

# Differential indicators



A guarantee of maintenance of the correct ISO 4406 contamination class achieved through the use of the filters can be provided exclusively with the correct use of the specific differential indicators.

The trip threshold of the indicator must be selected taking account of the maximum differential pressure indicated for each type of filter element and the trip pressure of the bypass valve, if incorporated in the filter.

## Indicator housing (Materials)

- Brass

## Pressure

- Max. working pressure: 420 bar (42 MPa)

## Temperature

- From -35°C to +110°C

## Seals

- HNBR
- FPM

## Compatibility

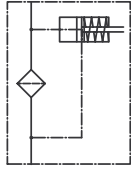
- Housings compatible with:  
Mineral oils to ISO 2943 - aqueous emulsions  
Synthetic fluids, water and glycol.
- V and H series FPM and HNBR seals, compatible with:  
Mineral oils to ISO 2943 - aqueous emulsions  
Synthetic fluids, water and glycol.  
For synthetic fluids type HS-HFDR-HFDS-HFDU,  
series V FPM seals.



## STYLE

## TECHNICAL CHARACTERISTICS

### SERIES Z VISUAL



Standard visual indicator with manual reset.

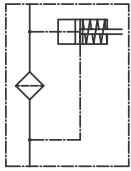
Nylon signalling button.

Button depressed position = cartridge clean.  
Button raised position, Red = cartridge clogged.

Weight: 118 g.

Tightening torque: 65 Nm.

### SERIES V VISUAL



Cover and lens in nylon.

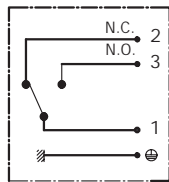
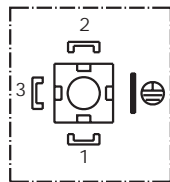
Visual indicator green = cartridge clean.  
Visual indicator red = cartridge clogged.

Weight: 137 g.

Tightening torque: 95 Nm.

### SERIES E ELECTRICAL/VISUAL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65  
Max. contact rating 5 A/250V ~  
Power supply voltage 230 V ~

Connector DIN 43650 Microswitch contact  
Cable gland PG 9

Cover and lens in nylon.

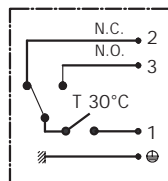
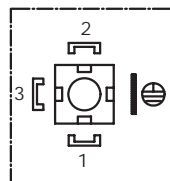
Visual indicator green = cartridge clean.  
Visual indicator red = cartridge clogged.

Weight: 188 g.

Tightening torque: 95 Nm.

### SERIES J ELECTRICAL/VISUAL WITH THERMOSTAT CONTROL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65  
Max. contact rating 5 A/250V ~  
Power supply voltage 230 V ~

Connector DIN 43650 Microswitch contact  
Cable gland PG 9  
Cover and lens in nylon

Visual indicator green = cartridge clean.  
Visual indicator red = cartridge clogged.

CONTACT N.O.  
Operation on reaching temperature of +30°C

Weight: 198 g.

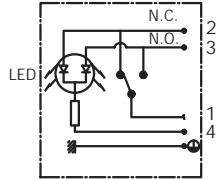
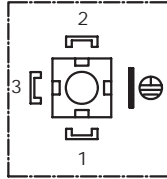
Tightening torque: 95 Nm.

## STYLE

## TECHNICAL CHARACTERISTICS

### SERIES K ELECTRICAL/VISUAL

Connector EN 175301-803 A/ISO 4400



Protection rating P 65  
Max. contact rating 5 A/250V ~  
Power supply voltage 24V DC - 115V DC/AC - 230V AC

Connector DIN 43650 Microswitch contact  
Cable gland PG 9

SIGNALLING LEDES

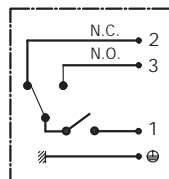
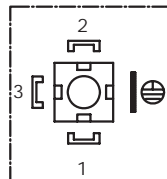
GREEN LED = Cartridge clean.  
RED LED = Cartridge clogged.

Weight: 183 g.

Tightening torque: 65 Nm.

### SERIES N ELECTRICAL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65  
Max. contact rating 5 A/250V ~  
Power supply voltage 230 V ~

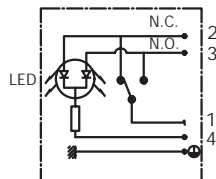
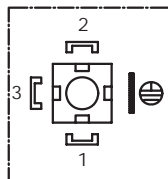
Connector DIN 43650 Microswitch contact  
Cable gland PG 9

Weight: 183 g.

Tightening torque: 65 Nm.

### SERIES KR ELECTRICAL/VISUAL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65  
Max. contact rating 0.8 A/24V DC  
0.17 A/115V DC  
Power supply voltage 24V - 115V DC

Connector DIN 43650 Reed switch  
Cable gland PG 9

SIGNALLING LEDES

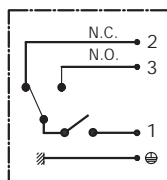
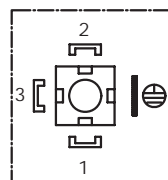
GREEN LED = Cartridge clean.  
RED LED = Cartridge clogged.

Weight : 123 g.

Tightening torque: 65 Nm.

### SERIES NR ELECTRICAL

Connector EN 175301-803 A/ISO 4400



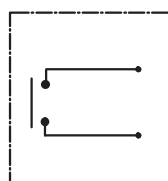
Protection rating IP 65  
Max. contact rating 0.17 A/115V DC  
Max power supply voltage 1 max 120V DC

Connector DIN 43650 Reed switch  
Cable gland PG 9

Weight : 123 g.

Tightening torque: 65 Nm.

### SERIES NM.A ELECTRICAL

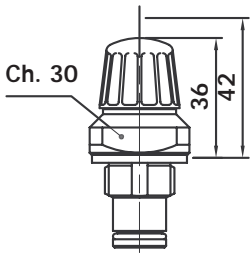


Connector AMP Superseal  
Cable and cable gland PVC  
Max. contact rating 0.17 A/115V DC  
Max power supply voltage max 120V DC  
Protection rating IP 67  
Contacts N.O.

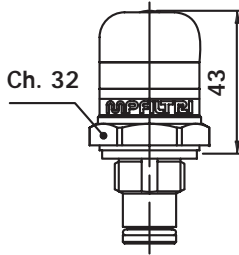
Weight : 110 g.

Tightening torque: 65 Nm.

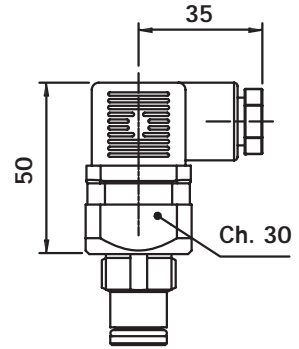
# Differential indicator dimensions



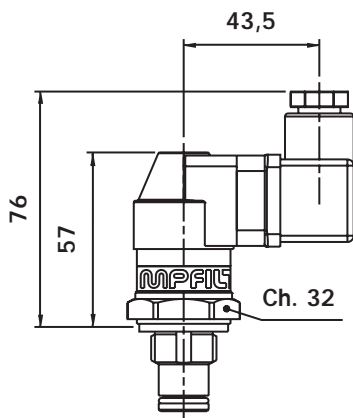
SERIES Z



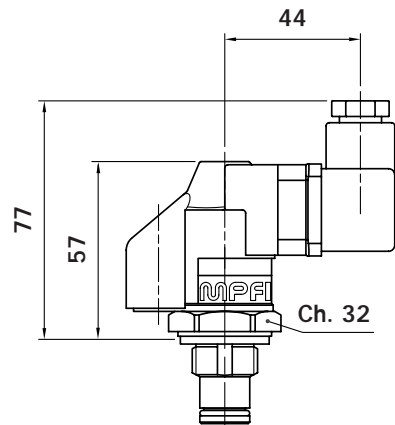
SERIES V



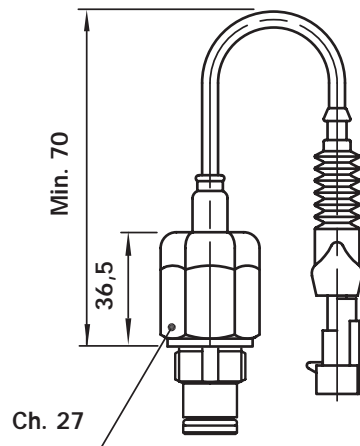
SERIES NR - KR



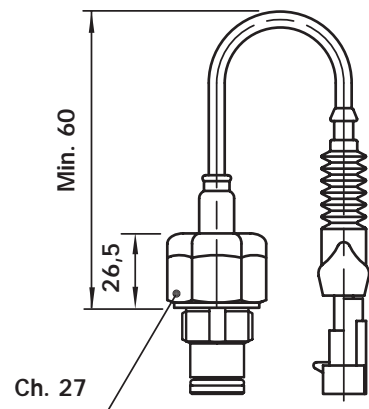
SERIES E



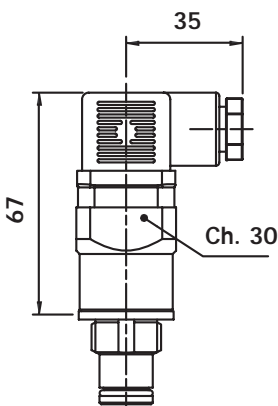
SERIES J



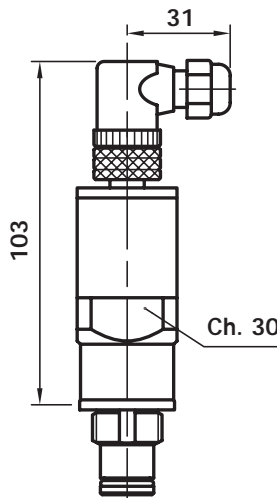
SERIES NM con Termostato



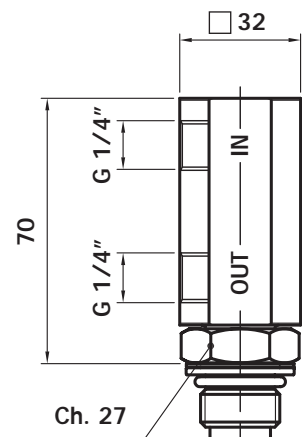
SERIES NM senza Termostato



SERIES N - K - NE



SERIES NE...T

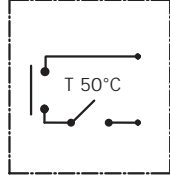


ICPAP01

## STYLE

## TECHNICAL CHARACTERISTICS

### SERIES NM.C ELECTRICAL/THERMOSTAT

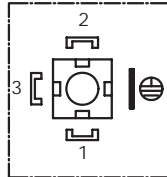


Connector	AMP Superseal
Cable and cable gland	PVC
Max. contact rating	0.17 A/115V DC
Max power supply voltage	max 120V DC
Protection rating	IP 67
N.O. Contacts	
Thermostat (N.O.)	Switching +50°C
Weight :	136 g.
Tightening torque:	65 Nm.

### SERIES NE ELECTRONIC



1= + 24 VCC  
2= Out 4 - 20 mA  
3= - 24 VCC

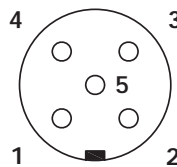


Protection rating	IP 65
Power supply voltage from	19 to 28 VCC
Output signal	4 - 20 mA
Input impedance	100 Ohm
Non-linearity + hysteresis	≤10% of full scale
Thermal deviation from zero	< 5% of full scale from 0°C to +60°C
Operating temperature	from -20°C to +80°C
Storage temperature	from -35°C to +110°C
Connector	DIN 43650
Cable gland	PG 9
Weight:	200 g.
Tightening torque:	65 Nm.

### INDICATOR NE...T ELECTRONIC



1= + 24 VCC  
2= Out 4 > 20 mA  
3= Out N.O. 20 mA  
4= Out N.O. 16 mA  
5= - 24 VCC



Protection rating	IP 67
Power supply voltage from	19 to 28 VCC
Output signal	4 - 20 mA
Input impedance	100 Ohm
Non-linearity + hysteresis	≤10% of full scale
Thermal deviation from zero	< 5% of full scale from 0°C to +70°C
N° 1 N.O. alarm threshold	16 mA (75% of full scale)
N° 2 N.O. alarm threshold	20 mA (100% of full scale)
Fixed timer interval	threshold N° 1 and N° 2 6 seconds
Operating temperature	from -20°C to +80°C
Storage temperature	from -35°C to +110°C
Connector	M12 5 pin IEC 60947-5-2
Weight:	350 g.
Tightening torque:	65 Nm.

### ADAPTER ICPAP01



Adapter for oil outlet and pressure sensing up-stream and down-stream from the filter element.

IN/OUT connections G 1/4"

Orientation of IN/OUT connections 360°

Material: Phosphated stainless steel

Seals: NBR (others on request)