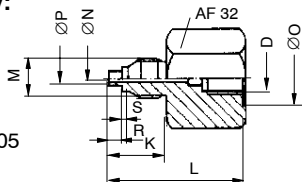
## Accessories

Included with device: 1 USIT Ring U12.7x20x1.5

### To be ordered separately:

Connection studs for measurement ranges up to 500 bar.

Material: Stainless steel 1.4305



Type	D	K	L	M	N	O	P	R	S
P3 M/500/M14	M12x1,5	19	50	M14x1,5	3	20,2	5	5	2
P3 M/500/M20	M12x1,5	25	50	M20x1,5	4	20,2	5	5	3
P3 M/500/R1/2	M12x1,5	20	50	G1/2	4	20,2	5	5	3

Connection cable Kab 405.30-3 (for versions with HS6P plug)

Cable socket HK6S, Order No. 3-3312.0095

Cable plug MS3106A16S-1P, Order No. 3-3312.0027

15 pole D plug, Order No. 2-9278.0321

Order code P6A -  -

Ordering example P6A - 010B - D

## Ordering details

Code	Option 1: Measurement range
010B	10 bar
020B	20 bar
050B	50 bar
100B	100 bar
200B	200 bar
500B	500 bar

Code	Option 2: Electrical connection
K	with cable, 3 m, flying leads
Y	with cable, ≤ 20 m, flying leads <sup>*)</sup>
M	with cable, 3 m, MS plug
D	with cable, 3 m, D15 plug
N	with cable, ≤ 20 m, MS plug <sup>*)</sup>
F	with cable, ≤ 20 m, D15 plug <sup>*)</sup>
P	with H86P plug

<sup>\*)</sup> Please state required cable length

Modifications reserved.

All details describe our products in general form only. They are not to be understood as express warranty and do not constitute any liability whatsoever.

Hottinger Baldwin Messtechnik GmbH

Im Tiefen See 45, D-64293 Darmstadt, Germany

Tel.: +49 6151 8030; Fax: +49 6151 803 9100

E-mail: support@hbm.com www.hbm.com



measurement with confidence