

Sequence and Unloading Valves

VDB 12-EN

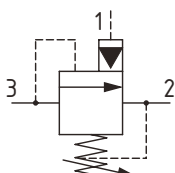
Unloading Valve, Differential Area, Poppet Type, Hydraulic Pilot, Internal Drain

350 bar [5000 psi] • 160 l/min [42 US gpm]

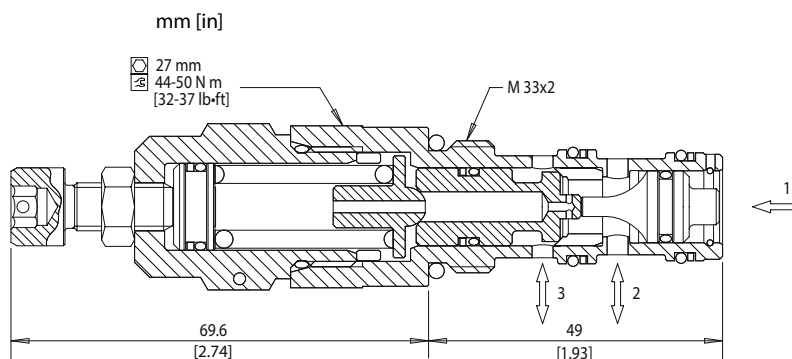
DESCRIPTION AND OPERATION

This is a hydraulically pilot operated, poppet type unloading valve where port 3 is closed until pressure rises above the relief setting, allowing flow from port 3 to port 2. Pilot pressure on port 1 will reduce the relief valve setting and eventually open the valve fully. This is ideal for use in two-pump unloading circuits where a gradual reduction in low pressure flow is preferred.

SCHEMATIC



DIMENSIONS

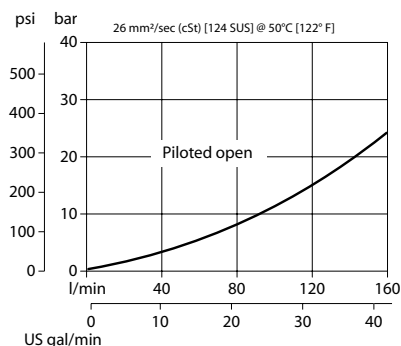


PERFORMANCE DATA

Rated pressure	350 bar [5000 psi]
Rated flow @ 7 bar [100 psi]	160 l/min [42 US gpm]
Weight	0.70 kg [1.54 lb]
Cavity	NCS12/3

PERFORMANCE CURVES

Pressure Drop



MODEL CODE

VDB 12 - EN - 1 - B - SE3/4 - V - 60

Pressure Range

Pilot Ratio A			Pilot Ratio A		
Code	Bar	Psi	Code	Bar	Psi
1	25-170	[360-2460]	1	25-120	[360-1740]
Standard Setting	Not set		Standard Setting	Not set	
2	70-250	[1015-3600]	2	60-200	[870-2900]
Standard Setting	Not set		Standard Setting	Not set	
3	105-350	[1520-5000]	3	90-280	[1305-4060]
Standard Setting	Not set		Standard Setting	Not set	

Pilot Ratio

A-6.9:1
B-4.7:1

Pressure Setting

Code-Pressure setting in bar (5 bar increments within specified Pressure Range)
XXX-Standard setting (see Pressure Range for value)
Example:

Code	Bar	Psi
60	60	[870]

Seal Option

Code	Seal kit
Omit-Buna - N	230000130
V-Viton	230000360

Housing

Code	Ports & Material	Housing Model Code
00	No Housing	No Housing
SE1/2	AL, 1/2 BSP	NCS12/3-SE-1/2
SE3/4	AL, 3/4 BSP	NCS12/3-SE-3/4
SE85	AL, #8 SAE	NCS12/3-SE-85
SE125	AL, #12 SAE	NCS12/3-SE-125

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available