# **Bell Hydromatics**



## **Pilot Operated**

**DHG-10** 



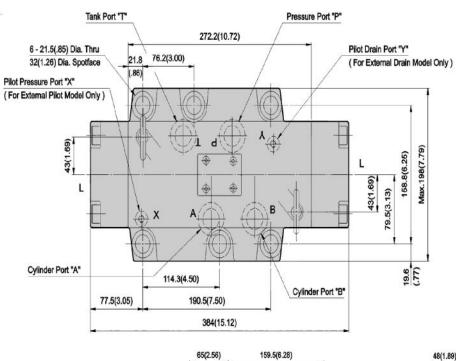
## Features:

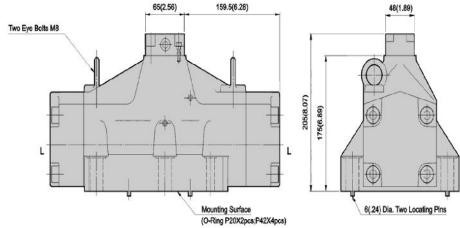
- High Flow rate upto 1100 lpm (291 USgpm)
  Maximum Operating presuure upto 315 bar (4500 PSI)
  Long service life with average durability of 50 million spool shifts.

### **Technical Specifications**

Number   Capacity   Capacity	Spool Type & Graphic Symbols		DHG – 10 (1-1/4")			
DHG-10-2B3-**  X——————————————————————————————————	Symbols			Maximun Flow Capacity		
DHG-10-2B3-**   DHG-10-2N2-**   DHG-10-2N2-**   DHG-10-3C2-**   DHG-10-3C2-**   DHG-10-3C3-**   DHG-10-3C3-**   DHG-10-3C4-**   S70 lpm (150 USgpm)   1100 lpm (291 USgpm)   1100 lpm	X X I I I A B	DHG-10-2B2-**				
DHG-10-3C2-**  X	xXHIII	DHG-10-2B3-**				
Note	x X 1 1 1 1 - Y	DHG-10-2N2-**				
Note	x	DHG-10-2N3-**				
Name	x -~ X + B + T - Y	DHG-10-3C2-**				
DHG-10-3C40-**    AB	x-~XAB	DHG-10-3C3-**				
DHG-10-3C40-  X AB  X BPT  Y  DHG-10-3C9-**  DHG-10-3C10-  X AB  X BPT  Y  DHG-10-3C11-  X AB  X BPT  Y  DHG-10-3C12-  X AB  X BPT  Y  DHG-10-3C12-  X AB  X BPT  Y  DHG-10-3C5-**  DHG-10-3C6-**  X BPT  Y  DHG-10-3C60-  X BPT  X BPT  Y  DHG-10-3C60-  X BPT  X BPT  X BPT  Y  DHG-10-3C60-  X BPT  X B	x-~XHII^-Y	DHG-10-3C4-**	570 lpm (150 USgpm)	1100 lpm (291 USgpm)		
DHG-10-3C7-**    X	1 1	DHG-10-3C40-				
DHG-10-3C9-**    Name	x-~XHII	DHG-10-3C7-**				
DHG-10-3C10-    X	x-~XHII	DHG-10-3C9-**				
DHG-10-3C11-    X	MYIT IIIM	DHG-10-3C10-				
DhG-10-3C12-    Name	X - X A B P T					
DHG-10-3C5-**	x - X B Y	DhG-10-3C12-				
Max. Operating Pressure (P.A.B) (bar)  Min. Required Pilot Pressure  10 (143 PSI)  Max. Pilot Pressure  250 (3600 PSI)  Max. T-Line Back Pressure (T) (bar)  210 (3000 PSI)  Weight (Kgs)  43.8(96.6 lbs)  Hydraulic Fluids  Use Hydraulic Fluids Equivalent to ISO VG32 or	x - X B T Y	DHG-10-3C5-**				
Max. Operating Pressure (P.AB) (bar)  Min. Required Pilot Pressure  10 (143 PSI)  Max. Pilot Pressure  250 (3600 PSI)  Max. T-Line Back Pressure (T) (bar)  210 (3000 PSI)  Weight (Kgs)  43.8(96.6 lbs)  Hydraulic Fluids  Use Hydraulic Fluids Equivalent to ISO VG32 or	X — TI I I I I I I I I I Y	DHG-10-3C6-**	570 lpm (150 USgpm)	950 lpm (250 USgpm)		
Min. Required Pilot Pressure  10 (143 PSI)  Max. Pilot Pressure  250 (3600 PSI)  Max. T-Line Back Pressure (T) (bar)  210 (3000 PSI)  Weight (Kgs)  43.8(96.6 lbs)  Hydraulic Fluids  Use Hydraulic Fluids Equivalent to ISO VG32 or						
Max. Pilot Pressure 250 (3600 PSI)  Max. T-Line Back Pressure (T) (bar) 210 (3000 PSI)  Weight (Kgs) 43.8(96.6 lbs)  Hydraulic Fluids Use Hydraulic Fluids Equivalent to ISO VG32 of	Max. Operating Pressure (P.AB) (bar)		315 (4500 PSI)			
Max. T-Line Back Pressure (T) (bar)  Weight (Kgs)  Hydraulic Fluids  210 (3000 PSI)  43.8(96.6 lbs)  Use Hydraulic Fluids Equivalent to ISO VG32 or	Min. Required Pilo	t Pressure	10 (1	143 PSI)		
Weight (Kgs) 43.8(96.6 lbs)  Hydraulic Fluids Use Hydraulic Fluids Equivalent to ISO VG32 or	Max. Pilot Pressure		250 (3600 PSI)			
Hydraulic Fluids Use Hydraulic Fluids Equivalent to ISO VG32 or	Max. T-Line Back Pressure (T) (bar)		210 (3000 PSI)			
180	Weight (Kgs)		43.8(96.6 lbs)			
	150		Use Hydraulic Fluids Equivalent to ISO VG32 or VG4			
Operating Temperature Range (°C) -15 ~ +70 (+5 ~ +160 °F)		8 8 6	-15 ~ +70 (+5 ~ +160 °F)			
Operating Viscosity (cSt) 15 ~ 400 (80 ~ 1800 SSU)	Operating Viscos	sity (cSt)	15 ~ 400 (80 ~ 1800 SSU)			

#### Dimensions



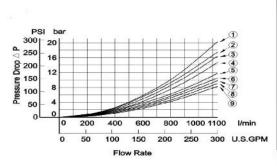


Attachment Name	Description	Tightening Torque	Code	
Soc. Hd. Cap Screw	M20X75LgX6pcs	473-585 Nm	30	
Soc. Hd. Cap Screw	3/4-10UNCX3"LgX6pcs	4106-5078 in.lbs	3090	

#### **Ordering Code**

DHG	3C2	N	10	D1	36	*P*D	
Series No.	Spool Type	Electrical Conduit Type	Valve Size	Coil Voltage	Design No.	Pilot and Drain Connection	
	Spring centered 3 Position (3C94, 3C60, 3C6, 3C3 etc.)			D1: DC12V D2: DC24V		*P -> Pilot Plug (1/16, 1/8, 1/4) *D -> Drain Plug (1/16, 1/8, 1/4)	
DHG  Spring Offset 2 Position(2B2, 2B3, 2B8, 2B29 etc.)  Spring Detented 2 Position(2D2, 2D3 etc.)  For complete list see Spool Types tab below	2 Position(2B2, 2B3, 2B8,	N: DIN	06 : 1- 1/4"	D3; DC36V <u>D4;</u> DC48V	36: with	<b>1P1D</b> : Internal Pilot, Internal Drain	
	with light.	(NFPA- D10)	<u>D5</u> : DC60V <u>D6</u> : DC72V	bolts	1P2D: Internal Pilot, External Drain		
				D14.5: DC14.5v		2P1D: External Pilot, Internal Drain	
	Types tab			D28: DC28V		2P2D: External Pilot, External Drain	

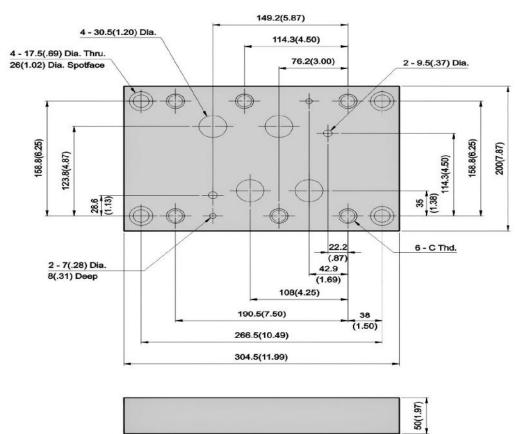
#### Performance Graph

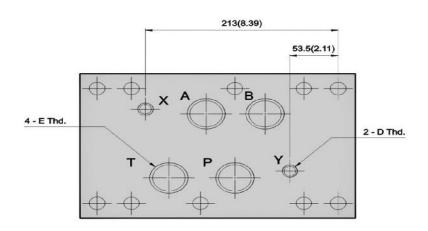


Series	Spool	Pressure Drop Curve Number				
	Туре	P→A	в→т	P→B	A→T	P→T
	3C2	(8)(9)	<b>6</b> (3)	9(8)	(A)	_
	3C3	7	(6)	7	7	(5)
Ĭ	3C4	9(8)	6(5)	9(8)	6(6)	-
DSHG-10 DSHG-10-S	3C40	9	6	9	(8)	-
	3C5	9	(6)	8	(6)	1
	3C6	(5)	3	(5)	4	2
	3C60	8(8)	<b>5</b> (4)	8(8)	<b>5</b> (4)	3)(2)
	3C7	(7)	<b>(6</b> )	(7)	(7)	_
	3C9	(7)	(6)	(7)	(8)	10000
	3C10	9	(5)	(9)	(8)	1000
	3C11	9	6	8	7	-
	3C12	9	(7)	(9)	(6)	

Graphs based on fluid viscosity of 35 cSt ( 162 SSU). Notes: ( ) curve No. is for shock-less type.

#### Sub Plate





CODE	C Thd.	D Thd.	E Thd.
M10-10-**-30	M20XP2.5	PT1/4	PT1-1/4
M10-10-**-3090	3/4-10UNC	NPT1/4	NPT1-1/4