

Selection and Ordering data

Article No.

Pointek CLS300 - Standard - Rod Version with Threaded or Flanged process connection
7ML5650-

Inverse frequency shift capacitance level and material detection switch with optional rod/cable choices and configurable output. CLS300 is ideal for detecting liquids, solids, slurries, foam, and interfaces in demanding conditions where high pressure and temperatures are present, and 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.

Process connection
Threaded, 316L stainless steel

¾" NPT [(Taper), ANSI/ASME B1.20.1]

0 A

1" NPT [(Taper), ANSI/ASME B1.20.1]

0 B

1¼" NPT [(Taper), ANSI/ASME B1.20.1]

0 C

1½" NPT [(Taper), ANSI/ASME B1.20.1]

0 D

R ¾" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]

1 A

R 1" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]

1 B

R 1½" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]

1 D

G ¾" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]

3 A

G 1" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]

3 B

G 1½" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]

3 D

Welded flange, 316L stainless steel, raised face

1" ASME, 150 lb

5 A

1" ASME, 300 lb

5 B

1" ASME, 600 lb

5 C

1½" ASME, 150 lb

5 D

1½" ASME, 300 lb

5 E

1½" ASME, 600 lb

5 F

2" ASME, 150 lb

5 G

2" ASME, 300 lb

5 H

2" ASME, 600 lb

5 J

3" ASME, 150 lb

5 K

3" ASME, 300 lb

5 L

3" ASME, 600 lb

5 M

4" ASME, 150 lb

5 N

4" ASME, 300 lb

5 P

4" ASME, 600 lb

5 Q

Welded flange, 316L stainless steel,
Type A flat faced

DN 25, PN 16

6 A

DN 25, PN 40

6 B

DN 40, PN 16

6 C

DN 40, PN 40

6 D

DN 50, PN 16

6 E

DN 50, PN 40

6 F

DN 80, PN 16

6 G

DN 80, PN 40

6 H

DN 100, PN 16

6 J

DN 100, PN 40

6 K

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

Probe length (length from flange face)

(threaded lengths include process thread)

Note: No Y01 needed in Order code for standard lengths

Standard version, rod 350 mm (13.78 inch)

A

Extended rod, length 500 mm (19.69 inch)

B

Extended rod, length 750 mm (29.53 inch)

C

Extended rod, length 1 000 mm (39.37 inch)

D

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Add Order code Y01 and plain text: "Insertion length ... mm"

Extended rod, factory adjusted length 250 ... 499 mm (9.8 ... 19.65 inch)

E

Extended rod, factory adjusted length 500 ... 749 mm (19.69 ... 29.49 inch)

F

Extended rod, factory adjusted length 750 ... 999 mm (29.53 ... 39.3 inch)

G

Thermal isolator

Without thermal isolator

0

With thermal isolator [for process connection temperatures over 85 °C (185 °F)]

1

Wetted seals

FKM

0

FFKM [for process temperatures above -20 °C (-4 °F)]

1

Probe material

316L stainless steel with PFA lining and PEEK isolators

0

Approvals

Dust Ignition Proof with IS Probe: CE, RCM, ATEX II 1/2 D T100 °C

C

Flameproof Enclosure with IS Probe: CE, RCM, ATEX II 1/2 G EEx d[ia] IIC T6 ... T1, ATEX II 1/2 D T100 °C

D

Flameproof Enclosure with IS Probe, with WHG approval: CE, RCM, ATEX II 1/2 G EEx d[ia] IIC T6 ... T1, ATEX II 1/2 D T100 °C

E

Dust Ignition Proof with IS Probe: CSA/FM Class II, Div. 1, Groups E, F, G CSA/FM Class III T4

F

Explosion Proof Enclosure with IS Probe: CSA/FM Class I, Div. 1, Groups A, B, C, D CSA/FM Class II, Div. 1, Groups E, F, G CSA/FM Class III T4

G

General Purpose (CSA, FM)

H

General Purpose (CE, RCM)

J

General Purpose with WHG approval (CSA, FM, CE, RCM)

K

Enclosure and lid
Aluminum epoxy coated

2 x ½" NPT via adapter - cable inlet, IP65

A

2 x M20 x 1.5 cable inlet, IP65

B

2 x ½" NPT via adapter - cable inlet, IP68

C

2 x M20 x 1.5 cable inlet, IP68

D

Active shield length

Standard length - (125 mm threaded, 105 mm flanged)

0

 Extended shield - (250 mm threaded, 230 mm flanged)¹⁾

1

 Extended shield - (400 mm threaded, 380 mm flanged)²⁾

2

¹⁾ Available with Probe version options B ... D, F, G only [≥ 500 mm (19.69 inch)]

²⁾ Available with Probe version options C, D, and G only [≥ 750 mm (29.53 inch)]

➤ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol. For details see page 9/5 in the appendix.

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**

 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.

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Accessories
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- ◆ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol ◆. For details see page 9/5 in the appendix.

Selection and Ordering data

Article No.

Pointek CLS300 - Standard - Cable Version with Threaded or Flanged process connection
7ML5651-

Inverse frequency shift capacitance level and material detection switch with optional rod/cable choices and configurable output. CLS300 is ideal for detecting liquids, solids, slurries, foam, and interfaces in demanding conditions where high pressure and temperatures are present, and 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.

Process connection
Threaded, 316L stainless steel

 1¼" NPT [(Taper), ANSI/ASME B1.20.1] **0 C**

 1½" NPT [(Taper), ANSI/ASME B1.20.1] **0 D**

 R 1½" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203] **1 D**

 G 1½" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202] **3 D**
Welded flange, 316L stainless steel, raised face

 1½" ASME, 150 lb **5 D**

 1½" ASME, 300 lb **5 E**

 1½" ASME, 600 lb **5 F**

 2" ASME, 150 lb **5 G**

 2" ASME, 300 lb **5 H**

 2" ASME, 600 lb **5 J**

 3" ASME, 150 lb **5 K**

 3" ASME, 300 lb **5 L**

 3" ASME, 600 lb **5 M**

 4" ASME, 150 lb **5 N**

 4" ASME, 300 lb **5 P**

 4" ASME, 600 lb **5 Q**
Welded flange, 316L stainless steel,
Type A flat faced

 DN 40, PN 16 **6 C**

 DN 40, PN 40 **6 D**

 DN 50, PN 16 **6 E**

 DN 50, PN 40 **6 F**

 DN 80, PN 16 **6 G**

 DN 80, PN 40 **6 H**

 DN 100, PN 16 **6 J**

 DN 100, PN 40 **6 K**

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

Probe length (length from flange face) (threaded lengths include process thread)

 Note: No Y01 needed in Order code for standard lengths

 Extended cable, 3 000 mm (118.11 inch), length can be shortened by customer **A**

 Extended cable, 6 000 mm (236.22 inch), length can be shortened by customer **B**

 Add Order code Y01 and plain text: "Insertion length ... mm"

 Extended cable, 500 ... 1 000 mm (19.69 ... 39.37 inch) **E**

 Extended cable, 1 001 ... 5 000 mm (39.41 ... 196.85 inch) **F**

 Extended cable, 5 001 ... 10 000 mm (196.89 ... 393.70 inch) **G**

 Extended cable, 10 001 ... 15 000 mm (393.74 ... 590.55 inch) **H**

 Extended cable, 15 001 ... 20 000 mm (590.59 ... 787.40 inch) **J**

 Extended cable, 20 001 ... 25 000 mm (787.44 ... 984.25 inch) **K**

Selection and Ordering data

Article No.

Further designs

Order code

Pointek CLS300 - Standard - Cable Version with Threaded or Flanged process connection
7ML5651-

Inverse frequency shift capacitance level and material detection switch with optional rod/cable choices and configurable output. CLS300 is ideal for detecting liquids, solids, slurries, foam, and interfaces in demanding conditions where high pressure and temperatures are present, and has the ability to tune out buildup on the probe.

Thermal isolator

Without thermal isolator 0
 With thermal isolator [for process connection temperatures over 85 °C (185 °F)] 1

Wetted seals

FKM 0
 FFKM [for process temperatures above -20 °C (-4 °F)] 1

Probe material

Bare 316L stainless steel cable, PEEK isolators and 316L stainless steel cable weight 0
 PFA coated cable, PEEK isolators and 316L stainless steel cable weight 1

Approvals

Dust Ignition Proof with IS Probe: CE, RCM, ATEX II 1/2 D T100 °C C
 Flameproof Enclosure with IS Probe: CE, RCM, ATEX II 1/2 G EEx d[ia] IIC T6 ... T1, ATEX II 1/2 D T100 °C D
 Flameproof Enclosure with IS Probe, with WHG approval: CE, RCM, ATEX II 1/2 G EEx d[ia] IIC T6 ... T1, ATEX II 1/2 D T100 °C E
 Dust Ignition Proof with IS Probe: CSA/FM Class II, Div. 1, Groups E, F, G CSA/FM Class III T4 F
 Explosion Proof Enclosure with IS Probe: CSA/FM Class I, Div. 1, Groups A, B, C, D CSA/FM Class II, Div. 1, Groups E, F, G CSA/FM Class III T4 G
 General Purpose (CSA, FM) H
 General Purpose (CE, RCM) J
 General Purpose with WHG approval (CSA, FM, CE, RCM) K

Enclosure and lid

Aluminum epoxy coated

2 x 1/2" NPT via adapter - cable inlet, IP65 A
 2 x M20 x 1.5 cable inlet, IP65 B
 2 x 1/2" NPT via adapter - cable inlet, IP68 C
 2 x M20 x 1.5 cable inlet, IP68 D

Active shield length

Standard length - (125 mm threaded, 105 mm flanged) 0
 Extended shield - (250 mm threaded, 230 mm flanged)¹⁾ 1
 Extended shield - (400 mm threaded, 380 mm flanged)¹⁾ 2

¹⁾ Available with Probe version options A, B, F ... K, only [≥ 1 000 mm (39.7 inch)]

We can offer shorter delivery times for configurations designated with the Quick Ship Symbol . For details see page 9/5 in the appendix.

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

Total insertion length: enter the total insertion length in plain text description **Y01**

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.

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Accessories

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Selection and Ordering data

Article No.

Pointek CLS300 - Standard - High Temperature Rod Version with Threaded or Flanged process connection

7ML5652-

Inverse frequency shift capacitance level and material detection switch with optional rod/cable choices and configurable output. CLS300 is ideal for detecting liquids, solids, slurries, foam, and interfaces in demanding conditions where high pressure and temperatures are present, and 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.

Process connection

Threaded, 316L stainless steel

- 0 A 3/4" NPT [(Taper), ANSI/ASME B1.20.1]
- 0 B 1" NPT [(Taper), ANSI/ASME B1.20.1]
- 0 C 1 1/4" NPT [(Taper), ANSI/ASME B1.20.1]
- 0 D 1 1/2" NPT [(Taper), ANSI/ASME B1.20.1]
- 1 A R 3/4" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]
- 1 B R 1" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]

- 1 D R 1 1/2" [(BSPT), EN 10226/PT (JIS-T), JIS B 0203]
- 3 A G 3/4" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]
- 3 B G 1" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]
- 3 D G 1 1/2" [(BSPP), EN ISO 228-1/PF (JIS-P), JIS B 0202]

Welded flange, 316L stainless steel, raised face

- 5 A 1" ASME, 150 lb
- 5 B 1" ASME, 300 lb
- 5 C 1" ASME, 600 lb
- 5 D 1 1/2" ASME, 150 lb
- 5 E 1 1/2" ASME, 300 lb
- 5 F 1 1/2" ASME, 600 lb
- 5 G 2" ASME, 150 lb
- 5 H 2" ASME, 300 lb
- 5 J 2" ASME, 600 lb
- 5 K 3" ASME, 150 lb
- 5 L 3" ASME, 300 lb
- 5 M 3" ASME, 600 lb
- 5 N 4" ASME, 150 lb
- 5 P 4" ASME, 300 lb
- 5 Q 4" ASME, 600 lb

Welded flange, 316L stainless steel, Type A flat faced

- 6 A DN 25, PN 16
- 6 B DN 25, PN 40
- 6 C DN 40, PN 16
- 6 D DN 40, PN 40
- 6 E DN 50, PN 16
- 6 F DN 50, PN 40
- 6 G DN 80, PN 16
- 6 H DN 80, PN 40
- 6 J DN 100, PN 16
- 6 K DN 100, PN 40

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

Probe length (length from flange face) (threaded lengths include process thread)

Note: No Y01 needed in Order code for standard lengths

- A Standard version rod, 350 mm (13.78 inch)
- B Extended rod, length 500 mm (19.69 inch)
- C Extended rod, length 750 mm (29.53 inch)
- D Extended rod, length 1 000 mm (39.37 inch)

Selection and Ordering data

Article No.

Pointek CLS300 - Standard - High Temperature Rod Version with Threaded or Flanged process connection

7ML5652-

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Add Order code Y01 and plain text: "Insertion length ... mm"

- E Extended rod, factory adjusted length 250 ... 499 mm (9.8 ... 19.65 inch)
- F Extended rod, factory adjusted length 500 ... 749 mm (19.69 ... 29.49 inch)
- G Extended rod, factory adjusted length 750 ... 999 mm (29.53 ... 39.3 inch)

Wetted seals

- 0 Graphite

Probe material

- 0 316L stainless steel with ceramic (ZrO₂) isolators

Approvals

- C Dust Ignition Proof with IS Probe: CE, RCM, ATEX II 1/2 D T100 °C
- D Flameproof Enclosure with IS Probe: CE, RCM, ATEX II 1/2 G EEx d[ia] IIC T6 ... T1, ATEXII 1/2 D T100 °C
- E Flameproof Enclosure with IS Probe, with WHG approval: CE, RCM, ATEX II 1/2 G EEx d[ia] IIC T6 ... T1, ATEX II 1/2 D T100 °C
- F Dust Ignition Proof with IS Probe: CSA/FM Class II, Div. 1, Groups E, F, G CSA/FM Class III T4
- G Explosion Proof Enclosure with IS Probe: CSA/FM Class I, Div. 1, Groups A, B, C, D CSA/FM Class II, Div. 1, Groups E, F, G CSA/FM Class III T4
- H General Purpose (CSA, FM)
- J General Purpose (CE, RCM)
- K General Purpose with WHG approval (CSA, FM, CE, RCM)

Enclosure and lid

- A Aluminum epoxy coated
- B 2 x 1/2" NPT via adapter - cable inlet, IP65
- C 2 x M20 x 1.5 cable inlet, IP65
- D 2 x 1/2" NPT via adapter - cable inlet, IP68
- 2 x M20 x 1.5 cable inlet, IP68

Active shield length

- 0 Standard length - (125 mm threaded, 105 mm flanged)
- 1 Extended shield - (250 mm threaded, 230 mm flanged)¹⁾
- 2 Extended shield - (400 mm threaded, 380 mm flanged)²⁾

¹⁾ Available with Probe version options B ... D, F, G only [≥ 500 mm (19.69 inch)]

²⁾ Available with Probe version options C, D, and G only [≥ 750 mm (29.53 inch)]

➤ We can offer shorter delivery times for configurations designated with the Quick Ship Symbol. For details see page 9/5 in the appendix.

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**

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.

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Operating Instructions - Standard

English

7ML1998-5JH04

German

7ML1998-5JH34

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.

Operating Instructions - Digital

English

7ML1998-5JJ05

German

7ML1998-5JJ34

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

One metallic cable gland M20 x 1.5, -40 ... +80 °C (-40 ... +176 °F) with integrated shield connection (available for PROFIBUS PA)

7ML1930-1AQGeneral 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)

7ML1830-1JCHazardous 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**Blind threaded flanges are available.**

Customers interested in a custom designed device should consult a local sales person. For more information, please visit

http://www.automation.siemens.com/aspa_app.

Pointek Specials**See page 4/79**