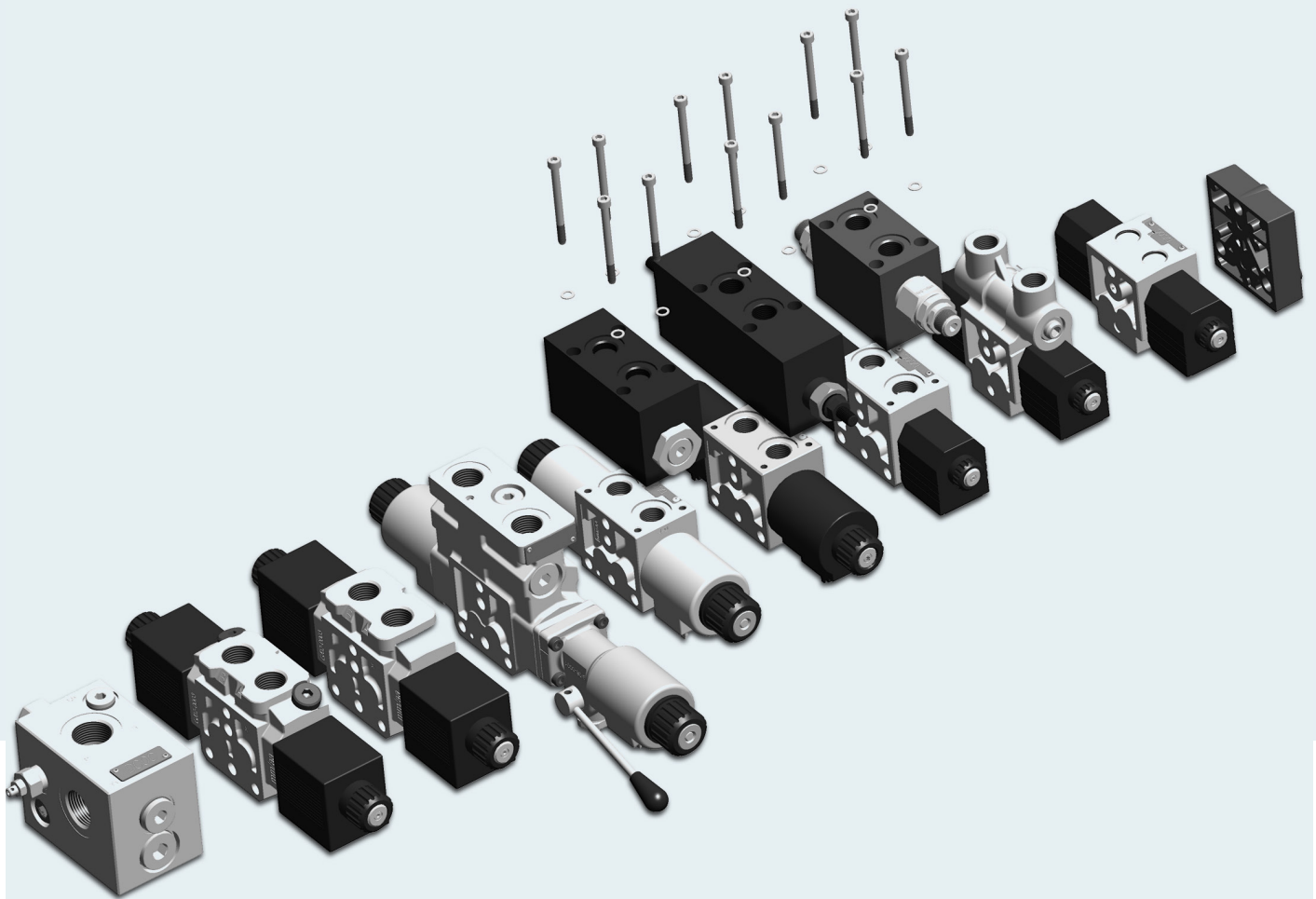


Modular Directional valves ED assembly



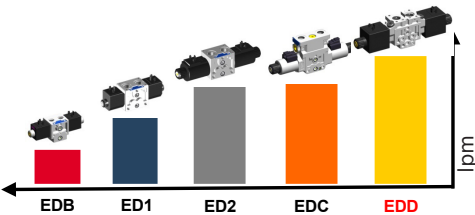


Bosch Rexroth Oil Control introduces the “Modular Directional Valve – ED assembly brochure”: released to simplify the modular system’s selection, depending on the target applications. The goal was to create a document (which doesn’t replace the product catalog) very simple to consult. Thanks to the complete products list, the clear symbology and feasible options, the brochure can guide the user in the component’s choice. The ED assembly brochure is based on the “Slice ED concept”, which replaces the traditional “6 ways directional valve system” allowing potentially infinite combinations to match any customers needs and to improve their machines performances.

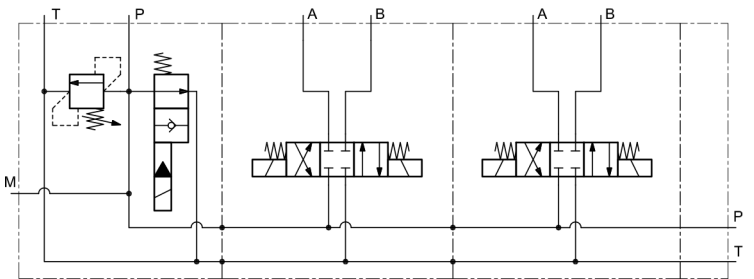
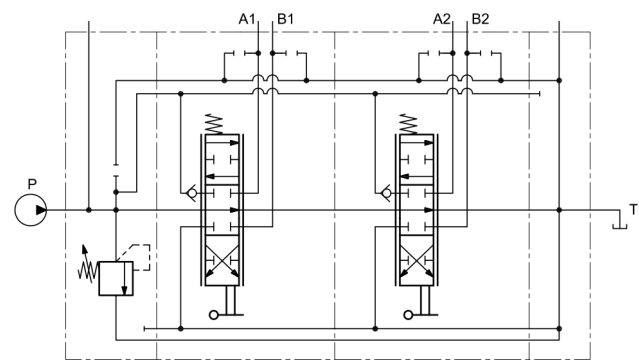
The ED assembly brochure helps the users in completing the configuration of modular elements for creating on-off and proportional solenoid operated hydraulic control blocks for actuators (motors or cylinders).

Based on the circuit type, it will be easy to choose between the suggested slice elements in order to configure the proper modular system matching the circuit features. The brochure also includes some hydraulics schemes which can be developed for different circuits/applications types.

In case of systems/applications in which the flow request is over 80 lpm per each section, it’s also possible to assembly the ED slices with the M412/M415 elements, helping in the creation of “Hybrid Solutions”.

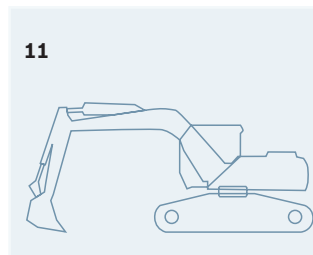
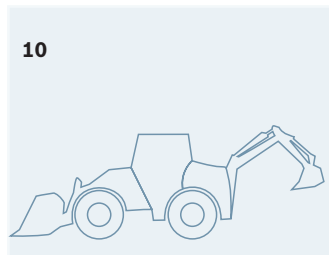
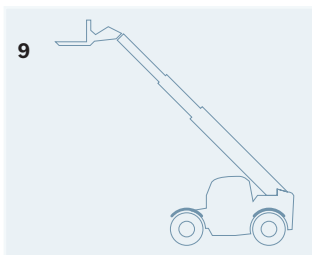
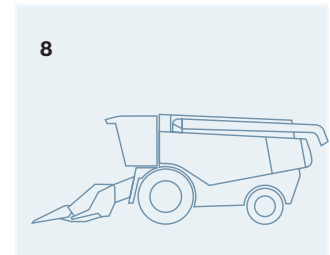
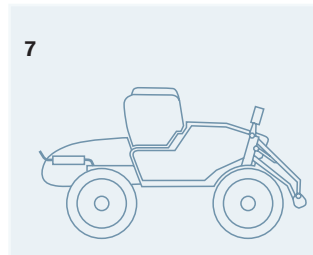
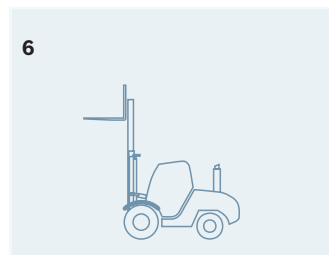
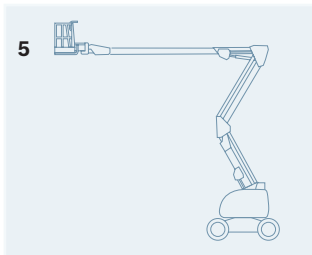
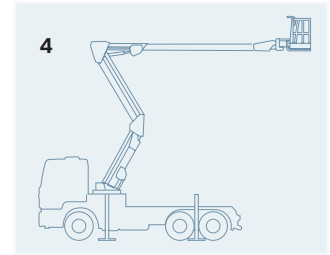
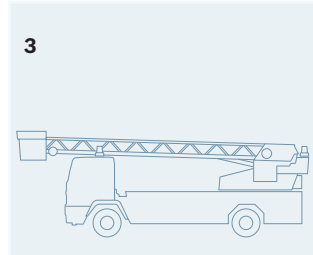
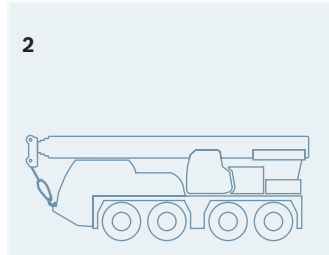
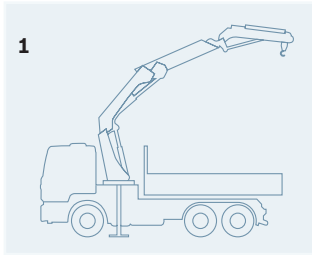


Picture 1



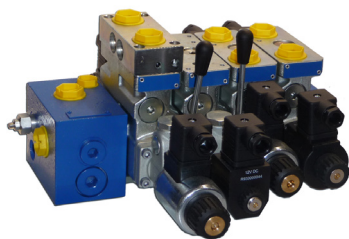
Picture 2

The pictures 1 and 2 show the main difference between ED modular system and the traditional 6 ways directional valve. In the traditional sheme (picture 1) pump is unloaded by the by-pass channel available in the 6 ways directional valve, while in ED concept there are only four ports available, therefore a dumping system is necessary. The most popular is a 2/2 electric valve,as show in picture 2, or logic element.

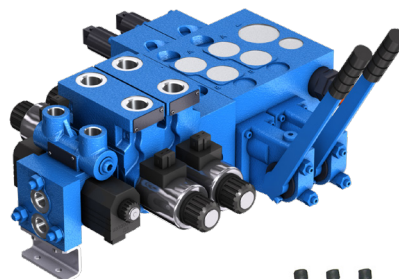


Applications

- ▶ 1. Truck mounted crane
- ▶ 2. All terrain crane
- ▶ 3. Aerial ladder platform
- ▶ 4. Aerial platform on truck
- ▶ 5. Aerial platform
- ▶ 6. Fork lift
- ▶ 7. Sprayer
- ▶ 8. Harvester
- ▶ 9. Telehandler
- ▶ 10. Backhoe loader
- ▶ 11. Excavator
- ▶ 12. Drilling
- ▶ 13. Garbage truck
- ▶ 14. Sweeper



EDC slices assembly



**Hybrid solution
M4 + EDC + EDB slices assembly**

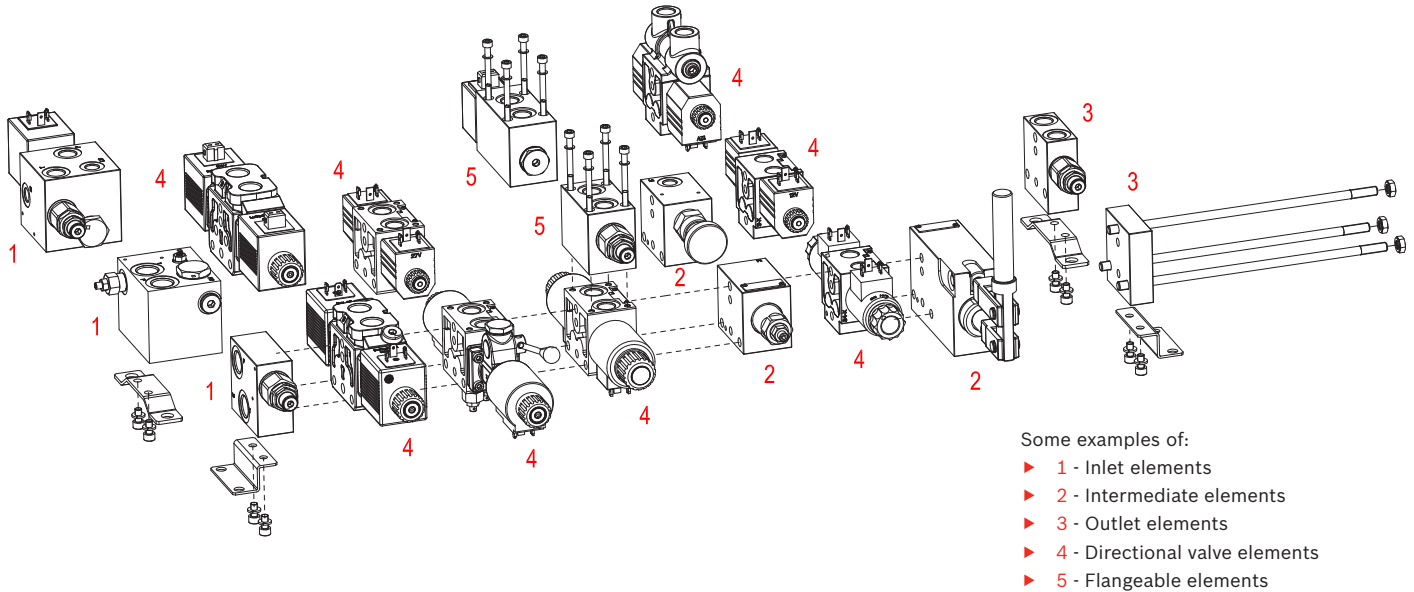


EDD slices assembly



**Hybrid solution
M4 + EDC + ED slices assembly**

Fixed displacement pump - single movements (On-Off / Proportional)



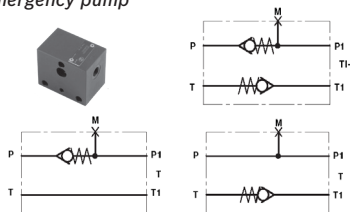
1 - Inlet elements

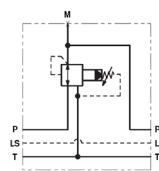
TE-04 (*)	Data sheet 18300-04	Technical Data
Inlet element with primary pressure relief valve and with LS connection		
		Max pressure 250 bar 3600 psi
		Max inlet flow 50 l/min 13 gpm
		Material Aluminum
		Port connections G 3/8-G1/2 SAE8
TE-05	Data sheet 18300-05	Technical Data
Inlet element with primary pressure relief valve and with solenoid unloading cartridge		
		Max pressure for aluminum version 250 bar 3600 psi
		Max pressure for cast iron version 310 bar 4500 psi
		Max inlet flow 50 l/min 13 gpm
		Port connections G 3/8-G1/2 SAE8
TE-06	Data sheet 18300-06	Technical Data
Inlet element with limitation of primary pressure in the system and LS controlled unloading of excess flow		
		Max pressure 250 bar 3600 psi
		Max inlet flow up to 90 l/min 24 gpm
		Rated flow at P1 40 l/min 11 gpm
		Max rated flow through LS drain 0,7 l/min 0,2 gpm
		Material Aluminum
Port connections G 3/8-G1/2		

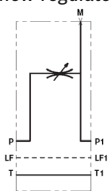
(*) External unloading must be applied.
LS port must be plugged

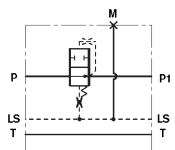
TE-07	Data sheet 18300-07	Technical Data
Inlet element with limitation of primary pressure, LS compensated flow control and solenoid operated unloading		
		Max pressure 250 bar 3600 psi
		Max inlet flow 90 l/min 24 gpm
		Rated flow at P1 0-30 l/min 0-8 gpm
		Material Aluminum
		Port connections G1/2
TE-10	Data sheet 18300-09	Technical Data
Inlet element with primary pressure relief valve and proportional LS controlled 3-way flow regulator		
		Max pressure 210 bar 3000 psi
		Max inlet flow 40 l/min 11 gpm
		Rated flow at P1 32 l/min 9 gpm
		Material Aluminum
		Port connections G 3/8-G1/2 SAE8
TE-11	Data sheet 18300-10	Technical Data
Inlet element with pressure reducing valve on the P line		
		Max pressure 250 bar 3600 psi
		Max inlet flow 50 l/min 13 gpm
		Material Aluminum
		Port connections G 3/8-G1/2 SAE8

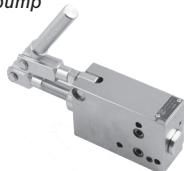
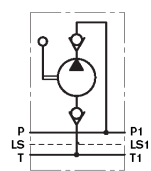
2 - Intermediate elements

TI-00	Data sheet 18301-25	Technical Data
<i>Intermediate element with check valves for emergency pump</i>		
 	Max pressure	250 bar 3600 psi
	Max inlet flow	50 l/min 13 gpm
	Material	Aluminum

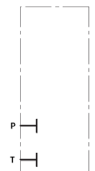
TI-03	Data sheet 18301-26	Technical Data
<i>Intermediate element with pressure reducer and relieving</i>		
 	Max pressure	250 bar 3600 psi
	Max inlet flow	50 l/min 13 gpm
	Material	Aluminum

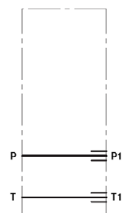
TI-04	Data sheet 18301-27	Technical Data
<i>Intermediate element with flow regulator on P line</i>		
 	Max pressure	250 bar 3600 psi
	Max inlet flow	50 l/min 13 gpm
	Material	Aluminum

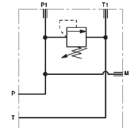
TI-C2	Data sheet 18301-28	Technical Data
<i>Intermediate element with 2 way compensator, and with LS connection</i>		
 	Max pressure	310 bar 4500 psi
	Max inlet flow	30 l/min 8 gpm
	Material	Cast iron

EPM-DE-18	Data sheet 18301-30	Technical Data
<i>Intermediate element with double acting hand pump</i>		
 	Max resistance pressure	310 bar 4500 psi
	Max generated pressure	250 bar 3600 psi
	Total displacement	18 cc 1 in ³
	Opening displacement	8.5 cc 0.5 in ³
	Closing displacement	9.5 cc 0.6 in ³
	Material	Cast iron

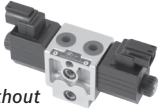
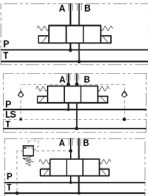
3 - Outlet elements

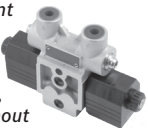
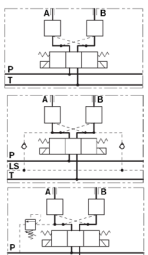
TC-00	Data sheet 18301-60	Technical Data
<i>End element basic</i>		
 	Max pressure for aluminum version	250 bar 3600 psi
	Max pressure for cast iron version	310 bar 4500 psi

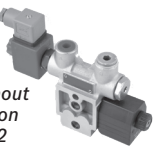
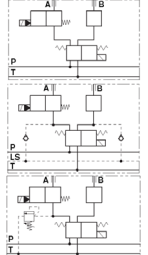
TC-03	Data sheet 18301-63	Technical Data
<i>Outlet element with additional inlet port P1 and tank port T1</i>		
 	Max pressure for aluminum version	250 bar 3600 psi
	Max pressure for cast iron version	310 bar 4500 psi
	Max flow in P and T	50 l/min 13 gpm
	Port connections	G 3/8-G1/2

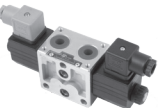
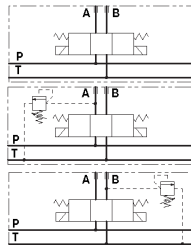
TC-04	Data sheet 18301-64	Technical Data
<i>Outlet element with pressure relief valve and with P, T and M ports for downstream operators</i>		
 	Max pressure	250 bar 3600 psi
	Max flow in P and T	35 l/min 9 gpm
	Material	Aluminum
	Port connections	G 3/8

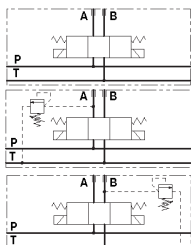
4 - Directional valve elements - On-Off

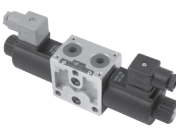
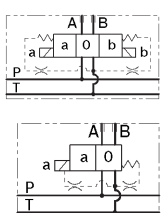
EDBZ	Data sheet 18300-52	Technical Data
4/3-4/2 directional valve element with or without secondary relief valve and with or without LS connection		
		Size 4
		Max operating pressure 310 bar 4500 psi
		Max flow 25 l/min 7 gpm
		Port connections G 3/8 SAE6 M16x1.5
		Electrical connection EN 175301-803, AMJ, DT04-2P

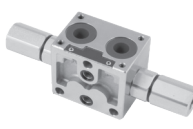
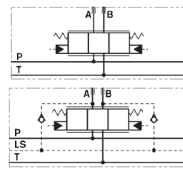
EDBZ-VR	Data sheet 18300-53	Technical Data
4/3 directional valve element with or without secondary relief valves, with or without LS connection, and PO check valves		
		Size 4
		Max operating pressure 250 bar 3600 psi
		Max flow 20 l/min 5 gpm
		Port connections G 3/8 SAE6 M16x1.5
		Electrical connection EN 175301-803, AMJ, DT04-2P

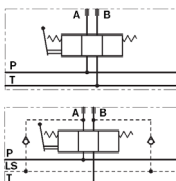
EDBZ-VEI	Data sheet 18300-54	Technical Data
4/2 directional valve element with or without secondary relief valve, with or without LS connection and with 2/2 solenoid cartridge valve		
		Size 4
		Max operating pressure 310 bar 4500 psi
		Max flow 25 l/min 7 gpm
		Port connections G 3/8 SAE6 M16x1.5
		Electrical connection EN 175301-803, AMJ, DT04-2P

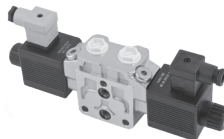
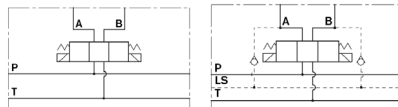
ED1-Z	Data sheet 18301-01	Technical Data
4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection		
		Size 6
		Max operating pressure 310 bar 4500 psi
		Max flow 30 l/min 8 gpm
		Port connections G 3/8 SAE6
		Electrical connection EN 175301-803, AMJ, DT04-2P

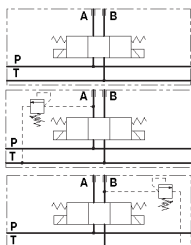
ED2-DZ	Data sheet 18301-02	Technical Data
4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection		
		Size 6
		Max operating pressure 310 bar 4500 psi
		Max flow 50 l/min 13 gpm
		Port connections G 3/8-SAE6 G 1/2-SAE8
		Electrical connection EN 175301-803, AMJ, DT04-2P

ED2S-DZ	Data sheet 18301-03	Technical Data
4/3-4/2 directional valve element with soft-shift		
		Size 6
		Max operating pressure 310 bar 4500 psi
		Max flow 50 l/min 13 gpm
		Port connections G 3/8
		Electrical connection EN 175301-803, AMJ, DT04-2P

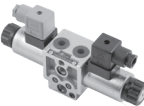
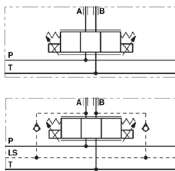
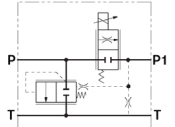
ED-IP	Data sheet 18301-07	Technical Data
4/3 directional valve element with proportional hydraulic control and with or without LS connection		
		Size 6
		Max operating pressure 310 bar 4500 psi
		Max flow 45 l/min 12 gpm
		Port connections G 3/8-SAE6 G 1/2-SAE8

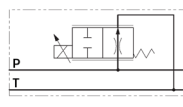
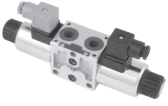
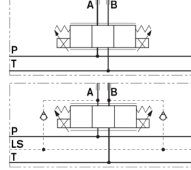
ED-LV	Data sheet 18301-08	Technical Data
4/3 directional valve elements with manual lever operated control and with or without LS connections		
		Size 6
		Series 00
		Max operating pressure 310 bar 4500 psi
		Max flow 60 l/min 16 gpm
		Port connections G 3/8- G 1/2-SAE8

EDD-XZ	Data sheet 18301-12	Technical Data
4/3-4/2 directional valve elements with or without secondary relief valves, and with or without LS connections		
		Size 8
		Max pressure (pump side) 310 bar 4500 psi
		Max pressure (actuator side) 380 bar 5500 psi
		Max flow 80 l/min 21 gpm
		Port connections G1/2-SAE10 Flangeable
		Electrical connection EN 175301-803, AMJ, DT04-2P

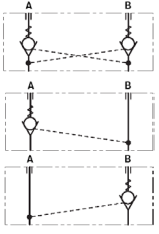
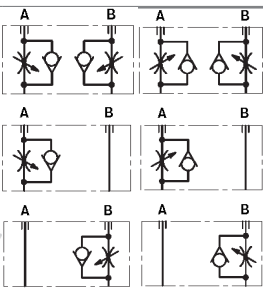
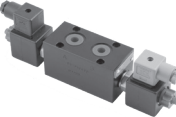
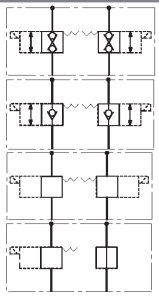
ED2-DZ	Data sheet 18301-02	Technical Data
4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection		
		Size 6
		Max operating pressure 310 bar 4500 psi
		Max flow 50 l/min 13 gpm
		Port connections G 3/8-SAE6 G 1/2-SAE8
		Electrical connection EN 175301-803, AMJ, DT04-2P

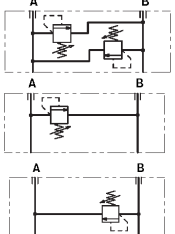
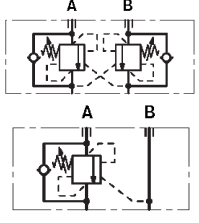
4 - Directional valve elements - Proportional

EDB-P	Data sheet 18300-55	Technical Data
4/3-4/2 directional valve element with proportional control and with or without LS connection		
 	Size	4
	Max operating pressure	310 bar 4500 psi
	Max flow	17 l/min 5 gpm
	Port connections	G 3/8 SAE6 M16x1.5
	Electrical connection	EN 175301-803, AMJ
ED4-PTC	Data sheet 18301-05	Technical Data
Directional valve element with compensated proportional control of tank unloaded excess flow		
 	Size	6
	Max operating pressure	250 bar 3600 psi
	Max flow	40 l/min 11 gpm
	Electrical connection	EN 175301-803, AMJ, DT04-2P

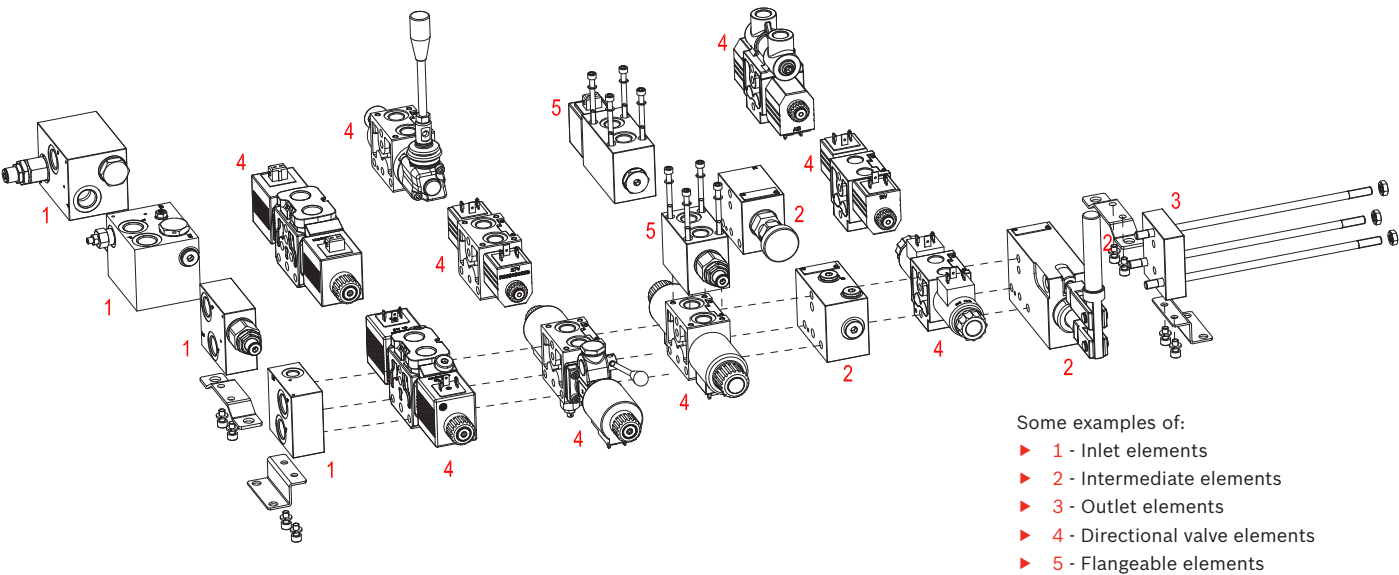
ED4-PT	Data sheet 18301-04	Technical Data
Directional valve element with proportional control of tank unloaded excess flow		
 	Size	6
	Max operating pressure	310 bar 4500 psi
	Max flow	28 l/min 7 gpm
	Electrical connection	EN 175301-803, AMJ, DT04-2P
ED4-P	Data sheet 18301-06	Technical Data
4/3-4/2 directional valve element with proportional control and with or without LS connection		
 	Size	6
	Max operating pressure	310 bar 4500 psi
	Max flow	30 l/min 8 gpm
	Port connections	G 3/8-SAE6 G 1/2-SAE8
	Electrical connection	EN 175301-803, AMJ, DT04-2P

5 - Flangeable elements

EDM-VR	Data sheet 18301-40	Technical Data
Flangeable element with single or double acting cross piloted check valves		
 	Size	6
	Max pressure	250 bar 3600 psi
	Max flow	50 l/min 13 gpm
	Port connections	G 3/8
	Material	Aluminum
EDM-VF	Data sheet 18301-42	Technical Data
Flangeable element with unidirectional flow control for meter-in and meter-out		
 	Size	6
	Max pressure	250 bar 3600 psi
	Max flow	50 l/min 13 gpm
	Port connections	G 3/8
	Material	Aluminum
EDM-VEI	Data sheet 18301-44	Technical Data
Flangeable element with 2/2 solenoid cartridge valves		
 	Size	6
	Max pressure	250 bar 3600 psi
	Max flow	40 l/min 11 gpm
	Port connections	G 3/8
	Electrical connection	EN 175301-803, AMJ, DT04-2P

EDM-VM	Data sheet 18301-41	Technical Data
Flangeable element with single or double secondary pressure relief valve		
 	Size	6
	Max pressure	250 bar 3600 psi
	Max flow	50 l/min 13 gpm
	Port connections	G 3/8
	Material	Aluminum
EDM-VB	Data sheet 18301-43	Technical Data
Flangeable element with cross piloted counterbalance valves		
 	Size	6
	Max pressure	250 bar 3600 psi
	Max flow	40 l/min 11 gpm
	Port connections	G 3/8-SAE6
	Material	Aluminum

Variable displacement pump - single movements
(On-Off / Proportional)



- Some examples of:
- ▶ 1 - Inlet elements
 - ▶ 2 - Intermediate elements
 - ▶ 3 - Outlet elements
 - ▶ 4 - Directional valve elements
 - ▶ 5 - Flangeable elements

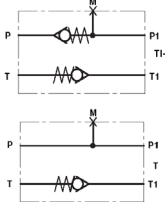
1 - Inlet elements

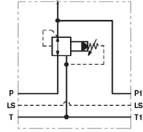
TE-03	Data sheet 18300-03	Technical Data
Inlet element with LS connection		
		Max pressure for aluminum version 250 bar 3600 psi
		Max pressure for cast iron version 310 bar 4500 psi
		Max inlet flow 50 l/min 13 gpm
		Port connections G 3/8-G1/2 SAE8
TE-04	Data sheet 18300-04	Technical Data
Inlet element with primary pressure relief valve and with LS connection		
		Max pressure 250 bar 3600 psi
		Max inlet flow 50 l/min 13 gpm
		Port connections G 3/8-G1/2 SAE8
		Material Aluminum
TE-06 (*)	Data sheet 18300-06	Technical Data
Inlet element with limitation of primary pressure in the system and LS controlled unloading of excess flow		
		Max pressure 250 bar 3600 psi
		Max inlet flow up to 90 l/min 24 gpm
		Rated flow at P1 40 l/min 11 gpm
		Max rated flow through LS drain 0,7 l/min 0,2 gpm
		Material Aluminum
		Port connections G 3/8-G1/2

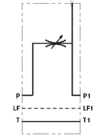
(*) Version with mechanical blocking only

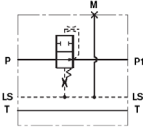
TE-16	Data sheet 18300-14	Technical Data
Inlet element with LS connection and double pressure relief valve (P and LS line)		
		Max pressure 310 bar 4500 psi
		Max inlet flow 120 l/min 32 gpm
		Material Cast iron
		Port connections G1/2-G3/4- SAE10

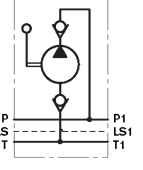
2 - Intermediate elements

TI-00	Data sheet 18301-25	Technical Data
<i>Intermediate element with check valves for emergency pump</i>		
 	Max pressure	250 bar 3600 psi
	Max inlet flow	50 l/min 13 gpm
	Material	Aluminum

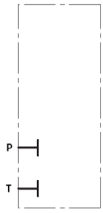
TI-03	Data sheet 18301-26	Technical Data
<i>Intermediate element with pressure reducer and relieving</i>		
 	Max pressure	250 bar 3600 psi
	Max inlet flow	50 l/min 13 gpm
	Material	Aluminum

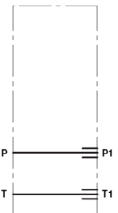
TI-04	Data sheet 18301-27	Technical Data
<i>Intermediate element with flow regulator on P line</i>		
 	Max pressure	250 bar 3600 psi
	Max inlet flow	50 l/min 13 gpm
	Material	Aluminum

TI-C2	Data sheet 18301-28	Technical Data
<i>Intermediate element with 2 way compensator, and with LS connection</i>		
 	Max pressure	310 bar 4500 psi
	Max inlet flow	30 l/min 8 gpm
	Material	Cast iron

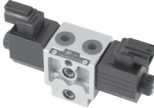
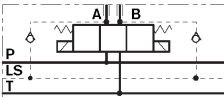
EPM-DE-18	Data sheet 18301-30	Technical Data
<i>Intermediate element with double acting hand pump</i>		
 	Max resistance pressure	310 bar 4500 psi
	Max generated pressure	250 bar 3600 psi
	Total displacement	18 cc 1 in ³
	Opening displacement	8.5 cc 0.5 in ³
	Closing displacement	9.5 cc 0.6 in ³
	Material	Cast iron

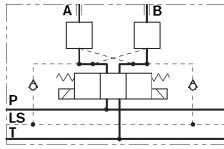
3 - Outlet elements

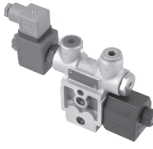
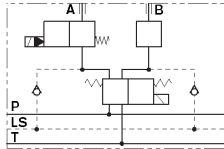
TC-00	Data sheet 18301-60	Technical Data
<i>End element basic</i>		
 	Max pressure for aluminum version	250 bar 3600 psi
	Max pressure for cast iron version	310 bar 4500 psi

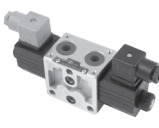
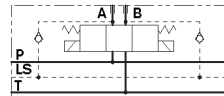
TC-03	Data sheet 18301-63	Technical Data
<i>Outlet element with additional inlet port P1 and tank port T1</i>		
 	Max pressure for aluminum version	250 bar 3600 psi
	Max pressure for cast iron version	310 bar 4500 psi
	Max flow in P and T	50 l/min 13 gpm
	Port connections	G 3/8-G1/2

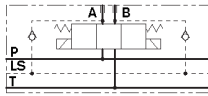
4 - Directional valve elements - On-Off

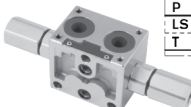
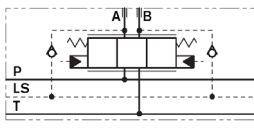
EDBZ	Data sheet 18300-52	Technical Data	
4/3-4/2 directional valve element with or without secondary relief valve and with or without LS connection			
		Size	4
		Max operating pressure	310 bar 4500 psi
		Max flow	25 l/min 7 gpm
		Port connections	G 3/8 SAE6 M16x1.5
		Electrical connection	EN 175301-803, AMJ, DT04-2P

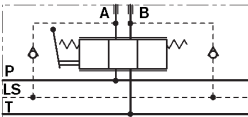
EDBZ-VR	Data sheet 18300-53	Technical Data
<i>4/3 directional valve element with or without secondary relief valves, with or without LS connection, and PO check valves</i>		
		Size4
		Max operating pressure250 bar 3600 psi
		Max flow20 l/min 5 gpm
		Port connectionsG 3/8 SAE6 M16x1.5
		Electrical connectionEN 175301-803, AMJ, DT04-2P

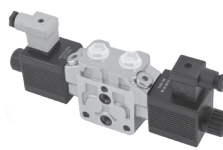
EDBZ-VEI	Data sheet 18300-54	Technical Data	
<i>4/2 directional valve element with or without secondary relief valve, with or without LS connection and with 2/2 solenoid cartridge valve</i>			
		Size	4
		Max operating pressure	310 bar 4500 psi
		Max flow	25 l/min 7 gpm
		Port connections	G 3/8 SAE6 M16x1.5
		Electrical connection	EN 175301-803, AMJ, DT04-2P

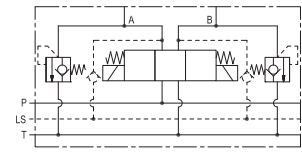
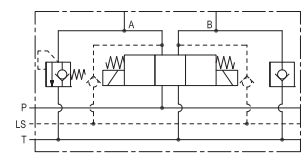
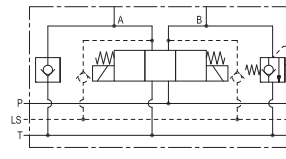
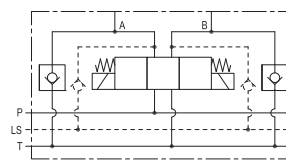
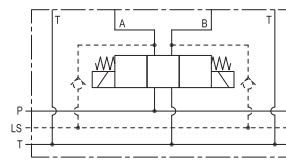
ED1-Z	Data sheet 18301-01	Technical Data	
4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection			
		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	30 l/min 8 gpm
		Port connections	G 3/8 SAE6
		Electrical connection	EN 175301-803, AMJ, DT04-2P

ED2-DZ	Data sheet 18301-02	Technical Data	
4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection			
		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	50 l/min 13 gpm
		Port connections	G 3/8-SAE6 G 1/2-SAE8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

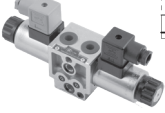
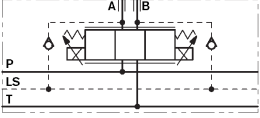
ED-IP	Data sheet 18301-07	Technical Data	
<i>4/3 directional valve element with proportional hydraulic control and with or without LS connection</i>		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	45 l/min 12 gpm
		Port connections	G 3/8-SAE6 G 1/2-SAE8

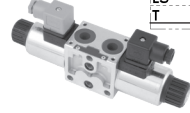
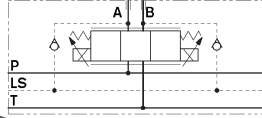
ED-LV	Data sheet 18301-08	Technical Data	
4/3 directional valve elements with manual lever operated control and with or without LS connections			
		Size	6
		Series	00
		Max operating pressure	310 bar 4500 psi
		Max flow	60 l/min 16 gpm
		Port connections	G 3/8- G 1/2-SAE8

EDD-XZ	Data sheet 18301-12	Technical Data	
4/3-4/2 directional valve elements with or without secondary relief valves, and with or without LS connections			
		Size	8
		Max pressure (pump side)	310 bar 4500 psi
		Max pressure (actuator side)	380 bar 5500 psi
		Max flow	80 l/min 21 gpm
		Port connections	G1/2-SAE10 Flangeable
		Electrical connection	EN 175301-803, AMJ, DT04-2P

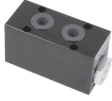
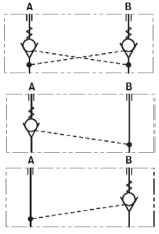


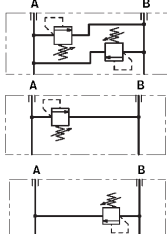
4 - Directional valve elements - Proportional

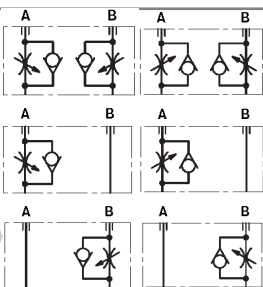
EDB-P	Data sheet 18300-55	Technical Data	
4/3-4/2 directional valve element with proportional control and with or without LS connection		Size	4
 		Max operating pressure	310 bar 4500 psi
		Max flow	17 l/min 5 gpm
		Port connections	G 3/8 SAE6 M16x1.5
		Electrical connection	EN 175301-803, AMJ

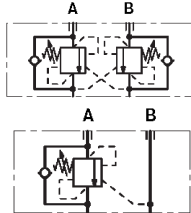
ED4-P	Data sheet 18301-06	Technical Data	
4/3-4/2 directional valve element with proportional control and with or without LS connection		Size	6
 		Max operating pressure	310 bar 4500 psi
		Max flow	30 l/min 8 gpm
		Port connections	G 3/8- SAE6 G 1/2- SAE8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

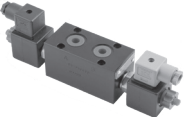
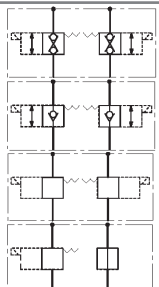
5 - Flangeable elements

EDM-VR	Data sheet 18301-40	Technical Data	
Flangeable element with single or double acting cross piloted check valves		Size	6
 		Max pressure	250 bar 3600 psi
		Max flow	50 l/min 13 gpm
		Port connections	G 3/8
		Material	Aluminum

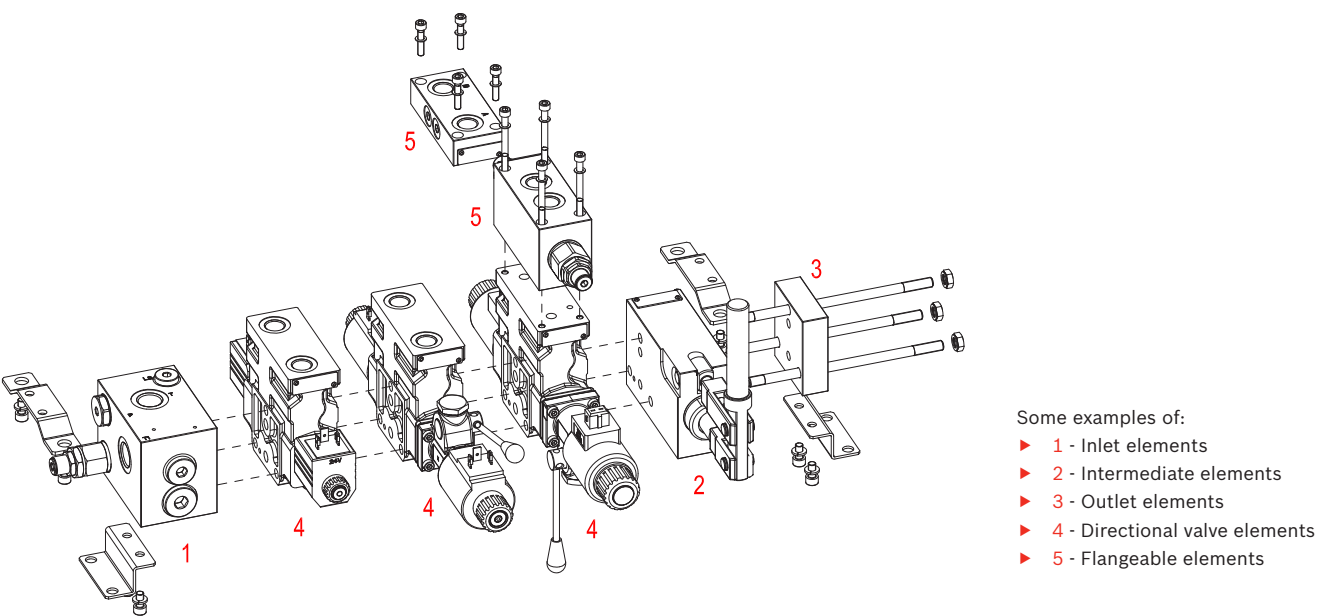
EDM-VM	Data sheet 18301-41	Technical Data	
Flangeable element with single or double secondary pressure relief valve		Size	6
 		Max pressure	250 bar 3600 psi
		Max flow	50 l/min 13 gpm
		Port connections	G 3/8
		Material	Aluminum

EDM-VF	Data sheet 18301-42	Technical Data	
Flangeable element with unidirectional flow control for meter-in and meter-out		Size	6
 		Max pressure	250 bar 3600 psi
		Max flow	50 l/min 13 gpm
		Port connections	G 3/8
		Material	Aluminum

EDM-VB	Data sheet 18301-43	Technical Data	
Flangeable element with cross piloted counterbalance valves		Size	6
 		Max pressure	250 bar 3600 psi
		Max flow	40 l/min 11 gpm
		Port connections	G 3/8- SAE6
		Material	Aluminum

EDM-VEI	Data sheet 18301-44	Technical Data	
Flangeable element with 2/2 solenoid cartridge valves		Size	6
 		Max pressure	250 bar 3600 psi
		Max flow	40 l/min 11 gpm
		Port connections	G 3/8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

Fixed displacement pump - simultaneous movements (On-Off / Proportional)



1 - Inlet elements

TE-13	Data sheet 18300-13	Technical Data
Inlet element with by-pass compensator, LS relief for open center control block and solenoid operated unloading		
	Max pressure	310 bar 4500 psi
	Max inlet flow	up to 120 l/min 32 gpm
	Port connections	G 1/2-G3/4 SAE 10
	Material	Cast iron

2 - Intermediate elements

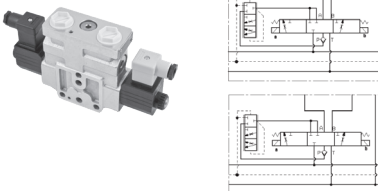
EPM-DE-18	Data sheet 18301-30	Technical Data
Intermediate element with double acting hand pump		
	Max resistance pressure	310 bar 4500 psi
	Max generated pressure	250 bar 3600 psi
	Total displacement	18 cc 1 in³
	Opening displacement	8.5 cc 0.5 in³
	Closing displacement	9.5 cc 0.6 in³
	Material	Cast iron

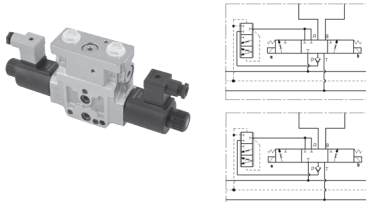
3 - Outlet elements

TC-00	Data sheet 18301-60	Technical Data
End element basic		
	Max pressure	310 bar 4500 psi
	Material	Cast iron

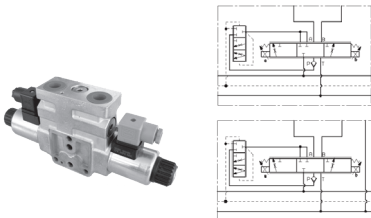
TC-03	Data sheet 18301-63	Technical Data
Outlet element with additional inlet port P1 and tank port T1		
	Max pressure	310 bar 4500 psi
	Max flow in P and T	50 l/min 13 gpm
	Port connections	G 3/8-G1/2
	Material	Cast iron

4 - Directional valve elements - On-Off

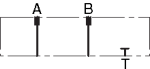
EDC-Z	Data sheet 18301-10	Technical Data	
4/3-4/2 on-off directional valve element with flow sharing control (LUDV concept)			
	Size	6	
	Max operating pressure	310 bar 4500 psi	
	Max flow	up to 26 l/min 7 gpm	
	Port connections	G 3/8 SAE8	
	Electrical connection	EN 175301-803, AMJ, DT04-2P	

EDC-DZ	Data sheet 18301-11	Technical Data	
4/3-4/2 on-off directional valve element with flow sharing control (LUDV concept)			
	Size	6	
	Max operating pressure	310 bar 4500 psi	
	Max flow	up to 54 l/min 14 gpm	
	Port connections	G 1/2 SAE8	
	Electrical connection	EN 175301-803, AMJ, DT04-2P	

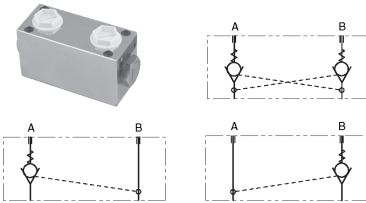
4 - Directional valve elements Proportional

EDC-P	Data sheet 18301-09	Technical Data	
4/3-4/2 proportional directional valve element with flow sharing control (LUDV concept)			
	Size	6	
	Max operating pressure	310 bar 4500 psi	
	Max flow	up to 58 l/min 15 gpm	
	Port connections	G 3/8-G1/2 SAE8	
	Electrical connection	EN 175301-803, AMJ, DT04-2P	

5 - Flangeable elements

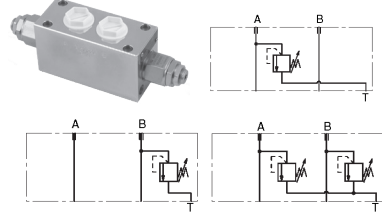
EDCMF	Data sheet 18301-48	Technical Data	
<i>Flangeable elements with different type of ports</i>			
	Size	6	
	Max operating pressure	310 bar 4500 psi	
	Max flow	60 l/min 16 gpm	
	Port connections	G 3/8-G1/2- M18x1.5 M22x1.5 JIS SAE8-SAE10	
	Material	Cast iron	

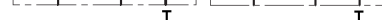
5 - Flangeable elements

EDCM/EDCMF-VR	Data sheet 18301-46	Technical Data	
<i>Flangeable element with single or double acting cross piloted check valves</i>			
	Size	6	
	Max pressure	310 bar 4500 psi	
	Max flow	70 l/min 19 gpm	
	Port connections	G 3/8-G1/2 SAE8	
	Material	Cast iron	

5 - Flangeable elements

EDCM/EDCMF-VM		Data sheet 18301-45	Technical Data	
<i>Flangeable element with single or double secondary pressure relief valves and anti-cavitation function</i>				
	Size	6		
	Max pressure	310 bar 4500 psi		
	Max flow	30 l/min 8 gpm		
	Port connections	G 3/8-G1/2 SAE8		
	Material	Cast iron		

EDCM/EDCMF-VM5		Data sheet 18301-47	Technical Data	
<i>Flangeable element with single or double secondary pressure relief valves</i>				
	Size	6		
	Max pressure	310 bar 4500 psi		
	Max flow	50 l/min 13 gpm		
	Port connections	G 3/8-G1/2		
	Material	Cast iron		

EDCM/EDCMF-VM	Data sheet 18301-45	Technical Data	
<i>Flangeable element with single or double secondary pressure relief valves and anti-cavitation function</i>			
	Size	6	
	Max pressure	310 bar 4500 psi	
	Max flow	30 l/min 8 gpm	
	Port connections	G 3/8-G1/2 SAE8	
	Material	Cast iron	

Variable displacement pump - simultaneous movements (On-Off / Proportional)

Some examples of:

- ▶ 1 - Inlet elements
- ▶ 2 - Intermediate elements
- ▶ 3 - Outlet elements
- ▶ 4 - Directional valve elements
- ▶ 5 - Flangeable elements

1 - Inlet elements

TE-16
Data sheet 18300-14

Technical Data

Max pressure	310 bar 4500 psi
Max inlet flow	120 l/min 32 gpm
Material	Cast iron
Port connections	G1/2-G3/4- SAE10

Inlet element with LS connection and double pressure relief valve (P and LS line)

2 - Intermediate elements

EPM-DE-18
Data sheet 18301-30

Technical Data

Max resistance pressure	310 bar 4500 psi
Max generated pressure	250 bar 3600 psi
Total displacement	18 cc 1 in ³
Opening displacement	8.5 cc 0.5 in ³
Closing displacement	9.5 cc 0.6 in ³
Material	Cast iron

Intermediate element with double acting hand pump

3 - Outlet elements

TC-00
Data sheet 18301-60

Technical Data

Max pressure for aluminum vers.	250 bar 3600 psi
Max pressure for cast iron vers.	310 bar 4500 psi

End element basic

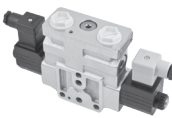
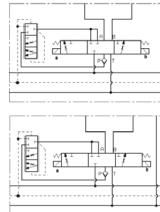
TC-03
Data sheet 18301-63

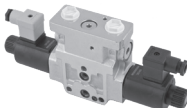
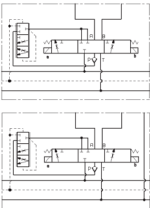
Technical Data

Max pressure for aluminum vers.	250 bar 3600 psi
Max pressure for cast iron vers.	310 bar 4500 psi
Max flow in P and T	50 l/min 13 gpm
Port connections	G 3/8-G1/2

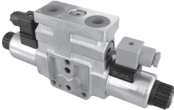
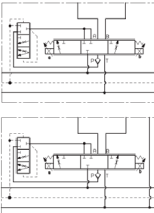
Outlet element with additional inlet port P1 and tank port T1

4 - Directional valve elements - On-Off

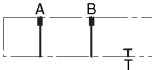
EDC-Z	Data sheet 18301-10	Technical Data	
4/3-4/2 on-off directional valve element with flow sharing control (LUDV concept)			
		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	up to 26 l/min 7 gpm
		Port connections	G 3/8 SAE8
		Electrical connection	EN 175301-803 AMJ, DT04-2P

EDC-DZ	Data sheet 18301-11	Technical Data	
4/3-4/2 on-off directional valve element with flow sharing control (LUDV concept)			
		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	up to 54 l/min 14 gpm
		Port connections	G 1/2 SAE8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

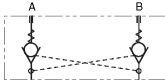
4 - Directional valve elements Proportional

EDC-P		Data sheet 18301-09		Technical Data	
4/3-4/2 proportional directional valve element with flow sharing control (LUDV concept)					
			Size	6	
			Max operating pressure	310 bar 4500 psi	
			Max flow	up to 58 l/min 15 gpm	
			Port connections	G 3/8-G1/2 SAE8	
			Electrical connection	EN 175301-803, AMJ, DT04-2P	

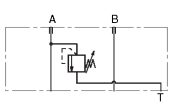
5 - Flangeable elements

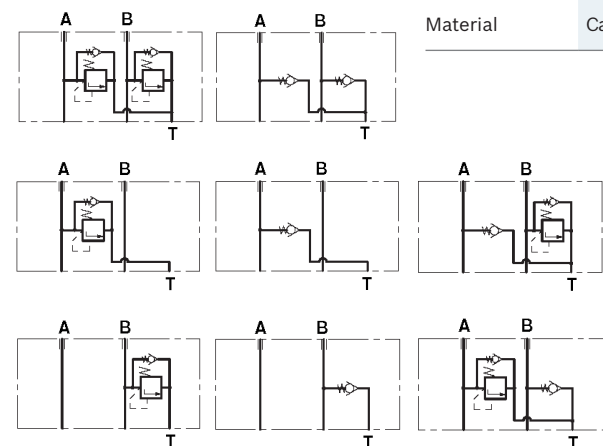
EDCMF	Data sheet 18301-48	Technical Data	
<i>Flangeable elements with different type of ports</i>		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	60 l/min 16 gpm
		Port connections	G 3/8-G1/2- M18x1.5 M22x1.5 JIS SAE8-SAE10
		Material	Cast iron

5 - Flangeable elements

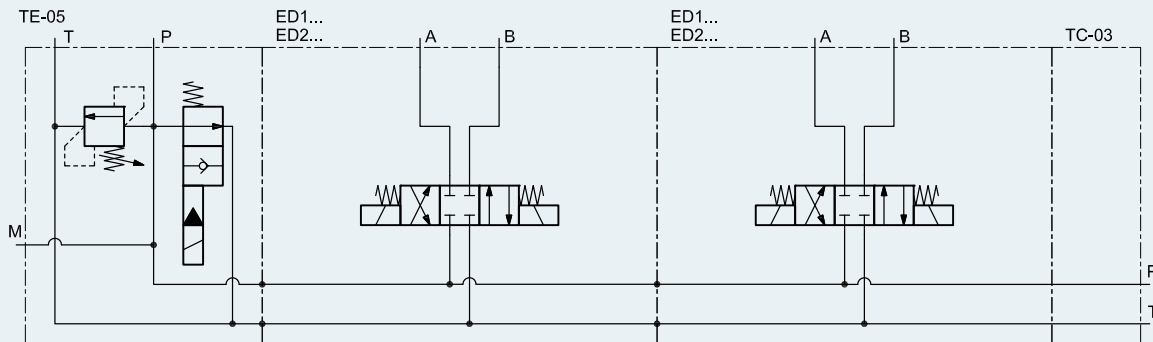
EDCM/EDCMF-VR	Data sheet 18301-46	Technical Data	
<i>Flangeable element with single or double acting cross piloted check valves</i>			
		Size	6
		Max pressure	310 bar 4500 psi
		Max flow	70 l/min 19 gpm
		Port connections	G 3/8-G1/2 SAE8
		Material	Cast iron

EDCM/EDCMF-VM		Data sheet 18301-45	Technical Data	
<i>Flangeable element with single or double secondary pressure relief valves and anti-cavitation function</i>			Size	6
			Max pressure	310 bar 4500 psi
		Max flow	30 l/min 8 gpm	
		Port connections	G 3/8-G1/2 SAE8	
		Material	Cast iron	

EDCM/EDCMF-VM5		Data sheet 18301-47	Technical Data	
<i>Flangeable element with single or double secondary pressure relief valves</i>				
			Size	6
			Max pressure	310 bar 4500 psi
			Max flow	50 l/min 13 gpm
			Port connections	G 3/8-G1/2
			Material	Cast iron



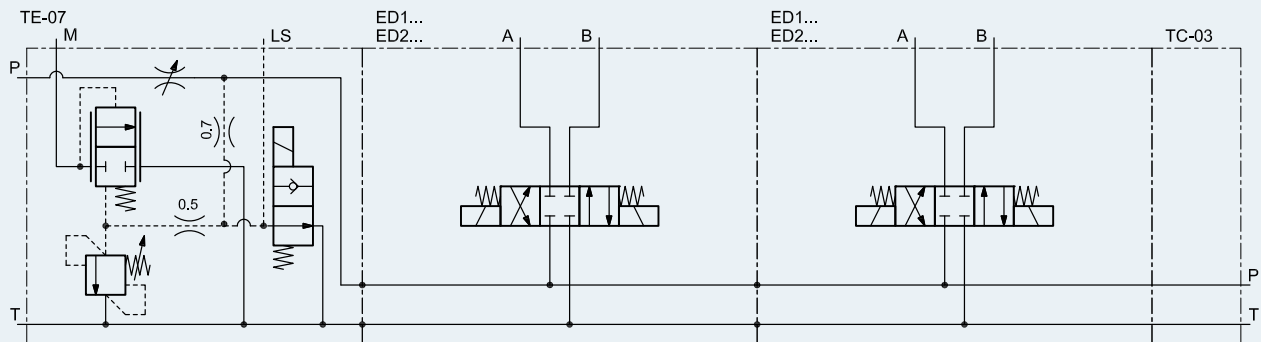
Fixed displacement pump - single movements



Suitable for:



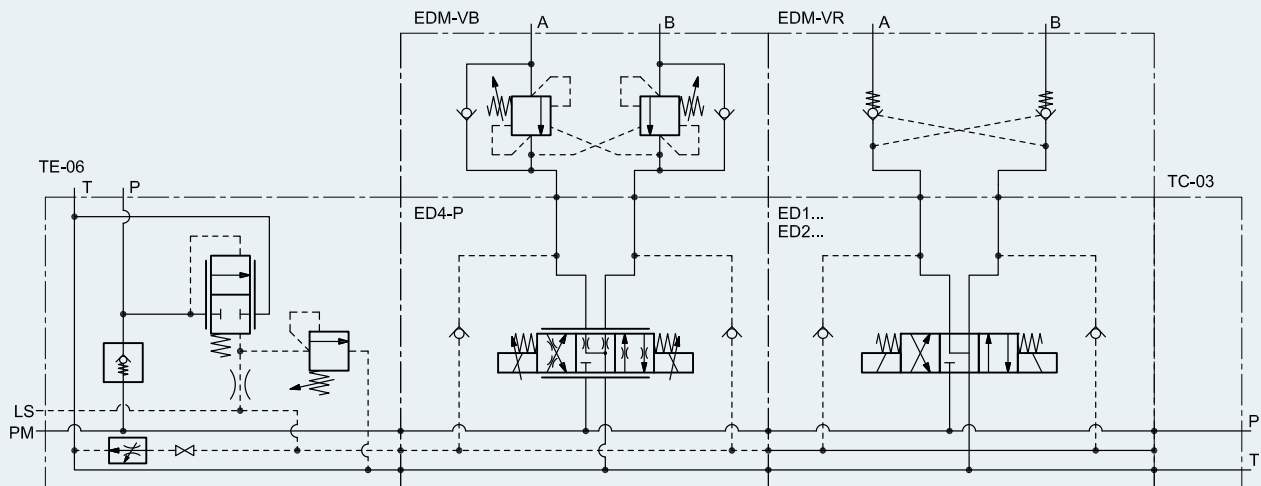
Fixed displacement pump (high flow) - single movements



Suitable for:



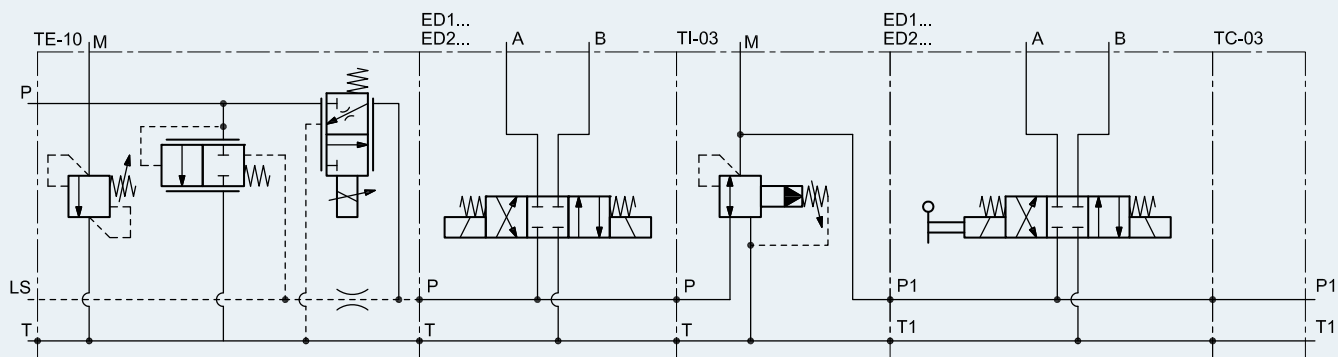
Fixed displacement pump - single movements (on-off / Proportional)



Suitable for:



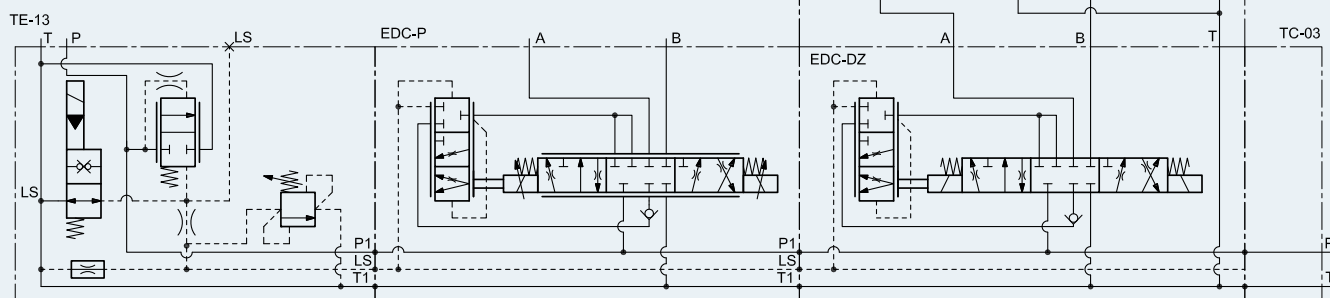
Fixed displacement pump - single movements (on-off / Proportional)
compensated inlet



Suitable for:



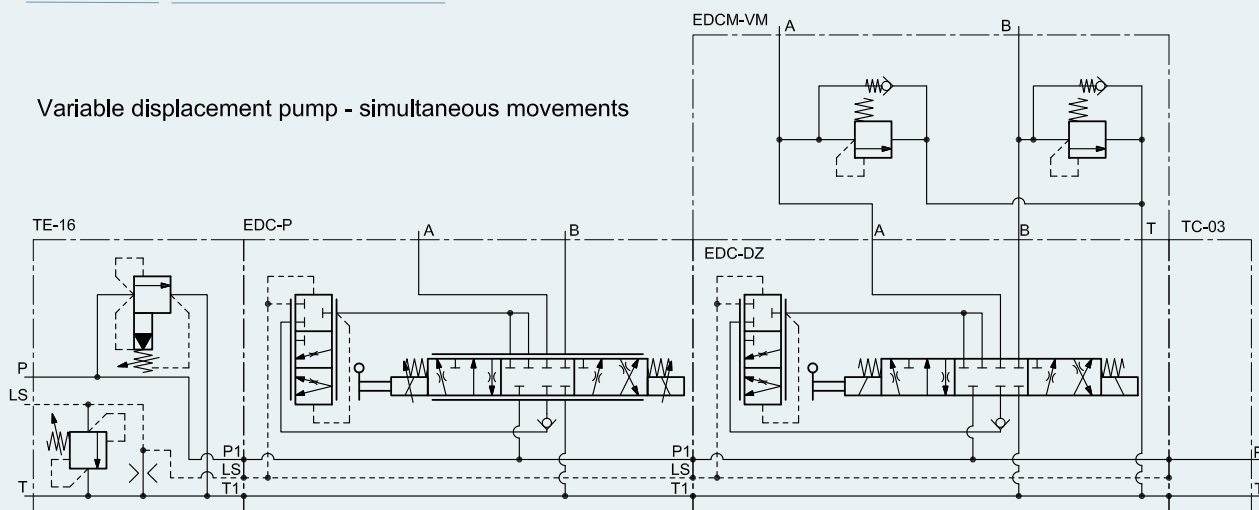
Fixed displacement pump
simultaneous movements (on-off / Proportional)



Suitable for:



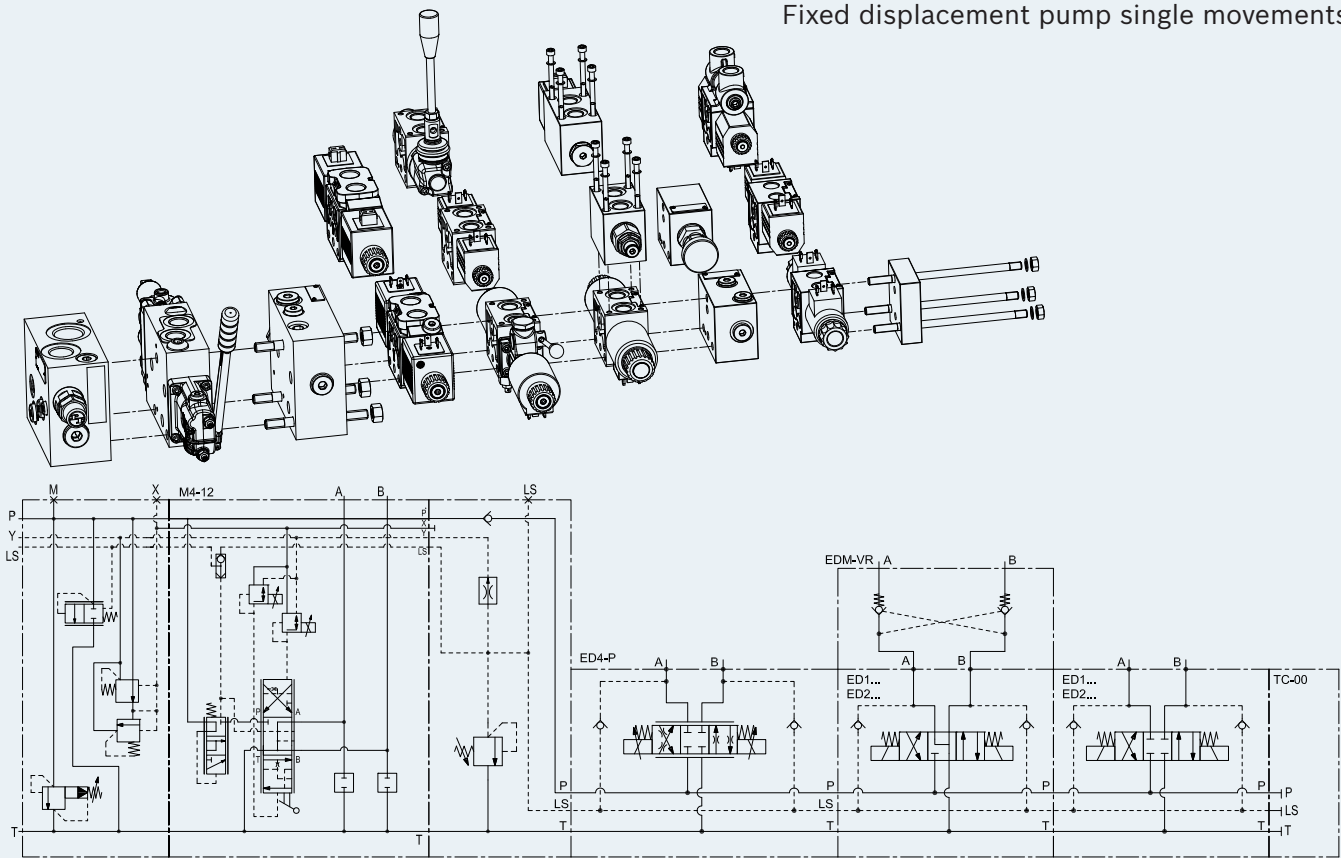
Variable displacement pump - simultaneous movements



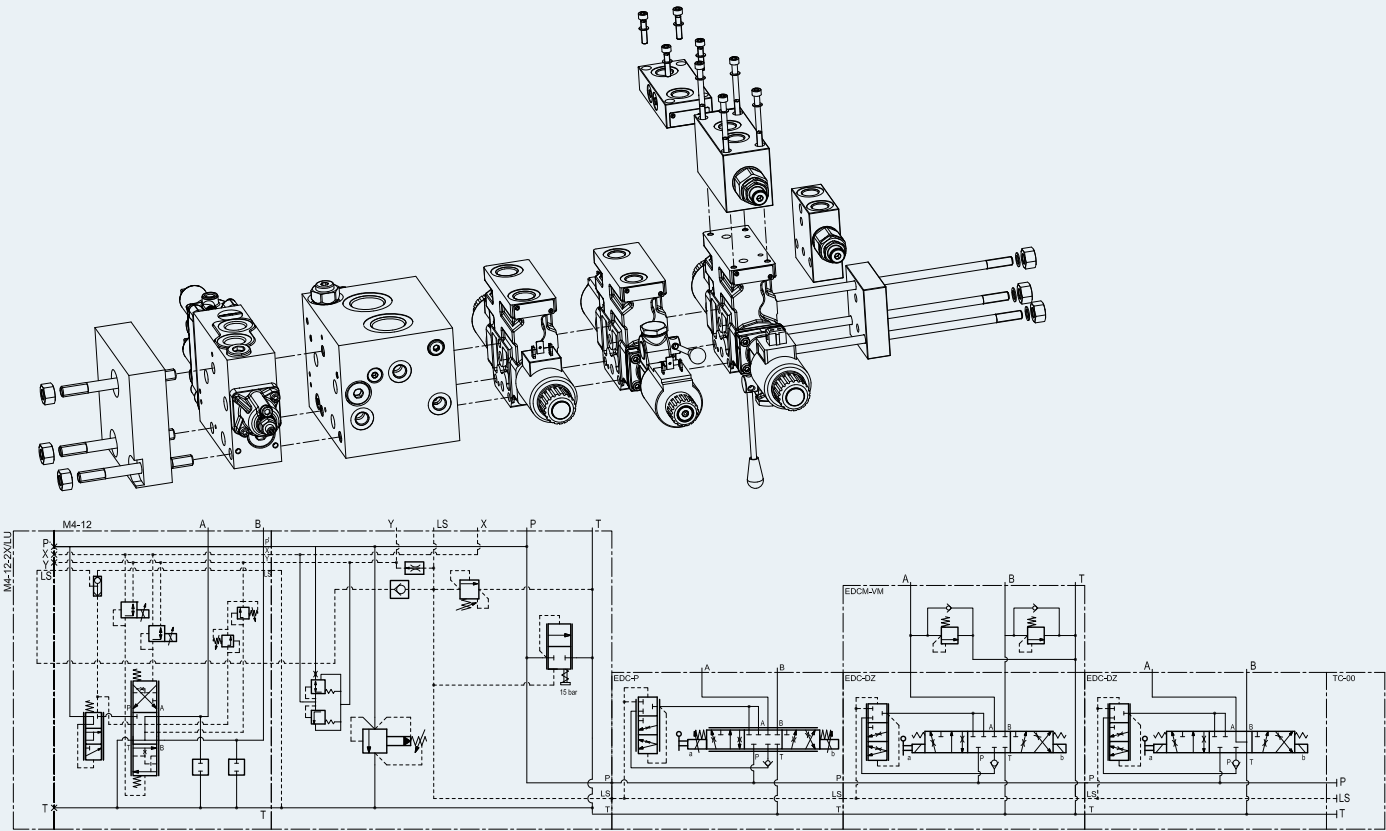
Suitable for:



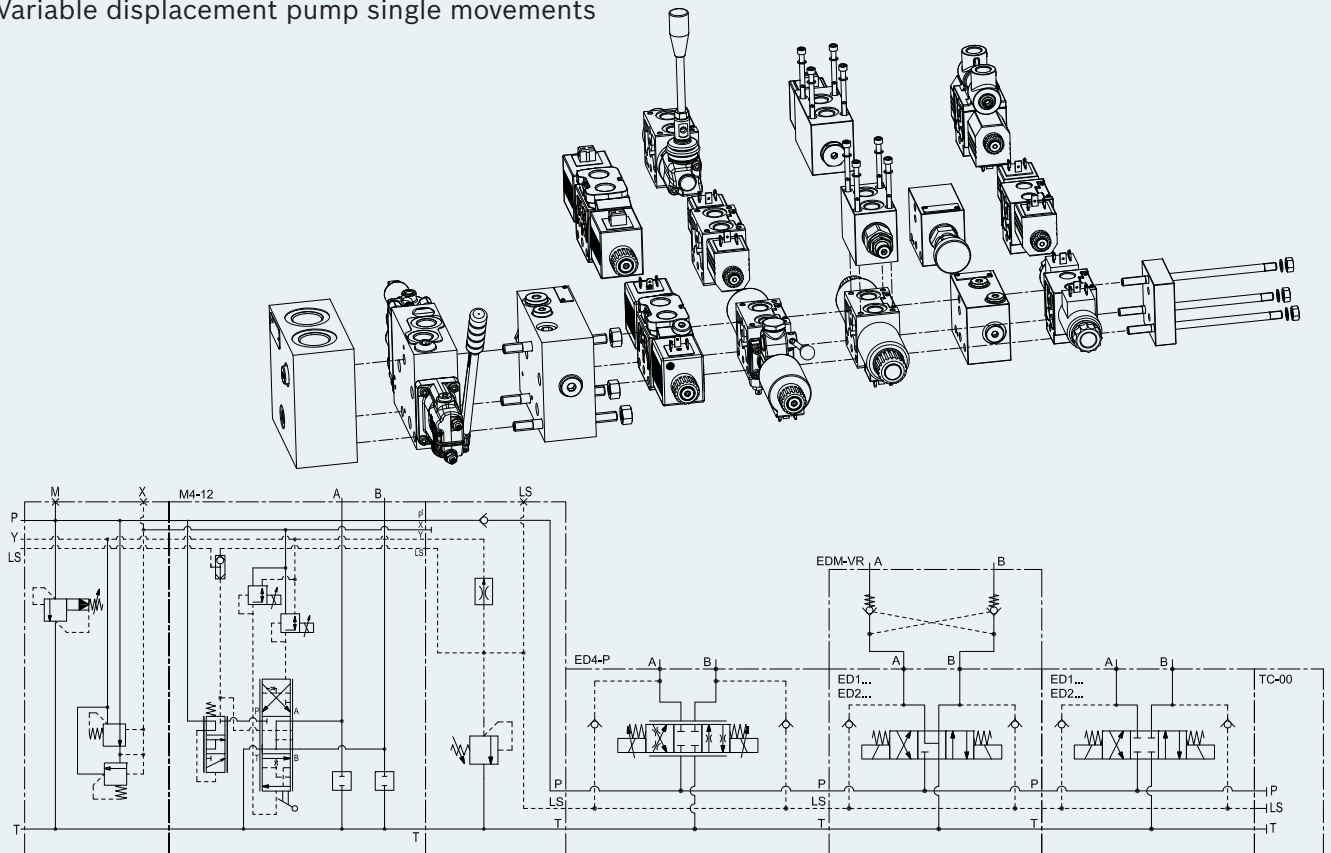
Fixed displacement pump single movements



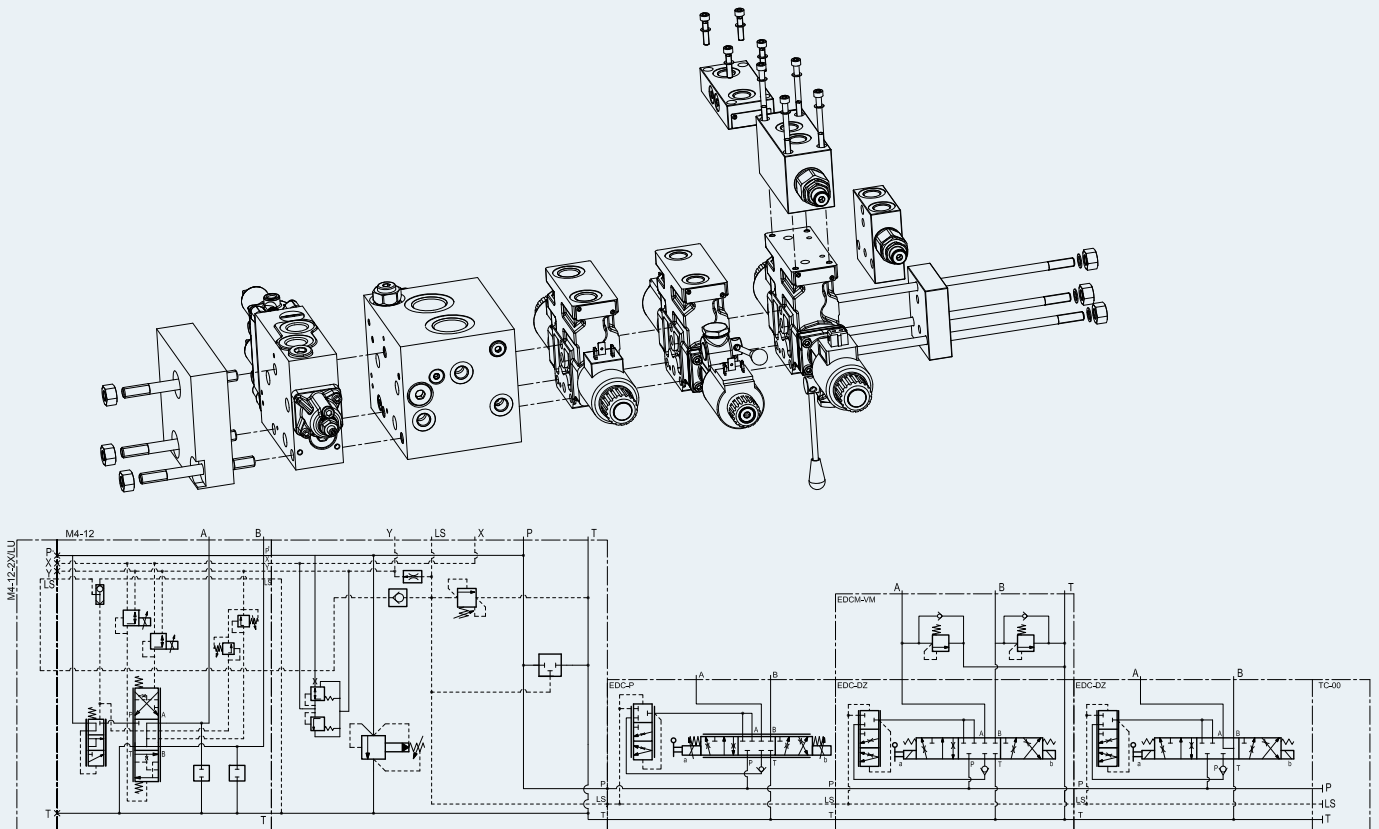
Fixed displacement pump simultaneous movements



Variable displacement pump single movements



Variable displacement pump simultaneous movements



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