



**1% ACCURACY, INTERNAL DIAPHRAGM,
COMPACT HEAVY DUTY SENSOR**



- Internal diaphragm
- Full stainless steel wetted parts
- Sensing ranges from -1... 0 Bar, to 0... 1000 Bar
- Accuracy class 1
- 4-20mA signal output

Type

3272

3373

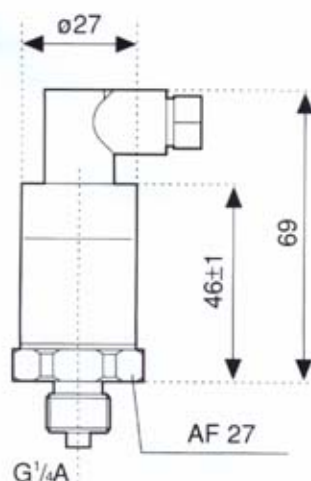
PART NUMBERS

Range (Bar)	3272	3373
0 to 0.25	065001	-
0 to 0.4	066001	-
0 to 0.6	067001	-
0 to 1	069001	-
0 to 1.6	070001	-
0 to 0.25	072001	-
0 to 4	073001	-
0 to 6	074001	-
0 to 10	075001	-
0 to 16	076001	-
0 to 25	-	078001
0 to 40	-	079001
0 to 60	-	080001
0 to 100	-	081001
0 to 160	-	082001
0 to 250	-	084001
0 to 400	-	086001
0 to 600	-	087001
0 to 1000	-	088001

TECHNICAL DATA

Type	3272	3373
Pressure type	Positive or negative gauge pressure	
Output type	4-20 mA, 2 wire system	
Accuracy class	1%	
Measuring ranges to Din	0... 0.25 Bar to 0... 16 Bar	0... 25 Bar to 0... 1000 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	≤ ±0.05% of full scale	
Case	Stainless steel 1.4301(304)	
Wetted parts	Stainless steel 1.4571 (316T) and 1.4542	
Connection thread	G1/4 A (1/4" BSP) to Din 16288	
Overload limit	≤16 Bar 3.5 x full scale value ≤600 Bar 2 x full scale value >600 Bar 1.5 x full scale value	
Electrical connection	Right angle plug with cable socket	
Power supply	10...30VDC	
Temperature Compensation range	0... +80°C	
Influence on zero point and measuring range	±0.3% / 10K	
Response time	≤1 ms (within 10 to 90% of full scale value)	
Power consumption	4-20 mA output: Signal current Voltage output: 8 mA	
Load (Ω)	≤ Supply - 10V for 4-20 mA output 0.020A >10KΩ for voltage supply	
Electrical protection	Reverse polarity, overvoltage and short circuit protection	
Protection	IP65 to EN60 529/IEC529	
EMC	EN 50 081-1, EN 50 081-2, EN 50 082-2	
Temperature ranges	- storage -40... +100°C - media -30... +100°C - ambient -40... +85°C	
Weight approx (Kg)	0.10	

DIMENSIONS



Types 3272 and 3373

All dimensions in mm



0.5% ACCURACY, INTERNAL DIAPHRAGM, HEAVY DUTY SENSOR



- All stainless steel wetted parts
- Suitable for gauge and absolute pressure
- Ranges from -1 ... 5 Bar, to 0... 4000 Bar
- 4-20mA signal output
- 0.5% accuracy class
- Internal diaphragm

Type

3276

3376

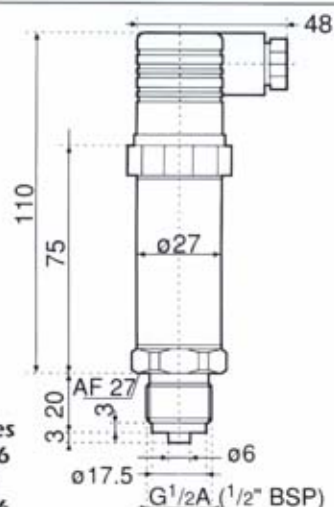
PART NUMBERS

Range (Bar)	3276	3376
-1 to 0	016001	-
-1 to +1.5	043001	-
-1 to +3	044001	-
-1 to +5	045001	-
0 to 0.1	063001	-
0 to 0.16	064001	-
0 to 0.25	065001	-
0 to 0.4	066001	-
0 to 0.6	067001	-
0 to 1	069001	-
0 to 1.6	070001	-
0 to 0.25	072001	-
0 to 4	073001	-
0 to 6	074001	-
0 to 10	075001	-
0 to 16	076001	-
0 to 25	-	078001
0 to 40	-	079001
0 to 60	-	080001
0 to 100	-	081001
0 to 160	-	082001
0 to 250	-	084001
0 to 400	-	086001
0 to 600	-	087001
0 to 1000	-	088001
0 to 1600	-	089001
0 to 2500	-	090001
0 to 4000	-	091001

TECHNICAL DATA

Type	3276	3376
Pressure type	Negative or positive gauge pressure	
Output signal	4...20 mA, 2 wire system	
Accuracy class	0.5% of full scale value	
Measuring ranges	0... 0.1 Bar, to 0... 16 Bar	0... 25 Bar, to 0... 4000 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	$\leq \pm 0.05\%$ of full scale value	
Case	Stainless steel 1.4301	
Wetted parts	Stainless steel 1.4571 and 1.4542	
Thread connection	G $\frac{1}{2}$ A (G $\frac{1}{2}$ BSP) to Din 16288 M16 x 1.5 female	
Overload limit	≤ 16 Bar: 3.5 x full scale value ≤ 600 Bar: 2 x full scale value > 600 Bar: 1.5 x full scale value ≥ 1600 Bar: 1.2 x full scale value	
Power supply	10...30 VDC (14...30 VDC for output 0...10VDC)	
Power consumption	Output 4...20 mA: Signal current Voltage output: 8 mA	
Load (Ω) for output 4-20mA	$\leq \frac{\text{Supply} - 12V}{0.02 A}$	
Temperature Compensation range	0... +80°C	
Influence on zero point and measuring range	$\pm 0.2\% / 10K$	
Adjustability	Zero point and full scale up to $\pm 5\%$	
Response time	≤ 1 ms (within 10 to 90% of full scale)	
Protection	IP65 to EN 60529/IEC 529	
Electrical protection	Reverse polarity, overvoltage and short circuit	
Temperature ranges	- storage: -40... +100°C - media: -30... +100°C - ambient: -20... +80°C	
Weight approx (Kg)	0.20	

DIMENSIONS



Types
3276
and
3376

All dimensions in mm

Options include electrical outputs of 0... 20mA, 0... 5VDC, 0... 10VDC, absolute pressure versions, IP67 rating, G $\frac{1}{2}$ A connection and 0.25% accuracy.



0.5% ACCURACY, FLUSH DIAPHRAGM, HEAVY DUTY SENSOR



- All stainless steel wetted parts
- Suitable for gauge and absolute pressure
- Ranges from -1... 0 Bar, to 0... 600 Bar
- Flush diaphragm
- 4-20mA signal output
- 0.5% accuracy class

Type

3251

3386

PART NUMBERS

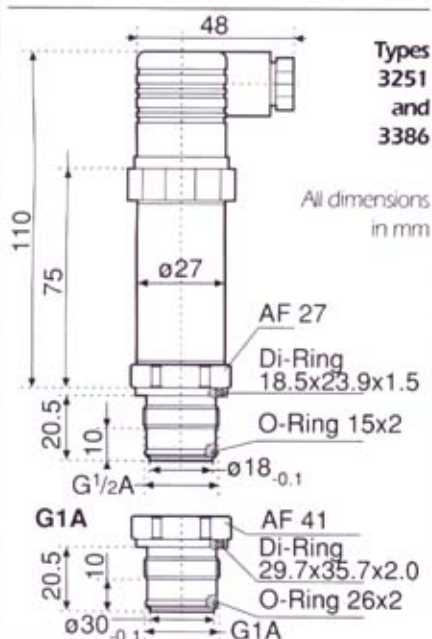
Range (Bar)	3251	3386
-1 to 0	016001	-
-0.6 to 0	015001	-
-0.4 to 0	014001	-
-0.25 to 0	013001	-
0 to 0.1	063001	-
0 to 0.16	064001	-
0 to 0.25	065001	-
0 to 0.4	066001	-
0 to 0.6	067001	-
0 to 1	069001	-
0 to 1.6	070001	-
0 to 2.5	072001	-
0 to 4	073001	-
0 to 6	074001	-
0 to 10	075001	-
0 to 16	076001	-
0 to 25	-	078001
0 to 40	-	079001
0 to 60	-	080001
0 to 100	-	081001
0 to 160	-	082001
0 to 250	-	084001
0 to 400	-	086001
0 to 600	-	087001

Please note that items in bold are available from stock

TECHNICAL DATA

Type	3251	3386
Pressure type	Negative or positive gauge pressure	
Output type	4...20 mA, 2 wire system	
Accuracy class	0.5% of full scale value	
Measuring ranges	0... 0.1 Bar, to 0... 16 Bar	0... 25 Bar, to 0... 600 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	$\leq \pm 0.05\%$ of full scale value	
Case	Stainless steel 1.4301	
Wetted parts	Stainless steel 1.4571	
Thread connection		
≤ 2.5 Bar	G1 A (1" BSP)	
≥ 4 Bar	G $\frac{1}{2}$ A ($\frac{1}{2}$ " BSP)	
Overload limit		
≤ 16 Bar	3.5 x full scale value	
≤ 600 Bar	2 x full scale value	
Power supply	10...30 VDC (14...30 VDC for output 0...10V)	
Power consumption	Units with output of 4-20 mA: Signal current Units with voltage output: 8 mA	
Load (Ω) for output 4-20mA	$\leq \frac{\text{Supply} - 12V}{0.020 \text{ A}}$	
Temperature Compensation range	0... +80°C	
Influence on zero point and measuring range	$\pm 0.2\%$ / 10K $\pm 0.4\%$ / 10K, for ranges < 0.25 Bar	
Adjustability	Zero point and measuring range up to $\pm 5\%$	
Response time	≤ 1 ms (within 10 to 90% of full scale value)	
Protection	IP65 to EN50 629/IEC529	
Electrical protection	Reverse polarity, overvoltage and short circuit	
Temperature ranges		
- storage	-40... +100°C	
- media	-30... +100°C	
- ambient	-20... +80°C	
Weight approx (Kg)	0.20	

DIMENSIONS



Options include electrical outputs of 0...20mA, 0...5VDC, 0...10VDC, absolute pressure versions, IP67 rating, 0.25% accuracy and high temperature versions of up to 130°C.



0.5% ACCURACY, INTERNAL DIAPHRAGM SENSOR WITH FIELD CASING



- All stainless steel wetted parts
- Suitable for gauge and absolute pressure
- Field casing protection IP67
- Ranges from -1 ... 0 Bar, to 0 ... 4000 Bar
- 4-20mA signal output • Internal diaphragm
- 0.5% accuracy class (0.25% option)

Type

3236

3336

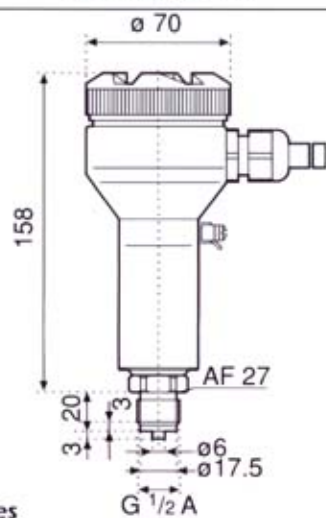
PART NUMBERS

Range (Bar)	3236	3336
-1 to 0	016001	-
-0.6 to 0	015001	-
-0.4 to 0	014001	-
-0.25 to 0	013001	-
-0.16 to 0	012001	-
-0.1 to 0	011001	-
0 to 0.1	063001	-
0 to 0.16	064001	-
0 to 0.25	065001	-
0 to 0.4	066001	-
0 to 0.6	067001	-
0 to 1	069001	-
0 to 1.6	070001	-
0 to 2.5	072001	-
0 to 4	073001	-
0 to 6	074001	-
0 to 10	075001	-
0 to 16	076001	-
0 to 25	-	078001
0 to 40	-	079001
0 to 60	-	080001
0 to 100	-	081001
0 to 160	-	082001
0 to 250	-	084001
0 to 400	-	086001
0 to 600	-	087001
0 to 1000	-	088001
0 to 1600	-	089001
0 to 2500	-	090001
0 to 4000	-	091001

TECHNICAL DATA

Type	3236	3336
Pressure type	Negative or positive gauge pressure	
Output signal	4-20 mA, 2 wire system	
Accuracy class	0.5% of full scale value	
Measuring ranges	-1 ... 0 Bar, 0 ... 0.1 Bar to 0 ... 16 Bar	0 ... 25 Bar, to 0 ... 4000 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	≤ ±0.05% of full scale value	
Case	Stainless steel 1.4301	
Terminal housing	Aluminium with epoxy resin housing	
Wetted parts	≤16 Bar Stainless steel 1.4571 ≥25 Bar Stainless steel 1.4571 and 1.4542	
Thread connection	≤1600 Bar G½A (½" BSP) ≥2500 Bar m16 x 1.5	
Overload limit	≤16 Bar 3.5 x full scale value ≤600 Bar 2 x full scale value 1000 Bar 1.5 x full scale value >1000 Bar 1.2 x full scale value 4000 Bar 1.1 x full scale value	
Power supply	11 ... 30 VDC (14 ... 30 VDC for output 0 ... 10V)	
Power consumption	Units with outputs of 4 ... 20 mA: Signal current Units with voltage output: 8 mA	
Load (Ω) for output 4 ... 20mA	≤ Supply - 11V 0.020 A	
Temperature Compensation range	0 ... +80°C	
Influence on zero point and measuring range	≤ ±0.2% / 10K ≤ ±0.4% / 10K, for ranges < 0.25 Bar	
Adjustability	Zero point and measuring range up to ±5% with potentiometers	
Response time	≤ 1ms (within 10 to 90% of full scale)	
Protection	IP67 to Din 40050	
Electrical protection	Reverse polarity, overvoltage and short circuit	
Temperature ranges	- storage -40 ... +100°C - media -30 ... +100°C - ambient -20 ... +80°C	
Weight approx (Kg)	0.5	

DIMENSIONS



Types
3236 and 3336 All dimensions in mm

Options include 0.25% accuracy, different connection threads, electrical outputs of 0 ... 20mA, 0 ... 5VDC, 0 ... 10VDC and special versions suitable for use with oxygen.



0.5% ACCURACY, FLUSH DIAPHRAGM SENSOR WITH FIELD CASING



- All stainless steel wetted parts
- Suitable for gauge and absolute pressure
- Field casing protection IP67
- Ranges from -1... 0, to 0... 600 Bar
- 4-20mA signal output
- Flush diaphragm
- 0.5% accuracy class (0.25% option)

Type

3238

3338

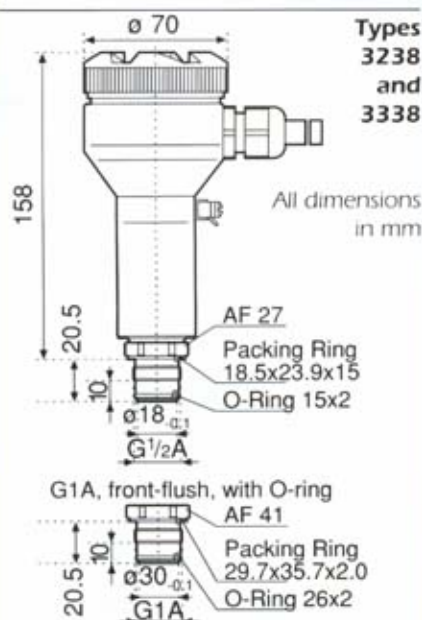
PART NUMBERS

Range (Bar)	3238	3338
-1 to 0	016001	-
-0.6 to 0	015001	-
-0.4 to 0	014001	-
-0.25 to 0	013001	-
-0.16 to 0	012001	-
-0.1 to 0	011001	-
0 to 0.1	063001	-
0 to 0.16	064001	-
0 to 0.25	065001	-
0 to 0.4	066001	-
0 to 0.6	067001	-
0 to 1	069001	-
0 to 1.6	070001	-
0 to 2.5	072001	-
0 to 4	073001	-
0 to 6	074001	-
0 to 10	075001	-
0 to 16	076001	-
0 to 25	-	078001
0 to 40	-	079001
0 to 60	-	080001
0 to 100	-	081001
0 to 160	-	082001
0 to 250	-	084001
0 to 400	-	086001
0 to 600	-	087001

TECHNICAL DATA

Type	3238	3338
Pressure type	Negative or positive gauge pressure	
Output signal	4...20 mA, 2 wire system	
Accuracy class	0.5% of full scale value	
Measuring ranges	-1... 0 Bar, 0... 0.1 Bar to 0... 16 Bar	0... 25 Bar, to 0... 600 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	$\leq \pm 0.05\%$ of full scale value	
Case	Stainless steel 1.4301	
Terminal housing	Aluminium with epoxy resin housing	
Wetted parts	Stainless steel 1.4571	
Thread connection	≤2.5 Bar G1A (1" BSP) front flush with o-ring ≥4 Bar G3/4A (3/4" BSP) front flush with o-ring	
Overload limit	2 x full scale value	
Power supply	11...30 VDC (14...30 VDC for output 0...10VDC)	
Power consumption	Units with outputs of 4...20 mA: Signal current Units with voltage output: 8 mA	
Load (Ω) for output 4...20mA	$\leq$ Supply - 11V 0.02 A	
Temperature Compensation range	0... +80°C	
Influence on zero point and measuring range	$\leq \pm 0.2\%$ / 10K $\leq \pm 0.4\%$ / 10K, for ranges <0.25 Bar	
Adjustability	Zero point and measuring range up to $\pm 5\%$ with potentiometers	
Response time	≤ 1 ms (within 10 to 90% of full scale)	
Protection	IP67 to Din 40050	
Electrical protection	Reverse polarity, overvoltage and short circuit	
Temperature ranges	- storage -40... +100°C - media -30... +100°C - ambient -20... +80°C	
Weight approx (Kg)	0.5	

DIMENSIONS





**0.5% ACCURACY, HEAVY DUTY SENSOR,
INTERNAL DIAPHRAGM**



- Internal diaphragm (Flush option)
- Full stainless steel wetted parts
- Sensing ranges from -1... 0 Bar, to 0... 4000 Bar
- Ex certified for zone 1
- 0.5% accuracy class (0.25% option)

Type

3202

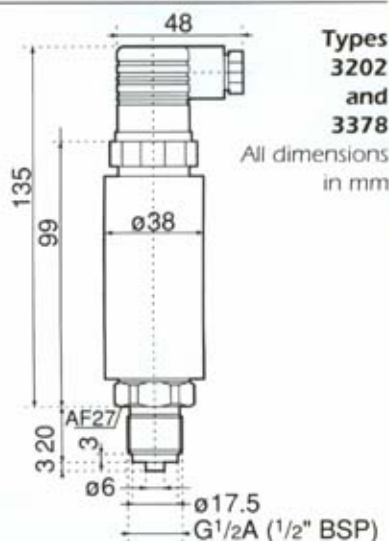
3378

PART NUMBERS

Range (Bar)	3202	3378
-1 to 0	016001	-
-0.6 to 0	015001	-
-0.4 to 0	014001	-
-0.25 to 0	013001	-
-0.16 to 0	012001	-
-0.1 to 0	011001	-
0 to 0.1	063001	-
0 to 0.16	064001	-
0 to 0.25	065001	-
0 to 0.4	066001	-
0 to 0.6	067001	-
0 to 1	069001	-
0 to 1.6	070001	-
0 to 2.5	072001	-
0 to 4	073001	-
0 to 6	074001	-
0 to 10	075001	-
0 to 16	076001	-
0 to 25	-	078001
0 to 40	-	079001
0 to 60	-	080001
0 to 100	-	081001
0 to 160	-	082001
0 to 250	-	084001
0 to 400	-	086001
0 to 600	-	087001
0 to 1000	-	088001
0 to 1600	-	089001
0 to 2500	-	090001
0 to 4000	-	091001

Please note that items in bold are available from stock

DIMENSIONS



Types
3202
and
3378

All dimensions
in mm

TECHNICAL DATA

Type	3202	3378
Explosion proof protection type	Ex ia I Ic T5/T6	
Pressure type	Negative or positive gauge pressure	
Output signal	4...20 mA, 2 wire system	
Accuracy class	0.5% of full scale	
Measuring ranges	-1... 0 Bar, 0... 0.1 Bar to 0... 16 Bar	0... 25 Bar, to 0... 4000 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	≤ ±0.05% of full scale	
Case	Stainless steel 1.4301	
Wetted parts	Stainless steel 1.4571	St. steel 1.4541 & 1.4542
Thread connection	G1/2A according to Din 16288 M16 x 1.5	
Overload limit	≤16 Bar 3.5 x full scale value ≤600 Bar 2 x full scale value 1000 Bar 1.5 x full scale value >1000 Bar 1.2 x full scale value 4000 Bar 1.1 x full scale value	
Power supply	11... 28Vdc	
Power consumption	Signal current	
Load (Ω)	≤ Supply - 10V 0.020 A	
Power restriction	1.75W	
Temperature Compensation range	0... +60°C/T6, 0... +75°C/T5	
Influence on zero point and measuring range	≤0.2%/10K (≤0.4%/10K, for ranges <0.25 Bar)	
Adjustability of zero point and measuring range	Up to ±5% with potentiometers	
Response time	≤1ms (within 10% to 90% of full scale)	
Protection class	IP65 EN 60529/IEC 529	
Electrical protection	Reverse polarity, overvoltage and short circuit	
Temperature ranges	- storage -20... +80°C/T6 -20... +75°C/T5 - media -20... +60°C/T6 -20... +75°C/T5 - ambient -20... +60°C/T6 -20... +75°C/T5	
Weight approx (Kg)	0.35	

Please note that other options are available including flush mounting diaphragm, accuracy class of 0.25%, different threads and an IP67 version.



0.1% HIGH ACCURACY SENSOR, INTERNAL DIAPHRAGM



- Internal diaphragm
- Full stainless steel wetted parts
- Sensing ranges from -1... 0 Bar, to 0... 1000 Bar
- 0.1% accuracy class (0.05% option)

Type

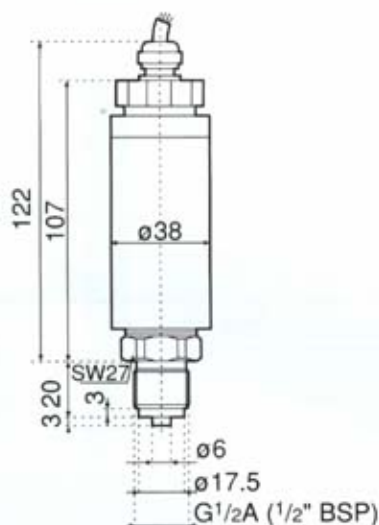
3284

3384

PART NUMBERS

Range (Bar)	3284	3384
-1 to 0	016301	-
-0.6 to 0	015301	-
-0.4 to 0	014301	-
-0.25 to 0	013301	-
0 to 0.25	065301	-
0 to 0.4	066301	-
0 to 0.6	067301	-
0 to 1	069301	-
0 to 1.6	070301	-
0 to 2.5	072301	-
0 to 4	073301	-
0 to 6	074301	-
0 to 10	075301	-
0 to 16	076301	-
0 to 25	078301	-
0 to 40	-	079301
0 to 60	-	080301
0 to 100	-	081301
0 to 160	-	082301
0 to 250	-	084301
0 to 400	-	086301
0 to 600	-	087301
0 to 1000	-	088301

DIMENSIONS



Types
3284 and 3384 All dimensions in mm

TECHNICAL DATA

Type	3284	3384
Pressure type	Negative or positive gauge pressure	
Output signal	0...20 mA, 3 wire system or RS232 interface	
Accuracy class	0.1% of full scale (0.05% option)	
Measuring ranges	-1... 0 Bar, 0... 0.25 Bar to 0... 25 Bar	0... 40 Bar, to 0... 1000 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	$\leq \pm 0.03\%$ of full scale value	
Case	Stainless steel 1.4301	
Wetted parts	Stainless steel 1.4571	
Thread connection	G1/2A (1/2" BSP) according to Din 16288	
Electrical connection	1.5m cable with gland	
Overload limit	≤ 25 Bar 3 x full scale value ≤ 600 Bar 2 x full scale value > 600 Bar 1.5 x full scale value	
Power supply	10...30 Vdc, RS232 - voltage supply from interface	
Power consumption	Units with outputs of 0...20 mA: max 37mA	
Load (Ω) for output 0...20mA	$\leq$ Supply - 10V 0.020 A	
Temperature Compensation range	0... +70°C	
Influence on zero point and measuring range	0... 10°C $\leq 0.1\%/10K$ 10... 40°C none 40... 70°C $\leq 0.1\%/10K$	
Adjustability of zero point and measuring range	Programmable on versions with either serial interface or analogue output	
Response time	$\leq 100ms$ (within 10 to 90% of full scale)	
Protection	IP67 EN 60529/IEC 529	
Temperature ranges	- storage -20... +70°C - media -20... +70°C - ambient 0... +70°C	
Weight approx (Kg)	0.30	

Please note that other types are available including flush mounted, accuracy class of 0.05%, connection threads and outputs of 0...5Vdc, 0...10Vdc.



1% ACCURACY, INTERNAL DIAPHRAGM, ECONOMIC OEM HEAVY DUTY SENSOR



- Full stainless steel wetted parts
- Suitable for gauge and absolute pressure
- Ranges from -1... 0 Bar, to 0... 1000 Bar
- Low cost suitable for OEM applications
- 4-20mA output
- 1% accuracy class
- Internal diaphragm

Type

3296

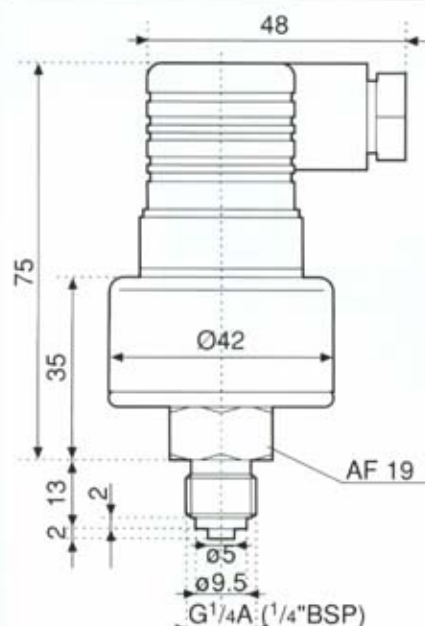
3396

PART NUMBERS

Range (Bar)	3296	3396
0 to 1	069001	-
0 to 1.6	070001	-
0 to 2.5	072001	-
0 to 4	073001	-
0 to 6	074001	-
0 to 10	075001	-
0 to 16	-	076001
0 to 25	-	078001
0 to 40	-	079001
0 to 60	-	080001
0 to 100	-	081001
0 to 160	-	082001
0 to 250	-	084001
0 to 400	-	086001
0 to 600	-	087001
0 to 1000	-	088001

For higher volume usage, customer specific pressure ranges are available

DIMENSIONS



Types
3296 and 3396 All dimensions in mm

TECHNICAL DATA

Type	3296	3396
Pressure type	Negative or positive gauge pressure	
Output signal	4...20 mA, 2 wire system	
Accuracy class	1% of full scale value	
Measuring ranges	-1... 0 Bar, 0... 1 Bar to 0... 10 Bar	0... 16 Bar, to 0... 1000 Bar
Sensor element	Piezoresistive	Thin film
Reproducibility	≤ ±0.2% of full scale value	
Case	Stainless steel 1.4301	
Wetted parts	Stainless steel 1.4571 and 1.4542	
Thread connection	G¼A (¼" BSP) according to Din 16288	
Overload limit		
≤10 Bar	3.5 x full scale value	
≤600 Bar	2 x full scale value	
1000 Bar	1.5 x full scale value	
Power supply	10...30 VDC (14...30 VDC for output 0...10VDC)	
Power consumption	Units with outputs of 4...20 mA: Signal current Units with voltage output: 8 mA	
Load (Ω) for output 4...20mA	≤ Supply - 10V 0.02 A	
Temperature Compensation range	0... +80°C	
Influence on zero point and measuring range	±0.4% / 10K	
Response time	≤5ms (within 10 to 90% of full scale)	
Protection	IP65 to EN 60529/IEC 529	
Electrical protection	Reverse polarity, overvoltage and short circuit	
Temperature ranges		
- storage	-30... +100°C	
- media	-40... +100°C	
- ambient	-30... +80°C	
Weight approx (Kg)	0.15	

Options include customer specific pressure and output ranges, different connection threads.

Standard outputs available are 1-5VDC, 0-10VDC, 1-6VDC. IP67 cabled versions and higher temperature specification can also be requested.