

Proportional pressure reducing valves series R4R*P2 are based on the mechanically adjusted series R4R. The additional proportional unit between the mechanical pilot valve and the main stage allows continuous pressure adjustment.

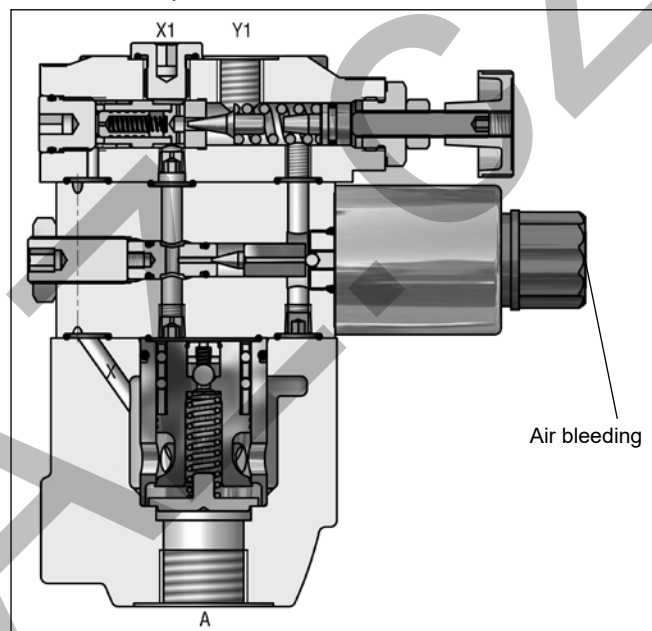
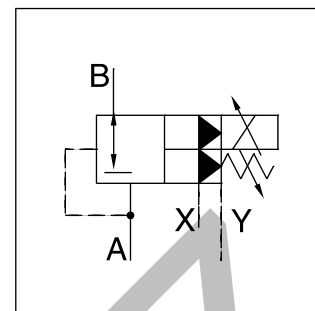
The optimum performance can be achieved in combination with the digital amplifier module PCD00A-400.

Features

- Continuous adjustment by proportional solenoid
- 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
- With mechanical maximum pressure adjustment



R4R10*P2 L-body



R4R06*P2 L-body

Ordering code

R4R		5				2	P2	G0R	B		
Pressure reducing valve	Nominal size	Max. pressure 350 bar	Body	Pressure stages	Adjustment	Drain line ext. from pilot head (Y1)	Proportional pressure control	Solenoid voltage 12 V=	Design series	Seal	Options

Code	Nominal size
03	NG10 (G $\frac{1}{2}$ ")
06	NG25 (G1" - T-body, G $\frac{3}{4}$ " - L-body)
10	NG32 (G1 $\frac{1}{4}$ ")

Code	Body
6	R4R03 T-body R4R06 T-body
D	R4R06 L-body R4R10 L-body

Code	Seal
1	NBR
5	FPM

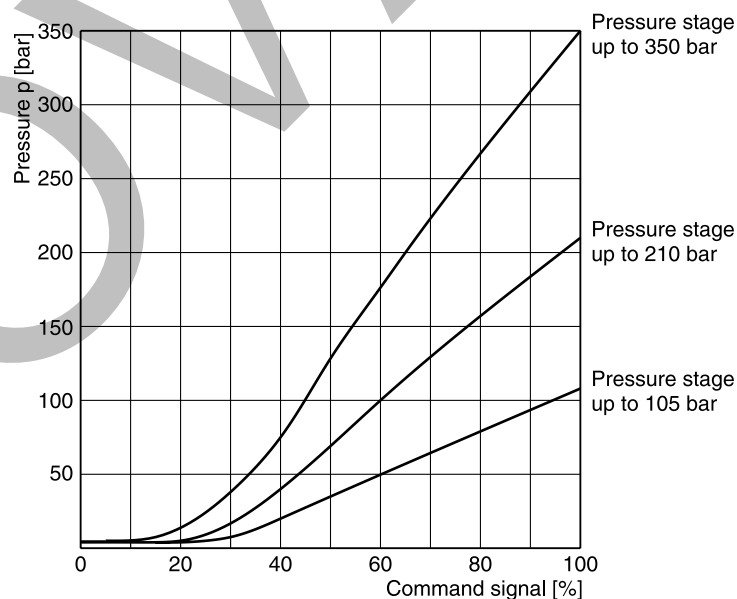
Code	Adjustment
1	Hand knob
3	Acorn nut with lead seal

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

Technical data

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]	5.0	5.1	7.4	8.4
Hydraulic						
Max. operating pressure		[bar]	Ports A, B and X up to 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]/[mm²/s]	20...400			
recommended		[cSt]/[mm²/s]	30...80			
Filtration		ISO 4406 (1999) 18/16/13				
Electrical (prop. solenoid)						
Duty ratio		[%]	100			
Protection class		IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)				
Nominal voltage		[V]	12 =			
Max. current		[A]	2.3			
Coil resistance		[Ohm]	4 at 20 °C			
Solenoid connection		Connector as per EN175301-803				
Power amplifier		PCD00A-400				

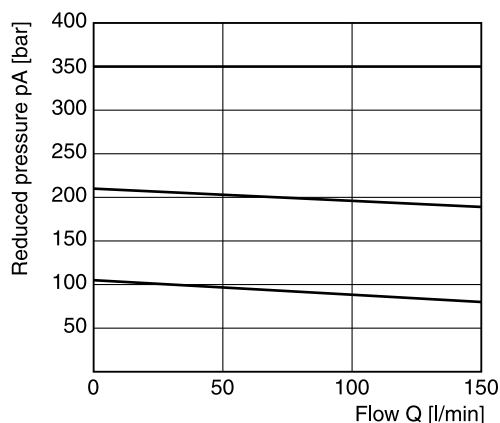
Command/pressure curve



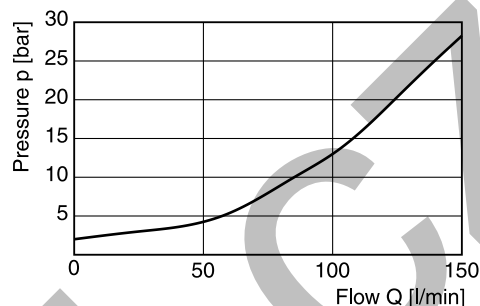
All characteristic curves measured with HLP46 at 50 °C.

Reduced pressure pA versus flow Q

R4R03 ¹⁾

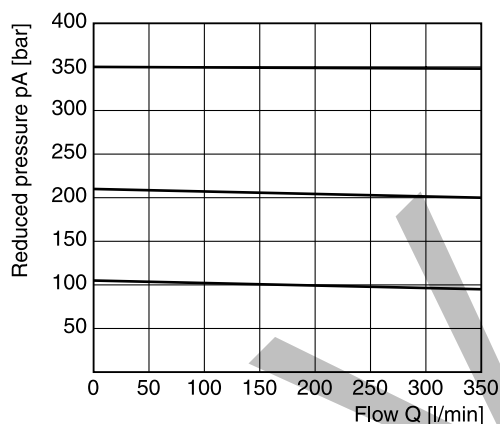


Minimum pressure curve

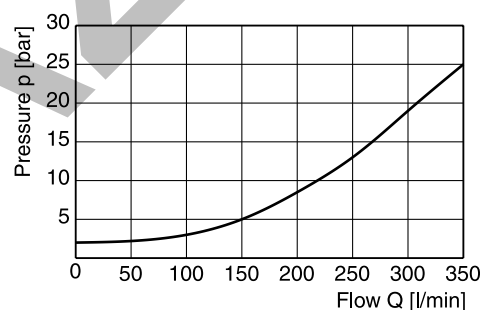


Reduced pressure pA versus flow Q

R4R06 ¹⁾

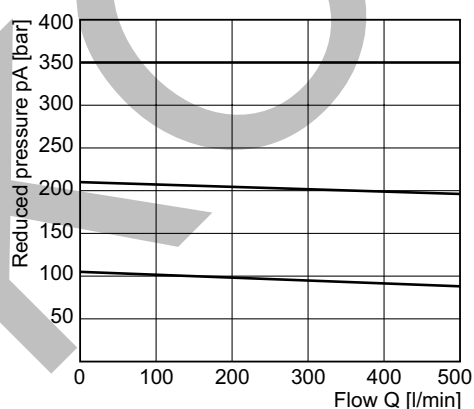


Minimum pressure curve

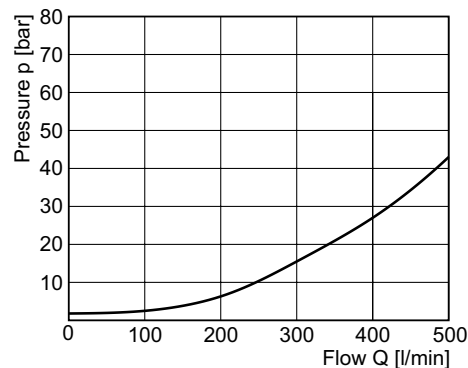


Reduced pressure pA versus flow Q

R4R10 ¹⁾



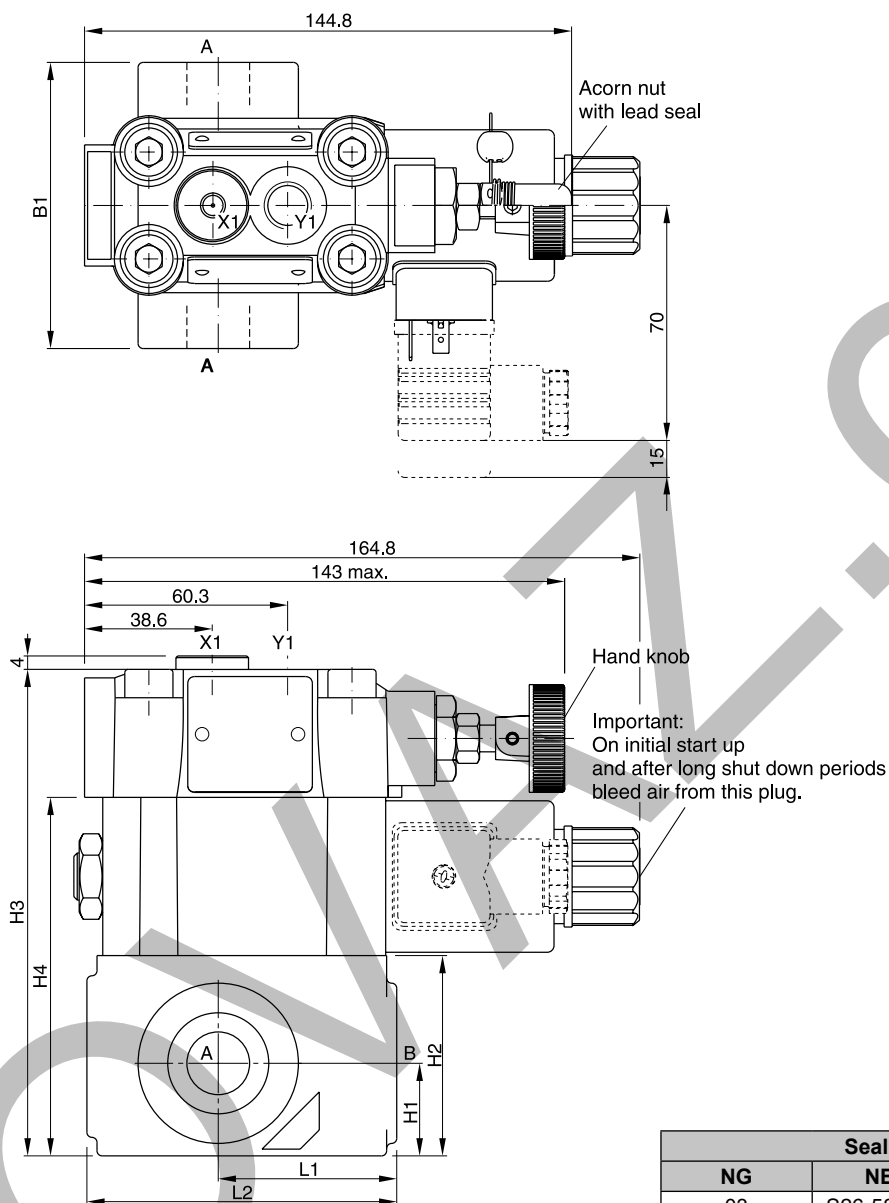
Minimum pressure curve



All characteristic curves measured with HLP46 at 50 °C.

¹⁾ Measured at 350 bar primary pressure pB.

T-body

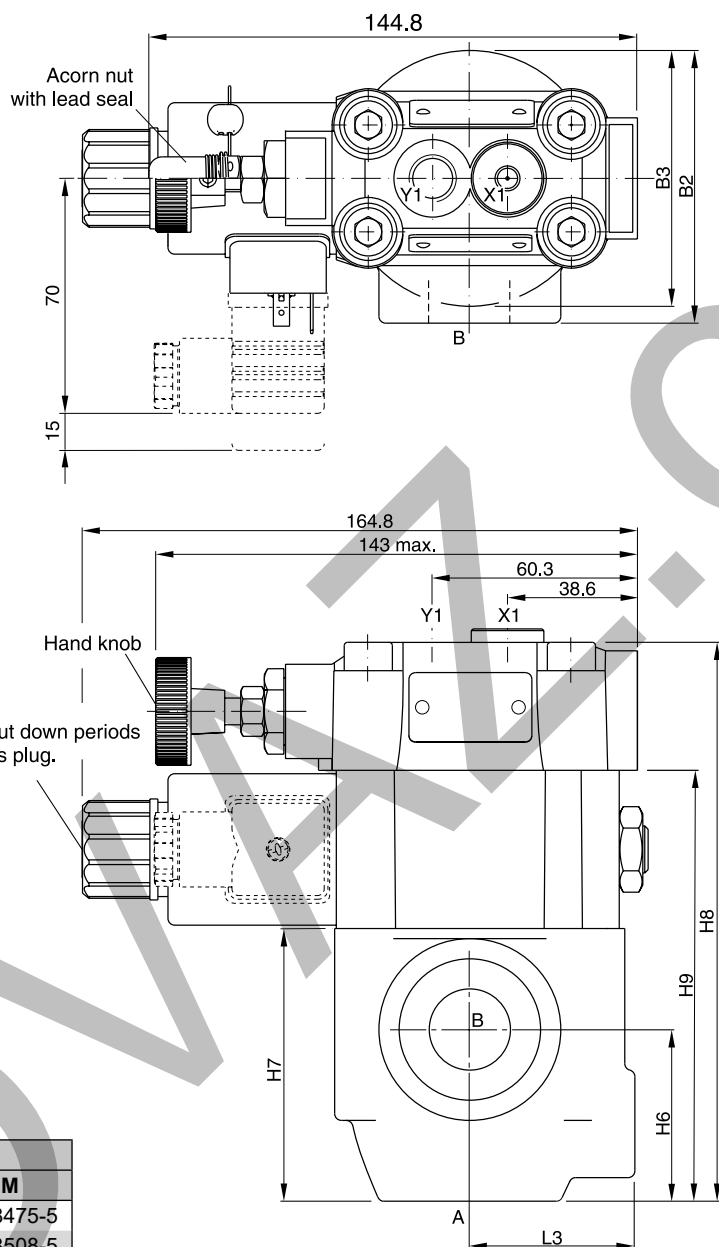


Seal kits		
NG	NBR	FPM
03	S26-58507-0	S26-58507-5
06	S26-58475-0	S26-58475-5
Prop. section P2*	S26-58473-0	S26-58473-5

NG	Body	B1	H1	H2	H3	H4	L1	L2
03	T-body	85	27.5	59.5	144.5	106.5	53	92
06	T-body	136	38	93	178	140	66.5	117.5

Ports	Function	Port size	
		R4V03*P2 T-body	R4V06*P2 T-body
B	pressure (inlet)	G½ "	G1 "
A	pressure (outlet)	G½ "	G1 "
X1 ¹⁾	ext. remote control or vent connection	G¼ "	G¼ "
Y1	external drain	G¼ "	G¼ "

* Please combine seal kit of one size with seal kit of prop. section for complete seal kit.
¹⁾ Closed when supplied.

L-body

Seal kits		
NG	NBR	FPM
06	S26-58475-0	S26-58475-5
10	S26-58508-0	S26-58508-5
Prop. section P2*	S26-58473-0	S26-58473-5

NG	Body	B2	B3	H6	H7	H8	H9	L3
06	L-body	81	76	51	81	166	128	49
10	L-body	120.7	85.8	50.8	96	181	143	49.8

Ports	Function	Port size	
		R4V06*P2 L-body	R4V10*P2 L-body
B	pressure (inlet)	G $\frac{3}{4}$ "	G1 $\frac{1}{4}$ "
A	pressure (outlet)	G $\frac{3}{4}$ "	G1 $\frac{1}{4}$ "
X1 ¹⁾	ext. remote control or vent connection	G $\frac{1}{4}$ "	G $\frac{1}{4}$ "
Y1	external drain	G $\frac{1}{4}$ "	G $\frac{1}{4}$ "

* Please combine seal kit of one size with seal kit of prop. section for complete seal kit.

¹⁾ Closed when supplied.

R4RP2 UK.indd 04.08.22