Catalogue HY11-3500/UK Characteristics

Pilot Operated Prop. Pressure Relief Valve Series R4V*P2

Proportional pressure relief valves series R4V*P2 are based on the mechanically adjusted series R4V. The additional proportional unit between the mechanical pilot valve and the main stage allows continuous pressure adjustment.

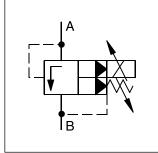
The optimum performance can be achieved in combination with the digital amplifier module PCD00A-400.

Features

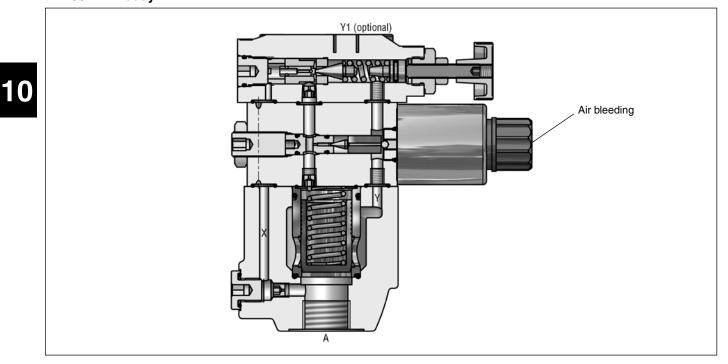
- Continuous adjustment by proportional solenoid
- 2 interfaces
 - L-body (R4V06-G¾", R4V10-G1¼")
 - T-body (R4V03-G1/2", R4V06-G1")
- 3 pressure stages
- · With mechanical maximum pressure adjustment







R4V06*P2 L-body





Pilot Operated Prop. Pressure Relief Valve Series R4V*P2

Order	ring code								
R4 Propor press relief	tional Size	5 Max. B ressure 350 bar	Body Press stag	Drain line	P2 Proportional pressure control	GOR Solenoid voltage 12 V= ¹⁾	A Design		Design Options series (not required for ordering)
Code	Nominal size							Code	Seal
03	NG10 (G½")							1	NBR
	NG25							5	FPM
06	(G1" - T-body, G¾" - L-body)								
10	NG32 (G1¼")	-						Code	Drain line
10	NG32 (G174)]						0	internal
Code	Body]						2	external from pilot head (Y1)
6	R4V03 T-body R4V06 T-body								
	R4V06 L-body							Code	Adjustment
D	R4V10 L-body							1	Hand knob
	-	1						3	Acorn nut with lead seal
Code	Pressure stages								
1	up to 105 bar	-							
3	up to 210 bar								
5	up to 350 bar								

1) Onboard electronics on request

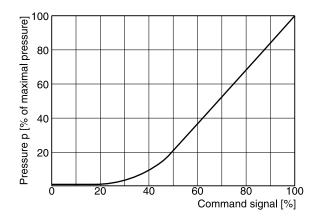
Technical data R4V*P2

General							
Design		T-b	ody	L-b	ody		
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 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] / [mm ² /s]	20400					
Viscosity recommended	[cSt] / [mm ² /s]	3080					
Filtration		ISO 4406 (1999), 18	8/16/13				
Electrical (prop. solenoid)		-					
Duty ratio	[%]	100					
Protection class		IP65 in accordance	with EN 60529 (with c	correctly mounted plug	g-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					



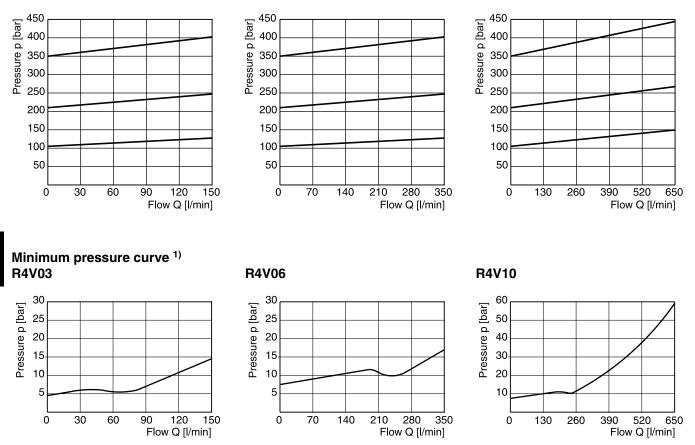
R4V10

Signal/pressure curve R4V



R4V06

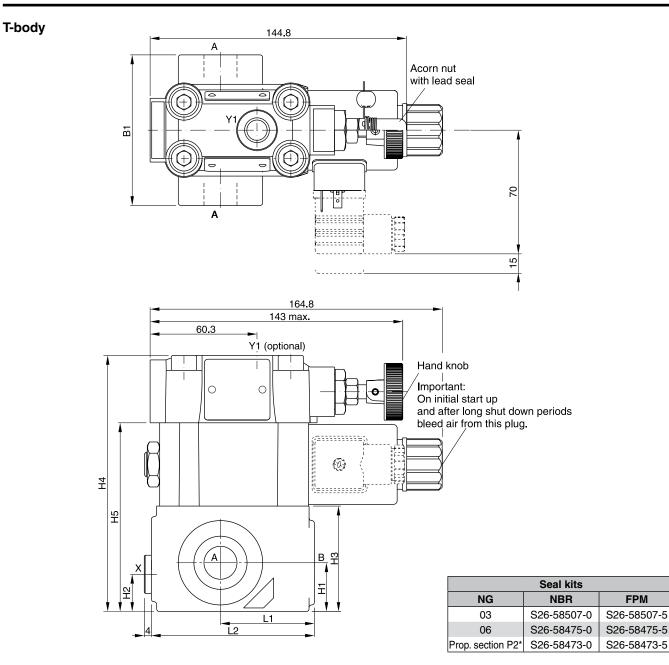
p/Q performance curves ¹⁾ R4V03



All characteristic curves measured with HLP46 at 50 °C.

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





FPM

N	IG	Body	B1	H1	H2	H3	H4	H5	L1	L2
()3	T-body	85	27.5	21	59.5	144.5	106.5	53	92
(06	T-body	136	38	28	93	178	140	66.5	117.5

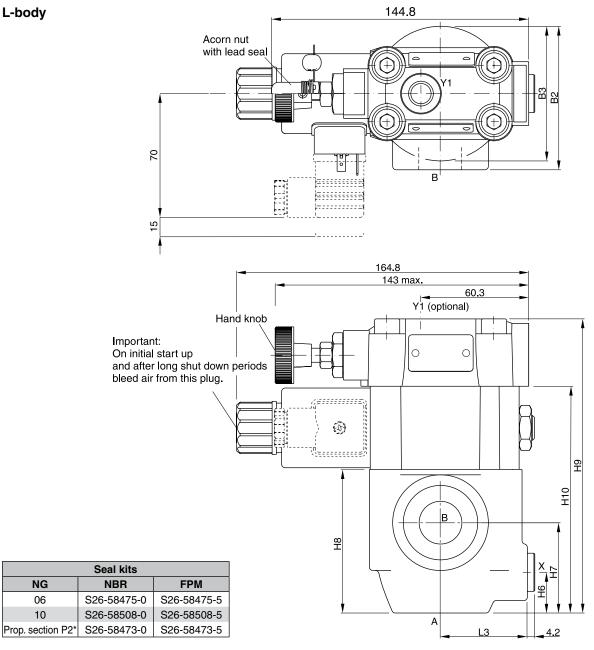
Ports	Function	Port size					
Ports	Function	R4V03*P2 T-body	R4V06*P2 T-body				
Α	pressure (inlet)	G½ "	G1 "				
В	tank (outlet)	G½ "	G1 "				
X ¹⁾	ext. remote control or vent connection	G¼ "	G¼ "				
Y1 ²⁾	external drain	G¼ "	G¼ "				

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

1) Closed when supplied.

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





NG	Body	B2	B3	H6	H7	H8	H9	H10	L3
06	L-body	81	76	23	51	81	166	128	49
10	L-body	120.7	85.8	38.1	50.8	96	181	143	49.8

Ports	Function	Port size					
Ports	Function	R4V06 L-body	R4V10 L-body				
Α	pressure (inlet)	G¾ "	G1¼ "				
В	tank (outlet)	G¾ "	G1¼ "				
X ¹⁾	ext. remote control or vent connection	G1⁄4 "	G¼ "				
Y1 ²⁾	external drain	G1⁄4 "	G¼ "				

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

1) Closed when supplied.

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

