

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.

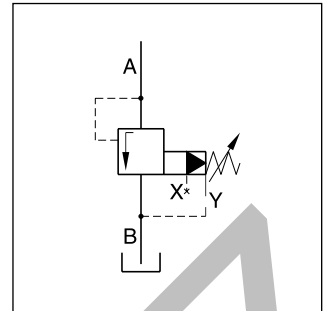
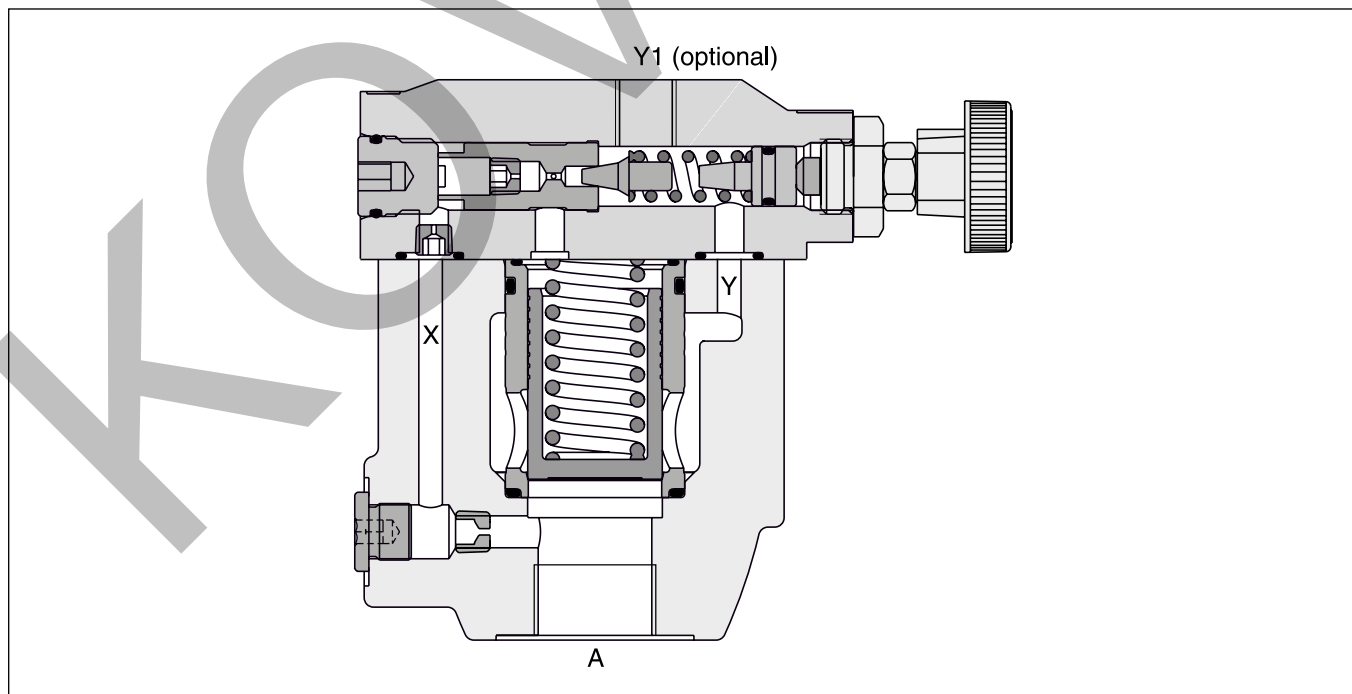
The R4V valves are available with 2 ports (L-body) for in-line relief function or with 3 ports (T-body) for relief functions in the bypass.

**Features**

- Pilot operated with manual adjustment
- 2 interfaces:
  - L-body (R4V06-G $\frac{3}{4}$ ", R4V10-G1 $\frac{1}{4}$ ")
  - 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

Pilot Operated Pressure Relief Valve  
Series R4V

Pressure relief valve	Nominal size	Max. pressure 350 bar	Body	Pressure stages	Adjustment	Drain line	Switching type	Solenoid voltage	Design	Seal	Design series (not required for ordering)	Options
<b>R4V</b>		<b>5</b>							<b>A</b>			

Code	Nominal size
03	NG10 (G½")
06	NG25 (G1" - T-body, G¾" - L-body)
10	NG32 (G1¼")

Code	Body
6	R4V03 T-body R4V06 T-body
D	R4V06 L-body R4V10 L-body

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

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

Code	Seal
1	NBR
5	FPM

Code	Solenoid voltage
omit	Standard w/o vent function
G0R	12 V=
G0Q	24 V=
GAR <sup>1)</sup>	98 V=
GAG <sup>1)</sup>	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 unpressure circulation
11	Solenoid activated unpressure circulation

Code	Drain line
0	internal
2	external from pilot head (Y1)

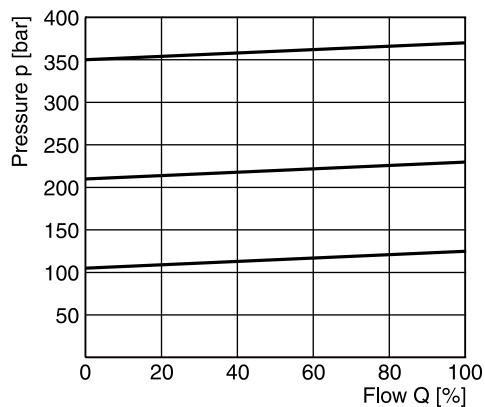
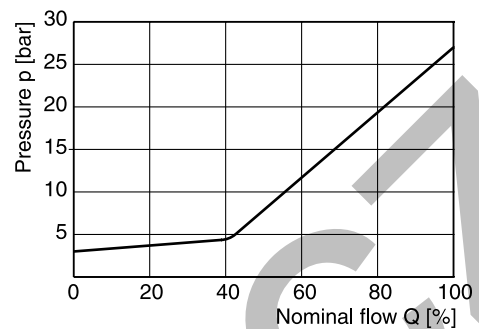
<sup>1)</sup> To be used in combination with rectifier plugs at 120 VAC / 230 VAC power supply.

**R4V**

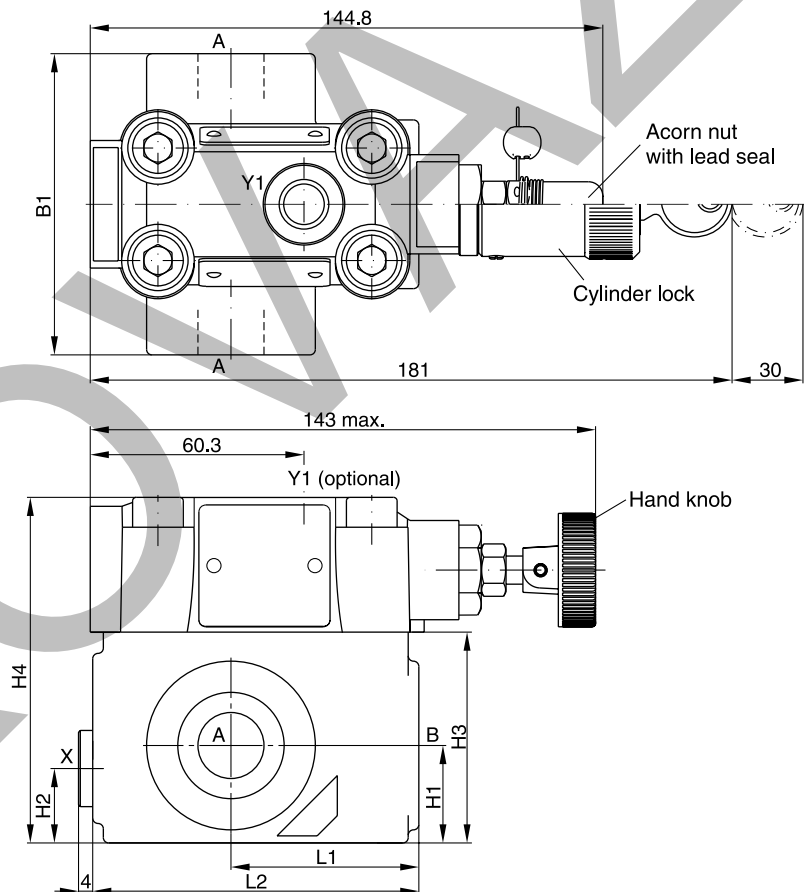
General					
Design		T-body		L-body	
Size		03 (½")	06 (1")	06 (¾")	10 (1¼")
Mounting		Threaded body			
Mounting position		unrestricted			
Ambient temperature	[°C]	-20...+60			
MTTF <sub>D</sub> value	[years]	75			
Weight	[kg]	3.2	6.6	3.3	5.6
Hydraulic					
Max. operating pressure	[bar]	Ports A and X 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 <sub>D</sub> 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 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				

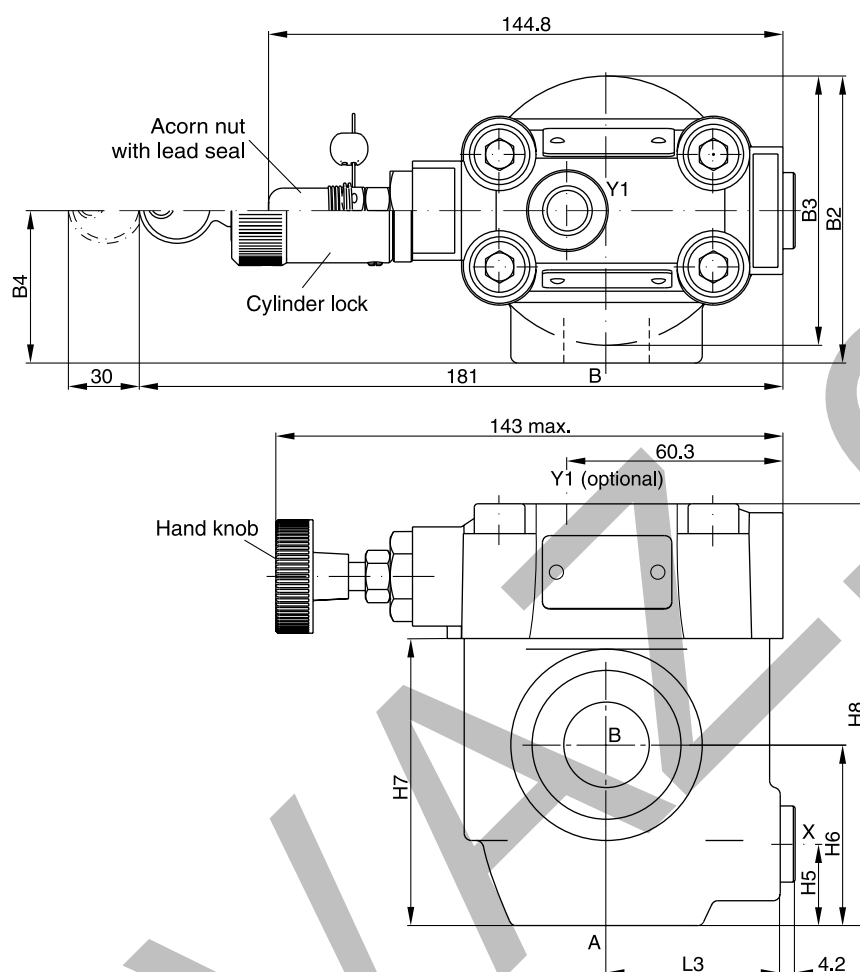
**p/Q performance curve <sup>1)</sup>****Minimum pressure curve**

All characteristic curves measured with HLP46 at 50 °C.

**Dimensions****T-body**

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

## L-body



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

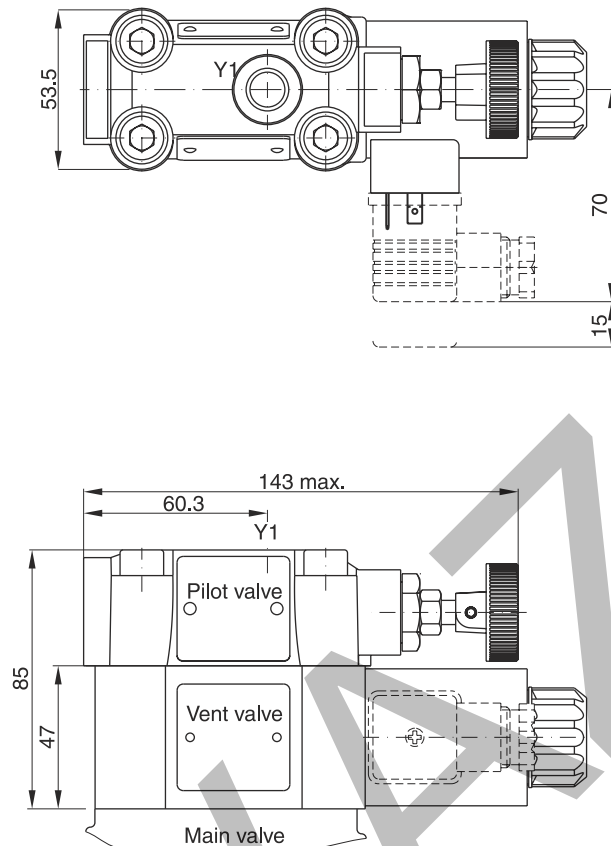
NG	Body	B1	B2	B3	B4	H1	H2	H3	H4	H5	H6	H7	H8	L1	L2	L3
03	T-body	85	—	—	—	27.5	21	59.5	97.5	—	—	—	—	53	92	—
06	T-body	136	—	—	—	38	28	93	131	—	—	—	—	66.5	117.5	—
06	L-body	—	81	76	43	—	—	—	—	23	51	81	119	—	—	49
10	L-body	—	120.7	85.8	77.8	—	—	—	—	38.1	50.8	96	134	—	—	49.8

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.

<sup>2)</sup> 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		