

### FEATURES

- Compact pilot boxes with direct operated, integrated pilot valves
- Especially designed for the remote control of pulse valves (series 353)
- Valve seats are integrated in base plate
- Common exhaust connection for just 1 or 2 (G 3/8") silencers
- Built-in heating elements for trouble free operation at low ambient temperatures
- Degree of protection: IP 65
- Facilities for integrated quick fittings
- The components satisfy all relevant EC directives

### GENERAL

**Differential pressure (PS)** 0 to 8,5 bar [1 bar = 100kPa]  
**Response times** 5 - 25 ms

fluid	temperature range (TS)	seal material
air	-20 to +80°C	NBR (nitrile)

### CONSTRUCTION

<b>Base-plate</b>	Anodised aluminium
<b>Cover</b>	ABS (polystyrene) UV stabilized
<b>Core tube</b>	Brass
<b>Core and plugnut</b>	Stainless steel
<b>Spring</b>	Stainless steel
<b>Disc</b>	NBR (nitrile)
<b>Shading coil</b>	Copper
<b>Coil insulation class</b>	F
<b>Electrical connection</b>	Spades according to DIN 46244

### ELECTRICAL CHARACTERISTICS

**Standard voltages** DC (=) 24V  
AC (~) 24V - 115V - 230V/50Hz

coil type	nominal power ratings				ambient temperature range (2) (°C)	protection
	inrush ~	holding ~		cold =		
	(VA)	(VA)	(W)	(W)		
UCM22-FI (1)	20,4	14	10	22	-40 to +85	moulded

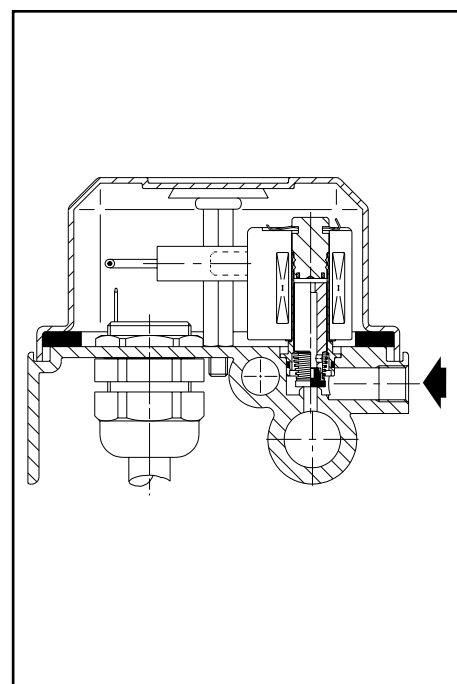
### SPECIFICATIONS

number of pilot valves	pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number for the boxes (2)		
					min.	maximum (PS)	without heating	1 heating element (3)	2 heating elements (3)
						air ~/=			
2 3 4 5 6	1/8	3,6	0,35	5,8	0	8,5	S G110A020 S G110A030 S G110A040 S G110A050 S G110A060	S G110A021 S G110A031 S G110A041 S G110A051 S G110A061	- - - - -
7 8 9 10 11 12	1/8	3,6	0,35	5,8	0	8,5	S G110A070 S G110A080 S G110A090 S G110A100 S G110A110 S G110A120	S G110A071 S G110A081 S G110A091 S G110A101 S G110A111 S G110A121	S G110A072 S G110A082 S G110A092 S G110A102 S G110A112 S G110A122

(1) Intermittent duty, Relative Duty Time is 10%. Max on time is 1 min.

(2) Minimum ambient temperature without heating elements : 0°C  
Minimum ambient temperature with 1 heating element : -40°C (2 to 6 pilots)  
: -15°C (7 to 12 pilots)  
Minimum ambient temperature with 2 heating elements : -40°C (7 to 12 pilots)

(3) Heating element(s) 220-240 VDC / VAC 50-60 Hz standard, for other voltages see ordering information.  
Heating element(s) rating 80 watt each.



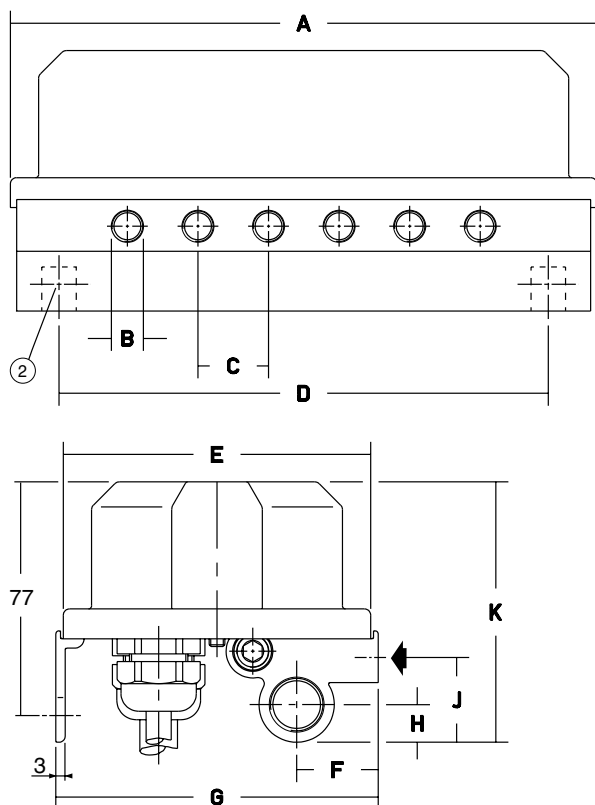
### OPTIONS

- Pilot boxes with metal cover for harsh conditions and dust approved to ATEX heavy duty applications (prefix: **WP**)
- Integrated quick fittings for 6 or 8 mm tubes
- Special customer adapted executions

### INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: G 1/8 according to ISO 228 for pilot connection  
G 3/8 according to ISO 228 for common exhaust
- Cable entries: control cable on box with 2 - 6 pilot valves : cable Ø 10 - 14 mm  
control cable on box with 7 - 12 pilot valves : cable Ø 13 - 18 mm  
connection cable heating element : cable Ø 5 - 10 mm
- Installation/maintenance instructions are included with each pilot box
- Spare parts kit and replacement coils are available

### DIMENSIONS (mm), WEIGHT (kg)



### ORDERING INFORMATION

(WP) S G110 A 12 0 230/50

Volts/ Hz

#### Optional execution

- 0 = no heating element
- 1 = 1 heating element 230V/50Hz
- 2 = 2 heating elements 230V/50Hz
- 3 = 1 heating element 24V DC
- 4 = 2 heating elements 24V DC
- 5 = 1 heating element 115V/50Hz
- 6 = 2 heating elements 115V/50Hz

#### Number of pilots

- 02 = 2 pilot valves
- 03 = 3 pilot valves etc. (max. 12)

#### Change letter

#### Basic number

- G110 = threaded ports
- G120 = 6 mm quick fitting + TPL 22467
- G130 = 8 mm quick fitting + TPL 22386

Electrical connection  
spade terminals 6,3 x 0,8

#### Prefix (optional)

**WP:** Waterproof IP 65  
metal enclosure and cover

number of pilot valves	A	B	C	D	E	F	G	H	J	K	weight (1)
2 to 6	187	G 1/8	22,5	156	98	26	103	12	27	83	1
7 to 12	322	G 1/8	22,5	266	98	26	103	12	27	83	2,2

(1) incl. coil and connector

(2) mounting: 2 holes Ø10 with pitch D

### FEATURES

- Pilot box intended for use in potentially explosive dusty atmospheres, according to Directive ATEX 94/9/EC
- Compliance with the Essential Health and Safety Requirements has been assured by European Standards EN 50014, EN 50281-1-1 and EN 13463-1
- Containing 2 to 12 valves, 2/2 normally closed, direct operated
- Common exhaust connection for 1 or 2 (G 3/8") silencers
- Degree of protection: IP65
- Facilities for integrated quick fittings
- The components satisfy all relevant EC directives

### GENERAL

**Differential pressure (PS)** 0 to 8,5 bar [1 bar = 100kPa]  
**Response times** 5 - 25 ms

fluid	temperature range (TS)	seal material
air	-20 to +80°C	NBR (nitrile)

### CONSTRUCTION

Base-plate	Anodised aluminium
Cover	Aluminium
Core tube	Brass
Core and plugnut	Stainless steel
Spring	Stainless steel
Disc	NBR (nitrile)
Shading coil	Copper
Coil insulation class	F
Electrical connection	Spades according to DIN 46244

### ELECTRICAL CHARACTERISTICS

**Standard voltages** DC (=) 24V; AC (~) 24V - 115V - 230V/50Hz

coil type	nominal power ratings			ambient temperature range (2) (°C)	protection
	inrush ~	holding ~	cold =		
	(VA)	(VA) (W)	(W)		
UCM22-FI (1)	20,4	14 10	22	-40 to +75	moulded

### TEMPERATURE CLASSIFICATION TABLES

AC (~) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
10,0	F	40°C	60°C	75°C

DC (=) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
22,0	F	40°C	60°C	75°C

### SPECIFICATIONS

number of pilot valves	pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number for ATEX approved boxes (2)		
					min.	maximum (PS)	without heating	1 heating element (3)	2 heating elements (3)
						air ~/=			
2 3 4 5 6	1/8	3,6	0,35	5,8	0	8,5	WPSDU G110A020 WPSDU G110A030 WPSDU G110A040 WPSDU G110A050 WPSDU G110A060	WPSDU G110A021 WPSDU G110A031 WPSDU G110A041 WPSDU G110A051 WPSDU G110A061	- - - - -
7 8 9 10 11 12	1/8	3,6	0,35	5,8	0	8,5	WPSDU G110A070 WPSDU G110A080 WPSDU G110A090 WPSDU G110A100 WPSDU G110A110 WPSDU G110A120	WPSDU G110A071 WPSDU G110A081 WPSDU G110A091 WPSDU G110A101 WPSDU G110A111 WPSDU G110A121	WPSDU G110A072 WPSDU G110A082 WPSDU G110A092 WPSDU G110A102 WPSDU G110A112 WPSDU G110A122

(1) Intermittent duty, Relative Duty Time is 10%. Max on time is 1 min.

(3) Heating element(s) 220-240 VDC / VAC 50-60 Hz standard, for other voltages see ordering information. Heating element(s) rating 80 watt each.

(2) Minimum ambient temperature without heating elements: 0°C

Minimum ambient temperature with 1 heating element : -40°C (2 to 6 pilots)  
: -15°C (7 to 12 pilots)

Minimum ambient temperature with 2 heating elements : -40°C (7 to 12 pilots)

### OPTIONS

- Integrated quick fittings for 6 or 8 mm tubes
- Special customer adapted executions

### INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: G 1/8 according to ISO 228 for pilot connection  
G 3/8 according to ISO 228 for common exhaust
- Cable entries: control cable on box with 2 - 6 pilot valves : cable Ø 7 - 12 mm  
control cable on box with 7 - 12 pilot valves : cable Ø 9 - 16 mm  
connection cable heating element : cable Ø 5 - 10 mm
- Installation/maintenance instructions are included with each pilot box
- Spare parts kit and replacement coils are available

### DIMENSIONS (mm), WEIGHT (kg)



### ORDERING INFORMATION

**WP S DU G110 A 12 0 230/50**

**Volts/ Hz**

#### Optional execution

- 0 = no heating element
- 1 = 1 heating element 230V/50Hz
- 2 = 2 heating elements 230V/50Hz
- 3 = 1 heating element 24V DC
- 4 = 2 heating elements 24V DC
- 5 = 1 heating element 115V/50Hz
- 6 = 2 heating elements 115V/50Hz

#### Number of pilots

- 02 = 2 pilot valves
- 03 = 3 pilot valves etc. (max. 12)

#### Change letter

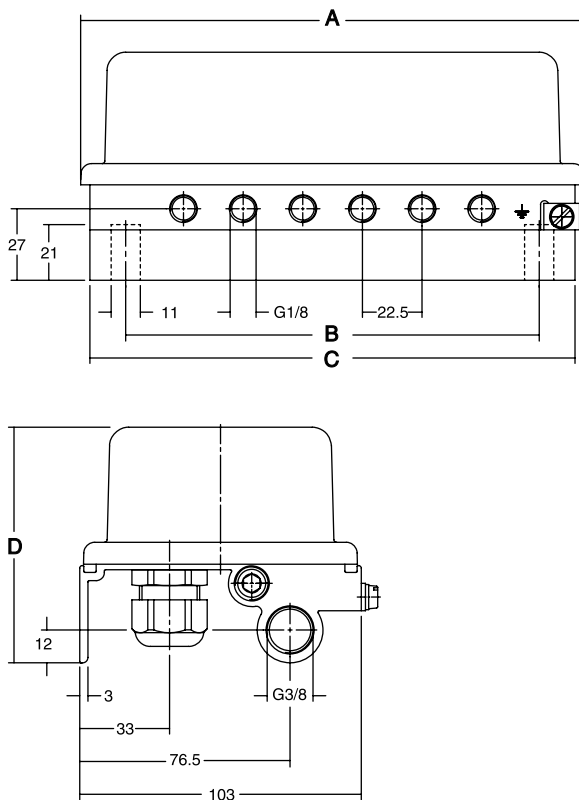
#### Basic number

- G110 = threaded ports
- G120 = 6 mm quick fitting + TPL 22467
- G130 = 8 mm quick fitting + TPL 22386

Approval according to  
Directive ATEX 94/9/EC

Electrical connection  
spade terminals 6,3 x 0,8

Prefix (optional)  
**WP**: Waterproof IP 65  
metal enclosure and cover



number of pilot valves	A	B	C	D
2 to 6	190	156	183	86
7 to 12	328	266	318	95

### FEATURES

- Compact pilot boxes with direct operated, integrated pilot valves
- Especially designed for the remote control of pulse valves (series 353)
- Pilot valves are assembled in base plate
- Heating element for trouble free operation at low ambient temperatures
- Class of protection: IP 65
- The components satisfy all relevant EC directives

### GENERAL

**Differential pressure (PS)** 0 - 7 bar [1 bar = 100kPa]  
**Response times** 5 - 25 ms

fluid	temperature range (TS)	diaphragms
air	-20 to +80°C	NBR (nitrile)



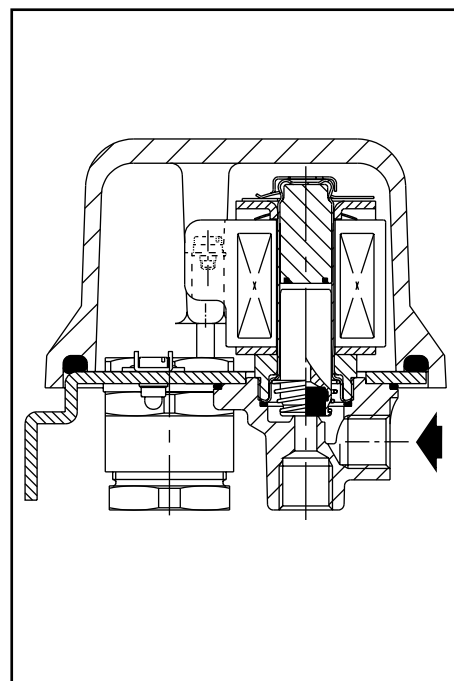
### CONSTRUCTION

<b>Base-plate</b>	Steel (zinc plated)
<b>Cover</b>	Cast-aluminium
<b>Core tube</b>	Stainless steel
<b>Core and plugnut</b>	Stainless steel
<b>Spring</b>	Stainless steel
<b>Disc</b>	NBR (nitrile)
<b>Pilot body</b>	Brass
<b>Shading coil</b>	Copper
<b>Coil insulation class</b>	F
<b>Electrical connection</b>	Coil with screw terminal

### ELECTRICAL CHARACTERISTICS

**Standard voltages** DC (=) 24V  
AC (~) 24V - 115V - 230V/50Hz

coil type	nominal power ratings				ambient temperature range (2) (°C)	protection
	inrush ~	holding ~		cold =		
	(VA)	(VA)	(W)	(W)		
SMXX-FB	56	35	16,7	-	-15 to +85	moulded
SMXX-FI (1)	-	-	-	30	-15 to +85	moulded



### SPECIFICATIONS

number of pilot valves	pipe size	orifice size	flow coefficient kv		operating pressure differential (bar)		catalogue number for boxes (2)	
					min.	maximum (PS)	without heating	with 1 heating element (3)
						air ~/=		
4	1/4	5,6	0,71	11,8	0	7	C204-220 C205-220 C206-220	C204-221 C205-221 C206-221
5								
6								

(1) Intermittent duty, Relative Duty Time is 10%. Max on time 1 min.

(2) Without heating elements: minimum ambient temperature 0°C; with one heating element: -15°C

(3) Heating element: refer to "Ordering Information". Heating element rating: 80 watt.

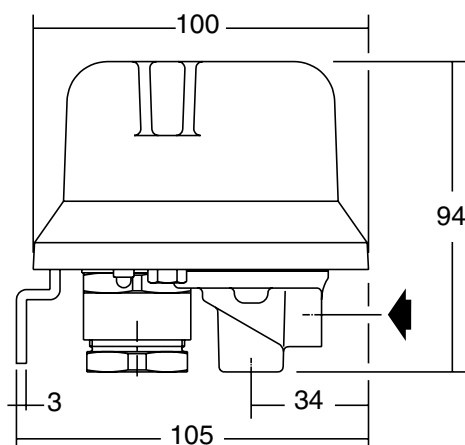
### OPTIONS

- Heating element for low ambient temperatures
- Special customer adapted executions on request

### INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: Rp 1/4 according to ISO 7/1 for pilot connection
- Cable entries: control cable on box : cable Ø 13 - 18 mm  
connection cable heating element : cable Ø 6 - 12 mm
- Spare parts kit and replacement coils are available

### DIMENSIONS (mm), WEIGHT (kg)



### ORDERING INFORMATION

**C20 6 - 2 2 0 230/50**

**Volts / Hz**

#### Optional execution

0 = no heating element  
1 = element with same voltage as coils. If coil voltage deviates from heating element voltage, please consult us for exact codification

**Pipe size Rp 1/4**

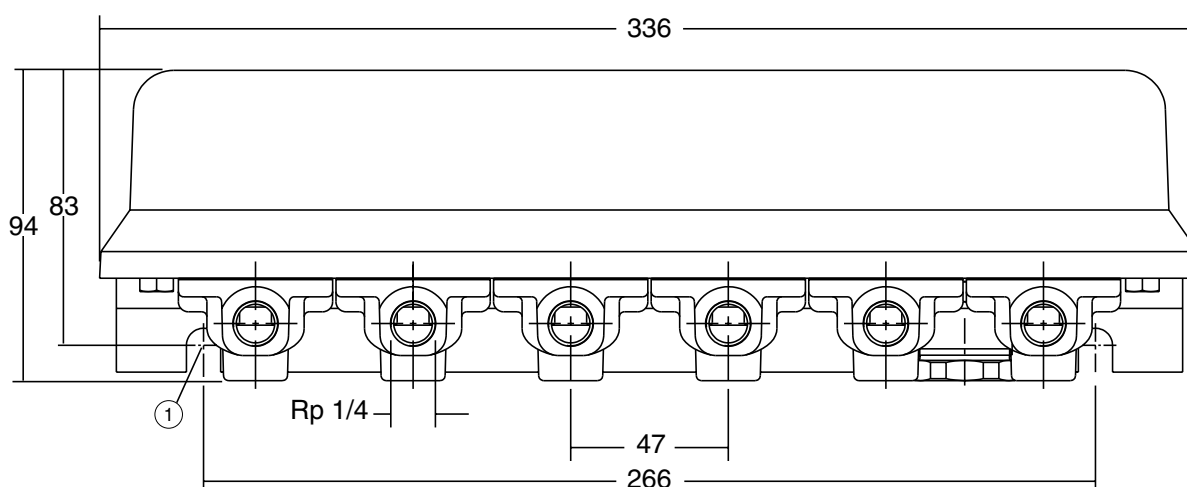
**Coil type only SMXX**

**Change letter**

#### Number of pilots

4 = 4 pilot valves  
5 = 5 pilot valves  
6 = 6 pilot valves

**Basic number C20**



① Mounting : 2 holes Ø 10 with pitch D

pipe connections		weight
C204	Rp 1/4	3,7
C205		4,1
C206		4,6

### FEATURES

- Pilot box intended for use in potentially explosive dusty atmospheres, according to Directive ATEX 94/9/EC
- Compliance with the Essential Health and Safety Requirements has been assured by European Standards EN 50014, EN 50281-1-1 and EN 13463-1
- Containing 4 to 6 valves, 2/2 normally closed, direct operated
- Pilot valves are assembled in base plate
- Heating element for trouble free operation at low ambient temperatures
- Class of protection: IP65
- The components satisfy all relevant EC directives

### GENERAL

Differential pressure (PS) 0 - 7 bar [1 bar = 100kPa]

Response times 5 - 25 ms

fluid	temperature range (TS)	seal material
air	-20 to +80°C	NBR (nitrile)

### CONSTRUCTION

Base-plate	Steel (zinc plated)
Cover	Aluminium
Core tube	Stainless steel
Core and plugnut	Stainless steel
Spring	Stainless steel
Disc	NBR (nitrile)
Pilot body	Brass
Shading coil	Copper
Coil insulation class	F
Electrical connection	Coil with screw terminal

### ELECTRICAL CHARACTERISTICS

Standard voltages DC (=) 24V  
AC (~) 24V - 115V - 230V/50Hz

coil type	nominal power ratings				ambient temperature range (2) (°C)	protection
	inrush ~	holding ~		cold =		
	(VA)	(VA)	(W)	(W)		
SMXX-FB	56	35	16,7	-	-15 to +75	moulded
SMXX-FI (1)	-	-	-	30	-15 to +75	moulded

### TEMPERATURE CLASSIFICATION TABLES

AC (~) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
16,7	F	40°C	60°C	75°C

DC (=) Solenoids

power level (watt)	isolation class	maximum ambient °C surface temperature		
		85°C	100°C	135°C
30,0	F	40°C	60°C	75°C

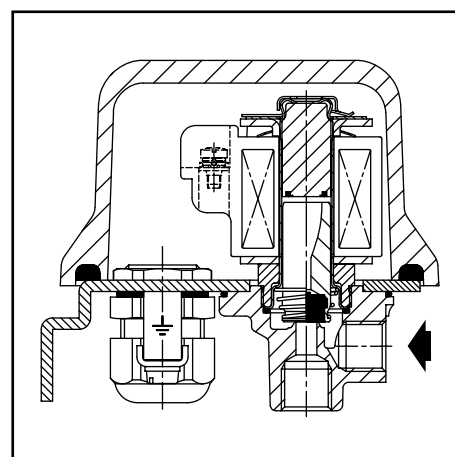
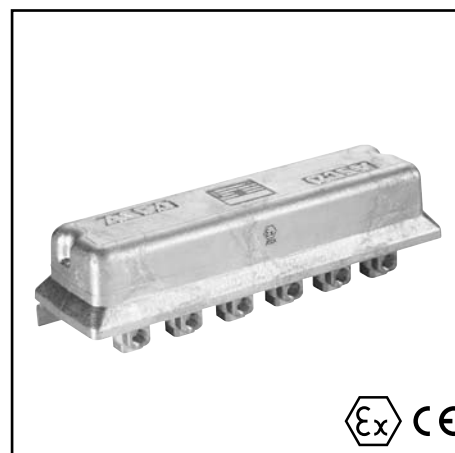
### SPECIFICATIONS

number of pilot valves	pipe size	orifice size	flow coefficient kv		operating pressure differential (bar)		catalogue number for ATEX approved boxes (2)	
					min.	maximum (PS)	without heating	with 1 heating element (3)
						air ~/=		
4	Rp	(mm)	(m³/h)	(l/min)	0	7	DU C204-220 DU C205-220 DU C206-220	DU C204-221 DU C205-221 DU C206-221
5								
6								

(1) Intermittent duty, Relative Duty Time is 10%. Max on time 1 min.

(2) Without heating elements: minimum ambient temperature 0°C: with one heating element: -15°C

(3) Heating element: refer to "Ordering Information". Heating element rating: 80 watt.



## OPTIONS

- Heating element for low ambient temperatures -40°C
- Special customer adapted executions on request

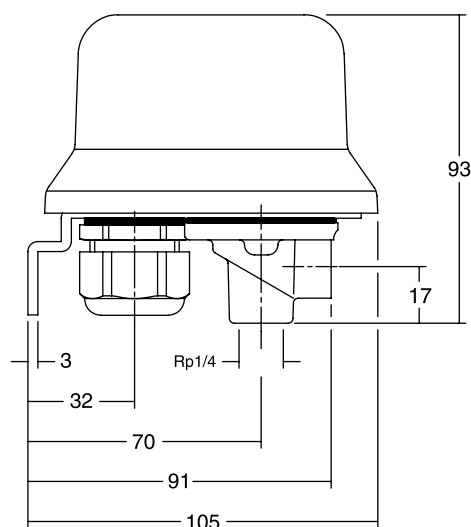
## INSTALLATION

- The pilot boxes can be mounted in any position without affecting operation
- Pipe connections are: Rp 1/4 according to ISO 7/1 for pilot connection
- Cable entries: control cable on box : cable Ø 9 - 16 mm  
connection cable heating element : cable Ø 7 - 12 mm
- Spare parts kit and replacement coils are available

### DIMENSIONS (mm), WEIGHT (kg)



## ORDERING INFORMATION



**DU C20 6 - 2 2 0 230/50**

**Volts / Hz**

### Optional execution

0 = no heating element

1 = element with same voltage as coils. If coil voltage deviates from heating element voltage, please consult us for exact codification

**Pipe size Rp 1/4**

### Coil type only SMXX

### Change letter

### Number of pilots

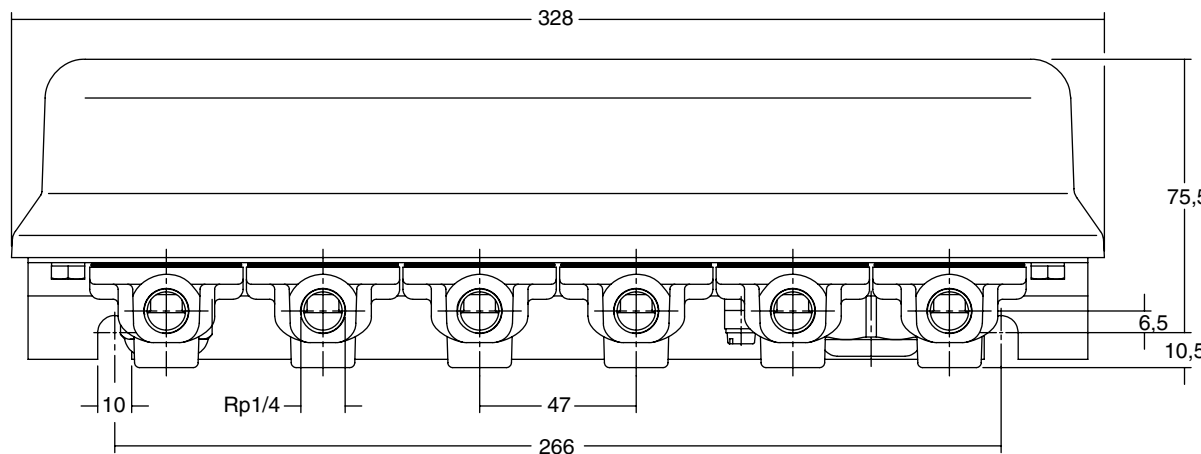
4 = 4 pilot valves

5 = 5 pilot valves

6 = 6 pilot valves

### Basic number C20

Approval according to  
Directive ATEX 94/9/EC



pipe connections	weight
C204	3,7
C205 Rp 1/4	4,1
C206	4.6