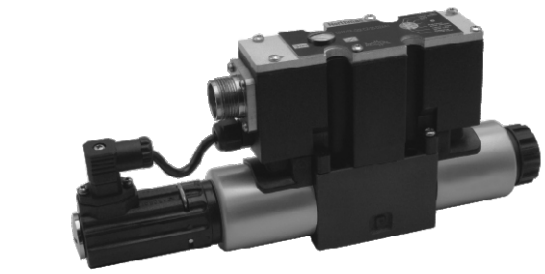
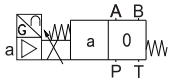
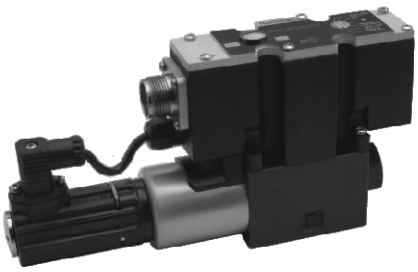


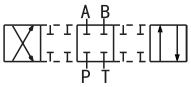
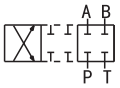
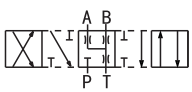
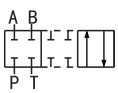
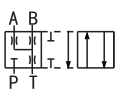




HOW TO ORDER

ESWHEE	-G	02	-C2	-30	-D24	-K31	-A1
Series	Mounting Style	Nominal Size	Spool Type	Nominal Flow	Supply Voltage	Connector	Command Value
Proportional directional valve, Direct operated, close loop, with integrated electronics	Subplate Mounted	02:6mm	①	08:08L/min 16:16L/min 32:32L/min	D24:DC24V	No code: with amplifier connector K31: without	A1 : ±10V F1 : 4-20mA

① List of Spool Configurations

Application	Spool Type	Symbols	Application	Spool Type	Symbols
4-way, 3-position	C2 C21		4-way, 2-position	C2B	
	C3			C4B	
	C4 C41			C2BS	
				C4BS	

Remarks: Rated flow ratio of spool type C21、C41 P-A to P-B is 1:2

Technical Data

Nominal Size	G02(6mm)
Installation Position	any, preferably horizontal
Storage temperature range	-15 to 80°C
Ambient temperature range	-15 to 70°C
Weight	2.4kg

● Hydraulic(measured with P=100bar, VG46, ϑÖl = 40 ±5 °C

Maximum operating pressure	PortA, B, P 315 bar PortT 210 bar
Nominal flow (ΔP=10bar)	08, 16, 32L/min
Maximum flow	80L/min
Hydraulic fluid	Mineral Oil
Viscosity range	20 to 380mm²/s (preferably 30…46)
admissible degree of contamination of the hydraulic fluid	Maximum admissible degree of contamination of the hydraulic fluid, cleanliness class 9 according to NAS 1638 (c) and Class 20/18/15 according to ISO 4406 (c)
Hysteresis	≤0. 1%
Range of inversion	≤0. 05%
Response Sensitivity	≤0. 05%
Zero temperature drift	0.15%/ 10K 0.1%/ 100 bar

● Electrical

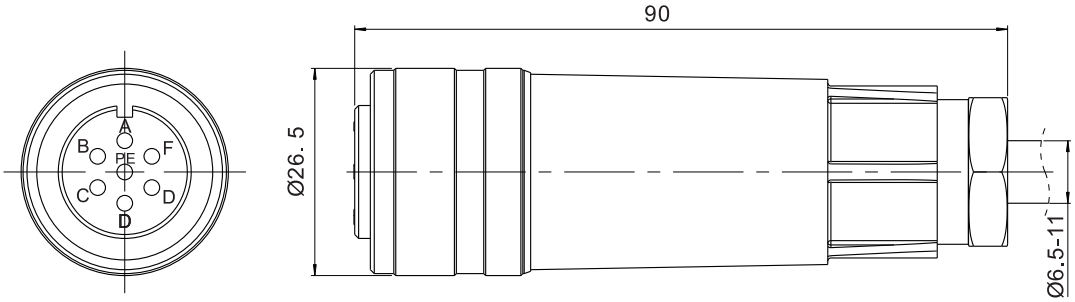
Rated current	2.5A
Solenoid coil resistance	Cold value 2.7Ω Maximum hot value 4.05Ω
Actuated time	ED100%
Maximum coil temperature	150℃
Protection class	IP65

● Amplifier

Type	Digital
Supply Voltage	DC24V(19-35V)
Power Consumption	＜45VA
Current Consumption	＜2A
Command Value	±10V(R_e>50KΩ) or 4-20mA(R_e<200Ω)
Measuring output Actual Value	±10V(I_L<2mA) or 4-20mA(R_L<200Ω)
Electrical connection	Connector (according to E DIN 43650-AM2)
Protection class	IP65

Electrical Connection

Connector（According to DIN EN 175201-804)



Pin Assignment

Contact	Function	-A1 voltage type	-F1 Current type
A	Power Supply	DC24V(19-35V)	
B		0V	
D	Differential amplifier input (command value)	±10V(Re>50KΩ)	4-20mA(Re<200Ω)
E		Reference Potential command value	
F	Measuring output (actual value)	±10V(IL<2mA)	4-20mA(RL<200Ω)
C		Reference Potential actual value	
PE	Earthing	Connected to the valve side cover and housing	

Command value:

Positive command value (0…10 V or 12…20 mA) at D and reference potential at E result in flow from P → A and B → T

Negative command value (0…-10 V or 12…4 mA) at D and reference potential at E result in flow from P → B and A → T

With control spool type C*B, a positive command value at D and reference potential at E (0 to +10V or 4 to 20mA) result in flow from P → B and A → T;

With control spool type C*BS, with same condition, it results in P → A and B → T

Actual Value:

Actual value 0 … +10 V (or 12 … 20 mA) at F and reference potential at C result in flow from P → A and B → T.

Actual value 0 … –10 V (or 4 … 12 mA) result in flow from P → B and A → T.

With control spool type C*B, a positive actual value 0 … +10V (or 4 … 20 mA) result in flow from P → B and A → T.

With control spool type C*BS, a positive actual value 0 … +10V (or 4 … 20 mA) result in flow from P → A and B → T.

Notice:Electrical signals provided via control electronics (e. g. actual value) must not be used for switching off safety-relevant machine functions.

Connection cable: Recommendation

Up to 25m cable length type LiYCY 5 x 0.75 mm²

Up to 50m cable length type LiYCY 5 x 1.0 mm²

External diameter 6.5 ... 11 mm, Connect shield on PE only on the supply side

Amplifier Internal Diagram