GOK Installation and Operating Instructions

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13501, 13504-...
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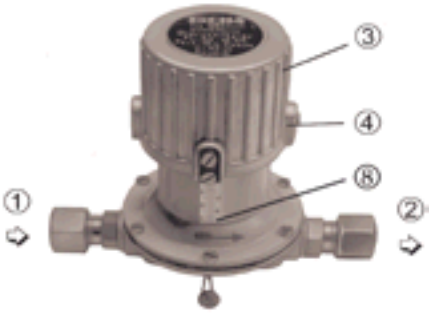
Oil pressure regulator Type ODR, ODRE and ODRE-M PN 10

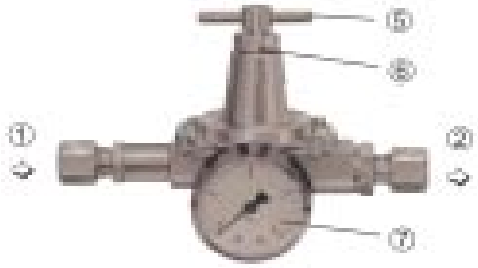
Oil pressure reducer according to DIN EN 12514-2 and DIN 4755

Type ODR

Type ODRE



Type ODRE-M



① inlet connection
② outlet connection
③ regulator cover
④ grub screw
⑤ T-screw
⑥ counter-nut
⑦ manometer
⑧ scale 1 - 17 m oil column

GENERAL

An oil pressure regulator is a device which keeps the outlet pressure constant within a stipulated range independent of fluctuations of the inlet pressure and changes in flow. Oil pressure regulators must be installed if the working pressure in the oil firing installation is higher than the maximum allowed inlet pressure of fittings or consuming appliances installed after.
For appropriate operation and maintaining guarantee, these instructions must be respected and handed over to the operating authority.

CONSTRUCTION

Type ODR	Oil pressure regulator with fixed adjustment (0.1 - 0.3 bar), nominal capacity 0.1 - 20 l/h
Type ODRE	Adjustable oil pressure regulator, adjustment of the outlet pressure via regulator cover and scale 1 - 17 m oil column (0.08 - 1.4 bar), nominal capacity 0.1 - 20 l/h
Type ODRE-M	Adjustable oil pressure regulator with manometer 0 - 4 bar as indicator of outlet pressure, adjustment via T-screw, nominal capacity 2 - 180 l/h • The outlet pressure of the regulator can be adjusted between 0 and 2.5 bar if the inlet pressure is between 0.5 and 10 bar. • The inlet pressure is always 1.5 bar higher than the outlet pressure. • If the capacity is 0 l/h, the adjusted outlet pressure is increased by approximately 1 bar (closing pressure) • The outlet pressure depends on the capacity. If the capacity is reduced, the outlet pressure is increased independent of the adjusted outlet pressure.

OPERATING MEDIA	Light fuel oil	according to DIN 51603-1
	Diesel	according to DIN EN 590

CONNECTIONS

Tube connection	Dimensions	According to standard
① + ②	Olive connection, upon request for tube diameters 8, 10, 12 or 15 mm	DIN 2353 DIN EN ISO 8434-1
	Female thread G ¼ or G ⅜	DIN ISO 228-1

INSTALLATION

Check the pressure regulator for transport damages before installation. The installation, setting into operation, servicing and maintenance have to be carried out by an expert. An expert installation respecting the technical rules which are valid for planning, construction and operation of the complete installation is the condition for a faultless functioning of the pressure regulator.

Important notice:

- Installation exclusively with fork wrench of the corresponding wrench size.
  A pipe wrench must not be used!
- Before installation visual control for possible metal filings or other residues in the connections. They absolutely have to be removed by blowing in order to avoid possible malfunctions.

Mounting of oil pressure regulators	• In tube systems of pressure range PN 10 bar • Respect flow direction • Any fitting position required, preferably horizontal

Mounting of connections with female thread

Component	Connection	Explanations
Oil pressure regulator	Connecting socket ①	Female thread G ¼ according to DIN ISO 228-1
	Connecting socket ②	Female thread G ⅜ according to DIN ISO 228-1
Connection thread	Pipe thread or Screw-in connection according to DIN 2353 / DIN EN ISO 8434-1	Pipe thread: parallel male thread G ¼ or ⅜ in tolerance class A according to DIN ISO 228-1 Screw in connection with sealing edge, e.g. screwed plug form B according to DIN 3852-2 or form SDCS, type B according to DIN EN ISO 8434-1
Sealing	2 O-rings	Comprised in the scope of delivery, for screw-in connection

Mounting of olive connection with brass olive

Component	Connection	Explanations
Oil pressure regulator	Connecting socket, upon request as olive connection for tube diameters 8, 10, 12 or 15 mm	Olive connection with brass olive according to DIN 2353 or DIN EN ISO 8434-1
Connection	Tube with outside diameter, upon request 8, 10, 12 or 15 mm	• Brass tube, e.g. according to DIN EN 1057 • Aluminium tube, e.g. according to DIN EN 754-2 • Precision steel tube: steel olive recommended!

Installation according to **GOK Instructions for Installation** for olive connections according to DIN 2353 and DIN EN ISO 8434-1 following DIN 3859-2. Ask for if required!

SETTING INTO OPERATION

Setting into operation is carried out in connection with the oil firing installation. If a pressure check of the tube is demanded before the setting into operation of the oil fuel supply installation - e.g. according to DIN 4755, a **test pressure up to 6 bar** can be admitted at the outlet ✱.
When using the adjustable oil pressure regulators, the required outlet pressure must be adjusted. In this connection, take into consideration the allowed operational pressure of following fittings and consuming appliances!

Type	Adjustment of outlet pressure via	Locking by means of
ODRE	Regulator cover ③ and scale 1 - 17 m oil column ( )	Grub screw ④
ODRE-M	T-screw ⑤ with indication at manometer ⑦	Counter-nut ⑥

After mounting and setting into installation apply knot varnish!

OPERATION and CONTROL OF FUNCTION

- In ongoing operation of the oil firing installation, the oil pressure regulator does not require any service.
- Check the intactness of the applied knot varnish.
  In case of damage, new adjustment as described under SETTING INTO OPERATION!
- Check the outlet pressure as described under SETTING INTO OPERATION:
  The outlet pressure may adjust itself only within the indicated limits.

MAINTENANCE

SAFETY NOTICE: Oil fuel is a water-endangering material! When carrying out maintenance work, oil fuel which is running out must be collected. Respect corresponding laws and decrees!

Within the framework of the annual maintenance or after a longer period of placing out of service, a soundness control of the oil pressure regulator including connections as well as a FUNCTION CONTROL are recommended.

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