

**Selection and Ordering data**

Article No.

**Selection and Ordering data**

Order code

**Pointek CLS500, threaded**

Inverse frequency shift capacitance level and material detection switch for detecting interfaces, solids, liquids, toxic and aggressive chemicals in critical conditions of extreme temperature and pressure. CLS500 also has the ability to tune out buildup on the probe.

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

**Electronic transmitter**

No transmitter supplied  
MSP 2002-1 (330 pF)

**Process connection**

3/4"  
1"  
1 1/4"  
1 1/2"  
2"

**Threaded connection and rating**

NPT [(Taper), ANSI/ASME B1.20.1]  
R [(BSPT), EN 10226/PT (JIS-T) JIS B 0203]  
G [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]

**Probe insulation/material of process connection**

PFA insulation/316L stainless steel

**Approvals**

General Purpose: CE, CSA/FM, RCM  
CSA/FM Class I, Div. 2, Groups A, B, C, D T4;  
ATEX II 3GD 2D EEx nA [ib] IIC T6 ... T4 T100 °C;  
CSA/FM Class II and III Div. 1, Groups E, F, G T4  
  
ATEX II 1/2 GD EEx d [ia] IIC T6 ... T1 T100 °C  
FM Class I, Div. 1, Groups A, B, C, D T4

**Probe/electrode diameter**

16 mm (0.63 inch) rigid rod, minimum insertion length 200 mm (7.9 inch), maximum insertion length 1 000 mm (39.4 inch)<sup>1)</sup>

**Thermal isolator/remote version**

Rigid thermal isolator [for process connection temperature over 85 °C (185 °F)]  
No thermal isolator

<sup>1)</sup> Add Order code Y01 and Y02 in plain text:  
\*Insertion/active shield length to mm\*

7ML5601-

A 0

0  
1A  
B  
C  
D  
EA  
B  
D

1

1  
2  
  
4  
6

1

A  
B**Further designs**

Please add "-Z" to Article No. and specify Order code(s).

Total insertion length: enter the total insertion length in plain text description

Note: The difference between Y01 and Y02 must be a minimum of 150 mm

Active Shield length - minimum length is 50 mm  
Y02: to mm<sup>1)</sup>

Stainless steel tag [69 x 50 mm (2.71 x 1.97 inch)]:  
Measuring-point number/identification  
(max. 27 characters) specify in plain text

Manufacturer's test certificate: M to DIN 55350,  
Part 18 and to ISO 9000

Inspection Certificate Type 3.1 per EN 10204

**Operating Instructions**

Note: The Operating Instructions should be ordered as a separate line on the order.  
This device is shipped with the Siemens Level and Weighing manual DVD containing the ATEX Quick Start and manual library.

**Pointek Specials**

<sup>1)</sup> See dimension drawings on page 4/76 for further explanation of Y02

Y01

Y02

Y15

C11

C12

See page 4/70

See page 4/79

**Selection and Ordering data**
**Pointek CLS500, welded flange**

Inverse frequency shift capacitance level and material detection switch for detecting interfaces, solids, liquids, toxic and aggressive chemicals in critical conditions of extreme temperature and pressure. CLS500 also has the ability to tune out buildup on the probe.

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

**Electronic transmitter**

MSP 2002-1 (330 pF)

**Process connection and pressure rating**

Welded flange, 316L stainless steel, raised face

2" ASME, 150 lb

2" ASME, 300 lb

3" ASME, 150 lb

3" ASME, 300 lb<sup>1)</sup>

4" ASME, 150 lb<sup>1)</sup>

4" ASME, 300 lb<sup>1)</sup>

6" ASME, 150 lb<sup>1)</sup>

6" ASME, 300 lb<sup>1)</sup>

Welded flange, 316L stainless steel,

Type A flat faced

DN 50 PN 16

DN 50 PN 40

DN 80 PN 16

DN 80 PN 40

DN 100 PN 16<sup>1)</sup>

DN 125 PN 16<sup>1)</sup>

(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1 standard.)

**Probe insulation/material of process connection**

PFA insulation/316L stainless steel

**Approvals**

General Purpose

CSA/FM Class I, Div. 2, Groups A, B, C, D T4;

ATEX II 3GD 2D EEx nA [ib] IIC T6 ... T4 T100 °C;

CSA/FM Class II and III Div. 1, Groups E, F, G T4

ATEX II 1/2 GD EEx d [ia] IIC T6 ... T1 T100 °C

FM Class I, Div. 1, Groups A, B, C, D T4

**Probe/electrode diameter**

16 mm (0.63 inch) rigid rod, min. length 200 mm (7.9 inch), max. length 1 000 mm (39.4 inch)

**Thermal isolator**

Rigid thermal isolator

[for process temperature over 85 °C (185 °F)]

No thermal isolator

**Article No.**

7ML5602-

AA - A 0

1

AA

AB

BA

BB

CA

CB

DA

DB

EC

ED

FC

FD

GC

HC

1

1

2

4

6

1

A

B

**Selection and Ordering data**
**Order code**
**Further designs**

Please add "-Z" to Article No. and specify Order code(s).

Total insertion length: enter the total insertion length in plain text description

**Y01**

Active Shield length - minimum length is 50 mm. Y02: to mm<sup>1)</sup>

**Y02**

Stainless steel tag [69 x 50 mm (2.71 x 1.97 inch)]: Measuring-point number/identification (max. 27 characters) specify in plain text

**Y15**

Manufacturer's test certificate: M to DIN 55350, Part 18 and to ISO 9000

**C11**

Inspection Certificate Type 3.1 per EN 10204

**C12**

**Operating Instructions**

Note: The Operating Instructions should be ordered as a separate line on the order. This device is shipped with the Siemens Level and Weighing manual DVD containing the ATEX Quick Start and manual library.

**See page 4/70**

**Pointek Specials**

**See page 4/79**

<sup>1)</sup> See dimensional drawings on page 4/77 for further explanation of Y02

<sup>1)</sup> Custom shipping methods required. Contact factory for more details.

**Selection and Ordering data**

Article No.

**Selection and Ordering data**

Order code

**Pointek CLS500, single piece flange**

Inverse frequency shift capacitance level and material detection switch for detecting interfaces, solids, liquids, toxic and aggressive chemicals in critical conditions of extreme temperature and pressure. CLS500 also has the ability to tune out buildup on the probe.

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

**Electronic transmitter**

MSP 2002-1 (330 pF)

**Process connection and pressure rating**

Single piece flange, 316L stainless steel, raised face

2" ASME, 150 lb

2" ASME, 300 lb

3" ASME, 150 lb

 3" ASME, 300 lb<sup>1)</sup>

 4" ASME, 150 lb<sup>1)</sup>

 4" ASME, 300 lb<sup>1)</sup>

 6" ASME, 150 lb<sup>1)</sup>

 6" ASME, 300 lb<sup>1)</sup>

Single piece flange, 316L stainless steel, Type B1 raised faced

DN 50 PN 16

DN 50 PN 25

DN 80 PN 16

DN 80 PN 25

 DN 100 PN 16<sup>1)</sup>

 DN 100 PN 25<sup>1)</sup>

 DN 125 PN 16<sup>1)</sup>

 DN 125 PN 25<sup>1)</sup>
**Probe insulation/material of process connection**

PFA insulation/316L stainless steel

**Approvals**

General Purpose: CE, CSA/FM, RCM

CSA/FM Class I, Div. 2, Groups A, B, C, D T4;

ATEX II 3GD 2D EEx nA [ib] IIC T6 ... T4 T100 °C;

CSA/FM Class II and III Div. 1, Groups E, F, G T4

ATEX II 1/2 GD EEx d [ia] IIC T6 ... T1 T100 °C

FM Class I, Div. 1, Groups A, B, C, D T4

**Probe/electrode diameter**

16 mm (0.63 inch) rigid rod, maximum length 1 000 mm (39.4 inch) (Y01)

**Thermal isolator**

Rigid thermal isolator [for process connection temperature over 85 °C (185 °F)]

No thermal isolator

7ML5603-

1

AA

AB

BA

BB

CA

CB

DA

DB

EC

ED

FC

FD

GC

GD

HC

HD

1

1

2

4

6

1

A

B

**Further designs**

Please add "-Z" to Article No. and specify Order code(s).

Total insertion length: enter the total insertion length in plain text description

Active Shield length - minimum length is 50 mm. Y02: to mm<sup>1)</sup>

Stainless steel tag [69 x 50 mm (2.71 x 1.97 inch)]: Measuring-point number/identification (max. 27 characters) specify in plain text

Manufacturer's test certificate: M to DIN 55350, Part 18 and to ISO 9000

Inspection Certificate Type 3.1 per EN 10204

**Operating Instructions**

Note: The Operating Instructions should be ordered as a separate line on the order. This device is shipped with the Siemens Level and Weighing manual DVD containing the ATEX Quick Start and manual library.

**Accessories**

<sup>1)</sup> See dimensional drawings on page 4/77 for further explanation of Y02

<sup>1)</sup> Custom shipping methods required. Contact factory for more details

**Selection and Ordering data**

Article No.

**Pointek CLS500 High temperature**
**7ML5604-**

Inverse frequency shift capacitance level and material detection switch for detecting interfaces, solids, liquids, toxic and aggressive chemicals in critical conditions of extreme temperature and pressure. CLS500 also has the ability to tune out buildup on the probe.

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

**Electronic transmitter**

 None<sup>5)</sup>

MSP 2002-1 (330 pF)

**Process connection and pressure rating**

 316L stainless steel, raised face<sup>1)</sup>

2" ASME, 150 lb

2" ASME, 300 lb

2" ASME, 600 lb

2" ASME, 900 lb

3" ASME, 150 lb

 3" ASME, 300 lb<sup>2)</sup>

 3" ASME, 600 lb<sup>2)</sup>

 3" ASME, 900 lb<sup>2)</sup>

 4" ASME, 150 lb<sup>2)</sup>

 4" ASME, 300 lb<sup>2)</sup>

 4" ASME, 600 lb<sup>2)</sup>

 4" ASME, 900 lb<sup>2)</sup>

 6" ASME, 150 lb<sup>2)</sup>

 6" ASME, 300 lb<sup>2)</sup>

 6" ASME, 600 lb<sup>2)</sup>

 6" ASME, 900 lb<sup>2)</sup>

316L stainless steel, Type B1 flat faced

DN 50 PN 16

DN 50 PN 25

DN 50 PN 40

DN 50 PN 63

DN 80 PN 16

DN 80 PN 25

 DN 80 PN 40<sup>2)</sup>

 DN 80 PN 63<sup>2)</sup>

 DN 100 PN 16<sup>2)</sup>

 DN 100 PN 25<sup>2)</sup>

 DN 100 PN 40<sup>2)</sup>

 DN 100 PN 64<sup>2)</sup>

 DN 125 PN 16<sup>2)</sup>

 DN 125 PN 25<sup>2)</sup>

 DN 125 PN 40<sup>2)</sup>

 DN 125 PN 64<sup>2)</sup>

(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1 standard.)

A -

0

1

**A 1**
**A 2**
**A 3**
**A 4**
**B 1**
**B 2**
**B 3**
**B 4**
**C 1**
**C 2**
**C 3**
**C 4**
**D 1**
**D 2**
**D 3**
**D 4**
**E 1**
**E 2**
**E 3**
**E 4**
**F 1**
**F 2**
**F 3**
**F 4**
**G 1**
**G 2**
**G 3**
**G 4**
**H 1**
**H 2**
**H 3**
**H 4**
**Selection and Ordering data**

Article No.

**Pointek CLS500 High temperature**
**7ML5604-**

Inverse frequency shift capacitance level and material detection switch for detecting interfaces, solids, liquids, toxic and aggressive chemicals in critical conditions of extreme temperature and pressure. CLS500 also has the ability to tune out buildup on the probe.

**Probe material of process connection**

 No insulation/316L stainless steel<sup>3)4)</sup>
**Stilling well**

No stilling well

**Approvals**

General Purpose

CSA/FM Class I, Div. 2, Groups A, B, C, D T4;  
ATEX II 3GD 2D EEx nA [ib] IIC T6 ... T4 T100 °C;  
CSA/FM Class II and III Div. 1, Groups E, F, G T4

ATEX II 1/2 GD EEx d [ia] IIC T6 ... T1 T100 °C

FM Class I, Div. 1, Groups A, B, C, D T4

**Probe/electrode diameter**

 Maximum length 1 000 mm (39.37 inch)<sup>4)</sup>
**Thermal isolator**

Rigid thermal isolator [for process connection temperature over 85 °C (185 °F)]

<sup>1)</sup> Welded flange for no insulation option only

<sup>2)</sup> Custom shipping methods required

<sup>3)</sup> Non-conductive material only, stainless steel non-insulated probe diameter 19 mm (0.75 inch)

<sup>4)</sup> Add Order code Y01 and Y02 in plain text: "Insertion/active shield length to mm"

Minimum insertion length depends on probe version selected. See dimensional drawings on page 4/76 for more details

<sup>5)</sup> Only available with Approvals option A

A -

1

0

**A**
**B**
**D**
**F**
**A**

1

**Selection and Ordering data**

Order code

**Further designs**

Please add **"-Z"** to Article No. and specify Order code(s).

Total insertion length: enter the total insertion length in plain text description

**Y01**

Active Shield length - minimum length is 50 mm. Y02: to mm<sup>1)</sup>

**Y02**

Stainless steel tag [69 x 50 mm (2.71 x 1.97 inch)]: Measuring-point number/identification (max. 27 characters) specify in plain text

**Y15**

Manufacturer's test certificate: M to DIN 55350, Part 18 and to ISO 9000

**C11**

Inspection Certificate Type 3.1 per EN 10204

**C12****Operating Instructions**

Article No.

English

**7ML1998-5GG03**

German

**7ML1998-5GG32**

Note: The Operating Instructions should be ordered as a separate line on the order.

All literature is available to download for free, in a range of languages, at <http://www.siemens.com/processinstrumentation/documentation>

This device is shipped with the Siemens Level and Weighing manual DVD containing the ATEX Quick Start and Operating Instructions library.

**Accessories**General Purpose

1/2" NPT General Purpose Cable Entry IP68/IP69K NEMA6, -40 ... +100 °C (-40 ... +212 °F), cable size 6 ... 12 mm (0.236 ... 0.472 inch)

**7ML1830-1JA**

M20 x 1.5 General Purpose Cable Entry IP68/IP69K NEMA6, -40 ... +100 °C (-40 ... +212 °F), cable size 7 ... 12 mm (0.275 ... 0.472 inch)

**7ML1830-1JC**

Transmitter, MSP 2002-1, 330 PF

**7ML1830-1JP**Hazardous Locations

1/2" NPT EMC rated Cable Gland: Dust Ignition Proof, Flameproof Exd, and Increased Safety ATEX II 2 GD ExtD A21 (Zone 1, Zone 2, Zone 21, Zone 22, and in Gas Groups IIA, IIB, and IIC) -60 ... +80 °C IP66, IP67, IP68, NEMA4X, cable sizes 5.5 ... 12 mm (0.216 ... 0.472 inch)

**7ML1830-1JB**

M20 EMC rated Cable Gland: Dust Ignition Proof, Flameproof Exd, and Increased Safety ATEX II 2 GD ExtD A21 (Zone 1, Zone 2, Zone 21, Zone 22, and in Gas Groups IIA, IIB and IIC) -60 ... +80 °C IP66, IP67, IP68, NEMA4X, cable sizes 5.5 ... 12 mm (0.216 ... 0.472 inch)

**7ML1830-1JD****Pointek Specials****See page 4/79**

<sup>1)</sup> See dimensional drawings on page 4/77 for further explanation of Y02