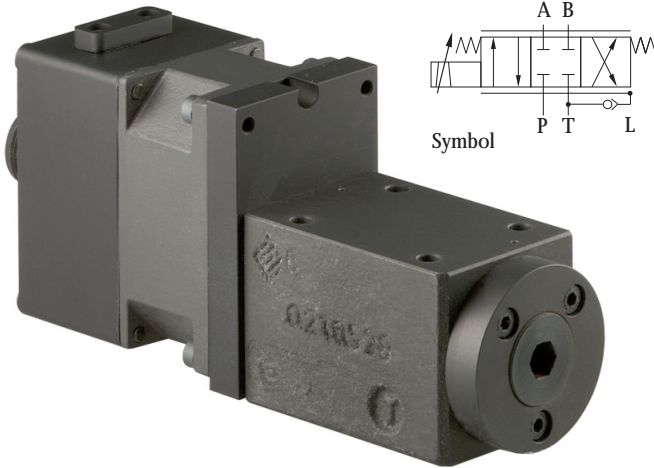


Elektrohydraulic Servovalves Typ HVM 061



- Special features:
- high reliability
 - easy service
 - robust construction
 - high dynamic response
 - relatively insensitive to contamination
 - variable metering orifices only
 - $Q_{max} = 5\text{ l/min}$ at $\Delta p = 70\text{ bar}$
 - $p_{max} = 315\text{ bar}$

General description:

- Type : electrical input stage, torque motor, sliding spool system
- Pilot : none
- main spool : directly controlled 4-way sliding spool
- Style of mounting : subplate / Cetop 03
- Mounting position : unrestricted
- Weight : 1,3kg

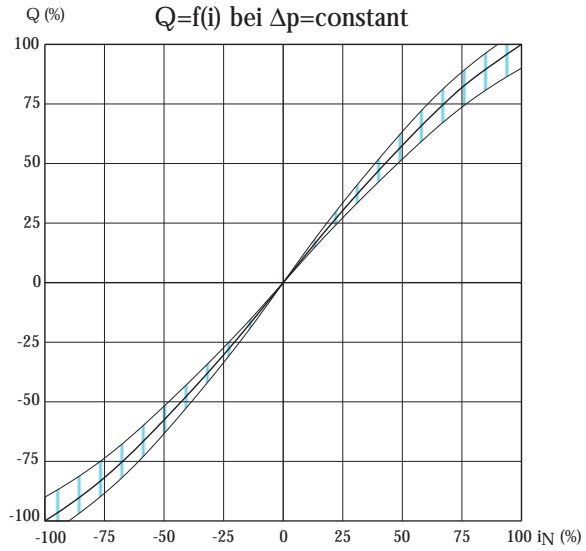
Technical Data

1. Hydraulic Data (definition according to DIN 24311)

.1	rated pressure	p_N	=	210	[bar]	
.2	operating pressure	$p_{b\ min}$	=	10	[bar]	
.2.1	return line pressure	$p_{b\ max}$	=	315	[bar]	
.2.2	no separate leakage line necessary	$p_{r\ max}$	=	10	[bar]	static
.3	max. pressure (static test pressure)	p_{max}	=	450	[bar]	
.4	rated flow at $\Delta p = 70\text{ bar}$	Q_N	=	1/3/5	[l/min]	
.5	quiescent flow, max. at p_N	Q_{02}	<	5% Q_N		
.6	hysteresis	H	<	4,5% i_N 2% i_N	(without Dither) (with Dither)	
.7	threshold sensitivity	E	<	0,4% i_N 0,1% i_N	(without Dither) (with Dither)	
.8	threshold span	S	<	2% i_N 1% i_N	(without Dither) (with Dither)	
.9	linearity deviation		<	10% i_N		
.10	flow symmetry - Q_N zu + Q_N		<	10% i_N		
.11	pressure gain (see diagram)	V_P	>	0,2 $P_b / 1\% i_N$		
.12	overlap, standard	h	=	-1...+3% i_N		
.13	operating temperature range	δ_M	=	253...353	[K]	
.13.1	temperature drift		≤	2% $i_N / 50K$		
.14	viscosity range of fluid	γ_{min}	=	10...1000 mm^2/s approximate value normal: ISO VG 10...ISO VG 46		
.15	filtration of fluid		<	class 4-5 class 15/14/11	to NAS 1638 or to ISO 4406	
.16	fluid standard		=	HLP-hydraulic oils as per DIN 51524 Teil 2 (Special equipments possible)		

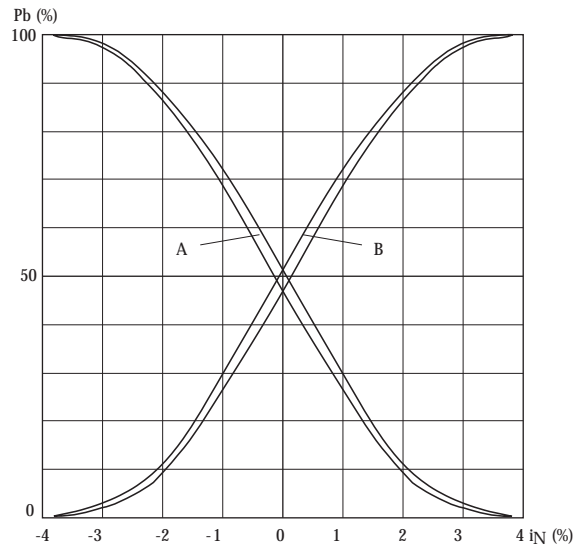
2. Diagrams HVM 061

Flow rate-signal function



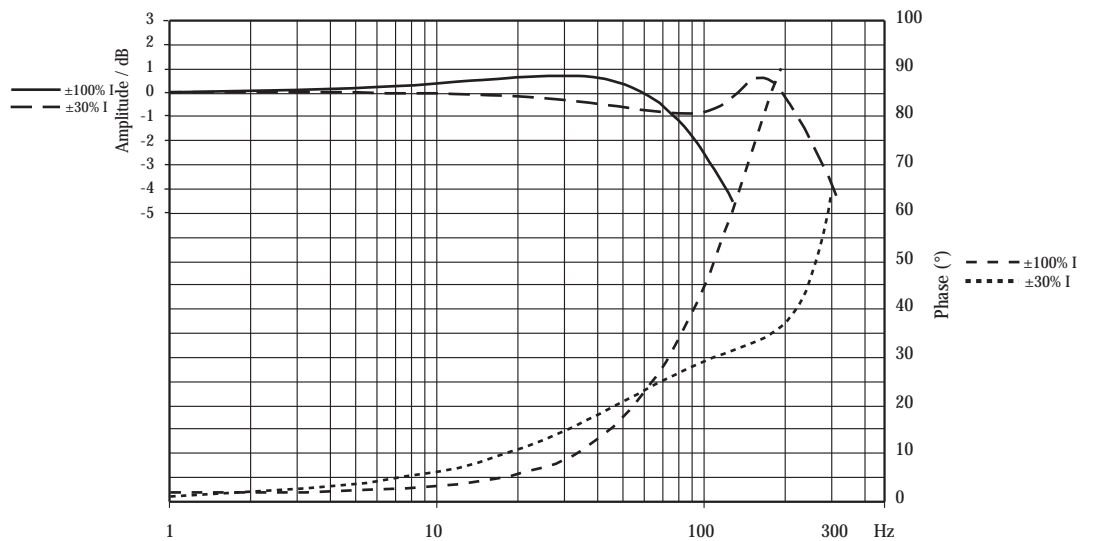
Pressure gain

$$V_p = \tan \alpha = \frac{\Delta p}{\Delta i}$$



Frequency Response

Coils: 2x65Ω
Power Supply: ±32V
P_V: 210bar

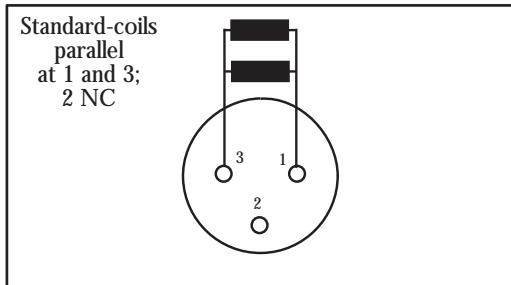


3. Electrical Data

3.1 Electrical Data without Electronic

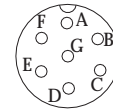


connector (M8x1)

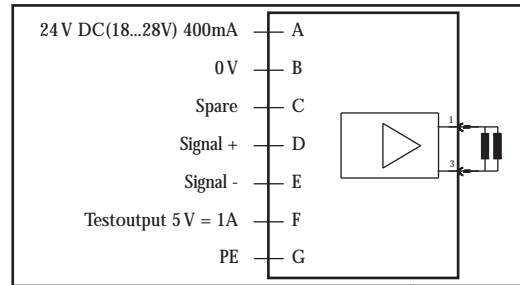


coil type		inductance	rated current	resistance	power
1	1 coil	90 mH	± 100 mA	65Ω	0,65 W
	2 coil parallel	72 mH	± 200 mA	32Ω	1,3 W

3.2 Electrical Data with Electronic

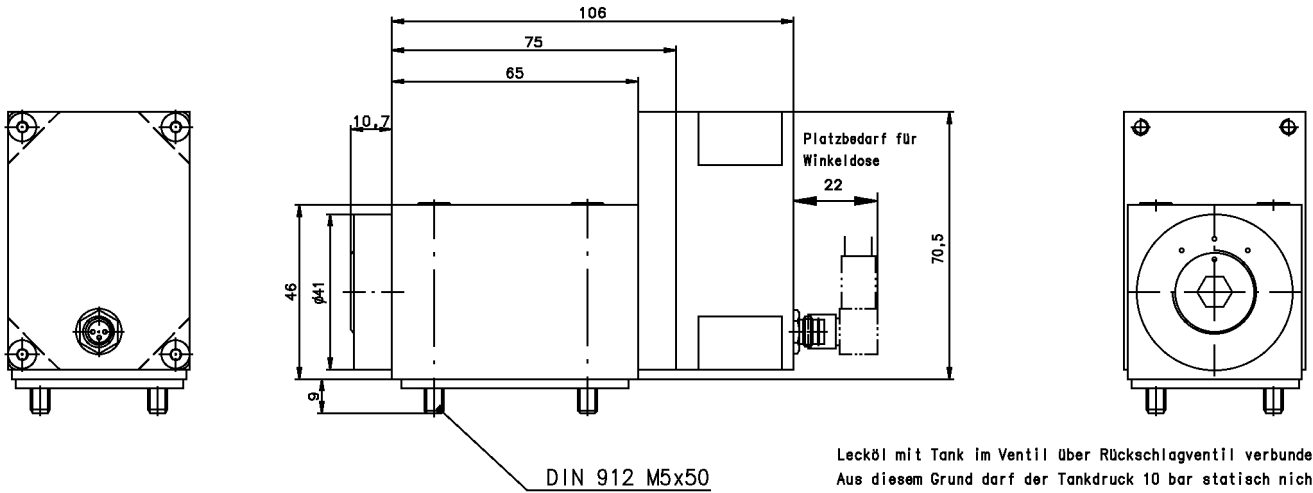
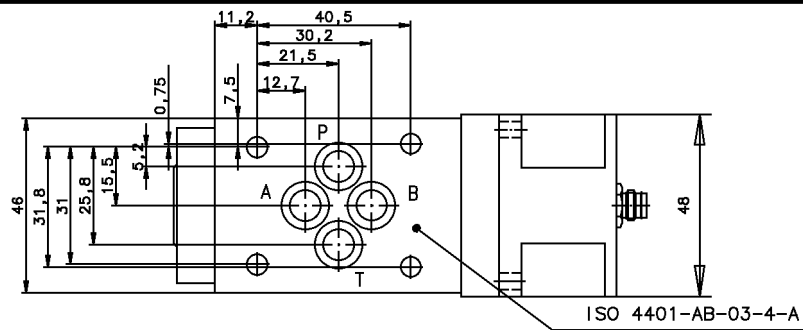


connector 7 pol. DIN 43563

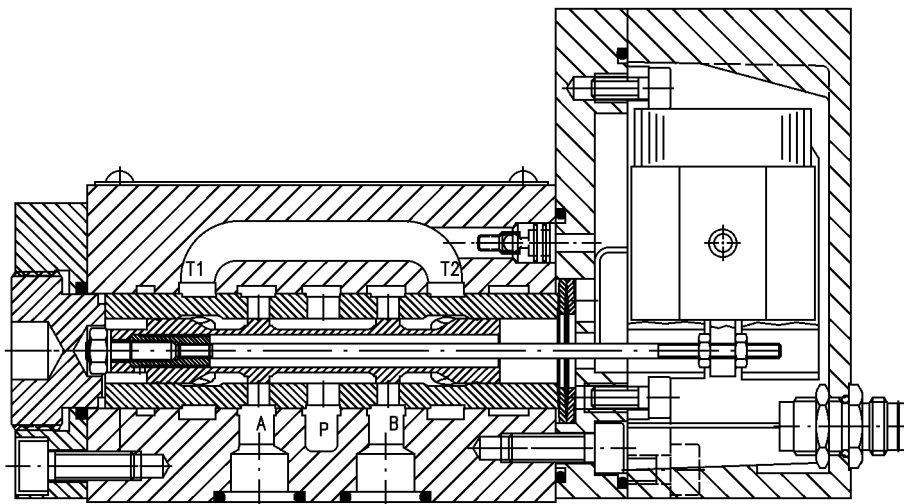
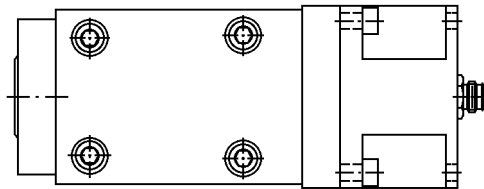


Input	E1	E2	E3	E4	Flow
Signal D>E	+ 10 V	4 mA	20 mA	+20 mA	P>A
	0 V	12 mA	12 mA	0 mA	0
	- 10 V	20 mA	4 mA	-20 mA	P>B

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Lecköl mit Tank im Ventil über Rückschlagventil verbunden.
Aus diesem Grund darf der Tankdruck 10 bar statisch nicht überschreiten!



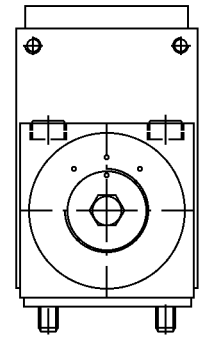
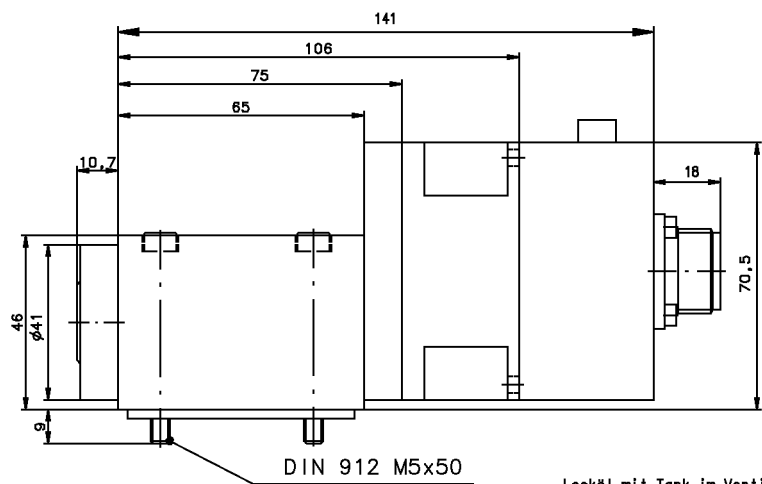
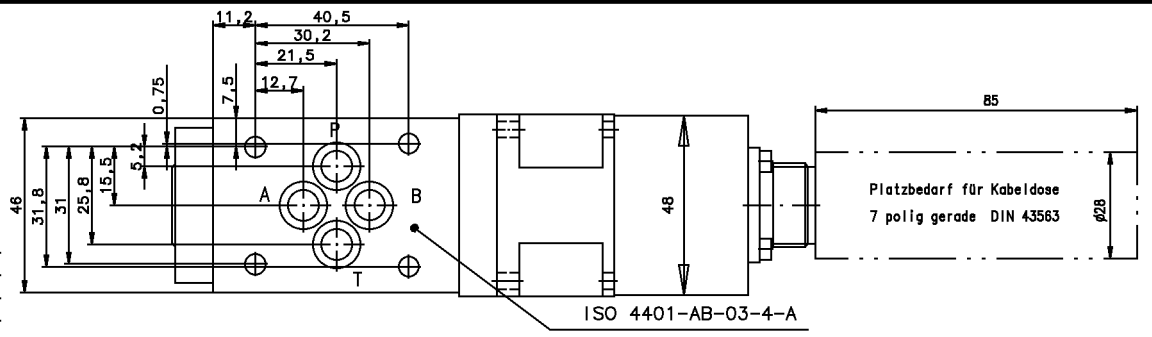
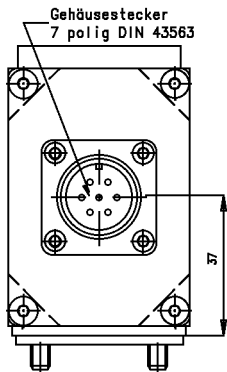
Angaben ohne Einheiten in mm
All dimensions without unit in mm

Nur zur Information / Only for information

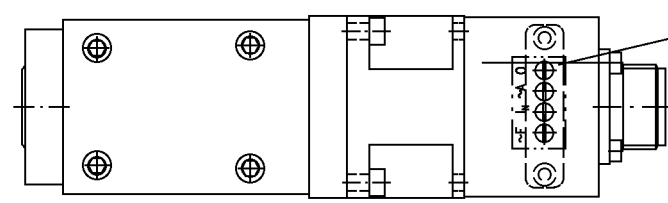
Änderungsindex / Amendment index		Ventil Valve	HVM 061-0XX-1XXX-XA	Id.- Nr. -
-	-			
Datum Date	Name Name			
dwg.	01.04	Dindorf		
		Jos. Schneider Optische Werke GmbH Ringstr. 132 55543 Bad Kreuznach Germany		

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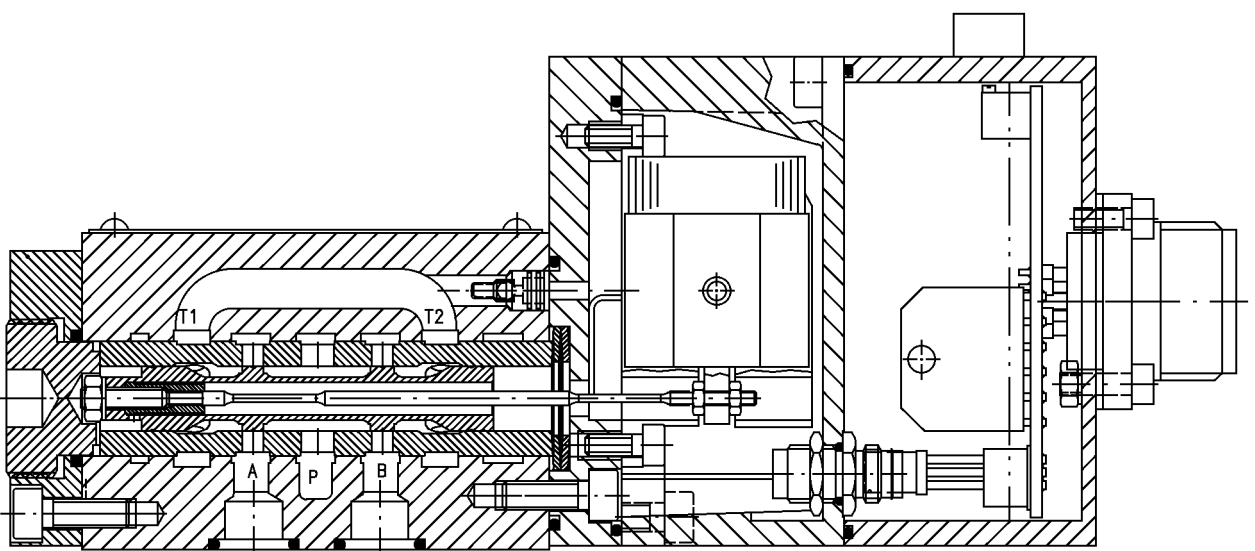
A	24 VDC ; 400 mA
B	0 V
C	Signal 0
D	± 10 V
E	0 V
F	Feedback
G	PE



Lecköl mit Tank im Ventil über Rückschlagventil verbunden.
Aus diesem Grund darf der Tankdruck 10 bar statisch nicht überschreiten!



- ~F: Ditherfrequenz
- I: Nennstrom
- A: Ditheramplitude
- 0: Nullpunkt



Angaben ohne Einheiten in mm.
All dimensions without unit in mm

Nur zur Information / Only for information

Änderungsindex / Amendment index		Ventil Valve	HVM 061-XXX-XXXX-XX-EX	Id.- Nr. -
	-			
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dwg.	01.04	Dindorf		
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