MICRO-EPSILON

More Precision.

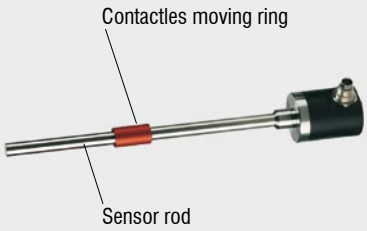
induSENSOR

Linear inductive displacement sensors

16 VIP series - displacement sensors with measuring ring and integral electronics

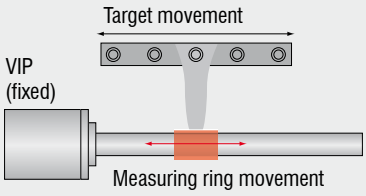
No wear and no maintenance
Linearity 0.25% FSO
Integrated microelectronics
Short and compact design
Rugged encapsulated sensor construction
For use in difficult ambient conditions
Lateral measurement possible

VIP sensors operate with a contactless moving ring. There is no mechanical contact between the measuring element (ring) and the sensor rod. The sensor therefore operates without any wear.



Parallel mounting

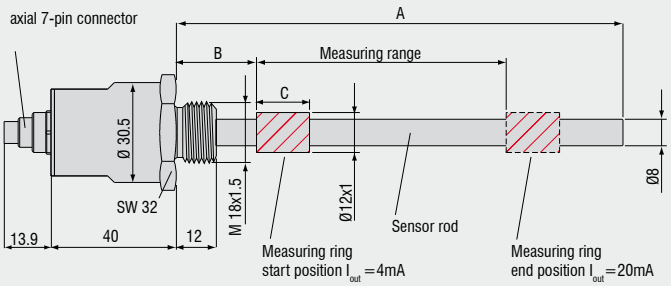
The optimum ratio of measurement range to installed length of the sensor reduces the installation space needed for the VIP series.
The parallel connection of the measurement object and measuring ring facilitates completely new construction and installation options. Whereas with conventional sensors with an axial measurement path, the length of the plunger must be added to the actual housing length, with the VIP series only the housing length has to be considered during the design.
With protection class IP67, the sensors can even be used in harsh industrial environments.



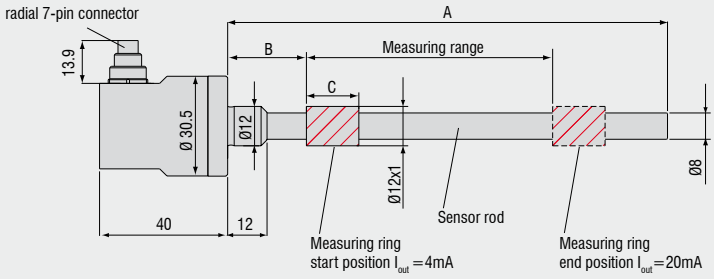
Model		VIP-50	VIP-100	VIP-150
Measuring range		50mm	100mm	150mm
Linearity	standard ±0.5% FSO	0.25mm	0.5mm	0.75mm
	option ±0.25% FSO	0.125mm	0.25mm	-
Resolution	<0.03% FSO	0.015mm	0.03mm	0.045mm
Temperature range		-40°C ... +85°C		
Temperature stability	zero	± 50ppm / °C		
	sensitivity	±150ppm / °C		
Frequency response (-3 dB)		300Hz		
Output		4 - 20mA		
Output load		500Ω		
Power supply		18 - 30VDC		
Current consumption		max. 40mA		
Protection class		IP 67		
Electromagnetic compatibility (EMC)		EN 61326-1:2006 (spurious emission) EN 61326-2-3:2006 (immunity to interference)		
Shock[1]		40g, 3000 shocks / axis 100g radial, 300g axial		
Vibration		5Hz ... 44Hz ± 2.5mm; 44Hz ... 500Hz ±20g		

FSO = Full Scale Output
1) Half sinusoid 6ms

VIP series housing version -GA- (option)
Dimensions in mm, not to scale



VIP series housing version -ZA-
Dimensions in mm, not to scale



Article

VIP- ***50*** - ***ZA*** - ***2.5*** - ***SR7*** - I

- I — Electrical output
- SR7 — SA7= connector, axial (housing version GA)
  SR7= connector, radial (housing version ZA)
- 2.5 — Linearity 5 = 0.5% FSO
  2.5 = 0.25% FSO
- ZA — ZA= housing, cylindical (standard)
  GA= housing, threaded (option)
- 50 — Measuring range in mm

Measuring range	A	B	C
50	105	24	11.5
100	175	27	22
150	242	30	33

Accessories for VIP, LVP, LDR, EDS and LVDT series

Accessories

2960031	MC25D	digital micrometer calibration fixture
2420062	PS2020	power supply on DIN rail, input 100 - 240VAC, output 24VDC / 2.5A
2984026	certificate	function and linearity inspection certificate incl. protocol with listed measurement data of the linearity inspection and documentation

Linearity inspection certificate

Accessories VIP and LVP series

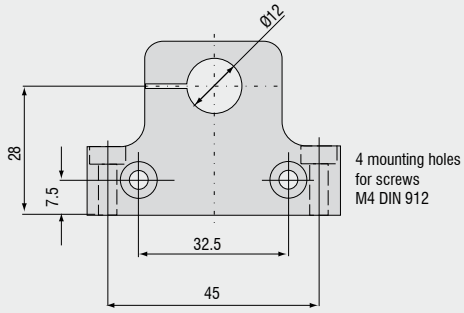
Connection cable

0157043	C703-5	VIP/LVP/EDS 7-pin connection cable, 5m
2902084	C703-5/U	VIP/LVP/EDS 7-pin connection cable, 5m for voltage output 1 - 5V
0157050	C703/90-5	VIP-/LVP-/EDS-7-pin connection cable, 5m with 90° cable connector
2962001	MBS 12/8	mounting set for VIP series with 3 mounting blocks and 2 adapting rings
0487087	MBS 12/8	mounting block VIP/LVP series

Plunger

0800114	LVP-50	plunger
0800115	LVP-100	plunger
0800116	LVP-200	plunger

Mounting block VIP and LVP series



Accessories LDR series

Connection cable

0157047	C7210-5/3	sensor cable, 5m, with cable connector
0157048	C7210/90-5/3	sensor cable, 5m, with 90° cable connector

Supply cable

2901087	PC710-6/4	supply/output cable, 6m

Plunger

0800136	LDR-10	plunger
0800137	LDR-25	plunger
0800138	LDR-50	plunger

Accessories EDS series

Service

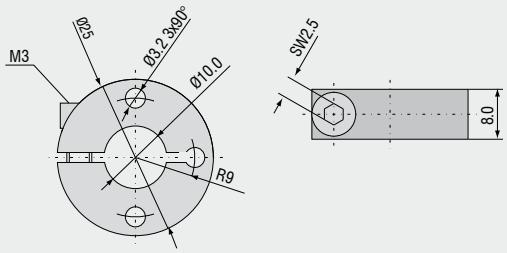
2985001		Function and linearity inspection for EDS series incl. pressure inspection and documentation without recalibration

Connection cable

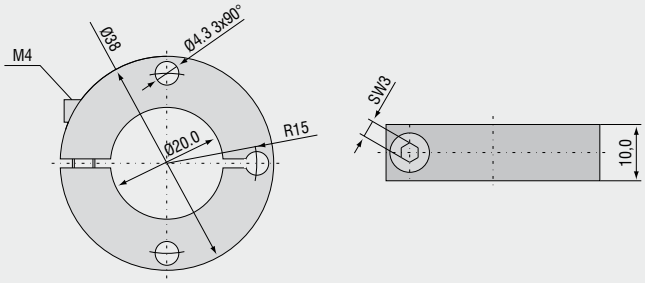
0157043	C703-5	VIP/LVP/EDS 7-pin connection cable for S series, 5m
2902084	C703-5/U	VIP/LVP/EDS 7-pin connection cable for S series, 5m for voltage output 1 - 5V
0157050	C703/90-5	VIP/LVP/EDS 7-pin connection cable for S series, 5m with 90° cable connector
2901143	C705-5	VIP-/LVP-/EDS -pin connection cable for F series, 5m
2901160	C705-15	VIP-/LVP-/EDS -pin connection cable for F series, 15m

Accessories	LVDT series	
Sensor cable		
2902004	C701-3	sensor cable 3m, with connector and tin-plated free ends
2902013	C701-6	sensor cable, 6m, with connector and tin-plated free ends
2902009	C701/90-3	sensor cable, 3m, with 90° connector and tin-plated free ends
2966002		MSC710 connector set for supply/output cable
2981010		connector mounting and calibration of MSC710
Connection cable		
2901087	PC710-6/4	supply/output cable, 6 m
Plunger		
0800001	DTA-1D	plunger
0800002	DTA-3D	plunger
0800003	DTA-5D	plunger
0800004	DTA-10D	plunger
0800005	DTA-15D	plunger
0800006	DTA-25D	plunger
Flange		
0483090.01	DTA-F10	mounting flange, slotted for DTA-1D, DTA-3D, DTA-5D, DTA-10D
0483083.02	DTA-F20	mounting flange, slotted for DTA-15D, DTA-25D
Probe tips		
0459002	type 2	
0459001	type 2 hard metall	
0459003	type 11	
0459004	type 13	

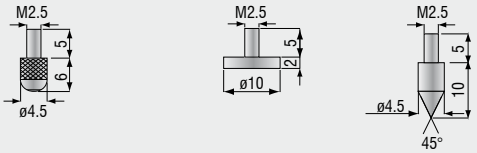
Flange DTA-F10



Flange DTA-F20



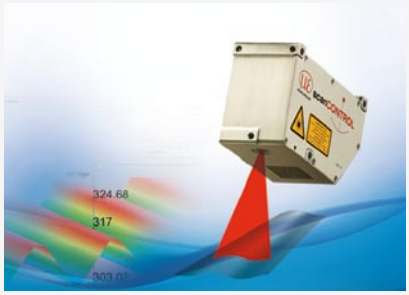
Standard probe tip: type 2 **Option: type 11** **Option: type 13**



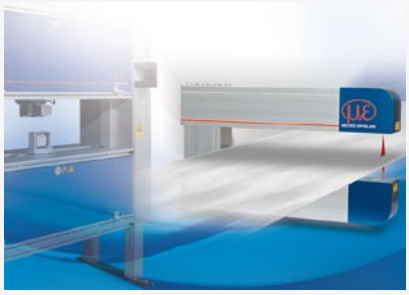
High performance sensors made by Micro-Epsilon

Sensors and systems for displacement and position

Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Measurement and inspection systems for quality assurance

Optical micrometers, fiber optic sensors and fiber optics

Color recognition sensors, LED analyzers and color online spectrometer

Modifications reserved / Y9761177-B031072GKE

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