OPERATORS

intrinsically safe
II 1G Ex **ia** IIC T6, II 2D Ex **iaD** 21 IP67
steel or stainless steel enclosure

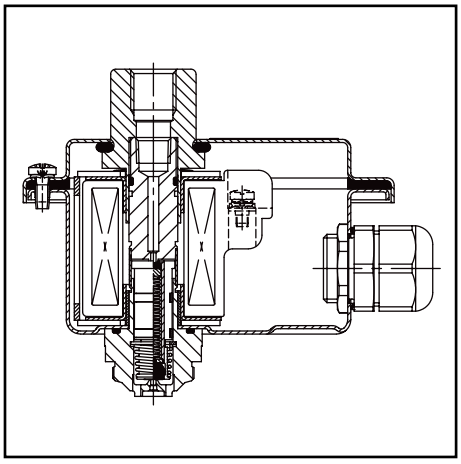
Series
WPISX
WSISX
TPL 27249

FEATURES

- *Explosion proof operator, intended for use in potentially explosive atmospheres, according to Directive ATEX 2014/34/EU*
- *EC type examination certificate (KEMA 98 ATEX 2544X) and IECEx certificate (IECEx KEM 08.0017) are in compliance with the International and European Standards IEC and EN: 60079-0, 60079-11 and 60079-26*
- *This highly efficient solenoid operates at very low power level (0.4W)*
- *Coils have class H insulation materials and contain moulded in solid state components for switch-off peak voltage suppression.*
- *Enclosure provided with integral strain relief for cables with an o.d. from 7 to 12 mm*
- *Ingress protection degree IP66/67*
- *A wide range of valves can be supplied with the operator*

CONSTRUCTION

Solenoid enclosure	WPISX	Zinc plated steel (epoxy coated)
	WSISX	Stainless steel, AISI 316
Core, core tube & plugnut		Stainless steel
Seals and discs		NBR
Riddering		PTFE
Connector specification		ISO 4400
Nameplate		PA
Cartridge		Welded, packless AISI 430 SS
Coil connection		Embedded screw terminals
Cable gland		Polyamide (PA), M20x1.5



ELECTRICAL CHARACTERISTICS

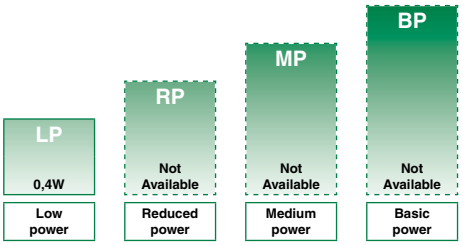
Standard voltages
DC (=) : 24V nominal

A minimum current of 32 mA is necessary for optimal performance. The minimum series resistance required is 200 Ohms. The nominal value of the resistance of the coil is 406 Ohms. (at 20 degrees C)

SAFETY CODE

II 1G Ex ia IIC T6 (gas)
II 2D Ex iaD 21 T85°C IP67 (dust)

prefix option	safety parameters				
	U_i = (DC)	I_i	P_i	L_i	C_i
	(V)	(mA)	(W)	(mH)	(µF)
Low power (LP)					
WPISX	< 32	500	1,5	0	0
WSISX	< 32	500	1,5	0	0



POWER LEVELS - cold electrical holding values (watt)

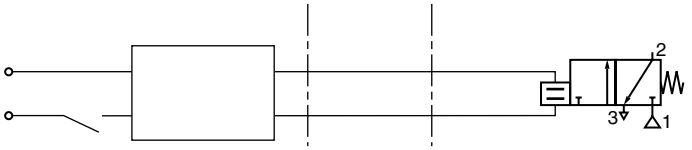
TEMPERATURE CLASSIFICATION TABLES

The minimum allowable ambient temperature is -40°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.

DC (=) Solenoids

power level (watt)	insulation materials	maximum ambient (1) temp. "T" classification		
		T6 (G) 85°C (D)	T5 (G) 100°C (D)	T4 (G) 135°C (D)
Low power (LP)				
0,4	H	60°C	-	-

Example of use with a Zener barrier installed in a non-hazardous zone:
safe area (RS interface) **cable** **explosive area**



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PREFIX TABLE

prefix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
W	P			I	S	X	I.S. with Metal IP67 enclosure (EN/IEC 60079-11+26)*	❍	-	-	-
W	S			I	S	X	I.S. with 316 SS IP67 enclosure (EN/IEC 60079-11+26)*	❍	-	-	-
		E	T				Threaded conduit/hole (M20 x 1,5)	❍	-	-	-
		T					Threaded conduit (1/2" NPT)	❍	-	-	-
						X	Other special constructions	❍	-	-	-

❍ Available feature in DC only
- Not available
* 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 indentification letter from one of the specification tables on the separate catalogue pages.
Example: B314A315 U

STEP 2
Select voltage. Refer to standard voltages on page 1.
Example: 24V DC

STEP 3
Select solenoid prefix (combination). Refer to the prefix table on this page and respect the indicated power level, cold electrical holding values and "T" classification mentioned on page 1.
NOTE: Make sure that the ambient temperature does not exceed the allowable valve temperature characteristics.
Example: WPISX
60°C ambient
Low Power (LP) 0.4W
II 1G Ex ia IIC T6
II Ex iaD 21 IP67 T85°C

STEP 4
Final catalogue / ordering number.
Example:
WPISX B314A315 U 24V DC .27249

ORDERING EXAMPLES VALVES:

WPISX	8	552A317		24V / DC	.27249
WPISX	G	551A308	MO	24V / DC	.27249
WSISX	B	307A335	U	24V / DC	.27249
WSISX	G	551B353		24V / DC	.27249
WSISX	G	551B388		24V / DC	.27249
WPISX	B	316A301		24V / DC	.27249
WSISX	B	316A382	V	24V / DC	.27249

prefix
pipe thread
basic number
TPL number
voltage
suffix

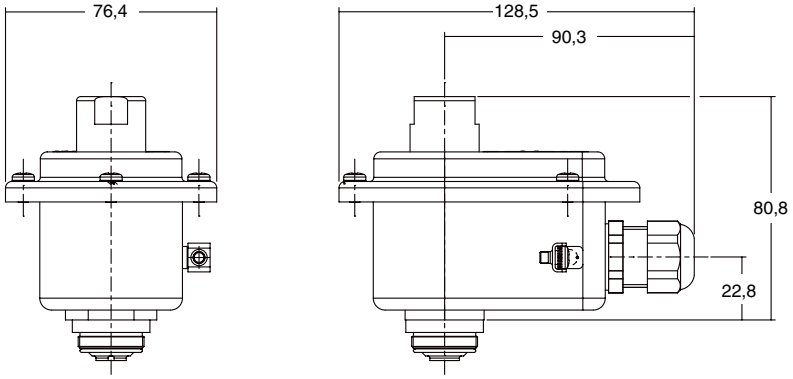
ADDITIONAL OPTIONS

- Brass nickel plated or stainless steel cable gland
- Conduit hub, 1/2"NPT, M20x1,5, 3/4"NPT or M25x1,5 in aluminium or stainless steel

INSTALLATION

- Multi language installation/maintenance instructions are included with each valve
- The solenoid operator can be mounted in any position without affecting operation
- Application of the operator, located within hazardous areas, is not permitted without the addition of an approved and classified device (such as barriers) located between the safe and hazardous area
- The operator can be rotated 360° to select the most favourable position for cable entry
- Solenoid enclosure has a cable gland with integral strain relief for cables with an o.d. from 7 to 12 mm and is provided with an internal and external connection facility for an earthing or bonding conductor

DIMENSIONS (mm), WEIGHT (kg)



prefix	weight
WPISX	0,85 kg
WSISX	0,85 kg