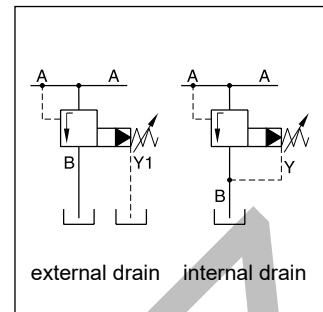
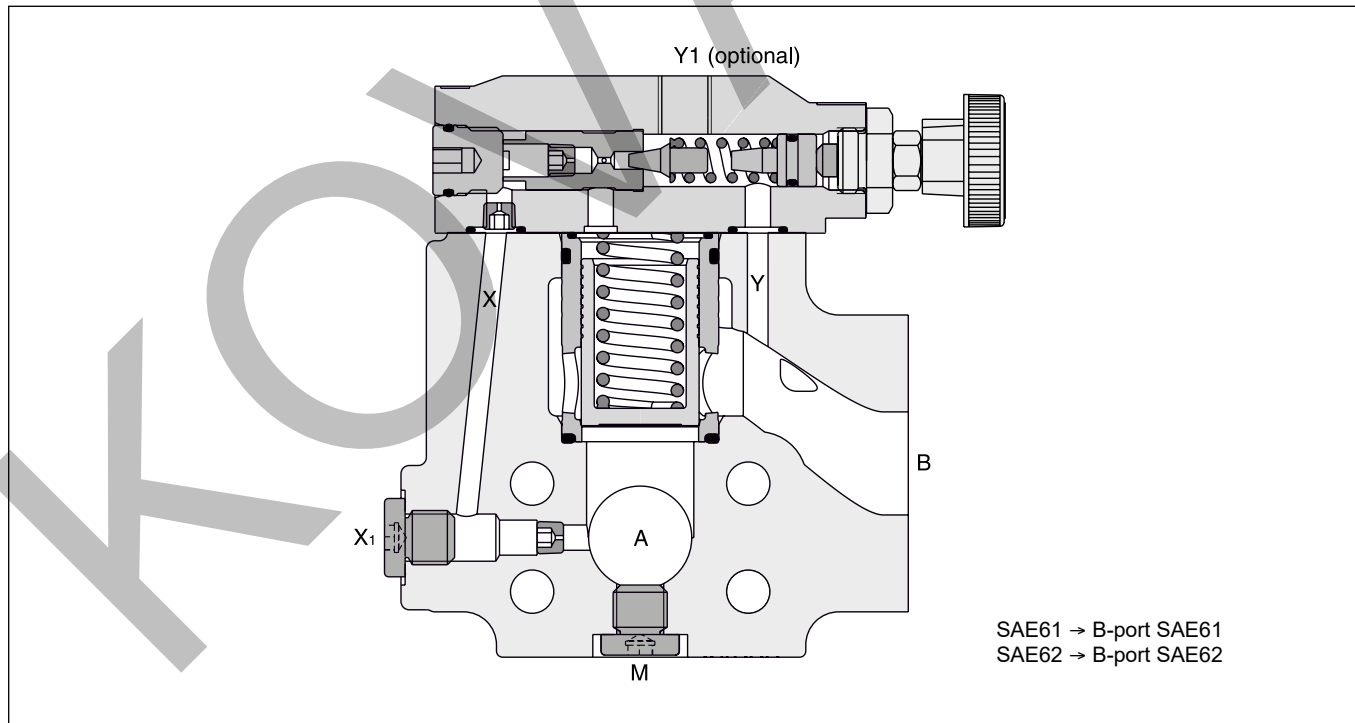


Pilot operated pressure relief valves series R5V have a similar design to the subplate mounted R4V series. The SAE flanges allow to mount the valves directly on the outlet flanges of pumps or inlet flanges of actuators to achieve a very compact design.

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 $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ ")
 - SAE61 and SAE62 flange
- 3 pressure stages
- 3 adjustment modes
 - Hand knob
 - Acorn nut with lead seal
 - Cylinder lock
- With optional vent function

**R5V**

Ordering Code

Pilot Operated Pressure Relief Valve
Series R5V

Pressure relief valve	Nominal size	SAE Interface	Pilot ports ¹⁾ Y1, X1, M = G 1/4"	Pressure stages	Adjustment	Pilot oil	Switching type	Solenoid voltage	Design	Seals	Design series (not required for ordering)	Options
R5V			9						A			

Code	Port size
06	SAE 3/4"
08	SAE 1"
10	SAE 1 1/4"
12	SAE 1 1/2"

SAE61		
Code	Size	Max. pressure [bar]
3	12	210
4	10	280
5	06/08	350

SAE62		
Code	Size	Max. pressure [bar]
6	06/08/10/12	350

Code	Pressure stages
1	up to 105 bar
3	up to 210 bar
5 ²⁾	up to 350 bar

Code	Adjustment
1	Hand knob
3	Acorn nut with lead seal
4	Cylinder lock

Pilot oil	
Code	Drain line
2	internal
6	external from Y1-port

Code	Options
008 ⁴⁾	Vent function with slow unloading
070	Metric 3-port body for R5V10 SAE62: Pressure ports (A): SAE62 with 15 mm through holes (for M14), Tank port: SAE61 (M12)
152 ⁵⁾	3-port body with metric threads

Code	Seals
1	NBR
5	FPM

Code	Solenoid voltage
omit	Standard w/o vent function
G0R	12 V=
G0Q	24 V=
GAR ³⁾	98 V=
GAG ³⁾	205 V=
W30	110 V / 50 Hz 120 V / 60 Hz
W31	230 V / 50 Hz 240 V / 60 Hz

Code	Switching type
omit	Standard w/o vent function
09	Solenoid not activated, unpress. circulation
11	Solenoid activated unpress. circulation

Further options on request

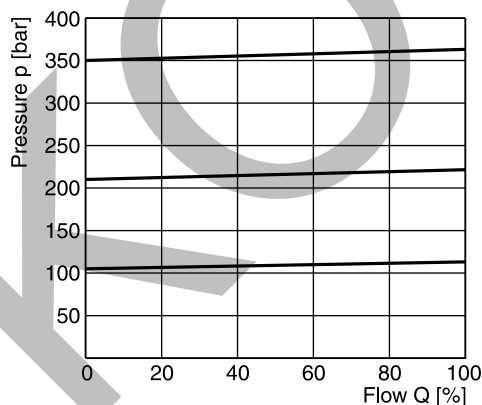
¹⁾ Y1 only available at external drain (pilot oil code 6).²⁾ R5V10-495 up to 280 bar.³⁾ To be used in combination with rectifier plugs at 120 VAC / 230 VAC power supply.⁴⁾ Only for vent valve function code 09.⁵⁾ R5V08 SAE62: Tank port SAE61 (M10).

Technical data

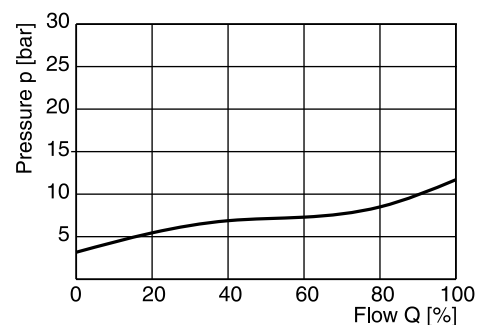
General							
Size		06 (¾")		08 (1")		10 (1¼")	12 (1½")
Mounting		Flanged according to SAE61 and SAE62					
Mounting position		unrestricted					
Ambient temperature	[°C]	-20...+60					
MTTF _D value	[years]	75					
Weight	[kg]	3.6	4.6	5.2	8.0		
Hydraulic							
Max. operating pressure	[bar]						
SAE61 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] / [mm²/s]	20 ... 400					
Viscosity, recommended	[cSt] / [mm²/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.	[mm²]	3 x 1.5 recommended					
Wiring length max.	[m]	50 recommended					

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p/Q performance curve



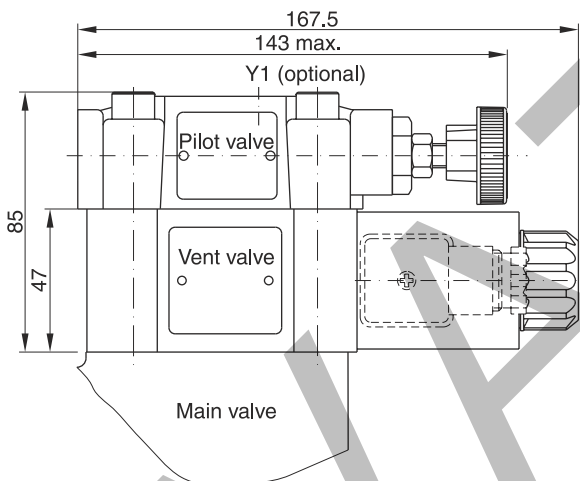
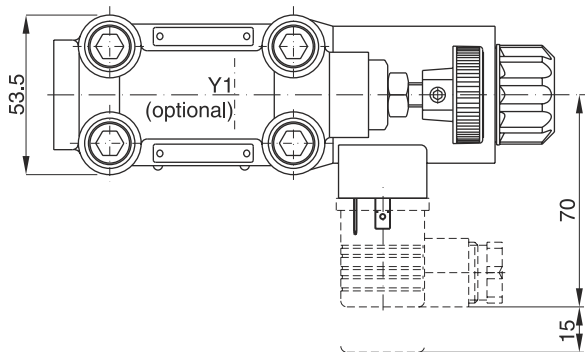
Minimum pressure curve



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.

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		