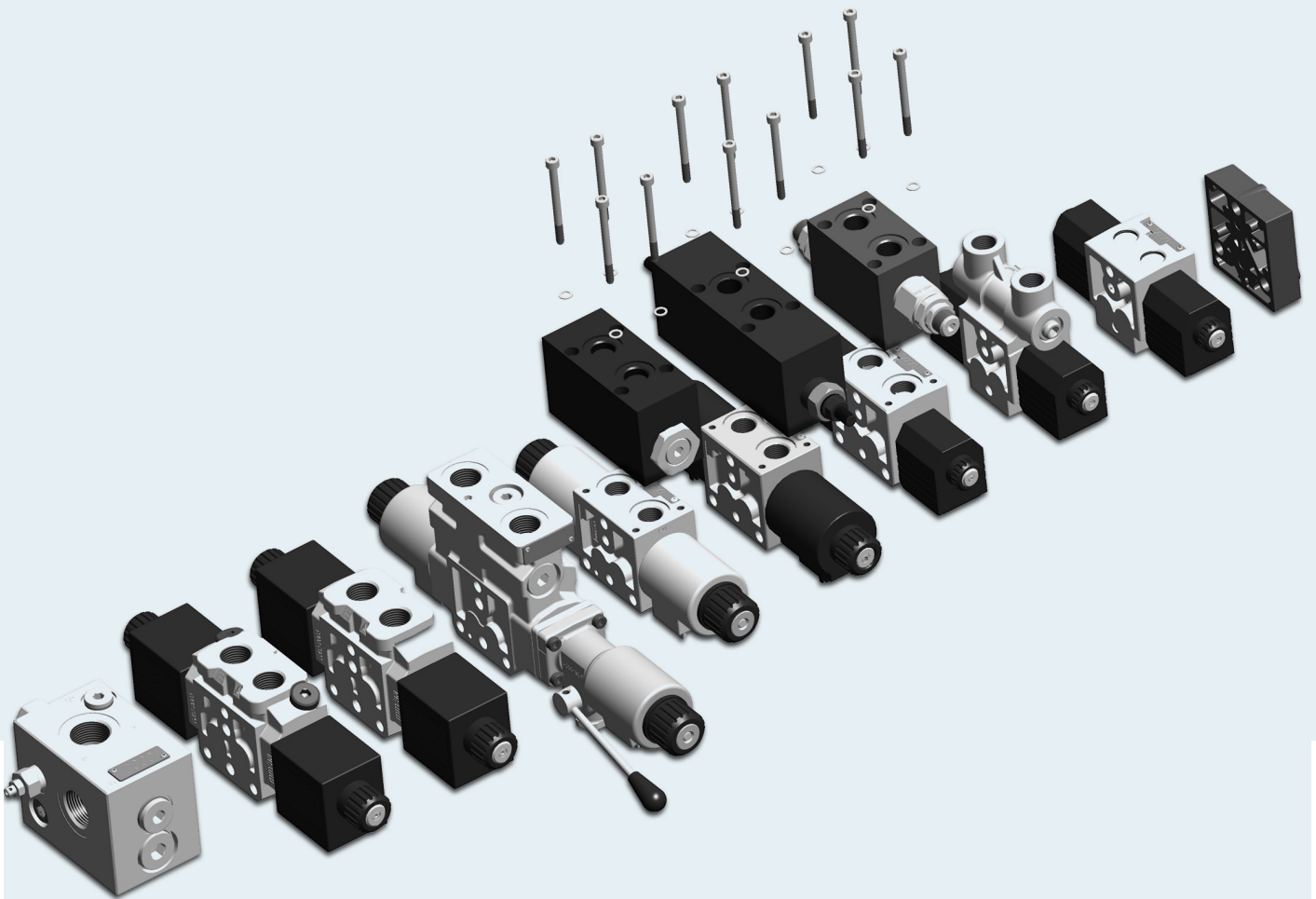


Modular Directional valves ED assembly



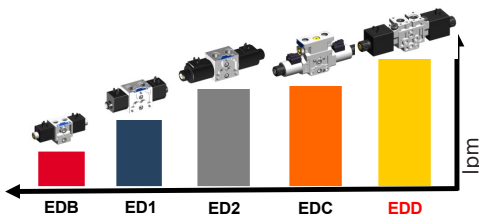


Bosch Rexroth Oil Control introduces the “Modular Directional Valve – ED assembly brochure”: released to simplify the modular system’s selection, depending on the target applications. The goal was to create a document (which doesn’t replace the product catalog) very simple to consult. Thanks to the complete 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.

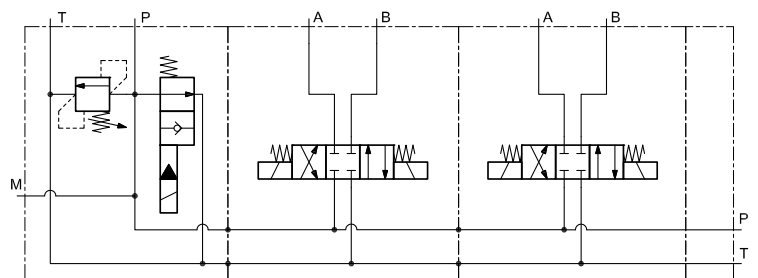
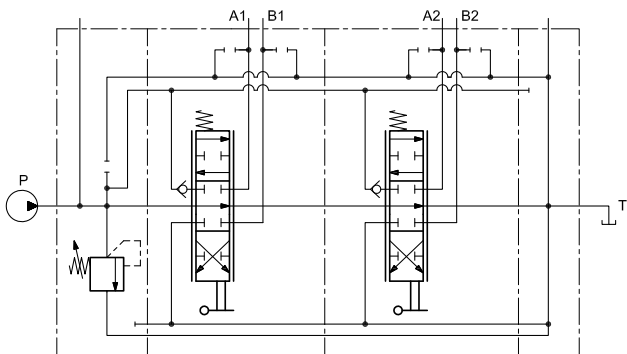
The ED assembly brochure helps the users in completing the configuration of modular elements for creating on-off and proportional solenoid operated hydraulic control blocks for actuators (motors or cylinders).

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”.

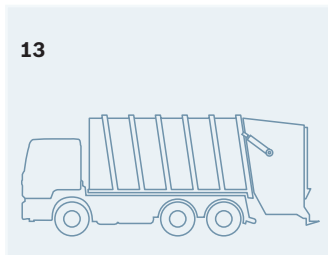
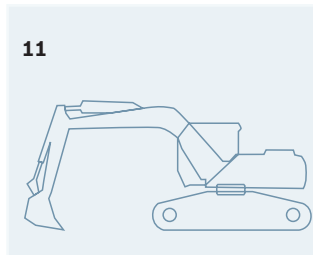
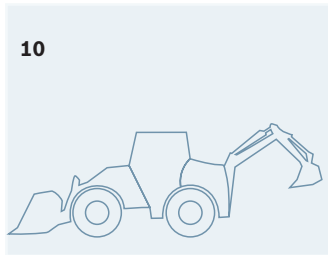
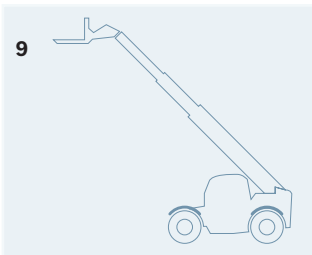
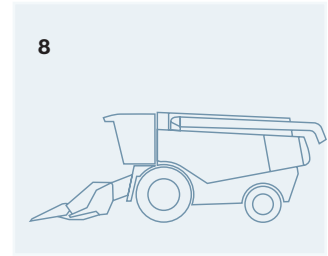
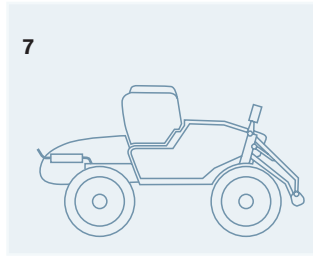
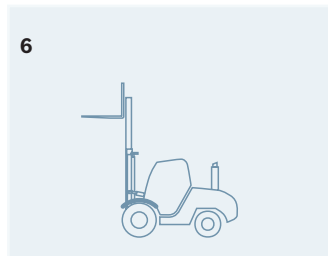
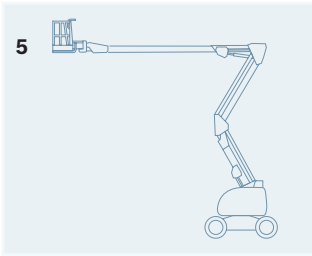
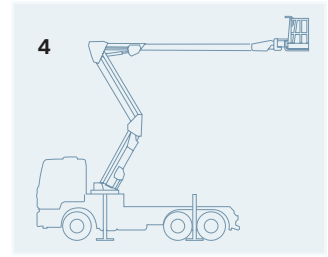
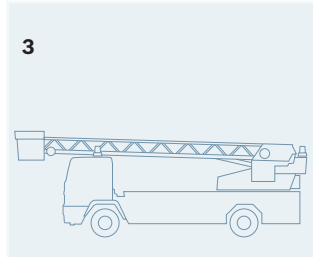
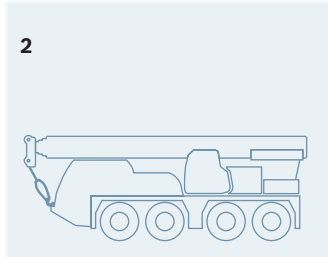
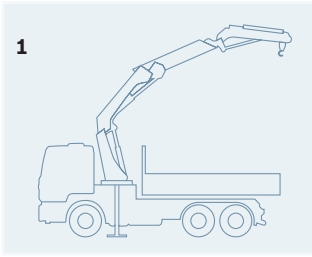


Picture 1



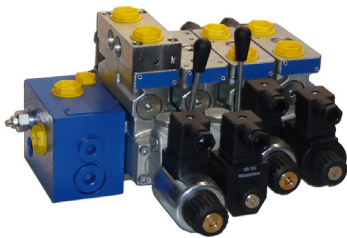
Picture 2

The pictures 1 and 2 show the main difference between ED modular system and a traditional 6 ways directional valve. In the traditional scheme (picture 1) pump is unloaded by the by-pass channel available in the 6 ways directional valve, while in ED concept a valve is used to bypass/dump the flow. The most popular valve used is a 2/2 electric valve, as shown in picture 2, or a logic element. Therefore the whole system is much more compact and a safer bypass system is applied.

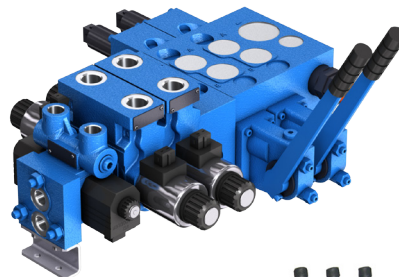


Applications

- ▶ 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**

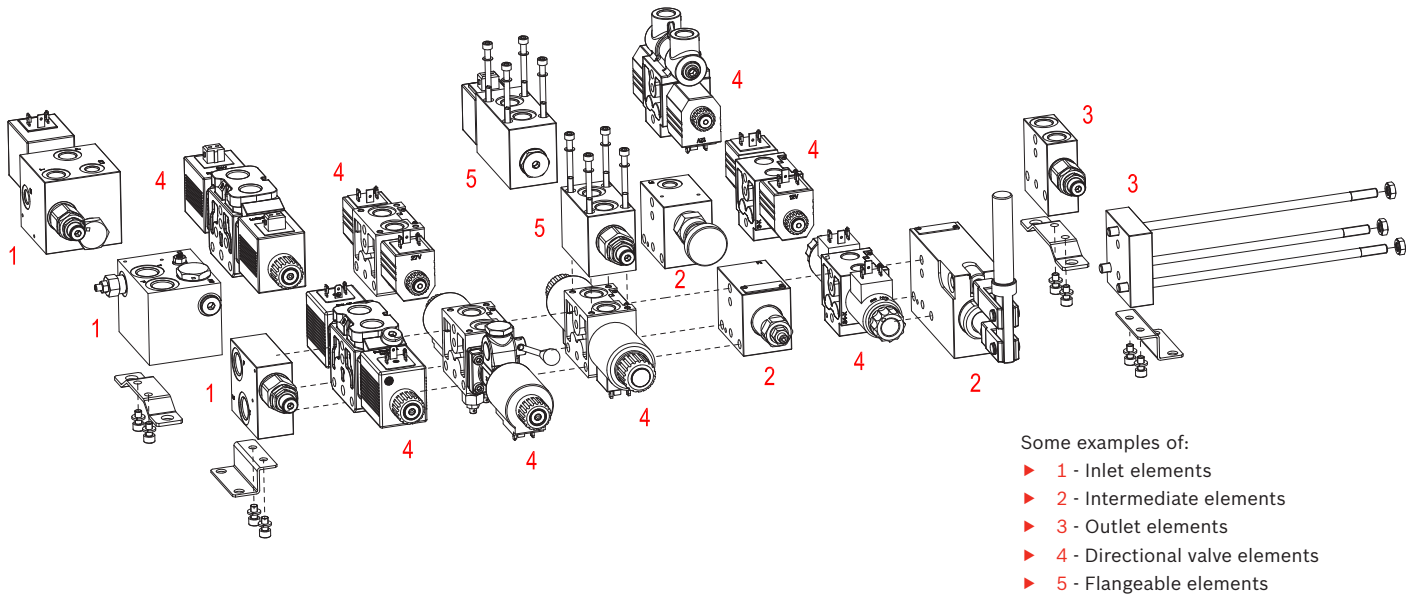


EDD slices assembly


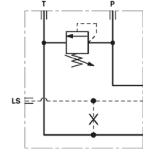

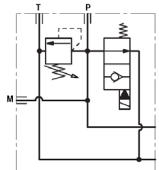
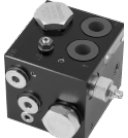
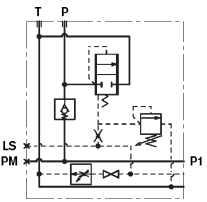

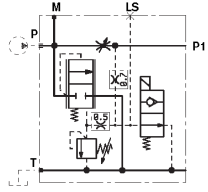

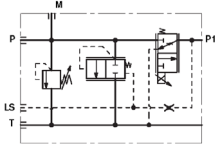

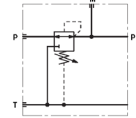

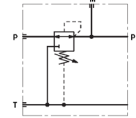


**Hybrid solution
M4 + EDC + ED slices assembly**

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


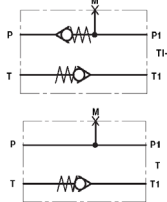



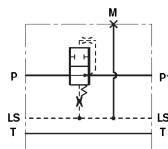
1 - Inlet elements


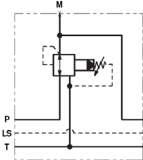
TE-04 (*)	Data sheet 18300-04	Technical Data
		Inlet element with primary pressure relief valve and with LS connection
		Max pressure 250 bar 3600 psi Max inlet flow 50 l/min 13 gpm Material Aluminum Port connections G 3/8-G1/2 SAE8
		TE-05 Data sheet 18300-05
		Inlet element with primary pressure relief 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
		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-07 Data sheet 18300-07
		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-10 Data sheet 18300-09
		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
TE-11 Data sheet 18300-10	TE-11 Data sheet 18300-10	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	Max pressure 250 bar 3600 psi Max inlet flow 50 l/min 13 gpm Material Aluminum Port connections G 3/8-G1/2 SAE8	Max pressure 250 bar 3600 psi Max inlet flow 50 l/min 13 gpm Material Aluminum Port connections G 3/8-G1/2 SAE8

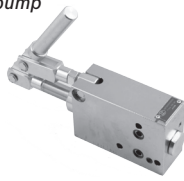
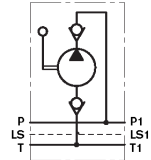
(*) External unloading must be applied. LS port must be plugged


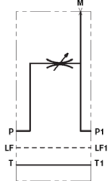
2 - Intermediate elements

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-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


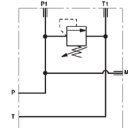
TI-03	Data sheet 18301-26	Technical Data
<i>Intermediate element with pressure reducer and relieving</i>		
		Max pressure 250 bar 3600 psi
		Max inlet flow 50 l/min 13 gpm
		Material Aluminum


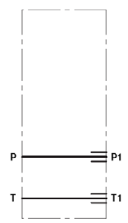
EPM-DE-18	Data sheet 18301-30	Technical Data
<i>Intermediate element with double acting hand pump</i>		
		Max resistance pressure 310 bar 4500 psi
		Max generated pressure 250 bar 3600 psi
		Total displacement 18 cc 1 in ³
		Opening displacement 8.5 cc 0.5 in ³
		Closing displacement 9.5 cc 0.6 in ³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

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

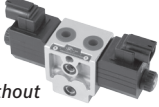
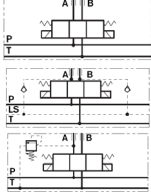
3 - Outlet elements

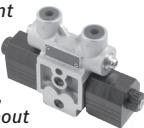
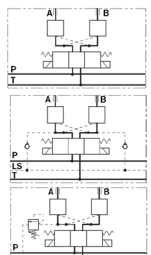
TC-00	Data sheet 18301-60	Technical Data
<i>End element basic</i>		
		Max pressure for aluminum version 250 bar 3600 psi
		Max pressure for cast iron version 310 bar 4500 psi

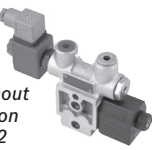
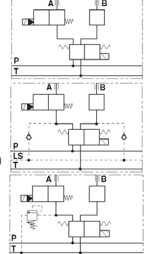
TC-04	Data sheet 18301-64	Technical Data
<i>Outlet element with pressure relief valve and with P, T and M ports for downstream operators</i>		
		Max pressure 250 bar 3600 psi
		Max flow in P and T 35 l/min 9 gpm
		Material Aluminum
		Port connections G 3/8

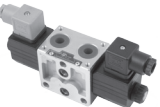
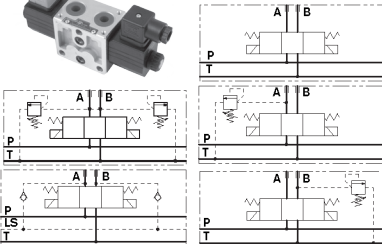
TC-03	Data sheet 18301-63	Technical Data
<i>Outlet element with additional inlet port P1 and tank port T1</i>		
		Max pressure for aluminum version 250 bar 3600 psi
		Max pressure for cast iron version 310 bar 4500 psi
		Max flow in P and T 50 l/min 13 gpm
		Port connections G 3/8-G1/2


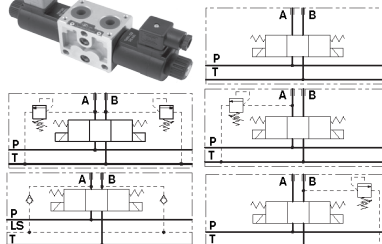
4 - Directional valve elements - On-Off


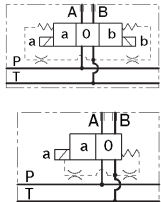
EDBZ	Data sheet 18300-52	Technical Data
 <p>4/3-4/2 directional valve element with or without secondary relief valve and with or without LS connection</p>		Size 4
		Max operating pressure 310 bar 4500 psi
		Max flow 25 l/min 7 gpm
		Port connections G 3/8 SAE6 M16x1.5
Electrical connection EN 175301-803,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


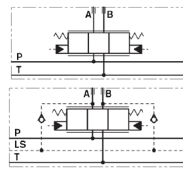
EDBZ-VR	Data sheet 18300-53	Technical Data
 <p>4/3 directional valve element with or without secondary relief valves, with or without LS connection, and PO check valves</p>		Size 4
		Max operating pressure 250 bar 3600 psi
		Max flow 20 l/min 5 gpm
		Port connections G 3/8 SAE6 M16x1.5
Electrical connection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


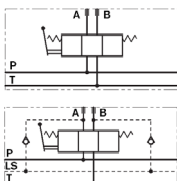
EDBZ-VEI	Data sheet 18300-54	Technical Data
 <p>4/2 directional valve element with or without secondary relief valve, with or without LS connection and with 2/2 solenoid cartridge valve</p>		Size 4
		Max operating pressure 310 bar 4500 psi
		Max flow 25 l/min 7 gpm
		Port connections G 3/8 SAE6 M16x1.5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

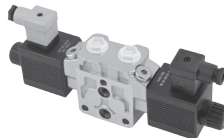
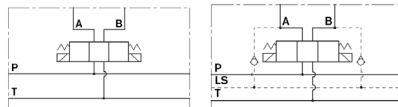
ED1-Z	Data sheet 18301-01	Technical Data
 <p>4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection</p>		Size 6
		Max operating pressure 310 bar 4500 psi
		Max flow 30 l/min 8 gpm
		Port connections G 3/8 SAE6
Electrical connection EN 175301-803, AMJ,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

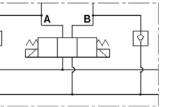
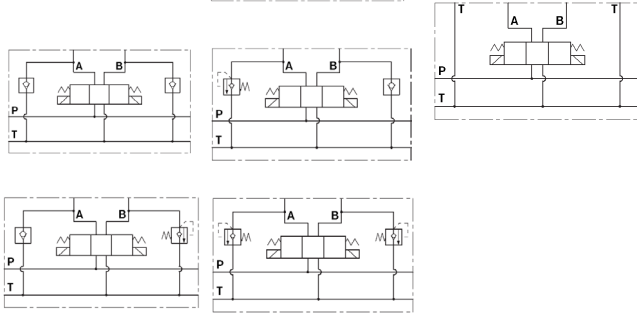
ED2-DZ	Data sheet 18301-02	Technical Data
 <p>4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection</p>		Size 6
		Max operating pressure 310 bar 4500 psi
		Max flow 50 l/min 13 gpm
		Port connections G 3/8-SAE6 G 1/2-SAE8
Electrical connection EN 175301-803,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

ED2S-DZ	Data sheet 18301-03	Technical Data
 <p>4/3-4/2 directional valve element with soft-shift</p>		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
 <p>4/3 directional valve element with proportional hydraulic control and with or without LS connection</p>		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
 <p>4/3 directional valve elements with manual lever operated control and with or without LS connections</p>		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
 <p>4/3-4/2 directional valve elements with or without secondary relief valves, and with or without LS connections</p>		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		

ED2S-DZ	Data sheet 18301-03	Technical Data
 <p>4/3-4/2 directional valve element with soft-shift</p>		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-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-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-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

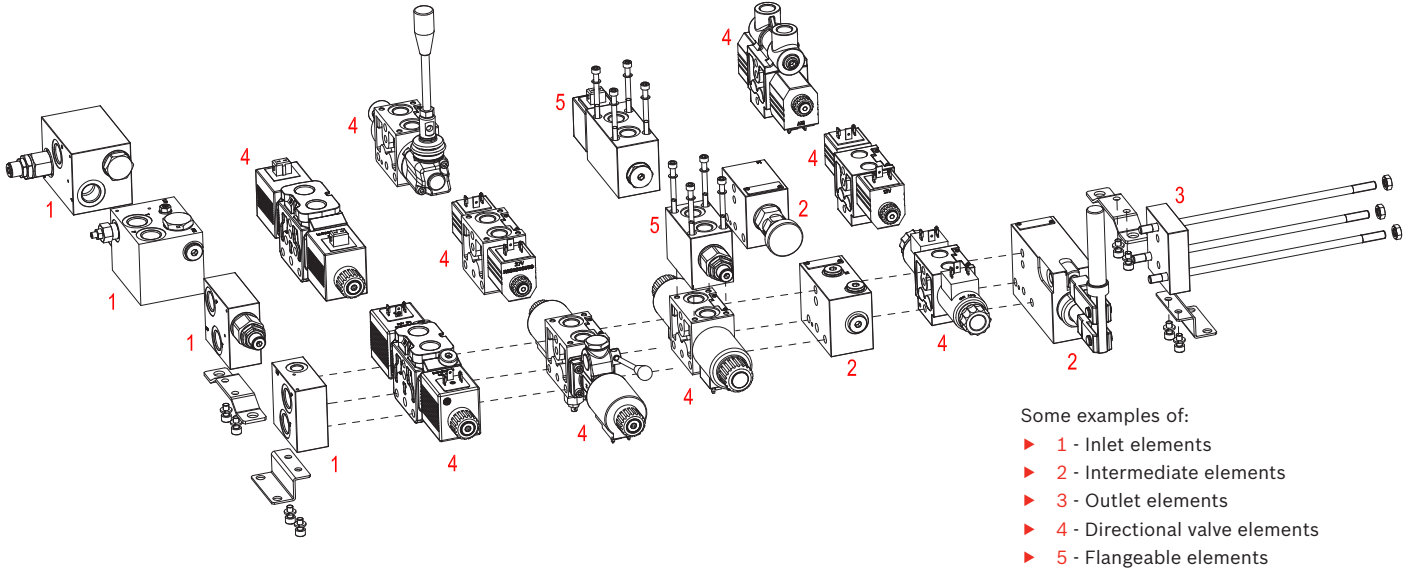
EDM-VM	Data sheet 18301-41	Technical Data	
Flangeable element with single or double secondary pressure relief valve		Size	6
		Max pressure	250 bar 3600 psi
		Max flow	50 l/min 13 gpm
		Port connections	G 3/8
		Material	Aluminum

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

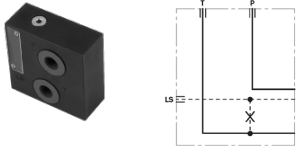
EDM-VB	Data sheet 18301-43	Technical Data	
Flangeable element with cross piloted counterbalance valves		Size	6
		Max pressure	250 bar 3600 psi
		Max flow	40 l/min 11 gpm
		Port connections	G 3/8-SAE6
		Material	Aluminum

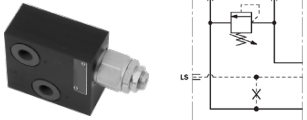
EDM-VEI	Data sheet 18301-44	Technical Data	
Flangeable element with 2/2 solenoid cartridge valves		Size	6
		Max pressure	250 bar 3600 psi
		Max flow	40 l/min 11 gpm
		Port connections	G 3/8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

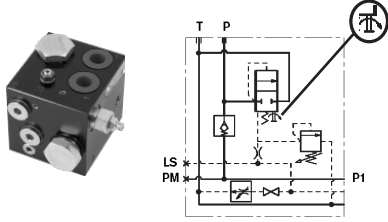
Variable displacement pump - single movements (On-Off / Proportional)




1 - Inlet elements

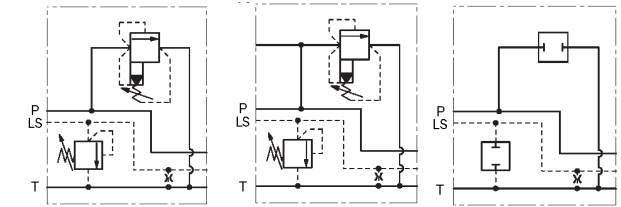
TE-03	Data sheet 18300-03	Technical Data	
<i>Inlet element with LS connection</i>		Max pressure for aluminum version	250 bar 3600 psi
		Max pressure for cast iron version	310 bar 4500 psi
		Max inlet flow	50 l/min 13 gpm
		Port connections	G 3/8-G1/2 SAE8

TE-04	Data sheet 18300-04	Technical Data	
<i>Inlet element with primary pressure relief valve and with LS connection</i>		Max pressure	250 bar 3600 psi
		Max inlet flow	50 l/min 13 gpm
		Port connections	G 3/8-G1/2 SAE8
		Material	Aluminum


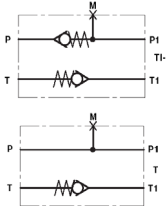
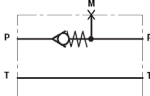
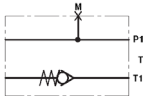
TE-06 (*)	Data sheet 18300-06	Technical Data	
<i>Inlet element with limitation of primary pressure in the system and LS controlled unloading of excess flow</i>		Max pressure	250 bar 3600 psi
		Max inlet flow	up to 90 l/min 24 gpm
		Rated flow at P1	40 l/min 11 gpm
		Max rated flow through LS drain	0,7 l/min 0,2 gpm
		Material	Aluminum
		Port connections	G 3/8-G1/2


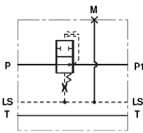
(*) Version with mechanical blocking only


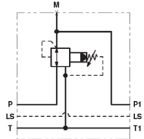
TE-16	Data sheet 18300-14	Technical Data	
<i>Inlet element with LS connection and double pressure relief valve (P and LS line)</i>		Max pressure	310 bar 4500 psi
		Max inlet flow	120 l/min 32 gpm
		Material	Cast iron
		Port connections	G1/2-G3/4- SAE10


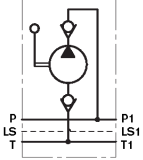



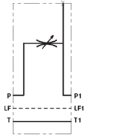
2 - Intermediate elements

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


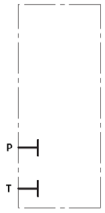
TI-C2	Data sheet 18301-28	Technical Data	
<i>Intermediate element with 2 way compensator, and with LS connection</i>			
		Max pressure	310 bar 4500 psi
		Max inlet flow	30 l/min 8 gpm
		Material	Cast iron


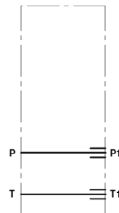
TI-03	Data sheet 18301-26	Technical Data	
<i>Intermediate element with pressure reducer and relieving</i>			
		Max pressure	250 bar 3600 psi
		Max inlet flow	50 l/min 13 gpm
		Material	Aluminum

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

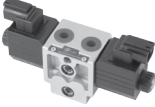
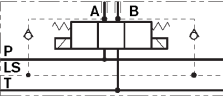
TI-04	Data sheet 18301-27	Technical Data	
<i>Intermediate element with flow regulator on P line</i>			
		Max pressure	250 bar 3600 psi
		Max inlet flow	50 l/min 13 gpm
		Material	Aluminum

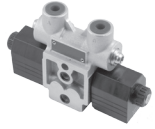
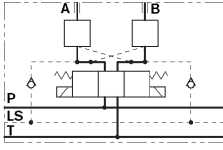
3 - Outlet elements

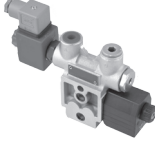
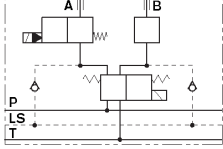
TC-00	Data sheet 18301-60	Technical Data	
<i>End element basic</i>			
		Max pressure for aluminum version	250 bar 3600 psi
		Max pressure for cast iron version	310 bar 4500 psi


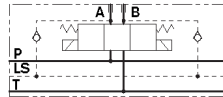
TC-03	Data sheet 18301-63	Technical Data	
<i>Outlet element with additional inlet port P1 and tank port T1</i>			
		Max pressure for aluminum version	250 bar 3600 psi
		Max pressure for cast iron version	310 bar 4500 psi
		Max flow in P and T	50 l/min 13 gpm
		Port connections	G 3/8-G1/2


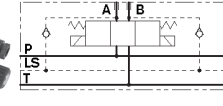
4 - Directional valve elements - On-Off


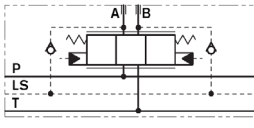
EDBZ	Data sheet 18300-52	Technical Data
<i>4/3-4/2 directional valve element with or without secondary relief valve and with or without LS connection</i>		
		Size 4
		Max operating pressure 310 bar / 4500 psi
		Max flow 25 l/min / 7 gpm
		Port connections G 3/8 SAE6 / M16x1.5
		Electrical connection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


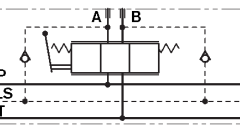
EDBZ-VR	Data sheet 18300-53	Technical Data
<i>4/3 directional valve element with or without secondary relief valves, with or without LS connection, and PO check valves</i>		
		Size 4
		Max operating pressure 250 bar / 3600 psi
		Max flow 20 l/min / 5 gpm
		Port connections G 3/8 SAE6 / M16x1.5
		Electrical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

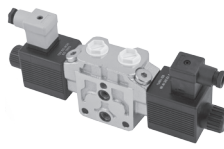
EDBZ-VEI	Data sheet 18300-54	Technical Data
<i>4/2 directional valve element with or without secondary relief valve, with or without LS connection and with 2/2 solenoid cartridge valve</i>		
		Size 4
		Max operating pressure 310 bar / 4500 psi
		Max flow 25 l/min / 7 gpm
		Port connections G 3/8 SAE6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

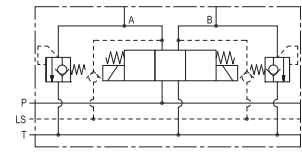
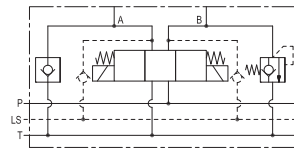
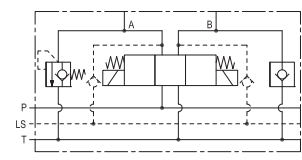
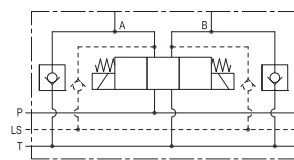
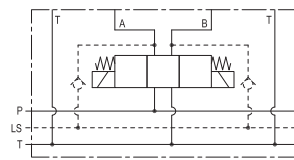
ED1-Z	Data sheet 18301-01	Technical Data
<i>4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection</i>		
		Size 6
		Max operating pressure 310 bar / 4500 psi
		Max flow 30 l/min / 8 gpm
		Port connections G 3/8 SAE6
		Electrical connection EN 175301-803,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

ED2-DZ	Data sheet 18301-02	Technical Data
<i>4/3-4/2 directional valve element with or without secondary relief valves, with or without LS connection</i>		
		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

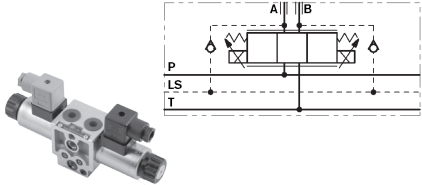
ED-IP	Data sheet 18301-07	Technical Data
<i>4/3 directional valve element with proportional hydraulic control and with or without LS connection</i>		
		Size 6
		Max operating pressure 310 bar / 4500 psi
		Max flow 45 l/min / 12 gpm
		Port connections G 3/8-SAE6 / G 1/2-SAE8

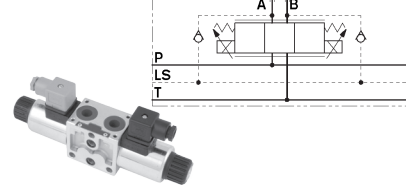
ED-LV	Data sheet 18301-08	Technical Data
<i>4/3 directional valve elements with manual lever operated control and with or without LS connections</i>		
		Size 6
		Series 00
		Max operating pressure 310 bar / 4500 psi
		Max flow 60 l/min / 16 gpm
		Port connections G 3/8-SAE8

EDD-XZ	Data sheet 18301-12	Technical Data
<i>4/3-4/2 directional valve elements with or without secondary relief valves, and with or without LS connections</i>		
		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

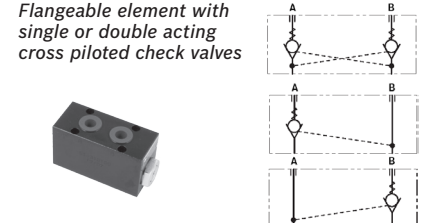


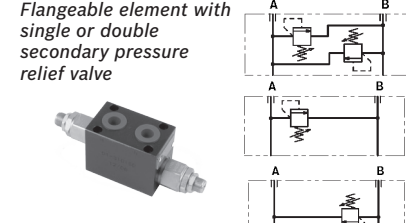
4 - Directional valve elements - Proportional

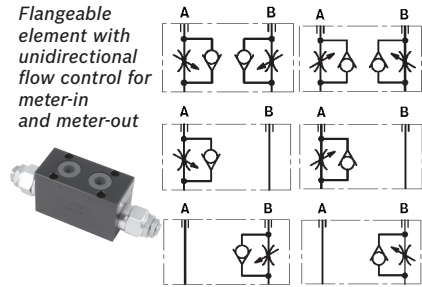
EDB-P	Data sheet 18300-55	Technical Data	
4/3-4/2 directional valve element with proportional control and with or without LS connection 		Size	4
		Max operating pressure	310 bar 4500 psi
		Max flow	17 l/min 5 gpm
		Port connections	G 3/8 SAE6 M16x1.5
		Electrical connection	EN 175301-803, AMJ

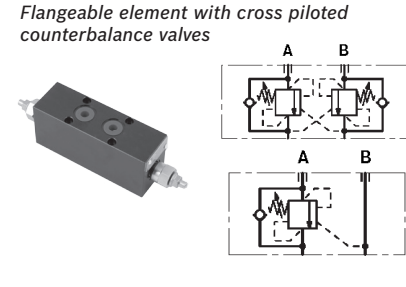
ED4-P	Data sheet 18301-06	Technical Data	
4/3-4/2 directional valve element with proportional control and with or without LS connection 		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	30 l/min 8 gpm
		Port connections	G 3/8- SAE6 G 1/2- SAE8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

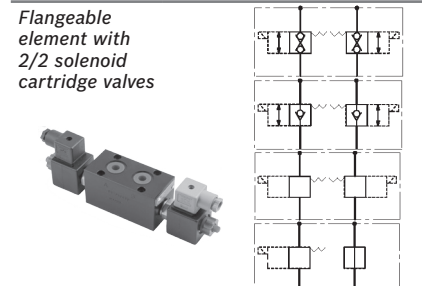
5 - Flangeable elements

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

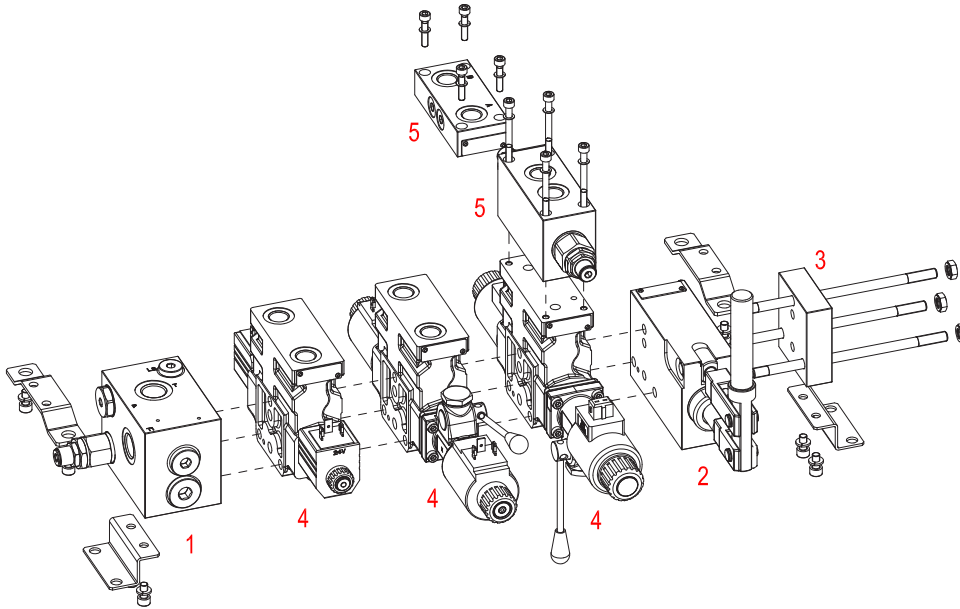
EDM-VM	Data sheet 18301-41	Technical Data	
Flangeable element with single or double secondary pressure relief valve 		Size	6
		Max pressure	250 bar 3600 psi
		Max flow	50 l/min 13 gpm
		Port connections	G 3/8
		Material	Aluminum

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


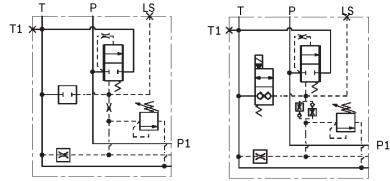
EDM-VEI	Data sheet 18301-44	Technical Data	
Flangeable element with 2/2 solenoid cartridge valves 		Size	6
		Max pressure	250 bar 3600 psi
		Max flow	40 l/min 11 gpm
		Port connections	G 3/8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

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


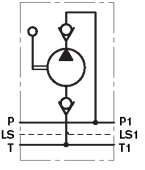


- Some examples of:
- ▶ 1 - Inlet elements
 - ▶ 2 - Intermediate elements
 - ▶ 3 - Outlet elements
 - ▶ 4 - Directional valve elements
 - ▶ 5 - Flangeable elements


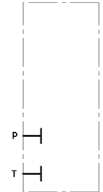
1 - Inlet elements


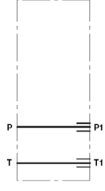
TE-13	Data sheet 18300-13	Technical Data
<p><i>Inlet element with by-pass compensator, LS relief for open center control block and solenoid operated unloading</i></p> 		<p>Max pressure 310 bar 4500 psi</p>
		<p>Max inlet flow up to 120 l/min 32 gpm</p>
		<p>Port connections G 1/2-G3/4 SAE 10</p>
		<p>Material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

2 - Intermediate elements

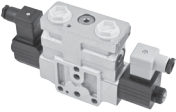
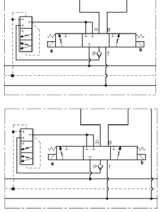
EPM-DE-18	Data sheet 18301-30	Technical Data
<p><i>Intermediate element with double acting hand pump</i></p> 		<p>Max resistance pressure 310 bar 4500 psi</p>
		<p>Max generated pressure 250 bar 3600 psi</p>
		<p>Total displacement 18 cc 1 in³</p>
		<p>Opening displacement 8.5 cc 0.5 in³</p>
		<p>Closing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

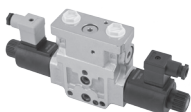
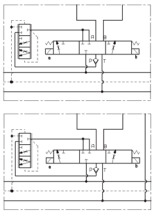
3 - Outlet elements

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

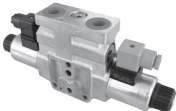
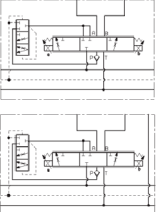
TC-03	Data sheet 18301-63	Technical Data
<p><i>Outlet element with additional inlet port P1 and tank port T1</i></p> 		<p>Max pressure for aluminum version 250 bar 3600 psi</p>
		<p>Max pressure for cast iron version 310 bar 4500 psi</p>
		<p>Max flow in P and T 50 l/min 13 gpm</p>
		<p>Port connections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

4 - Directional valve elements - On-Off

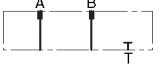
EDC-Z	Data sheet 18301-10	Technical Data	
<i>4/3-4/2 on-off directional valve element with flow sharing control (LUDV concept)</i> PATENT PROTECTED			
		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	up to 26 l/min 7 gpm
		Port connections	G 3/8 SAE8
		Electrical connection	EN 175301-803,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

EDC-DZ	Data sheet 18301-11	Technical Data	
<i>4/3-4/2 on-off directional valve element with flow sharing control (LUDV concept)</i>			
		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


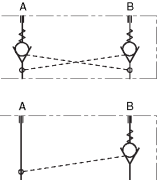
4 - Directional valve elements Proportional

EDC-P	Data sheet 18301-09	Technical Data	
<i>4/3-4/2 proportional directional valve element with flow sharing control (LUDV concept)</i> PATENT PROTECTED			
		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


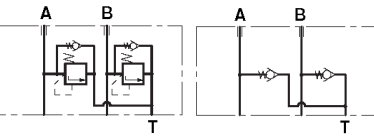
5 - Flangeable elements


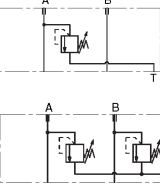
EDCMF	Data sheet 18301-48	Technical Data	
<i>Flangeable elements with different type of ports</i>			
		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	60 l/min 16 gpm
		Port connections	G 3/8-G1/2- M18x1.5 M22x1.5 JIS SAE8-SAE10
		Material	Cast iron

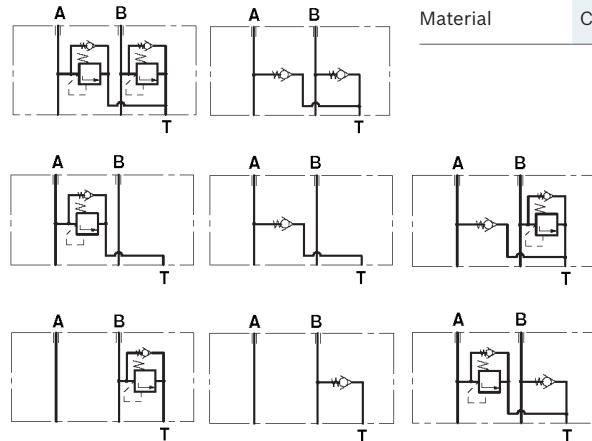
5 - Flangeable elements

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

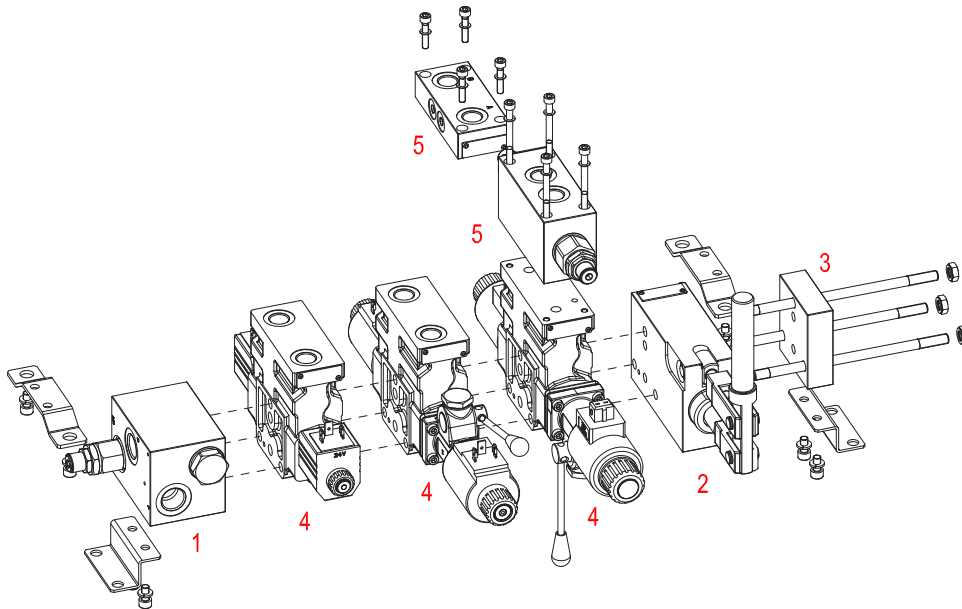
5 - Flangeable elements

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

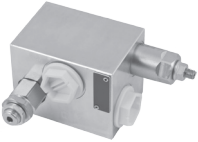
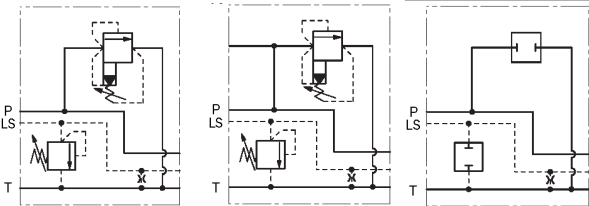


Variable displacement pump - simultaneous movements (On-Off / Proportional)


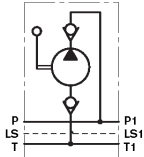


- Some examples of:
- ▶ 1 - Inlet elements
 - ▶ 2 - Intermediate elements
 - ▶ 3 - Outlet elements
 - ▶ 4 - Directional valve elements
 - ▶ 5 - Flangeable elements


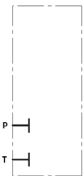
1 - Inlet elements


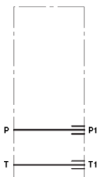
TE-16	Data sheet 18300-14	Technical Data								
<i>Inlet element with LS connection and double pressure relief valve (P and LS line)</i>		<table border="1"> <tr> <td>Max pressure</td> <td>310 bar 4500 psi</td> </tr> <tr> <td>Max inlet flow</td> <td>120 l/min 32 gpm</td> </tr> <tr> <td>Material</td> <td>Cast iron</td> </tr> <tr> <td>Port connections</td> <td>G1/2-G3/4- SAE10</td> </tr> </table>	Max pressure	310 bar 4500 psi	Max inlet flow	120 l/min 32 gpm	Material	Cast iron	Port connections	G1/2-G3/4- SAE10
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

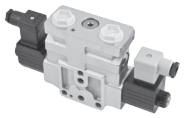
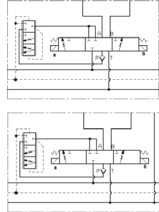
EPM-DE-18	Data sheet 18301-30	Technical Data												
<i>Intermediate element with double acting hand pump</i>		<table border="1"> <tr> <td>Max resistance pressure</td> <td>310 bar 4500 psi</td> </tr> <tr> <td>Max generated pressure</td> <td>250 bar 3600 psi</td> </tr> <tr> <td>Total displacement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

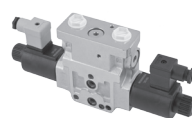
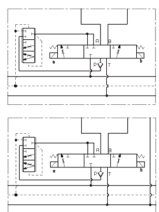
3 - Outlet elements

TC-00	Data sheet 18301-60	Technical Data				
<i>End element basic</i>		<table border="1"> <tr> <td>Max pressure for aluminum vers.</td> <td>250 bar 3600 psi</td> </tr> <tr> <td>Max pressure for cast iron vers.</td> <td>310 bar 4500 psi</td> </tr> </table>	Max pressure for aluminum vers.	250 bar 3600 psi	Max pressure for cast iron vers.	310 bar 4500 psi
Max pressure for aluminum vers.	250 bar 3600 psi					
Max pressure for cast iron vers.	310 bar 4500 psi					
						
						

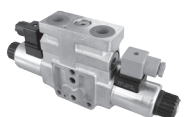
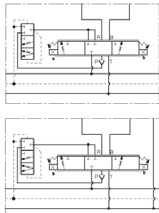
TC-03	Data sheet 18301-63	Technical Data								
<i>Outlet element with additional inlet port P1 and tank port T1</i>		<table border="1"> <tr> <td>Max pressure for aluminum vers.</td> <td>250 bar 3600 psi</td> </tr> <tr> <td>Max pressure for cast iron vers.</td> <td>310 bar 4500 psi</td> </tr> <tr> <td>Max flow in P and T</td> <td>50 l/min 13 gpm</td> </tr> <tr> <td>Port connections</td> <td>G 3/8-G1/2</td> </tr> </table>	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
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									
										
										

4 - Directional valve elements - On-Off

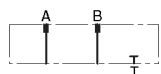
EDC-Z	Data sheet 18301-10	Technical Data	
4/3-4/2 on-off directional valve element with flow sharing control (LUDV concept) PATENT PROTECTED		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	up to 26 l/min 7 gpm
		Port connections	G 3/8 SAE8
		Electrical connection	EN 175301-803, AMJ, DT04-2P

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


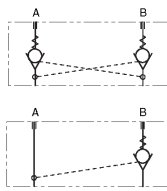
4 - Directional valve elements Proportional

EDC-P	Data sheet 18301-09	Technical Data	
4/3-4/2 proportional directional valve element with flow sharing control (LUDV concept) PATENT PROTECTED		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


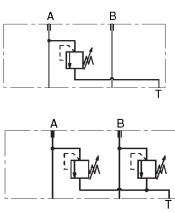
EDCMF	Data sheet 18301-48	Technical Data	
Flangeable elements with different type of ports		Size	6
		Max operating pressure	310 bar 4500 psi
		Max flow	60 l/min 16 gpm
		Port connections	G 3/8-G1/2- M18x1.5 M22x1.5 JIS SAE8-SAE10
		Material	Cast iron

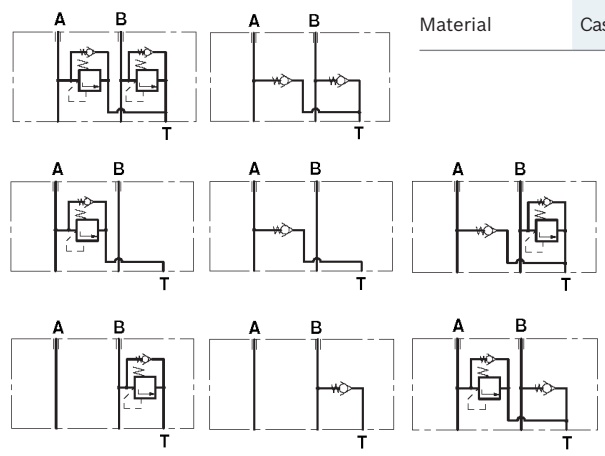
5 - Flangeable elements

EDCM/EDCMF-VR	Data sheet 18301-46	Technical Data	
Flangeable element with single or double acting cross piloted check valves		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

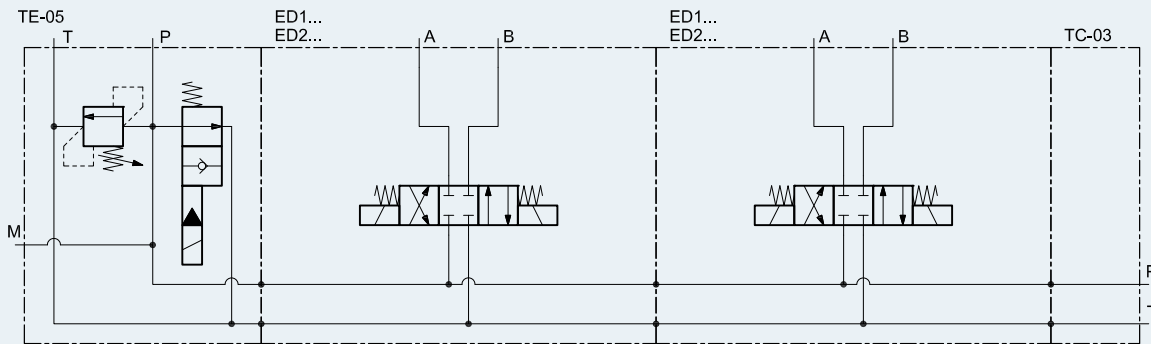
5 - Flangeable elements


EDCM/EDCMF-VM	Data sheet 18301-45	Technical Data	
Flangeable element with single or double secondary pressure relief valves and anti-cavitation function		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	
Flangeable element with single or double secondary pressure relief valves		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

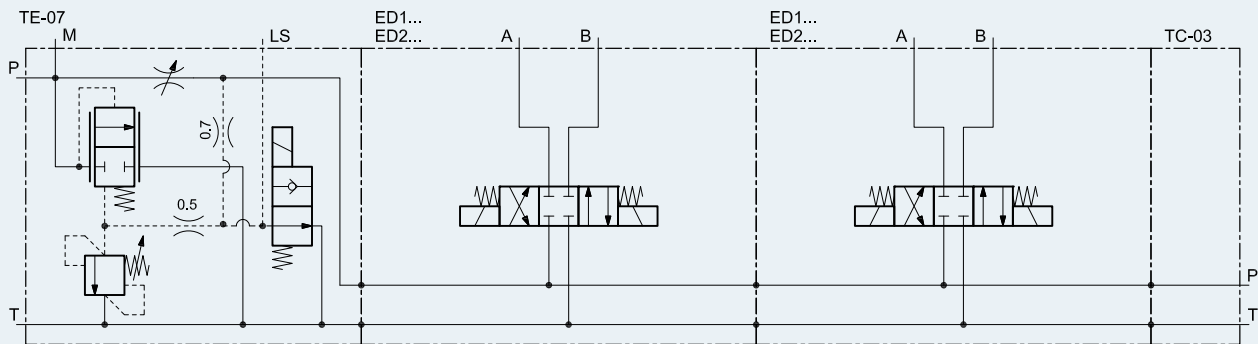


Fixed displacement pump - single movements



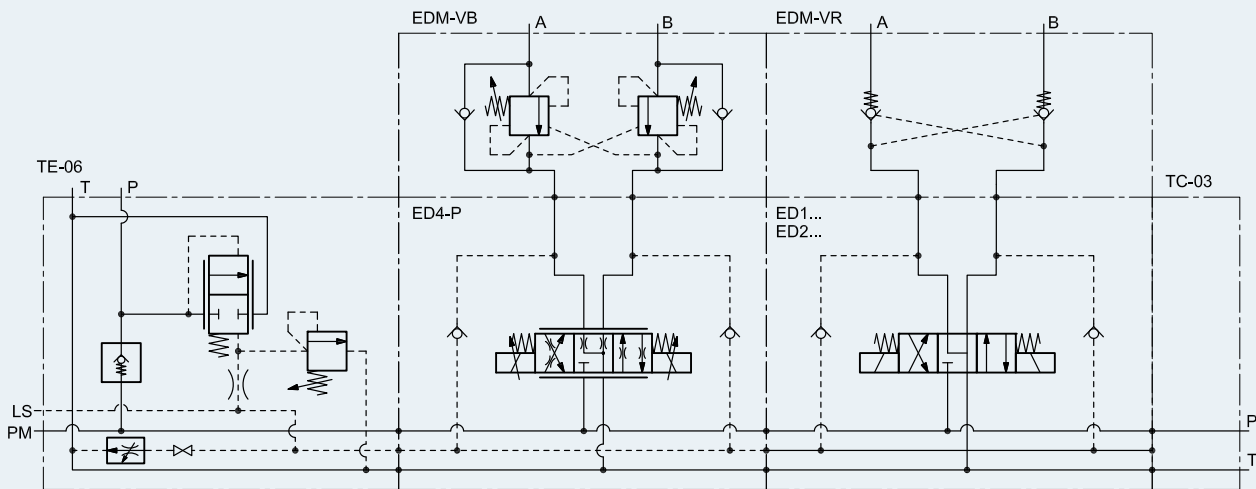
Suitable for: 

Fixed displacement pump (high flow) - single movements



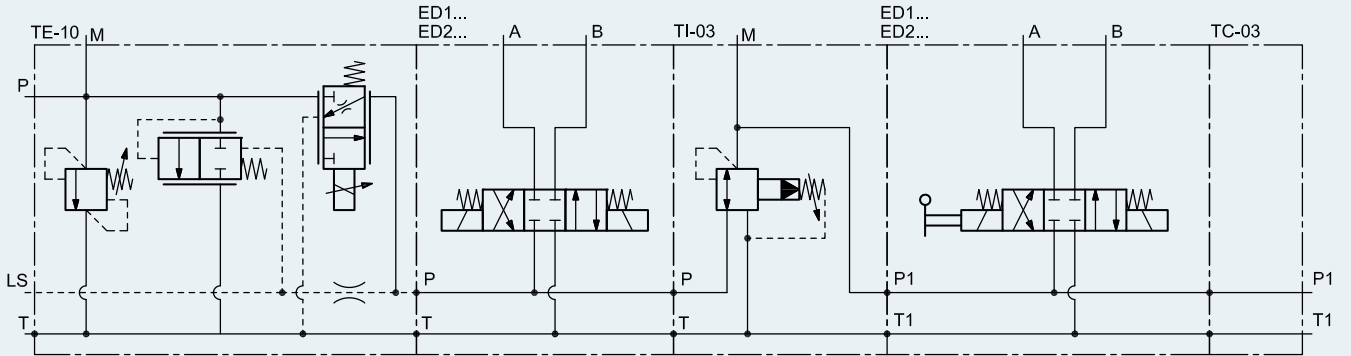
Suitable for: 

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



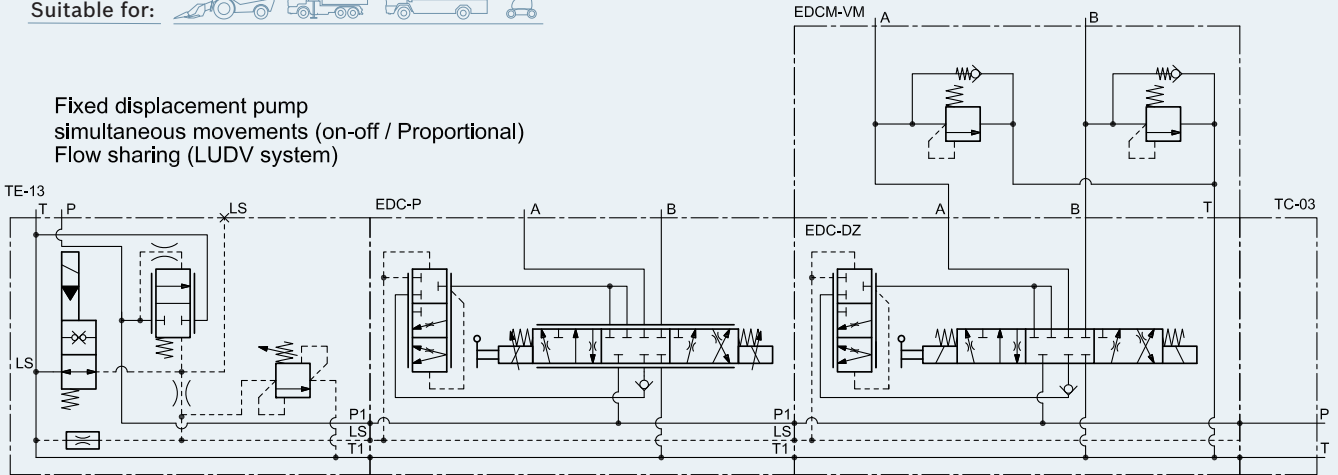
Suitable for: 


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



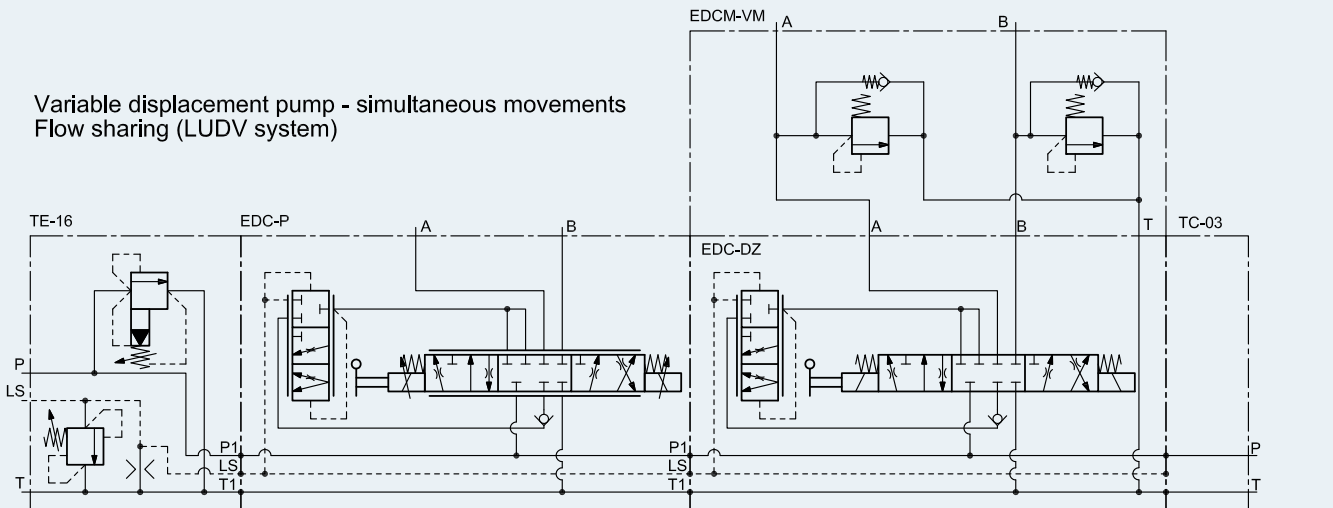
Suitable for: 

Fixed displacement pump simultaneous movements (on-off / Proportional) Flow sharing (LUDV system)



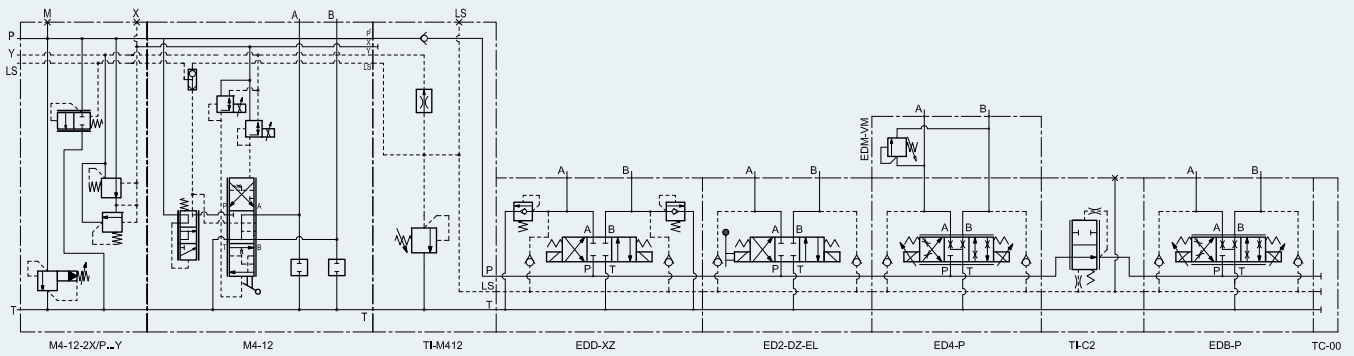
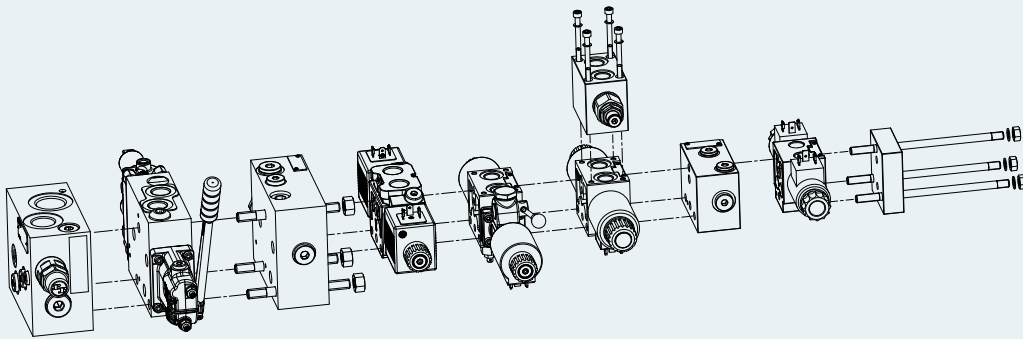
Suitable for: 

Variable displacement pump - simultaneous movements Flow sharing (LUDV system)

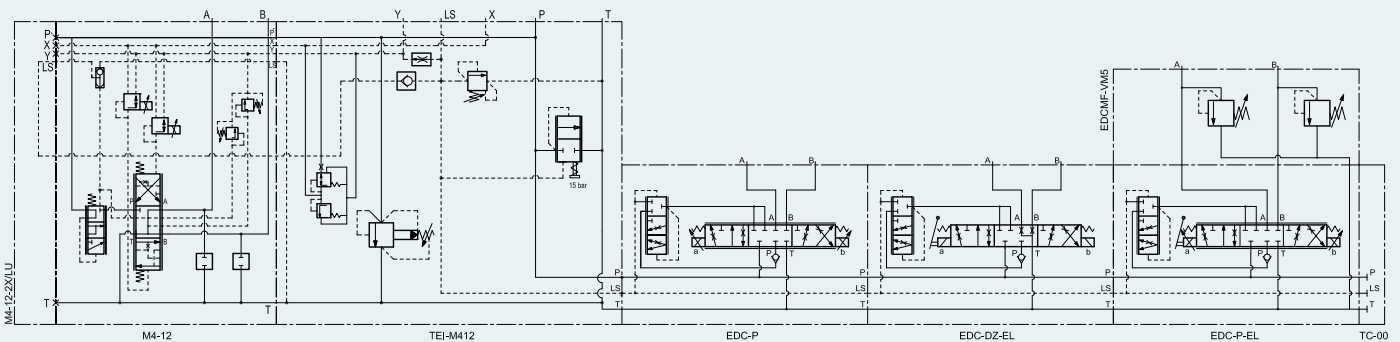
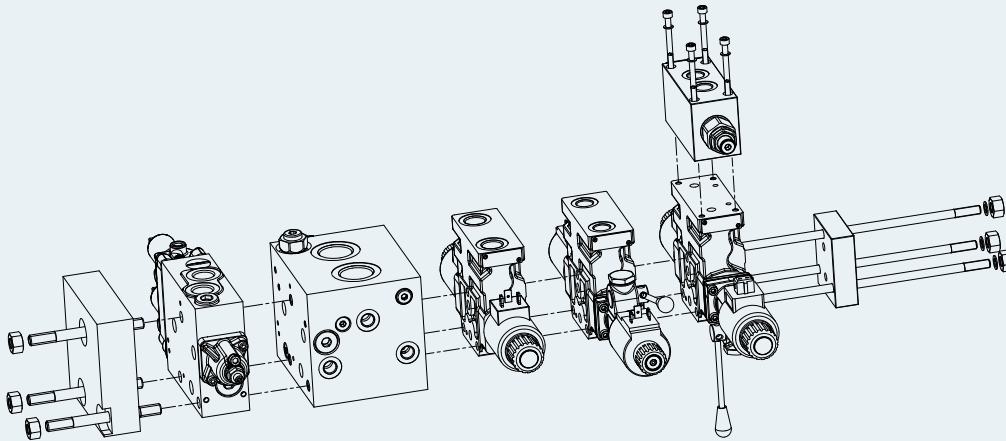


Suitable for: 

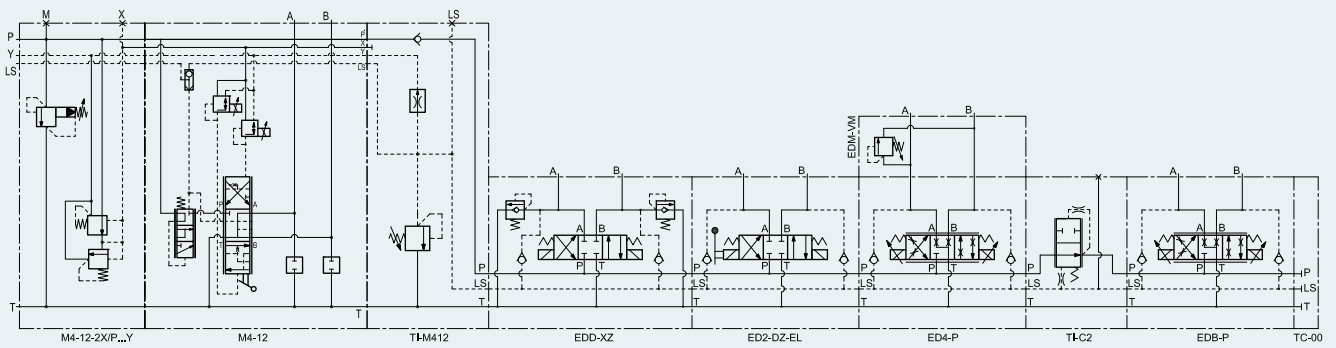
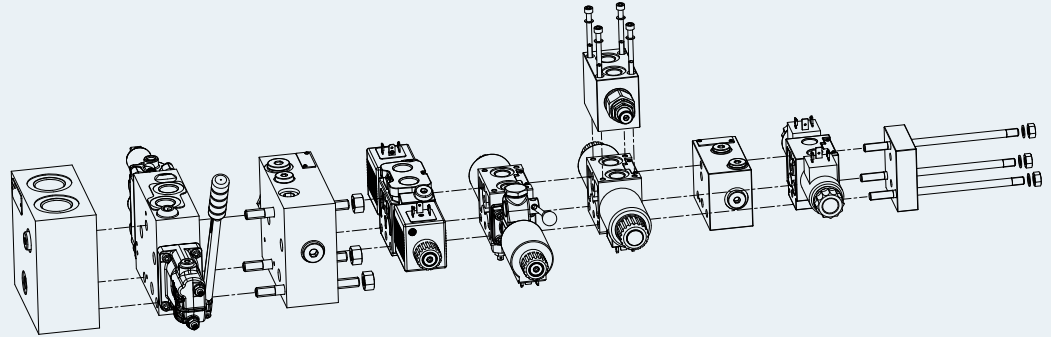
Fixed displacement pump single movements



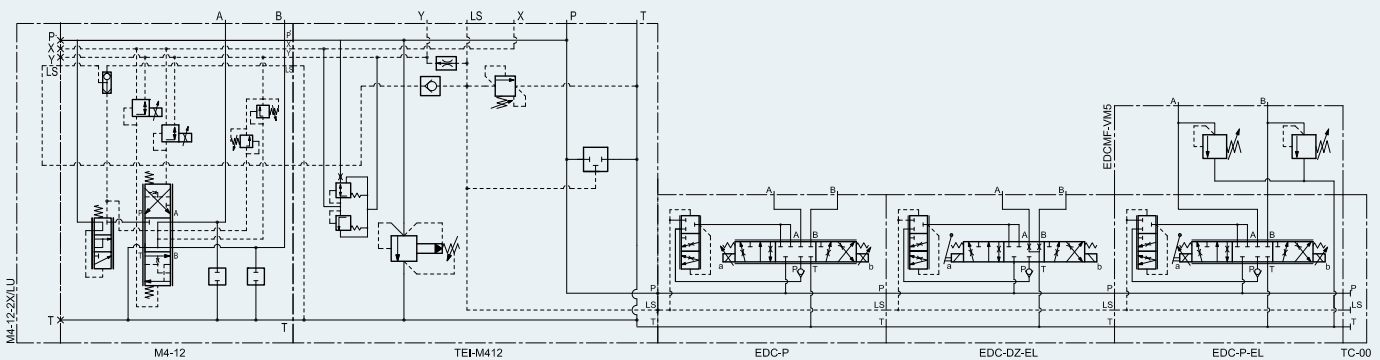
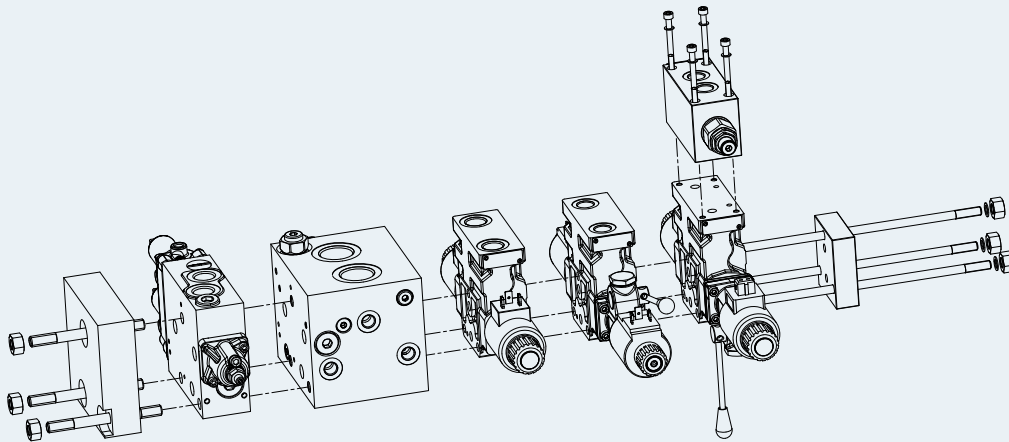
Fixed displacement pump simultaneous movements



Variable displacement pump single movements



Variable displacement pump simultaneous movements



Bosch Rexroth Oil Control S.p.A.

Via L. da Vinci, 5

I - 41015 Nonantola (MO), Italy

Tel +39 059 887 611

Fax +39 059 547 848

www.boschrexroth.com/compacthydraulics

compact-hydraulics-cdv@boschrexroth.com

The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.