

# PSG3 Modular Feeder

for use in oil or grease lubrication systems



## Application

Modular feeders of the PSG3 series are used in oil and grease lubrication systems. Fields of application include, for example, paper machinery, tunnel driving machinery, metal-forming machinery (presses) and general engineering.

## Advantages

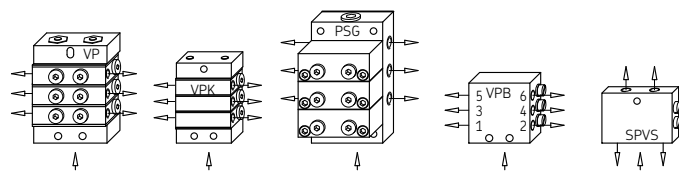
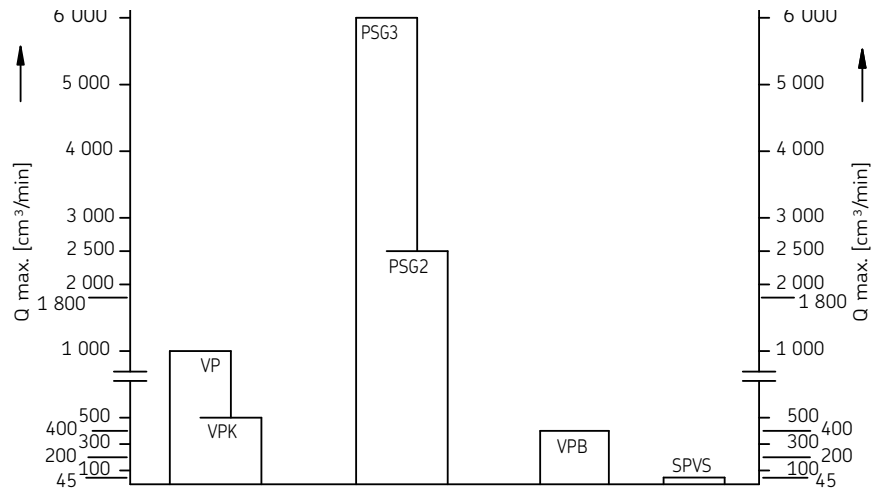
- Easily serviceable modular feeder technology through baseplate design
- Outlet quantities are especially easy to allocate, because the lubricant outlets are located directly below the metering piston
- Flexible system design due to metering sections with volumes per cycle and outlets of 800, 1200, 1600, 2400 and 3200 mm<sup>3</sup>
- High operational reliability due to standard installation of check valves
- High metering accuracy; the integrated check valves are located directly after the metering pistons
- Flow limiters, flow regulators, gear-type flow indicator and directional solenoid valves can be attached
- Up to 20 outlets
- Measurement connectors for system pressure and feeder outlets
- Retrofitting with piston detectors for monitoring is possible at any time
- The metering volume of opposite outlets can be connected internally, neighboring outlets can be connected externally using bridges
- Also available in corrosion-resistant design (chemically nickel-plated)



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Overview of progressive feeders - types and frame sizes



See important product usage information on the back cover.

### General information

The PSG3 Modular Feeder (Progressive Feeder) can be used for an inlet volume flow of up to 6 l/min. The inlet and all outlets of the feeder are located in the baseplate. The functional sections are attached to the baseplate and can be replaced without loosening.

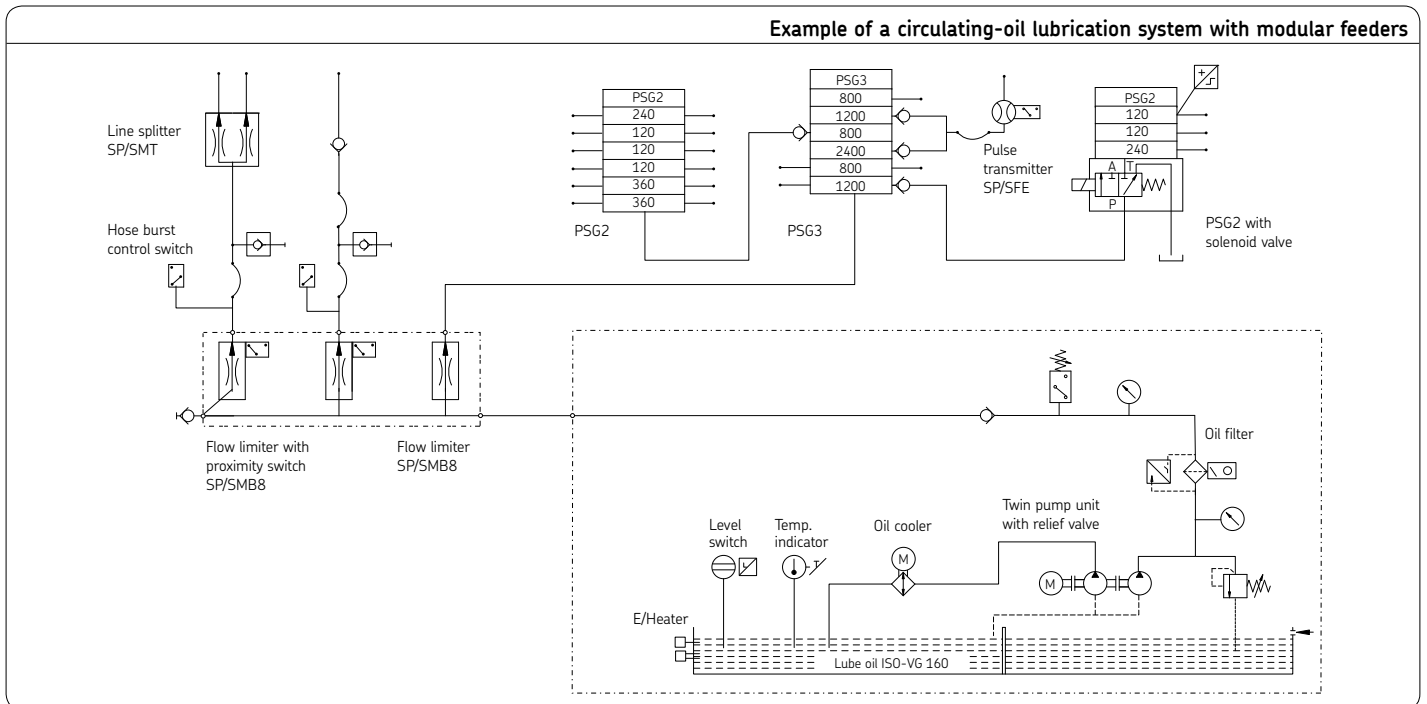
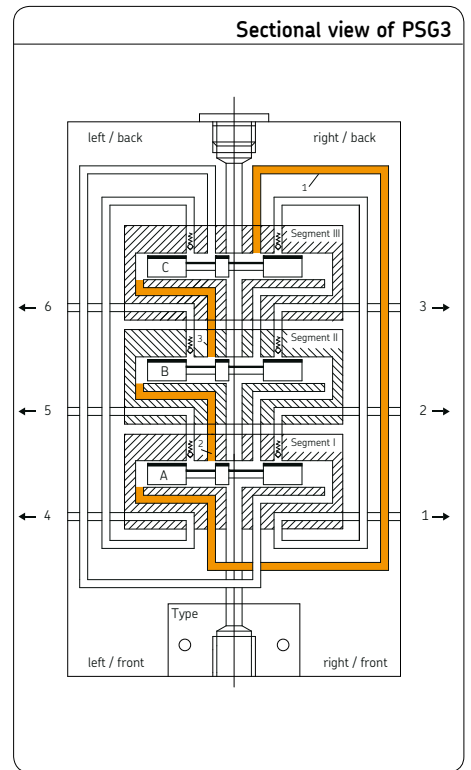
The volumetric flow which is sent via a tube is forcibly distributed in a predetermined ratio to the outlets, i.e. to the lubrication points or the downstream progressive feeders. Pistons, which are aligned in series, meter the lubricant for two opposite outlets each and control the function of the neighboring piston. This way, the function of the modular feeder can be checked by monitoring **any** piston (with a cycle indicator or piston detector) or the inlet volume flow (with gear-type flow indicator) can be monitored.

High operational reliability (at high or different back pressures) is achieved due to the standard installation of check valves. They also provide an accurate and safe blocking behavior, even for internal and external combinations.

### Mode of operation

Observing the movement when all three pistons (A, B, C) on the left end stop, shows that the lubricant and operating pressure last from the inlet through the through-duct to the pistons C-right, B-right and A-left; that is, while pistons C and B retain their positions, the A piston is pushed right. The lubricant volume specified by the piston diameter and stroke is pressed into a duct on whose end (outlet 4) the same quantity exits. This stroke movement of piston A opens or closes multiple control ducts. Control duct 2, through which the lubricant reaches piston B-left and shifts it right, is now open. The corresponding metering volume is pressed into the outlet duct and exits at outlet 2. The stroke movement of piston B has now closed or opened control ducts. Control duct 3 is now open. The lubricant pressure moves piston C to the right, pushing the corresponding metering volume into the duct to outlet 3. This movement of piston C opens, among others, the reversing duct that reconnects the through-duct with piston A-right.

Analogous to the piston movement just described, pistons A, B and C now move consecutively back to the left.



### Operating pressure

The maximum permissible operating pressure of the modular feeder depends on the monitoring type or the upstream attachments and is between 85 and 200 bar.

### Operating temperature

The respective operating temperature range specified under technical data has to be maintained.

### Consolidation of outlets

The volumetric flow of an outlet can be doubled by internal combination of two opposite outlets. To do this, the threaded pin **G** in the baseplate -- the right input as seen from the feeder inlet -- must be screwed out. The outlet in the baseplate that is no longer needed is to be closed using a washer **D** and a screw plug **V**.

Adjacent outlets can be combined using external bridges (crossporting). One bridge can connect either two or three outlets.

### Dummy section

Dummy and functional sections can be varied as desired within the frame size (a minimum of three functional sections are required per feeder). If dummy sections are installed, two lubricant outlets each must be closed in the baseplate (under the dummy section). Increased pressure loss must be expected if two dummy sections are installed side-by-side or if dummy sections are used as the start or end section.

### Attachment of bridges (crossporting)

Bridges with or without an outlet (G 1/4") can be utilized to allow combinations between an internal crossporting and a bridge. It is still possible to use bridges with check valve(s) (see page 16).

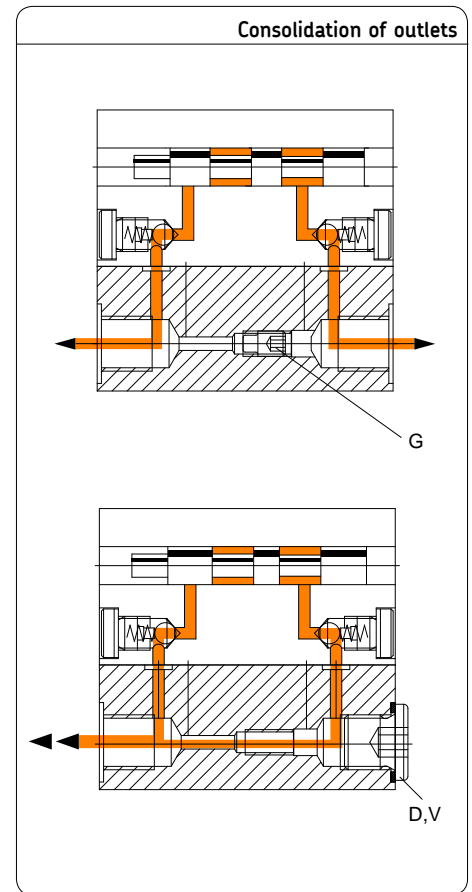
### Information on the design

The general criteria for the design of progressive feeders also apply without restrictions to the PSG3 modular feeder. The stroke rate is the most important criterion. It should be held as low as possible by selecting high-volume sections. This reduces pressure losses and noise levels. In case of an installation on movable machine parts or in case of strong vibrations (e.g. on carbody presses), the piston position of the feeder **must not** correspond with the direction of movement of the machine part.

### Tightening torque of the sections

When installing PSG3 sections on the baseplate, the following tightening torque must be complied with:

**Damping torque: 23 Nm**



## Monitoring

All standard sections can be directly monitored by means of a piston detector (compare parameters for piston detector, monitoring type **P3**) and can be retrofitted. If piston movement is recorded using a cycle indicator (visual stroke monitoring, monitoring type **ZY**) with proximity switch (**ZS**), the sections intended for these purposes are to be used.

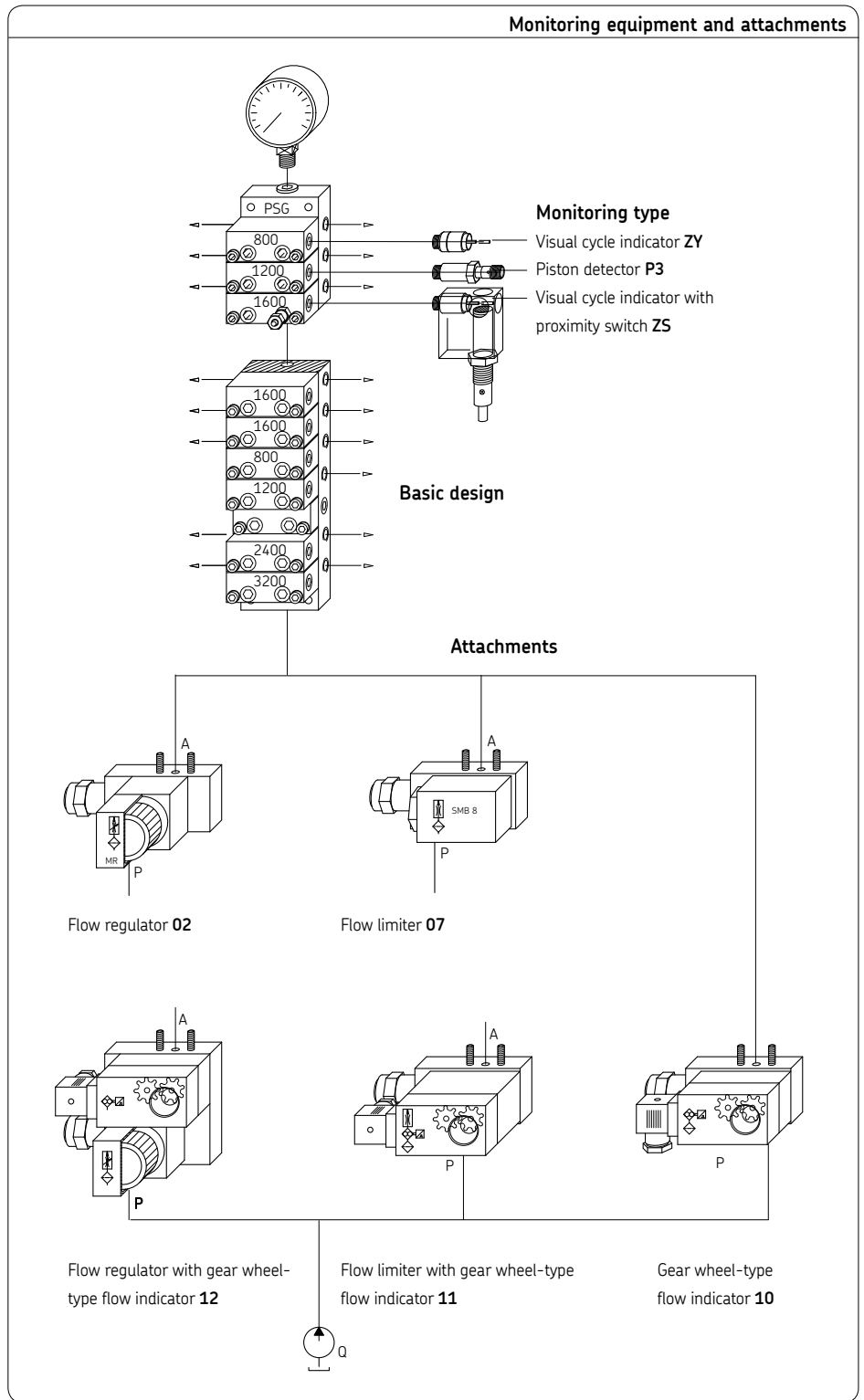
## Attachments

The modular structure of the modular feeder becomes apparent when you consider the range of attachments. It can be equipped with an upstream:

- Flow limiter (attachment **07**)
- Flow regulator (attachment **02**)

The attachments can be supplied with or without a gear wheel-type flow indicator. Further designs with directional solenoid valve available on request.

If the inlet volume flow should be visually and electrically controlled, an upstream gear wheel-type flow indicator (attachments **10**, **11** and **12**) can be used.

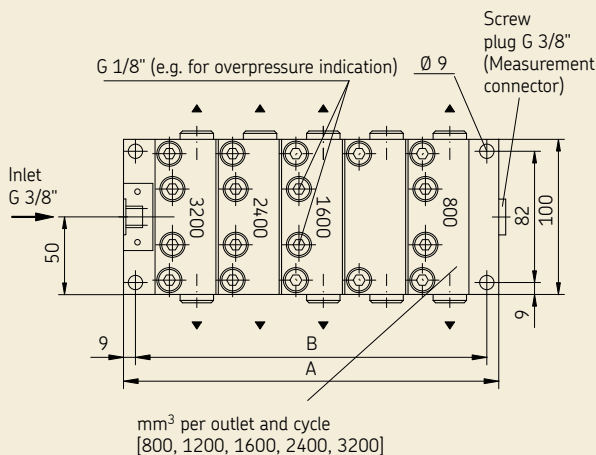
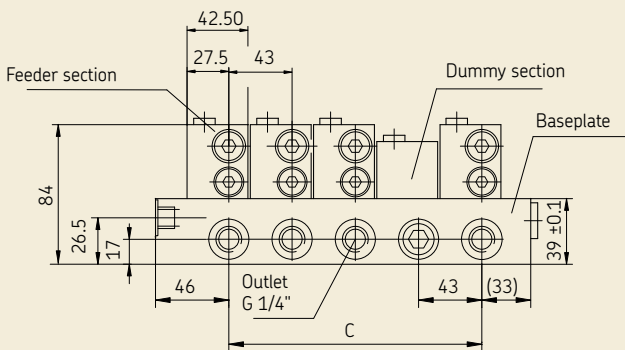


# PSG3 modular feeder, basic design

for oil and grease, without attachments, without monitoring



PSG3 modular feeder, basic design



mm<sup>3</sup> per outlet and cycle  
[800, 1200, 1600, 2400, 3200]

### Technical Data

#### General information

Type ..... hydraulically controlled  
 Mounting position ..... discretionary <sup>1)</sup>  
 Ambient temperature range ..... - 15 to + 110 °C  
 Baseplate with ..... 6, 8, 10, 12, 14, 16, 18, 20 outlets  
 working outlets without bridges ..... 3 to 20  
 working outlets with bridges ..... 1 to 19

#### Material

Baseplate ..... Al Cu Mg Pb F 38  
 Sections ..... GGC 25 <sup>2)</sup>

#### Hydraulic

Operating pressure max. .... 200 bar  
 Einlassvolumenstrom ..... up to 6 l/min  
 Volume per outlet and cycle ... 800-, 1200-, 1600-, 2400-, 3200 mm<sup>3</sup>  
 Dividing ratio ..... 1 : 1 to 1 : 4 <sup>3)</sup>  
 Pressure difference ..... 5 to 15 bar <sup>4)</sup>  
 Lubricant ..... Mineral oils, greases based on mineral oil,  
 environmentally friendly and synthetic oils and greases  
 Operating viscosity ..... > 12 mm<sup>2</sup>/s  
 Worked penetration ..... ≥ 265 x 0.1 mm (up to NLGI Grade 2)

- 1) In case of attachments on movable machine parts or in case of strong vibrations (e.g. on pressing machines), the piston position of the feeder **must not** be the same as the direction of movement of the machine part.
- 2) Also available in corrosion-resistant design (chemically nickel-plated).
- 3) Larger dividing ratios are possible when consolidated.
- 4) Depending on volume index and viscosity or penetration and volumetric flow.

### Dimensions

Number of Sections	Dim. A [mm]	Dim. B [mm]	Dim. C [mm]	Complete weight [kg]
3	165	147	2 x 43 = 86	6.83
4	208	190	3 x 43 = 129	8.55
5	251	233	4 x 43 = 140	10.27
6	294	276	5 x 43 = 140	11.99
7	337	319	6 x 43 = 168	13.71
8	380	362	7 x 43 = 196	15.43
9	423	405	8 x 43 = 224	17.15
10	466	448	9 x 43 = 252	18.87

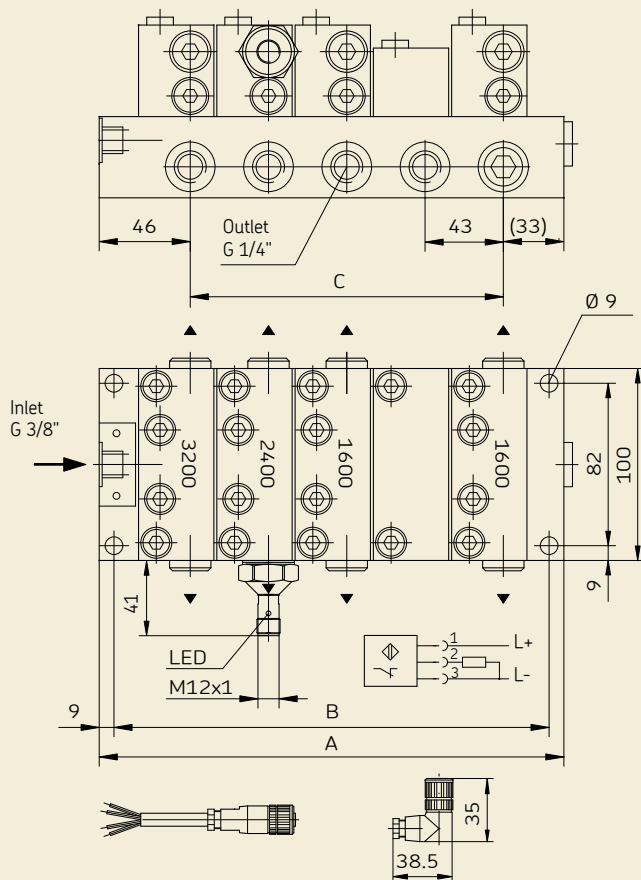
# PSG3 modular feeder with piston detector

for oil and grease, monitoring type P3



**PSG3 modular feeder with piston detector**

For further measurements, see "basic design", page 7



## Technical Data

### General information

For further technical data, see "PSG3 basic design", page 7

Type ..... hydraulically controlled  
 Ambient temperature range ..... - 15 to + 80 °C  
 Piston detector weight ..... 0.12 kg

### Hydraulic

Operating pressure max. .... 200 bar  
 Inlet volume flow ..... up to 6 l/min  
 Lubricant ..... Mineral oils, greases based on mineral oil,  
 environmentally friendly and synthetic oils and greases  
 Operating viscosity ..... > 12 mm<sup>2</sup>/s  
 Worked penetration ..... ≥ 265 x 0.1 mm (up to NLGI Grade 2)

### Electrical

#### Piston detector

design ..... with 4-point LED  
 Rated voltage ..... 10 to 36 V DC  
 Residual ripple ..... ≤10%  
 Load current ..... max. 100 mA  
 Protection class ..... IP 67  
 Outlet function ..... PNP contact

## Accessories

Designation	Order no.
Cable socket M12 x 1, 4-pin, without LED,	
without cable	179-990-371
with 5 m cable	179-990-600
with 10 m cable	179-990-603
angled, without cable	179-990-372
angled, with 5 m cable	179-990-601

The cable socket of the piston detector must be ordered separately. For technical data, please refer to leaflet no. 1-1730-EN, "Electrical Plug-In Connections".

## Spare parts

Designation	Order no.
Piston detector M22 x 1,5 with gasket	24-1884-2469
O-ring for piston detector	44-0411-2046

## Note

The piston detector is designed for a service life of approx. 10-15 million cycles. This value may be significantly exceeded depending on the application, external environmental influences, medium, pressure, and cycle speed.

Please consult the manufacturer if you have questions in this regard.



# PSG3 modular feeder with cycle indicator

for oil and grease, monitoring type ZY



### Technical Data

#### General

For further technical data, see "PSG3 basic design", page 7

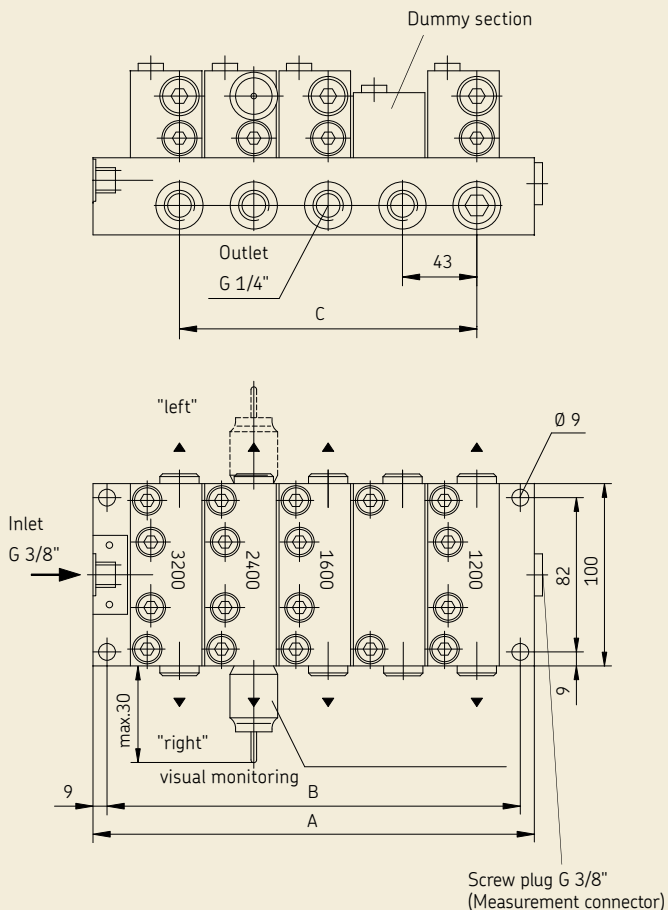
Type . . . . .hydraulically controlled  
 Ambient temperature range . . . . . - 15 to + 90 °C  
 Cycle indicator weight. . . . . 0.05 kg

#### Hydraulic

Operating pressure max. . . . . 200 bar  
 Inlet volume flow . . . . . up to 6 l/min  
 Lubricant . . . . . Mineral oils, greases based on mineral oil,  
 environmentally friendly and synthetic oils and greases  
 Operating viscosity . . . . . > 12 mm<sup>2</sup>/s  
 Worked penetration . . . . . ≥ 265 x 0.1 mm (up to NLGI Grade 2)

### PSG3 modular feeder with cycle indicator

For further measurements, see "basic design", page 7



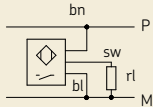
# PSG3 modular feeder with proximity switch

for oil and grease, monitoring type ZS

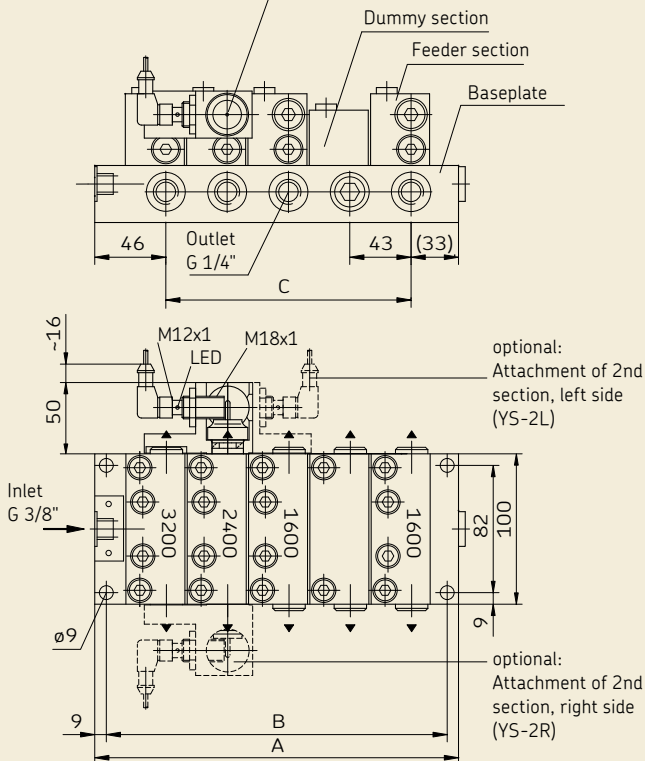


## PSG3 modular feeder with proximity switch

For further measurements, see "basic design", page 7



Attachment is made on left or right from the second to second-to-last section



### Technical Data

#### General

For further technical data, see "PSG3 basic design", page 7

Type . . . . . hydraulically controlled  
 Ambient temperature range . . . . . - 15 to + 70 °C  
 Proximity switch weight . . . . . 0.17 kg

#### Hydraulic

Operating pressure max. . . . . 150 bar  
 Inlet volume flow . . . . . up to 6 l/min  
 Lubricant . . . . . Mineral oils, greases based on mineral oil, environmentally friendly and synthetic oils and greases  
 Operating viscosity . . . . . > 12 mm<sup>2</sup>/s  
 Worked penetration . . . . . ≥ 265 x 0.1 mm (up to NLGI Grade 2)

#### Electrical

##### Proximity switch <sup>1)</sup>

Design . . . . . PNP with LED  
 Rated voltage . . . . . 10 to 30 V DC  
 Load current . . . . . max. 130 mA  
 Protection class . . . . . IP 67  
 Outlet function . . . . . NO-contact (electricity flows if switch damped)

1) Further designs available on request

### Accessories

Designation	Order no.
Cable socket M12 x 1, 4-pin, without LED	
without cable	179-990-371
with 5 m cable	179-990-600
with 10 m cable	179-990-603
angled, without cable	179-990-372
angled, with 5 m cable	179-990-601

### Spare parts

Designation	Order no.
Proximity switch	24-1884-2316
Housing proximity switch	44-0711-2593

#### Note

The cable socket of the proximity switch must be ordered separately. For technical data, please refer to leaflet no. 1-1730-EN, "Electrical Plug-In Connections".

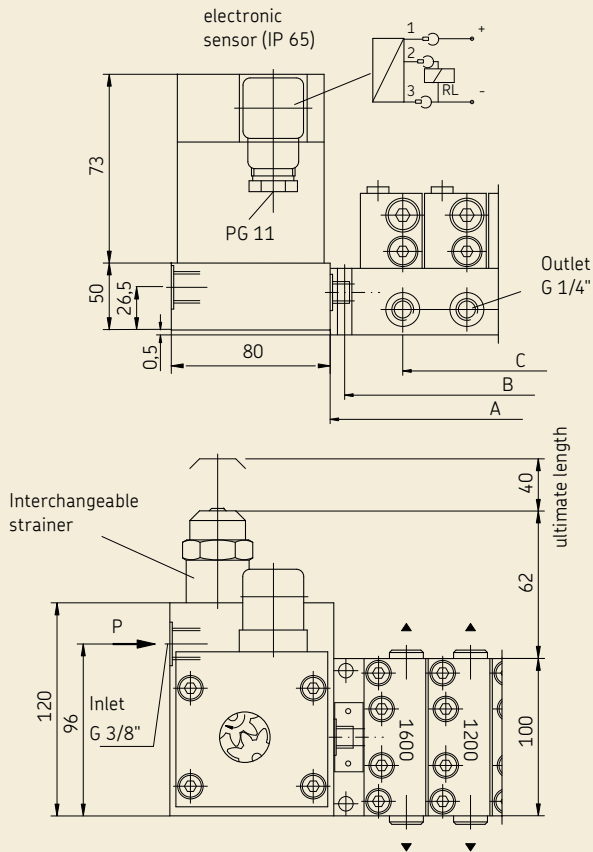
# PSG3 modular feeder with gear-type flow indicator

for oil, Attachment 10



## PSG3 modular feeder with gear-type flow indicator

For further measurements, see "basic design", page 7



### Technical Data

#### General

For further technical data, see "PSG3 basic design", page 7

Type . . . . . Gear motor  
 Ambient temperature range . . . . . - 15 to + 70 °C  
 Gear-type flow indicator weight . . . . . 0.9 kg

#### Hydraulic

Operating pressure max. . . . . 85 bar  
 Inlet volume flow . . . . . 2 l/min to 6 l/min  
 Lubricant . . . . Mineral oils, environmentally friendly and synthetic oils  
 Operating viscosity . . . . . 20 to 600 mm<sup>2</sup>/s  
 Gear-type flow indicator capacity. . . . . 4.6 cm<sup>3</sup>/rev  
 Filtering unit/interchangeable strainer . . . . . 0.3 mm

#### Electrical

##### Sensor

Type . . . . . Hall sensor (PNP technology)  
 Rated voltage . . . . . 24 V DC  
 Residual ripple . . . . . ≤10%  
 Protection class . . . . . IP 65  
 Proportionality factor . . . . . 4.6 cm<sup>3</sup>/pulse

### Accessories

#### Designation

Cable socket, DIN 43 650 type A (ISO 4400)  
 without cable and LED

#### Order no.

**179-990-034**

### Spare parts

#### Designation

Gear-type flow indicator with baseplate G 3/8"

#### Order no.

**24-1883-2234**

#### Note

The cable socket of the gear-type flow indicator must be ordered separately. For technical data, please refer to leaflet no. 1-1730-EN, "Electrical Plug-In Connections".

# PSG3 modular feeder with flow regulator

for oil, attachment 02



### Technical Data

#### General

For further technical data, see "PSG3 basic design", page 7

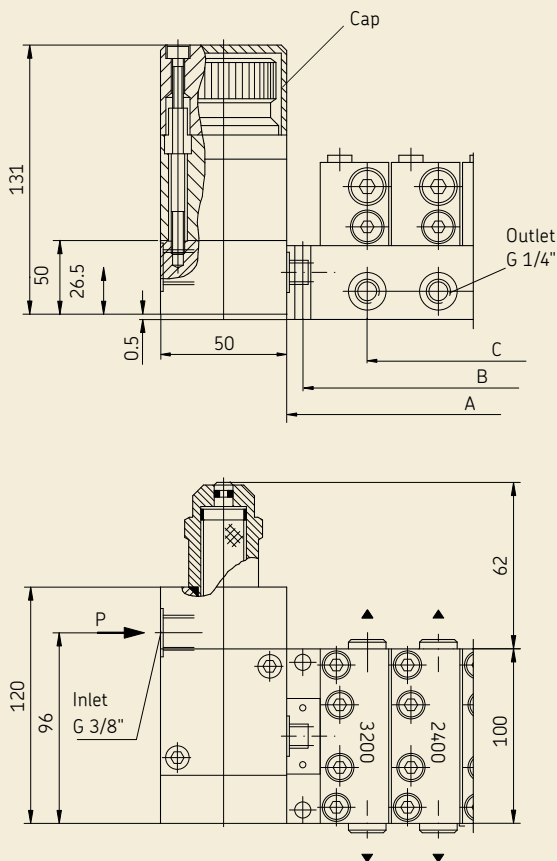
Type ..... 2-way flow control valve  
 Ambient temperature range ..... - 15 to + 75 °C  
 Flow regulator weight ..... 1.3 kg

#### Hydraulic

Operating pressure max. .... 200 bar  
 Inlet volume flow ..... 0.1 to 6 l/min  
 Lubricant . . . . Mineral oils, environmentally friendly and synthetic oils  
 Operating viscosity ..... 12 - 350 mm<sup>2</sup>/s  
 Filtering unit/interchangeable strainer ..... 0.3 mm  
 Scale graduation ..... 1 - 10

### PSG3 modular feeder with flow regulator

For further measurements, see "basic design", page 7



### Spare parts

#### Designation

#### Order no.

Baseplate G 3/8" for flow regulator	24-1883-2238
Flow regulator up to 0.6 l/min	24-1883-2211
Flow regulator up to 1.6 l/min	24-1883-2201
Flow regulator up to 2.5 l/min	24-1883-2024
Flow regulator up to 4.0 l/min	24-1883-2025
Flow regulator up to 6.0 l/min	24-1883-2083

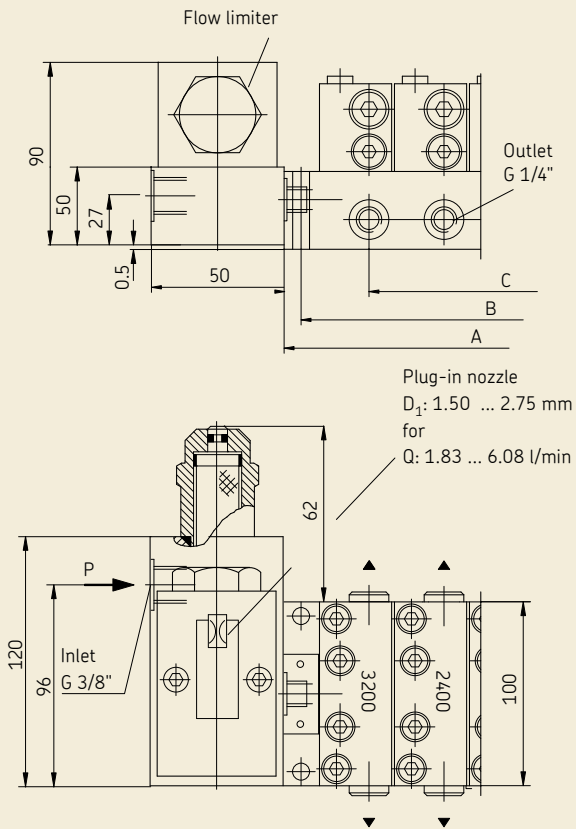
# PSG3 modular feeder with SP/SMB8 flow limiter

for oil, attachment 07



**PSG3 modular feeder with SP/SMB8 flow limiter**

For further measurements, see "basic design", page 7



**Technical Data**

**General**

For further technical data, see "PSG3 basic design", page 7

Type . . . . . 2-way flow control valve  
 Ambient temperature range . . . . . - 15 to + 90 °C  
 Flow limiter weight . . . . . 1.1 kg

**Hydraulic**

Operating pressure max. . . . . 200 bar  
 Inlet volume flow . . . . . 1.8 - 6 l/min  
 Lubricant . . . . . Mineral oils, environmentally friendly and synthetic oils  
 Operating viscosity . . . . . 20 to 600 mm<sup>2</sup>/s  
 Filtering unit/interchangeable strainer . . . . . 0.3 mm

**Spare parts**

**Designation**

**Order no.**

Flow limiter with baseplate G3/8"	<b>24-1883-2230</b>
Flow limiter with baseplate UNF	24-1883-2244

**See plug-in nozzle table for SP/SMB8 flow limiter**

Nominal volumetric flow <sup>1)</sup> [l/min]	Nozzle [Ø mm]	Nozzle index	Spare part complete plug-in nozzle D <sub>1</sub> Order no.
1.83	1.50	150	<b>24-0455-2594</b>
1.96	1.55	155	<b>24-0455-2595</b>
2.09	1.60	160	<b>24-0455-2596</b>
2.22	1.65	165	<b>24-0455-2597</b>
2.36	1.70	170	<b>24-0455-2598</b>
2.50	1.75	175	<b>24-0455-2599</b>
2.64	1.80	180	<b>24-0455-2600</b>
2.79	1.85	185	<b>24-0455-2601</b>
2.94	1.90	190	<b>24-0455-2602</b>
3.10	1.95	195	<b>24-0455-2603</b>
3.25	2.00	200	<b>24-0455-2604</b>
3.42	2.05	205	<b>24-0455-2605</b>
3.58	2.10	210	<b>24-0455-2606</b>
3.75	2.15	215	<b>24-0455-2607</b>
3.93	2.20	220	<b>24-0455-2608</b>
4.10	2.25	225	<b>24-0455-2609</b>
4.29	2.30	230	<b>24-0455-2610</b>
4.47	2.35	235	<b>24-0455-2611</b>
4.66	2.40	240	<b>24-0455-2612</b>
4.85	2.45	245	<b>24-0455-2613</b>
5.05	2.50	250	<b>24-0455-2614</b>
5.25	2.55	255	<b>24-0455-2615</b>
5.45	2.60	260	<b>24-0455-2616</b>
5.66	2.65	265	<b>24-0455-2617</b>
5.87	2.70	270	<b>24-0455-2618</b>
6.08	2.75	270	<b>24-0455-2619</b>

1) at a service viscosity of 300 mm<sup>2</sup>/s

## Accessories and spare parts, PSG3 modular feeder

				Accessories
Designation	Number of sections	Volume per cycle and outlet [mm <sup>3</sup> ]	Order no.	Weight [kg]
<b>Baseplate complete</b>	3		24-0714-3310	1.60
Inlet thread G 3/8"	4		24-0714-3311	2.02
Outlet thread G 1/4"	5		24-0714-3312	2.42
	6		24-0714-3313	2.83
	7		24-0714-3314	3.24
	8		24-0714-3315	3.64
	9		24-0714-3316	4.08
	10		24-0714-3317	4.54
<b>Baseplate complete</b>	3		24-0714-2290	1.60
Inlet thread 3/4-16 UNF	4		24-0714-2291	2.02
Outlet thread 9/16-18 UNF	5		24-0714-2292	2.42
	6		24-0714-2293	2.83
	7		24-0714-2294	3.24
	8		24-0714-2295	3.64
	9		24-0714-2296	4.08
	10		24-0714-2297	4.54
<b>Feeder section complete</b>		800	24-2151-4240	1.31
prepared for the		1200	24-2151-4244	1.31
Piston detector assembly		1600	24-2151-4241	1.31
Monitoring type P3		2400	24-2151-4242	1.31
		3200	24-2151-4243	1.31
<b>Complete feeder cycle indicator right <sup>1)</sup></b>		800	24-2151-4250	1.43
Monitoring type ZY (not on the first or the last section)		1.200	24-2151-4258	1.43
		1600	24-2151-4251	1.43
		2400	24-2151-4252	1.43
		3200	24-2151-4253	1.43
<b>Complete dummy section without screw plug for baseplate</b>			24-2151-4211	0.50

1) Feeder section with cycle indicator is supplied in the "plunger rod right" design.  
Retrofitting to the "plunger rod left" design is described on page 15.

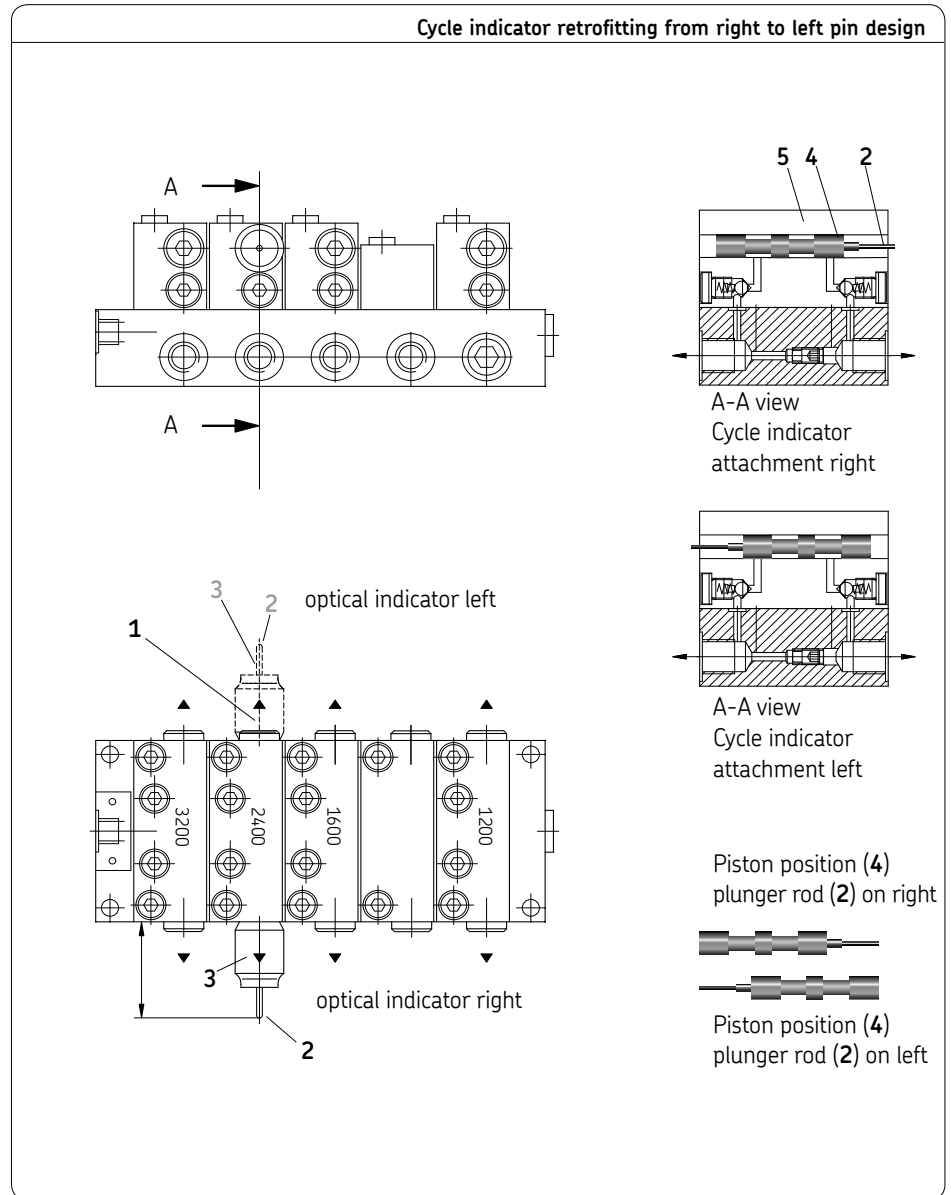
		Spare parts
Designation		Order no.
<b>Piston stop screw,</b>		44-1855-2106
<b>Screw plug</b> for baseplate outlet G 1/4"		DIN 908-R1-4-5.8
<b>Washer for screw plugs</b> G 1/4"		DIN 7603-A14x18-CU
<b>Screw plug</b> for baseplate outlet with gasket (Measurement connector) (3/4-16 UNF)		24-1855-2027
<b>Screw plug</b> for baseplate outlet with gasket (9/16-18 UNF)		24-1855-2028
<b>Threaded pin for feeder baseplate</b>		95-0812-0915
<b>Baseplate O-ring</b> (9 O-rings are required for one section)		96-9026-0062

## Retrofitting instructions Cycle indicator

### Note!

To avoid damages pressure must not be applied to the feeder section during the retrofitting described below. Retrofitting the feeder section from a right cycle indicator design to a left cycle indicator design should therefore be performed before mounting the feeder section on the baseplate.

- Loosen up and remove screw plug (1) (left)
- **Push** plunger rod (2) of of the cycle indicator (right) **into cycle indicator housing (3)** (using finger)
- Carefully remove piston (4) with plunger rod (2) from left side of section housing (5)
- Loosen up and remove cycle indicator (3) (hexagon socket screw SW4) and install in left side
- ☞ Do not bend during subsequent installation of piston (4) and plunger rod and do not shear off O-rings.
- Turn piston (4) with plunger rod (2) 180° and carefully install on the right side of section housing (5)
- Carefully insert the plunger rod (2) into the cycle indicator (3)
- Install the screw plug (1) on the right side



# Bridge design for PSG3 modular feeder

Crossporting

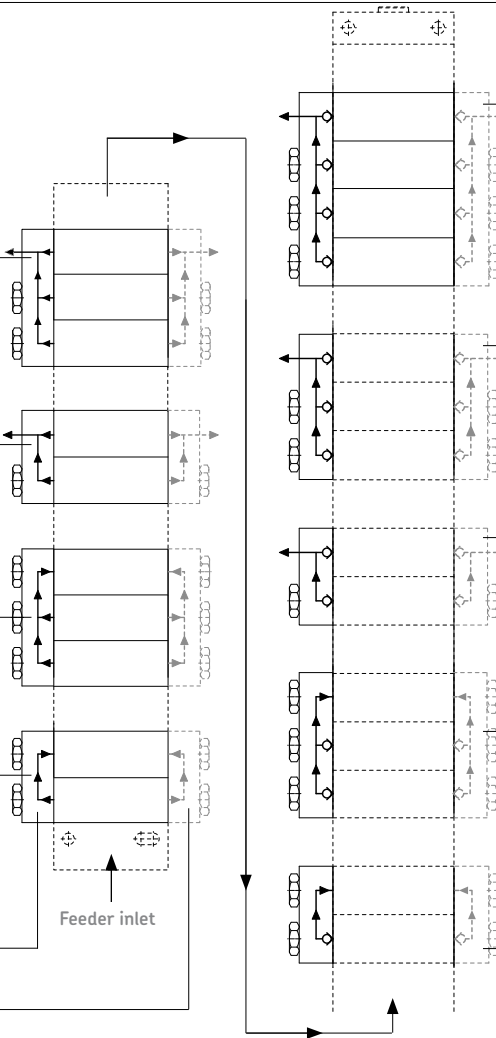
**Designation**  
3-bridge, with one outlet  
**Order no.**  
G 1/4" 24-2151-3737

**Designation**  
2-bridge, with one outlet  
**Order no.**  
G 1/4" 24-2151-3736

**Designation**  
3-bridge, without outlet  
**Order no.**  
G 1/4" 24-2151-3735

**Designation**  
2-bridge, without outlet  
**Order no.**  
G 1/4" 24-2151-3734

Bridge, installation position left  
or  
Bridge, installation position right



**Designation**  
4-bridge, with one outlet,  
with check valves  
**Order no.**  
on request

**Designation**  
3-bridge, with one outlet,  
with check valves  
**Order no.**  
G 1/4" 24-2151-3738  
UNF 24-2151-4143

**Designation**  
2-bridge, with one outlet,  
with check valves  
**Order no.**  
G 1/4" 24-2151-3396  
UNF 24-2151-3753

**Designation**  
3-bridge, without outlet,  
with check valves  
**Order no.**  
G 1/4" 24-2151-3393  
UNF 24-2151-4142

**Designation**  
2-bridge, without outlet,  
with check valve  
**Order no.**  
G 1/4" 24-2151-3392  
UNF 24-2151-4141



## Notes

# Key to order codes

## Design

**Example:** **PSG 3 /10 15 / P3-4R /07 A 1 - 3200 - 2400L - X - 1600-1200L-2400R-1200-1200 ...**

PSG3 Progressive modular feeder on baseplate

Size 3: max. 6 l/min

Baseplate size

- 03 = for 3 sections (max. 6 outlets)
- 04 = for 4 sections (max. 8 outlets)
- 05 = for 5 sections (max. 10 outlets)
- 06 = for 6 sections (max. 12 outlets)
- 07 = for 7 sections (max. 14 outlets)
- 08 = for 8 sections (max. 16 outlets)
- 09 = for 9 sections (max. 18 outlets)
- 10 = for 10 sections (max. 20 outlets)

Number of working outlets

03 = 3 outlets open



20 = 20 outlets open (1 outlet usable with bridges)

Monitoring type

- 00 = without
- P3 = piston detector, 3-pin connection
- ZY = cycle indicator <sup>2)</sup>
- ZS = cycle indicator with proximity switch <sup>2)</sup>

Installation position of the monitoring system

- 1R = right side on first section
- 1L = left side on first section
- 2R = right side on second section



- OR = right side on 10th section
- OL = left side on 10th section

### Description of the order example

Progressive feeder, type PSG3 with a max. flow rate of 4.1 l/min (PSG3), baseplate for 10 sections (10), with 15 occupied outlets (15), with monitoring by 3-pin piston detector (P3), installed on the right side of the 4th section (4R), with upstream flow limiter (07), change version A (A), G3/8" inlet thread (1), 1st section with 3200 mm<sup>3</sup>/stroke (3200), 2nd section 2400 mm<sup>3</sup>/stroke, right outlet closed (2400L), dummy section (X), 4th section with 1600 mm<sup>3</sup>/stroke (1600), 5th section with 1200 mm<sup>3</sup>/stroke, right outlet closed (1200L), 6th section with 2400 mm<sup>3</sup>/stroke, left outlet closed (2400R), the further sections (section 7 to 10) with 1200, 1200, 800 and 800 mm<sup>3</sup>/stroke (1200-1200-800-800). The bridges, check valves, screw unions as well as test or measurement connector on the following pages have been allocated to the progressive feeder, as seen from the inlet.

1- to max. 10 sections →

4<sup>th</sup> section <sup>1)</sup>  
1600 mm<sup>3</sup>/stroke  
left outlet: 1600 mm<sup>3</sup>/cycle  
right outlet: 1600 mm<sup>3</sup>/cycle

Dummy section  
left and right outlet closed

2<sup>nd</sup> section <sup>1)</sup>  
Baseplate:  
2400 mm<sup>3</sup>/stroke  
left outlet: 2 x 2400 mm<sup>3</sup>/cycle  
right outlet: closed

1<sup>st</sup> section <sup>1)</sup>  
Baseplate:  
3200 mm<sup>3</sup>/stroke  
left outlet: 3200 mm<sup>3</sup>/cycle  
right outlet: 3200 mm<sup>3</sup>/cycle

- 1 = Basic design:  
Inlet G 3/8"  
Outlet G 1/4"
- 2 = UNF version:  
Inlet G 3/4-16 UNF - thread  
Outlet 9/16-18 UNF - thread

A = change version

### Attachments

- 00 = without attachments
- 02 = with flow regulator
- 07 = with flow limiter SP/SMB8
- 08 = with 4/2-directional solenoid valve, de-energized, continuity to feeder open P-A
- 09 = with 4/2-directional solenoid valve, de-energized, continuity to feeder closed P-B
- 10 = with gear-type flow indicator
- 11 = with flow limiter and gear-type flow indicator
- 12 = with flow regulator and gear-type flow indicator
- 13 = with 2/2-directional solenoid valve, de-energized closed

1) The sections are available in volumes per outlet and cycle of 800, 1200, 1600, 2400 and 3200 mm<sup>3</sup> (volume index).

2) Attachment is made on the left or right from the second to next to last section.

# Key to order codes

## Attachments and screw unions

**Connections - left feeder side**

Outlet open ← / outlet closed →

Bridge **B**

Check valve **RV**

Overpressure indication [bar] **50 / 100 / 150 / 200**

Outlet screw union  
Outlet- Ø mm **6 / 8 / 10 / 12**

**customer-specific screw unions or bridges**

**Test and measurement connector (inlet pressure)**

Measurement connector **MA** or  
Pressure gauge max. pressure indication [bar] **160**

**Connections - right feeder side**

Outlet open → / outlet closed ←

Bridge **B**

Check valve **RV**

Overpressure indication [bar] **50 / 100 / 150 / 200**

Outlet screw union  
Outlet- Ø mm **6 / 8 / 10 / 12**

**customer-specific screw unions or bridges**

	Order No.							Order No.
10		<b>10</b>					←	
9		<b>10</b>					←	
8		<b>12</b>					←	
7		<b>12</b>					←	
6					<b>B</b>		→	
5	<b>24-2151-3392</b>				<b>RV</b>	<b>B</b>	←	
4		<b>12</b>					←	
3							→	
2		<b>12</b>					←	
1		<b>15</b>					←	

**Comments**

**Attachments**

**Note!**  
When attaching a flow limiter, add the order number of the plug-in nozzle, (see page 13).  
Order no. **24-0455-2609**

**16** — Inlet screw union  
Inlet - Ø mm **8 / 10 / 12 / 15/16**

customer-specific screw unions

Inlet screw union = with Ø 16 mm (**16**),

Attachments = with plug-in nozzle for the flow limiter for a volumetric flow of 4.1 l/min (**24-0455-2609**)

1st section = outlet screw union on both sides with Ø 15 mm (**15**), right side with additional check valve (**RV**)

2nd section = outlet screw union on left with Ø 12 mm (**12**), right side closed (480L),

3rd section = dummy section (**X**), closed on both sides,

4th section = outlet screw union on both sides with Ø 10 mm (**10**),

5th section = outlet left bridge (**B**) and check valve (**RV**) (bridge between 5th (1200L) and 6th section (2400R) (**24-2151-3392**) -see page 17), outlet right closed (2400L),

6th section = outlet left bridge (**B**), outlet screw union with Ø 15 mm (**15**),

7th section = outlet screw union on both sides with Ø 12 mm (**12**),

8th section = outlet screw union on both sides with Ø 12 mm (**12**), right with overpressure indication max. 100 bar (**100**),

9th-10th section = screw unions on both sides Ø 10 mm (**10**).

On baseplate outlet, pressure gauge with max. pressure indication 160 bar (**160**).

Order Form     Inquiry Form

Please create an order code using the sample below.

**Note!** The actual order number will be allocated after the order has been placed.

### Configuration - order code PSG3

PSG 3 /10 15 / P3-4R /07 A 1 - 3200 - 2400L - X -1600-1200L-2400R-1200-800-800...

PSG3 / .. ... / ... - ... / ... A .. - .... - .... - .... - .... - .... - .... - .... - .... - .... - ....

**Connections - left feeder side**

Outlet open ← / outlet closed →

Bridge B

Check valve RV

Overpressure indication [bar] 50 / 100 / 150 / 200

Outlet screw union  
Outlet- Ø mm 6 / 8 / 10 / 12

customer-specific screw unions or bridges

Test and measurement connector (inlet pressure)

Measurement connector MA or  
Pressure gauge max. pressure indication [bar] 160

**Connections - right feeder side**

Outlet open → / outlet closed ←

Bridge B

Check valve RV

Overpressure indication [bar] 50 / 100 / 150 / 200

Outlet screw union  
Outlet- Ø mm 6 / 8 / 10 / 12

customer-specific screw unions or bridges

	Order No.	PSG	Order No.
10		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
9		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
8		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
7		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
6		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
5		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
4		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
3		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
2		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	
1		⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	

**Attachments**

↑

**Note!**  
When attaching a flow limiter, add the order number of the plug-in nozzle, (see page 13).

Order no.

Inlet screw union  
Inlet - Ø mm 8 / 10 / 12 / 15 / 16

customer-specific screw unions

**Comments**

Company: ..... Address: ..... Reference: .....	Name: ..... Function/dept.: ..... Phone: ..... Fax/E-Mail: .....
--	---

## PSG3 Modular Feeder

The configuration of a PSG3 progressive feeder is customer-specific. The most important data for the generation of an order number are summarized on pages 18 to 19. As an illustration, an example of an order has been added.

### Please read the two pages thoroughly!

An order / inquiry form is located on the inside of this leaflet.

Please fill this in according to the sample, whereby the blank line PSG3/... (configuration) must be completed according to the sample on page 18 and the graphic below according to the sample on page 19.

### Note!

The configuration of a modular feeder (and thereby its order code) always starts at the baseplate inlet section.

**Copy the order sheet, fill it out and send it to the following address:**

### SKF Lubrication Systems Germany AG

2. Industriestrasse 4  
68766 Hockenheim  
Germany

Tel. +49 (0)62 05 27-0  
Fax +49 (0)62 05 27-101

[www.skf.com/lubrication](http://www.skf.com/lubrication)

**Please complete your address here:**

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Reference: \_\_\_\_\_

Name: \_\_\_\_\_

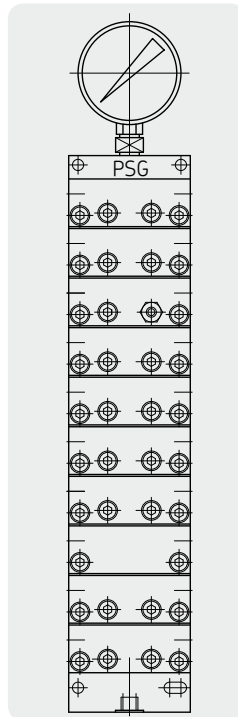
Function/dept.: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

## Additional amendments or remarks:



**Order No. 1-3014-EN**

Subject to change without notice! (07/2009)

**Important product usage information**

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 (1013 mbars) 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.

**Brochure note**

- 1-3011-EN Progressive modular feeder PSG3(PM)
- 1-3013-EN Progressive modular feeder PSG2
- 1-3015-EN Progressive sectional feeder VP
- 1-3016-EN Progressive sectional feeder VPK
- 1-3017-EN Progressive block feeder VPB
- 1-3029-EN Progressive block feeder SPVS

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