



OPERATORS

for potentially explosive atmospheres
increased safety/encapsulation
II 2G Ex e mb IIC T4 Gb, II 2D Ex tb IIIC T135°C Db IP67
moulded enclosure



Series
WBLP

FEATURES

- Explosionproof operator for use in potentially explosive atmospheres according to ATEX-Directive 2014/34/EU
EC type examination certificate no.: **LCIE 12 ATEX 3005 X**
IECEx Certificate of Conformity no.: **IECEx LCI 12.0002X**
- 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 and EN-IEC 60079-31
- Easy electrical installation by means of a screw terminal coil
- Peak voltage suppression standard for DC executions
- The coil winding is fitted with a thermal fuse (in AC/DC) which will trip in case of excessive temperature due to prolonged overvoltage or a blocked core and cause the valve to de-energise and fail-safe
- Enclosure provided with integral strain relief for cable with an O.D. of 7 to 8,5 mm
- Ingress protection degree IP67
- A wide range of valves can be supplied with the operator

CONSTRUCTION

Solenoid enclosure

Cable gland

Nameplate

Coil connection

Safety code

PBT

PA 66, M20 x 1,5

Polyester

Embedded screw terminals

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ELECTRICAL CHARACTERISTICS

Standard voltages

DC (=) : 24V - 48V

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

TEMPERATURE CLASSIFICATION TABLES

AC (~) solenoids

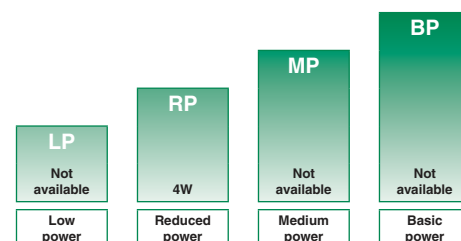
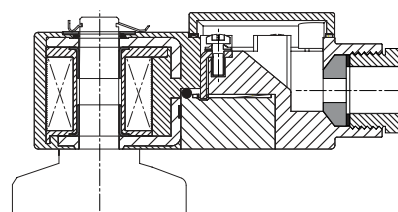
Pn (watt)	solenoid size				maximum ambient °C ⁽¹⁾
	WBLP				surface temperature
					T4 135°C
insulation class F (155°C) 100% E.D.					
3,5 ⁽²⁾	●				65

DC (=) solenoids

Pn (watt)	solenoid size				maximum ambient °C ⁽¹⁾
	WBLP				surface temperature
					T4 135°C
insulation class F (155°C) 100% E.D.					
4	●				65

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.



POWER LEVELS - cold electrical holding values (watt)



**THORNE &
DERRICK
INTERNATIONAL**

Thorne & Derrick
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PREFIX TABLE

prefix							description	power level			
1	2	3	4	5	6	7		LP	RP	MP	BP
W	B	L	P			X	I.S./encapsulation with PBT IP67 enclosure (EN/IEC 60079-7,-18, -31)* Other special constructions	-	●	-	-

- Available feature
- Not available

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: G551A005

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: WBLP

65°C ambient

Reduced Power (RP) 4 W

II 2G Ex e mb IIC T4 Gb

II 2D Ex t IIIC T135°C Db IP67

STEP 4

Final catalogue / ordering number.

Example:

WBLP G551A005 24V / DC

ORDERING EXAMPLES VALVES:

WBLP	G	551A005	MS	24V	DC
WBLP	G	552A006	MO	230V	230V/ 50 Hz
WBLP	8	553A001		24V	DC

prefix pipe thread basic number voltage suffix

INSTALLATION

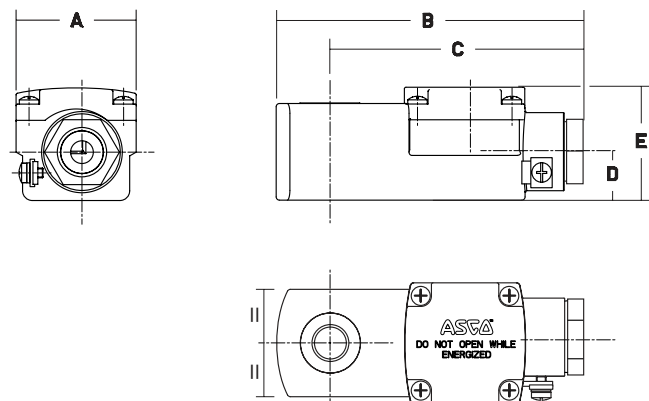
- Multi language installation/maintenance instructions are included with each valve
- The solenoid valves can be mounted in any position without affecting operation
- Internal and external earthing connection
- The solenoid can be rotated 360° to select the most favourable position for cable entry

DIMENSIONS (mm), WEIGHT (kg)



TYPE 01:

Prefix "WBLP" solenoids
EN-IEC 60079-7, EN-IEC 60079-18 and EN-IEC 60079-31
II 2G Ex e mb IIC T4 Gb, II 2D Ex tb IIIC T135°C Db IP67



prefix	A	B	C	D	E	weight
WBLP	37	98	81,5	15	35,2	0,18