

## manotherm bv

**workshop and offices:** welplaathoek 20, 3197 KP botlek rt  
p.o. box 1218, 3000 BE rotterdam

**phone:** 010 - 16 90 11 \*

**telex:** 28604 termo nl



## pressure gauge, type 100/16

<b>case diameter</b>	: 63 mm
<b>case</b>	: brass
<b>bezel</b>	: brass
<b>model</b>	: 100/16 a. without flange 100/16 b. with back flange for wall mounting 100/16 c. with chromed front flange for panel mounting
<b>movement</b>	: reinforced "turbine"
<b>bourdontube</b>	: phosphor bronze
<b>connection</b>	: brass
<b>thread connection:</b>	: 1/4" BSP, back or bottom connection
<b>ranges</b>	: -1 -0 BAR or 30" HG-0 or combined 0-1, 1,6, 2,5, 4, 6, 10, 16, 25, 40 BAR 0-63, 100, 160, 250 BAR 0-15, 30, 60, 100, 160, 200, 300, 600 psi 0-800, 1000, 1500, 2000, 3000 psi or dual scale BAR and psi

**dimensions acc. DIN standard:**  
**maten volgens DIN-normen:**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
63 mm	85	75	3,6	53	1/4"	12	28	4	28	2	11,5	3	5	6	26	9,5	63	17

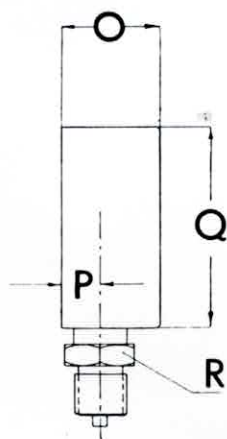
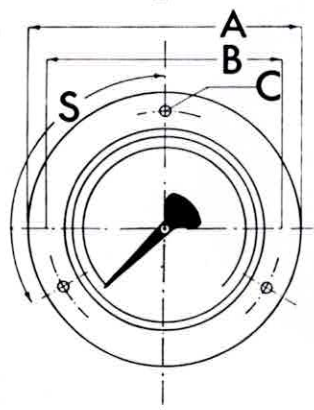
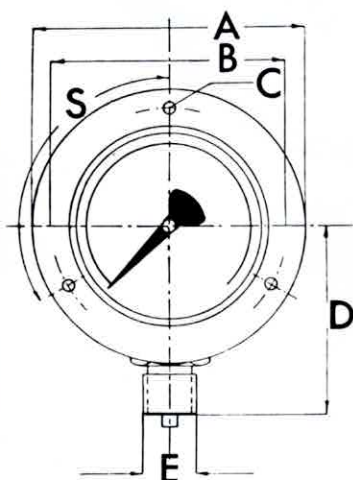


FIG. a

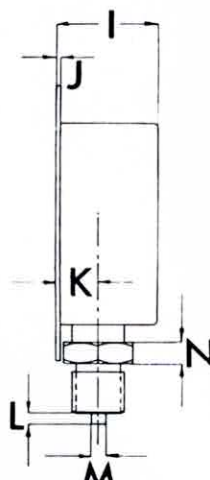


FIG. b

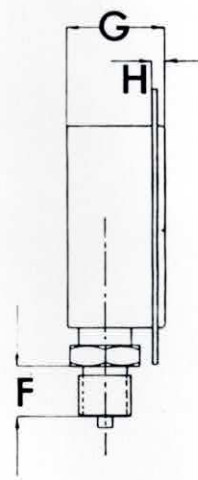


FIG. c

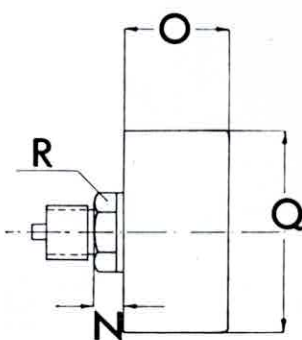


FIG. a

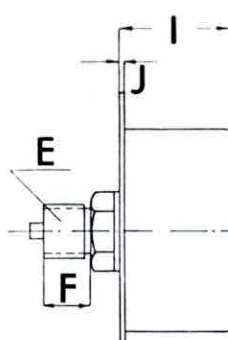


FIG. b

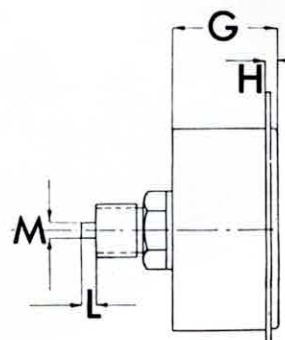


FIG. c

## manometer, type no. 100/16

<b>kastdiameter</b>	: 63 mm
<b>huis</b>	: messing
<b>oversteekkap</b>	: messing gepolijst
<b>model</b>	: 100/16 a. zonder rand 100/16 b. met achterflens voor wandmontage 100/16 c. verchromde voorflens voor paneelmontage
<b>binnenwerk</b>	: verzaamd, z.g. „turbinewerk"
<b>bourdonveer</b>	: fosfor brons
<b>aansluiting</b>	: messing
<b>aansluitvorm</b>	: 1/4" BSP, achter of onderzijde kast
<b>meetbereiken</b>	: -1 -0 BAR 30" HG-0 of gecombineerd 0-1, 1,6, 2,5, 4, 6, 10, 16, 25, 40 BAR 0-63, 100, 160, 250 BAR 0-15, 30, 60, 100, 160, 200, 300, 600 psi 0-800, 1000, 1500, 2000, 3000 psi of dubbele schaal BAR en psi

## pressure gauge, type 100/18

<b>case diameter</b>	: 80 mm
<b>case</b>	: brass
<b>bezel</b>	: brass
<b>model</b>	: 100/18 a. without flange 100/18 b. with back flange for wall mounting 100/18 c. with chromed front flange for panel mounting
<b>movement</b>	: reinforced "turbine"
<b>bourdontube</b>	: phosphor bronze
<b>connection</b>	: brass
<b>thread connection:</b>	$\frac{1}{2}$ " BSP back or bottom connection
<b>ranges</b>	: -1 -0 BAR or 30" HG-0 or combined 0-1, 1,6, 2,5, 4, 6, 10, 16, 25, 40, 63 BAR 0-15, 30, 60, 100, 160, 200, 300, 600 psi 0-800, 1000 psi or dual scale BAR and psi

## manometer, type no. 100/18

<b>kastdiameter</b>	: 80 mm
<b>huis</b>	: messing
<b>oversteekkap</b>	: messing gepolijst
<b>model</b>	: 100/18 a. zonder rand 100/18 b. met achterflens voor wandmontage 100/18 c. verchromde voorflens voor paneelmontage
<b>binnenwerk</b>	: verzaamd, z.g. „turbinewerk“
<b>bourdonveer</b>	: phosphor brons
<b>aansluiting</b>	: messing
<b>aansluitvorm</b>	: $\frac{1}{2}$ " BSP achter of onderzijde kast
<b>meetbereiken</b>	: -1 -0 BAR of 30" HG-0 of gecombineerd 0-1, 1,6, 2,5, 4, 6, 10, 16, 25, 40, 63 BAR 0-15, 30, 60, 100, 160, 200, 300, 600 psi 0-800, 1000 psi of dubbele schaal BAR en psi

dimensions acc. DIN standard:  
maten volgens DIN-normen:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
80 mm	110	95	4,8	75	$\frac{1}{2}$ "	20	38,5	5	40,5	2	15	5	6	8,5	38,5	13	80	27

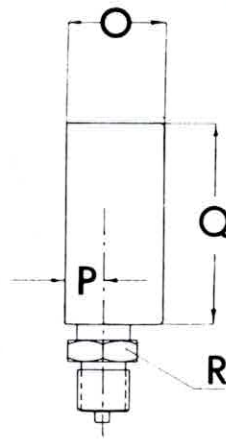
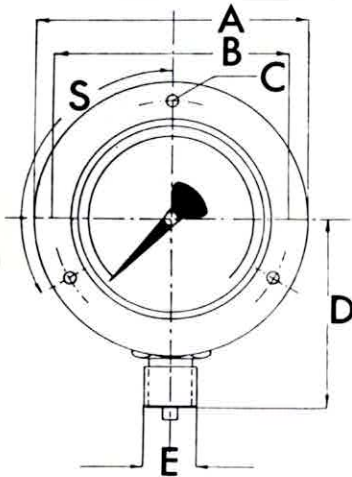


FIG. a

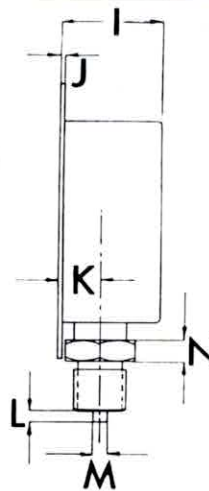


FIG. b

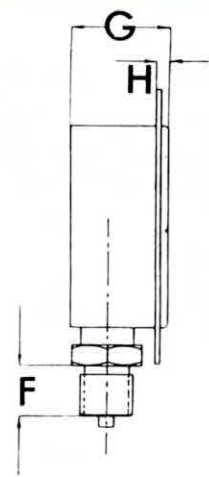


FIG. c

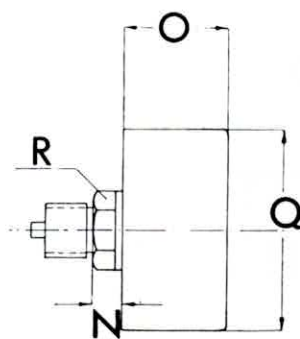
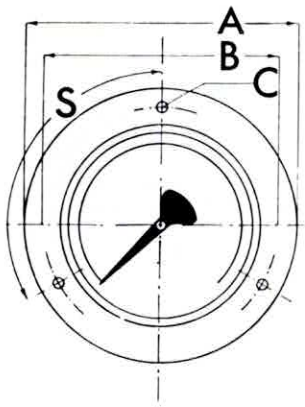


FIG. a

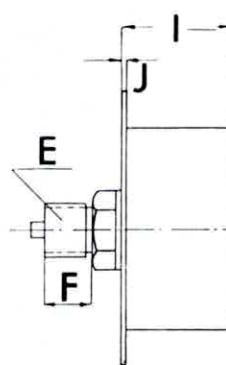


FIG. b

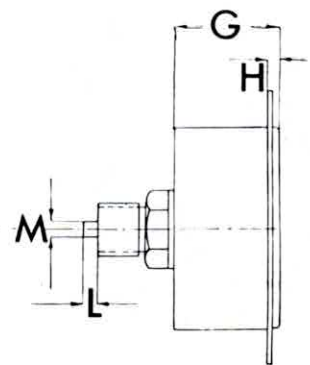


FIG. c

## pressure gauge, type 100/23

<b>case diameter</b>	: 100 mm
<b>case</b>	: steel
<b>bezel</b>	: steel-black
<b>model</b>	: 100/23 a. without flange 100/23 b. with back flange for wall mounting 100/23 c. with chromed front flange for panel mounting
<b>movement</b>	: reinforced "turbine"
<b>bourdontube</b>	: phosphor bronze till 63 BAR copper beryllium till 400 BAR steel till 1000 BAR
<b>connection</b>	: brass
<b>thread connection:</b>	$\frac{1}{2}$ " BSP back or bottom connection
<b>ranges</b>	: -1 -0 BAR or 30" HG-0 or combined 0-1, 1,6, 2,5, 4, 6, 10, 16, 25, 40 BAR 0-63, 100, 160, 250, 400, 630-1000 BAR 0-15, 30, 60, 100, 160, 200, 300, 600 psi 0-800, 1000, 1500, 2000, 3000, 5000, 10000, 15000 psi or dual scale BAR and psi

dimensions acc. DIN standard:  
maten volgens DIN-normen:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
100 mm	132	116	4,8	—	$\frac{1}{2}$ "	20	48	6	48	2	—	5	6	10	48	—	100	27

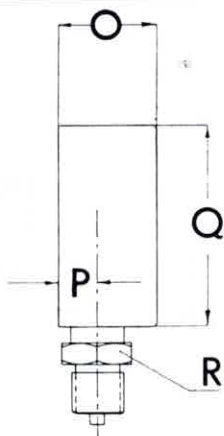
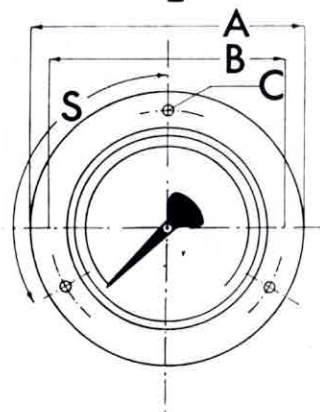
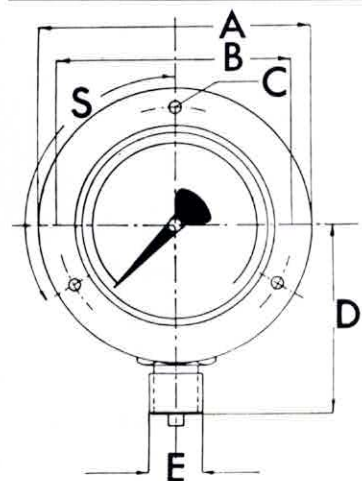


FIG. a

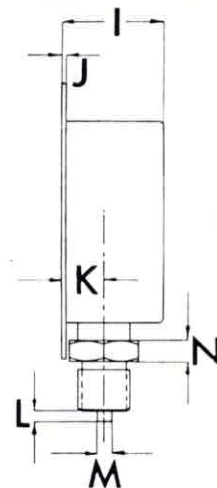


FIG. b

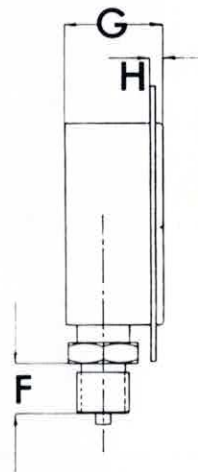


FIG. c

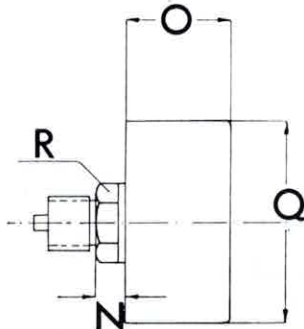


FIG. a

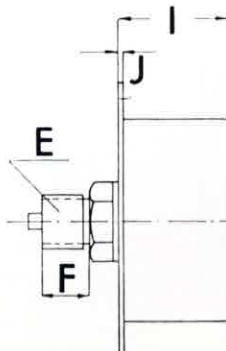


FIG. b

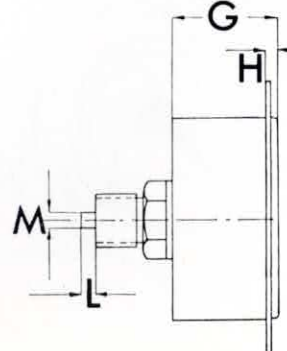


FIG. c

## manometer, type no. 100/23

<b>kastdiameter</b>	: 100 mm
<b>huis</b>	: plaatstaal
<b>oversteekkap</b>	: staal-zwart
<b>model</b>	: 100/23 a. zonder rand 100/23 b. met achterflens voor wandmontage 100/23 c. verchromde voorflens voor paneelmontage
<b>binnenwerk</b>	: verzwaard, z.g. „turbinewerk"
<b>bourdonveer</b>	: phosphor brons tot 43 BAR koper berilium tot 400 BAR staal tot 1000 BAR
<b>aansluiting</b>	: messing
<b>aansluitvorm</b>	: $\frac{1}{2}$ " BSP, achter of onderzijde kast
<b>meetbereiken</b>	: -1 -0 BAR of 30" HG-0 of gecombineerd 0-1, 1,6, 2,5, 4, 6, 10, 16, 25, 40 BAR 0-63, 100, 160, 250, 400, 630-1000 BAR 0-15, 30, 60, 100, 160, 200, 300, 600 psi 0-800, 1000, 1500, 2000, 3000, 5000, 10000, 15000 psi of dubbele schaal BAR en psi

## pressure gauge, type 100/25

- case diameter** : 160 mm  
**case** : steel  
**bezel** : steel-black  
**model** : 100/25 a. without flange  
 100/25 b. with back flange for wall mounting  
 100/25 c. with chromed front flange for panel mounting  
  
**movement** : reinforced "turbine"  
**bourdontube** : phosphor bronze till 63 BAR  
 copper beryllium till 400 BAR  
 steel till 1000 BAR  
  
**connection** : brass  
**thread connection:** 1/2" BSP back or bottom connection  
**ranges** : -1 -0 BAR or 30" HG-0 or combined  
 0-1, 1.6, 2.5, 4, 6, 10, 16, 25, 40 BAR  
 0-63, 100, 160, 250, 400, 630, 1000 BAR  
  
 0-15, 30, 60, 100, 160, 200, 300, 600 psi  
 0-800, 1000, 1500, 2000, 3000, 5000, 10000, 15000 psi  
 or dual scale BAR and psi

## manometer, type no. 100/25

- kastdiameter** : 160 mm  
**huis** : plaatstaal  
**oversteekkap** : staal-zwart  
**model** : 100/25 a. zonder rand  
 100/25 b. met achterlens voor wandmontage  
 100/25 c. verchroomde voorlens voor paneelmontage  
  
**binnenwerk** : verzaamd, z.g. „turbinewerk“  
**bourdonveer** : phosphor brons tot 63 BAR  
 koper berilium tot 400 BAR  
 staal tot 1000 BAR  
  
**aansluiting** : messing  
**aansluitvorm** : 1/2" BSP, achter of onderzijde kast  
**meetbereiken** : -1 -0 BAR of 30" HG-0 of gecombineerd  
 0-1, 1.6, 2.5, 4, 6, 10, 16, 25, 40 BAR  
 0-63, 100, 160, 250, 400, 630, 1000 BAR  
  
 0-15, 30, 60, 100, 160, 200, 300, 600 psi  
 0-800, 1000, 1500, 2000, 3000, 5000, 10000, 15000 psi  
 of dubbele schaal BAR en psi

dimensions acc. DIN standard:  
maten volgens DIN-normen:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
160 mm	196	178	5,8	—	1/2"	20	49	6,5	49	2	—	5	6	10	49	—	160	27

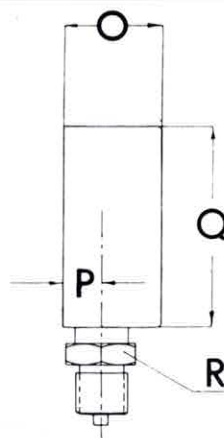
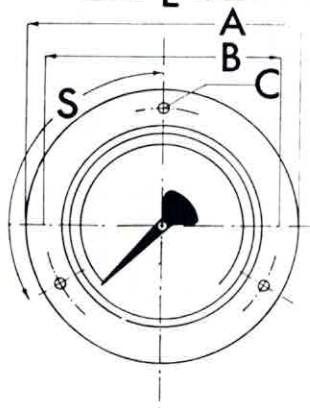
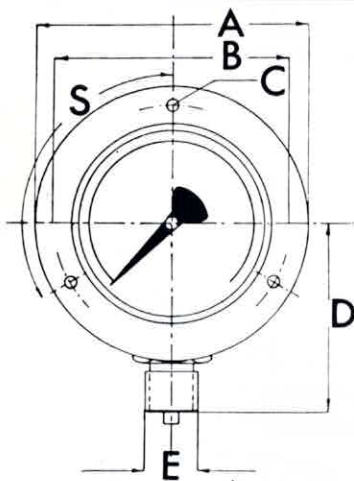


FIG. a

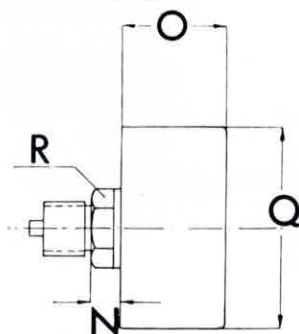


FIG. a

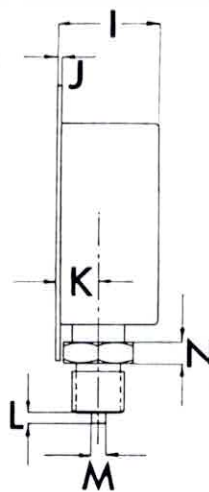


FIG. b

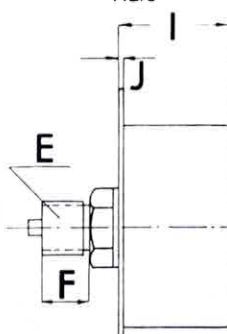


FIG. b

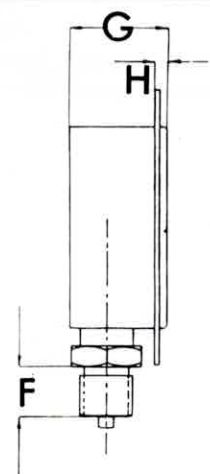


FIG. c

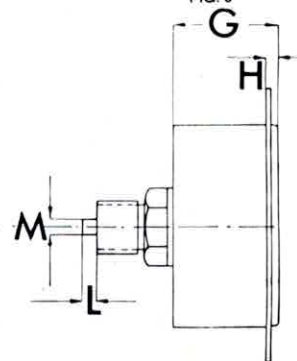


FIG. c

**pressure gauge all stainless steel, type (1407/1408), glycerine filled, type (1417/1418)**

**case diameter** : 100 mm (1407-1417) or 160 mm (1408-1418)

**case** : all stainless steel

**bezel** : bayonet joint in stainless steel, polished

**model** : 1407/1408; 1417/1418 without flange, bottom connection  
1407/1408 a.; 1417/1418 a. direct mounting with back connection  
1407/1408 b.; 1417/1418 b. surface mounting  
1407/1408 c.; 1417/1418 c. flush mounting with 3-hole fixing

**movement** : stainless steel or monel

**bourdontube** : 316 stainless steel, solid drawn

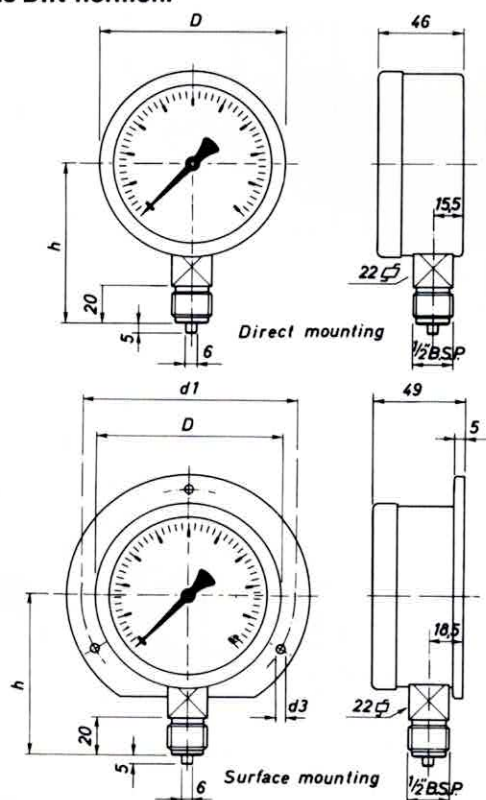
**connection** : 316 stainless steel

**thread connection:** 1/2" BSP bottom or back connection or 1/2" NPT

**window** : perspex

**ranges** : -1 -0 BAR or 30" HG-0 or combined  
0-0,6, 1, 1,6, 2,5, 4, 6, 10, 16, 25, 40 BAR  
0-63, 100, 160, 250, 400, 630, 1000 BAR  
0-15, 30, 60, 100, 160, 200, 300, 600 psi  
0-800, 1000, 1500, 2000, 3000, 5000, 10000, 15000 psi  
or dual scale BAR and PSI

**dimensions acc. DIN standard:**  
**maten volgens DIN-normen:**



**manometers, geheel roestvrij staal type (1407/1408), glycerine gevuld, type (1417/1418)**

**kastdiameter** : 100 mm (1407-1417) of 160 mm (1408/1418)

**kast** : geheel roestvrij staal

**oversteekkap** : bayonetsluiting in gepolijst roestvrij staal

**model** : 1407/1408; 1417/1418 zonder rand, onderaansluiting  
1407/1408 a.; 1417/1418 a. zonder rand, achteraansluiting  
1407/1408 b.; 1417/1418 b. met achterflens voor wandmontage  
1407/1408 c.; 1417/1418 c. met voorflens voor paneelmontage

**binnenwerk** : roestvrij staal of monel

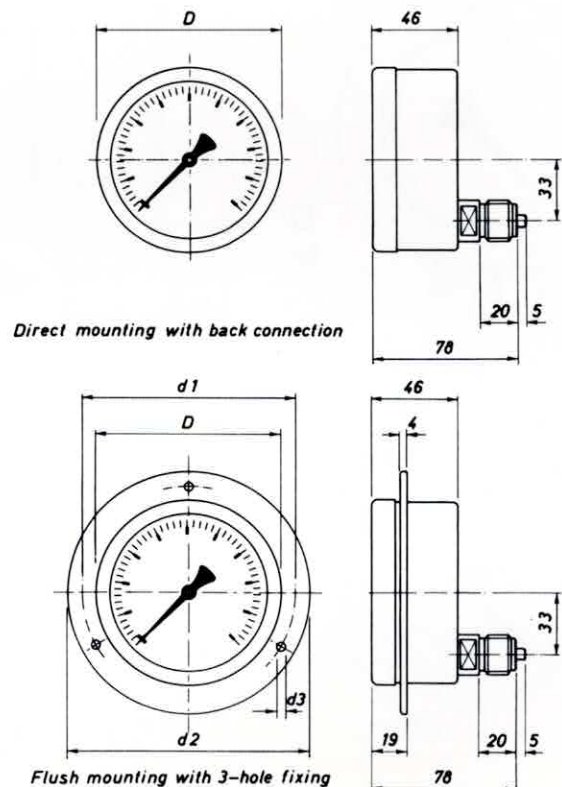
**bourdonveer** : 316 roestvrij staal, getrokken uit één stuk

**aansluiting** : 316 roestvrij staal

**aansluitvorm** : 1/2" BSP onder of achter aansluiting, of 1/2" NPT

**ruit** : perspex

**meetbereiken** : -1 -0 BAR or 30" HG-0 of gecombineerd  
0-0,6, 1, 1,6, 2,5, 4, 6, 10, 16, 25, 40 BAR  
0-63, 100, 160, 250, 400, 630, 1000 BAR  
0-15, 30, 60, 100, 160, 200, 300, 600 psi  
0-800, 1000, 1500, 2000, 3000, 5000, 10000, 15000 psi  
of dubbele schaal BAR en psi



### **Other products:**

- Elektromekano Salinometers
- Tank gauges, tank vents, relief valves, flame arresters
- Desuperheaters  
JERGUSON reflex- and transparent level glasses
- Feedwater regulators, sootblowers
- Instruments for the process industry
- Oilcon Bilge-Ballast monitors
- Pneumatic control valves, electronic transmitters
- Manoeuvring and positioning systems
- Glass thermometers, ASTM and IP Thermometers for laboratories
- Ships loading-computers
- Bimetal thermometers, pressure gauges, seals

### **Service agents for:**

- |                   |  |
|-------------------|--|
| General Regulator | - boiler combustion controls   |
| Kaps-Kawasaki     | - boiler combustion controls   |
| Nakakita          | - hydraulic systems for cargo and ballast<br>pneumatic systems for tank level gauges |
| Taylor Servomex   | - O <sub>2</sub> Analyzers   |
| Volcano           | - burner equipment and incinerators  |

### **Own design and production of electronic instruments for temperature, pressure- and level -**

- Monitor- and alarm systems
- pressure and temperature sensors
- multipoint salinometers
- pressure transducers
- test boxes
- temperature installations for refrigerating holds (Lloyd's approval)
- various tank level systems
- systems for boiler controls - feedwater controls
- high- and low water safety devices
- burner safety devices
- design and production of hydraulic systems for remote control of butterfly valves
- electronic controllers
- electronic modules

### Other products:

- Elektromekano Salinometers
- Tank gauges, tank vents, relief valves, flame arresters
- Desuperheaters
  - JERGUSON reflex- and transparent level glasses
- Feedwater regulators, sootblowers
- Instruments for the process industry
- Oilcon Bilge-Ballast monitors
- Pneumatic control valves, electronic transmitters
- Manoeuvring and positioning systems
- Glass thermometers, ASTM and IP Thermometers for laboratories
- Ships loading-computers
- Bimetal thermometers, pressure gauges, seals



 **manotherm**

**manotherm bv**

**workshop and offices:** welplaathoek 20, 3197 KP botlek rt  
p.o. box 1218, 3000 BE rotterdam

**phone:** 010 - 16 90 11 \*

**telex:** 28604 termo nl