## Ningbo Best Industrial Co．，Ltd．

## DSG－02Series Solenoid Operated Directional valve

## ［Specification】

1．These are epoch－making solenoid operated directional valves of high pressure，high flow which have been developed． 2．Use matching Electromagnetic suction and improve Spring force．


3．Unique waterproof and dust proof characteristics．
4．Use DIN43650 ISO4400 EN175301－－803 standard plug．
protection degree IP65 and we can also custom more degree，like AMP type plug Deutsch plug or other Terminal box type．


## 【Description】



【Technical data】

General parameters

| Weight (with 2 electromagne) | kg | 1.94 |
| :--- | :--- | :--- |
| Weight (with 1 electromagne) | kg | 1.50 |
| Mounting location |  | anywhere |
| Ambient temperature | ${ }^{\circ} \mathrm{C}$ | $\sim 20 \sim+50$ (use NBR lock ring) |

Hydraulic data

| Max working oil pressure P.A.B | MPa | 31.5 |
| :--- | :---: | :---: |
| Max oil pressure for T chamber | MPa | 16 |
| Rated Flow | $1 / \mathrm{min}$ | 20 |
| Max flow | $1 / \mathrm{min}$ | 63 |
| liquid medium |  | Mineral oil, hydraulic oil |
| Oil temperature range | ${ }^{\circ} \mathrm{C}$ | $-20 \sim+80$ |
| Oil cleanliness |  | ISO4572: $\beta 10 \geqslant 75$ NAS1638:9 degree |

Electrical data

| Voltage class |  | DC, RAC |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Work system | ED | 100\% |  |  |  |  |
| Voltage range | \% | -10~+10 |  |  |  |  |
| Transposition and reset time | ms | on 50 off 40 . (not include RAC) |  |  |  |  |
| Maximum operating frequency | Hz | 3 |  |  |  |  |
| Coil insulation class |  | B |  |  |  |  |
| Coil max working temperature | ${ }^{\circ} \mathrm{C}$ | 130 |  |  |  |  |
| Coil weight | kg | 0.30 |  |  |  |  |
| Power voltage | v | 12 | 24 | 110 | 110 | 220 |
| Power type |  | DC | DC | DC | RAC | RAC |
| Power frequency | Hz |  |  |  | 50/60 | 50\60 |
| Loss power | W | 34 | 34 | 34 | 36 | 36 |
| Coil resistance | ohm | 4.2 | 16.5 | 346 | 64.6 | 258 |
| Working current | A | 2.8 | 1.45 | 0.31 | 0.42 | 0.21 |

【Spool valve symbol 】

Single solenoid valve
Spring offset

$\underline{2 B}$＊BL

$4 . \omega 3$
$4 . \|_{T}^{L} \quad 4$
4． 40
4．$)^{-1} 5$
$\operatorname{din}_{\text {II }}^{1+1} 6$

4．t． 9
［1TT 10
4．｜｜c｜ 11
AT 12
2 position．No Spring


2N＊
4iIII 2
AIIX 3
10）

double solenoid valve
3 position．Spring central


3C＊
4
$4 \rightarrow 3$
4
4．${ }_{T}^{k}=1$
$4.7^{-1}>5$

NI四泄， 60
4． 9
4．$\|_{T}^{1} \mid$
4．${ }^{4} \mid 11$
4． 12
2 position．Spring offset


2B＊
4 I II
AIX 3

$\xrightarrow{A B}$

$4 \|$| $1+7$ |
| :--- | :--- |
| 1 |

4， 3

Single solenoid valve Spring offset

$2 B * B$
$\left.\begin{array}{ll}\square 1 \\ 4 T\end{array}\right] 2$
$\because 3$
4
40
$\square^{1} \$ 5$

［7］${ }^{4}$ ． 60
TH 9

|  |  |  |
| :--- | :--- | :--- |
| 4 | 1 | 10 |

$\begin{array}{ll}1 \\ 4 & 11\end{array}$

2 position，Mechanical position


2D＊
4熕I 2

## 【Characteristics curve】



Pressure:7Mpa
Folw:63I/min
Viscosity:35cst

| Type | Pressure drop curve |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{P} \rightarrow \mathrm{A}$ | $\mathrm{B} \rightarrow \mathrm{T}$ | $\mathrm{P} \rightarrow \mathrm{B}$ | A | $\mathrm{P} \rightarrow \mathrm{T}$ |
| 3C2 | 5 | 5 | 5 | 5 | - |
| 3C3 | 6 | 6 | 6 | 6 | 4 |
| 3C4 | 5 | 6 | 5 | 6 | - |
| 3C40 | 5 | 5 | 5 | 5 | - |
| 3C5 | 2 | 2 | 2 | 2 | 4 |
| 3C6 | 1 | 1 | 1 | 1 | 4 |
| 3C60 | 1 | 1 | 1 | 1 | 3 |
| 3C9 | 6 | 5 | 6 | 5 | - |
| 3C12 | 6 | 5 | 6 | 5 | - |
| 3C11 | 5 | 5 | 5 | 6 | - |
| 2D2 | 6 | 5 | 5 | 5 | - |
| 2D3 | 5 | 3 | 5 | 3 | - |
| 2B2 | 4 | 5 | 4 | 5 | - |
| 2B3 | 3 | 3 | 5 | 5 | - |
| 2B8 | 2 | - | 5 | - | - |
| 2B2-L | 4 | 5 | 4 | 5 | - |
| 2B3-L | 5 | 5 | 3 | 3 | - |
| 2B8-L | 5 | - | 2 | - | - | voltage:100\%(Hot state)



| type | Pressure drop curve |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{P} \rightarrow \mathrm{A}$ | $\mathrm{B} \rightarrow \mathrm{T}$ | $\mathrm{P} \rightarrow \mathrm{B}$ | $\mathrm{A} \rightarrow \mathrm{T}$ |
| 3C2 | 1 | 1 | 1 | 1 |
| 3C4 | 1 | 2 | 1 | 2 |
| 2B2 | 1 | 1 | 1 | 1 |

[Viscosity ranged

| Viscosity | cSt | 15 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SSU | 77 | 98 | 141 | 186 | 232 | 278 | 324 | 371 | 417 | 464 |
| Modulu\$ G' ) |  | 0.81 | 0.87 | 0.96 | 1.03 | 1.09 | 1.14 | 1.19 | 1.23 | 1.27 | 1.30 |

For other proportion, pressure drop can refer $\triangle \mathrm{P}^{\prime}=\triangle \mathrm{P}\left(\mathrm{G}^{\prime} / 0.85\right)$


Unit dimensions:


Unit dimensions:


DSG 02-AC - B
Unit dimensions:


