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HPC Hydraulic Pilot Control Unit



PERFORMANCE THROUGH PRECISION CONTROL

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HPC Hydraulic Pilot Control Valves are part of the comprehensive range of Hydraulic products.

The HPC Valve, with its single lever dual axis control is available with a wide range of springs allowing for an extensive range of control curve characteristics and handle options and makes it suitable for a wide range of both mobile and industrial applications.

Our engineers can offer specialist support to optimise this product to suit your application.

Key Features include :

- · Compact and light weight
- All ports on bottom face for ease of installation
- · Suitable for arm rest of console mounting
- · Compatible with a wide range of Nimco and other products
- Stylish good looks suitable for modern cabs
- · Operator is insulated from high temperature components
- Proven, simple pressure reducing elements
- · Wide range of low hysteresis, high accuracy, pressure control curves
- · Wide range of electrical options in both standard and multi-functional ergonomic handles

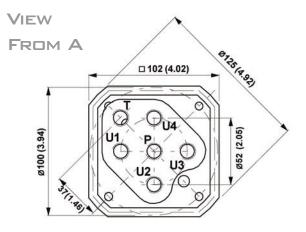
HPC 1 CO1 X XXX X X	Return spring
	0 = Standard: 1.4 to 2.8 daN 1 = Light: 3.0 to 4.5 daN 2 = Medium: 7.5 to 13.8 daN
	R = Round S = Square
	Metering curve see page 6 to 10 Handle type
	W = Without Handle see page Handles catalogue ofr standard Options
	Basic model type C01 see page 4.5 1 = Design Mark
	HPC = Hydraulic Pilot Control

Example: ordering number: HPC 1 C01 W 015 S 1 model number: HPC 1 C01 W 015 S 1 / 123456

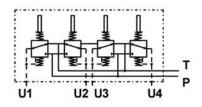
(assigned number)

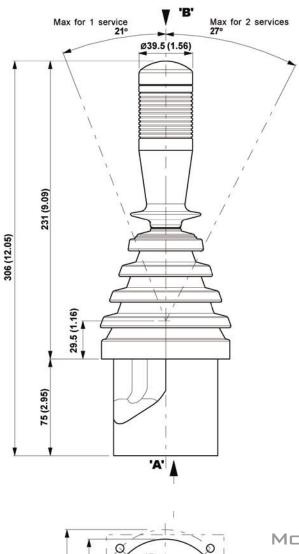


WITH SQUARE GAITER



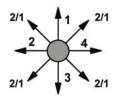
TYPICAL FUNCTIONAL DIAGRAM VIEW FROM B





45

Ø



MOUNTING DETAILS

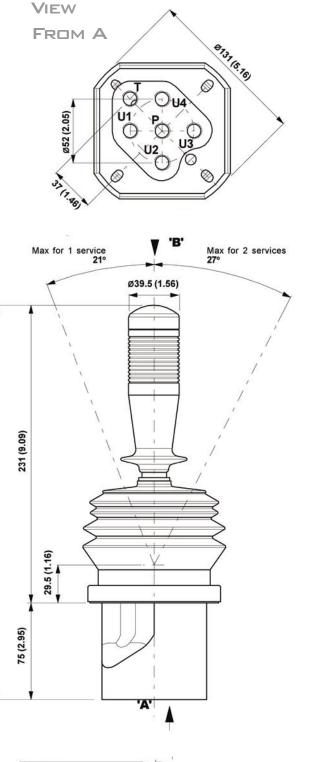
Ø6.5 (0.255)

Ø

Ø100 (3.94) Ø85 (2.95)



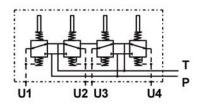
WITH ROUND GAITER

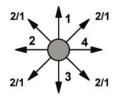


306 (12.05)

BIOR MAX (4.25) BIOR (4.09) DETAILS

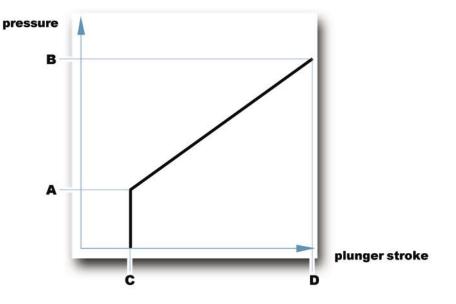
TYPICAL FUNCTIONAL DIAGRAM VIEW FROM B







LINEAR CHARACTERISTICS WITHOUT STEP

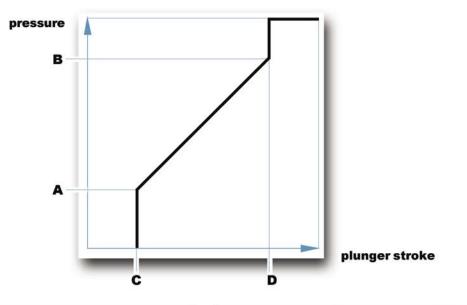


	tput re (bar)	Plunger Stroke (mm)		Metering Curve Number
A	В	С	D	
0.0	40.4	0.9	9.5	061
0.0	68.6	2.0	9.5	022
0.0	123.2	2.0	9.5	033
0.5	13.0	1.8	9.5	087
0.7	31.8	1.0	9.5	071
1.4	12.1	1.0	9.5	072
1.5	9.5	1.0	9.5	086
1.5	41.9	0.9	9.5	093
2.0	8.4	2.0	9.5	004
2.0	15.8	0.9	9.5	060
2.0	55.7	1.0	9.5	092
3.0	24.2	0.9	9.5	058
3.2	19.0	1.0	9.5	053
3.2	20.9	0.0	9.5	096
3.8	24.9	0.9	9.5	074
4.0	10.4	2.0	9.5	005
4.7	27.6	0.8	9.5	132
5.0	18.9	2.0	9.5	079
5.0	20.8	0.9	9.5	094
5.0	20.9	1.0	9.5	089
5.5	26.7	0.9	9.5	075
5.8	24.2	1.6	9.5	035
5.8	24.1	0.9	9.5	036
5.8	24.2	1.8	9.5	037
5.8	30.0	0.8	9.5	133

	tput ıre (bar)	Plunger Stroke (mm)		Metering Curve Number	
Α	В	С	D		
6.0	31.7	2.0	9.5	001	
6.0	41.1	1.0	9.5	040	
6.0	42.1	0.9	9.5	046	
8.0	15.5	2.0	9.5	056	
8.1	21.1	3.3	9.5	105	
8.6	26.9	0.9	9.5	039	
9.1	27.9	0.9	9.5	003	



LINEAR CHARACTERISTICS WITH STEP ... CONTNILED



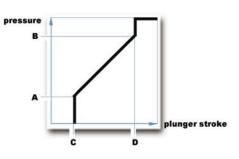
	tput ire (bar)	Plunger Stroke (mm)		Metering Curve Number
А	В	с	D	
0.0	13.0	0.5	8.5	027
0.5	4.0	1.8	8.4	009
0.5	6.5	2.0	8.5	010
0.5	11.4	1.8	8.5	047
0.5	18.4	1.0	8.5	076
0.8	29.0	1.4	3.5	097
1.0	12.0	1.0	8.5	034
1.0	8.0	1.0	8.5	011
1.5	8.5	1.0	8.5	069
1.8	8.5	1.8	9.0	004
1.9	52.4	1.0	9.0	092
2.0	7.1	1.0	6.5	042
2.0	11.5	1.0	8.5	012
2.0	11.5	2.0	8.5	025
2.0	13.0	1.0	8.5	045
2.0	20.5	0.9	8.5	077
2.0	27.5	1.0	8.5	080
2.8	14.9	1.0	8.5	123A
2.8	4.75	1.0	8.3	129
2.8	15.3	1.8	8.5	505
2.9	9.9	1.0	8.5	021
2.9	9.9	1.0	8.5	051
2.9	9.9	1.0	8.5	070
3.0	9.0	2.0	8.5	021A
3.0	8.0	1.0	8.5	125A

	tput re (bar)	Plunger Stroke (mm)		Metering Curve Number
A	В	С	D	
3.0	21.7	0.9	8.5	121A
3.1	18.1	1.0	9.0	053
3.1	17.2	1.0	8.5	062
3.2	29.6	1.0	8.5	030
3.2	11.7	1.8	8.5	048
3.3	15.4	1.0	8.5	041
3.5	13.0	1.0	8.5	101A
3.7	10.4	1.8	9.0	005
3.7	13.8	1.8	7.2	115
3.7	17.2	1.8	9.0	116
3.7	29.2	1.0	8.5	104A
4.0	15.4	1.4	8.5	110
4.0	14.0	1.0	8.5	117
4.1	16.2	1.0	8.5	049
4.1	27.4	1.0	9.0	502
4.3	15.2	1.0	8.5	049A
4.3	13.8	1.0	8.5	122A
4.4	17.0	1.8	8.5	501
4.4	17.0	1.8	8.5	107A
4.4	17.9	1.8	9.0	504
4.5	18.0	0.9	8.5	095
4.5	27.0	1.0	8.5	108A
4.6	18.4	1.8	7.5	114
4.6	20.8	1.8	8.5	126
4.6	18.1	1.8	9.0	079



LINEAR CHARACTERISTICS WITHOUT STEP... CONTINUED

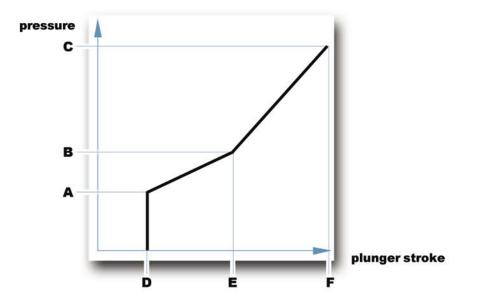
	Output Plunger		Metering	
a second s	ire (bar)	Stroke (mm)		Curve Number
A	В	C	D	
4.9	18.9	1.0	8.5	091
4.9	17.5	1.0	8.0	117A
5.0	15.9	1.0	8.5	026
5.0	19.7	1.8	8.5	127
5.0	14.5	1.0	8.5	019
5.0	12.0	1.0	8.5	023
5.0	21.5	1.8	7.3	099A
5.0	23.0	1.0	8.5	116A
5.0	19.1	1.0	8.5	018
5.0	20.0	1.0	9.0	094
5.0	21.0	1.0	6.5	038
5.0	24.5	1.8	8.5	109
5.0	26.8	1.0	8.5	503
5.1	15.1	1.0	8.5	118
5.2	19.1	1.2	8.5	112A
5.2	24.2	0.9	8.5	028
5.2	17.8	1.8	8.5	128
5.6	22.0	1.4	9.0	121
5.6	16.3	1.8	7.5	523
5.6	18.2	1.8	8.5	524
5.7	21.1	1.0	6.3	100
5.8	16.6	1.4	7.2	008
5.8	24.0	1.8	8.5	122
5.8	22.0	1.8	8.5	015
5.8	18.9	1.8	7.2	016
5.8	19.1	1.0	6.5	017
5.8	23.2	1.8	9.0	037
5.8	20.8	1.0	7.2	101
5.8	23.9	1.0	8.5	113
5.8	23.1	1.0	9.0	036
5.8	22.0	1.0	8.5	088
5.8	19.9	1.0	7.5	107
5.8	22.4	0.9	8.5	082
5.8	22.0	1.8	8.5	090
5.8	19.8	1.0	8.5	106A
5.8	26.0	1.0	8.5	115A
5.9	12.9	1.0	8.5	065
6.0	21,7	2.0	6,3	007
6.0	31.3	1.8	9.0	001



	tput re (bar)	Plunger Stroke (mm)		Metering Curve Number
А	В	с	D	
6.0	22.5	1.8	6.5	002
6.0	25.0	1.8	7.2	006
6.2	21.9	1.8	7.2	099
6.2	22.8	1.8	7.5	104
6.2	19.3	1.8	6.3	105
6.2	21.9	1.8	7.2	106
6.5	14.0	1.0	8.5	020
6.5	20.6	1.0	8.5	043
6.7	16.2	1.0	8.5	127A
6.8	19.8	1.8	7.2	029
6.9	23.1	1.0	8.5	125
6.9	22.4	1.4	8.5	525
7.0	26,7	0,5	8,5	135
7.2	15.3	1.0	8.9	100A
7.2	22.6	1.8	7.5	123
7.3	23.0	1.0	7.5	111
7.3	25.4	1.0	8.5	112
7.3	23.1	1.8	7.2	108
7.5	30.1	1.4	9.0	526
7.5	23.7	1.0	8.5	124
7.6	24.6	0.5	8.5	136
8.0	24,2	0,9	8,5	024
8.0	20.6	1.8	8.5	044
8.1	24.3	1.0	8.5	014
8.2	24.4	1.8	8.5	013
8.4	50.0	1.0	8.5	073
8.4	21.1	3.3	8.5	098
8.4	27.9	1.8	8.5	120
9.0	15,5	2.0	8,5	084
9.1	26.3	1.0	9.0	003
9.8	26.0	1.8	8.5	032
13.2	29.5	1.0	8.5	031



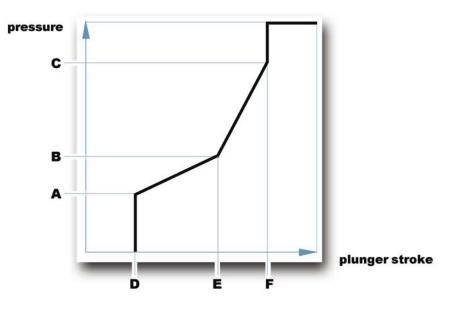
LINEAR CHARACTERISTICS WITH STEP... CONTINUED



Output Pressure (b		ar)	Plunger Stroke (mm)		Metering Curve Number	
Α	В	С	D	E	F	
1.5	8.0	19.6	2.0	7.0	9.5	124
0.0	20.0	94.2	0.8	6.0	9.5	130
2.0	8.0	30.5	1.0	5.0	9.5	191



BROKEN CHARACTERISTICS WITH STEP



Pr	Output essure (b	ar)	Plunger Stroke (mm)			Metering Curve Number		
Α	В	С	D	E	F			
0.2	2.8	8.4	0.5	5.7	8.4	102		
1.0	4.5	9.0	1.0	7.5	8.5	114		
1.0	8.3	14.0	1.1	7.0	8.4	118		
1.2	4.0	11.0	0.6	5.4	8.4	111		
1.5	8.0	15.0	2.0	7.0	8.5	103		
2.0	5.0	8.0	1.0	7.0	8.5	164		
2.0	7.0	20.0	1.0	5.0	8.5	174		
5.0	9.5	21.5	1.3	5.0	8.6	154		
7.5	15.0	20.7	1.2	5.4	6.5	184		
7.5	15.0	28.0	1.8	6.0	8.5	134		
8.5	12.5	32.0	1.0	3.0	8.5	144		

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