Rexroth
Bosch Group

Axial Piston Variable Pump A10VSO

RE 92711/01.12 **1**/48
Replaces: 06.09
and RE 92707/11.10

Data sheet

Series 31
Sizes 18 to 140
Nominal pressure 280 bar
Maximum pressure 350 bar
Open circuit

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Features

- Variable pump in axial piston swashplate design for hydrostatic drives in an open circuit
- The flow is proportional to the drive speed and the displacement
- The flow can be steplessly varied by adjustment of the swashplate angle.
- 2 case drain ports
- Excellent suction characteristics
- Low noise level
- Long service life
- Axial and radial load capacity of drive shaft
- Favorable power/weight ratio
- Versatile controller range
- Short control time
- The through drive is suitable for adding gear pumps and axial piston pumps up to the same size, i.e., 100% through drive.

Type code for standard program

	A10VS	O			/	31		–	V					
01	02	03	04	05		06	07		08	09	10	11	12	13

Version

		18	28	45	71	100	140	
01	Standard version (without symbol)	●	●	●	●	●	●	
	HFA, HFB, HFC hydraulic fluid (except for Skydrol)	–	●	●	●	●	●	**E**
	High-speed version	–	–	●	●	●	●	**H**

Axial piston unit

02	Swashplate design, variable, nominal pressure 280 bar, maximum pressure 350 bar	**A10VS**

Operation mode

03	Pump, open circuit	**O**

Size (NG)

		18	28	45	71	100	140
04	Geometric displacement, see table of values on pages 6 and 7	**18**	**28**	**45**	**71**	**100**	**140**

Control device

				18	28	45	71	100	140	
05	Two-point control, directly operated			●	●	●	●	●	●	**DG**
	Pressure control			●	●	●	●	●	●	**DR**
	with flow control, hydraulic									
		X-T open		●	●	●	●	●	●	**DFR**
		X-T closed		●	●	●	●	●	●	**DFR1**
	with swivel angle control, electric			–	●	●	●	●	●	**FE1**[1]
		pressure and swivel-angle control, electric		●	●	●	●	●	●	**DFE1**[1]
	with pressure cut-off, remotely operated									
	hydraulic			●	●	●	●	●	●	**DRG**
	electrical	negative characteristic	12V	●	●	●	●	●	●	**ED71**
			24V	●	●	●	●	●	●	**ED72**
		positive characteristic	12V	●	●	●	●	●	●	**ER71**[2]
			24V	●	●	●	●	●	●	**ER72**[2]
	Pressure, flow and power control			–	●	●	●	●	●	**DFLR**

Series

06	Series 3, Index 1	**31**

Direction of rotation

07	Viewed on drive shaft	clockwise	**R**
		counter clockwise	**L**

Seals

08	FKM (fluor-caoutchouc)	**V**

1) See RE 30030

2) The following must be taken into account during project planning:
Excessive current levels (I > 1200 mA with 12 V or I > 600 mA with 24 V) to the ER solenoid can result in undesired increase of pressure which can lead to pump or system damage:
- Use I_{max} current limiter solenoids.
- A sandwich plate pressure reducing valve can be used to protect the pump in the event of overflow.
An accessory kit with pressure reducing sandwich plate can be ordered from Rexroth under part number R902490825.

● = available ❍ = on request – = not available

Type code for standard program

	A10VS	O			/	31		–	V					
01	02	03	04	05		06	07		08	09	10	11	12	13

	Drive shaft		18	28	45	71	100	140	
09	Splined shaft ANSI B92.1a	standard shaft	●	●	●	●	●	●	S
		similar to shaft "S" however for higher input torque	●	●	●	●	–	–	R
	Parallel keyed shaft DIN 6885	not for through drive	●	●	●	●	●	●	P

	Mounting flange		18	28	45	71	100	140	
10	ISO 3019-2	2-hole	●	●	●	●	●	–	A
		4-hole	–	–	–	–	–	●	B

	Service line port		18	28	45	71	100	140	
11	SAE flange ports on opposite side, metric fastening thread		●	●	●	–	●	●	12
			–	–	–	●	–	–	42

	Through drive			18	28	45	71	100	140	
12	without through drive			●	●	●	●	●	●	N00
	Flange ISO 3019-1	coupling for splined shaft[1]								
	Diameter	diameter								
	82-2 (A)	5/8 in	9T 16/32DP	●	●	●	●	●	●	K01
		3/4 in	11T 16/32DP	●	●	●	●	●	●	K52
	101-2 (B)	7/8 in	13T 16/32DP	–	●	●	●	●	●	K68
		1 in	15T 16/32DP	–	–	●	●	●	●	K04
	127-2 (C)	1 1/4 in	14T 12/24DP	–	–	–	●	●	●	K07
		1 1/2 in	17T 12/24DP	–	–	–	–	●	●	K24
	152-4 (D)	1 3/4 in	13T 8/16DP	–	–	–	–	–	●	K17
	Ø 63, metric 4-hole	shaft key Ø 25		–	●	●	●	●	●	K57
	Flange ISO 3019-2									
	Diameter									
	80, 2-hole	3/4 in	11T 16/32DP	●	●	●	●	●	●	KB2
	100, 2-hole	7/8 in	13T 16/32DP	–	●	●	●	●	●	KB3
		1 in	15T 16/32DP	–	–	●	●	●	●	KB4
	125, 2-hole	1 1/4 in	14T 12/24DP	–	–	–	●	●	●	KB5
		1 1/2 in	17T 12/24DP	–	–	–	–	●	●	KB6
	180, 4-hole	1 3/4 in	13T 8/16DP	–	–	–	–	–	●	KB7

	Connectors for solenoids[2]	18	28	45	71	100	140	
13	HIRSCHMANN connector – without suppressor diode	●	●	●	●	●	●	H

1) Coupling for splined shaft as per ANSI B92.1a
2) Connectors for other electric components can deviate.

● = available ❍ = on request – = not available