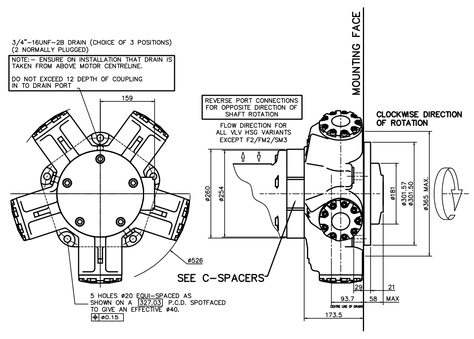
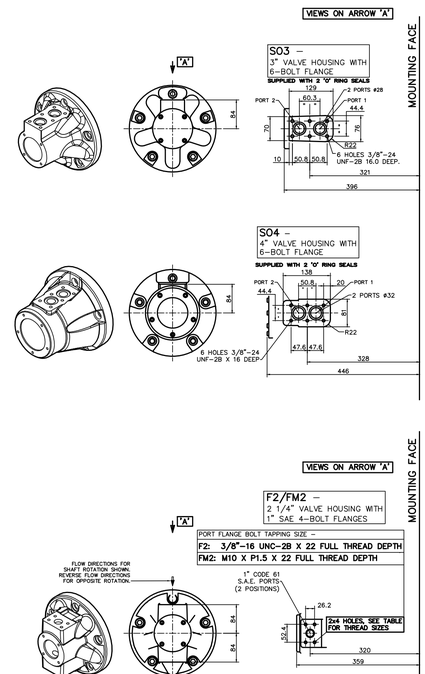
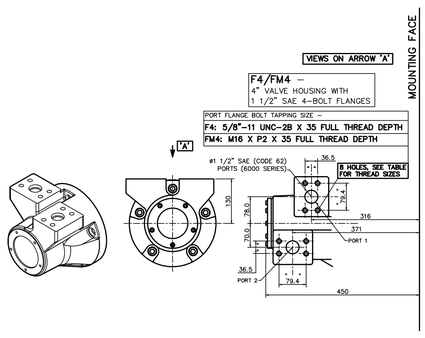
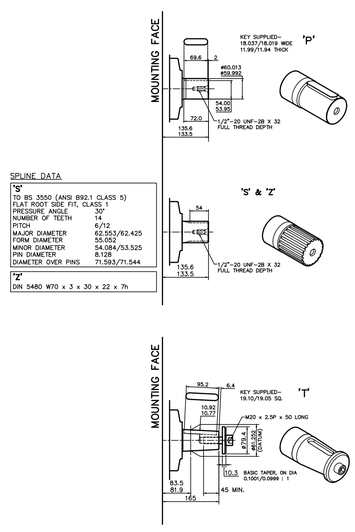
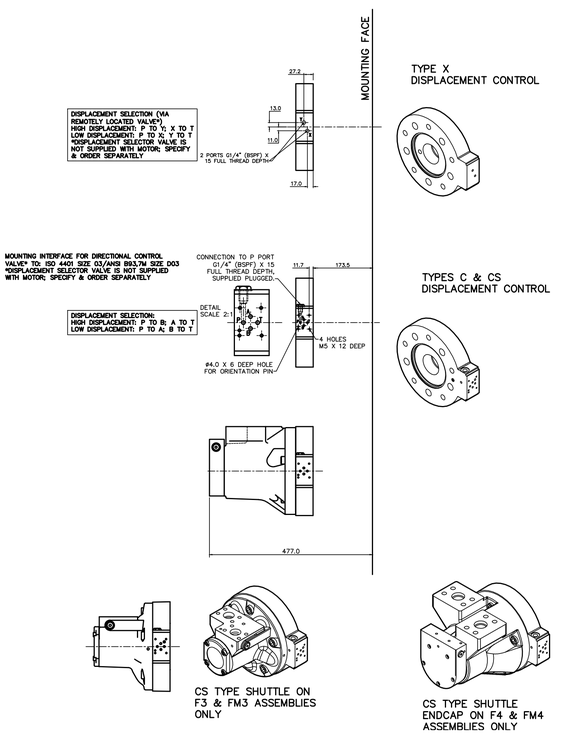
HMC080


3/4"-16UNF-2B DRAIN (CHOICE OF 3 POSITIONS)
(2 NORMALLY PLUGGED)
NOTE:- ENSURE ON INSTALLATION THAT DRAIN IS TAKEN FROM ABOVE MOTOR CENTRELINE.
DO NOT EXCEED 12 DEPTH OF COUPLING IN TO DRAIN PORT
159
REVERSE PORT CONNECTIONS FOR OPPOSITE DIRECTION OF SHAFT ROTATION
FLOW DIRECTION FOR ALL VLV HSG VARIANTS EXCEPT F2/FM2/3M3
MOUNTING FACE
CLOCKWISE DIRECTION OF ROTATION
ø260
ø224
ø185
ø201.97
ø182.50
ø95 MAX
ø526
SEE C-SPACERS
5 HOLES ø20 EQUI-SPACED AS SHOWN ON A 127.03 P.C.D. SPOTFACED TO GIVE AN EFFECTIVE ø40.
ø0.15
129
21
93.7
58
MAX
173.5


VIEWS ON ARROW 'A'
MOUNTING FACE
'A'
S03 –
3" VALVE HOUSING WITH
6-BOLT FLANGE
SUPPLIED WITH 2 'O' RING SEALS
129
2 PORTS ø28
PORT 2
PORT 1
60.3
44.4
70
70
R22
6 HOLES 3/8"-24 UNF-2B 16.0 DEEP.
10
50.8
50.8
321
396
84
S04 –
4" VALVE HOUSING WITH
6-BOLT FLANGE
SUPPLIED WITH 2 'O' RING SEALS
138
50.8
20
PORT 1
PORT 2
44.4
2 PORTS ø32
80
R22
47.6
47.6
6 HOLES 3/8"-24 UNF-2B X 16 DEEP
328
446
84
F2/FM2 –
2 1/4" VALVE HOUSING WITH
1" SAE 4-BOLT FLANGES
PORT FLANGE BOLT TAPPING SIZE –
F2: 3/8"-16 UNC-2B X 22 FULL THREAD DEPTH
FM2: M10 X P1.5 X 22 FULL THREAD DEPTH
FLOW DIRECTIONS FOR SHAFT ROTATION SHOWN. REVERSE FLOW DIRECTIONS FOR OPPOSITE ROTATION
1" CODE 61 S.A.E. PORTS (2 POSITIONS)
26.2
2x4 HOLES, SEE TABLE FOR THREAD SIZES
22.4
320
359
84
84
F3/FM3 –
3" VALVE HOUSING WITH
1 1/4" SAE 4-BOLT FLANGES
PORT FLANGE BOLT TAPPING SIZE –
F3: 7/16"-14 UNC-2B X 27 FULL THREAD DEPTH
FM3: M12 X P1.75 X 27 FULL THREAD DEPTH
1 1/4" CODE 61 S.A.E. PORTS (3000 SERIES)
30.2
PORT 1
8 HOLES, SEE TABLE FOR THREAD SIZES
58.7
58.7
27
PORT 2
30.2
46.5
303
396
87


VIEWS ON ARROW 'A'
MOUNTING FACE
F4/FM4 –
4" VALVE HOUSING WITH
1 1/2" SAE 4-BOLT FLANGES
PORT FLANGE BOLT TAPPING SIZE –
F4: 5/8"-11 UNC-2B X 35 FULL THREAD DEPTH
FM4: M16 X P2 X 35 FULL THREAD DEPTH
'A'
ø1 1/2" SAE (CODE 62) PORTS (6000 SERIES)
36.5
8 HOLES, SEE TABLE FOR THREAD SIZES
79.4
316
371
PORT 1
130
79.4
70.0
36.5
PORT 2
79.4
450


MOUNTING FACE
KEY SUPPLIED-
18.037/18.019 WIDE
11.99/11.94 THICK
'P'
69.6
2
ø60.013
ø59.955
54.00
53.90
72.0
135.6
133.5
1/2"-20 UNF-2B X 32
FULL THREAD DEPTH
SPLINE DATA
'S'
TO BS 3550 (ANSI B92.1 CLASS 5)
FLAT ROOT SIDE FIT, CLASS 1
PRESSURE ANGLE 30°
NUMBER OF TEETH 14
PITCH 6/12
MAJOR DIAMETER 62.553/62.425
FORM DIAMETER 55.052
MINOR DIAMETER 54.084/53.525
PIN DIAMETER 8.128
DIAMETER OVER PINS 71.593/71.544
'Z'
DIN 5480 W70 x 3 x 30 x 22 x 7h
'S' & 'Z'
54
135.6
133.5
1/2"-20 UNF-2B X 32
FULL THREAD DEPTH
MOUNTING FACE
95.2
6.4
KEY SUPPLIED-
19.10/19.05 SQ.
'T'
10.92
10.77
M20 x 2.5P x 50 LONG
ø19.4
ø19.0
DATUM
10.3
BASIC TAPER ON DIA
0.100/0.0999 : 1
63.5
81.9
165
45 MIN.


MOUNTING FACE
TYPE X
DISPLACEMENT CONTROL
DISPLACEMENT SELECTION (VIA REMOTELY LOCATED VALVE*)
HIGH DISPLACEMENT: P TO Y; X TO T
LOW DISPLACEMENT: P TO X; Y TO T
*DISPLACEMENT SELECTOR VALVE IS NOT SUPPLIED WITH MOTOR; SPECIFY & ORDER SEPARATELY
27.2
13.0
11.0
2 PORTS G1/4" (BSPP) X 15 FULL THREAD DEPTH
17.0
MOUNTING INTERFACE FOR DIRECTIONAL CONTROL VALVE* TO: ISO 4401 SIZE 03/ANSI B93.7M SIZE D03
*DISPLACEMENT SELECTOR VALVE IS NOT SUPPLIED WITH MOTOR; SPECIFY & ORDER SEPARATELY
CONNECTION TO P PORT G1/4" (BSPP) X 15 FULL THREAD DEPTH, SUPPLIED PLUGGED
11.7
173.5
TYPES C & CS
DISPLACEMENT CONTROL
DISPLACEMENT SELECTION:
HIGH DISPLACEMENT: P TO B; A TO T
LOW DISPLACEMENT: P TO A; B TO T
DETAIL
SCALE 2:1
4 HOLES M5 X 12 DEEP
ø4.0 X 6 DEEP HOLE FOR ORIENTATION PIN
477.0
CS TYPE SHUTTLE ON F3 & FM3 ASSEMBLIES ONLY
CS TYPE SHUTTLE ENDCAP ON F4 & FM4 ASSEMBLIES ONLY