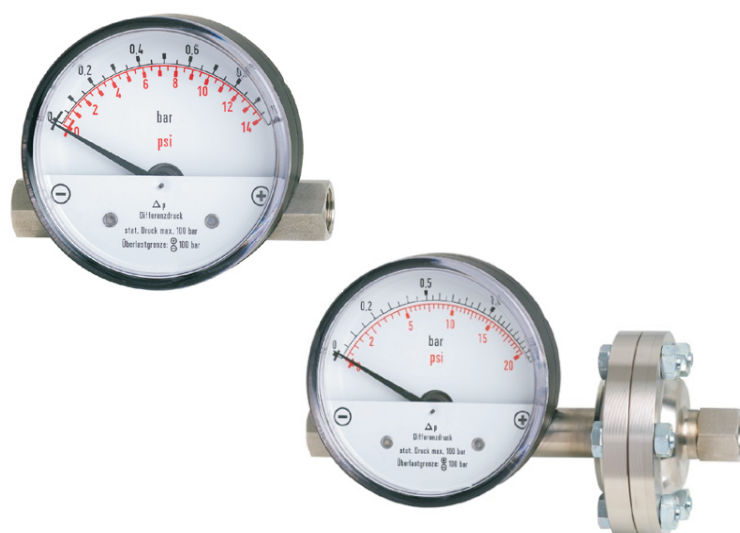


# DIFFERENTIAL PRESSURE GAUGE with magnetic piston

2x side connection



## DESCRIPTION:

- case: steel, aluminium cast or stainless steel
- inspection hole: acrylate, glass
  - connection 2x side, bottom
- measurement mechanism: CuZn, stainless steel
- piston sealing: NBR, EPDM, Viton
- design: with direct entry or with separating membrane

## APPLICATION:

- air-conditioning
  - hydraulics
- power engineering
- petrochemical industry
- chemical industry

## TECHNICAL PARAMETERS:

- diameter: 63, 80, 100, 115, 150mm
- measure ranges - differential pressure: 0-40kPa, 0-1MPa
- max. static pressure: 10, 25, 40MPa
  - connection thread: G1/4 (G1/2, 1/2NPT inner or outer)
- accuracy class: 3% for differential pressure

## SPECIFICATION:

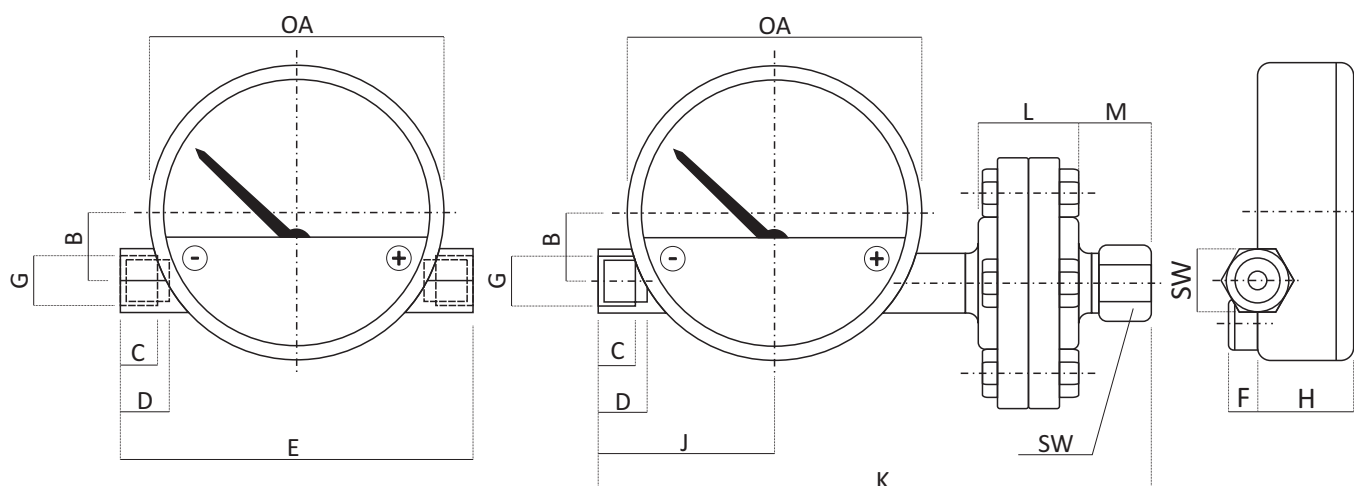
Differential pressure gauges with magnetic pistons are suitable for all applications with high static pressures. They are produced in compliance with EN 837-3 standard. Differential pressure gauges can be used for measurements of all liquids, gases and vapour that do not have corrosive effect on copper alloys and its viscosity allows for use of measuring mechanism made of stainless steel class 1.4305. For mediums of higher viscosity it is possible to use pressure gauges with separating membranes.

Differential pressure gauges with magnetic pistons may be used in applications for measurements of small pressure differences even in high static pressures. This design finds its application in wide range of operations, pressure gauges may be supplied with piston and spring or with a membrane, in wide range of materials - brass, aluminium, stainless steel. Maximum environment temperature -20 up to 60°C, medium temperature  $T_{max}$  100°C. Dother design options on individual request - with switching contacts, analog output, special scale design, connection threads, etc.

|                         |                                                     |                      |
|-------------------------|-----------------------------------------------------|----------------------|
| Code                    | 700.01                                              | 700.02               |
| Diameter                | 80mm                                                |                      |
| Design                  | side connection                                     |                      |
| Accuracy class          | ±3%                                                 | ±5%                  |
| Ranges                  | 0-400mbar...0-10bar                                 | 0-160mbar...0-2,5bar |
| Max. pressure           | 100, 250, 400bar                                    | 100bar               |
| Protection              | IP 54 (EN 60 529 / IEC 529)                         |                      |
| Case                    | alluminium, black                                   |                      |
| Inspection hole         | acrylate, mounted                                   |                      |
| Dial                    | alluminium, white                                   |                      |
| Needle                  | alluminium, black                                   |                      |
| Machine basis           | stainless steel                                     |                      |
| Spring                  | stainless steel                                     |                      |
| Thread                  | stainless steel, G1/4 (G1/2, 1/2NPT inner or outer) |                      |
| Medium temper.          | 0-60°C                                              |                      |
| T <sub>max</sub> medium | 100°C                                               |                      |

• Type 700.01

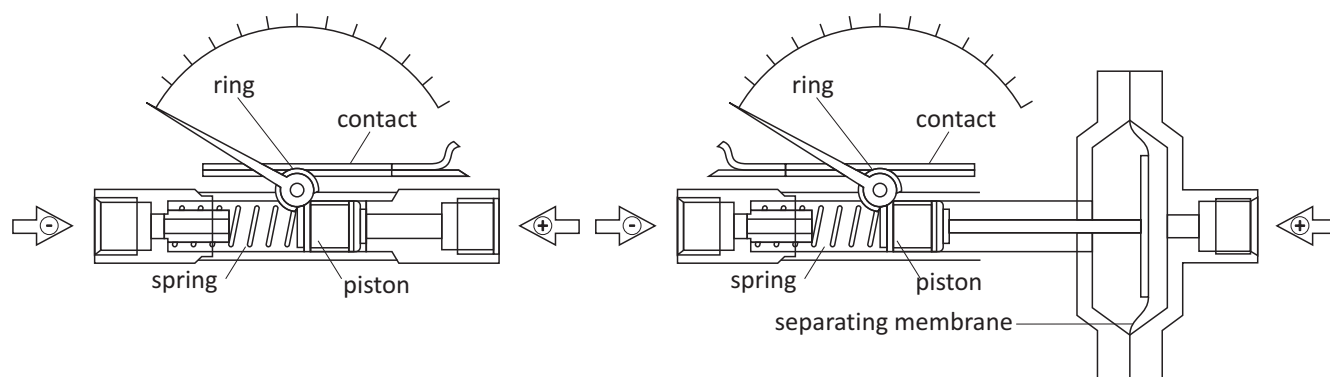
• Type 700.02



| Dimensions in mm |      |     |    |    |   |      |    |    |    |     |    |      |    |  |
|------------------|------|-----|----|----|---|------|----|----|----|-----|----|------|----|--|
| A                | B    | C   | D  | E  | F | G    | H  | I  | J  | K   | L  | M    | SW |  |
| 79               | 18,5 | 9,5 | 13 | 94 | 8 | G1/4 | 25 | 66 | 47 | 146 | 27 | 18,5 | 17 |  |

• Type 700.01

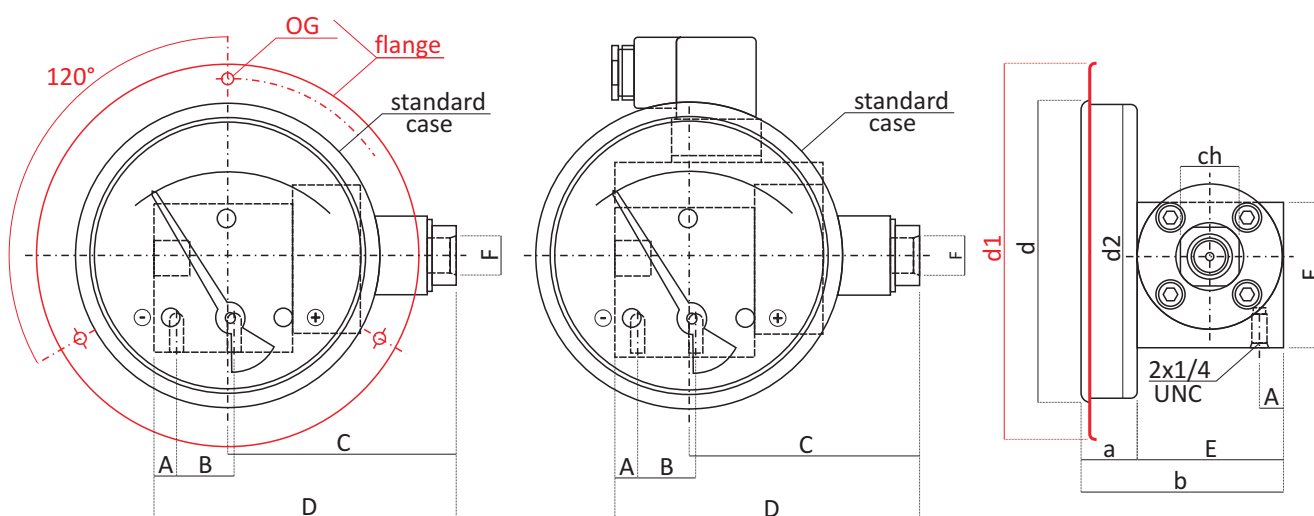
• Type 700.02



| Type              | 200DPG                                            | 200DGR               | 300DGC            | 400DGC         | Magnetic        |
|-------------------|---------------------------------------------------|----------------------|-------------------|----------------|-----------------|
| Measuring element | piston with spring                                | piston+rolling memb. | membrane          | membrane       | membrane        |
| Measure range     | 0-25kPa/0-1MPa                                    | 0-25kPa/0-700MPa     | 0-7,5kPa/0-400kPa | 0-250Pa/0-6kPa | 0-250Pa/0-10kPa |
| Sealing           | negligible flow of medium from pressure to vacuum | without flow         | without flow      | without flow   | plastic body    |

|                                    |                                                                            |
|------------------------------------|----------------------------------------------------------------------------|
| Contacts                           | SPST: max 5VA, 150V, 0,5A AC/DC; SPDT: max 10VA, 175V, 0,25A AC/DC         |
| Membrane and piston seals material | NBR, EPDM, Viton                                                           |
| Body material                      | Al alloy ( Ms, stainless steel, structural polymer)                        |
| Static pressure                    | up to 40MPa                                                                |
| Accuracy                           | 2% from range (3% from range)                                              |
| Body material                      | Al alloy ( alter. Ms, stainless steel 316 Ti, Monel )                      |
| Parts in contact w/t medium        | spring stainless steel 302, seals or membrane NBR (teflon), ceramic magnet |
| Contact load                       | max. 10VA (AC), max. current 5A / 170V, optionally 230V                    |

- Differential piston pressure gauges with contacts HIRLEKAR



|            | F               | a  | b    | d     | d1  | d2    | ch | p.c.d. | d*    | A | B  | C    | D   | E    | G   |
|------------|-----------------|----|------|-------|-----|-------|----|--------|-------|---|----|------|-----|------|-----|
| 63 (2,5")  | 1/4"BSP-1/4"NPT | 19 | 69,7 | 66    | 93  | 65    | 20 | 83     |       | 9 | 23 | 83,5 | 112 | 50,7 | 4,2 |
| 80 (3,5")  | 1/4"BSP-1/4"NPT | 19 | 69,7 | 83    | 109 | 82    | 20 | 99     | 83    |   |    |      |     |      |     |
| 100 (4")   | 1/4"BSP-1/4"NPT | 19 | 69   | 104,3 | 131 | 102   | 20 | 121    | 104,3 |   |    |      |     |      |     |
| 115 (4,5") | 1/4"BSP-1/4"NPT | 19 | 69,7 | 119,7 | 146 | 117   | 20 | 136    | 119,7 |   |    |      |     |      |     |
| 150 (6")   | 1/4"BSP-1/4"NPT | 19 | 69,7 | 154,3 | 181 | 152,5 | 20 | 171    | 154,3 |   |    |      |     |      |     |

