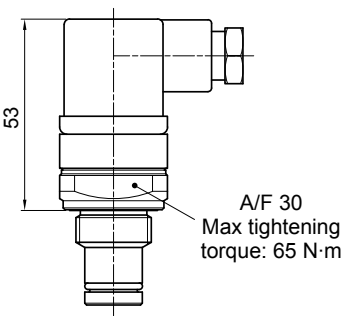


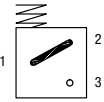
# DIFFERENTIAL INDICATORS

## Dimensions

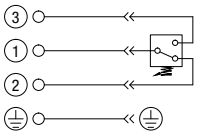
DEA*50	
<b>Electrical Differential Indicator</b>	
Settings	Ordering code
1.2 bar ±10%	DE A 12 x A 50 P01
2 bar ±10%	DE A 20 x A 50 P01
5 bar ±10%	DE A 50 x A 50 P01
7 bar ±10%	DE A 70 x A 50 P01
9.5 bar ±10%	DE A 95 x A 50 P01



**Hydraulic symbol**



**Electrical symbol**



**Materials**

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

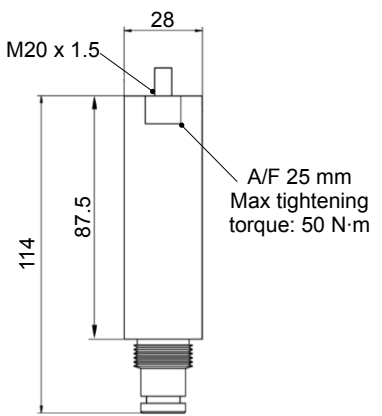
**Technical data**

- 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

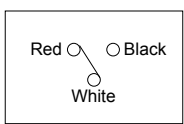
**Electrical data**

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

DEH*48	
<b>Hazardous Area Electronic Differential Indicator</b>	
Settings	Ordering code
5 bar ±10%	DE H 50 x A 48 P01
7 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)

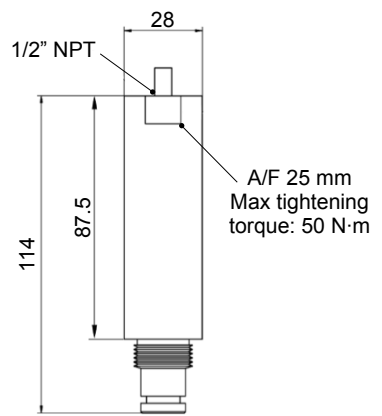
**Technical data**

- 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

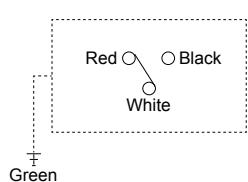
**Electrical data**

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

DEH*49	
<b>Hazardous Area Electronic Differential Indicator</b>	
Settings	Ordering code
5 bar ±10%	DE H 50 x A 49 P01
7 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 |

DEH*70		Connection diagram	Materials
<b>Hazardous Area Electronic Differential Indicator</b>			
Settings	Ordering code		
5 bar ±10%	DE H 50 x A 70 P01	<b>Protection class</b> EX ia IIC T6: Intrinsically safe  <b>Temperature class</b> T6 (85 °C)	
7 bar ±10%	DE H 70 x A 70 P01		
		<ul style="list-style-type: none"> <li>- Certification / Approvals: ATEX, IECEx, TRCU, INMETRO</li> <li>- Certification included as standard</li> </ul>	<b>Technical data</b> <ul style="list-style-type: none"> <li>- Max working pressure: 420 bar</li> <li>- Working temperature: From -20 °C to +80 °C</li> <li>- Connection type: 4 pole male M12 connector - plastic</li> <li>- Contact type: SPCO/SPDT (Hermetically sealed - volt free contacts)</li> <li>- Compatibility with fluids: Mineral oils, Synthetic fluids</li> <li>- Degree of protection: HFA, HFB, HFC according to ISO 2943</li> <li>- Degree of protection: IP 66/67 according to EN 60529</li> </ul>

DEM*10		Hydraulic symbol	Materials
<b>Electrical Differential Indicator</b>			
Settings	Ordering code		
1.2 bar ±10%	DE M 12 x x 10 P01	<b>Technical data</b> <ul style="list-style-type: none"> <li>- Max working pressure: 420 bar</li> <li>- Proof pressure: 630 bar</li> <li>- Burst pressure: 1260 bar</li> <li>- Working temperature: From -25 °C to +110 °C</li> <li>- Compatibility with fluids: Mineral oils, Synthetic fluids</li> <li>- Degree protection: HFA, HFB, HFC according to ISO 2943</li> <li>- Degree protection: IP66 according to EN 60529</li> </ul>	
2 bar ±10%	DE M 20 x x 10 P01		
5 bar ±10%	DE M 50 x x 10 P01		
7 bar ±10%	DE M 70 x x 10 P01		
9.5 bar ±10%	DE M 95 x x 10 P01		
		<b>Electrical symbol</b>	<b>Electrical data</b> <ul style="list-style-type: none"> <li>- Electrical connection: AMP Superseal series 1.5</li> <li>- Resistive load: 0.2 A / 115 Vdc</li> <li>- Switching type: Normally open contacts (NC on request)</li> <li>- Thermal lockout: Normally open up to 30 °C (option "F")</li> </ul>

DEM*20		Hydraulic symbol	Materials
<b>Electrical Differential Indicator</b>			
Settings	Ordering code		
1.2 bar ±10%	DE M 12 x x 20 P01	<b>Technical data</b> <ul style="list-style-type: none"> <li>- Max working pressure: 420 bar</li> <li>- Proof pressure: 630 bar</li> <li>- Burst pressure: 1260 bar</li> <li>- Working temperature: From -25 °C to +110 °C</li> <li>- Compatibility with fluids: Mineral oils, Synthetic fluids</li> <li>- Degree protection: HFA, HFB, HFC according to ISO 2943</li> <li>- Degree protection: IP66 according to EN 60529</li> </ul>	
2 bar ±10%	DE M 20 x x 20 P01		
5 bar ±10%	DE M 50 x x 20 P01		
7 bar ±10%	DE M 70 x x 20 P01		
9.5 bar ±10%	DE M 95 x x 20 P01		
		<b>Electrical symbol</b>	<b>Electrical data</b> <ul style="list-style-type: none"> <li>- Electrical connection: AMP Time junior</li> <li>- Resistive load: 0.2 A / 115 Vdc</li> <li>- Switching type: Normally open contacts (NC on request)</li> <li>- Thermal lockout: Normally open up to 30 °C (option "F")</li> </ul>

# DIFFERENTIAL INDICATORS

## Dimensions

DEM*30	
Electrical Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DE M 12 x x 30 P01
2 bar ±10%	DE M 20 x x 30 P01
5 bar ±10%	DE M 50 x x 30 P01
7 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 bar ±10%	DE M 20 x x 35 P01
5 bar ±10%	DE M 50 x x 35 P01
7 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")

DLA*51 - DLA*52	
Electrical/Visual Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DL A 12 x A xx P01
2 bar ±10%	DL A 20 x A xx P01
5 bar ±10%	DL A 50 x A xx P01
7 bar ±10%	DL A 70 x A xx P01
9.5 bar ±10%	DL A 95 x A xx P01

A/F 30  
Max tightening torque: 65 N·m

**Hydraulic symbol**

**Electrical symbol**

**Materials**

- Body: Brass
- Base: Transparent 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
- Type: 51                      52
- Lamps: 24 Vdc            110 Vdc
- Resistive load: 1 A / 24 Vdc      1 A / 110 Vdc

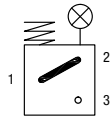
**DLA\*71**

**Electrical/Visual Differential Indicator**

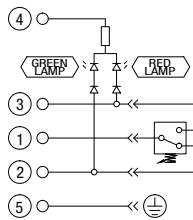
Settings	Ordering code
1.2 bar ±10%	DL A 12 x A 71 P01
2 bar ±10%	DL A 20 x A 71 P01
5 bar ±10%	DL A 50 x A 71 P01
7 bar ±10%	DL A 70 x A 71 P01
9.5 bar ±10%	DL A 95 x A 71 P01

A/F 30  
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: IP65 according to EN 60529  
IP69K according to ISO 20653

### Electrical data

- Electrical connection: IEC 61076-2-101 D (M12)
- Lamps: 24 Vdc
- Resistive load: 0.4 A / 24 Vdc

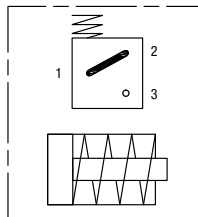
**DLE\*A50**

**Electrical/Visual Differential Indicator**

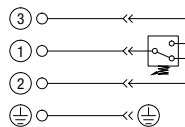
Settings	Ordering code
1.2 bar ±10%	DL E 12 x A 50 P01
2 bar ±10%	DL E 20 x A 50 P01
5 bar ±10%	DL E 50 x A 50 P01
7 bar ±10%	DL E 70 x A 50 P01
9.5 bar ±10%	DL E 95 x A 50 P01

A/F 32  
Max tightening torque: 95 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: IP65 according to EN 60529

### Electrical data

- Electrical connections: EN 175301-803
- Resistive load: 5 A / 250 Vac
- Available the connector with lamps

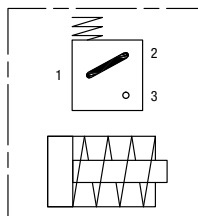
**DLE\*F50**

**Electrical/Visual Differential Indicator**

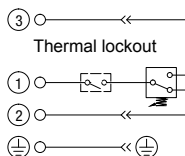
Settings	Ordering code
1.2 bar ±10%	DL E 12 x F 50 P01
2 bar ±10%	DL E 20 x F 50 P01
5 bar ±10%	DL E 50 x F 50 P01
7 bar ±10%	DL E 70 x F 50 P01
9.5 bar ±10%	DL E 95 x F 50 P01

A/F 32  
Max tightening torque: 95 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: IP65 according to EN 60529

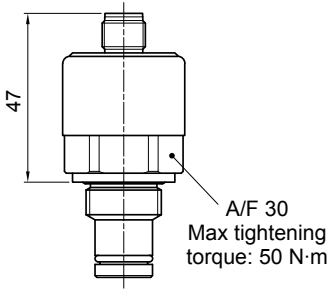
### Electrical data

- Electrical connections: EN 175301-803
- Resistive load: 5 A / 250 Vac
- Thermal lockout setting: +30 °C

# DIFFERENTIAL INDICATORS

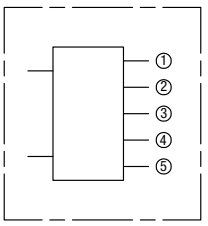
## Dimensions

DTA*70	
<b>Electronic Differential Indicator</b>	
Settings	Ordering code
1.2 bar ±10%	DT A 12 x x 70 P01
2 bar ±10%	DT A 20 x x 70 P01
5 bar ±10%	DT A 50 x x 70 P01
7 bar ±10%	DT A 70 x x 70 P01
9.5 bar ±10%	DT A 95 x x 70 P01



A/F 30  
Max tightening torque: 50 N·m

**Hydraulic symbol**



**Electrical symbol**

①	○	○	+24 Vdc
②	○	○	4 ÷ 20 mA
③	○	○	75% - N.O. Digital output
④	○	○	100% - N.O. Digital output
⑤	○	○	0 Vdc

**Materials**


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

**Technical data**

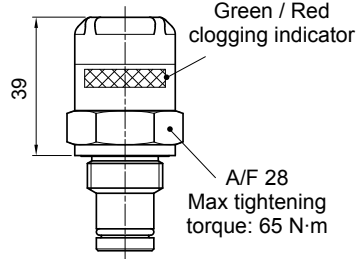
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP67 according to EN 60529

**Electrical data**

- Electrical connection: IEC 61076-2-101 D (M12)
- Power supply: 24 Vdc
- Analogue output: From 4 to 20 mA
- Thermal lockout: 30 °C (all output signals stalled up to 30 °C)



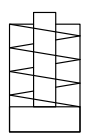
DVA	
<b>Visual Differential Indicator</b>	
Settings	Ordering code
1.2 bar ±10%	DVA 12 x P01
2 bar ±10%	DVA 20 x P01
5 bar ±10%	DVA 50 x P01
7 bar ±10%	DVA 70 x P01
9.5 bar ±10%	DVA 95 x P01



Green / Red clogging indicator

A/F 28  
Max tightening torque: 65 N·m

**Hydraulic symbol**



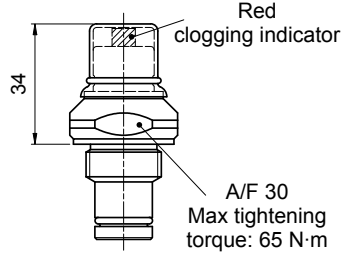
**Materials**

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

**Technical data**

- Reset: Automatic reset
- 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: IP65 according to EN 60529

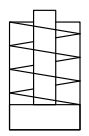
DVM	
<b>Visual Differential Indicator</b>	
Settings	Ordering code
1.2 bar ±10%	DV M 12 x P01
2 bar ±10%	DV M 20 x P01
5 bar ±10%	DV M 50 x P01
7 bar ±10%	DV M 70 x P01
9.5 bar ±10%	DV M 95 x P01



Red clogging indicator

A/F 30  
Max tightening torque: 65 N·m

**Hydraulic symbol**



**Materials**

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

**Technical data**

- Reset: Manual reset
- 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: IP65 according to EN 60529

<b>T2</b>		<b>Materials</b> - Body: Phosphatized steel - Seal: HNBR / FPM
<b>Indicator plug</b>		
<b>Seal</b>	<b>Ordering code</b>	
HNBR	T2 H	
FPM	T2 V	

A/F 30  
Max tightening torque: 50 N·m

### DESIGNATION & ORDERING CODE - DIFFERENTIAL INDICATORS

<b>Series</b>	Configuration example 1:	DE	M	50	H	F	50	P01
<b>DE</b> Electrical or Electronic differential indicator	Configuration example 2:	DE	H	50	F	A	70	P01
<b>DL</b> Electrical / Visual differential indicator	Configuration example 3:	DL	E	70	V	A	71	P01
<b>DT</b> Electronic differential indicator	Configuration example 4:	DT	A	50	H	F	70	P01
<b>DV</b> Visual differential indicator	Configuration example 5:	DV	M	95	V			P01

Type	DE	DL	DT	DV
<b>A</b> Standard type	•	•	•	<b>A</b> With automatic reset
<b>M</b> With wired electrical connection	•			<b>M</b> With manual reset
<b>E</b> For high power supply		•		
<b>H</b> Hazardous area	•			

Pressure setting	DEA	DEH	DEM	DLA	DLE	DT	DV
<b>12</b> 1.2 bar	•		•	•	•	•	•
<b>20</b> 2 bar	•		•	•	•	•	•
<b>50</b> 5 bar	•	•	•	•	•	•	•
<b>70</b> 7 bar	•	•	•	•	•	•	•
<b>95</b> 9.5 bar	•		•	•	•	•	•

Seals	DEA	DEH	DEM	DLA	DLE	DT	DV
<b>F</b> MFQ		•					
<b>H</b> HNBR	•		•	•	•	•	•
<b>V</b> FPM	•	•	•	•	•	•	•

Thermostat	DEA	DEH	DEM	DLA	DLE	DT	DV
<b>A</b> Without	•	•	•	•	•		
<b>F</b> With thermostat			•		•	•	

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

Option
<b>P01</b> MP Filtri standard
<b>Pxx</b> Customized

### DESIGNATION & ORDERING CODE - DIFFERENTIAL INDICATOR PLUG

<b>Series</b>	Configuration example	T2	H
<b>T2</b> Indicator plug			
<b>Seals</b>			
<b>H</b> HNBR			
<b>V</b> FPM			