PROGRESSIVE BLOCK DISTRIBUTOR

BVA

APPLICATION

The BVA progressive block distributors are lubricating elements of central grease lubricating systems that are subsequently called circuits with progressive distributors. They are recommended for use even in higher range lubrication circuits, i.e. even for circuits with several dozens of lubricated points.

Lubrication circuits with progressive distributors are usually applied for permanent regular lubrication of various machines, machine technologies and equipment. Furthermore, they are applied for lubrication of mobile machines and equipment, e.g. for the chassis of trucks, buses, construction and earthmoving machines, semi-trailers, trailers etc.

The BVA progressive distributors are block distributors with uniform nominal weight of lubricant of 0.2 cm³/stroke and outlet. The maximum operation pressure is 350 bar.

DESCRIPTION

The BVA progressive block distributor is a compact lubricating element formed by a body with fitted-in working pistons. Each working piston is provided with 2 outlet holes. Opposite outlets belonging to one piston can be joined inside the distributor body into one outlet by unscrewing the distribution screw and stopping one of the opposite outlets with a plug. With this adjustment, you achieve double feeding amount at the second of the opposite outlets. The outlets situated next to each other can further be connected by external connecting bridges, thus achieving sums of nominal doses of the connected outlets.

The lubricant ejected by the respective working piston comes out thought the outlet located at the preceding working piston in the direction towards the distributor inlet. Only in the first piston (at the distributor inlet) is the lubricant from the right of the piston fed to the left outlet located at the last piston, and the lubricant from the left side of the piston is fed to the right outlet at the last piston.

The progressive distributor can be equipped with operation signalling, namely visual (signalling pin) or electric (contactless switch), normally placed at the outlet no. 4.

OPERATION

By taking the force-feed lubricant to the progressive distributor inlet, the individual pistons in the body are gradually shifted to their stop positions and at the same time the lubricant located under the pistons is forced out the outlets. This function is repeated for as long as the lubricant is fed to the progressive distributor. If progressive distributor is equipped with electric signalling, competent piston has shaft shoulder. Shoulder of sliding piston performs contactless switching electrical control circuit. When designing a lubrication circuit, it is recommended that the outlets of one distributor be connected to lubricated points with similar back-pressures to ensure minimum fluctuation of the nominal dose.

SERVICE AND MAINTENANCE

The BVA progressive distributor is mounted to a flat surface with the piston in horizontal position. After fixing the distributor to the designated place, air-free feeding piping is attached and the lubricant is fed through the distributor. If the lubricant ejects from the distributor outlets regularly and without air bubbles, the outlets are closed by attaching them to the outlet pipes. If the lubrication circuit is branched, each branch pipe has to be de-aerated in a similar way. It is necessary to keep the pipes clean during the assembly, i.e. to rid the pipes

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of burrs and other impurities. With permanent operation, it is recommended to check the tightness of the lubrication circuit and connection to progressive distributors once a month. To ensure long lifetime of the progressive distributor, it is recommended to include in the lubrication circuit a flow-through grease filter with a replaceable strainer screen (type FLT 150).

TECHNICAL DATA

Maximum working pressure		350 bar		
Operation pressure		250 bar		
Max. differential pressu	ure between	2 outlets	100 bar	
Nominal feed rate			0.2 cm ³ /stroke/outlet	
Minimum number of ou	utlets		2 (when using a connecting bridge)	
Maximum number of or	utlets		24	
Inlet threaded joint			M10x1, for tube dia. 6 mm	
Outlet threaded joint			M10x1, for tube dia. 4, 6 mm	
Nominal voltage of the	contactless	switch	10 - 34V DC, 100mA	
Lubricant		grease	max. NLGI-2	
		oil	min. 50 mm ² /sec.	
Working environment t	emperature		-25 to 80°C	
Weight	BVA 3		0.75 kg	
	BVA 4		1.00 kg	
	BVA 5		1.25 kg	
	BVA 6		1.50 kg	
BVA 7			1.70 kg	
BVA 8			1.85 kg	
	BVA 9		2.00 kg	
BVA 10		2.25 kg		
	BVA 11		2.50 kg	
BVA 12			2.75 kg	

TYPE IDENTIFICATION KEY

BVA x

- х - number of working pistons
 - e.g. BVA 5 5 working pistons (max. 10 outlets), no signalling

BVA xV

- number of working pistons Х V
 - visual signalling (signalling pin)
 - e.g. BVA 5V 5 working pistons (max. 10 outlets), visual signalling

BVA xPC

- number of working pistons X
- PC - electric signalling (contactless switch) for a connector
 - e.g. BVA 5PC 5 working pistons (max. 10 outlets), electric signalling, connected by connector





In the case of plugging of outlet grease (double dose) is necessary for the correct operation of the distribution to remove the screw -position 3.



Туре	Code Zn	Code ZnNi	No. of pistons	No. of outlets	Α
BVA 7	9 43 0337	9 43 0398	7	14	125
BVA 8	9 43 0338	9 43 0399	8	16	140
BVA 9	9 43 0339	9 43 0400	9	18	155
BVA 10	9 43 0340	9 43 0401	10	20	170
BVA 11	9 43 0341	9 43 0402	11	22	185
BVA 12	9 43 0342	9 43 0403	12	24	200
BVA 7V	9 43 0361	9 43 0404	7	14	125
BVA 8V	9 43 0362	9 43 0405	8	16	140
BVA 9V	9 43 0363	9 43 0406	9	18	155
BVA 10V	9 43 0364	9 43 0407	10	20	170
BVA 11V	9 43 0365	9 43 0408	11	22	185
BVA 12V	9 43 0366	9 43 0409	12	24	200
BVA 7PC	9 43 0367	9 43 0410	7	14	125
BVA 8PC	9 43 0368	9 43 0411	8	16	140
BVA 9PC	9 43 0369	9 43 0412	9	18	155
BVA 10PC	9 43 0370	9 43 0413	10	20	170
BVA 11PC	9 43 0371	9 43 0414	11	22	185
BVA 12PC	9 43 0372	9 43 0415	12	24	200

Name	PROGRESSIVE BLOCK DISTRIBUTOR	CTriboTec s.r.o.
Туре	BVA 7 ÷ BVA 12, BVA 7V ÷ BVA 12V, BVA 7PC ÷ BVA 12PC	Košuličova 4 Brno
Code		+420 543 425 611

STRAIGHT CONNECTOR WITH CABLE





Technical data			
Number of poles	3		
Threading	M8x1		
Operating voltage	max. 60V DC		
Operating current	max. 4 A		
Ambient temperature	-25+100°C		
Material of contacts	CuSn/Au		
Cable sheating	PUR		
Cable cores	3x0,34mm ²		
Protection degree	IP 67		

Name	Туре	Lenght L	Code
Straight connector with cable	V3-GM-2M-PUR	2m	425 531 116 460
Straight connector with cable	V3-GM-3M-PUR	3m	425 531 193 750
Straight connector with cable	V3-GM-5M-PUR	5m	425 531 024 772
Straight connector with cable	V3-GM-10M-PUR	10m	425 531 116 462

INDUCTIVE SWITCH FOR CONNECTOR





WIRING DIAGRAM



Code		8 43 0076	
Rated operating distance		1,8 mm	
Installation		embeddable	
Make funct	ion	PNP	
Operating v	/oltage	1034 V DC	
Operating of	current	100 mA	
Switching f	requency	0÷3000 Hz	
No-load su	pply current	2 mA	
Voltage dro	pp	2 V	
Brotaction	short-circuit	yes	
FIOLECLION	reversing of polarity	yes	
Indication		LED, yellow	
Connection type		connector M8x1	
Housing material		stainless steel	
Protection degree		IP 67	
Ambient temperature		-25+70°C	
Max.tightening torgue M8x1		2 Nm	
Max.tightening torgue M10x1		10 Nm	



Name	Code
Complete inductive switch with cable PUR L=2m	8 43 0067
Complete inductive switch with cable PUR L=3m	8 43 0068
Complete inductive switch with cable PUR L=5m	8 43 0069
Complete inductive switch with cable PUR L=10m	8 43 0070

Name	INDUCTIVE SWITCH AND CONNECTORS	CTriboTec s.r.o.
Туре	FOR PROGRESSIVE DISTRIBUTORS BVA 3PC+BVA 6PC	Košuličova 4 Brno
		+420 543 425 611

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		Identification	Code Zn	Code ZnNi
/		Connecting bridge 2 TB4	<u>8 43 0027</u>	8 43 0416
ſ		Connecting bridge 2 - TR4	8 /3 00/1	8 /3 0/17
Ţ		Connecting bridge 2 - TK0	8 43 0023	8 43 0418
L		Connecting bridge 2 - SV - TR4	8 43 0032	8 43 0419
Į	<u>→→→</u> ┩ ┖ →→→┩	*SV chock valvo	0 40 0002	0 40 04 10
	ø4/ø6			
		Identification	Code Zn	Code ZnNi
		Connecting bridge 3 - TR4	8 43 0038	8 43 0420
	┑ <u>┍</u> ╫╫┑┍╫╫┩	Connecting bridge 3 - TR6	8 43 0042	8 43 0421
		Connecting bridge 3 - SV - TR4	8 43 0028	8 43 0422
		Connecting bridge 3 - SV - TR6	8 43 0035	8 43 0423
	Ø4/Ø6	Identification	Code Zn	Code ZnNi
		Connecting bridge 4 - TR4	8 43 0039	8 43 0424
		Connecting bridge 4 - TR6	8 43 0043	8 43 0425
		Connecting bridge 4 - SV - TR4	8 43 0030	8 43 0426
└┫┼┊┼┢╴┫	╵┊╎┣╺┫╎┊╎┣╺┫╎┊╎┣ ┚	Connecting bridge 4 - SV - TR6	8 43 0036	8 43 0427
		Identification Connecting bridge 2 - M10x1 Connecting bridge 3 - M10x1 Connecting bridge 4 - M10x1	Code Zn 8 43 0334 8 43 0335 8 43 0336	Code ZnNi 8 43 0428 8 43 0429 8 43 0430
		Identification	Code Zn	Code ZnNi
		Outlet plua	43 0022	43 0431
		Identification	Code 309543000624	
		Screw M6 x 50	309543000628	
		Screw M6 x 60	309543000632	
		Nut M6	311120500060	
		Flexible washer 6	311214500061	
Na	220025			
Name	PROGRES		Ж	CTribolec s.r.o
Туре	BVA 3	÷BVA 12 - ACCESSORIES		www.tribotec.cz
Code				+420 543 425 611