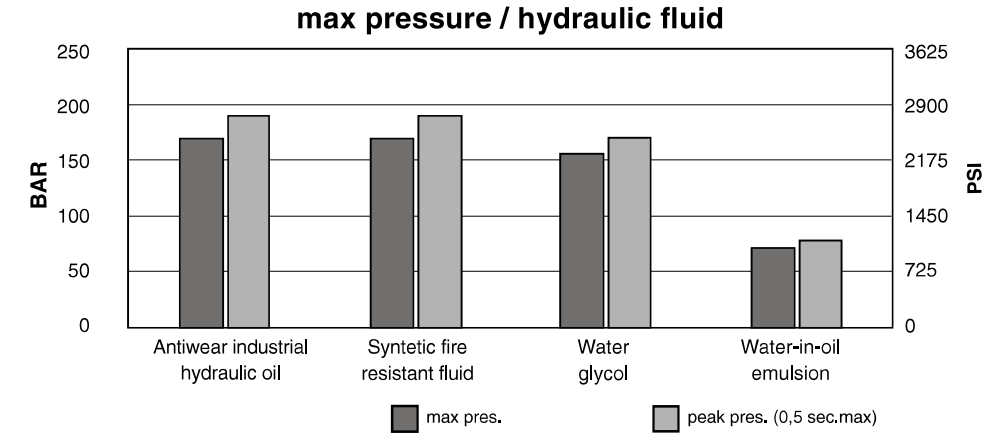
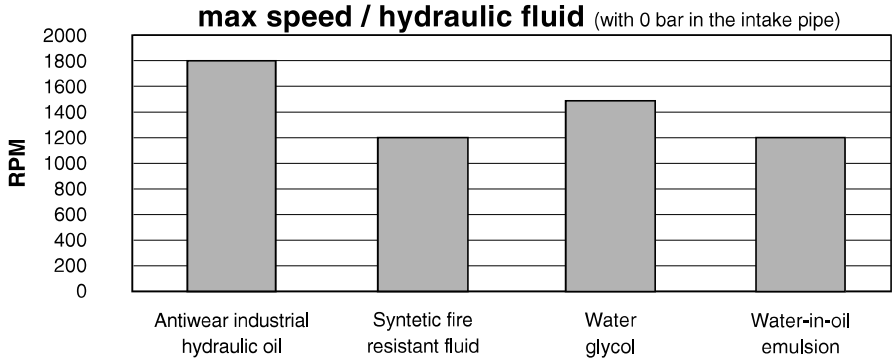
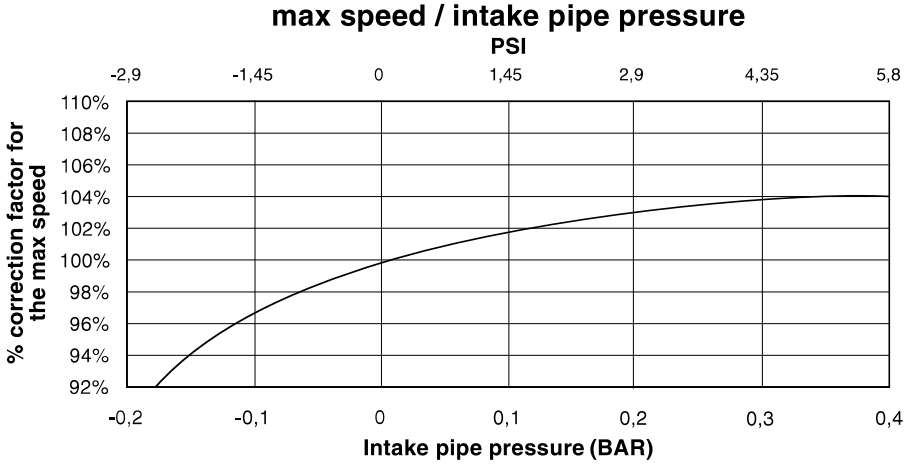
Single Pump Type BV04

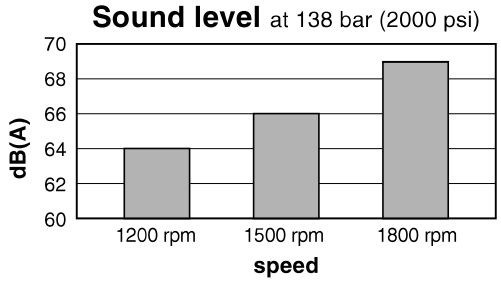
Main operating data





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

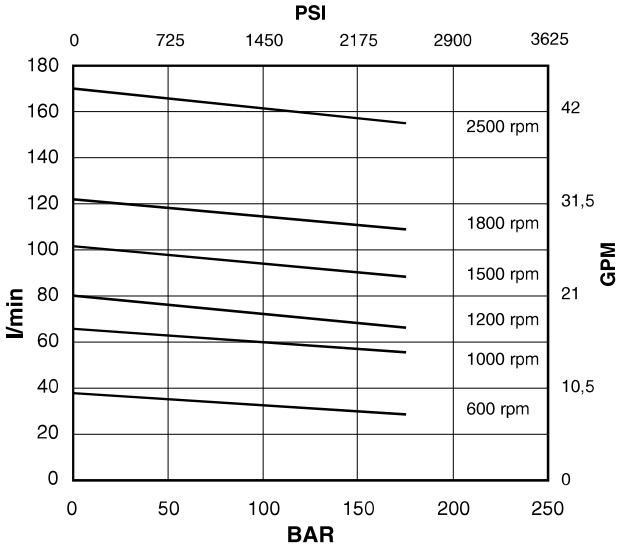




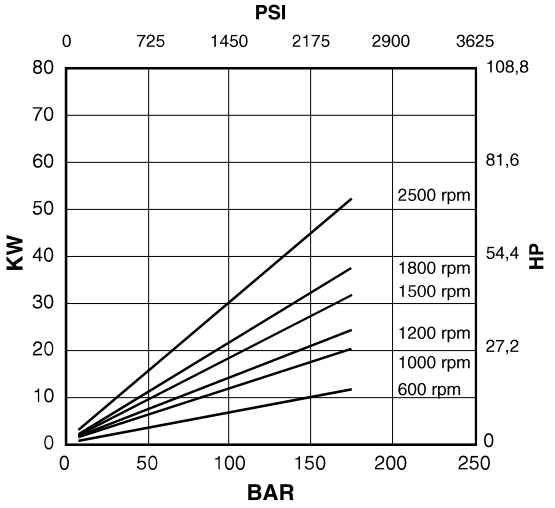
Single Pump Type BV04

Cartridge V04-21

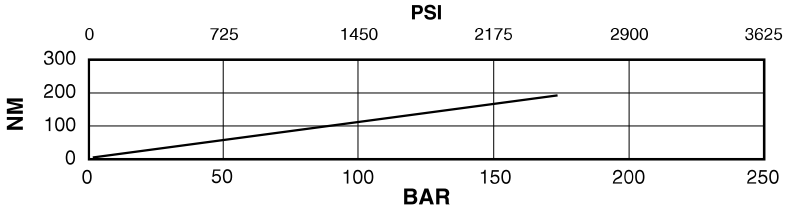
flow / pressure



power / pressure



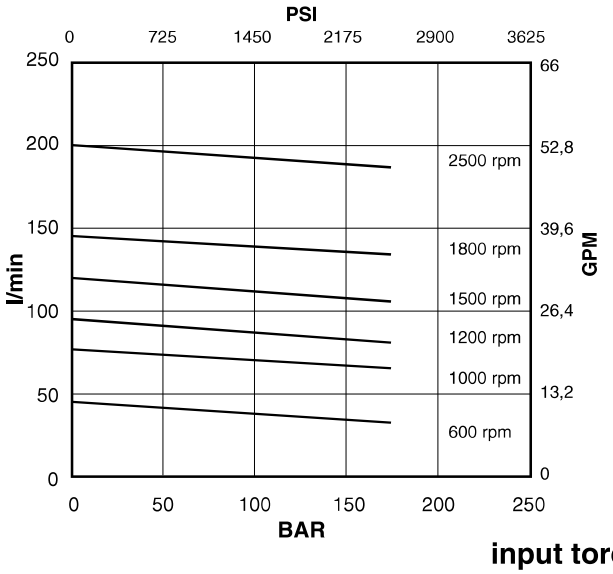
input torque / pressure



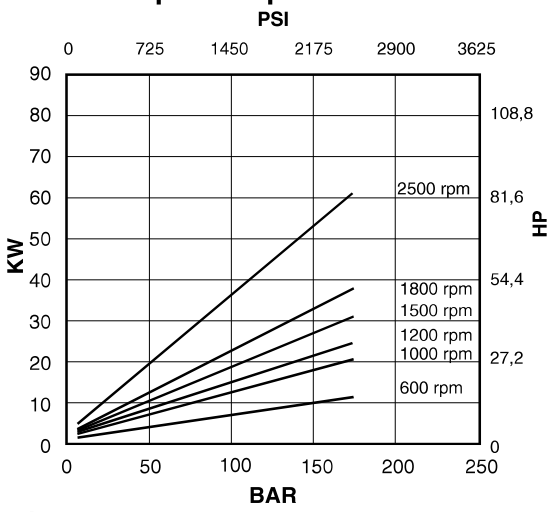
Oil viscosity: 25 c.St.(10W)
Temperature: 45°C
Inlet pressure: 0 BAR

Cartridge V04-25

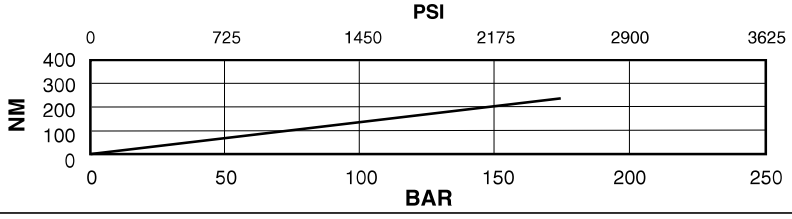
flow / pressure



power / pressure



input torque / pressure

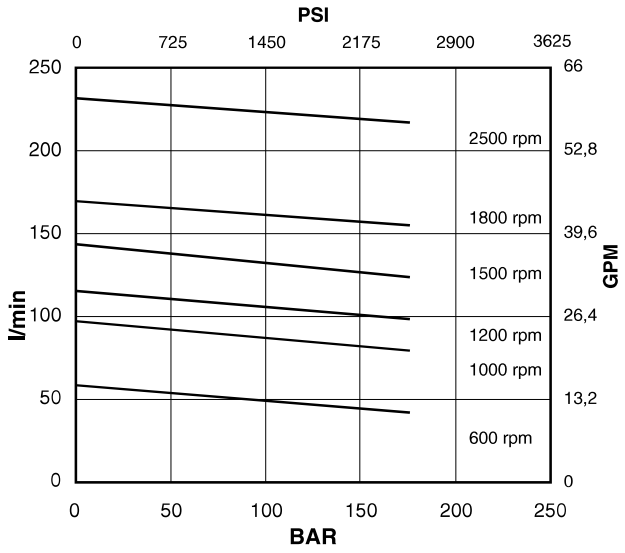


Oil viscosity: 25 c.St.(10W)
Temperature: 45°C
Inlet pressure: 0 BAR

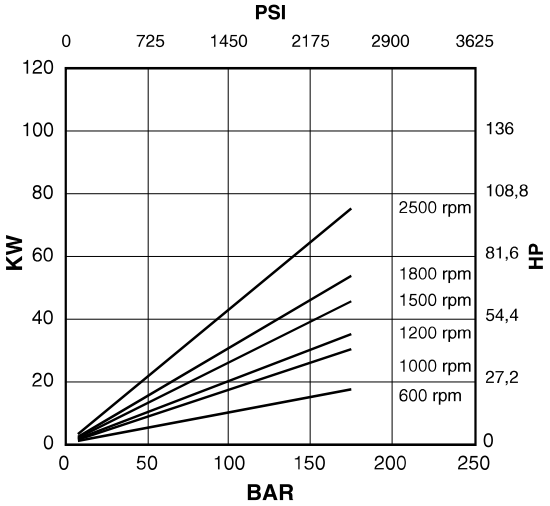
Single Pump Type BV04

Cartridge V04-30

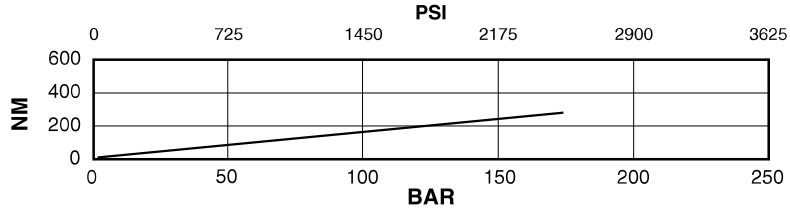
flow / pressure



power / pressure



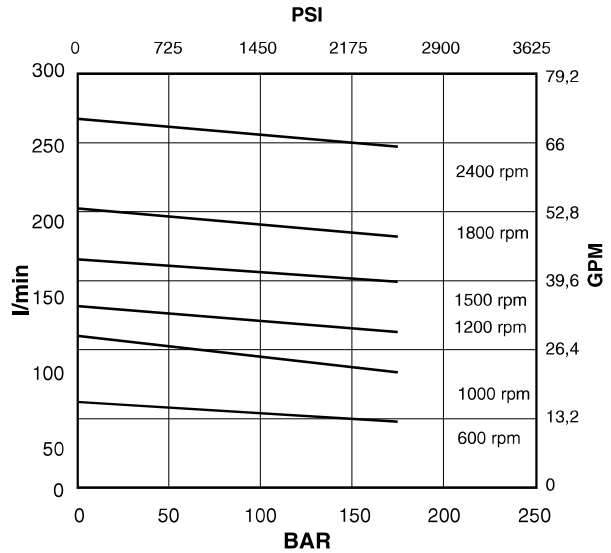
input torque / pressure



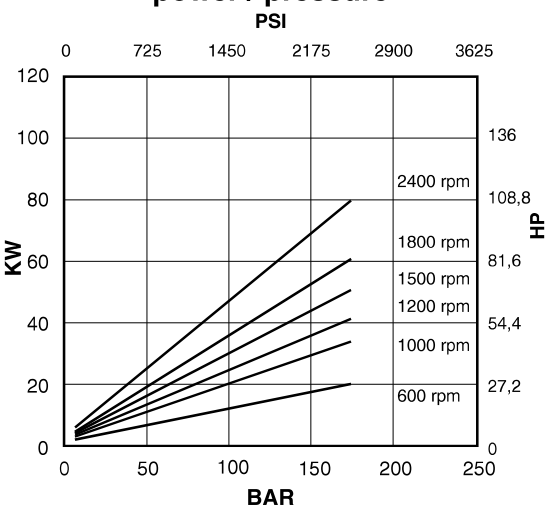
Oil viscosity: 25 c.St.(10W)
Temperature: 45°C
Inlet pressure: 0 BAR

Cartridge V04-35

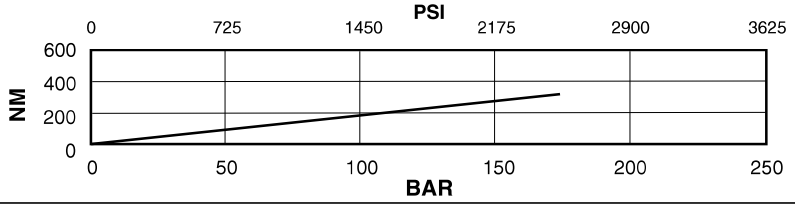
flow / pressure



power / pressure



input torque / pressure

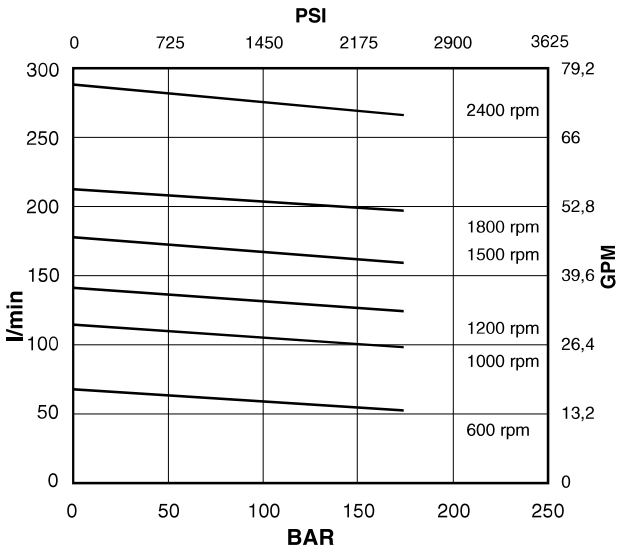


Oil viscosity: 25 c.St.(10W)
Temperature: 45°C
Inlet pressure: 0 BAR

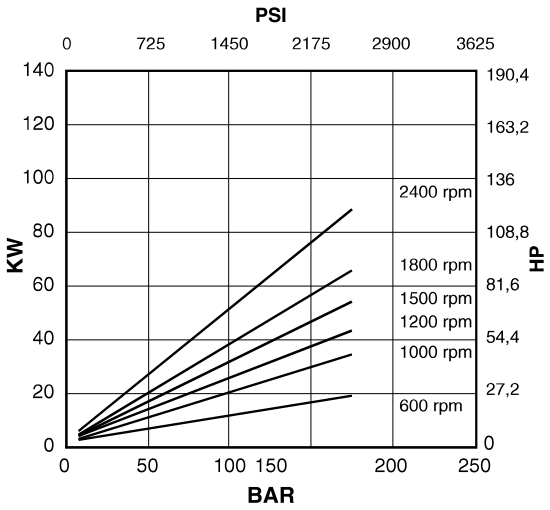
Single Pump Type BV04

Cartridge V04-38

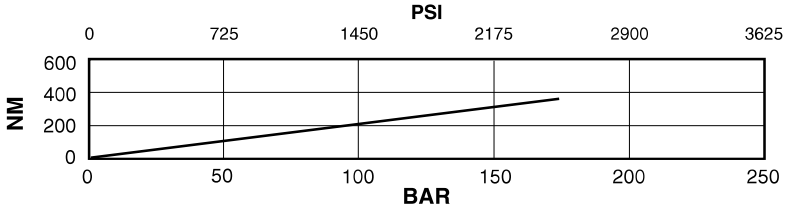
flow / pressure



power / pressure

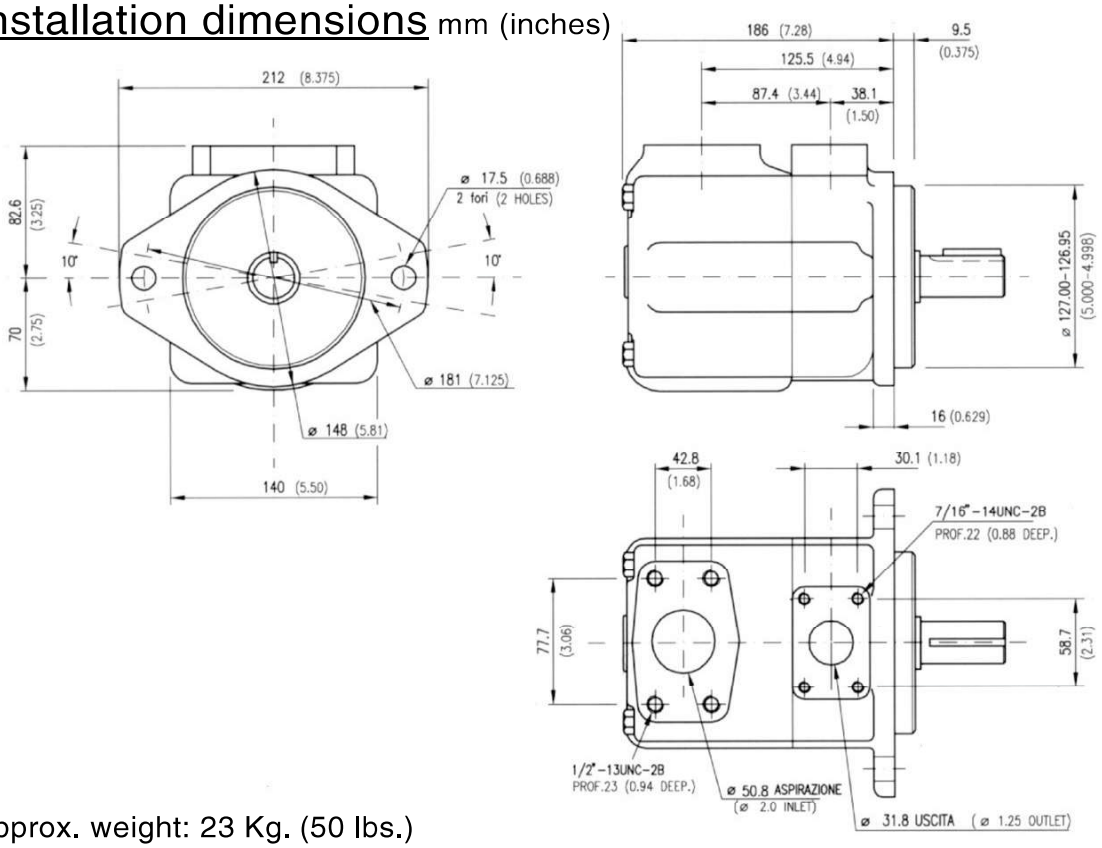


input torque / pressure



Oil viscosity: 25 c.St.(10W)
Temperature: 45°C
Inlet pressure: 0 BAR

Installation dimensions mm (inches)



Approx. weight: 23 Kg. (50 lbs.)

Single Pump Type BV04

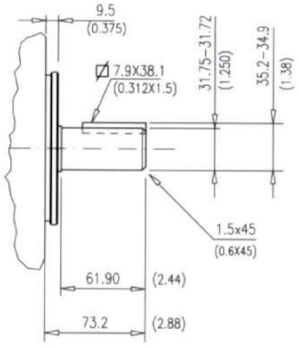
Model code breakdown

BV 04 G * * * * * (L) * (A)

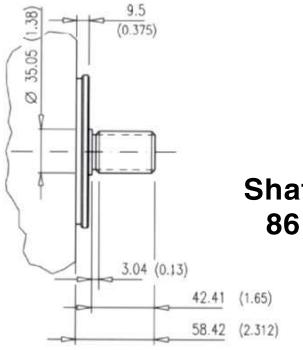
- **BV** — Pump series
- **04** — Pump type
- **G** — Design
- *** *** — Cartridge type
  21 25 30 35 38
- ***** — Outlet port positions
  (outlet viewed from cover end)
  A = Outlet opposite end
  B = Outlet 90° CCW from inlet
  C = Outlet in line with inlet
  D = Outlet 90° CW from inlet
- *** *** — Shaft end options
  01 = Straight with key (standard), **11** = Splined
  86 = Heavy duty straight keyed, **90** = Splined SAE C
- **(L)** — Rotation
  (viewed from shaft end)
  L = left hand rotaton CCW (omit if CW)
- ***** — Seals
  (omit with standard seals and one shaft-seal in NBR)
  V = seals and shaft-seal in FPM (Viton®)
  D = standard seals and double shaft-seals in NBR
  F = seals and double shaft-seals in FPM (Viton®)
- **(A)** — Mounting
  (omit if not required)

Shaft options mm (inches)

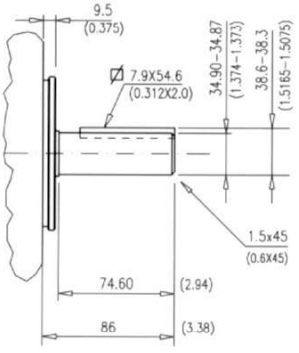
Shaft 01



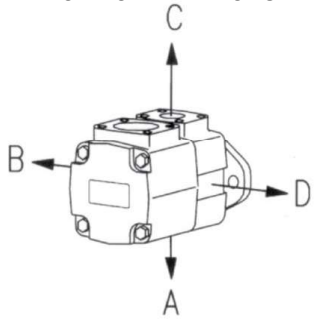
Shaft 11



Shaft 86



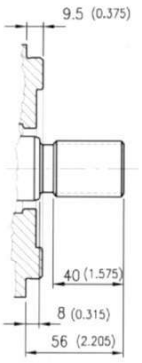
PORT ORIENTATIONS



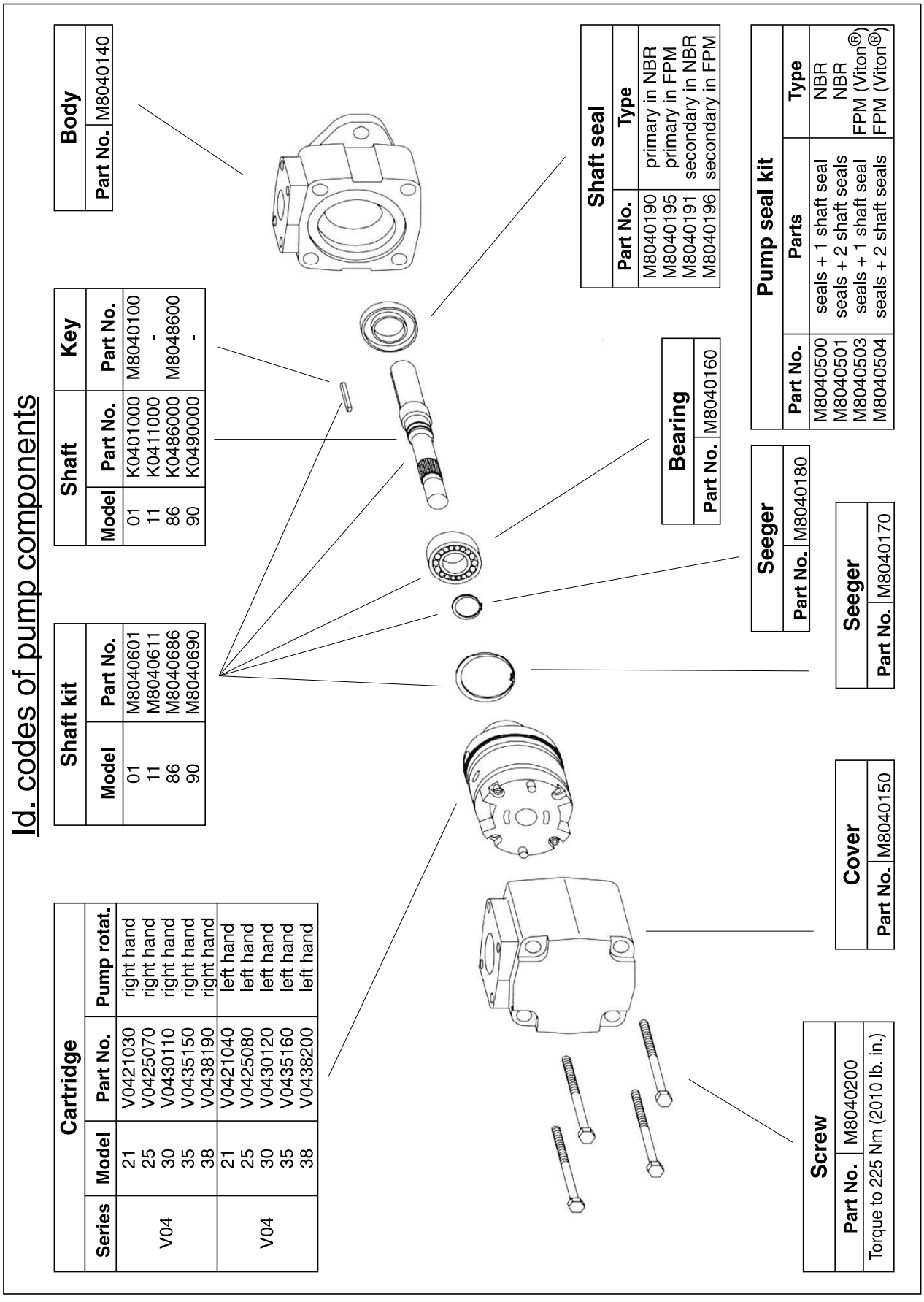
Spline data
(shaft 11 and shaft 90)

Spline	Involute side fit (ASA B5.15)	
Pressure angle	30°	
No. of teeth	14	
Pitch	12/24	
Major dia.	31.60 - 31.50	(1.244 - 1.240)
Pitch dia.	29.634	(1.1667)
Minor dia.	26.99 - 26.66	(1.0627 - 1.05)
Wildhaber	15.68 - 15.73	(0.617 - 0.619)

Shaft 90



Single Pump Type BV04



Cartridge			
Series	Model	Part No.	Pump rotat.
V04	21	V0421030	right hand
	25	V0425070	right hand
	30	V0430110	right hand
	35	V0435150	right hand
	38	V0438190	right hand
V04	21	V0421040	left hand
	25	V0425080	left hand
	30	V0430120	left hand
	35	V0435160	left hand
	38	V0438200	left hand

Shaft kit	
Model	Part No.
01	M8040601
11	M8040611
86	M8040686
90	M8040690

Shaft		Key
Model	Part No.	Part No.
01	K0401000	M8040100
11	K0411000	-
86	K0486000	M8048600
90	K0490000	-

Body
Part No. M8040140

Shaft seal	
Part No.	Type
M8040190	primary in NBR
M8040195	primary in FPM
M8040191	secondary in NBR
M8040196	secondary in FPM

Bearing
Part No. M8040160

Pump seal kit		
Part No.	Parts	Type
M8040500	seals + 1 shaft seal	NBR
M8040501	seals + 2 shaft seals	NBR
M8040503	seals + 1 shaft seal	FPM (Viton®)
M8040504	seals + 2 shaft seals	FPM (Viton®)

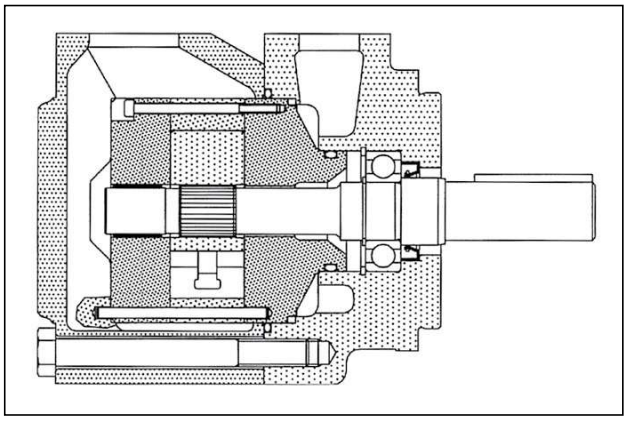
Seeger
Part No. M8040180

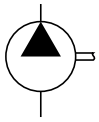
Seeger
Part No. M8040170

Cover
Part No. M8040150

Screw
Part No. M8040200
Torque to 225 Nm (2010 lb. in.)

Single Pump Type BV05





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 versions with capacities from 164 to 230 l/min *(from 42 to 60 gpm*) at 1200 rpm and 7 bar.

Technical characteristcs

Cartridge model	Geometric displacement		Rated capacity at 1200 rpm 7 bar		Rated capacity at 1500 rpm 7 bar		Maximum pressure with mineral oil		Speed range rpm	
	cm^3/g	(in^3/r)	**l/min**	(gpm)	**l/min**	(gpm)	**bar**	(psi)	**min**	**max**
V05-42	**138,6**	(8.46)	**164**	(42)	**203,4**	(53.7)	**175**	(2538)	**600**	**1800**
V05-47	**153,5**	(9.4)	**180**	(47)	**222,7**	(58.8)	**175**	(2538)	**600**	**1800**
V05-50	**162,2**	(9.9)	**189**	(50)	**234**	(61.8)	**175**	(2538)	**600**	**1800**
V05-57	**183,4**	(11.2)	**217**	(57)	**267**	(71.2)	**175**	(2538)	**600**	**1800**
V05-60	**193,4**	(11.8)	**230**	(60)	**285**	(75.3)	**175**	(2538)	**600**	**1800**

Hydraulic fluids: mineral oils, phosphate ester based fluids, water emulsions in oil, water-glycol 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),* with water based fluids +15°C to +50°C.

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