

# Spool Valve Motors

## BM4 series motors

Compact in design with spool valving and Geroler

Imported high pressure capacity shaft seal

Wide variety of mounting flanges, shafts, ports and speed provides design flexibility



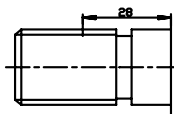
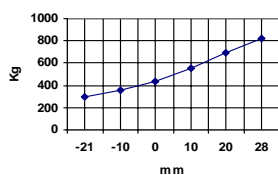
Direction of shaft rotation and speed can be controlled easily and smoothly

Best combination of efficiency and economy in medium duty applications

### Specification Data

Displ. cc/r		245	310	390	490	630	800
Flow LPM	Rated	80	80	80	80	80	80
	Max	100	100	100	100	100	100
Speed RPM	Rated	320	250	200	200	160	120
	Max	350	280	230	200	160	120
Pressure Bar	Rated	140	140	140	140	125	100
	Max	150	150	150	150	130	120
Torque Nm	Rated	400	500	550	680	780	800
	Max	420	520	580	700	800	820
Weight		13	13.7	14.3	14.8	15.2	15.6

### Shaft Side Load Capacity



Maximum Allowable Case Pressure — 103 bar [1500 PSI] without case drain.

Maximum Inlet Pressure — 179 bar [2600 PSI]. Do not exceed D pressure rating (see chart above)

$\Delta$  bar [PSI] — True pressure difference between inlet port and outlet port.

Continuous Rating — Motor may be run continuously at these ratings.

Intermittent Operation — 10% of every minute.

Peak Operation — 1% of every minute

Recommended Maximum System Operating Temp. — Is 82° C [180° F]

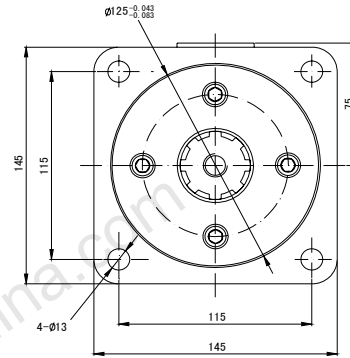
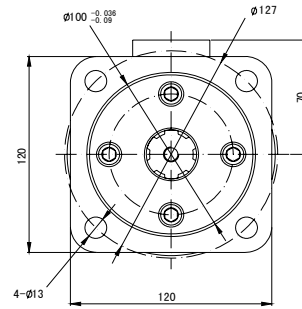
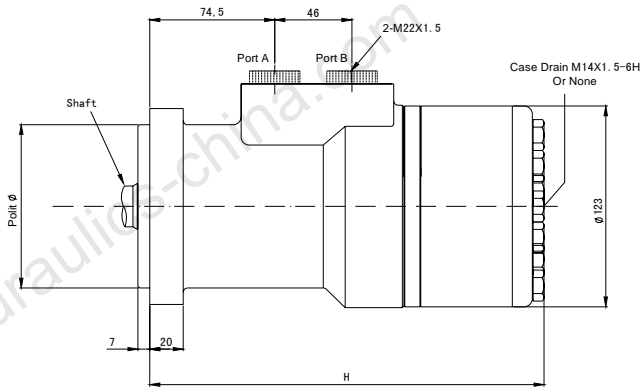
Recommended Filtration — per ISO Cleanliness Code, level 18/13

Low Speed Spool — Standard

To assure best motor life, run motor for approximately one hour at 30% of rated pressure before application to full load. Be sure motor is filled with fluid prior to any load applications

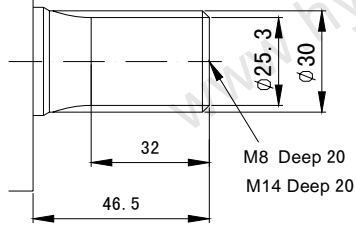
# Spool Valve Motors

## BM4 series Dimensions

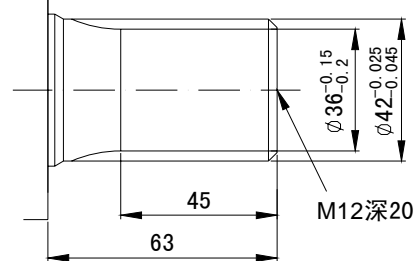


Displ. cc/r	245	310	390	490	630	800
H mm	209	216	225	236	251	268

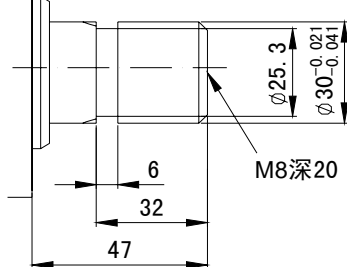
Square Spline  
6 teeth  
major  $\phi$  30  
minor  $\phi$  25.3  
teeth wide 8 Or 6



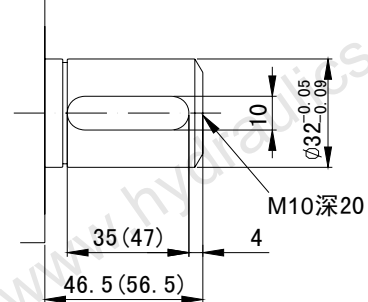
Square Spline  
8 teeth  
major  $\phi$  42  
minor  $\phi$  36  
teeth wide 7



Square Spline  
6 teeth  
major  $\phi$  30  
minor  $\phi$  25.3  
teeth wide 6

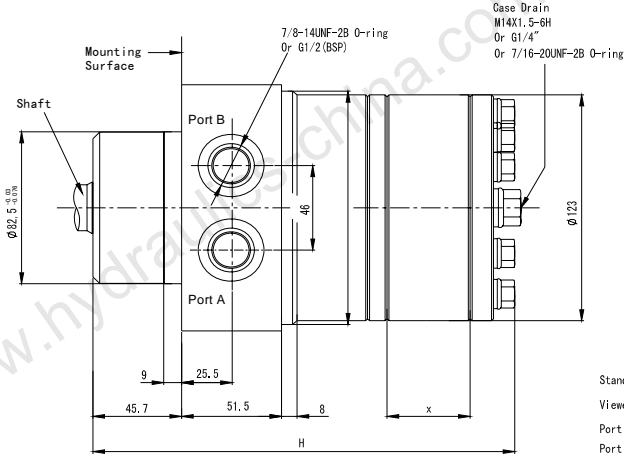


Straight  $\phi$  32  
Straight key 10



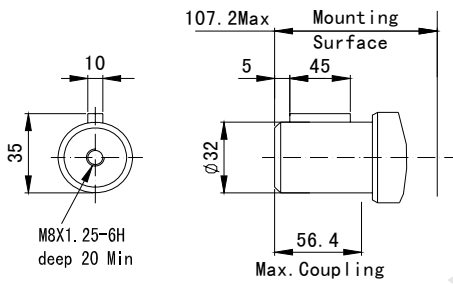
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## BM4 series Dimensions

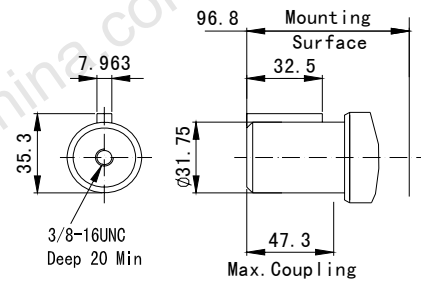


Standard Rotation  
 Viewed from Shaft End  
 Port A Pressurized — CW  
 Port B Pressurized — CCW

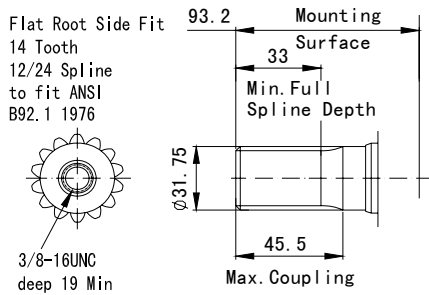
### 32mm straight



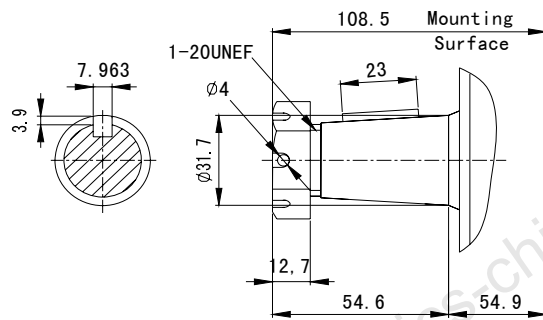
### 1-1/4 Inch straight



### 1-1/4 14 tooth splined



### 1-1/4 Tapered





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## BM4 Series Customer Order Information

1	2	3	4	5	6	7	8	9	10
B	M	4							

If the specification is not in the table or you have specific requirements, please contact us.

**Pos.1 2 3 :**

B M 4 ----- Orbit Motor

**Pos.4,5: Displacement cc/r**

0 1 ----- 245

0 2 ----- 310

0 3 ----- 390

0 4 ----- 490

0 5 ----- 630

0 6 ----- 800

**Pos.6 : Flange And Pilot**

A ----- Big flange , Pilot  $\phi$  125

B ----- 4 bolt flange ,pilot  $\phi$  100

C ----- 4 bolt flange ,pilot  $\phi$  82.5,wheel

D ----- 4 bolt Rhomb-flange,pilot  $\phi$  82.5

**Pos.7 :Shaft**

A ----- Square spline:6D-30X25.3X6 L=46.5

B ----- Square spline:6D-30X25.3X8 L=46.5

C ----- Square spline:8D-42X36X7 L=63

C ----- Square spline:6D-30X25.3X6 L=47

D ----- straight  $\phi$  32,flat key 10 L=46.5

E ----- straight  $\phi$  32,flat key 10 L=58

F ----- straight  $\phi$  35,flat key 10 L=58

G ----- straight  $\phi$  31.75,flat key 7.96 L=48

H ----- Square spline:6D-25.32X21.47X6.25 L=40

I ----- Splined 14-DP12/24 L=58

J ----- Splined 14-DP12/24 L=48

K ----- straight  $\phi$  32,flat key 10 (wheel)

L -----  $\phi$  1-1/4 Inch straight key 7.963 (wheel)

M ----- 1-1/4 14 tooth splined (wheel)

N ----- 1-1/4 tapered flat key 7.963(wheel)

**Pos.8 :port**

A ----- M22X1.5-6H

B ----- 7/8-14unf-2B O-ring

C ----- G1/2(BSP)

D ----- 1/2-14NPTF

E ----- PT(Rc)1/2

**Pos.9 : Drain port**

0 ----- G1/4

1 ----- M14X1.5

2 ----- 7/16-20unf

3 ----- PT(Rc)1/4

**Pos.10 Paint**

A ----- No Paint

B ----- Blue (standard)

C ----- Black (standard)

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