

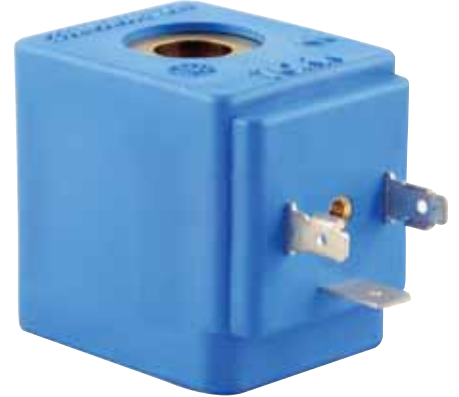
GENERAL FEATURES

- New design
- Better performance
- Long life

COIL CHARACTERISTICS

Continuous Duty : ED %100
 Coil insulation class : H (180°C)
 Coil Impregnation : Polyester Fiber Glass
 Coil Encapsulation Material : Fiber Glass Reinforced
 Ambient Temperature : -10°C, +60°C
 Protection degree : IP 65 (ISO 60529) with coil duly fitted with the plug connector
 Electric plug connection : DIN 46340 3-poles connectors (DIN 43650)
 Connector specification : ISO 4400 / EN 175301-803, Form A, Spade Plug (Cable Ø -8 mm)
 Electrical safety : IEC 335
 Standard Voltages : For AC 12V , 24V , 48V , 110V , 230V
 DC 12V , 24V , 48V , 110 V

Other voltages on request
 Frequency : 50 / 60 Hz
 Voltage Tolerances : + / - 10%
 Other request : connector with LED
 Specify coil voltage with order

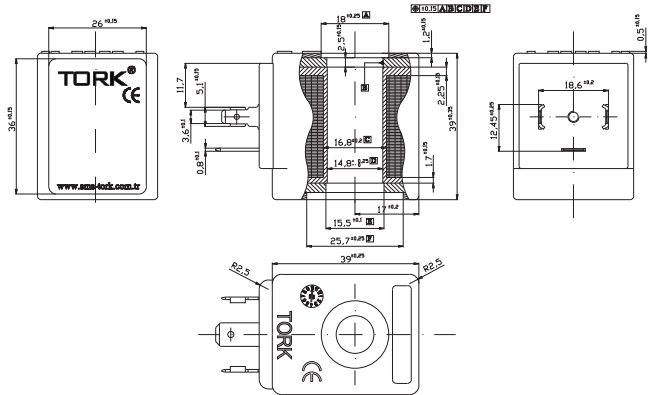
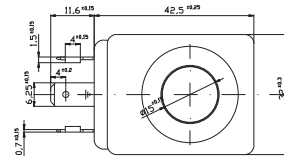


MATERIALS ON CONTACT WITH FLUID

Body : Iron cast
 Internal Parts : Stainless steel and Brass
 Sealing : NBR
 Shading Ring : Copper
 Core, Tube, Spring : Stainless Steel

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



POWER RATINGS			
Alternating Current (AC)			
Coil Type	Voltage (V)	Power (VA)	Current (A)
C40012VAC15VA	12	15	1,25
C40024VAC15VA	24	15	0,521
C40048VAC15VA	48	15	0,312
C40110VAC15VA	110	15	0,12
C40230VAC15VA	230	15	0,06
C40230VAC24VA	230	24	0,096

POWER RATINGS			
Direct Current (DC)			
Coil Type	Voltage (V)	Power (W)	Current (A)
C40012VDC18W	12	18	1,5
C40024VDC18W	24	18	0,8
C40048VDC18W	48	18	0,37
C40110VDC18W	110	18	0,163

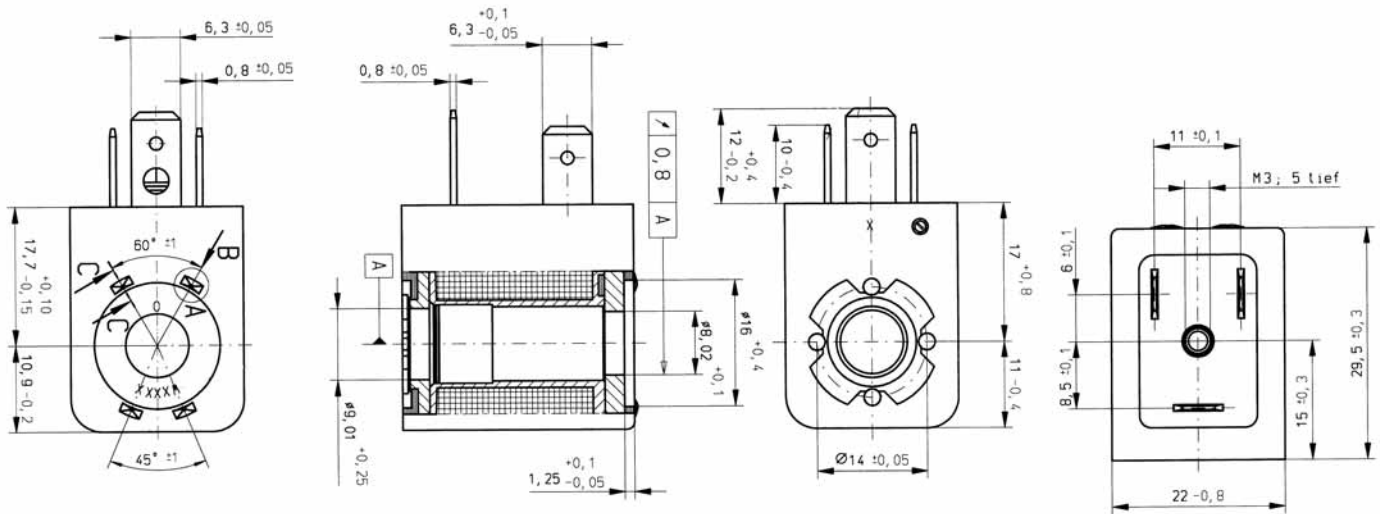
COIL CHARACTERISTICS

Coils in the catalogue pages are identified by their electrical characteristics such as ;
 Continuous Duty : ED %100
 Coil insulation class : H (180°C)
 Coil impregnation : Polyester Fiber Glass
 Coil Encapsulation Material : Fiber Glass Reinforced
 Minimum and maximum ambient temperature : from -10°C ; +60°C
 Protection degree : Generally IP 65 (EN 60529) with coil duty fitted with the plug connector
 Power : for DC 5.5 W, for AC 6 VA 8.5 VA
 Electric plug connection : DIN 46340 3-poles connectors (DIN 43650)
 Electrical safety : IEC 335
 Insulation class of insulating materials according to DIN VDE 0580
 Deg. of protection with mounted plug-in connector according to IEC 529



STANDARD VOLTAGES

The standard voltages indicated in the catalogue are as follows ;
 Standard Voltages : For AC 12V , 24V , 48V , 110V , 230V
 For DC 12V , 24V , 48V , 110 V
 Other voltage on request
 Voltages Tolerance : For AC %-15 ; %+10 , For DC %-5 ; %+10
 Frequency : 50 Hz , other frequencies on request (60 Hz)
 On request connector with LED



Coil Type / Order no	Coil Voltage
C20	Volt
C20.01	230 V AC
C20.02	110 V AC
C20.03	24 V AC
C20.04	12 V AC
C20.06	24 V DC
C20.07	12 V DC

Useful Informations

1 bar:14,5 PSI:10 mH₂O:10 N/cm²:1 kg/cm²:100000 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
 Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer, EPDM:Ethylene-Propylene Elastomer

COIL CHARACTERISTICS

Coils in the catalogue pages are identified by their electrical characteristics such as ;

Continuous Duty : ED %100
 Coil insulation class : H (180°C)
 Coil Impregnation : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Coil Encapsulation Material : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Explosionproof operator, intended for use in potentially explosive atmospheres
 Easy electrical installation by means of the cable, standard length 1 meter
 Safety mode : EEx em II T4 (Max Surface Temperature : 135°C
 em: encapsulation safety , II : Equipment group)

Minimum and maximum ambient temperature : from -10°C ; +50°C
 Power : for DC 4.5 to 5 W, for AC 3.8 to 5.5 VA
 Protection degree : Generally IP 65 (EN 60529) with coil duty fitted with the plug connector
 Electric plug connection : DIN 46340 3-poles connectors (DIN 43650)
 Electrical safety : IEC 335

On request maximum surface temperature T5 = 100°C or T6 = 85°C
 Ambient Temperature : -20°C...+50°C
 Insulation class of insulating materials according to DIN VDE 0580
 Deg. of Protection with mounted plug-in connector according to IEC 529
 These coils are approved according to EN 50028
 DIN VDE 0170/0171, part 9 by the PTB and according to 94/9 EG (Atex 100a)

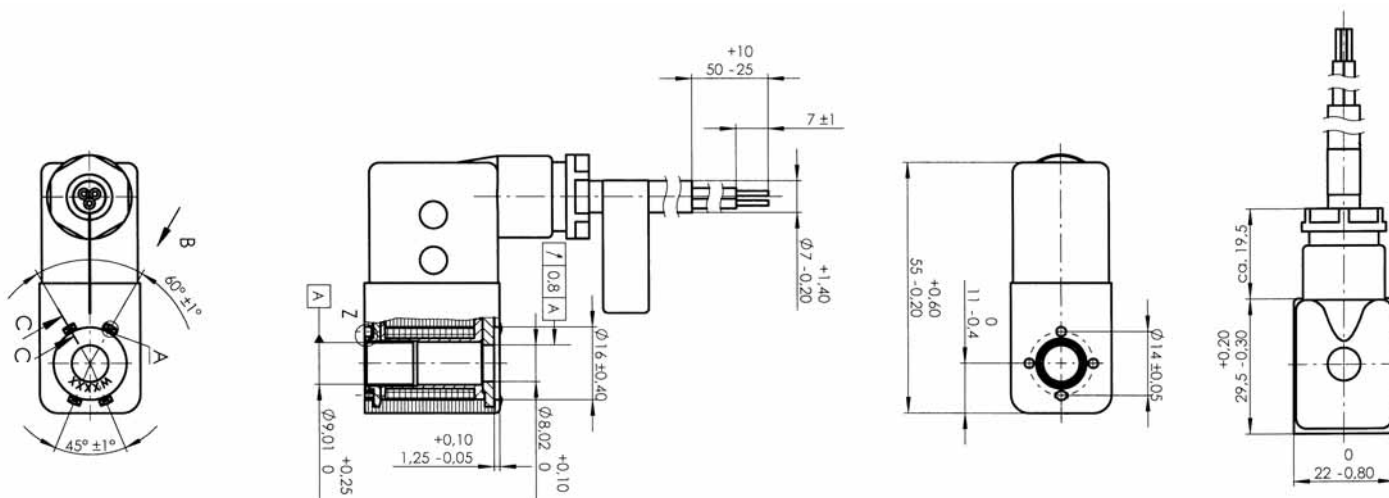
Atex Certificated



STANDARD VOLTAGES

The standard voltages indicated in the catalogue are as follows ;
 Standard Voltages : For AC 12V , 24V , 48V , 110V , 230V
 For DC 12V , 24V , 48V , 110 V

Other voltage on request
 Voltages Tolerance : For AC %-15 ; %+10 , For DC %-5 ; %+10
 Frequency : 50 Hz, other frequencies on request (60 Hz)
 On request connector with LED



Coil Type / Order no	Voltage	Power Ratings	Alternating Current (AC)			Direct Current (DC)		
			Valve Type / Order no	Voltage	Power Ratings	Valve Type / Order no	Voltage	Power Ratings
C21	Volt							
C 21 . 01	230 V AC	EEx em II T4	C 21 . 22	240 V	5.5 VA	C 21 . 26	125 V	5 W
C 21 . 02	110 V AC	EEx em II T4	C 21 . 01	230 V	4.8 VA	C 21 . 05	110 V	5 W
C 21 . 03	24 V AC	EEx em II T4	C 21 . 24	120 V	4.5 VA	C 21 . 18	48 V	4.7 W
C 21 . 04	12 V AC	EEx em II T4	C 21 . 02	110 V	3.8 VA	C 21 . 06	24 V	5 W
C 21 . 06	24 V DC	EEx em II T4	C 21 . 23	200 V	5.2 VA	C 21 . 07	12 V	4.5 W
C 21 . 07	12 V DC	EEx em II T4	C 21 . 25	36 V	5.2 VA	-	-	-
-	-	-	C 21 . 03	24 V	4.6 VA	-	-	-

Useful Informations

1 bar:14,5 PSI:10 mH₂O:10 N/cm²:1 kg/cm²:100000 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
 Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer, EPDM:Ethylene-Propylene Elastomer

COIL CHARACTERISTICS

Coils in the catalogue pages are identified by their electrical characteristics such as ;

Continuous Duty : ED %100
 Coil insulation class : H (180°C)
 Coil Impregnation : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Coil Encapsulation Material : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Explosion proof operator, intended for use in potentially explosive atmospheres
 Easy electrical installation by means of the cable, standard length 3 meters
 Safety mode : EEx em II T4/T5 (Max Surface Temperature : 100°C -135°C , em: encapsulation increased safety , II: Equipment group)
 Minimum and maximum ambient temperature : from -10°C ; +60°C
 Protection degree: Generally IP 65 (EN 60529) with coil duty fitted with the plug connector
 Connector specification or type of connector, mostly with ISO 4400 / EN 175301-803, Form A,
 Spade plug (Cable Ø 6-8 mm) or small connector
 Electric plug connection : DIN 46340 3-poles connectors (DIN 43650)
 Electrical safety : IEC 335
 Exproof coils for use in zone 1 and zone 2



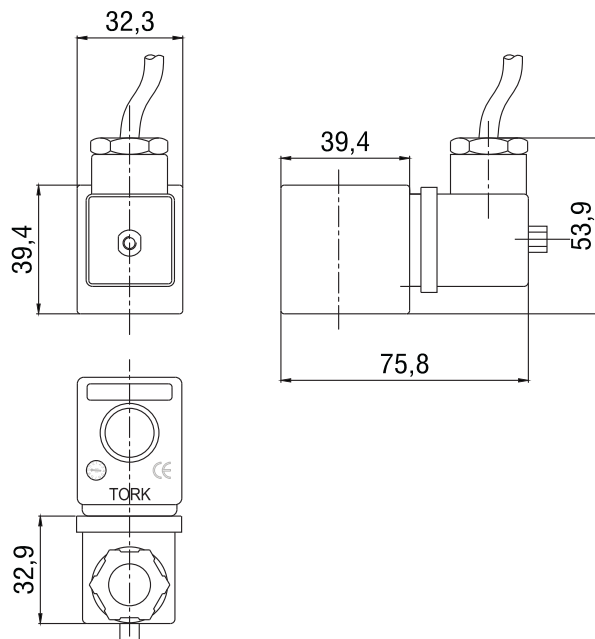
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STANDARD VOLTAGES

The standard voltages indicated in the catalogue are as follows ;

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

Other voltages on request
 Voltage Tolerances : + / - 10%
 Frequency : 50 / 60 Hz
 On request connector with LED



POWER RATINGS			
Alternating Current (AC)			
Coil Type	Voltage (V)	Power (VA)	Current (A)
C11012VAC15VA	12	15	1,25
C11024VAC15VA	24	15	0,521
C11048VAC15VA	48	15	0,312
C11110VAC15VA	110	15	0,12
C11230VAC15VA	230	15	0,06
C11230VAC24VA	230	24	0,096

POWER RATINGS			
Direct Current (DC)			
Coil Type	Voltage (V)	Power (W)	Current (A)
C11012VDC18W	12	18	1,5
C11024VDC18W	24	18	0,8
C11048VDC18W	48	18	0,37
C11110VDC18W	110	18	0,163

Useful Informations

1 bar:14,5 PSI:10 mH₂O:10 N/cm²:1 kg/cm²:100000 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
 Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer, EPDM:Ethylene-Propylene Elastomer

GENERAL FEATURES

- New design
- Better performance
- Long life
- For use in potentially explosive areas
- Easy electrical installation by built-in cable, standard length 3m. Other lengths on request.

COIL CHARACTERISTICS

Continuous Duty : ED %100
 Coil insulation class : H (180°C)
 Coil Impregnation : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Coil Encapsulation Material : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Ambient Temperature : -10°C, +60°C
 ExProof Protection Class :



II 2G Ex mb IIC T4 Gb
 Ex tD A21 (T 130°C Max)
 IEP 13 ATEX 0182 X

Protection degree : IP 67 (ISO 60529)
 Electric plug connection : DIN 46340 3-poles connectors (DIN 43650)
 Connector specification : ISO 4400 / EN 175301-803, Form A,
 Electrical safety : IEC 335
 Standard Voltages : For AC 12V , 24V , 48V , 110V , 230V
 DC 12V , 24V , 48V , 110 V

Other voltages on request
 Frequency : 50/60 Hz
 Voltage Tolerances : + / - 10%
 Specify coil voltage with order

Voltage Tolerances : Opening Time: 400 ms to ~ 1600 ms
 Closing Time: 1000 ms to ~ 2000 ms



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POWER RATINGS			
Alternating Current (AC)			
Coil Type	Voltage (V)	Power (VA)	Current (A)
C41012VAC15VA	12	15	1,25
C41024VAC15VA	24	15	0,521
C41048VAC15VA	48	15	0,312
C41110VAC15VA	110	15	0,12
C41230VAC15VA	230	15	0,06
C41230VAC24VA	230	24	0,096

POWER RATINGS			
Direct Current (DC)			
Coil Type	Voltage (V)	Power (W)	Current (A)
C41012VDC18W	12	18	1,25
C41024VDC18W	24	18	0,8
C41048VDC18W	48	18	0,37
C41110VDC18W	110	18	0,163

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 Coil insulation class : H (180°C)
 Coil Impregnation : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Coil Encapsulation Material : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
 Explosionproof operator, intended for use in potentially explosive atmospheres
 Easy electrical installation by means of the cable, standard length 3 meters
 Safety mode : EEx m II T4 (Max Surface Temperature : 135°C)
 (m: encapsulation increased safety , II: Equipment group)

Minimum and maximum ambient temperature : from -10°C ; +60°C
 Protection degree: Generally IP 65 (EN 60529) with coil duty fitted with the plug connector
 Connector specification or type of connector, mostly with ISO 4400 / EN 175301-803, Form A,
 Spade plug (Cable Ø 6-8 mm) or small connector
 Electric plug connection : DIN 46340 3-poles connectors (DIN 43650)
 Electrical safety : IEC 335

Insulation Class of insulating Materials according to DIN VDE 0580
 Deg. of Protection with mounted plug-in connector according to IEC 529
 These coils are approved according to EN 50028

DIN VDE 0170/0171 , part 9 by the PTB and according to 94/9 EG (Atex 100a)
 The device, which is provided with the CE symbol , meets the following standarts ; EN 50014, EN 50028 , IEC 60079-0, IEC 60079-18,
 EN 50281-1-1, IEC 61241-1-1, EN 60529, EN 61000-6-4, 61000-6-2, DIN VDE 0580, Directive 94/9/EG
 The solenoid operator is an encapsulated safe electrical work equipment group II, designed for application in atmospheres according
 to category 2G and 2D (temperature class and surface temperature as per imprint).



II 2G EEx m II T4
 II 2D IP65 T130°C



STANDARD VOLTAGES

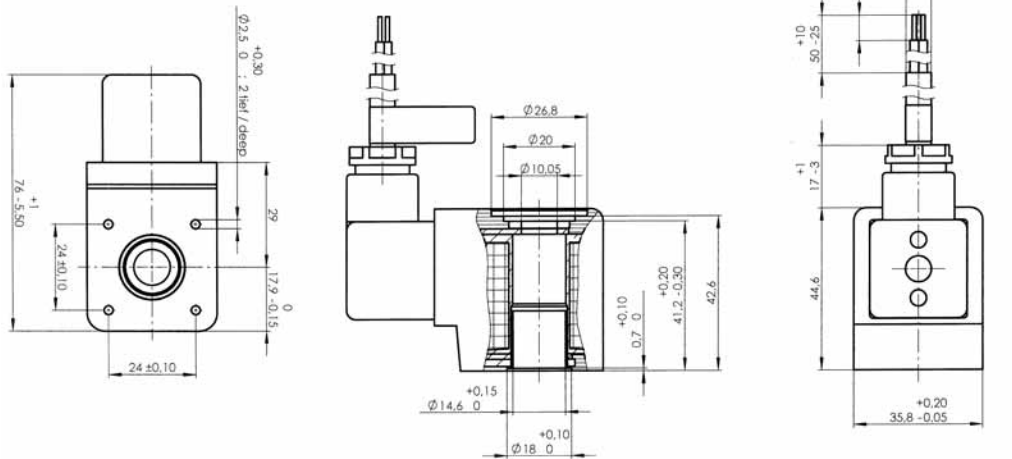
The standard voltages indicated in the catalogue are as follows ;
 Standard Voltages : For AC 12V , 24V , 48V , 110V , 220V, 230V
 For DC 12V , 24V , 48V , 110 V

Other voltage 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

POWER RATING

Power ratings (P) for alternating current coils the inrush power expressed in VA (Volt – Amper)
 Power ratings (P) for direct current coils in the cold state (at inrush of power) W (Watt)

Options:
 II 2G EEx m II T5
 II 2D IP65 T100°C
 For AC 4,4VA -4,9 VA; For DC 4,9W ile 5,1W
 II 2G EEx m II T6
 II 2D IP65 T85°C
 For AC 3,9VA -4,4 VA; For DC 4,7W ile 5,2W



Alternating Current (AC)		
Coil Type / Order no	Voltage	Power Ratings
C 12 . 22	240 V	9.2 VA
C 12 . 01	230 V	8.5 VA
C 12 . 27	220 V	7.7 VA
C 12 . 24	120 V	8.65 VA
C 12 . 02	110 V	9.1 VA
C 12 . 03	24 V	7.2 VA
C 12 . 04	12 V	7.5 VA

Direct Current (DC)		
Coil Type / Order no	Voltage	Power Ratings
C 12 . 13	220 V	9.5 VA
C 12 . 05	110 V	8.4 VA
C 12 . 18	48 V	7.7 VA
C 12 . 06	24 V	8.9 VA
C 12 . 07	12 V	9.9 VA
-	-	-
-	-	-

Useful Informations

1 bar:14,5 PSI:10 mH₂O:10 N/cm²:1 kg/cm²:100000 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
 Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer, EPDM:Ethylene-Propylene Elastomer

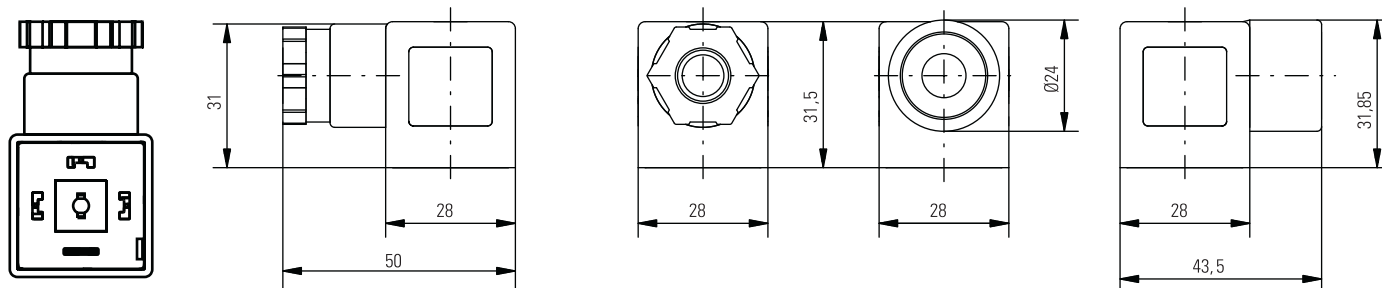
GENERAL DATA

Number of Contacts	: 2+earth
Cable Diameter	: 6 to 8 mm
Protection Rating	: IP 65
Contact Resistance	: ≤ 4 mOhm
Maximum Operating Current	: 10 A
Wire Cross Section	: Maximum 1,5 mm ² / Clamping Contact
Wire Cross Section	: 0,75 mm ² - 1 mm ² / Cut Contact
Ambient Temperature	: -25°C ; +80°C
Operating Temperature	: -40°C ; +90°C
Cable Connection	: Screw
Electrical Safety	: IEC 335
Connectors	: Removable
Electric Plug Connection	: DIN 46340 3-poles connectors (DIN 43650)
Connector Specification	: ISO 4400 / EN 175301-803 , Form A, Spade plug
On request connector with LED	
On request; with a three core 2 m cable	
Special versions	: With circuit, flat-and profile gasket ECO, single packing, cable clamp
Central fixing screw M3 x 33,5	
Maximum operating voltage: 250 V	



MATERIALS

Contacts	: CuZn , Cu/Sn-Plated
Terminal Block	: PA6+%30FG, Black
Housing	: PA6+%30FG, PA6 (translucent)
Cover	: PA6
Screws	: Steel 37 , zinc-plated
Gasket	: Nitril-LABS-free , profile
Wire Holder	: PA6.6 +50%FG P7, 5, black
On request housing material V1 (Exproof material).	



Plug Type / Order no	Standard	Suitable Coil	Fluid Temperature	Features
C80 / C85 / C81 / C86		T-SB	°C	
C 8 0	DIN 43650 IP65	C10 / C11 / C12	70	Standard
C 8 5	DIN 43650 IP65	C20 / C21	70	Standard
C 8 1	DIN 43650 IP65	C10 / C11 / C12	70	With LED
C 8 6	DIN 43650 IP65	C20 / C21	70	With LED

Useful Informations

1 bar:14,5 PSI:10 mH₂O:10 N/cm²:1 kg/cm²:100000 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
Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer, EPDM:Ethylene-Propylene Elastomer

FEATURES

(C93)

- Solenoid Valve Controller
- Selectable Timing Range
- 24 - 240 VAC 50/60Hz 24 - 240 VDC
- DIN 43650 ISO-4400/6952
- IP65 NEMA IV
- Test Facility
- Dual Earth O/P 6 & 12 O' Clock. Form A
- Special Timing Ranges Available on Request
- Suitable for T-SB1 TORK valve coil (big body)

(C94)

- Solenoid Valve Controller
- Selectable Timing Range
- 24 - 240 VAC 50/60Hz 24 - 240 VDC
- DIN 43650 ISO-4400/6952
- IP65 NEMA IV
- Test Facility
- Output Registration Form B
- Special Timing Ranges Available on Request
- Suitable for T-SB2 TORK valve coils (small body)

DESCRIPTION

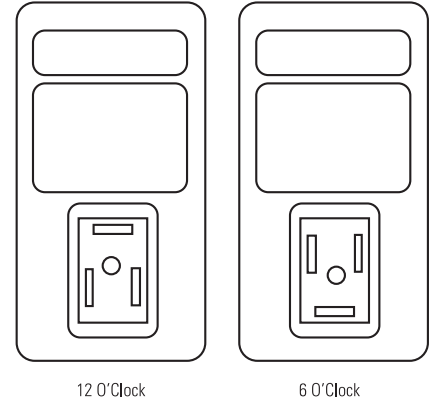
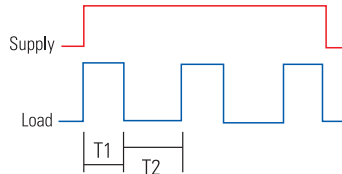
Upon application of power the timer resets, enters the ON state for a period T1, then switches OFF for a period T2. This cycle repeats until power is removed.

APPLICATIONS

- Sampling : Gas or liquids
- Air Dryers : Condensate Discharge
- Effluent Sampling
- Sprinkler Systems
- Auto Drain Valve : Automatic Discharge of Condensate
- Pneumatic Vibration Systems : (e.g. Powder Silos)
- Automatic Lubrication Systems
- Automatic Control of Hand Wash Basins

TECHNICAL SPECIFICATIONS

- Interval time : 0.5 to 45 minutes, adjustable
- Discharge time : 0.5 to 10 seconds, adjustable
- Manual TEST switch : Yes, micro-switch
- Supply voltage : 24 to 240VAC/DC 50/60Hz
- Current consumption : 4 mA maximum
- Operating temperature : -40° Celcius to 60° Celcius
- Environmental protection : IP65
- Housing material : ABS plastic FR grade
- Connection : DIN 43650A
- Indicators : LED's to indicate ON and OFF
- Design standard : VDE 01 10C



Timer Type / Order no	Discharge Time	Interval Time	Voltage	Application
C93	0.5 ...10 sec. 0.5 ...10 sn.	0.5 sec...45 min. 0.5 sn. 45 dak.	24 ... 220 V 7mA	For C10 Tork valve coil

- Operation temperature : 40°C: +60°C
- Indicator : Led On/Off
- Manual test switch : Yes
- Protection : IP 65 with plug

Timer Type / Order no	Discharge Time	Interval Time	Voltage	Application
C94	0.5 ...10 sec. 0.5 ...10 sn.	0.5 sec...45 min. 0.5 sn. 45 dak.	24 ... 220 V 7mA	For C20 Tork valve small coil

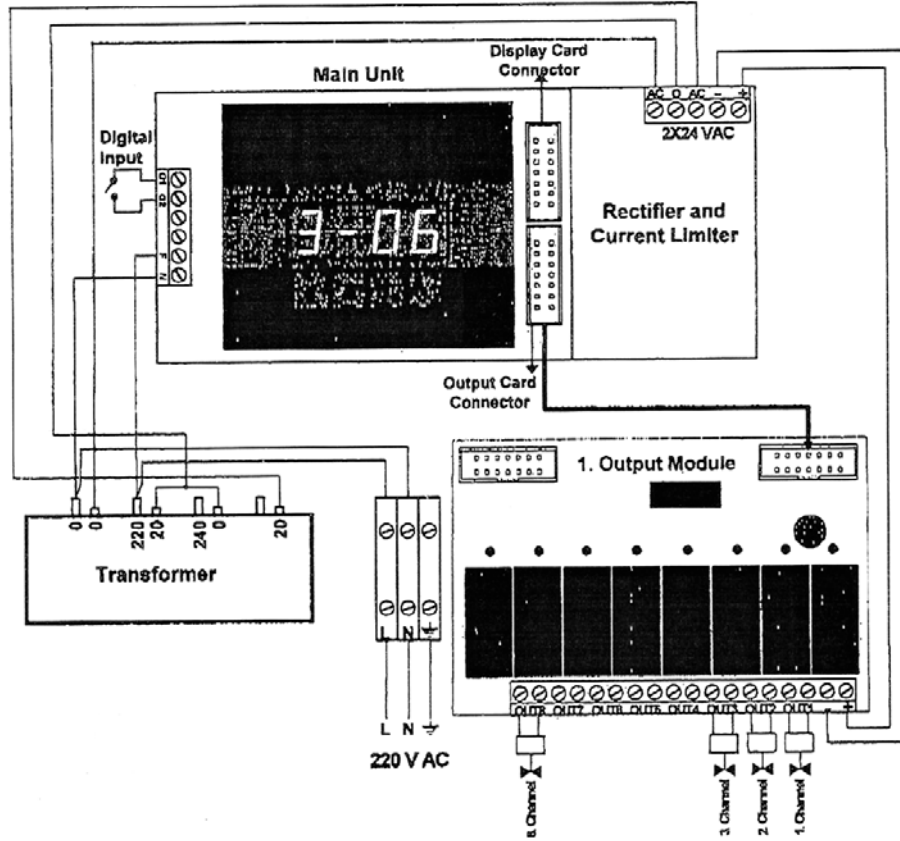
- Operation temperature : -40°C: +60°C
- Indicator : Led On/Off
- Manual test switch : Yes
- Protection : IP 65 with plug

GENERAL FEATURES

- Filter cleaning Timers are micro-processor based control instruments used in jet pulse filters.
- The filters are used commonly in the industries such as glass, cement, painting, fertilizers and fodder industry
- Ambient dust from spreading.
- Used for cleaning the bag chambers of filters

DESCRIPTION

- C95 Filter Timer is placed into a polyester case. The dimensions of the case are 250 x 300 x 170 mm. The layout of the timer and the connection diagram is given in Figure 1 The devices having 1 to 8 outputs has only one output module.
- The timer unit can be mounted on a wall or in a panel. The mounting pieces must be fixed to the corners of the case before installation. The connection cables passing inside the unit through the cable sheaths on the bottom of the unit are screwed on the terminals.



Timer Type / Order no	Output
C95	
C95.08	8 relay
C95.16	16 relay
C95.24	24 relay
C95.32	32 relay