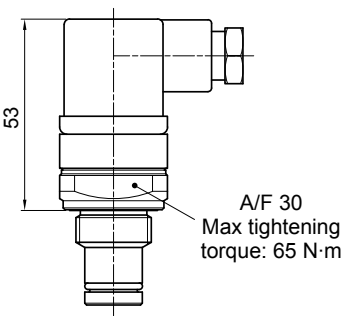


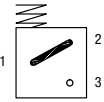
DIFFERENTIAL INDICATORS

Dimensions

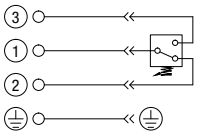
DEA*50	
Electrical Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DE A 12 x A 50 P01
2.0 bar ±10%	DE A 20 x A 50 P01
5.0 bar ±10%	DE A 50 x A 50 P01
7.0 bar ±10%	DE A 70 x A 50 P01
9.5 bar ±10%	DE A 95 x A 50 P01



Hydraulic symbol



Electrical symbol



Materials

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

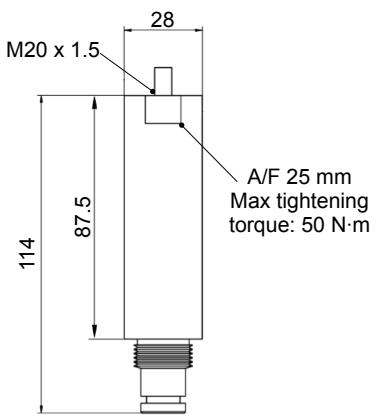
Technical data

- 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

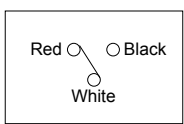
Electrical data

- 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

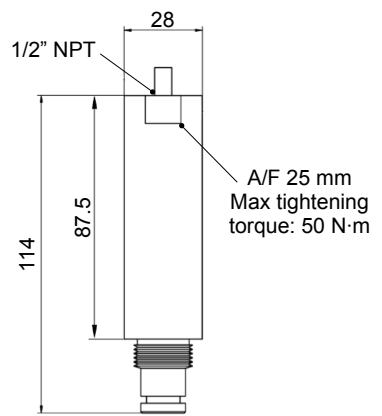
- Current Ratings: 24v DC 830mA - 110v AC 180mA
- Electrical Ratings: Ui 30V - Li 250mA - Pi 1.3W

Certification / Approvals:
ATEX, IECEx, TRCU, INMETRO

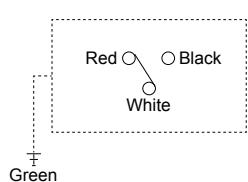
Certification included as standard



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)
7.0 bar ±10%	DE H 70 x A 70 P01		
			Technical data
		<ul style="list-style-type: none"> - Certification / Approvals: ATEX, IECEx, TRCU, INMETRO - Certification included as standard 	<ul style="list-style-type: none"> - 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: IP 66/67 according to EN 60529
			Electrical data
			<ul style="list-style-type: none"> - Current Ratings: 24v DC 830mA - 110v AC 180mA - Electrical Ratings: Ui 30V - Li 250mA - Pi 1.3W

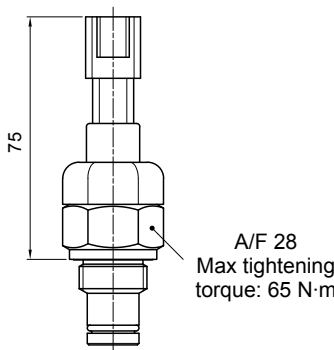
DEM*10		Hydraulic symbol	Materials
Electrical Differential Indicator			
Settings	Ordering code		
1.2 bar ±10%	DE M 12 x x 10 P01		Technical data
2.0 bar ±10%	DE M 20 x x 10 P01		
5.0 bar ±10%	DE M 50 x x 10 P01		<ul style="list-style-type: none"> - Max working pressure: 420 bar - Proof pressure: 630 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		Electrical data
			<ul style="list-style-type: none"> - 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")

DEM*20		Hydraulic symbol	Materials
Electrical Differential Indicator			
Settings	Ordering code		
1.2 bar ±10%	DE M 12 x x 20 P01		Technical data
2.0 bar ±10%	DE M 20 x x 20 P01		
5.0 bar ±10%	DE M 50 x x 20 P01		<ul style="list-style-type: none"> - 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		Electrical data
			<ul style="list-style-type: none"> - 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")

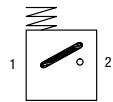
DIFFERENTIAL INDICATORS

Dimensions

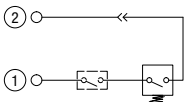
DEM*30	
Electrical Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DE M 12 x x 30 P01
2.0 bar ±10%	DE M 20 x x 30 P01
5.0 bar ±10%	DE M 50 x x 30 P01
7.0 bar ±10%	DE M 70 x x 30 P01
9.5 bar ±10%	DE M 95 x x 30 P01



Hydraulic symbol



Electrical symbol



Materials

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

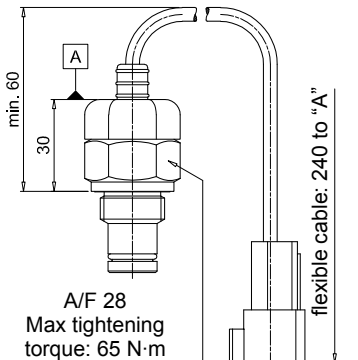
Technical data

- 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

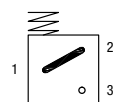
Electrical data

- 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")

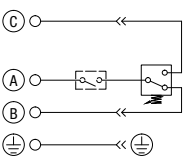
DEM*35	
Electrical Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DE M 12 x x 35 P01
2.0 bar ±10%	DE M 20 x x 35 P01
5.0 bar ±10%	DE M 50 x x 35 P01
7.0 bar ±10%	DE M 70 x x 35 P01
9.5 bar ±10%	DE M 95 x x 35 P01



Hydraulic symbol



Electrical symbol



Materials

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

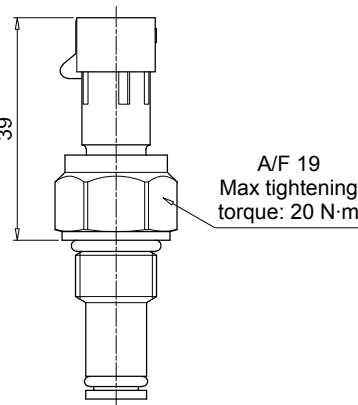
Technical data

- 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

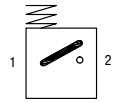
Electrical data

- 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")

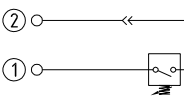
DES*10	
Electrical Differential Indicator	
Settings	Ordering code
2.5 bar ±10%	DE S 25 HA 10 P01
4.0 bar ±10%	DE S 40 HA 10 P01



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)

DES*30	
Electrical Differential Indicator	
Settings	Ordering code
2.5 bar \pm 10%	DE S 25 H A 30 P01
4.0 bar \pm 10%	DE S 40 H A 30 P01

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
- Degree protection: IP67 according to EN 60529

Electrical data

- Electrical connection: Deutsch DT-04-2-P
- Resistive load: 0.2 A / 24 Vdc
- Switching type: Normally open contacts (NC on request)

DES*80	
Electrical Differential Indicator	
Settings	Ordering code
2.5 bar \pm 10%	DE S 25 H A 80 P01
4.0 bar \pm 10%	DE S 40 H A 80 P01

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
- Degree protection: IP67 according to EN 60529

Electrical data

- Electrical connection: Stud #10-32 UNF
- Resistive load: 0.2 A / 24 Vdc
- Switching type: Normally open contacts (NC on request)

DLA*51 - DLA*52	
Electrical/Visual Differential Indicator	
Settings	Ordering code
1.2 bar \pm 10%	DL A 12 x A xx P01
2.0 bar \pm 10%	DL A 20 x A xx P01
5.0 bar \pm 10%	DL A 50 x A xx P01
7.0 bar \pm 10%	DL A 70 x A xx P01
9.5 bar \pm 10%	DL A 95 x A xx P01

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
- Degree protection: IP66 according to EN 60529

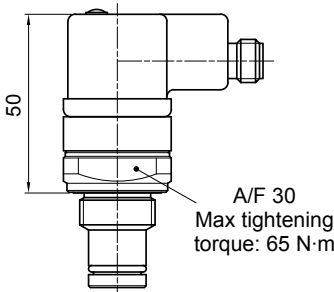
Electrical data

- Electrical connection: EN 175301-803
- Type: 51 52
- Lamps: 24 Vdc 110 Vdc
- Resistive load: 1 A / 24 Vdc 1 A / 110 Vdc

DIFFERENTIAL INDICATORS

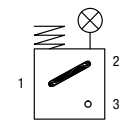
Dimensions

DLA*71	
Electrical/Visual Differential Indicator	
Settings	Ordering code
1.2 bar $\pm 10\%$	DL A 12 x A 71 P01
2.0 bar $\pm 10\%$	DL A 20 x A 71 P01
5.0 bar $\pm 10\%$	DL A 50 x A 71 P01
7.0 bar $\pm 10\%$	DL A 70 x A 71 P01
9.5 bar $\pm 10\%$	DL A 95 x A 71 P01

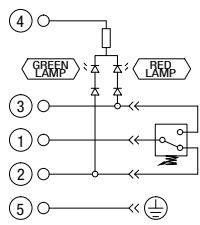


A/F 30
Max tightening torque: 65 N·m

Hydraulic symbol



Electrical symbol



Materials

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

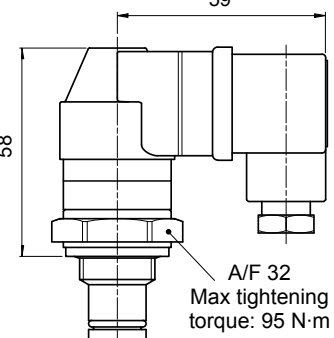
Technical data

- 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

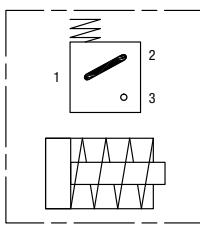
- Electrical connection: IEC 61076-2-101 D (M12)
- Lamps: 24 Vdc
- Resistive load: 0.4 A / 24 Vdc

DLE*A50	
Electrical/Visual Differential Indicator	
Settings	Ordering code
1.2 bar $\pm 10\%$	DL E 12 x A 50 P01
2.0 bar $\pm 10\%$	DL E 20 x A 50 P01
5.0 bar $\pm 10\%$	DL E 50 x A 50 P01
7.0 bar $\pm 10\%$	DL E 70 x A 50 P01
9.5 bar $\pm 10\%$	DL E 95 x A 50 P01

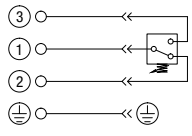


A/F 32
Max tightening torque: 95 N·m

Hydraulic symbol



Electrical symbol



Materials

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

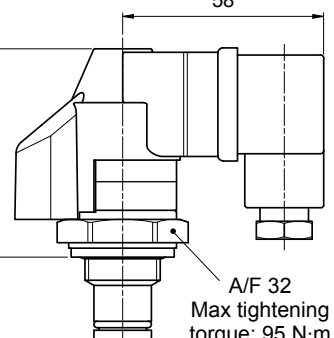
Technical data

- 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

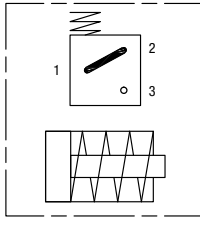
- Electrical connections: EN 175301-803
- Resistive load: 5 A / 250 Vac
- Available the connector with lamps

DLE*F50	
Electrical/Visual Differential Indicator	
Settings	Ordering code
1.2 bar $\pm 10\%$	DL E 12 x F 50 P01
2.0 bar $\pm 10\%$	DL E 20 x F 50 P01
5.0 bar $\pm 10\%$	DL E 50 x F 50 P01
7.0 bar $\pm 10\%$	DL E 70 x F 50 P01
9.5 bar $\pm 10\%$	DL E 95 x F 50 P01

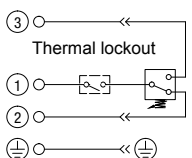


A/F 32
Max tightening torque: 95 N·m

Hydraulic symbol



Electrical symbol



Materials

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

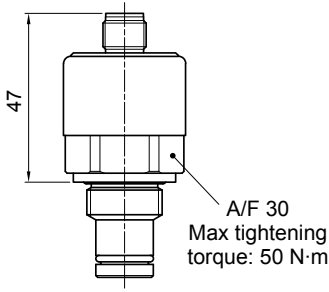
Technical data

- 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

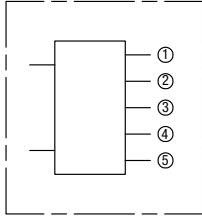
Electrical data

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

DTA*70	
Electronic Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DT A 12 x x 70 P01
2.0 bar ±10%	DT A 20 x x 70 P01
5.0 bar ±10%	DT A 50 x x 70 P01
7.0 bar ±10%	DT A 70 x x 70 P01
9.5 bar ±10%	DT A 95 x x 70 P01



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

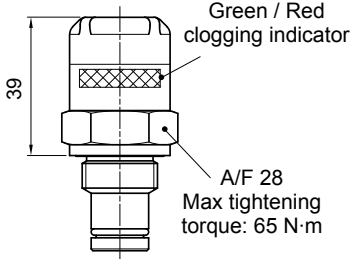
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP67 according to EN 60529

Electrical data

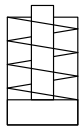
- Electrical connection: IEC 61076-2-101 D (M12)
- Power supply: 24 Vdc
- Analogue output: From 4 to 20 mA
- Thermal lockout: 30 °C (all output signals stalled up to 30 °C)



DVA	
Visual Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DV A 12 x P01
2.0 bar ±10%	DV A 20 x P01
5.0 bar ±10%	DV A 50 x P01
7.0 bar ±10%	DV A 70 x P01
9.5 bar ±10%	DV A 95 x P01



Hydraulic symbol



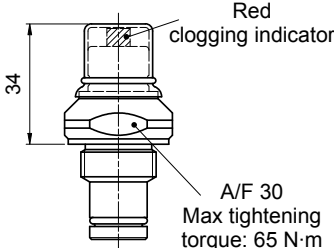
Materials

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

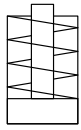
Technical data

- 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	
Visual Differential Indicator	
Settings	Ordering code
1.2 bar ±10%	DV M 12 x P01
2.0 bar ±10%	DV M 20 x P01
5.0 bar ±10%	DV M 50 x P01
7.0 bar ±10%	DV M 70 x P01
9.5 bar ±10%	DV M 95 x P01



Hydraulic symbol



Materials

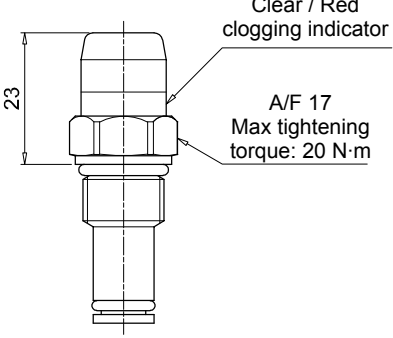
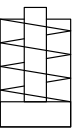
- Body: Brass
- Internal parts: Brass - Nylon
- Contacts: Silver
- Seal: HNBR - FPM

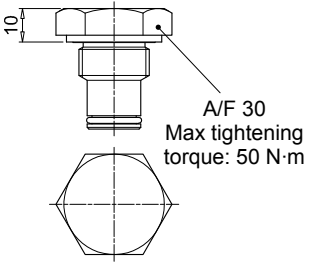
Technical data

- 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

DIFFERENTIAL INDICATORS

Dimensions

DVS	
Visual Differential Indicator	
Settings	Ordering code
2.5 bar $\pm 10\%$	DV S 25 H P01
4.0 bar $\pm 10\%$	DV S 40 H P01
	
Hydraulic symbol	
	
Materials	
- Body:	Brass
- Internal parts:	Brass - Nylon
- Contacts:	Silver
- Seal:	HNBR
Technical data	
- Reset:	Automatic reset
- 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

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

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	Type DV
A Standard type	•	•	•	A With automatic reset
E For high power supply		•		M With manual reset
H Hazardous area	•			S Compact version
M With wired electrical connection	•			
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			