

Directional spool type, direct acting,
external pilot external vent
Common cavity, Size 12

VDSC-12A

04.77.21 - X - 57 - Z

RE 18320-91

Edition: 03.2016

Replaces: 10.2013



Technical data

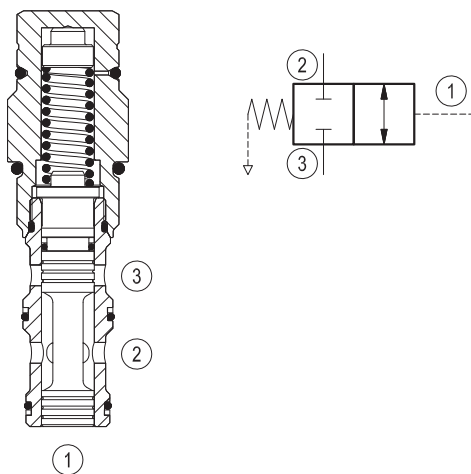
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|---|--|
| Max. operating pressure | 350 bar (5000 psi) |
| Max. flow | 120 l/min. (32 gpm) |
| Max. internal leakage ¹⁾ | 160 cm ³ /min. (10 cu.in./min.) |
| Pilot displacement volume | 1.12 cm ³ (0.07 cu.in.) |
| Fluid temperature range | -30 to 100 °C (-22 to 212 °F) |
| Installation torque | 81 - 95 Nm (60 - 70 ft-lbs) |
| Weight | 0.35 kg (0.77 lbs) |
| Cavity | CA-12A-3N (see data sheet 18325-70) |
| Lines bodies and standard assemblies | Please refer to section "Hydraulic integrated circuit" or consult factory |
| Seal kit ²⁾ | Code: RG12A3010520100 material no: R930000941 |
| Fluids | Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /s (cSt) |
| Recommended degree of fluid contamination | Nominal value max. 10µm (NAS 8) / ISO 4406 19/17/14 |
| Installation position | No restrictions |
| Other Technical Data | See data sheet 18350-50 |

Description

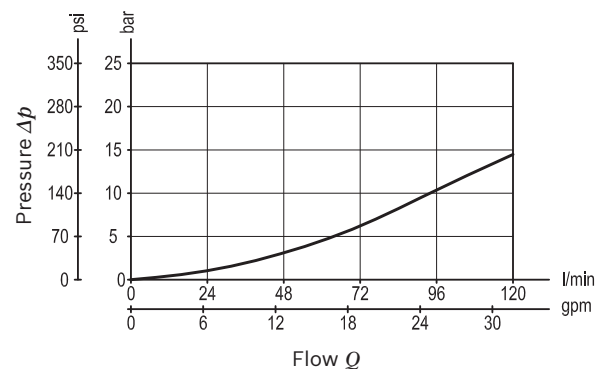
Flow is blocked bi-directionally at 2 and 3 until pressure at 1 rises to overcome the spring bias against the spool. When this bias pressure is surpassed, the spool shifts, allowing flow from 2 to 3, or 3 to 2. The spring chamber is sealed and vented to atmosphere, allowing consistent shifting with only spring bias pressure independent of conditions at 2 or 3.

1) Measured at 200 bar (2900 psi)

2) Only external seals for 10 valves



Characteristic curve



Ordering code

| | | | | | |
|-----------------|----------|-----------|----------|-----------|----------|
| 04.77.21 | X | 57 | Z | 00 | * |
|-----------------|----------|-----------|----------|-----------|----------|

Directional spool type, direct acting
external pilot external vent

Series 0/A to L
unchanged performances and dimensions

Version and options standard

O-Ring on pilot piston

00 No O-Ring

10 With O-Ring (available only for Z=15)

57 Common cavity, Size 12

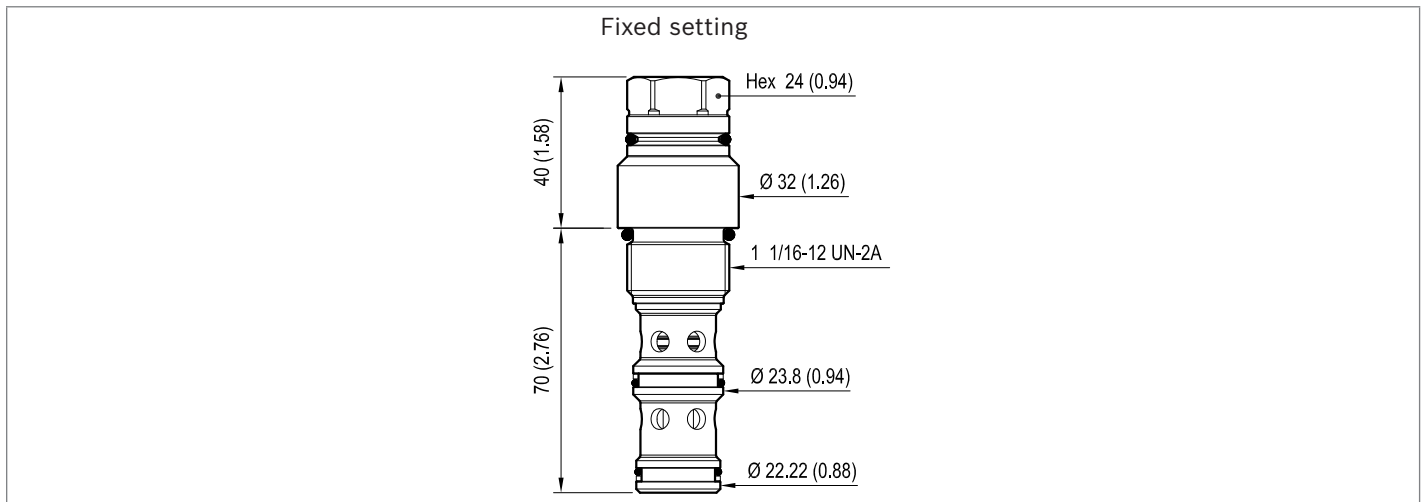
| SPRINGS | |
|-----------|------------------------|
| | Std. setting bar (psi) |
| 06 | 6 (87) ± 15% |
| 15 | 15 (220) ± 10% |

Preferred types

| Type | Material number |
|-----------------|-----------------|
| 047721005706000 | R930008294 |
| 04772100571500A | R930006701 |
| 047721105715000 | R930008083 |

| Type | Material number |
|------|-----------------|
| | |
| | |
| | |

Dimensions



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