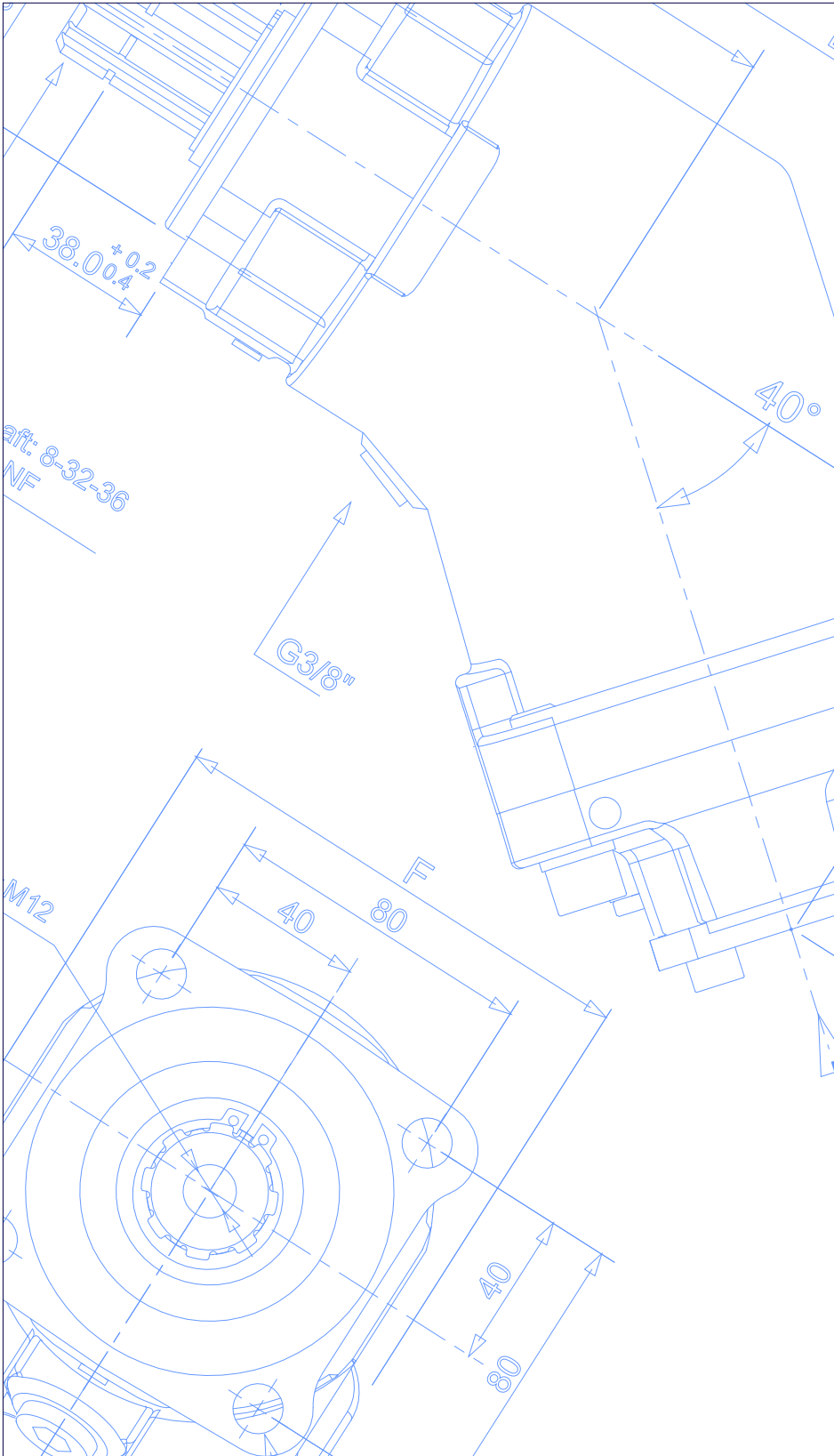




INTERSEAL, S.A.
HIDRÁULICA Y ESTANQUEIDAD

Desde 1980

A8PD

Bi-Directional

Bent Axis Piston Pumps

12cc to 130cc all size
available in stocks now.

420 bar high pressure
high rotational speed
on time delivery

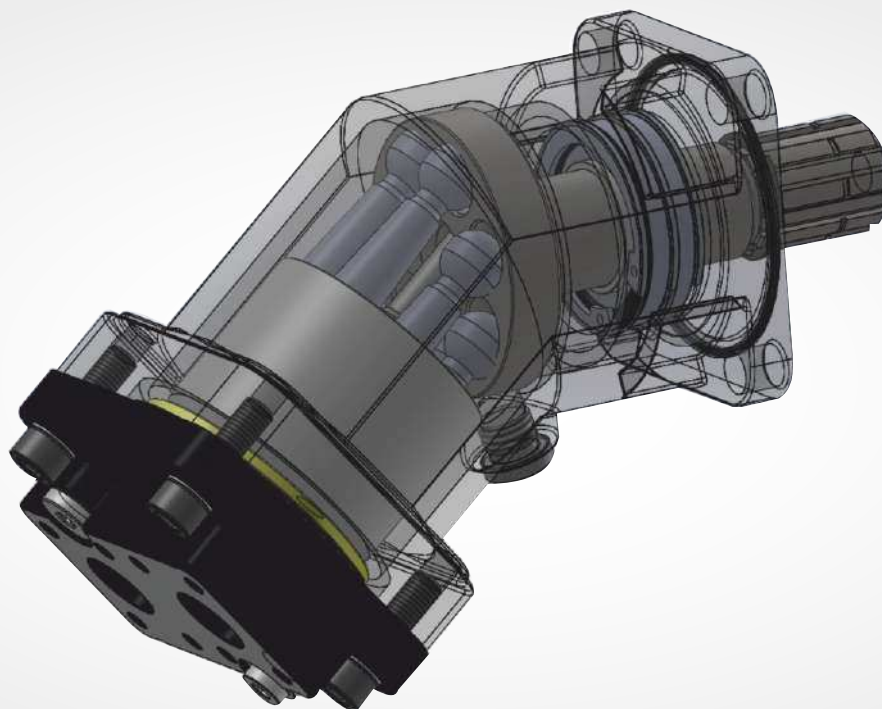




INTERSEAL, S.A.

HIDRÁULICA Y ESTANQUEIDAD

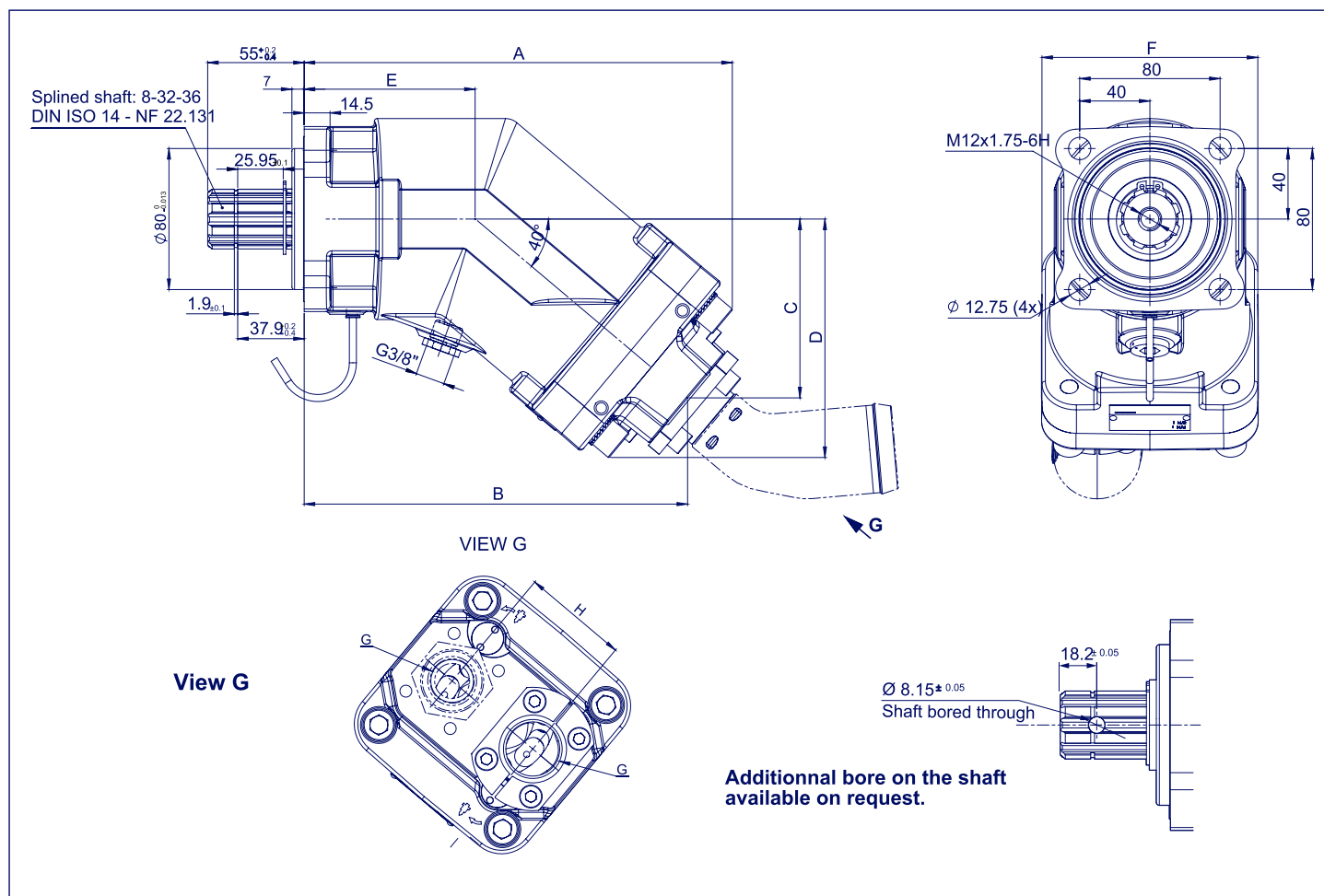
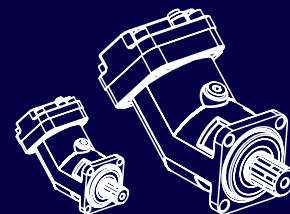
Desde 1980



A8PD

DIN

Bent Axis Piston Pumps

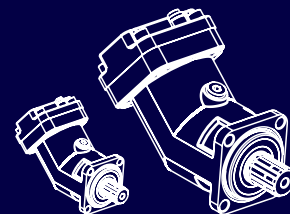


Pump reference	Displac. (cc/rev)	Maximum continuous pressure (bar)	Maximum intermittent peak pressure < 5 seconds (bar)	Maximum rotating speed at absolute pressure 1 bar with inlet line 2' (rpm)	Max. torque absorbed at 380 bar (N.m)	Weight		Overhang torque	
						without inlet fitting (kg)	with inlet fitting (kg)	without inlet fitting (N.m)	with inlet fitting (N.m)
12 cc	12	380	420	3150	76	9.	9.6	8.7	9.17
18 cc	18	380	420	2900	114	9.2	9.	8.7	9.21
25 cc	25	380	420	2750	159	9	9.75	8.8	9.26
32 cc	32	380	420	2700	204	1	11.55	11.	11.55
41 cc	41	380	420	2550	261	11.	11.6	11.1	11.6
50 cc	50.3	380	420	2450	318	11	11.65	11.7	12.23
63 cc	63	380	420	2300	401	11.	11.7	11.8	12.28
80 cc	80.4	380	420	2150	509	14.	15.3	17.8	18.36
108 cc	108.3	380	420	1900	687	14.	15.4	17.9	18.48
130 cc	129.8	380	420	1750	827	15.	15.8	18.7	19.28

A8PD

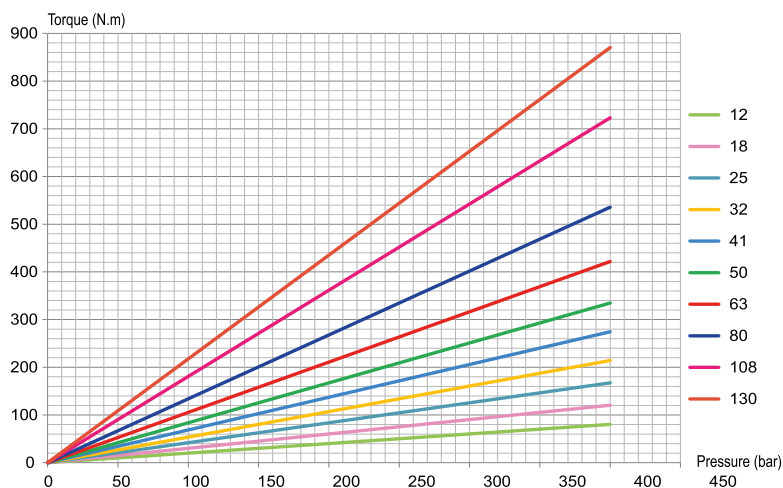
DIN

Bent Axis Piston Pumps

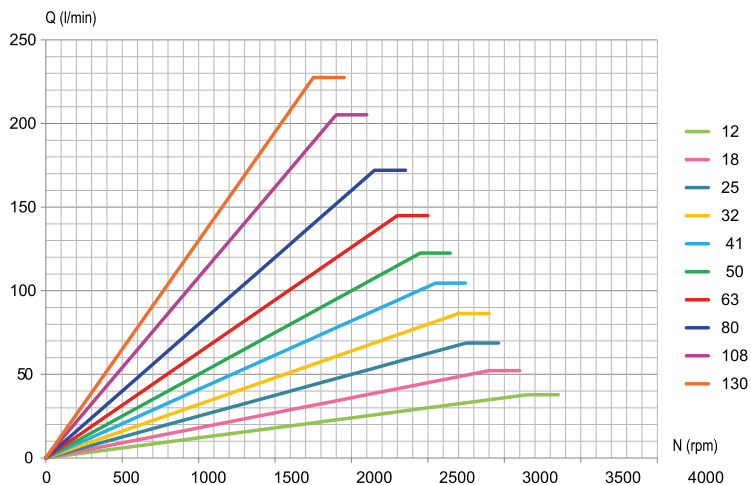


Pump reference	A	B	C	D	E	F	G	H
12 cc	196.7	177.8	77.1	103.9	85.7	108	G 3/4"	54
18 cc	196.7	177.8	77.1	103.9	85.7	108	G 3/4"	54
25 cc	196.7	177.8	77.1	103.9	85.7	108	G 3/4"	54
32 cc	202.8	184	82.3	109.1	85.7	108	G 3/4"	54
41 cc	202.8	184	82.3	109.1	85.7	108	G 3/4"	54
50 cc	214.4	195.6	92	118.9	85.7	108	G 3/4"	54
63 cc	214.4	195.6	92	118.9	85.7	108	G 3/4"	54
80 cc	241.7	220.	10	133.3	97.4	123	G 1"	60
108 cc	241.7	222.	10	133.3	97.4	123	G 1"	60
130 cc	244	224	10	135.2	97.4	123	G 1"	60

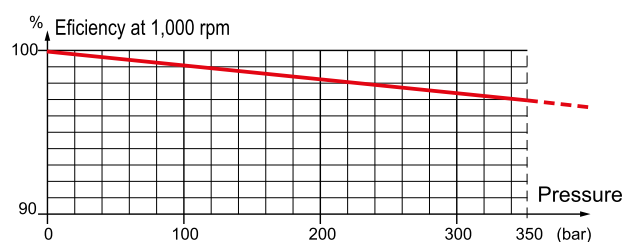
Torque absorbed as a function of pump output pressure



Flow as a function of rotating speed



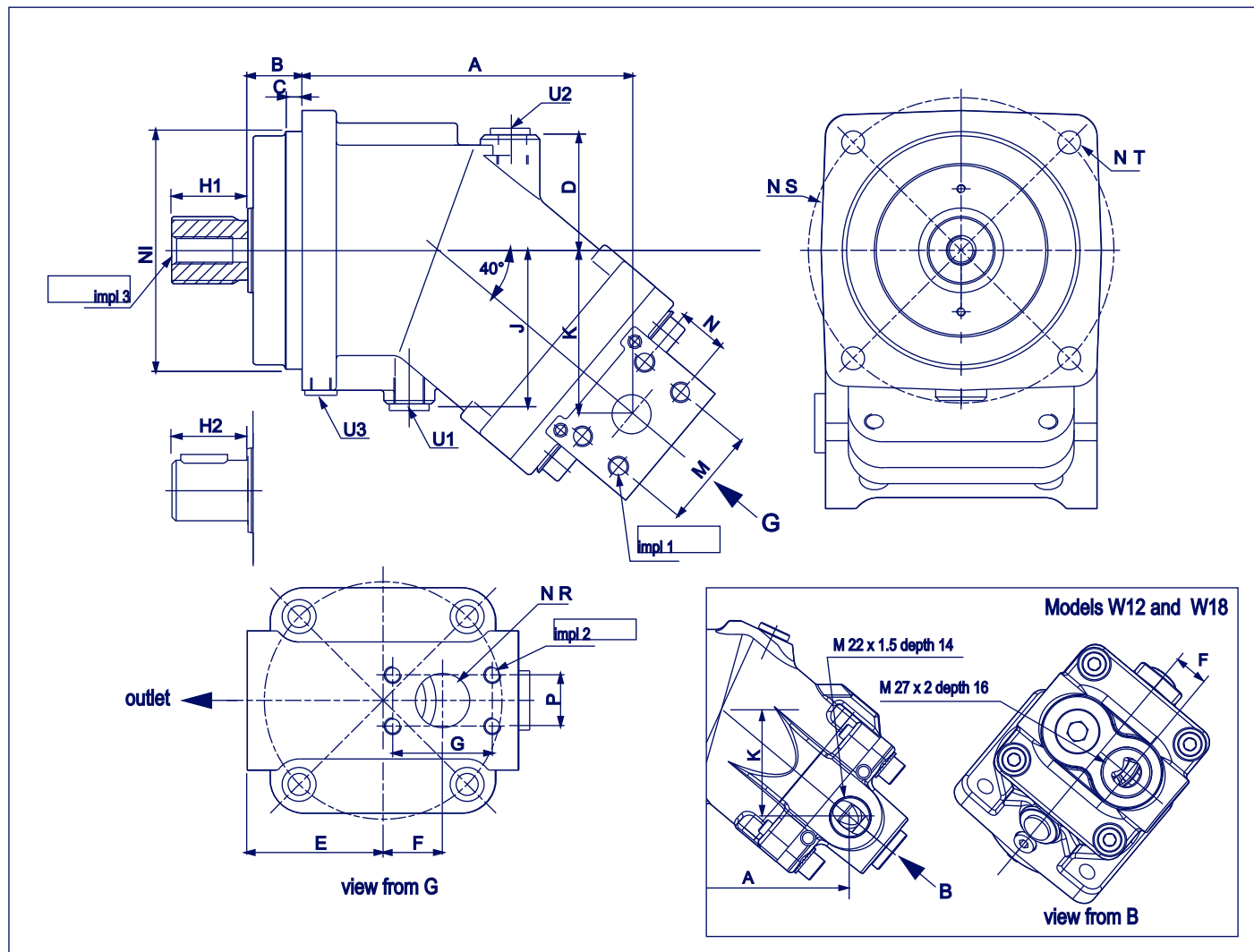
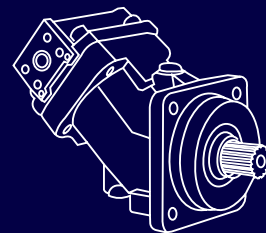
Volumetric efficiency



A8PO

ISO

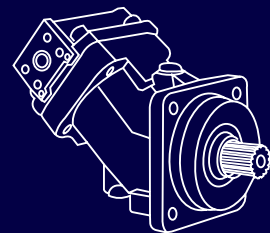
Bent Axis Piston Pumps



Pump model	max continous speed (rpm)	max pressure continous/peak (bar)	torque at 350 bar (m.N)	max flow (l/min)	pumps mini/max temperature * (°C)	weight (kg)
A8PO - 12	3150	400 / 450	67	37.80	-25 / 110	5.5
A8PO - 18	3150	400 / 450	98	56.70	-25 / 110	5.5
A8PO - 25	2500	400 / 450	140	62.50	-25 / 110	11.5
A8PO - 32	2500	400 / 450	175	80.00	-25 / 110	11.5
A8PO - 41	2250	400 / 450	227	92.25	-25 / 110	11.5
A8PO - 45	2300	400 / 450	252	103.50	-25 / 110	18
A8PO - 50	2300	400 / 450	280	115.00	-25 / 110	18
A8PO - 63	2250	400 / 450	350	145.00	-25 / 110	18
A8PO - 80	2300	400 / 450	445	184.00	-25 / 110	23
A8PO - 90	2100	400 / 450	497	189.00	-25 / 110	23
A8PO -108	1900	400 / 450	595	205.00	-25 / 110	23
A8PO -125	1950	400 / 450	695	244.00	-25 / 110	30

A8PO

ISO Bent Axis Piston Pumps



Pump model	A	B	C	D	E	F	G	I	J	K	M	N	P	R	S	T	U1	U2	U3
A8PO 12	123	20	6	39	44	17	-	80	51.5	58	-	-	-	-	100	9.0	M12x1.5	M12x1.5	M8x1
A8PO 18	123	20	6	39	44	17	-	80	51.5	58	-	-	-	-	100	9.0	M12x1.5	M12x1.5	M8x1
A8PO 25	144	25	8	56	60	22	47.6	100	69.0	66	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
A8PO 32	150	25	8	56	60	22	47.6	100	69.0	71	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
A8PO 41	150	25	8	56	60	22	47.6	100	69.0	71	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
A8PO 45	168	32	10	59	68	30	52.5	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
A8PO 50	168	32	10	59	68	30	52.4	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
A8PO 63	168	32	10	59	68	30	52.4	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
A8PO 80	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
A8PO 90	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
A8PO 108	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
A8PO 125	207.8	40	10	68	89	35	69.9	160	107.5	100.8	66.7	31.8	35.7	38	200	17.5	M18x1.5	M18x1.5	M14x1.5

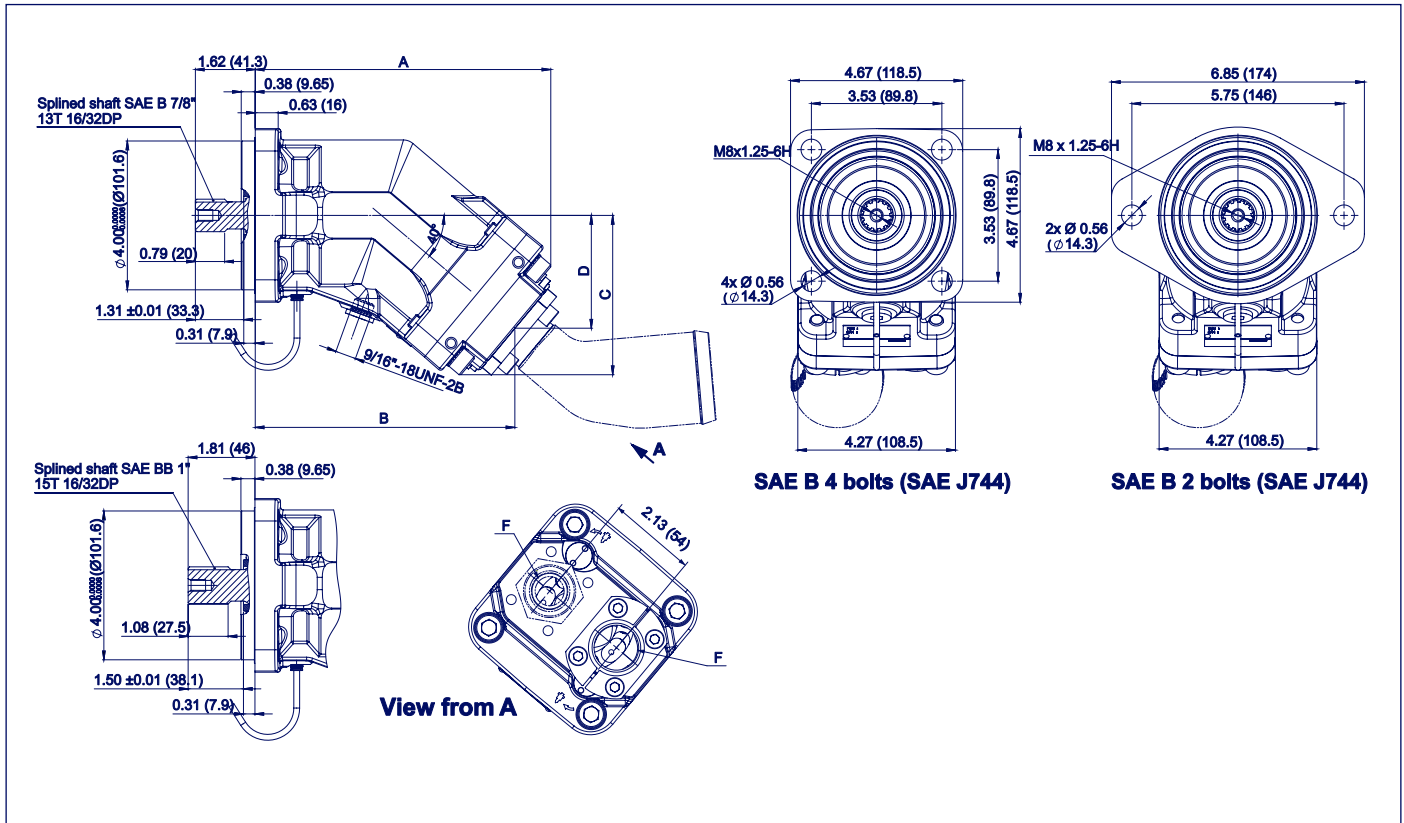
Pump model	splined shaft	H1	cylindrical keyed shaft	H2	outlet 6000 PSI	inlet 3000 PSI	Impl 1	Impl 2	Impl 3
A8PO 12	W25x1.25x30x18x9g	28	Ø25 (8 x 7 x 32)	40	M22x1.5	M27x2	-	-	M8
A8PO 18	W25x1.25x30x18x9g	28	Ø25 (8 x 7 x 32)	40	M22x1.5	M27x2	-	-	M8
A8PO 25	W25x1.25x30x18x9g	43	Ø25 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M8
A8PO 32	W30x2x30x14x9g	35	Ø30 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M10
A8PO 41	W30x2x30x14x9g	35	Ø30 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M10
A8PO 45	W30x2x30x14x9g	35	Ø30 (8 x 7 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
A8PO 50	W35x2x30x16x9g	40	Ø35 (10 x 8 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
A8PO 63	W35x2x30x16x9g	40	Ø35 (10 x 8 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
A8PO 80	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
A8PO 90	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
A8PO 108	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
A8PO 125	W45x2x30x21x9g	60	Ø45 (14 x 9 x 63)	80	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M12x1.75 prof 20	M16



!!!
important.
for shaft type, rear
cover and detailed
drawings, please
e-mail us.
thanks

A8PS

SAE Bent Axis Piston Pumps



Dimensions in inches (mm).

► SAE B - 2 bolt mounting configurations (SAE J744)

Reference	A	B	C	D	F	Shaft
A8PS - 18	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 25	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 32	8 (203.2)	7.03 (178.5)	4.28 (108.7)	3.03 (77)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 41	8 (203.2)	7.03 (178.5)	4.28 (108.7)	3.03 (77)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP

► SAE B - 4 bolt mounting configurations (SAE J744)

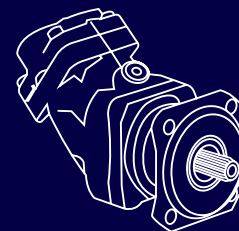
Reference	A	B	C	D	F	Shaft
A8PS - 18	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 25	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 32	8 (203.2)	7.02 (178.5)	4.28 (108.7)	3.03 (77)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 41	8 (203.2)	7.02 (178.5)	4.28 (108.7)	3.03 (77)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 50	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 63	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
A8PS - 50	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE BB 1" 15T-16/32DP
A8PS - 63	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE BB 1" 15T-16/32DP

Dimensions in inches (mm).

A8PS

SAE

Bent Axis Piston Pumps



► 2 bolt flange - SAE J744

Pump reference	Displac. Cu.in/rev (cc/rev)	Maximum continuous pressure psi (bar)	Maximum intermittent peak pressure psi (bar)	Maximum rotating speed at absolute pressure 14.51 psi (1 bar) rpm	Max. torque absorbed at 5511 psi (380 bar) lbf ft (N.m)	Weight		Overhang torque	
						without inlet itting lbs (kg)	with inlet itting lbs (kg)	without inlet itting lbf ft (N.m)	with inlet itting lbf ft (N.m)
A8PS - 18	1.1 (18)	5511 (380)	6092 (420)	2900	84 (114)	22.15 (10.5)	23.14 (10.5)	7.04 (9.54)	7.35 (9.97)
A8PS - 25	1.52 (25)	5511 (380)	6092 (420)	2750	117 (159)	22.38 (10.15)	23.36 (10.6)	7.11 (9.64)	7.4 3 (10.07)
A8PS - 32	1.95 (32)	5511 (380)	6092 (420)	2700	150 (204)	26.34 (11.95)	27.67 (12.4)	8.81 (11.95)	9.15 (12.4)
A8PS - 41	2.5 (41)	5511 (380)	6092 (420)	2550	192 (261)	26.45 (12)	27.45 (12.45)	8.85 (12)	9.18 (12.45)

► 4 bolt flange - SAE J744

Pump reference	Displac. cu.in/rev (cc/rev)	Maximum continuous pressure psi (bar)	Maximum intermittent peak pressure psi (bar)	Maximum rotating speed at absolute pressure 14.51 psi (1 bar) rpm	Max. torque absorbed at 5511 psi (380 bar) lbf ft (N.m)	Weight		Overhang torque	
						without inlet itting lbs (kg)	with inlet itting lbs (kg)	without inlet itting lbf ft (N.m)	with inlet itting lbf ft (N.m)
A8PS - 18	1.1 (18)	5511 (380)	6092 (420)	2900	84 (114)	22.59 (10.25)	23.59 (10.7)	7.18 (9.73)	7.49 (10.16)
A8PS - 25	1.52 (25)	5511 (380)	6092 (420)	2750	117 (159)	22.71 (10.3)	23.70 (10.75)	7.19 (9.75)	7.53 (10.21)
A8PS - 32	1.95 (32)	5511 (380)	6092 (420)	2700	150 (204)	26.68 (12.1)	27.67 (12.55)	8.92 (12.1)	9.26 (12.55)
A8PS - 41	2.5 (41)	5511 (380)	6092 (420)	2550	192 (261)	26.78 (12.15)	27.78 (12.6)	8.96 (12.15)	9.29 (12.6)
A8PS - 50	3.07 (50.3)	5511 (380)	6092 (420)	2450	234 (318)	26.89 (12.2)	27.89 (12.65)	9.45 (12.81)	9.80 (13.28)
A8PS - 63	3.84 (63)	5511 (380)	6092 (420)	2300	295 (401)	27.01 (12.25)	28 (12.7)	9.49 (12.86)	9.83 (13.33)

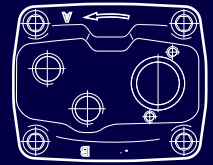


SAE -A-

SAE -B-

SAE -C-

SAE -D-



Specifications

Frame size	53/53	70/35
Displacement [cm ³ /rev]		
Port A	54	69
Port B	52	36
Max operating pressure [bar]	350	350
Max shaft speed [rpm]		
(unloaded pump; low pressure)	2550	2550
Max selfpriming speed [rpm]		
Ports A ¹⁾²⁾ and B ¹⁾²⁾ pressurized	1800	1800
Port A ²⁾ unloaded, pressure in port B	2100	2100
Input power [kW]		
Max intermittent ³⁾	110	110
Max continuous	88	88
Weight [kg]	19	19

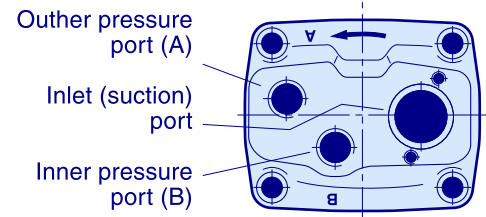
1) Valid with 2 1/2" inlet (suction) line; with 2" inlet line: max 1400 rpm.

2) Measured at 1.0 bar abs. inlet pressure.

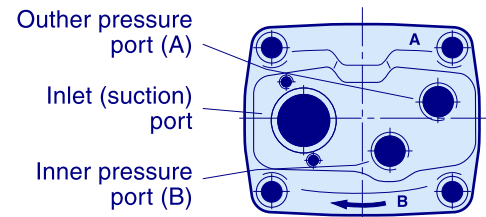
Please note: A lower inlet pressure affects pump performance.

3) Max 6 seconds in any one minute.

'Left hand' and 'right hand' end caps



End cap for right hand rotating pump



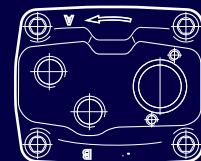
End cap for left hand rotating pump

Flow vs. shaft speed (theoretical)

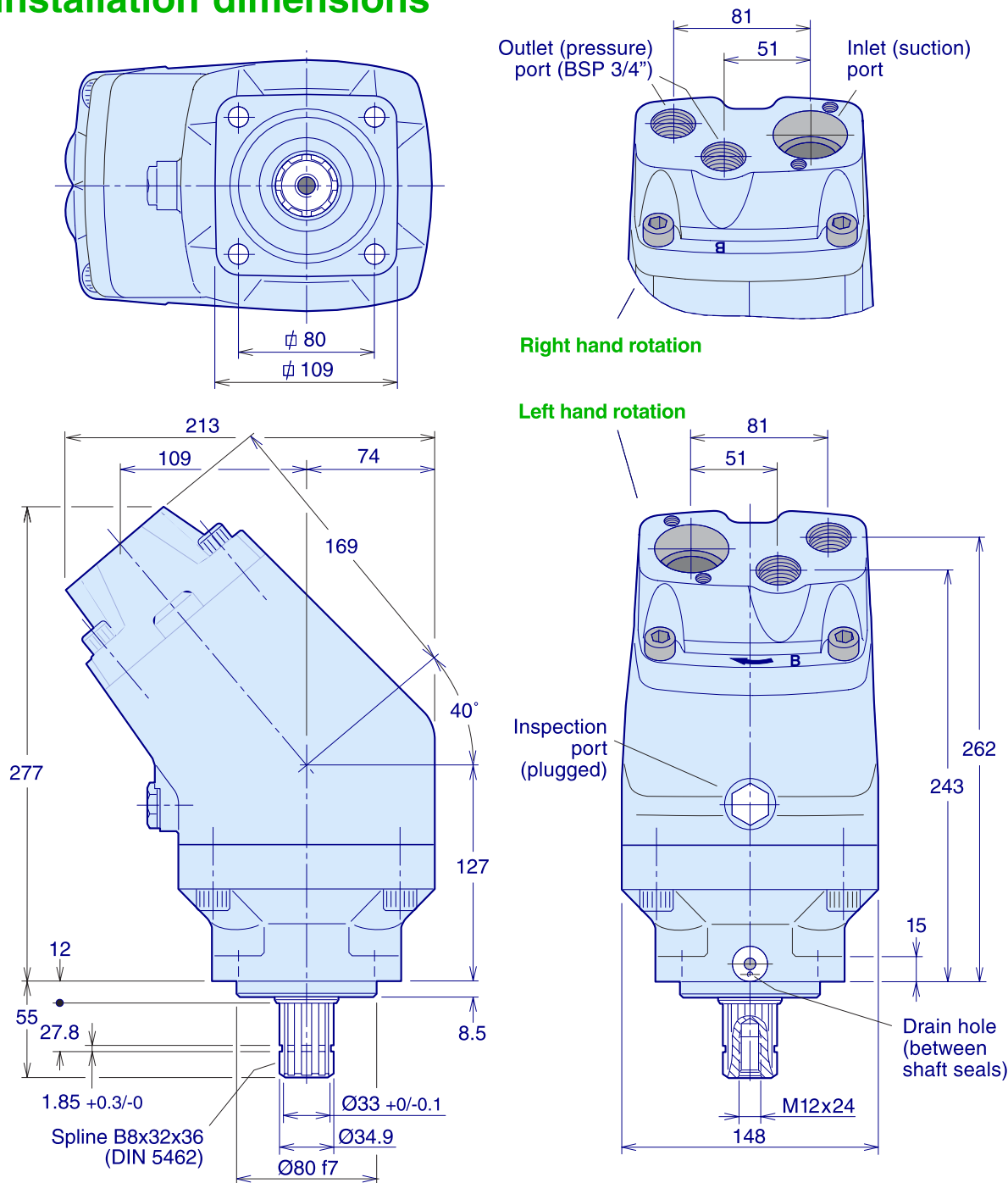
Pump speed [rpm]	800	1000	1200	1400	1600	1800	1900	2000	2100
53/53 flow [l/min]									
Port A	43	54	65	76	86	97	-	-	-
Port B	42	52	62	73	83	94	99	104	109
Total (ports A + B)	85	106	127	149	169	191	-	-	-
70/35 flow [l/min]									
Port A	55	69	83	97	110	124	-	-	-
Port B	29	36	43	50	58	65	68	72	76
Total (ports A + B)	84	105	126	147	168	189	-	-	-

Shaft torque vs. pressure (theoretical)

Pressure [bar]	150	200	250	300	350
53/53 torque [Nm]					
Port A	126	168	210	252	294
Port B	124	165	206	248	289
Total (ports A and B)	250	333	416	500	583
70/35 torque [Nm]					
Port A	164	219	274	329	383
Port B	86	114	143	171	200
Total (ports A and B)	250	333	417	500	583



Installation dimensions



Ordering code

53/53 - L	53/53 - R	Rotation
70/35 - L	70/35 - R	
76/76 - L	76/76 - R	L : Left
64/32 - L	64/32 - R	R : Right
46/46 - L	46/46 - R	
56/26 - L	56/26 - R	CW : Right
35/35 - L	35/35 - R	CCW : Left
40/40 - L	40/40 - R	
40/20 - L	40/20 - R	W : Bi-Direct.
28/28 - L	28/28 - R	
20/20 - L	20/20 - R	

NOTE:

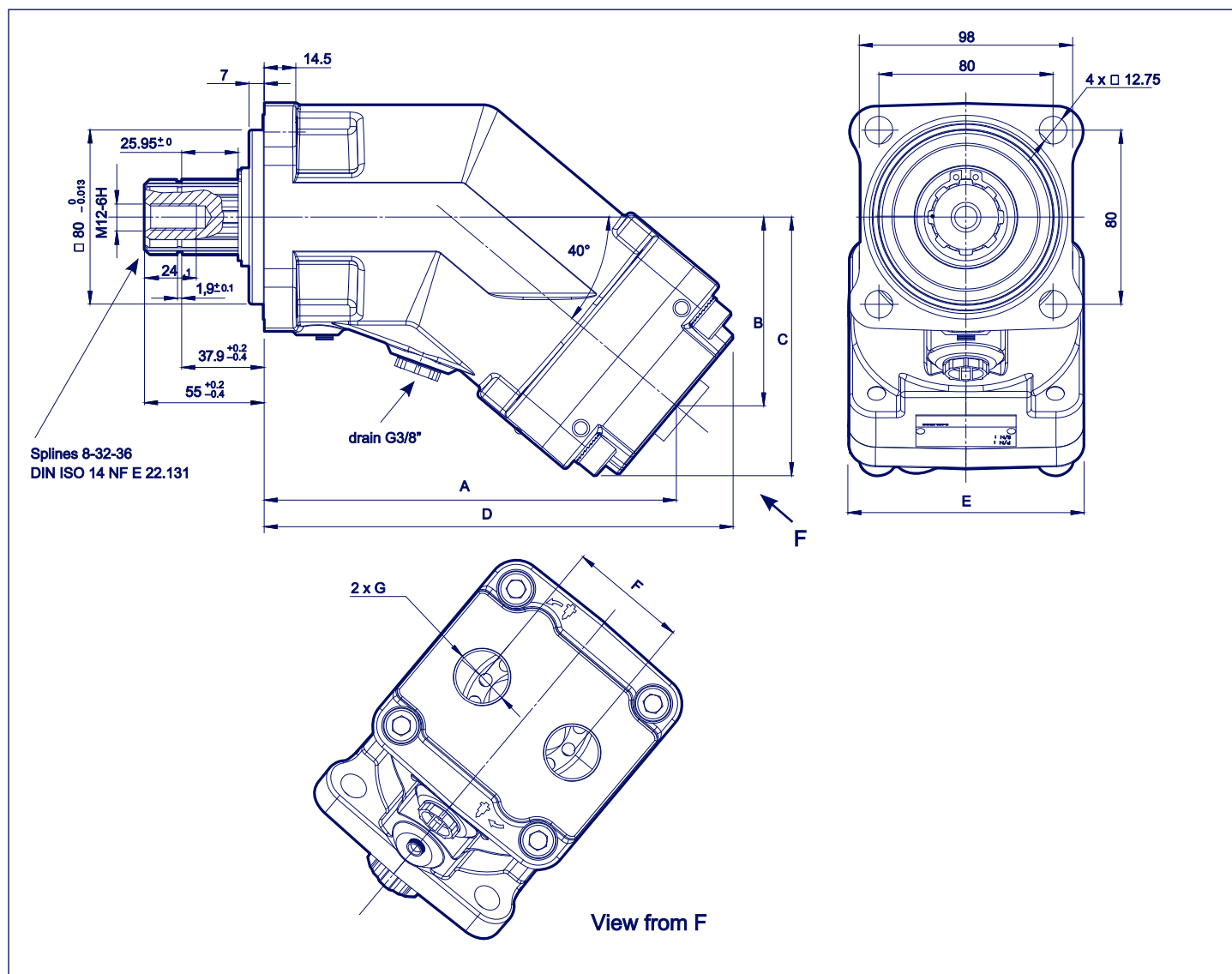
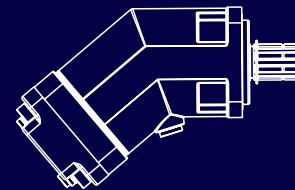
- Before start-up, tighten the inspection port plug to 70–100 Nm.
- To change the direction of rotation, **the end cap must be replaced.**

NOTE: The pump **does not** include a suction fitting; it must be ordered separately. See chapter 9.

A9MD

DIN

Bent Axis Piston Motors

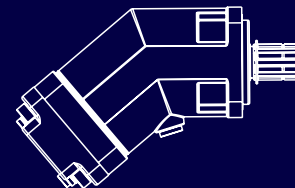


Motor model	Dis. (cc)	A	B	C	D	E	F	G	weight (kg)
A9MD - 12	12	171.5	71.9	103.9	197.9	108.5	54	G 3/4"	9.3
A9MD - 18	18	171.5	71.9	103.9	197.9	108.5	54	G 3/4"	9.3
A9MD - 25	25	171.5	71.9	103.9	197.7	108.5	54	G 3/4"	9.3
A9MD - 32	32	177.7	77	109.1	203.8	108.5	54	G 3/4"	10.3
A9MD - 41	41	177.7	77	109.1	203.8	108.5	54	G 3/4"	10.3
A9MD - 50	50,3	189.3	86.8	118.9	215.4	108.5	54	G 3/4"	11.5
A9MD - 63	63	189.3	86.8	118.9	215.4	108.5	54	G 3/4"	11.5
A9MD - 80	80,4	216.2	99.5	133.3	241.7	123.5	60	G 1"	14.5
A9MD - 108	108,3	216.2	99.5	133.3	241.7	123.5	60	G 1"	14.5
A9MD - 126	126	218.5	101.43	135.2	244	123.5	60	G 1"	14.5

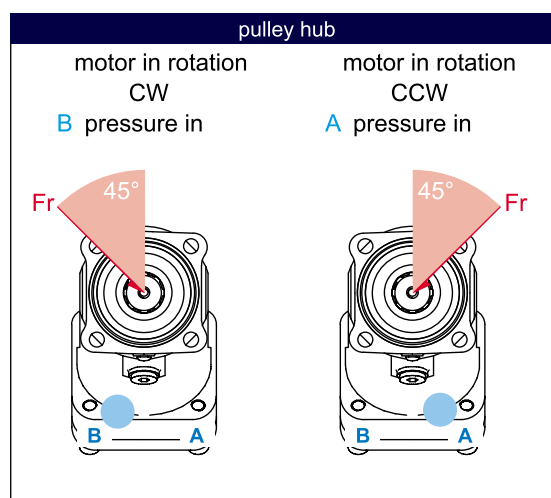
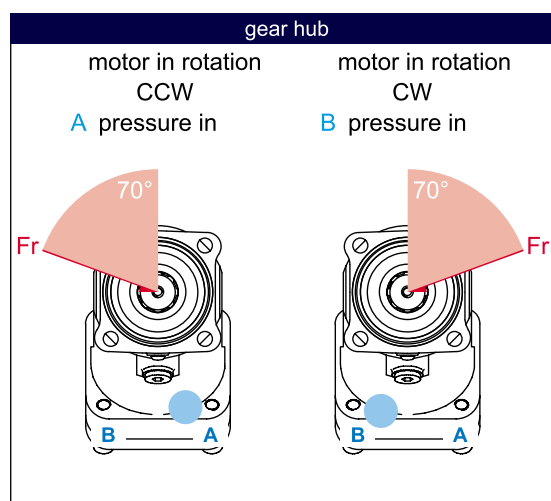
A9MD

DIN

Bent Axis Piston Motors



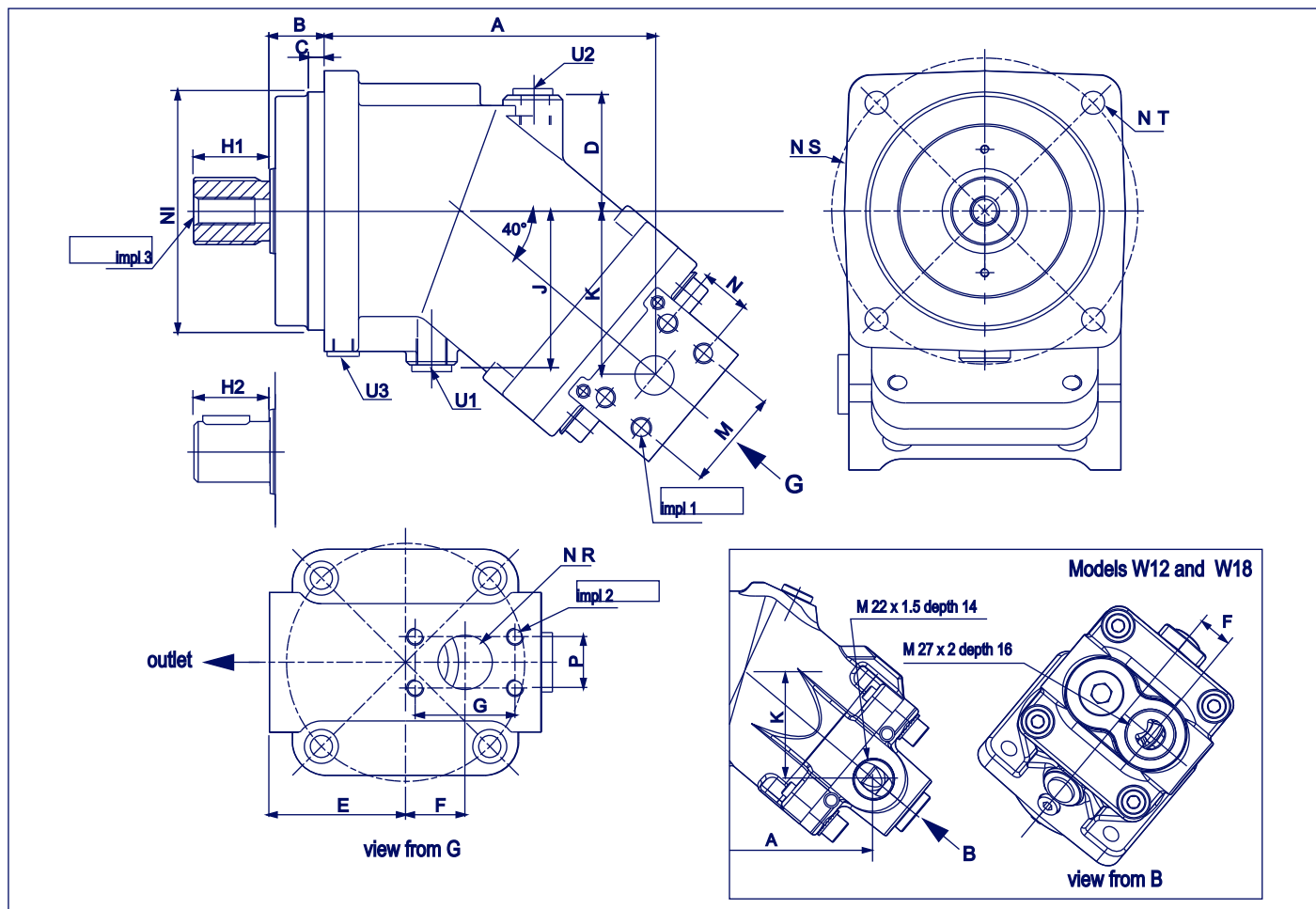
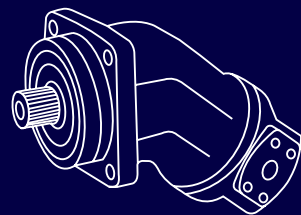
Motor model	Displacement (cc)	continuous max. speed (rpm)	Intermittent max. speed (rpm)	Max. flow absorbed (l/mn)	Torque bar (m.N/bar)	Torque at 350 bar (m.N)	Motor max./min. temperature (°C)	Max. allowable pressure continuous / peak (bar)
A9MD - 12	12	8000	8800	96	0.19	66	-25 / 110	400 / 450
A9MD - 18	18	8000	8800	144	0.28	98	-25 / 110	400 / 450
A9MD - 25	25	6300	6900	158	0.4	140	-25 / 110	400 / 450
A9MD - 32	32	6300	6900	202	0.5	175	-25 / 110	400 / 450
A9MD - 41	41	5600	6200	230	0.65	227	-25 / 110	400 / 450
A9MD - 50	50.3	5000	5500	252	0.8	280	-25 / 110	400 / 450
A9MD - 63	63	5000	5500	315	1	350	-25 / 110	400 / 450
A9MD - 80	80.4	4500	5000	362	1.27	445	-25 / 110	400 / 450
A9MD - 108	108.3	4000	4400	435	1.7	595	-25 / 110	400 / 450
A9MD - 126	126	3400	4400	428	2.0	700	-25 / 110	400 / 450



A9MO

ISO

Bent Axis Piston Motors

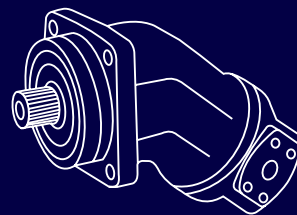


Motor model	Displacement (cc/rev)	Continuous max. speed (1) (rpm)	Intermittent max. speed (1) (rpm)	Max. low absorbed (l/mn)	Torque (N.m/bar)	Torque at 350 bar (N.m)	Theoretical maximal power at 400 bar (kW)	Max. allowable pressure continuous / peak (bar)	Weight (kg)
A9MO 5	5	8000	8800	40	0.08	28	26.6	400 / 450	4.4
A9MO 12	12	8000	8800	96	0.19	67	64	400 / 450	5.5
A9MO 18	18.0	8000	8800	144	0.29	100	96	400 / 450	5.5
A9MO 25	24.9	6300	6900	157	0.40	139	104.5	400 / 450	11.5
A9MO 28	27.7	6300	6900	175	0.44	154	116.3	400 / 450	11.5
A9MO 32	32.1	6300	6900	202	0.51	179	134.8	400 / 450	11.5
A9MO 41	41.1	5600	6200	230	0.65	229	153.4	400 / 450	11.5
A9MO 45	45.4	5000	5500	227	0.72	253	151.3	400 / 450	18
A9MO 50	50.3	5000	5500	252	0.80	280	167.6	400 / 450	18
A9MO 63	63	5000	5500	315	1.00	351	210	400 / 450	18
A9MO 80	80.4	4500	5000	362	1.28	448	241.2	400 / 450	23
A9MO 90	90	4500	5000	405	1.43	501	270	400 / 450	23
A9MO 108	108.3	4000	4400	433	1.72	603	288.8	400 / 450	23
A9MO 108R	108.3	3400	4500	368	1.72	603	245.4	400 / 450	35
A9MO 125	125.4	3400	4500	426	2.00	699	284.2	400 / 450	35
A9MO 160	160	3600	4000	576	2.55	891	384	400 / 450	48.5
A9MO 180	180.6	3600	4000	650	2.87	1006	433.4	400 / 450	48.5

A9MO

ISO

Bent Axis Piston Motors



Pump model	A	B	C	D	E	F	G	I	J	K	M	N	P	R	S	T	U1	U2	U3
A9MO 12	123	20	6	39	44	17	-	80	51.5	58	-	-	-	-	100	9.0	M12x1.5	M12x1.5	M8x1
A9MO 18	123	20	6	39	44	17	-	80	51.5	58	-	-	-	-	100	9.0	M12x1.5	M12x1.5	M8x1
A9MO 25	144	25	8	56	60	22	47.6	100	69.0	66	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
A9MO 32	150	25	8	56	60	22	47.6	100	69.0	71	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
A9MO 41	150	25	8	56	60	22	47.6	100	69.0	71	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
A9MO 45	168	32	10	59	68	30	52.4	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
A9MO 50	168	32	10	59	68	30	52.4	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
A9MO 63	168	32	10	59	68	30	52.4	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
A9MO 80	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
A9MO 90	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
A9MO 108	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
A9MO 125	207.8	40	10	68	89	35	69.9	160	107.5	100.8	66.7	31.8	35.7	38	200	17.5	M18x1.5	M18x1.5	M14x1.5

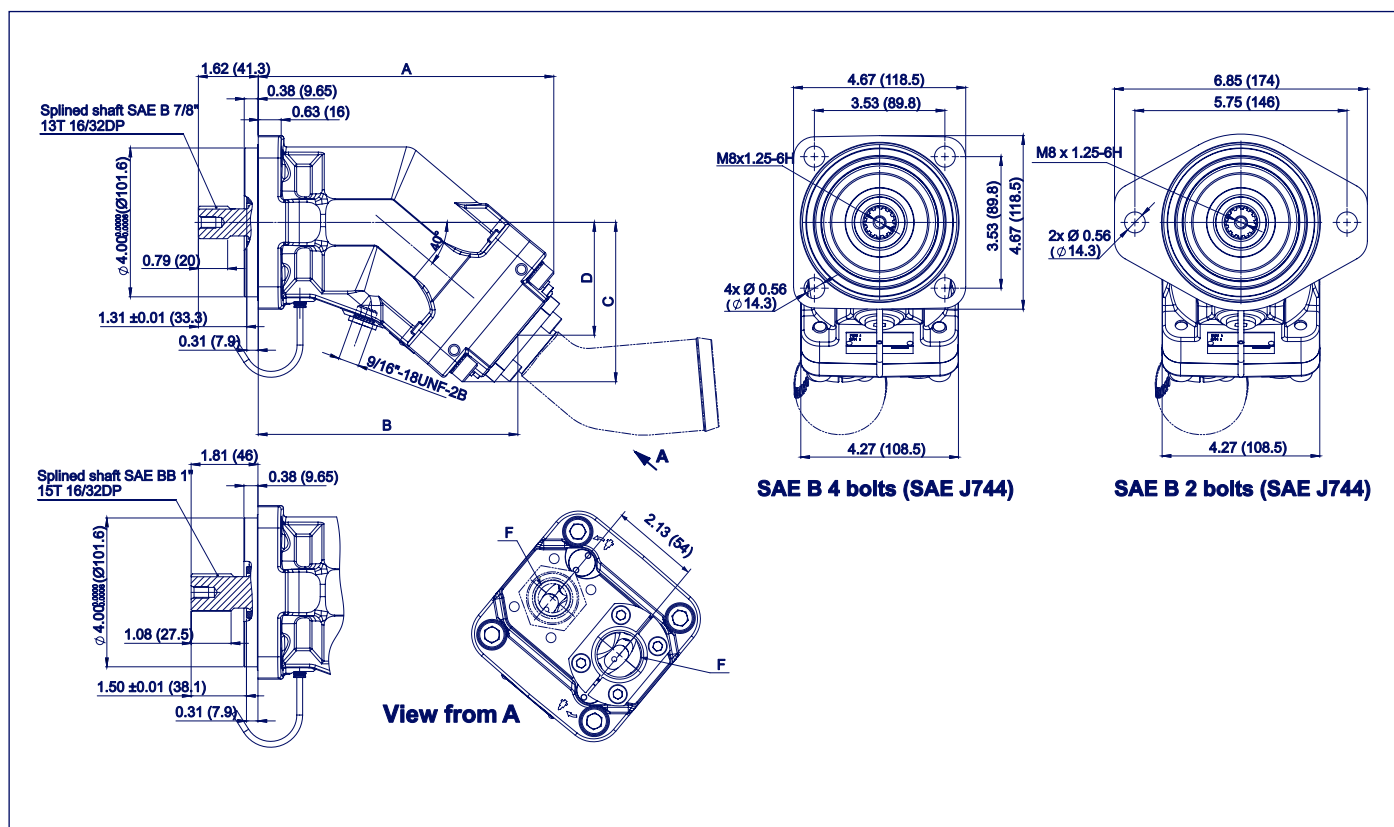
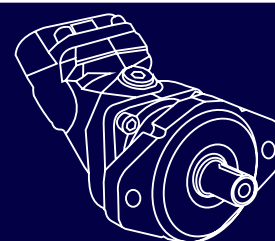
Pump model	splined shaft	H1	cylindrical keyed shaft	H2	outlet 6000 PSI	inlet 3000 PSI	Impl 1	Impl 2	Impl 3
A9MO 12	W25x1.25x30x18x9g	28	Ø25 (8 x 7 x 32)	40	M22x1.5	M27x2	-	-	M8
A9MO 18	W25x1.25x30x18x9g	28	Ø25 (8 x 7 x 32)	40	M22x1.5	M27x2	-	-	M8
A9MO 25	W25x1.25x30x18x9g	43	Ø25 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M8
A9MO 32	W30x2x30x14x9g	35	Ø30 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M10
A9MO 41	W30x2x30x14x9g	35	Ø30 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M10
A9MO 45	W30x2x30x14x9g	35	Ø30 (8 x 7 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
A9MO 50	W35x2x30x16x9g	40	Ø35 (10 x 8 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
A9MO 63	W35x2x30x16x9g	40	Ø35 (10 x 8 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
A9MO 80	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
A9MO 90	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
A9MO 108	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
A9MO 125	W45x2x30x21x9g	60	Ø45 (14 x 9 x 63)	80	SAE 1"	SAE 1 ¼"	M12x1.75 prof 20	M12x1.75 prof 20	M16



!!!
important.
for shaft type, rear
cover and detailed
drawings, please
e-mail us.
thanks

A9MS

SAE Bent Axis Piston Motors



Dimensions in inches (mm).

► SAE B - 2 bolt mounting configurations (SAE J744)

Reference	A	B	C	D	F	Shaft
A9MS - 18	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 25	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 32	8 (203.2)	7.03 (178.5)	4.28 (108.7)	3.03 (77)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 41	8 (203.2)	7.03 (178.5)	4.28 (108.7)	3.03 (77)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP

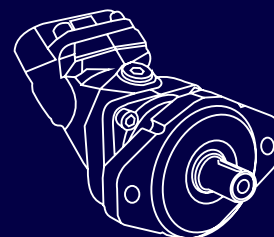
► SAE B - 4 bolt mounting configurations (SAE J744)

Reference	A	B	C	D	F	Shaft
A9MS - 18	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 25	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 32	8 (203.2)	7.02 (178.5)	4.28 (108.7)	3.03 (77)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 41	8 (203.2)	7.02 (178.5)	4.28 (108.7)	3.03 (77)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 50	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 63	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
A9MS - 50	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE BB 1" 15T-16/32DP
A9MS - 63	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE BB 1" 15T-16/32DP

Dimensions in inches (mm).

A9MS

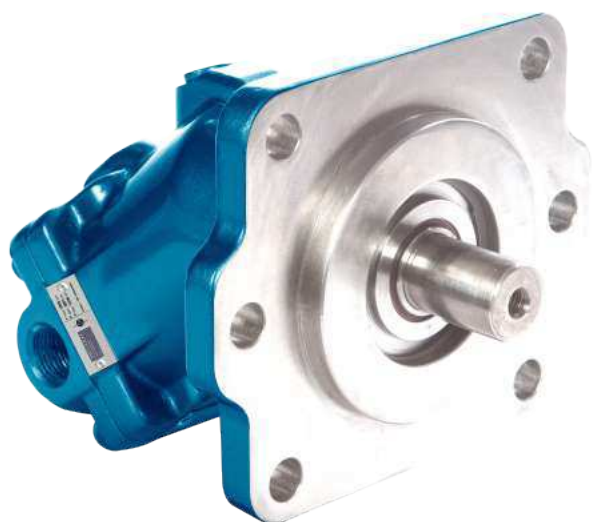
SAE Bent Axis Piston Motors



Motor model	Displacement (cc/rev)	Continuous max. speed (1) (rpm)	Intermittent max. speed (1) (rpm)	Max. low absorbed (l/mn)	Torque (N.m/bar)	Torque at 350 bar (N.m)	Theoretical maximal power at 400 bar (kW)	Max. allowable pressure continuous / peak (bar)	Weight (kg)
A9MS 5	5	8000	8800	40	0.08	28	26.6	400 / 450	4.4
A9MS 12	12	8000	8800	96	0.19	67	64	400 / 450	5.5
A9MS 18	18.0	8000	8800	144	0.29	100	96	400 / 450	5.5
A9MS 25	24.9	6300	6900	157	0.40	139	104.5	400 / 450	11.5
A9MS 28	27.7	6300	6900	175	0.44	154	116.3	400 / 450	11.5
A9MS 32	32.1	6300	6900	202	0.51	179	134.8	400 / 450	11.5
A9MS 41	41.1	5600	6200	230	0.65	229	153.4	400 / 450	11.5
A9MS 45	45.4	5000	5500	227	0.72	253	151.3	400 / 450	18
A9MS 50	50.3	5000	5500	252	0.80	280	167.6	400 / 450	18
A9MS 63	63	5000	5500	315	1.00	351	210	400 / 450	18
A9MS 80	80.4	4500	5000	362	1.28	448	241.2	400 / 450	23
A9MS 90	90	4500	5000	405	1.43	501	270	400 / 450	23
A9MS 108	108.3	4000	4400	433	1.72	603	288.8	400 / 450	23
A9MS 108R	108.3	3400	4500	368	1.72	603	245.4	400 / 450	35
A9MS 125	125.4	3400	4500	426	2.00	699	284.2	400 / 450	35
A9MS 160	160	3600	4000	576	2.55	891	384	400 / 450	48.5
A9MS 180	180.6	3600	4000	650	2.87	1006	433.4	400 / 450	48.5

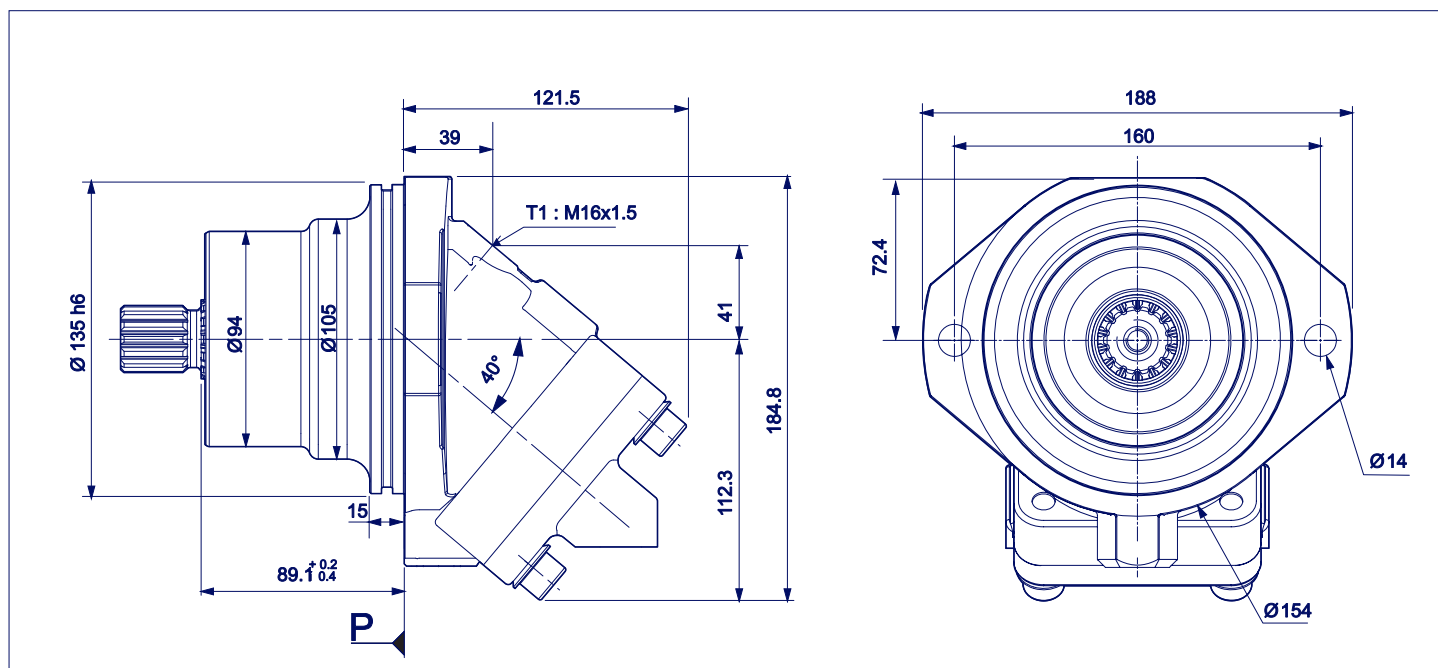
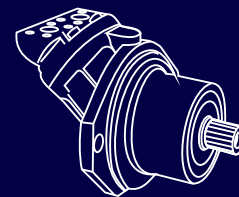


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important.
for shaft type, rear
cover and detailed
drawings, please
e-mail us.
thanks

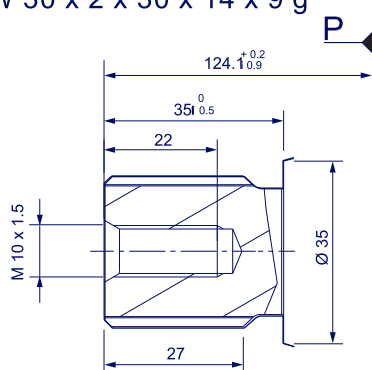


A9MF

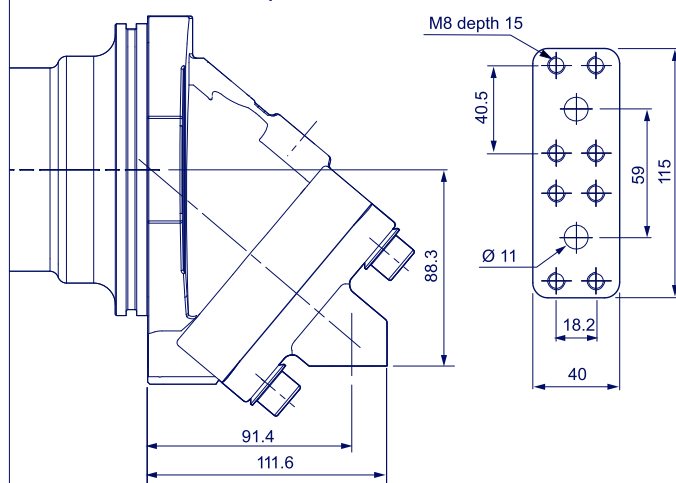
Fixed Plug-in Bent Axis Piston Motors Semi-integrated



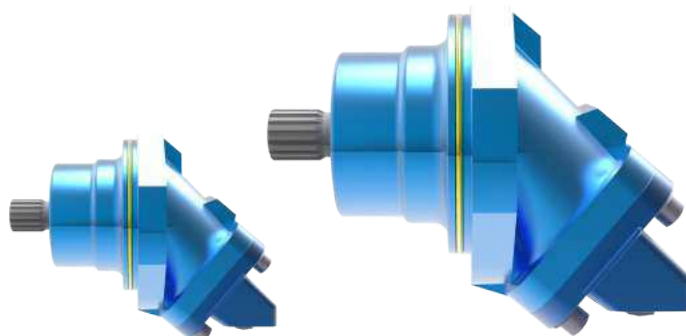
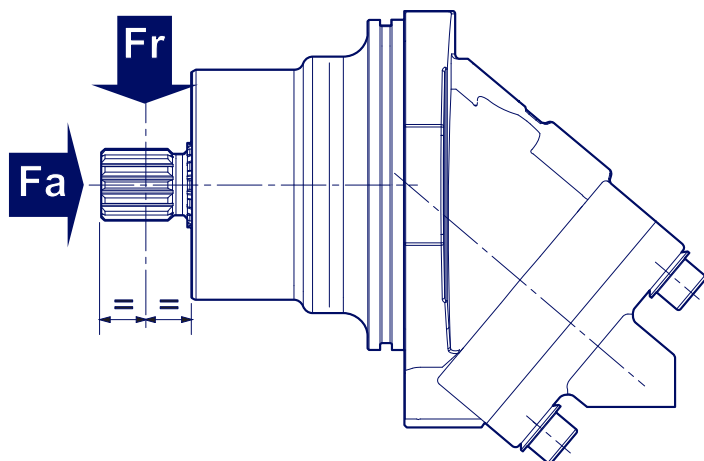
W1 Splined shaft DIN 5480
W 30 x 2 x 30 x 14 x 9 g



L0 SAE flange ports, Bottom 40° A and B
SAE 6000 psi

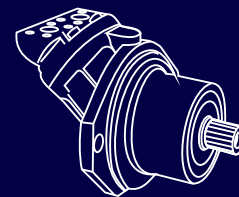


Dimensions in mm are given only as an indication.

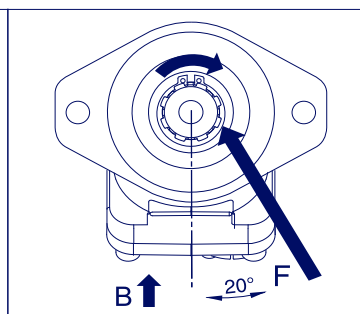
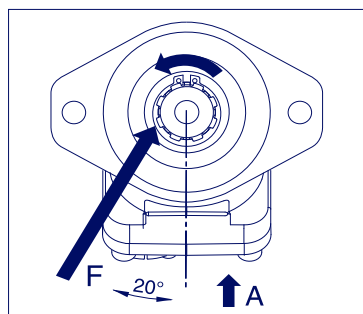
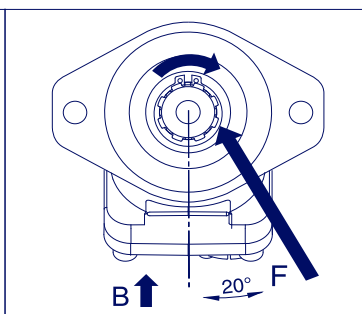
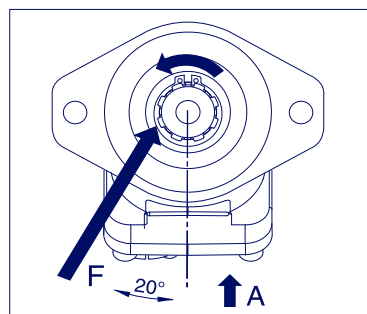
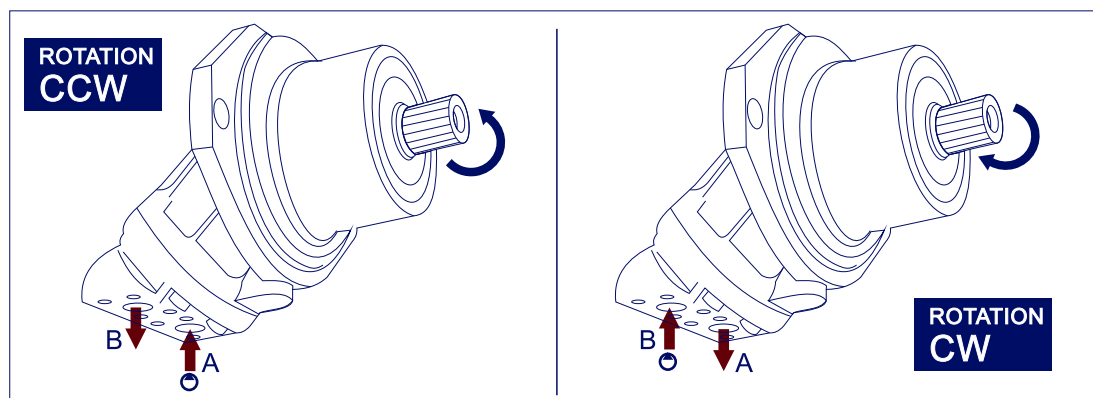
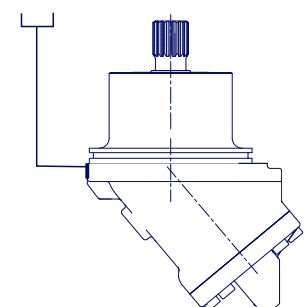
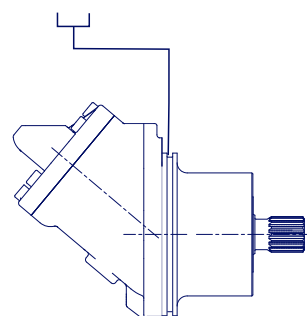
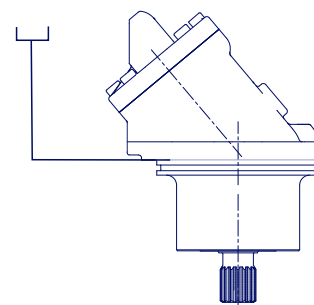
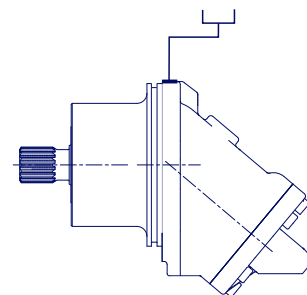


A9MF

Fixed Plug-in Bent Axis Piston Motors Semi-integrated

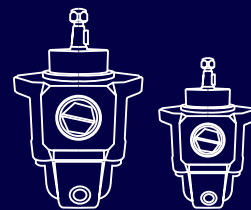


		25	32	40	50	56	63	80	108
Displacement	cc	25,00	32,00	40,20	50,00	56,40	63,00	80,00	108,4
Theoretical oil flow l/min at pump speed	1000 rpm	25,00	32,00	40,20	50,00	56,40	63,00	80,00	108,4
	1500 rpm	37,50	48,00	60,30	75,00	84,60	94,50	120,0	162,6
Maximum Speed									
- Continuous	rpm	6250	6250	5600	5000	5000	5000	4400	4000
- Intermittent	rpm	6800	6800	6300	5500	5500	5500	4900	4400
Max. Continuous Pressure	bar	400	400	400	400	400	400	400	400
Max. Peak Pressure	bar	450	450	450	450	450	450	450	450
Torque bar	m.N/bar	0.40	0.51	0.65	0.80	0.92	1.00	1.28	1.69
Torque at 350 bar	m.N	140	174	228	280	320	350	440	600
Max. Flow	l/mn.	156	200	225	250	282	315	352	433
Weight									
- Without accessories	kg	12,00	12,00	12,00	18,50	18,50	18,50	25,50	25,50
- With accessories	kg	12,50	12,50	12,50	19,00	19,00	19,00	26,00	26,00
Motor Temperature									
- Minimum	°C	-25	-25	-25	-25	-25	-25	-25	-25
- Maximum	°C	110	110	110	110	110	110	110	110

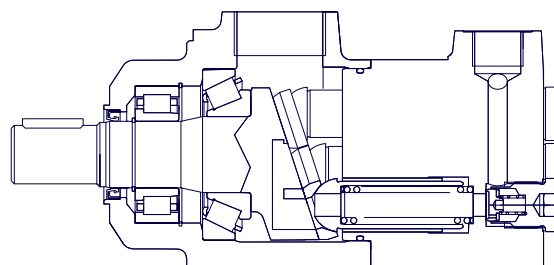
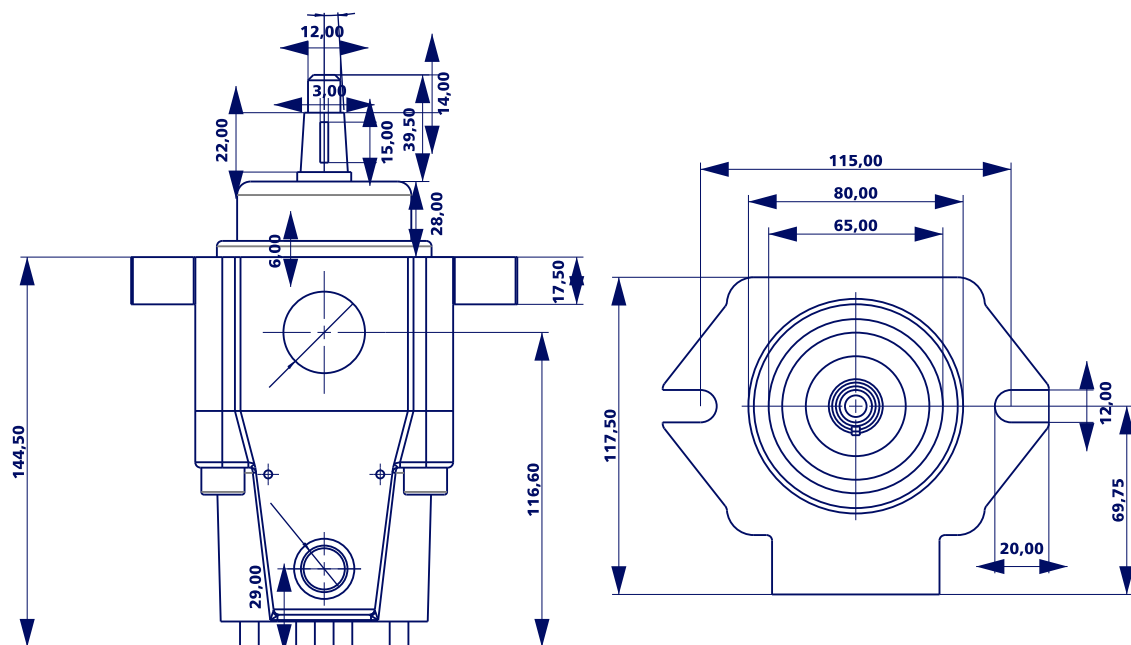


A6HP

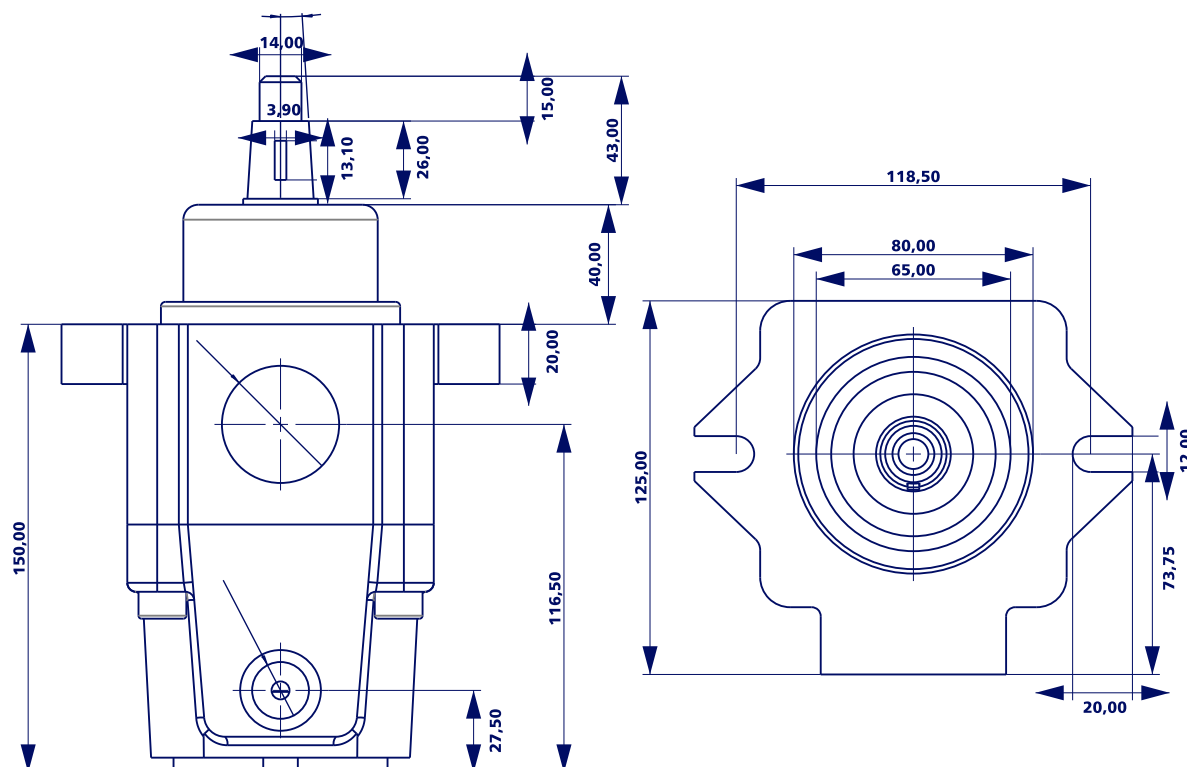
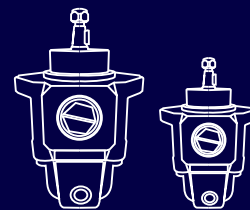
High Pressure Piston Pumps



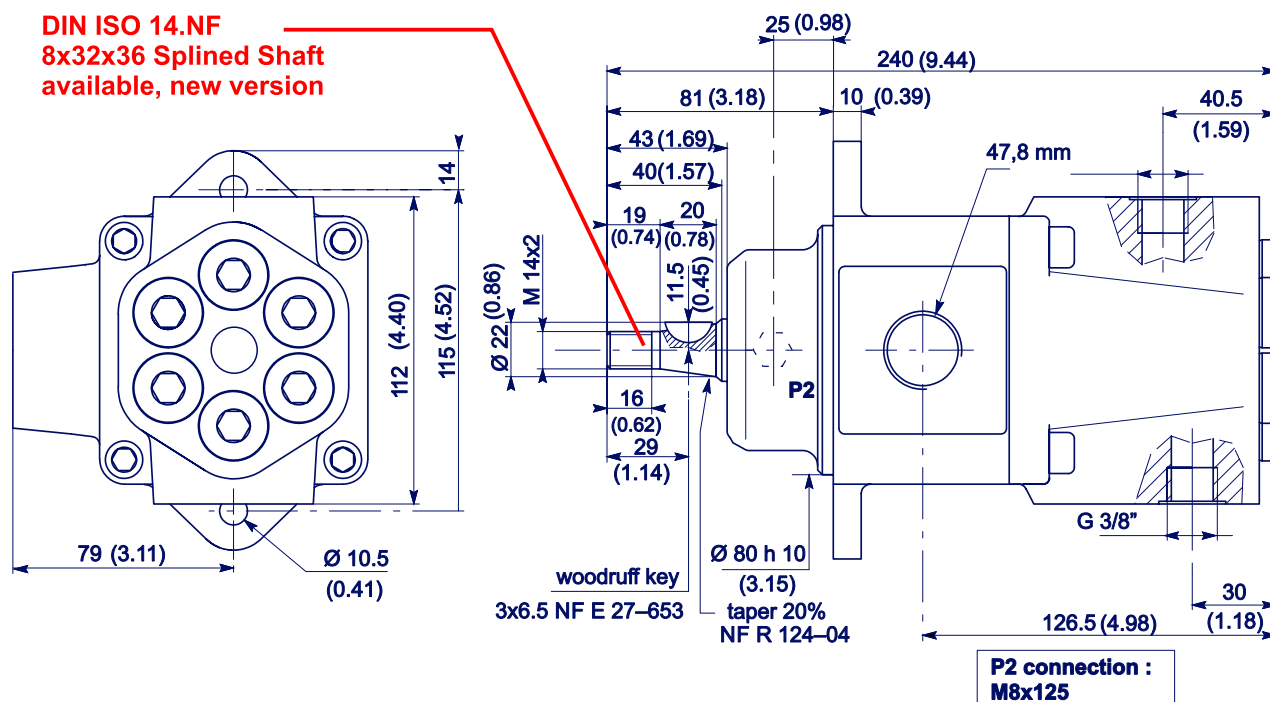
		02	04	06	12	15	22	35	45
Displacement	cc	1,56	2,70	4,40	7,80	10,50	14,73	23,70	30,40
	Theoretical oil flow l/min at pump speed								
	1000 rpm	1,56	2,70	4,40	7,80	10,50	14,73	23,70	30,40
	1500 rpm	2,34	4,05	6,60	11,70	15,75	22,09	35,55	45,60
Maximum Pump Speed									
- Continuous	rpm	3000	3000	3000	2800	2800	2800	2500	2400
- Limited	rpm	3500	3500	3500	3000	3000	3000	2800	2700
Max. Continuous Pressure	bar	600	600	600	450	400	400	400	400
Max. Peak Pressure	bar	700	700	700	500	500	500	500	500
Weight									
- Without inlet fitting	kg	5,50	5,50	5,50	8,00	8,00	8,00	12,00	12,00
- With inlet fitting	kg	5,60	5,60	5,60	8,15	8,15	8,15	12,25	12,25
Fluid		Mineral Based Hydraulic Oils							
Inlet		G 1"	G 1"	G 1"	G 1"	G 1"	G 1"	47,8mm	47,8mm
Outlet		G 3/8"	G 3/8"	G 3/8"	G 1/4"	G 1/4"	G 1/4"	26,4mm	26,4mm



High Pressure Piston Pumps

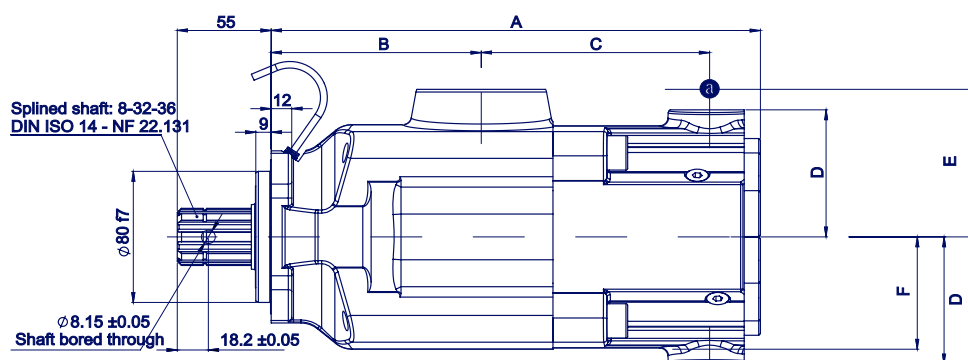
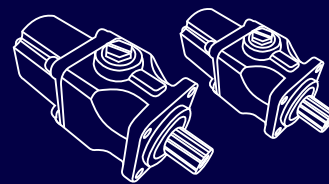


DIN ISO 14.NF —
8x32x36 Splined Shaft
available, new version

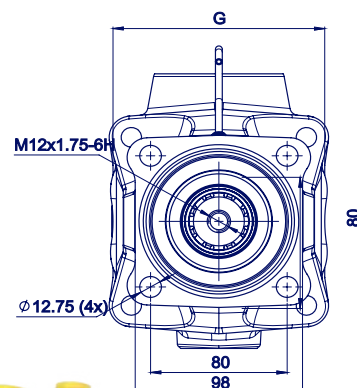
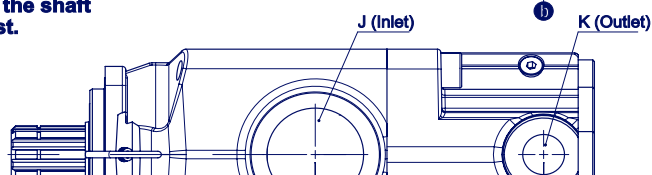


A4PP

High Pressure Axial Piston Pumps



Additional bore on the shaft
available on request.



Pump reference	Displac. (cc/rev)		A	B	C	D	E	F	G	J	K	Weight (kg)	Overhang torque (N.m)
	a	b											

► Single flow

A4PP 25	25	-	261	102	126	47	78	64	107	G 1 1/2"	G 3/4"	15	17
A4PP 32	34	-	261	102	126	47	78	64	107	G 1 1/2"	G 3/4"	15	17
A4PP 40	43	-	261	102	126	47	78	64	107	G 1 1/2"	G 3/4"	15	17
A4PP 50	50	-	261	102	126	47	78	64	107	G 1 1/2"	G 3/4"	15	17
A4PP 63	66	-	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	17
A4PP 80	82	-	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	31.5
A4PP 100	104	-	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	31.5
A4PP 114	114	-	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	31.5

A4PP 25	26	-	226	94.9	103.3	62	73.2	54	98	G 1 1/2"	G 3/4"	12.5	12.6
A4PP 40	40	-	226	94.9	103.3	62	73.2	54	98	G 1 1/2"	G 3/4"	12.5	12.6
A4PP 50	50	-	226	94.9	103.3	62	73.2	54	98	G 1 1/2"	G 3/4"	12.5	12.6
A4PP 65	65	-	243	102.5	112.8	63	78	65	107	G 1 1/2"	G 3/4"	16	17.6
A4PP 80	78	-	247	102.5	116.3	63	78	65	107	G 1 1/2"	G 3/4"	17	21.3

► Twin-flow - 2 x 3 pistons

A4PP 2 x 32	32	32	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	31.5
A4PP 2 x 40	39	39	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	31.5
A4PP 2 x 50	52	52	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	31.5
A4PP 2 x 57	57	57	290	123	138.8	69	90	69	124	G 2"	G 3/4"	23.5	31.5
A4PP 2 x 75	75	75	302	126	147.8	72.5	90	72.5	135	G 2"	G 3/4"	26.8	38.7

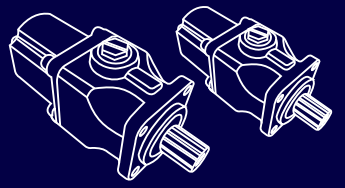
A4PP 75-40	75	40	302	126	147.8	72.5	90	72.5	135	G 2"	G 3/4"	27.4	38.7
A4PP 2 x 25	25	25	243	102.5	112.8	63	78	65	107	G 1 1/2"	G 3/4"	16	17.6
A4PP 2 x 32	32	32	243	102.5	112.8	63	78	65	107	G 1 1/2"	G 3/4"	16	17.6
A4PP 2 x 40	39	39	247	102.5	116.3	63	78	65	107	G 1 1/2"	G 3/4"	17	21.3

► Twin-flow - 2 x 5 pistons

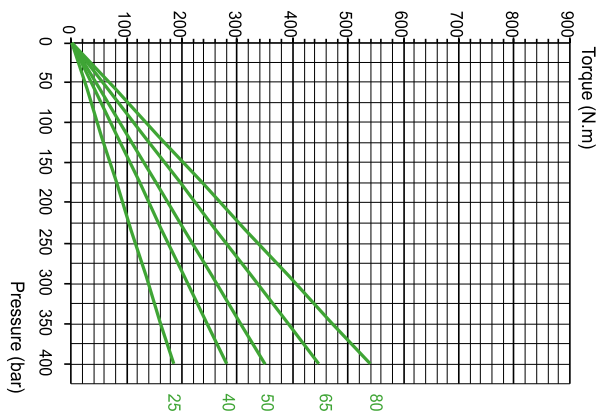
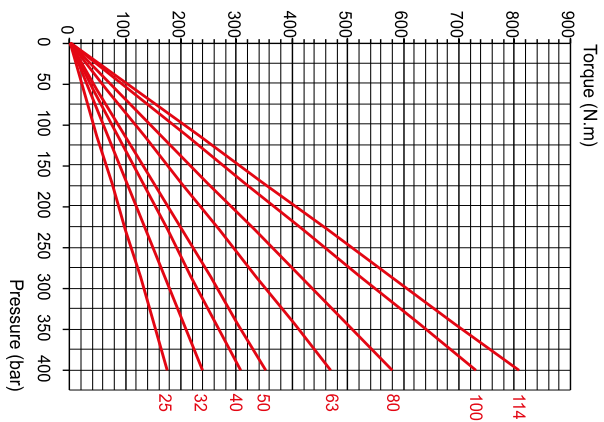
A4PP 2 x 32	32	32	287	123	133.8	77.5	90	69	124	G 2"	G 3/4"	24.6	34.4
A4PP 2 x 40	40	40	287	123	133.8	77.5	90	69	124	G 2"	G 3/4"	24.6	34.4
A4PP 2 x 55	55	55	287	123	133.8	77.5	90	69	124	G 2"	G 3/4"	24.6	34.4
A4PP 2 x 67	67	67	287	123	133.8	77.5	90	69	124	G 2"	G 3/4"	24.6	34.4
A4PP 55-33	55	33	287	123	133.8	77.5	90	69	124	G 2"	G 3/4"	24.6	34.4
A4PP 67-40	67	40	287	123	133.8	77.5	90	69	124	G 2"	G 3/4"	24.6	34.4

A4PP

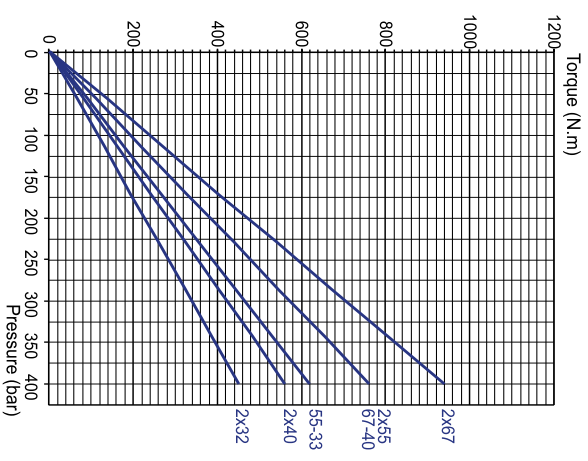
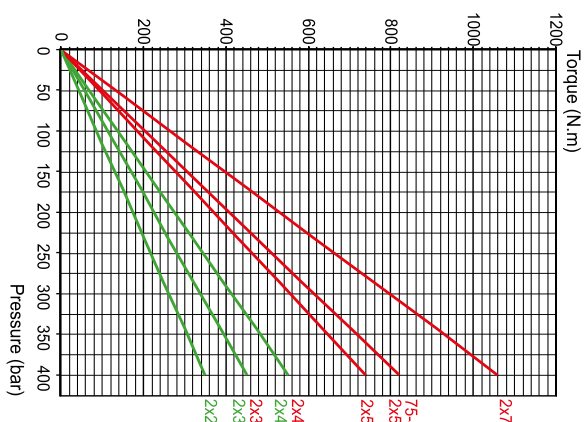
High Pressure Axial Piston Pumps



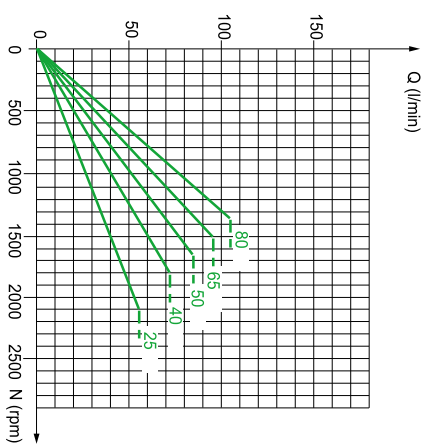
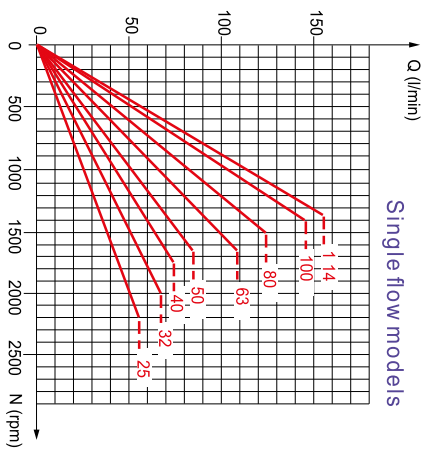
Single flow models



Twin-flow models



Single flow models



Twin-flow models

