

Parker Series R4R Pilot Operated Pressure Reducing Valve, In-line Mounting Service Manual

Pilot operated pressure reducing valves for in-line mounting series R4R have a similar design to the subplate mounted R4R series. For single functions – where no manifold blocks are used – the valves can be directly placed in the pipework.

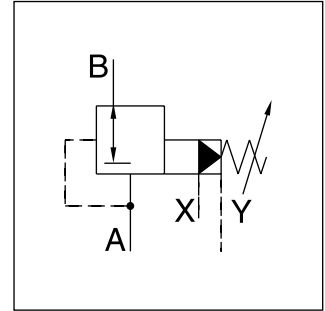
The valves are available with 2 ports (L-body) or with 3 ports (T-body).

Features

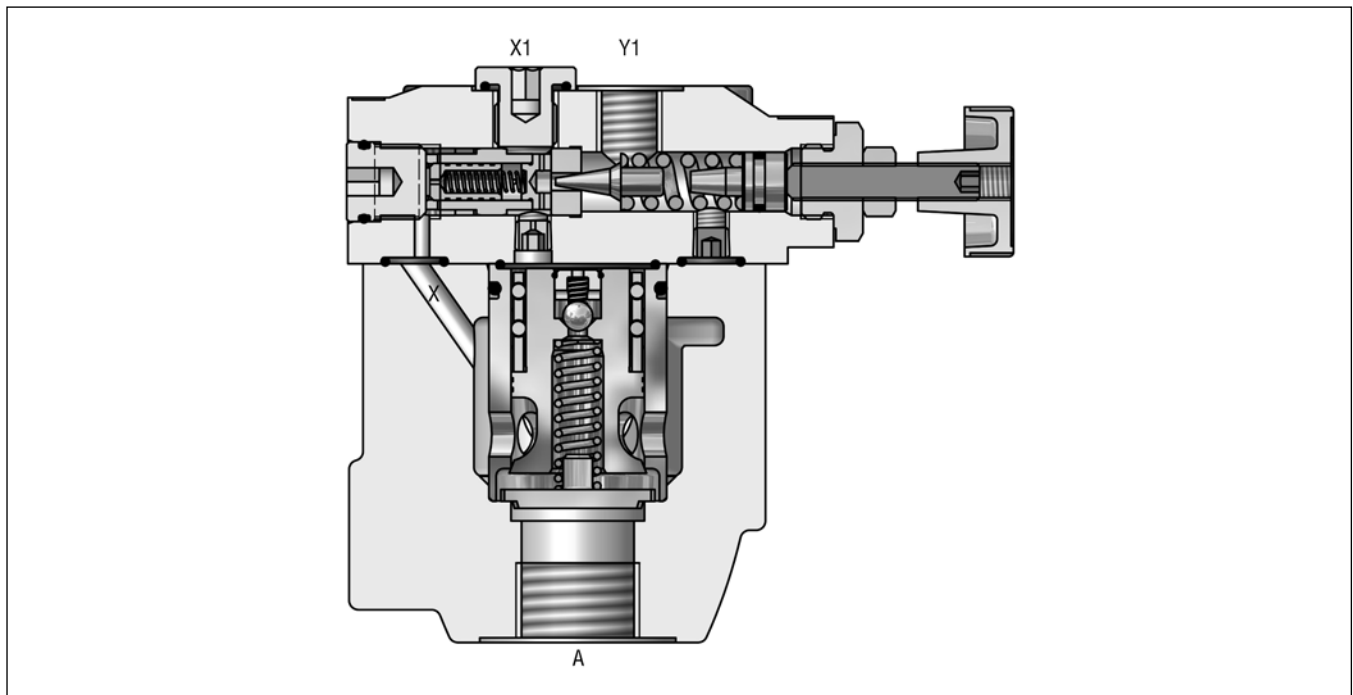
- Pilot operated with manual adjustment
- Normally closed to avoid undesired motion
- 2 interfaces
 - L-body (R4R06-G $\frac{3}{4}$ ", R4R10-G1 $\frac{1}{4}$ ")
 - T-body (R4R03-G $\frac{1}{2}$ ", R4R06-G1")
- 3 pressure stages
- 3 adjustment modes
 - Hand knob
 - Acorn nut with lead seal
 - Cylinder lock
- With optional vent function



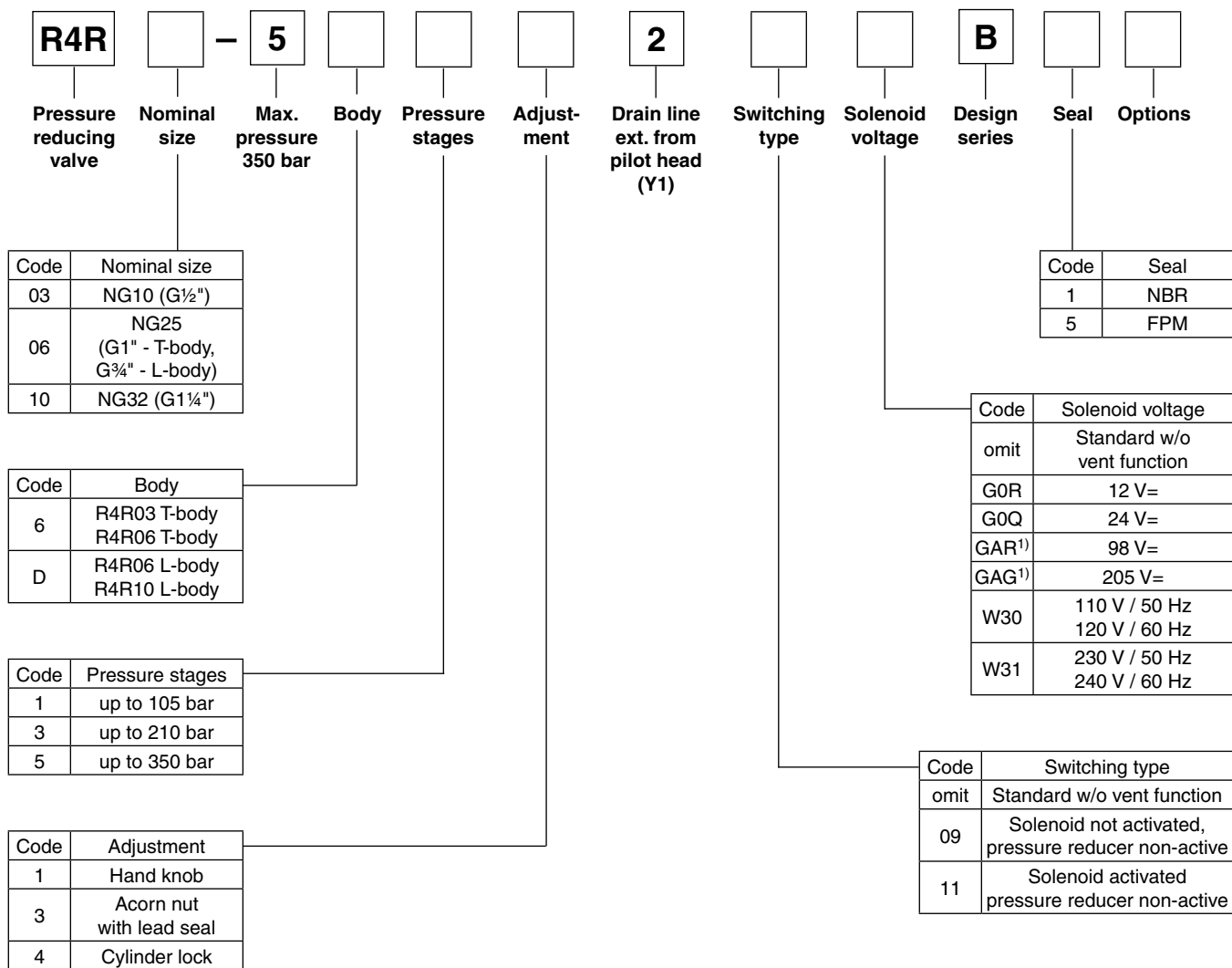
R4R10 L-body



R4R06 L-body



Ordering Code



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

Technical Data

R4R

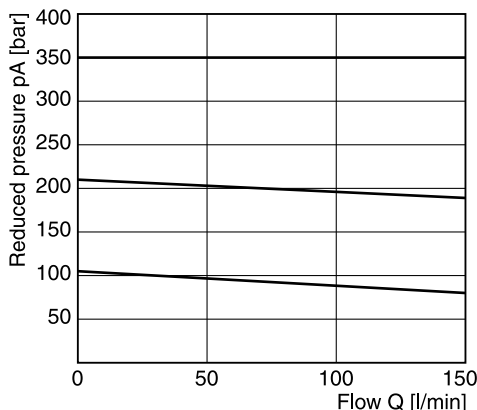
General					
Design	T-body		L-body		
	03 (½")	06 (1")	06 (¾")	10 (1¼")	
Size	Threaded body				
Mounting	unrestricted				
Mounting position	unrestricted				
Ambient temperature	[°C]	-20...+60			
MTTF _D value	[years]	75			
Weight	[kg]	3.2	3.3	5.6	6.6
Hydraulic					
Max. operating pressure	[bar]	Ports A, B and X: 350; Port Y depressurized			
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]/[mm ² /s]	20...400			
Viscosity recommended	[cSt]/[mm ² /s]	30...80			
Filtration	ISO 4406 (1999); 18/16/13				

R4R with vent function

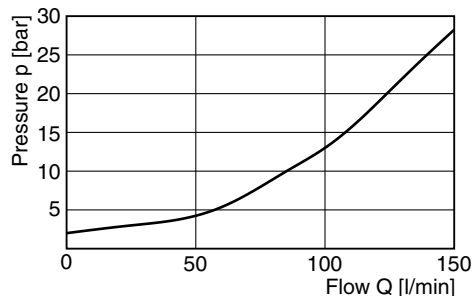
General								
Design	T-body		L-body					
	03 (½")	06 (¾")	06 (1")	10 (1¼")				
Size	Threaded body							
Mounting	unrestricted							
Mounting position	unrestricted							
Ambient temperature	[°C]	-20...+60						
MTTF _D value	[years]	75						
Weight	[kg]	4.9	5.0	7.3	8.3			
Hydraulic								
Max. operating pressure	[bar]	Ports A and X up to 350; Ports B and Y depressurized						
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] / [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						

Reduced pressure pA versus flow Q

R4R03 ¹⁾

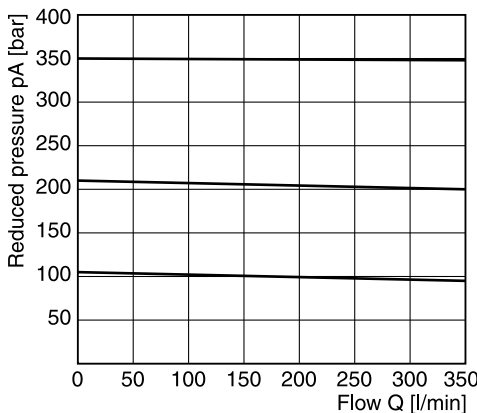


Minimum pressure curve

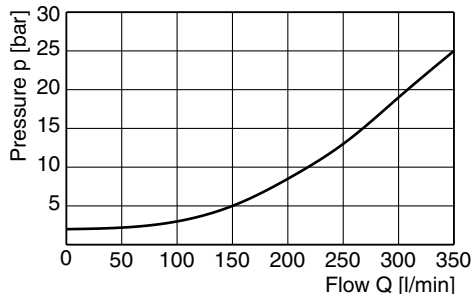


Reduced pressure pA versus flow Q

R4R06 ¹⁾

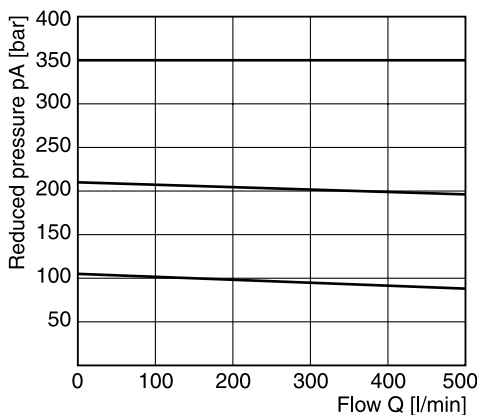


Minimum pressure curve

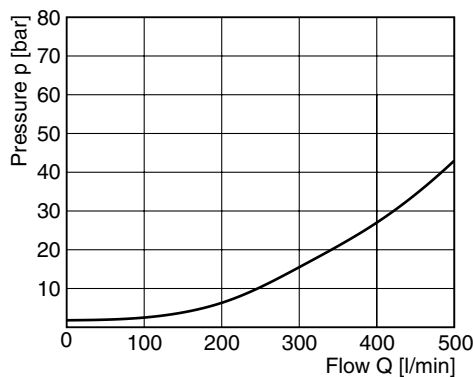


Reduced pressure pA versus flow Q

R4R10 ¹⁾



Minimum pressure curve

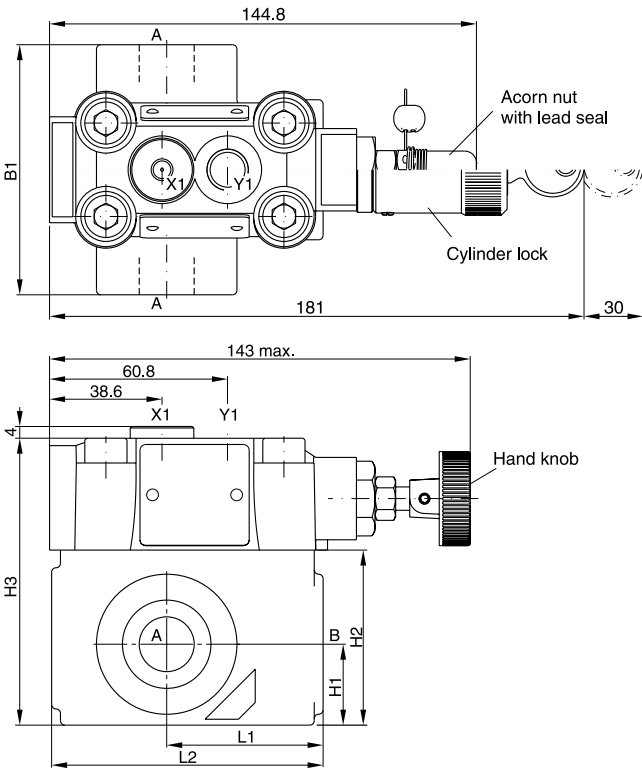


All characteristic curves measured with HLP46 at 50 °C.

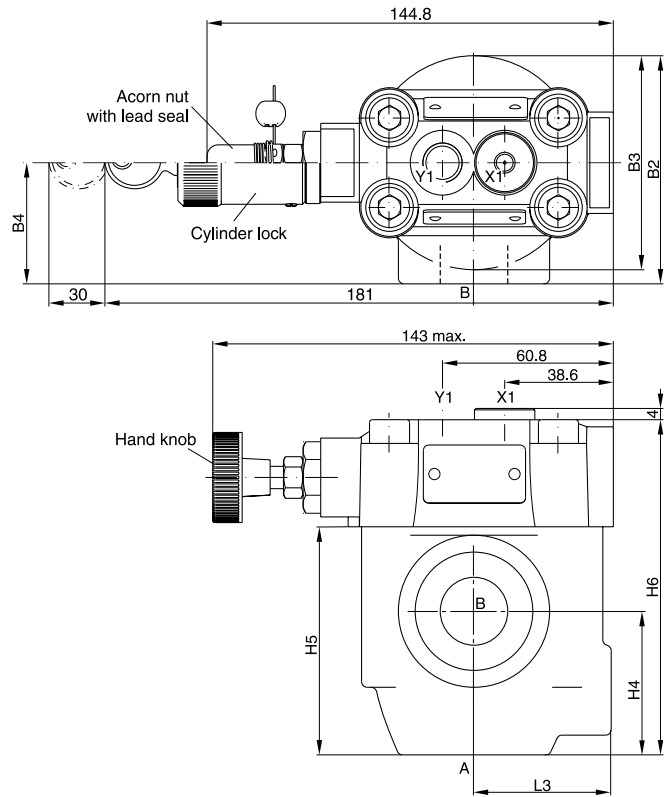
¹⁾ Measured at 350 bar primary pressure pB.

Dimensions

T-body



L-body



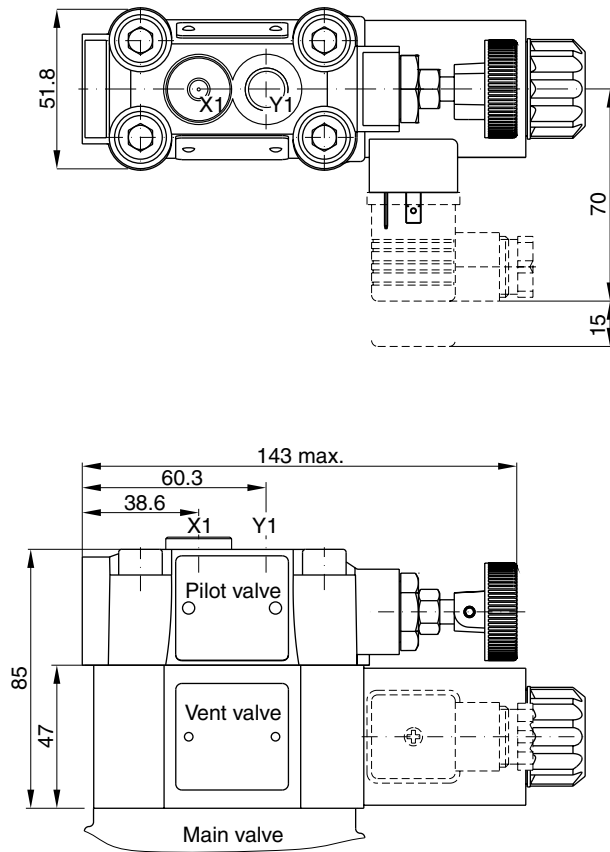
10

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	L1	L2	L3
03	T-body	85	–	–	–	27.5	59.5	97.5	–	–	–	53	92	–
06	T-body	136	–	–	–	38	93	131	–	–	–	66.5	117.5	–
06	L-body	–	81	76	43	–	–	–	51	81	119	–	–	49
10	L-body	–	120.7	85.8	77.8	–	–	–	50.8	96	134	–	–	49.8

Ports	Function	Port size			
		R4V03 T-body	R4V06 L-body	R4V06 T-body	R4V10 L-body
B	pressure (inlet)	G½ "	G¾ "	G1 "	G1¼ "
A	pressure (outlet)	G½ "	G¾ "	G1 "	G1¼ "
X1	external remote control or vent connection	G¼ "	G¼ "	G¼ "	G¼ "
Y1	external drain	G¼ "	G¼ "	G¼ "	G¼ "

R4R with vent function



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

Code	External drain
11	
09	