

Characteristics

Pilot operated pressure relief valves for in-line mounting series R4V have a similar design to the subplate mounted R4V series. For single functions – where no manifold blocks are used – the valves can be directly placed in the pipework.

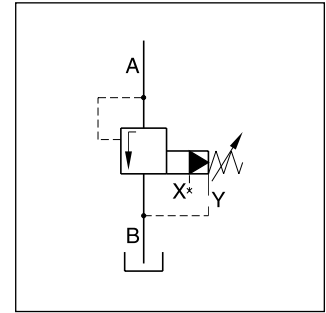
The R4V valves are available with 2 ports (L-body) for in-line relief function or with 3 ports (T-body) for relief functions in the bypass.

Features

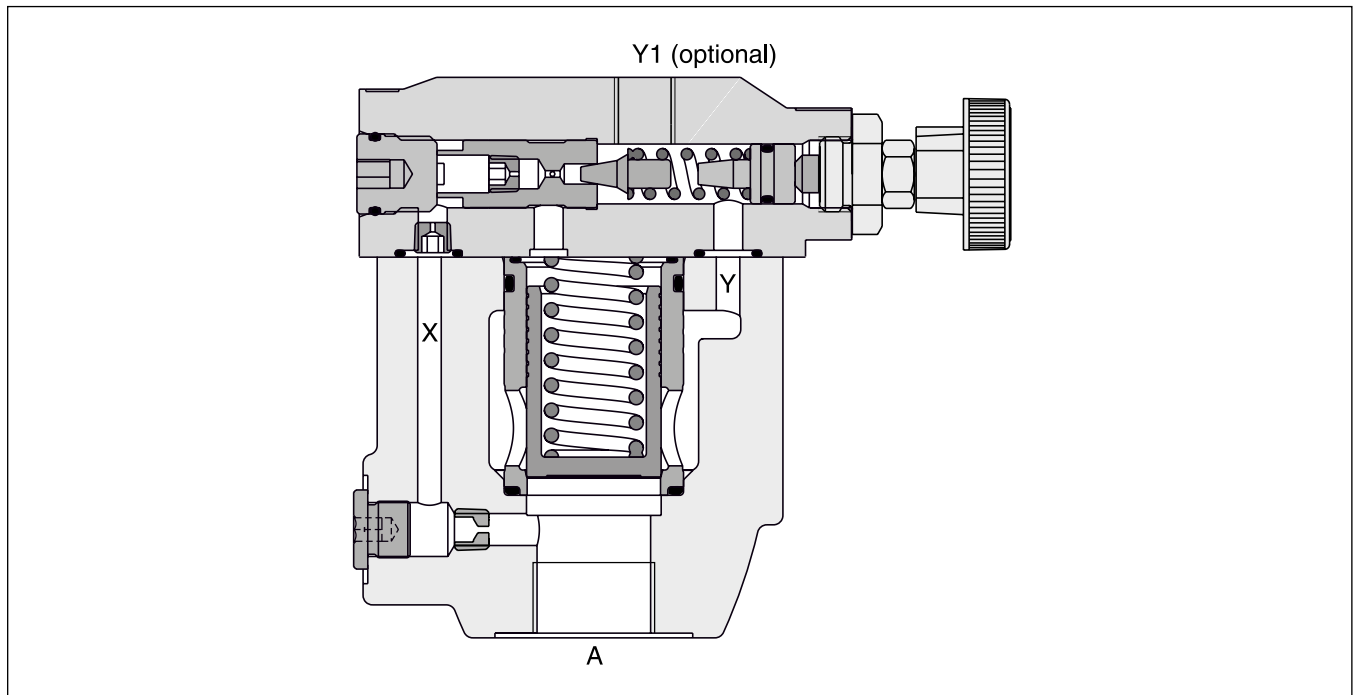
- Pilot operated with manual adjustment
- 2 interfaces:
 - L-body (R4V06-G $\frac{3}{4}$ "", R4V10-G $1\frac{1}{4}$ "")
 - T-body (R4V03-G $\frac{1}{2}$ "", R4V06-G1"")
- 3 pressure stages
- 3 adjustment modes
 - Hand knob
 - Acorn nut with lead seal
 - Cylinder lock
- With optional vent function



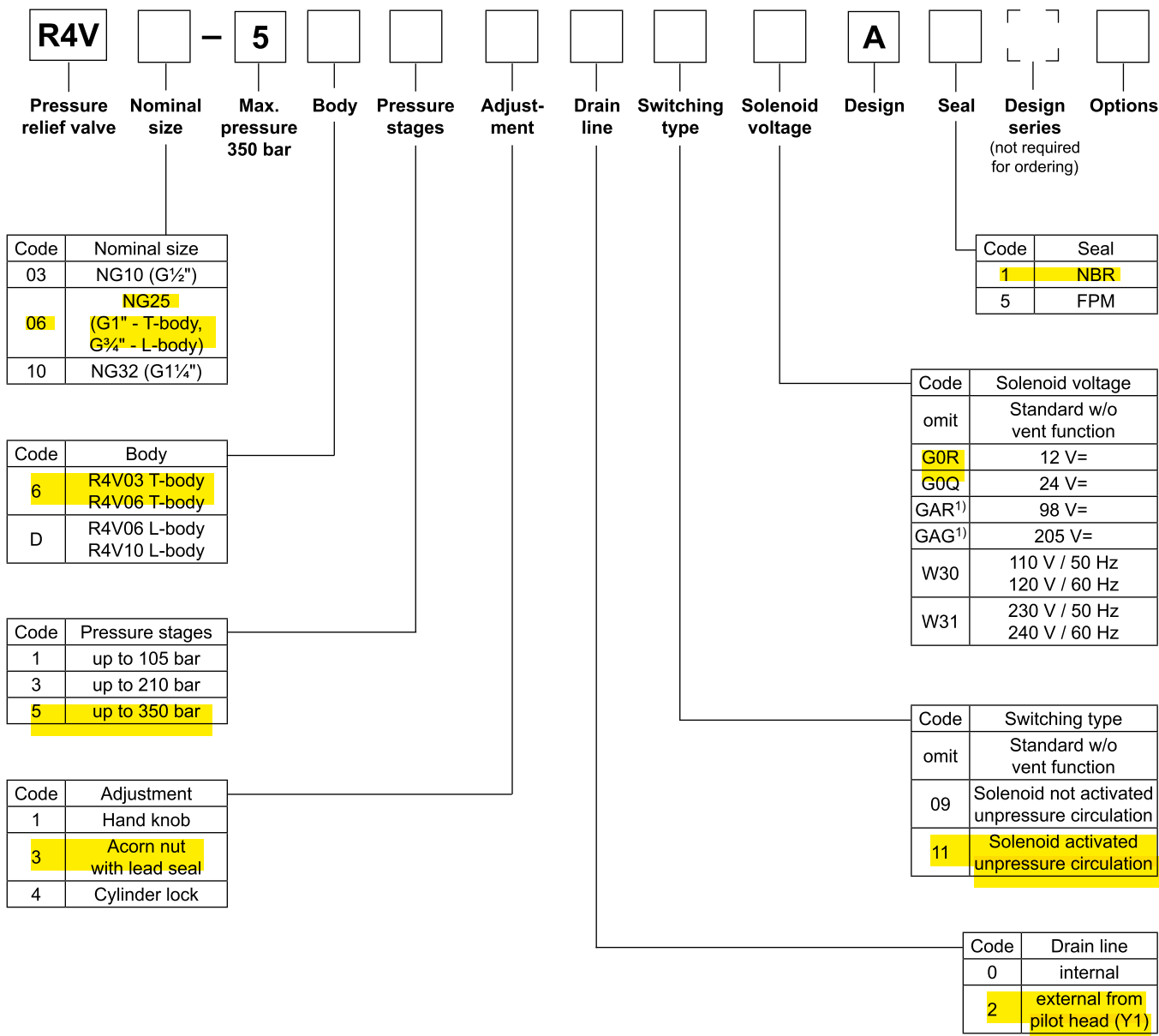
R4V10 L-body



R4V06 L-body



Ordering Code



¹⁾ To be used in combination with rectifier plugs at 120 VAC / 230 VAC power supply.

Technical Data

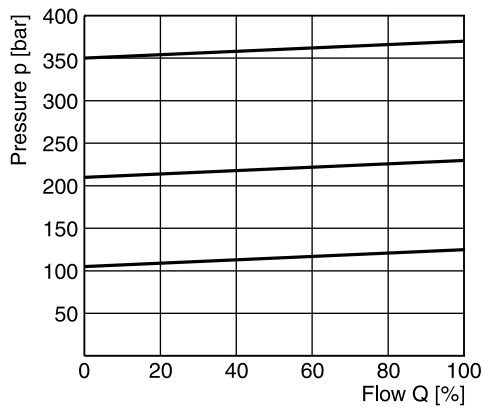
R4V

General				
Design	T-body		L-body	
Size	03 (½")	06 (1")	06 (¾")	10 (1¼")
Mounting	Threaded body			
Mounting position	unrestricted			
Ambient temperature [°C]	-20...+60			
MTTF _D value [years]	75			
Weight [kg]	3.2	6.6	3.3	5.6
Hydraulic				
Max. operating pressure [bar]	Ports A and X up to 350; Ports B and Y 30 bar			
Pressure stages [bar]	105, 210, 350			
Nominal flow [l/min]	60	200	200	450
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			

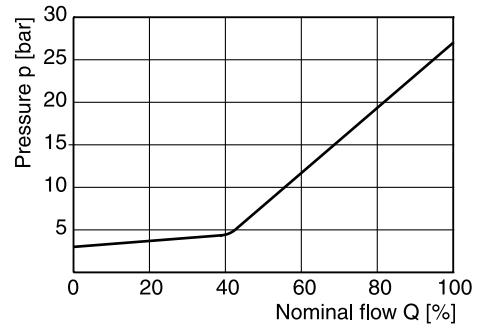
R4V with vent function

General							
Design	T-body		L-body				
Size	03 (½")	06 (1")	06 (¾")	10 (1¼")			
Mounting	Threaded body						
Mounting position	unrestricted						
Ambient temperature [°C]	-20...+60						
MTTF _D value [years]	75						
Weight [kg]	4.9	8.3	5.0	7.3			
Hydraulic							
Max. operating pressure [bar]	Ports A and X up to 350; Ports B and Y 30						
Pressure stages [bar]	105, 210, 350						
Nominal flow [l/min]	60	200	200	450			
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 120 at 60 Hz	230 at 50 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
Current consumption 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
Power consumption 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						

p/Q performance curve ¹⁾

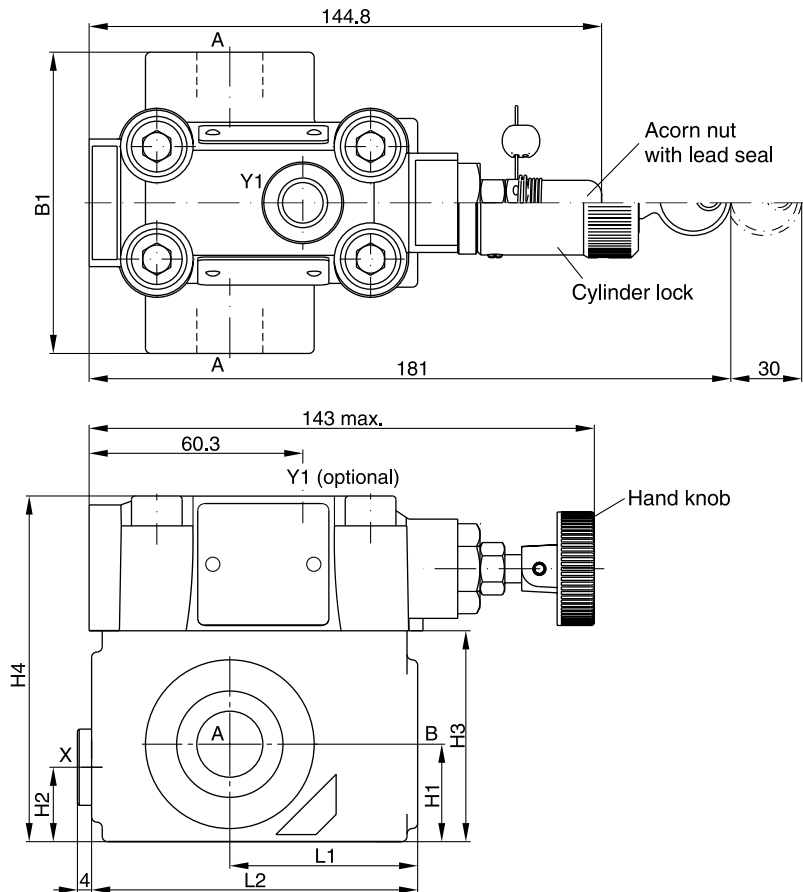


Minimum pressure curve



All characteristic curves measured with HLP46 at 50 °C.

**Dimensions
 T-body**

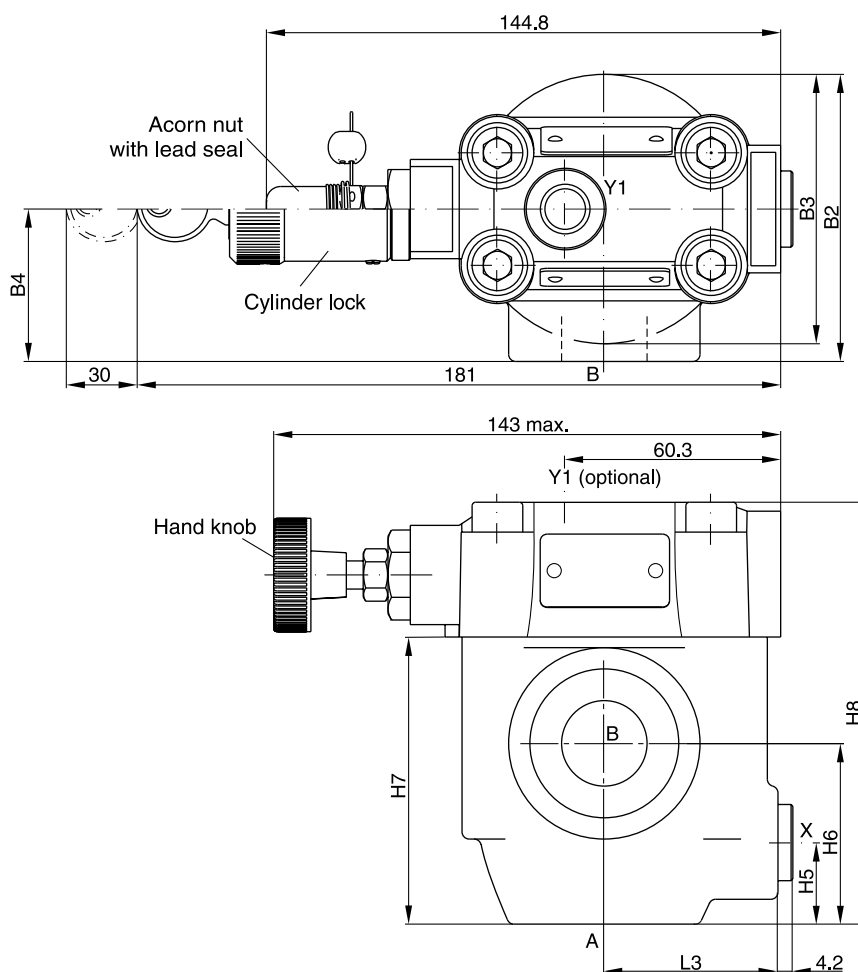


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¹⁾ The performance curves are measured with external drain. For internal drain the tank pressure has to be added to curve.

Dimensions

L-body



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Seal kits		
NG	NBR	FPM
03	S26-58507-0	S26-58507-5
06	S26-58475-0	S26-58475-5
10	S26-58508-0	S26-58508-5

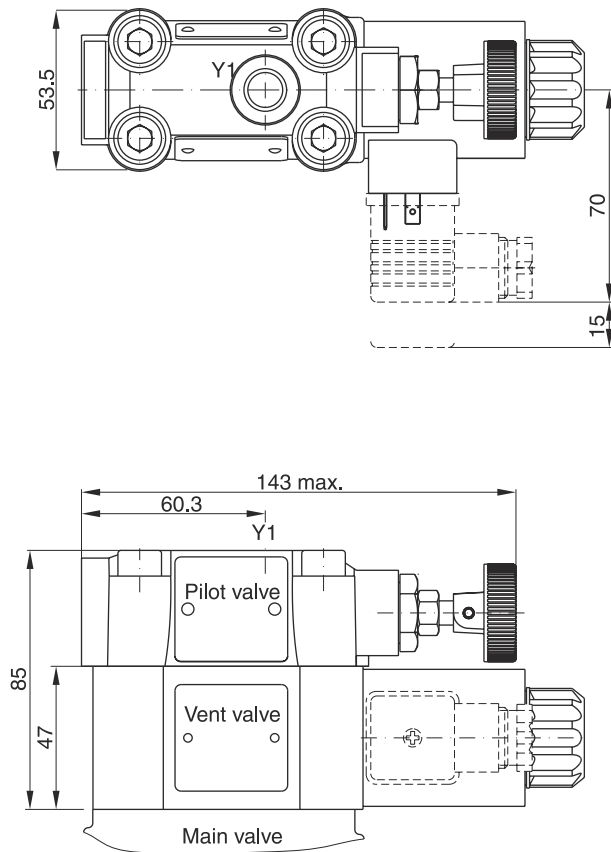
NG	Body	B1	B2	B3	B4	H1	H2	H3	H4	H5	H6	H7	H8	L1	L2	L3
03	T-body	85	-	-	-	27.5	21	59.5	97.5	-	-	-	-	53	92	-
06	T-body	136	-	-	-	38	28	93	131	-	-	-	-	66.5	117.5	-
06	L-body	-	81	76	43	-	-	-	-	23	51	81	119	-	-	49
10	L-body	-	120.7	85.8	77.8	-	-	-	-	38.1	50.8	96	134	-	-	49.8

Ports	Function	Port size			
		R4V03 T-body	R4V06 L-body	R4V06 T-body	R4V10 L-body
A	pressure (inlet)	G½ "	G¾ "	G1 "	G1¼ "
B	tank (outlet)	G½ "	G¾ "	G1 "	G1¼ "
X 1)	external remote control or vent connection	G¼ "	G¼ "	G¼ "	G¼ "
Y1 2)	external drain	G¼ "	G¼ "	G¼ "	G¼ "

1) Closed when supplied.

2) Port Y1 is only available at drain line (code 2) external from the pilot head.

R4V with vent function



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

Code	Internal drain	External drain
11		
09		

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