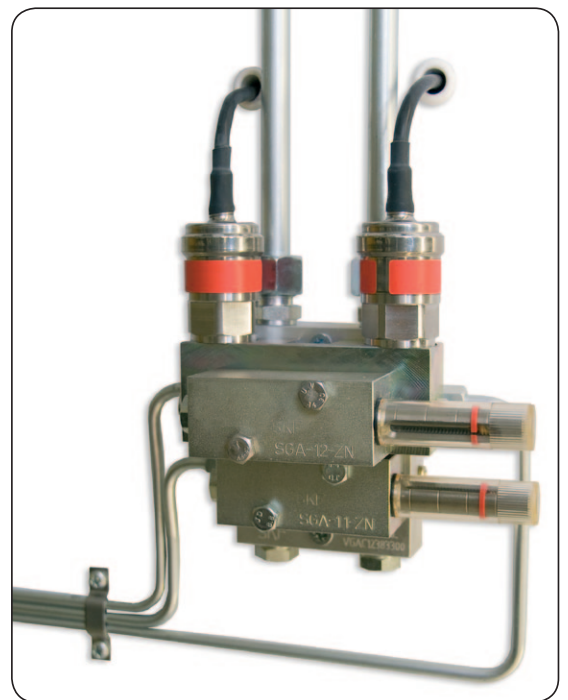
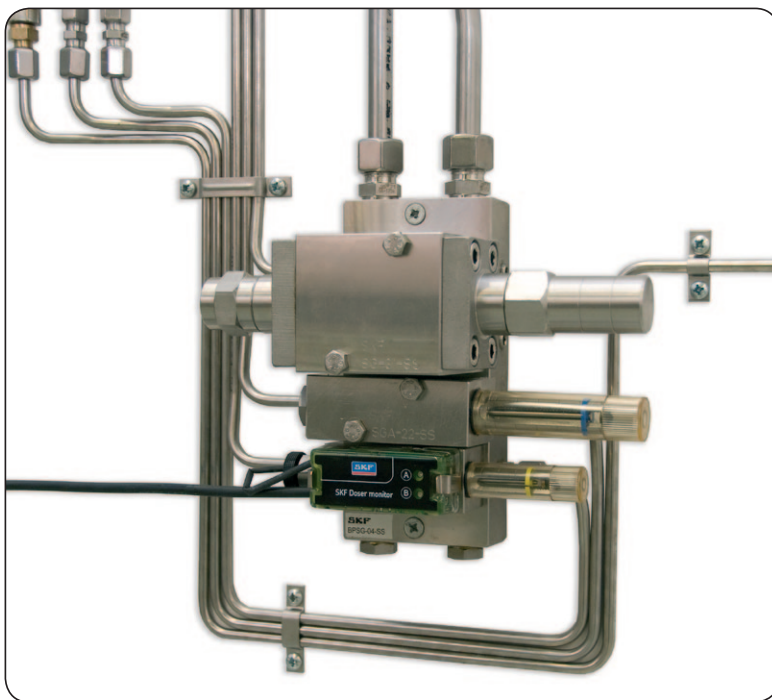


# SGA and SG-dosers

for SKF DuoFlex dual-line lubrication systems



*Modular and mechanical adjustable SGA and SG-doser are used in SKF DuoFlex applications.*

## SGA and SG-dosers

The dosing modules are hydraulically operated piston units and they are installed onto baseplates. Because of this construction, various dosing module groups can be built. There are six basic sizes of modules, covering all industrial needs from small joints to large roller bearings. Dosing modules are made of zinc-coated and yellow-passivated steel or stainless steel AISI-316 L. The baseplates are made of aluminium or stainless steel AISI-316 L.

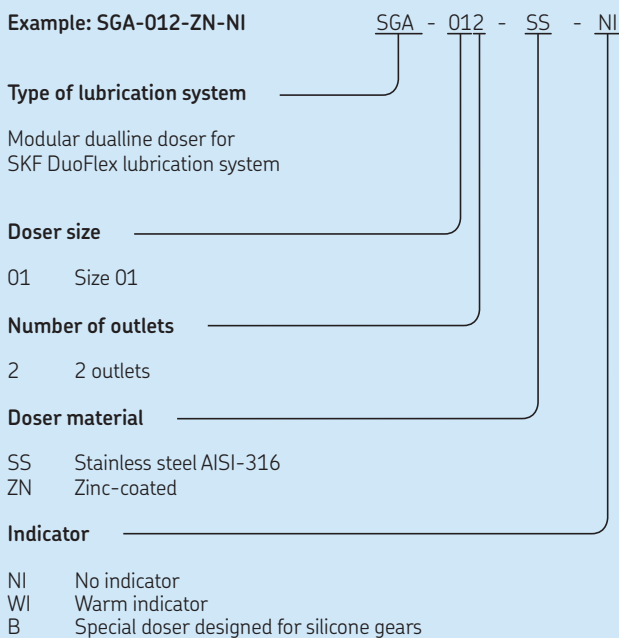
Lubricant: Oil and greases  
NLGI 000 – 2

SGA-xy-zz-B	Abbreviation	Description
SG:	SG	The type of lubrication system, SKF DuoFlex
A:	A No symbol	Small doser (sizes 01, 1 and 2) Big doser (sizes 3, 4 and 5)
xx:	01, 1–5	Doser size 01–5
y:	1 2	One outlet Two outlets
zz:	ZN SS	Doser material, zinc-coated and yellow-passivated steel Doser material, stainless steel AISI-316
B:	No symbol B WI NI	Normal doser Special doser designed for silicone greases Heat and splashes free doser Doser without mechanical indicator



Value	Range	Unit	Description
t	-25 to +80	°C	Operation temperature range
pmax	250 300	bar bar	Max. pressure, 01 dosers Max. pressure, other dosers
M	4–8	Nm	Tightening torque range of the dosers

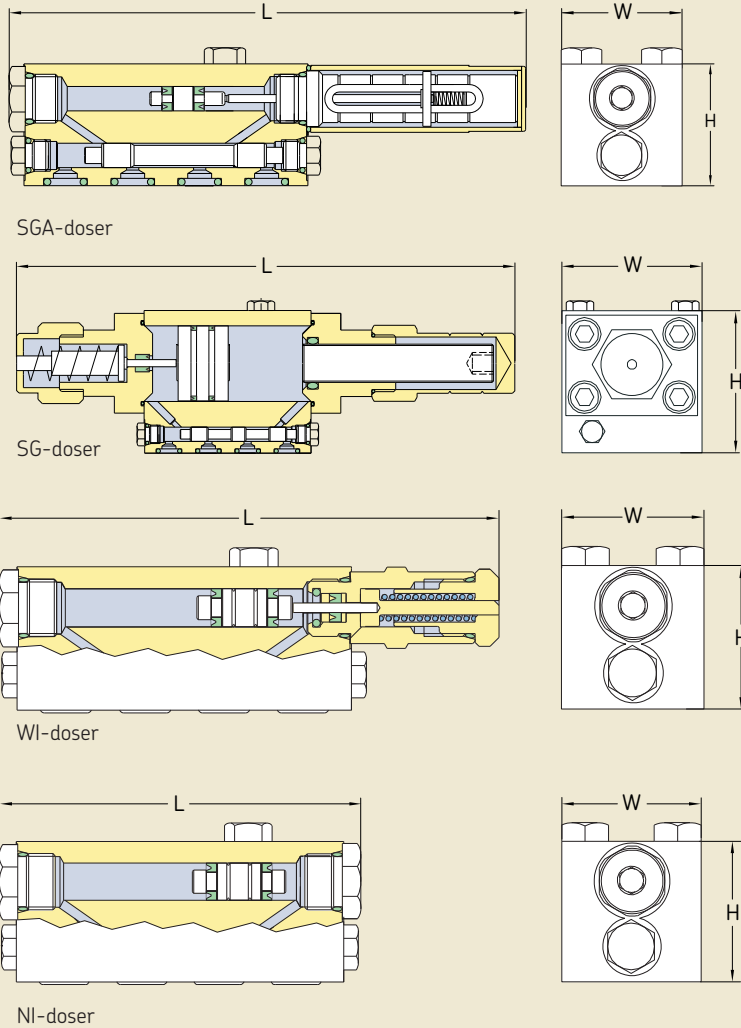
### Designation system for SKF SGA-Doser



### Types and dosage ranges of grease dosing modules

Dosing module	Dosage range g/cycle	Material	
		Mild steel	Stainless steel AISI-316
SGA-011	0,30–1,45	X	X
SGA-012	0,15–0,70	X	X
SGA-11	0,50–2,55	X	X
SGA-12	0,25–1,25	X	X
SGA-21	1,50–8,75	X	X
SGA-22	0,70–4,35	X	X
SG-31	8,50–56,00	X	X
SG-32	4,30–28,00	X	X
SG-41	19,30–92,00		X
SG-42	9,65–46,00		X
SG-51	86,30–177,00		X
SG-52	43,10–88,40		X

### Doser measurements



### CAUTION

For all systems described in this brochure, see important product usage information on the back cover.

Dosing module	L	W	H	Prefix	Code
SGA-011-ZN	128	30	30	VGAC	12387460
SGA-011-ZN-B	128	30	30	VGAC	12387465
SGA-012-ZN	128	30	30	VGAC	12387510
SGA-012-ZN-B	128	30	30	VGAC	12387515
SGA-11-ZN	128	30	30	VGAC	12387560
SGA-11-ZN-B	128	30	30	VGAC	12387565
SGA-12-ZN	128	30	30	VGAC	12387610
SGA-12-ZN-B	128	30	30	VGAC	12387615
SGA-21-ZN	161	30	40	VGAC	12387660
SGA-22-ZN	161	30	40	VGAC	12387710
*SG-31-ZN	222	60	60	VGAC	12388110
*SG-32-ZN	222	60	60	VGAC	12388160
SGA-011-SS	128	30	30	VGAC	12386560
SGA-011-SS-B	128	30	30	VGAC	12386565
SGA-012-SS	128	30	30	VGAC	12386610
SGA-012-SS-B	128	30	30	VGAC	12386615
SGA-11-SS	128	30	30	VGAC	12386660
SGA-11-SS-B	128	30	30	VGAC	12386665
SGA-12-SS	128	30	30	VGAC	12386710
SGA-12-SS-B	128	30	30	VGAC	12386715
SGA-21-SS	161	30	40	VGAC	12386760
SGA-21-SS-B	161	30	40	VGAC	12386765
SGA-22-SS	161	30	40	VGAC	12386810
SGA-22-SS-B	161	30	40	VGAC	12386815

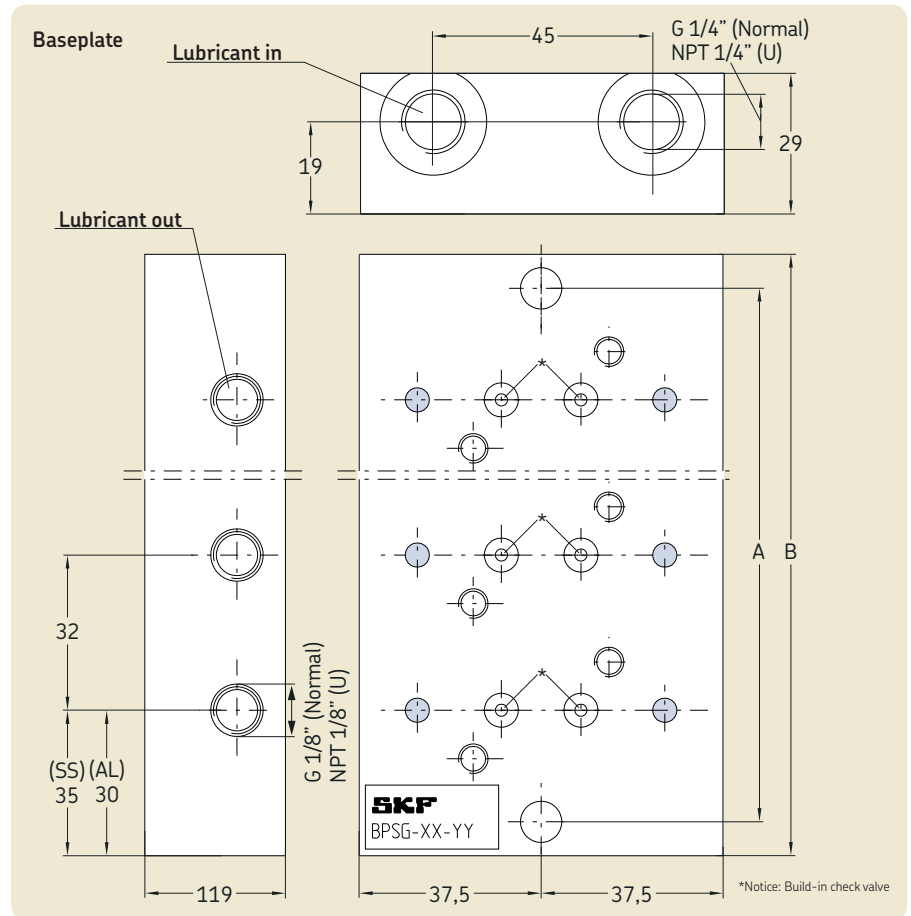
\*Notice: Takes two places on baseplate

Dosing module	L	W	H	Prefix	Code
*SG-31-SS	222	60	60	VGAC	12387160
*SG-31-SS-B	222	60	60	VGAC	12387165
*SG-32-SS	222	60	60	VGAC	12387210
*SG-32-SS-B	222	60	60	VGAC	12387215
*SG-41-SS	263	62	60	VGAC	12387260
*SG-41-SS-B	263	62	60	VGAC	12387265
*SG-42-SS	263	62	60	VGAC	12387310
*SG-42-SS-B	263	62	60	VGAC	12387315
*SG-51-SS	307	62	60	VGAC	12387360
*SG-51-SS-B	307	62	60	VGAC	12387365
*SG-52-SS	307	62	60	VGAC	12387410
*SG-52-SS-B	307	62	60	VGAC	12387415
SGA-011-ZN-WI	105	30	30	VGAC	12387470
SGA-012-ZN-WI	105	30	30	VGAC	12387520
SGA-11-ZN-WI	105	30	30	VGAC	12387570
SGA-12-ZN-WI	105	30	30	VGAC	12387620
SGA-21-ZN-WI	117	30	40	VGAC	12387670
SGA-22-ZN-WI	117	30	40	VGAC	12387720
SGA-011-ZN-NI	73	30	30	VGAC	12387525
SGA-012-ZN-NI	73	30	30	VGAC	12387530
SGA-11-ZN-NI	73	30	30	VGAC	12387625
SGA-12-ZN-NI	73	30	30	VGAC	12387630
SGA-21-ZN-NI	80	30	40	VGAC	12387680
SGA-22-ZN-NI	80	30	40	VGAC	12387685

\*Notice: Takes two places on baseplate

## Baseplate

The baseplates contain built-in check valves to ensure the precise dosage distribution. Standard baseplates are available for groups of 1 to 6 dosers.



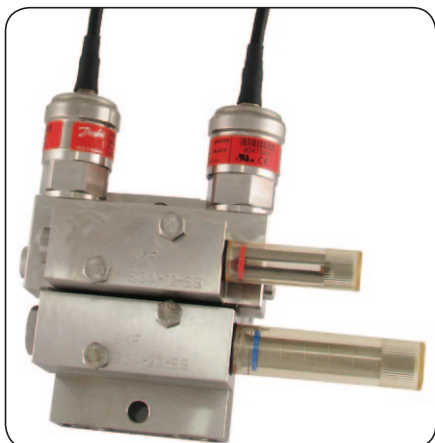
BPSG-U-model	A	B	Prefix	Code
BPSG-01-AL-U	2 1/8	2 3/4	VGAC	12383250
BPSG-02-AL-U	3 3/8	4	VGAC	12383300
BPSG-03-AL-U	4 10/16	5 9/32	VGAC	12383350
BPSG-04-AL-U	5 29/32	6 17/32	VGAC	12383400
BPSG-05-AL-U	7 5/32	7 25/32	VGAC	12383450
BPSG-06-AL-U	8 7/16	9 1/16	VGAC	12383500
BPSG-01-SS-U	2 1/8	2 3/4	VGAC	12384300
BPSG-02-SS-U	3 3/8	4	VGAC	12384350
BPSG-03-SS-U	4 10/16	5 9/32	VGAC	12384400
BPSG-04-SS-U	5 29/32	6 17/32	VGAC	12384450
BPSG-05-SS-U	7 5/32	7 25/32	VGAC	12384500
BPSG-06-SS-U	8 7/16	9 1/16	VGAC	12384550

BPSG-model	A	B	Prefix	Code
BPSG-01-AL	46	60	VGAC	12383250
BPSG-02-AL	78	92	VGAC	12383300
BPSG-03-AL	110	124	VGAC	12383350
BPSG-04-AL	142	156	VGAC	12383400
BPSG-05-AL	174	188	VGAC	12383450
BPSG-06-AL	206	220	VGAC	12383500
BPSG-01-SS	54	70	VGAC	12384300
BPSG-02-SS	86	102	VGAC	12384350
BPSG-03-SS	118	134	VGAC	12384400
BPSG-04-SS	150	166	VGAC	12384450
BPSG-05-SS	182	198	VGAC	12384500
BPSG-06-SS	214	230	VGAC	12384550

BPSG-XX-YY-U	Abbreviation	Description
BP	BP	Baseplate
SG	SG	Type of lubrication system, Dualline grease lubrication
XX	01	1-place baseplate
	02	2-place baseplate
	03	3-place baseplate
	04	4-place baseplate
	05	5-place baseplate
	06	6-place baseplate
YY	AL	Baseplate material, anodized aluminum
	SS	Mounting rail material, stainless steel AISI 316
U	no symbol	Connections, R-female threads
	U	Connections, NPT-female threads

## BPSG2-PTA-MOD

The pressure transmitter assembly is installed on the baseplate of the doser group under the doser. The pressure transmitters, which are installed in the body of the assembly, measure pressure of the passing lubricant and the information is transmitted to the control unit. The pressure of the main lines can be monitored from the control unit.

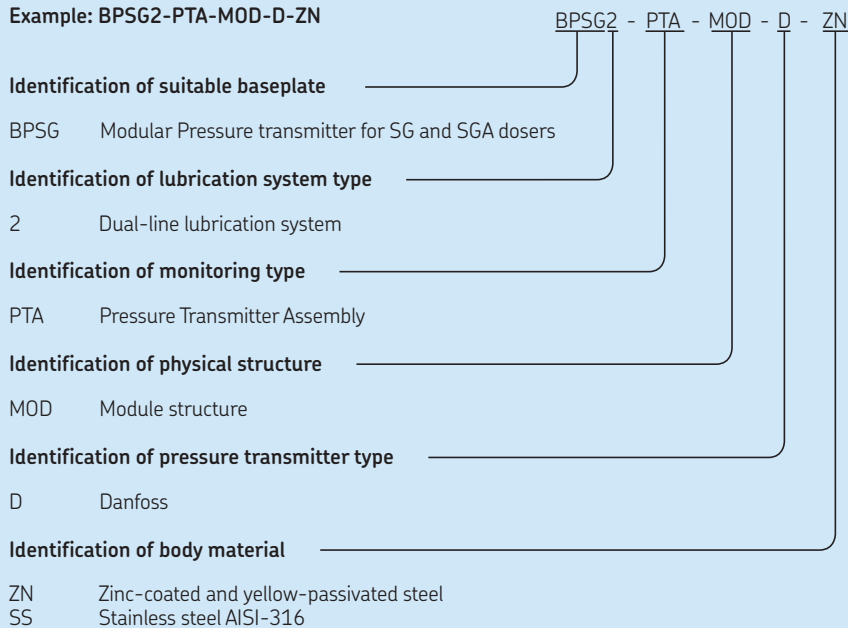


Quantity	Range	Unit	Description
t	-40 to +85	°C	Operation temperature range
p	0-250	bar	Pressure range
U	24 (10-30)	V DC	Supply voltage
I	4-20	mA	Output signal of a pressure transmitter

BPSG2-PTA-MOD-D-xx	Abbreviation	Description
BPSG:	BPSG	Baseplate SB-doser
2:	2	2-line pressure transmitter assembly
PTA:	PTA	Pressure Transmitter Assembly
MOD:	MOD	Module structure
D:	D	pressure trasmitter type
xx:	ZN	Body material, zinc-coated and yellow-passivated steel
	SS	Body material, stainless steel AISI-316

### Designation system for pressure transmitter assembly

Example: BPSG2-PTA-MOD-D-ZN



BPSG2-PTA-model	Prefix	Code
BPSG2-PTA-MOD-D-ZN	VGDB	462070
BPSG2-PTA-MOD-D-SS	VGDB	462070

## SKF Doser monitor

SKF Doser monitor is a monitoring unit for SGA- and SG-dosers in a dual-line central lubrication system. It senses the movement of the doser piston.

The status of the doser monitor can be seen from the LED-signals of the electronic part:

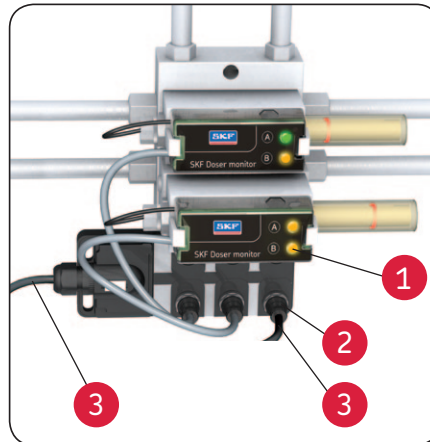
- 1 yellow LED signal A: waiting status, relay contact is open
- 2 green LED-signal B: sensing status, relay contact is closed.

Alarms are monitored and viewed in control center. Two optional operation modes: pulse operation mode and latching operation mode.

SKF Doser monitor contains:

- 1 Electrical sensors
- 2 Junction box
- 3 Connection cable

Dosing module	Prefix	Code
SKF Doser monitor SGA-0-1	VGDV	12388180
SKF Doser monitor SGA-2	VGDV	12388184
SKF Doser monitor SG-3-4-5	VGDV	12388188
SKF Doser monitor junction box	VGDV	12388192
SKF Doser monitor extension cable M 12, L=1m	VGNB	12771677
SKF Doser monitor extension cable M 12, L=5m*	VGNB	12771678



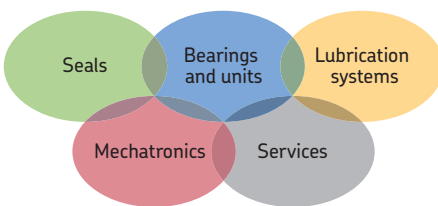
### Technical specifications, SKF Doser monitor

**Operation temperature**  
t = -20 to +70 °C

**Supply voltage**  
U = 24 (20-28) V DC

**Protection classification**  
IP 67

**Connections**  
4-pole M 12 male connector  
Input: Supply voltage 24 V DC  
Output: Potential-free relay contact



### The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.

### SKF lubrication systems

e-mail: [skf-lube@skf.com](mailto:skf-lube@skf.com)

#### ! Important information on product usage

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

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PUB LS/P8 11277 • January 2013

Printed in Sweden on environmentally friendly paper.

