

| KOMPETENZ, DIE ANTREIBT

Handsteuerventil LMBV-3/ Manual control valve LMBV-3



HANDSTEUERVENTIL LMBV-3

MANUAL CONTROL VALVE LMBV-3

Merkmale

- Kompakte Bauweise
- Geringe Druckverluste
- Lange Lebensdauer und hoher Leistungsgrad
- Verschiedene Anschlussmöglichkeit und Schaltbilder
- Langfristige Präzision

Characteristics

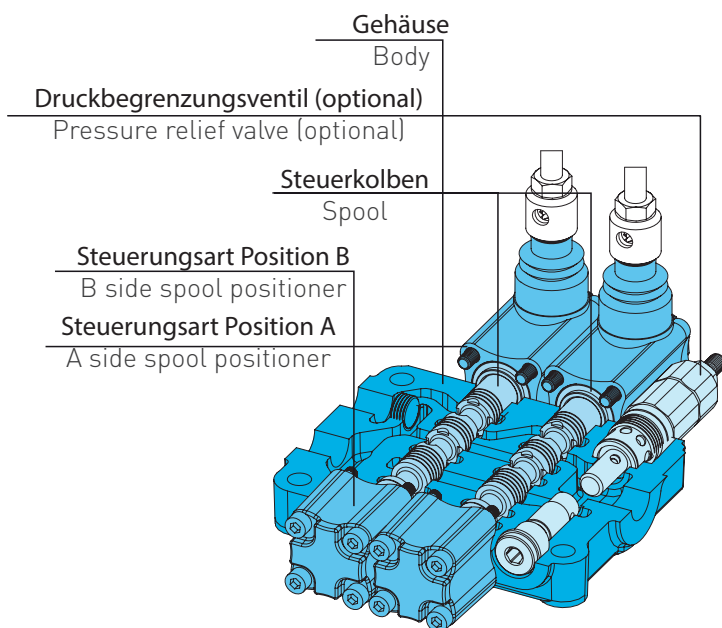
- Compact construction
- Low pressure drop
- Long service life and efficiency
- Various ports and circuits
- Long term accuracy

TECHNISCHE DATEN

TECHNICAL DATAS

Max. Ölstrom	Flow rate
lpm 45	GPM 12
Max. Betriebsdruck	Max. operating pressure
bar 315	PSI 4600
Max. Gegendruck am Anschluss T	Max. back pressure on port T
bar 25	PSI 360
Temperaturbereich Betriebsmedium (Dichtungsmaterial)	Fluid temperature range (Sealing material)
-20 - 80 (NBR) / -20 - 100 (FPM)	[-4 - 176 (NBR) / -4 - 212 (FPM)]
Viskosität	Viscosity
Empfohlen 15 - 75 mm	Recommended 15 - 75 mm
Min. 12 mm ² /s	Min. 12 mm ² /s
Max 400 mm ² /s	Max 400 mm ² /s
Umgebungstemperatur	Ambient temperature
-40 - 60 °C	-40 - 60 °F

AUFBAU CONSTRUCTION



BESTELLCODE ORDER CODE

1.	Gehäuse Body	2.	Druckbegrenzungsventil Pressure relief valve	4.	Steuerungsart Position B B side spool positioner		
...S	Anzahl Sek- tionen Num- ber of sections (max. 6 Sections)	2	40 bis 80 bar [580 - 1150 PSI], Standardeinstellung 80 bar [1150 PSI] 40 to 80 bar [580 - 1150 PSI], standard setting 80 bar [1150 PSI]	6-1	3 Positionen, Rastung in Position 1-0-2 3 positions, detent in position 1-0-2		
		3	63 bis 200 bar [900 - 2900 PSI], Standardeinstellung 120 bar [1750 PSI] 63 to 200 bar [900 - 2900 PSI], standard setting 120 bar [1750 PSI]	6-2	2 Positionen, Rastung in Position 0-2 2 positions, detent in position 0-2		
		4	160 bis 315 bar [2300 - 4600 PSI], Standardeinstellung 220 bar [3200 PSI] 160 to 315 bar [2300 - 4600 PSI], standard setting 220 bar [3200 PSI]	6-3	2 Positionen, Rastung in Position 1-0 2 positions, detent in position 1-0		
		VS	Ohne / mit Verschlussstopfen Without / with blanking plug	8	3 Positionen, Federzentriert 3 positions, spring centered		
		3.	Schaltbild Graphic symbol	8-1	2 Positionen, Federzentriert 2 positions, spring centered		
		1	3 Positionen, doppeltwirkend, A-B geschlossen 3 positions, double acting, A-B closed	8-2	2 Positionen, Federzentriert 3 positions, double acting, A-B-T connected, P closed		
		2	3 Positionen, doppeltwirkend, A-B-T verbunden 3 positions, double acting, A-B-T connected	9-1	3 Positionen, Rastung in Position 1-2, Federzentriert 3 positions, detent in position 1-2, spring centered		
		3	3 Positionen, einfachwirkend an A 3 positions, single acting on A	9-2	3 Positionen, Rastung in Position 2, Federzentriert 3 positions, detent in position 2, spring centered		
		5	3 Positionen, doppeltwirkend, B-T verbunden, A-P geschlossen 3 positions, double acting, B-T connected, A-P closed	9-3	3 Positionen, Rastung in Position 1, Federzentriert 3 positions, detent in position 1, spring centered		
		6	3 Positionen, doppeltwirkend, A-T verbunden, B-P geschlossen 3 positions, double acting, A-T connected, B-P closed	D2	3 Positionen, Federzentriert und M8-Gewinde 3 positions, spring centered an M8 male thread		
		7	3 Positionen, einfachwirkend an A, A-T verbunden, B geschlossen 3 positions, single acting on A, A-T connected, B closed	EP3	3 Positionen, Elektro-pneumatische Steuerung 3 positions, electro-pneumatic actuator		
		9	3 Positionen, doppeltwirkend, A-B-P-T geschlossen 3 positions, double acting, A-B-P-T closed	P	3 Positionen, Pneumatische Steuerung 3 positions, pneumatic actuator		
		10	3 Positionen, doppeltwirkend, A-B-T verbunden, P geschlossen 3 positions, double acting, A-B-T connected, P closed	MG1 (NO)	3 Positionen, Mikroschalter in Pos. 1, stromlos offen 3 positions, Microswitch in pos. 1, normally open		
		DY	4 Positionen, doppeltwirkend, Schwimmstellung in Pos. 3 (A-B-T verbunden) 4 positions, double acting, floating circuit in Pos. 3 (A-B-T connected)	MG2 (NO)	3 Positionen, Mikroschalter in Pos. 2, stromlos offen 3 positions, Microswitch in pos. 2, normally open		
		PYX	4 Pos., doppeltwirkend, Schwimmstellung in Pos. 3 (A-B-T verbunden) + RSV 4 pos., double acting, floating circuit in Pos. 3 (A-B-T connected)+ check valve	MG3 (NO)	3 Positionen, Mikroschalter in Pos. 1+2, stromlos offen 3 positions, Microswitch in pos. 1+2, normally open		
		PY	4 Positionen, doppeltwirkend, Schwimmstellung in Pos. 3 (A-B-T verbunden) 4 positions, double acting, floating circuit in Pos. 3 (A-B-T connected)	MG1 (NC)	3 Positionen, Mikroschalter in Pos. 1, stromlos geschlossen 3 positions, Microswitch in pos. 1, normally closed		
		Z41	4 Positionen, doppeltwirkend, Eilgang, Nullstellung in Position 1 4 positions, double acting, regenerative circuit, rest in position 1	MG2 (NC)	3 Positionen, Mikroschalter in Pos. 1, stromlos geschlossen 3 positions, Microswitch in pos. 1, normally closed		
		Z42	4 Positionen, doppeltwirkend, Eilgang, Nullstellung in Position 0 4 positions, double acting, regenerative circuit, rest in position 0	MG3 (NC)	3 Positionen, Mikroschalter in Pos. 1, stromlos geschlossen 3 positions, Microswitch in pos. 1, normally closed		
						ES...	Elektro-Hydraulische Steuerung [12/24V DC] 3 positions, Microswitch in pos. 1, normally closed
						5.	Steuerungsart Position A A side spool positioner
				L	Standardhebel Standard lever box		
				SL	Ohne Handhebel Without any cover		
				SPL	Staubschutzplatte, ohne Handhebel With dust-proof plate, without lever		
				TQ	Flexible Kabelverbindung Flexible cable connection		
				LCB	Joystick Joystick		

6.	Anschlüsse Ports	7.	Druckweiterführungsstopfen Power beyond conversion plug
G-3	G 3/8" BSPP	M8	Mit Stopfen With plug
G-4	G 1/2" BSPP	M3	Ohne Stopfen Without plug
G-6	G 3/4" BSPP		
E8	3/4-16 UNF-2B		
E10	7/8-14 UNF-2B		
E12	1 1/16-12 UNF-2B		
E16	1 5/16-12 UNF-2B		
M18	M18x1,5		

*Bei Bestellung ab 2 Sektionen bitte folgendes beachten:

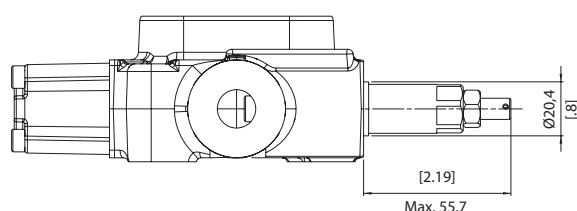
Wenn ein unterschiedliche Sektionen benötigt werden, müssen die Positionen 3, 4 und 5 erneut angegeben werden!

*Please note for orders starting from 2 sections:

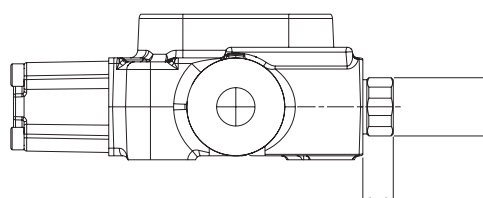
If different sections needed, please indicate positions 3, 4 and 5 again!

DRUCKBEGRENZUNGSVENTIL PRESSURE RELIEF VALVE

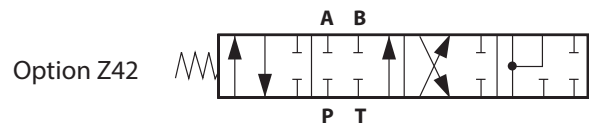
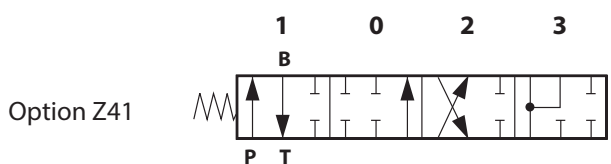
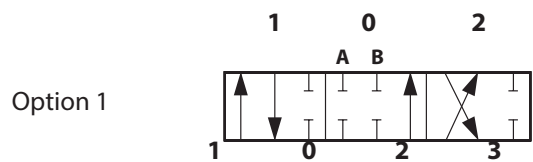
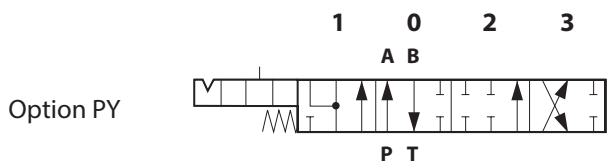
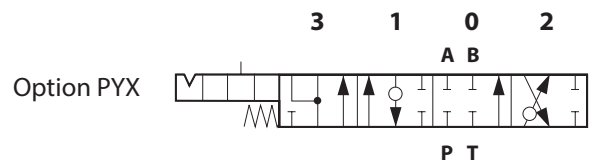
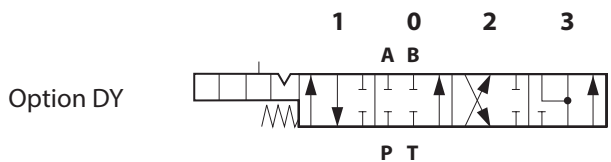
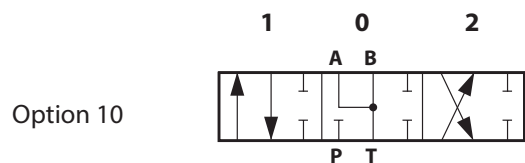
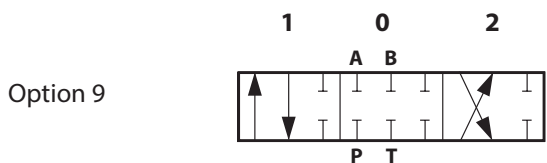
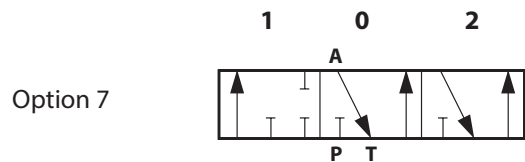
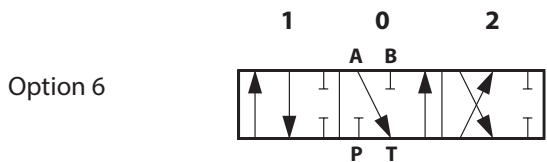
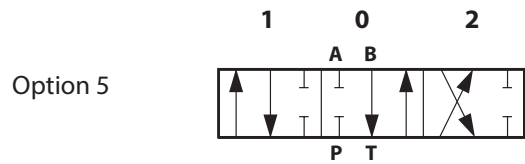
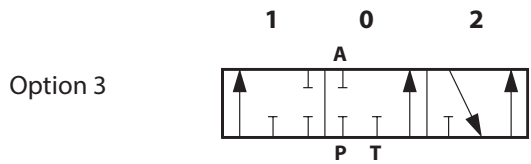
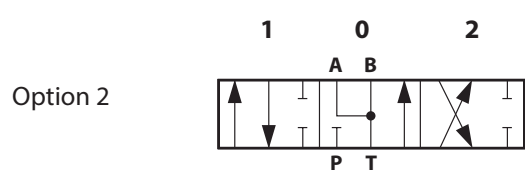
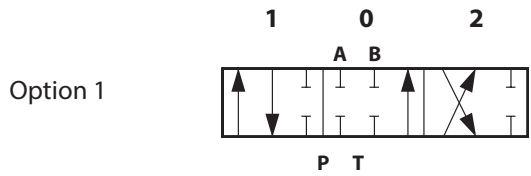
Option 2, 3 + 4: Mit Druckbegrenzungsventil
Option 2, 3 + 4: With pressure relief valve



Option VS: Ohne Druckbegrenzungsventil
Option VS: Without pressure relief valve

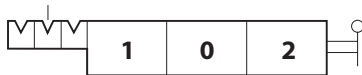


SCHALTBILD GRAPHIC SYMBOL

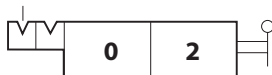


STEUERUNGSART POSITION B B SIDE SPOOL POSITIONER

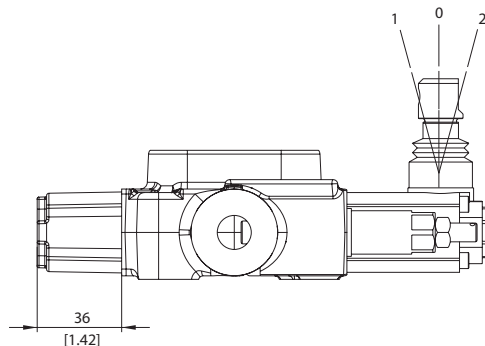
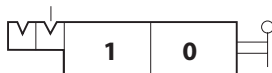
Option 6-1



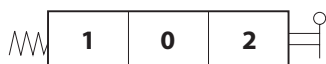
Option 6-2



Option 6-3



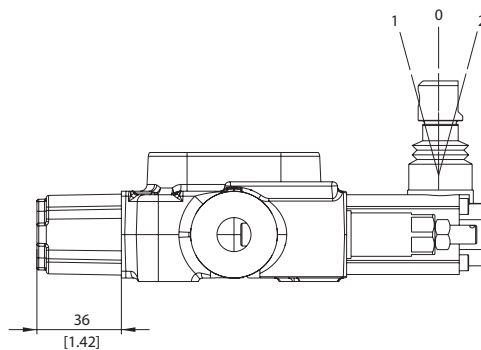
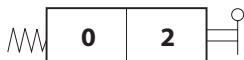
Option 8



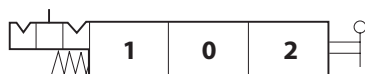
Option 8-1



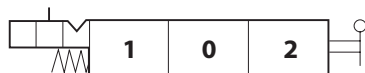
Option 8-2



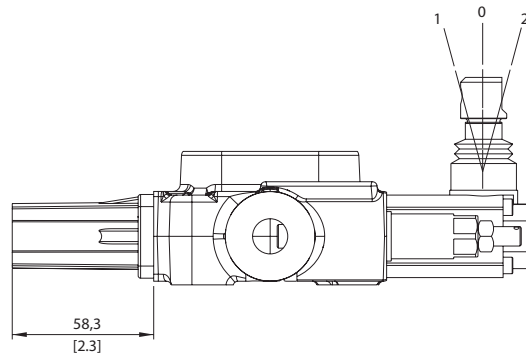
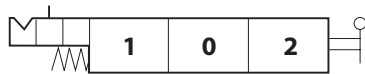
Option 9-1



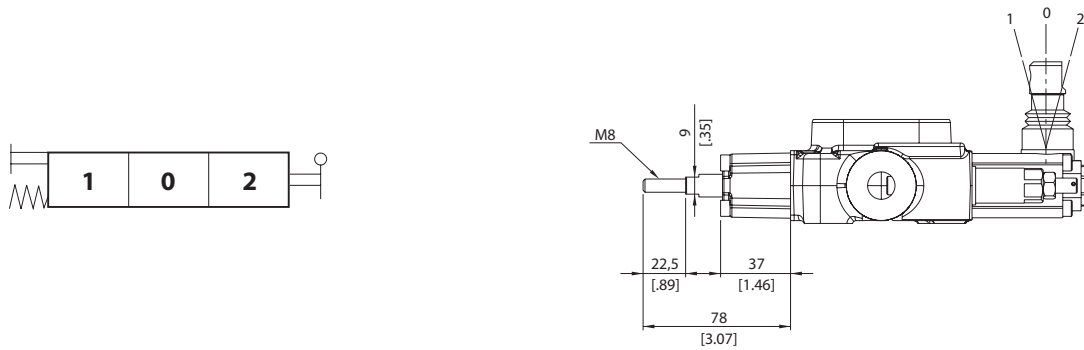
Option 9-2



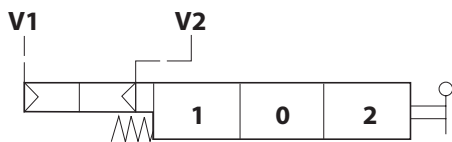
Option 9-3



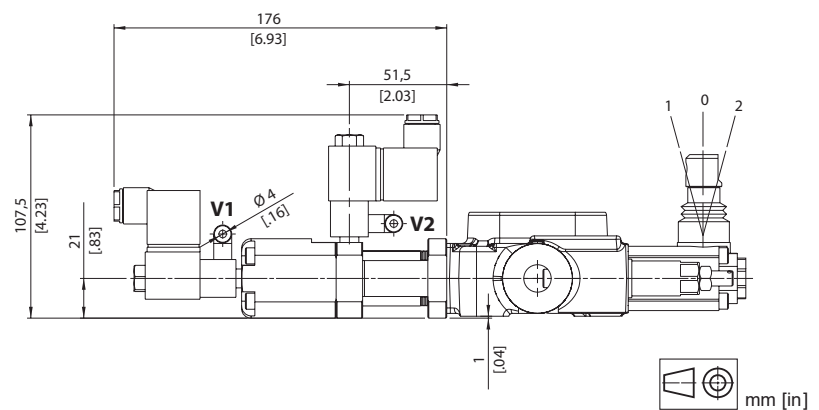
Option D2



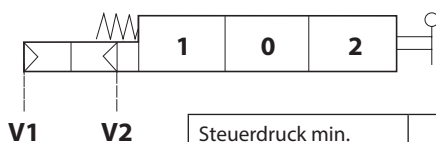
Option EP3



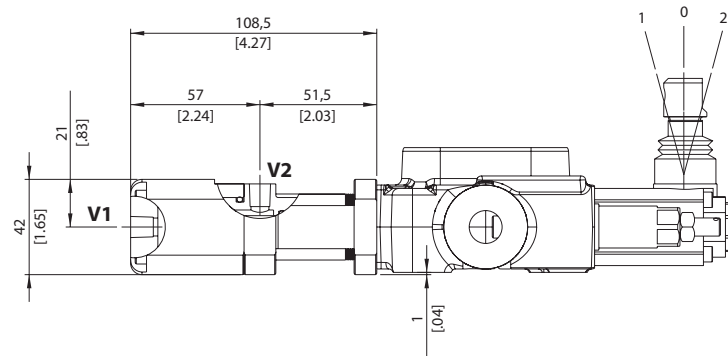
Nennspannung Nominal Voltage	24V DC
Toleranz Tolerance	± 10%
Nennleistung Power rating	5W



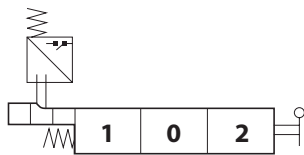
Option P



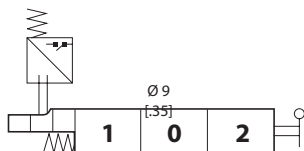
Steuerdruck min. Pilot pressure min.	5,5 bar 80 PSI
Steuerdruck max. Pilot pressure max.	10 bar 145 PSI
Anschlussgröße V1, V2 Port size V1, V2	1/8-27 NPT



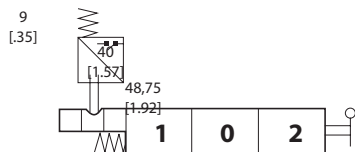
Option MG1(NO)



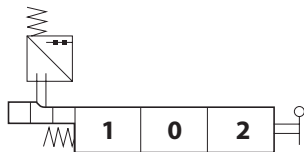
Option MG2(NO)



Option MG3(NO)



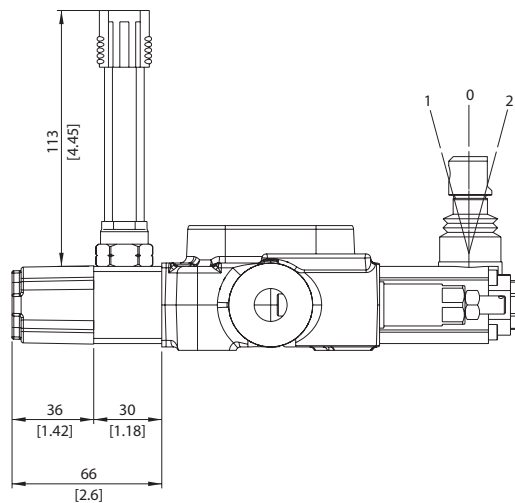
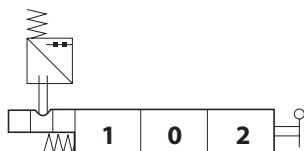
Option MG1(NC)



Option MG2(NC)

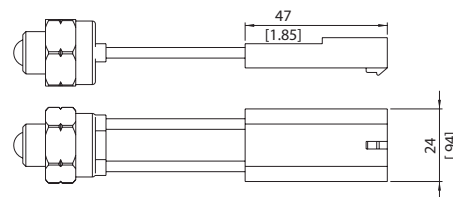


Option MG3(NC)

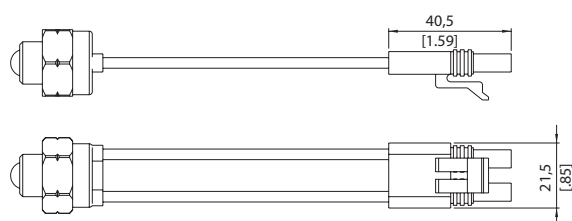


Induktive Belastung 7A/13,5V DC - 10A / 12V DC - 3A / 28V DC
Resistive load

NO-Kontakt (weiblicher Verbinder mit männlichem Ende)
NO-contact (female connector with male end)

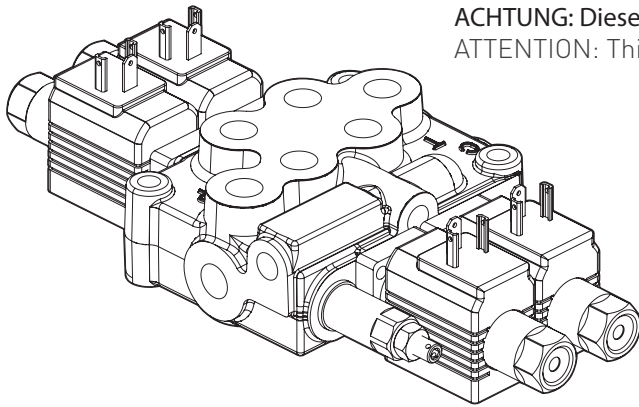


NO-Kontakt (männlicher Verbinder mit männlichem Ende)
NO-contact (male connector with male end)

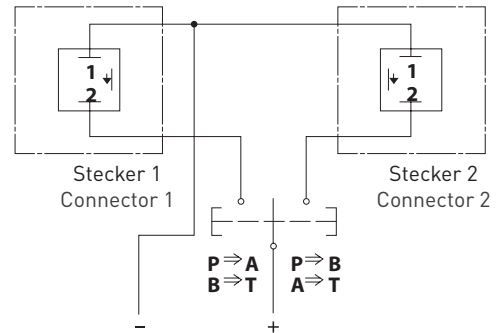


Option ES ...

ACHTUNG: Dieses Ventil ist nur mit Schaltbild Option 1 und 2 erhältlich
ATTENTION: This valve is only available with graphic symbol option 1 and 2

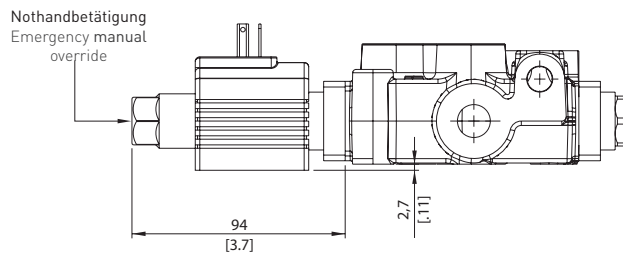


Verkabelungsbeispiel
 Electric wiring example

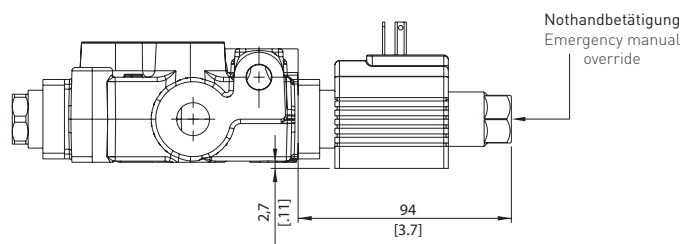


Standardspannung Nominal Voltage	12 / 24V DC
Toleranz Tolerance	± 10%
Nennleistung Power rating	36W

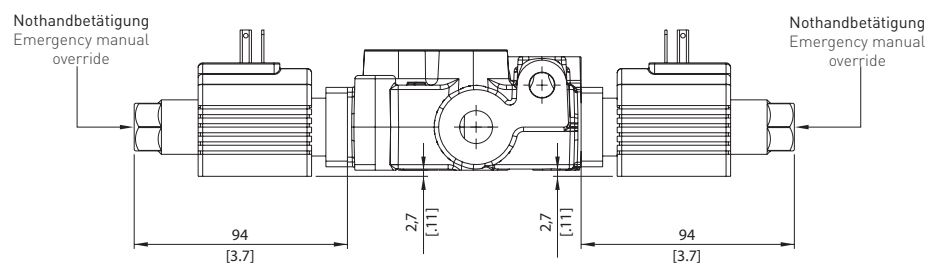
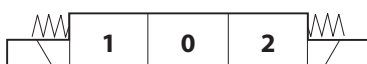
Bestellcode: ES-1
 Ordercode: ES-1



Bestellcode: ES-2
 Ordercode: ES-2

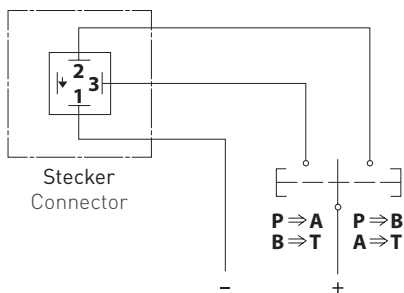


Bestellcode: ES-3
 Ordercode: ES-3

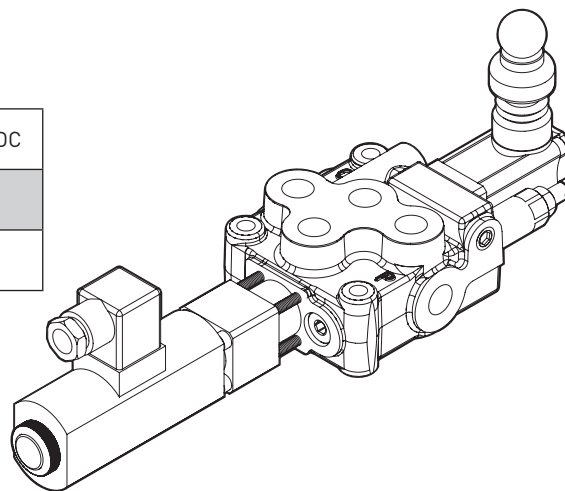


Option ESN ...

Verkabelungsbeispiel
Electric wiring example

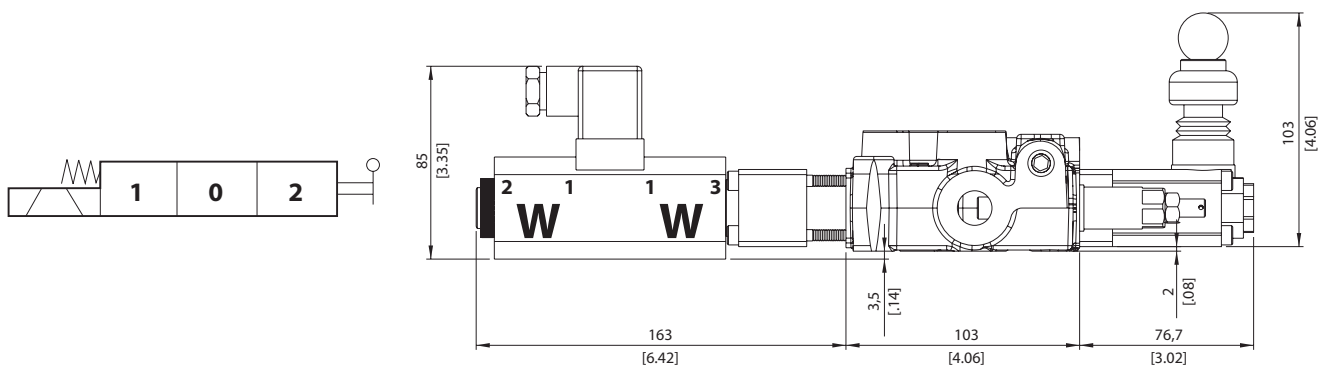


Standardspannung Nominal Voltage	12 / 24V DC
Toleranz Tolerance	± 10%
Nennleistung Power rating	36W

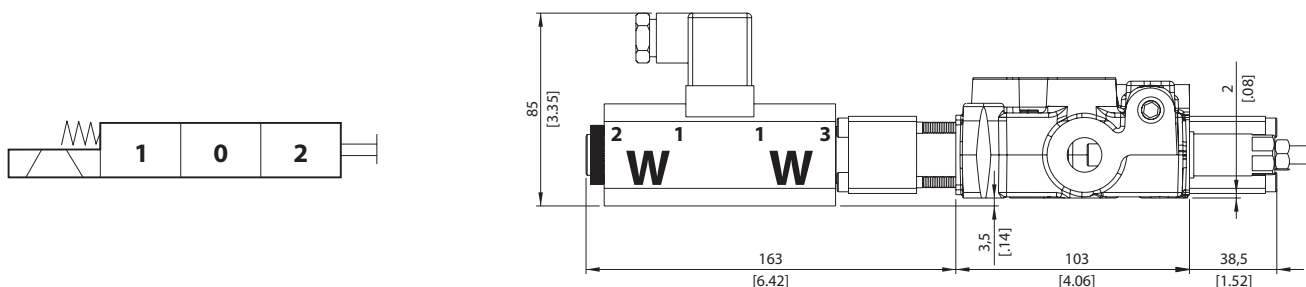


ACHTUNG: Dieses Ventil ist nur mit Schaltbild Option 1 und 2 erhältlich
ATTENTION: This valve is only available with graphic symbol option 1 and 2

Bestellcode: ESNLES
Ordercode: ESNLES

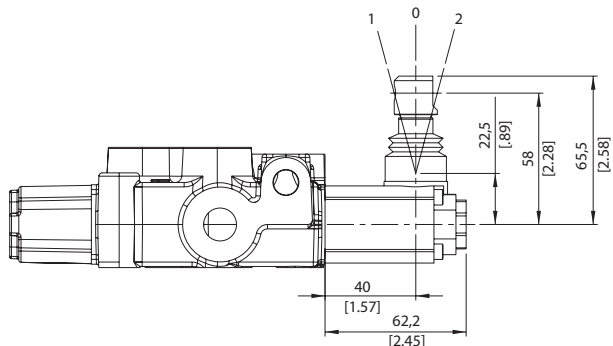


Bestellcode: ESNCAE
Ordercode: ESNCAE

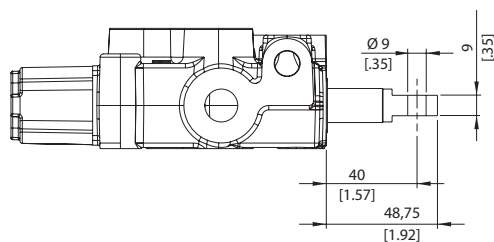


STEUERUNGSART POSITION A A SIDE SPOOL POSITIONER

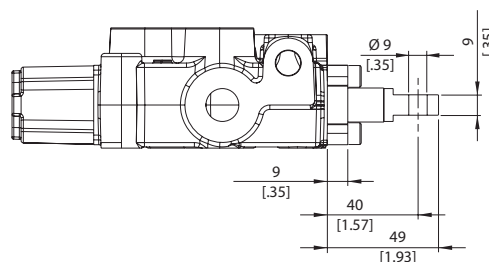
Option L: Standardhandhebel
Option L: Standard lever box



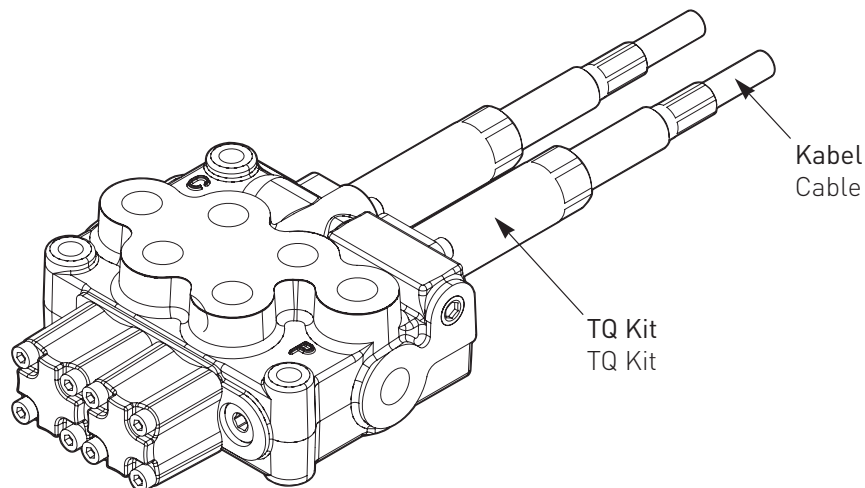
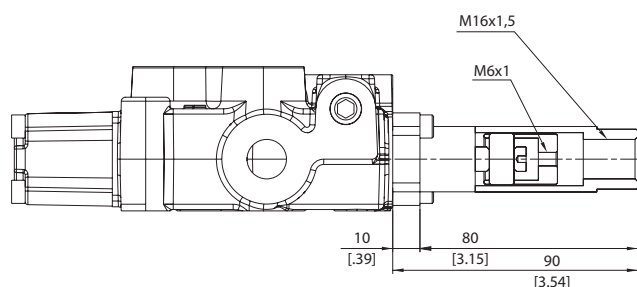
Option SL: Ohne Handhebel
Option SL: Without any cover



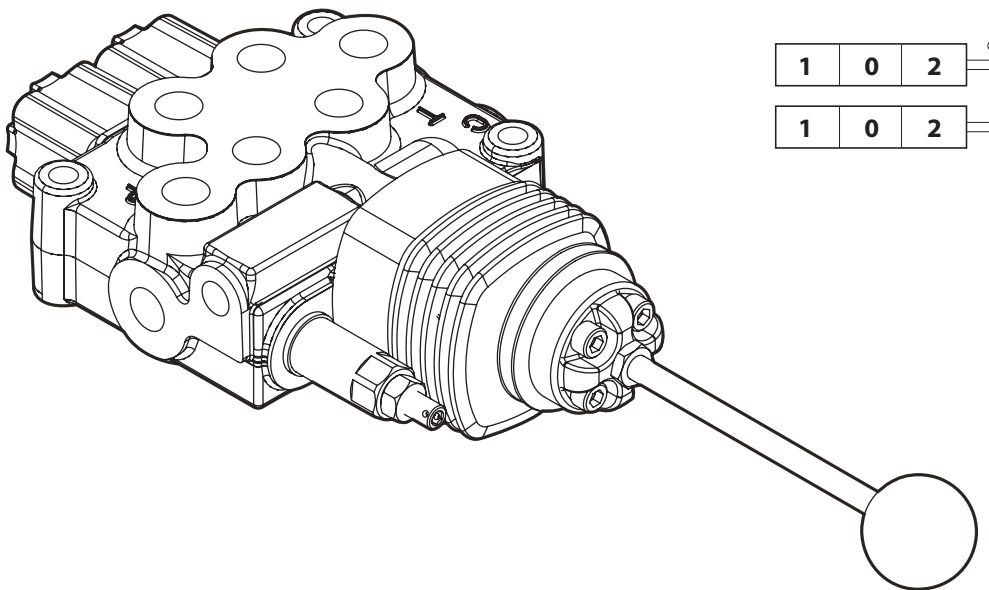
Option SPL: Staubschutzplatte, ohne Handhebel
Option SPL: With dust-proof plate, without lever



Option TQ: Flexible Kabelverbindung (ohne Kabel)
Option TQ: Flexible cable connection (cable not included)

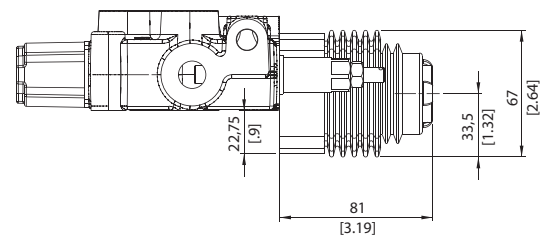
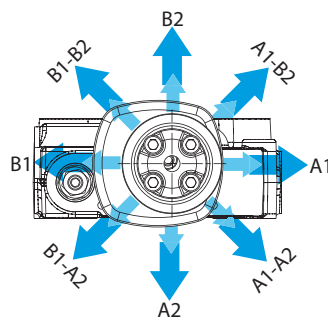
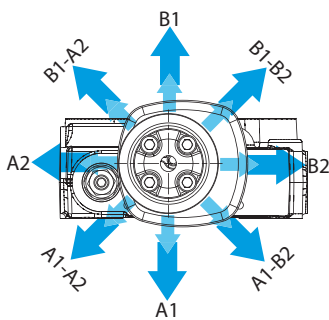


Option LCB: Joystick
 Option LCB: Joystick



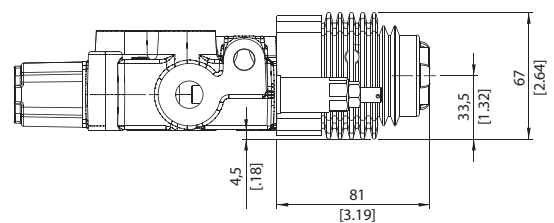
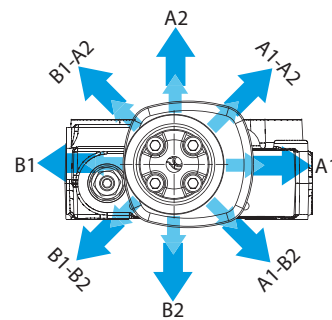
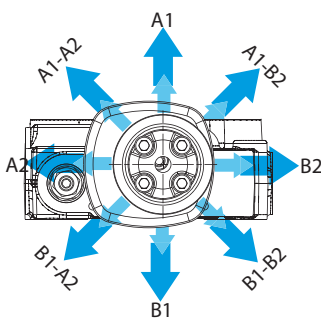
Bestellcode: LCB1
 Ordercode: LCB1

Bestellcode: LCB2
 Ordercode: LCB2



Bestellcode: LCB 3
 Ordercode: LCB 3

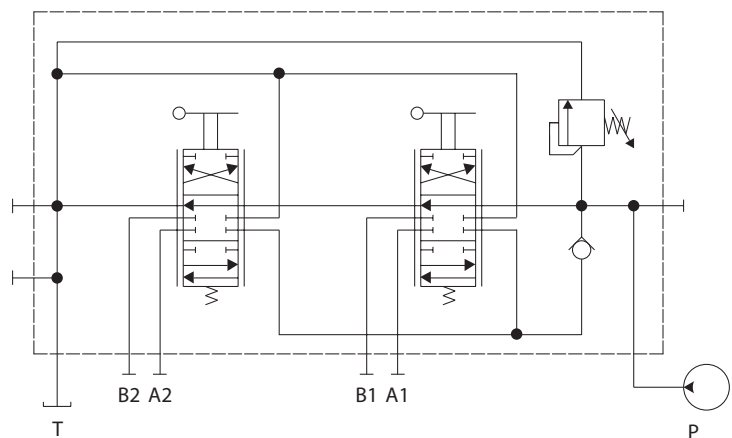
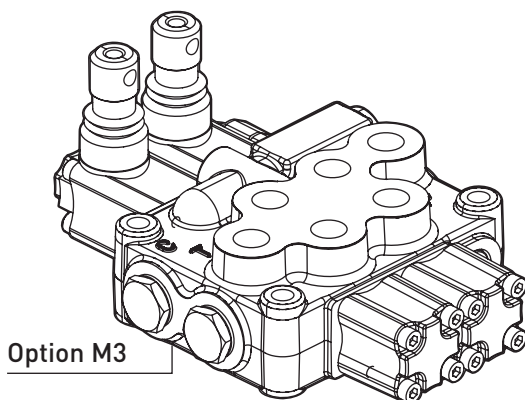
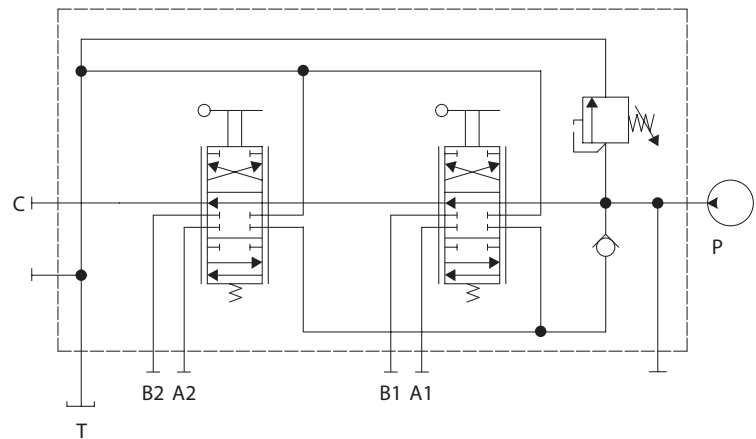
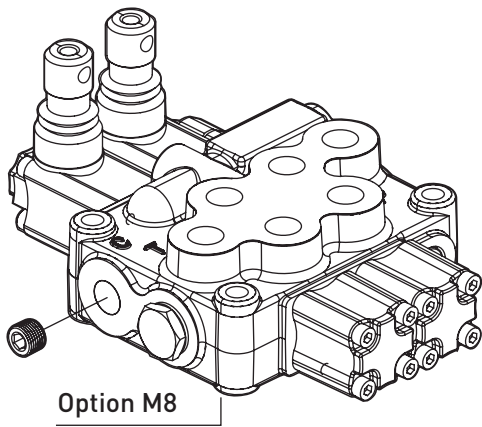
Bestellcode: LCB 4
 Ordercode: LCB 4



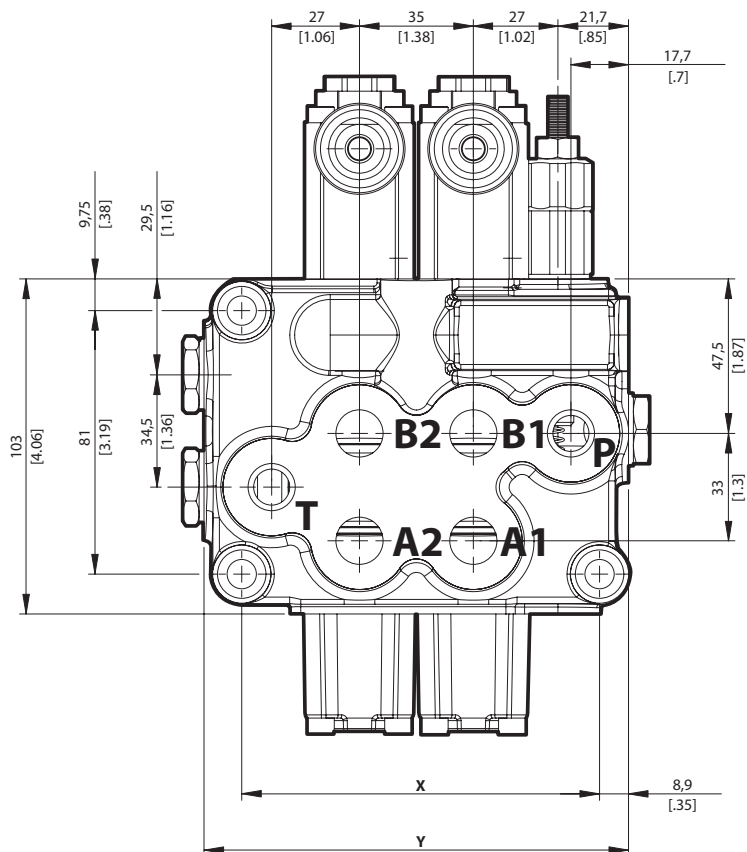
Anschlüsse
Ports

Option Option	G-3	G-4	G-6	E8	E10	E12	E16	M18
A / B / P / T	G 3/8"	G 1/2"	G 3/4"	3/4-16 UNF	7/8-14 UNF	1 1/16-12 UNF	1 5/16-12 UNF	M18x1,5

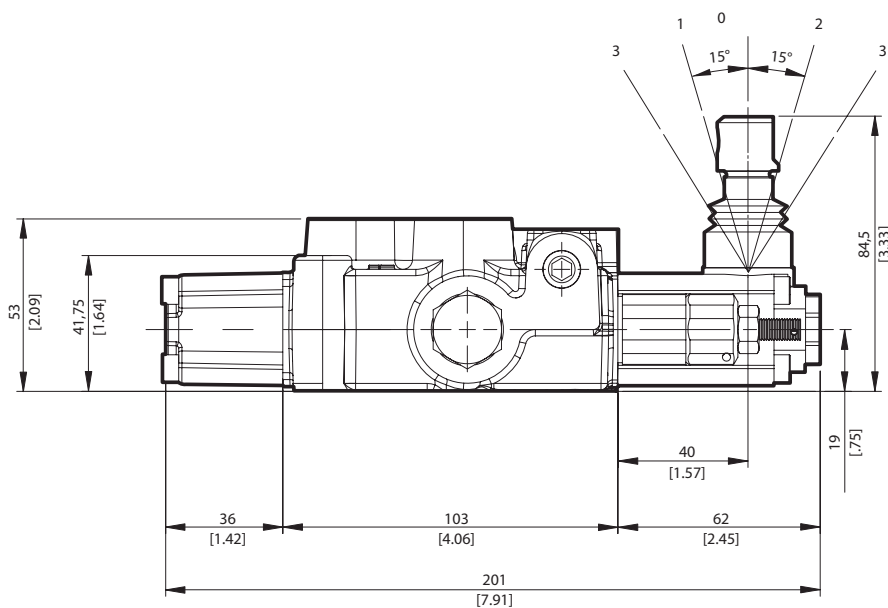
Druckweiterführungsstopfen
Power beyond conversion plug



EINBAUMASSE MM [IN.]
DIMENSIONS MM [IN.]

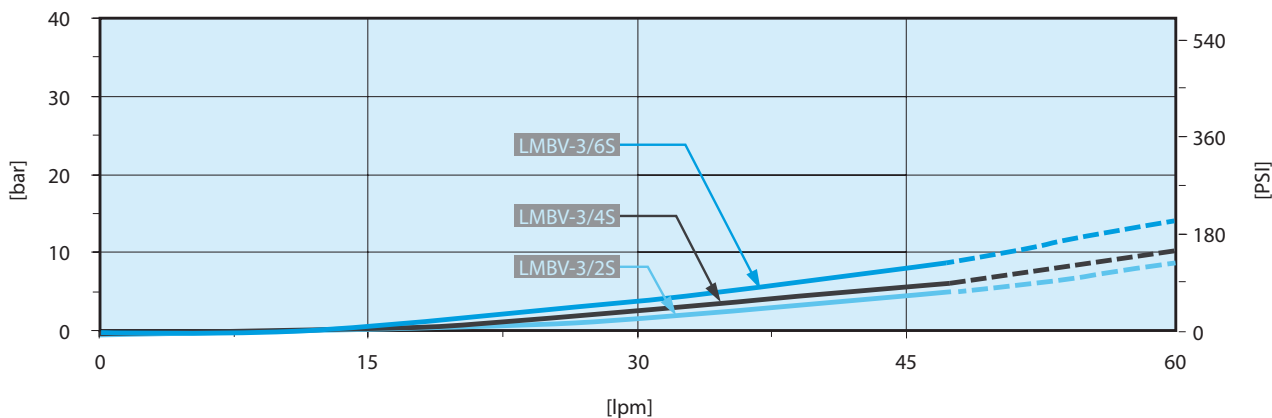


Typ Type	X mm [in]	Y mm [in]
LMBV-3/1S	93,5 [3.68]	73 [2.87]
LMBV-3/2S	130,5 [5.14]	110 [4.33]
LMBV-3/3S	165,5 [6.52]	147 [5.79]
LMBV-3/4S	202,5 [7.97]	184 [7.24]
LMBV-3/5S	239,5 [9.43]	221 [8.70]
LMBV-3/6S	276,5 [10.89]	258 [10.16]

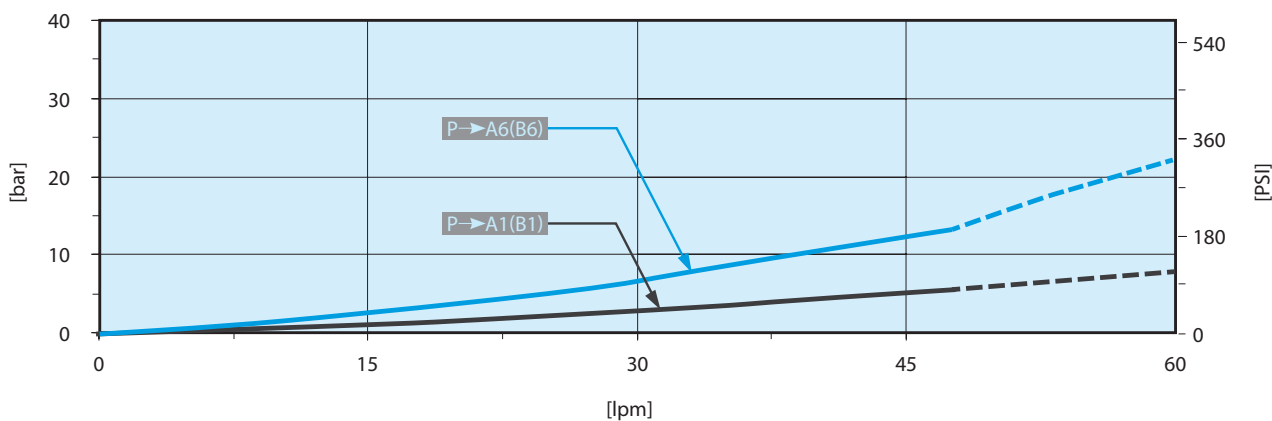


DRUCKGEFÄLLE PRESSURE DROP

P nach T
P to T



P nach A (B)
P to A (B)



A (B) nach T
A (B) to T

