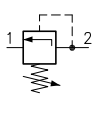
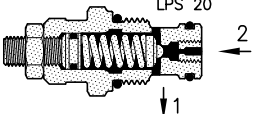
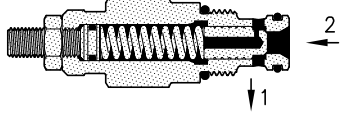
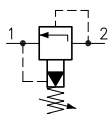
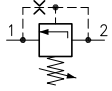
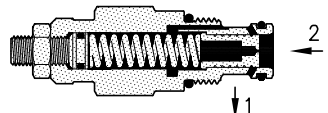
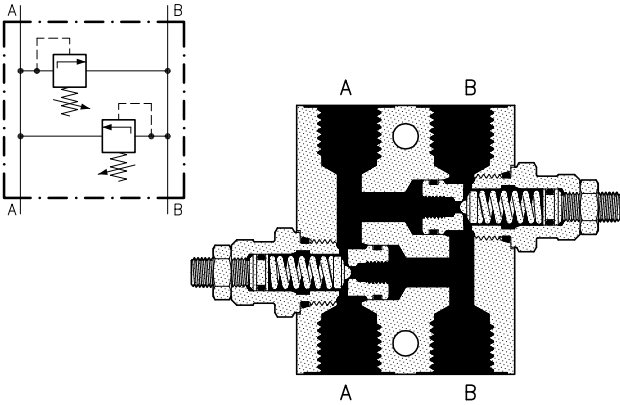
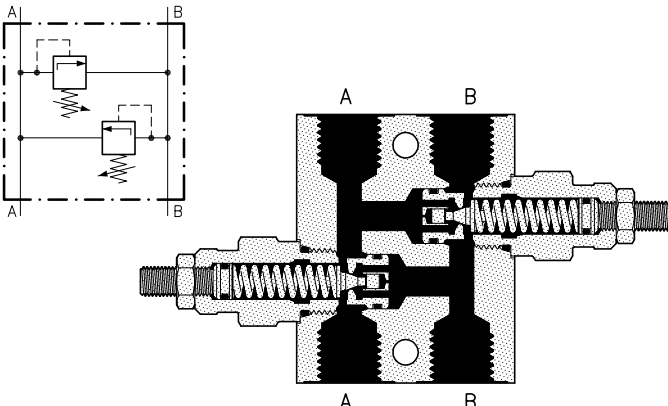
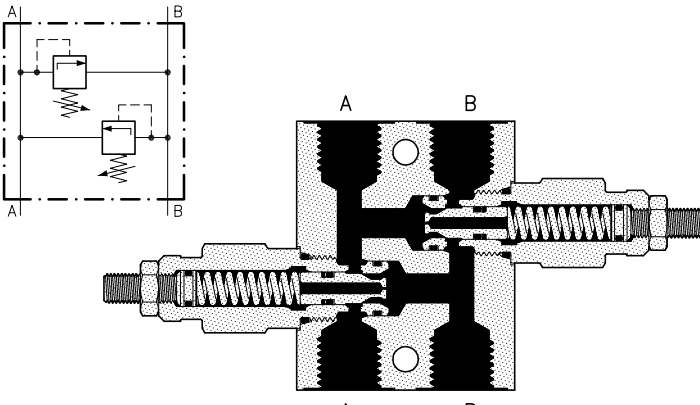
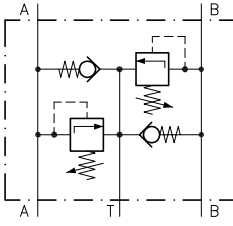
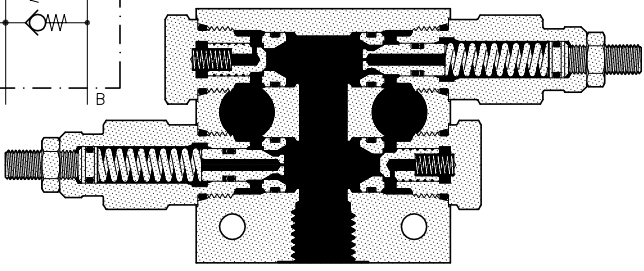
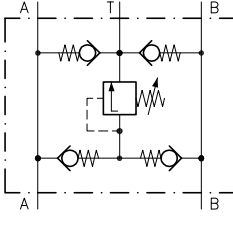
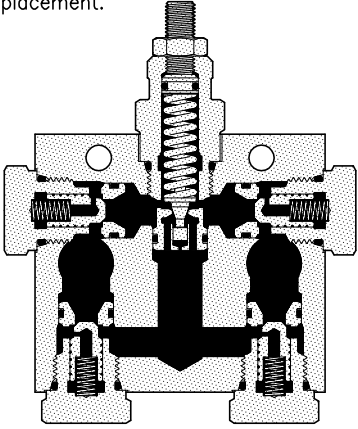
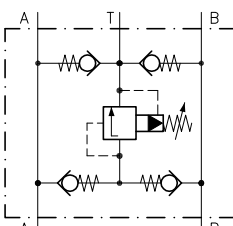
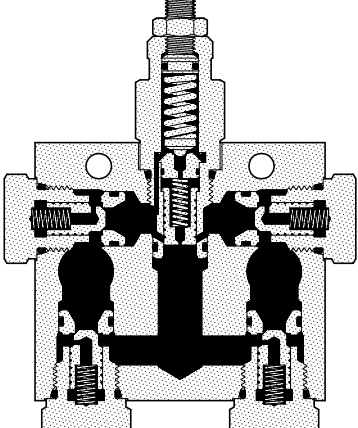


Pressure relief valves.

They are indispensable in most of all hydraulic applications in order to limit the pressure, to prevent shocks and to protect from overload. They are classified in direct acting and pilot operated valves and are manufactured in many models. The following schedule reports the main technical and use features: for further informations please look up in the technical detailed schedules.

Main features	Type	Q max. (l/min.)	P max. (bar)	Technical schedule
LPS 20 series – direct acting ball-type. They have good reseal without pressure peack. Are used for remote control of valves or logical elements and for infrequent duty relief or thermal expansion relief.   	LPS 20	2	420	02.020
	LPS 20/20	12	420	02.030
LPE series – direct acting guided conical poppet-type. They have't a pressure peack, the pressure-flow trend is good. Generally are used as main pressure relief valve for continuous service or in dual cross-over valves in frequent intermittences applications.  	LPE 20	30	210	02.040
LPA series – direct acting guided conical poppet-type. They have a low pressure peack and a good flow-pressure trend. Generally are used as main pressure relief valve for continuous service.  	LPA 10	15	350	02.050
	LPA 20	20	350	02.060
	LPA 30	50	350	02.070
LPB series – direct acting differential poppet-type. They can stand high back pressure and have fast act with low pressure peack. Mainly are used as dual cross-over valves in frequent intermittences applications.  	LPB 10	20	350	02.078
	LPB 20	50	350	02.080
	LPB 30	90	350	02.090
	LPB 50	160	350	02.100
	LPB 70	360	350	02.110
LPI series – pilot operating spool-type. They distinguish themselves by their first-rate stability, their large passing orifice and their good reseal. Thanks to the very good flow-pressure trend, they are recommended for industrial applications which may result particularly heavy and for continuous service.  	LPI 30	90	420	02.120
	LPI 50	160	420	02.130
	LPI 70	320	420	02.140
LPT series – direct acting spool-type for low pressure settings.  	LPT 30	30	50	02.160

Main features	Type	Q max. (l/min.)	P max. (bar)	Technical schedule
LPS 20/20 series CSL 03 circuit. They assemble two relief valves, series LPS 20/20 and are utilized to prevent shocks or are used as protection from thermal expansions. They can only be used on hydraulic motors or on actuators having the same displacement on both parts. 	LPS 20/20 CSL 03	12	315	02.210
LPE and LPA series CSL 03 circuit. They assemble two relief valves, series LPE or LPA and are used to control pressure on both line A and line B. They can only be used on hydraulic motor or on actuator having the same displacement on both parts. 	LPE 20 CSL 03	30	210	02.215
	LPA 20 CSL 03	20	210	02.220
	LPA 30 CSL 03	50	210	02.230
LPB series CSL 03 circuit. They assemble two relief valves, series LPB, are used as dual cross over valve on both lines. They can only be used on hydraulic motors or on actuators having the same displacement on both parts. 	LPB 20 CSL 03	50	350	02.240
	LPB 30 CSL 03	90	350	02.250
	LPB 50 CSL 03	160	350	02.260
	LPB 70 CSL 03	360	350	02.270

Main features	Type	Q max. (l/min.)	P max. (bar)	Technical schedule
LPB series CSL 04 circuit. They assemble two pressure relief valves series LPB and two check valves. Generally are used as dual relief make-up check valves in hydraulic motors or in cylinders having also different displacement. The T port must be connected with under oil level tank with a tube having a suitable section which can guarantee the required make-up flow.  	LPB 20 CSL 04	50	350	02.300
	LPB 30 CSL 04	90	350	02.310
	LPB 50 CSL 04	160	350	02.320
	LPB 70 CSL 04	360	350	02.330
LPE and LPA series CSL 06 circuit. They assemble one pressure relief valve series LPE or LPA and four check valves. Generally are used as dual relief make-up check valves in hydraulic motors or in cylinders having also different displacement. The T port must be connected with under oil level tank with a tube having a suitable section which can guarantee the required make-up flow.  	LPE 20 CSL 06	30	210	02.335
	LPA 20 CSL 06	20	350	02.340
	LPA 30 CSL 06	50	350	02.350
LPI series CSL 06 circuit. They have functional features like LPE and LPA-CSL 06 series, the pilot valves series LPI use, allows to operate with higher flows and pressures.  	LPI 30 CSL 06	90	420	02.360
	LPI 50 CSL 06	160	420	02.370
	LPI 70 CSL 06	320	420	02.380