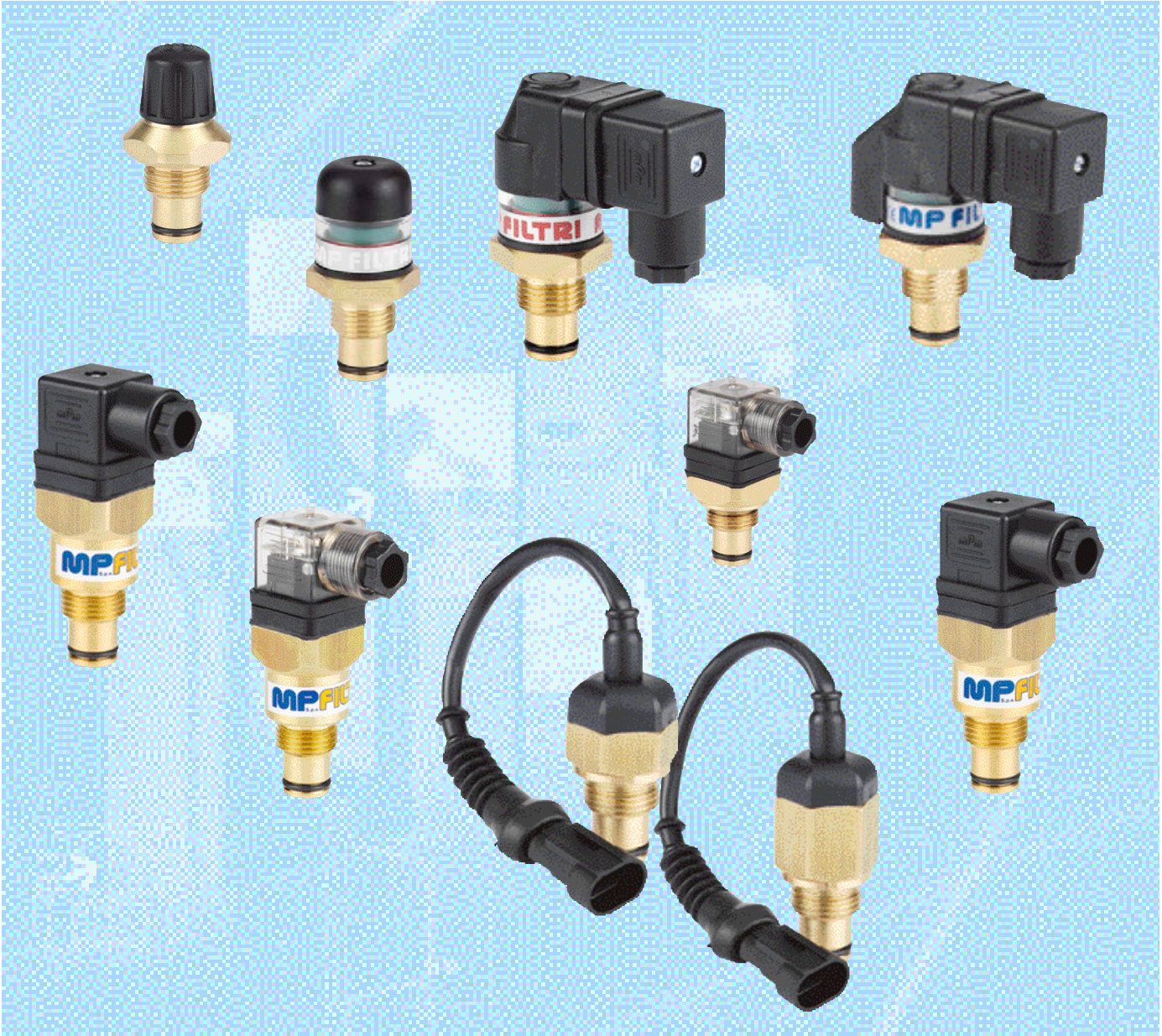


Differential indicators



To properly maintain your system to the correct ISO 4406 contamination class MP recommends the use of filters provided with the correct clogging indicator.

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 body (Material)

- Brass

Pressure

- Max. working pressure: 6000 psi (42 MPa)

Temperature

- From - 31°F to + 230°F

Seals

- HNBR
- FPM

Compatibility

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

Order code

1	2	3

Example: **E 7**

1 - Styles

V	Visual
E	Electric -Visual
J	Electrical -Visual - Thermostat controlled

2 - Differential trip pressure

6	30 psi ± 10%
7	75 psi ± 10%
8	100 psi ± 10%
9	145 psi ± 10%

3 - Seals

FPM Standard

x	Other information on request
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Seal for indicator/filter head, Bonded Seal.

ADAPTER

Order code
ICPAP01



Order code

1	2	3	4	5	6	7	8

Example: **NM 8 C 11 P01**

1 - Styles

NR	Electrical
KR	Electric -Visual
NM	Electric IP 67
Z	Visual
N	Electric
K	Electric - Visual
NE	Electronic

2 - Differential trip pressure

6	30 psi ± 10%
7	75 psi ± 10%
8	100 psi ± 10%
9	145 psi ± 10%

3 - Power supply voltage*

(only for style K - KR)

1	24 Volt
2	110 Volt (DC only for KR)
3	220 Volt (not available for KR)

4 - Seals

H	HNBR Standard
V	FPM
X	Others on request

5 - Thermostat (only for NM style)

A	Without
C	120 °F

6 - Electrical connector (only for NM style)

11	AMP Superseal connector
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7 - Options (only for style NE)

S	Standard
T	Double contact 75% - 100% 6 sec. signalling delay

8 - Options

P01	MP standard
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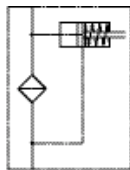
Seal for indicator/filter head, flat profiled.

* Other supply voltage on request.

STYLE

TECHNICAL CHARACTERISTICS

SERIES Z VISUAL



Standard visual indicator with manual reset.

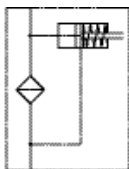
Nylon signalling button.

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

Weight: 4,1 oz

Tightening torque: 48 ft-lbs

SERIES V VISUAL



Cover and lens in nylon.

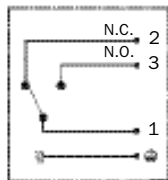
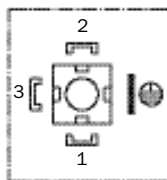
Visual indicator green = cartridge clean.
 Visual indicator red = cartridge clogged.

Weight: 4,8 oz

Tightening torque: 70 ft-lbs

SERIES E ELECTRIC / VISUAL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65
 Max. contact rating 5 A/250V~
 Voltage 230 V~

Connector DIN 43650 Microswitch contact
 Cable gland PG 9

Cover and lens in nylon.

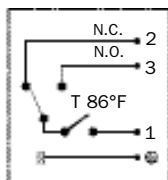
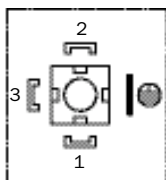
Visual indicator green = cartridge clean.
 Visual indicator red = cartridge clogged.

Weight: 6,6 oz

Tightening torque: 70 ft-lbs

SERIES J ELECTRIC / VISUAL WITH THERMOSTAT CONTROL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65
 Max. contact rating 5 A/250V~
 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.

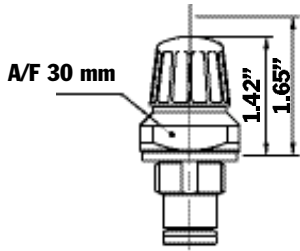
CONTACT N.O.

Operation on reaching temperature of + 86°F

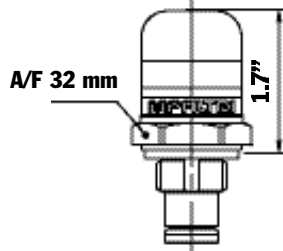
Weight: 7 oz

Tightening torque: 70 ft-lbs

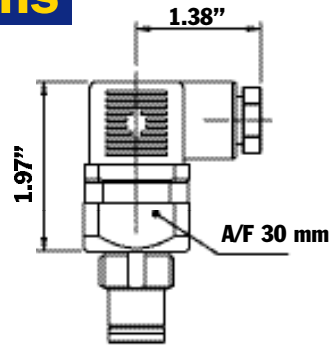
Differential indicator dimensions



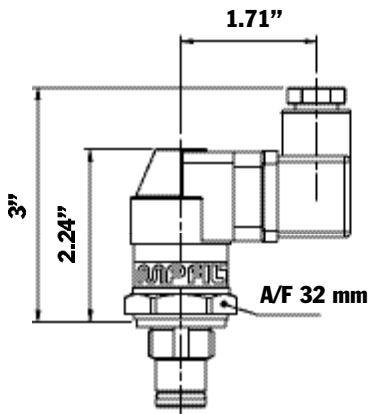
SERIES Z



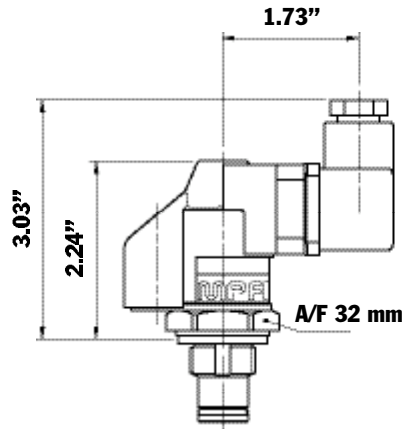
SERIES V



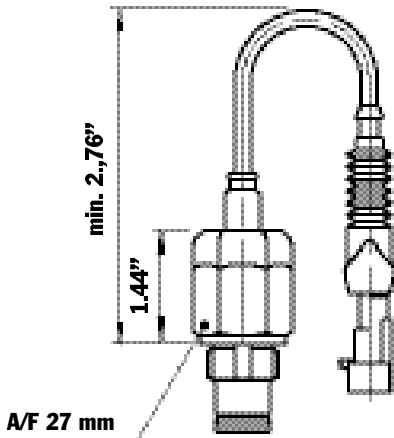
SERIES NR - KR



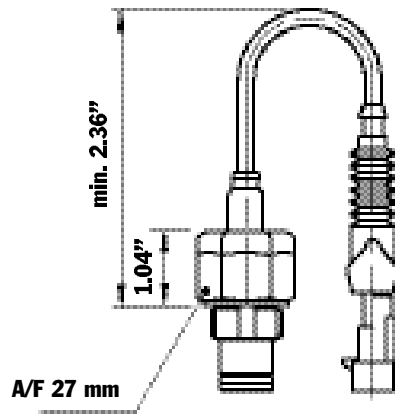
SERIES E



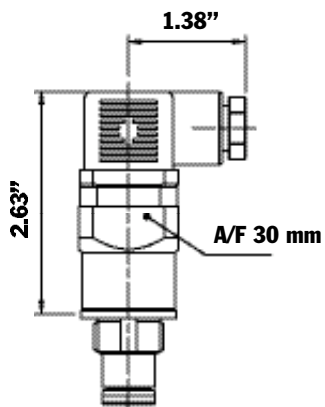
SERIES J



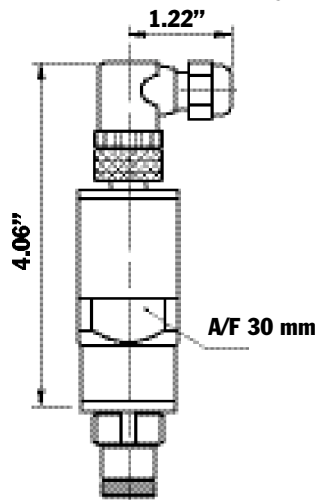
SERIES NM with Thermostat



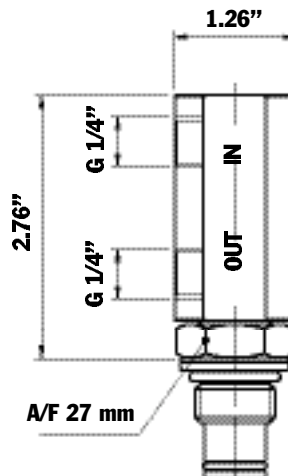
SERIES NM without Thermostat



SERIES N - K - NE



SERIES NE...T



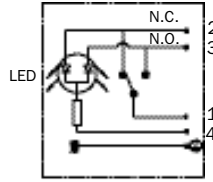
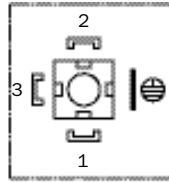
ICPAP01

STYLE

TECHNICAL CHARACTERISTICS

SERIES K ELECTRIC / VISUAL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65
Max. contact rating 5 A/24V~
Voltage 24V DC - 115V DC/AC - 230V AC

Connector DIN 43650 Microswitch contact
Cable gland PG 9

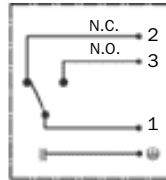
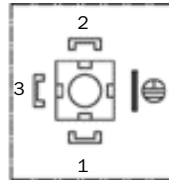
SIGNALLING LEDES :

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

Weight: 6,5 oz
Tightening torque: 48 ft-lbs

SERIES N ELECTRIC

Connector EN 175301-803 A/ISO 4400



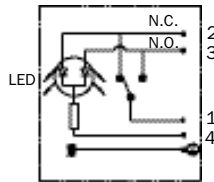
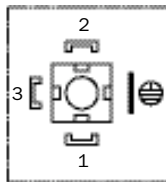
Protection rating IP 65
Max. contact rating 5 A/250V~
Voltage 230 V~

Connector DIN 43650 Microswitch contact
Cable gland PG 9

Weight: 6,5
Tightening torque: 48 ft-lbs

SERIES KR ELECTRIC / VISUAL

Connector EN 175301-803 A/ISO 4400



Protection rating IP 65
Carico massimo sui contatti 0,8 A/24V DC
Max. contact rating 0,17 A/115V DC
24V - 115V DC

Connector DIN 43650 Reed switch
Cable gland PG 9

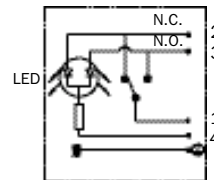
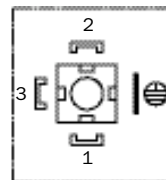
SIGNALLING LEDES :

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

Weight: 4,3 oz
Tightening torque: 48 ft-lbs

SERIES NR ELECTRIC

Connector EN 175301-803 A/ISO 4400

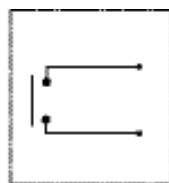


Protection rating IP 65
Max. contact rating 0,17 A/115V DC
Voltage max 120V DC

Connector DIN 43650 Reed switch
Cable gland PG 9

Weight : 4,3 oz
Tightening torque: 48 ft-lbs

SERIES NM.A



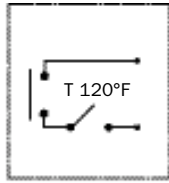
Connector AMP Superseal
Cable and cable gland PVC
Max. contact rating 0,17 A/115V DC
Voltage max 120V DC
Protection rating IP 67
Contacts N.O.

Weight : 3,9 oz
Tightening torque: 48 ft-lbs

STYLE

TECHNICAL CHARACTERISTICS

SERIES NM.C



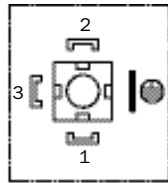
Connector	AMP Superseal
Cable and cable gland	PVC
Max. contact rating	0,17 A/115V DC
Voltage	max 120V DC
Protection rating	IP 67
Contacts	N.O.
Thermostat (N.O.)	Switching + 120°F

Weight :	4,8 oz
Tightening torque:	48 ft-lbs

SERIES NE



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



Protection rating	IP 65
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°F to + 140°F
Operating temperature	From - 4°F a + 176°F
Storage temperature	From - 31°F a + 230°F

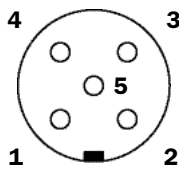
Connector	DIN 43650
Cable gland	PG 9

Weight:	7 oz
Tightening torque:	48 ft-lbs

INDICATOR NE...T



- 1= + 24 VCC
- 2= Out 4 > 20 mA
- 3= - 24 VCC
- 4= Out NA 16 mA
- 5= Out NA 20 mA

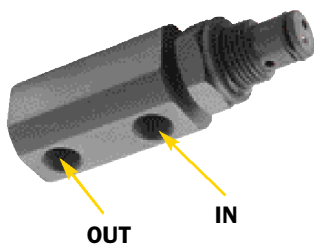


Protection rating	IP 67
Power supply voltage	From 19 to 28 VCC
Output signal	4 - 20 mA
Input impedance	100 Ohm
Non-linearity + hysteresis	≤ 10% of full scale
Thermal deviation from zero	< 5% of full scale from 0°F to + 158°F
N° 1 N.O. alarm threshold	a 16 mA (75% of full scale)
N° 2 N.O alarm threshold	a 20 mA (100% of full scale)
Fixed timer interval	threshold N° 1 and N° 2 6 seconds
Operating temperature	From - 4°F to + 176°F
Storage temperature	From - 31°F to + 230°F

Connector	M12 5 pin IEC 60947-5-2
Weight:	12,3 oz

Tightening torque:	48 ft-lbs
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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: IN/OUT connections 360°

Material: Phosphated steel

Seals: NBR (others on request)