

MESSKO® MFIoC® FLOW INDICATOR

ORDERING SPECIFICATIONS.



MESSKO INSTRUMENTS

Project/Reference: _____

Cooling agent

- ☐ Insulating oil (minerally) acc. IEC 60296
- ☐ Water
- ☐ Insulating agent (alternative) *)

*) For alternative insulating agent use Viton flat gasket (see accessories)

Flange version

- ☐ Standard (DN100 – DN300)
- ☐ Retrofit flange

Colour housing

- ☐ RAL 7033 standard cement grey
- ☐ RAL 7038 (similar to ANSI 70 light grey)

Electrical connection

- ☐ Terminal box with connection terminals
- ☐ ANSI connector / 2x changeover switches *)
- ☐ MIL connector / 2x changeover switches *)

*) Coupling socket with different cable lengths available as optional accessory

Dial colour

- ☐ Naturally anodized, inscription black
- ☐ Black anodized, inscription white
- ☐ Black anodized, inscription yellow

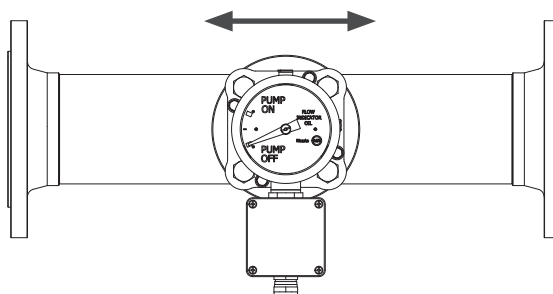
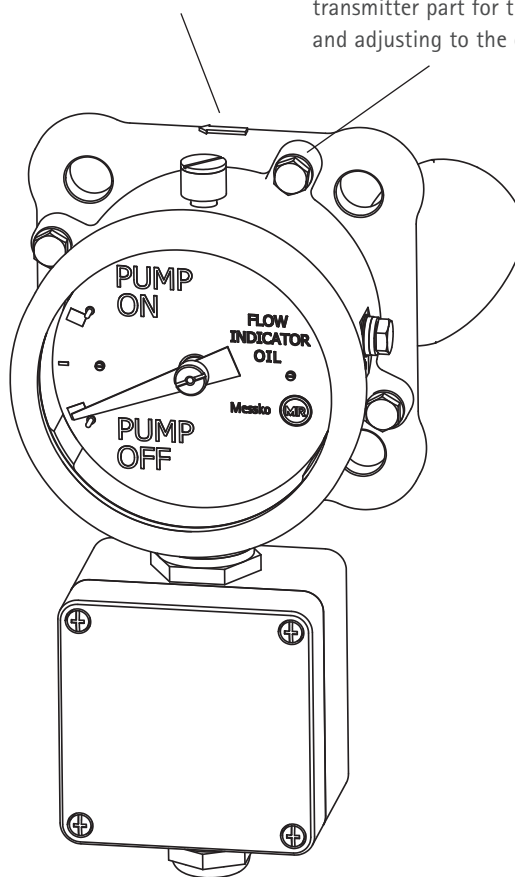
Offshore version

- ☐ Offshore-Ausführung includes:
 - Flange in offshore version
 - Color of terminal box acc. DIN EN ISO 12944 part 5, protection class C5M
 - Unpainted parts in high-grade steel

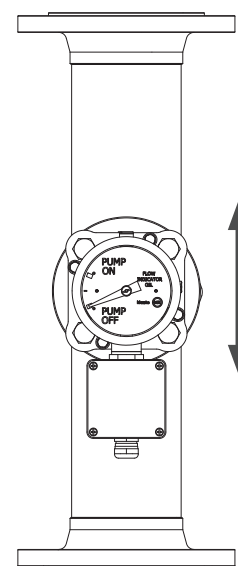
Further models on request

Direction of flow

Mounting screws between display part and transmitter part for turning around the flange and adjusting to the direction of the flow



Mounting option
with horizontal direction of flow



Mounting option
with vertical direction of flow

Please enclose this order form filled in the order.

MESSKO® MFloC® – FLOW INDICATOR

TECHNICAL DATA.

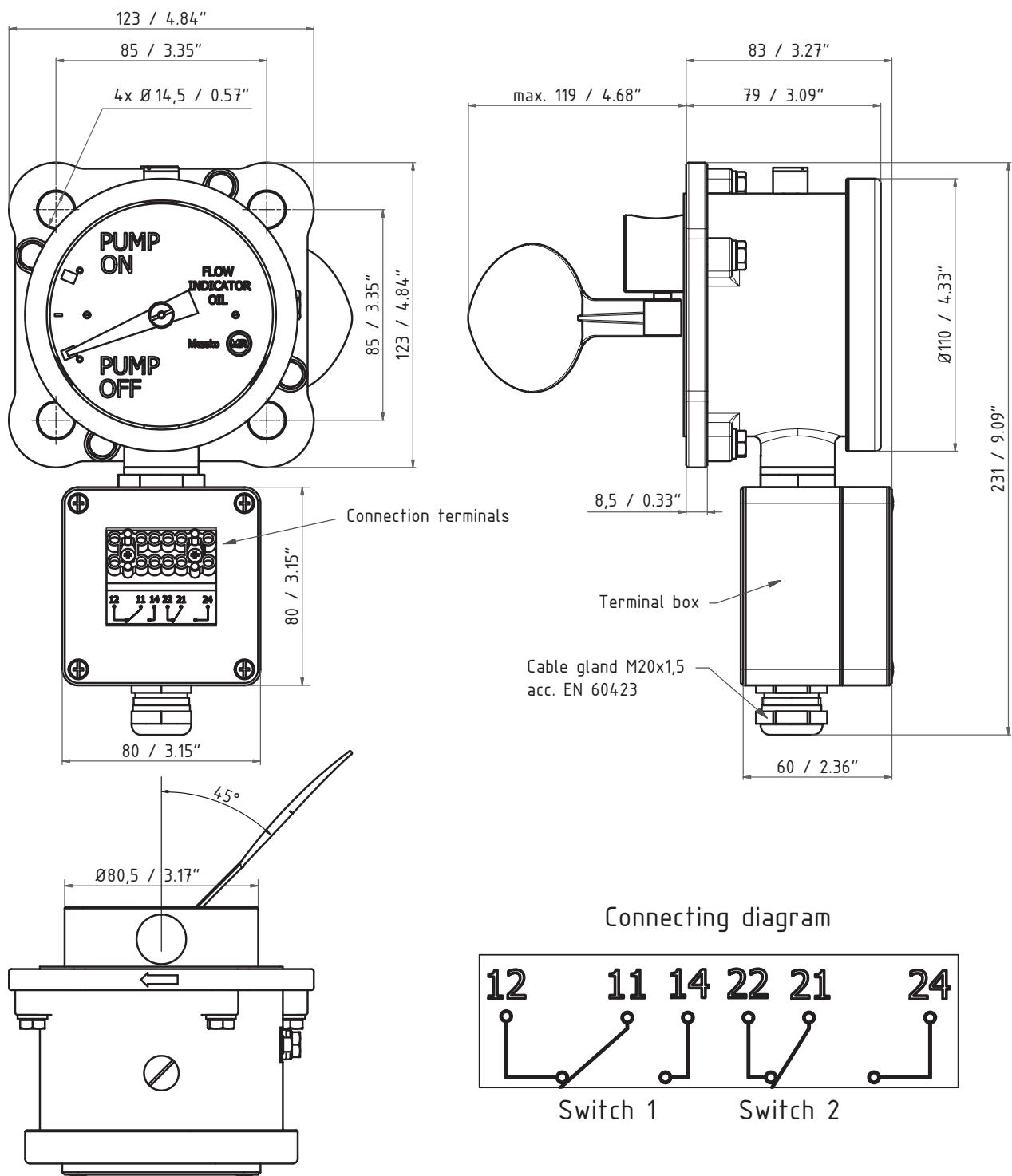
MESSKO® MFloC®	Technical Data
Materials	
Housing/terminal box	Aluminium alloy, RAL 7033 or 7038 (similar to ANSI 70 light grey), powder coated
Mounting flange	Aluminium alloy
Paddle	High-grade steel 1.4301
Dial	Aluminium, anodized
Dial markings	PUMP ON/PUMP OFF, OIL or WATER
Viewing glass	Laminated safety glass with UV filter
Characteristics	
Location	Indoors and outdoors, tropical proof
Ambient temperature	-50 °C to +80 °C
Cooling agent temperature	-30 °C to +120 °C
Protection mode	IP 54 in acc. with DIN EN 60 529
Nominal tube diameter	DN100 to DN300
Max. flow velocity	2.5 [m/s] / 98.43 [inch/s]
Min. flow velocity	0.7 [m/s] / 27.56 [inch/s]
Response pressure	See table below
Pressure loss	< 0.1 bar
Noise emission	Not perceptible
Microswitches	
Number switches	2 changeover type, electrically isolated, fixed positioned
Contact load	Max. 5 A/250 V AC or 2.5 A/24 V DC, min. 1 mA/4 V DC
Switching point	Central between "PUMP ON" and "PUMP OFF"
Rated isolation voltage	2.5 kV AC, 1 min, contacts to housing
Elektrical connection	
Connection via terminal box	Terminal box with M20 x 1.5 screwed cable gland and connection terminals (min. 0.25 mm ² /max. 2.5 mm ²); connection terminals see page 3
Connection via ANSI or MIL connector	6 x AWG16, 500 W, 600 V; connection terminals see pages 4 and 5
Flange gasket (optional)	
Material	NBR (for oil), FPM (Viton) (for alternative insulation agents), EPDM (for water)
Material hardness	75 shore
Dimensions	See page 6

Nominal diameter DN	Internal flange diameter in acc. with DIN 2633		Minimum flow velocity to response of MESSKO® MFloC		Oil flow rate to response of MESSKO® MFloC	
	[mm]	[inch]	[m/s]	[inch/s]	[l/min]	[Gallonen/min]
100	107.10	4.22	0.70	27.56	380.00	100.39
125	131.70	5.19	0.70	27.56	572.00	151.11
150	159.30	6.27	0.70	27.56	837.00	221.11
200	207.30	8.16	0.70	27.56	1418.00	374.60
250	260.40	10.25	0.70	27.56	2236.00	590.69
300	309.70	12.19	0.70	27.56	3163.00	835.58

Max. permitted flow velocity: 2.5 m/s; 98.43 inch/s

MESSKO® MFloC® – FLOW INDICATOR DIMENSIONS.

MESSKO® MFloC® with terminal box



Technical drawings of the Manta 1000 pump unit, showing dimensions in inches and millimeters.

Front View:

- Overall width: 85 / 3.35"
- Overall height: 161 / 6.34"
- Mounting holes: 4x Ø14,5 / 0.57"
- Flow indicator: "FLOW INDICATOR OIL"
- Labels: "PUMP ON", "PUMP OFF", "Manta 1000"
- Bottom connection: 80,5 / 3.17"
- Angle: 45°

Side View:

- Overall width: Ø110 / 4.33"
- Overall height: 79 / 3.09"
- Mounting holes: 34 / 1.32"
- Bottom connection: 8,5 / 0.33"
- Bottom connection diameter: Ø38 / 1.50"

Top View:

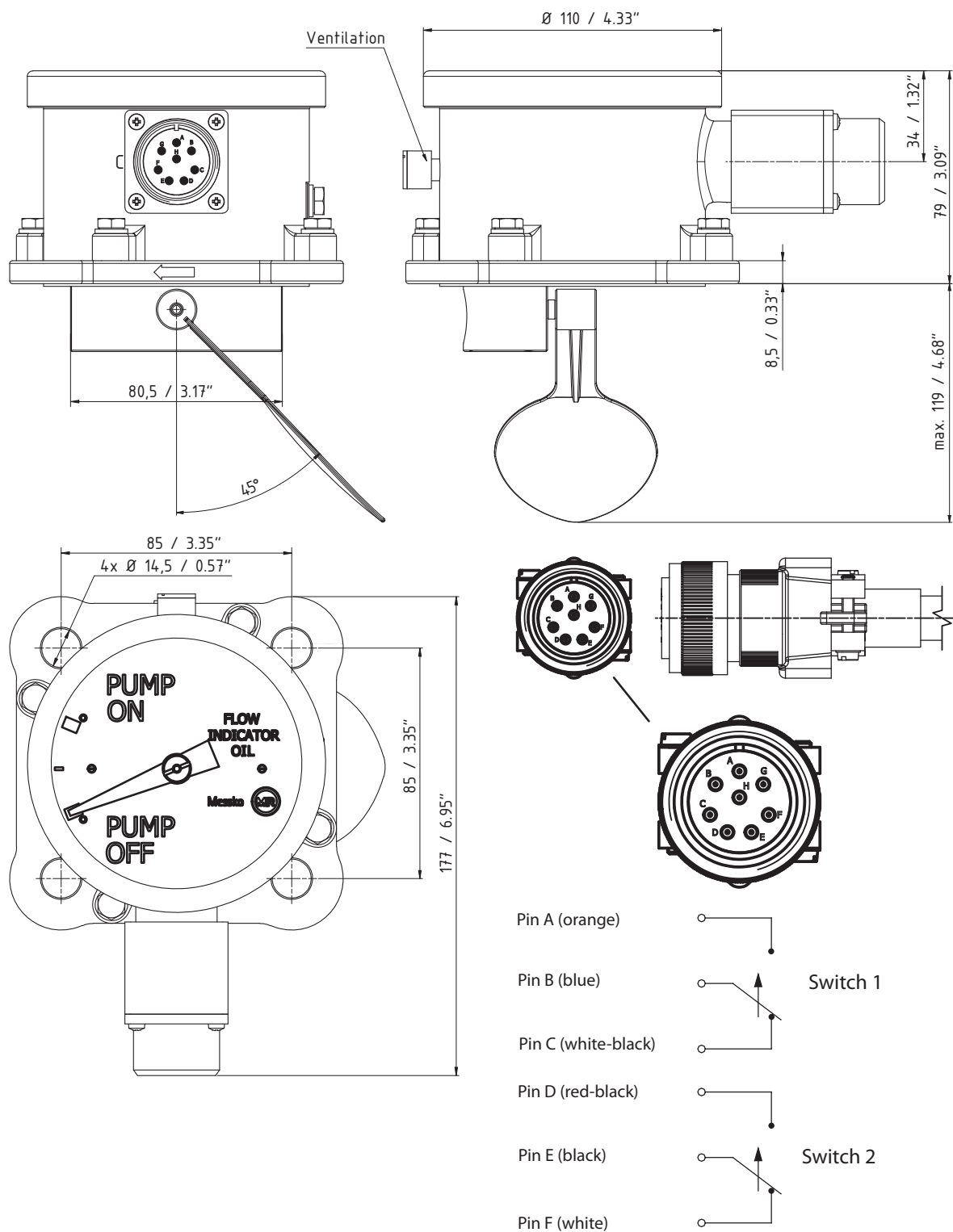
- Pin 1 (black)
- Pin 2 (red)
- Pin 3 (blue)
- Pin 4 (orange)
- Pin 5 (yellow)
- Pin 6 (brown)

Wiring Diagram:

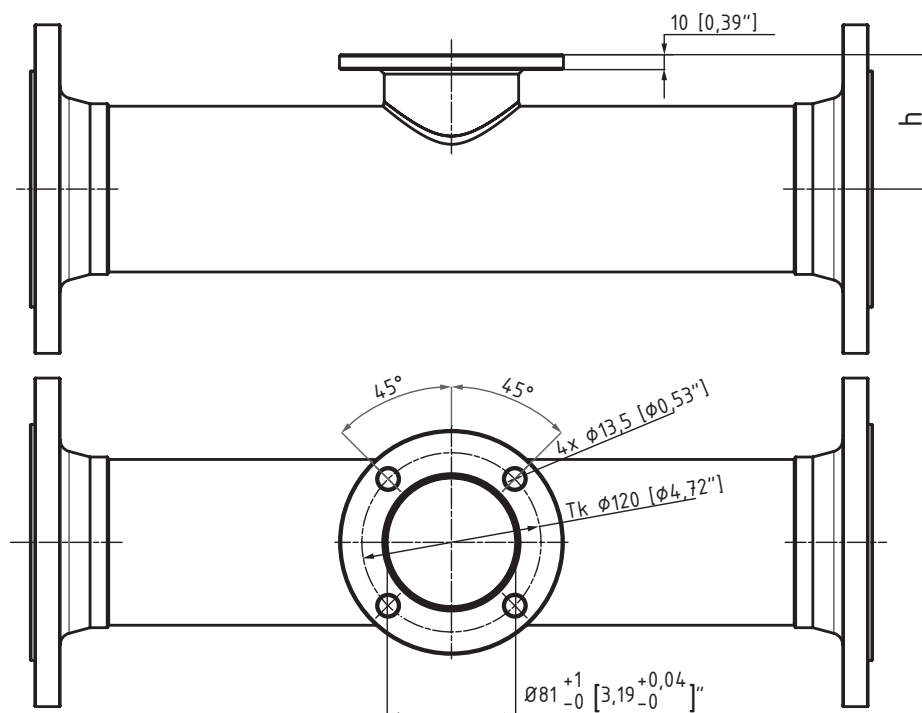
- Switch 1: Connects Pin 1 (black) to Pin 2 (red).
- Switch 2: Connects Pin 3 (blue) to Pin 4 (orange).

MESSKO® MFloC® – FLOW INDICATOR DIMENSIONS.

MESSKO® MFloC® with MIL connector

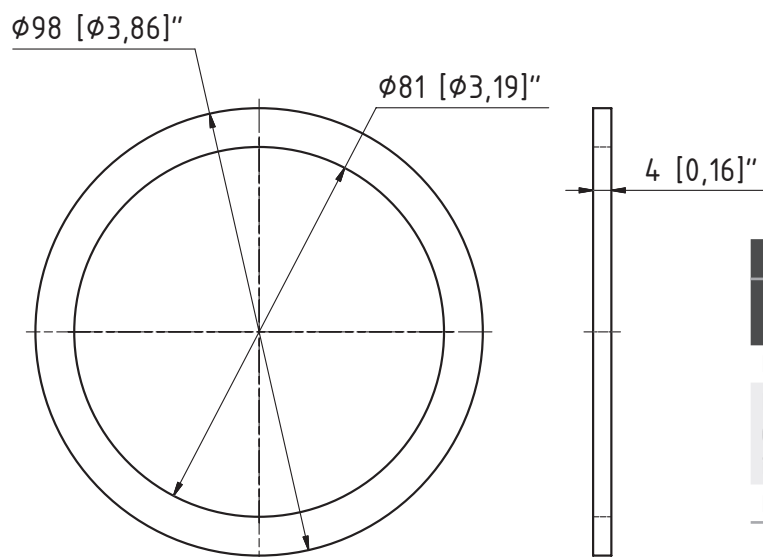


Connection tube dimensions



	DN100	DN125	DN150	DN200	DN250	DN300
h	90/3.54"	105/4.11"	118/4.65"	143/5.36"	171/6.73"	190/7.48"

Flange gasket (optional)



Accessories / spare parts			
Flat gaskets	Material-hardness	Operating temperature	Art. no.
NBR (for oil)	75 shore	-40 °C ... +120 °C	MS215021
FPM (Viton) (for alternative isolation agents)	75 shore	-40 °C ... +125 °C	MS215020
EPDM (for Wasser)	75 shore	-40 °C ... +120 °C	MS234510

Messko GmbH
Gewerbegebiet An den Drei Hasen
Messko-Platz 1
61440 Oberursel, Germany

Please note:

The data in our publications may differ from the data of the devices delivered.

We reserve the right to make changes without notice

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Phone: +49 6171 6398 0
Fax: +49 6171 6398 98
Email: info@messko.com

www.messko.com

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