Pilot operated proportional pressure relief valves series R4V (DIN 24340 Form D) and R6V (DIN 24340 Form E) consist of a proportionally adjusted pilot stage and a seated type main stage.

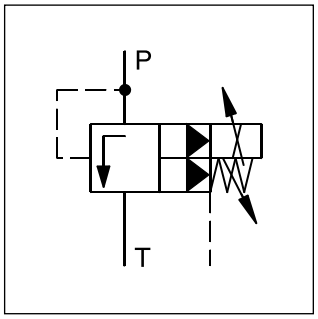
The optimum performance can be achieved in combination with the digital amplifier module PCD00A-400.

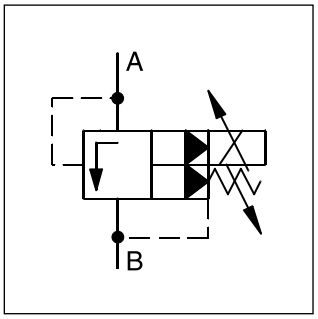
Features

- Pilot operated with proportional solenoid
- 2 interfaces:
  - R4V subplate ISO 6264 (DIN 24340 Form D)
  - R6V subplate ISO 6264 (DIN 24340 Form E)
- 3 pressure stages
- Mechanical maximum pressure adjustment (optional for R6V)

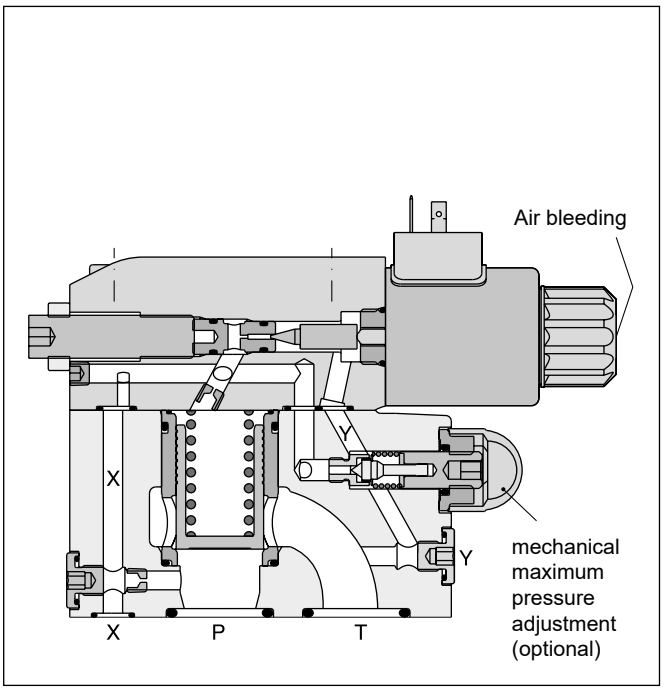
R6V06

R4V06

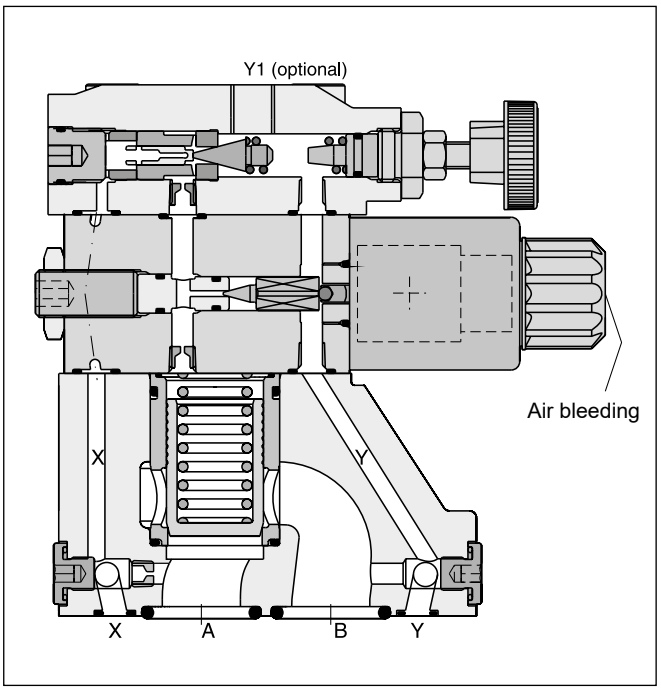




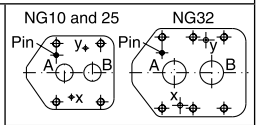
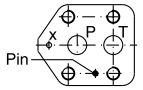
R6V06



R4V06



R		V		–	5						G0R					
Pressure valve	**Interface**	**Relief function**	**Nominal size**		**Max. pressure (350 bar)**	**Drain port**	**Pressure stages**	**Mechanical adjustment**	**Pilot oil**	**Op-tions**	**Solenoid voltage 12 V / 2.3 A**	**Design**	**Seals**	**Design series** (not required for ordering)	**Modifi-cations**

Code	Interface	
4	Subplate mounting ISO 6264	NG10 and 25 / NG32 
6		

Code	Seals
1	NBR
5	FPM

Code	Design
A	R4V
B	R6V

Code	Nominal size
03	NG10
06	NG25
10	NG32

Code	Options
P2	With mechanical max. adjustment
PS [5]	w/o mechanical max. adjustment

Code	Interface	Drain port
3	R4V	Y port in mounting pattern
9	R6V	Y-port = G 1/8“

Pilot oil	
Code	Drain line
0	internal
1 [3]	external from sub-plate
2 [4]	external from valve body (Y-port)

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

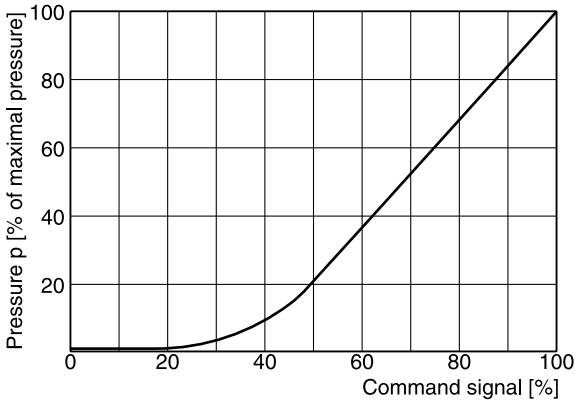
Code	Interface	Mechanical adjustment
P [2]	R6V	Hexagon screw with lock nut
1	R4V	Hand knob
3	R4V	Acorn nut with lead seal

[1] Other pressure stages on request.
[2] Use code P also for valve w/o mechanical adjustment.
[3] R4V only.
[4] R6V only.
[5] Not for R4V.

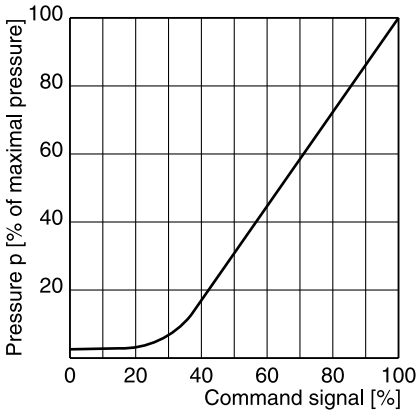
General					
Nominal size			**10**	**25**	**32**
Interface			Subplate mounting acc. ISO 6264		
Mounting position			Unrestricted, horizontal mounting preferred		
Ambient temperature		[°C]	-20...+60		
$MTTF_D$ value		[years]	75		
Weight	Series R4V	[kg]	4.5	6.3	7.8
	Series R6V	[kg]	5.2	6.4	8.3
Hydraulic					
Max. operating pressure		[bar]	Ports P (or A) and X up to 350, port T (or B) and Y 30		
Pressure stages		[bar]	105, 210, 350		
Nominal flow	Series R4V	[l/min]	90	300	600
	Series R6V	[l/min]	250	500	650
Fluid			Hydraulic oil according to DIN 51524		
Viscosity, permitted		[cSt] / [mm²/s]	20 ... 400		
recommended		[cSt] / [mm²/s]	30 ... 80		
Fluid temperature		[°C]	-20...+70 (NBR: -25...+70)		
Filtration			ISO 4406; 18/16/13		
Electrical (prop. 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)		
Supply voltage		[V]	12 V =		
Max. current		[A]	2.1		
Coil resistance at 20 °C		[Ohm]	4.28		
Solenoid connection			Connector as per EN 175301-803		
Power amplifier, recommended			PCD00A-400		

4

R4V Signal/pressure curve



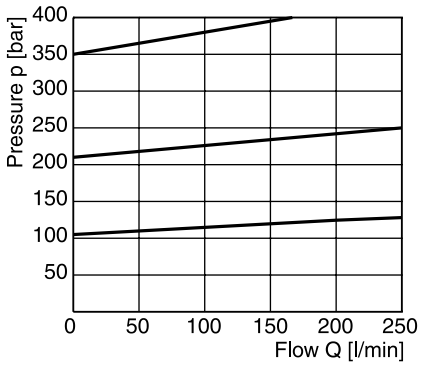
R6V Signal/pressure curve



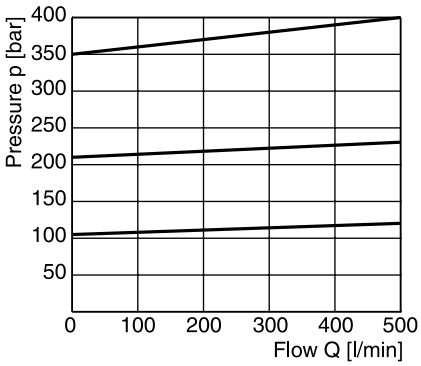
4

p/Q performance curves [1)]

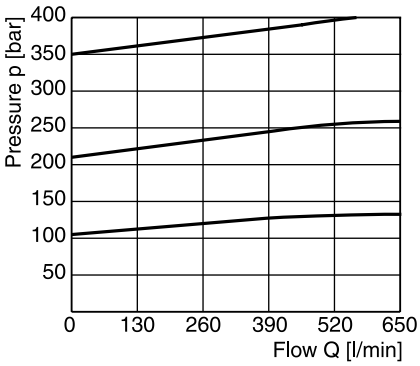
R4V / R6V03



R4V / R6V06

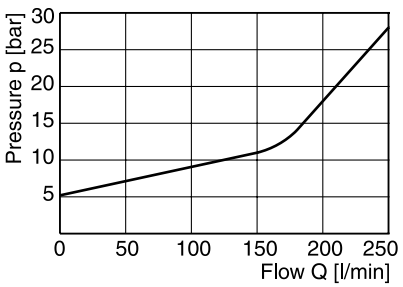


R4V / R6V10

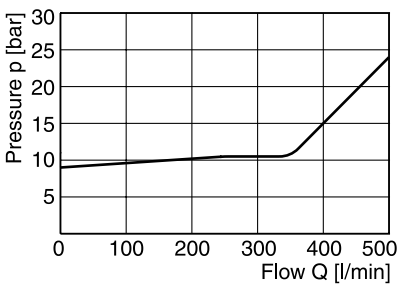


Minimum pressure curves [1)]

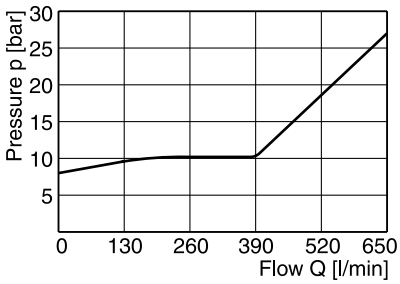
R4V / R6V03



R4V / R6V06



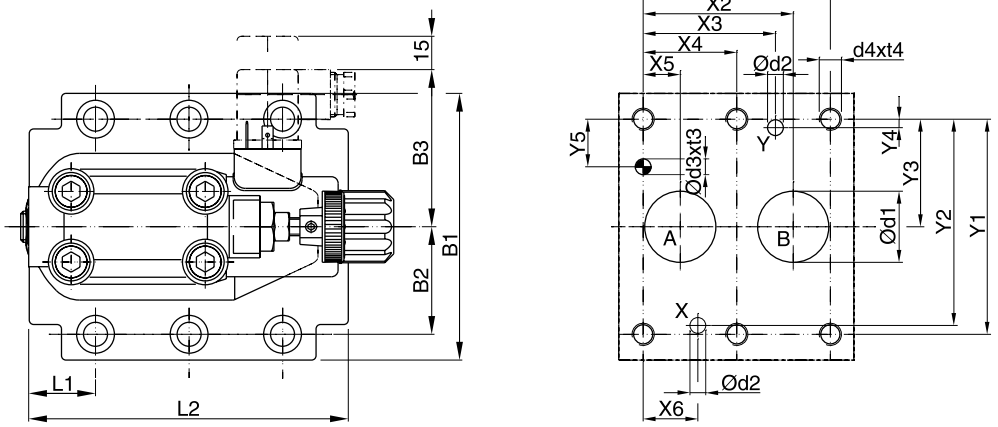
R4V / R6V10

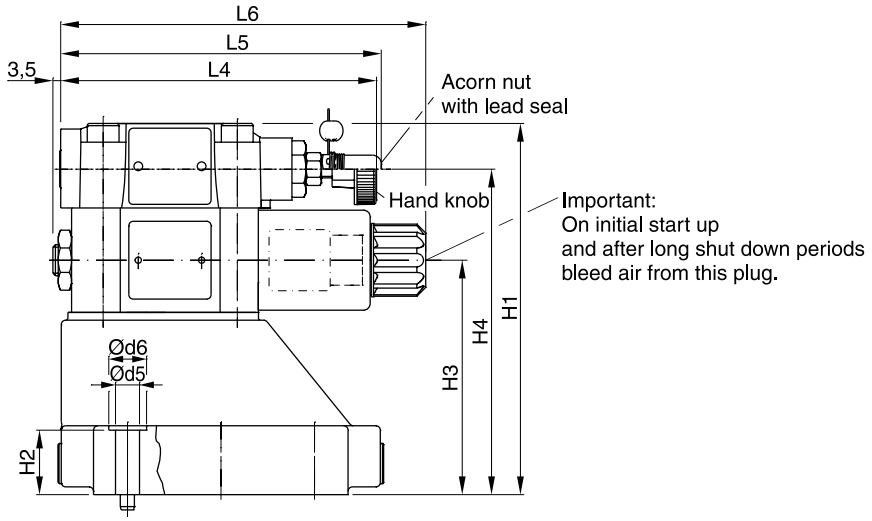


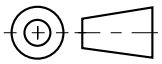
All characteristic curves measured with HLP46 at 50 °C.

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

R4V





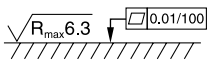


NG	ISO-code	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6
10	6264-06-07-*-97	42.9	35.8	21.5	–	7.2	21.5	0	66.7	58.8	33.4	7.9	14.3	–
25	6264-08-11-*-97	60.3	49.2	39.7	–	11.1	20.6	0	79.4	73	39.7	6.4	15.9	–
32	6264-10-15-*-97	84.2	67.5	59.5	42.1	16.7	24.6	0	96.8	92.8	48.4	3.8	21.4	–

Tolerance at X and Y pin holes and screw holes ±0.1, at port holes ±0.2.

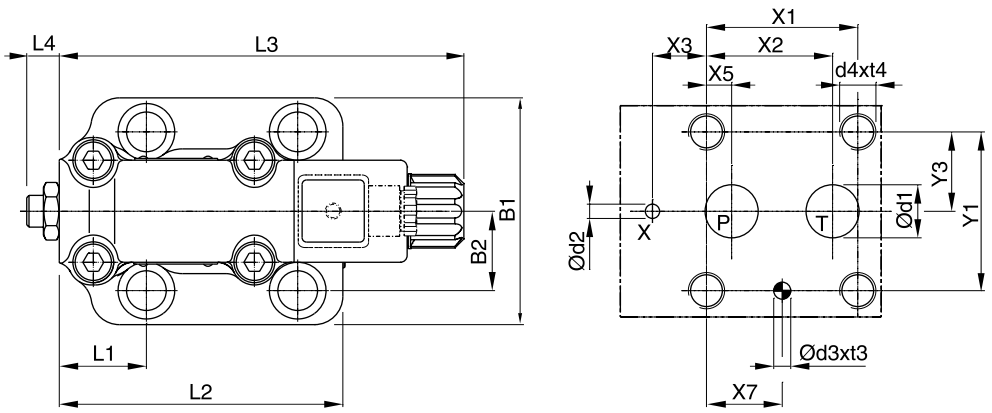
NG	ISO-code	B1	B2	B3	H1	H2	H3	H4	H6	L1	L2	L3	L4	L5	L6
10	6264-06-07-*-97	87.3	33.35	71	130	21	68.5	109.5	–	25	90.8	–	143	144.8	164.8
25	6264-08-11-*-97	105	39.7	71	154.5	29	93	134	–	30.9	123	–	143	144.8	164.8
32	6264-10-15-*-97	120	48.4	71	167	30	105.5	146.5	–	29.8	143.5	–	143	144.8	164.8

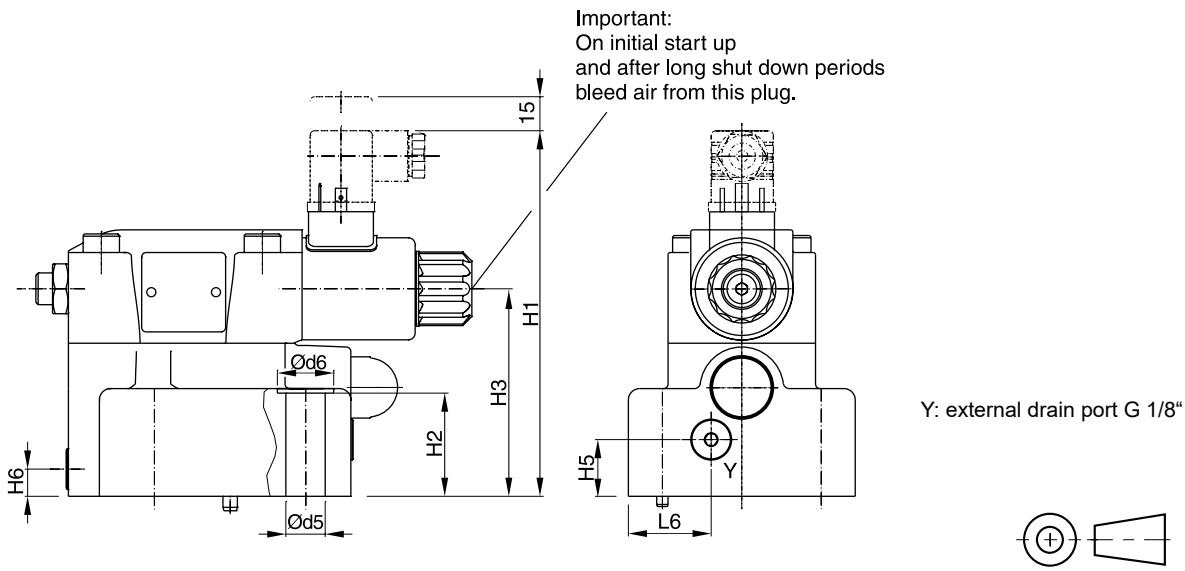
NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6	Subplate [1]
10	6264-06-07-*-97	15	7	7.1	8	M10	16	10.8	17	SPP 3M6B 910
25	6264-08-11-*-97	23.4	7.1	7.1	8	M10	18	10.8	17	SPP 6M8B 910
32	6264-10-15-*-97	32	7.1	7.1	8	M10	20	10.8	17	SPP 10M12B 910

NG	Bolt kit			Kit		Surface finish
				NBR	FPM	
10	BK505	4x M10x35 ISO 4762-12.9	63 Nm ±15 %	S26-58507-0 [2]	S26-58507-5 [2]	
25	BK485	4x M10x45 ISO 4762-12.9	63 Nm ±15 %	S26-58475-0 [2]	S26-58475-5 [2]	
32	BK506	4x M10x45 ISO 4762-12.9	63 Nm ±15 %	S26-58508-0 [2]	S26-58508-5 [2]	
Prop. section P2				S26-58473-0	S26-58473-5	

[1] Details see chapter 12, series SPP.
[2] Please combine seal kit of one size with seal kit of prop. section P2 for complete seal kit.

R6V





NG	ISO-code	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6
10	6264-06-09-*-97	53.8	47.5	0	–	22.1	–	22.1	53.8	–	26.9	–	–	–
25	6264-08-13-*-97	66.7	55.6	23.8	–	11.1	–	33.4	70	–	35	–	–	–
32	6264-10-17-*-97	88.9	76.2	31.8	–	12.7	–	44.5	82.6	–	41.3	–	–	–

Tolerance at X and Y pin holes and screw holes ±0.1, at port holes ±0.2.

NG	ISO-code	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	L6
10	6264-06-09-*-97	80	26.9	158.7	27	88	–	20.5	25	52	117	182.3	14.4	–	29.5
25	6264-08-13-*-97	100	35	161.2	46.5	91.5	–	25	12	37.9	124.5	182.3	14.4	–	36.5
32	6264-10-17-*-97	120	41.3	166.7	51.3	98.5	–	26.5	13.5	44.3	153	182.3	14.4	–	46.5

NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6	Subplate [1]
10	6264-06-09-*-97	14.7	4.8	7.5	10	M12	20	13.5	20	SPP 3R6B 910
25	6264-08-13-*-97	23.4	6.3	7.5	10	M16	27	17.5	25	SPP 6R10B 910
32	6264-10-17-*-97	32	6.3	7.5	10	M18	28	20	30	SPP 10R12B 910

NG	Bolt kit			Kit		Surface finish
				NBR	FPM	
10	BK494	4x M12x45 ISO 4762-12.9	108 Nm ±15 %	S26-98589-0	S26-98589-5	R_{max}6.3 ▱ 0.01/100
25	BK366	4x M16x70 ISO 4762-12.9	264 Nm ±15 %	S26-96396-0	S26-96396-5	
32	BK507	4x M18x75 ISO 4762-12.9	398 Nm ±15 %	S26-96392-0	S26-96392-5	

[1] Details see chapter 12, series SPP.