

Part number:

091-10105

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

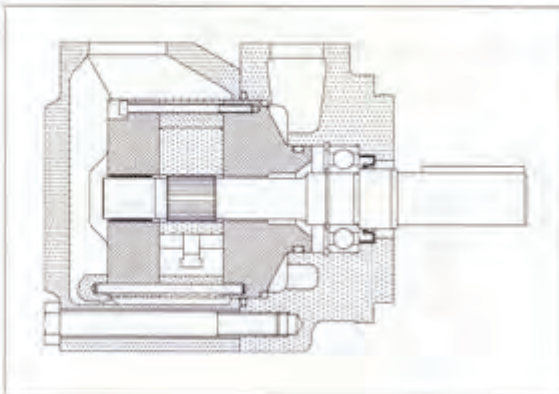
UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

single pump

BV02



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 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 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
V02-12	40,1	(2.45)	46,9	(12)	58,8	(15.5)	210	(3050)	600	2700
V02-14	45,4	(2.77)	52,7	(14)	65,7	(17.4)	210	(3050)	600	2700
V02-17	55,2	(3.37)	64,2	(17)	80,2	(21.2)	210	(3050)	600	2500
V02-19	60,0	(3.66)	71,0	(19)	88,7	(23.4)	210	(3050)	600	2500
V02-21	67,5	(4.12)	79,0	(21)	99,8	(26.4)	210	(3050)	600	2500

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).

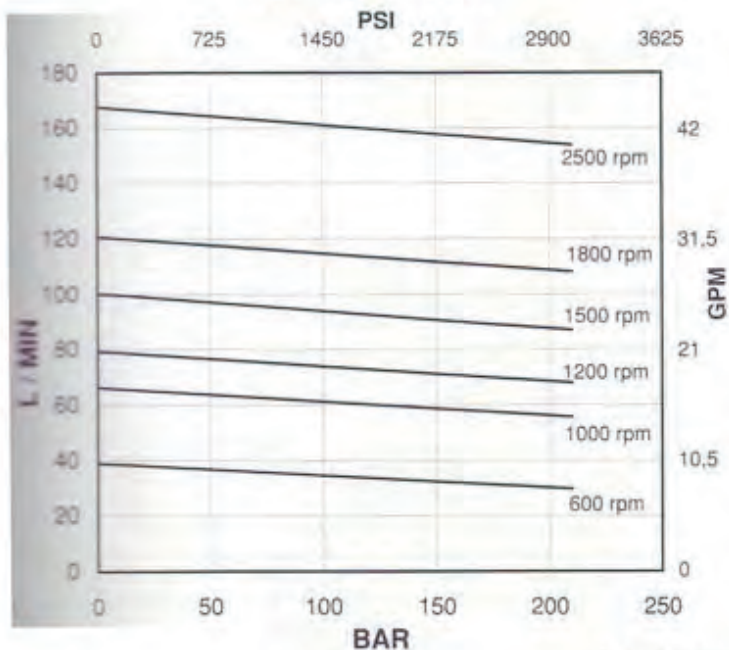
Inlet pressure (with mineral oil): from -0.17 to +1.4 bar (-2.5 to + 20 psi).

Operating temperature: with mineral oil -10°C to +70°C (+30°C to +60°C recommended), with water based fluids +15°C to +50°C.

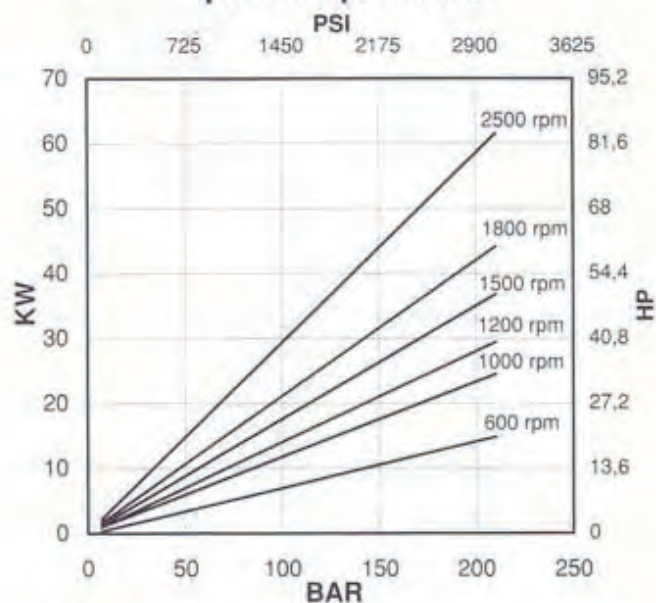
Drive: direct and coaxial by means of a flexible coupling.

Cartridge V02-21

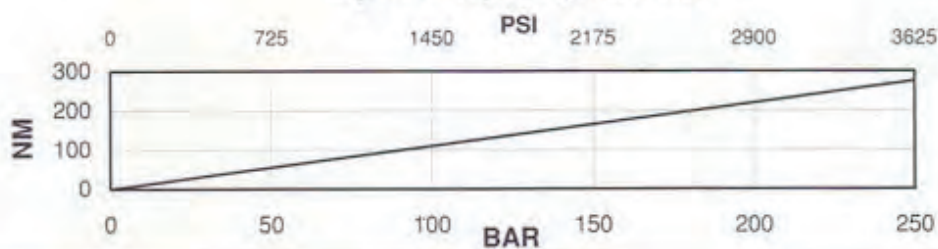
flow / pressure



power / pressure

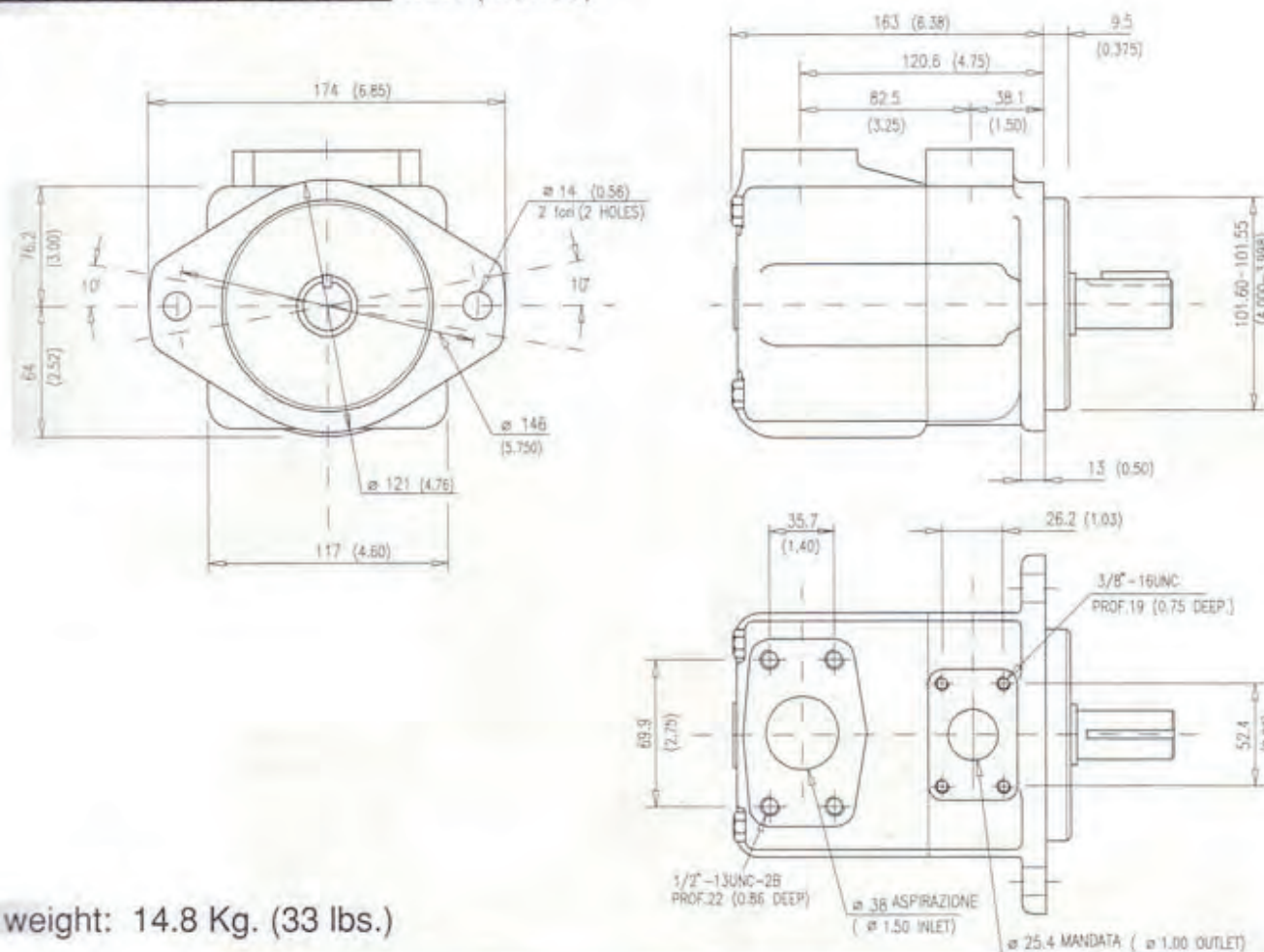


input torque / pressure



viscosity: 25 cSt (10W)
 temperature: 45°C
 seal pressure: 0 BAR

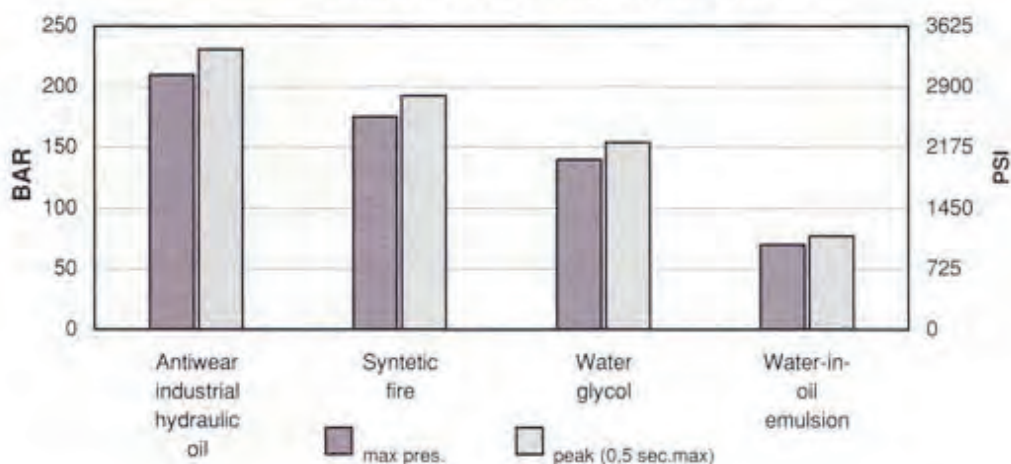
Installation dimensions mm (inches)



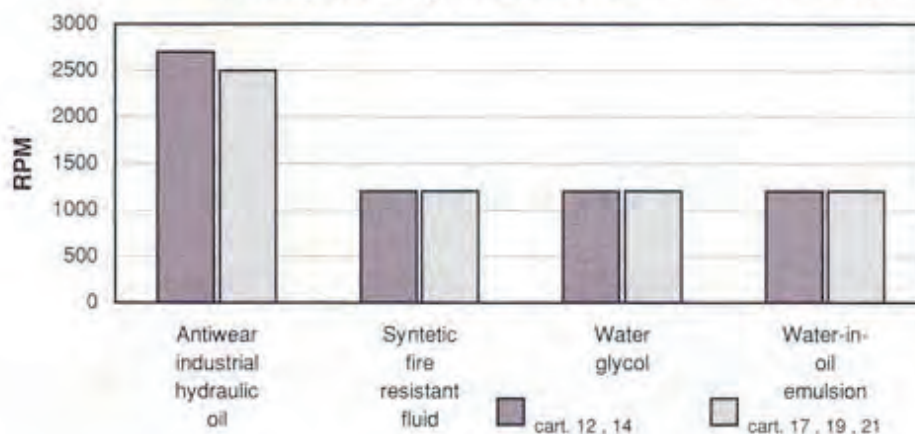
Accorox. weight: 14.8 Kg. (33 lbs.)

Main operating data

max pressure / hydraulic fluid

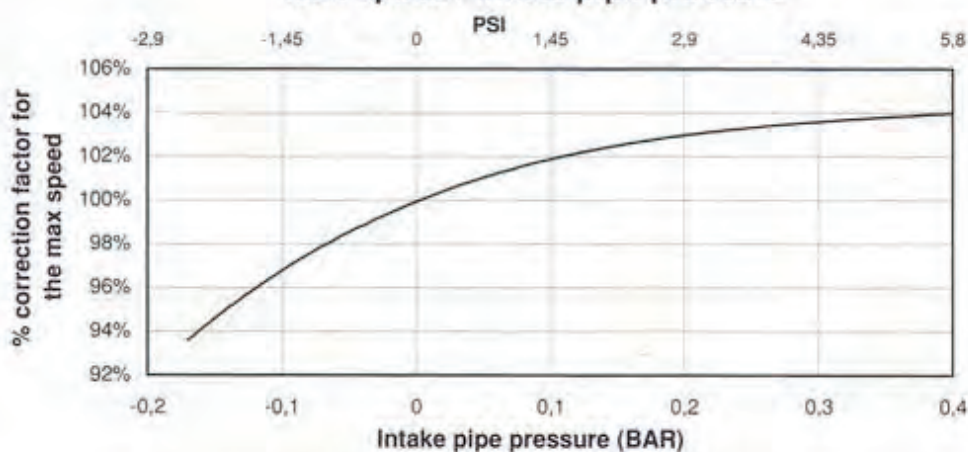


max speed / hydraulic fluid (with 0 bar in the intake pipe)



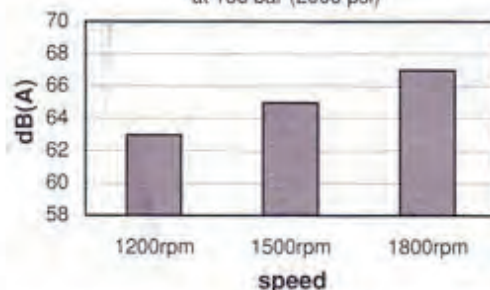
If the intake pressure is not zero bar, use the graph below to find the percentage correction factor to apply to the maximum speed.

max speed / intake pipe pressure

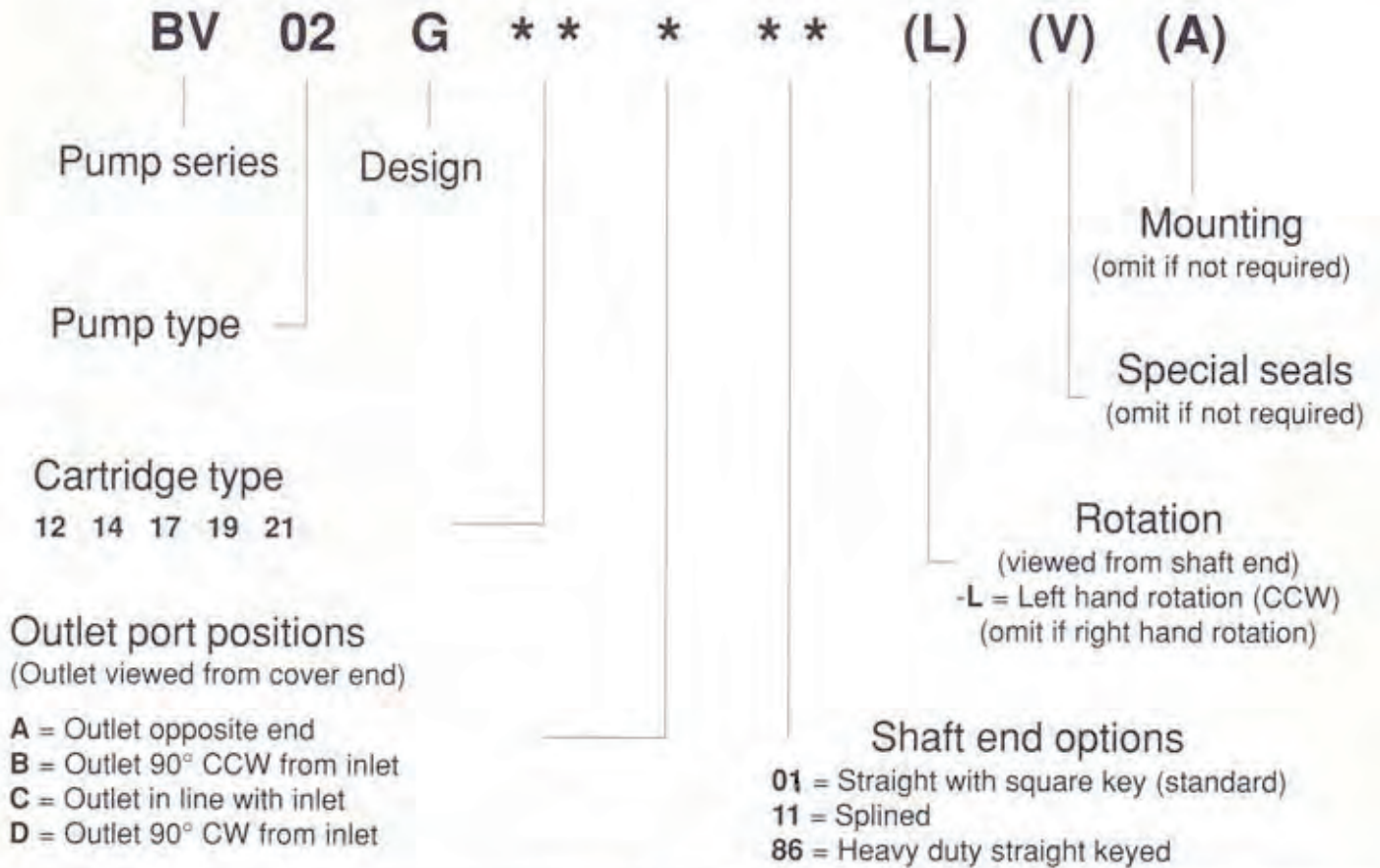


sound level

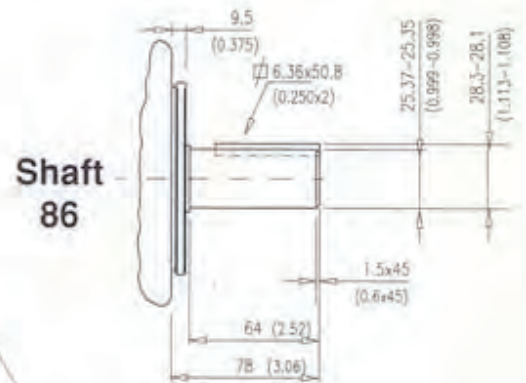
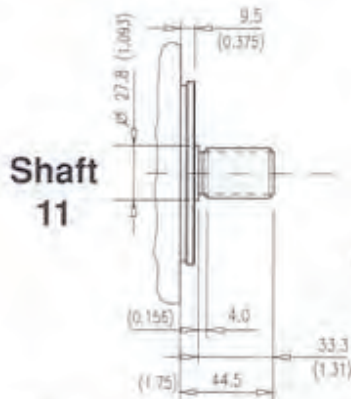
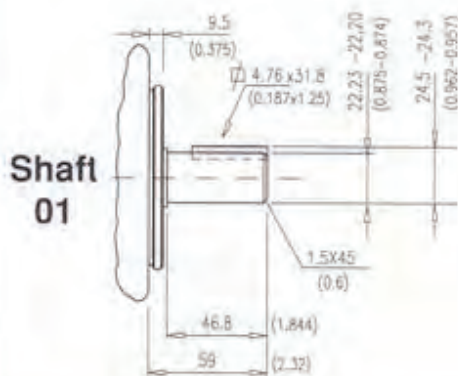
at 138 bar (2000 psi)



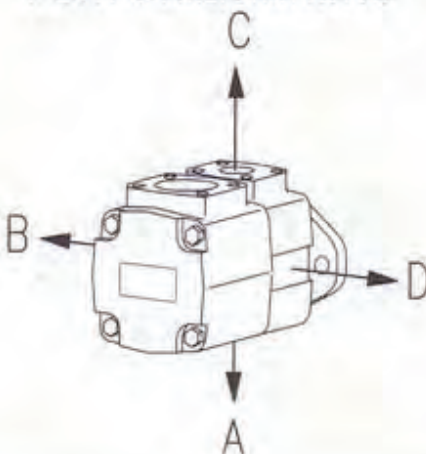
Model code breakdown



Shaft options mm (inches)



PORT ORIENTATIONS



Spline data

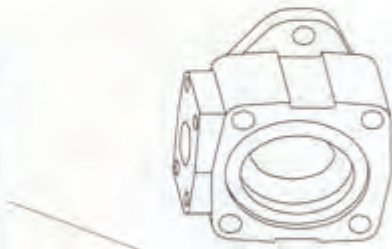
Pressure angle	30°
No. of teeth	13
Pitch	16/32
Major dia.	22.17-22.15 (0.873-0.872)
Form dia.	20.64 (0.8125)
Minor dia.	18.35 (0.722)
Dim. over pin	25.03-24.98 over 3.048 pins dia. (0.9854-0.9835 over 0.1200 pins dia.)

Id. codes of pump components

Cartridge		PUMP ROTAT.	
Series	Model	PART NO.	
V02	12	V0212030	right hand
	14	V0214070	right hand
	17	V0217110	right hand
	19	V0219150	right hand
	21	V0221190	right hand
V02	12	V0212040	left hand
	14	V0214080	left hand
	17	V0217120	left hand
	19	V0219160	left hand
	21	V0221200	left hand

Model	Shaft	Key
01	K0201000	M8010100
86	K0286000	M80286000
11	K0211000	-

Seal ring
PART NO. | M8020060



Body
PART NO. | M8020010

Bearing
PART NO. | M8020030

Seeger
PART NO. | M8020050

Seeger
PART NO. | M8020040

Cover
PART NO. | M8020020

Screw
PART NO. | M8020070
Torque to 102 Nm (910 lb.in.)

Seal kit (5 pcs.)
PART NO. | M8020500