

EDG Inlet Elements

with by-pass compensator, LS relief for open/closed center control block and solenoid operated unloading

TEG-13

RE 18300-16

Edition: 02.2025

Replaces: 08.2024



Description

The inlet elements TEG-13 are employed to connect the external P, T lines to the P, T channels inside the EDG elements of the Directional Valve Assembly and to connect the LS line for inlet flow control. For Open Center configurations, an LS controlled 3-way compensator provides pressure compensated flow to the EDG elements of the Directional Valve Assembly, any excess flow is bypassed to tank at LS pressure plus compensator spring bias. For Closed Center configurations, the inlet compensator is used as piloting stage for main relief valve. When the EDG elements are in neutral position, the compensator bypasses the entire flow to tank at a bypass pressure equal to the compensator spring bias (Open Center configuration). The TEG-13 can be equipped with a NO or NC Solenoid Unloading VEI Cartridge, which can be employed to unloads to tank the LS signal. When activated the entire flow is bypassed to tank at compensator bias spring pressure.

The TEG-13 is made of zinc plated cast iron.

The D36 coil must be ordered separately (refer to RE18325-90).

Technical data

General		
Weight	kg (lbs)	3.6 (7.9) to 4,5 (10)
Ambient Temperature	°C (°F)	-20....+90 (-4....+194) (NBR seals)
Hydraulic		
Maximum pressure	bar (psi)	350 (5076)
Maximum inlet flow for TEG-13-__-3 version	l/min (gpm)	33 (8.7)
Maximum inlet flow for TEG-13-__-5 version	l/min (gpm)	50 (13.2)
Maximum inlet flow for TEG-13-__-8 version	l/min (gpm)	80 (21.1)
Maximum inlet flow for TEG-13-__-0 version	l/min (gpm)	120 (31.7)
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.		
Fluid Temperature	°C (°F)	-20....+100 (-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

00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
TEG	-	13	/	2	-	-	-	-	-	-	-	-	-	CI

Family

00	Inlet Elements for EDG series directional valve	TEG
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Configuration

01	With by-pass compensator, LS relief valve, and LS line solenoid cartridge (VEI) unloading valve	13
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Flange

02	With P-TA-TB-LS-YA-YB-X-Y lines	2
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Pilot oil supply option¹⁾

03	No pilot oil supply option: without valve cavity (not drilled) for pressure reducing and relieving valve, without external oil supply	0
	With pressure reducing and relieving MHDRDB, without external oil supply	1
	With pressure reducing and relieving MHDRDB, with external oil supply	2
	Without pressure reducing and relieving MHDRDB (with normally open plug R930088470), with external oil supply	3
	With pressure reducing and relieving valve cavity plugged (with normally closed plug R930074980)	9

Ports and connections

04	P G 1/2 DIN 3852; T G 3/4 DIN 3852; LS G 1/4 DIN 3852; M G 1/4 DIN 3852	01
	P G 1/2 DIN 3852; T G 1/2 DIN 3852; LS G 1/4 DIN 3852; M G 1/4 DIN 3852	02
	P SAE10; T SAE12; LS SAE6; M SAE6	04
	P SAE8; T SAE10; LS SAE6; M SAE6	06

System configuration option

05	Open Center	OC
	Closed Center	CC

Dual stage compensator option

06	Plugged, no option	99
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Spool compensator size

07	Maximum inlet flow 33 l/min (8.7 gpm)	3
	Maximum inlet flow 50 l/min (13.2 gpm)	5
	Maximum inlet flow 80 l/min (21.1 gpm)	8
	Maximum inlet flow 120 l/min (31.7 gpm)	0

Compensator cracking pressure

08	12 bar (174 psi)	12
	14 bar (203 psi)	14
	18 bar (261 psi)	18
	Adjustable 8-18 bar (116-261 psi), standard setting 14 bar (203 psi)	R8
	Adjustable 10-18 bar (116-261 psi) with locking option, standard setting 14 bar (203 psi)	BR

LS relief valve

09	35-140 bar (500-2000 psi)	1
	105-210 bar (1500-3000 psi)	2
	175-350 bar (2500-5000 psi)	3
	Plugged	P

LS line solenoid cartridge (VEI) unloading valve

10	Without valve (ordered separately)	00
	Standard VEI normally open, single check ³⁾	A_
	Standard VEI normally open, double check ³⁾	B_
	Standard VEI normally closed, single check ³⁾	C_
	Standard VEI normally closed, double check, without override ²⁾	D_
	Plugged	PP

LS line solenoid cartridge (VEI) unloading valve - Override

11	Standard	_A
	Push style manual override	_B
	Push and twist style manual override	_C

LS line solenoid cartridge (VEI) unloading valve - Coil voltage

12	Without coil	00
	12 V DC	OB
	24 V DC	OC

LS line solenoid cartridge (VEI) unloading valve - Coil electric connection

13	Without coil	00
	With coil, with connection DIN EN 175301-803	01
	With coil, with connection vertical Amp - Junior	03
	With coil, with connection DT04-4P	07

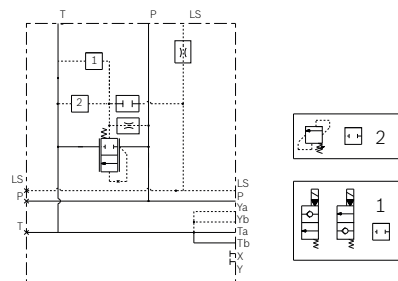
Material

14	Cast Iron	CI
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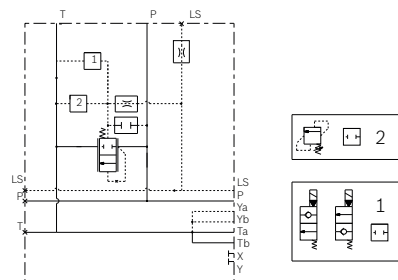
- 1) Pressure reducing valve MHDRDB setting: 35 bar (508 psi) R900641606.
- 2) Available only for OC selection at point (06); this selection disables pressure relieving function. Please make sure you have relieving function in your system.
- 3) For A-B-C-D selection, please select also Override Option (12).

▼ Symbol

Closed Center Configuration (Variable displacement pump)



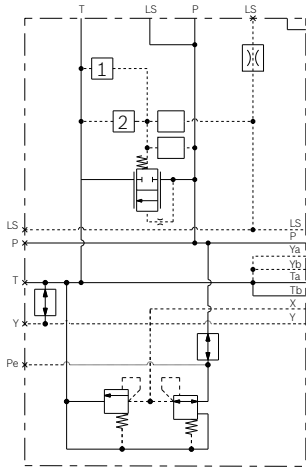
Open Center Configuration (Fixed displacement pump)



Symbol

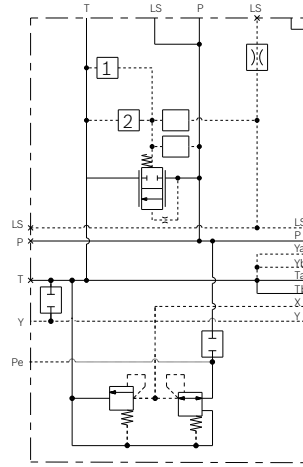
TEG-13/21-_-

With pressure reducing and relieving MHDRDB, without external oil supply



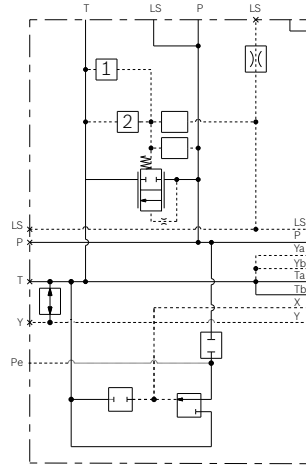
TEG-13/22-_-

With pressure reducing and relieving MHDRDB, with external oil supply



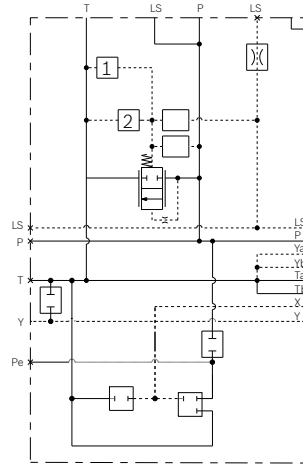
TEG-13/23-_-

Without pressure reducing and relieving MHDRDB (with Normally open plug), with external oil supply



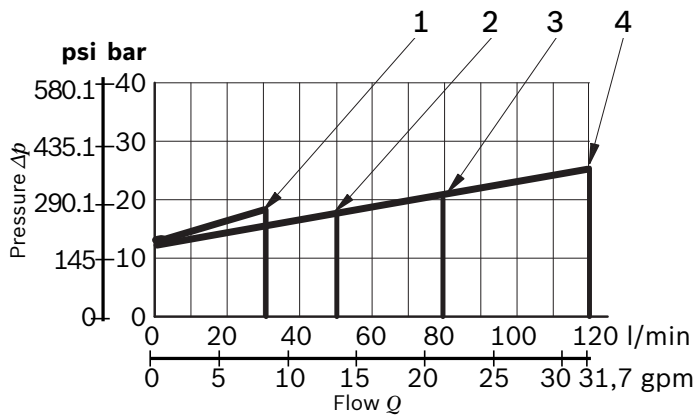
TEG-13/29-_-

Without pressure reducing and relieving MHDRDB (with Normally closed plug), without external oil supply



Characteristic curves

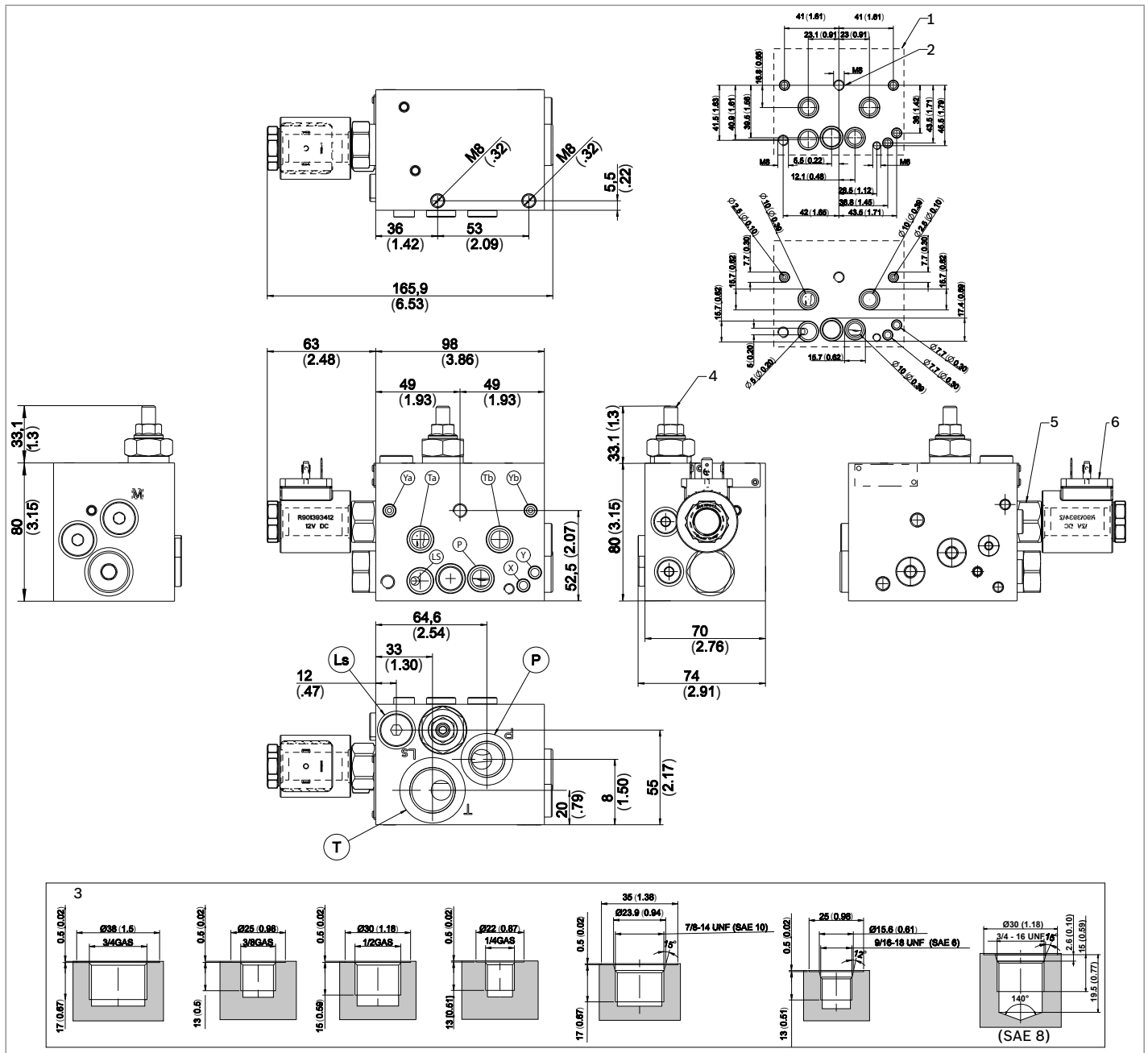
DeltaP main compensator



Model	Curve no.
TEG-13/_ _ 33 l/min@12bar compensator version	1
TEG-13/_ _ 50 l/min@12bar compensator version	2
TEG-13/_ _ 80 l/min@12bar compensator version	3
TEG-13/_ _ 120l/min@12bar compensator version	4

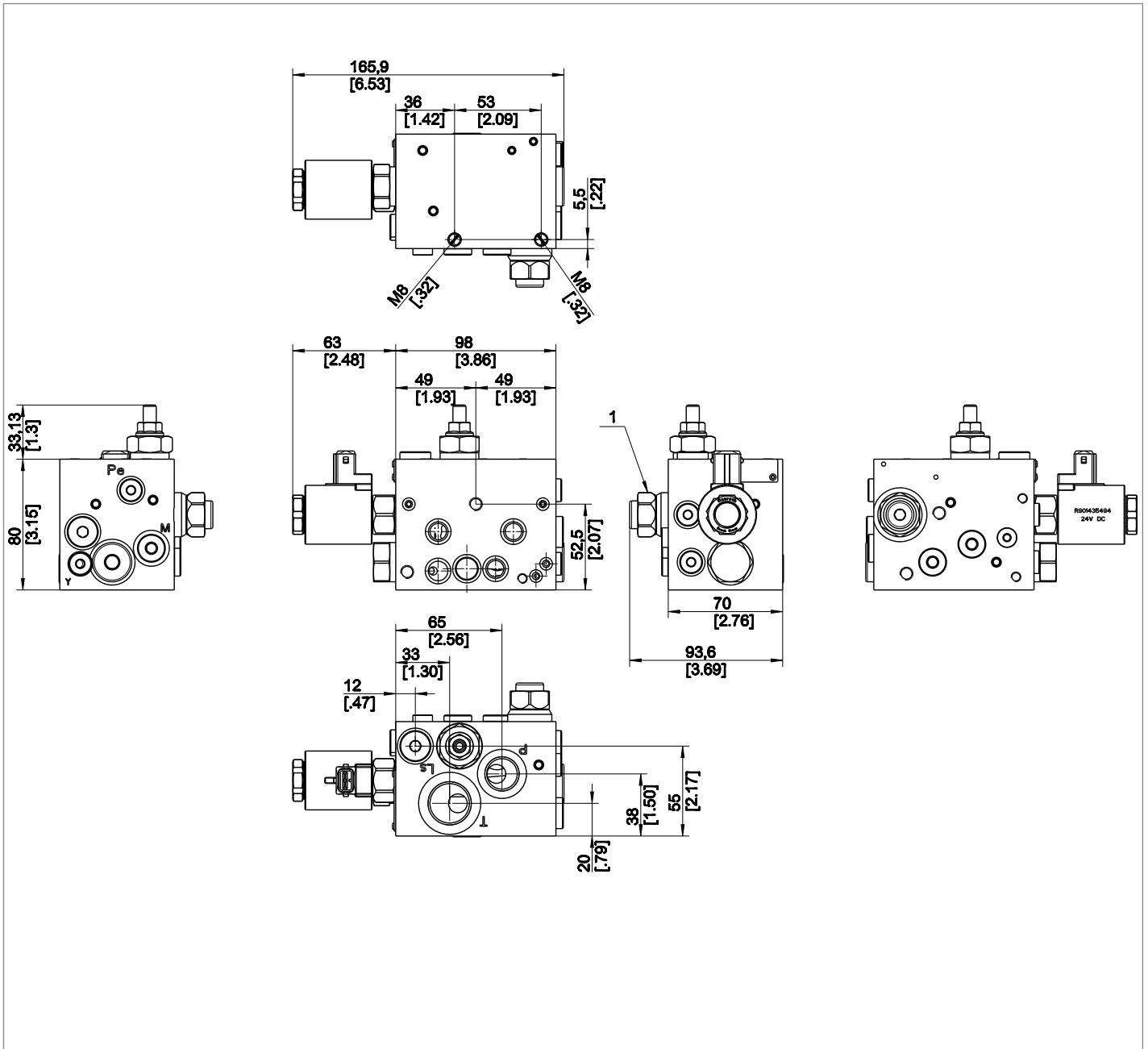
Measured with hydraulic fluid ISO-VG32 at 45° ±5 °C (113° ±9 °F); ambient temperature 20 °C (68 °F).

External dimensions and fittings



- 1 Flange specifications for coupling to the EDG Directional Valve Elements.
- 2 Three threaded holes two M8 and one M6 for coupling of the EDG Directional Valve Elements.
- 3 For P,T and LS port size and configuration, please see page 2.
- 4 Pressure relief cartridge VSBN-08A datasheet RE18318-04.
- 5 Solenoid Unloading cartridge VEI-16-08A-NA or VEI-16-08A-NC type datasheet 18323-26 or 18323-25.
- 6 Solenoid Unloading cartridge coil D36 RE18325-90.

External dimensions and fittings



1 Pressure reducing and relieving valve MHDRDB, optional configuration (refer to RE 18318-55).

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

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Subject to change.