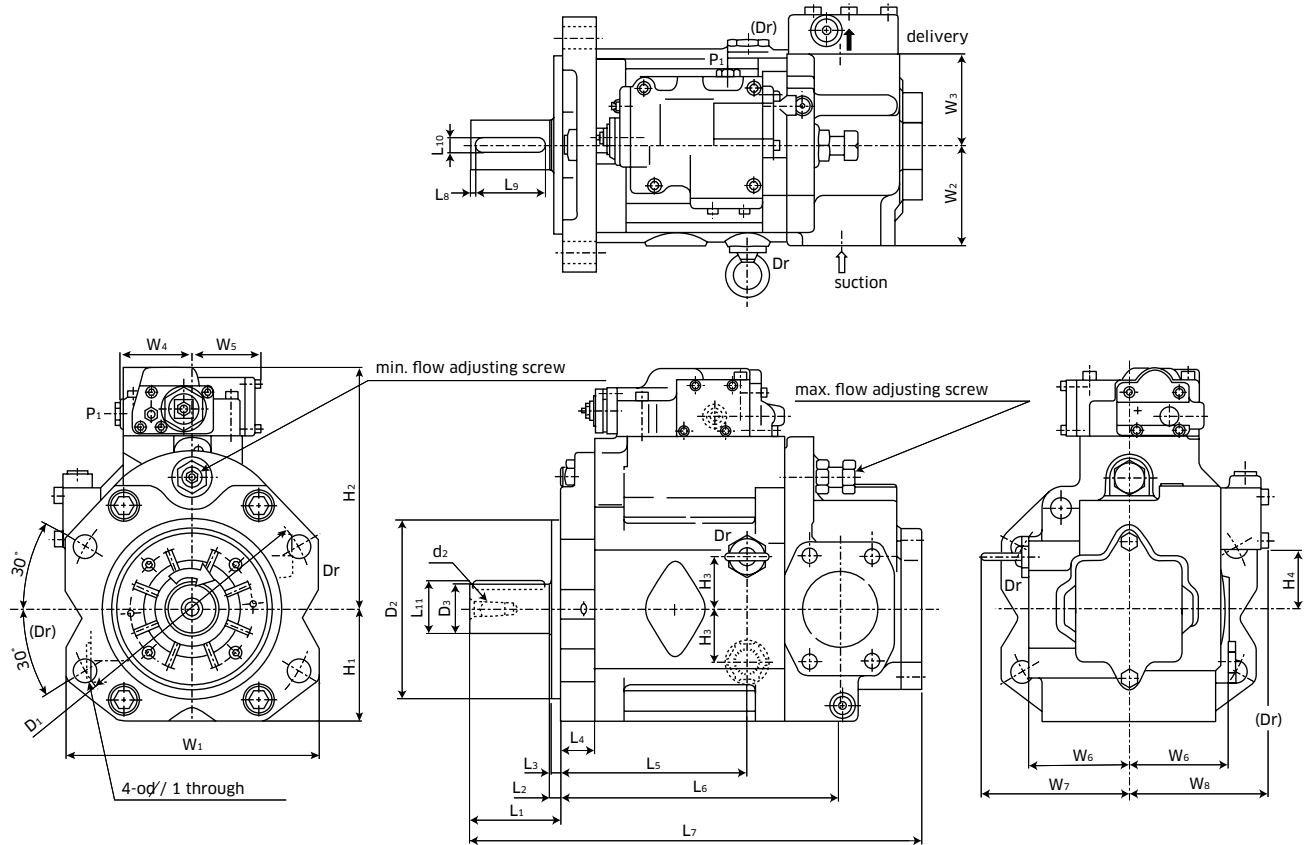


K3VG series Axial Piston Pumps Catalog

◆ K3VG63/112/180/280

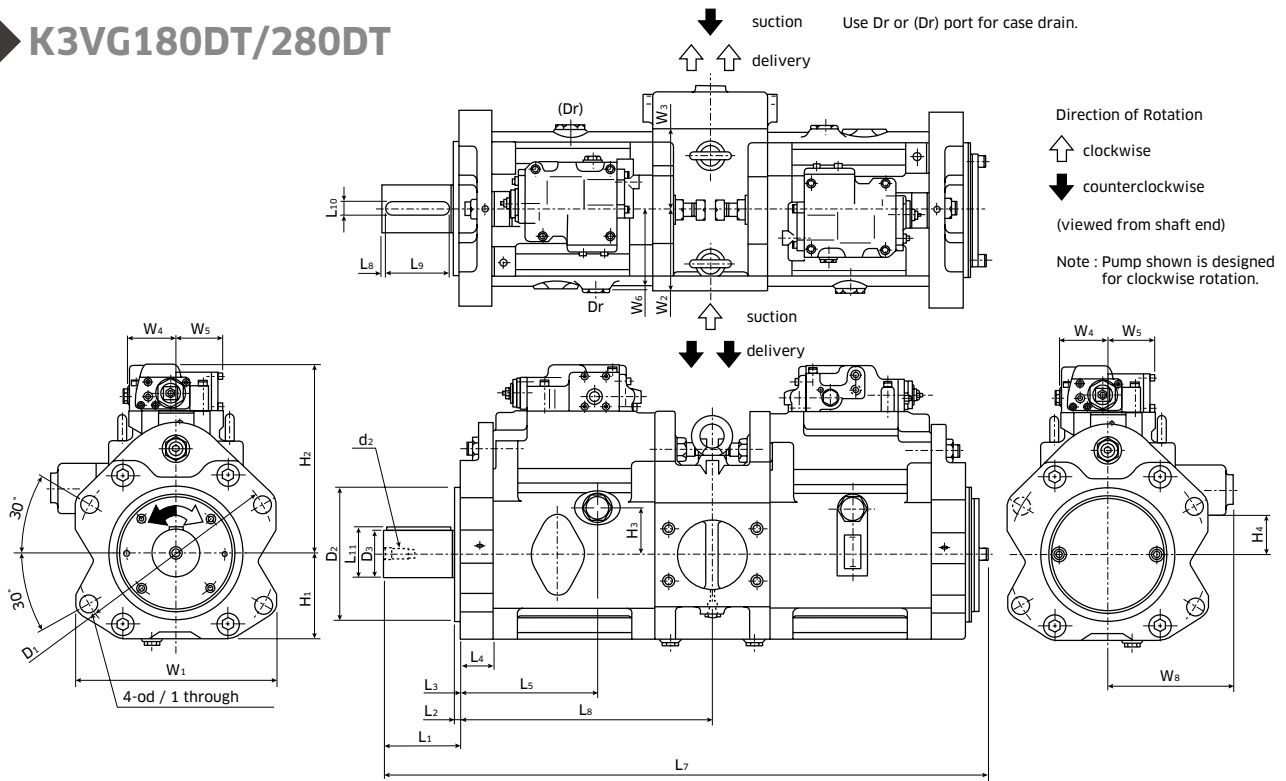


Dimensions of single pumps without gear pump - in (mm)

Pump Size	D ₁	D ₂	D ₃	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	L ₈	L ₉	L ₁₀	L ₁₁
63	7.09 (180)	4.92 ^{-0.002} _{-0.004} (125)	1.26 (32 ^{k6})	2.67 (68)	0.39 (10)	0.32 (8)	1.06 (27)	5.43 (138)	8.27 (210)	13.74 (349)	0.16 (4)	1.97 (50)	0.39 (10)	1.38 (35)
112	8.82 (224)	6.30 ^{-0.002} _{-0.004} (160)	1.55 (40 ^{k6})	3.62 (92)	0.39 (10)	0.32 (8)	1.30 (33)	6.57 (167)	9.80 (249)	16.50 (419)	0.20 (5)	2.76 (70)	0.47 (12)	1.69 (43)
180	9.84 (250)	7.09 ^{-0.002} _{-0.004} (180)	1.97 (50 ^{k6})	3.62 (92)	0.39 (10)	0.32 (8)	1.42 (36)	7.48 (190)	11.22 (285)	18.35 (466)	0.20 (5)	2.76 (70)	0.55 (14)	2.11 (53.5)
280	11.81 (300)	7.87 ^{-0.002} _{-0.004} (200)	2.17 (55 ^{k6})	3.62 (92)	0.39 (10)	0.35 (9)	1.97 (50)	7.99 (203)	13.82 (351)	21.22 (539)	0.20 (5)	2.76 (70)	0.63 (16)	2.32 (59)

Pump Size	H ₁	H ₂	H ₃	H ₄	W ₁	W ₂	W ₃	W ₄	W ₅	W ₆	W ₇	W ₈	d ₁	d ₂
63	3.50 (89)	7.68 ^{-0.002} _{-0.004} (195)	1.46 (37)	1.61 (41)	7.48 (190)	2.76 (70)	2.76 (70)	2.83 (72)	2.72 (69)	2.99 (76)	4.53 (115)	4.45 (113)	0.71 (18)	M12
112	3.94 (100)	8.66 ^{-0.002} _{-0.004} (220)	1.61 (41)	1.93 (49)	9.21 (234)	3.54 (90)	3.15 (80)	2.83 (72)	2.72 (69)	3.54 (90)	5.43 (138)	4.92 (125)	0.87 (22)	M12
180	7.09 (112)	9.65 ^{-0.002} _{-0.004} (245)	2.09 (53)	2.28 (58)	10.08 (256)	3.94 (100)	3.62 (92)	2.83 (72)	2.72 (69)	3.98 (101)	5.87 (149)	5.47 (139)	0.87 (22)	M16
280	5.00 (127)	11.26 ^{-0.002} _{-0.004} (286)	2.76 (70)	2.68 (68)	11.81 (300)	4.72 (120)	4.72 (120)	2.83 (72)	2.72 (69)	4.65 (118)	-	6.57 (167)	1.02 (26)	M16

K3VG180DT/280DT



Dimensions of tandem pumps without gear pump - in (mm)

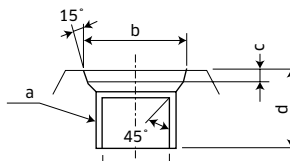
Pump Size	D ₁	D ₂	D ₃	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	L ₈	L ₉	L ₁₀	L ₁₁
180DT	9.84 (250)	7.09 ^{-0.002} _{-0.004} (180)	2.36 (60 ^{k6})	4.53 (115)	0.39 (10)	0.32 (8)	1.42 (36)	7.48 (190)	12.24 (311)	30.95 (786)	0.20 (5)	3.74 (95)	0.71 (18)	2.52 (64)
280DT	11.81 (300)	7.87 ^{-0.002} _{-0.004} (200)	2.76 (70 ^{k6})	4.53 (115)	0.39 (10)	0.35 (9)	1.97 (50)	7.99 (203)	14.72 (374)	35.28 (896)	0.20 (5)	3.74 (95)	0.79 (20)	2.93 (74.5)

Pump Size	H ₁	H ₂	H ₃	H ₄	W ₁	W ₂	W ₃	W ₄	W ₅	W ₆	W ₈	d ₁	d ₂
180DT	7.09 (112)	9.65 (245)	2.09 (53)	2.01 (51)	10.08 (256)	3.94 (100)	3.94 (100)	2.83 (72)	2.72 (69)	3.98 (101)	6.50 (165)	0.87 (22)	M16
280DT	5.00 (127)	11.26 (286)	2.76 (70)	2.32 (59)	11.81 (300)	4.72 (120)	4.72 (120)	2.83 (72)	2.72 (69)	4.65 (118)	7.28 (185)	1.02 (26)	M16

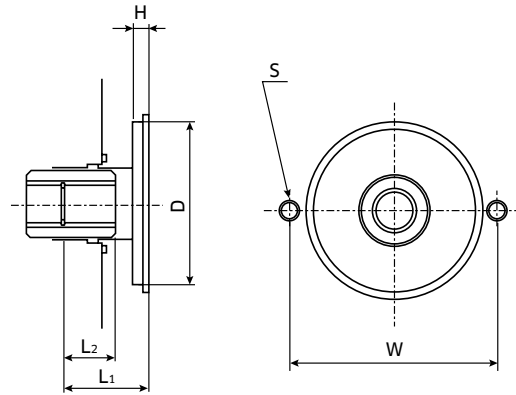
DRAIN PORT

Dimensions of drain ports - in (mm)

Pump Size	a	b	c	d
63	G1/2	0.890 (22.6)	0.098 (2.5)	0.75 (19)
112	G3/4	1.213 (30.8)	0.138 (3.5)	0.79 (20)
180,180DT	G3/4	1.213 (30.8)	0.138 (3.5)	0.79 (20)
280,280DT	G3/4	1.213 (30.8)	0.138 (3.5)	0.79 (20)

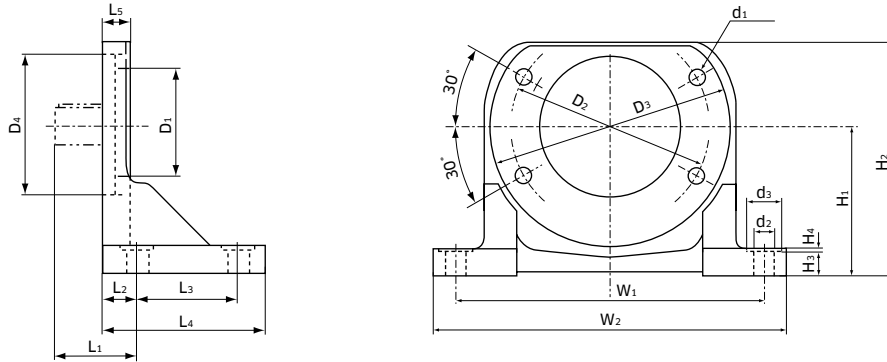


◆ Mounting Provisions for Attaching Gear Pumps



Size		63, 112, 180, 280				280, 180DT, 280DT
Install form code	Without assist pressure port	5	7	9	C	A
	With assist pressure port	4	6	8	D	
Dimensions (mm)	D	82.5				101.6
	H	8				11
	W	106				146
	S	2-M10 depth 16				2-M12 depth 20
	L ₁	34	43	37	34	43
	L ₂	18	26	26	17	26
Dimensions of Spline (mm)	Rule	SAE flat root, side fit				
	Number of teeth	11	13	11	10	13
	Diametral pitch	16/32				
	Pressure angle	30°				
	Root diameter	19.05 ^{+0.279} ₀	22.225 ^{+0.279} ₀	19.05 ^{+0.279} ₀	17.463 ^{+0.279} ₀	22.225 ^{+0.279} ₀
	Measurements over pins	13.358 ⁰ _{-0.076}	16.589 ⁰ _{-0.067}	13.358 ⁰ _{-0.076}	11.887 ⁰ _{-0.084}	16.589 ⁰ _{-0.067}
	Pin diameter	2.743				
Allowable max. torque (lb-ft)		42.7	157.9	92	67.4	157.9

◆ Foot Bracket (Accessory)

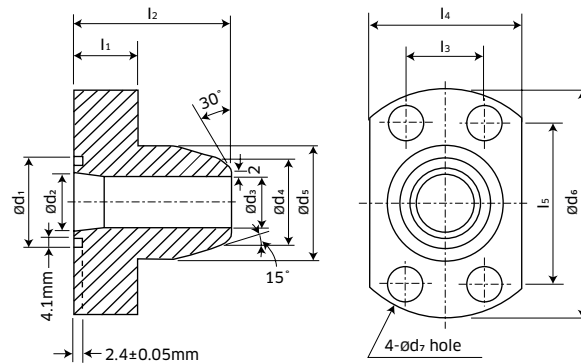


Dimensions of foot bracket - in (mm)

Pump Size	D ₁	D ₂	D ₃	D ₄	L ₁	L ₂	L ₃	L ₄	L ₅
63	4.92 (125)	7.09 (180)	8.43 (214)	-	2.95 (75)	1.26 (32)	3.66 (93)	5.91 (150)	0.98 (25)
112	6.30 (160)	8.82 (224)	10.39 (264)	-	3.94 (100)	1.50 (38)	7.09 (112)	7.09 (180)	1.18 (30)
180	7.09 (180)	9.84 (250)	11.42 (290)	-	3.94 (100)	1.73 (44)	5.20 (132)	8.35 (212)	1.65 (36)
280	11.02 (200)	11.81 (300)	13.39 (340)	9.84 (250)	3.94 (100)	1.97 (50)	15.75 (400)	19.69 (500)	1.65 (42)
180DT	7.09 (180)	9.84 (250)	11.42 (290)	8.03 (204)	4.84 (123)	1.73 (44)	12.60 (320)	15.75 (400)	1.65 (36)
280DT	11.02 (200)	11.81 (300)	13.39 (340)	9.84 (250)	4.84 (123)	1.97 (50)	15.75 (400)	19.69 (500)	1.65 (42)

Pump Size	H ₁	H ₂	H ₃	H ₄	W ₁	W ₂	d ₁	d ₂	d ₃
63	5.20 (132)	8.15 (207)	0.87 (22)	0.12 (3)	11.02 (280)	12.60 (320)	M16	0.71 (18)	1.26 (32)
112	6.30 (160)	9.92 (252)	1.06 (27)	0.12 (3)	13.19 (335)	15.12 (384)	M20	0.87 (22)	1.58 (40)
180	7.09 (180)	11.18 (284)	1.30 (33)	0.12 (3)	14.76 (375)	16.85 (428)	M20	0.87 (22)	1.58 (40)
280	8.86 (225)	14.09 (358)	1.54 (39)	0.12 (3)	17.72 (450)	20.47 (520)	M24	1.34 (34)	2.36 (60)
180DT	11.02 (200)	11.97 (304)	1.30 (33)	0.12 (3)	14.76 (375)	16.85 (428)	M20	0.87 (22)	1.58 (40)
280DT	8.86 (225)	14.09 (358)	1.54 (39)	0.12 (3)	17.72 (450)	20.47 (520)	M24	1.34 (34)	2.36 (60)

◆ Flange Accessory for Delivery Port (SAE code 62)



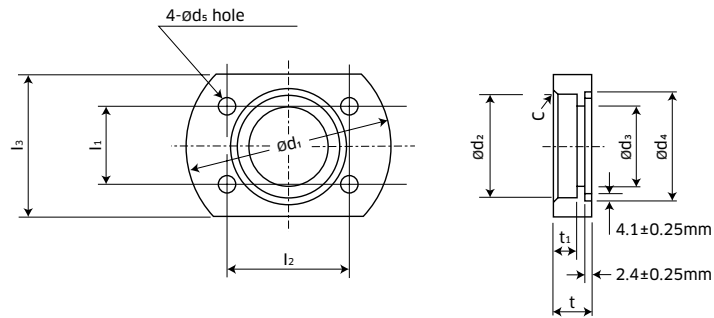
Delivery Port Flange - in (mm)

Pump Size	l ₁	l ₂	l ₃	l ₄	l ₅	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	d ₇	SAE Pipe Size	Screw Size
63	0.98 (25)	2.17 (55)	1.095 (27.8)	2.13 (54)	2.252 (57.2)	1.58 (40)	1.02 (26)	0.835 (21.2)	1.339 (34.0)	1.693 (43)	3.23 (82)	0.43 (11)	1	M10-40
112	1.18 (30)	2.56 (65)	1.252 (31.8)	2.40 (61)	2.626 (66.7)	1.77 (45)	1.26 (32)	1.177 (29.9)	1.681 (42.7)	1.97 (50)	3.78 (96)	0.55 (14)	1 1/4	M12-45
180	1.38 (35)	2.95 (75)	1.437 (36.5)	2.76 (70)	3.126 (79.4)	1.97 (50)	1.50 (38)	1.354 (34.4)	1.913 (48.6)	2.28 (58)	4.53 (115)	0.71 (18)	1 1/2	M16-55
280	1.38 (35)	2.95 (75)	1.437 (36.5)	2.76 (70)	3.126 (79.4)	1.97 (50)	1.50 (38)	1.354 (34.4)	1.913 (48.6)	2.28 (58)	4.53 (115)	0.71 (18)	1 1/2	M16-55
180DT	1.18 (30)	2.56 (65)	1.252 (31.8)	2.40 (61)	2.626 (66.7)	1.77 (45)	1.26 (32)	1.177 (29.9)	1.681 (42.7)	1.97 (50)	3.78 (96)	0.55 (14)	1 1/4	M12-45
280DT	1.38 (35)	2.95 (75)	1.437 (36.5)	2.76 (70)	3.126 (79.4)	1.97 (50)	1.50 (38)	1.354 (34.4)	1.913 (48.6)	2.28 (58)	4.53 (115)	0.71 (18)	1 1/2	M16-55

When using confluence block - in (mm)

180DT	1.58 (40)	3.54 (90)	1.752 (44.5)	3.39 (86)	3.811 (96.8)	2.56 (65)	2.01 (51)	1.697 (43.1)	2.382 (60.5)	2.80 (71)	5.51 (140)	0.87 (22)	2	M20-65
280DT	1.58 (40)	3.54 (90)	1.752 (44.5)	3.39 (86)	3.811 (96.8)	2.56 (65)	2.01 (51)	1.697 (43.1)	2.382 (60.5)	2.80 (71)	5.51 (140)	0.87 (22)	2	M20-65

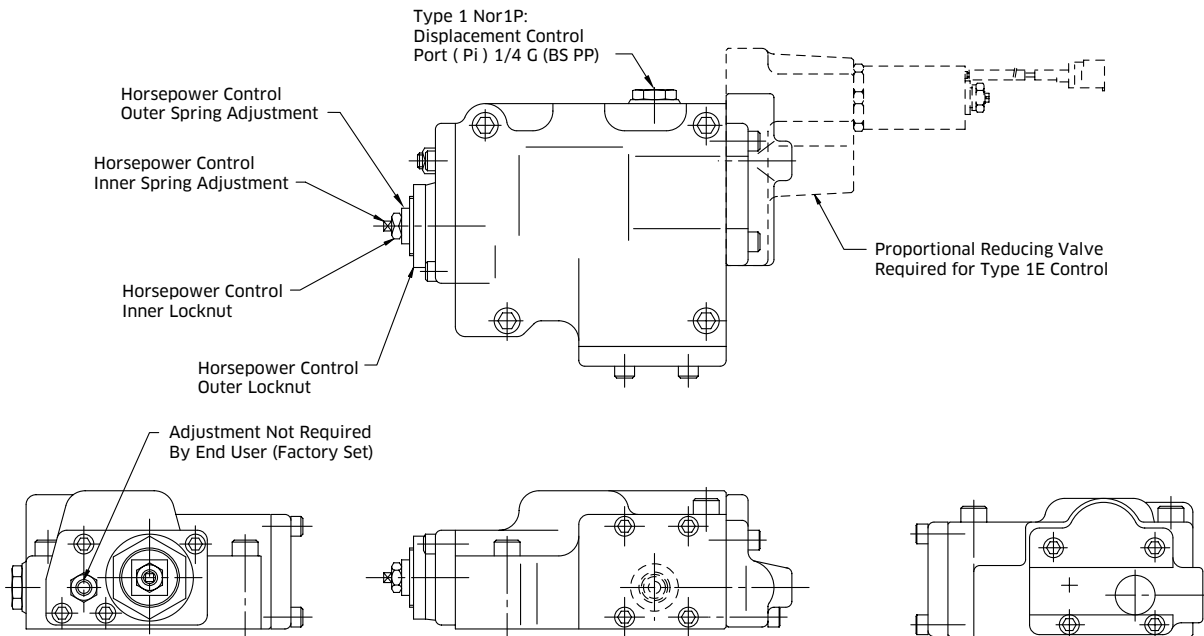
◆ Flange Accessory for Suction Port (SAE Code 61)



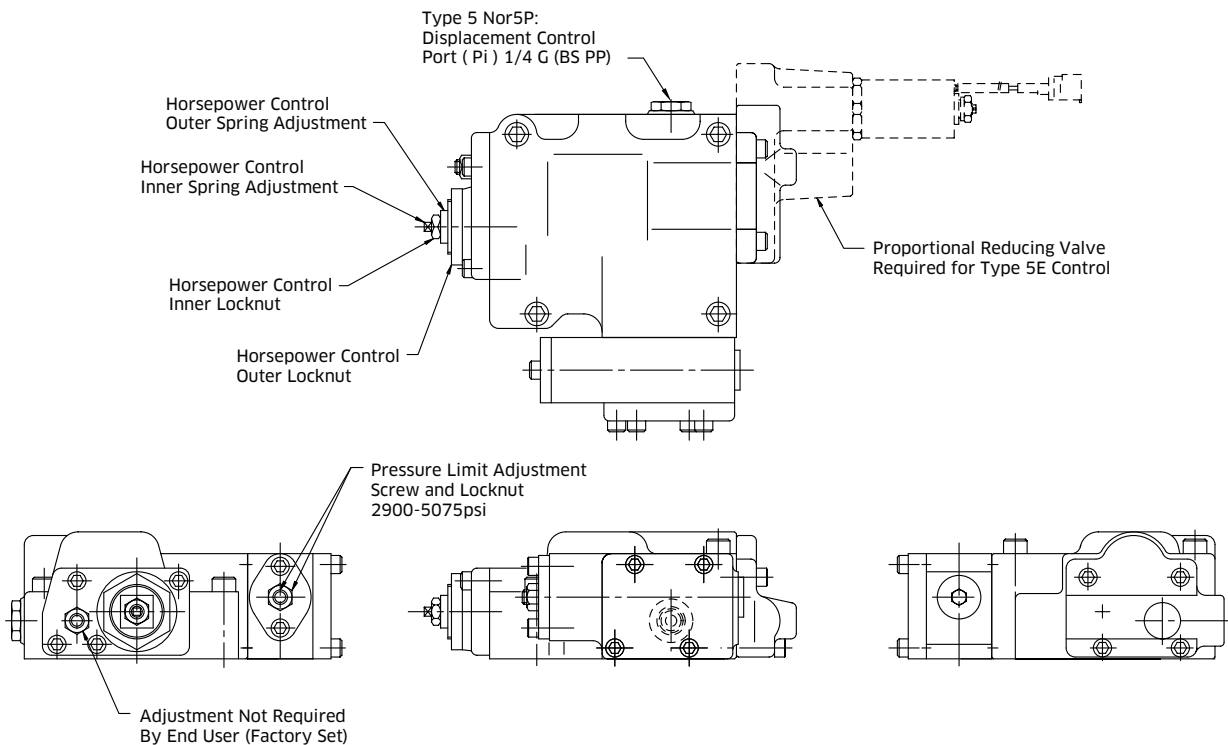
Suction Port Flange - in (mm)

Pump Size	l_1	l_2	l_3	t	t_1	d_1	d_2	d_3	d_4	d_5	C	SAE Pipe Size	Screw Size
63	1.406 (35.7)	2.752 (69.9)	3.15 (80)	0.79 (20)	0.39 (10)	4.33 (110)	1.933 (49.1)	1.50 (38)	2.17 (55)	0.55 (14)	0.12 (3)	1 1/2	M12-35
112	2.000 (50.8)	3.500 (88.9)	4.13 (105)	0.98 (25)	0.59 (15)	5.12 (130)	3.031 (77.0)	2.52 (64)	3.15 (80)	0.55 (14)	0.12 (3)	2 1/2	M12-40
180	2.441 (62.0)	4.189 (106.4)	4.92 (125)	1.18 (30)	0.79 (20)	6.30 (160)	3.543 (90.0)	2.99 (76)	3.54 (90)	0.71 (18)	0.12 (3)	3	M16-50
280	2.752 (69.9)	4.752 (120.7)	5.32 (135)	1.18 (30)	-	6.69 (170)	3.543 (90.0)	3.54 (90)	4.13 (105)	0.71 (18)	0.16 (4)	3	M16-50
180DT	3.063 (77.8)	5.126 (130.2)	5.71 (145)	1.18 (30)	0.79 (20)	7.48 (190)	4.543 (115.4)	3.94 (100)	4.72 (120)	0.71 (18)	0.16 (4)	4	M16-50
280DT	3.063 (77.8)	5.126 (130.2)	5.71 (145)	1.18 (30)	0.79 (20)	7.48 (190)	4.543 (115.4)	3.94 (100)	4.72 (120)	0.71 (18)	0.16 (4)	4	M16-50

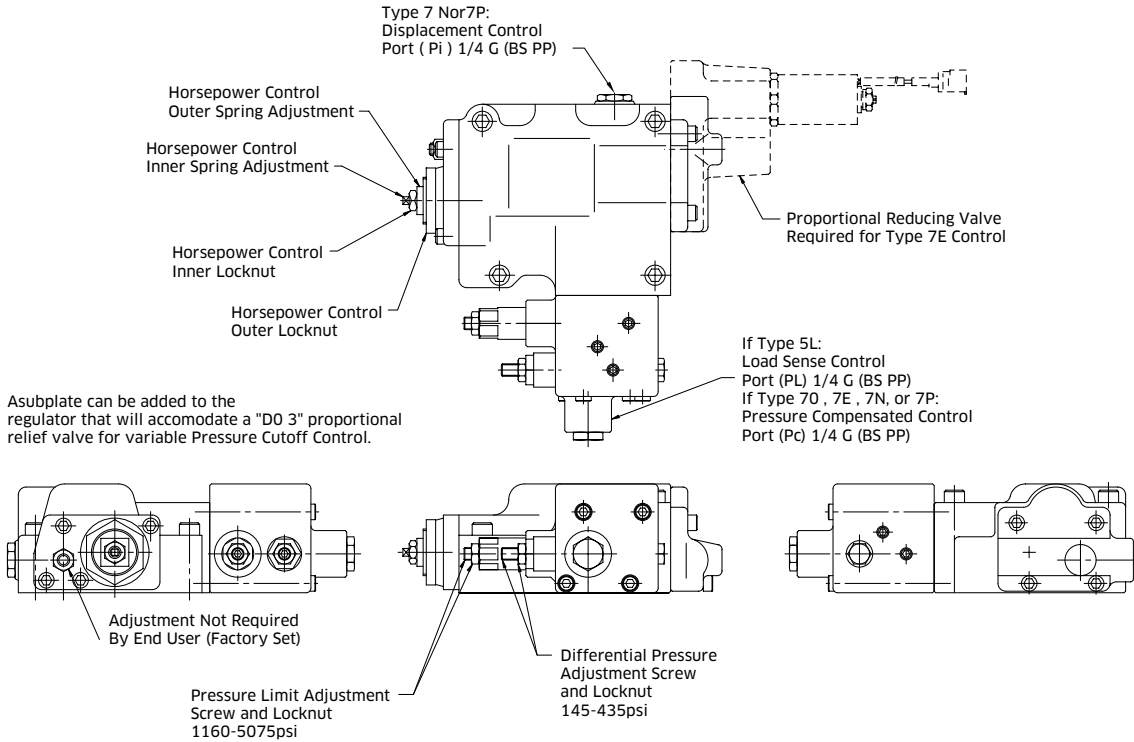
◆ Type 1 - Power Control, Positive & Negative Displacement Control



◆ Type 5 - Power and Pressure Cutoff Control



◆ Type 7 - Power and Pressure Cutoff Control with Remote Pressure Cutoff Control Capability



◆ Type 4 - Pressure Cutoff Control with Remote Pressure Cutoff Control Capability

