

Intelligent hydraulics combined with multi-technology expertise

As a leading provider in the field of industrial hydraulics, Rexroth takes a top position with its components, systems and extensive know-how and expertise regarding applications and engineering.

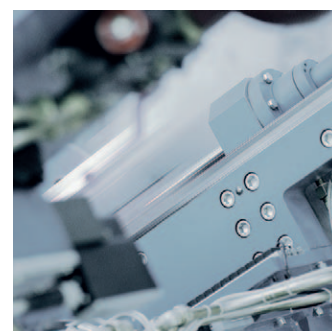
From its hydraulics range, which is the widest in the world, Rexroth offers standard products, application-related systems and customer-specific special solutions of high quality.

Using highly advanced microelectronics, Rexroth has rendered hydraulics even more capable. The products can be easily integrated in state-of-the-art machinery concepts and are extremely powerful and energy efficient. As a supplier of all technologies, Rexroth always provides the perfect application-specific drive solution.

Rexroth is the ideal development partner for highly efficient machinery and production equipment – from the initial contact to commissioning and throughout the entire life cycle.

Worldwide operational teams assume all project planning tasks for your machines and systems until they are ready for start of production or turnkey delivery if desired.

Using the multi-technology expertise and drive and control technology of Rexroth, you will become more competitive than ever.



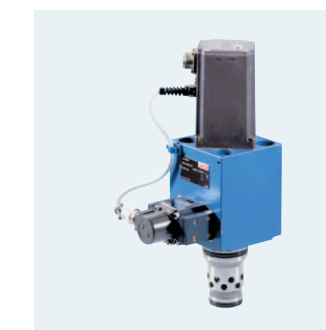
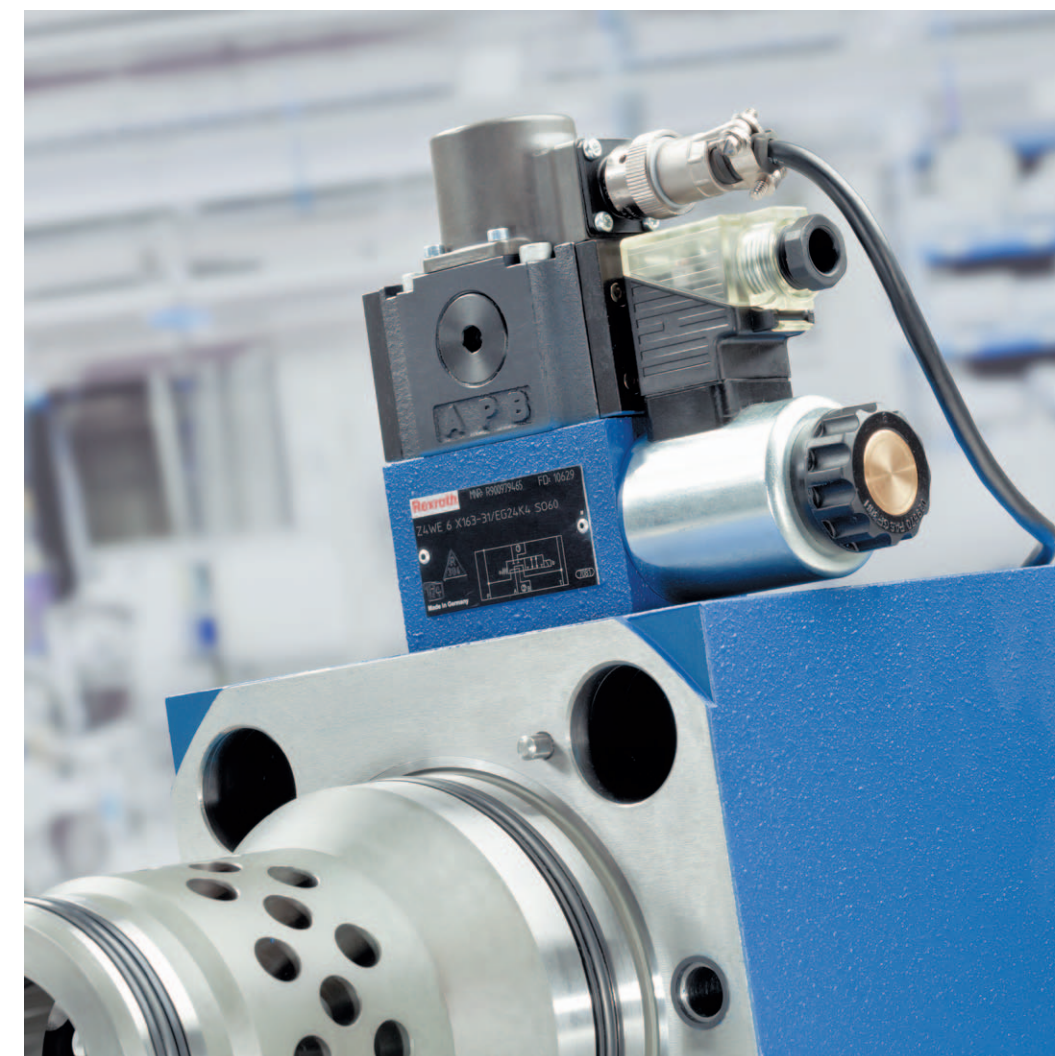
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Proportional and high-response pressure and flow control valves

Product overview

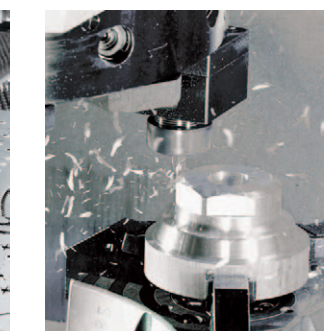
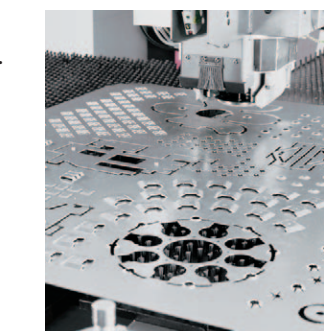
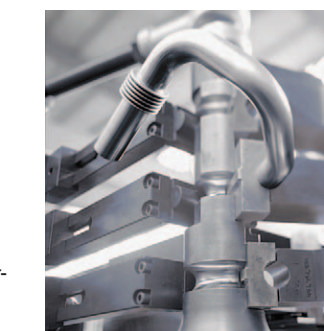


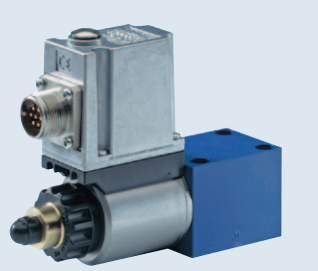

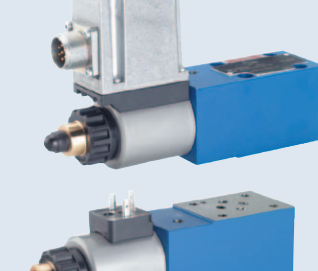
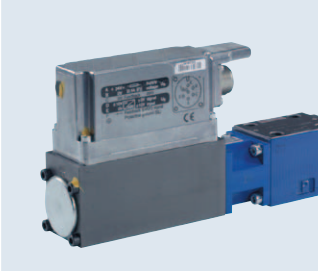
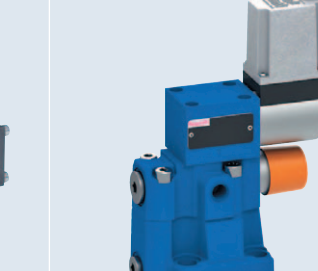

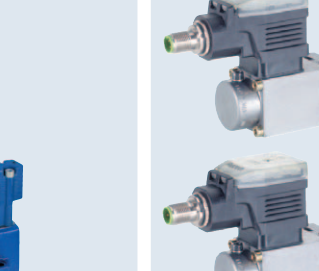
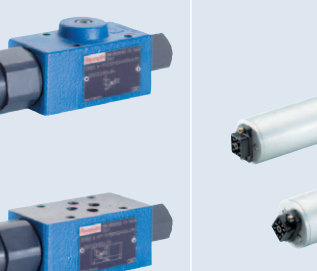
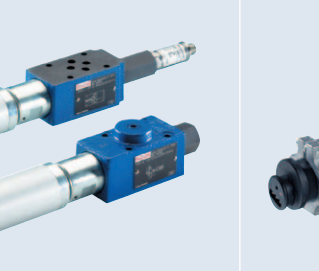
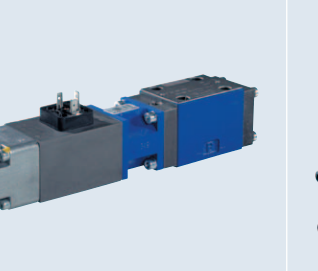
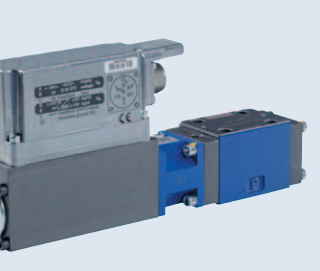
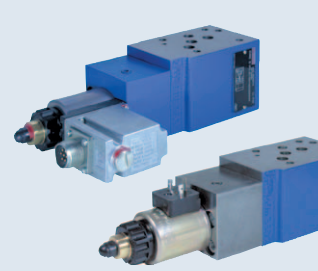
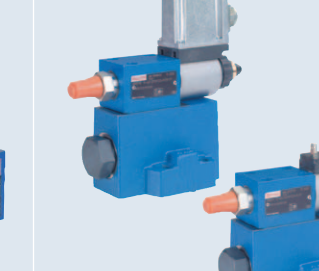
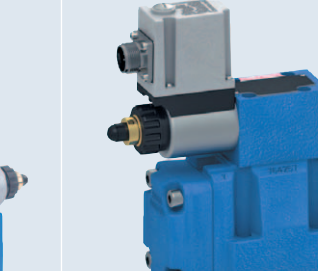
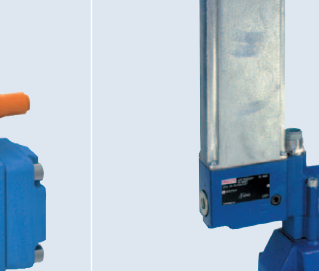
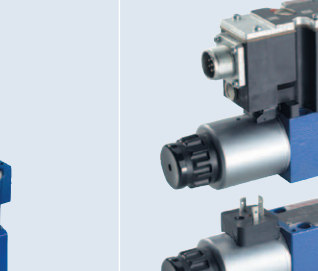
The data and properties specified in this brochure only serve to provide a general overview of the "Continuous pressure and flow control valves" product range of Bosch Rexroth AG.



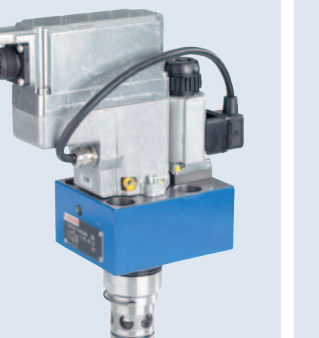
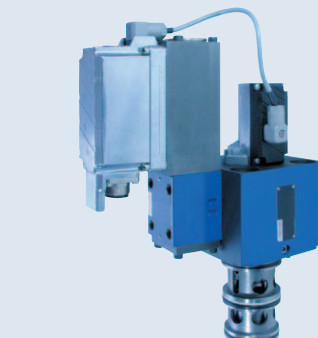
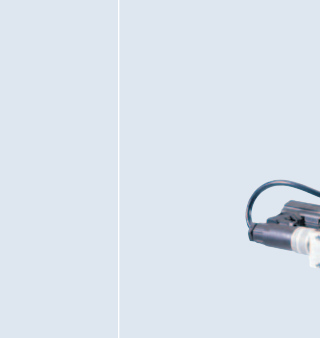


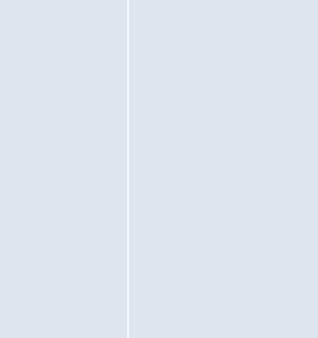

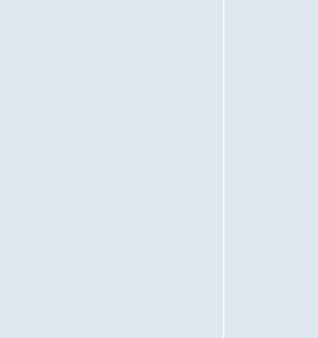
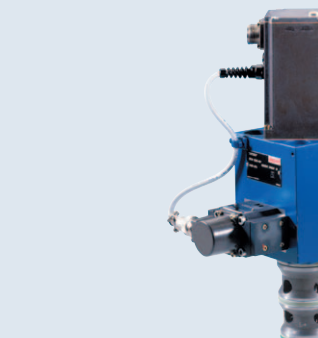



The overview does not include all technical data and variants and does not replace a technical data sheet. Detailed information on the individual valves can be found in the corresponding data sheets.

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.



	Proportional pressure relief valves, direct operated		Proportional pressure relief valves, pilot operated										Proportional pressure reducing valves, pilot operated																				
Type	DBET, DBETE	DBETA	DBE, ZDBE	DBEBE		DBEM, DBEME			DBG				DRE, DREE, ZDRE, ZDREE	DRS, ZDRS		DREB	DREBE	ZDRE, ZDREE		DREM, DREME			3DREM, 3DREME		DRG						3DREP, 3DREPE		
																																	
Size	6	6	6	6	10	10	25	32	8	10	15	20	25	32	6	6	6	6	10	10	10	10	25	32	10	16	8	10	15	20	25	32	6
Component series	6X	6X	2X	1X	1X	7X			1X				1X	1X	1X	1X		2X	6X			7X		1X						2X			
Data sheet no.	29162	29262	29258	29159	29163	29361			29139				29175	29173	29182	29195	29199	29279		29276	29278	29286		29145						29184			
Features	<ul style="list-style-type: none"> Subplate mounting Coil 800 mA, optional Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting With integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting Sandwich plate design With integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting Position-controlled With integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting Threaded connection With integrated electronics (OBE) Coil 800 mA, optional 	<ul style="list-style-type: none"> Subplate mounting Threaded connection Cartridge valve 	<ul style="list-style-type: none"> Subplate mounting Sandwich plate design 3-way version Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting Sandwich plate design 3-way version 	<ul style="list-style-type: none"> Subplate mounting Position-controlled 3-way version 	<ul style="list-style-type: none"> Subplate mounting Position-controlled With integrated electronics (OBE) 3-way version (size 6) 2-way version (size 10) 	<ul style="list-style-type: none"> Sandwich plate design 3-way version Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting 2.5-way version Coil 800 mA, optional Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting 3-way version Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting Threaded connection 	<ul style="list-style-type: none"> Subplate mounting Pilot control valve type WRZ Without/with integrated electronics (OBE) 																		
Maximum flow in l/min	2	5	30	40	120	275	550	700	100	200	200	400	400	600	30	30	40	40	120	80	200	300	300	125	300	80	80	200	200	200	300	15	
Maximum operating pressure in bar	420	500	350	315		350			315				30	210	315	315		315	315			315	250	315						100			
Step response in ms	80	80	130	On 70; Off 15	~80	~100							~150		On 50; off 20	On 50; off 20	~80			~160	-130												
External control electronics	VT-MSPA1-1-1X (data sheet 30223)		VT-MSPA1-11-1X (data sheet 30223)		VT-MSPA1-1-1X (data sheet 30223)			VT-MSPA1-1-1X (data sheet 30223)				VT-MSPA1-1-1X (data sheet 30223)				VT-MRMA1-1-1X (data sheet 30214)		VT-VRPA1-527-10 (data sheet 30052)		VT-MSPA1-11-1X (data sheet 30223)		VT-MSPA1-11-1X (data sheet 30223)		VT-MSPA1-11-1X (data sheet 30223)		VT-VRM1-1-1X (data sheet 30405)						VT 11118-1X (data sheet 30218)	

	Proportional throttle valves, pilot operated						High-response throttle valves, pilot operated												Proportional flow control valves, direct operated																										
Type	FE, FEE		FES, FESE			FESX, FESXE	3WRCBH, 3WRCBEE			2WRCE...P			3WRCE...P			2WRCE...S			2WRCE...S, 2WRCE...S			3WRCE...S			3WRCE...S, 3WRCE...S			2FRE		2FREX, 3FREX		3FREZ		3FREEZ											
																																													
Size	16	25	32	40	50	63	16	25	32	40	50	25	32	40	50	32	40	50	32	40	50	63	80	100	125	160	32	40	50	63	80	100	125	160	6	10	16	6	10	6	10	6	10		
Component series	2X		3X			1X	1X			2X			2X			1X			2X			1X			2X	4X	1X		1X		1X														
Data sheet no.	29202		29209			29215 (type FESX), 29216 (type FESXE)	29217 (3WRCBH), 29222 (3WRCBEE)			29137			29137			29136			29135			29136			29135			29188	29190	29219		29220		29221											
Features	<ul style="list-style-type: none"> Cartridge valve Position-controlled Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve Position-controlled Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve Position-controlled Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve Position-controlled Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve 2-way version With integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve 3-way version With integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve 2-way version Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve 2-way version Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve 3-way version Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Cartridge valve 3-way version Without/with integrated electronics (OBE) 	<ul style="list-style-type: none"> Subplate mounting 2-way version Position-controlled 	<ul style="list-style-type: none"> Subplate mounting 2- or 3-way version 	<ul style="list-style-type: none"> Subplate mounting Position-controlled 3-way version 	<ul style="list-style-type: none"> Subplate mounting Position-controlled With integrated electronics (OBE) 																															
Rated flow in l/min ($\Delta p = 10$ bar)	190	360	480	680	1400	1800	180	300	450	700	1400	270	540	1060	920	1400	2260	410	650	1020	920	1400	2260	3675	5800	8900	14000	24000	410	650	1020	1770	2590	3820	6450	10450	25	60	160	35	70	35	80	35	70
Maximum operating pressure in bar	315	315					40	45	60	14	20	30	14	15	20	10	15	20	70	50	75	90	120	10	10	15	35	30	40	55	80	210	315	250	250	250									
Step response in ms (0 ... 100 %)	70	80	100	110	200	410	70	70	90	90	110	40	45	60	14	20	30	14	15	20	10	15	20	70	50	75	90	120	10	10	15	35	30	40	55	80									
External control electronics	VT-VRPA1-5X-1X (data sheet 30117)		VT-VRPA1-5X-1X (data sheet 30117)			VT-VRPA1-527-2X/V0/RTS-2/2V (data sheet 30053)	VT-VRPA1-527-2X/V0 (data sheet 30045)									VT-SR31 to VT-SR38 (data sheet 29931)			VT-SR31 to VT-SR38 (data sheet 29931)			VT-MRPA1-150(151)-1X (data sheet 30221)			VT-MSPA1-525-10 (data sheet 30222)		VT-VRPA1-527-10 (data sheet 30052)																		