



4.1

EHD SERIES

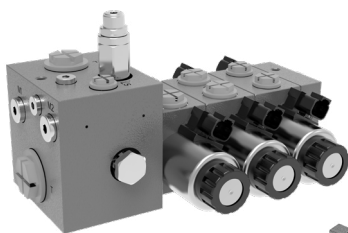
DIRECTIONAL VALVE WITH SOLENOID

EHD:

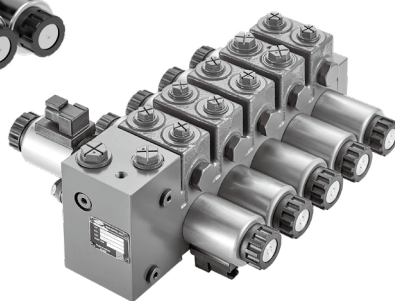
Nominal size	08
Rated pressure(bar)	315
Rated flow(L/min)	30/80

Benefits:

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



EHD08 (No hydraulic lock)



EHD08 (With hydraulic lock)

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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



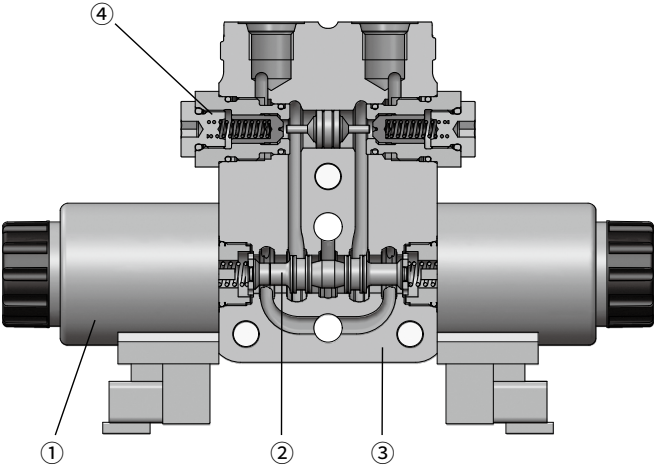
Ensilage harvester



Telescopic handler

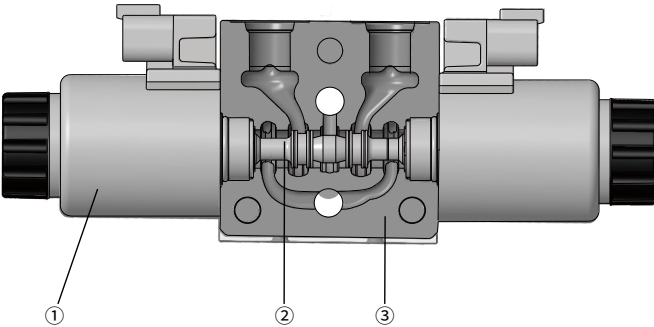
Section view

· With hydraulic lock



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

· No hydraulic lock



1. Solenoid
2. Main spool
3. Valve block

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)	30/80
Max. working pressure at port	P (bar)	315
	A/B (bar)	315

Electric

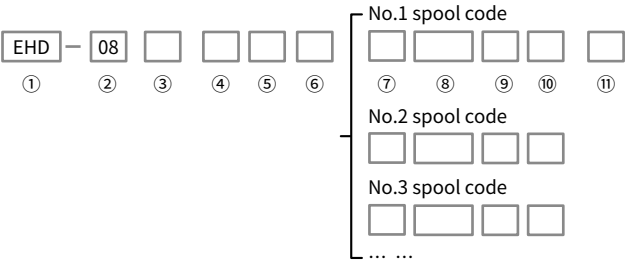
Electrical on/off or electrical proportional: · Connection: Deutsch DT04-2P · Protection class: IP69k · Supply voltage: 12 or 24VDC	
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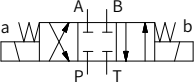
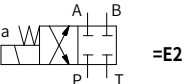
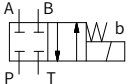
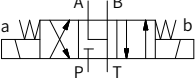
Using environment

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(°C)	-20 ~ +80
Viscosity range ν (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 $\beta_{10} \geq 75$

(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 Additional features	LZ	Electric proportional throttling
		LA	Electromagnetic unloading
		N	None
Middle section	⑦ Spool symbol	E1	 =E1
		E2	 =E2
		E3	 =E3
		Q1	 =Q1

Ordering code

EHD

—

08

①

②

③

④

⑤

⑥

No.1 spool code

⑦

⑧

⑨

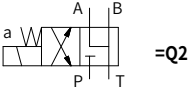
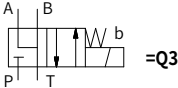
⑩

⑪

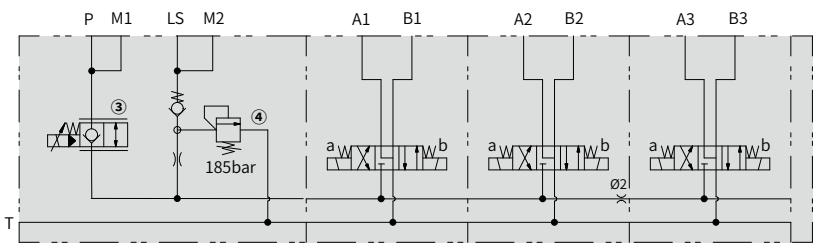
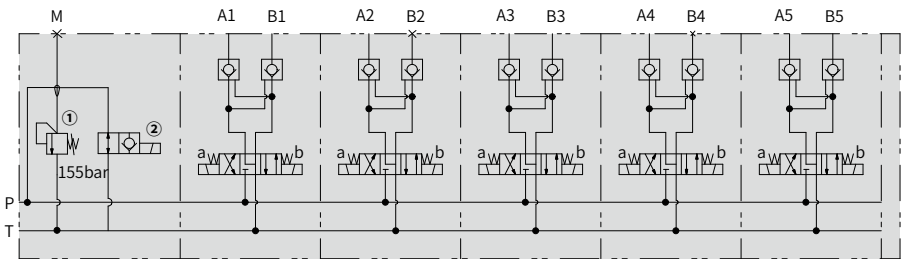
No.2 spool code

No.3 spool code

... ..

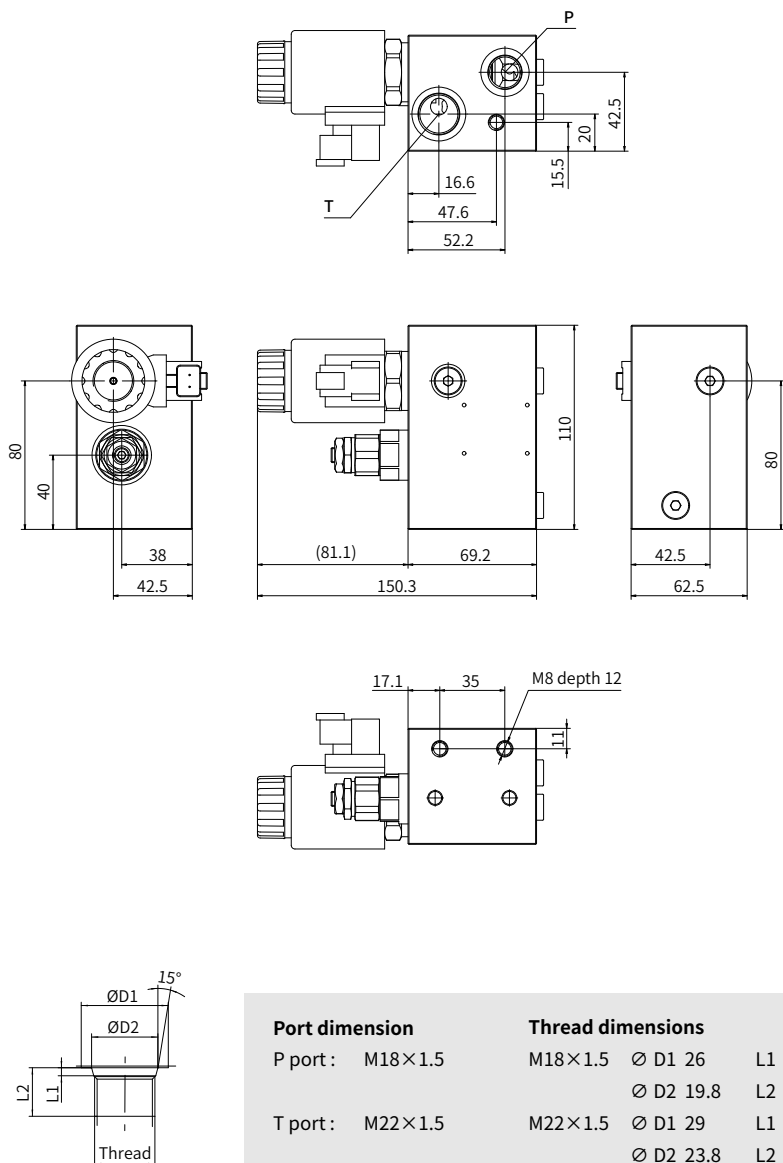
Middle section	⑦ Spool symbol	Q2	
		Q3	
	⑧ A/B flow	..—..	Flow in l/min, 2-digits, e.g. 50-50
	⑨ Operator type	W41	Electrical switch control, 24V
		W43	Electrical switch control, 12V
	⑩ AB hydraulic operated check valve	OO	Without hydraulic operated check valve
		AB	The AB port has a hydraulic operated check valve (Maximum flow rate: 30L/min)
		AO	Only A port has a hydraulic operated check valve (Maximum flow rate: 30L/min)
		OB	Only B port has a hydraulic operated check valve (Maximum flow rate: 30L/min)
	⑪ Design code	001	
*	Other request	Further requirement in the clear text	

Hydraulic diagram

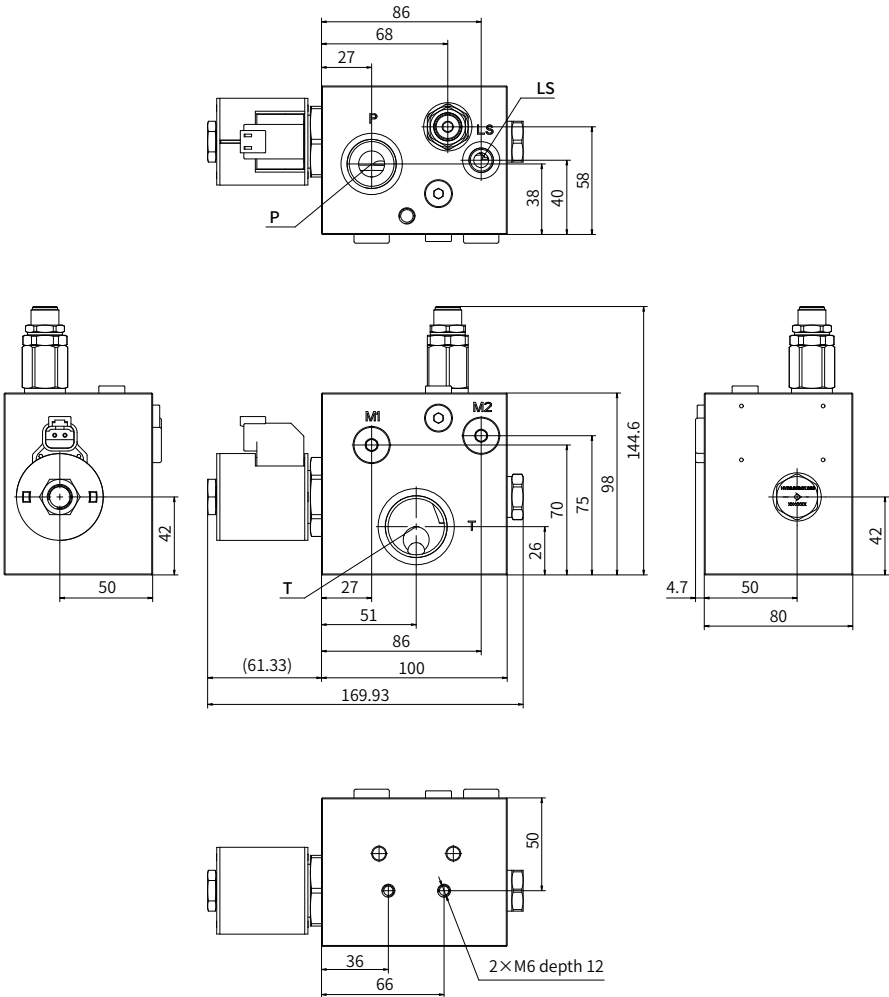


- ① Main relief valve
- ② Electromagnetic unload valve
- ③ Electrical proportional throttle valve
- ④ LS relief valve

Inlet section assembly

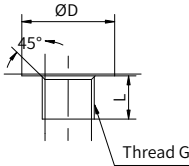
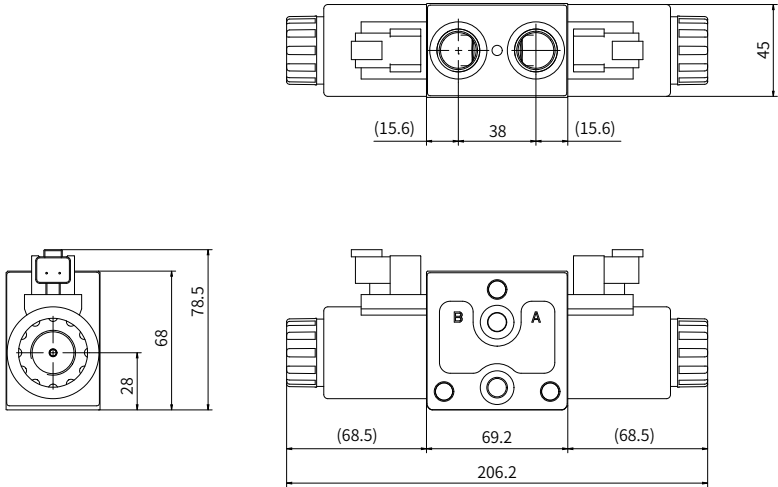


Inlet section assembly- with electrical proportional throttle valve



Port dimension	Thread dimensions
P port : G3/4	G3/4: Ø D 33 L 16.5
T port : G1	G1: Ø D 41 L 19
LS port : G1/4	G1/4: Ø D 20 L 12.5
M port : G1/4	

Middle section assembly



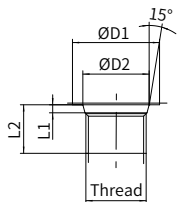
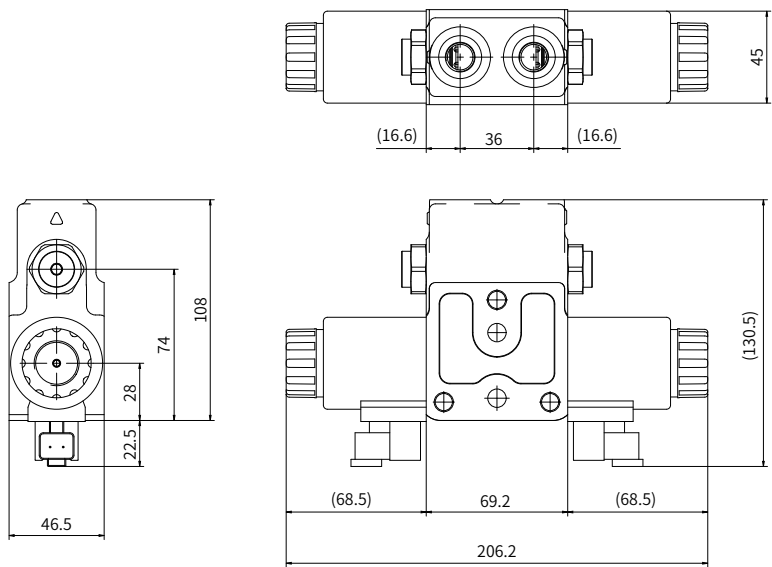
Port dimension

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

Thread dimensions

G3/8: $\varnothing D$ 23 L 12.5
G1/2: $\varnothing D$ 28 L 15

Middle section assembly-with hydraulic lock



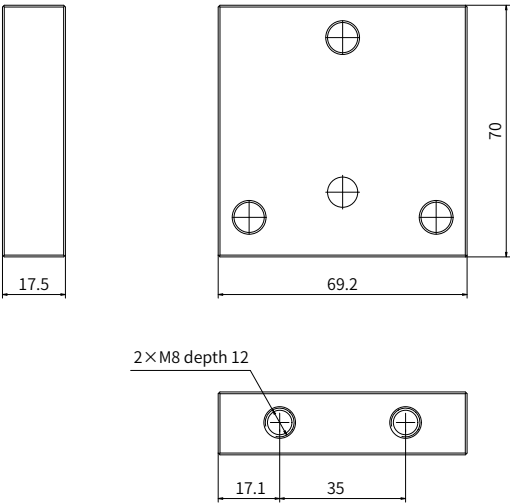
Port dimension

A/B port: M18×1.5
or M14×1.5

Thread dimensions

M18×1.5	$\varnothing D1$ 26	L1 2.4
	$\varnothing D2$ 19.8	L2 14.5
M14×1.5	$\varnothing D1$ 21	L1 2.4
	$\varnothing D2$ 15.8	L2 11.5

Endlet section assembly





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