

Oil Stop Valves Types OSV-NG and OSV-NI

Application

The connection between the oil separator and the oil injection nozzles during the shut down has to be cut off avoid blowing out oil through the suction line. During the start up the oil stop valve should be open as fast as possible to ensure an accurate lubrication and cooling of the compressor.

Function

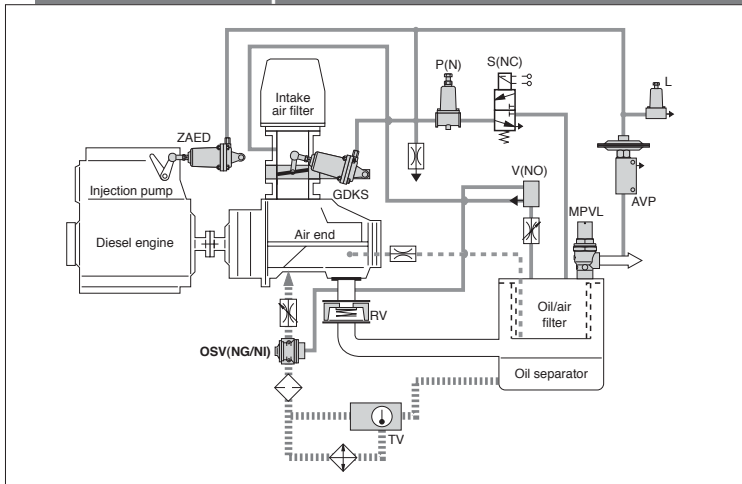
Type OSV-NG: The valve is controlled by the discharge pressure of the air end. The oil stop valve opens when the compressor starts operating. It closes at shut down.

Details of types OSV-NG: No oil can pass through the valve in the closed position. O-type seal rings on the valve seat and piston guide prevent any leakage.

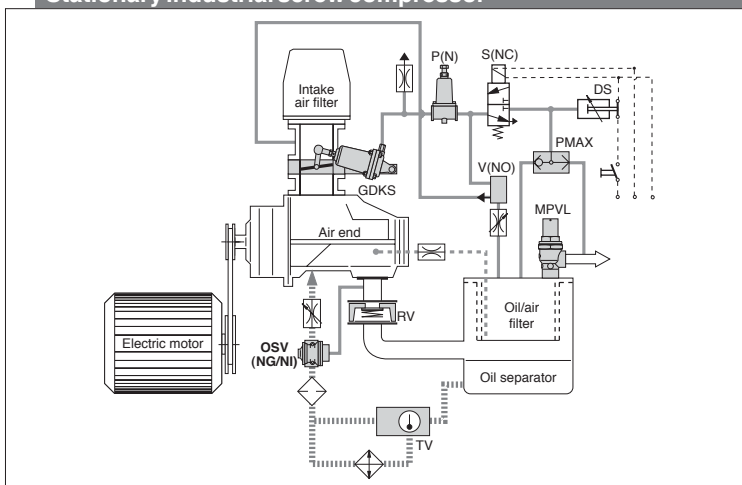
Type OSV-NI: Same function as valve type OSV-NG; valve allows a minimum leakage in closed position.

⚠ Attention! Never attempt to disassemble the valve whilst under pressure!

Portable screw compressor



Stationary industrial screw compressor



Details of types OSV-NI: When the OSV-NI is closed after shut-down, a small amount of oil can pass from inlet P to outlet A via the nozzle I in the valve piston. At start-up this small amount of oil is used for lubrication and sealing between rotors and housing of the compressor. It is recommended to install an OSV-NI on compressors if the maximum oil level in the oil separator is lower than the shaft sealings of the air end.

Installation

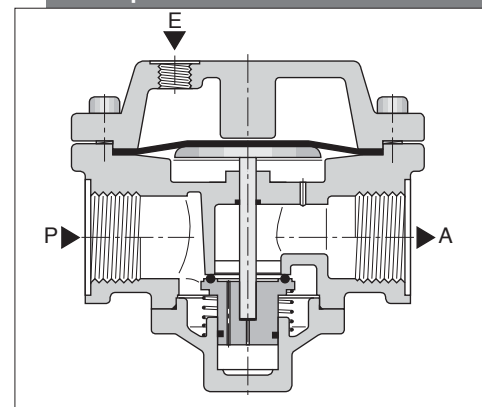
The oil stop valve is installed in the oil injection line downstream from the oil cooler and the oil filter. The signal pressure inlet E is connected directly to a connection in the discharge duct of the compressor upstream from the non-return valve NRV (as illustrated). Alternatively, the valve can be opened or closed by signal pressure from a reliable solenoid valve (not shown).

Ordering details:

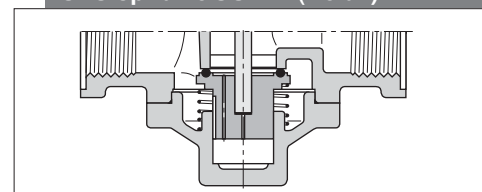
Type, ordering term, e.g. OSV25NI



Oil stop valve OSV-NG



Oil stop valve OSV-NI (Detail)



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R207E

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Details

Type		OSV15NG OSV15NI	OSV20NG OSV20NI	OSV25NG OSV25NI	OSV40NG OSV40NI	OSV50NG OSV50NI
Nominal diameter DN	mm	15	20	25	40	50
K_V -value	m ³ /h	7.8	9	9	30	30
Max. working pressure PS	bar (g)	16				
Operating temperature	°C	-10 to +100				
Oil types		mineral or synthetic oils				
Installation position		optional			Inlet E facing up- or downwards	
Materials		aluminium alloy, brass, corrosion resistant steel, Viton				
Dimensions	mm	see fig. 1			see fig. 2	
Weight	kg	1.35	1.3	1.25	4.0	3.9

Details for valve types OSV-NG

Type		OSV15NG	OSV20NG	OSV25NG	OSV40NG	OSV50NG
Valve opening		see diagram 1				
Valve closing		see diagram 2				

Details for valve types OSV-NI

Type		OSV15NI	OSV20NI	OSV25NI	OSV40NI	OSV50NI
K_V -value valve closed	m ³ /h	0.1	0.1	0.1	0.1	0.1
Valve opening	bar (g)	0.35	0.35	0.35	0.25	0.25
Valve closing		see diagram 2				

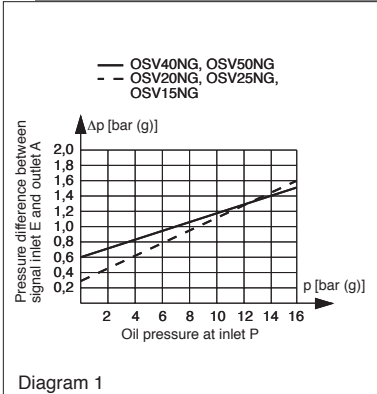
Maintenance:

The service manual W207RCC contains information regarding the maintenance intervals. While disassembling the valve for inspection,

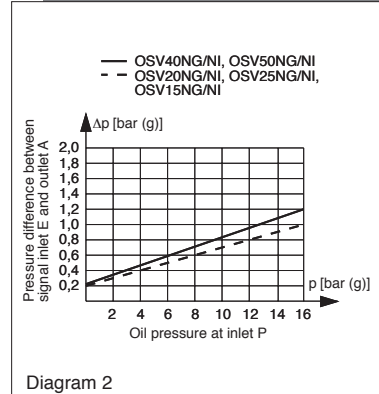
cleaning or retrofitting purposes, also refer to the respective information contained in the service manual

W207RCC. For the actual service manuals visit our homepage www.hoerbigerkompresortechnik.de

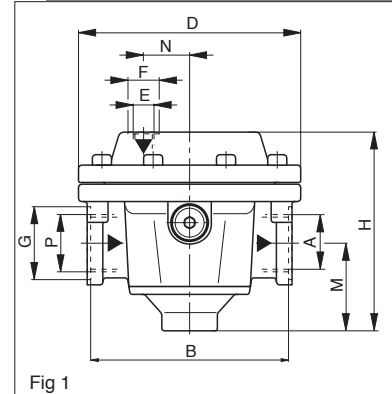
Valve opening OSV-NG



Valve closing OSV-NG, OSV-NI



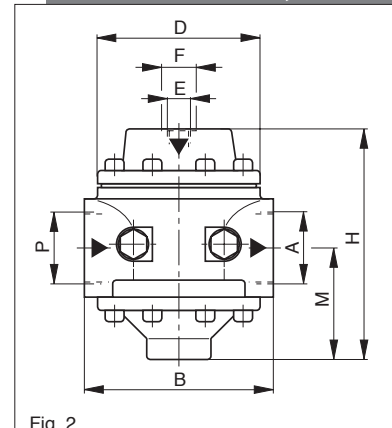
Dimensions OSV15-25



Dimensions (in mm)

Type	Fig. 1			Fig. 2	
	OSV15NG OSV15NI	OSV20NG OSV20NI	OSV25NG OSV25NI	OSV40NG OSV40NI	OSV50NG OSV50NI
for oil DN	15	20	25	40	50
D	ø126	ø126	ø126	ø132	ø132
H	118	118	118	184	184
P, A	G1/2	G3/4	G1	G1 1/2	G2
G	ø42	ø42	ø42	-	-
B	112	112	112	180	180
M	54	54	54	89	89
E	G3/8	G3/8	G3/8	G3/8	G3/8
F	ø24	ø24	ø24	ø24	ø24
N	28	28	28	-	-

Dimensions OSV-40,50



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