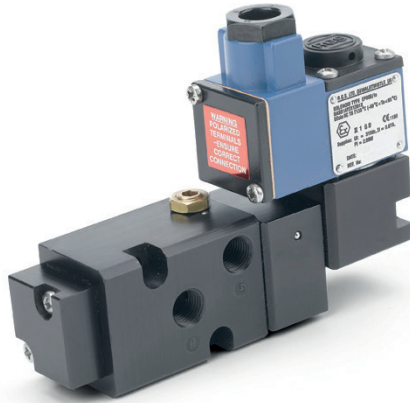


## Type T23, 1/4" Ported, 3/2 Solenoid Valve with Integral Speed Control & ETS

**CALL:** +44 (0)1254 872277  
**E-MAIL:** sales@pneumatrol.com



### DESCRIPTION

Pilot valve designed for direct mounting onto 1/4 turn pneumatically operated valve actuators meeting 'NAMUR' standard fixing dimensions.

Adjustable speed control (exhaust only).

Valve is illustrated with an Exia coil.

Body material available in

- Aluminium (standard)
- Stainless Steel
- Brass

Seal kit available – VSKT25P

### FEATURES

- Unique feature of Integrated Exhaust to Spring (ETS) in 3/2 position with combined Integral exhaust Speed Control (screw adjusted on top face)
- Top face air connection
- 1/4" BSP mains air connection and 1/8" BSP pilot ports, also available in NPT ports
- Single pilot spring return function or double pilot stay put function

**PRODUCT CODE:** **T 2 3** **OPERATOR** **F** **COIL** **0** **VOLTAGE** **DESIGNATOR** **OPTIONS 2**

**SEE BELOW FOR  
PRODUCT CODE  
DETAILS**

Any of the below options that are not required enter '0' in relevant box.

#### Operator

- |          |          |                                              |
|----------|----------|----------------------------------------------|
| <b>1</b> | <b>8</b> | Spring return, internal pilot air feed       |
| <b>8</b> | <b>0</b> | Spring return, external pilot air connection |

#### Coil

- |          |                                        |
|----------|----------------------------------------|
| <b>A</b> | Exia (BASEEFA)                         |
| <b>B</b> | Terminal Box                           |
| <b>C</b> | Exia (FM)                              |
| <b>D</b> | Exd                                    |
| <b>K</b> | MC30 Plug & Socket                     |
| <b>N</b> | ExnA                                   |
| <b>P</b> | Plug & Socket                          |
| <b>S</b> | Exia (BASEEFA) Stainless Steel Housing |
| <b>0</b> | No Coil Unit                           |
| <b>9</b> | Exm                                    |

#### Options 1

- |          |                                  |
|----------|----------------------------------|
| <b>C</b> | Lever manual override            |
| <b>D</b> | Push button manual override      |
| <b>S</b> | Screw driver override (standard) |
| <b>0</b> | No option required               |

#### Standard Voltage

- |          |                                 |
|----------|---------------------------------|
| <b>B</b> | 24v DC                          |
| <b>H</b> | 24v DC Low Power <sup>(1)</sup> |
| <b>R</b> | 24v AC (50/60 Hz)               |
| <b>T</b> | 110v AC (50/60 Hz)              |
| <b>N</b> | 220v AC (50/60 Hz)              |
| <b>U</b> | 240v AC (50/60 Hz)              |

**\* A comprehensive range of non-standard voltages available on request**

#### Note:

- (1) "H" option not available with Exia solenoids  
(2) IECEx only available with Exia and Exd Solenoids  
(3) GOST CU TR only available with Exd solenoids  
(4) NEPSI only available with Exia and Exd solenoids

#### Designator

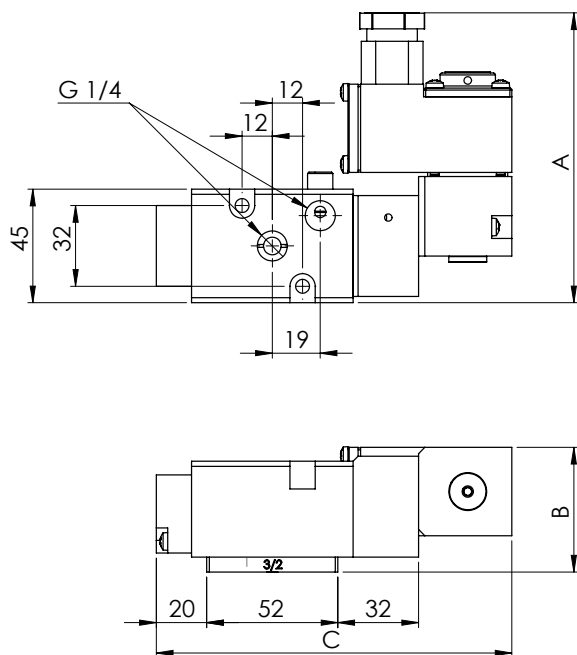
- |          |                           |
|----------|---------------------------|
| <b>A</b> | ATEX                      |
| <b>C</b> | IECEx <sup>(2)</sup>      |
| <b>E</b> | Exme 0.5W                 |
| <b>G</b> | ATEX Exd IIB              |
| <b>H</b> | Exm                       |
| <b>J</b> | Exme 2.4W                 |
| <b>R</b> | GOST CU TR <sup>(3)</sup> |
| <b>X</b> | NEPSI <sup>(4)</sup>      |

#### Options 2

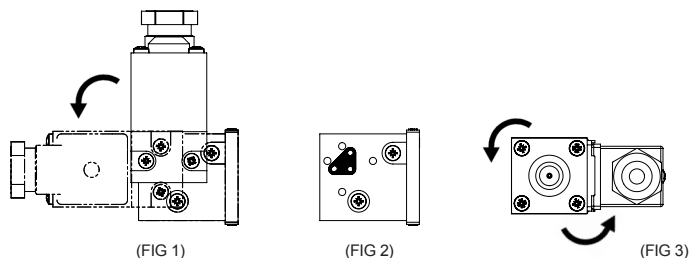
- |          |                                                                          |
|----------|--------------------------------------------------------------------------|
| <b>B</b> | Valve body brass                                                         |
| <b>C</b> | Valve body brass and NPT ports                                           |
| <b>D</b> | Valve body brass, NPT ports and 1/2" NPT electrical connection           |
| <b>E</b> | 1/2" NPT electrical connection                                           |
| <b>L</b> | Low temperature duty -40°C                                               |
| <b>M</b> | NPT ports and 1/2" NPT electrical connection                             |
| <b>N</b> | NPT ports                                                                |
| <b>P</b> | Valve body stainless steel, NPT ports and 1/2" NPT electrical connection |
| <b>R</b> | Valve body stainless steel and NPT ports                                 |
| <b>S</b> | Valve body stainless steel                                               |
| <b>X</b> | Valve suitable for use with Oxygen                                       |

## COIL ORIENTATION

The solenoid pilot can be mounted in two possible positions by rotating the solenoid base through 90° (FIG 1). This is achieved by releasing the two M4 pozi-drive screws which secure the solenoid pilot to the valve body. When changing the solenoid pilot position care should be taken to ensure the triangular gasket seal is in place. (FIG 2)



The coil itself can be rotated in 90° steps by releasing the four securing screws. (FIG 3) When rotating the coil care should be taken to ensure the core assembly (core, spring, seal and washer) remains intact and aligned correctly. This is easily achieved by only lifting the coil the small amount required to clear the screws enabling the coil to be rotated.



## DIMENSIONS (mm)

COIL TYPE	A	B	C
Plug & Socket	100	50	141
MC30 Coil	95	48	136
Terminal Box	109	50	141
ExnA	109	50	141
Exd	121	58	190
Exia	115	50	141
Exm	86	50	141

## MATERIAL SPECIFICATIONS

### STANDARD

Body and End Caps	Black Anodised Aluminium (Dural)
Spool	Hard Anodised Aluminium PTFE Impregnated
Spacers	Glass Filled Acetal
Seals	Nitrile
Spring	Music Wire
Mounting Screws	Stainless Steel
Change Over Plate	Nylon 66 30% Glass Filled
Gasket	Nitrile

## VALVE SPECIFICATIONS

### STANDARD

Port Connection Size	1/4" BSP
Pilot Port Connection Size	1/8" BSP
Working Pressure	3 to 10 bar
Pilot Signal Pressure	3 to 10 bar
Cv Factor	1.2
Flow Rate (at 6 bar with 1 bar pressure drop)	1246 l/min
Maximum Ambient Temperature	+80 °C
Minimum Working Temperature	-20 °C

## COIL DETAILS

Coil Type	Plug & Socket	Terminal Box	ExnA	Exd	Exm	Exia
Area Class	Safe	Safe	Zone 2	Zones 1 & 2	Zones 1 & 2	Zone 0, 1 & 2
Area Category	N/A	N/A	ExN II T4-T6	Exd IIC T3-T6	Exm IIC T5	Exia IIC T6
Ingress Protection	IP65	IP65	IP65	IP66	IP65	IP65
Cable Entry	PG.9	M20 x 1.5	M20 x 1.5	M20 x 1.5	Flying leads	M20 x 1.5
Ambient Temperature	-20 to +80 °C	-20 to +80 °C	-40 to +60 °C	-60 to +80 °C	-20 to +65 °C	-40 to +65 °C
Magnetic Wire Class	H	H	H	H	H	H

**\* FURTHER SOLENOID OPTIONS AVAILABLE ON REQUEST**