

Inlet Elements

with primary pressure relief valve

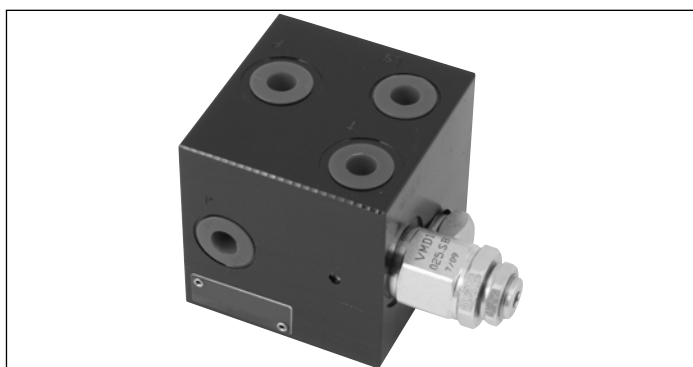
and proportional LS controlled 3-way flow regulator

TE-10-__-

RE 18300-09

Edition: 02.2016

Replaces: 07.2012



Description

The inlet elements TE-10-__ are employed to connect the external P, T lines to the P, T channels inside the ED elements of the Directional Valve Assembly and to connect to the LS ports of the ED elements equipped with LS channels. The LS signal is sent downstream of the proportional flow restrictor VEP: it provides a proportional pressure compensated flow, across the VEP, for the ED elements of the Directional Valve Assembly, and it unloads the excess flow. The main functions are: to limit the maximum primary pressure in the P line and to supply proportional pressure compensated flow the ED elements of the Directional Valve Assembly. TE-10-__ inlet elements are available with body made of Black Anodized Aluminium (Al).

P and T Port sizes can be G 3/8, G 1/2, or SAE 8. Test point M is G 1/4 on BSPP versions, and SAE 4 in SAE versions.

Technical data

General		
TE-10-02-00-	kg (lbs)	0.83 (1.83)
TE-10-03-00-	kg (lbs)	0.88 (1.94)
TE-10-56-00-	kg (lbs)	0.88 (1.94)
TE-10-02-S_-	kg (lbs)	1.08 (2.37)
TE-10-03-S_-	kg (lbs)	1.16 (2.57)
TE-10-56-S_-	kg (lbs)	1.16 (2.57)
Max rated flow at P1		
TE-10-02-00-	l/min (gpm)	0-12 (0-3.1)
TE-10-03-00-	l/min (gpm)	0-32 (0-8.4)
TE-10-56-00-	l/min (gpm)	0-32 (0-8.4)
TE-10-02-S_-	l/min (gpm)	0-12 (0-3.1)
TE-10-03-S_-	l/min (gpm)	0-32 (0-8.4)
TE-10-56-S_-	l/min (gpm)	0-32 (0-8.4)
Ambient Temperature	°C (°F)	-20....+50 (-4....+122) (NBR seals)
Hydraulic		
Maximum pressure	bar (psi)	210 (3045)
Maximum inlet flow	l/min (gpm)	40 (10.6)
Rated flow at P1	l/min (gpm)	32 (8.45)
Hydraulic fluid	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.	
General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example:		
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	20....380

Note

For applications with different specifications consult us

Ordering details

01	02	03	04	05	06	07	08	09
TE	-	10	-	-	-	AL	-	-

Family

01	Inlet Elements	TE
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Configuration

02	Configuration with primary pressure relief valve and proportional LS controlled 3-way flow regulator	10
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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	00
	25-120bar (362-1740 psi)	SN
	40-200bar (580-2900 psi)	SB
	200-350bar (2900-5076 psi)	SV

Material

05	Aluminium	AL
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Cartridge voltage supply

06	No cartridge	No code
	Cartridge without coil	00
	12V DC	OB
	24V DC	OC

Electric connections

07	No cartridge	No code
	Without coils	00
	With coils, without mating connector DIN EN 175301-803 ¹⁾	01

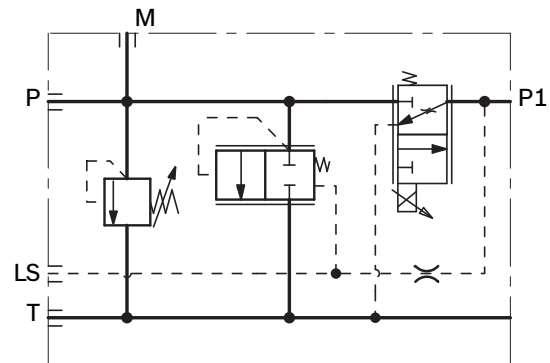
P1 Max Flow

08	No cartridge	No code
	12 l/min (3.2 gpm)	12
	30 l/min (7.9 gpm)	30

Options

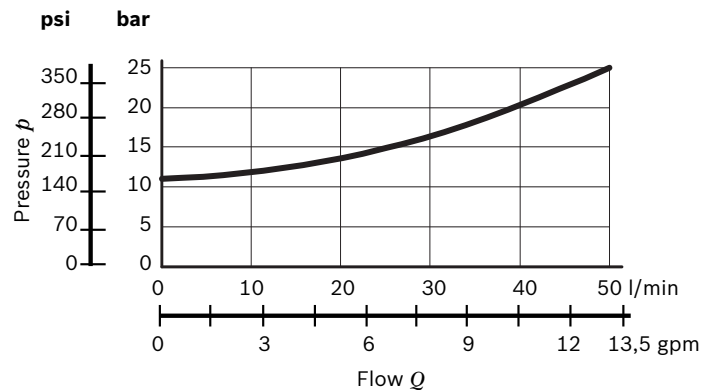
09	No cartridge	No code
	Standard	00
	Screw type manual override	EF

Symbol

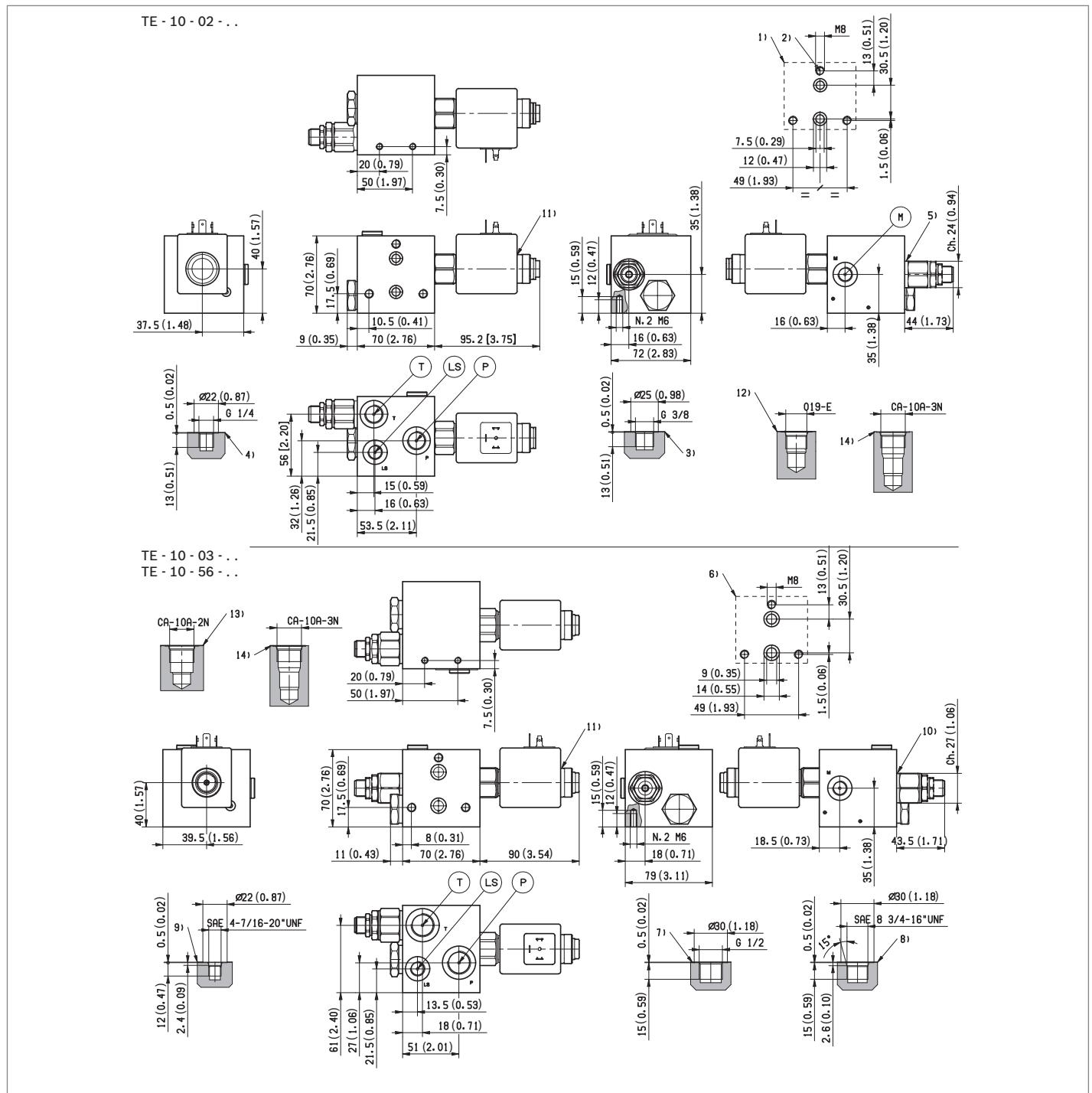


Characteristic curves

Pressure drop through compensator



¹⁾ For connectors ordering code see data sheet RE 18325-90.

External dimensions and fittings

- 1 Flange specifications for coupling to the ED Directional Valve Elements (versions TE-10-02...).
- 2 For tie rod and tightening torque information see data sheet RE 18301-90.
- 3 Hydraulic Ports P and T size G 3/8, for versions TE-10-02...
- 4 Port for pressure gauge connection M size G 1/4, for versions TE-10-02... and TE-10-03...
- 5 Primary Pressure Relief Cartridge VMD1025 for versions TE-10-02... (refer to RE 18301-91).
- 6 Flange specifications for coupling to the ED Directional Valve

- Elements (versions TE-10-03..., and TE-10-56...).
- 7 Hydraulic Ports P and T size G 1/2, for versions TE-10-03...
- 8 Hydraulic Ports P and T size SAE 8, for versions TE-10-56...
- 9 Port for pressure gauge connection M size SAE 4.
- 10 Primary Pressure Relief Cartridge VMD1040 for versions TE-10-03..., and TE-10-56... (refer to RE 18301-91).
- 11 Proportional Solenoid Cartridge, VEP type, (refer to RE 18301-91).
- 12 Cavity for Primary Pressure Relief Cartridge VMD1025.
- 13 Cavity for Primary Pressure Relief Cartridge VMD1040.
- 14 Cavity for Proportional Solenoid cartridge VEP.

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Subject to change.