

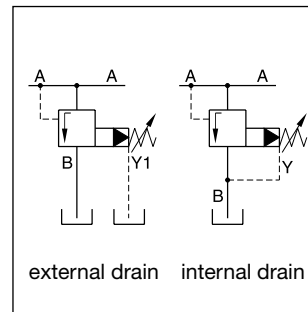
Characteristics

Pilot operated pressure relief valves series R5V have a similar design to the subplate mounted R4V series. The SAE flanges allow to mount the valves directly on the outlet flanges of pumps or inlet flanges of actuators to achieve a very compact design.

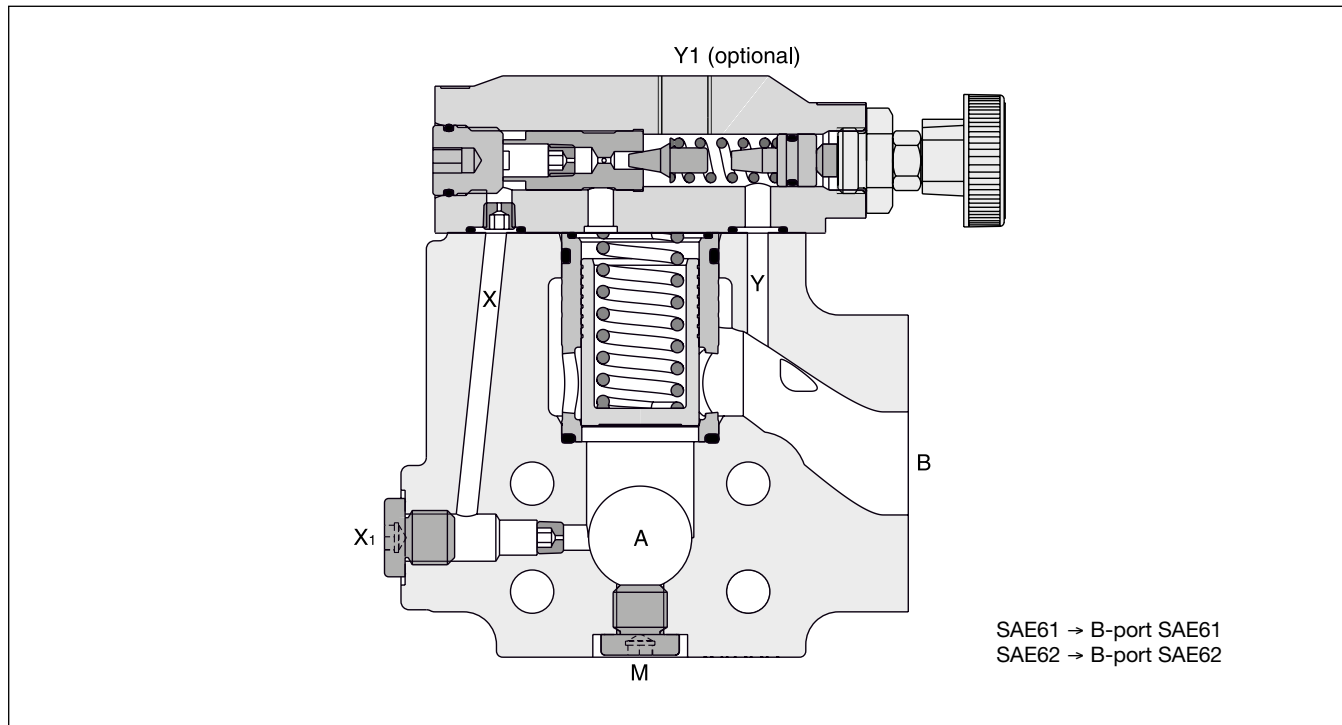
Valves with SAE flanges can also be bolted together to combine functions without the need of a manifold block.

Features

- Pilot operated with manual adjustment
- Body with 3-ports
 - 4 sizes (SAE 3/4", 1", 1 1/4", 1 1/2")
 - SAE61 and SAE62 flange
- 3 pressure stages
- 3 adjustment modes
 - Hand knob
 - Acorn nut with lead seal
 - Cylinder lock
- With optional vent function

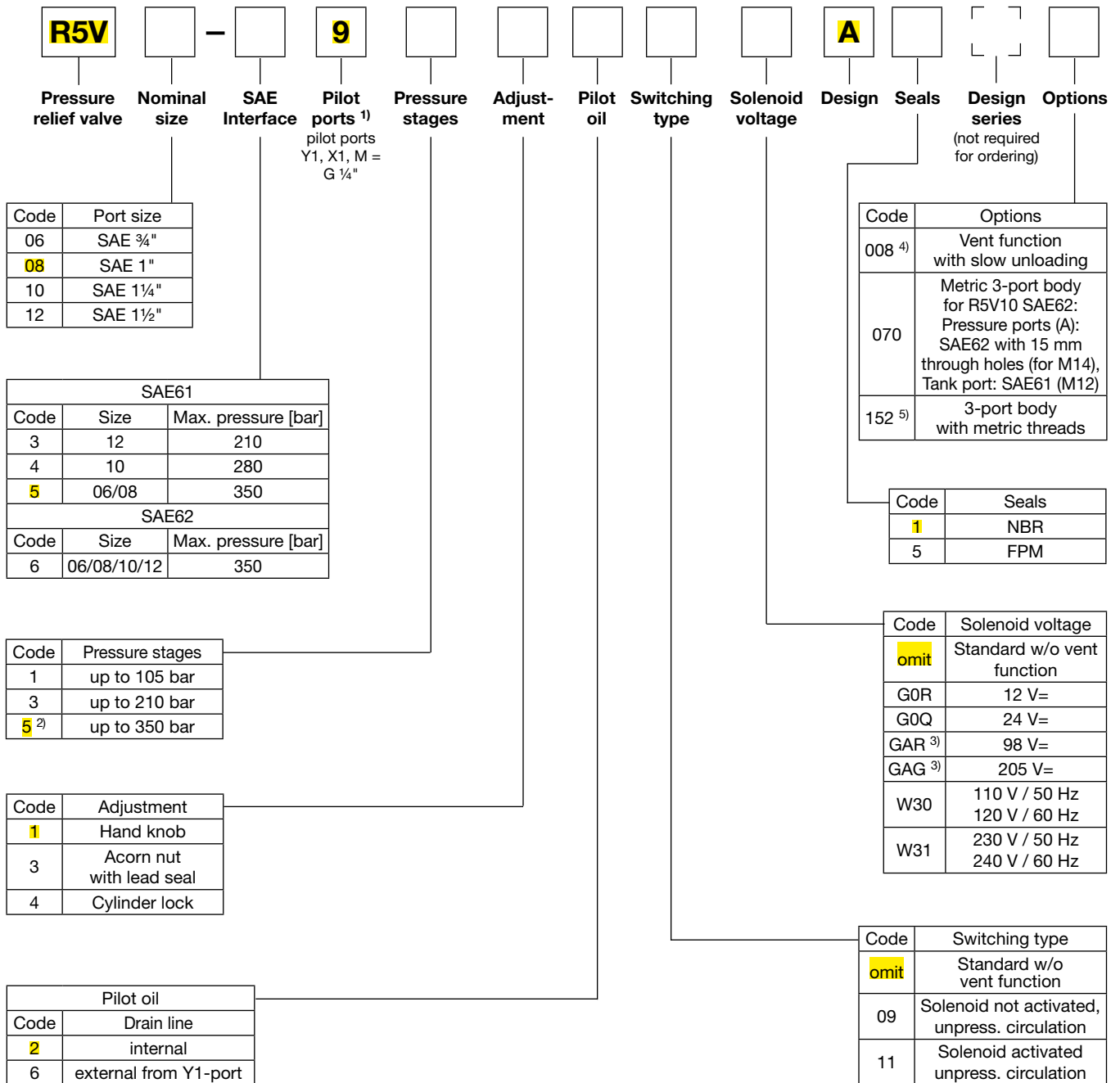


R5V



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Ordering Code



Further options on request

¹⁾ Y1 only available at external drain (pilot oil code 6).
²⁾ R5V10-495 up to 280 bar.
³⁾ To be used in combination with rectifier plugs at 120 VAC / 230 VAC power supply.
⁴⁾ Only for vent valve function code 09.
⁵⁾ R5V08 SAE62: Tank port SAE61 (M10).

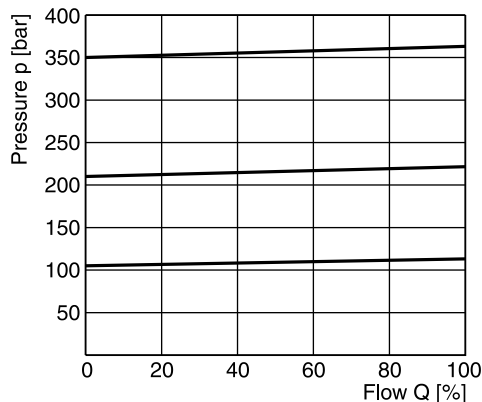
Technical Data / Characteristic Curves

Technical data

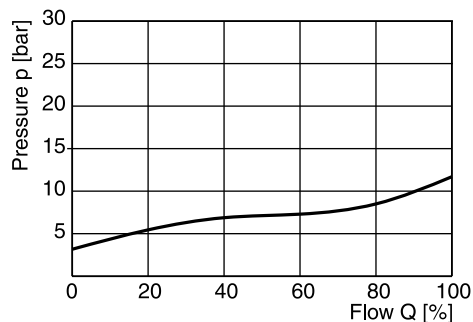
General						
Size		06 (¾")	08 (1")	10 (1¼")	12 (1½")	
Mounting	Flanged according to SAE61 and SAE62					
Mounting position	unrestricted					
Ambient temperature	[°C]	-20...+60				
MTTF _D value	[years]	75				
Weight	[kg]	3.6	4.6	5.2	8.0	
Hydraulic						
Max. operating pressure	[bar]					
SAE61 Ports A, B		350	350	280	210	
Port Y1		30	30	30	30	
SAE62 Ports A, B		350	350	350	350	
Port Y1		30	30	30	30	
Pressure stages	[bar]	105, 210, 350				
Nominal flow	[l/min]	90	300	600	600	
Fluid	Hydraulic oil according to DIN 51524					
Fluid temperature	[°C]	-20...+70 (NBR: -25...+70)				
Viscosity, permitted	[cSt] / [mm ² /s]	20 ... 400				
Viscosity, recommended	[cSt] / [mm ² /s]	30...80				
Filtration	ISO 4406 (1999); 18/16/13					
Electrical (solenoid)						
Duty ratio	100 % ED; CAUTION: coil temperature up to 150 °C possible					
Protection class	IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)					
	Code	G0R	G0Q	GAR	GAG	W30 W31
Supply voltage	[V]	12 V =	24 V =	98 V =	205 V =	110 at 50 Hz 230 at 50 Hz
	[V]					120 at 60 Hz 240 at 60 Hz
Tolerance supply voltage	[%]	±10	±10	±10	±10	±5 ±5
Current consumption hold	[A]	2.72	1.29	0.33	0.13	0.6 / 0.55 0.3 / 0.27
in rush	[A]	2.72	1.29	0.33	0.13	2.5 / 2.4 1.25 / 1.2
Power consumption hold	[W]	32.7	31	31.9	28.2	70/70 VA 70/70 VA
in rush	[W]	32.7	31	31.9	28.2	280/290 VA 280/290 VA
Solenoid connection	Connector as per EN175301-803, solenoid identification as per ISO 9461					
Wiring min.	[mm ²]	3 x 1.5 recommended				
Wiring length max.	[m]	50 recommended				

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p/Q performance curve

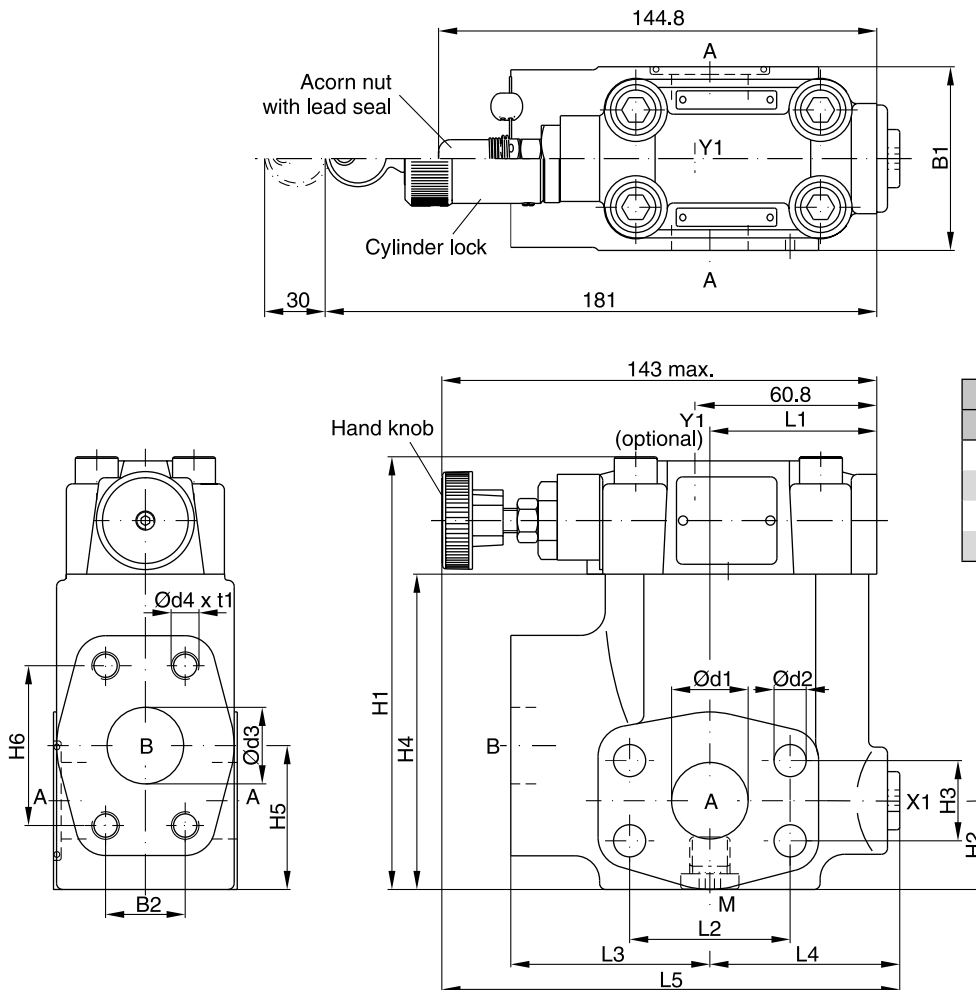


Minimum pressure curve



All characteristic curves measured with HLP46 at 50 °C.

The performance curves are measured with external drain.
For internal drain the tank pressure has to be added to curve.



Seal kits		
NG	NBR	FPM
06	S16-91850-0	S16-91850-5
08	S16-91851-0	S16-91851-5
10	S16-91852-0	S16-91852-5
12	S26-27421-0	S26-27421-5

SAE61

NG	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	d1	d2	d3	d4 (option 152)	t1
06	60	22.2	119	29.5	22.2	81	41	47.6	50.3	47.6	63	60	152	19	10.5	19	3/8"-16 UNC (M10)	20
08	60	26.2	141	30.5	26.2	103	47	52.4	55.8	52.4	65	62	149	25	10.5	25	3/8"-16 UNC (M10)	23
10	75	30.2	151	37.5	30.2	113	65	58.7	57.8	58.7	61	68	150.5	32	12.5	30	7/16"-14 UNC (M12)	22
12	80	35.7	178	72	35.7	140	73	69.8	37.3	69.8	92.5	59.2	171.2	38	13.5	38	1/2"-13 UNC (M12)	27

SAE62

NG	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	d1	d2	d3	d4 (option 152)	t1
06	60	23.8	119	29.5	23.8	81	41	50.8	50.3	50.8	63	60	152	19	10.5	19	3/8"-16 UNC (M10)	20
08	60	27.8	141	30.5	27.8	103	47	57.2	55.8	57.2	65	62	149	25	12.5	25	7/16"-14 UNC (M10) ¹⁾	22
10	75	31.8	151	37.5	31.8	113	65	66.7	57.8	66.7	61	68	150.5	32	13.5	30	1/2"-13 UNC (M12)	24
12	80	36.5	178	72	36.5	140	73	79.4	37.3	79.4	92.5	59.2	171.2	38	17	38	5/8"-11 UNC (M16)	33

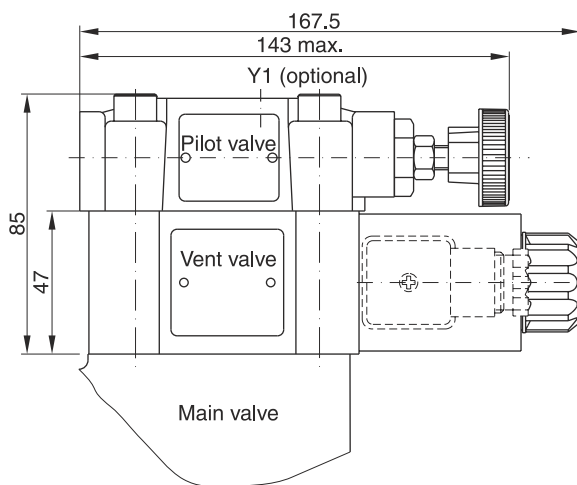
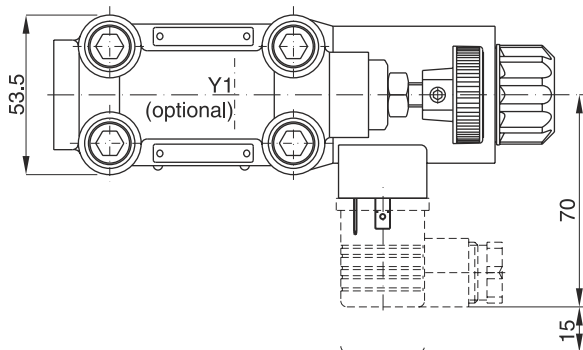
Port	Function	Port size			
		R5V06	R5V08	R5V10	R5V12
A (2)	Pressure	3/4" SAE61/62	1" SAE61/62	1 1/4" SAE61/62	1 1/2" SAE61/62
B	Tank	3/4" SAE61/62	1" SAE61/62	1 1/4" SAE61/62	1 1/2" SAE61/62
X1	External pilot port ²⁾	G1/4"	G1/4"	G1/4"	G1/4"
Y1	External drain	G1/4"	G1/4"	G1/4"	G1/4"
M	Pressure gauge	G1/4"	G1/4"	G1/4"	G1/4"

¹⁾ T-port SAE61.

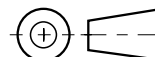
²⁾ Closed when supplied.

Dimensions

Dimensions R5V with vent function



Seal kits	
NBR	FPM
DC solenoid	
S56-40609-0	S56-40609-5
AC solenoid	
S26-35237-0	S26-35237-5



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Code	Internal drain	External drain
11		
09		