PRODUCTS CATALOG 2014 - REV. 0

SGM LEKTRA

LEVELS | FLOW | PRESSURE | TEMPERATURE

PROCESS CONTROL AND MEASUREMENT

MEASURE & CONTROL INDEX

MEASURE & CONTROL INDEX

MEASURE & CONTROL INDEX

MEASURE & CONTROL INDEX

ACCESSORIES AND SPARE PARTS

ITEMS SUBJECT TO AVAILABILITY

ULTRASONIC

METER Ultrasonic level transmitter

Ultrasonic - 4÷20mA output
G 2"A / PP threaded connection (for ATEX version in PVDF)
+ nr. 1 2" BSP/PP fixing bolt
Setting by keyboard/graphic LCD display detachable module (optional)
Temperature range : -30° ÷ +70°C (80° non continuous)

Version	
-	2-wire, range 5m, HART, ATEX II 1/2G Ex ia II C T6 (amb. temp. -20÷+60°C)
0	2-wire, range 8m, HART, ATEX II 1/2G Ex ia II C T6 (amb. temp. -20÷+60°C)
1	2-wire, range 5m
2	2-wire, range 5m, HART
3	2-wire, range 5m, ATEX II 1/2G Ex ia II C T6 (amb. temp. -20÷+60°C)
4	4-wire, range 5m, 2 relays, MODBUS
5	2-wire, range 8m
6	2-wire, range 8m, ATEX II 1/2G Ex ia II C T6 Tamb -20÷+60°C
7	2-wire, range 8m, HART
8	4-wire, range 8m, 2 realys, MODBUS
9	Special

Housing material	
F	PC with transparent cap, IP67
L	PC with blind cap, IP67
M	PC with transparent cap and anticondensation, IP67
N	PC with blind cap and anticondensation, IP67
U	Aluminum with transparent cap, IP67 (compulsory for ATEX versions)
Z	Special

Power supply	
4	24Vdc (20÷30Vdc)
5	12Vdc (20Vdc) range 5m (only for version 1)
9	Special

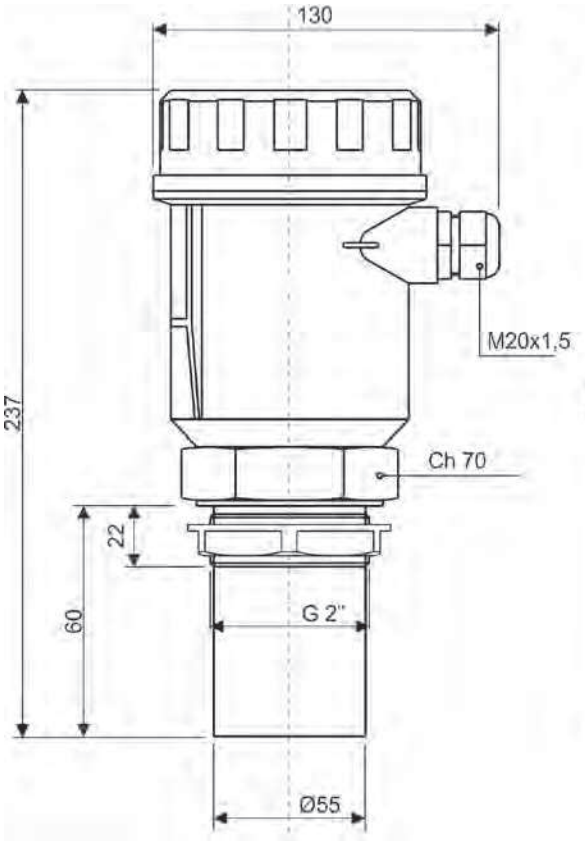
Optional (opt.)	
A	None
C	DN80 PN6 UNI 1092-1/PP flange
D	VL601 keyboard/graphic LCD display module (VL601SGM)
S	MODBUS communication software (010F105A)
T	HART communication software (010E105A)
Z	Special

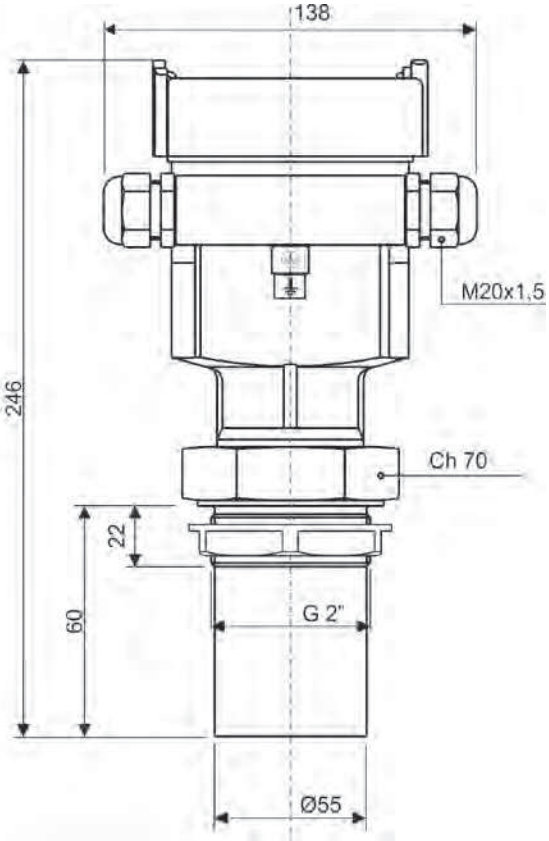
VL601

MODBUS software
Cod. 010F105A


PC housing
cod. F
PP
wetted
part


Alu. housing
cod. U
PVDF
wetted
part


130
237
M20x1,5
Ch 70
22
60
G 2"
Ø55


138
246
M20x1,5
Ch 70
22
60
G 2"
Ø55

ULTRASONIC

KTU5 Level control and measure unit

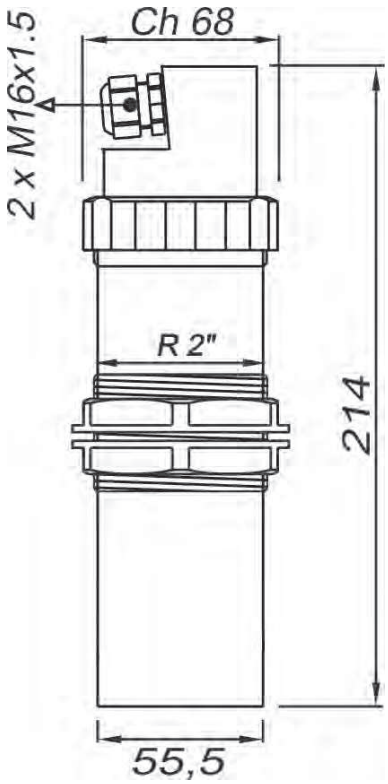
Ultrasonic - G 2"A/PP threaded connection + n.2 2" BSP/ PP fixing bolts
4÷20mA output with 2 relays for alarms or pumps control
Calibration by 2 push-buttons, VL611 programming display
or via MODBUS RTU
Working temperature: -30 ÷ +70°C

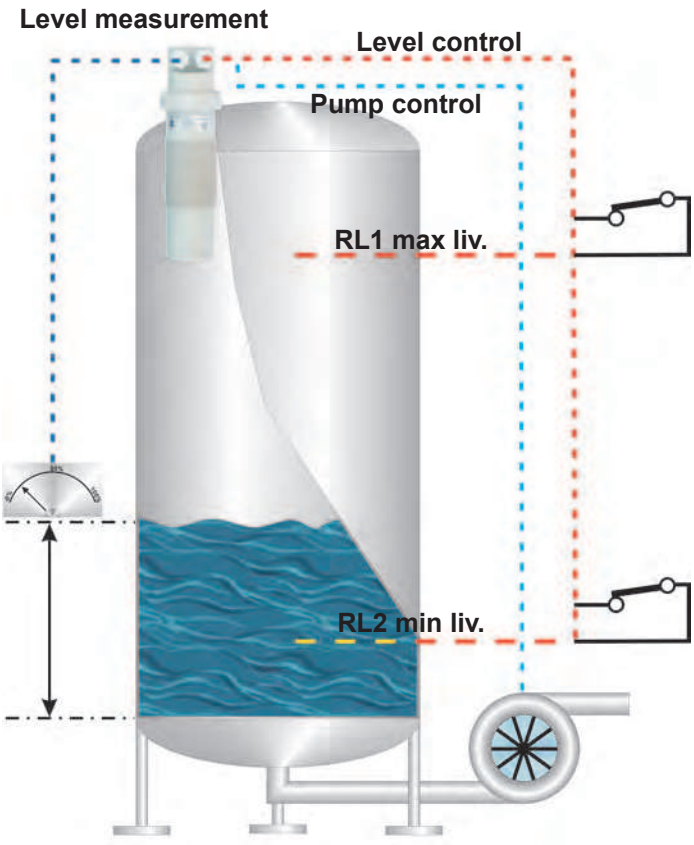
Version	
1	IP66, range 0,25÷5m, with electrical connection by 2 internal plug-in connectors
3	IP66, range 0,4÷8m, with electrical connection by 2 internal plug-in connectors

Housing material	
B	PP polypropilene
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz
4	24Vdc
5	12Vdc Attention! Max 3m distance (only for version 1)
9	Special

Optional (opt.)	
A	None
C	DN80 PN6 UNI 1092-1 / PP flange
D	VL611 keyboard/display programming module (VL611SGM) with 1,5 m cable
S	S/W for communication MODBUS (010F105A)
Z	Special





ULTRASONIC

SMART Level control and measure unit

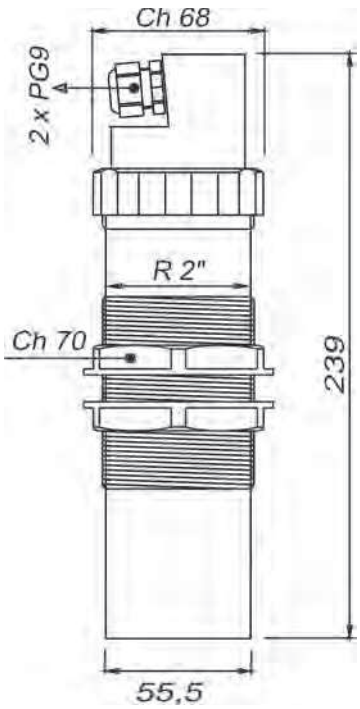
Ultrasonic - G 2"A/PP threaded connection + n.2 2" BSP/ PP fixing bolts
4÷20mA output with 2 relays for alarms or pumps control
Calibration by 2 push-buttons or via RS485 by PC
Working temperature: -30 ÷ +70°C

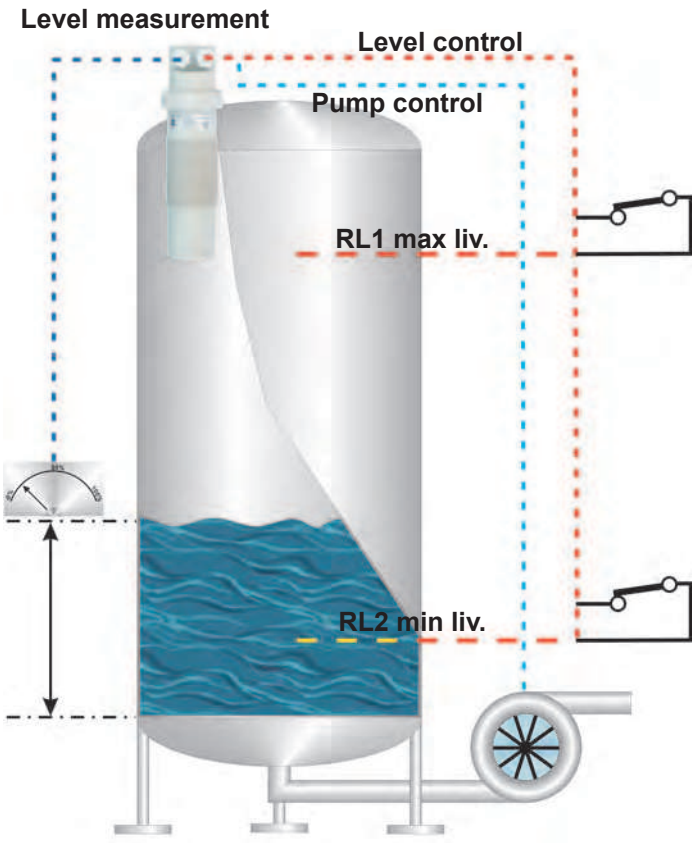
Version	
1	IP66, range 0,25÷5m, with electrical connection by 2 internal plug-in connectors
2	IP68, range 0,25÷5m, with n.2 electrical cable (3m length) connection
3	IP66, range 0,4÷7m, with electrical connection by 2 internal plug-in connectors
4	IP68, range 0,4÷7m, with n.2 electrical cable (3m length) connection
5	IP66, range 0,25÷5m, with electrical connection by 2 internal plug-in connectors suggested for installation into calm-pipes
9	Special

Housing material	
B	PP polypropilene
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz
4	24Vdc
5	12Vdc Attention! Max 3m distance-no relays inside
9	Special

Optional (opt.)	
A	None
C	DN80 PN6 UNI 1092-1 / PP flange
E	IP66 Junction-box for remote calibration (programming push-buttons built in)
F	S/W for communication with SGM LEKTRA ultrasonic units (010D034A)
Z	Special





ULTRASONIC

MTU5 Level control and measure unit

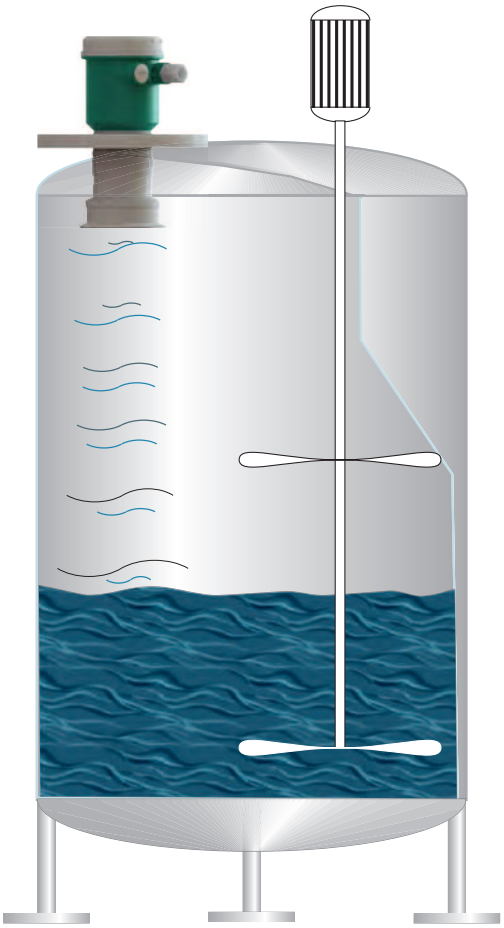
Ultrasonic - 4÷20mA output with 2 relays for alarms or pumps control
Calibration by keyboard/graphic LCD display detachable module (optional) or via MODBUS RTU.
Flanged or bracket connection
Working temperature: -30 ÷ +70°C

Version	
2	IP67, range 0,5÷12m, connection by DN50 PN6 UNI 1092-1 flange in PP
4	IP67, range 0,5÷12m, bracket connection
9	Special

Housing material	
F	PC with transparent cap, IP67
L	PC with blind cap, IP67
M	PC with transparent cap and anticondensate, IP67
N	PC with blind cap and anticondensate, IP67
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz
4	24Vdc
9	Special

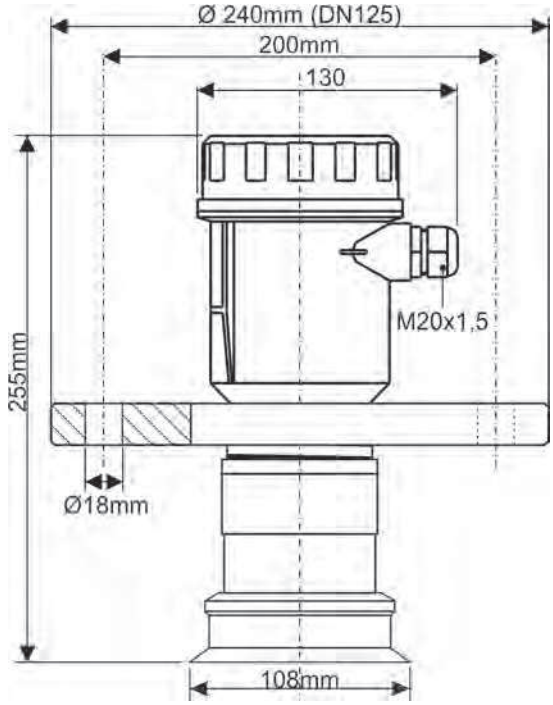
Optional (opt.)	
A	None
D	VL601 keyboard/graphic LCD display module (VL601SGM)
S	MODBUS communication software (010F105A)
Z	Special



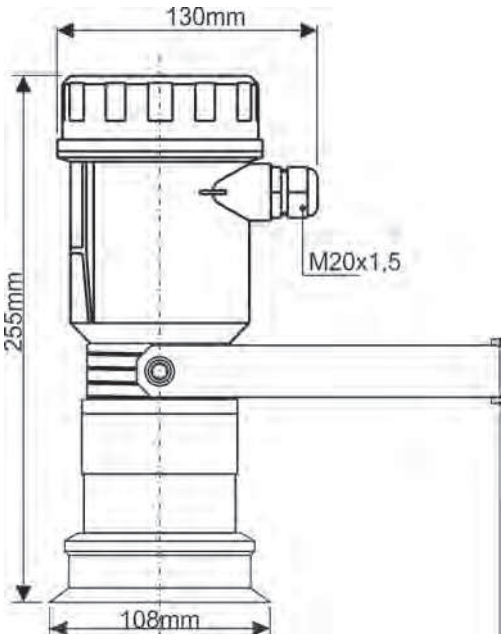
VL601

MODBUS software
Cod. 010F105A

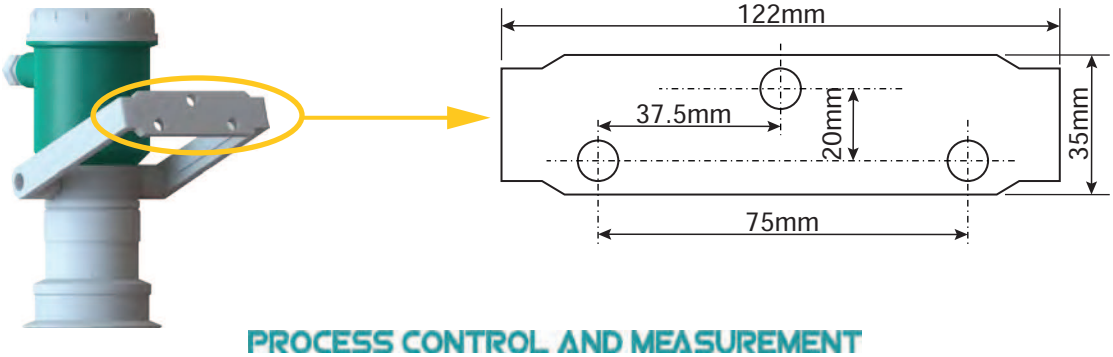
PROCESS CONTROL AND MEASUREMENT



Mounting with DN50 flange
Version “2”



Mounting with bracket
Version “4”



ULTRASONIC

VLW90M Level, open channels flow and pumps control unit

Directly connectable to PTU ultrasonic sensors
Matrix 320 x 240 backlighted color LCD display
USB port for memory pen connection (logger)
Wall or DIN rail mounting
5 calibrating push-buttons
IP66 mechanical protection; temperature range : -20 ÷ +60°C

Version	
2	For connection up to Max. 8 PTU family sensors
9	Special

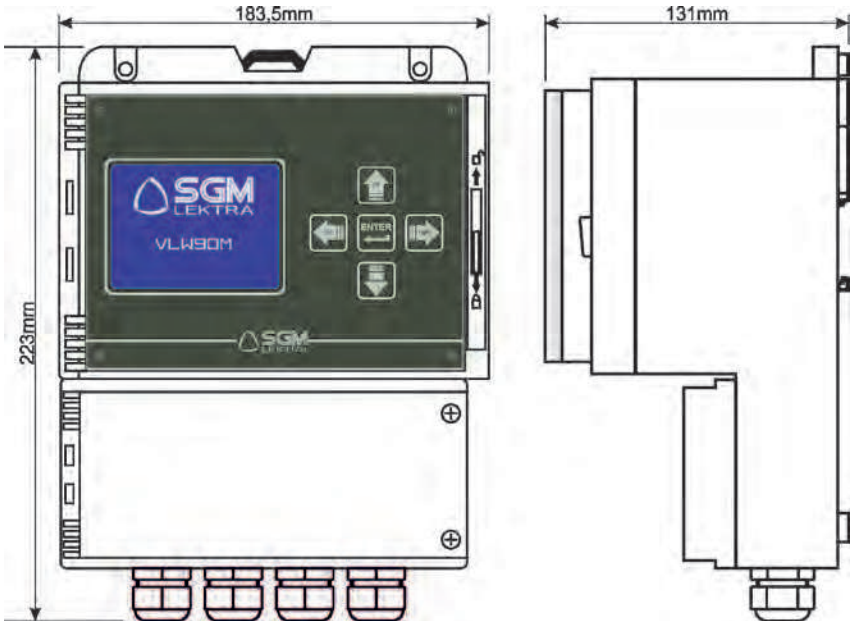
Relay	
C	5 Relays with change over contact (SPDT)

Power supply	
1	85÷265Vac 50÷60Hz
4	24Vdc

Output	
B	n.2 optoisolated 4÷20mA + n.2 optoisolated open collector

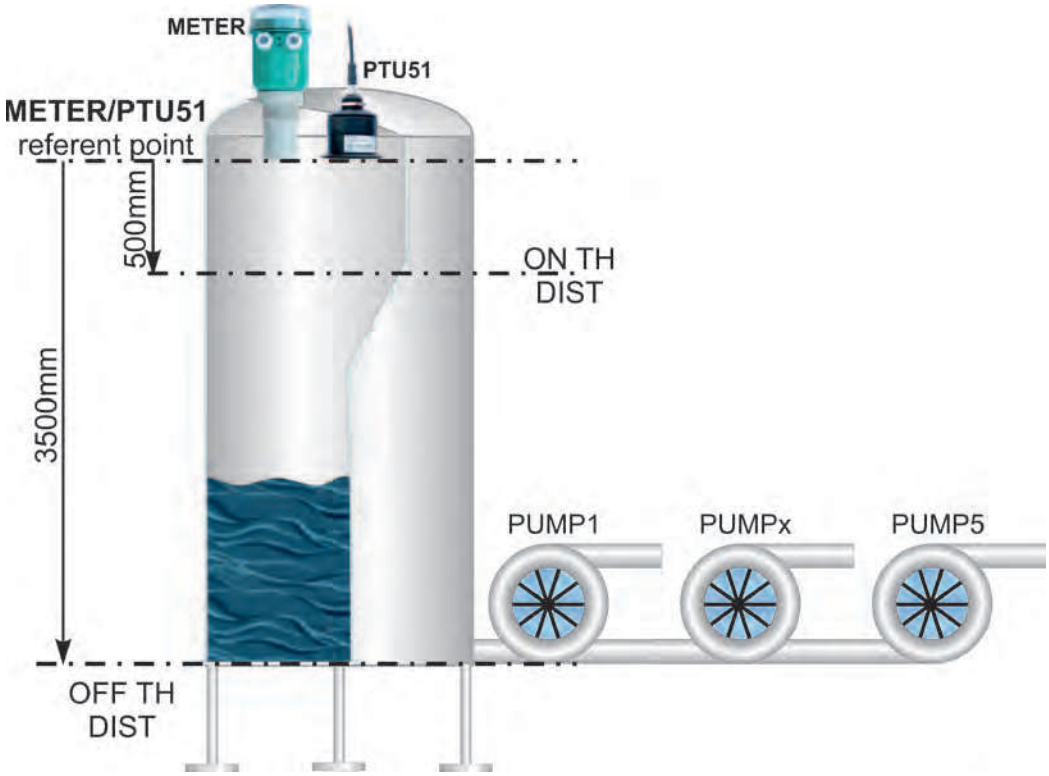
Field Bus	
1	MODBUS RTU
9	Special

Accessories	
A	None
U	1GB USB Pen Drive for datalogger



SGM LEKTRA std. Venturi channels
SGM LEKTRA cust.Venturi channels
Kafagi Venturi channels

SGM LEKTRA
Palmer-Bowlus channels



PROCESS CONTROL AND MEASUREMENT

ULTRASONIC

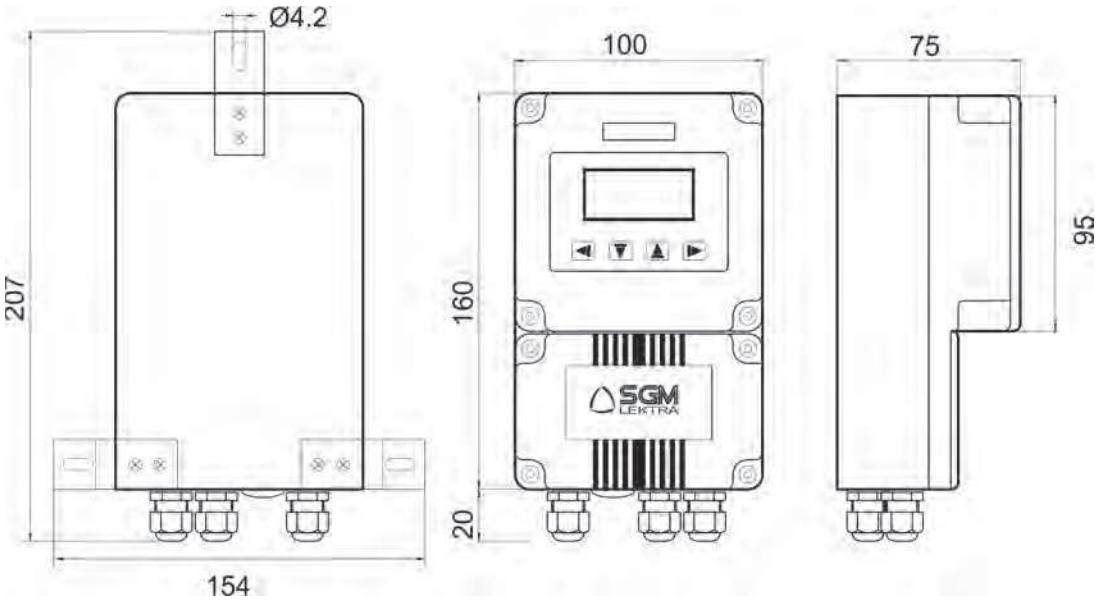
VLW601 Display unit

IP67 protection
Suitable for 4- wire METER, FLOWMETER and PTU50 series
Output 4÷20mA

Version	
A	Standard
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz
4	24Vdc
9	Special

Accessories	
A	None
L	MC601, module for connection to 4 wires METER, MTU5 and FLOWMETER transmitters
Z	Special



ULTRASONIC

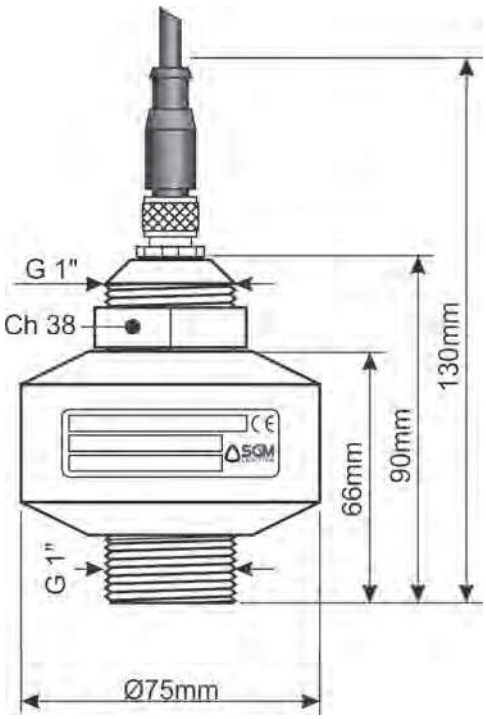
PTU50 Level transmitter

Ultrasonic - for measurement in liquids, muds and acids;
Range: 0,05 ÷ 1,5m; IP68 proof
Housing in polypropylene (PP)
Calibration via MODBUS or by VLW601 / VLW90M modules
Power supply 24Vdc
Temperature range -25 ÷ +75°C

Version	
C	Designed to be connected to VLW90M unit + male connector
D	4÷20mA + MODBUS output transmitter + male connector
Z	Special

Process connection / Sensor material	
0	G 1" A / PP + n. 1 1" BSP / PP fixing bolt
1	DN100 PN6 UNI 1092-1 flange / PP
9	Special

Optional (opt.)	
A	None
F	MODBUS PC communication S/W (010F105A)
T	IP68 female connector with 5m linking cable
U	IP68 female connector with 10m linking cable
V	IP68 female connector with 15m linking cable
W	IP68 female connector with 20m linking cable
Z	Special



ULTRASONIC

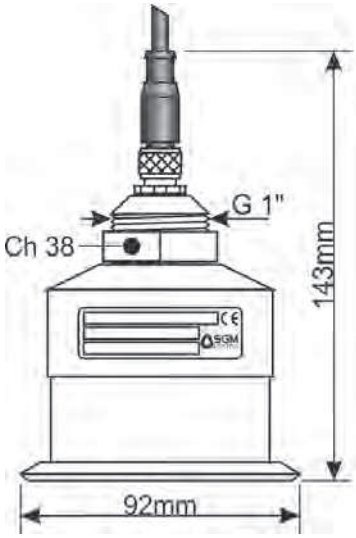
PTU51 Level transmitter

Ultrasonic - for measurement in liquids, muds and acids;
Range: 0,3 ÷ 6m; IP68 proof
Housing in polypropylene (PP)
Calibration via MODBUS or by VLW601 / VLW90M modules
Power supply 24Vdc
Temperature range -25 ÷ +75°C

Version	
C	Designed to be connected to VLW90M unit + male connector
D	4÷20mA + MODBUS output transmitter + male connector
Z	Special

Process connection / Sensor material	
0	G 1" A / PP + n.1 1" BSP/ PP fixing bolt
1	DN100 PN6 UNI 1092-1 / PP flange
9	Special

Optional (opt.)	
A	None
F	MODBUS PC communication S/W (010F105A)
T	IP68 female connector with 5m linking cable
U	IP68 female connector with 10m linking cable
V	IP68 female connector with 15m linking cable
W	IP68 female connector with 20m linking cable
Z	Special



PROCESS CONTROL AND MEASUREMENT

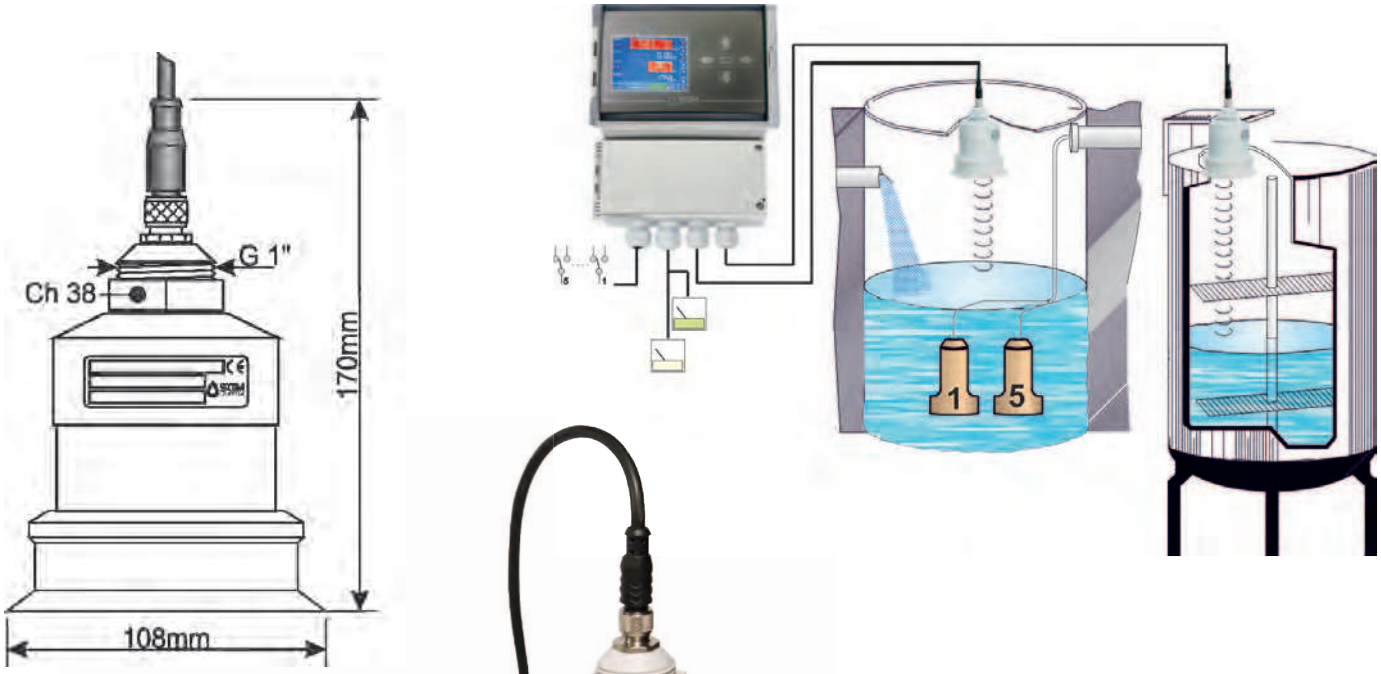
PTU56 Level transmitter

Ultrasonic - for measurement in liquids, muds and acids
Range: 0,5 ÷ 12m; IP68 proof
Housing in polypropylene (PP)
Calibration via MODBUS or by VLW601 / VLW90M modules
Power supply 24Vdc
Temperature range -25 ÷ +75°C

Version	
C	Designed to be connected to VLW90M unit + male connector
D	4÷20mA + MODBUS output transmitter + male connector
Z	Special

Process connection / Sensor material	
0	G 1" A / PP + n.1 1" BSP fixing bolt/ PP
1	DN100 PN6 UNI 1092-1 flange / PP
9	Special

Optional (opt.)	
A	None
F	MODBUS PC communication S/W (010F105A)
T	5m linking cable for IP68 connection
U	10m linking cable for IP68 connection
V	15m linking cable for IP68 connection
W	20m linking cable for IP68 connection
Z	Special



PULSE RADAR

RPL51 Radar level transmitter

Micro-waves pulse group C
For liquids measurement also with strong erosive products
Max. distance: 30m
Accuracy: ±10mm
Process pressure: -1,0÷3bar
Conic antenna length: 270mm

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material / Process temperature	
A	Mono-pole / PP / -20 ÷ +100°C
B	Mono-pole / PTFE / -40 ÷ +120°C

Antenna extension (blind zone H)	
A	68mm (standard)
B	118mm
C	168mm
D	218mm
E	268mm
F	318mm
Z	Special

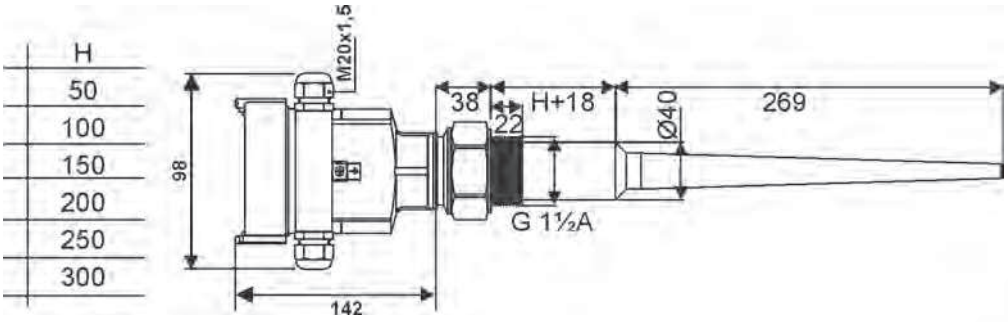
Process connection / Material	
GP	Thread G1" ½ A / PVDF (PN3)
ZZ	Special

Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART(4-wire); 24Vdc
D	4÷20mA HART(4-wire); 230Vac

Housing / Housing protection / Antenna protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67 / IP67
U	Aluminum with transparent cap / IP67 / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No



PROCESS CONTROL AND MEASUREMENT

PULSE RADAR

RPL52 Radar level transmitter

Micro-waves pulse group C
For liquids measurement also with strong erosive products
Max. distance: 30m
Accuracy: ±10mm
Process pressure: -1,0÷16bar
Conic antenna extension: 270mm

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material / Process temperature	
B	Mono-pole / PTFE / -40 ÷ +150°C

Antenna extension (blind zone H)	
A	68mm
B	118mm
C	168mm
D	218mm
E	268mm
F	318mm
Z	Special

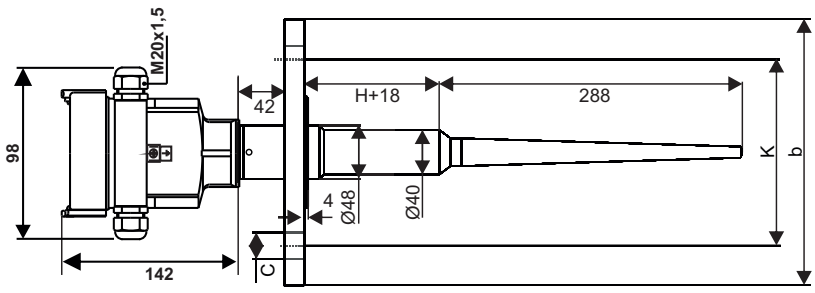
Process connection / Material	
FC	PTFE protected flange DN50 PN16 / SS316L
FD	PTFE protected flange DN80 PN16 / SS316L
FE	PTFE protected flange DN100 PN16 / SS316L
FK	PTFE protected flange DN150 PN16 / SS316L
ZZ	Special

Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4-wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

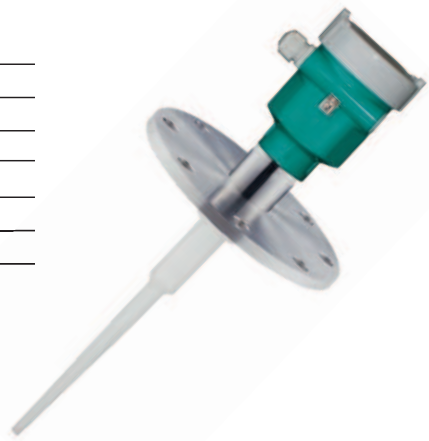
Housing / Housing protection / Antenna protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67 / IP67
U	Aluminum with transparent cap / IP67 / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No



H
50
100
150
200
250
300



	K	b	C
DN50	Ø125	Ø165	Ø16x4
DN80	Ø160	Ø200	Ø16x8
DN100	Ø180	Ø220	Ø16x8
DN150	Ø240	Ø285	Ø20x8

PROCESS CONTROL AND MEASUREMENT

PULSE RADAR

RPL55 Radar level transmitter

Micro-waves pulse 26GHz group K
For liquids measurement also with strong erosive products
Max distance: 10m
Accuracy: ±5mm
Process pressure: -1÷3bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material / Process temperature	
B	Mono-pole / PTFE / -40° ÷ +130°C

Process connection / Material	
GP	Thread G 1"½ / PTFE
ZZ	Special

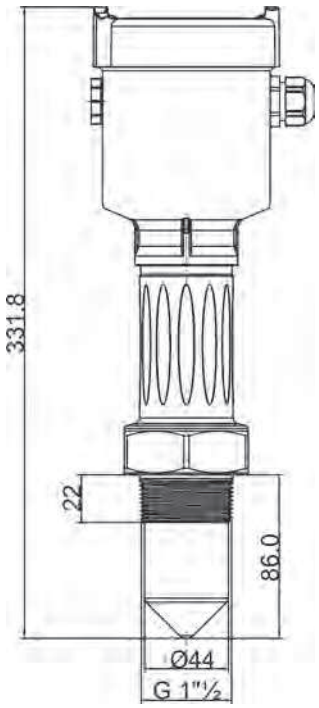
Non sensitive part (for nozzle mounting)	
A	100 mm
B	200 mm

Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4-wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Housing protection / Antenna protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67 / IP67
U	Aluminum with transparent cap / IP67 / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No



RPL56 Radar level transmitter

Micro-waves pulse 26GHz group K
For liquid storage or process applications
Max distance: 30m
Accuracy: ±3mm
Process pressure: -1÷40bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material	
B	Horn antenna Ø48mm / SS316L
C	Horn antenna Ø78mm / SS316L
H	Horn antenna Ø98mm / SS316L
J	Horn antenna Ø123mm / SS316L
K	Horn antenna Ø98mm / PP with PTFE cap

Process connection / Material	
GC	Thread G 1" ½ with cooling fin / SS316L (-60 ÷ +250°C)
GD	Thread G 1" ½ with cooling fin and flange / SS316L (-60 ÷ +400°C); pressure 40MPa
GE	Thread G 1" ½ / SS316L with blowing in connection (-40° ÷ +130°C)
GP	Thread G 1" ½ / SS316L (-40° ÷ +130°C)
ZZ	Special

Additional flange (DN / Material)	
FA	DN50 / PP
FB	DN50 / PTFE
FC	DN50 /SS316
GA	DN80 / PP
GB	DN80 / PTFE
GC	DN80 / SS316
HA	DN100 / PP
HB	DN100 / PTFE
HC	DN100/ SS316
OO	None
ZZ	Special

Seal / Process temperature	
2	Viton / -40÷130°C
3	Kalrez / -60÷250°C
4	Graphite / -60÷400°C

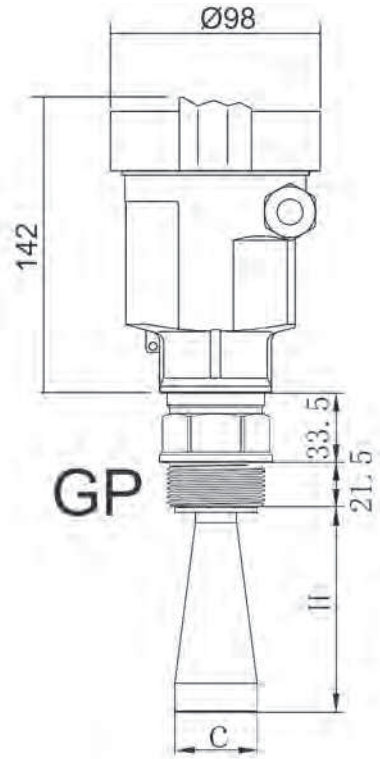
Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4-wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Housing protection / Antenna protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67 / IP67
U	Aluminum with transparent cap / IP67 / IP67
Z	Special

Cable entry	
M	M20x1,5

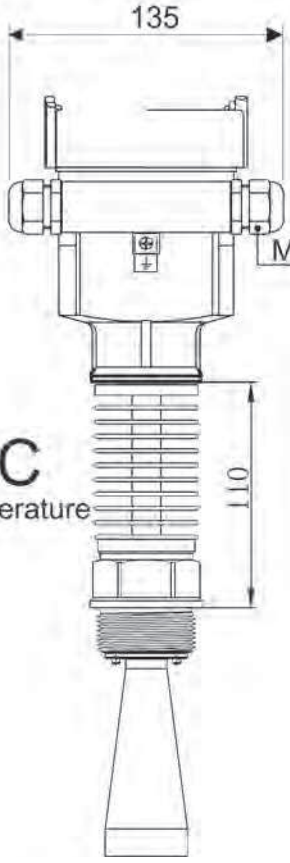
Keyboard/display programming module VL602	
A	Yes
X	No

PULSE RADAR



GP

GD
Alte temperature
Alte pressioni



GC
Alte temperature

c	H 316L
(B) Φ 48	140
(C) Φ 78	227
(H) Φ 98	288
(K) Φ 98 + Cap	300

RPL57 Radar level transmitter

Micro-waves pulse 26GHz group K
For highly corrosive liquid storage or process applications
Max distance: 20m
Accuracy: ±3mm
Temperature: -40÷150°C
Process pressure: -1÷5bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

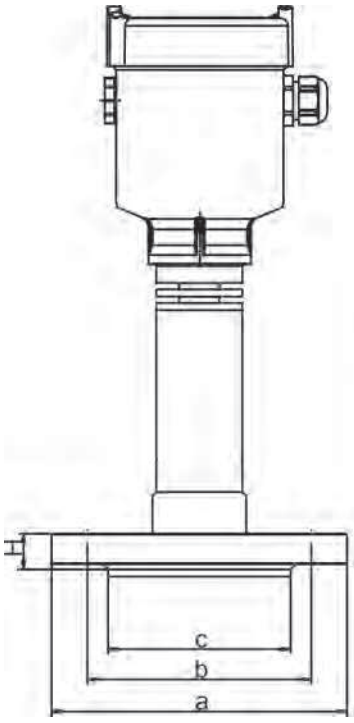
Antenna shape / Material / Process connection	
B	(U Type) SS316L / DN50 PTFE flange
C	(U Type) SS316L / DN80 PTFE flange
D	(U Type) SS316L / DN100 PTFE flange
Z	Special

Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4-wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Housing protection / Antenna protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67 / IP67
U	Aluminum with transparent cap / IP67 / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No



	a	b	c	H
DN50 PN40	Φ165	Φ125	Φ102	20
DN80 PN40	Φ200	Φ160	Φ138	24
DN100 PN16	Φ220	Φ180	Φ158	20
DN150 PN16	Φ285	Φ240	Φ212	22

PULSE RADAR

RPL58 Radar level transmitter

Micro-waves pulse 26GHz group K
For bulk solids and powders storage or process applications
Max distance: 70m
Accuracy: ±15mm
Process pressure: -1÷40bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material	
B	Horn antenna Ø48mm / SS316L
C	Horn antenna Ø78mm / SS316L
H	Horn antenna Ø98mm / SS316L
J	Horn antenna Ø123mm / SST316L
K	Horn antenna Ø98mm / PP with PTFE cap
M	Horn antenna Ø98mm / SST316L with PTFE cap
P	Horn antenna Ø123mm / SST316L with PTFE cap
Q	Parablic horn Ø198mm / SST316L
R	Parablic horn Ø246mm / SST316L

Process connection / Material	
GC	Thread G 1" ½ with cooling fin / SS316L (-60°÷ +250°C)
GE	Thread G 1" ½ / SS316L with blowing in connection (-40°÷ +130°C)
GP	Thread G 1" ½ / SS316L (-40°÷ +130°C)
ZZ	Special

Additional flange (DN / Material)	
FA	DN50 / PP
FB	DN50 / PTFE
FC	DN50 / SS316
GA	DN80 / PP
GB	DN80 / PTFE
GC	DN80 / SS316
HA	DN100 / PP
HB	DN100 / PTFE
HC	DN100 / SS316
HE	Aiming device DN100 / SS316
JA	DN150 / PP
JB	DN150 / PTFE
JC	DN150 / SS316
JE	Aiming device DN150 / SS316
KA	DN200 / PP
KB	DN200 / PTFE
KC	DN200 / SS316
KE	Aiming device DN200 / SS316
LA	DN250 / PP
LB	DN250 / PTFE
LC	DN250 / SS316
LE	Aiming device DN250 / SS316
OO	None
ZZ	Special

Seal / Process temperature	
2	Viton / -40÷130°C
3	Kalrez / -60÷250°C

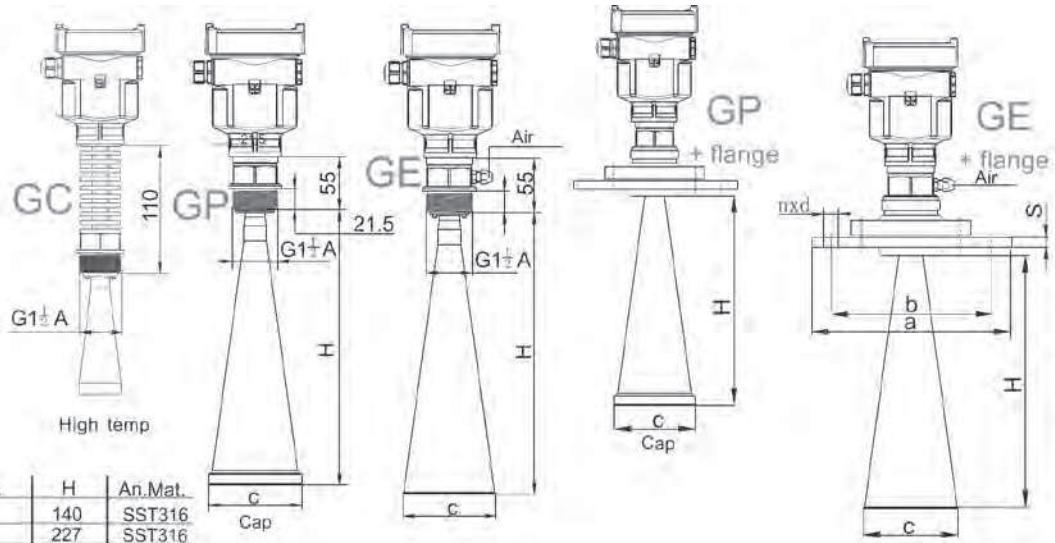
Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Housing protection / Antenna protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67 / IP67
U	Aluminum with transparent cap / IP67 / IP67
Z	Special

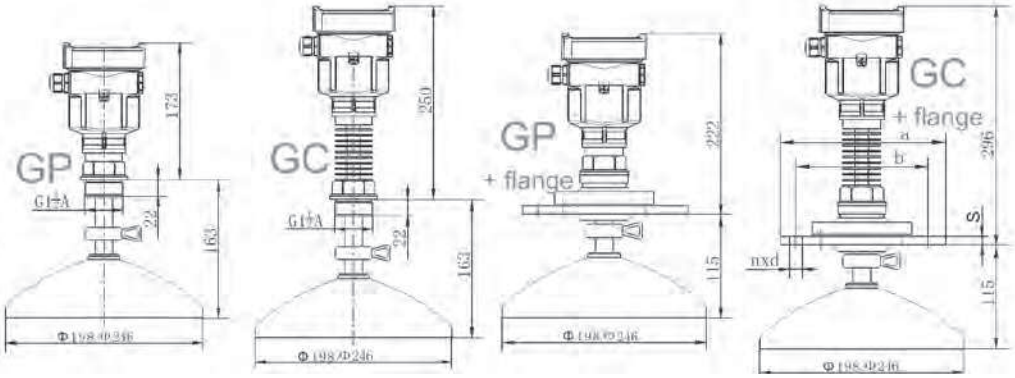
Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No



(Cod.)ΦAnt.	H	An.Mat.
(B) Φ48	140	SST316
(C) Φ78	227	SST316
(H) Φ98	288	SST316
(J) Φ123	620	SST316
(K) Φ98 + Cap	280	PP
(M)Φ98 + Cap	300	SST316
(P) Φ123 + Cap	625	SST316

Flange	a	b	S	d
DN 50/2"	165mm	125mm	11.5mm	4xΦ18mm
DN 80/3"	200mm	160mm	11.5mm	8xΦ18mm
DN 100/4"	220mm	180mm	11.5mm	8xΦ18mm
DN 125/5"	250mm	210mm	11.5mm	8xΦ18mm
DN 150/6"	285mm	240mm	11.5mm	8xΦ22mm
DN 200/8"	340mm	295mm	11.5mm	12xΦ22mm
DN 250/10"	405mm	355mm	11.5mm	12xΦ26mm



PULSE RADAR

RPL59 Radar level transmitter

Micro-waves pulse 26GHz group K
For bulk solids and powders storage or process applications
Max distance: 15m
Accuracy: ±10mm
Process pressure: -1÷40bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material	
B	Horn antenna Ø48mm / SS316L
C	Horn antenna Ø78mm / SS316L
H	Horn antenna Ø98mm / SS316L
J	Horn antenna Ø123mm / SST316L
K	Horn antenna Ø98mm / PP with PTFE cap
M	Horn antenna Ø98mm / SST316L with PTFE cap
P	Horn antenna Ø123mm / SST316L with PTFE cap
Q	Parablic horn Ø198mm / SST316L
R	Parablic horn Ø246mm / SST316L

Process connection / Material	
GC	Thread G 1" ½ with cooling fin / SS316L (-60° ÷ +250°C)
GE	Thread G 1" ½ / SS316L with blowing in connection (-40° ÷ +130°C)
GP	Thread G 1" ½ / SS316L (-40° ÷ +130°C)
ZZ	Special

Additional flange (DN / Material)	
FA	DN50 / PP
FB	DN50 / PTFE
FC	DN50 / SS316
GA	DN80 / PP
GB	DN80 / PTFE
GC	DN80 / SS316
HA	DN100 / PP
HB	DN100 / PTFE
HC	DN100 / SS316
HE	Aiming device DN100 / SS316
JA	DN150 / PP
JB	DN150 / PTFE
JC	DN150 / SS316
JE	Aiming device DN150 / SS316
KA	DN200 / PP
KB	DN200 / PTFE
KC	DN200 / SS316
KE	Aiming device DN200 / SS316
LA	DN250 / PP
LB	DN250 / PTFE
LC	DN250 / SS316
LE	Aiming device DN250 / SS316
OO	None
ZZ	Special

Seal / Process temperature	
2	Viton / -40÷130°C
3	Kalrez / -60÷250°C

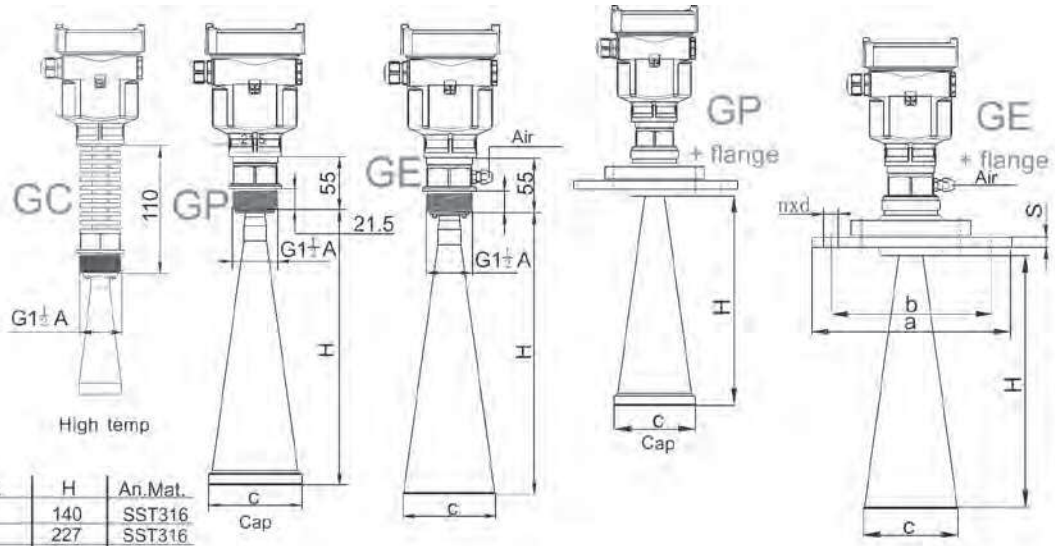
Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Housing protection / Antenna protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67 / IP67
U	Aluminum with transparent cap / IP67 / IP67
Z	Special

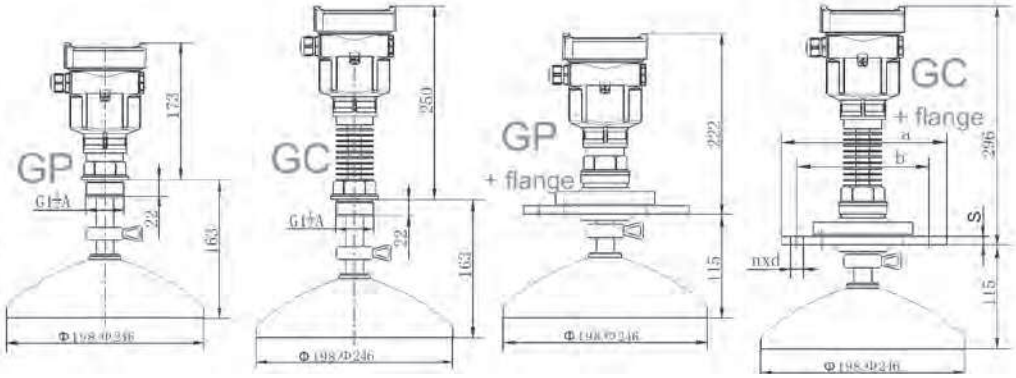
Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No



(Cod.)ΦAnt.	H	An.Mat.
(B) Φ48	140	SST316
(C) Φ78	227	SST316
(H) Φ98	288	SST316
(J) Φ123	620	SST316
(K) Φ98 + Cap	280	PP
(M)Φ98 + Cap	300	SST316
(P) Φ123 + Cap	625	SST316

Flange	a	b	S	d
DN 50/2"	165mm	125mm	11.5mm	4xΦ18mm
DN 80/3"	200mm	160mm	11.5mm	8xΦ18mm
DN 100/4"	220mm	180mm	11.5mm	8xΦ18mm
DN 125/5"	250mm	210mm	11.5mm	8xΦ18mm
DN 150/6"	285mm	240mm	11.5mm	8xΦ22mm
DN 200/8"	340mm	295mm	11.5mm	12xΦ22mm
DN 250/10"	405mm	355mm	11.5mm	12xΦ26mm



PULSE RADAR

RPL61 Radar level transmitter

Micro-waves pulse 26GHz group K
For liquid applications / environmental protection
Max. distance: 30m
Accuracy: ±3mm
Protection degree: IP68
Temperatura di processo: -40 ÷ 100°C

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material	
P	Horn antenna Ø98mm / PA66 + Aluminum

Process connection / Material	
GD	Bracket / Stainless steel
GP	Thread G 1" / PP

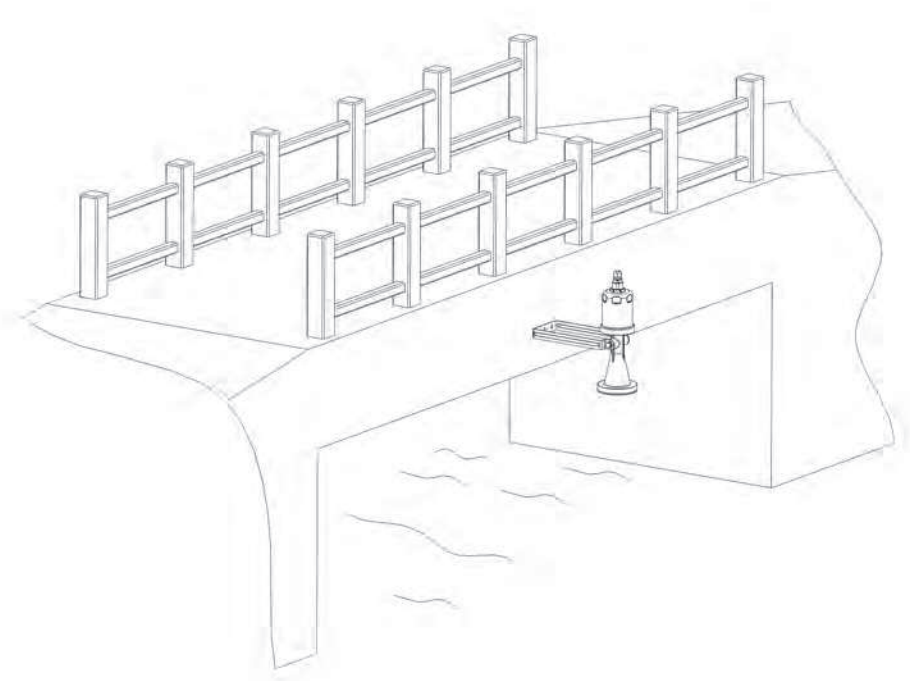
Housing / Protection	
A	PA66 / IP68

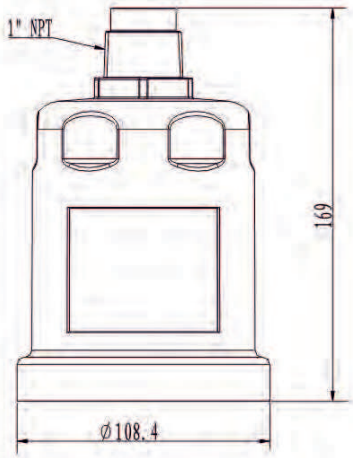
Electronic preamplifier	
B	4÷20mA - 2-wire - HART - 24Vdc
R	RS485 MODBUS

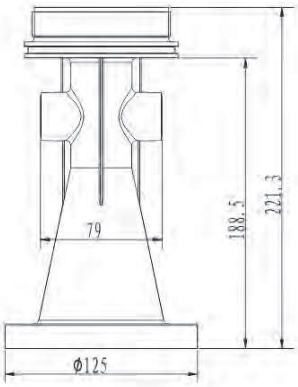
Remote display	
A	Yes
X	No

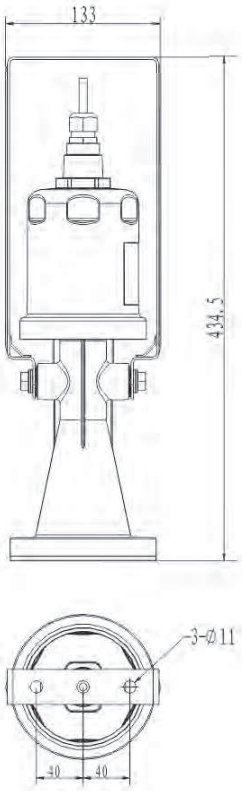
Accessories	
A	Sun shield
N	None

Cable	
A	Standard - 2-wire 10 m (over 10 m eur 11 each additional meter)
C	7-wire (necessary for MODBUS version) - price each meter




1" NPT
169
Ø108.4


79
188.5
221.3
Ø125


133
434.5
3-Ø11
40
40

GUIDED WAVE RADAR

RWL51 Guided microwave radar level transmitter

Microwaves pulse TDR
For liquids and bulk solids measurement
Max. length: rod 3m , rope 30m (Ø4mm or Ø6mm according to the application)
Accuracy: ±10mm
Process pressure: -1÷40 bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material / Sealing	
A	Rope Ø4mm (up to 5m) or Rope Ø 6mm (over 5m) / SS316L / PTFE
B	Rod Ø10mm / SS316L / PTFE
X	None

Process connection / Material	
GP	Thread G1 ½" A / SS316L
KP	Thread G2" A / SS316L
ZZ	Special

Seal / Process temperature	
A	Viton / -30÷130°C
B	Kalrez / -40÷150°C

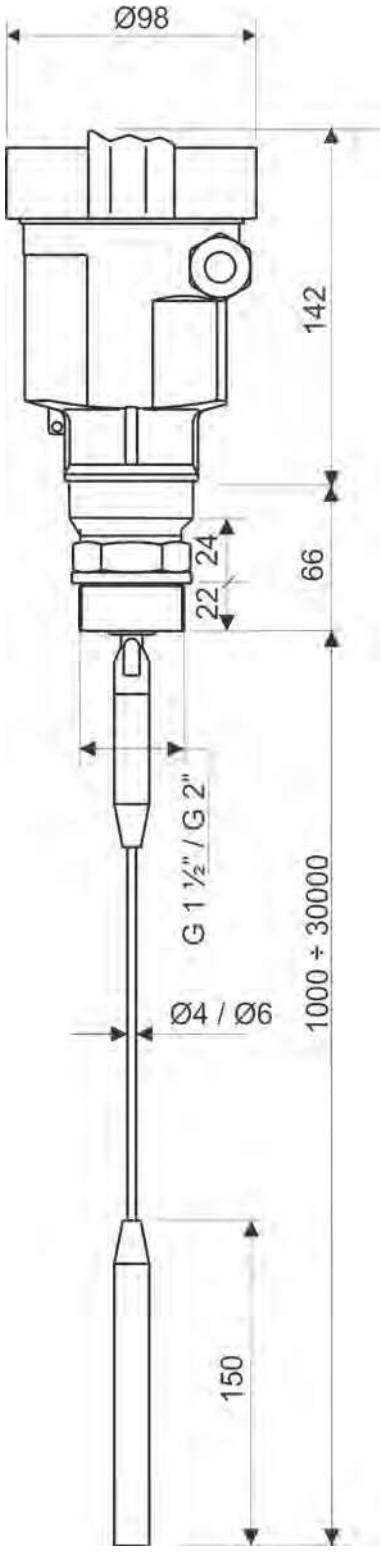
Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4wire); 230Vac

Housing / Protection	
D	Aluminum 2 chambers (for 4-wire versions) / IP67
U	Aluminum with transparent cap / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No

L= length, price each 100mm	
A	Rope Ø4/6mm / SS316L (max 30m)
B	Rod Ø10mm / SS316L (max 3m)
C	Rod Ø10mm / SS304 (max 3m)


Ø98
142
66
24
22
G 1 ½" / G 2"
1000 ÷ 30000
Ø4 / Ø6
150

GUIDED WAVE RADAR

RWL52 Guided microwave radar level transmitter

Microwaves pulse TDR
For liquids and bulk solids measurement
Max. length: 3m
Accuracy: ±10mm
Process pressure: -1÷16bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material / Sealing	
A	Rod Ø10mm / SS316L / PTFE

Process connection / Material	
FA	Flange DN50 PN16 / SS316L (GB/T9119-2000)
FB	Flange DN80 PN16 / SS316L (GB/T9119-2000)
FC	Flange DN100 PN16 / SS316L (GB/T9119-2000)
FD	Flange DN150 PN16 / SS316L (GB/T9119-2000)
ZZ	Special

Seal / Process temperature	
A	Viton / -40÷150°C

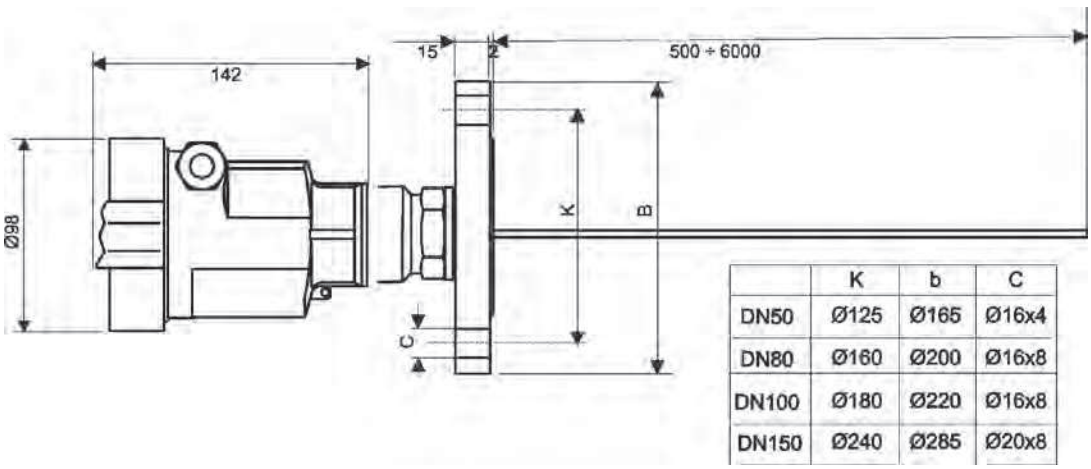
Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Protection	
D	Aluminum with 2 chambers (for 4-wire versions) / IP67
U	Aluminum with transparent cap / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No

L= length, price each 100mm	
A	Rod Ø10mm / SS316L (max 3m)



	K	b	C
DN50	Ø125	Ø165	Ø16x4
DN80	Ø160	Ø200	Ø16x8
DN100	Ø180	Ø220	Ø16x8
DN150	Ø240	Ø285	Ø20x8

RWL53 Guided microwave radar level transmitter

Microwaves pulse TDR
For small dielectric constant liquids (oils, distilled water, others)
Max. length: 3m
Accuracy: ±10mm
Process pressure: -1÷40bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material / Sealing	
A	Coaxial Ø28mm / SS316L / PTFE

Process connection / Material	
GP	Thread G1" ½ A / SS316L
KP	Thread G2" A / SS316L
ZZ	Special

Seal / Process temperature	
A	Viton / -30÷130°C
B	Kalrez / -40÷150°C

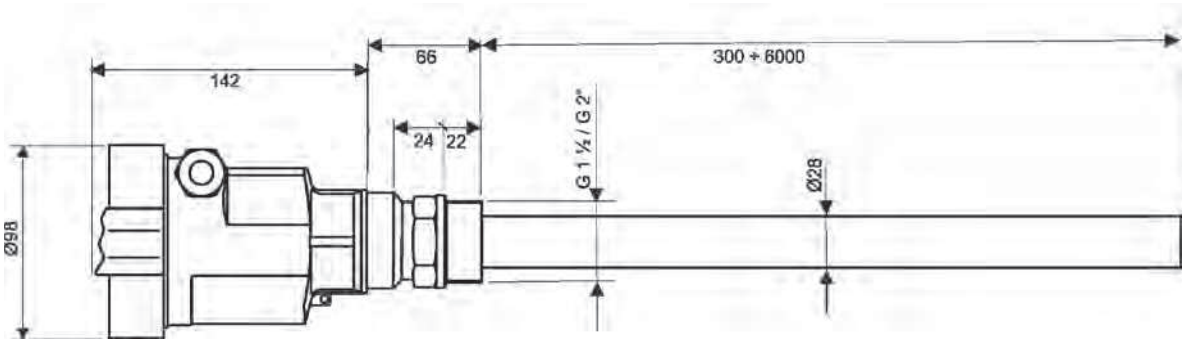
Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Protection	
D	Aluminum with 2 chambers (for 4-wire versions) / IP67
U	Aluminum with transparent cap / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No

L= length, price each 100mm	
A	Coaxial Ø28mm / SS316L (max 3m)



GUIDED WAVE RADAR

RWL54 Guided microwave radar level transmitter

Microwaves pulse TDR
For liquids with high process temperature/pressure
Max. length: 3m rod - 30m rope
Accuracy: ±10mm
Process pressure: -1÷40bar

Version	
I	Intrinsically safe CENELEC EExia IIC T6
P	Standard

Antenna shape / Material / Sealing	
A	Rope Ø4mm (up to 5m) or Rope Ø 6mm (over 5m) / SS316L / PTFE
B	Rod Ø10mm / SS316L / PTFE

Process connection / Material	
GP	Thread G1" ½ A / SS316L
KP	Thread G2" A/ SS316L
ZZ	Special

Seal / Process temperature	
A	Viton / -30 ÷ +150°C
B	Kalrez / -40 ÷ +250°C

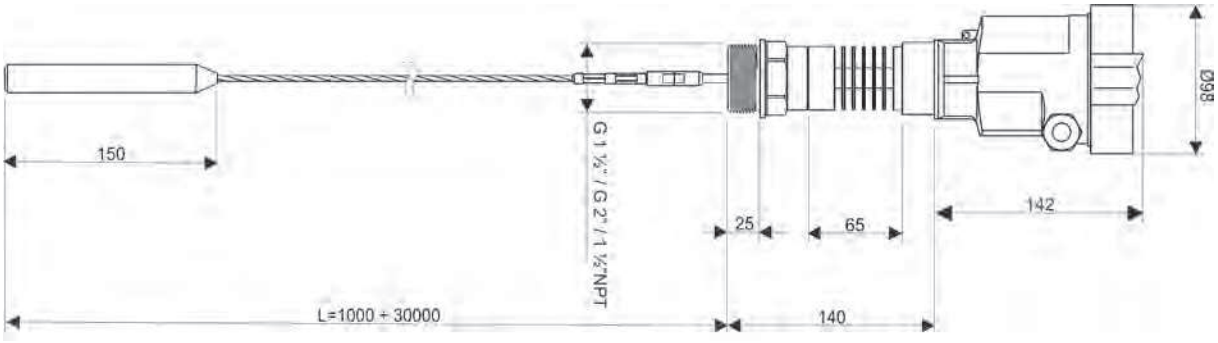
Electronic preamplifier	
B	4÷20mA HART (2-wire); 24Vdc
C	4÷20mA HART (4wire); 24Vdc
D	4÷20mA HART (4-wire); 230Vac

Housing / Protection	
D	Aluminum with 2 chambers (for 4-wire versions) / IP67
U	Aluminum with transparent cap / IP67
Z	Special

Cable entry	
M	M20x1,5

Keyboard/display programming module VL602	
A	Yes
X	No

L= Electrode length, price each 100mm	
A	Rope Ø4/6mm / SS316L (max 30m)
B	Rod Ø10mm / SS316L (max 3m)
C	Rod Ø10mm / SS304 (max 3m)



CAPACITIVE

CLT4 Capacitive rod probe for liquids and dust

Suitable for level measurement
Installation in the top of metallic tanks; 3m max.

Version	
A	Without insert-preamplifier (only capacitive electrode + head connection)
B	Compact
C	Compact Intrinsic Safe, ATEX II 1 GD EExia II C T4..T6 IP65 T85°C certified (select TC30 insert only)
D	Spacer-cooling-fins compact in carbon-steel
F	Spacer-cooling-fins compact in stainless-steel
H	Separate, IP66 preampl.head + 1,5m coaxcable
L	Spacer-cooling-fins compact in carbon-s., ATEX II 1 GD EExia II C T4..T6 IP65 T85°C cert. (select TC30 insert only)
M	Spacer-cooling-fins compact in S.S., ATEX II 1 GD EExia II C T4..T6 IP65 T85°C cert. (select TC30 insert only)
R	Separate, IP66 preampl.head with Al fixing base + 2m coaxcable
Z	Special

Electronic preamplifier	
00	None
22	TC22, 4÷20mA, 2 push buttons for calibration, 24Vdc
23	TC23, 4÷20mA, 2 push buttons for calibration, 24Vac
24	TC24, 4÷20mA, 2 push buttons for calibration, 115Vac
25	TC25, 4÷20mA, 2 push-buttons calibration, 230Vac
26	TC26, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vdc
27	TC27, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vac
28	TC28, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 115Vac
29	TC29, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 230Vac
30	TC30, 4÷20mA 2-wire, 2 push-buttons calibration, 24Vdc
99	Special

Housing	
B	IP66 loaded PC , white polycarbonate cap (necessary for ATEX version)
E	DIN B aluminum painted , IP66; for separate versions (H or R code) only
F	PC with transparent cap, IP67
G	IP66 aluminum varnished with 2 cable-glands
L	PC with blind cap, IP67
N	SS316; IP66; For separate vers.(H/R cod.) with G½" (12 cod.) process con.and PTFE insulated Ø8 electrode (T56 cod.)
P	DIN A aluminum painted, IP66; for separate versions (H or R code) only
Z	Special

Process connection	
01	G1" (G 1 A) / Carbon-steel
02	G1" (G 1 A) / Stainless-steel SS316
03	1" NPT / Carbon-steel
04	1" NPT / Stainless-steel SS316
11	G1"½ (G 1 ½ A) / Carbon-steel
12	G1"½ (G 1 ½ A) / Stainless-steel SS316
18	G1"½ (G 1 ½ A) / PVC
19	G1"½ (G 1 ½ A) / PTFE
20	Sanitary DN25 DIN 11851 / SS304L
21	Sanitary DN40 DIN 11851 / SS304L
22	Sanitary DN50 DIN 11851 / SS304L
40	Flange DN40 PN 6 UNI 1092-1 / PVC
41	Flange DN40 PN 6 UNI6991-71 / PTFE
42	Flange DN40 PN6 / carbon steel
45	Flange DN50 PN6 UNI 1092-1 / PVC
46	Flange DN80 PN6 UNI 1092-1 / PVC
47	Flange DN100 PN6 UNI 1092-1 / PVC
50	Flange DN40 PN16 / SS304
51	Flange DN40 PN16 / SS316
52	Flange DN50 PN16 DIN 2527 form B (without gasket) / SS316
53	Flange DN80 PN16 DIN 2527 form B (without gasket) / SS316
54	Flange DN100 PN16 DIN 2527 form B (without gasket) / SS316
60	Flange ANSI RF 2" 150 psi / SS316

CAPACITIVE

61	Flange ANSI RF 3" 150 psi / SS316
62	Flange ANSI RF 4" 150 psi / SS316
71	CLAMP 1" / SS316
73	CLAMP 1 1/2" / SS316
75	CLAMP 2" / SS316
83	G½" (G ½ A) / Carbon-steel
84	G½" (G ½ A) / Stainless-steel SS316
99	Special

Electrode type and insulation	
B	PTFE partially insulated SS316 rod
D	PVC totally insulated SS316 rod
H	PTFE totally insulated SS316 rod
M	PTFE partially insulated SS316 rod + Carbon steel concentric reference electrode
N	PVC insulated rod + Carbon steel concentric reference electrode
P	PTFE insulated rod + Carbon steel concentric reference electrode
Q	PTFE partially insulated SS316 rod + AISI316 concentric reference electrode
R	PVC insulated rod + SS316 concentric reference electrode
S	PTFE insulated rod + SS316 concentric reference electrode
T	Ø8mm SS316 rod PTFE totally insulated; with SS316 housing (N code) only
Z	Special

L= Electrode length, price each 100mm	
40	PTFE partially insulated SS316 rod
42	PVC totally insulated SS316 rod
46	PTFE totally insulated SS316 rod
50	PTFE partially insulated SS316 rod + Carbon steel concentric reference electrode
51	PVC insulated rod + Carbon steel concentric reference electrode
52	PTFE insulated rod + Carbon steel concentric reference electrode
53	PTFE partially insulated SS316 rod + SS316 concentric reference electrode
54	PVC insulated rod + SS316 concentric reference electrode
55	PTFE insulated rod + SS316 concentric reference electrode
56	Ø8mm SS316 rod PTFE totally insulated; with SS316 housing (N code) only
99	Special

L1 = non sensitive part (rod), material and price each 10cm	
A	Standard
B	Carbon-steel
C	SS316
Z	Special

CLT5 Capacitive double-rods probe for liquids

Continuous capacitive level measurement
Installation in the top of non-metallic tanks; 3m max.

Version	
A	Without insert-preamplifier (only capacitive electrode + head connection)
B	Compact
Z	Special

Electronic preamplifier	
00	None
22	TC22, 4÷20mA, 2 push buttons for calibration, 24Vdc
23	TC23, 4÷20mA, 2 push buttons for calibration, 24Vac
24	TC24, 4÷20mA, 2 push buttons for calibration, 115Vac
25	TC25, 4÷20mA, 2 push buttons for calibration, 230Vac
26	TC26, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vdc
27	TC27, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vac
28	TC28, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 115Vac
29	TC29, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 230Vac
30	TC30, 2wires, 2 push buttons for calibration, 24Vdc
99	Special

Housing	
F	PC with transparent cap, IP67
L	PC with blind cap, IP67
Z	Special

Process connection	
18	G1"½ (G 1 ½ A) / PVC
19	G1"½ (G 1 ½ A) / PTFE
40	Flange DN40 PN6 UNI 1092-1, material PVC
41	Flange DN40 PN6 UNI 1092-1, material PTFE
45	Flange DN50 PN6 UNI 1092-1, material PVC
46	Flange DN80 PN6 UNI 1092-1, material PVC
47	Flange DN100 PN6 UNI 1092-1, material PVC
99	Special

Electrode type and insulation	
B	PTFE partially insulated SS316
D	PVC totally insulated
H	PTFE totally insulated
Z	Special

L= insertion length (electrodes couple), price each 100mm	
40	PTFE partially insulated SS316 rod
42	PVC totally insulated (with spreader each meter)
46	PTFE totally insulated (with spreader each meter)
99	Special

CAPACITIVE

CLT7 Capacitive rope probe for granulates and powders

Continuous capacitive level measurement
Installation on the top of metallic tanks

Version	
A	Without insert-preamplifier (only capacitive electrode + head connection)
B	Compact version
C	Compact Intrinsic Safe, ATEX II 1 GD EExia II C T4..T6 IP65 T85°C certified (select TC30 insert only)
H	Separate, IP66 preampl.head + Electrode and DIN A Al head + 1,5m coaxcable
N	Separate, IP66 preampl.head with Al fixing base + 1,7m coaxcable
Z	Special

Electronic preamplifier	
00	None
22	TC22, 4÷20mA, 2 push buttons for calibration, 24Vdc
23	TC23, 4÷20mA, 2 push buttons for calibration, 24Vac
24	TC24, 4÷20mA, 2 push buttons for calibration, 115Vac
25	TC25, 4÷20mA, 2 push buttons for calibration, 230Vac
26	TC26, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vdc
27	TC27, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vac
28	TC28, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 115Vac
29	TC29, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 230Vac
30	TC30, 2wires, 2 push buttons for calibration, 24Vdc
99	Special

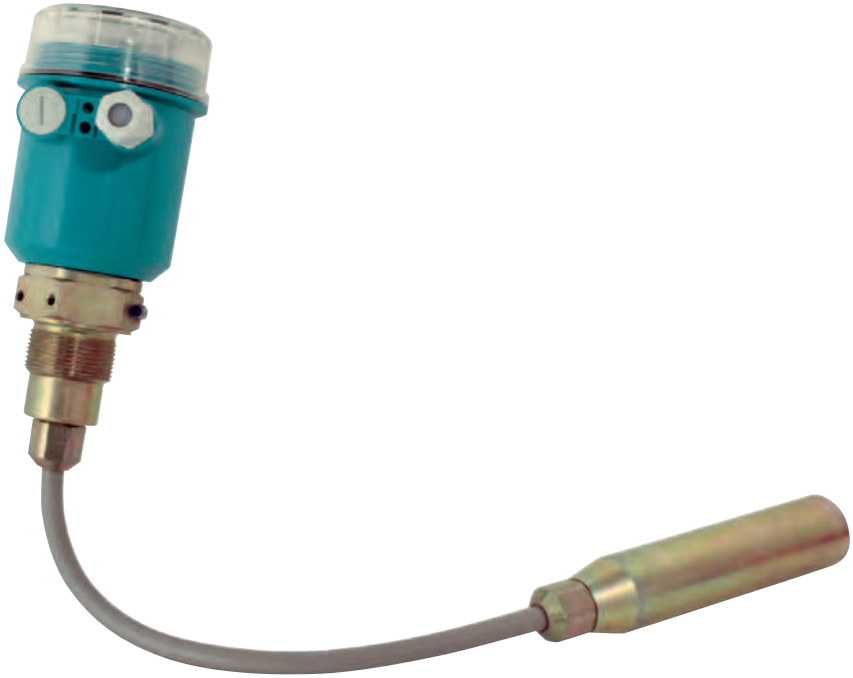
Housing	
B	IP66 loaded PC , white polycarbonate cap (necessary for ATEX version)
F	PC with transparent cap, IP67
G	IP66 aluminum varnished with 2 cable-glands
H	IP66 PC with aluminum adapter, 4 holes flange
L	PC with blind cap, IP67
Z	Special

Process connection	
11	G1"½ (G 1 ½ A) / Carbon-steel
12	G1"½ (G 1 ½ A) / SS316
42	Flange DN40 PN6 material Carbon-steel
50	Flange DN 40 PN16 material SS304
51	Flange DN 40 PN16 material SS316
52	Flange DN 50 PN16 DIN 2527 form B (without gasket) SS316
53	Flange DN 80 PN16 DIN 2527 form B (without gasket) SS316
54	Flange DN 100 PN16 DIN 2527 form B (without gasket) SS316
60	Flange ANSI RF 2" 150 psi SS316
61	Flange ANSI RF 3" 150 psi SS316
62	Flange ANSI RF 4" 150 psi SS316
99	Special

Electrode type and insulation	
L	Ø8mm carbon steel, counterweight in carbon steel
M	Ø8mm carbon steel, counterweight in SS316
N	Ø8mm carbon steel PE coated, counterweight in carbon steel
P	Ø8mm carbon steel PE coated, counterweight in SS316
Z	Special

L= Electrode length, price each meter	
73	Ø8mm carbon steel
74	Ø8mm carbon steel PE coated
99	Special

L1 = non sensitive part (rod), material and price each 10cm	
A	Standard
B	Carbon-steel
C	SS316
Z	Special



CAPACITIVE

CLT8 Capacitive rope probe for liquids

Continuous capacitive level measurement
Suitable for conductive and not conductive liquids, paste
Installation on the top of metallic tanks
IP66 mechanical protection

Version	
A	Without insert-preamplifier (only capacitive electrode + head connection)
B	Compact
C	Compact Intrinsic Safe, ATEX II 1 GD EExia II C T4..T6 IP65 T85°C certified (select TC30 insert only)
D	Spacer-cooling-fins compact in carbon-steel
F	Spacer-cooling-fins compact in stainless-steel
H	Separate, IP66 preampl.head + Electrode and DIN-A Al head + 1,5m coaxcable
L	Spacer-cooling-fins compact in carbon-s., ATEX II 1 GD EExia II C T4..T6 IP65 T85°C cert. (select TC30 insert only)
M	Spacer-cooling-fins compact in S.S., ATEX II 1 GD EExia II C T4..T6 IP65 T85°C cert. (select TC30 insert only)
N	Separate, IP66 preampl.head with Al fixing base + 1,5m coaxcable
Z	Special

Electronic preamplifier	
00	None
22	TC22, 4÷20mA, 2 push buttons for calibration, 24Vdc
23	TC23, 4÷20mA, 2 push buttons for calibration, 24Vac.
24	TC24, 4÷20mA, 2 push buttons for calibration, 115Vac.
25	TC25, 4÷20mA, 2 push buttons for calibration, 230Vac.
26	TC26, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vdc
27	TC27, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 24Vac
28	TC28, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 115Vac
29	TC29, 4÷20mA, 2 push-buttons calibration, 1relay, RS485, 230Vac
30	TC30, 2wires, 2 push buttons for calibration, 24Vdc
99	Special

Housing	
B	IP66 loaded PC , white polycarbonate cap (necessary for ATEX version)
F	PC with transparent cap, IP67
G	IP66 aluminum varnished with 2 cable-glands
H	IP66 PC with aluminum adapter, 4 holes flange
L	PC with blind cap, IP67
Z	Special

Process connection	
02	G1" (G 1 A) / Stainless-steel SS316
04	1" NPT / Stainless-steel SS 316
11	G1"½ (G 1 ½ A) / Carbon-steel
12	G1"½ (G 1 ½ A) / Stainless-steel SS316
18	G1"½ (G 1 ½ A) / PVC
19	G1"½ (G 1 ½ A) / PTFE
20	Sanitary DN 25 DIN 11851, SS 304L
21	Sanitary DN 40 DIN 11851, SS 304L
22	Sanitary DN 50 DIN 11851, SS 304L
42	Flange DN 40 PN16 material Carbon-steel
50	Flange DN 40 PN16 material SS 304
51	Flange DN 40 - PN16 material SS 316
52	Flange DN 50 - PN16 DIN 2527 form B (without gasket) SS 316
53	Flange DN 80 PN16 DIN 2527 form B (without gasket) SS 316
54	Flange DN 100 PN16 DIN 2527 form B (without gasket) SS 316
60	Flange ANSI RF 2" 150 psi SS 316
61	Flange ANSI RF 3" 150 psi SS 316
62	Flange ANSI RF 4" 150 psi SS 316
71	CLAMP 1" SS 316
73	CLAMP 1 1/2" SS 316
75	CLAMP 2" SS 316
99	Special

CAPACITIVE

Electrode type and insulation	
B	Ø2,5mm PVC insulated, counterweight in SS316
C	Ø2,5mm PTFE insulated, counterweight in SS316
L	Ø2,5mm PVC insulated, counterweight in PVC
M	Ø2,5mm PTFE insulated, counterweight in PTFE
Z	Special

L= Electrode length, price each meter	
81	Ø2,5mm PVC insulated
82	Ø2,5mm PTFE insulated
99	Special

L1 = non sensitive part (rod), material and price each 10cm	
A	Standard
C	SS316
Z	Special

PURGE

PVI Air purge lev. transm. unit with 4 threshold relay

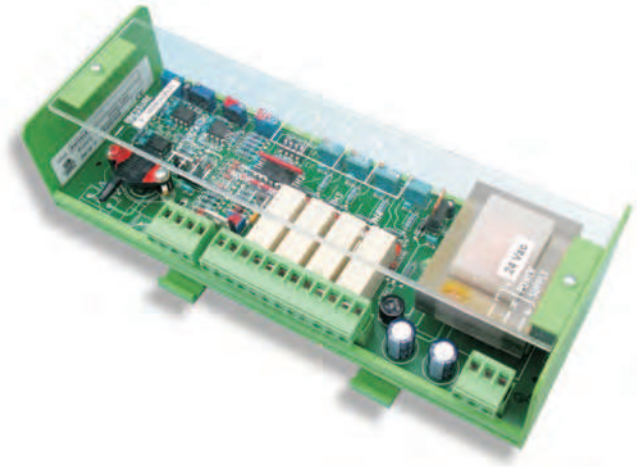
Air purge; connection to a 20PSI air instrumentation, (137,895 kPa)
Analog output: 0÷10Vdc min 3kohm, and 4÷20mA max 500ohm
Mechanical protection: IP10
Working temperature -10, +50°C,

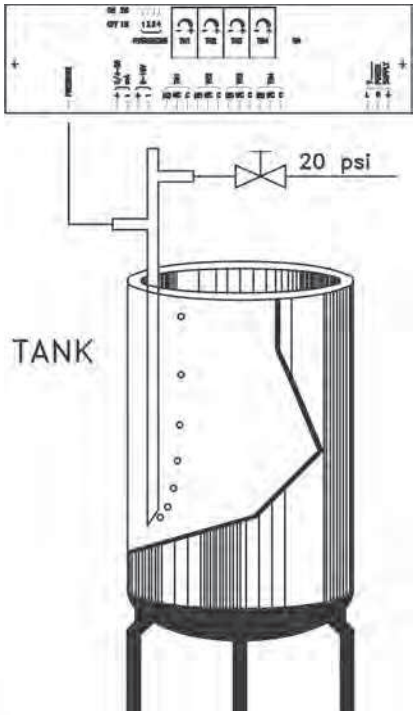
Version	
0	Level transmitter, IP10 DIN-rail mounting
1	Level transmitter + 4 relays SPDT, IP10 DIN-rail mounting
9	Special

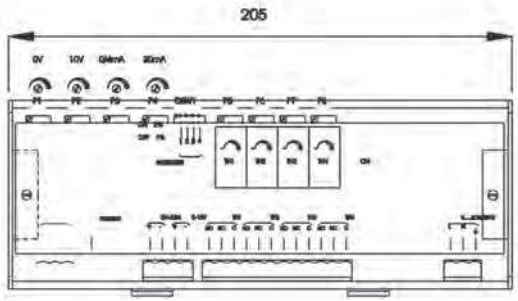
Power supply	
A	24Vac 50÷60Hz
B	115Vac 50÷60Hz
C	230Vac 50÷60Hz

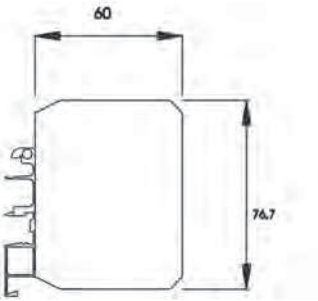
Measure range	
1	0÷1000mm H2O, (0÷9,80665kPa)
2	0÷5000mm H2O, (0÷4,903325kPa)
5	For differential pressure 0÷100mm H2O, (0÷0,980665kPa)
9	Special

Accessories	
A	None
Z	Special









PTS Air purge lev. transm.-1/2 threshold relays

Air purge; connection to a 20PSI air instrumentation, (137,895 kPa)
Undecal socket mounting into DIN-rail
Zero and Span frontal trimmers adjustement
Working temperature -10 ÷ +50°C

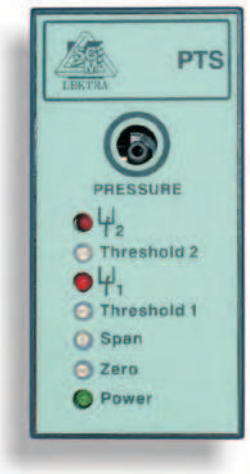
Version	
A	IP20, n.1 threshold relay
B	IP20, n.2 threshold relays
Z	Special

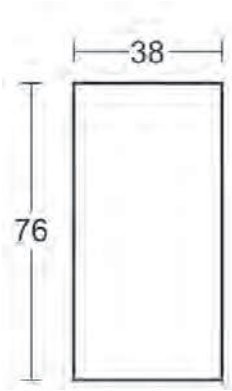
Power supply	
0	24Vac 50/60 Hz
1	115Vac 50/60 Hz
2	230Vac 50/60 Hz
4	24Vdc
9	Special

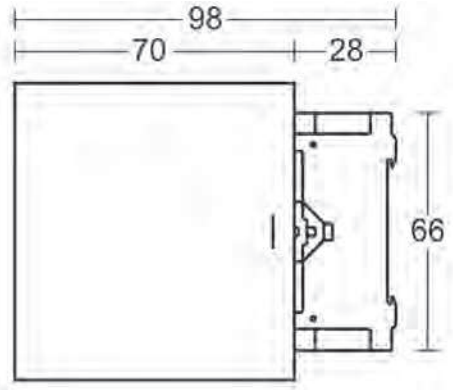
Output	
A	4÷20mA
B	0÷10V
Z	Special

Measure range	
2	0÷1000mm H2O, (0÷9,80665kPa)
4	0÷5000mm H2O, (0÷4,903325kPa)
9	Special max 20.000mm H2O, (0÷196,133kPa)

Accessories	
A	None
B	Socket and fixing spring
Z	Special





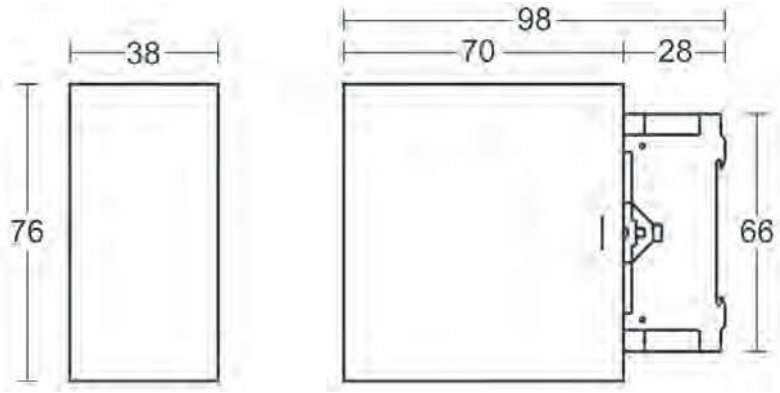


DISPLAY AND RELAY THRESHOLD

LC2 2 rel. switch and power control unit for transm.

Trim-adjustable 4÷20mA input / 2 relays output
Suitable to be connected to "general purpose" transmitters (TC, PTU, SMART)
Transmitter supply output 24Vdc - max 200mA
Frontal trimmers adjustment for switch points calibration and time delay 0÷12s
Power supply: 85÷255 Vac - Working temperature: -10 ÷ +50°C
Undecal socket mounting, IP20

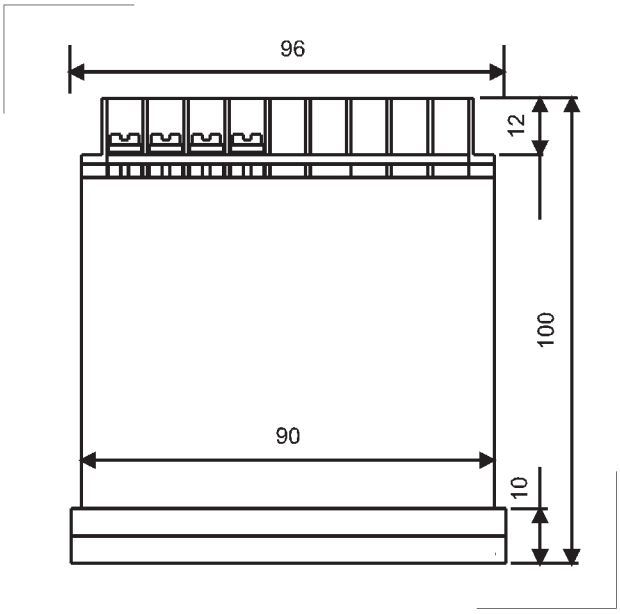
Version	
A	Standard
Z	Special



VL501 4÷20mA loop powered digital display

3 1/2digit LCD
Fine calibration with dip-switches
Zero and Span setting with internal simulator
Panel mounting std 48x96mm, IP40 frontal

Accessories	
A	None
M	Frontal window IP54
Z	Special



PROCESS CONTROL AND MEASUREMENT

DISPLAY AND RELAY THRESHOLD

SLA2X Display and control unit

5 ½ digit led display, suitable to be connected to analogic transmitters
Power supply output: 24Vdc; max.40mA
4 frontal push-buttons for calibration; level auto-calibration available
Working temperature -10, +50°C, Front panel mounting 48 x 96
IP40 frontal mechanical protection

Power supply	
0	115Vac 50÷60Hz
1	230Vac 50÷60Hz
2	24Vac 50÷60Hz
3	24Vdc

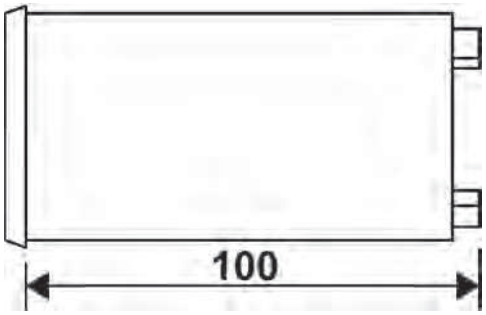
Relay	
0	None
2	2 Relays
4	4 Relays

Output	
A	None
D	RS485 MODBUS
R	RS232
T	4÷20mA / 0÷10V

Linearization	
A	None
L	With up to 20 segments programmable

Input galvanic insulation	
A	Std. (only with Vac power supplies)
D	Input galvanic insulation; opt. only with 24Vdc power supply (cod.3)

Accessories	
A	None
M	Frontal window IP54
N	Enclosure for external mounting IP66
Z	Special



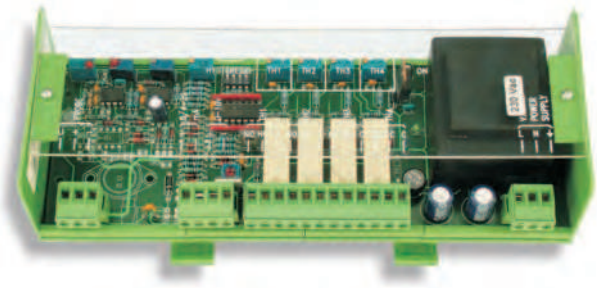
DISPLAY AND RELAY THRESHOLD

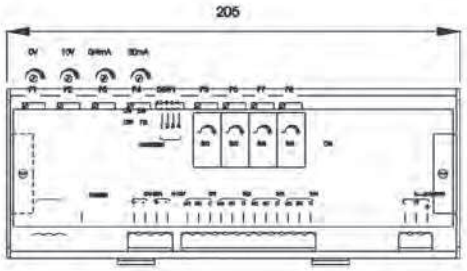
CVI — 4 rel. switch and power control unit for transm.

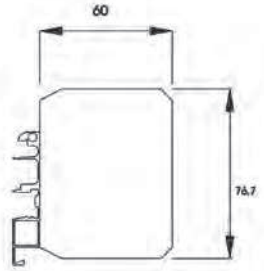
Suitable to be connected to general purpose transmitters (TC, PTU, SMART)
Maximum current consumption 150mA
Analogic output 4÷20mA and 0÷10V
Frontal trimmers (4) adjustment for switch points calibration
Panel mounting (DIN rail) IP10
Working temperature -20 ÷ +60°C,

Input	
A	0/4÷20mA
Z	Special

Power supply	
1	24Vac 50÷60Hz
2	115Vac 50÷60Hz
3	230Vac 50÷60Hz







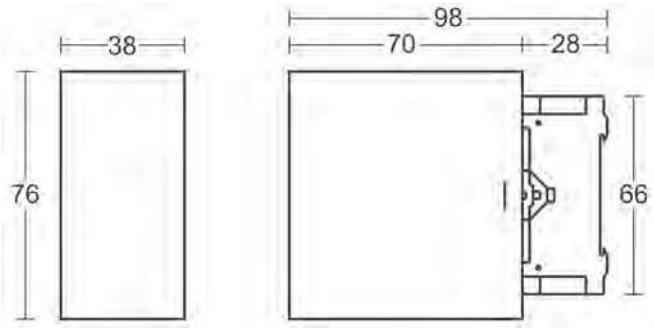
A2S — Control unit for 4÷20mA 2 relays transmitters

Suitable to be connected to 4÷20mA analogic transmitters
2 SPDT 3A 250Vac relays, trimmer adjustable set points
IP20 mechanical protection; Undecal plug-in male-socket

Input	
A	4÷20mA
B	0÷10V
Z	Special

Power supply	
0	24Vac 50-60 Hz
1	115Vac 50-60 Hz
2	230Vac 50-60 Hz
4	24Vdc

Accessories	
A	None
B	Socket and fixing spring
Z	Special



ON-OFF CAPACITIVE

CLS2 Standard rod level switch

ON/OFF capacitive level control
Top and lateral side metallic tank-installation
Standard length: 250mm

Version	
A	Without preamplifier insert (only capacitive electrode)
B	Compact
D	Compact with carbon-steel dissipator between head and connection
E	Compact, dust ATEX Zone 20/21 certificated (TL41 insert); to be used with " G" housing
F	Compact with SS316 dissipator (use same of process conn.)
Z	Special

Electronic preamplifier	
00	None
33	TL31R ON-OFF, supply 24Vdc, Relay output SPDT
34	TL31R ON-OFF, supply 24Vac, Relay output SPDT
35	TL31R ON-OFF, supply 115Vac, Relay output SPDT
36	TL31R ON-OFF, supply 230Vac, Relay output SPDT
41	TL41 ON-OFF, supply 20÷30Vdc/24Vac 50Hz, Relay output SPDT
43	TL41 ON-OFF, supply 85÷250Vac 50Hz, Relay output SPDT
99	Special

Housing	
B	IP66 loaded PC , white polycarbonate cap
F	PC with transparent cap, IP67 ; only with TL41 insert
G	IP66 aluminum varnished (necessary for ATEX version)
H	IP66 PC with aluminum adapter, 4 holes flange
L	PC with blind cap, IP67 ; only with TL41 insert
Z	Special

Process connection	
01	G1" (G 1 A) / Carbon-steel
02	G1" (G 1 A) / SS316
11	G1"½ (G 1 ½ A) / Carbon steel
12	G1"½ (G 1 ½ A) / SS316
92	G ¾" (G ¾ A) / SS316
99	Special

Electrode type and insulation	
B	Partially PVC insulated Ø15mm Carbon-steel rod
C	Ø15mm Carbon-steel rod with extended PVC insulation
D	Partially PTFE insulated Ø15mm Carbon-steel rod
H	Partially PVC insulated Ø15mm SS316 rod
I	Ø15mm SS316 rod with extended PVC insulation
L	Partially PTFE insulated Ø15mm SS316 rod
Z	Special

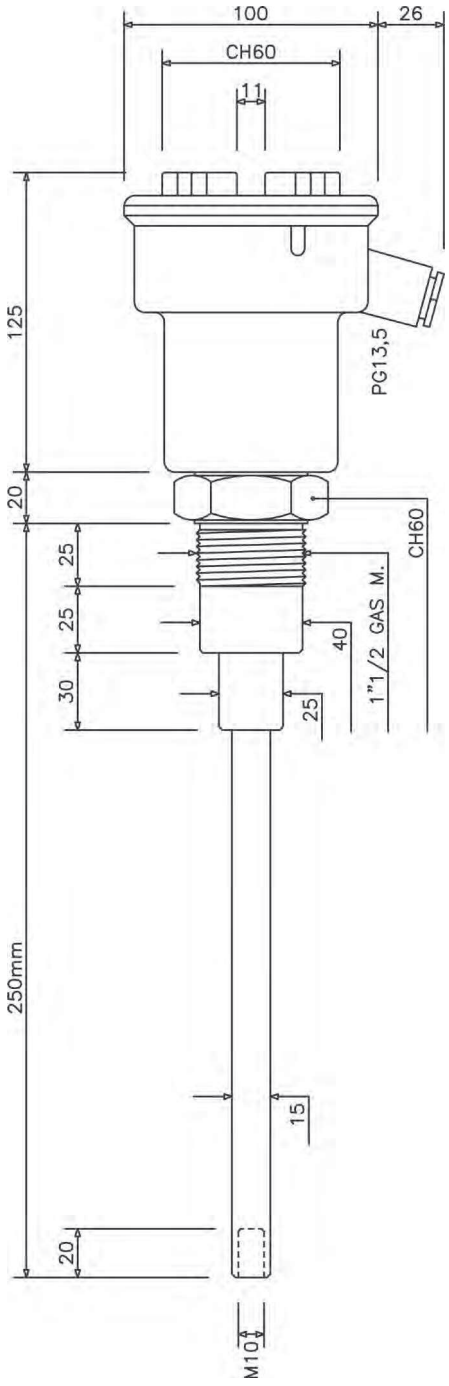
M10x1,5 female thread for extension	
0	None
1	M10x1,5 female thread on top

Non sensitive part	
A	50mm standard (carbon-steel or SS316 function of the process connection)
B	100mm Carbon-steel, (same of material select in process-connection)

ON-OFF CAPACITIVE

Extension type	
000	None
400	Ø10mm SS316 rod
700	Ø6mm Carbon-steel rope + carbon-steel counterweight (type 50) Warning! For length over 3m, extra price of 30,00 EUR

Extension length	
A	None
B	Rigid rod, price each 10cm
C	Carbon-steel rope Ø6mm, price each m.



ON-OFF CAPACITIVE

CLS4 Rod level switch

ON/OFF capacitive level control
Suitable for conductive and non-conductive liquids
Top and lateral side metallic tank-installation

Version	
A	Without preamplifier (only capacitive electrode)
B	Compact
D	Compact with carbon-steel dissipator between head and connection
E	Compact, Zone 20/21 ATEX certificated (TL41 insert only); to be used with "G" housing
F	Compact, with SS316 dissipator between head and connection
H	Separate, IP66 preampl.head + 1,5m coaxcable
N	Compact, with carbon-steel dissipator, Zone 20/21 ATEX cert. (TL41 insert only); to be used with "G" housing
P	Compact, with SS316 dissipator, Zone 20/21 ATEX cert. (TL41 insert only); to be used with "G" housing
R	Separate, IP66 preampl.head with Al fixing base + 2m coaxcable
Z	Special

Electronic preamplifier	
00	None
33	TL31R ON-OFF local sensibility calibration supply 24Vdc, Relay output SPDT
34	TL31R ON-OFF local sensibility calibration supply 24Vac, Relay output SPDT
35	TL31R ON-OFF local sensibility calibration supply 115Vac, Relay output SPDT
36	TL31R ON-OFF local sensibility calibration supply 230Vac, Relay output SPDT
41	TL41 ON-OFF, supply 20÷30Vdc/24Vac 50Hz, Relay output SPDT
43	TL41 ON-OFF, supply 85÷250Vac 50Hz, Relay output SPDT
73	TC7.3R local calibration, 24Vdc, 3 relays out for 3 adjustable set-points
99	Special

Housing	
B	IP66 loaded PC , white polycarbonate cap
C	IP65 aluminum varnished
E	DIN B aluminum painted; IP66; for separate versions (H or R code) only
F	PC with transparent cap, IP67 ; only with TL41 insert
G	IP66 aluminum varnished (necessary for ATEX versions)
L	PC with blind cap, IP67 ; only with TL41 insert
N	SS316; IP66; For separate vers.(H/R cod.) with G½" (12 cod.) process con.and PTFE insulated Ø8 electrode (T56 cod.)
P	DIN A aluminum painted; IP66; for separate versions (H or R code) only
Z	Special

Process connection	
01	G1" (G 1 A) / Carbon-steel
02	G1" (G 1 A) / SS316
03	1" NPT-M / Carbon-steel
04	1" NPT-M / SS316
11	G1"½ (G 1 ½ A) / Carbon-steel
12	G1"½ (G 1 ½ A) /SS316
18	G1"½ (G 1 ½ A) / PVC
19	G1"½ (G 1 ½ A) / PTFE
20	Sanitary DN25 DIN 11851, SS304L
21	Sanitary DN40 DIN 11851, SS304L
22	Sanitary DN50 DIN 11851, SS304L
40	Flange DN40 PN6 UNI 1092-1, PVC
41	Flange DN40 PN 6 UNI6991/71, PTFE
42	Flange DN40 PN16, Carbon-steel
45	Flange DN50 PN6 UNI 1092-1, PVC
46	Flange DN80 PN6 UNI 1092-1, PVC
47	Flange DN100 PN6 UNI 1092-1, PVC
50	Flange DN40 PN16, SS304
51	Flange DN40 PN16, SS316
52	Flange DN50 PN16 DIN 2527 form B (without gasket), SS316
53	Flange DN80 PN16 DIN 2527 form B (without gasket), SS316
54	Flange DN100 PN16 DIN 2527 form B (without gasket), SS316

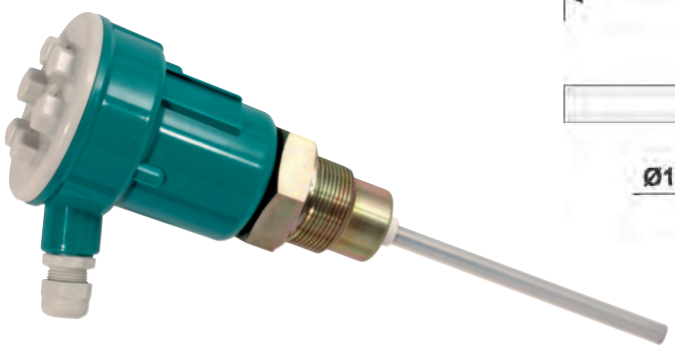
ON-OFF CAPACITIVE

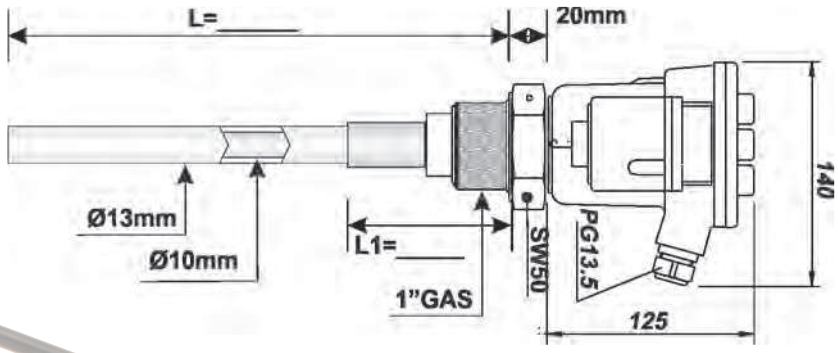
60	Flange ANSI RF 2" 150 psi, SS316
61	Flange ANSI RF 3" 150 psi, SS316
62	Flange ANSI RF 4" 150 psi, SS316
71	CLAMP 1" SS316
73	CLAMP 1 1/2" SS316
75	CLAMP 2" SS316
83	G½" (G ½ A) / Carbon-steel
84	G½" (G ½ A) / Stainless-steel SS316
99	Special

Electrode type and insulation	
B	PTFE partially insulated SS316 rod
C	SSI316 rod with extended PVC insulation
D	PVC totally insulated SS316 rod
G	SS316 rod with extended PTFE insulation
H	SS316 rod PTFE totally insulated
M	PTFE partially insulatedSS316 rod + Carbon steel concentric reference electrode
N	PVC totally insulated SS316 rod + Carbon steel concentric reference electrode
P	PTFE totally insulated SS316 rod + Carbon steel concentric reference electrode
Q	PTFE partially insulated SS316 rod + SS316 concentric reference electrode
R	PVC totally insulated SS316 rod + SS316 concentric reference electrode
S	PTFE totally insulated SS316 rod + SS316 concentric reference electrode
T	Ø8mm SS316 rod PTFE totally insulated; with SS316 housing (N code) only
Z	Special

L= Electrode length, price each 100mm	
40	PTFE partially insulated SS316 rod
41	SS316 rod with extended PVC insulation
42	PVC totally insulated SS316 rod
45	SS316 rod with extended PTFE insulation
46	PTFE totally insulated SS316 rod
50	PTFE partially insulated SS316 rod + Carbon steel concentric reference electrode
51	PVC totally insulated SS316 rod + Carbon steel concentric reference electrode
52	PTFE totally insulated SS316 rod+ Carbon steel concentric reference electrode
53	PTFE partially insulated SS316 rod + SS316 concentric reference electrode
54	PVC totally insulated SS316 rod + SS316 concentric reference electrode
55	PTFE totally insulated SS316 rod + SS316 concentric reference electrode
56	Ø8mm SS316 rod PTFE totally insulated; with SS316 housing (N code) only
99	Special

L1 = non sensitive part (rod), material and price each 10cm	
A	Standard
B	Carbon-steel
C	SS316
Z	Special





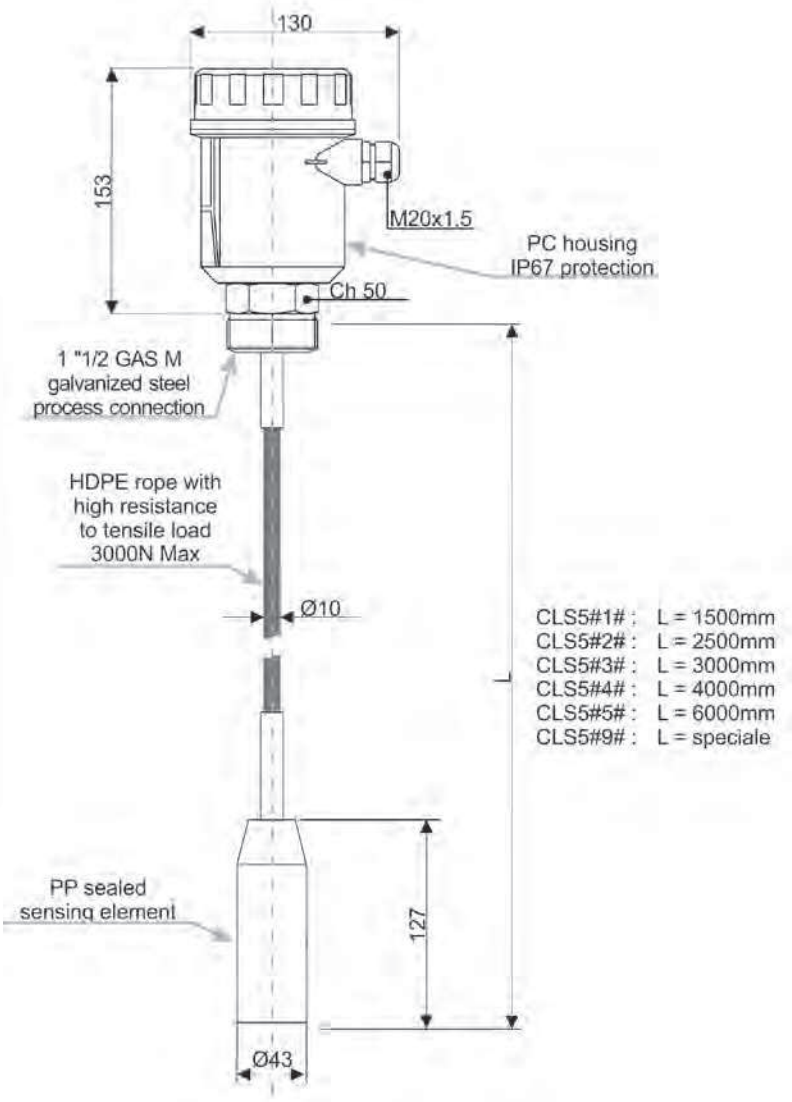
CLS5 PEHD insulated rope level switch for granulates

Process connection, G 1 1/2" A/ galvanized steel
Product temperature range : -30° ÷ +70°C (80° non continuous)
IP67 mechanical protection
Extension with PEHD isolated steel cable
Power supply: 20÷36Vdc / 20÷255Vac 50Hz
0,8W or 15VA max power consumption
Relay output rating 250Vac, 2A

Version	
A	Compact with transparent cap, IP67
B	Compact with blind cap, IP67
Z	Special

Extension length	
1	L = 1500mm
2	L = 2500mm
3	L = 3000mm
4	L = 4000mm
5	L = 6000mm
9	Special

Optional (opt.)	
A	None
D	VL601 keyboard/display programming module (VL601SGM)
Z	Special



ON-OFF CAPACITIVE

CLS7 Rope level switch for granulates

ON/OFF capacitive level control
Suitable for bulk solid and granulates
Top side metallic tank-installation

Version	
A	Without electronic preamplifier
B	Compact
E	Compact, Zone 20/21 ATEX certificated (TL41 insert only); to be used with "G" housing
H	Separate insert, DIN A aluminum electrode head, 1,5m coax cable (PTFE/SIL.)
Z	Special

Electronic preamplifier	
00	None
33	TL31R ON-OFF local sensibility calibration supply 24Vdc, Relay output SPDT
34	TL31R ON-OFF local sensibility calibration supply 24Vac, Relay output SPDT
35	TL31R ON-OFF local sensibility calibration supply 115Vac, Relay output SPDT
36	TL31R ON-OFF local sensibility calibration supply 230Vac, Relay output SPDT
41	TL41 ON-OFF, supply 20÷30Vdc/24Vac 50Hz, Relay output SPDT
43	TL41 ON-OFF, supply 85÷250Vac 50Hz, Relay output SPDT
73	ON-OFF TC7.3R local calibration, 24Vdc, 3 relays out for 3 adjustable set-points
99	Special

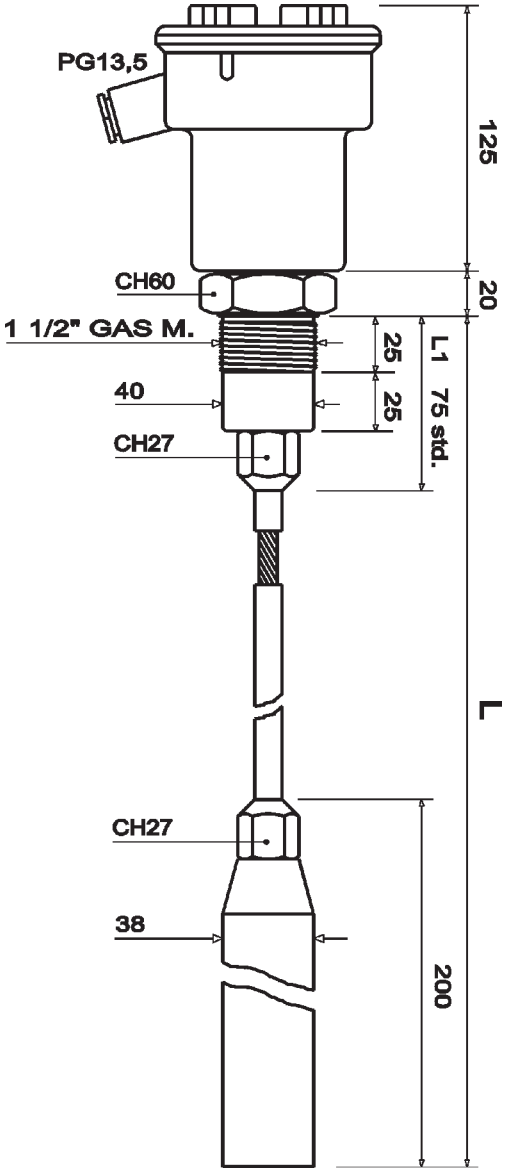
Housing	
B	IP66 loaded PC , white polycarbonate cap
F	PC with transparent cap, IP67 ; only with TL41 insert
G	IP66 aluminum varnished (necessary for ATEX version)
H	IP66 PC with aluminum adapter, 4 holes flange
L	PC with blind cap, IP67 ; only with TL41 insert
Z	Special

Process connection	
11	G1"½ (G 1 ½ A) / Carbon-steel
42	Flange DN40 PN16, Carbon-steel
50	Flange DN40 PN16, SS304
51	Flange DN40 PN16, SS316
52	Flange DN50 PN16 DIN2527 form B (without gasket), SS316
53	Flange DN80 PN16 DIN2527 form B (without gasket), SS316
54	Flange DN100 PN16 DIN2527 form B (without gasket), SS316
60	Flange ANSI RF 2" 150psi, SS316
61	Flange ANSI RF 3" 150psi, SS316
62	Flange ANSI RF 4" 150 psi, SS316
99	Special

Electrode type and insulation	
L	Ø8mm carbon steel, counterweight in carbon steel
M	Ø8mm carbon steel, counterweight in SS316
N	Ø8mm carbon steel PE coated, counterweight in carbon steel
P	Ø8mm carbon steel PE coated, counterweight in SS316
Z	Special

L= Electrode length, price each meter	
73	Ø8mm carbon steel
74	Ø8mm carbon steel PE coated
99	Special

L1 = non sensitive part (rod), material and price each 10cm	
A	Standard
B	Carbon-steel
C	SS316
Z	Special



ON-OFF CAPACITIVE

CLS8 Rope level switch for liquids

ON/OFF capacitive level control
Suitable for conductive and not conductive liquids
Top side metallic tank-installation

Version	
A	Without electronic preamplifier
B	Compact
D	Compact, with carbon steel dissipator between head and connection
E	Compact, Zone 20/21 ATEX certificated (TL41 insert only); to be used with "G" housing
F	Compact, with SS316 dissipator between head and connection
H	Separate insert, DIN A aluminum electrode head, 1,5m coax cable (PTFE/SIL.)
N	Compact, with carbon-steel dissipator, Zone 20/21 ATEX cert. (TL41 insert only); to be used with "G" housing
P	Compact, with SS316 dissipator, Zone 20/21 ATEX cert. (TL41 insert only); to be used with "G" housing
Z	Special

Electronic preamplifier	
00	None
33	TL31R ON-OFF local sensibility calibration supply 24Vdc, Relay output SPDT
34	TL31R ON-OFF local sensibility calibration supply 24Vac, Relay output SPDT
35	TL31R ON-OFF local sensibility calibration supply 115Vac, Relay output SPDT
36	TL31R ON-OFF local sensibility calibration supply 230Vac, Relay output SPDT
41	TL41 ON-OFF, supply 20÷30Vdc/24Vac 50Hz, Relay output SPDT
43	TL41 ON-OFF, supply 85÷250Vac 50Hz, Relay output SPDT
73	ON-OFF TC7.3R local calibration, 24Vdc, 3 relays out for 3 adjustable set-points
99	Special

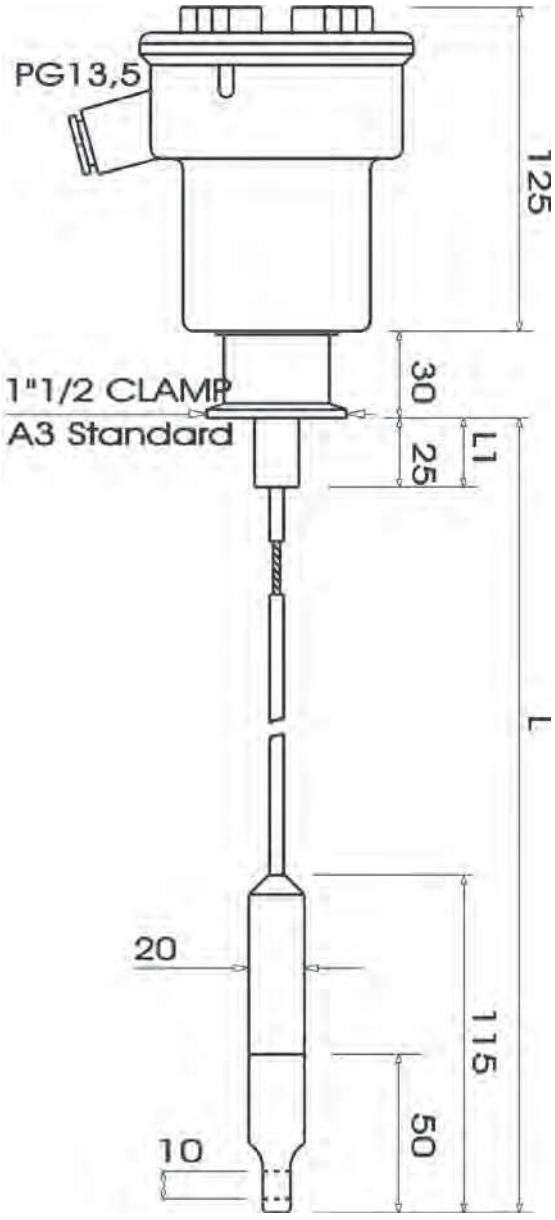
Housing	
B	IP66 loaded PC , white polycarbonate cap
C	IP65 aluminum varnished
F	PC with transparent cap, IP67 ; only with TL41 insert
G	IP66 aluminum varnished (necessary for ATEX versions)
H	IP66 PC with aluminum adapter, 4 holes flange
L	PC with blind cap, IP67 ; only with TL41 insert
Z	Special

Process connection	
02	G1" (G 1 A) / SS316
04	1" NPT / SS316
11	G1"½ (G 1 ½ A) / Carbon-steel
12	G1"½ (G 1 ½ A) / SS316
18	G1"½ (G 1 ½ A) / PVC
19	G1"½ (G 1 ½ A) / PTFE
20	Sanitary DN25 DIN11851, SS304L
21	Sanitary DN40 DIN11851, SS304L
22	Sanitary DN50 DIN11851, SS304L
42	Flange DN40 PN16, Carbon-steel
50	Flange DN40 PN16, SS304
51	Flange DN40 PN16, SS316
52	Flange DN50 PN16 DIN2527 form B (without gasket), SS316
53	Flange DN80 PN16 DIN2527 form B (without gasket), SS316
54	Flange DN100 PN16 DIN2527 form B (without gasket), SS316
60	Flange ANSI RF 2" 150psi, SS316
61	Flange ANSI RF 3" 150psi, SSI316
62	Flange ANSI RF 4" 150psi, SS316
71	CLAMP 1" SS316
73	CLAMP 1 1/2" SS316
75	CLAMP 2" SS316
99	Special

Electrode type and insulation	
B	Ø2,5mm PVC insulated, counterweight in SS316
C	Ø2,5mm PTFE insulated, counterweight in SS316
L	Ø2,5mm PVC insulated, counterweight in PVC
M	Ø2,5mm PTFE insulated, counterweight in PTFE
Z	Special

L= Electrode length, price each meter	
81	Ø2,5mm PVC insulated
82	Ø2,5mm PTFE insulated
99	Special

L1 = non sensitive part (rod), material and price each 10cm	
A	Standard
C	SS316
Z	Special



ON-OFF CAPACITIVE

CLS9 Rod level switch for plastic tanks

ON/OFF capacitive level control; L = 150mm
Suitable for chemical products, acids and others
Top and lateral side plastic tanks-installation

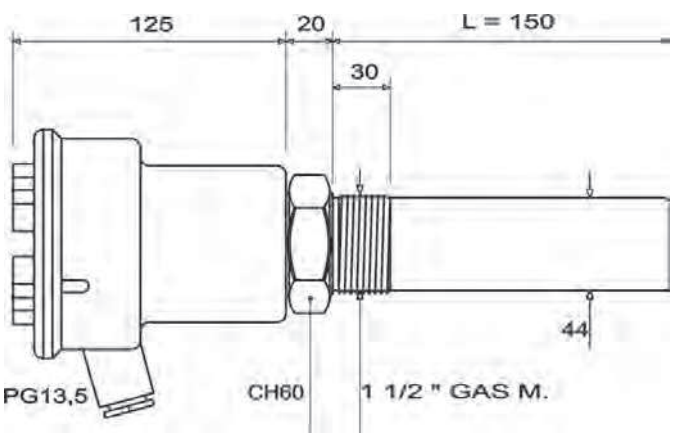
Version	
A	Without electronic preamplifier
B	Compact
E	Compact, Zone 20/21 ATEX certificated (TL41 insert only); to be used with "G" housing
Z	Special

Electronic preamplifier	
00	None
33	TL31R ON-OFF local sensibility calibration supply 24Vdc, Relay output SPDT
34	TL31R ON-OFF local sensibility calibration supply 24Vac, Relay output SPDT
35	TL31R ON-OFF local sensibility calibration supply 115Vac, Relay output SPDT
36	TL31R ON-OFF local sensibility calibration supply 230Vac, Relay output SPDT
41	TL41 ON-OFF, supply 20÷30Vdc/24Vac 50Hz, Relay output SPDT
43	TL41 ON-OFF, supply 85÷250Vac 50Hz, Relay output SPDT
99	Special

Housing	
B	PC polycarbonate loaded; IP66
C	Diecast aluminum varnished; IP66
F	PC with transparent cap, IP67 ; only with TL41 insert
G	IP66 aluminum varnished (necessary for ATEX versions)
H	IP66 PC with aluminum adapter, 4 holes flange
L	PC with blind cap, IP67 ; only with TL41 insert
Z	Special

Process connection	
05	G1" (G 1 A) PVC
06	G1" (G 1 A) PP
18	G1"½ (G 1 ½ A) / PVC
23	G1"½ (G 1 ½ A) / PP
40	Flange DN40 PN6 PVC (Threaded+welded)
43	DN40 PN6 PP (Threaded+welded)
99	Special

Electrode type and insulation	
B	PVC totally insulated - Ø44mm (G1"½) Ø30mm (G1")
C	PP totally insulated - Ø44mm (G1"½) Ø30mm (G1")
Z	Special



CLN Electrode for well and borehole

Base	
CLN	ON/OFF conductive level control electrode, to be fixed to the connection cable (not included) SS316 coaxial insulating pipe to avoid short circuits with other electrode Electrode material SS316 Ø 6mm

PS33 3 rods electrode

Base	
PS33	Conductive level control G ½" A / PVC process connection IP20 mechanical protection Electrodes SS316, Ø4mm, L=300mm electrodes Working temperature up to 60°C

PS310 3 rods electrode

Base	
PS310	Conductive level control G ½ A / PVC process connection IP20 mechanical protection Electrodes in SS316, Ø4mm, L=1000mm electrodes Working temperature up to 60°C

SL PTFE insulated electrode

Conductive level control; Suitable for boiler and autoclave
G 3/8" A / AISI316 process connection
SS316 Ø6mm electrode
IP00 mechanical protection; Max press.10bar
Working temperature up to 180°C

L= Electrode length	
030	L = 300mm
050	L = 500mm
070	L = 700mm
100	L = 1000mm

SU PTFE insulated electrode

Conductive level control; suitable for boiler and autoclave
G 3/8" A / AISI316 process connection
PTFE insulated SS316 Ø6mm electrode
IP00 mechanical protection; Max press.25bar
Working temperature up to 180°C

L= Electrode length	
056	L = 56mm

5M thread	
A	None
B	5M thread on top

ON-OFF CONDUCTIVE

RL2 PTFE insulated electrode

Base	
RL2	Conductive level control G 3/8" A / SS316 process connection Terminal part in SS316, Ø5mm L=105mm Working temperature up to 50°C

RL3 Multi rods electrode

Conductive level control;
max 5 rods
Max electrode length: 3m

Housing	
B	PVC black; IP66

Process connection	
18	G 1" ½ A / Black PVC

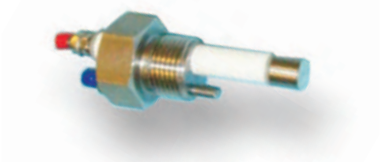
Electrode n.	
D	n.3; Ø6mm
F	n.5; Ø6mm

Optional (opt.)	
0	None
1	L = 1m Ø6mm rod - unit price
2	L = 2m Ø6mm rod - unit price
3	L = 3m Ø6mm rod - unit price
4	PVC spacer (585B045P)

RL5 Ceramic insulated electrode with fibre glass

Conductive level control
Terminal part in SS316, Ø15mm L=65mm
Working temperature up to 280°C, max press. 25bar

Process connection	
A	G ½" A / 316SS
B	G ½" A / brass



RL6 Multi rods electrode

Conductive level control; max 5 rods
Max electrode length: 3m

Housing	
B	Polycarbonate loaded; IP66
E	DIN B aluminum painted (n.1 electrode selection available); IP66
G	DIN A aluminum painted; IP66
Z	Special

Process connection	
02	G 1 A / SS316, max 3 rods Ø5mm
04	1" NPT-M / SS316, max 3 rods Ø5mm
05	G 1 A / PVC, max 3 rods Ø5mm
12	G 1 ½ A / SS316, not available for head connection DIN B
18	G 1 ½ A / PVC, not available for head connection DIN B
20	DN25 DIN11851 SS304L (sanitary) 1 rod only (option B)
21	DN40 DIN11851 SS304L (sanitary)
22	DN50 DIN11851 SS304L (sanitary) - only with B housing
71	Clamp 1" material SS316
73	Clamp 1 1/2" material SS316, not available for head connection DIN B
75	Clamp 2" material SS316, not available for head connection DIN B
84	G ½ A / SS316, only with head connection DIN B - 1 rod only (option B)
85	1/2" NPT-M / SS316, only with head connection DIN B - 1 rod only (option B)
92	G 3/4 A / SS316, max 1 rod Ø10mm - head connection DIN B
93	3/4" NPT-M / SS316, max 1 rod Ø10mm - head connection DIN B
94	G 3/4 A / PVC, max 2 rods Ø5mm
99	Special

Electrode n.	
B	n.1
C	n.2 Ø5mm only for process fitting cod. 02, 04, 05, 12, 18, 20, 21, 22, 71, 73, 75
D	n.3; Ø5mm only for process fitting cod. 02, 04, 05, 12, 18, 21, 22, 73, 75
E	n.4; Ø5mm only, only for process fitting cod. 12, 18, 21, 22, 71, 73, 75
F	n.5; Ø5mm only, only for process fitting cod. 12, 18, 21, 22, 71, 73, 75
Z	Special

Electrode types and insulation, price per 100mm of each electrode (max 3m)	
36	Ø5mm SS316 rod
37	PVC coated Ø5mm SS316 rod
38	PTFE coated Ø5mm SS316 rod
39	FEP lined Ø5mm SS316 rod
40	Ø10mm SS316 rod, only one electrode per sensor possible
41	PVC coated Ø10mm SS316 rod, only one electrode per sensor possible
44	PTFE coated Ø10mm SS316 rod, only one electrode per sensor possible
99	Special

ON-OFF CONDUCTIVE

RL8 Multi ropes electrode

Conductive level control; max. 5 ropes
Max electrodes length 30m

Housing	
B	Polycarbonate loaded; IP66
G	DIN A aluminum painted; IP66
Z	Special

Process connection	
02	G 1 A / SS316
04	1" NPT-M / SS316
05	G 1 A / PVC
12	G 1 ½ A /SS316
18	G 1 ½ A / PVC
19	G 1 ½ A / PTFE
71	Clamp 1" / SS316
73	Clamp 1 1/2" / SS316
75	Camp 2" / SS316
99	Special

Electrode n.	
B	n.1
C	n.2
D	n.3
E	n.4; only for connection cod. 12, 18, 73, 75
H	n.5; only for connection cod. 12, 18, 73, 75
Z	Special

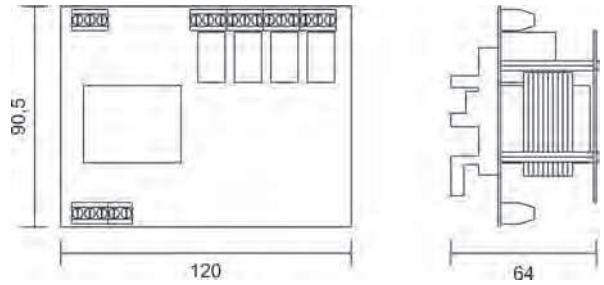
Rope type, price per meter of each electrode	
81	PVC insulated Ø2,5mm SS316
99	Special

RAL04 Unit for level conductive electrodes

Conductive level control up to 4 single setpoint
AC control electrode voltage
N.4 SPDT 3A/250Vac contact (1 for setpoint)
Working temperature -20 + 60°C

Version	
B	DIN rail enclosure IP10
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz



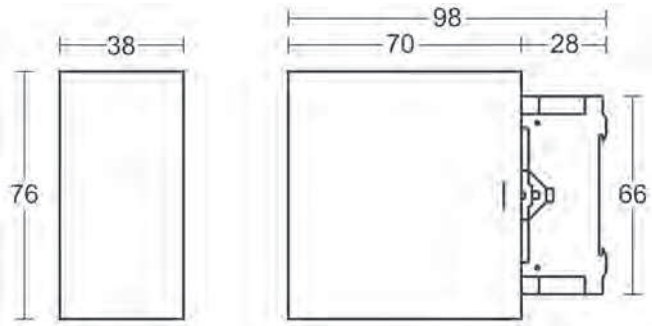
RAL11 Unit for level conductive electrodes

Min/max conductive level control or pump control
Alternate control voltage to the electrodes
2 relays SPDT contacts 3A/250Vac - Adj.sensibility
Undecal plug-in male-socket; IP40 frontal
Working temperature -20 +50°C

Version	
A	Standard
B	IP66
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz

Accessories	
A	None
B	Undecal socket + fixing spring
Z	Special



ON-OFF CONDUCTIVE

RAL12 — Unit for level conductive electrodes

Min/max conductive level control; adj.sensibility
Alternate control voltage to the electrodes
Control of the electrodes electrical connection "security relay"
N1 level control relay; SPDT contacts 3A/250Vac
N1 safety relay; SPDT contacts 3A/250Vac
Undecal plug-in male-socket; IP40 frontal
Working temperature -20 +50°C

Version	
A	Standard
B	IP66
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz

Accessories	
A	None
B	Undecal socket + fixing spring
Z	Special

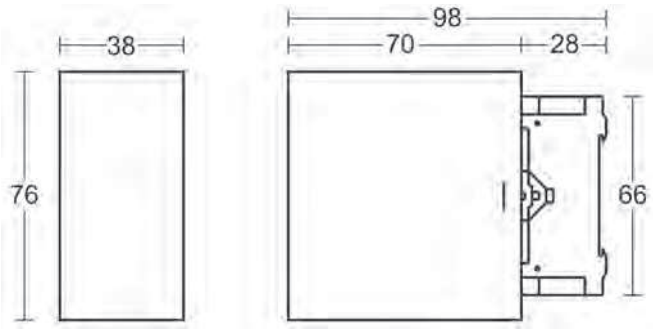
RAL13 — Unit for level conductive electrodes

Min/max conductive level control or pump control
Alternate control voltage to the electrodes
2 relays SPDT contacts 3A/250Vac
Adj. sensibility and delay time
Undecal plug-in male-socket; IP40 frontal
Working temperature -20 +50°C

Version	
A	Standard
B	IP66
Z	Special

Power supply	
0	24Vac 50÷60Hz
1	115Vac 50÷60Hz
2	230Vac 50÷60Hz
4	24Vdc

Accessories	
A	None
B	Undecal socket + fixing spring
Z	Special



RSL200 Diapason level switch, granulates and powders

Process connection, G 1 1/2" A/ SS316
Fork materiale: SS316
Product temperature range from -20 to 140°C
IP66 mechanical protection
Power supply: 20÷36Vdc / 20÷255Vac 50Hz
0,8W or 15VA max power consumption
Relay output rating 250Vac, 2A

Version	
A	Compact - Insertion length 202mm (fork 155mm)
B	Rigid extension, price each 100mm (min. length 200mm - max. 3000mm)
E	Compact + transparent cap - Insertion length 202mm (fork 155mm)
Z	Special

Certification	
0	None - with IP66 PC (loaded-polycarbonate)
1	22 Zone - with IP66 PC (loaded-polycarbonate)
2	Atex II 1/2D Ex tD A20/21 IP66 T 150 (zone 20/21) - with aluminum housing

Output	
A	N. 1 SPDT relay