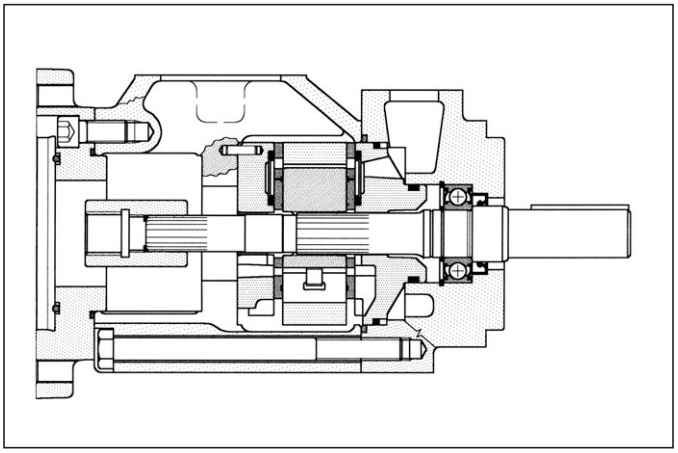


General description

Fixed displacement vane pump, hydraulically balanced, with capacity determined by the type of cartridge used and the speed of rotation. The pump is available in five different displacements from 47 to 79 L/min (from 12 to 21 gpm) at 1200 rpm and 7 bar.

Technical characteristics

Cartridge model	Geometric displacement		Rated capacity at 1000 rpm 7 bar		Rated capacity at 1200 rpm 7 bar		Rated capacity at 1500 rpm 7 bar		Maximum pressure with mineral oil		Speed range rpm	
	cm³/g	(in³/r)	l/min	(gpm)	l/min	(gpm)	l/min	(gpm)	bar	(psi)	min	max
A02-12	**40,1**	(2.45)	**39,1**	(10.0)	**46,9**	(12)	**58,8**	(15.5)	**210**	(3050)	**600**	**2700**
A02-14	**45,4**	(2.77)	**43,9**	(11.7)	**52,7**	(14)	**65,7**	(17.4)	**210**	(3050)	**600**	**2700**
A02-17	**55,2**	(3.37)	**53,5**	(14.2)	**64,2**	(17)	**80,2**	(21.2)	**210**	(3050)	**600**	**2500**
A02-19	**60,1**	(3.66)	**59,2**	(15.8)	**71,1**	(19)	**88,7**	(23.4)	**210**	(3050)	**600**	**2500**
A02-21	**67,5**	(4.12)	**65,8**	(17.5)	**79,3**	(21)	**99,8**	(26.4)	**210**	(3050)	**600**	**2500**

For detailed technical informations please refer to BQ Series catalogue

Hydraulic fluids: mineral oils, phosphate ester based fluids.

Viscosity range *(with mineral oil)*: from 13 to 860 cSt. *(13 to 54 cSt. recommended)*.

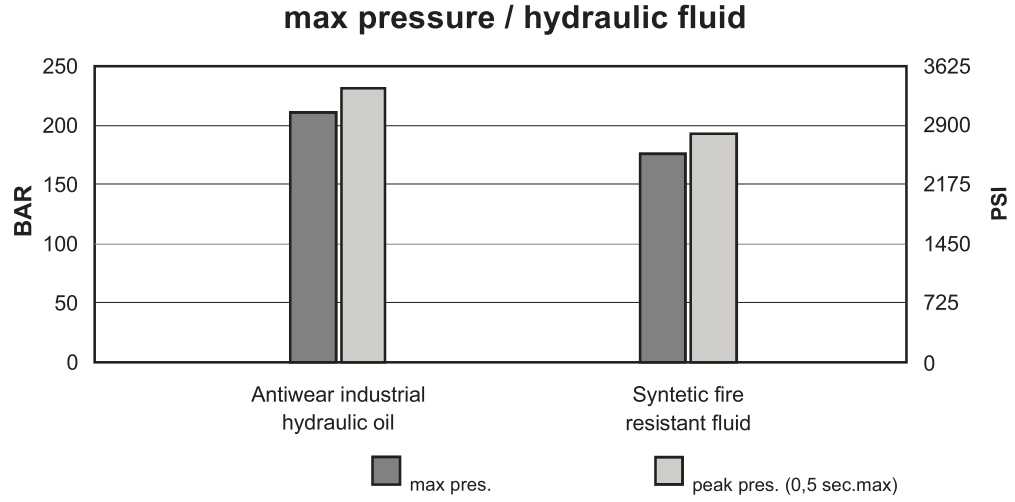
Filtration: for the inlet - 149 micron abs., for the return line - 25 micron abs. or better *(with synthetic fluids: for the return line - 10 micron abs. or better)*.

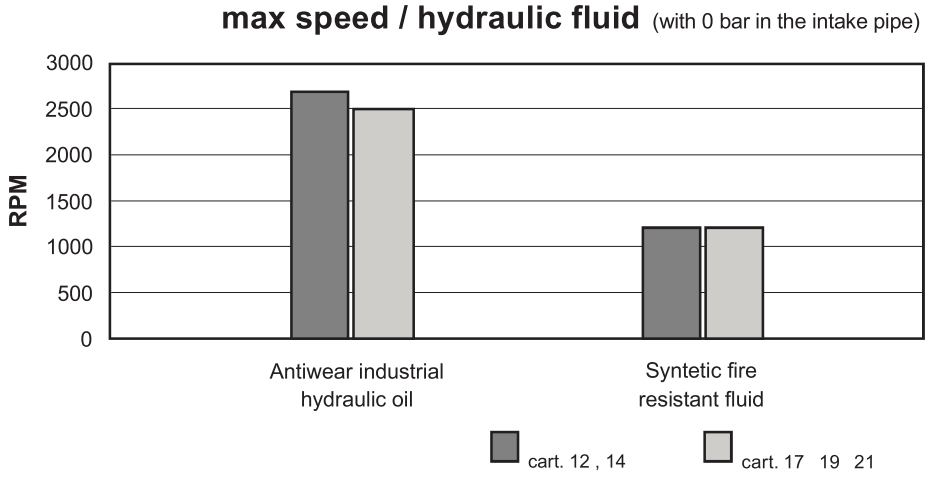
Inlet pressure: *(with mineral oil)*: from -0,17 to +1,4 bar *(-2.5 to + 20 psi)*

Operating temperature: with mineral oil -10□C +70□C *(+30□C to +60□C recommended)*.

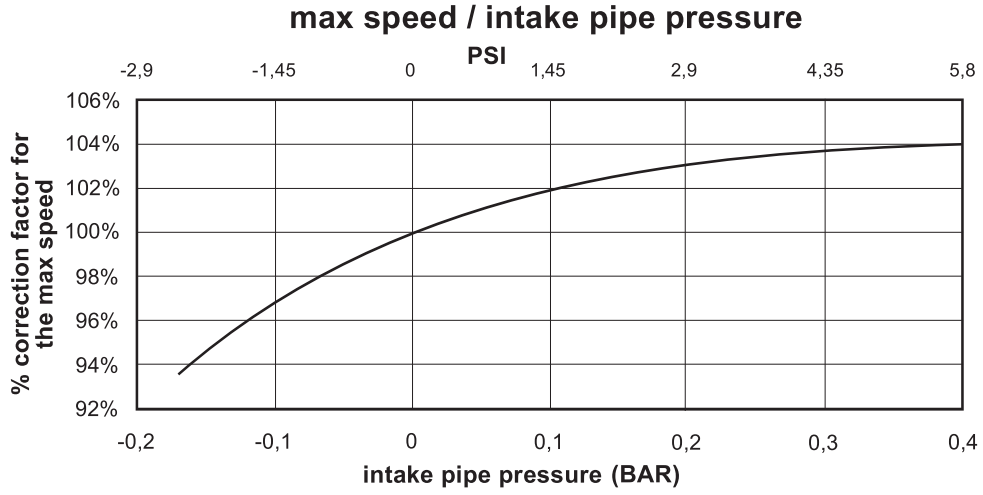
Drive: direct and coaxial by means of a flexible coupling.

Main operating data

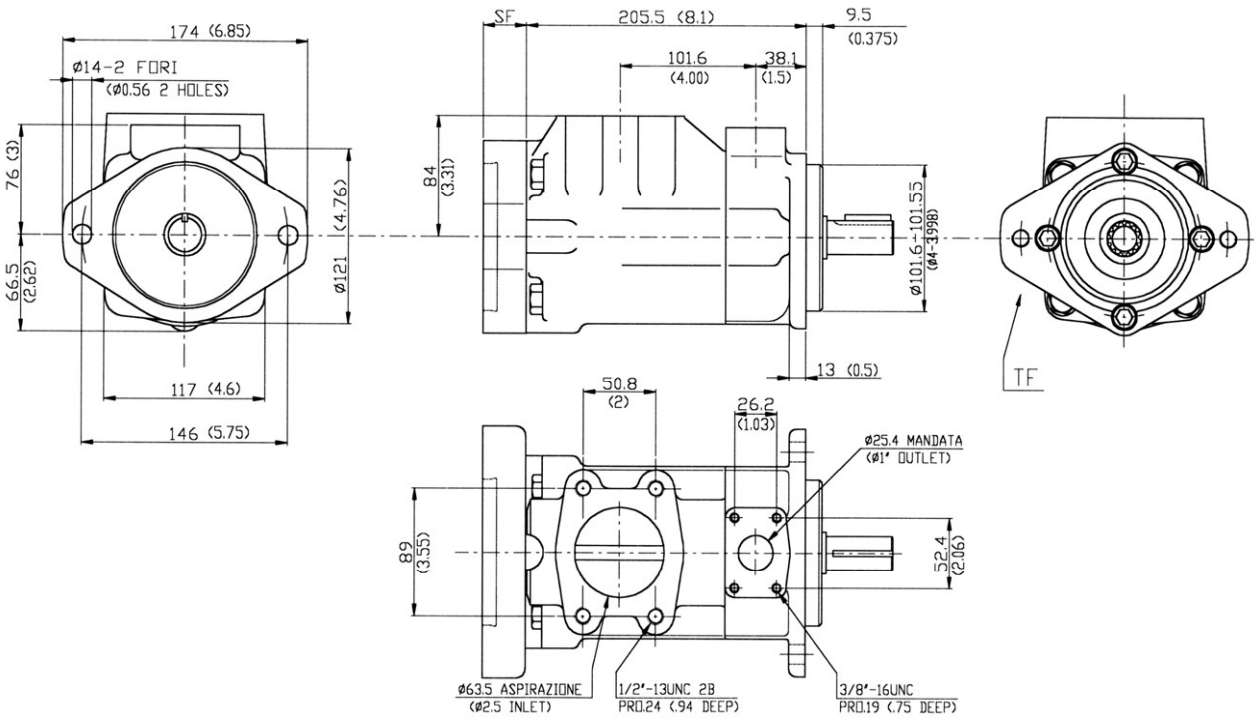




If the intake pressure is not zero bar, use the graph below to find the percentage correction factor to apply to the maximum speed.



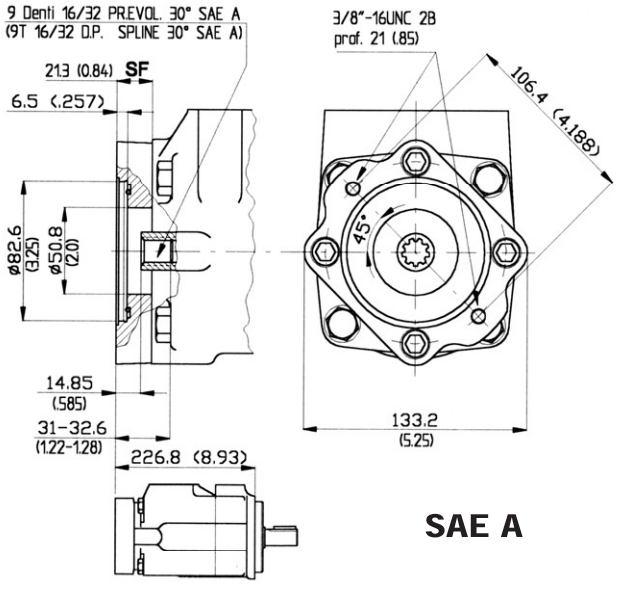
Installation dimensions mm (inches)



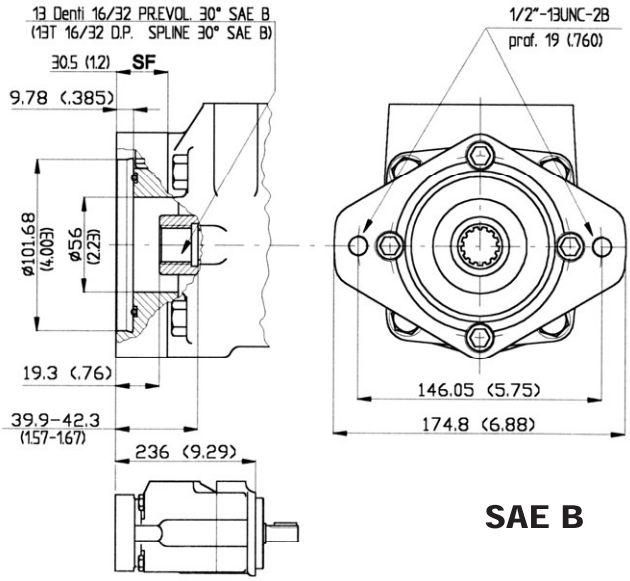
Approx. weight: 19,4 kg. (43 lbs.)

Rear mountings mm (inches)

Different types of coupling with other pumps are also available. Please contact our Technical Dept. for detailed information.



SAE A



SAE B

Model code breakdown

TQ 02 * ** * * * (L) (*)**

Pump series

Pump type

Rear mounting
A = SAE A, **B** = SAE B

Cartridge type
12 14 17 19 21

Outlet port positions
(outlet viewed from adapter side)
A = Outlet opposite end
B = Outlet 90° CCW from inlet
C = Outlet in line with inlet
D = Outlet 90° CW from inlet

Shaft options
203 = Straight with key
297 = Splined

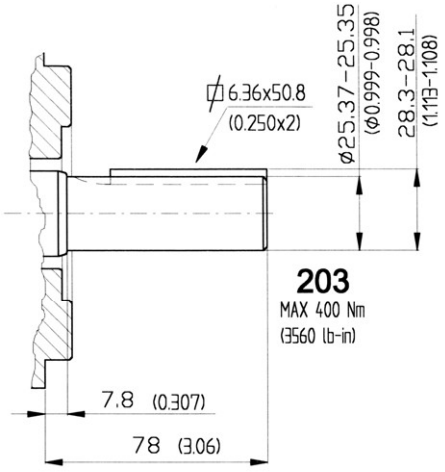
Adapter orientation
(viewed from adapter side)
SAE A
A = Rotate 45° CW with respect to pump mounting flange
B = Rotate 45° CCW with respect to pump mounting flange

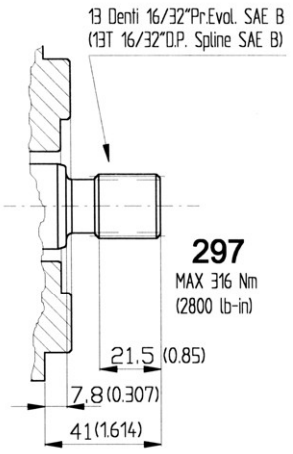
SAE B
A = In line with pump mounting flange
B = Rotate 90° with respect to pump mounting flange

Rotation
(viewed from shaft end)
L = left hand rotation CCW (omit if CW)

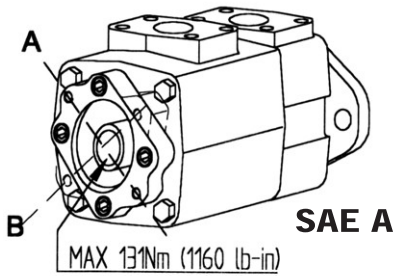
Seals
(omit with standard seals and one shaft seal in NBR)
V = seal and shaft-seal in FPM (Viton®)
D = standard seals and double shaft-seals in NBR
F = seals and double shaft-seals in FPM (Viton®)

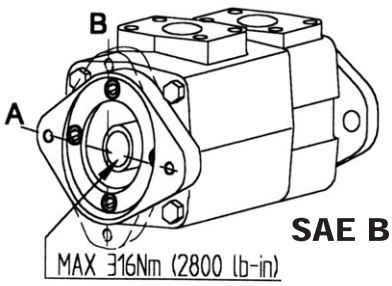
Shaft options mm (inches)



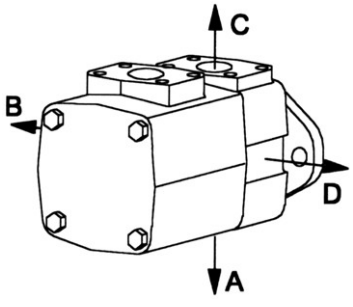


Adapter plate orientations





PORT ORIENTATIONS



Id. codes of pump components

Model	Coupling	Seeger	Coupling kit (seeger+coupling)
TQ02B	M7002000	M7061170	M7012000
TQ02A	M7001000	M7061160	M7011000

✶ "O" ring	
PART NO.	M7061050

Cartridge			
Series	Model	PART NO.	PUMP ROTAT.
A02	12	A0212030	right hand
	14	A0214070	
	17	A0217110	
	19	A0219150	
	21	A0221190	
A02	12	A0212040	left hand
	14	A0214080	
	17	A0217120	
	19	A0219160	
	21	A0221200	

Pump	Model	Kit	Shaft	Key
TQ02A	203	M7021203	K0270203	M8028600
TQ02A	297	M7021297	K0290297	-
TQ02B	203	M7022203	K0271203	M8028600
TQ02B	297	M7022297	K0291297	-

Adapter plate	
PART NO.	M8060200

✶ "O" ring	
PART NO.	M7061070

Adapter kit	
PART NO.	M7060200

Screw	
PART NO.	M7061010
Torque at 70 Nm (624 lb. in.)	

SAE B

SAE A

Body	
PART NO.	M8020010

Shaft seal	
PART NO.	Tipo
M8020060	primary in NBR
M8020065	primary in FPM
M8020061	secondary in NBR
M8020066	secondary in FPM

Bearing	
PART NO.	M8020030

Seeger	
PART NO.	M8020050

Adapter plate	
PART NO.	M8060100

Seeger	
PART NO.	M8020040

Screw	
PART NO.	M8020130
Torque at 102 Nm (910 lb. in.)	

Inlet body	
PART NO.	M8020110

Adapter kit	
PART NO.	M7060100

✶ "O" ring	
PART NO.	M7061110

✶ "O" ring	
PART NO.	M7061060

✶ Adapter seal kit		
Model	PART NO.	Type
TQ02A	M7065100	NBR
TQ02B	M7065200	NBR
TQ02A	M7065150	FPM
TQ02B	M7065250	FPM

For "Pump seal kit" part no. refer to BQ Series technical catalogue