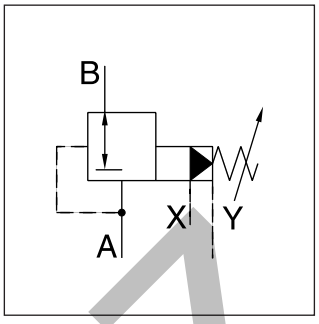
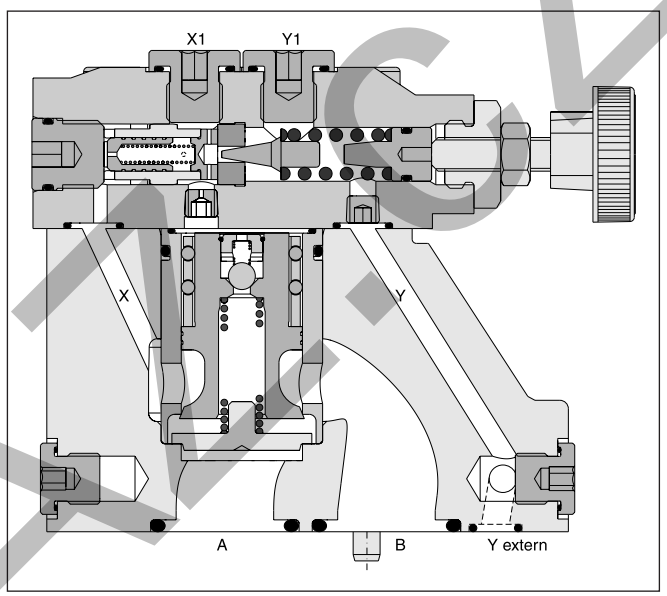
Subplate mounted pressure reducing valves are available with both Parker (series PR) and Denison (series R4R) model codes.

These valves 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
- 4 pressure stages
- 3 adjustment modes
  - hand knob
  - acorn nut with lead seal
  - Key lock

Technical data

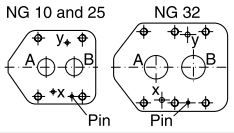
General				
Nominal size		**10**	**25**	**32**
Interface		Subplate mounting acc. ISO 5781		
Mounting position		as desired, horizontal mounting prefered		
Ambient temperature	[°C]	-20...+80		
Weight	[kg]	4.8	7.2	13.5
Hydraulic				
Max. operating pressure	[bar]	Ports A, B and X 350, port Y depressurized		
Pressure stages	[bar]	105, 175, 250, 350 (series PR), 105, 210, 350 (series R4R)		
Nominal flow	[l/min]	150	350	500
Fluid		Hydraulic oil according to DIN 51524 ... 525		
Viscosity, recommended	[cSt] / [mm²/s]	30 ... 50		
permitted	[cSt] / [mm²/s]	20 ... 380		
Fluid temperature	[°C]	-20 ... +70		
Filtration		ISO 4406 (1999); 18/16/13		

Parker

PR		M			1	P		9	
Pressure reducing valve	Nominal size	Interface	Pressure stages	Adjust-ment	Pilot oil: external drain	Poppet spring	Seals	Normaly closed	Design series (not required for ordering)

Code	Nominal size
10	NG10
25	NG25
32	NG32

Code	Seals
N	NBR
V	FPM

Code	Interface	
M	Subplate mounting ISO 5781	NG 10 and 25 / NG 32 

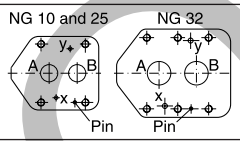
Code	Adjustment
S	Hand knob (Standard)
L	Key lock
A	Acorn nut with lead seal

Code	Pressure stages
10	up to 105 bar
17	up to 175 bar
25	up to 250 bar
35	up to 350 bar

The Parker model code should be used for all new applications. Otherwise also refer to Denison model code.

Denison

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	NG 10 and 25 / NG 32 

Code	Seals
1	NBR
5	FPM

Code	Nominal size
03	NG10
06	NG25
10	NG32

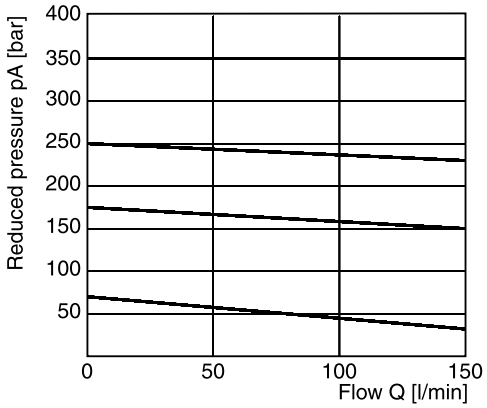
Pilot oil		
Code	Pilot	Drain
1	Internal	External from Y
2	Internal	External from Y1

Code	Adjustment
1	Hand knob 32mm dia. (Standard)
3	Acorn nut with lead seal
4	Key lock

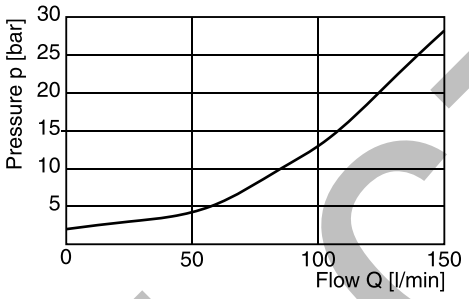
Code	Pressure stages
1	up to 105 bar
3	up to 210 bar
5	up to 350 bar

The Denison model code is available for existing applications. Otherwise also refer to Parker model code.

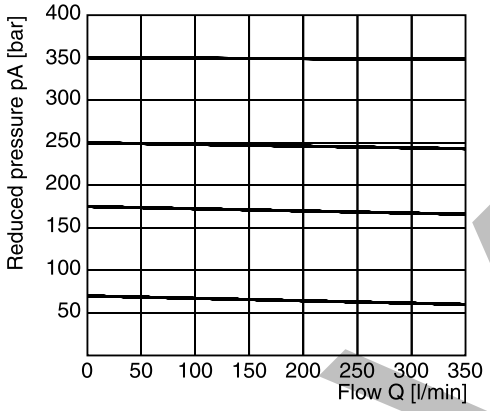
Reduced pressure pA versus flow Q
PR10M [1)]



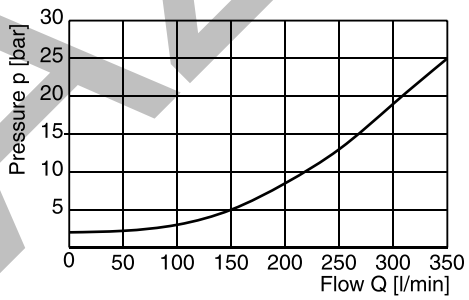
Minimum pressure curve



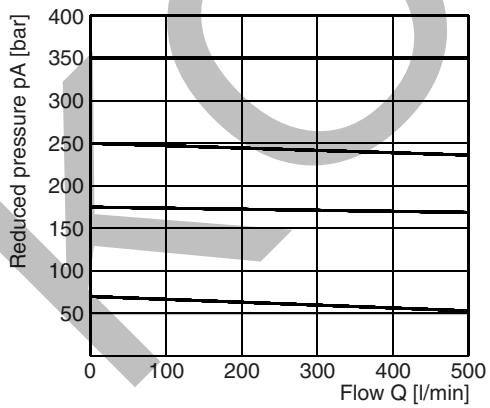
Reduced pressure pA versus flow Q
PR25M [1)]



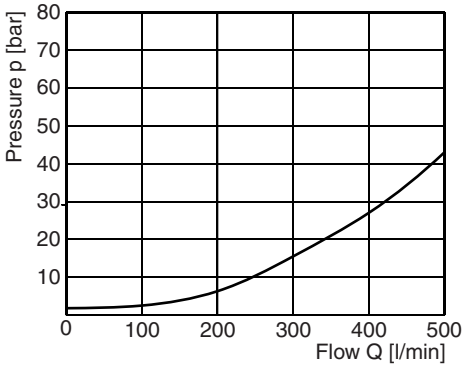
Minimum pressure curve



Reduced pressure pA versus flow Q
PR32M [1)]

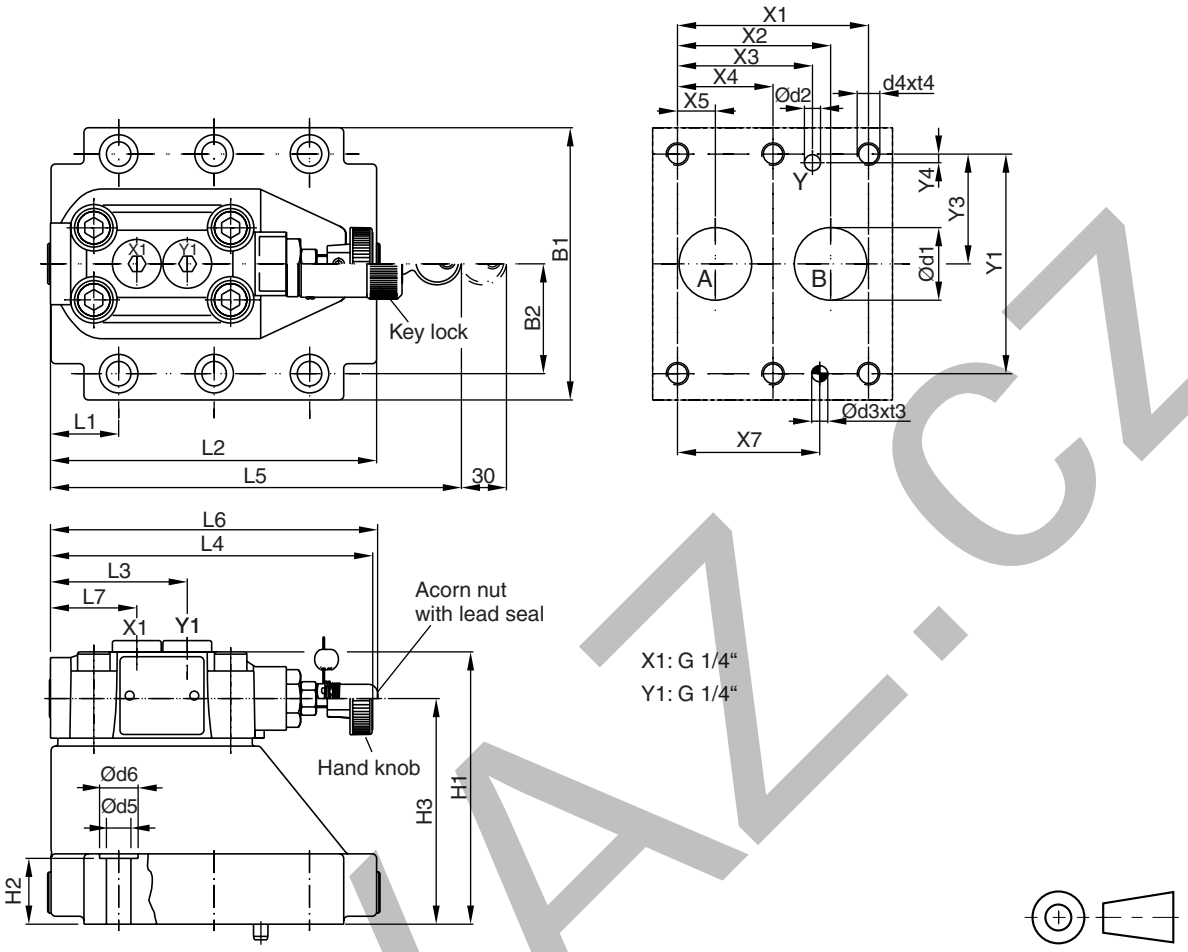


Minimum pressure curve



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

PR*M



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	83	21	62.5	–	–	–	29	94.8	60.8	143	181	144.8	38.6
25	5781-08-10-0-00	105	39.7	109.5	29	89	–	–	–	34.7	126.8	60.8	143	181	144.8	38.6
32	5781-10-13-0-00	120	48.4	120	29	99.5	–	–	–	30.6	144.3	60.8	143	181	144.8	38.6

NG	ISO-code	d1max	d2max	d3	t3	d4	t4	d5	d6
10	5781-06-07-0-00	15	7	7.1	8	M10	16	10.8	17
25	5781-08-10-0-00	23.4	7.1	7.1	8	M10	18	10.8	17
32	5781-10-13-0-00	32	7.1	7.1	8	M10	20	10.8	17

NG	ISO-code	Bolt kit			Kit NBR	Kit FPM	Surface finish
10	5781-06-07-0-00	BK 505	4x M10 x 35 DIN 912 12.9	63 Nm ±15%	SK-PR10MN50	SK-PR10MV50	
25	5781-08-10-0-00	BK 485	4x M10 x 45 DIN 912 12.9	63 Nm ±15%	SK-PR25MN50	SK-PR25MV50	
32	5781-10-13-0-00	BK 506	6x M10 x 45 DIN 912 12.9	63 Nm ±15%	SK-PR32MN50	SK-PR32MV50	