

2.5

# **PILOT OIL SUPPLY**

Type: MHSTE5G L1X/350 MHSTE5G L1X/100

> Accumulator volume 0.32L Rated pressure(bar) 100~350 Rated flow(L/min) 20~25



# **Contents**

	Page
Features	03
Function description, section view	04
Ordering code	05
Technical Data	06
Unit dimension	07-08
·MHSTE5G L1X/350 B032 L12 G12W M01	07
· MHSTE5G L1X/100 B032 L10 G12ZC1 M01G	08
Symbol	09

03/10

#### **Features**

#### 1. Type MHSTE5G L1X/350 B032 L12 G12W M01

- · Supply from circuits in the high pressure range
- · Integrated pressure relief valve for the protection of pilot oil circuit
- · Compact unit for supply of pilot oil circuits with oil in low pressure range
- · Low energy consumption

#### 2. Type MHSTE5G L1X/100 B032 L12 G12ZC1 M01G

- · Supply directly from pilot oil circuits with oil in the low pressure range
- · Without integrated pressure relief valve
- · Low energy consumption

#### 3. Applications







Tractor loader backhoes



Wheel loaders



Cranes

Hengli hydraulic

#### Function description, section view

The pilot oil supply systems type MHSTE.. supply reduced pressure to pilot units which are used for the hydraulic or electrohydraulic operation of medium and high pressure power systems.

The pilot oil supply unit mainly consists of housing (1), accumulator (2), a pressure reducing valve (3) a direct operated pressure relief valve (4) as well as a check valve (5).

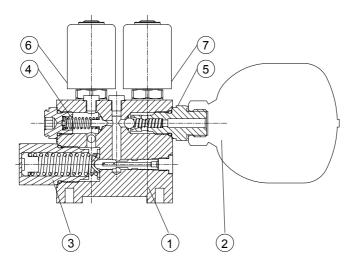
The pressure fluid from P1 flows through the pressure reducing valve (3) and the check valve (5) and supplies the pilot oil circuit connected via PV or PR with reduced pressure.

With the accumulator (2) the pilot oil circuit has a power reserve for the supply of the consumers which are connected to this circuit.

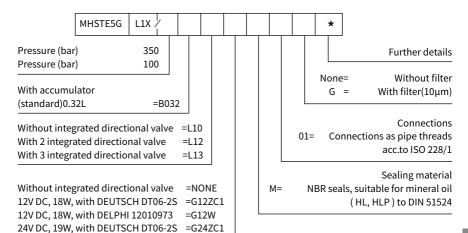
The pressure relief valve (4) secures the pilot oil circuit in the case of a malfunction of the pressure reducing valve (3) occurs.

The solenoid operated directional valves (6; 7) allow or block the flow via BV or PR for the hydraulic two-point-control of switching motors (connection in BV) or for the oil drain (safety function) of the pilot oil circuit connected via PR.

Note:Pilot oil supply systems MHSTE are used in hydraulic or electrohydraulic operated machines without pilot oil pump. If the accumulator is empty or if the pilot oil unit has no accumulator the pressure of approx. 10 bar must be produced in one of the power circuits when starting the system in order for the supply of the pilot oil circuit to begin.



# **Ordering code**



# **Technical Data**

Hengli hydraulic

(Please inquire in case the intended use of unit is outside the given values!)

# General

Weight Type 350 (with reducing valve)	kg	5.2
Type 100(without reducing valve)		
Without integrated directional valve	kg	4.2
With 2 integrated directional valve	kg	6.1
With 3 integrated directional valve	kg	6.8
Installation position		Any

# Hydraulic

Primary pressure	-Type 350	bar	up to 350
	-Type 100	bar	up to 100
Secondary pressure	-Type 350	bar	33.5 to 36.5
Flow capacity	-Type 350	L/min	20
	-Type 100	L/min	25
Hydraulic fluid		Mineral oil(HL, HLP)acc.to DIN51524	
Hydraulic fluid temperature range °C		°C	-20 to +90
Viscosity range mm		mm/S	10 to 420
Maximum permitted degree of the contamination		NAS1638 Class 20/18/15	
of hydraulic fluid cleanliness class			

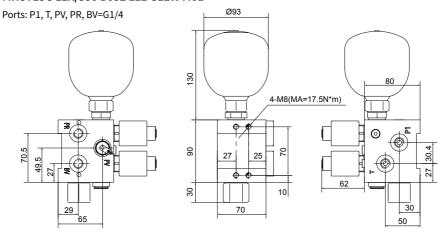
# **Electrical**

Normal voltage	V	12V DC/24V DC
Protection class acc.to DIN 40050		IP65
Consumed nominal power	W	18/19

# **Unit dimensions**

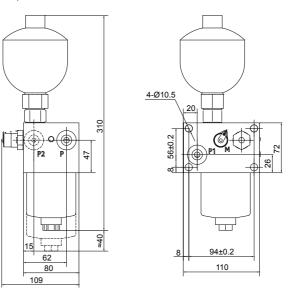
(dimensions in mm)

#### ·MHSTE5G L1X/350 B032 L12 G12W M01



#### ·MHSTE5G L1X/100 B032 L10 G12ZC1 M01G

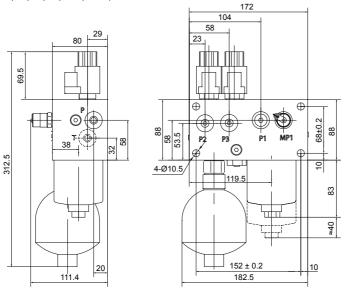
Ports: P, P1, P2=G3/8; M=G1/4



08/10

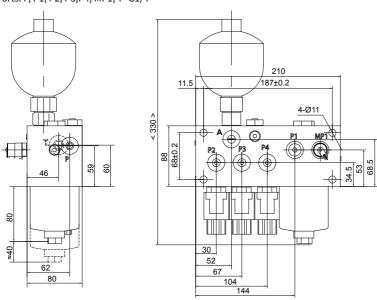
# · MHSTE5G L1X/100 B032 L12 G12ZC1 M01G

Ports: P, P1, P2, P3, MP1, T=G1/4

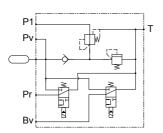


#### ·MHSTE5G L1X/100 B032 L10 G24ZC1 M01G

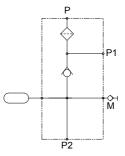
Ports: P, P1, P2, P3, P4, MP1, T=G1/4



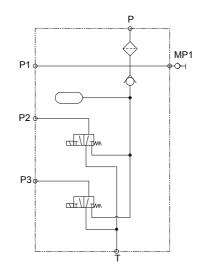
# Symbol



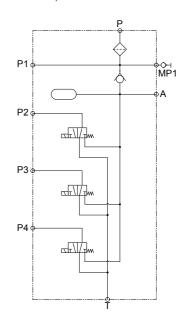
MHSTE5G L1X/350 B032 L12 G12W M01



MHSTE5G L1X/100 B032 L10 G12ZC1 M01G



MHSTE5G L1X/100 B032 L12 G12ZC1 M01G



MHSTE5G L1X/100 B032 L10 G24ZC1 M01G

Hengli hydraulic

China

+86 400 101 8889

America +01 630 995 3674

Germany

+49 (30) 72088-0

Japan +81 03 6809 1696



© This brochure can be reproduced, edited, reproduced or transmitted electronically without the authorization of Hengli Hydraulic Company. Due to the continuous development of the product, the information in this brochure is not specific to the specific conditions or applicability of the industry, thus, Hengli does not take any responsibility for any incomplete or inaccurate description.