

2/2 Way Direct Operated G 1/8", G1/4" **S2073 SERIES** 

**Normally Closed** 

S2073 (N.C) 1

#### **GENERAL FEATURES**

- New design
- Especially for overheated water and steam
   Very small body size
- **Suitable for non-aggressive liquids, gaseous fluids** Working Temperature: -10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Don't require any differential pressure to operate
- Compact and low weight valve enabling easy and quick installation
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD).
- Some applications: laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Ky of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards preferred. Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available
- (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty Coil Insulation Class FD %100 H (180°C)

Polyester Fiber Glass Coil Impregnation Coil Encapsulation Material Ambient Temperature Fiber Glass Reinforced from -10°C: +60°C

IP 65 (EN 60529) with coil duly fitted with the plug connector DIN 46340 3-poles connectors (DIN 43650) Protection Degree

Electric Plug Connection Connector Specification

ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Electrical Safety

Standard Voltages :For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances :For AC -15%; +10%, For DC -5%; +10% Frequency : 50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

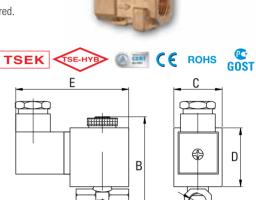
#### MATERIALS IN CONTACT WITH FLUIDS TECHNICAL FEATURES

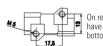
Internal Parts: Stainless Steel Sealing FPM (VITON) Shading Ring: Copper Brass Seats

Core Tube Stainless Steel and Brass

Springs Stainless Steel On request; nickel plated body On request; sealing can be EPDM

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s) Response Time: Opening Time: 30 ms, Closing Time: 30 ms Maximum Allowable Pressure: 5 bar Fluid Temperature for EPDM from -10°C; 140°C





On request; solenoid valve can have 2 mounting holes at the bottom of the body.

#### Dimensions (mm)

G	Α	В	C	D	Е	F	Н
1/8"	35.5	67	32	39	74.5	24.5	18
1/4"	35.5	67	32	39	74.5	24.5	18

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV		uid erature	Seal	Weight
T-BT	S2073	G	mm	bar	bar	lt/min	min	C   max		(kg)
T-BT 200	S2073.00.018	1/8"	1.8	0	5	1.6	-10	160	VITON	0.31
T-BT 200.2,5	S2073.00.025	1/8"	2.5	0	5	3.2	-10	160	VITON	0.31
T-BT 200.3	S2073.00.030	1/8"	3	0	5	4.6	-10	160	VITON	0.31
T-BT 200.4	S2073.00.040	1/8"	4	0	5	6.4	-10	160	VITON	0.31
T-BT 200.4,5	S2073.00.045	1/8"	4.5	0	5	7.5	-10	160	VITON	0.31
T-BT 201	S2073.01.018	1/4"	1.8	0	5	1.6	-10	160	VITON	0.3
T-BT 201.2,5	S2073.01.025	1/4"	2.5	0	5	3.2	-10	160	VITON	0.3
T-BT 201.3	S2073.01.030	1/4"	3	0	5	4.6	-10	160	VITON	0.3
T-BT 201.4	S2073.01.040	1/4"	4	0	5	6.4	-10	160	VITON	0.3
T-BT 201.4,5	S2073.01.045	1/4"	4.5	0	5	7.5	-10	160	VITON	0.3

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: EPDM: Ethylene-Propylene Elastomer, FPM (VITON): Fluoro-Carbon Elastomer

#### **STEAM SOLENOID VALVES**

2/2 Way Direct Operated G 1/8", G1/4" **S2010 SERIES** 

#### **GENERAL FEATURES**

- Small body size.
- Especially for overheated water and steam
- Suitable for liquids and gaseous fluids Working Temperature: -10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Don't require any differential pressure
- Compact and low weight valve enabling easy and guick installation
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- On request; solenoid valve can have 1 mounting hole at the bottom of the body.
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure Solenoid valves must be used with filtered fluids
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty ED %100 Coil Insulation Class H (180°C)

Coil Impregnation Polvester Fiber Glass Coil Encapsulation Material Fiber Glass Reinforced Ambient Temperature from -10°C; +60°C

Protection Degree IP 65 (EN 60529) with coil duly fitted with the plug connector

Electric Plug Connection Connector Specification DIN 46340 3-poles connectors (DIN 43650)

ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Electrical Safety

:For AC 12V, 24V, 48V, 110V, 230V Standard Voltages For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10% Frequency :50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body

Internal Parts: Stainless Steel Sealing FPM (VITON) Shading Ring: Copper Brass Seats Core Tube

Stainless Steel Springs Stainless Steel On request; nickel plated body On request; sealing can be EPDM

On request; seat Stainless Steel (for overheated water and steam )

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s) Response Time : Opening Time : 30 ms, Closing Time: 30 ms Maximum Allowable Pressure: 5 bar

Fluid Temperature for EPDM from -10°C; +140°C

#### **Normally Closed**



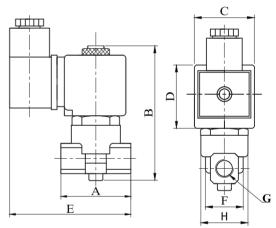












#### Dimensions (mm)

G	Α	В	C	D	Ε	F	Н
1/8"	40	90	32	39	78	22.3	25.6
1/4"	40	90	32	39	78	22.3	25.6

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	Flu Tempe	uid erature	Seal	Weight
T-B	S2010	G	mm	bar	bar	lt/min	min °	C max		(kg)
T-B 200	S2010.00.018	1/8"	1.8	0	5	1.6	-10	160	VITON	0.36
T-B 200.2,5	S2010.00.025	1/8"	2.5	0	5	3.2	-10	160	VITON	0.36
T-B 200.3	S2010.00.030	1/8"	3	0	5	4.6	-10	160	VITON	0.36
T-B 201	S2010.01.018	1/4"	1.8	0	5	1.6	-10	160	VITON	0.35
T-B 201.2,5	S2010.01.025	1/4"	2.5	0	5	3.2	-10	160	VITON	0.35
T-B 201.3	S2010.01.030	1/4"	3	0	5	4.6	-10	160	VITON	0.35

1 bar: 14,5 PSI: 10 mH<sub>2</sub>0: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m³/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m³/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151 °C, 5 bar steam: 160 °C, 6 bar steam: 165 °C

Sealings: FPM (VITON): Fluoro-Carbon Elastomer, EPDM: Ethylene-Propylene Elastomer



#### **REGULATION STEAM SOLENOID VALVES**

2/2 Way Direct Operated G 1/8", G1/4" S2090 **SERIES** 

**Normally Closed** 

#### **GENERAL FEATURES**

- Small body size.
- Inlet from bottom of the body
   Including flow regulation manual override for setting flow rate
- Especially for overheated water and steam
  Suitable for liquids and gaseou fluids

- Working Temperature:-10°C / +160°C
   Not suitable for use with dangerous fluids listed in Group 1
- Not suitable for use with adapterous fidus listed in droup?
   Don't require any differential pressure to operate
   Compact and low weight valve enabling easy and quick installation.

- Compact and low weight valve enabling easy and quick installation
   High reliability, quality and performance; long life, corrosion resistance
   Ideal for the automatic control of media in a wide range of applications.
   TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow  $\Omega$  can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty :ED %100 Coil Insulation Class : H (180°C)

Coil Impregnation Polyester Fiber Glass Coil Encapsulation Material : Fiber Glass Reinforced Ambient Temperature from -10°C; +60°C

Protection Degree IP 65 (EN 60529) with coil duly fitted with the plug connector

DIN 46340 3-poles connectors (DIN 43650)

Electric Plug Connection Connector Specification Electrical Safety ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

: IEC 335

:For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V Standard Voltages

Other voltages on request;

:For AC %-15; %+10, For DC %-5; %+10 Voltage Tolerances Frequency :50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass Stainless Steel Internal Parts: FPM (VITON) Sealing Shading Ring Copper

Seats Brass Core Tube Stainless Steel Springs Stainless Steel On request; nickel plated body

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 30 ms, Closing Time: 30 ms

Maximum Allowable Pressure:5 bar

# \$2090 (N.C.)





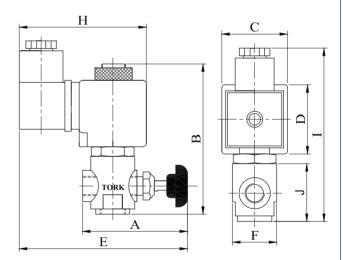












#### Dimensions (mm)

G	Α	В	C	D	Ε	F	J	Н	I
1/8"	62	86.6	32	38	93.1	24.8	33.6	73.5	99.4
1/4"	62	86.6	32	38	93.1	24.8	33.6	73.5	99.4

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV		Fluid Temperature		Weight
T-BR	S2090	G	mm	bar	bar	lt/min	min °	C max		(kg)
T-BR 200	S2090.00.030	1/8"	3	0	5	4.6	-10	160	VITON	0.4
T-BR 201	S2090.01.030	1/4"	3	0	5	4.6	-10	160	VITON	0.39

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>0: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151 °C, 5 bar steam: 160 °C, 6 bar steam: 165 °C Sealings:FPM (VITON):Fluoro-Carbon Elastomer

Especially for overheated water and steam

Don't require any differential pressure

Solenoid valves must be used with filtered fluids

**ELECTRICAL CHARACTERISTICS** 

Suitable for non-aggressive liquids, gaseous fluids Working Temperature : -10°C / +160°C
Not suitable for use with dangerous fluids listed in Group 1

Wide pressure ratings, range of flow rate and orifice options

Compact and low weight valve enabling easy and quick installation High reliability, quality and performance; long life, corrosion resistance

ED %100

:H (180°C)

Polyester Fiber Glass

: Fiber Glass Reinforced

from -10°C; +60°C

Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines

Ideal for the automatic control of media in a wide range of applications.
 TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC

Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure

Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available

:DIN 46340 3-poles connectors (DIN 43650)

:For AC -15%; +10%, For DC -5%; +10% :50 Hz, other frequencies on request; (60 Hz)

:IEC 335 :For AC 12V, 24V, 48V, 110V, 230V

For DC 12V, 24V, 48V, 110 V

IP 65 (EN 60529) with coil duly fitted with the plug connector

ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

**GENERAL FEATURES** 

Low Voltage Directive (LVD)

Coils interchangeable

(NPT (ANSI 1.20.3))

Coil Encapsulation Materia

Continuous Duty

Coil Insulation Class

Ambient Temperature

Electric Plug Connection

Connector Specification

Other voltages on request; Voltage Tolerances

On request; connector with LED Specify coil voltage with order

Coil Impregnation

Protection Degree

Electrical Safety Standard Voltages

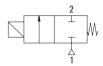
New design

Small body size.

#### STEAM SOLENOID VALVES

2/2 Wav Direct Operated G 3/8", G1/2" S2073 **SERIES** 

#### **Normally Closed**







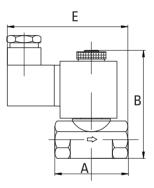


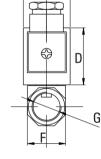












#### Dimensions (mm)

G	Α	В	C	D	Ε	F
3/8"	50	73	32	39	82.5	26.5
1/2"	50	73	32	39	82.5	26.7

#### **New Valve Type** Connection **Orifice** Fluid Valve Type / **Pressure** ΚV Seal Weight / Order no **Temperature** Order no Size size min / max S2073 T-BT G bar It/min (kg) mm bar min max 5 -10 160 VITON T-BT 202.3 S2073.02.030 3/8" 3 0 4.6 0.4 T-BT 202.4 S2073.02.040 3/8" 4 0 5 6.4 -10 160 VITON 0.4 5 0 5 9.2 -10 160 VITON 0.4 T-BT 202.5 S2073.02.050 3/8' 5 T-BT 203.3 S2073.03.030 1/2" 3 0 4.6 -10 160 VITON 0.38 T-BT 203.4 S2073.03.040 1/2" 4 0 5 6.4 -10 160 VITON 0.38 T-BT 203.5 S2073.03.050 1/2' 5 0 5 9.2 160 VITON 0.38 -10

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: EPDM: Ethylene-Propylene Elastomer, FPM (VITON): Fluoro-Carbon Elastomer

Sealing

Frequency

Body Brass Internal Parts : Stainless Steel Sealing : FPM (VITON) Shading Ring: Copper Seats Brass

Stainless Steel and Brass Core Tube

Stainless Steel Springs On request; nickel plated body On request; sealing can be EPDM

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 30 ms, Closing Time: 30 ms

**MATERIALS IN CONTACT WITH FLUIDS** 

Maximum Allowable Pressure: 5 bar

Fluid Temperature for EPDM from -10°C; 140°C

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### SMS

**Useful Informations** 

NEW



#### HIGH TEMPERATURE STEAM SOLENOID VALVES

2/2 Wav Direct Operated G 3/8", G1/2" **S2091 SERIES** 

#### **GENERAL FEATURES**

- Small body size.
- Especially for overheated water and steam
   With cooling neck. By this way, the effect of the fluid's temperature on the coil is reduced
- Suitable for liquids and gaseous fluids
- Working Temperature:-10°C / +160°C
   Not suitable for use with dangerous fluids listed in Group 1
   Don't require any differential pressure

- Easy and quick installation
  High reliability, quality and performance; long life, corrosion resistance
- Ideal for the automatic control of media in a wide range of applications.
   TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Ky of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty : ED %100 Coil Insulation Class H (180°C)

Coil Impregnation Polyester Fiber Glass : Fiber Glass Reinforced : from -10°C ; +60°C Coil Encapsulation Material Ambient Temperature

IP 65 (EN 60529) with coil duly fitted with the plug connector DIN 46340 3-poles connectors (DIN 43650) ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm) Protection Degree

Electric Plug Connection

Connector Specification Electrical Safety

: For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V Standard Voltages

Other voltages on request;

: For AC %-15; %+10, For DC %-5; %+10 Voltage Tolerances 50 Hz, other frequencies on request; (60 Hz) Frequency

On request: connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass Internal Parts: Stainless Steel FPM (VITON) Sealing Shading Ring Copper Brass Seats

Core Tube Stainless Steel Springs Stainless Steel On request; nickel plated body

#### **TECHNICAL FEATURES**

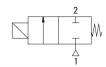
Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 30 ms, Closing Time: 30 ms

Maximum Allowable Pressure:5 bar

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#### **Normally Closed**







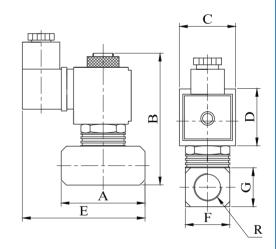












#### Dimensions (mm)

R	Α	В	C	D	Ε	F	G
3/8"	50	87	32	38.9	79.5	25	25
1/2"	50	87	32	38.9	79.5	25	25

V	alve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV		Fluid Temperature		Weight
	T-BHD	S2091	G	mm	bar	bar	lt/min	°( min	C max		(kg)
Т	T-BHD 202	S2091.02.050	3/8"	5	0	5	9.2	-10	160	VITON	0.56
T	T-BHD 203	S2091.03.050	1/2"	5	0	5	9.2	-10	160	VITON	0.53

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings:FPM (VITON):Fluoro-Carbon Elastomer

#### HIGH TEMPERATURE STEAM SOLENOID VALVE

2/2 Wav **Direct Operated** G3/8", G1/2"

S2092 **SERIES** 

#### **GENERAL FEATURES**

- TORK series S2092 direct acting nickel plated steam solenoid valves are 2/2 way normally closed and have small body size.
- Especially for overheated water and steam
- With cooling neck. By this way, the effect of the fluids temperature on the coil is reduced
- Suitable for liquids and gaseous fluids
   Working Temperature:-10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Don't require any differential pressure
- Easy and quick installation
- High reliability, quality and performance; long life, corrosion resistance
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD).
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

:FD %100 Continuous Duty Coil Insulation Class : H (180°C)

Coil Impregnation : Polyester Fiber Glass :Fiber Glass Reinforced :from -10°C; +60°C Coil Encapsulation Material Ambient Temperature

IP 65 (EN 60529) with coil duly fitted with the plug connector Protection Degree

Electric Plug Connection DIN 46340 3-poles connectors (DIN 43650)

ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø6-8 mm) Connector Specification

Electrical Safety IEC 335

Standard Voltages :For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances :For AC -15%; +10%, For DC -5%; +10% 50 Hz, other frequencies on request; (60 Hz) Frequency

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUID**

: Nickel Plated Brass Body Internal Parts : Stainless Steel Sealing : FPM (VITON) Shading Ring: Copper Seats : Brass

Core Tube Stainless Steel Springs : Stainless Steel

On request; body and internal parts can be Stainless Steel. On request; seat Stainless Steel (for overheated water and steam)

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time : Opening Time:30 ms, Closing Time:30 ms

Maximum Allowable Pressure:5 bar

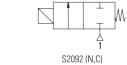


Nickel

Coated

#### **Normally Closed**





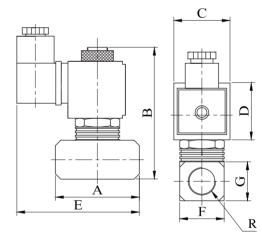












#### Dimensions (mm)

R	Α	В	C	D	Е	F	G
3/8"	50	87	32	38.9	79.5	25	25
1/2"	50	87	32	38.9	79.5	25	25

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV		uid erature	Seal	Weight
T-BHDK	S2092	G	mm	bar	bar	lt/min	min	C max		(kg)
T-BHDK 202	S2092.02.050	3/8"	5	0	5	9.2	-10	160	VITON	0.6
T-BHDK 203	S2092.03.050	1/2"	5	0	5	9.2	-10	160	VITON	0.56

#### **Hseful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151 °C, 5 bar steam: 160 °C, 6 bar steam: 165 °C Sealings:FPM (VITON):Fluoro-Carbon Elastomer



2/2 Way Direct Operated G 1/8", G1/4" S2011 **SERIES** 

#### **GENERAL FEATURES**

- Small body size.
- New design, internal exhaust system
- Especially for overheated water and steam

- Suitable for liquids and gaseous fluids that
   Working Temperature: -10°C / +160°C
   Not suitable for use with dangerous fluids listed in Group 1
   Don't require any differential pressure

- Compact and low weight valve enabling easy and quick installation High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
  On request; solenoid valve can have 1 mounting hole at the bottom of the body.
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty Coil Insulation Class :ED %100 : H (180°C)

Coil Impregnation Polyester Fiber Glass Coil Encapsulation Material Ambient Temperature : Fiber Glass Reinforced from -10°C; +60°C

: IIP 65 (EN 60529) with coil duly fitted with the plug connector : DIN 46340 3-poles connectors (DIN 43650) Protection Degree

Electric Plug Connection Connector Specification

:ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm )

Electrical Safety

Standard Voltages : For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10% Frequency :50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass

Internal Parts: Stainless Steel Sealing FPM (VITON) Shading Ring : Copper Seats Brass

Core Tube Stainless Steel Stainless Steel Springs On request; nickel plated body

#### **TECHNICAL FEATURES**

Max Viscosity: 5°E (~37cSt or mm<sup>2</sup>/s) Response Time: Opening Time: 30 ms,

Closing Time: 30 ms Maximum Allowable Pressure: 5 bar



#### Normally Open





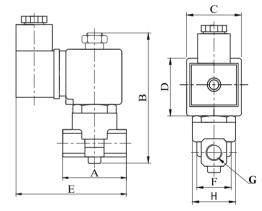












#### Dimensions (mm)

G	Α	В	C	D	Е	F	Н
1/8"	40	90	32	39	78	22.3	25.6
1/4"	40	90	32	39	78	22.3	25.6

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	Fluid Temperature		Seal	Weight
T-BN	S2011	G	mm	bar	bar	lt/min	°C min   max			(kg)
T-BN 200	S2011.00.018	1/8"	1.8	0	5	1.6	-10	160	VITON	0.38
T-BN 200.2,5	S2011.00.025	1/8"	2.5	0	5	3.2	-10	160	VITON	0.38
T-BN 200.3	S2011.00.030	1/8"	3	0	5	4.6	-10	160	VITON	0.38
T-BN 201	S2011.01.018	1/4"	1.8	0	5	1.6	-10	160	VITON	0.37
T-BN 201.2,5	S2011.01.025	1/4"	2.5	0	5	3.2	-10	160	VITON	0.37
T-BN 201.3	S2011.01.030	1/4"	3	0	5	4.6	-10	160	VITON	0.37

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144°C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: FPM (VITON): Fluoro-Carbon Elastomer



2/2 Wav Pilot Operated G 3/8", G1/2", G3/4", G1", G11/4", G11/2", G2" **S2010 SERIES** 

**Normally Closed** 

S2010 (N.C)

#### **GENERAL FEATURES**

- Especially for overheated water and steam
- **Suitable for liquids and gaseous fluids that**Working Temperature : -10°C / +140°C and 160°C
  Not suitable for use with dangerous fluids listed in Group 1

- Minimum operating differential pressure 0,5 bar
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Ky of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty ED %100 H (180°C) Coil Insulation Class

Coil Impregnation Polyester Fiber Glass Coil Encapsulation Material Fiber Glass Reinforced Ambient Temperature from -10°C; +60°C

Protection Degree IP 65 (EN 60529) with coil duly fitted with the plug connector

DIN 46340 3-poles connectors (DIN 43650)

ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Electric Plug Connection Connector Specification Electrical Safety IEC 335

For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V Standard Voltages

Other voltages on request;

: For AC -15%; +10%, For DC -5%; +10% Voltage Tolerances

50 Hz, other frequencies on request; (60 Hz) Frequency On request; connector with LED

Specify coil voltage with order

#### MATERIALS IN CONTACT WITH FLUIDS

Body Brass

Internal Parts: Stainless Steel and brass PTFE (for 3/8",1/2",3/4",1") and EPDM (for 11/4",11/2",2") Sealing

Shading Ring: Copper Seats Brass

Stainless Steel Core Tube Stainless Steel **Springs** On request; nickel plated body

#### **TECHNICAL FEATURES**

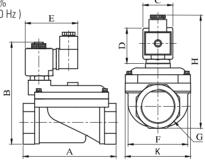
Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 400 ms to ~ 1600 ms, Closing Time: 1000 ms to ~ 2000 ms

Maximum Allowable Pressure : 5 bar

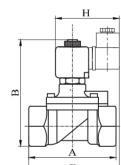
Fluid Temperature for PTFE from -10°C; +160°C, for EPDM

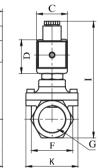
from -10°C; +140°C





G	Δ	R	C	ח	Ε	F	К	Н
_		_	_	_	_	-		
11/4"	141	143	32	45	76	96.5	110.7	156
11/2"	139	143	32	45	76	96.5	110.7	156
2"	145 6	153	32	45	76	96.5	110 7	165 5





ROHS

GOST

#### Dimensions (mm)

G	Α	В	C	D	Ε	F	K	Н	I
3/8"	75	97	32	45	91.3	37.5	52	76	108
1/2"	79	100	32	45	92	39.5	52	76	110
3/4"	79	107.5	32	45	94	41.5	52	76	118
1″	87	115	32	45	102	42.5	52	76	124

CE

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	(V Fluid Temperature		Seal	Weight
T-B	S2010	G	mm	bar	bar	lt/min	min	C   max		(kg)
T-B 202	S2010.02	3/8"	12.5	0.5	5	48	-10	160	PTFE	0.68
T-B 203	S2010.03	1/2"	14.5	0.5	5	70	-10	160	PTFE	0.71
T-B 204	S2010.04	3/4"	17	0.5	5	85	-10	160	PTFE	8.0
T-B 205	S2010.05	1"	17	0.5	5	90	-10	160	PTFE	0.97
T-B 206	S2010.06	11/4"	46	0.5	3	390	-10	140	EPDM	2.65
T-B 207	S2010.07	11/2"	46	0.5	3	460	-10	140	EPDM	2.55
T-B 208	S2010.08	2"	46	0.5	3	580	-10	140	EPDM	2.98

#### Useful Informations

1 bar: 14,5 PSI: 10 mH<sub>2</sub>0: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: PTFE: Polytetrafluorethylene, EPDM: Ethylene-Propylene Elastomer





2/2 Wav Pilot Operated G 3/8", G1/2", G3/4", G1", G11/4", G11/2", G2" **S2030 SERIES** 

#### **GENERAL FEATURES**

- New design
- Full orifice steam solenoid valves
- Especially for overheated water and steam
- · Suitable for liquids and gaseous fluids
- Working Temperature:-10°C / +140°C
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating differential pressure 0,35, 0,5
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- These solenoid valves are ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

: ED %100 : H (180°C) Continuous Duty Coil Insulation Class

Coil Impregnation : Polyester Fiber Glass
Coil Encapsulation Material : Fiber Glass Reinforced
Ambient Temperature : from -10°C; +60°C

: IDB 5 (RN 60529) with coil duly fitted with the plug connector : DIN 46340 3-poles connectors (DIN 43650) : ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm) Protection Degree
Electric Plug Connection

Connector Specification Electrical Safety

IEC 335

: For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V Standard Voltages

Other voltages on request

Voltage Tolerances For AC %-15; %+10, For DC %-5; %+10

50 Hz, other frequencies on request; (60 Hz ....) Frequency

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass

Internal Parts: Stainless Steel and brass

Sealing **EPDM** Shading Ring: Copper Seats Brass

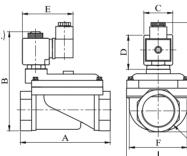
Core Tube Stainless Steel Stainless Steel Springs On request; nickel plated body

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 400 ms to ~ 1600 ms, Closing Time: 1000 ms to ~ 2000 ms

Maximum Allowable Pressure: 3 bar

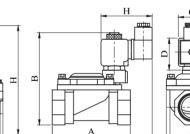




		,						
G	Α	В	C	D	Ε	F	1	Н
11/4"	141	143	32	45	76	96.5	110.7	156
11/2"	139	143	32	45	76	96.5	110.7	156
2"	145.6	153	32	45	76	96.5	110.7	165.5

### **Normally Closed**





#### Dimensions (mm)

G	Α	В	C	D	Е	F	J	Н	I
3/8"	69	97	32	45	106.5	38	52	76	112
1/2"	75	100	32	45	109	40	52	76	115
3/4"	81.3	107.9	32	45	115.8	42.1	51.9	76	121
1″	87.9	115.3	32	45	122.4	51.5	60.9	76	127.5

CE

**ROHS** 

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size	Pressure min / max KV			uid erature	Seal	Weight	
T-BL	S2030	G	mm	bar	bar	lt/min	min °	C   max		(kg)
T-BL 202	S2030.02	3/8"	12.5	0.35	3	45	-10	140	EPDM	0.68
T-BL 203	S2030.03	1/2"	12.5	0.35	3	65	-10	140	EPDM	0.64
T-BL 204	S2030.04	3/4"	20	0.5	3	120	-10	140	EPDM	0.66
T-BL 205	S2030.05	1"	25	0.5	3	170	-10	140	EPDM	0.8
T-BL 206	S2030.06	11/4"	46	0.5	3	390	-10	140	EPDM	2 <u>.</u> 65
T-BL 207	S2030.07	11/2"	46	0.5	3	460	-10	140	EPDM	2.55
T-BL 208	S2030.08	2"	46	0.5	3	580	-10	140	EPDM	2.98

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>0: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m³/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m³/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: EPDM: Ethylene-Propylene Elastomer

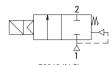
#### STEAM SOLENOID VALVES

2/2 Wav Pilot Operated G 3/8", G1/2", G3/4", G1"

### **S2040 SERIES**

### NEW

#### **Normally Closed**







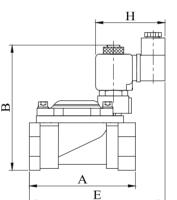


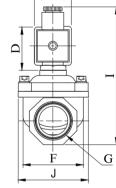












#### Dimensions (mm)

G	Α	В	С	D	Е	F	J	Н	I
3/8"	69	97	32	45	106.5	38	52	76	112
1/2"	69	97	32	45	109	40	52	76	112
3/4"	81.3	107.9	32	45	115.8	42.1	52	76	121
1"	87.9	115.3	32	45	122.4	51.5	60.9	76	127.5

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV		Fluid Temperature		Weight
T-BTD	S2040	G	mm	bar	bar	lt/min	min	C   max		(kg)
T-BTD 202	S2040.02	3/8"	12.5	0.35	3	45	-10	140	EPDM	0.68
T-BTD 203	S2040.03	1/2"	12.5	0.35	3	65	-10	140	EPDM	0.64
T-BTD 204	S2040.04	3/4"	15	0.35	3	70	-10	140	EPDM	0.79
T-BTD 205	S2040.05	1"	15	0.35	3	85	-10	140	EPDM	0.96

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151 °C, 5 bar steam: 160 °C, 6 bar steam: 165 °C Sealings: FPM (VITON): Fluoro-Carbon Elastomer, EPDM: Ethylene-Propylene Elastomer

### • Especially for overheated water and steam

**GENERAL FEATURES** 

New design

Suitable for non-aggressive liquids, gaseous. fluids
 Working Temperature: -10°C / +140°C
 Not suitable for use with dangerous fluids listed in Group 1
 Minimum operating differential pressure 0,35 bar

High reliability, quality and performance; long life, corrosion resistance

Wide pressure ratings, range of flow rate and orifice options

• On request; manual override

• Ideal for the automatic control of media in a wide range of applications.

 TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD)

• Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines

Coils interchangeable

Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure

Solenoid valves must be used with filtered fluids.

Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards

• Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3 ))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty Coil Insulation Class :FD %100 : H (180°C)

Coil Impregnation Polyester Fiber Glass Coil Encapsulation Material Ambient Temperature : Fiber Glass Reinforced from -10°C: +60°C

IP 65 (EN 60529) with coil duly fitted with the plug connector DIN 46340 3-poles connectors (DIN 43650) Protection Degree

Electric Plug Connection Connector Specification ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Electrical Safety

Standard Voltages :For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances :For AC -15%; +10%, For DC -5%; +10% :50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass

Internal Parts: Stainless Steel and brass

Sealing **EPDM** Shading Ring : Copper Seats Brass

Core Tube Stainless Steel Springs Stainless Steel On request; nickel plated body

On request; sealing can be FPM (VITON)

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm²/s)
Response Time : Opening Time : 400 ms to ~ 1600 ms,
Closing Time: 1000 ms to ~ 2000 ms

Maximum Allowable Pressure : 3bar Fluid Temperature for FPM (VITON) from -10°C; +160°C

SANAYİ MALZEMELERİ ÜRETİM VE SATIŞI A.Ş.

### SMS



#### HIGH TEMPERATURE STEAM SOLENOID VALVES

2/2 Wav Pilot Operated G 3/8", G1/2", G3/4", G1" S2013 **SERIES** 

#### **GENERAL FEATURES**

- Especially for overheated water and steam
- With cooling neck. By this way, the effect of the fluid's temperature on the coil is reduced
- · Suitable for liquids and gaseous fluids
- Working Temperature:-10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating differential pressure 0,5 bar
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC Low Voltage Directive (LVD).

  Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty Coil Insulation Class ·FD %100 · H (180°C)

: Polyester Fiber Glass : Fiber Glass Reinforced Coil Impregnation Coil Encapsulation Material Ambient Temperature

:from -10°C; +60°C: :IP 65 (EN 60529) with coil duly fitted with the plug connector: :DIN 46340 3-poles connectors (DIN 43650) Protection Degree

Electric Plug Connection Connector Specification : ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Electrical Safety Standard Voltages : IEC 335

:For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances :For AC %-15; %+10, For DC %-5; %+10 :50 Hz, other frequencies on request; (60 Hz) Frequency

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Brass

Internal Parts: Stainless Steel and brass

Sealing **PTFE** Shading Ring Copper Seats Brass Core Tube

Stainless Steel Stainless Steel Springs On request; nickel plated body

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time : Opening Time: 400 ms to ~ 1600 ms, Closing Time : 1000 ms to ~ 2000 ms

Maximum Allowable Pressure: 6 bar

#### **Normally Closed**



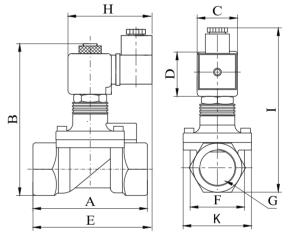












#### Dimensions (mm)

G	Α	В	C	D	Е	F	K	Н	I
3/8"	74	112	32	45	91.3	37.5	52	76	126
1/2"	79	115	32	45	92	39.8	52	76	112.7
3/4"	79	122.3	32	45	94	41.5	52	76	135.5
1"	85	130	32	45	101	42.5	52	76	141.5

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size	Pressure min / max				uid erature	Seal	Weight
T-BH	S2013	G	mm	bar	bar	lt/min	min	C   max		(kg)
T-BH 202	S2013.02	3/8"	12.5	0.5	6	48	-10	180	PTFE	0.74
T-BH 203	S2013.03	1/2"	14.5	0.5	6	70	-10	180	PTFE	0.77
T-BH 204	S2013.04	3/4"	17	0.5	6	85	-10	180	PTFE	0.86
T-BH 205	S2013.05	1"	17	0.5	6	90	-10	180	PTFE	1.04

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151 °C, 5 bar steam: 160 °C, 6 bar steam: 165 °C Sealings:PTFE:Polytetrafluorethylene

#### HIGH TEMPERATURE STEAM SOLENOID VALVE

2/2 Wav **Pilot Operated** G3/8", G1/2", G3/4", G1" S2093 **SERIES** 

#### **GENERAL FEATURES**

- TORK series S2093 diaphragm nickel plated steam solenoid valves are 2/2 way normally closed and pilot operated
- Especially for overheated water and steam
- With cooling neck. By this way, the effect of the fluids temperature on the coil is reduced

- Suitable for liquids and gaseous fluids
   Working Temperature:-10°C / +160°C
   Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating pressure differential 0,5 bar
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD).
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty :ED %100 Coil Insulation Class : H (180°C)

Coil Impregnation Polyester Fiber Glass Coil Encapsulation Material : Fiber Glass Reinforced Ambient Temperature from -10°C; +60°C

Protection Degree IP 65 (EN 60529) with coil duly fitted with the plug connector

DIN 46340 3-poles connectors (DIN 43650)

Electric Plug Connection Connector Specification : ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø6-8 mm)

Electrical Safety: IEC 335

Standard Voltages : For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances :For AC -15%; +10%, For DC -5%; +10% Frequency :50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUID**

: Nickel Plated Brass Body Internal Parts: Stainless Steel and brass

Sealing PTFF Shading Ring: Copper Seats : Brass Core Tube : Stainless Steel Springs : Stainless Steel

On request; body and internal parts can be Stainless Steel.

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 400 ms to ~ 1600 ms, Closing Time : 1000 ms to ~ 2000 ms

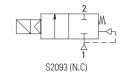
Maximum Allowable Pressure: 6 bar

#### **Normally Closed**



Nickel

Coated



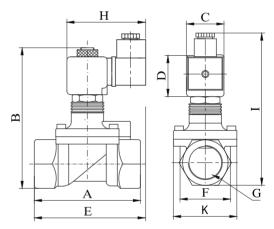












#### Dimensions (mm)

G	Α	В	C	D	Е	F	K	Н	I
3/8"	74	112	32	45	91.3	37.5	52	76	126
1/2"	79	115	32	45	92	39.8	52	76	112.7
3/4"	79	122.3	32	45	94	41.5	52	76	135.5
1"	85	130	32	45	101	42.5	52	76	141.5

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	Fluid Temperature		Seal	Weight
Т-ВНК	S2093	G	mm	bar	bar	lt/min	min °	C max		(kg)
T-BHK 202	S2093.02	3/8"	12.5	0.5	6	48	-10	180	PTFE	0.8
T-BHK 203	S2093.03	1/2"	14.5	0.5	6	70	-10	180	PTFE	0.82
T-BHK 204	S2093.04	3/4"	17	0.5	6	85	-10	180	PTFE	0.82
T-BHK 205	S2093.05	1"	17	0.5	6	90	-10	180	PTFE	1.1

#### **Hseful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings:PTFE:Polytetrafluorethylene



2/2 Way Pilot Operated G3/8", G1/2", G3/4", G1", G11/4", G11/2", G2" **S2011 SERIES** 

Normally Open

S2011 (N.O)

#### **GENERAL FEATURES**

- Internal exhaust system
- Especially for overheated water and steam
- Suitable for liquids and gaseous fluids
- Working Temperature: -10°C / +140°C and 160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating differential pressure 0,5 bar
- High reliability, quality and performance; long life, corrosion resistance
- · Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty Coil Insulation Class : ED %100 H (180°C)

Coil Impregnation Polyester Fiber Glass Coil Encapsulation Material : Fiber Glass Reinforced Ambient Temperature from -10°C; +60°C

IP 65 (EN 60529) with coil duly fitted with the plug connector Protection Degree

DIN 46340 3-poles connectors (DIN 43650)

Electric Plug Connection Connector Specification Electrical Safety ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

IEC 335

For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V Standard Voltages

Other voltages on request;

Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10%

Frequency 50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass

Internal Parts: Stainless Steel and brass
Sealing: PTFE (for 3/8",1/2",3/4",1") and
EPDM (for 11/4",11/2",2")

Shading Ring: Copper Seats Brass

Stainless Steel Core Tube Stainless Steel Springs On request; nickel plated body

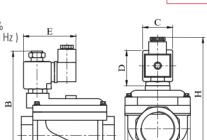
**TECHNICAL FEATURES** Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 400 ms to ~ 1600 ms, Closing Time: 1000 ms to ~ 2000 ms

Maximum Allowable Pressure : 5 bar

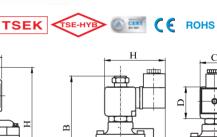
Fluid Temperature for PTFE from -10°C; +160°C,

for EPDM from -10°C; +140°C

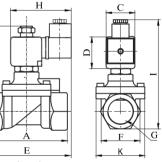




G	Α	В	C	D	Ε	F	K	Н
11/4"	141	143	32	45	76	96.5	110.7	156
11/2"	139	143	32	45	76	96.5	110.7	156
2"	145.6	153	32	45	76	96.5	110.7	165.5



MIEM



Dimensions (mm)

G	Α	В	C	D	Е	F	K	Н	I
3/8"	75	97	32	45	91.3	37.5	52	76	108
1/2"	79	100	32	45	92	39.5	52	76	110
3/4"	79	107.5	32	45	94	41.5	52	76	118
1"	87	115	32	45	102	42.5	52	76	124

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	Fluid Temperature		Seal	Weight
T-BN	S2011	G	mm	bar	bar	lt/min	min max			(kg)
T-BN 202	S2011.02	3/8"	12.5	0.5	5	48	-10	160	PTFE	0.69
T-BN 203	S2011.03	1/2"	14.5	0.5	5	70	-10	160	PTFE	0.72
T-BN 204	S2011.04	3/4"	17	0.5	5	85	-10	160	PTFE	0.81
T-BN 205	S2011.05	1"	17	0.5	5	90	-10	160	PTFE	0.98
T-BN 206	S2011.06	11/4"	46	0.5	3	390	-10	140	EPDM	2.66
T-BN 207	S2011.07	11/2"	46	0.5	3	460	-10	140	EPDM	2.56
T-BN 208	S2011.08	2"	46	0.5	3	580	-10	140	EPDM	2.99

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: PTFE: Polytetrafluorethylene, EPDM: Ethylene-Propylene Elastomer



#### STEAM SOLENOID VALVES

2/2 Wav Pilot Operated G 3/8", G1/2", G3/4", G1", G11/4", G11/2", G2" S2031 **SERIES** 

#### **GENERAL FEATURES**

- New design, internal exhaust system
- Full orifice steam solenoid valves
- Especially for overheated water and steam
- Suitable for liquids and gaseous fluids that
   Working Temperature:-10°C / +140°C
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating differential pressure 0,35, 0,5
- · High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD).
- · Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids. Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1 ) and on request; other pipe connections are available (NPT (ANSI 1.20.3 ) )

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty Coil Insulation Class :ED %100

Coil Impregnation Polyester Fiber Glass Coil Encapsulation Material Ambient Temperature

:Fiber Glass Reinforced :from -10°C; +60°C :IP 65 (EN 60529) with coil duly fitted with the plug connector Protection Degree

Electric Plug Connection

: DIN 46340 3-poles connectors (DIN 43650) : ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm ) Connector Specification Electrical Safety

: IEC 335

:For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V Standard Voltages

Other voltages on request; Voltage Tolerances

:For AC %-15; %+10, For DC %-5; %+10 :50 Hz, other frequencies Frequency on request; (60 Hz ....)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass

Internal Parts: Stainless Steel and brass

Sealing **EPDM** Shading Ring: Copper Seats Brass

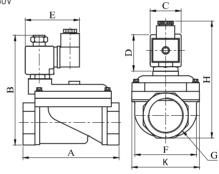
Stainless Steel Core Tube Springs Stainless Steel On request; nickel plated body

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 400 ms to ~ 1600 ms, Closing Time: 1000 ms to ~ 2000 ms

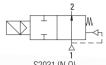
Maximum Allowable Pressure: 3 bar





G	Α	В	C	D	Ε	F	K	Н
11/4"	141	143	32	45	76	96.5	110.7	156
11/2"	139	143	32	45	76	96.5	110.7	156
2"	145.6	153	32	45	76	96.5	110.7	165.5

#### **Normally Open**



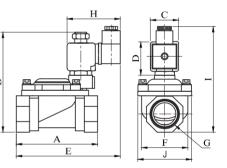












#### Dimensions (mm)

G	Α	В	C	D	Ε	F	J	Н	
3/8"	69	97	32	45	106.5	38	52	76	112
1/2"	75	97	32	45	109	38	52	76	115
3/4"	81.3	107.5	32	45	115.8	42.1	52	76	121
1″	87.9	115	32	45	122.4	51.5	60	76	127.5

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	Fluid Temperature		Seal	Weight
T-BLN	S2031	G	mm	bar	bar	lt/min	°C min   max			(kg)
T-BLN 202	S2031.02	3/8"	12.5	0.35	3	45	-10	140	EPDM	0.69
T-BLN 203	S2031.03	1/2"	12.5	0.35	3	65	-10	140	EPDM	0.66
T-BLN 204	S2031.04	3/4"	20	0.5	3	120	-10	140	EPDM	0.67
T-BLN 205	S2031.05	1"	25	0.5	3	170	-10	140	EPDM	0.81
T-BLN 206	S2031.06	11/4"	46	0.5	3	390	-10	140	EPDM	2.66
T-BLN 207	S2031.07	11/2"	46	0.5	3	460	-10	140	EPDM	2.56
T-BLN 208	S2031.08	2"	46	0.5	3	580	-10	140	EPDM	2.99

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m³/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m³/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: EPDM: Ethylene-Propylene Elastomer

#### STEAM SOLENOID VALVES

2/2 Wav Pilot Operated G 3/8", G1/2", G3/4", G1", G11/4", G11/2", G2" S2012 **SERIES** 

#### **GENERAL FEATURES**

- Especially for overheated water and steam

- Suitable for liquids and gaseous fluids that
  Working Temperature: -10°C / +140°C and 160°C
  Not suitable for use with dangerous fluids listed in Group 1
  Minimum operating differential pressure 0,5 bar
- High reliability, quality and performance; long life, corrosion resistance
   Wide pressure ratings, range of flow rate and orifice options

- Ideal for the automatic control of media in a wide range of applications.
   TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC Low Voltage Directive (LVD).

  Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty :ED %100 Coil Insulation Class : H (180°C)

Coil Impregnation : Polyester Fiber Glass Coil Encapsulation Material : Fiber Glass Reinforced Ambient Temperature from -10°C; +60°C

Protection Degree IP 65 (EN 60529) with coil duly fitted with the plug connector

Electric Plug Connection Connector Specification Electrical Safety DIN 46340 3-poles connectors (DIN 43650)

ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Standard Voltages For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

: For AC -15%; +10%, For DC -5%; +10% Voltage Tolerances

Frequency :50 Hz, other frequencies on request; (60 Hz )

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body: Brass

Internal Parts: Stainless Steel and brass

Sealing: PTFE (for 3/8",1/2",3/4",1") and EPDM (for 11/4",11/2",2")

Shading Ring: Copper Seats: Brass

Core Tube: Stainless Steel Springs: Stainless Steel On request; nickel plated body

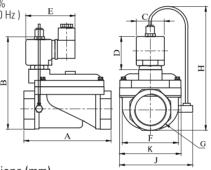
### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

Response Time: Opening Time: 400 ms to ~ 1600 ms, Closing Time: 1000 ms to ~ 2000 ms

Maximum Allowable Pressure : 5 bar Fluid Temperature for PTFE from -10°C; +160°C,

for EPDM from -10°C; +140°C





G	Α	В	C	D	Ε	F	K	Н	J
11/4"	141	143	32	45	76	96.8	110.7	191.6	123.8
11/2"	139	143	32	45	76	96.8	110.7	191.6	123.8
2"	145.6	153	32	45	76	96.8	110.7	206.8	123.8

#### Normally Open

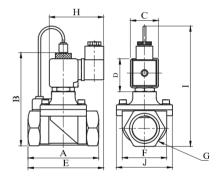












Dimensions (mm)

G	Α	В	C	D	Ε	F	J	Н	I
3/8"	75	97	32	45	91.3	37.5	52	76	124
1/2"	79	100	32	45	92	39.8	52	76	128
3/4"	79	107.5	32	45	94	41.5	52	76	134
1"	85	115	32	45	101	42.5	52	76	143.5

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	Fluid Temperature		Seal	Weight
T-BA	S2012	G	mm	bar	bar	lt/min	°C min max			(kg)
T-BA 202	S2012.02	3/8"	12.5	0.5	5	48	-10	160	PTFE	0.7
T-BA 203	S2012.03	1/2"	14.5	0.5	5	70	-10	160	PTFE	0.73
T-BA 204	S2012.04	3/4"	17	0.5	5	85	-10	160	PTFE	0.81
T-BA 205	S2012.05	1"	17	0.5	5	90	-10	160	PTFE	0.99
T-BA 206	S2012.06	11/4"	46	0.5	3	390	-10	140	EPDM	2.72
T-BA 207	S2012.07	11/2"	46	0.5	3	460	-10	140	EPDM	2.6
T-BA 208	S2012.08	2"	46	0.5	3	580	-10	140	EPDM	3.04

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C



Sealings: PTFE: Polytetrafluorethylene, EPDM: Ethylene-Propylene Elastomer

#### STEAM SOLENOID VALVES

2/2 Way Pilot Operated G 3/8", G1/2", G3/4", G1"



#### **GENERAL FEATURES**

- New design, internal exhaust system
- Especially for overheated water and steam
- Suitable for non-aggressive liquids, gaseous fluids
   Working Temperature: -10°C / +140°C
   Not suitable for use with dangerous fluids listed in Group 1

- Minimum operating differential pressure 0,35 bar
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- On request; manual override
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtred fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty :ED %100 Coil Insulation Class : H (180°C)

Coil Impregnation Polvester Fiber Glass Coil Encapsulation Material : Fiber Glass Reinforced Ambient Temperature from -10°C; +60°C

IP 65 (EN 60529) with coil duly fitted with the plug connector Protection Degree

:DIN 46340 3-poles connectors (DIN 43650)

Electric Plug Connection Connector Specification Electrical Safety ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Standard Voltages :For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10% :50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass

Internal Parts: Stainless Steel and brass

Sealing **EPDM** Shading Ring: Copper Seats Brass

Stainless Steel Core Tube Springs Stainless Steel On request; nickel plated body On request; sealing can be FPM (VITON)

#### **TECHNICAL FEATURES**

Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

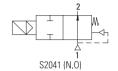
Response Time : Opening Time : 400 ms to ~ 1600 ms, Closing Time: 1000 ms to ~ 2000 ms

Maximum Allowable Pressure : 3bar

Fluid Temperature for FPM (VITON) from -10°C; +160°C



#### Normally Open





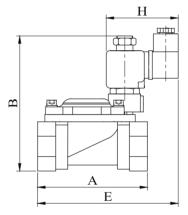


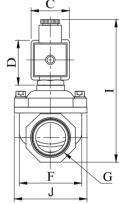












#### Dimensions (mm)

7		0.00	,	,						
	G	Α	В	С	D	Ε	F	J	Н	1
	3/8"	69	97	32	45	106.5	38	52	76	112
	1/2"	69	97	32	45	109	40	52	76	112
	3/4"	81.3	107.5	32	45	115.8	42.1	52	76	121
	1"	87.9	115	32	45	122.4	51.5	60.9	76	127.5

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size		ssure / max	KV	Fluid Temperature		Seal	Weight
T-BTDN	S2041	G	mm	bar	bar	lt/min	min	C max		(kg)
T-BTDN 202	S2041.02	3/8"	12.5	0.35	3	45	-10	140	EPDM	0.68
T-BTDN 203	S2041.03	1/2"	12.5	0.35	3	65	-10	140	EPDM	0.66
T-BTDN 204	S2041.04	3/4"	15	0.35	3	70	-10	140	EPDM	0.8
T-BTDN 205	S2041,05	1"	15	0.35	3	85	-10	140	EPDM	0.97

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: FPM (VITON): Fluoro-Carbon Elastomer, EPDM: Ethylene-Propylene Elastomer







2/2 Way Pilot Operated,  $\Delta P = 0$ G 3/8", G1/2", G3/4", G1" S2020 / S2021 **SERIES** 

#### **GENERAL FEATURES**

- TORK series S2020 (N.C) and S2021 (N.O) diaphragm steam solenoid valves are 2/2 way normally closed and normally open and pilot operated
- Especially for overheated water and steam

- Suitable for liquids and gaseous fluids
  Working Temperature: -10°C / +160°C
  Not suitable for use with dangerous fluids listed in Group 1
  Don't require any differential pressure (for 3/8", 1/2", 3/4", 1")
- Internal exhaust system for normally open solenoid valves
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED ) and 2006/95/EEC Low Voltage Directive (LVD)
- Some applications; closed circuits, laundry, auto claves, dry cleaning, sterilizers, ironing machines
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

#### **ELECTRICAL CHARACTERISTICS**

Continuous Duty :ED %100 H (180°C) Coil Insulation Class

:Fig. 180 Cy :Polyester Fiber Glass :Fiber Glass Reinforced :from -10°C; +60°C :IP 65 (EN 60529) with coil duly fitted with the plug connector :DIN 46340 3-poles connectors (DIN 43650) Coil Impregnation Coil Encapsulation Materia Ambient Temperature Protection Degree

Electric Plug Connection Connector Specification

ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Electrical Safety Standard Voltages IEC 335

:For AC 12V, 24V, 48V, 110V, 230V For DC 12V, 24V, 48V, 110 V

Other voltages on request;

Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10% Frequency :50 Hz, other frequencies on request; (60 Hz)

On request; connector with LED Specify coil voltage with order

#### **MATERIALS IN CONTACT WITH FLUIDS**

Body Brass

Internal Parts : Stainless Steel and brass

Sealing PTFF Shading Ring: Copper Seats Brass

Core Tube Stainless Steel Stainless Steel Springs On request; nickel plated body

#### **TECHNICAL FEATURES**

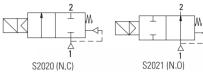
Max Viscosity : 5°E (~37cSt or mm²/s)
Response Time : Opening Time : 400 ms to ~ 1600 ms,
Closing Time: 1000 ms to ~ 2000 ms

Maximum Allowable Pressure : 5 bar Fluid Temperature for PTFE from -10°C; +160°C



#### **Normally Closed**

#### **Normally Open**



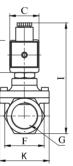


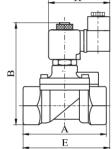


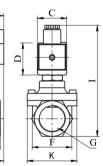












Dimensions (mm) (S2021)

			one (, (02021)						
G	Α	В	C	D	Ε	F	K	Н	I
3/8"	75	97	32	45	91.3	37.5	52	76	108
1/2"	79	100	32	45	92	39.8	52	76	110
3/4"	79	107.3	32	45	94	41.5	52	76	118
1"	85	115	32	45	101	42.5	52	76	124

Dimensions (mm) (S2020)

G	Α	В	C	D	Ε	F	K	Н	1
3/8"	74	97	32	45	91.3	37.5	52	76	108
1/2"	79	100	32	45	92	39.8	52	76	110
3/4"	79	107.3	32	45	94	41.5	52	76	118
1"	85	115	32	45	101	42.5	52	76	124

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size	Pressure min / max				ıid erature	Seal	Weight
T-BZ / T-BZN	S2020 / S2021	G	mm	bar	bar	lt/min	min	C max		(kg)
T-BZ 202	S2020.02	3/8"	12.5	0	5	38	-10	160	PTFE	0.69
T-BZ 203	S2020.03	1/2"	14.5	0	5	62	-10	160	PTFE	0.72
T-BZ 204	S2020.04	3/4"	17	0	5	85	-10	160	PTFE	0.8
T-BZ 205	S2020.05	1"	17	0	5	100	-10	160	PTFE	0.98
T-BZN 202	S2021.02	3/8"	12.5	0	5	38	-10	160	PTFE	0.7
T-BZN 203	S2021.03	1/2"	14.5	0	5	62	-10	160	PTFE	0.73
T-BZN 204	S2021.04	3/4"	17	0	5	85	-10	160	PTFE	0.81
T-BZN 205	S2021.05	1"	17	0	5	100	-10	160	PTFE	0.99

#### **Useful Informations**

1 bar: 14,5 PSI: 10 mH<sub>2</sub>O: 10 N/cm<sup>2</sup>: 1 kg/cm<sup>2</sup>: 100000 Pa , 1 PSI: 69 mbar,1 m<sup>3</sup>/h: 4,405 GPM: 16,7 L/d 1 Gallon / minute: 0,227 m<sup>3</sup>/h, 0°C: 89,6 F, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C Sealings: PTFE: Polytetrafluorethylene