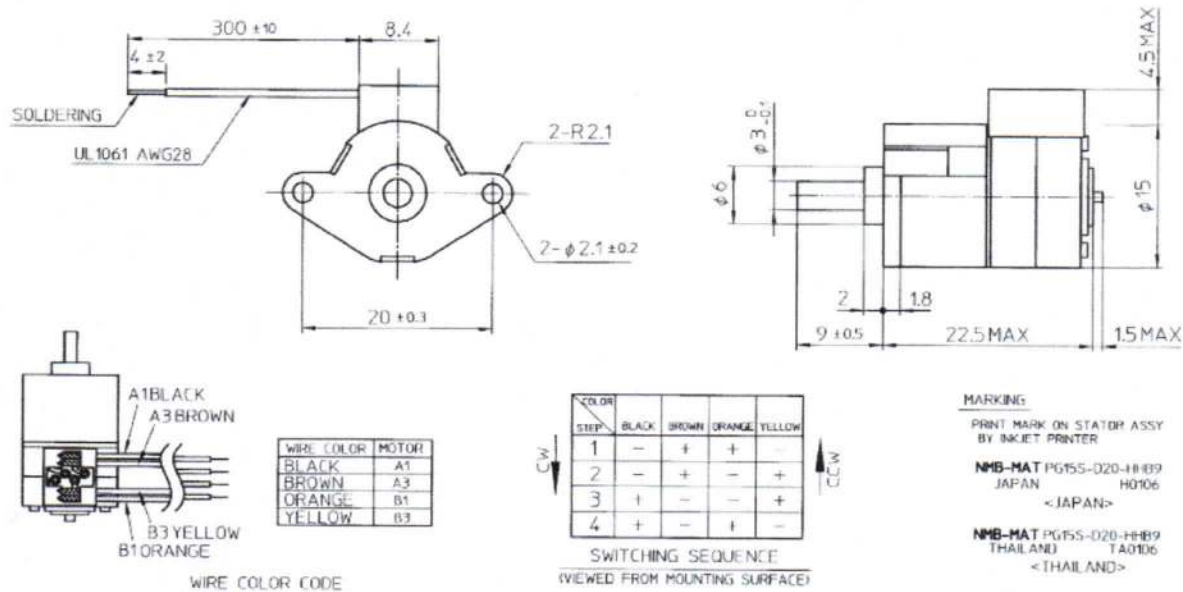


## Standard PG Step Motors

### PG15S-D20-HHB9

#### Model Specifications

Model:	PG15S-D20-HHB9
Step Angle:	0.176 °
Drive Voltage:	DC 15.0 V
Shaft Length:	9mm
Wire Length:	300mm fly leads (no connector)
Wire Holder:	90 deg. Left
Gear Ratio:	1/102.5
Electrical:	15V, 100mA
	Bipolar Constant Current

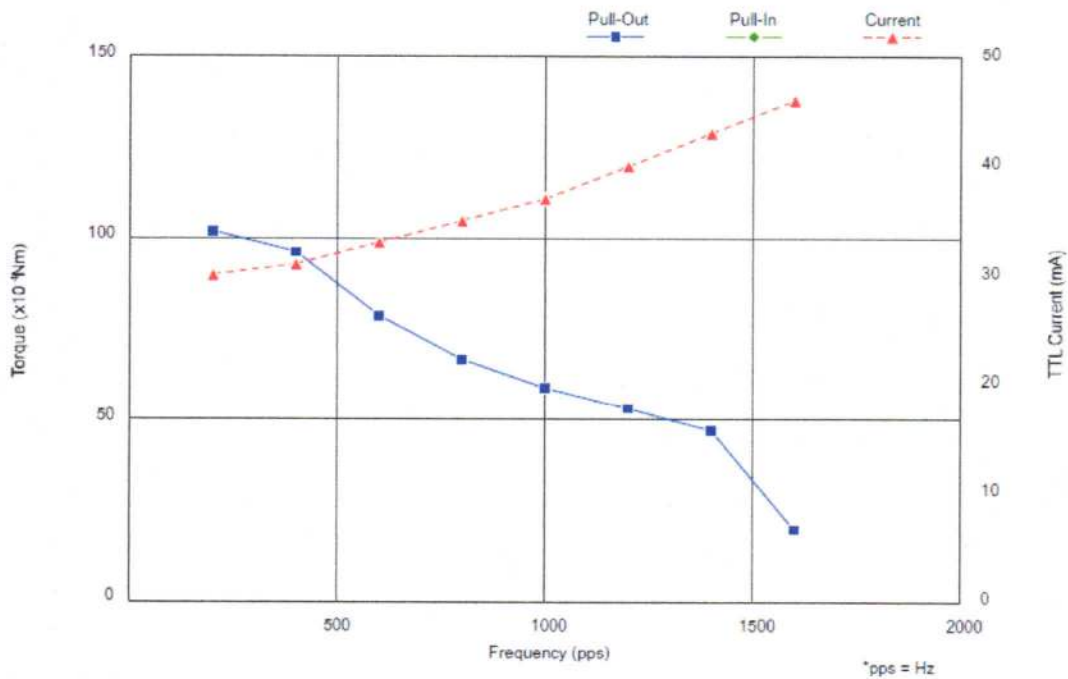


# PG15S-D20-HHB9

## DYNAMIC TORQUE CHARACTERISTICS (No. 63559)

(ALL VALUES ARE GAINED BY MEASUREMENT AND NOT SPECIFICATIONS VALUES)

Model : PG15S-D20-HHB9  
 Drive Mode : BIPOLAR CHOPPER  
 Drive Voltage : 15.0 V  
 Method : 2-2P  
 Drive IC : UDN2916B-V  
 Surge/Current : / 100 mA / Phase (Peak)  
 Coil Resistance : 10.0  $\Omega$   
 Magnet Material : MS70A  
 Stator Material : SECC  
 Note : Current adjust by 0 pps., GEAR RATIO 1/102.5  
 MAES8U4 STA9Z03

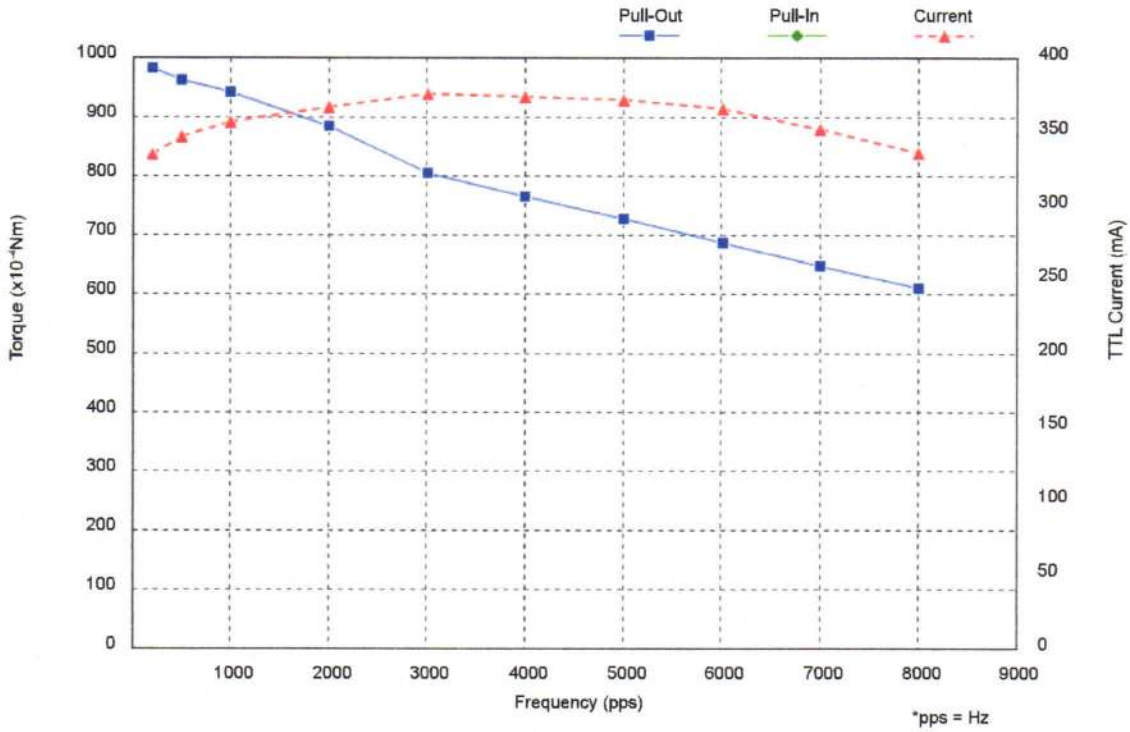


Frequency (pps)	200	400	600	800	1000	1200	1400	1600
■ Pull-Out (x10 <sup>-4</sup> Nm)	102.0	96.1	78.5	66.7	58.8	53.0	47.1	19.6
● Pull-In (x10 <sup>-4</sup> Nm)								
▲ Current (mA)	30	31	33	35	37	40	43	46

## DYNAMIC TORQUE CHARACTERISTICS (No. 77102)

(ALL VALUES ARE GAINED BY MEASUREMENT AND NOT SPECIFICATIONS VALUES)

Model : PG15S-D20-HHB9B  
 Drive Mode : BIPOLAR CHOPPER  
 Drive Voltage : 24.0 V  
 Method : 2-2P  
 Drive IC : LB1847  
 Surge/Current : / 500 mA / Phase (Peak)  
 Coil Resistance : 10.0 Ω  
 Magnet Material : MS70A  
 Stator Material : SECC  
 Note : Current adjust by 0 pps., GEAR RATIO 1/102.5  
 DATA REQ.

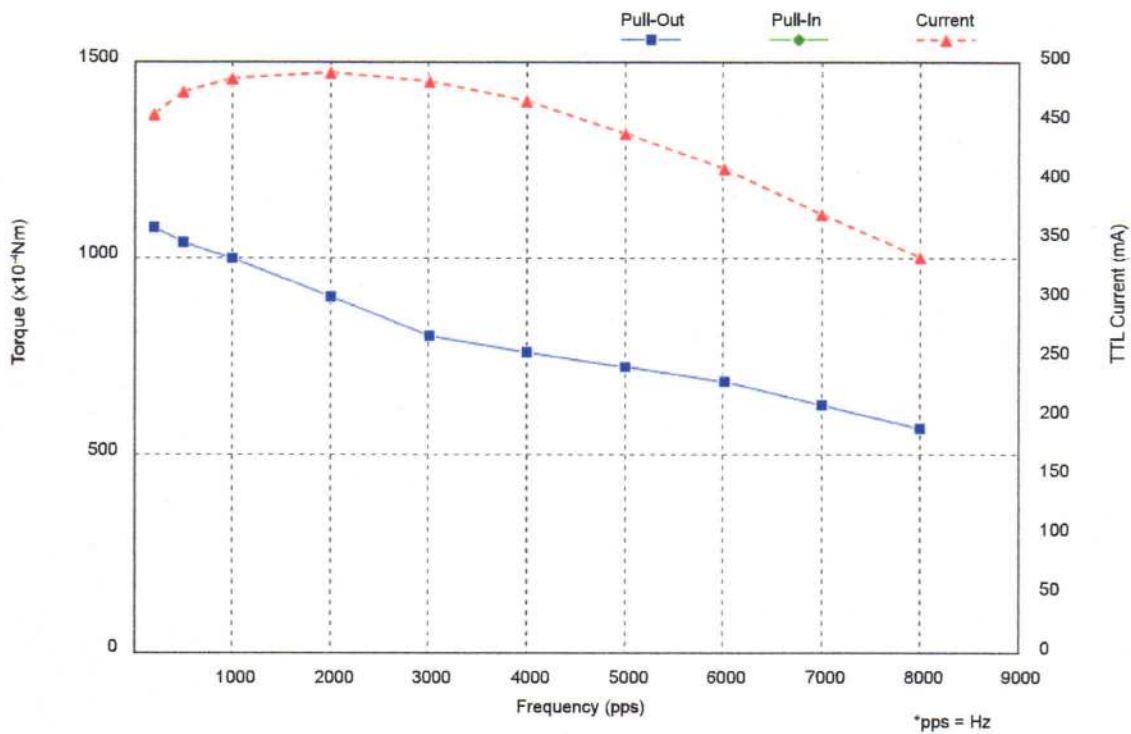


Frequency (pps)	200	500	1000	2000	3000	4000	5000	6000	7000	8000
■ Pull-Out (x10 <sup>-4</sup> Nm)	980.7	961.1	941.5	882.6	804.2	764.9	725.7	686.5	647.3	608.0
● Pull-In (x10 <sup>-4</sup> Nm)	335	347	357	367	376	374	372	366	352	336
▲ Current (mA)	335	347	357	367	376	374	372	366	352	336

## DYNAMIC TORQUE CHARACTERISTICS (No. 77103)

(ALL VALUES ARE GAINED BY MEASUREMENT AND NOT SPECIFICATIONS VALUES)

Model : PG15S-D20-HHB9B  
 Drive Mode : BIPOLAR CHOPPER  
 Drive Voltage : 24.0 V  
 Method : 2-2P  
 Drive IC : LB1847  
 Surge/Current : / 600 mA / Phase (Peak)  
 Coil Resistance : 10.0 Ω  
 Magnet Material : MS70A  
 Stator Material : SECC  
 Note : Current adjust by 0 pps., GEAR RATIO 1/102.5  
 DATA REQ.



Frequency (pps)	200	500	1000	2000	3000	4000	5000	6000	7000	8000
■ Pull-Out (x10 <sup>-4</sup> Nm)	1078.8	1039.5	1000.3	902.2	804.2	764.9	725.7	686.5	627.6	568.8
◆ Pull-In (x10 <sup>-4</sup> Nm)		1039.5	1000.3	902.2	804.2	764.9	725.7	686.5	627.6	568.8
▲ Current (mA)	456	475	486	491	483	467	439	409	371	335