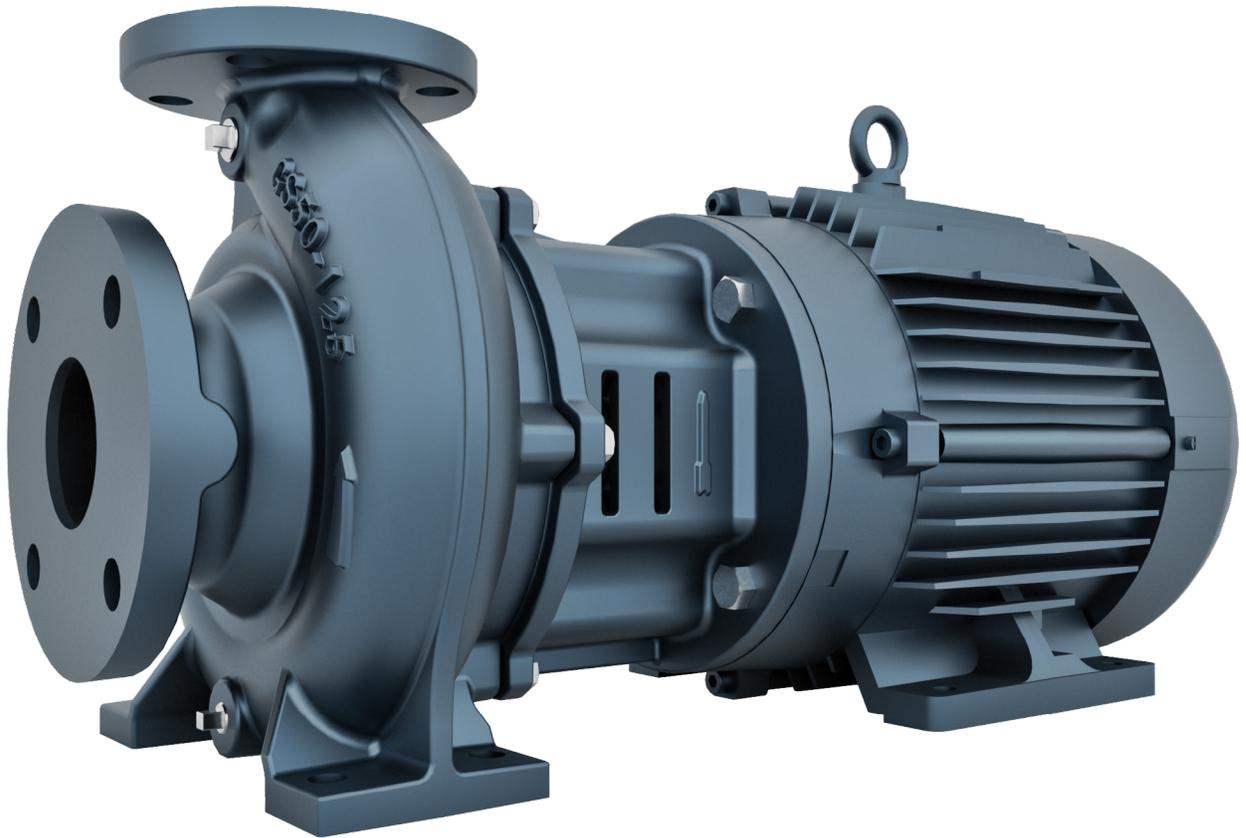

End Suction Centrifugal Pump

Model GSDU



Technical Data

Technical Data

Impeller Diameter

— Not Applicable Model

Model	60 Hz-3500 rpm- 2-Pole				60 Hz-1750 rpm-4-Pole			
	Unit: mm		Unit: in		Unit: mm		Unit: in	
	Max	Min	Max	Min	Max	Min	Max	Min
GSDU 32-125.1	140	100	5.51	3.94	—	—	—	—
GSDU 32-125	142	106	5.59	4.17	—	—	—	—
GSDU 32-160.1	177	126	6.97	4.96	—	—	—	—
GSDU 32-160	177	139	6.97	5.47	177	139	6.97	5.47
GSDU 32-200.1	207	172	8.15	6.77	207	172	8.15	6.77
GSDU 32-200	219	175	8.62	6.89	219	170	8.62	6.69
GSDU 32-250	262	198	10.31	7.80	262	198	10.31	7.80
GSDU 40-125	142	105	5.59	4.13	—	—	—	—
GSDU 40-160	177	134	6.97	5.28	177	134	6.97	5.28
GSDU 40-200	219	172	8.62	6.77	219	172	8.62	6.77
GSDU 40-250	260	211	10.24	8.31	260	211	10.24	8.31
GSDU 50-125	144	111	5.67	4.37	144	111	5.67	4.37
GSDU 50-160	177	131	6.97	5.16	177	131	6.97	5.16
GSDU 50-200	219	171	8.62	6.73	219	171	8.62	6.73
GSDU 50-250	—	—	—	—	270	210	10.63	8.27
GSDU 50-315	—	—	—	—	344	277	13.54	10.91
GSDU 65-125	147	120	5.79	4.72	147	120	5.79	4.72
GSDU 65-160	177	135	6.97	5.31	177	135	6.97	5.31
GSDU 65-200	—	—	—	—	219	162	8.62	6.38
GSDU 65-250	—	—	—	—	273	215	10.75	8.46
GSDU 65-315	—	—	—	—	320	261	12.60	10.28
GSDU 80-160	177	147/127	6.97	5.79/5.00	177	147/127	6.97	5.79/5.00
GSDU 80-200	—	—	—	—	222	170/159	8.74	6.69/6.26
GSDU 80-250	—	—	—	—	270	220	10.63	8.66
GSDU 80-315	—	—	—	—	334	262	13.15	10.31
GSDU 100-160	—	—	—	—	181	149	7.13	5.87
GSDU 100-200	—	—	—	—	220	171	8.66	6.73
GSDU 100-250	—	—	—	—	270	210	10.63	8.27
GSDU 100-315	—	—	—	—	312	242	12.28	9.53
GSDU 125-200	—	—	—	—	221	174	8.70	6.85
GSDU 125-250	—	—	—	—	274	213	10.43	8.39
GSDU 150-200	—	—	—	—	224/197	181/145	8.82/7.76	7.13/5.71

 Models coming soon

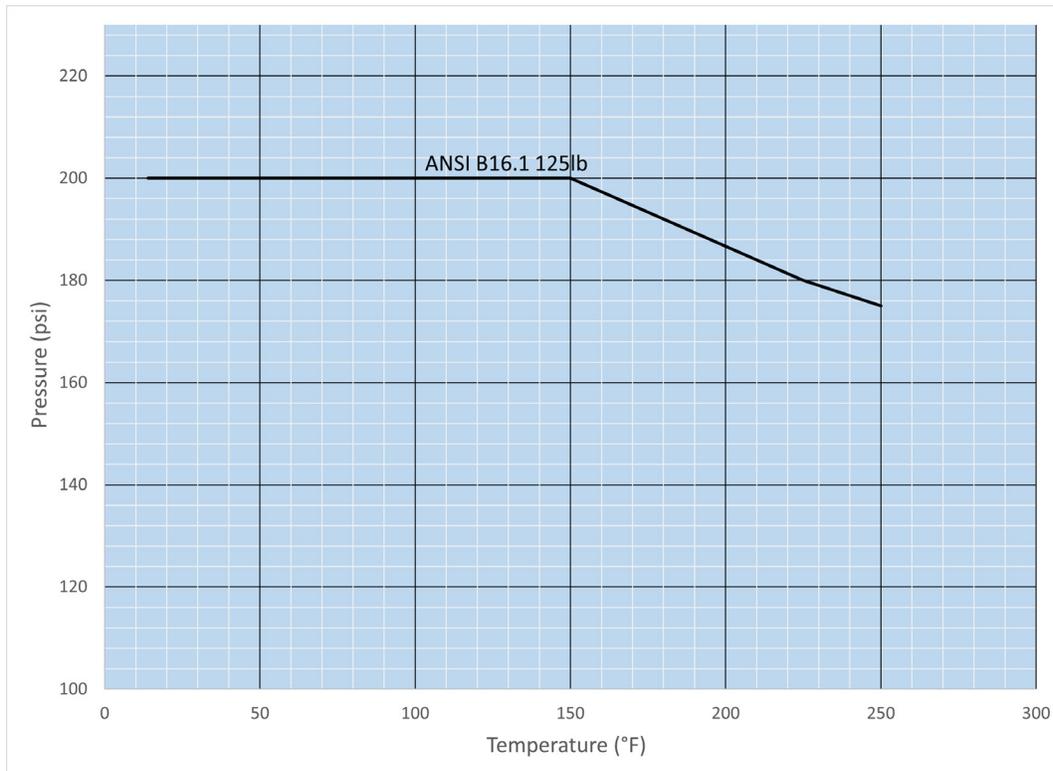


Technical Data

Maximum Allowable Pressure

1. Maximum Allowable Working Pressure (MAWP)

Pressure casing material	Liquid temperature	Max. allowable working pressure	Flange standard
Cast iron	14°F to 250°F	200 psi (13.8 bar)	ANSI B16.1 125lb



2. Maximum Allowable Suction Pressure (MASP)

a. Mechanical Seal Application

Maximum Allowable Suction Pressure (MASP) must be smaller than the difference between the Maximum Allowable Working Pressure (MAWP) and Pump Shut-off Pressure (PSP), as follows. However, MASP shall not exceed 200 psi (13.8 bar).

$$\text{MASP} < \text{MAWP} - \text{PSP}$$

$$[\text{PSP (in psi)} = 0.433 \times \text{Pump Shut-off Head (in ft)} \times \text{Liquid Density (in SG)}]$$



Technical Data

Interchangeability Chart

Interchangeability Chart

Model	Casing (001)	Impeller (021)	Casing Ring (107-1)	O-Ring (115-1)	Casing Ring (107-2) • Mechanical SEAL (111) • Shaft Sleeve (041)								
					Motor (800)								
					143/5JM	182/4JM	213/5JM	213/5JP	254/6JM	284/6JM	284/6JP	324/6JM	324/6JP
GSDU 32-125.1	○	○	A	A	AAA	AAA							
GSDU 32-125	○	○	A	A	AAA	AAA		ABB					
GSDU 32-160.1	○	○	A	A		AAA		ABB					
GSDU 32-160	○	○	A	A	AAA			ABB					
GSDU 32-200.1	○	○	A	B	AAA		AAA						
GSDU 32-200	○	○	A	B	AAA	AAA	AAA		ABC	ABC			
GSDU 32-250	○	○	A	C	AAA	AAA			ABC	ABC		ABC	
GSDU 40-125	○	○	B	A		BAA		BBB					
GSDU 40-160	○	○	B	A	BAA	BAA		BBB	BBC	BBC			
GSDU 40-200	○	○	B	B		BAA				BBC		BBC	
GSDU 40-250	○	○	B	C		BAA	CAA					BBC	
GSDU 50-125	○	○	C	A	DAA			DBB	DBC				
GSDU 50-160	○	○	C	A	DAA	DAA		DBB	DBC	DBC		DBC	
GSDU 50-200	○	○	C	B		DAA	DAA					EBC	
GSDU 50-250	○	○	C	C			EAA		EBC				
GSDU 50-315	○	○	D	D					FBC	FBC			
GSDU 65-125	○	○	D	A	FAA	FAA		FBB	FBC	FBC			
GSDU 65-160	○	○	D	A	FAA	FAA			FBC	FBC		FBC	
GSDU 65-200	○	○	D	B		FAA	FAA						
GSDU 65-250	○	○	D	C			FAA		FBC				
GSDU 65-315	○	○	E	D					GBC	HBC			
GSDU 80-160	○	○	E	A		GAA		GBB		GBC		GBC	
GSDU 80-200	○	○	E	B				GBB	GBC				
GSDU 80-250	○	○	F	C					IBC	IBC			
GSDU 80-315	○	○	F	D						IBC		IBC	
GSDU 100-160	○	○	F	A				JBB					
GSDU 100-200	○	○	G	B				KBB	KBC				
GSDU 100-250	○	○	G	C					LBC		LBB		LBB
GSDU 100-315	○	○	G	D							KBB		KBB
GSDU 125-200	○	○	H	B					KBC		KBB		
GSDU 125-200	○	○	I	C							LBB		LBB
GSDU 150-200	○	○	I	B					KBC		KBB		

- Components differ depending on the model
- A Same letter means same components
- AAA Same letter means same components. Each letter means Casing Ring, Mechanical Seal and Shaft Sleeve.
- Models coming soon



Technical Data

Interchangeability Chart

Interchangeability Chart

Model	Bracket (018)								
	Motor (800)								
	1435JM	182/4JM	213/5JM	213/5JP	254/6JM	284/6JM	284/6JP	324/6JM	324/6JP
GSDU 32-125.1	416A	416A							
GSDU 32-125	416A	416A		416C					
GSDU 32-160.1		416A		416C					
GSDU 32-160	416A			416C					
GSDU32-200.1	420A		320B						
GSDU 32-200	420A	420A	320B		320D	420E			
GSDU 32-250	425A	425A			325D	425E		425E	
GSDU 40-125		416A		416C					
GSDU 40-160	416A	416A		416C	416D	416E			
GSDU 40-200		420A				420E		420E	
GSDU 40-250		425A	525B					425E	
GSDU 50-125	616A			616C	616D				
GSDU 50-160	616A	616A		616C	616D	616E		616E	
GSDU 50-200		620A	620B					520E	
GSDU 50-250			525B		525D				
GSDU 50-315					531D	531E			
GSDU 65-125	616A	616A		616C	616D	616E			
GSDU 65-160	616A	616A			616D	616E		616E	
GSDU 65-200		620A	620B						
GSDU 65-250			625B		625D				
GSDU 65-315					631D	831E			
GSDU 80-160		816A		816C		816E		816E	
GSDU 80-200				820C	820D				
GSDU 80-250					825D	825E			
GSDU 80-315						831E		831E	
GSDU 100-160				1016C					
GSDU 100-200				1020C	1520D				
GSDU 100-250					1025D		1225F		1225F
GSDU 100-315							1031F		1031F
GSDU 125-200					1520D		1520F		
GSDU 125-250							1225F		1225F
GSDU 150-200					1520D		1520F		

416A Same code means same brackets

Models coming soon



Technical Data

Noise Data

The overall sound pressure is the value measured 1 m (3.3 ft) away from the pump unit. The value is valid for operation from 80 to 110% capacity of best efficiency point and no-cavitation operation.

Model	Motor Frame	Pole-hp		Overall Sound Pressure Level dB(A)
		2P	4P	
GSDU 32-125.1	143/5JM	2		65
	143/5JM	3		66
	182/4JM	5		68
GSDU 32-125	143/5JM	3		66
	182/4JM	5		68
	213/5JP	7.5		70
GSDU 32-160.1	182/4JM	5		68
	213/5JP	7.5		70
	213/5JP	10		71
	213/5JP	15		73
GSDU 32-160	143/5JM		1.5	57
	143/5JM		2	59
	213/5JP	7.5		70
	213/5JP	10		71
	213/5JP	15		73
GSDU 32-200.1	143/5JM		1.5	57
	143/5JM		2	59
	213/5JM	7.5		70
	213/5JM	10		71
	213/5JM	15		73
GSDU 32-200	143/5JM		1.5	57
	143/5JM		2	59
	182/4JM		3	61
	182/4JM		5	64
	213/5JM	15		73
	254/6JM	20		74
	284/6JM	25		75
	284/6JM	30		76
GSDU 32-250	143/5JM		2	59
	182/4JM		3	61
	182/4JM		5	64
	254/6JM	20		74
	284/6JM	25		75
	284/6JM	30		76
	324/6JM	40		78

 Models coming soon



Technical Data

Noise Data

Model	Motor Frame	Pole-hp		Overall Sound Pressure Level dB(A)
		2P	4P	
GSDU 40-125	182/4JM	5		68
	213/5JP	7.5		70
	213/5JP	10		71
GSDU 40-160	143/5JM		1.5	57
	143/5JM		2	59
	182/4JM		3	61
	213/5JP	10		71
	213/5JP	15		73
	254/6JM	20		74
	284/6JM	25		75
GSDU 40-200	182/4JM		3	61
	182/4JM		5	64
	284/6JM	25		75
	284/6JM	30		76
	324/6JM	40		78
GSDU 40-250	182/4JM		5	64
	213/5JM		7.5	66
	324/6JM	40		78
	324/6JM	50		79
GSDU 50-125	143/5JM		1.5	57
	143/5JM		2	59
	213/5JP	7.5		70
	213/5JP	10		71
	213/5JP	15		73
	254/6JM	20		74
GSDU 50-160	143/5JM		1.5	57
	143/5JM		2	59
	182/4JM		3	61
	182/4JM		5	64
	213/5JP	15		73
	254/6JM	20		74
	284/6JM	25		75
	284/6JM	30		76
	324/6JM	40		78
GSDU 50-200	182/4JM		5	64
	213/5JM		7.5	66
	324/6JM	40		78
	324/6JM	50		79

 Models coming soon



Technical Data

Noise Data

Model	Motor Frame	Pole-hp		Overall Sound Pressure Level dB(A)
		2P	4P	
GSDU 50-250	213/5JM		7.5	66
	213/5JM		10	68
	254/6JM		15	71
GSDU 50-315	254/6JM		15	71
	254/6JM		20	73
	284/6JM		25	73
GSDU 65-125	143/5JM		2	59
	182/4JM		3	61
	213/5JP	15		73
	254/6JM	20		74
	284/6JM	25		75
GSDU 65-160	143/5JM		2	59
	182/4JM		3	61
	182/4JM		5	64
	254/6JM	20		74
	284/6JM	25		75
	284/6JM	30		76
	324/6JM	40		78
GSDU 65-200	182/4JM		5	64
	213/5JM		7.5	66
	213/5JM		10	68
GSDU 65-250	213/5JM		10	68
	254/6JM		15	71
	254/6JM		20	73
GSDU 65-315	254/6JM		20	73
	284/6JM		25	73
	284/6JM		30	74
	324/6JM		40	75
GSDU 80-160	182/4JM		3	61
	182/4JM		5	64
	213/5JP		7.5	66
	284/6JM	25		75
	284/6JM	30		76
	324/6JM	40		78
	324/6JM	50		79

 Models coming soon



Technical Data

Noise Data

Model	Motor Frame	Pole-hp		Overall Sound Pressure Level dB(A)
		2P	4P	
GSDU 80-200	213/5JP		7.5	66
	213/5JP		10	68
	254/6JM		15	71
	254/6JM		20	73
GSDU 80-250	254/6JM		20	73
	284/6JM		25	73
	284/6JM		30	74
GSDU 80-315	284/6JM		30	74
	324/6JM		40	75
	324/6JM		50	76
GSDU 100-160	213/5JP		7.5	66
	213/5JP		10	68
GSDU 100-200	213/5JP		7.5	66
	213/5JP		10	68
	254/6JM		15	71
	254/6JM		20	73
GSDU 100-250	254/6JM		15	71
	254/6JM		20	73
	284/6JP		25	73
	284/6JP		30	74
	324/6JP		40	75
GSDU 100-315	284/6JP		25	73
	284/6JP		30	74
	324/6JP		40	75
	324/6JP		50	76
GSDU 125-200	254/6JM		15	71
	254/6JM		20	73
	284/6JP		25	73
	284/6JP		30	74
GSDU 125-250	284/6JP		25	73
	284/6JP		30	74
	324/6JP		40	75
	324/6JP		50	76
GSDU 150-200	254/6JM		15	71
	254/6JM		20	73
	284/6JP		25	73



Technical Data

Selection of Shaft Seal

Mechanical seal selection of conical type (*1)

Description	Standard	Optional		
Liquid temperature	14~250°F	14~250°F	14~250°F	14~250°F
Materials (*2)	SiC / C / EPDM	SiC / SiC / EPDM	SiC / C / Viton	SiC / SiC / Viton
Max. Allowable operating pressure (*3)(*4)	0~200 psi (0~13.8 bar)	0~200 psi (0~13.8 bar)	0~200 psi (0~13.8 bar)	0~200 psi (0~13.8 bar)

(*1) This table shows only the EBARA standard type mechanical seal. For other types or material combinations, please contact factory.

(*2) SiC: silicon carbide / C: carbon

(*3) These value show the allowable range of mechanical seal itself.

(*4) Calculation of P_{box} is based on below equation.

$$P_{box} = (0.05 \times T.H.) + P_s$$

P_{box}: Box pressure

T.H.: Total head in pressure (differential pressure)

P_s: Suction pressure

