

RE 18300-02 Edition: 01.2024

Replaces: 02.2016

Inlet Elements with Primary Pressure Relief Valve

TE-01-_-



Description

The inlet elements TE-01-__ 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 maximum primary pressure in the P line and unloads to Tank any excess flow. The relief setting can be checked through the Test Point port M.

The TE-01-__ 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 (Cl). Port sizes can be G 3/8, G 1/2 or SAE 8 (3/4" 16 UNF).

Technical data

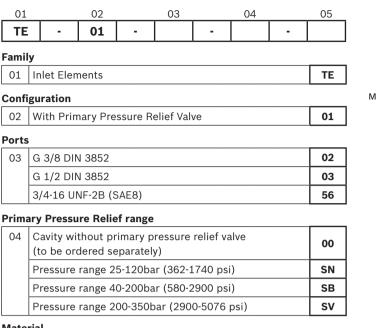
TE-01-03-00- kg (lbs) 0.49 (1.08) 1.23 (2.72) TE-01-56-00- kg (lbs) 0.49 (1.08) Not Available				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	General			
TE-01-03-00-kg (lbs)0.49 (1.08)1.23 (2.72)TE-01-56-00-kg (lbs)0.49 (1.08)Not AvailableTE-01-02-Skg (lbs)0.44 (0.96)Not AvailableTE-01-03-Skg (lbs)0.66 (1.45)1.36 (3.00)TE-01-56-Skg (lbs)0.66 (1.45)Not AvailableAmbient Temperature°C (°F) $-20+50$ (-4+122) (NBR seals)Not AvailableMaximum pressure for aluminium version (AL)bar (psi)310 (4500)Cast Iron version (CI)Jimin (gpm)50 (13.2)Maximum inlet flowI/min (gpm)50 (13.2)Hydraulic fluid General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example: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 contaminationISO 4572: $\beta_x \ge 75 \times =1012$	Inlet Element Type		AL Version	CI Version
TE-01-56-00-kg (lbs)0.49 (1.08)Not AvailableTE-01-02-Skg (lbs)0.44 (0.96)Not AvailableTE-01-03-Skg (lbs)0.66 (1.45)1.36 (3.00)TE-01-56-Skg (lbs)0.66 (1.45)Not AvailableAmbient Temperature°C (°F) $-20+50$ (-4+122) (NBR seals)Maximum pressure for aluminium version (AL)bar (psi) 310 (4500)Cast Iron version (CI) 310 (4500)Maximum inlet flowl/min (gpm) 50 (13.2)Hydraulic fluid General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example: $For use of environmentallyacceptable fluids(vegetable or polyglycolbase) please consult us.Fluid Temperature°C (°F)-20+80 (-4+176) (NBR)Permissible degree offluid contaminationISO 4572: \beta_x z 75 X = 1012Nor AuditationISO 4406: class 19/17/14NAS 1638: class 8$	TE-01-02-00-	kg (lbs)	0.31 (0.67)	Not Available
TE-01-02-Skg (lbs)0.44 (0.96)Not AvailableTE-01-03-Skg (lbs)0.66 (1.45)1.36 (3.00)TE-01-56-Skg (lbs)0.66 (1.45)Not AvailableAmbient Temperature°C (°F) $-20+50$ (-4+122) (NBR seals)(NBR seals)Hydraulic250 (3625)Maximum pressure for aluminium version (AL)bar (psi)310 (4500)Maximum pressure for cast Iron version (CI)bar (psi)310 (4500)Maximum inlet flowl/min (gpm)50 (13.2)Hydraulic fluid General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example:For use of environmentally acceptable fluids (vegetable or polyglycol base) please consult us.Fluid Temperature Permissible degree of fluid contaminationISO 4572: $\beta_x \ge 75 X=1012$ ISO 4406: class 19/17/14 NAS 1638: class 8	TE-01-03-00-	kg (lbs)	0.49 (1.08)	1.23 (2.72)
TE-01-03-Skg (lbs)0.66 (1.45)1.36 (3.00)TE-01-56-Skg (lbs)0.66 (1.45)Not AvailableAmbient Temperature°C (°F) $-20+50$ (-4+122) (NBR seals)(NBR seals)HydraulicMaximum pressure for aluminium version (AL)bar (psi)250 (3625)Maximum pressure for cast Iron version (CI)bar (psi)310 (4500)Maximum inlet flowl/min (gpm)50 (13.2)Hydraulic fluid General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example: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 contaminationISO 4406: class 19/17/14 NAS 1638: class 8	TE-01-56-00-	kg (lbs)	0.49 (1.08)	Not Available
TE-01-56-Skg (lbs)0.66 (1.45)Not AvailableAmbient Temperature°C (°F) $-20+50$ (-4+122) (NBR seals)(NBR seals)Hydraulic250 (3625)Maximum pressure for aluminium version (AL)bar (psi)310 (4500)Maximum pressure for cast Iron version (CI)bar (psi)310 (4500)Maximum inlet flow physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example:Mineral oil based hydraulic fluids HLP (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 fluid contamination°C (°F) $-20+80$ (-4+176) (NBR) ISO 4406: class 19/17/14 NAS 1638: class 8	TE-01-02-S	kg (lbs)	0.44 (0.96)	Not Available
Ambient Temperature $^{\circ}$ C ($^{\circ}$ F) $-20+50$ (-4+122) (NBR seals)HydraulicMaximum pressure for aluminium version (AL)bar (psi) bar (psi)250 (3625)Maximum pressure for cast Iron version (CI)bar (psi) bar (psi)310 (4500)Maximum inlet flowl/min (gpm)50 (13.2)Hydraulic fluid General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example: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 fluid contamination $^{\circ}$ C ($^{\circ}$ F) $-20+80$ (-4+176) (NBR) ISO 4406: class 19/17/14 NAS 1638: class 8	TE-01-03-S	kg (lbs)	0.66 (1.45)	1.36 (3.00)
(NBR seals)HydraulicMaximum pressure for aluminium version (AL)bar (psi) bar (psi)250 (3625) aluminium version (AL)Maximum pressure for Cast Iron version (CI)bar (psi) bar (psi)310 (4500) Cast Iron version (CI)Maximum inlet flow Hydraulic fluid General properties: it must have properties suitable for use in hydraulic systems such as, for example: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 fluid contamination°C (°F)-20+80 (-4+176) (NBR) ISO 4406: class 19/17/14 NAS 1638: class 8	TE-01-56-S	kg (lbs)	0.66 (1.45)	Not Available
Maximum pressure for aluminium version (AL)bar (psi) bar (psi)250 (3625)Maximum pressure for Cast Iron version (CI)bar (psi) bar (psi)310 (4500)Maximum inlet flowl/min (gpm)50 (13.2)Hydraulic fluid General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example:Mineral oil based hydraulic fluids HLP (DIN 51524 part 1). Mineral oil based hydraulic fluids HLP (DIN 51524 part 2). hydraulic systems such as, for example:Fluid Temperature°C (°F)-20+80 (-4+176) (NBR)Permissible degree of fluid contaminationISO 4572: $\beta_x \ge 75 \times =1012$ ISO 4406: class 19/17/14 NAS 1638: class 8	Ambient Temperature	°C (°F)	,	
aluminium version (AL) Maximum pressure for bar (psi) 310 (4500) Cast Iron version (CI) Maximum inlet flow I/min (gpm) 50 (13.2) Hydraulic fluid Mineral oil based hydraulic General properties: it must have fluids HL (DIN 51524 part 1). hydraulic systems and chemical properties suitable for use in fluids HLP (DIN 51524 part 2). hydraulic systems such as, for 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 ISO 4406: class 19/17/14 NAS 1638: class 8	Hydraulic			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		bar (psi)	250 (3625)	
Hydraulic fluid Mineral oil based hydraulic General properties: it must have fluids HL (DIN 51524 part 1). physical lubricating and chemical Mineral oil based hydraulic properties suitable for use in fluids HLP (DIN 51524 part 2). hydraulic systems such as, for For use of environmentally example: acceptable fluids (vegetable or polyglycol base) please consult us. Fluid Temperature °C (°F) Permissible degree of ISO 4572: β _x ≥75 X=1012 fluid contamination ISO 4406: class 19/17/14 NAS 1638: class 8		bar (psi)	310 (4500)	
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	Maximum inlet flow	l/min (gpm)	50 (13.2)	
Permissible degree of ISO 4572: β _x ≥75 X=1012 fluid contamination ISO 4406: class 19/17/14 NAS 1638: class 8	General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for		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	
fluid contamination ISO 4406: class 19/17/14 NAS 1638: class 8	Fluid Temperature	°C (°F)	-20+80 (-4	+176) (NBR)
Viscosity range mm ² /s 5420			ISO 4406: class 19/17/14	
	Viscosity range	mm²/s	5420	

Note

For applications with different specifications consult us

2 TE-01-_- | Inlet Elements Ordering details

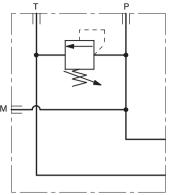
Ordering details



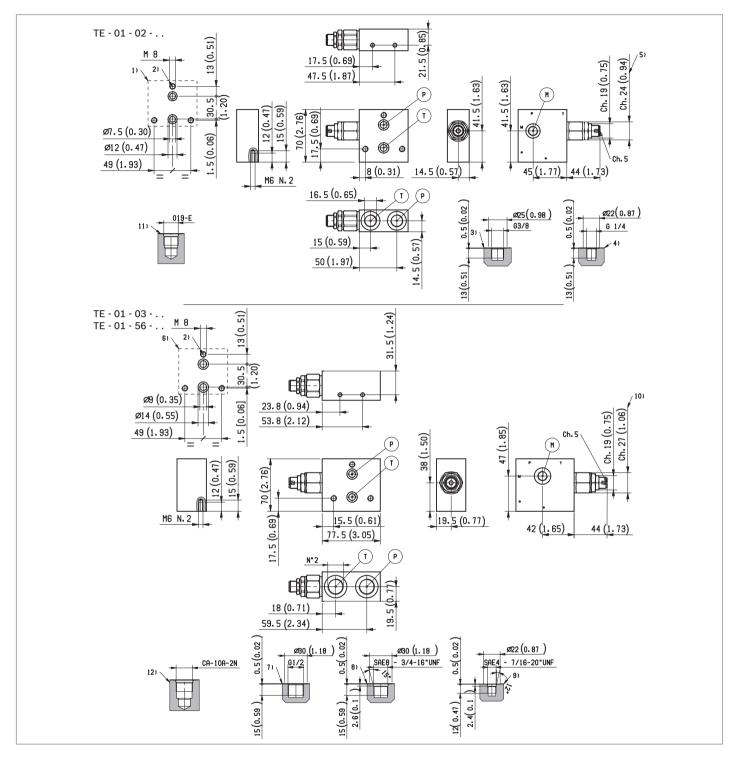
Material

05	Cast Iron	CI
	Aluminium	AL

Symbol



External dimensions and fittings



- 1 Flange specifications for coupling to the ED Directional Valve Elements (for Version TE-01-02...).
- **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-01-02...
- 4 Test Point port (M) G 1/4, for Inlet Elements TE-01-02... and TE-01-03...
- **5** Primary Pressure Relief Cartridge VMD1025, with screw type adjuster (refer to RE 18301-91).
- 6 Flange specifications for fitting of the ED Directional Valve Elements. (Versions TE-01-03... and TE-01-56...).
- 7 Hydraulic Ports P-T G 1/2, for versions TE-01-03-...
- 8 Hydraulic Ports P-T SAE 8, for versions TE-01-56...
- 9 Test Point port SAE 4, for versions TE-01-56-...
- **10** Primary Pressure Relief Cartridge VMD1040, with screw type adjuster (refer to RE 18301-91).
- **11** Cavity for Primary Pressure Relief VMD1025.
- **12** Cavity for Primary Pressure Relief VMD1040.

4 TE-01-_- | Inlet Elements

Bosch Rexroth Oil Control S.p.A.

Oleodinamica LC Division Via Artigianale Sedrio, 12 42030 Vezzano sul Crostolo Reggio Emilia - Italy Tel. +39 0522 601 801 Fax +39 0522 606 226 / 601 802 compact-hydraulics-cdv@boschrexroth.com www.boschrexroth.com/compacthydraulics © This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth Oil Control S.p.a.. It may not be reproduced or given to third parties without its consent. The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

Subject to change.