Hazarduos Area Electrical Differential Indicator DEH Series



PASSION TO PERFORM



Electrical Differential Indicators are used on the pressure line to check the efficiency of the filter element. They measure the pressure upstream and downstream of the filter element (differential pressure).

Suitable for all MP Filtri differential indicator port connections

Environmental properties

- Suitable for use in Zone 1 Gas and Zone 21 Dust
- Maximum surface temperature: Temperature class T4 (135°C) and T6 (85°C)
- Ambient temperature range: T4 (-60°C to +120°C)
- IP 66/67/68 cable version





BUILD OPTIONS			
Cable	Protection Class	Connections	
• 5.0 m cable M20 and 1/2" NPT gland conduit options	• EX ia: Intrinsically safe	• 420 bar (6092 PSI) M12 connector	
Contact us for more options	• Ex d: Flameproof		

Applications

- Marine
- Mining
- Petrochemical
- Offshore oil and gas
- Saw mills
- Paper mills
- Car plants
- Industrial plants
- Power generation
- Storage silos
- Hazardous environments









DEH SERIES



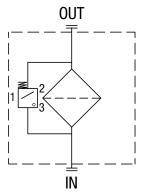
Filter elements are efficient only if their dirt holding capacity is fully exploited. This is achieved by using filter housings equipped with clogging indicators.

These devices trip when the clogging of the filter element causes an increasing in-pressure drop across the filter element.

The indicator is set to alarm before the element becomes fully clogged. This indicator will minimise the frequency of replacing filter elements as well as maximising the performance of each filter.

- Constructed from AISI 316L stainless steel
- 420 bar (6092 PSI) maximum working pressure
- Approved for use in hazardous environments
- ATEX, IECEx, UL/CSA, EAC TR CU and INMETRO certified





Performance Data

- Endurance tested up to 1,000,000 cycles at max working pressure
- Burst tested at 3x maximum pressure

Current Ratings

- 830 mA / 24 Vdc
- 180 mA / 110 Vac

Specification

- Temperature class T4 (135°C) and T6 (85°C)
- Protection grade IP 66/67/68 when used with suitable cable gland
- Indication range from 2 bar to 10 bar
- Suitable for use with all MP Filtri stainless steel pressure filters and cast iron pressure filters



HAZARDOUS AREA ELECTRICAL DIFFERENTIAL INDICATOR

DEH 48 SERIES - 5 METER THREE-CORE CABLE INDICATOR Ex ia IIC T4/T6 M20



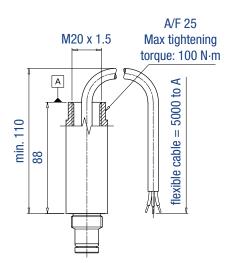
Connection diagram

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Certification / Approvals

ATEX, IECEx, EAC TR CU, INMETRO, Ex ia IIC T4/T6
Certification included as standard





Dimensions in mm

PROPERTIES			
Housing material	AISI 316L Stainless steel		
Body shape	Cylindrical		
Connection type	M20 x 1.5 - Three-core polyrad cable supplied with 5 metres		
Temperature range	-60 °C to +125 °C		
Contact type	SPCO/SPDT (Hermetically sealed - Volt-Free contacts)		
Contact material	Rhodium (tungsten optional)		
Dimensions	114 x 28 mm		
Ingress Protection	IP 66/67/68		

Electrical ratings				
Ui	Li	Pi		
30 Vdc	250 mA	1.3 W		



HAZARDOUS AREA ELECTRICAL DIFFERENTIAL INDICATOR

DEH 49 SERIES - 5 METER FOUR-CORE CABLE INDICATOR Ex d IIC T4/T6 1/2" NPT

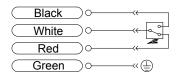


Certification / Approvals

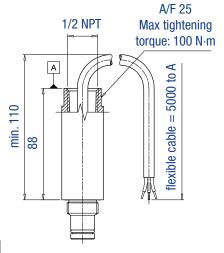
- ATEX, IECEX, EAC TR CU, INMETRO, EX d IIC T4/T6
- UL/CSA Class I Division 1 Groups A-D
- UL/CSA Class II Division 1 Groups E-G
- Certification included as standard



Connection diagram



PROPERTIES			
Housing material	AISI 316L Stainless steel		
Body shape	Cylindrical		
Connection type	1/2" NPT - 3 core polyrad cable supplied with 5 metres		
Temperature range	-60 °C to +120 °C - ATEC, IECEx, EAC TR CU, INMETRO -60 °C to +105 °C - UL/CSA		
Contact type	SPCO/SPDT (Hermetically sealed - volt free contacts)		
Contact material	Rhodium (tungsten optional)		
Dimensions	114 x 28 mm		
Ingress Protection	IP 66/67/68		



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Electrical ratings					
Supply Voltage	Maximum switching current	Maximum voltage	Power		
24 Vdc	830 mA				
110 Vac	180 mA	150 Vac/dc	20 W (VA)		

HAZARDOUS AREA ELECTRICAL DIFFERENTIAL INDICATOR

DEH 70 SERIES - M12 INDICATOR Ex ia IIC T6 RESIN SWITCH



Connection diagram

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Certification / Approvals

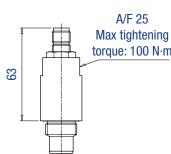
- ATEX, IECEx, EAC TR CU, INMETRO, Ex ia IIC T6
- **Certification included as standard** •



PROPERTIES

A/F 25 Max tightening torque: 100 N⋅m	Housing material	AISI 316L Stainless steel housing with internal engineered resin switch			
	Body shape	Cylindrical			
	Connection type	4 pole male M12 connector - plastic			
	Temperature range	-20 °C to +80 °C			
	Contact type	SPCO/SPDT (Hermetically sealed - volt free contacts)			
	Contact material	Rhodium			
	Dimensions	90 x 28 mm			
	Ingress Protection	IP 66/67			

Electrical ratings			
Ui	Li	Pi	
30 Vdc	250 mA	1.3 W	



Dimensions in mm



DESIGNATION AND ORDERING CODE

SERIES	Configuration example	DE		1	50	F	A	70	P01
DE = Electrical Differential Indicator									
PRESSURE RATING									
H = 420 bar (6092 PSI)									
PRESSURE SETTING									
50 = 5 bar									
70 = 7 bar									
95 = 9.5 bar									
SEALS									
V = FPM									
F = MFQ									
* Other options available on request									
THERMOSTAT									
A = Without									
CONNECTION									
48 = M20 Ex ia									
49 = 1/2" NPT Ex d									
70 = M12 Ex ia									
EXECUTION									
P01= MP Filtri Standard									

Certification included as standard

EXPLORE OUR RANGE OF FILTERS

Stainless In-line filter

- FZH 010-011 maximum pressure: 700 bar (10,152 PSI)*
- FZP 039 maximum pressure: 420 bar (6092 PSI)
- FZH 039 maximum pressure 700 bar ^(10,152 PSI)*
- FZP 136 maximum pressure 420 bar ^(6,091 PSI)

* Provided max working pressure is limited to 420 bar

Stainless Manifold mounting

- FZB 039 maximum pressure: 320 bar (4,641PSI)
- FZM 039 maximum pressure: 320 bar ^(4,641PSI)

Stainless Duplex pressure filter

- FZD 010 maximum pressure: 350 bar (5,076 PSI)
- FZD 021 maximum pressure: 350 bar (5,076 PSI)
- FZD 051 maximum pressure: 350 bar (5,076 PSI)

Standard High-Pressure Filters

- FHP maximum pressure: 420 bar (6,091 PSI)
- FMP maximum pressure: 110 bar/320 bar ^(1,595/4,641PSI)
- FMM maximum pressure: 420 bar (6,091 PSI)
- FHB maximum pressure: 320 bar (4,641PSI)
- FHM maximum pressure: 320 bar (4,641PSI)





WORLDWIDE NETWORK





Germany France USA Russian Federation China United Kingdom India Canada



PASSION TO PERFORM

CMP4AEN001I Rev. 04/2021

www.mpfiltri.com