

Inlet Elements with Primary Pressure Relief Valve and with Solenoid Unloading Cartridge

TE-05-__-

RE 18300-05

Edition: 04.2025

Replaces: 02.2016



Description

The inlet elements TE-05-__ are employed to connect the external P and T lines to the P and T channels inside the ED elements of the Directional Valve Assembly. They incorporate a pressure relief cartridge which limits the primary pressure in the P line. The relief setting can be checked through the Test Point port M. When fitted, the Normally Open Solenoid Unloading VEI Cartridge unloads to Tank all the P line flow; unloading stops when the cartridge coil is energized.

The TE-05-__ inlet elements are available in two versions:

- Body made of Black Anodized Aluminium (AL), or
 - Body made of Yellow Zinc plated (Cr+3) Cast Iron (CI).
- Port sizes can be G 3/8, G 1/2 or SAE 8 (3/4" 16 UNF).

Technical data

General			
Inlet Element Type		AL Version	CI Version
TE-05-02-00-	kg (lbs)	0.50 (1.10)	1.26 (2.78)
TE-05-03-00-	kg (lbs)	0.74 (1.68)	1.92 (4.20)
TE-05-56-00-	kg (lbs)	0.74 (1.68)	1.92 (4.20)
TE-05-02-S_-	kg (lbs)	0.60 (1.39)	1.40 (3.10)
TE-05-03-S_-	kg (lbs)	0.94 (2.06)	2.10 (4.60)
TE-05-56-S_-	kg (lbs)	0.94 (2.06)	2.10 (4.60)
Ambient Temperature	°C (°F)	-20...+50 (-4...+122) (NBR seals)	
Hydraulic			
Maximum pressure for aluminium version (AL)	bar (psi)	250 (3625)	
Maximum pressure for Cast Iron version (CI)	bar (psi)	310 (4500)	
Maximum inlet flow	l/min (gpm)	35 (9.3) TE-05-02... 50 (13.2) TE-05-03... and TE-05-56...	
Hydraulic fluid General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems.		Mineral oil based hydraulic fluids HL (DIN 51524 part 1). Mineral oil based hydraulic fluids HLP (DIN 51524 part 2). For use of environmentally acceptable fluids (vegetable or polyglycol base) please consult us.	
Fluid Temperature	°C (°F)	-20...+80 (-4...+176) (NBR)	
Permissible degree of fluid contamination		ISO 4572: $\beta_{x \geq 75} X = 10 \dots 12$ ISO 4406: class 19/17/14 NAS 1638: class 8	
Viscosity range	mm ² /s	5...420	

Note

For applications with different specifications consult us

Ordering details

01	02	03	04	05	06	07	08	09
TE	-	05	-	-	-	-	-	1

Family

01	Inlet Elements	TE
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Configuration

02	With primary pressure relief valve and with solenoid unloading cartridge	05
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Ports

03	G 3/8 DIN 3852	02
	G 1/2 DIN 3852	03
	3/4-16 UNF-2B (SAE8)	56

Primary Pressure Relief range

04	Without primary pressure relief valve (open cavity)	00
	Without primary pressure relief valve, cavity plugged	99
	Pressure range 25-120bar (362-1740 psi)	SN
	Pressure range 40-200bar (580-2900 psi)	SB
	Pressure range 200-350bar (2900-5076 psi)	SV

Material

05	Cast Iron	CI
	Aluminium	AL

Cartridge voltage supply

06	Without cartridge (open cavity)	-	-	-	-	-	No code
	Cartridge without coil	-	-	-	-	•	00
	12 V DC	•	•	•	•	-	OB
	24 V DC	•	•	•	•	-	OC

Electrical connections

07	No cartridge	No code
	Cartridge without coil	00
	With coils, without mating connector DIN EN 175301-803 ¹⁾	01
	With coils, with bi-directional diode, without mating connector vertical Amp-Junior	03
	With coils, with bi-directional diode, without mating connector horizontal Amp-Junior	04
	With coils, with bi-directional diode, without mating connector DT04-2P	07

Electrical cartridge option¹⁾

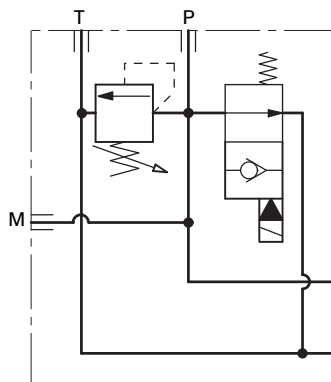
08	Without electrical cartridge (cavity open)	No code
	Normally open valve without override	00
	Without electrical cartridge, cavity plugged	99
	Normally open valve with push-button override	OP
	Normally open valve with push and twist override	SG

Components Series

09	Energy saving series	1
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1) For connectors ordering code see data sheet see following page.

▼ Symbol



Technical data

▼ Available Electrical connections

Code	Voltage [V]	Connector type	Coil description	Diode Type	Coil Mat no.
OB 01	12 DC	EN 175301-803	OD02360130OB00-36-K4	Not installed	R901393412
OB 03	12 DC	AMP JUNIOR Vertical	OD02361530OB00-36-C4Z	P6KE27CA	R901435507
OB 04	12 DC	AMP JUNIOR Horizontal	OD0236153POB00-36-C4	P6KE27CA	R901395031
OB 07	12 DC	DEUTSCH DT 04-2P Horiz.	OD0236223POB00-36-K40	P6KE27CA	R901394397
OC 01	24 DC	EN 175301-803	OD02360130OC00-36-K4	Not installed	R901393577
OC 03	24 DC	AMP JUNIOR Vertical	OD02361530OC00-36-C4Z	P6KE39CA	R901435494
OC 04	24 DC	AMP JUNIOR Horizontal	OD0236153POC00-36-C4	P6KE39CA	R901395035
OC 07	24 DC	DEUTSCH DT 04-2P Horiz.	OD0236223POC00-36-K40	P6KE39CA	R901394399
OD 01	48 DC	EN 175301-803	OD02360130OD00-36-K4	Not installed	R901394117
OU 01	96DC	EN 175301-803	OD02360130OU00-36-K4	Not installed	R901394229
AH 01	205DC	EN 175301-803	OD02360130AH00-36-K4	Not installed	R901394231

Note

For further versions (i.e. cable single lead) contact factory.

▼ Available electrical cartridge valves and plugs

Entry plate ports	Cartridge cavity	Cartridge type	Material number	Electrical cartridge
TE-05-02...	CA-08A-2N	Normally open valve without override	R930058435	00
	CA-08A-2N	Normally closed plug for 2way 2position valve	R933006815	99
	CA-08A-2N	Normally open valve with push-button override	R930058438	OP
	CA-08A-2N	Normally open valve with push and twist override	R930060128	SG
TE-05-03...TE-05-56...	017-E	Normally open valve without override	R930064265	00
	017-E	Normally closed plug for 2way 2position valve	R930045246	99
	017-E	Normally open valve with push-button override	R930064334	OP
	017-E	Normally open valve with push and twist override	R930063423	SG

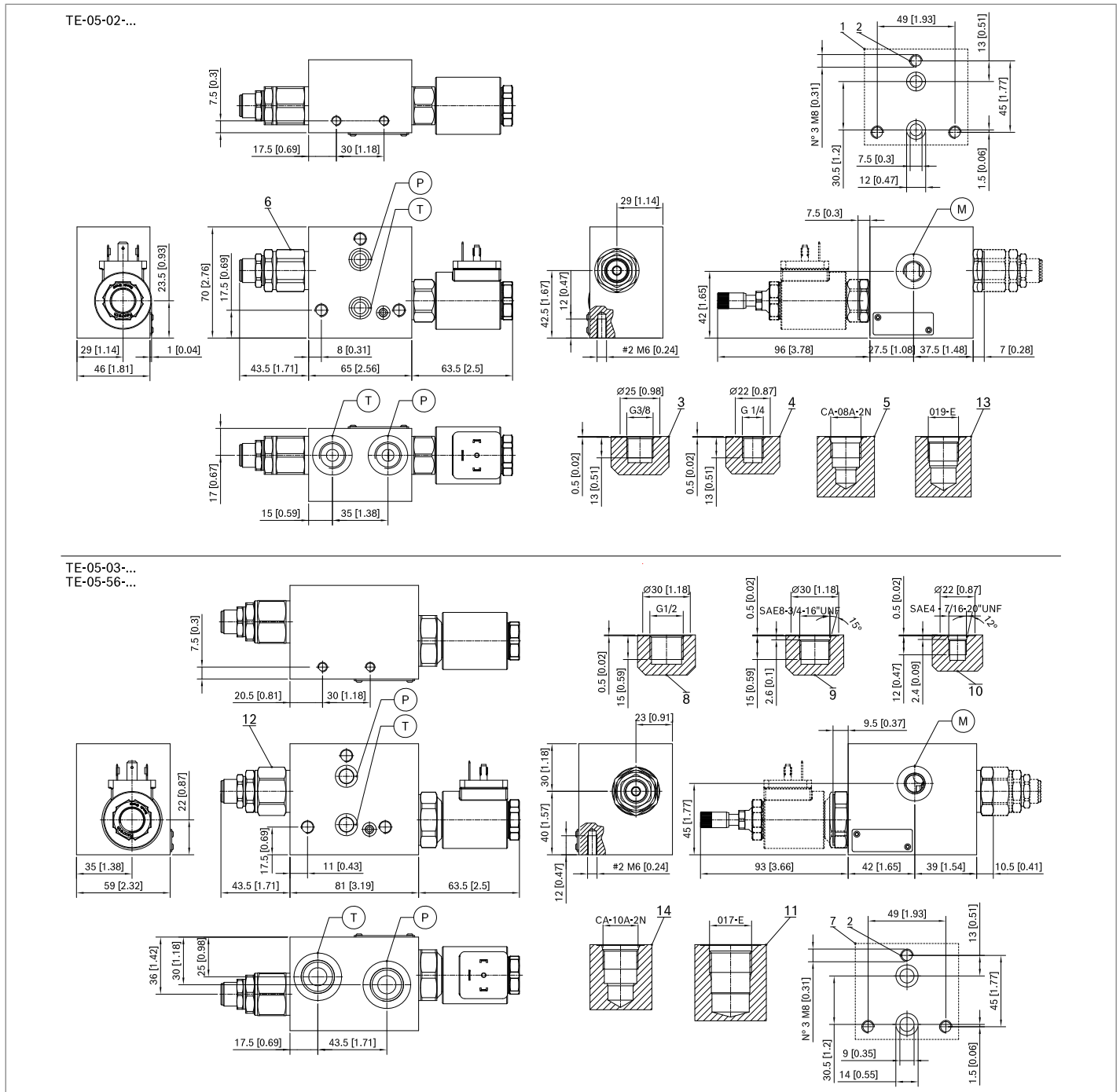
Note

For further versions contact factory.

▼ Available relief valves

Entry plate ports	Cartridge cavity	Cartridge type	Material number	Electrical cartridge
TE-05-02...	019-E	Normally closed plug for relief valve cavity	R934000635	99
	019-E	Pressure range 25-120bar (362-1740 psi)	R931002104	SN
	019-E	Pressure range 40-200bar (580-2900 psi)	R901091925	SB
	019-E	Pressure range 200-350bar (2900-5076 psi)	R901091920	SV
TE-05-03...TE-05-56...	CA-10A-2N	Normally closed plug for relief valve cavity	R930045728	99
	CA-10A-2N	Pressure range 25-120bar (362-1740 psi)	R901099401	SN
	CA-10A-2N	Pressure range 40-200bar (580-2900 psi)	R901099402	SB
	CA-10A-2N	Pressure range 200-350bar (2900-5076 psi)	R931002103	SV

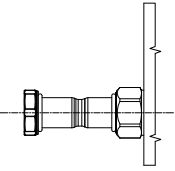
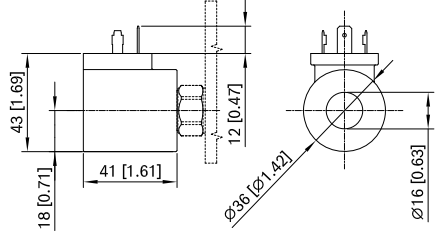
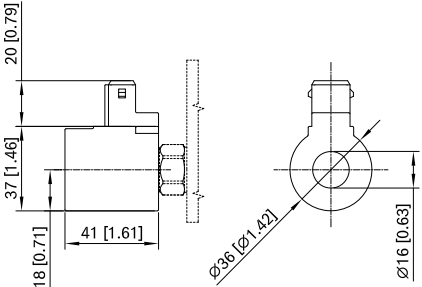
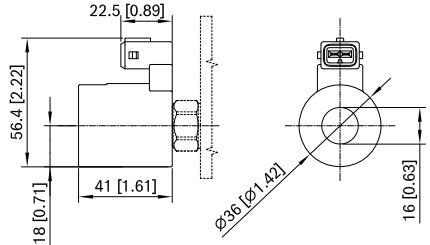
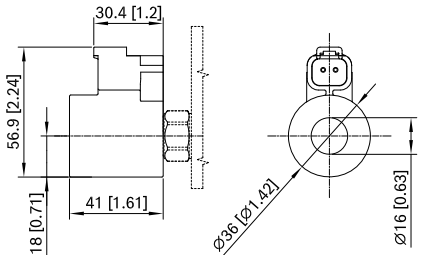
External dimensions and fittings



- 1 Flange specifications for coupling to the ED Directional Valve Element version TE-05-02-...
- 2 For tie rod and tightening torque information see data sheet RE 18301-90.
- 3 Hydraulic Ports P-T G 3/8, for Inlet Elements TE-05-02-...
- 4 Test Point port M G 1/4, for Inlet Elements TE-05-02... and TE-05-03-...
- 5 Cavity for Solenoid Unloading Cartridge, VEI type, for versions TE-05-02-...
- 6 Primary Pressure Relief Cartridge VMD1025, with screw type adjuster for TE-05-02... inlet elements.

- 7 Flange specifications for coupling to the ED Directional Valve Elements versions TE-05-03-..., TE-05-56-... .
- 8 Hydraulic Ports P-T G 1/2, for versions TE-05-03-...
- 9 Hydraulic Ports P-T SAE 8, for versions TE-05-56-...
- 10 Test Point port SAE 4, for versions TE-05-56-...
- 11 Cavity for Solenoid Unloading Cartridge, VEI type, for versions TE-05-03-... and TE-05-56-...
- 12 Primary Pressure Relief Cartridge VMD1040, with screw type adjuster for versions TE-05-03-... and TE-05-56-... .
- 13 Cavity for Primary Pressure Relief Cartridge VMD1025.
- 14 Cavity for Primary Pressure Relief Cartridge VMD1040.

Electric connections

<p>00</p>	<p>Without coil</p> 	<p>01</p> <p>Protection class: IP 65 with connector with seal is properly screwed down.</p> 
<p>03</p>	<p>Protection class: IP 65 with female connector properly fitted (see drawing).</p> 	<p>04</p> <p>Protection class: IP 65 with female connector properly fitted (see drawing).</p> 
<p>07</p>	<p>Protection class: IP 69 K with female connector properly fitted (see drawing).</p> 	

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Subject to change.