



OPERATORS

for potentially explosive atmospheres
increased safety/encapsulation
II 2 G Ex emb II T6..T3, II 2 D Ex tD A21 IP67
steel or stainless steel enclosure



Series
EM
WSEM

FEATURES

- Explosionproof operator for use in potentially explosive atmospheres according to ATEX-Directive 94/9/EC
EC type examination certificate no.: **KEMA 98 ATEX 2542 X**
IECEX Certificate of Conformity no.: **IECEX KEM 08.0002X**
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with the International and European Standards EN-IEC 60079-0, EN-IEC 60079-7, EN-IEC 60079-18, EN-IEC 61241-0 and EN-IEC 61241-1
- Easy electrical installation by means of a screw terminal coil
- Peak voltage suppression standard for DC executions
- Enclosure provided with integral strain relief for cable with an o.d. of 7 to 12 mm
- Ingress protection degree IP67
- A wide range of valves can be supplied with the operator

CONSTRUCTION

Solenoid enclosure

EM Zinc plated steel (epoxy coated)
WSEM Stainless steel, AISI 316

Cable gland

PA, M20 x 1,5

Core, core tube and plugnut

Stainless steel

Shading coil

Copper or silver

Nameplate

Polyester

Coil connection

Embedded screw terminals

Safety code



II 2 G Ex emb II T6..T3

II 2 D Ex tD A21 IP67 T 85°C to T 200°C

ELECTRICAL CHARACTERISTICS

Standard voltages

(Other voltages and 60 Hz on request)

DC (=) : 24V - 48V

AC (~) : 24V - 48V - 115V - 230V / 50 Hz

TEMPERATURE CLASSIFICATION TABLES

AC (~) solenoids

Pn (watt)	solenoid size			maximum ambient °C ⁽¹⁾			
	M6	MXX	M12	surface temperature			
				T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.							
1,2 ⁽²⁾			•	60	75		
1,5 ⁽²⁾		•		40	55		
1,9 ⁽²⁾			•	40	55		
3,7 ⁽²⁾			•	40	55	90	
5,8 ⁽²⁾			•		40	75	90
6,0	•						40
9,0	•						40
10,0 ⁽²⁾		•					40
10,0 ⁽²⁾			•			40	65
10,5		•					40
13,0		•					40
13,6 ⁽²⁾			•				40
14,1 ⁽²⁾			•				40
16,5			•				40

DC (=) solenoids

Pn (watt)	solenoid size			maximum ambient °C ⁽¹⁾			
	M6	MXX	M12	surface temperature			
				T6 85°C	T5 100°C	T4 135°C	T3 200°C
insulation class F (155°C) 100% E.D.							
1,3			•	60	75		
1,7		•		40	55		
1,8			•	40	55		
3,6			•	40	75	90	
5,7			•		40	75	90
9,7	•						40
10,0			•			40	65
11,2		•					40
14,0			•				40
15,3	•						40
16,8			•				40
19,7			•				40
23,0			•				50

Check the wattage compatibility with the product selected.

⁽¹⁾ The minimum allowable ambient temperature is -40°C for the operator. Actual temperature range can be limited depending on valve operation limits.

⁽²⁾ AC (~): rectified coil construction.

CONNECTIONS

- Internal and external earthing connection
- The operator can be rotated through 360° to select the most favourable position for cable entry

OPTIONS

- Brass nickel plated or stainless steel cable gland
- Conduit hub, 1/2 NPT, M20 x 1,5, 3/4 NPT or M25 x 1,5 in aluminium or stainless steel
- Special moulded-in solid state components for peak voltage suppression and/or rectification (four-diode bridge)



EM



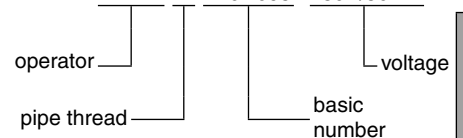
WSEM

ORDERING INFORMATION

A valve supplied with the explosionproof operator will be identified with prefix EM or WSEM before the catalogue number.

Example: **WSEM E 210D095 230V/50 Hz**

EM E 210D095 230V/50 Hz

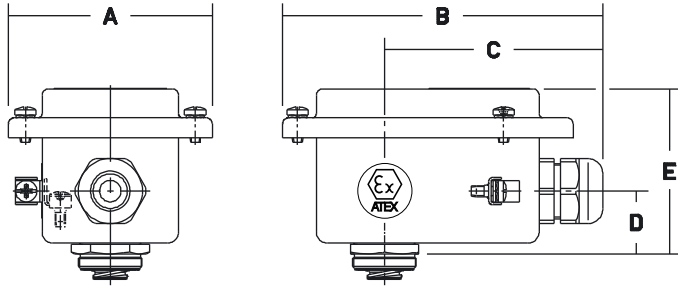


DIMENSIONS (mm), WEIGHT (kg)

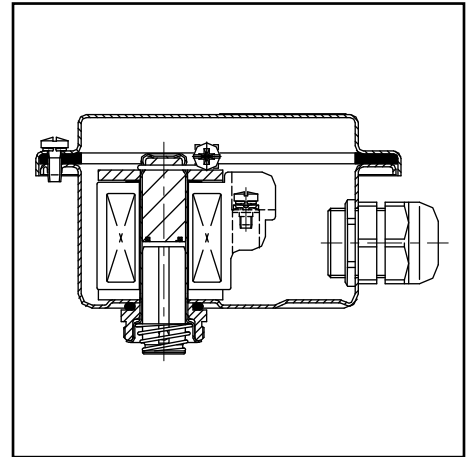


TYPE EM/WSEM

Prefix "EM"/"WSEM" solenoids
 Pull-type solenoid operator
 Metal enclosure, epoxy coated or stainless steel
 EN-IEC 60079-7, EN-IEC 60079-18 and EN-IEC 61241-1
 II 2 G Ex e mb II - II 2 D Ex tD A21 IP67

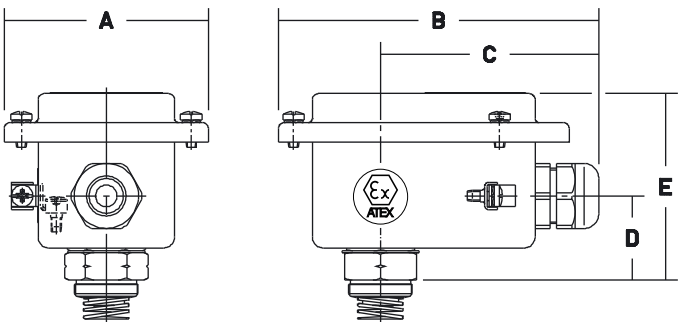


prefix/size	A	B	C	D	E	weight
EM/WSEM-M6	77	120	82	26	64	0,48
EM/WSEM-MXX	77	120	82	23	62	0,55
EM/WSEM-M12	77	120	82	21	65	0,67

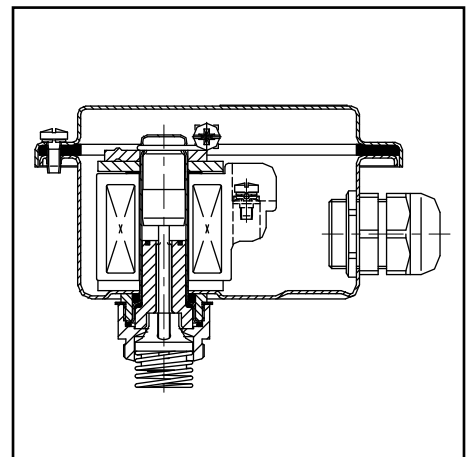


TYPE EM/WSEM

Prefix "EM"/"WSEM" solenoids
 Push-type solenoid operator
 Metal enclosure, epoxy coated or stainless steel
 EN-IEC 60079-7, EN-IEC 60079-18 and EN-IEC 61241-1
 II 2 G Ex e mb II - II 2 D Ex tD A21 IP67

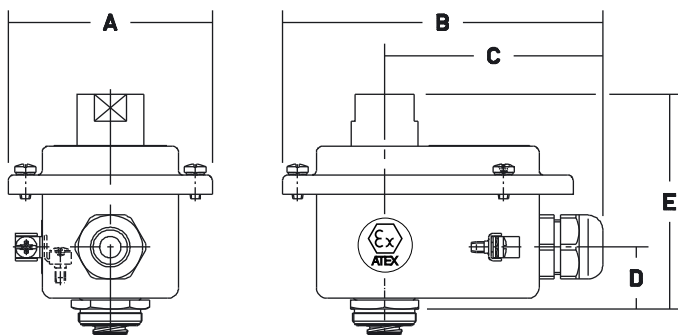


prefix/size	A	B	C	D	E	weight
EM/WSEM-M6	77	120	82	25	63	0,50
EM/WSEM-MXX	77	120	82	31	69	0,59
EM/WSEM-M12	77	120	82	30	73	0,70



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prefix/size	A	B	C	D	E	weight
EM/WSEM-MXX	77	120	82	23	80	0,68

