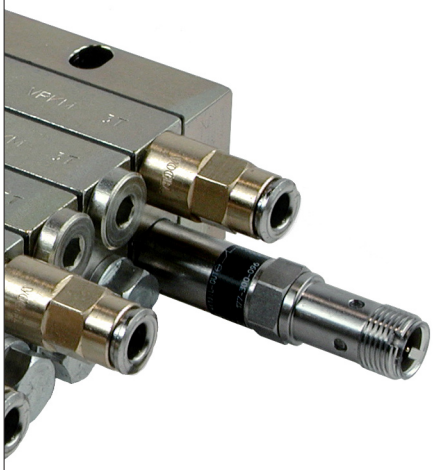
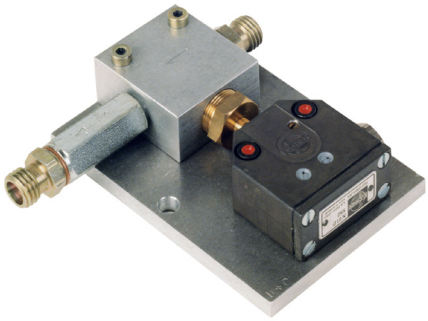
Accessories for Progressive Systems

Cycle switches, cycle indicators, crossporting bars, overpressure indicators, spray nozzles

Progressive feeder with cycle switch



Electric overpressure indicator

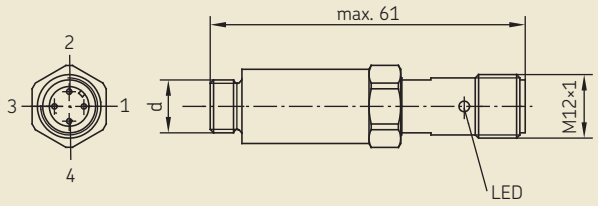


Spray nozzle

This leaflet gives an overview of the accessories of progressive systems.

- Cycle switches (piston detectors)
- Cycle switch with built-in microswitch
- Crossporting bars
- Cycle indicators
- Electric overpressure switch
  – with proximity switch
  – with micro switch
- Electric overpressure indicators
- Overpressure indicators
- Spray nozzles

Cycle switches (piston detectors)



Order No.	d	Feeder model	Version
177-300-091	M12×1	VP / PSG	2-wire
177-300-092	M10×1	VPK	
177-300-096	M10×1	VPB	
177-300-094	M12×1	VP / PSG	3-wire
177-300-095	M10×1	VPK	
177-300-097	M10×1	VPB	

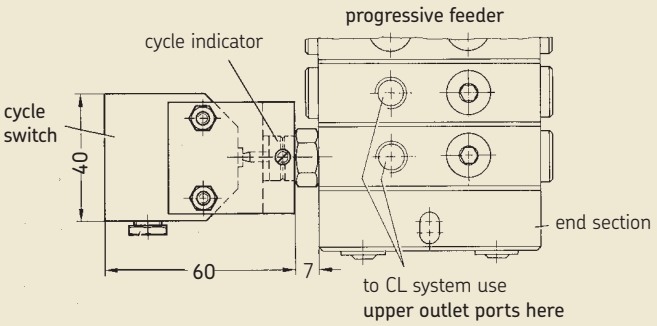
Line sockets (see leaflet 1-1730-EN)
Order No.
177-990-372
179-990-382

Technical data

Function . . . . . NC contact
Operating voltage . . . . . 10 36 V DC
Current-carrying capacity . . . . . 100 mA
Max. operating pressure . . . . . 350 bars
Operating temperature . . . . . –25 to +80 °C
Type of enclosure . . . . . IP 67
Housing material 1.4571

Cycle switches

with built-in microswitch



The unit is mounted on a feeder section with cycle **indicator**.

Order No.	Feeder model
VP-ZYS [1)]	VP

The cycle switch can used for all feeder sections starting at 2T.
It is supplied detached.

[1)] state in order in addition to the feeder

Technical data

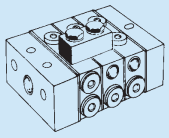
Rated voltage . . . . . 230 V
Rated switching capacity . . . . . 230 V / 25 mA – 24 V / 2 A
Contact . . . . . 1 changeover
Type of enclosure (DIN 40050) . . . IP 67
Type of connection . . . . . soldered
Temperature range . . . . . –5 to +80 °C

Crossporting bars

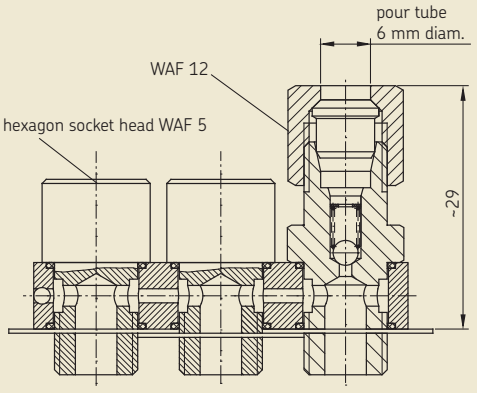
See important product usage information on the back cover.

Crossporting bars are used to combine adjacent outlet ports.
They are screwed into the lateral outlet ports or, if on hand, into the upper alternative outlet ports.

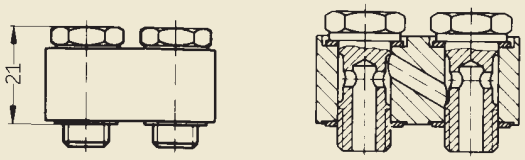
Order No.	Feeder model	Number of outlet ports to be combined
VP-C	VPM	2
VPG-C	VPG	2
VPBG(M)-C2	VPB	2
VPBG(M)-C3	VPB	3
VPBG(M)-C4	VPB	4
VPBM-C2-VS	VPB	2
VPBM-C3-VS	VPB	3
VPBM-C4-VS	VPB	4
24-2151-3732	PSG2	2
24-2151-3736	PSG3	2



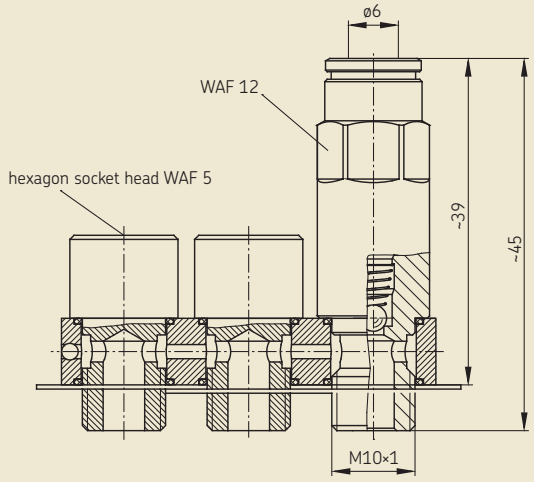
VPBM-C3 / VPBG-C3



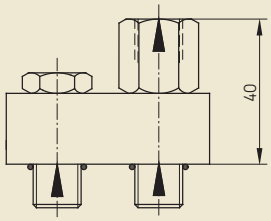
VPC / VPG-C



VPBM-C3-VS for tube 6 mm diam. with plug-in connector



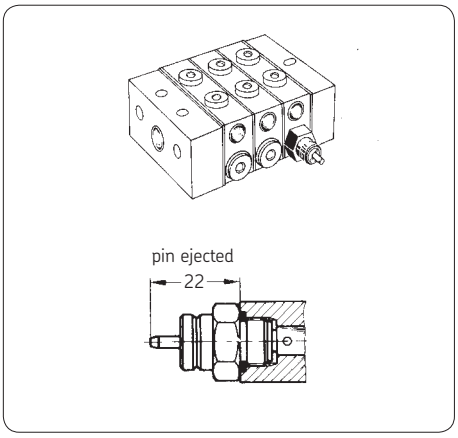
24-2151-3732 / 24-2151-3736



Cycle indicators

Cycle indicators are used to monitor feeder functions.
They are screwed into the piston bore of the first or last feeder section. In the course of each cycle the display pin executes a to-and-from movement. This motion does not take place if the feeder is blocked.

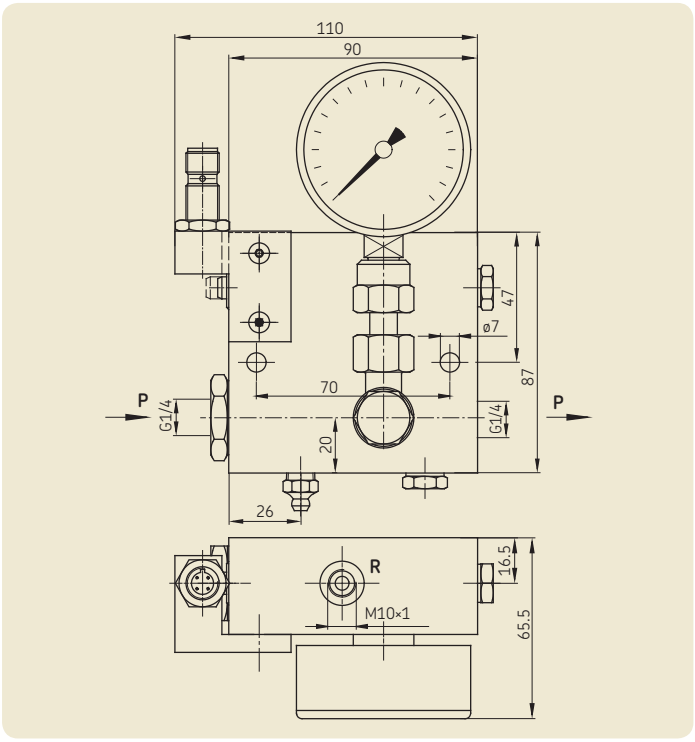
The cycle switch is only available complete with feeder section.



Order No.	Feeder model
VPM-ZY	VPM
VPG-ZY	VPG
VPKG-ZY	VPKG
VPKM-ZY	VPKM
VPBG-ZY	VPBG
VPBM-ZY	VPBM

Electric overpressure switch

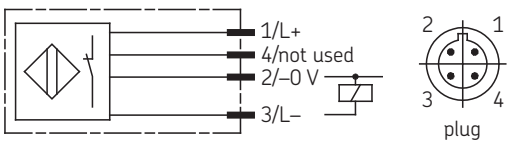
with proximity switch, adjusted to 120 bars



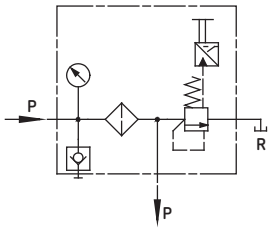
Technical data

Order No.	**PPU-UES-V70-S1**
Operating voltage	10 ... 36 V DC
Current load	100 mA max.
Contact	NC type
Function indicate	yellow (4×90°)
Type of enclosure (DIN 40050)	IP 67
Temperature range	–25 to +70 °C

Electrical terminal diagram

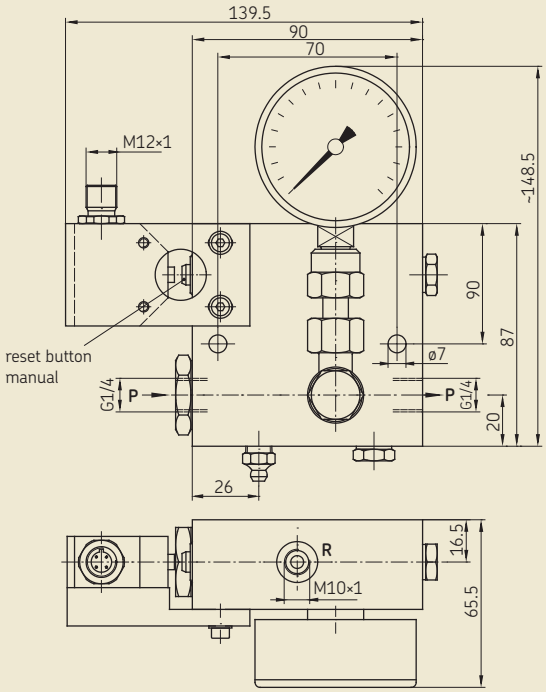


Hydraulic layout



Electric overpressure switch

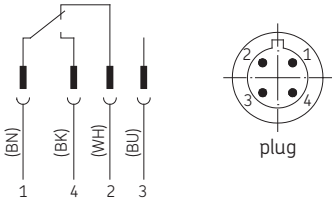
with micro switch



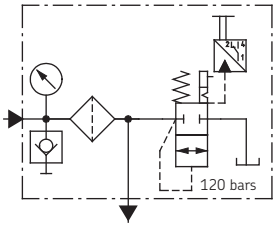
Technical data

Order No.	**PPU-UES-V57**
Rated voltage	230 V
Rated switching capacity	230 V / 25 mA – 24 V / 2 A
Contact	1 changeover
Type of enclosure (DIN 40050)	IP 67
Temperature range	–5 to +80 °C

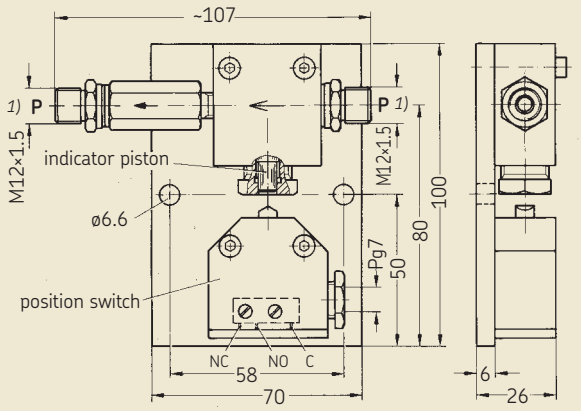
Electrical terminal diagram



Hydraulic layout



Electric overpressure indicator



1) For cutting-sleeve screw unions to DIN 2353 for ø6 tubing. Cutting ring 406-301, union nut 406-302 (order separately).

Technical data

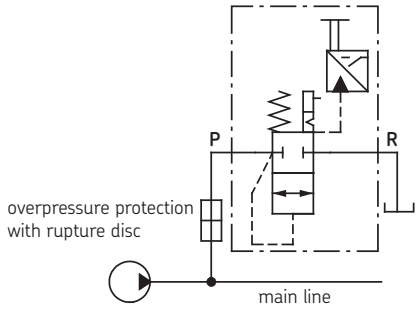
Order No.	**PPU-UES**
Rated voltage	230 V
Rated switching capacity	230 V / 25 mA – 24 V / 2 A
Contact	1 changeover
Type of enclosure (DIN 40050)	IP 67
Type of connection	soldered
Temperature range	–5 to +80 °C

Tripping pressure depends on rupture disc or safety valve.
Residual pressure through valve approx. 1 bar.

Practical example 1 (for PPU-UES)

A rise in the system's pressure (malfunction) beyond the specified value destroys the rupture disc. The lubricant pushes the indicator piston out, as a result of which the limit switch is actuated. The latter emits an electrical signal for acoustic or visual indication. But it can also be used to switch off the machine.

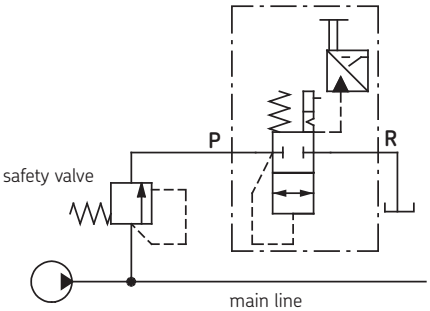
After the malfunction has been remedied and the rupture disc replaced, the indicator piston has to be shoved in again by hand.



Practical example 2 (for PPU-UES)

Functions like example 1, but the rupture disc does not have to be replaced since the safety valve is not destroyed and automatically closes again when the specified pressure is restored.

The indicator piston has to be shoved back in again as in example 1.



Overpressure indicators

Overpressure indicators on progressive feeders make it easier to localize malfunctions when they occur. They are screwed into the upper alternative outlet ports. If the specified lubricant pressure is exceeded in an outlet port equipped with an overpressure indicator, a pin emerges from the front of the indicator, thus pointing out the overpressure.

After the fault is remedied, the pin hasto be pressed back in again by hand.

Rated pressure [bar]	Order No. with **metric** threads	d	Order No. with **Whitworth** tubing threads	d	Fig.
16	VP-UE16-2		VPG-UE16-2		
32	VP-UE32-2		VPG-UE32-2		
63	VP-UE63-2		VPG-UE63-2		
80	VP-UE80-2	M10×1	VPG-UE80-2	G1/8A	1
100	VP-UE100-2		VPG-UE100-2		
140	VP-UE140-2		VPG-UE140-2		
180	VP-UE180-2		VPG-UE180-2		
50	VPM-UE50-3		VPG-UE50-3		
100	VPM-UE100-3	M10×1	VPG-UE100-3	G1/8A	2
150	VPM-UE150-3		VPG-UE150-3		
200	VPM-UE200-3		VPG-UE200-3		

Overpressure indicators are supplied detached.

Fig. 1

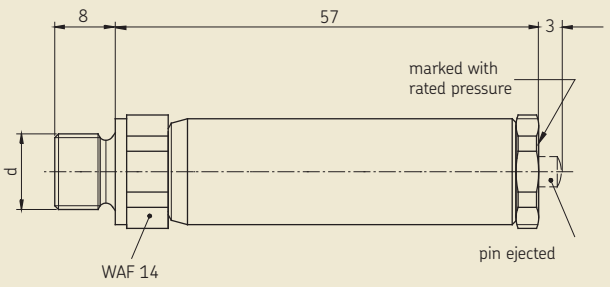
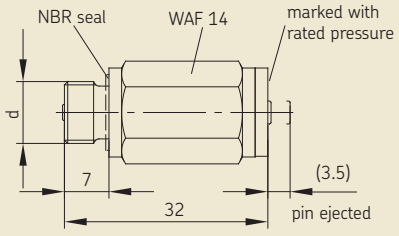
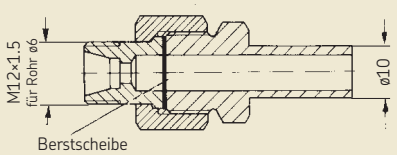


Fig. 2



Retainer for rupture discs

Order No.	for tube diam.	Version
PPU-SH	10	with tube neck for cuttingsleeve screw union

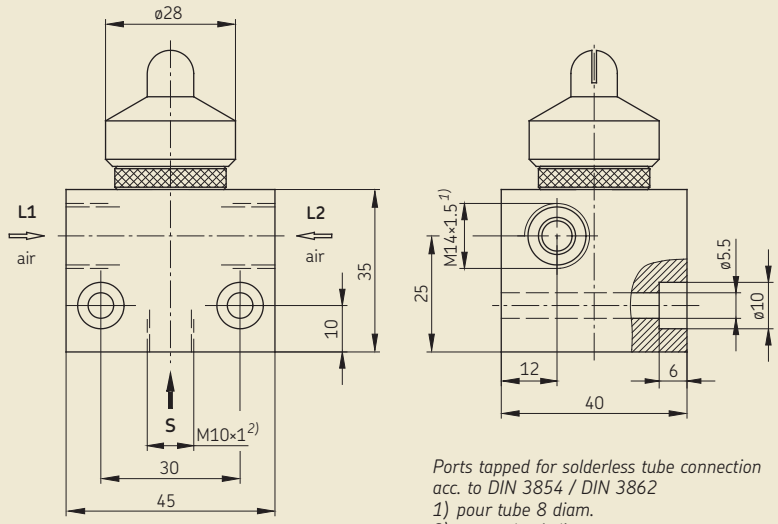


Rupture discs

Order No.	Rupture pressure [bar]	Color	Thickness [mm]
PPU-BS60	60	schwarz	0.152
PPU-BS80	80	grün	0.203
PPU-BS100	100	gelb	0.254
PPU-BS120	120	rot	0.305
PPU-BS140	140	orange	0.356
PPU-BS160	160	silber	0.406
PPU-BS180	180	rosa	0.457

Spray nozzles

for grease up to NLGI grade 2



Ports tapped for solderless tube connection acc. to DIN 3854 / DIN 3862
1) pour tube 8 diam.
2) pour tube 6 diam.

This spray nozzles are used to spray grease up to NLGI grade 2 on surfaces, e.g. on the tooth surface of large gears.

Function

The grease is supplied by pulsation via inlet **S** by, for instance, a progressive feeder and is blown out by compressed air flowing continuously during the entire lubrication period.

Compressed air in connected to inlet **L1**, optionally to **L2**. Depending on the construction of the spray nozzle, the spray pattern is either rectangular (SP31) or circular (SP32).

Several spray nozzles may be connected in series to one compressed air line. At the last spray nozzle of one line, however, **one inlet borehole** for the compressed air **must be closed** with a screw plug. This is also applicable to one spray nozzle only.

Technical data

Order No.	**SP31**
Spray pattern	retangular
Order No.	**SP32**
Spray pattern	circular
Lubricant	grease up to NLGI grade 2
Air pressure	5 bars min.
Air flow rate 5 bars	7 Nm^3/h
Spraying distance	approx. 300 mm
Sprayed surface at a distance of 100 mm:	
SP31	approx. 50×220 mm
SP32	approx. 45 mm diam.

Order No. 1-0107-6-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.

Further brochures
1-9201-EN Transport of Lubricants in Centralized Lubrication Systems

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