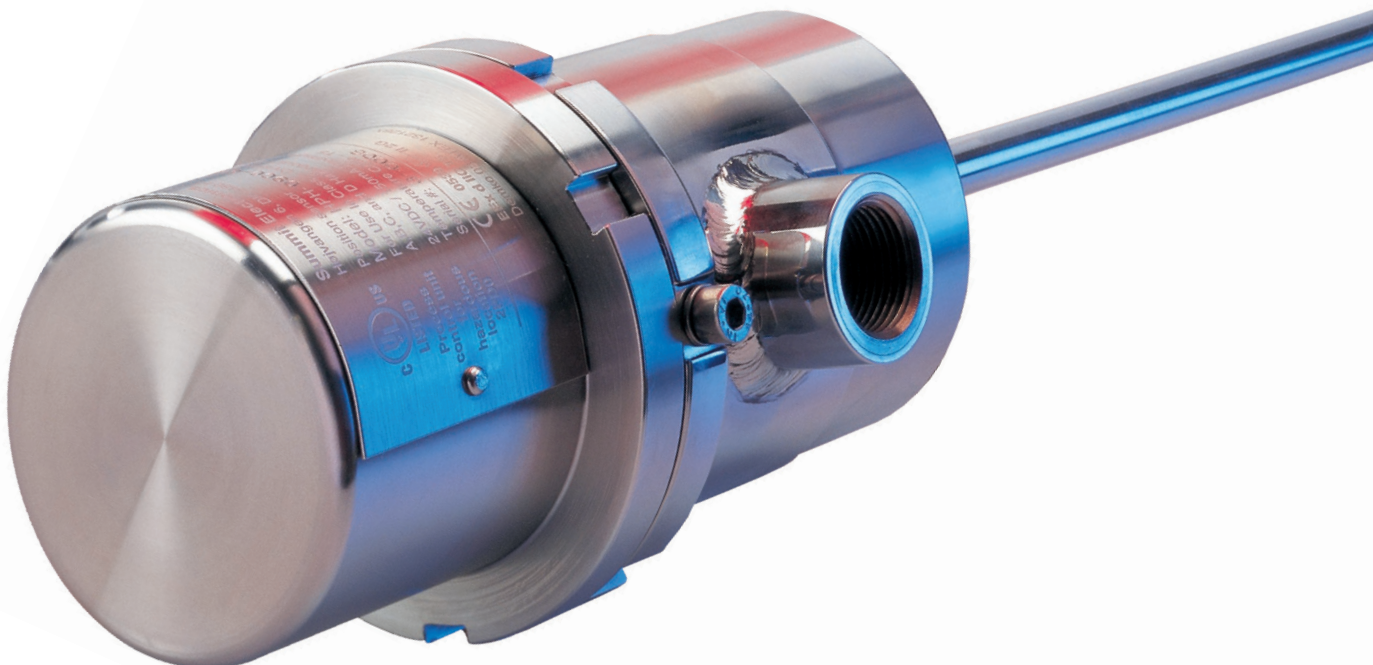


Temposonics®

Magnetostrictive Linear Position Sensors

DATA SHEET

High Pressure Housing (HPH)



ATEX



Data Sheet

High Pressure Housing

PRECISION POSITION MEASUREMENT – HPH

This High Pressure Housing (HPH) is ATEX-IECEX as well as UL and cUL approved for use in hazardous locations with Temposonics® position sensors. The ATEX, UL and cUL approvals cover flammable gases, vapors, liquids and dust.

This housing is made to fit Temposonics® G-Series analog + start/stop sensors and R-Series sensors with analog and digital outputs. Both fixed cable and connector versions can be used. When using a standard sensor in this housing you get a cost efficient solution for use in hazardous locations which also allows easy sensor replacement.

Several design combinations are available to fit your application:

- M18 or 3/4" UNF mounting flange
- M20 or 1/2" NPT cable gland thread
- top mounted or single/dual side-mounted

See design combination chart.

All parts are made of 316L stainless steel. The housing is also available in non-approved versions ensuring an outstanding protection to the sensor when used in rigged applications with high humidity and aggressive gases.


HPH ROTATION ADAPTOR

This adaptor allows you to adjust the position of the side opening when the HPH housing is mounted in a cylinder. The adaptor is pressure tested to 600 bar/8400 psi.

- **RTA-M18** is for use with the standard M18 housing thread and has a M30×1.5 mounting thread.
- **RTA-3/4" UNF** is for use with the 3/4" UNF housing thread and has a 1 1/16" UNF mounting thread.
- **253 961** is for use with the 3/4" UNF housing thread and has a 1 1/4" UNF mounting thread.

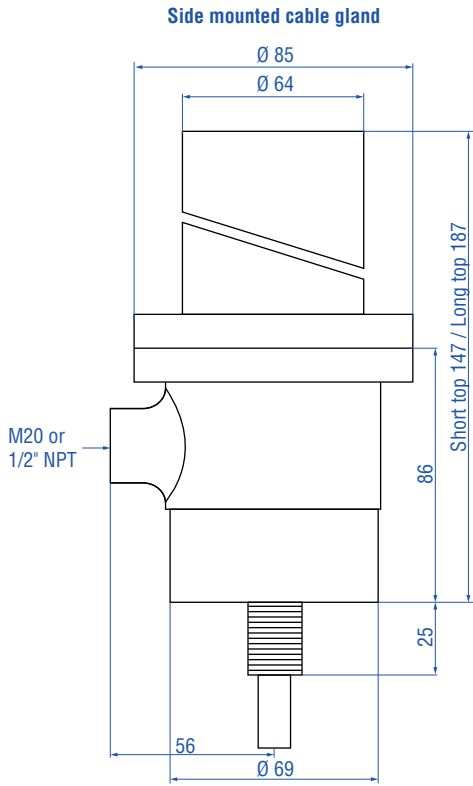
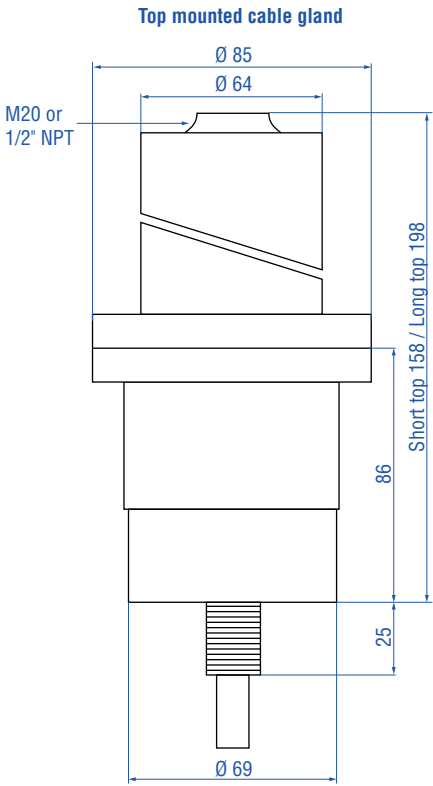
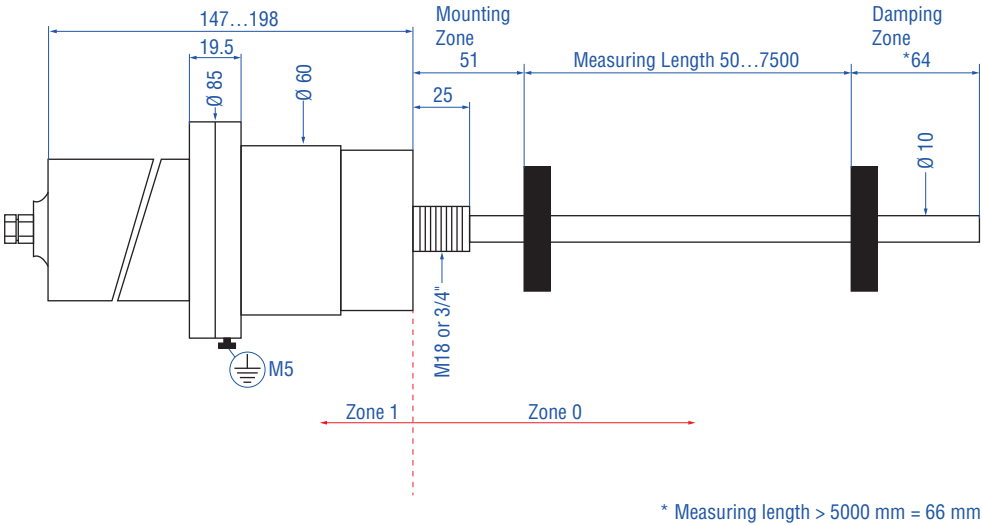


TECHNICAL DATA

ATEX, IECEX	TÜV 13 ATEX 121172 X IECEX TUN 13 0011 X ⊕ Ex II 1/2 G Ex d IIC T5 Gb ⊕ Ex II 1/2 D Ex tb IIIC T100°C Db T _{amb} -40° to +75°C ⁽¹⁾ In accordance with EN 60079-0, EN 60079-1, EN 60079-31 Only with ATEX and IECEX approved cable glands
	Class 1, Division 1, Groups A, B, C, and D hazardous locations, temperatur code T5 As to fire, electrical shock and explosion hazards only UL certificated no. 2PD0. In accordance with UL 1203 standard. Only with UL approved cable glands
Material	Stainless steel AISI 316L (1.4404)
Cable gland threads	M20×1.5 or 1/2" NPT
Ingress protection code	IP68 (only with IP68 approved cable gland)
Approved sensors	G-Series Analog+Digital R-Series Analog R-Series Profibus R-Series CANBUS R-Series SSI R-Series DeviceNet
Mounting flange	M18×1.5 or 3/4" - 16UNF - 3A
Pressure rating	350 bar
Peak pressure	530 bar
Magnet type	Ring magnets
Level measurement	Float on request
Operating temperature	-40...+75 °C ⁽¹⁾

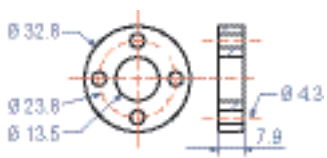

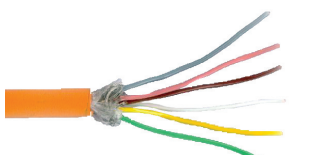
¹/T_{amb}+ is limited to max T_{amb}+ of used sensor -10°C

TECHNICAL DRAWING



All dimensions in mm

ACCESSORIES

Position magnet		Cable connectors	
			
<p>Standard ring magnet Part no. 201 542-2</p> <p>Material: PA ferrite GF20 Weight: ca. 14 g Operating temperature: -40...+100 °C Surface pressure: max. 40 N/mm² Fastening torque for M4 screws: max. 1 Nm</p>		<p>Female, straight, 6 pin Part no. 370 423</p> <p>Housing: zinc nickel plated Termination: solder Contact insert: silver plated Cable clamp: PG9 Cable Ø: 6...8 mm</p>	
			
		<p>Female, straight, 6 pin with 10 m PUR cable Part no. MTS-A-370423-1000-530052</p>	
Spanner tool		Cable glands ATEX	
<p>Spanner tool Part no. DIN 1018A AMF 80-90 mm</p>		<p>M20×1.5 Part no. CG-816679</p> <p>Type no. ADE1F-4 4...8.5 mm cable diameter, stainless steel</p>	
		<p>M20×1.5 Part no. CG-816609</p> <p>Type no. ADE1F-6 8.5...16 mm cable diameter, stainless steel</p>	
		<p>1/2" NPT cable gland ATEX/CSA US, 180 °C; Part no. 403 042</p> <p>Type no. A3LF/16 1/2 NPT 4.0...8.4 mm cable diameter, nickel plated brass</p>	
HPH rotation adapters			
<p>For M18, M30×1.5 Part no. RTA-M18</p>		<p>For 3/4" UNF; 1 1/16 Part no. RTA-3/4" UNF-2</p>	
		<p>For 3/4" UNF; 1 1/4" Part no. 253 961</p>	

See document "551444" for further accessories.

ORDER CODE

H	P	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X
			a				b				c	d				

a	Design combination			
X	X	X	X	Choose a design combination from the chart below

b	Stroke length			
X	X	X	X	50...7500 mm

c	Version
A	Approved
N	Non approved

d	Type of approval for version 1000					
A	T	E	X			ATEX
U	L	/	c	U	L	UL/cUL

Example:

Approved short housing with M18 mounting threads and one side mounted cable gland with M20 threads and a measuring length of 650 mm:

HPH-0900-0650-A

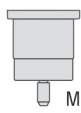
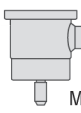
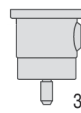
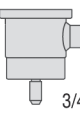
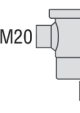








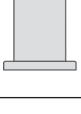
DELIVERY



High Pressure Housing

Please order separately:
Basic sensor and accessories

DESIGN COMBINATION CHART

Bottom \ Top	 M 18	 M 20	 1/2" NPT	 1/2" NPT	 M 20
Top \ Bottom	 M 18	 M 20	 3/4" UNF	 3/4" UNF	 M 18
Approval	ATEX	ATEX	ATEX	UL and cUL	ATEX
 M 20	0100				
		0900	1000 ATEX	1000 UL/cUL	1300
 M 20	0300				
					2100*

* upon request

Document Part Number:

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LOCATIONS

GERMANY

MTS Sensor Technologie GmbH & Co. KG
Auf dem Schüffel 9
58513 Lüdenscheid, Germany
Tel. + 49 2351 9587-0
Fax + 49 2351 56491
info.de@mtssensors.com
www.mtssensors.com

USA

MTS Systems Corporation Sensors Division
3001 Sheldon Drive
Cary, N.C. 27513, USA
Tel. +1 919 677-0100
Fax +1 919 677-0200
info.us@mtssensors.com
www.mtssensors.com

JAPAN

MTS Sensors Technology Corp.
737 Aihara-machi,
Machida-shi,
Tokyo 194-0211, Japan
Tel. +81 42 775-3838
Fax +81 42 775-5512
info.jp@mtssensors.com
www.mtssensors.com

FRANCE

MTS Systems SAS
Zone EUROPARC Bâtiment EXA 12
16/18, rue Eugène Dupuis
94046 Creteil, France
Tel. + 33 1 58 4390-28
Fax + 33 1 58 4390-03
info.fr@mtssensors.com
www.mtssensors.com

ITALY

MTS Systems Srl.Sensor Division
Via Diaz,4
25050 Provaglio d'Iseo (BS), Italy
Tel. + 39 030 988 3819
Fax + 39 030 982 3359
info.it@mtssensors.com
www.mtssensors.com

CHINA

MTS Sensors
Room 504, Huajing Commercial Center,
No. 188, North Qinzhou Road
200233 Shanghai, China
Tel. +86 21 6485 5800
Fax +86 21 6495 6329
info.cn@mtssensors.com
www.mtssensors.com

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