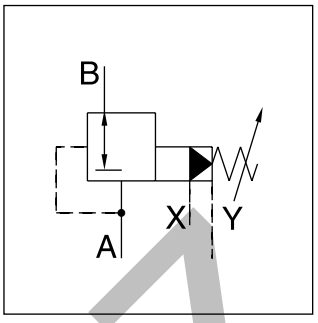
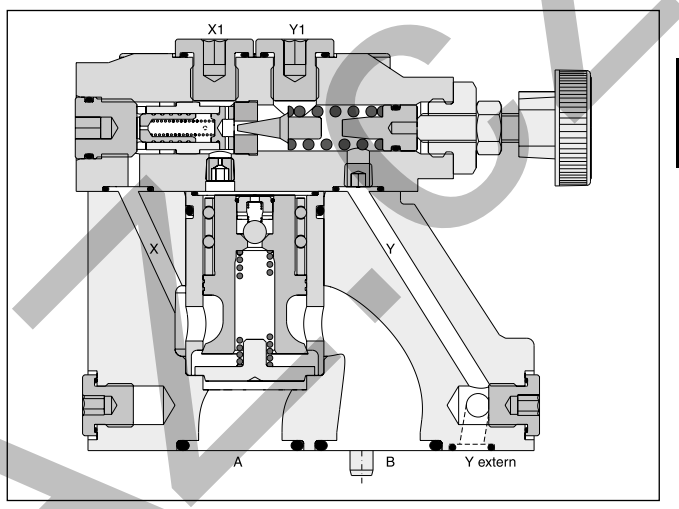
Subplate mounted pressure reducing valves series R4R are used to control the pressure in the secondary part of the hydraulic system. Independent of the primary pressure the secondary pressure is reduced to the pressure setting. In order to avoid undesired motion the valves are normally closed.



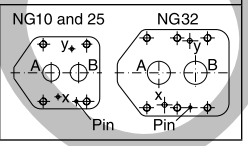


Features

- Pilot operated with manual adjustment
- Subplate mounting acc. to ISO 5781
- Normally closed to avoid unintended motion
- 3 pressure stages
- 3 adjustment modes:
  - hand knob
  - acorn nut with lead seal
  - cylinder lock

Ordering code

R	4	R		–	5	9				B		
Pressure valve	Interface	Reducing function	Nominal size		Max. pressure (350 bar)	Pilot ports G1/4“	Pressure stages	Adjust-ment	Pilot oil	Design series	Seals	Modifi-cations

Code	Interface	
4	Subplate mounting ISO 5781	

Code	Nominal size
03	NG10
06	NG25
10	NG32

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

Code	Seals
1	NBR
5	FPM

Pilot oil		
Code	Pilot	Drain
1	Internal	External from Y
2	Internal	External from Y1

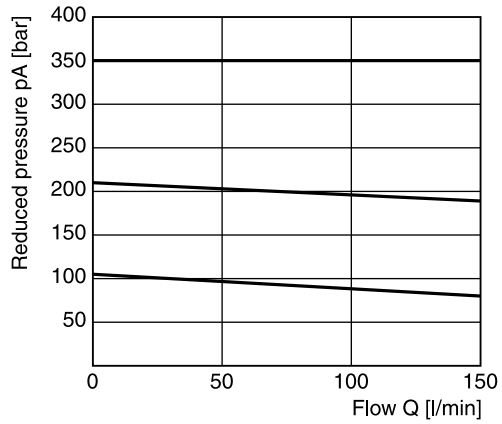
Code	Adjustment
1	Hand knob 32 mm diameter (standard)
3	Acorn nut with lead seal
4	Cylinder lock

[1] Further pressure stages on request.

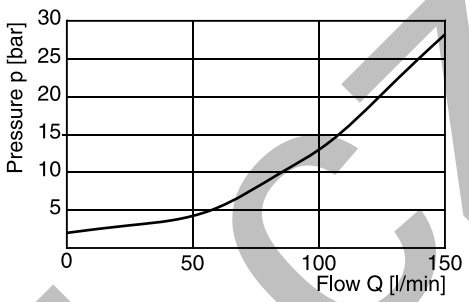
General					
Nominal size			**NG10**	**NG25**	**NG32**
Interface			Subplate mounting acc. ISO 5781		
Mounting position			Unrestricted, horizontal mounting preferred		
Ambient temperature		[°C]	-20...+60		
$MTTF_D$ value		[years]	75		
Weight		[kg]	2.7	4.5	6.0
Hydraulic					
Max. operating pressure		[bar]	Ports A, B and X 350, port Y depressurized		
Pressure stages		[bar]	105, 210, 350		
Nominal flow		[l/min]	150	350	500
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		

4

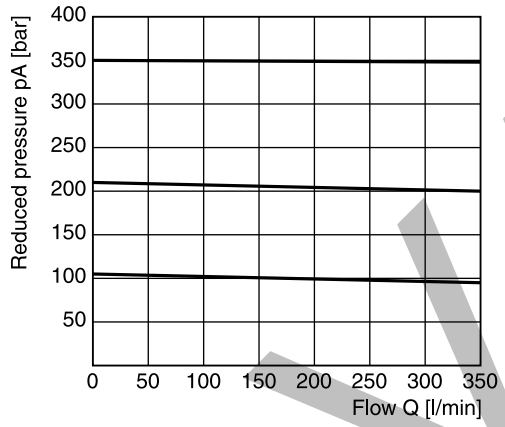
Reduced pressure pA versus flow Q
R4R03 [1)]



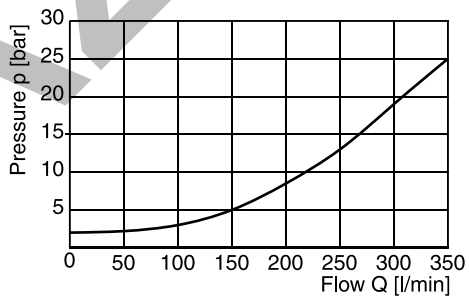
Minimum pressure curve



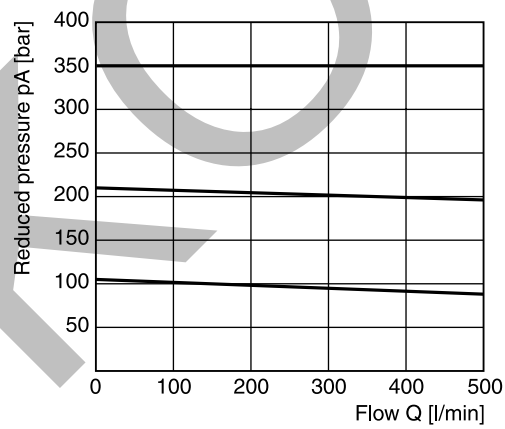
Reduced pressure pA versus flow Q
R4R06 [1)]



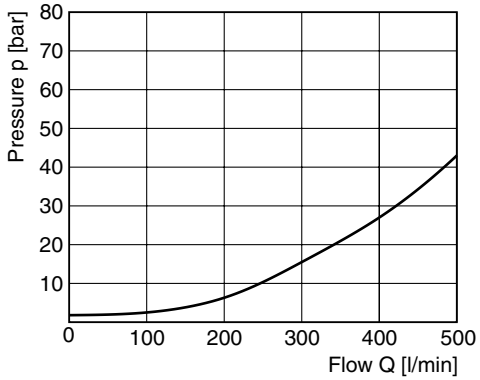
Minimum pressure curve



Reduced pressure pA versus flow Q
R4R10 [1)]



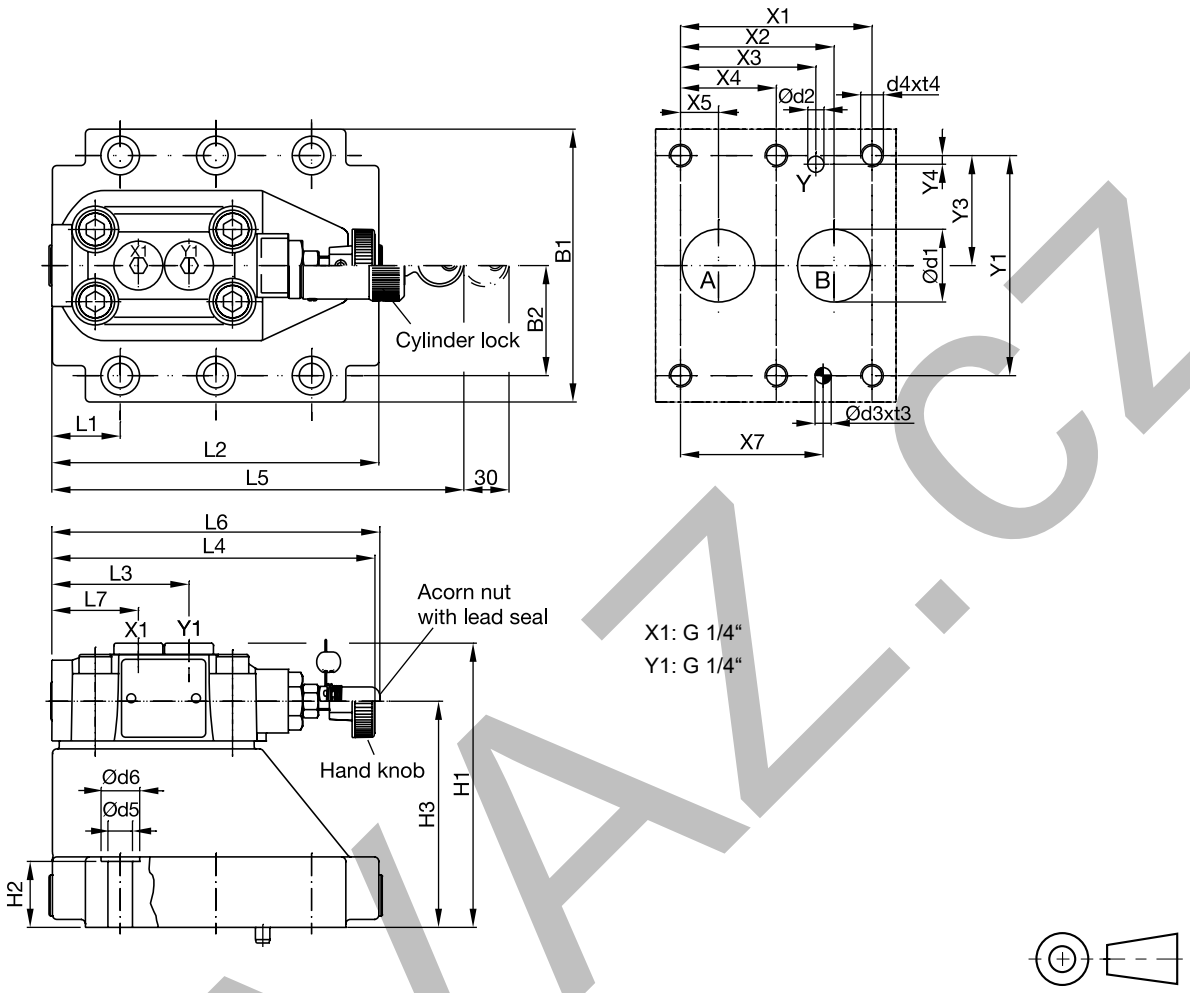
Minimum pressure curve



All characteristic curves measured with HLP46 at 50 °C.

[1)] Measured at 350 bar primary pressure pB.

4



NG	ISO-code	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6
10	5781-06-07-0-00	42.9	35.8	21.5	–	7.2	–	31.8	66.7	–	33.4	7.9	–	–
25	5781-08-10-0-00	60.3	49.2	39.7	–	11.1	–	44.5	79.4	–	39.7	6.4	–	–
32	5781-10-13-0-00	84.2	67.5	59.5	42.1	16.7	–	62.7	96.8	–	48.4	3.8	–	–

Tolerance for all dimensions ±0.2

NG	ISO-code	B1	B2	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4	L5	L6	L7
10	5781-06-07-0-00	87.3	33.35	87	21	62.5	–	–	–	25	90.8	60.8	143	181	144.8	38.6
25	5781-08-10-0-00	105	39.7	111.5	29	87	–	–	–	30.9	123	60.8	143	181	144.8	38.6
32	5781-10-13-0-00	120	48.4	124	30	99.5	–	–	–	29.8	143.5	60.8	143	181	144.8	38.6

NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6	Subplate [1]
10	5781-06-07-0-00	15	7	7.1	8	M10	16	10.8	17	SPP 3M6B 910
25	5781-08-10-0-00	23.4	7.1	7.1	8	M10	18	10.8	17	SPP 6M8B 910
32	5781-10-13-0-00	32	7.1	7.1	8	M10	20	10.8	17	SPP 10M12B 910

NG	Bolt kit			Kit NBR	Kit FPM	Surface finish
10	BK505	4x M10x35 ISO 4762-12.9	63 Nm ±15 %	S26-58507-0	S26-58507-5	R_{max}6.3 ▱ 0.01/100
25	BK485	4x M10x45 ISO 4762-12.9	63 Nm ±15 %	S26-58475-0	S26-58475-5	
32	BK506	6x M10x45 ISO 4762-12.9	63 Nm ±15 %	S26-58508-0	S26-58508-5	

[1] Details see chapter 12, series SPP.