

# Sectional feeder VPK

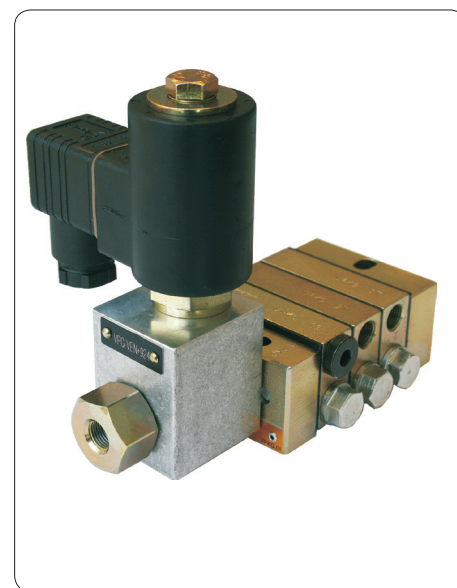
Progressive sectional feeder for use in oil or grease lubrication systems



Progressive sectional feeders of the VPKM/VPKG series are used in small circulating oil lubrication systems as well as in grease and



oil total loss lubrication systems. Fields of application are, for example, metal-forming machines, vehicles, production systems in



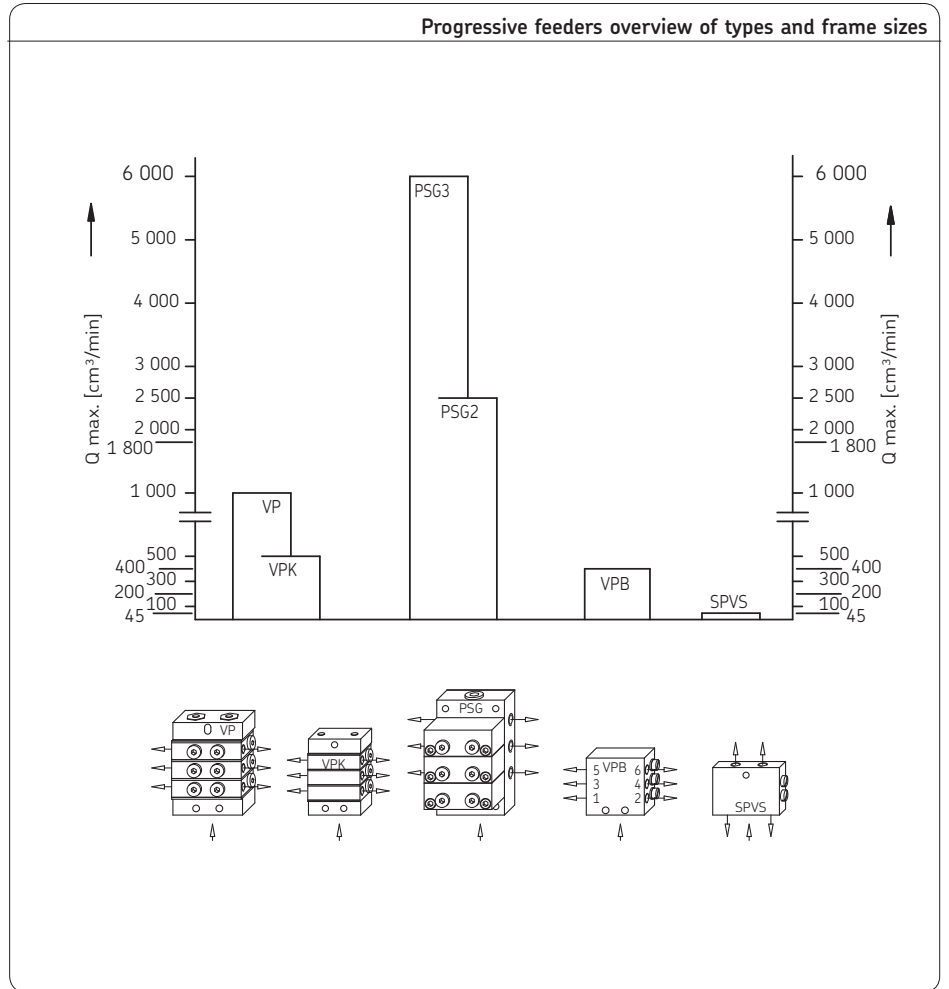
the automotive industry as well as packaging and printing machines.

## Advantages

- Usable for the widest possible range of applications with regards to mode of operation (continuous/intermittent) and lubricants
- Central function monitoring of all feeder ports with a minimum of effort
- Number of cycles: max. 200/min
- Available in metric design as VPKM or in inch design as VPKG
- Accurate lubricant distribution, also with back pressure, achieved by special fitted pistons
- The feeders are available with a maximum of 20 outlets
- Maximum number of lubrication points (approximately 100 per system); several hundred for ring-line systems with in-line metering pumps
- Flexible system design due to metering sections with variable metering volumes. Metering ratios from 1:1 to 1:12 without additional external crossportings
- Pressure range: 30 to 200 bar for oil circulating systems; 300 bar for grease systems

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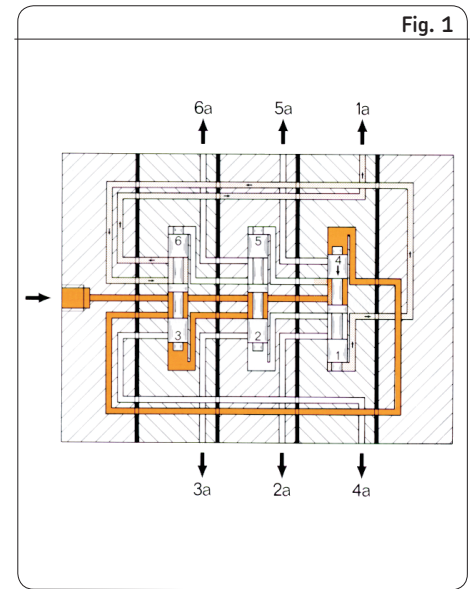
See important product usage information the on back cover.

## General information

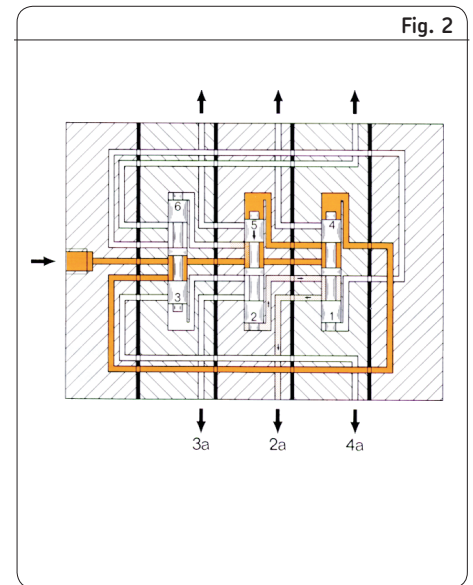
The sectional feeder VPK, which belongs to the progressive feeder range, is available in the VPKM (metric threaded connectors) and VPKG (inch threaded connectors) designs. With their metering sections, VPKM and VPKG designs cover a metering volume per outlet and cycle of 0.05 cm<sup>3</sup> (twin section) to 0.6 cm<sup>3</sup> (single section). The inlet of the feeder is located at an inlet section, the outlets are at the downstream feeder sections. The delivery ducts are sealed by elastic seals. An end section is located downstream of the last feeder section. All sections are interconnected with tie-rods. They seal the feeder assembly. The volumetric flow, which is sent via a tube, is compulsory 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 sectional feeder can be checked by monitoring any piston with a cycle indicator or a piston detector. The optional add-on check valves offer high functional reliability (for high or different back pressures). They also provide an accurate feed and safe blocking behavior, even for internal crossporting.

## Operation sectional feeder

The task of the progressive feeder is to distribute consecutively specified portions of the pressure-fed lubricant (grease or oil) to the connected lubricant points. The discharge of the lubricant continues as long as it is pressure-fed to the progressive feeder. The specified portions are generated through the piston movement. Two lubricant outlets on the two end positions of the piston travel are allocated to each piston. The number of pistons within a feeder is variable. If lubricant is pressure-fed, the pistons of a feeder move in turn to their end position. The piston movement displaces the pre-metered portion of lubricant downstream from the piston to the corresponding downstream outlet. The movement of a piston can only start after the upstream piston has been moved to its end position. If all pistons are in their left or right end position, internal connecting bores in the feeder ensure defined and continued running of the pistons. When all pistons have been moved once to the left as well as to the right end position, all connected lubricant points have been supplied once with the preset lubricant quantity. The portions for both outlets are determined by the diameter and the travel of the piston. Selection of the required portion is made during the feeder's design. A subsequent change of the portions is only possible through a modification of the feeder.



*Piston end 4 is under pump pressure; piston end 1 has discharged to outlet 1a. Through the movement of piston 1/4, the connection main line - piston end 5 h - as been released.*



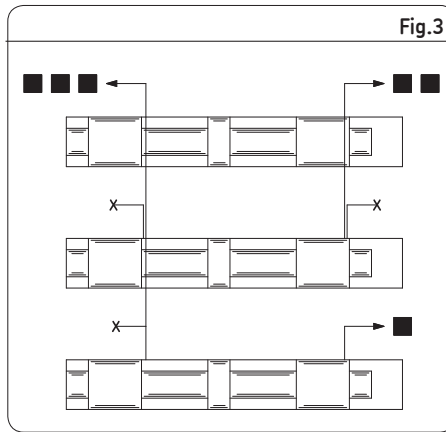
*Piston end 5 has been actuated and piston end 2 delivers via outlet 2a. Next, piston end 6 will be actuated - and so on.*

### Information on the VPK design

The general criteria for the design of progressive feeders also apply without restrictions to the sectional feeder VPK. The most important criterion is the number of cycles (stroke rate). They should be held as low as possible by selecting high-volume feeders. To avoid damages a maximum value of 200 cycles/min should not be exceeded. Thus, pressure losses and noise level will also be reduced. In case of an installation on movable machine parts or in case of strong vibrations (e.g. on grease guns), the piston position of the feeder should not correspond with the direction of movement of the machine part. To improve the metering accuracy and the functional reliability, check valves should be installed at the outlets when using greases. For the VPK feeder, the minimum number of feeder sections is 3, the maximum number is 10.

### Quantity distribution

Sectional feeders distribute an amount delivered by a pump to several outlets while the feeder determines the volumetric ratio. The different output quantities within a feeder are achieved by the use of various piston diameters or the joining of two or more outlets. The indicated lubricant quantities result from the piston diameter and the maximum travel of the piston. Depending on the system design, the volume flow may vary by 40%. For master feeder/secondary feeder systems, check valves must be used on the feeder outlets of the master feeder. For the sectional feeders VPKM and VPKG, sections for two connections (T = twin) or for one connection (S = single) are available. In case of single sections, the two opposite outlets are connected internally, whereby one outlet is closed. For the VPK feeder, it is also possible to join two neighboring outlets after the feeders have been completely installed.



**Internal connection (crossporting) of the outlets on each side**

### Operating pressure and temperature

The maximum permissible operating pressure of the sectional feeder depends on the monitoring type or the upstream attachments. In each case, the lower component is decisive. The respective operating temperature range specified under technical data has to be maintained.

### Tightening torques

During the installation of the VPK feeder, consisting of inlet section, inlet plate, twin and single sections, separator plates as well as end plate and end section, the following tightening torques have to be adhered to for the tie-rods and nuts:

- Tightening torque:**  
 Tie-rod (2x) each 2,4 Nm  
 Nut for tie-rod M6 (2x) each 9,0 Nm

### Monitoring

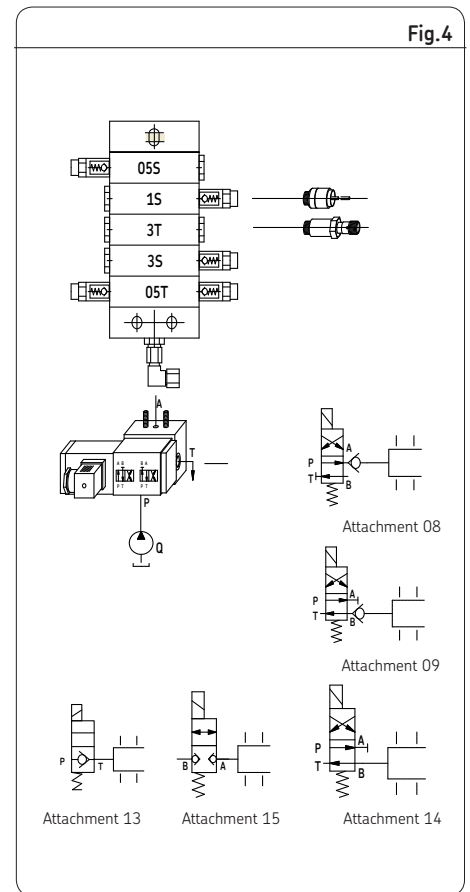
All standard sections can be monitored directly by means of a piston detector (compare parameters piston detector, monitoring type P2, P3). Piston detector can be retrofitted. Furthermore, the piston movement can be performed by visual stroke monitoring, monitoring type ZY.

Both monitoring models can be used for oil as well as for grease.

### Attachments

The modular structure of the sectional feeder becomes apparent when you consider the range of attachments. Optionally, the sectional feeder VPK can be equipped with:

- upstream 2/2 directional solenoid valve, (VPKG only), attachment 13, for oil
- upstream 2/2 directional solenoid valve, attachment 15, for grease
- upstream 4/2 directional solenoid valve, attachment 08/09/14, for oil (see Figure 04).



**Monitoring equipment and attachments**

## Sectional feeder VPK

### Consolidation of outlets

Two neighboring outlets are joined from the end section towards the inlet section. The plug <sup>1)</sup> of the outlet nearest to the end section must be unscrewed and the outlet bore must be sealed with a screw plug. The fluid of the two outlets will then flow out of the outlet near the inlet section.

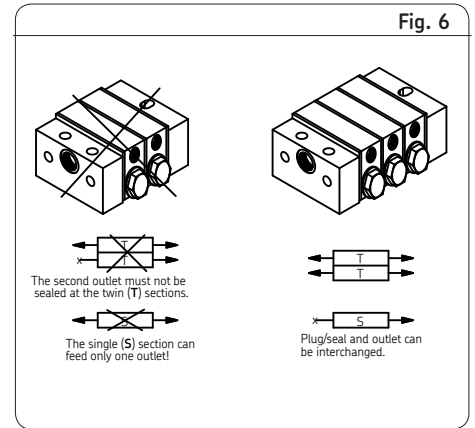
#### Note:

To avoid damages the feeder section behind the inlet section must not be closed!

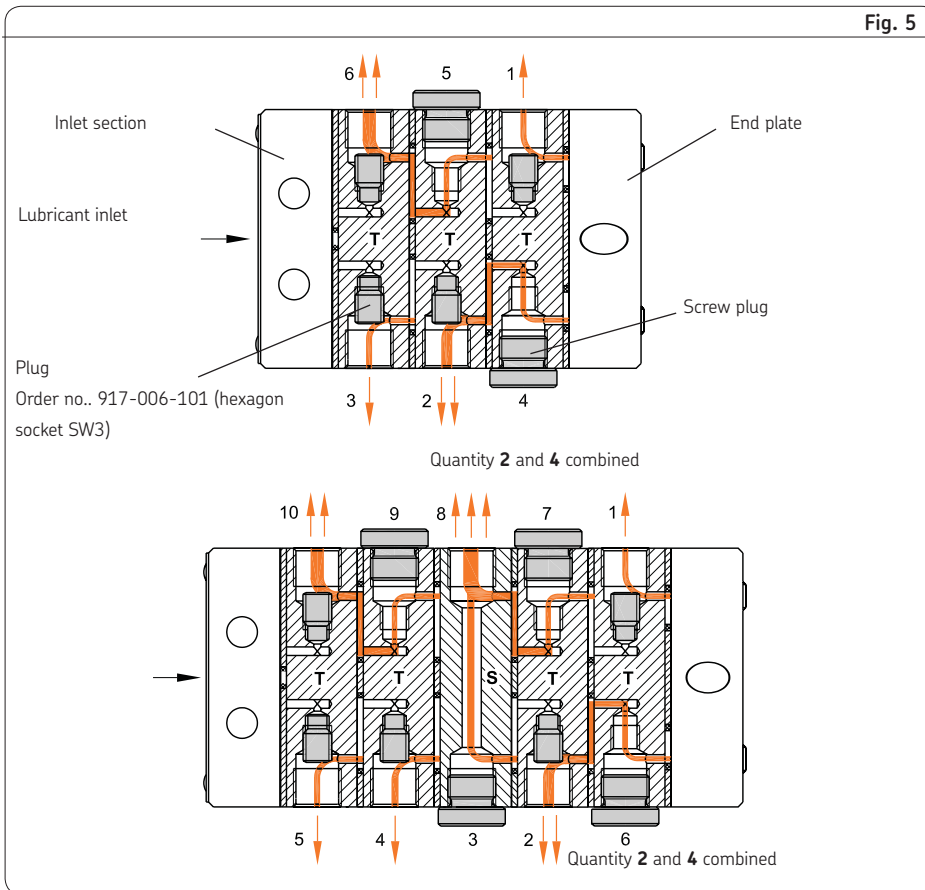
#### Important!

To avoid damages it is absolutely essential, that the plug <sup>1)</sup> has been removed before screwing in the screw plug, otherwise the feeder may block.

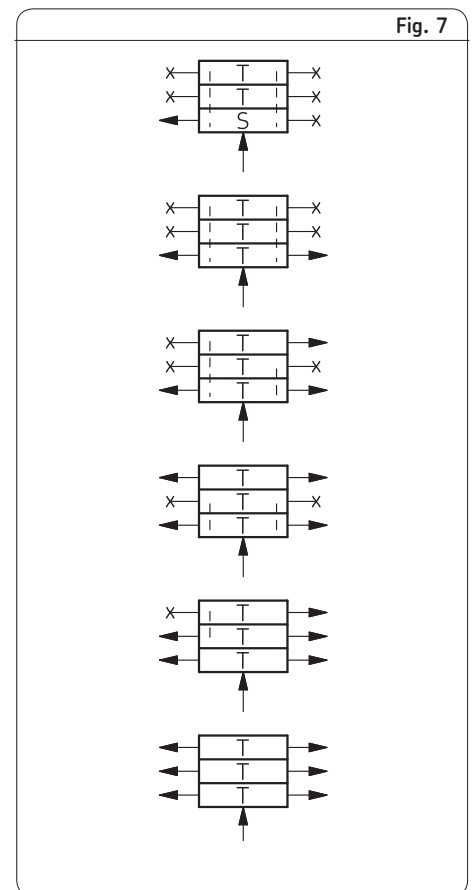
This consolidation of outlets can be combined, as long as there is no single section in-between. The single section completes the group formation; a new group formation can only be carried out behind the single section. If it turns out that the fluids of two neighboring outlets have to be separated again (e.g. due to an additional lubrication point), this will be a simple matter. The only thing to do is to screw in a plug <sup>1)</sup> and to connect the previously closed outlet to the new lubrication point.



1) Plug, order no. 917-006-101



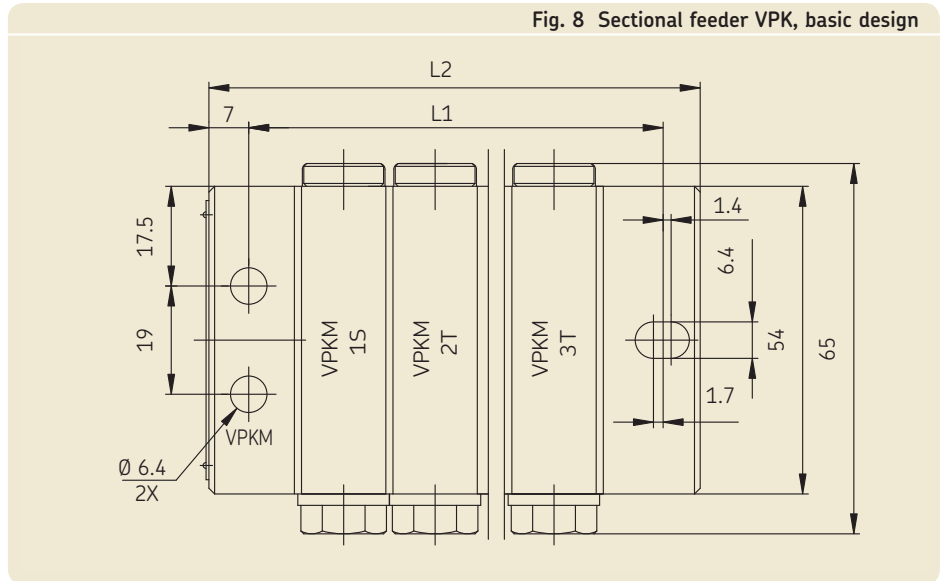
Example for the consolidation of several neighboring outlets



Example of the variations for 1 to 6 lubrication points on a 3-section feeder

# Sectional feeder VPK, basic design

for oil or grease, without attachments, without monitoring



Type	Number of Feeder sections	Number of possible outlets	Dimensions	
			L2 [mm]	L1 [mm]
VPKM-3 / VPKG-3 <sup>1)</sup>	3	6	81,9	68,4
VPKM-4 / VPKG-4	4	8	98,1	84,6
VPKM-5 / VPKG-5	5	10	114,3	100,8
VPKM-6 / VPKG-6	6	12	130,5	117,0
VPKM-7 / VPKG-7	7	14	146,7	133,2
VPKM-8 / VPKG-8	8	16	162,9	149,4
VPKM-9 / VPKG-9	9	18	179,1	165,6
VPKM-10 / VPKG-10	10	20	195,3	181,8

*1) This progressive feeder must be installed with check valves*

Selection of the feeder sections for the required lubricant quantity		
Quantity per cycle and outlet (cm <sup>3</sup> )	Number of Outlets	Description of the sections
0,05	2	05T
0,10	2	1T
0,20	2	2T
0,30	2	3T
0,10	1	05S
0,20	1	1S
0,40	1	2S
0,60	1	3S

Technical data	
Style	hydraulically controlled
Mounting position	discretionary
Screw connection	I/O: VPKM = M10x1 VPKG = G1/8"
Ambient temperature range	-25 to + 90 °C
Feeder sections	see table
Occupied outlets with internal connections	.1 to 19
<b>Material</b>	
Inlet plate, separator plate and end plate	Steel, tinned/nitrile-butadiene rubber
Sections (piston plates)	Steel, tinned
<b>Hydraulic</b>	
Operating pressure max.:	Oil 200 bar, grease 300 bar
Volume per outlet and cycle	see table
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 × 0.1 mm (up to NLGI grade 2)

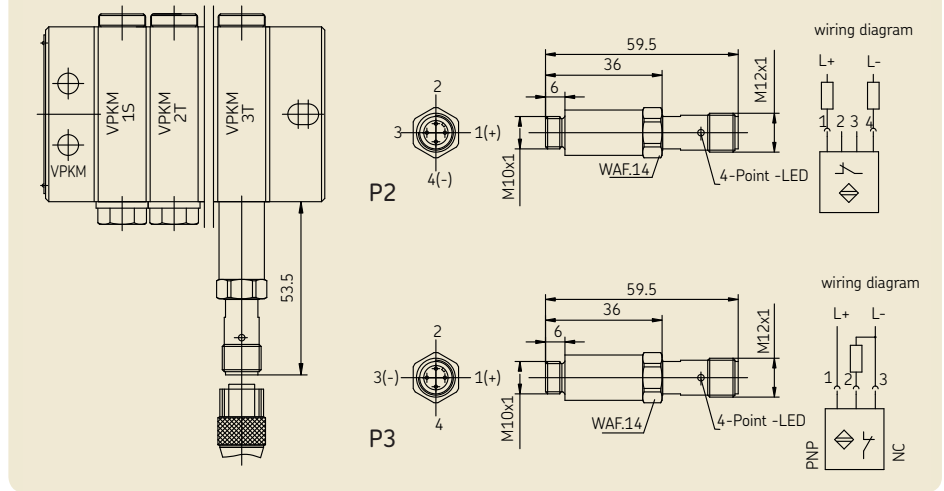
Accessories		
<b>Male couplings</b>		
Designation		
Inlet	for tube ø 6, M10x1:	Order no.
	for tube ø 8,	406-423
	for tube ø 10,	441-008-511
		410-443
Inlet	for tube ø 6, G1/8":	406-403W
	for tube ø 8,	408-423W
	for tube ø 10,	410-443W
Outlets	for tube ø 4, M10x1:	404-403
	for tube ø 6,	406-403
	for tube ø 8,	441-008-511
Outlets	for tube ø 4, G1/8":	404-403W
	for tube ø 6,	406-403W
	for tube ø 8,	408-403W
Plug-in connector VPM for tube ø 6, M		451-006-518-VS
Plug-in connector VPM for tube ø 6, G		406-423W-VS
Screw plug for unused outlets:		
	VPKM (M10x1)	466-431-001
	VPKG (G1/8")	466-419-001

# Sectional feeder VPK with piston detector

for oil or grease, monitoring types P2 and P3



Fig. 9 Sectional feeder VPK with piston detector



### Technical data

Sectional feeder VPK  
For further technical data, see "VPK Basic Design", page 6

#### Electric

#### Piston detector . . . . . 2-pin (P2)

(short-circuit protection, intermittent and protected against polarity reversal, NC contact)

- Internal thread . . . . . M10x1
- Design . . . . . with 4-point LED, 2-pin connection
- Ambient temperature range . . . - 25 to + 80 °C
- Rated voltage . . . . . 10 to 36 V DC
- Residual ripple . . . . . 3% to 15 %
- Load current . . . . . max. 100 mA
- Protection class . . . . . IP 67
- Output function . . . . . NC contact
- Minimum load current 4 mA

#### Piston detector, 3-pin (P3)

(short-circuit protection, intermittent and protected against polarity reversal, NC contact PNP)

- Internal thread . . . . . M10x1
- Design . . . . . with 4-point LED, 3-pin connection
- Ambient temperature range . . - 25 to + 80 °C
- Rated voltage . . . . . 10 to 36 V DC
- Residual ripple . . . . . ≤ 10%
- Load current . . . . . max. 100 mA
- Protection class . . . . . IP 67
- Output function . . . . . PNP contact

### Accessories

Note:  
The cable socket of the piston detector must be ordered separately!

#### Piston detector P2, 2-pin

Designation	Order no.
Cable socket M12x1, 4-pin, without LED, without cable	179-990-371
with 5 m cable	179-990-381
with 10 m cable	179-990-603
angled, without cable	179-990-372
angled, with 5 m cable	179-990-382

#### Piston detector P3, 3-pin

Designation	Order no.
Cable socket M12x1, 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

You will find additional technical data on the cable sockets in the leaflet "Electrical Plug-In Connections", leaflet no. 1-1730-US.

### Spare parts

Designation	Order no.
Piston detector, 2-pin	177-300-092
Piston detector, 3-pin	177-300-095
O-ring for piston detector	WVN501-10x1.5

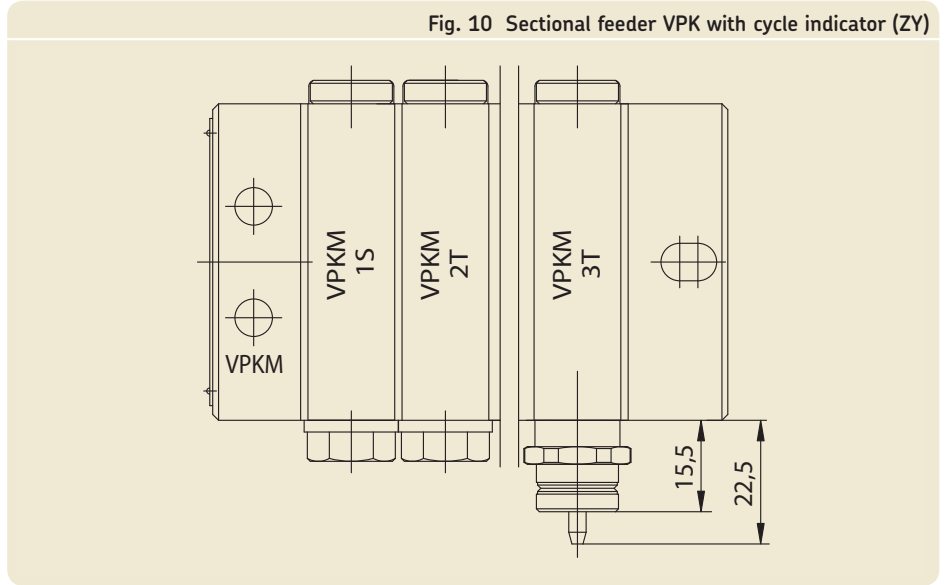
### Note

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.

# Sectional feeder VPK with cycle indicator

for oil or grease, monitoring type ZY (optical control)



**Technical data**

For further technical data, see "VPK Basic Design", page 6  
 Ambient temperature range . . . . . -15 to +75 °C

**Spare parts**

**Designation**

Cycle indicator (only complete with feeder section)

Example:

Specification of the thread, metric = **M**, inches = **G**

Specification of the metering section, e.g. **1T**; **2T**; ..

Specification of the installation position, left = **L**, right = **R**

**Order no.**

**VPK**<sup>M</sup>-**K**-**3T**-**ZY**-**R**



## Sectional feeder VPK with proximity switch for oil or grease, monitoring type ZS (electrical control)

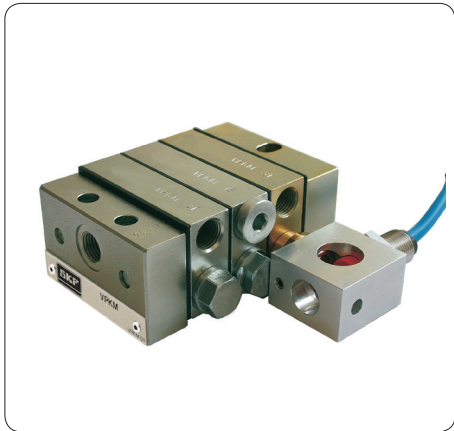
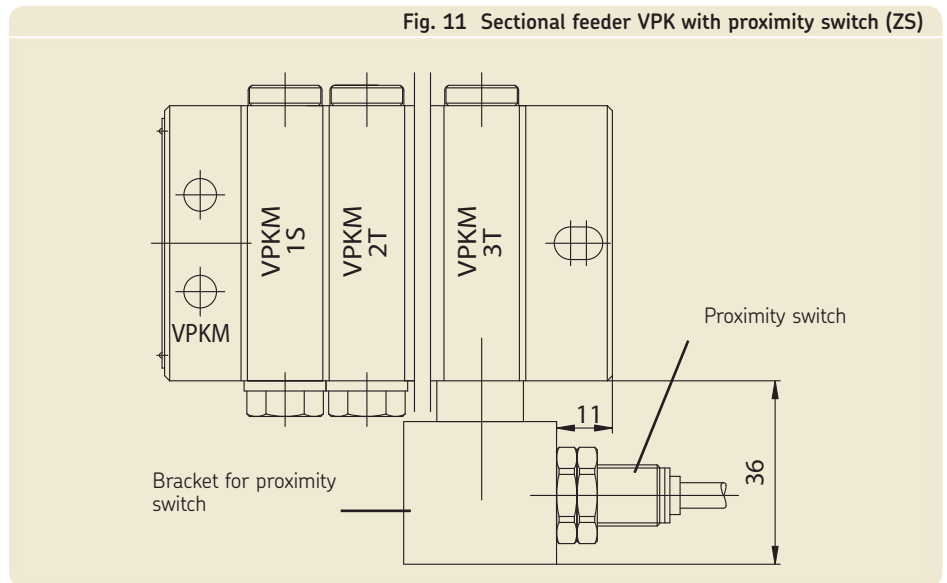


Fig. 11 Sectional feeder VPK with proximity switch (ZS)



### Technical data

For further technical data, see "VPK Basic Design", page 6  
Ambient temperature range -15 to +70 °C

#### Proximity switch

##### Note!

Proximity switch, can only be used with NAMUR switching amplifier!

Internal thread . . . . . M12x1

Design . . . . . PVC, with 2 m cable, 2x 0.34 mm<sup>2</sup>

rated voltage . . . . . 8.2 V DC

Power consumption . . . . . conducting > 2.2 mA, blocking < 1.0 mA

Protection class . . . . . IP 67

Output function . . . . . Contact normally closed (NC)

### Spare parts

Designation	Order no.
Proximity switch	177-300-075
Housing proximity switch	VPKM.13
Screws for the fitting of the housing	DIN914-M4x6-45H

# Sectional feeder VPKG with 2/2 directional solenoid valve

for oil, attachment 13

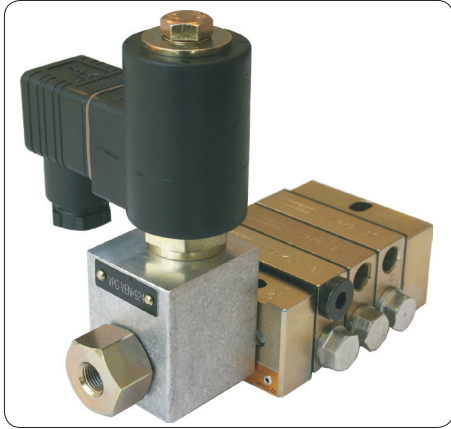
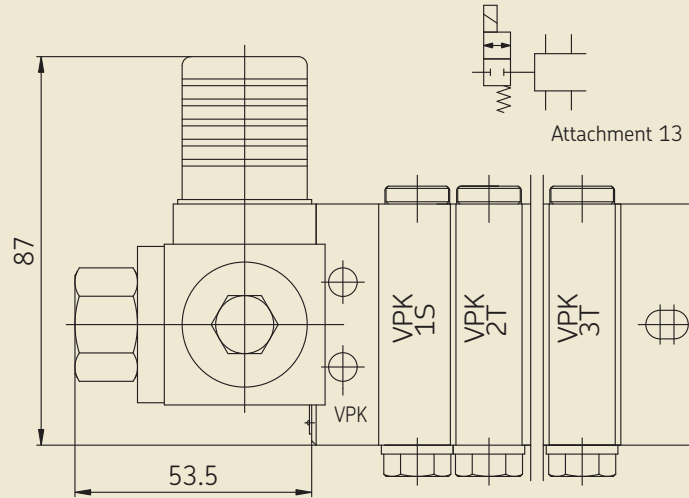


Fig. 12 Sectional feeder VPKG with 2/2 directional solenoid valve



### Technical data

#### Sectional feeder VPK

For further technical data, see "VPK Basic Design", page 6

Thread connection: . . . . . Inlet: VPKG G1/8"  
Ambient temperature range . . . . . -15 to 75 °C

#### Hydraulic

Operating pressure max. . . . . Oil 150 bar  
Lubricant . . . . . Mineral oils and synthetic oils  
Operating viscosity . . . . . 20-1000 mm<sup>2</sup>/s

#### Electric

Directional solenoid valve

#### General information

Valve function . . . . . 2/2 directional solenoid valve  
Type/operation . . . . . Pusher/solenoid  
Basic position . . . . . de-energized, relieved

#### Electrics

(When ordering, please state voltage, type of current and frequency)

Voltages . . . . . 24 V DC  
Rated current . . . . . 1.3 A at 24 V DC <sup>1)</sup>  
ON-time . . . . . 100% ED  
Protection class /. . . . . IP 65  
Electrical connection . . . . . Plug / DIN 43650

<sup>1)</sup> other operating voltage on request

### Spare parts

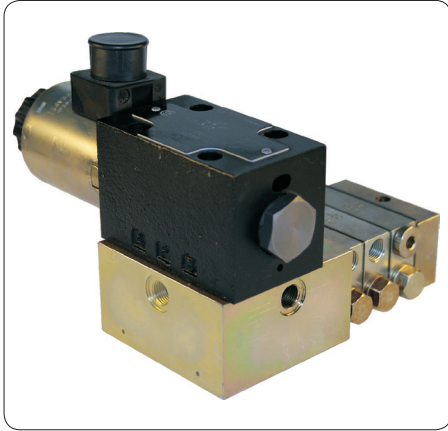
Designation	Order no.
2/2 directional control valve	VPKG-VEN+924
Cable socket - 2/2 directional control valve	24-1882-2029

#### Note!

You will find additional technical data on the cable sockets in the leaflet "Electrical Plug-In Connections", leaflet no. 1-1730-EN

# Sectional feeder VPK with 4/2 and 3/2 directional solenoid valve

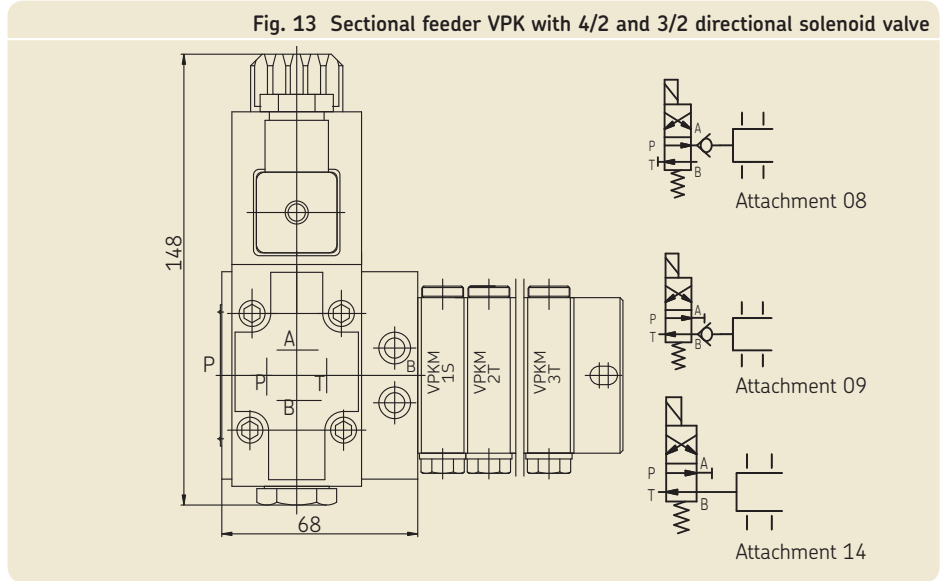
for oil, attachments 08; 09; 14



**Note**

For attachment 09 and attachment 14, the screw plug and the corresponding sealing ring must be ordered separately.

Fig. 13 Sectional feeder VPK with 4/2 and 3/2 directional solenoid valve



**Technical data**

**Sectional feeder VPK**

For further technical data, see "VPK Basic Design", page 6

Thread connection: . . . . . Inlet: VPKM M10x1, VPKG G1/8"  
Ambient temperature range . . . . . -15 to +75 °C

**Hydraulic**

Operating pressure max. . . . . Oil 150 bar  
Lubricant . . . . . Mineral oils and synthetic oils  
Operating viscosity . . . . . 20-1000 mm<sup>2</sup>/s

**Electric**

Directional solenoid valve

**General information**

Valve function . . . . . 4/2 (3/2) directional solenoid valve  
Type/operation . . . . . Pusher/solenoid  
Basic position . . . . . 4/2 open P > A  
3/2 open B > T

**Electrics**

(When ordering, please state voltage, type of current and frequency)  
Voltages . . . . . 24 V DC <sup>1)</sup>  
ON-time . . . . . 100% ED  
Protection class / . . . . . IP 65  
Electrical connection . . . . . Plug / DIN 43650

1) other operating voltage on request

**Spare parts**

**Note!**  
The cable socket of the directional solenoid valve must be ordered separately!

**VPKG**

Designation	Order No.
Starter plate for directional solenoid valve	44-0711-2263
4/2 directional solenoid valve	161-140-050+924
Plug directional solenoid valve	24-1882-2029
Fixing bolts for 4/2 directional solenoid valve	DIN912-M5x20-8.8
Screw plug (for unused connection)	95-0018-0908
Sealing ring	504-019

**VPKM**

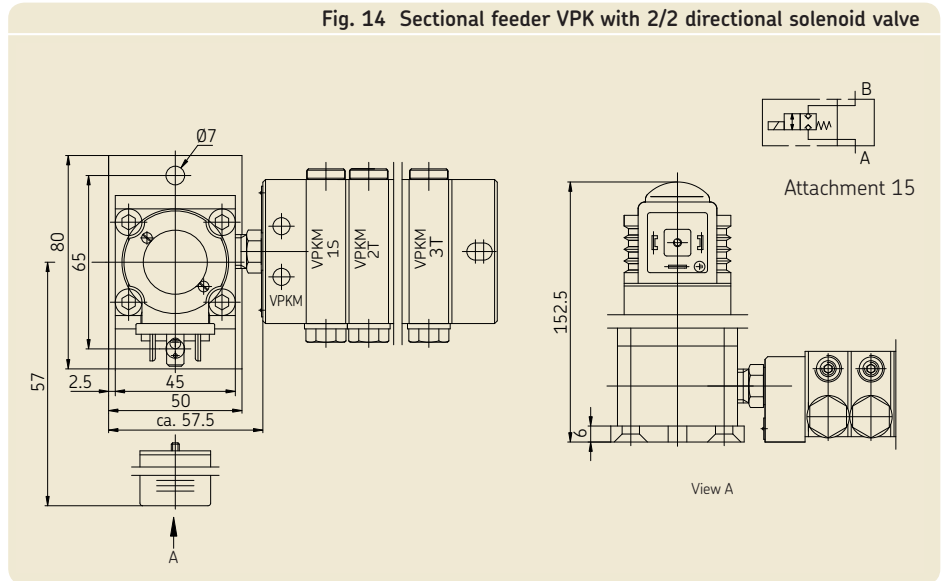
Designation	Order no.
Starter plate for 4/2 directional solenoid valve	44-0711-2264
4/2 directional solenoid valve	161-140-050+924
Cable socket directional solenoid valve	24-1882-2029
Fixing bolts for 4/2 directional solenoid valve	DIN912-M5x20-8.8
Screw plug (for unused connection)	DIN 908-M10x1-5.8
Sealing ring	504-019

**Note!**

You will find additional technical data on the cable sockets in the leaflet "Electrical Plug-In Connections", leaflet no. 1-1730-EN

## Sectional feeder VPK with 2/2 directional solenoid valve

for grease, attachment 15 with 2/2 directional control valve, de-energized, continuity to feeder closed



**Note**

Feeder and directional solenoid valve are delivered separately. Their assembly is performed by the customer using the installation instructions that accompany the products.

**Technical data**

**Sectional feeder VPK**

For further technical data, see "VPK Basic Design", page 6

Thread connection: . . . . . Inlet: G1/4"  
Ambient temperature range . . . . . - 25 to + 80 °C

**Hydraulic**

Operating pressure max. . . . . Grease 300 bar  
Lubricant . . . . . Greases up to NLGI Grade 2

**Electric**

Directional solenoid valve

**General information**

Valve function . . . . . 2/2 directional solenoid valve  
Type/operation . . . . . Spherical seat valve  
Basic position . . . . . closed when de-energized,  
Manual actuation . . . . . yes  
Electrics  
Voltages . . . . . 24 V DC  
Rated current . . . . . 0.67 A  
Nominal output . . . . . 16 W  
ON-time . . . . . 100% ED (at max. +35 °C)  
Protection class / . . . . . IP 65  
Electrical connection . . . . . Plug / DIN 43650 AF3

**Accessories**

**Note:**  
The cable socket of the directional solenoid valve must be ordered separately!

Designation	Order no.
Cable socket with protection device, 3 m PUR cable and LED	179-990-416

**Note**  
You will find additional cable sockets as well as technical data on the cable sockets in the leaflet "Electrical Plug-In Connections", leaflet no. 1-1730-EN

**Spare parts**

Designation	Order no.
2/2 directional control valve	161-110-031
Cable socket - 2/2 directional control valve	24-1882-2029
Adapter board	44-1503-2365
Screws adapter board	DIN963-M6x16-4.8

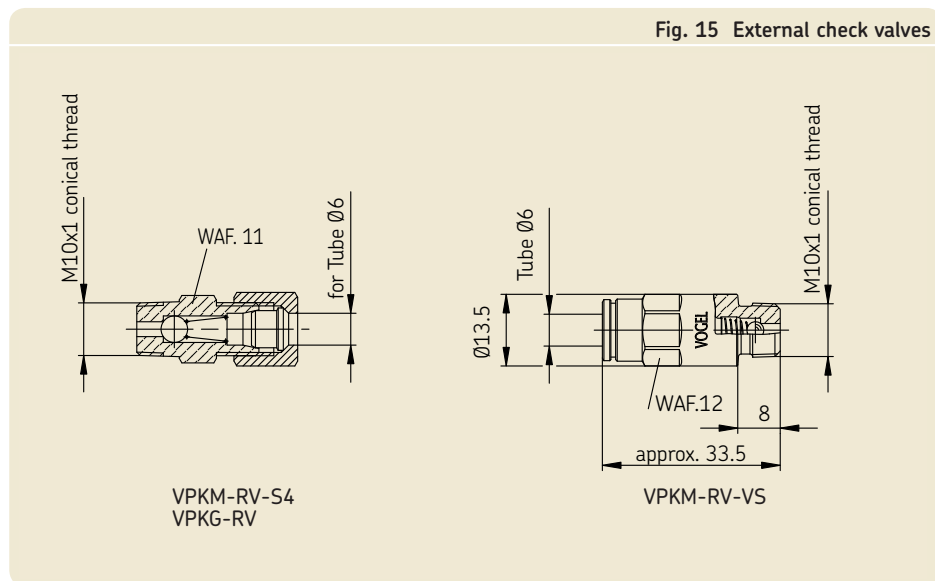
<b>VPKM</b>	
Inter-screw connection R1/4" to M10x1	44-0159-2282
Sealing ring	504-019

<b>VPKG</b>	
Inter-screw connection R1/4" to R1/8"	96-6013-0282

**Note!**  
You will find additional technical data on the cable sockets in the leaflet "Electrical Plug-In Connections", leaflet no. 1-1730-EN

## External check valves for VPK

Fig. 15 External check valves



### External check valves

Check valves and plug connectors for tube connection  $\varnothing 6$  mm

Order no.

Check valve for direct screwing into a feeder outlet.

VPKM-RV-S4

Check valve for plug connector

VPKM-RV-VS

Check valve for direct screwing into a feeder outlet.

VPKG-RV

## Explanation of the order codes

## Structure

**Example:** VPK M /10 15/ P3-4L /00 A 1 -1T -1SL -05TR - 2T - 3SR -2TLR -05T -2T -3T -3T

Progressive sectional feeders

Thread inlet and outlet screw connection

M = M10x1  
G = G 1/8"

Number of feeder sections

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 occupied outlets

03 = 3 outlets open  
↓  
20 = 20 outlets open

Monitoring type

00 = without  
P2 = Piston detector, 2-pin connection  
P3 = Piston detector, 3-pin connection  
ZY = cycle indicator <sup>1)</sup>  
ZS = cycle indicator with proximity switch <sup>1)</sup>

Installation position of the monitoring system

-1R = right-hand side on the 1st section  
-1L = left-hand side on the 1st section  
-2R = right-hand side on the 2nd section  
↓

-0R = right-hand side on the 10th section  
-0L = left-hand side on the 10th section

Attachments

00 = without attachments  
08 = with 4/2-directional solenoid valve, de-energized, continuity to feeder open  
09 = with 4/2-directional solenoid valve, de-energized, continuity to feeder closed  
13 = with (oil) 2/2-directional solenoid valve, de-energized feeder relieved <sup>2)</sup>  
14 = with 3/2 directional solenoid valve, de-energized feeder relieved  
15 = with (grease) 2/2-directional solenoid valve, de-energized, continuity to feeder closed

A = change version  
1 = basic design

1.- 2.- 3.- 4.- 5.- 6.- 7.- 8.- 9.- 10.-

1- to max. 10 feeder sections →

4.- to max. 10-  
(Twin or Single) feeder sections  
- see table: General system design/allocation

3rd (twin) feeder section  
left outlet 0.05 cm<sup>3</sup>/cycle, right outlet closed, lubricant discharge is carried out via an internal sealing disk to the 2nd feeder section, right outlet

2nd (single) feeder section  
left outlet closed right outlet 0.20 cm<sup>3</sup>/cycle (plus 0.05 cm<sup>3</sup>/cycle from the 3rd feeder section, right-hand side)

1st (twin) feeder section  
left outlet 0.10 cm<sup>3</sup>/cycle  
right outlet 0.10 cm<sup>3</sup>/cycle

#### General system design/allocation of the feeder sections

Designation sections	Volume per cycle and outlet [cm <sup>3</sup> ]	Number of Outlets
05T	= 0,05	2
1T	= 0,10	2
2T	= 0,20	2
3T	= 0,30	2
05S	= 0,10	1
1S	= 0,20	1
2S	= 0,40	1
3S	= 0,60	1

#### Note!

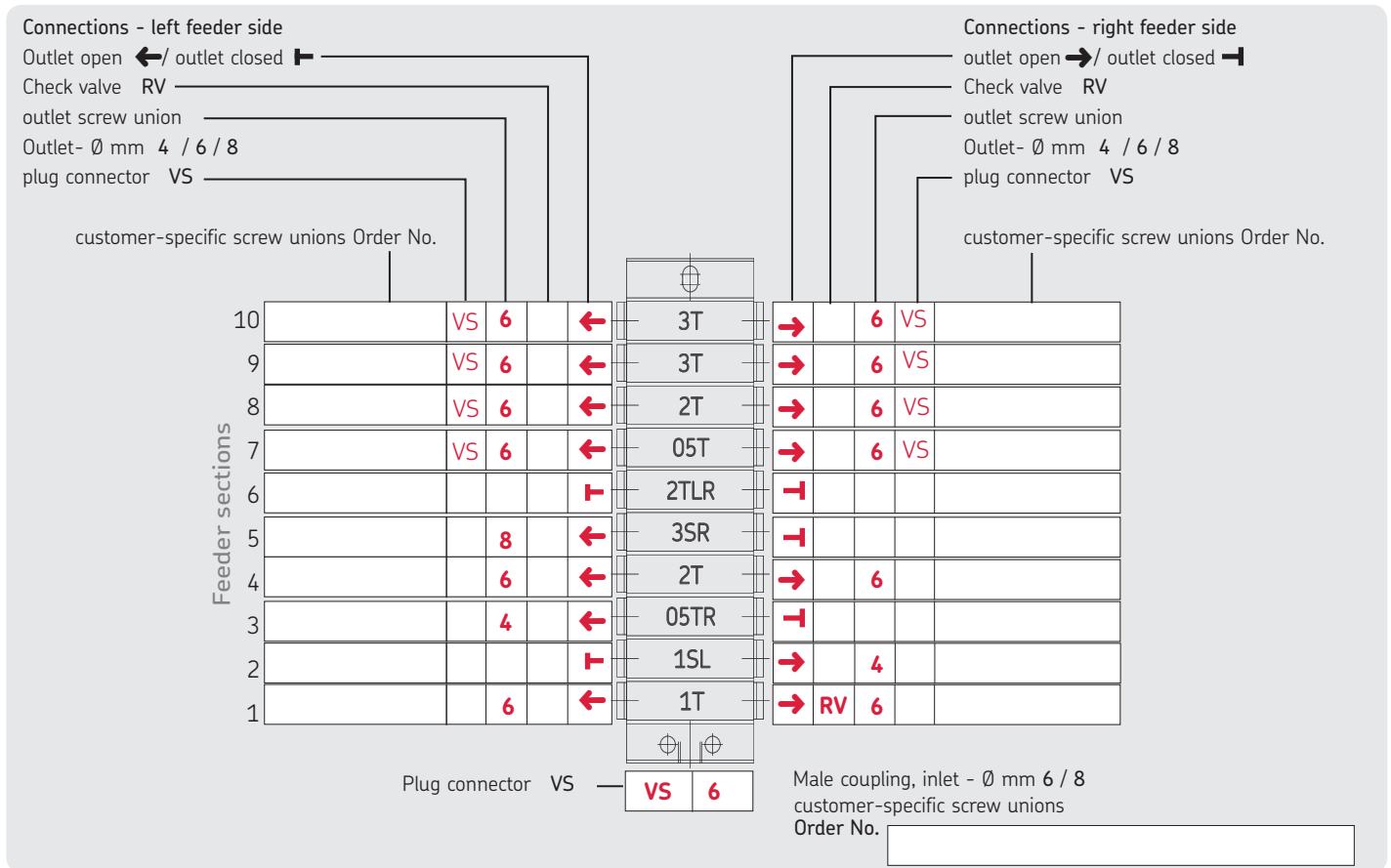
T = Twin = two outlets  
S = Single = one outlet  
TL or SL = left outlet closed  
TR or SR = right outlet closed  
TLR = both outlets closed

<sup>1)</sup> The installation of the cycle indicator with or without proximity switch is only possible from feeder section 2T and feeder section 2S, respectively!

<sup>2)</sup> Only for feeder type VPKG (inlet thread G1/8)

# Explanation of the order codes

## Attachments and screw unions



### How to order:

Progressive feeder, type VPK (VPK), consisting of an inlet section with inlet thread M10x1 (M), 10 feeder sections (outlet thread M10x1) (10), with 15 occupied outlets (15), with monitoring via 3-pin piston detector (P3), installed on the left side of the 4th feeder section (4L), without attachments (00), change version A (A), basic design (1).

The sectional feeder is structured as follows: 1st feeder section (twin) with 0.10 cm<sup>3</sup>/cycle per outlet (1T), 2nd feeder section (single), left outlet closed, right outlet 0.20 cm<sup>3</sup>/stroke, (1SL) (additional 0.05 cm<sup>3</sup>/stroke from the 3rd feeder section, right side), 3rd feeder section (twin), left outlet 0.05 cm<sup>3</sup>/stroke, right outlet closed, lubricant discharge (0.05 cm<sup>3</sup>/stroke) is carried out via 2nd feeder section, right outlet (05TR), 4th feeder section (twin) with 0.20 cm<sup>3</sup>/stroke per outlet (2T), 5th feeder section (single) left outlet 0.60 cm<sup>3</sup>/stroke (still 2x 0.20 cm<sup>3</sup>/stroke of the 6th feeder section), right outlet closed (3SR), 6th feeder section (twin) right and left outlet closed (plugs are removed on both sides and allow combining of the outflow quantity towards the 5th feeder section, left outlet) (2TLR), 7th to 10th feeder section (twin) with 0.05, 0.20, 0.30, 0.30 cm<sup>3</sup>/cycle per outlet (05T, 2T, 3T, 3T),

The downstream check valves (RV), outlet screw unions (4/6/8) or plug connectors (VS) (seen from the inlet) have been allocated to the progressive feeder:

- Inlet screw union = Ø 10 mm (6) with plug connector (VS),
- 1st feeder section = outlet screw union on both sides with Ø 6 mm (6), right side with additional check valve (RV),
- 2nd feeder section = outlet screw union right side Ø 6 mm (6), left side closed (1SL),
- 3rd feeder section = outlet screw union left side Ø 4 mm (4), right side closed (05TR),
- 4th feeder section = outlet screw union on both sides with Ø 6 mm (6) (left with piston detector),
- 5th feeder section = outlet screw union left side Ø 8 mm (8), right side closed (3SR),
- 6th feeder section = outlet screw union left and right closed (2TLR),
- 7th to 10th feeder section = Outlet on both sides Ø 6 mm (6) with plug connector (VS), as well as end section.

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 VPK

VPK M /10 15 /P3 -4L / 00 A 1- 1T -1SL-05TR-2T- 3SR -2TLR -05T -2T -3T -3T

VPK .... /..... /..... /..... / ..... A 1- ..... -.....-..... -..... - ..... -..... -..... -.....-.....-.....

**Connections - left feeder side**

Outlet open ← / outlet closed →

Check valve RV

Outlet screw union

Outlet- Ø mm 4 / 6 / 8

Plug connector VS

**Connections - right feeder side**

Outlet open → / outlet closed ←

Check valve RV

Outlet screw union

Outlet- Ø mm 4 / 6 / 8

Plug connector VS

Customer-specific screw unions

Order No.

Order No.

Customer-specific screw unions

Feeder sections

Plug connector VS

Male coupling, inlet - Ø mm 6 / 8  
customer-specific screw unions  
Order No.

---



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Company: .....

Name: .....

Address: .....

Function/dept.: .....

Reference: .....

Phone: ..... Fax/E-Mail: .....



## Sectional feeder VPK

The configuration of a progressive feeder VPK is customer-specific. The most important data for the generation of an order number are summarized on the preceding pages 14–16. As an illustration, an example of an order has been added.

### Please read the two preceding 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 VPK... (configuration) must be completed according to the sample on page 14 and the graphic below according to the sample on page 15.

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

### 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: .....

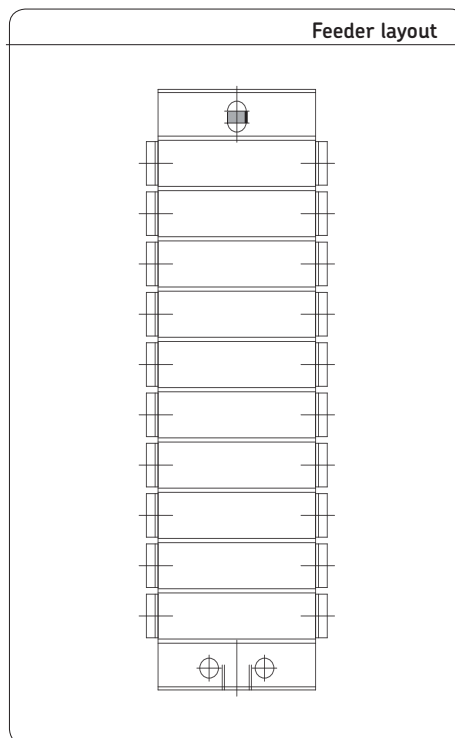
Function/dept.: .....

Phone: .....

Fax/E-Mail: .....

#### Note!!

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



Additional amendments or remarks:





Order No. 1-3015-EN

Subject to change without notice! (07/2014)



CAD models for products shown in this brochure can be downloaded at: [skf-lubrication.partcommunity.com](http://skf-lubrication.partcommunity.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.

**SKF Lubrication Systems Germany GmbH**

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)

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