

DIFFERENTIAL INDICATORS

Dimensions

DEA*50	
Electrical Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DE A 12 x A 50 P01
2.0 bar ±10%	DE A 20 x A 50 P01
5.0 bar ±10%	DE A 50 x A 50 P01
7.0 bar ±10%	DE A 70 x A 50 P01
9.5 bar ±10%	DE A 95 x A 50 P01

Hydraulic symbol

Electrical symbol

Materials

- Body: Brass
- Base: Black Nylon
- Contacts: Silver
- Seal: HNBR - FPM

Technical data

- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529
IP69K according to ISO 20653

Electrical data

- Electrical connection: EN 175301-803
- Resistive load: 0.2 A / 115 Vdc

DEH*48	
Hazardous Area Electronic Differential Indicator	
Settings	Ordering code
5.0 bar ±10%	DE H 50 x A 48 P01
7.0 bar ±10%	DE H 70 x A 48 P01

Connection diagram

Materials

- Body: AISI 316 Stainless steel
- Contacts: Rhodium (tungsten optional)
- Seal: MFQ - FPM

Protection class Ex ia IIC T4/T6: Intrinsically safe

Temperature class T4 (135 °C) and T6 (85 °C)

Technical data

- Max working pressure: 420 bar
- Working temperature: From -60 °C to +125 °C
- Connection type: M20 x 1.5 - 3 core polyrad cable supplied with 5 meters
- Contact type: SPCO/SPDT (Hermetically sealed - volt free contacts)
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFA, HFB, HFC according to ISO 2943
- Degree of protection: IP 66/67/68 according to EN 60529

Electrical data

- Current Ratings: 24v DC 830mA - 110v AC 180mA
- Electrical Ratings: Ui 30V - Li 250mA - Pi 1.3W

Certification / Approvals: ATEX, IECEx, TRCU, INMETRO
 - Certification included as standard

DEH*49	
Hazardous Area Electronic Differential Indicator	
Settings	Ordering code
5.0 bar ±10%	DE H 50 x A 49 P01
7.0 bar ±10%	DE H 70 x A 49 P01

Connection diagram

Materials

- Body: AISI 316 Stainless steel
- Contacts: Rhodium (tungsten optional)
- Seal: MFQ - FPM

Protection class Ex d IIC T4/T6: Flameproof

Temperature class T4 (135 °C) and T6 (85 °C)

Technical data

- Max working pressure: 420 bar
- Working temperature: From -60 °C to +120 °C : ATEX, IECEx, TRCU, INMETRO
From -60 °C to +105 °C : UL/CSA
- Connection type: 1/2" NPT - 3 core polyrad cable supplied with 5 meters
- Contact type: SPCO/SPDT (Hermetically sealed - volt free contacts)
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFA, HFB, HFC according to ISO 2943
- Degree of protection: IP 66/67/68 according to EN 60529

Electrical data

- Current Ratings: 24v DC 830mA - 110v AC 180mA
- Electrical Ratings:

Supply Voltage	24 VDC 110 VAC
Max switching current	830mA 180mA
Max voltage	150 V AC/DC
Power watts	20 W VA

Certification / Approvals: ATEX, IECEx, TRCU, INMETRO, UL/CSA Class I Division 1 Groups A-D, UL/CSA Class II Division 1 Groups E-G
 - Certification included as standard

DEH*70		Connection diagram	Materials
Hazardous Area Electronic Differential Indicator			
Settings	Ordering code		
5.0 bar ±10%	DE H 50 x A 70 P01	Protection class EX ia IIC T6: Intrinsically safe Temperature class T6 (85 °C)	Technical data - Max working pressure: 420 bar - Working temperature: From -20 °C to +80 °C - Connection type: 4 pole male M12 connector - plastic - Contact type: SPCO/SPDT (Hermetically sealed - volt free contacts) - Compatibility with fluids: Mineral oils, Synthetic fluids - Degree of protection: HFA, HFB, HFC according to ISO 2943 IP 66/67 according to EN 60529
7.0 bar ±10%	DE H 70 x A 70 P01		
			Electrical data - Current Ratings 24v DC 830mA - 110v AC 180mA - Electrical Ratings Ui 30V - Li 250mA - Pi 1.3W
- Certification / Approvals: ATEX, IECEx, TRCU, INMETRO - Certification included as standard			

DEM*10		Hydraulic symbol	Materials
Electrical Differential Indicator			
Settings	Ordering code		
1.2 bar ±10%	DE M 12 x x 10 P01	Technical data - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids - Degree protection: IP66 according to EN 60529	Electrical data - Electrical connection: AMP Superseal series 1.5 - Resistive load: 0.2 A / 115 Vdc - Switching type: Normally open contacts (NC on request) - Thermal lockout: Normally open up to 30 °C (option "F")
2.0 bar ±10%	DE M 20 x x 10 P01		
5.0 bar ±10%	DE M 50 x x 10 P01	Electrical symbol 	- Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids - Degree protection: IP66 according to EN 60529
7.0 bar ±10%	DE M 70 x x 10 P01		
9.5 bar ±10%	DE M 95 x x 10 P01		

DEM*20		Hydraulic symbol	Materials
Electrical Differential Indicator			
Settings	Ordering code		
1.2 bar ±10%	DE M 12 x x 20 P01	Technical data - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids - Degree protection: IP66 according to EN 60529	Electrical data - Electrical connection: AMP Time junior - Resistive load: 0.2 A / 115 Vdc - Switching type: Normally open contacts (NC on request) - Thermal lockout: Normally open up to 30 °C (option "F")
2.0 bar ±10%	DE M 20 x x 20 P01		
5.0 bar ±10%	DE M 50 x x 20 P01	Electrical symbol 	- Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids - Degree protection: IP66 according to EN 60529
7.0 bar ±10%	DE M 70 x x 20 P01		
9.5 bar ±10%	DE M 95 x x 20 P01		

DIFFERENTIAL INDICATORS

Dimensions

DEM*30	
Electrical Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DE M 12 x x 30 P01
2.0 bar ±10%	DE M 20 x x 30 P01
5.0 bar ±10%	DE M 50 x x 30 P01
7.0 bar ±10%	DE M 70 x x 30 P01
9.5 bar ±10%	DE M 95 x x 30 P01

A/F 28
Max tightening torque: 65 N·m

Hydraulic symbol

Electrical symbol

Materials

- Body: Brass
- Base: Black Nylon
- Contacts: Silver
- Seal: HNBR - FPM

Technical data

- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529

Electrical data

- Electrical connection: Deutsch DT-04-2-P
- Resistive load: 0.2 A / 115 Vdc
- Switching type: Normally open contacts (NC on request)
- Thermal lockout: Normally open up to 30 °C (option "F")

DEM*35	
Electrical Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DE M 12 x x 35 P01
2.0 bar ±10%	DE M 20 x x 35 P01
5.0 bar ±10%	DE M 50 x x 35 P01
7.0 bar ±10%	DE M 70 x x 35 P01
9.5 bar ±10%	DE M 95 x x 35 P01

A/F 28
Max tightening torque: 65 N·m

flexible cable: 240 to "A"

Hydraulic symbol

Electrical symbol

Materials

- Body: Brass
- Base: Black Nylon
- Contacts: Silver
- Seal: HNBR - FPM

Technical data

- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529

Electrical data

- Electrical connection: Deutsch DT-04-3-P
- Resistive load: 0.2 A / 115 Vdc
- Switching type: SPDT contact
- Thermal lockout: Normally open up to 30 °C (option "F")

DES*10	
Electrical Differential Indicator	
Settings	Ordering code
2.5 bar ±10%	DE S 25 HA 10 P01
4.0 bar ±10%	DE S 40 HA 10 P01

A/F 19
Max tightening torque: 20 N·m

Hydraulic symbol

Electrical symbol

Materials

- Body: Brass
- Internal parts: Brass - Nylon
- Contacts: Silver
- Seal: HNBR

Technical data

- Max working pressure: 16 bar
- Proof pressure: 24 bar
- Burst pressure: 48 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFA, HFB, HFC according to ISO 2943
- Degree protection: IP67 according to EN 60529

Electrical data

- Electrical connection: AMP Superseal series 1.5
- Resistive load: 0.2 A / 24 Vdc
- Switching type: Normally open contacts (NC on request)

DIFFERENTIAL INDICATORS

Series	Configuration example 1:	DE	H	50	F	A	70	P01
DE Electrical or Electronic differential indicator	Configuration example 2:	DE	M	50	H	F	50	P01
DL Electrical / Visual differential indicator	Configuration example 3:	DE	S	25	H	A	10	P01
DT Electronic differential indicator	Configuration example 4:	DL	E	70	V	A	71	P01
DV Visual differential indicator	Configuration example 5:	DT	A	50	H	F	70	P01
	Configuration example 6:	DV	M	95	V			P01
	Configuration example 7:	DV	S	40	H			P01

Type DE - DL - DT	DE	DL	DT
A Standard type	•	•	•
E For high power supply		•	
H Hazardous area	•		
M With wired electrical connection	•		
S Compact version	•		

Type DV
A With automatic reset
M With manual reset
S Compact version

Pressure setting	DEA	DEH	DEM	DES	DLA	DLE	DTA	DVA	DVM	DVS
12 1.2 bar	•		•		•	•	•	•	•	
20 2.0 bar	•		•		•	•	•	•	•	
25 2.5 bar				•						•
40 4.0 bar				•						•
50 5.0 bar	•	•	•		•	•	•	•	•	
70 7.0 bar	•	•	•		•	•	•	•	•	
95 9.5 bar	•		•		•	•	•	•	•	

Seals	DEA	DEH	DEM	DES	DLA	DLE	DTA	DVA	DVM	DVS
F MFQ		•								
H HNBR	•		•	•	•	•	•	•	•	•
V FPM	•	•	•		•	•	•	•	•	•

Thermostat	DEA	DEH	DEM	DES	DLA	DLE	DTA
A Without		•	•	•	•	•	•
F With thermostat				•			•

Electrical connections	DEA	DEH	DEM	DES	DLA	DLE	DTA
10 Connection AMP Superseal series 1.5				•	•		
20 Connection AMP Timer Junior					•		
30 Connection Deutsch DT-04-2-P					•	•	
35 Connection Deutsch DT-04-3-P						•	
48 Connection M20			•				
49 Connection 1/2" NPT			•				
50 Connection EN 175301-803			•				•
51 Connection EN 175301-803, transparent base with lamps 24 Vdc							•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc							•
70 Connection IEC 61076-2-101 D (M12)			•				•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc							•
80 Connection Stud #10-32 UNF				•			

Option
P01 MP Filtri standard
Pxx Customized

DESIGNATION & ORDERING CODE - DIFFERENTIAL INDICATOR PLUG

Series	Configuration example	T2	H
T2 Indicator plug			
Seals			
H HNBR			
V FPM			