



Helical rotor pumps for high pressure
and low noise application



Hydraport Hydraulics

7519 Sideroad 7 E, Kenilworth, ON N0G2E0, Canada

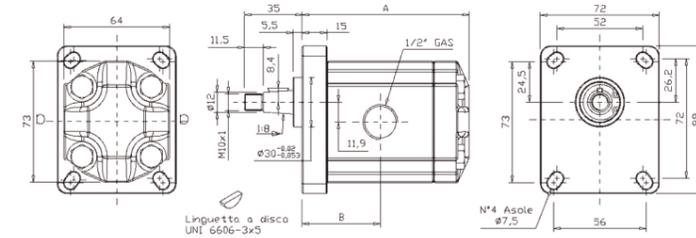
226-532-0040

contact@hydraportmfg.com

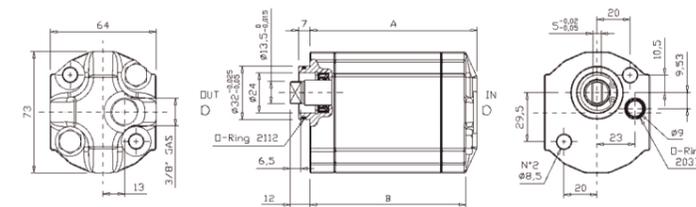
www.hydraportmfg.com

Dimensional drawing - HS28

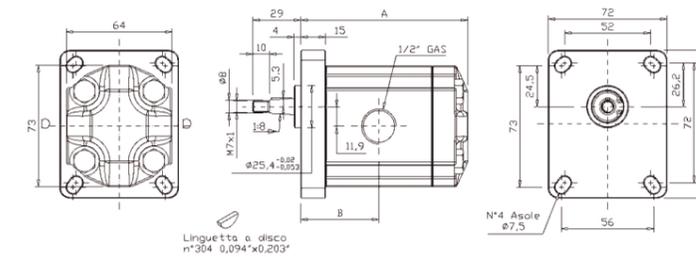
Shaft types & dimensions



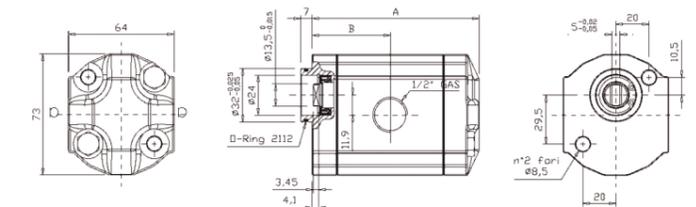
Type 1-C3								
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
4	4,2	6	95,6	44,55	275	280	300	55
6	6,4	9,2	101,1	47,3	275	280	300	55
8	8,3	12,0	106,1	49,8	246	260	280	55
10	10,2	14,7	111,1	52,3	222	250	270	55
13	12,9	18,6	118	55,75	176	230	250	55



Type 1L-GL54								
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
4	4,2	6	95,6	44,55	275	280	300	55
6	6,4	9,2	101,1	47,3	275	280	300	55
8	8,3	12,0	106,1	49,8	246	260	280	55
10	10,2	14,7	111,1	52,3	222	250	270	55
13	12,9	18,6	118	55,75	176	230	250	55



Type 1P-C2								
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
4	4,2	6	95,6	44,55	275	280	300	55
6	6,4	9,2	101,1	47,3	275	280	300	55
8	8,3	12,0	106,1	49,8	246	260	280	55
10	10,2	14,7	111,1	52,3	222	250	270	55
13	12,9	18,6	118	55,75	176	230	250	55

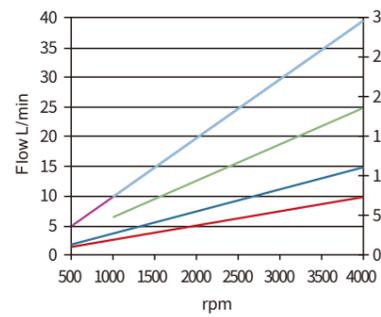


Type 1K-G54								
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
4	4,2	6	95,6	44,55	275	280	300	55
6	6,4	9,2	101,1	47,3	275	280	300	55
8	8,3	12,0	106,1	49,8	246	260	280	55
10	10,2	14,7	111,1	52,3	222	250	270	55
13	12,9	18,6	118	55,75	176	230	250	55

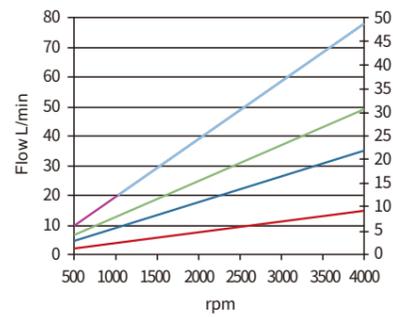
(*) Intermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec. OFF

PUMP PERFORMANCE CURVES

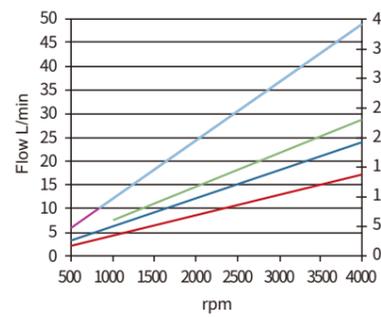
For Group 2
GROUP 2 Displacement CC/Rev



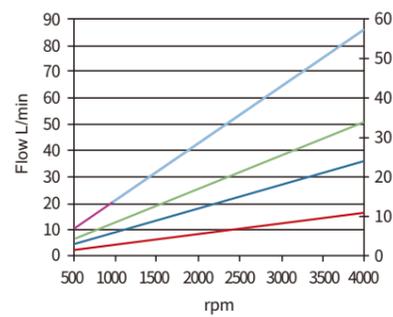
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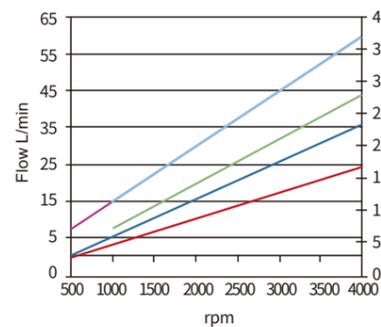
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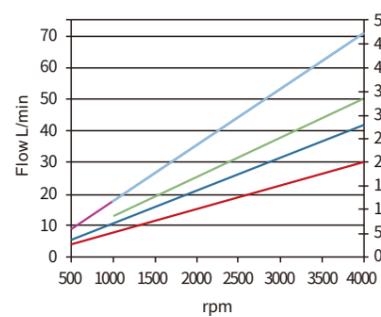
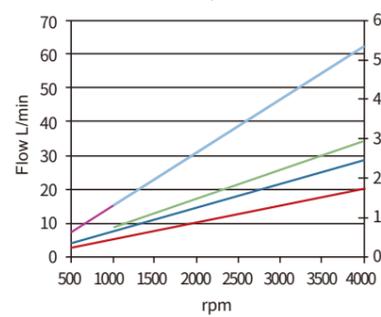
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16 28

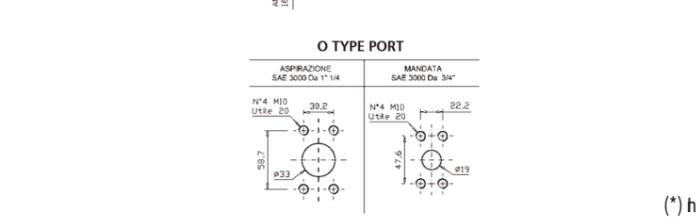
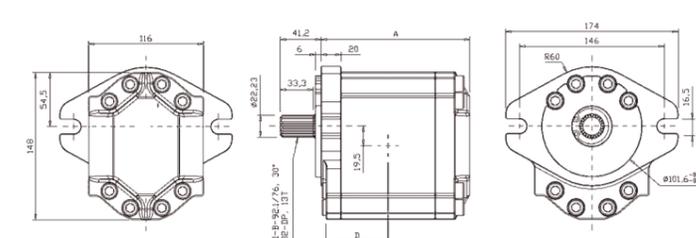
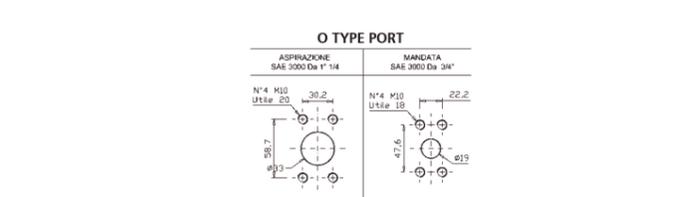
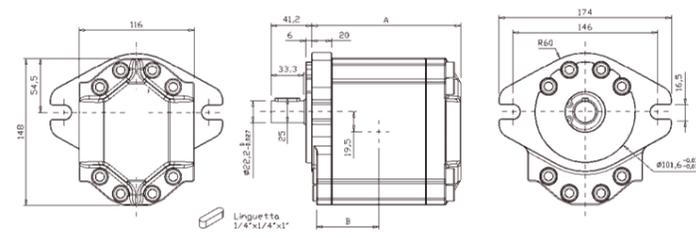
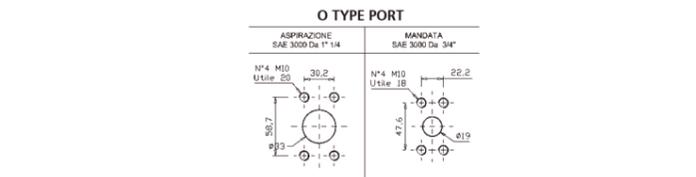
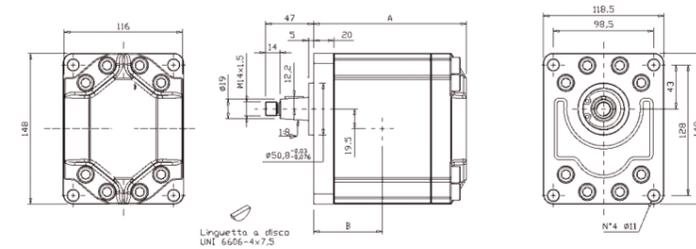


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Dimensional drawing - HS47

Shaft types & dimensions



Type		3-C9						
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
28	28	40,3	150,1	67,55	270	280	300	57
32	32,2	46,3	154,1	69,55	252	270	280	57
36	36,3	52,3	158,1	71,55	239	250	270	57
40	40,5	58,3	162,1	73,55	225	250	270	57
45	45,1	65,0	166,6	75,8	213	250	270	57
50	50,3	72,4	171,6	78,3	202	250	270	57

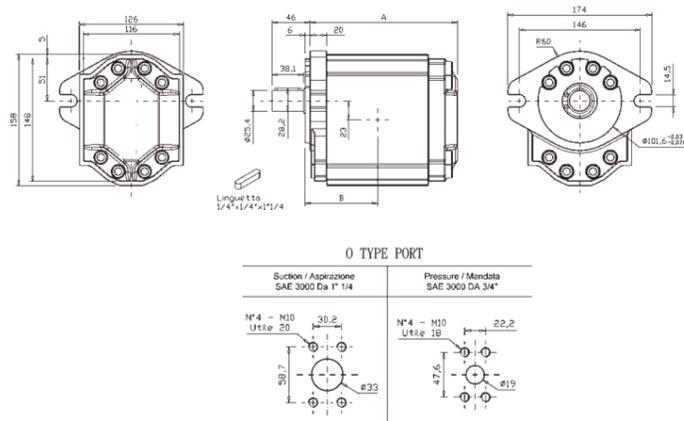
Type		SAEB-AC						
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
28	28	40,3	150,1	67,55	270	280	300	57
32	32,2	46,3	154,1	69,55	252	270	280	57
36	36,3	52,3	158,1	71,55	239	250	270	57
40	40,5	58,3	162,1	73,55	225	250	270	57
45	45,1	65,0	166,6	75,8	213	250	270	57
50	50,3	72,4	171,6	78,3	202	250	270	57

Type		SAEB-T13						
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
28	28	40,3	150,1	67,55	270	280	300	57
32	32,2	46,3	154,1	69,55	252	270	280	57
36	36,3	52,3	158,1	71,55	239	250	270	57
40	40,5	58,3	162,1	73,55	225	250	270	57
45	45,1	65,0	166,6	75,8	213	250	270	57
50	50,3	72,4	171,6	78,3	202	250	270	57

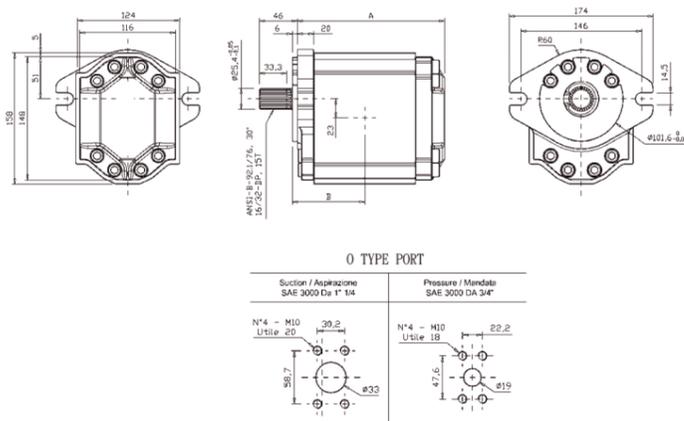
(*) htermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec. OFF

Dimensional drawing - HS55

Shaft types & dimensions



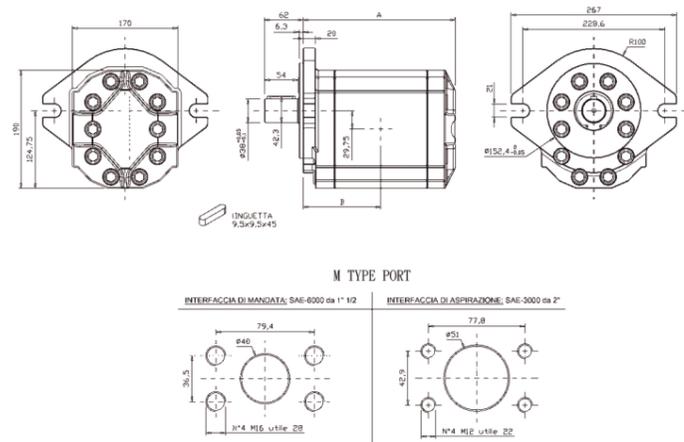
Type		SAEB-AC						
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
50	50,5	72,7	178,1	81,55	275	280	300	57
63	63,5	91,4	187,1	86,05	249	260	280	57
75	75	108,1	195,1	90,05	229	250	270	57
90	90,9	130,9	206,1	95,55	178	240	260	57



Type		SAEB-T15						
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
50	50,5	72,7	178,1	81,55	275	280	300	57
63	63,5	91,4	187,1	86,05	249	260	280	57
75	75	108,1	195,1	90,05	229	250	270	57
90	90,9	130,9	206,1	95,55	178	240	260	57

Dimensional drawing - HS72

Shaft types & dimensions

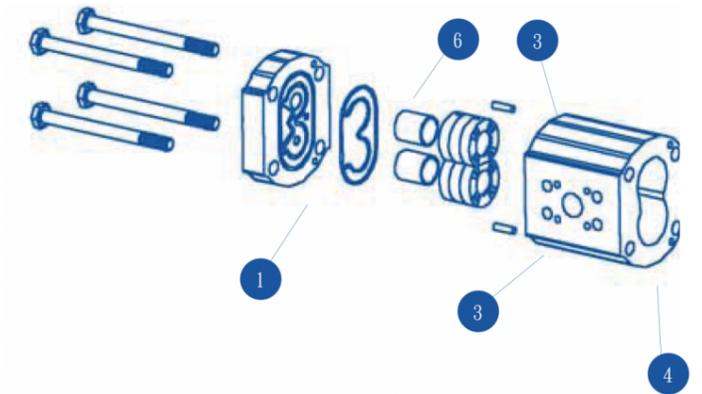


Type		SAED-AAC						
Type	CC	L/min	Dim A	Dim B	Cont press (*)	Intern press (*)	Peak press (*)	Noise level
94	94,1	136	245,2	125,6	270	280	300	57
101	101,45	147	248,2	127,1	252	270	300	57
125	125,5	181	258,2	132,1	239	250	300	57
150	150,9	218	268,7	137,35	225	250	275	57
175	175	253	278,7	142,35	213	250	275	57
200	200,4	290	289,2	147,6	202	250	275	57

(*) htermittent: cycle 20 sec. ON & 3 sec. OFF - Peak: cycle 1 sec. ON & 3 sec. OFF

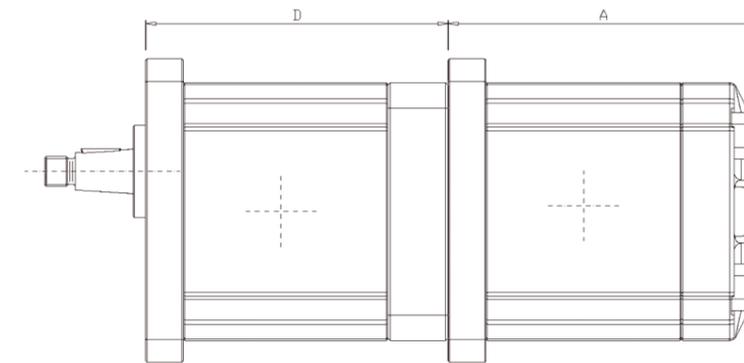
Component description

1. End cover
2. O-ring seal
3. Centring key
4. Body
5. Bushings
6. O-ring seal
7. Front flange
8. Bushings
9. Continuum® rotor
10. Seal
11. Shaft key
12. Seeger



Dimensional drawing Tandem Group 2 + 2

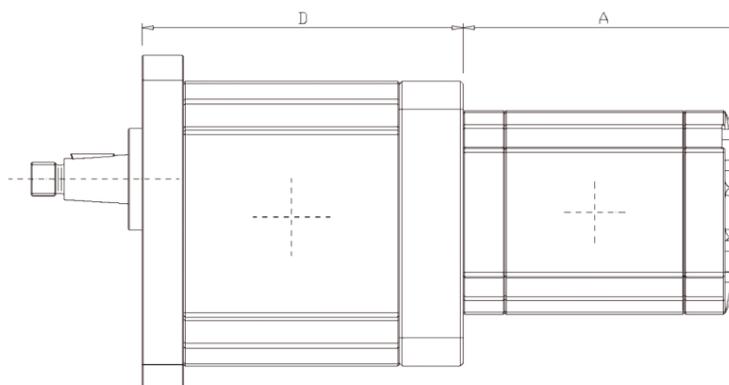
For unit dimensions please refer to HS33 and HS38 dimensional drawings



Front pump	CC	Dim D	Cont Press	Intern Press	Peak Press	Noise Level
HS33	010	113,6	275	280	300	55
	013	118,5	265	270	300	55
	015	123,5	241	250	300	55
	018	129,3	206	250	300	55
HS38	016	120,1	265	280	300	55
	018	123,1	247	260	300	55
	020	126,1	230	250	300	55
	022	129,1	222	250	300	55
	025	133,6	208	250	300	55
	028	138,1	197	250	300	55
		mm	bar	bar	bar	dB(A)

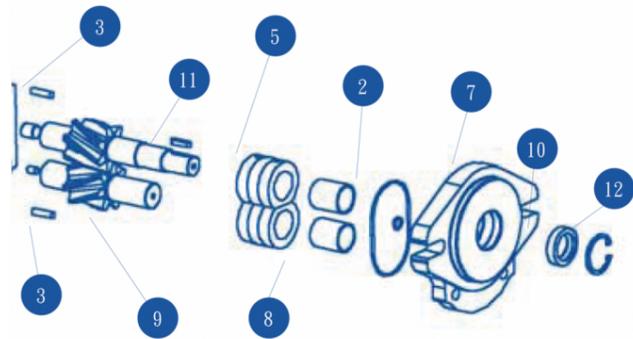
Dimensional drawing Tandem Group 2 + 1

For unit dimensions please refer to HS33 and HS38 dimensional drawings



Front pump	CC	Dim D	Cont Press	Intern Press	Peak Press	Noise Level
HS33	010	113,6	275	280	300	55
	013	118,5	265	270	300	55
	015	123,5	241	250	300	55
	018	129,3	206	250	300	55
HS38	016	120,1	265	280	300	55
	018	123,1	247	260	300	55
	020	126,1	230	250	300	55
	022	129,1	222	250	300	55
	025	133,6	208	250	300	55
	028	138,1	197	250	300	55
		mm	bar	bar	bar	dB(A)

Component



1. Rear cover
2. O-ring seal
3. Locating wedge
4. Pump body
5. Sleeve
6. O-ring seal
7. Front cover flange
8. Sleeve
9. CONTINUUM® rotor
10. Seal
11. Shaft key
12. Spring retaining ring

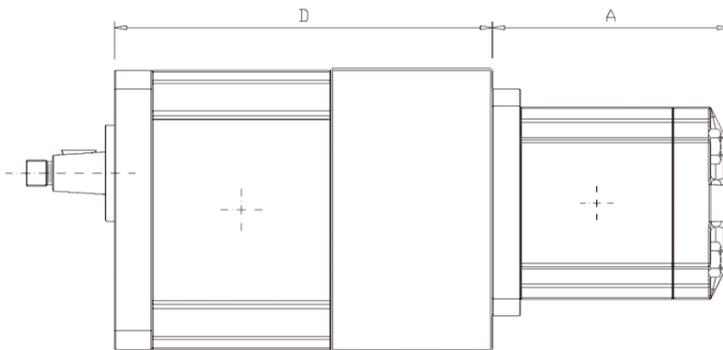
Ordering code

DG** 2V ***CC F***A** * HS* ***C C * * **
 1 2 3 4 5 *6 7 8 9 10

Pump Type	Class	Displacement	Flange & Shaft	Ports	Shaft Seal	Rotation
28		004-006-008-010-013	F1AC3-F1 PAC2-F1KAG54-F1LAGL54	G	(none) V	DX (default) SX
33		010-013-015-018	F2AC4-F2BK7AG-FSAEAC-FSAEA AT9	G-M		
38		016-018-020-022-025-028	F2AC4-F2BK7AG-FSAEAC-FSAEA AT11			
47		028-032-036-040-045-050	F3AC9-FSAEBAC-FSAEB AT13	O		
55		050-063-075-090	FSAEBAC-FSAEB AT15			
72		094-101-125-150-175-200	FSAEDAC	M		

Dimensional drawing Tandem Group 3 + 2

For unit dimensions please refer to HS33 and HS38 dimensional drawings



Front pump	CC	Dim D	Cont Press	Intern Press	Peak Press	Noise Level
HS47	28	201,1	270	280	300	57
	32	205,1	252	270	300	57
	36	209,1	239	250	300	57
	40	213,1	225	250	300	57
	45	217,6	213	250	300	57
	50	222,6	202	250	300	57
		mm	bar	bar	bar	dB(A)

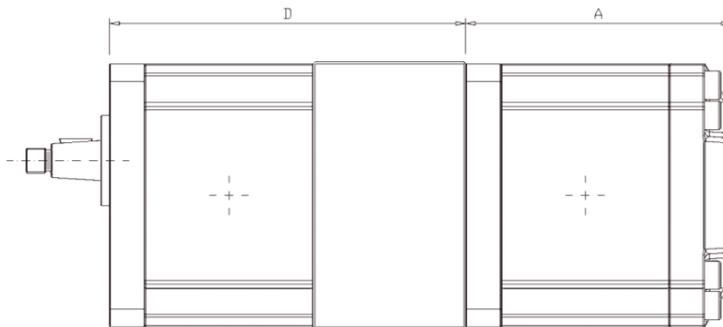
Ordering code multiple pumps

DG** 2V ***CC F***A** * HS* ***C C * * **
 1 2 3 4 5 6 7 8 9 10

Pump Type	Class	Displacement 1st stage	Flange & Shaft	Ports	Displacement 2nd stage	Ports	Shaft Seal	Rotation	
33		010-013-015-018	F2AC4	G-M	28	004-006-008-010-013	G	(none) V	DX (default) SX
					33	010-013-015-018	G-M		
					38	016-018-020-022-025-028			
					28	004-006-008-010-013	G		
					33	010-013-015-018	G-M		
					38	016-018-020-022-025-028	G-M		
47		028-032-036-040-045-050	F3AC9	O	33	010-013-015-018	G-M	(none) V	DX (default) SX
					38	016-018-020-022-025-028			
					47	028-032-036-040-045-050	O		
					47	028-032-036-040-045-050	O		
55		050-063-075-090	FSAEB AT15	O	33	010-013-015-018	G-M	(none) V	DX (default) SX
					38	016-018-020-022-025-028			
					47	028-032-036-040-045-050	O		
					55	050-063-075-090	O		

Dimensional drawing Tandem Group 3 + 3

For unit dimensions please refer to HS33 and HS38 dimensional drawings



Front pump	CC	Dim D	Cont Press	Intern Press	Peak Press	Noise Level
HS47	28	201,1	270	280	300	57
	32	205,1	252	270	300	57
	36	209,1	239	250	300	57
	40	213,1	225	250	300	57
	45	217,6	213	250	300	57
	50	222,6	202	250	300	57
		mm	bar	bar	bar	dB(A)

Group Product Range

Group	Product Range
1	HS28 4, 2 6, 4 8, 3 10, 2 12, 9
2	HS33 10, 1 12, 6 15, 2 18, 2
	HS38 15, 9 17, 9 20, 0 22, 1 25, 2 28, 3
3	HS47 28, 0 32, 2 36, 3 40, 5 45, 1 50, 3
	HS55 50, 5 63, 5 75, 0 90, 9
4	HS72 94, 1 101, 4 125, 5 150, 9 175, 0 200, 4

6 10 18 28 50 90 200