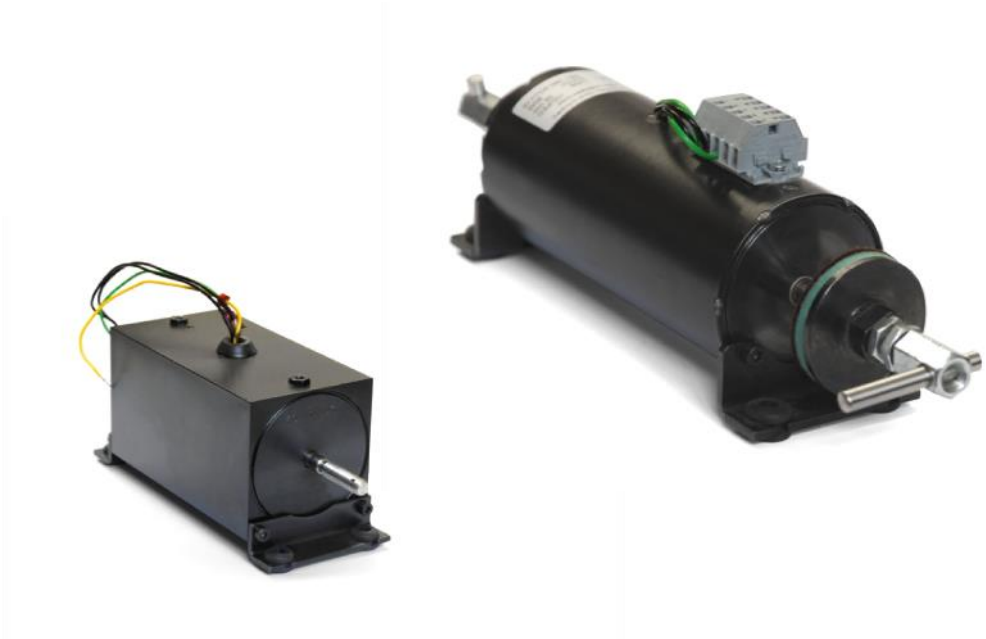
Reversing linear solenoid Typ GE1 and Double proportional solenoid Typ GD1



The following electromagnets are examples for Reversing Solenoids or Double proportional Solenoids (Double acting solenoids) realized in series. Magnetbau Schramme developments are customer-specific. If you are searching for the right electromagnet or solenoid for your series project, simply contact us for the perfect solution.

Our team will help you - guaranteed.

Please note that we do not have „ex stock“ standard products, and can therefore only process inquiries for series.

The difference between both systems

The GD1 specialized linear solenoids are used to effect stroke from the center position to the right or left end position. The stroke motion of the armature takes place by means of electromagnetic force of the respective solenoid coil. The solenoid is reset to the center position via external forces.

Compared to a reversing linear solenoid, a double-proportional solenoid accomplishes twice the stroke (in mm) at the same size. The characteristic curves decline appropriately.

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Reversing linear solenoid Typ GE1

Function

Electromagnets or solenoids designed as reversing linear solenoids consist of two magnet systems. The stroke motion of the armature from one end position to the other or opposite is effected by means of electromagnetic force. The desired operating direction is determined via excitation of the respective solenoid coil.

Operation

Reversing solenoids consist of two electromagnet systems. The plunger is moved by electromagnetic force. The direction of plunger travel is determinated by excitation of the respective coil.

Characteristics

The force of standard solenoids is flat to slightly rising during the initial 80% of travel, rising to double the initial force during the final 20% of travel. Maintenance-free support of the plunger ensures a long service life.

Installation Instructions

The solenoid can be installed in any position.

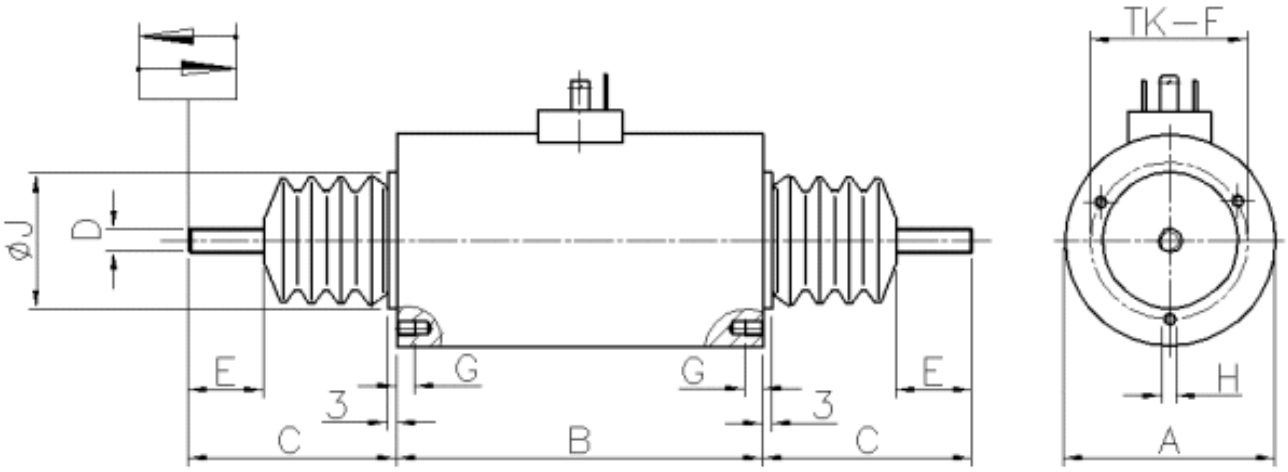
The power transfer should take place only in axial direction; lateral loads on the plunger are to be avoided. When employing these units, the „Technical Introduction" is to be observed.

Nominal supply voltage:	**U_N 24 VDC**
Relative duty cycle:	100%
Insulation class:	"H" according to VDE 0580
Limiting temperature:	180 °C
Degree of protection:	IP 65 according to DIN 40050

Technical Data Reversing Linear Solenoid GE1

Typ	Stroke [mm]	100% Duty Cycle			40% Duty Cycle			
		Power at 20°C [W]	Force stroke start [N]	Force stroke end [N]	Power at 20°C [W]	Force stroke start [N]	Force stroke end [N]	Weight [kg]
GE1 050	10	22,5	19	19	39,5	28	28	1,3
GE1 055	12	27	23	28	46	36	43	1,8
GE1 060	15	32	28	42	53	42	63	2,3
GE1 070	20	38	37	74	59	52	104	3,2
GE1 080	22	45	55	121	79	78	172	4,0
GE1 090	25	55	72	180	92	113	283	5,0
GE1 100	28	75	88	246	125	137	384	7,3
GE1 115	30	90	108	324	166	154	498	9,0

Installation drawing



Dimensions in mm

Typ	ØA	B	C	D	E	TKØF	G	H	ØJH8
GE1 050	50	87	41	M6	15	40	4	M4	36
GE1 055	55	102	48	M6	20	45	4,5	M4	36
GE1 062	62	119	60	M8	25	45	5	M4	36
GE1 070	70	121	66	M8	25	52	6	M5	45
GE1 080	80	135	68	M10	25	62	7	M5	50
GE1 090	90	142	72	M10	28	65	8	M5	55
GE1 100	100	162	78	M10	28	72	9	M6	59
GE1 115	115	169	94	M12	35	85	10	M8	72

Double proportional solenoid Typ GD1

Funktion

Double-proportional solenoids or Double Acting Solenoid consist of two magnet systems. These specialized linear solenoids are used to effect stroke from the center position to the right or left end position. The stroke motion of the armature takes place by means of electromagnetic force of the respective solenoid coil. The solenoid is reset to the center position via external forces.
Compared to a reversing linear solenoid, a double-proportional solenoid accomplishes twice the stroke (in mm) at the same size. The characteristic curves decline appropriately.

Characteristics

The force of standard solenoids is flat to slightly rising during the initial 80% of travel, rising to double the initial force during the final 20% of travel. Maintenance-free support of the plunger ensures a long service life.

Installation Instructions

The solenoid can be installed in any position.

The power transfer should take place only in axial direction; lateral loads on the plunger are to be avoided. When employing these units, the „Technical Introduction" is to be observed.

Nominal supply voltage:	**U_N 24 VDC**
Relative duty cycle:	100%
Insulation class:	"H" according to VDE 0580
Limiting temperature:	180 °C
Degree of protection:	IP 65 according to DIN 40050

Technische Daten Umkehrhubmagnet Bauart GD1

Typ	Stroke from middle position [mm]	100% Duty Cycle			40% Duty Cycle			
		Power at 20°C [W]	Force stroke start [N]	Force stroke end [N]	Power at 20°C [W]	Force stroke start [N]	Force stroke end [N]	Weight [kg]
GD1 050	10	22,5	19	19	39,5	28	28	1,3
GD1 055	12	27	23	28	46	36	43	1,8
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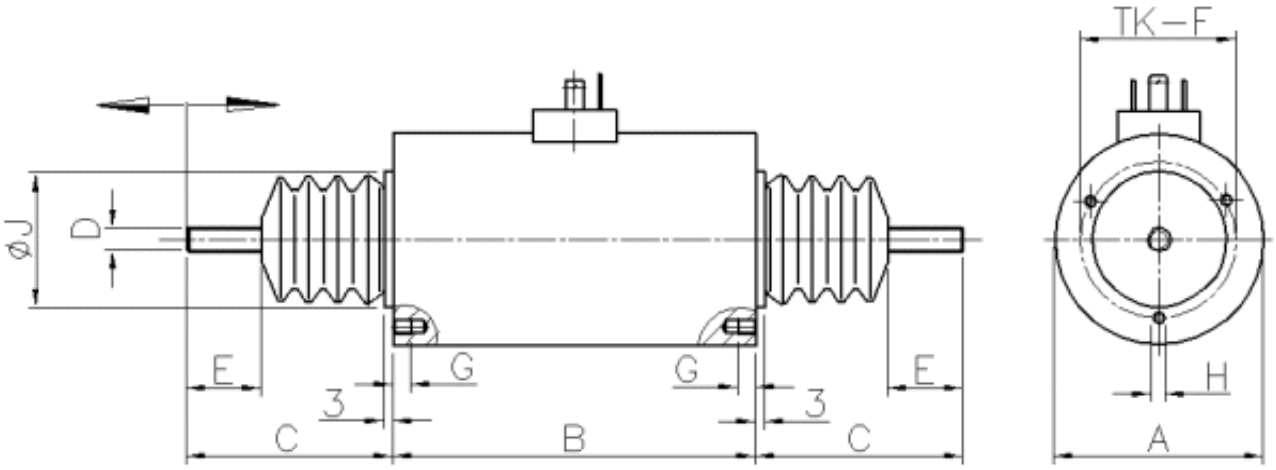
Installation drawing



Dimensions in mm

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