

CLOGGING INDICATORS
Visual and electrical indicators

## INDICATORS FOR APPLICATION ON SUCTION LINE

## NORMALLY USED ON FS7 / FA1 series (suction line)

The clogging indicator registers the pressure downstream the filter element:

- in the VISUAL indicator the red area shows the need for element replacement.
- in the ELECTRIC indicator an electrical switch is activated.
CODE DIMENSIONS SYMBOL SETTING

[^0]OPTIONAL CONNECTOR for S13


The LC24 connector can replace the
 standard black connector of the " S 13 " indicator (N.B. supplied separately).
Feeded with 24 V , it gives a visual indication of the filter element conditions: normally the GREEN LED is on, the RED LED switch on when the element is clogged.

## Clogging Indicators

## INDICATORS FOR APPLICATION ON RETURN LINE

NORMALLY USED ON FA1 (return line) / FA2 / FR1 / FR6 / FCR7
The clogging indicator registers the pressure upstream the filter element:

- in the VISUAL indicator the red area shows the need for element replacement.
- in the ELECTRIC indicator an electrical switch is activated.

CODE
DIMENSIONS

MPB


| MRB formerly R10 |  |  | PRESSURE GAUGE $1,7 \div 10$ bar $0 \div 1,7$ bar |
| :---: | :---: | :---: | :---: |
| MRC |  | (0). <br> 10 Nm | PRESSURE GAUGE $3 \div 10$ bar $0 \div 3$ bar |
| PDB formerly R13 <br> PDC <br> formerly R14 |  | a.) 10 Nm | PRESSURE SWITCH <br> $\operatorname{PDB}(\mathbf{R 1 3})=1,3 \mathrm{bar}$ <br> $\operatorname{PDC}($ R14 $)=2$ bar <br> - DC: $30 \mathrm{~V}-4 \mathrm{~A}$ inductive, 3 A resistive <br> - AC: $250 \mathrm{~V}-3 \mathrm{~A}$ inductive, 2 A resistive <br> - Protection: IP65, connector DIN43650 <br> - SPDT contacts <br> Available on request ATEX version <br> ExI MI Exial <br> Ex II 1G Ex ia IIC TX <br> Ex II 1D Ex ia IIIC TX ${ }^{\circ} \mathrm{C}$ |

LC24



The LC24 connector can replace the standard black connector of the "PDB / PDC" indicator (N.B. supplied separately).
Feeded with 24 V , it gives a visual indication of the filter element conditions: normally the GREEN LED is on, the RED LED switch on when the element is clogged.

## Clogging Indicators

## INDICATORS MULTIPURPOSE FOR APPLICATION ON SUCTION AND RETURN LINE

CAN BE USED ON FS7 / FA1 (suction line) OR FA1 (return line) / FA2 / FR1/ FR6 / FCR7

CODE
DIMENSIONS
SYMBOL
SETTING

(6). 10 Nm

## Clogging Indicators

## DIFFERENTIAL CLOGGING INDICATORS

V02 / E02 NORMALLY USED ON FO40 series
V05 / E05 NORMALLY USED ON F040 / F100 / F160 / F280 / F420 series
V08 / E08 NORMALLY USED ON F100/ F160 / F280 / F420 series


OPTIONAL CONNECTOR for E serie


The LC24 connector can replace the standard black connector of the " E " indicator (N.B.supplied separately).
Feeded with 24 V , it gives a visual indication of the filter element conditions: normally the GREEN LED is on, the RED LED switch on when the element is clogged.

## TEh <br> Clogging Indicators

DIFFERENTIAL CLOGGING INDICATORS

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EX5 / VX5 NORMALLY USED ON FD3 / FDM series
EX8 / VX8 NORMALLY USED ON FDM series
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OPTIONAL CONNECTOR for E serie
LC24


The LC24 connector can replace the standard black connector of the " E " indicator. (N.B. supplied separately)
Feeded with 24 V , it gives a visual indication of the filter element conditions: normally the GREEN LED is on, the RED LED switch on when the element is clogged.

## Clogging Indicators

## DIFFERENTIAL CLOGGING INDICATORS

Z34 / Z35 NORMALLY USED ON FA4 series



DIFFERENTIAL ELECTRIC
2,7 bar

- Max current: 0,5A resistive
$0,2 \mathrm{~A}$ inductive
- Max voltage: 36 VDC
- Protection: IP54 as per DIN 40050

Ground through filter head to chassis

## Clogging Indicators

## USER INFORMATION

The Pressure indicator measures the pressure in one point only:
-for suction application it must be located downstream the filter element (P-)
-for return application it must be located upstream the filter element ( $\mathrm{P}+$ )
The Differential indicator measures the Dp between upstream and downstream of the filter element, i.e. it is the ideal indicator for in line application.


The Pressure Drop ( $\mathrm{Dp}=$ differential pressure) through the filter increases during the system operation due to the contaminant retained by the filter element.

The filter element must be replaced when the indicator shows an alarm and before the Dp reaches the by-pass set value (i.e. the set value A of the clogging indicator must always be lower that the set value $B$ of the by-pass valve).

WARNING: in cold start conditions a false alarm can be caused by higher oil viscosity due to low temperature; the indicator alarm must be considered at normal working temperature only.

## OPTIONAL VERSIONS

Subject to MOQ our differential indicators can be supplied in special versions like ATEX, different connectors, two alarm levels, etc.: pls contact our Customer Service for further information.


[^0]:    S13
    

    VACUUM SWITCH
    -0,2 bar

    - DC: $30 \mathrm{~V}-4 \mathrm{~A}$ inductive, 3 A resistive
    - AC: $250 \mathrm{~V}-3$ A inductive, 2 A resistive
    - Protection: IP65, connector DIN43650
    - SPDT contacts

