



G2 Flow Through Sensor for 2" pipelines

Measuring range:

- 0-95%, or as high as material can be pumped
- For wide range Brix measuring applications

Quick coupling clamps

Single cable
 Length 10m
 Connector ended

2 * 4 – 20 mA →

← Sensor power 24VDC
 ← Line run, Digital input

Single sensor cable
 Length 10m, Connector ended



DDisplay Unit

Tablet



Power input, 24 VDC , 3 A

Brix 4–20 mA, (Active)

Temp. 4–20 mA, (Active)

RS 485 serial link to Gateway unit

Installation Parts

Weld rings
 Tri-Clamp



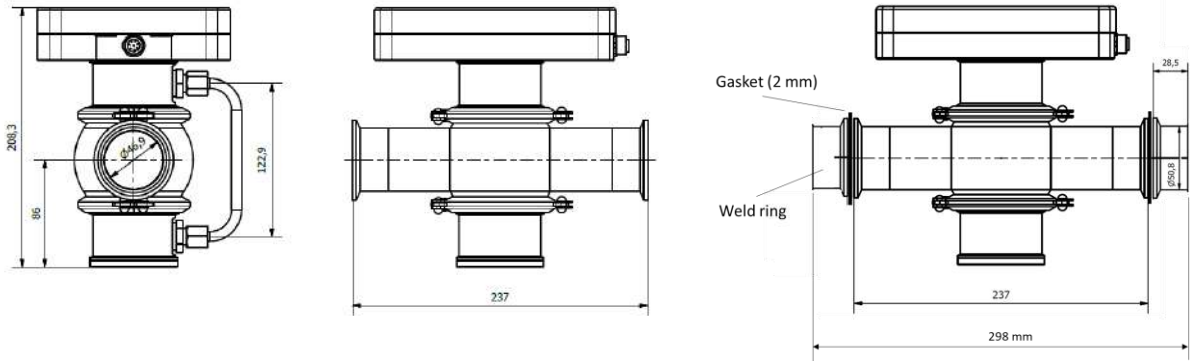
Gaskets
 EPDM
 PTFE Optional

Clamps

Tablet

- Windows 10
- Touch screen 10"
- In-built GSM-Cellular
- All sensor tuning functions
- Manages all sensors of a mill

Sensor Model G2 dimensions, mm



Total installation length, 298 mm

Display Unit connections

Power and I/O CONNECTIONS			
X1			
11	+	24 VDC Main Power	To fuse
12	-	24 VDC Main Power	Blue
13	+	24 VDC to sensor	Red
14	+	Brix, 4-20 mA output Active	Pink
15	-	Brix, 4-20 mA output Active	Grey
16	+	Temp, 4-20 mA output Active	Green
17	-	Temp, 4-20 mA output Active	Yellow
18		4-20 mA via display to X1;16	Grey



Tablet and Remote CONNECTIONS			
X2			
21	-	Rs-485 Remote (Gateway)	
22	-	RS-485 Local (Tablet)	Brown
23	+	Rs-485 Remote (Gateway)	
24	+	RS-485 Local (Tablet)	White

Tablet cable



Tablet

- Windows 10
- Touch screen 10"
- In-built Cellular
- All sensor tuning functions
- Manages all sensors of a mill

Display Unit features

- Numeric Brix Display
- Tablet cable connector
- Sensor cable connections
- Optional Router for Continuous remote access
- Mill connections
 - 24VDC,3A Power
 - 2 * 4-20mA outputs, Active; Max load 750 Ohm
 - Digital Input, 24VDC for Line Run signal

Dimensions

230*230*140 mm

Sensor specifications Inmec Model G2, Flow Through sensor

Measurement

Operating power	24VDC, 3 Amps, Continuous 2 Amps
Microwave power	15 mW
Connection	Cable to Connection unit, 12wire shielded. Connectors Aisi316L
Process connection	Socket Tri-Clamp, 2"
Gasket	EPDM, PTFE As an option

Measuring range

	0-95%, or as high as material can be pumped
Repeatability	+/- 0.01 % concentration
Sensitivity	+/-0.001% concentration
Measuring resolution	0.01% concentration
Output filtering	1 – 300s
Output 1	Brix output. 4 – 20 mA, Active and Isolated. Max load 750 Ohm
Output 2	Temperature output. 4 – 20 mA, Active and Isolated. Max load 750 Ohm
Digital Input	24VDC for Line Run signal
Signal processor	DSP

Process conditions

pH range	3 – 11
Temperature	0 – 140 C
Pressure	
Minimum	Recommended min 1.5 bar to avoid free air
Maximum	PN10 ,
Conductivity	Max. 13mS/cm
Certified	EHDG Hygienic design

Environment

Temperature	0 – +70
Housing	IP65
Vibration	max. 20 m/s ² 10-2000Hz

Materials

Model SRC	Model G2 Sensor body, Aisi 316L
Housing Parts	Aluminum, Anonized
Antennas	Ceramic

Weight and dimensions

3.2 kg ; Sensor length 237 mm; Total installation length 298 mm

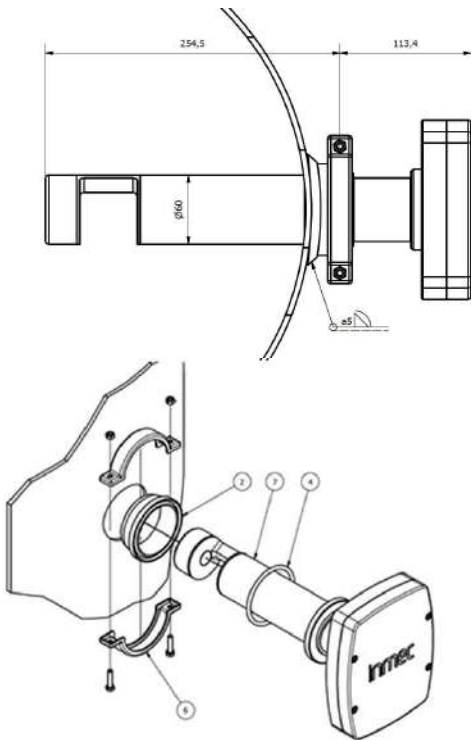
Display Unit specifications

Operating power	24VDC, 3 A
Connection	Cable to sensor, 10m, 8 wire shielded. Connectors Aisi316L
Environment	
Temperature	0 – +70
Housing	IP65
Material	ABS Plastic
Unit weight	1 kg
Dimensions	230*230*140 mm
Wall mount	4 bolts, Corner loops

Features:

- Numeric display of Brix, Density or %-Concentration
- I/O connections
- 24VDC, 3A power supply for the sensor
 - 2 * 4 -20mA outputs forwarded from the sensor, Active and Isolated, Max. load 750 Ohm
 - Digital Input 24VDC for Line Run signal
 - RS 485 serial link to external Gateway unit
 - Optional GSM Router for Remote access
 - Connection to the Operating Tablet, USB-A

Standard Model IL assembly

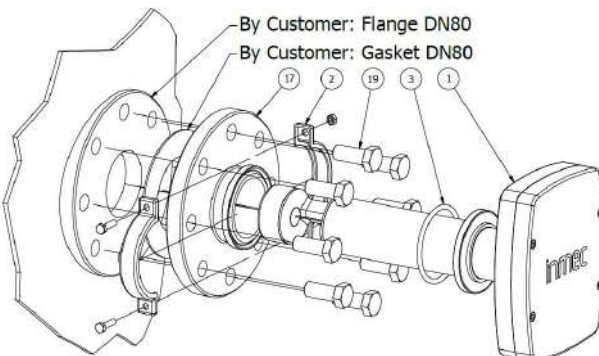
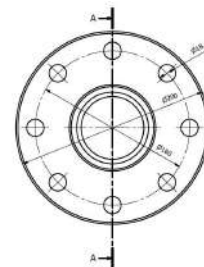
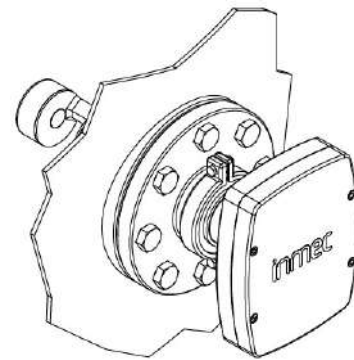
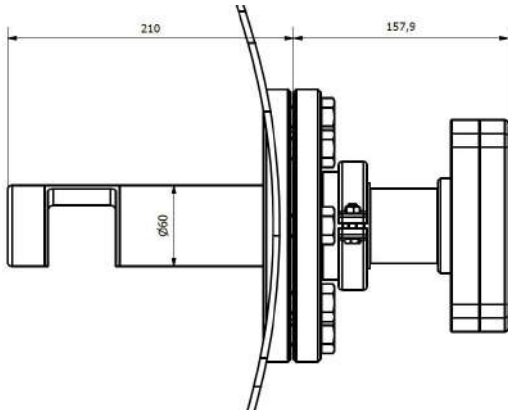


Model IL Union-L quick coupling,
Pressure rating: 10 Bar
Note: Assembly with adapters follow 10 bar rating

Part list					
Item	Qty	Part nr	Rev	Description	
2	1	Union-L 76.1x2.9 Ring			
4	1	O-ring		75x5mm NBR (option: Viton)	
6	1	31720		Ret Clamp Set 76,1	
7	1	E700804	v1.1	Inmec-IL-Union-L Sensor & Box Assembly	
Material		Mass	Volume	Area	Project
Designed by PRa		Checked by	Approved by	Date	Revision
				3.11.2020	1.0
				Title: Inmec-IL-Union-L S-Installation	
		inmec Instruments Ltd		Part number E700805	Revision v1.1
				Sheet 1 / 1	

Note! Item 2 available with extended length for reduced probe insertion

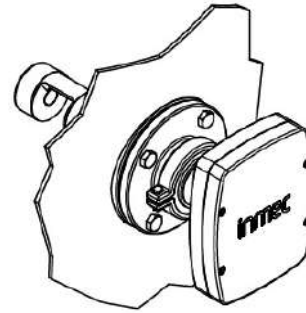
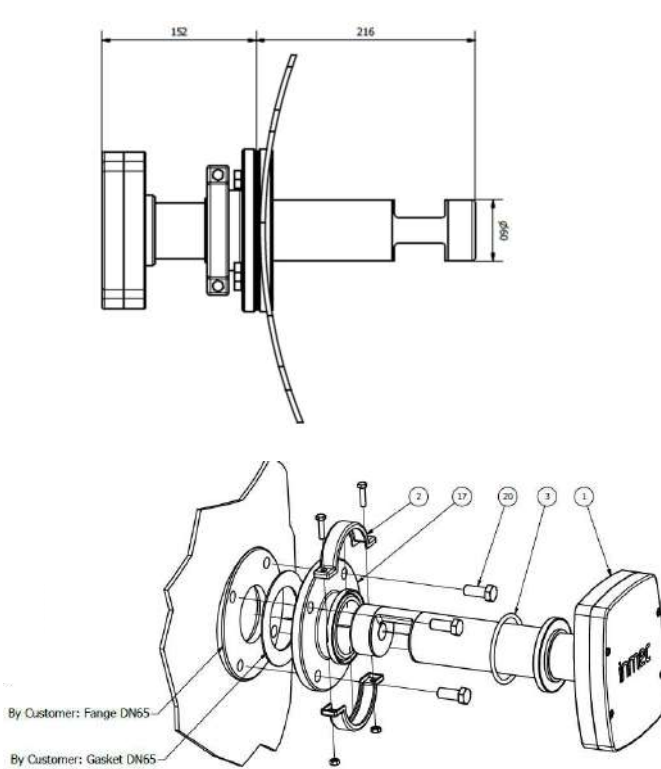
Model IL assembly
with Adapter DN80-PN10-16. Aisi 316L



Part list					
Item	Qty	Part nr	Rev	Description	
1	1	E700005	v1.1	Inmec-IL-Union-L Sensor Unit Assembly	
2	1	31720		Ret Clamp Set 76,1	
3	1	O-ring		75x5mm NBR (option: Viton)	
17	1	E700131	v1.0	Adapter DN80 PN10-16 Union-L	
19	8	ISO 4017 - M16 x 40		Hex-Head Bolt	
Material		Mass	Volume	Area	Project
Designed by PRa		Checked by	Approved by	Date	Revision
				5.11.2020	1.0
		inmec Instruments Ltd		Title: Model IL DN80-PN10-16 With Adapter Mounting	
				Part number E700130	Revision 1.0
				Sheet 1 / 1	

Note! Item 17 available according to other Standard or customized sizing

**Model IL assembly
with Adapter DN65-PN6. Aisi 316L**



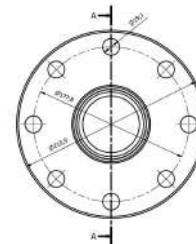
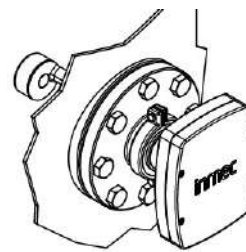
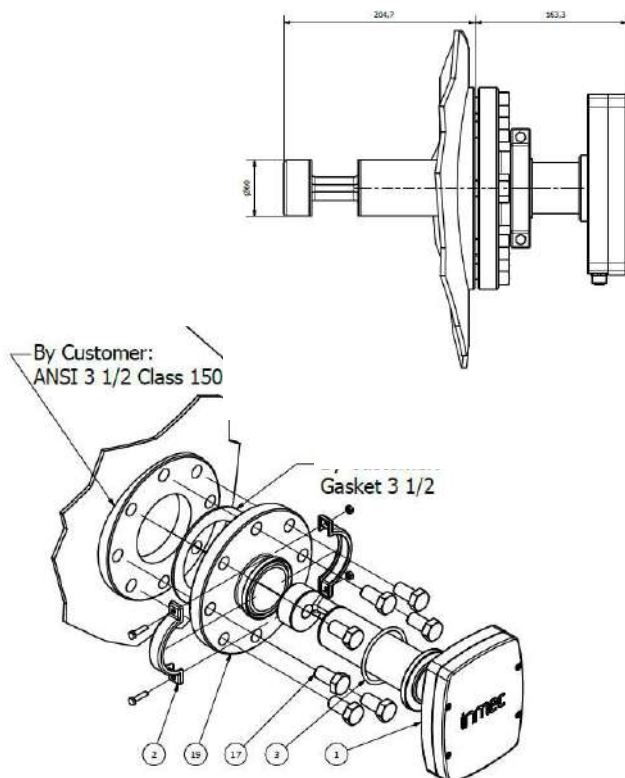
Part list				
Item	Qty	Part no	Rev	Description
1	1	E700005	v1.5	Inmec IL Union-L Sensor Unit Assembly
2	1	JL720		Rat Clamp Set 76, L
3	1	O-Ring		75x5mm NBR (option: Viton)
17	1	H700133	v1.0	Adapter inmec-DN65-PN6
20	4	ISO 4017 - M12 x 30		Hex-Head Bolt

Material	Mass	Volume	Area	Project
N/A	N/A	N/A	N/A	
Designed by PRa	Checked by	Approved by	Date	Date 27.1.2021

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Instruments Ltd

Title Model IL DN65-PN6 With Adapter Mounting			
Part number E700134	Revision 1.0	Sheets 1 / 1	

**Model IL assembly
with Adapter ANSI 31/2 Class 150. Aisi 316L**

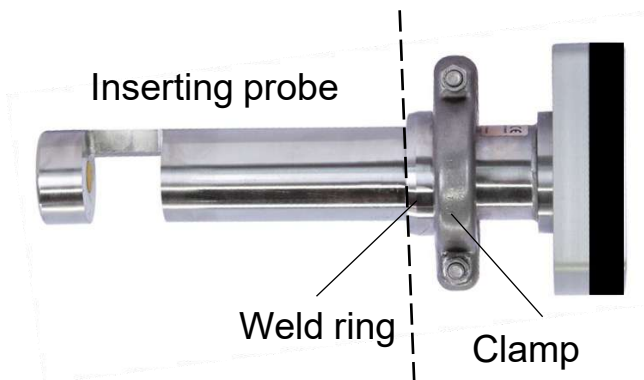


Part list				
Item	Qty	Part no	Rev	Description
1	1	E700005	v1.0	Inmec IL Union-L Sensor Unit Assembly
2	1	JL720		Rat Clamp Set 76, L
3	1	O-Ring		75x5mm NBR (option: Viton)
17	8	ISO 4017 - M16 x 35		Hex-Head Bolt
19	1	H700126	v1.1	Adapter ANSI 3-5 Class 150-Union-L

Material	Mass	Volume	Area	Project
N/A	N/A	N/A	N/A	
Designed by PRa	Checked by	Approved by	Date	Date 3.11.2020

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Instruments Ltd

Title Model IL with Adapter ANSI3.5-ANSI-Class 150			
Part number E700156	Revision v1.1	Sheets 1 / 1	



Digital measuring
 electronics,
 all integrated

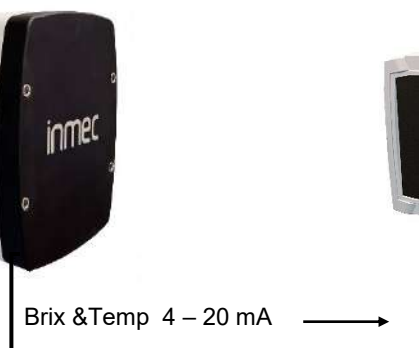
Measuring range:

- Designed for full range measurement, 0-100%
- Factory configured by customer specification



Quick coupling

Optional bolt flange
 adapters
 available



Single sensor cable
 Length 10m, Connector ended



Display unit



Tablet

Power input, 24 VDC , 3 A

Brix, 4-20 mA (Active)

Temp. 4-20 mA, (Active)

RS 485 serial link to Gateway unit

Installation parts



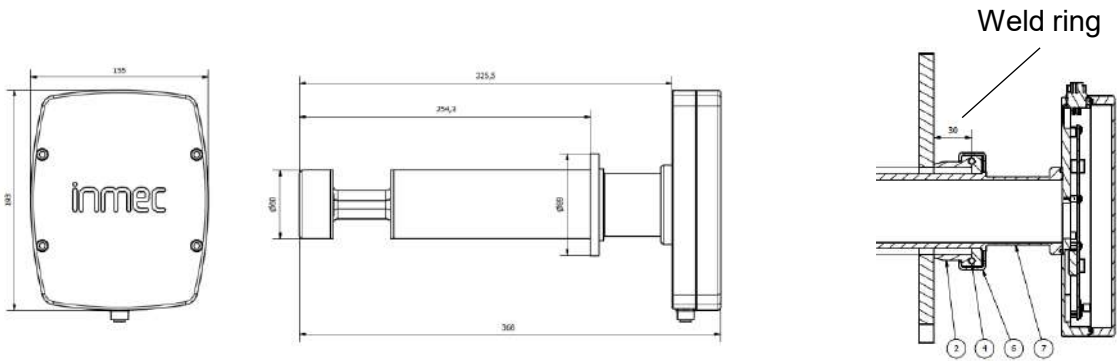
Clamp Weld ring O-ring

Optional bolt flange adapters



I/O 2 is dedicated for either
 Process temperature output
 or Line run Digital input
 Depends on application

Sensor Model IL dimensions, mm



Display Unit, connections

Power and I/O CONNECTIONS			
X1			
11	+	24 VDC Main Power	To fuse
12	-	24 VDC Main Power	Blue
13	+	24 VDC to sensor	Red
14	+	Brix, 4-20 mA output Active	Pink
15	-	Brix, 4-20 mA output Active	Grey
16	+	I/O 2, Temp, 4-20 mA or Dig In 24VDC	Green
17	-	I/O 2, Temp, 4-20 mA or Dig In 24VDC	Yellow
18		4-20 mA via display to X1;16	Grey

Display unit



Tablet and Remote CONNECTIONS			
X2			
21	-	Rs-485 Remote (Gateway)	
22	-	RS-485 Local (Tablet)	Brown
23	+	Rs-485 Remote (Gateway)	
24	+	RS-485 Local (Tablet)	White

Tablet cable



Tablet

- Windows 10
- Touch screen
- In-built Cellular
- All sensor tuning functions
- Manages all sensors of a mill

Display Unit features

- Numeric Brix Display
 - Tablet cable connector
 - Sensor cable connections
 - Mill connections
- 24VDC,3A Power
 4-20mA outputs, Active; Max load 750 Ohm

Dimensions

230*230*140 mm

Sensor specifications Inmec Model IL, In-Line sensor

Measurement	Digital signal formation and processing
Operating power	24VDC, 3 Amps, Continuous 2 Amps
Measuring power	15 mW
Connection	Cable to Connection unit, 8 wire shielded. Connectors Aisi316L
Process connection	Union-L coupling welded ,76.1 mm , Aisi 316L. Optional Bolt adapters
Gasket	O-ring EPDM, Viton as option
Measuring range	Factory configured to specific range by customer specification
Repeatability	+/- 0.01 % concentration
Sensitivity	+/-0.001% concentration
Measuring resolution	0.01% concentration
Output filtering	1 – 300s
Output 1	Brix output. 4 – 20 mA, Active and Isolated. Max load 750 Ohm
Output 2	Temperature output. 4 – 20 mA, Active and Isolated. Max load 750 Ohm
	Alternative: Line Run, Digital Input, 24VDC
Signal processor	DSP
Process conditions	
pH range	3 – 11
Temperature	0 – 140 C
Pressure	
Minimum	Recommended min 1.5 bar to avoid free air
Maximum	PN10 ,
Conductivity	Max. 13mS/cm
Environment	
Temperature	0 – +70 ; Protection needed in case of direct heat source
Housing	IP65
Vibration	max. 20 m/s ² 10-2000Hz
Materials	
Model IL	Sensor body, Aisi 316L. Installation weld ring Aisi 316L
Housing Parts	Aluminum, Anonized
Antennas	Ceramic
Sensor weight	3.4 kg

Display Unit specifications

Operating power	24VDC, 3 A
Connection	Cable to sensor, 10m, 8 wire shielded. Connectors Aisi316L
Environment	
Temperature	0 – +70
Housing	IP65
Material	ABS Plastic
Unit weight	1 kg
Dimensions	230*230*140 mm
Wall mount	4 bolts, Corner loops

Features:

- Numeric display of Brix, Density or %-Concentration
- I/O connections
- 24VDC, 3A power supply for the sensor
- 2 * 4 -20mA outputs forwarded from the sensor, Active and Isolated, Max. load 750 Ohm
- Alternative to second 4-20mA output: Line Run, Digital Input, 24VDC
- RS 485 serial link to external Gateway unit
- Connection to the Operating Tablet, USB-A