



OPERATORS

for potentially explosive atmospheres (mining)
flameproof enclosure, I M2 EEx d I
stainless steel

Series

WSNFX
TPL 25250

FEATURES

- Explosion proof operator, intended for use in potentially explosive atmospheres (mining), according to Directive ATEX 2014/34/EU
- EC type examination certificate (FTZU 04 ATEX 0213X) is in compliance with the European Standards EN 50014 and EN 50018
- Easy electrical installation by means of a screw terminal coil
- Enclosure provided with a 1/2 NPT or M20 x 1,5 threaded entry hole for a broad range of cable glands
- Ingress protection degree IP67
- The operator is available as both a push or pull type solenoid and can be supplied on a wide range of valves with ASCO interface

CONSTRUCTION

Solenoid enclosure	Stainless steel (AISI 316LSS)
Bonnet	Stainless steel (nickel plated)
Core, tube, springs & plugnut	Stainless steel
Shading coil	Copper or silver
Nameplate	Stainless steel
Coil connection	Embedded screw terminals
Fasteners & screws	Stainless steel

ELECTRICAL CHARACTERISTICS SAFETY CODE

Standard voltages: I M2 EEx d I
DC (=) : 24V - 48V
AC (~) : 24V - 48V - 115V - 230V / 50 Hz
(Other voltages and 60 Hz on request)

TEMPERATURE TABLES

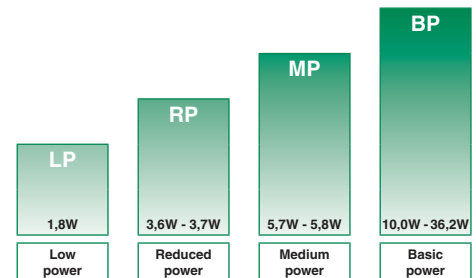
The minimum allowable ambient temperature is -60°C for the operator.
Select the requested "T" classification from the temperature classification tables (AC or DC), respecting the maximum ambient temperature and cold (20°C) electrical holding power values.

AC (~) Solenoids

power level level (watt)	insulation class	maximum ambient ⁽¹⁾ temp. "T" classification		
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)
Low power (LP)				
1,85 ⁽²⁾	F	75°C	80°C	-
Reduced power (RP)				
3,7 ⁽²⁾	F	60°C	75°C	100°C
Medium power (MP)				
5,8 ⁽²⁾	F	60°C	75°C	100°C
Basic power (BP)				
10,0 ⁽²⁾	F	40°C	60°C	75°C
10,0 ⁽²⁾	F	40°C	60°C	100°C
10,5	F	25°C	40°C	60°C
10,5	H	25°C	40°C	75°C
13,4 ⁽²⁾	F	40°C	60°C	75°C
14,1 ⁽²⁾	F	40°C	60°C	90°C
15,4	F	25°C	40°C	60°C
15,4	H	25°C	40°C	75°C
16,5	F	40°C	60°C	75°C
16,7	F	-	25°C	40°C
16,7	H	-	25°C	60°C
20,0	F	-	25°C	40°C
20,0	H	-	25°C	60°C
20,5	H	-	-	25°C
28,0	H	-	-	25°C

DC (=) Solenoids

power level (watt)	insulation class	maximum ambient ⁽¹⁾ temp. "T" classification		
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)
Low power (LP)				
1,8	F	75°C	80°C	-
Reduced power (RP)				
3,6	F	60°C	75°C	100°C
Medium power (MP)				
5,7	F	60°C	75°C	100°C
Basic power (BP)				
10,0	F	40°C	60°C	100°C
11,2	F	40°C	60°C	75°C
11,2	H	40°C	60°C	100°C
14,0	F	40°C	60°C	90°C
16,8	F	40°C	60°C	75°C
16,8	H	40°C	60°C	100°C
17,4	H	25°C	40°C	60°C
19,7	F	25°C	40°C	60°C
19,7	H	40°C	60°C	75°C
23,0	F	25°C	40°C	60°C
23,0	H	25°C	40°C	75°C
26,6	H	25°C	40°C	60°C
29,5	H	-	25°C	40°C
36,2	H	-	25°C	40°C



POWER LEVELS - cold electrical holding values (watt)

⁽¹⁾ Make sure that the selected ambient temperature does not exceed the allowable valve temperature characteristics as specified on the appropriate valve catalogue sheets.

⁽²⁾ AC (~) rectified coil construction



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PREFIX TABLE

prefix							description		power level			
1	2	3	4	5	6	7			LP	RP	MP	BP
W	S	N	F	E	T		Threaded conduit/hole (M20 x 1,5)		●	●	●	●
							Flameproof - 316 SS (EN/IEC 60079-1, 61241-1)*		●	●	●	●
						X	Other special constructions		●	●	●	●

● Available feature

* ATEX solenoids are also approved according to EN 13463-1 (non electrical valves)

PRODUCT SELECTION GUIDE

(The selection can only be made in conjunction with the appropriate valve catalogue sheet)

STEP 1

Select basic valve catalogue number, including pipe thread identification letter from one of the specification tables on the separate catalogue pages.

Example: 8327B002

STEP 2

Select voltage. Refer to standard voltages on page 1.

Example: 230V / 50Hz

STEP 3

Select solenoid prefix (combination). Refer to the prefix table on this page and respect the indicated power level and cold electrical holding values mentioned on page 1.

NOTE: Make sure that the ambient temperature does not exceed the allowable valve temperature characteristics.

Example: WSNFX

75°C ambient

Basic Power (BP) 10W

I M2 EEx d I

STEP 4

Final catalogue / ordering number.

Example:

WSNFX 8327B002 230V / 50 Hz

TPL 25250

ORDERING EXAMPLES / VALVES:

WSNFX	8	327B001	230V / 50 Hz
WSNFETX	G	327B001 MS	230V / 50 Hz
WSNFX	B	320A184 E	24V / DC
WSNFX	B	316A054 V	230V / 50Hz
WSNFETX	B	316B076 CO	240V / 60 Hz

prefix

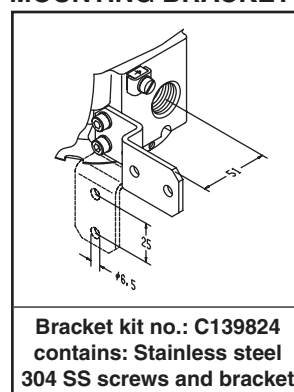
pipe thread

basic number

voltage

suffix

MOUNTING BRACKET



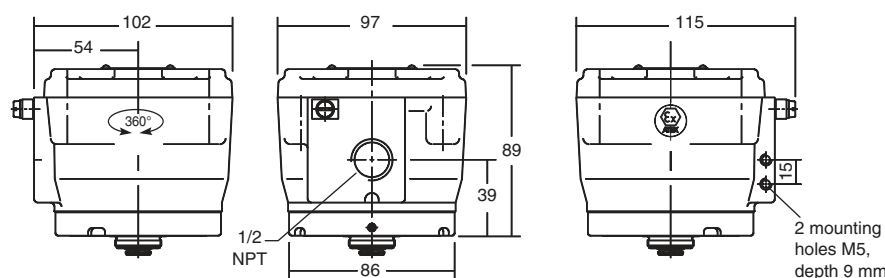
ADDITIONAL OPTIONS

- Special moulded-in solid state components for peak voltage suppression and/or AC (~) rectification

INSTALLATION

- Multi language installation/maintenance instructions are included with each valve
- The solenoid operators can be mounted in any position without affecting operation
- Any certified flameproof cable entry device for potentially explosive atmospheres (mining) can be fitted in the 1/2" NPT (M20 x 1,5 as an option) threaded entry hole, refer to the nameplate for identification of the maximum cable temperature
- Internal and external earthing connection
- The operator can be rotated 360° to select the most favourable position for cable entry

DIMENSIONS (mm), WEIGHT (kg)



prefix	weight
WSNFX	2,7 kg