1.2

EHD SERIES

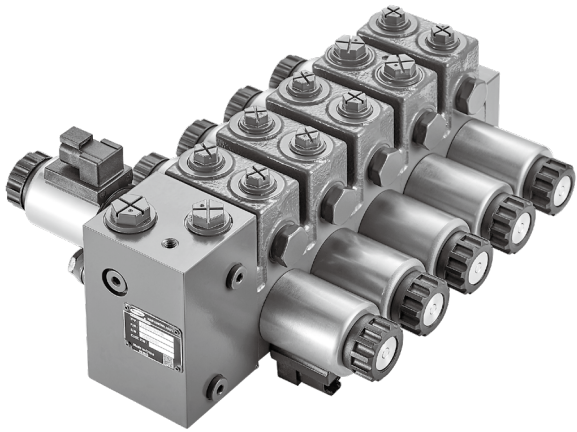
DIRECTIONAL VALVE WITH SOLENOID

EHD:

Nominal size	08
Rated pressure(bar)	310
Rated flow(L/min)	80

Benefits:

- High efficiency
- Less volume, lighter weight
- Low pressure drop, less fuel consumption
- Fine controlling



Contents

Features

1. System:

Open center, for fixed displacement pump

Closed center, for load-sensing variable displacement pump

· Electrical switch and electrical proportional control

2. Structure

· Sandwich plate of design

3. Pressure

· Primary and secondary pressure relief valve

· LS pressure relief valve

4. Applications

Corn combine harvester

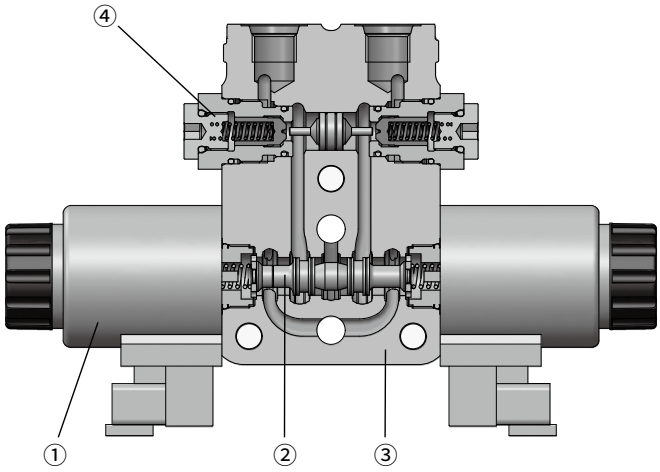
Wheat combine

Ensilage harvester

Telescopic handler

Section view

·With hydraulic lock



1. Solenoid
2. Main spool
3. Valve block
4. Hydraulic lock

Technical data

General

Structure	Stackable design		
Nominal size	08		
Type of connection	ISO 1179 / ISO6149		
Mass (kg)	Inlet element		4.2/6.3
	Middle section	General	2.8
		With hydraulic operated check valve	3.2
	End element		0.6/0.8

Hydraulic

Max. flow	Q （L/MIN）	80
Max. working pressure at port	P （bar）	310
	A/B （bar）	310

Electric

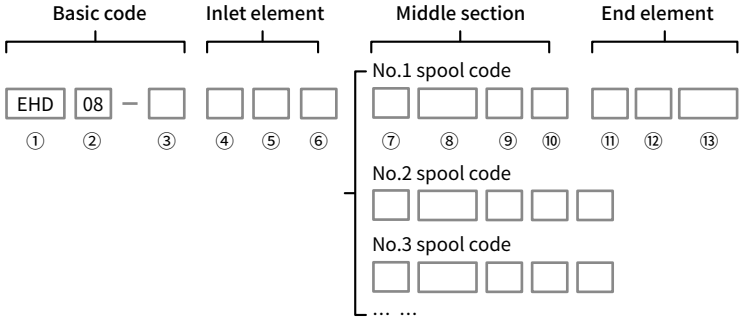
Electrical on/off or electrical proportional:
· Connection: Deutsch DT04-2P
· Protection class: IP69k
· Supply voltage: 12 or 24VDC

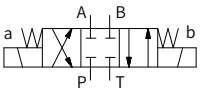
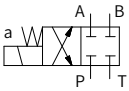
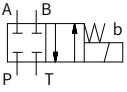
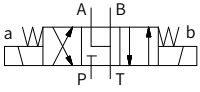
Using environment

Hydraulic fluid	Mineral oil (HL, HLP) according to DIN 51524. Other hydraulic fluids, such as HEES (Synthetic Ester) according to VDMA 24568.
Hydraulic fluid temperature range(℃)	-20 ~ +80
Viscosity range v (mm^2/s)	10 ~ 380
Maximum permissible degree of contamination of the pressure fluid cleanliness class to ISO 4406 (C)	Class 20/18/15, we therefore recommend a filter with a minimum retention rate of β10 ⩾ 75

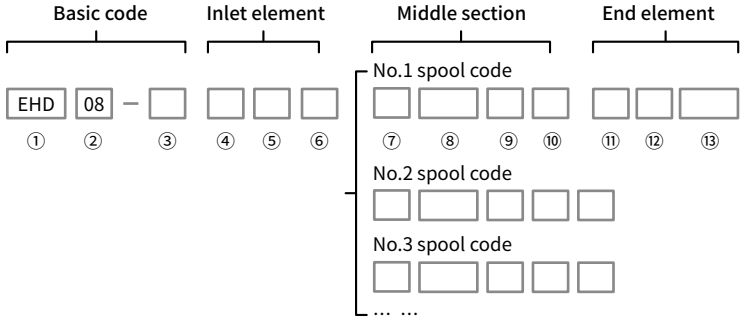
(For applications outside above mentioned parameters, please consult our sales dept.)

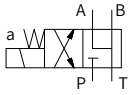
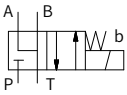
Ordering code



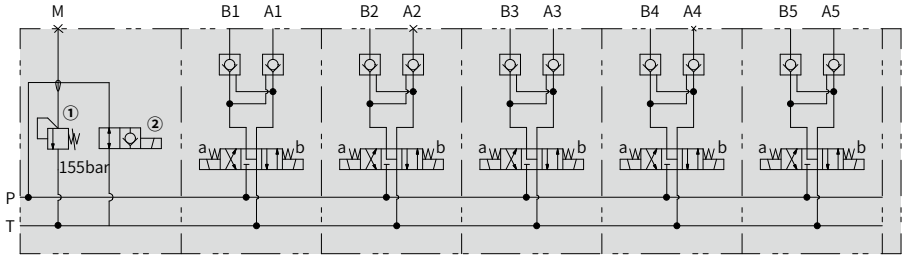
Basic code	① Structure	EHD	Stackable design
	② Nominal size		08
	③ Number of blocks	..	01~10
Inlet element	④ Main relief valve	Q	Without main pressure relief valve
		P…	With main pressure relief valve, (pressure in bar, 3-digits)
	⑤ LS relief valve	Q	Without LS pressure relief valve (LS relief valve plug)
		S…	With LS pressure relief valve (pressure in bar, 3-digits)
	⑥ Electromagnetic unload	LZ	Without LS unload function
		LA	With LS unload function
Middle section	⑦ Spool symbol	E1	 **=E1**
		E2	 **=E2**
		E3	 **=E3**
		Q1	 **=Q1**

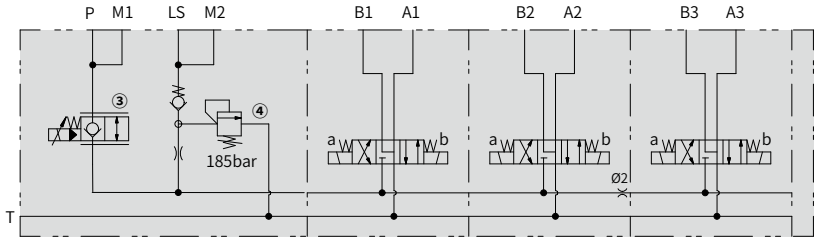
Ordering code



Middle section	⑦ Spool symbol	Q2	 =Q2		
		Q3	 =Q3		
	⑧ A/B flow	..—..	Flow in l/min, 2-digits, e.g. 50-50		
	⑨ Operator type	W41	Electrical switch control, 24V		
		W43	Electrical switch control, 12V		
	⑩ AB hydraulic operated check valve	OO	Without hydraulic operated check valve		
		AB	The AB port has a hydraulic operated check valve		
		AO	Only A port has a hydraulic operated check valve		
		OB	Only B port has a hydraulic operated check valve		
Others	⑪ Sealing type	V	FKM		
		N	NBR		
	⑫ Design code	001			
	⑬ Special Applications	No code	No special requirements	-450	Aluminum free material
*	Other request	Further requirement in the clear text			

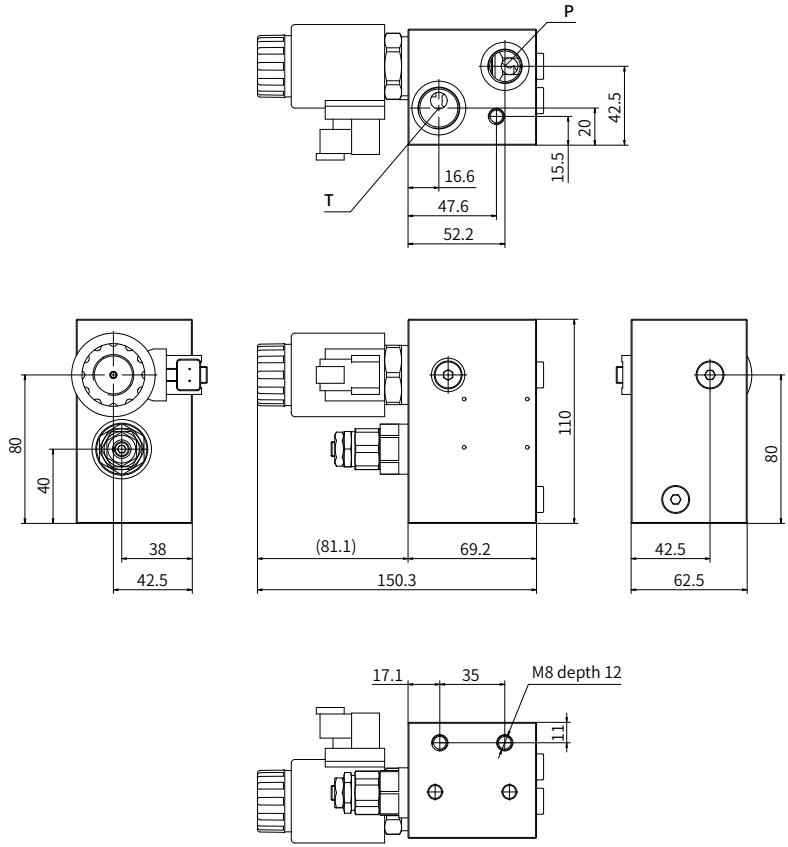
Hydraulic diagram

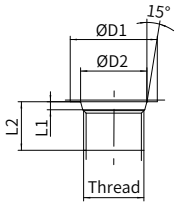




① Main relief valve
② Electromagnetic unload valve
③ Electrical proportional throttle valve
④ LS relief valve

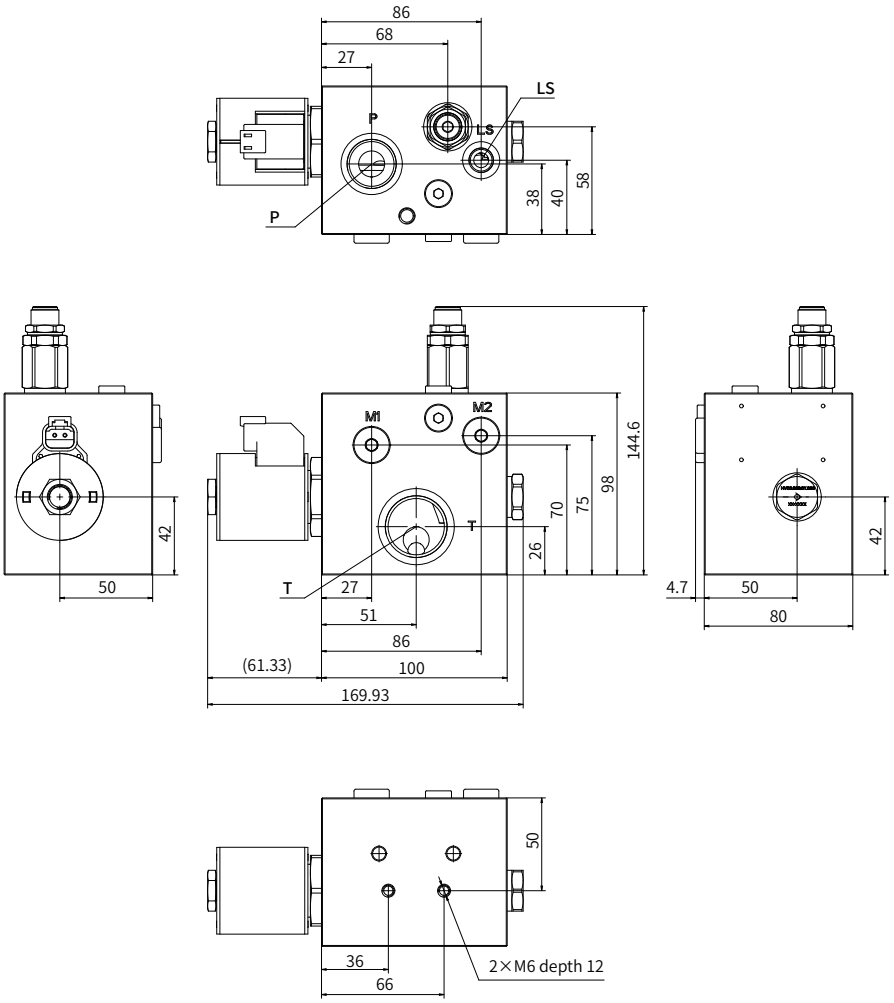
Inlet section assembly

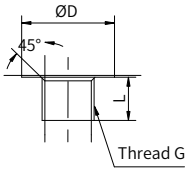




Port dimension		Thread dimensions		
P port :	M18×1.5	M18×1.5	∅ D1 26	L1 2.4
			∅ D2 19.8	L2 14.5
T port :	M22×1.5	M22×1.5	∅ D1 29	L1 2.4
			∅ D2 23.8	L2 15.5

Inlet section assembly- with electrical proportional throttle valve





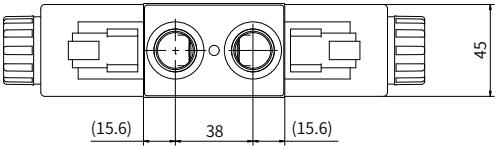
Port dimension

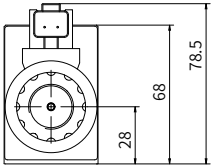
P port :	G3/4
T port :	G1
LS port :	G1/4
M port :	G1/4

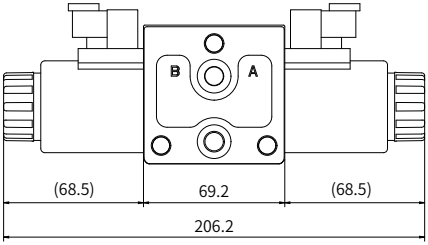
Thread dimensions

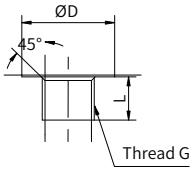
G3/4:	∅ D 33	L 16.5
G1:	∅ D 41	L 19
G1/4:	∅ D 20	L 12.5

Middle section assembly









Port dimension

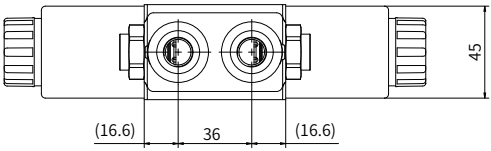
A/B port : G3/8 or G1/2

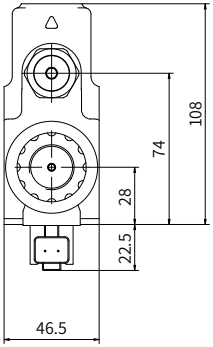
Thread dimensions

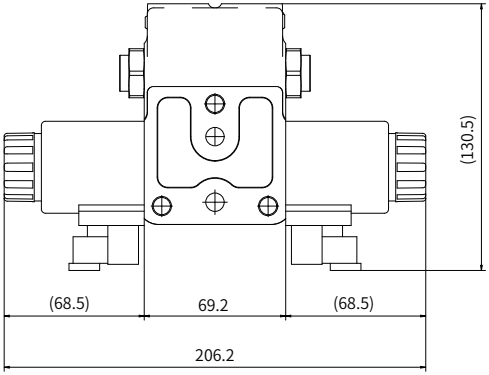
G3/8: Ø D 23 L 12.5

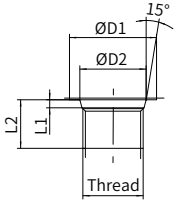
G1/2: Ø D 28 L 15

Middle section assembly-with hydraulic lock









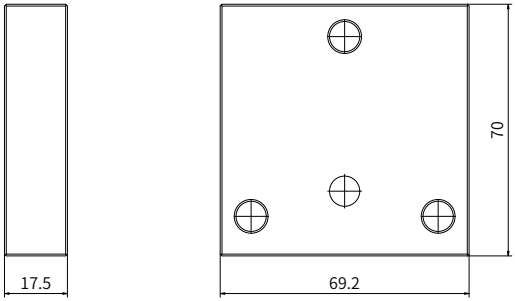
Port dimension

A/B port : M18×1.5
or M14×1.5

Thread dimensions

M18×1.5	∅ D1 26	L1 2.4
	∅ D2 19.8	L2 14.5
M14×1.5	∅ D1 21	L1 2.4
	∅ D2 15.8	L2 11.5

Endlet section assembly



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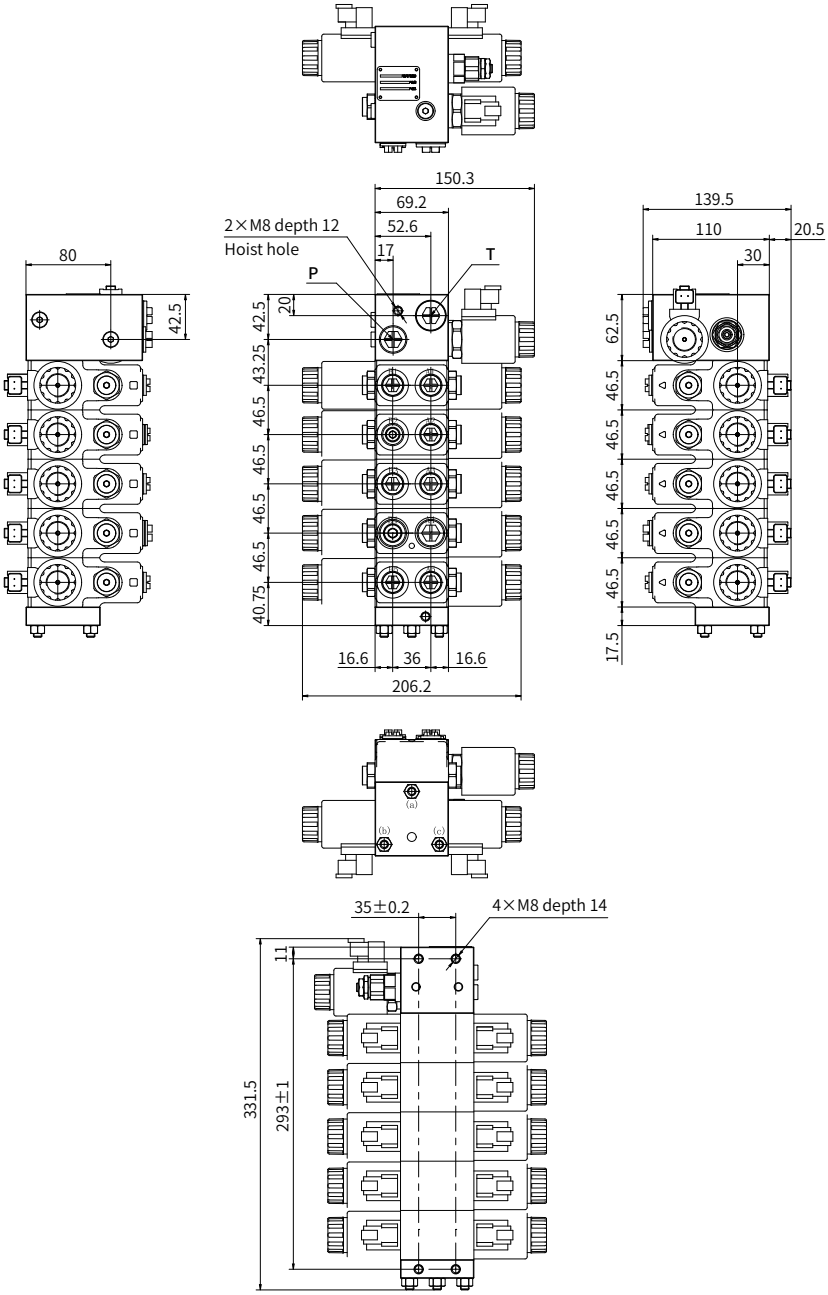
Unit dimensions



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