

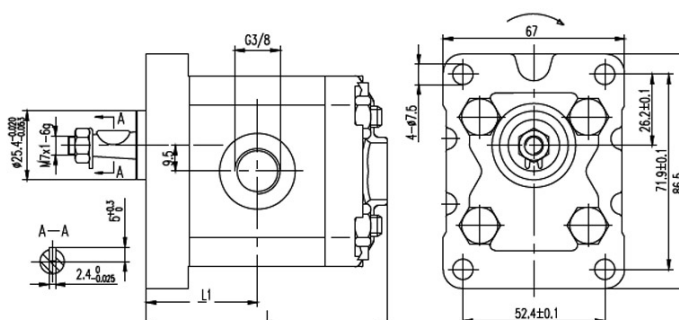
# HIGH PRESSURE - pumps

## Gear pumps TRALE

Positive displacement, external gear pumps intended for hydraulic systems of machines and devices.

Material	
Housing	Aluminium
Mounting plate	Aluminium (groups 1 and 2), cast iron (group 3)
Rear cover	Aluminium (groups 1 and 2), cast iron (group 3)
Sealing	NBR
Operation conditions	
Medium	Hydraulic oil of L-HM46 type or substitute
Fluid viscosity	From 10 cSt up to 600 cSt (recommended 30 ÷ 45)
Working temperature	From -20°C up to +90°C (medium), from -20°C up to +60°C (ambient)
Symbols	
CC	Displacement
P1	Maximum working pressure (continuous operation)
P3	Maximum peak pressure (intermittent operation)
V	Maximum rotary speed

Group 1 - conical 1:8, European cover (Ø 25.4 mm), threaded connection

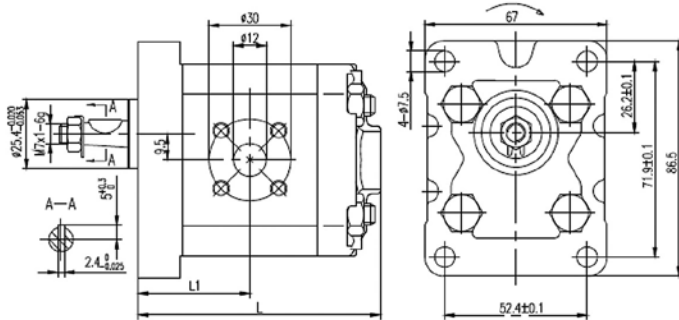


code		CC [cm <sup>3</sup> /rev.]	inlet [BSP]	outlet [BSP]	P1 [bar]	P3 [bar]	V [r.p.m.]	L1 [mm]	L [mm]
rotation right	rotation left								
TL-BTD111D01	TL-BTD111I01	1.1	3/8"	3/8"	250	300	6000	33	75
TL-BTD116D01	TL-BTD116I01	1.6	3/8"	3/8"	250	300	6000	35	78
TL-BTD118D01	TL-BTD118I01	1.8	3/8"	3/8"	250	300	6000	35.5	78.5
TL-BTD127D01	TL-BTD127I01	2.7	3/8"	3/8"	250	300	6000	37	81
TL-BTD132D01	TL-BTD132I01	3.	3/8"	3/8"	250	300	5000	38	83
TL-BTD137D01	TL-BTD137I01	3.7	3/8"	3/8"	250	300	4500	39	85
TL-BTD148D01	TL-BTD148I01	4.8	3/8"	3/8"	200	250	4000	41	89
TL-BTD158D01	TL-BTD158I01	5.8	1/2"	3/8"	200	250	3500	43	93
TL-BTD163D01	TL-BTD163I01	6.3	1/2"	3/8"	200	250	2900	45	97
TL-BTD180D01	TL-BTD180I01	8.0	1/2"	3/8"	200	250	2100	47	101

# HIGH PRESSURE - pumps

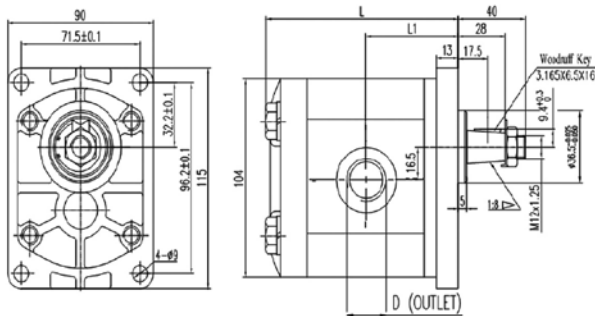
## Gear pumps TRALE

Group 1 - conical 1:8, European cover (Ø 25.4 mm), flanged connection



code		CC [cm <sup>3</sup> /rev.]	inlet [mm]	outlet [mm]	P1 [bar]	P3 [bar]	V [r.p.m.]	L1 [mm]	L [mm]
rotation right	rotation left								
TL-BTD107D03	TL-BTD107I03	0.7	30	30	250	300	6000	32	74
TL-BTD111D03	TL-BTD111I03	1.1	30	30	250	300	6000	33	75
TL-BTD116D03	TL-BTD116I03	1.6	30	30	250	300	6000	35	78
TL-BTD118D03	TL-BTD118I03	1.8	30	30	250	300	6000	35.5	78.5
TL-BTD127D03	TL-BTD127I03	2.7	30	30	250	300	6000	37	81
TL-BTD132D03	TL-BTD132I03	3.2	30	30	250	300	6000	38	83
TL-BTD137D03	TL-BTD137I03	3.7	30	30	250	300	5000	39	85
TL-BTD148D03	TL-BTD148I03	4.8	30	30	200	250	4000	41	89
TL-BTD158D03	TL-BTD158I03	5.8	30	30	200	250	3500	43	93
TL-BTD163D03	TL-BTD163I03	6.3	30	30	200	250	2900	44	97
TL-BTD180D03	TL-BTD180I03	8.0	30	30	200	250	2100	47	101

Group 2 - conical 1:8, European cover (Ø 36.5 mm), threaded connections

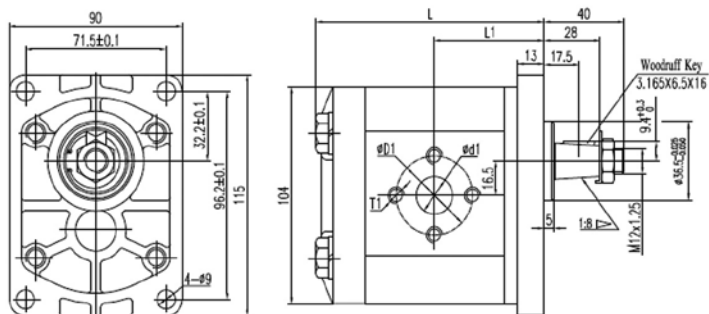


code		CC [cm <sup>3</sup> /rev.]	inlet [BSP]	outlet [BSP]	P1 [bar]	P3 [bar]	V [r.p.m.]	L1 [mm]	L [mm]
rotation right	rotation left								
TL-BTD240D01	TL-BTD240I01	4	1/2"	1/2"	250	300	3500	43.3	95.5
TL-BTD260D01	TL-BTD260I01	6	1/2"	1/2"	250	300	3500	45	99
TL-BTD280D01	TL-BTD280I01	8	1/2"	1/2"	250	300	3500	46.5	102
TL-BTD2120D01	TL-BTD2120I01	12	1/2"	1/2"	250	300	3500	49.5	108
TL-BTD2140D01	TL-BTD2140I01	14	1/2"	1/2"	250	300	3500	51	111
TL-BTD2160D01	TL-BTD2160I01	16	3/4"	1/2"	250	300	3500	52.5	114
TL-BTD2200D01	TL-BTD2200I01	20	3/4"	1/2"	250	300	3500	56	121
TL-BTD2230D01	TL-BTD2230I01	23	3/4"	1/2"	200	250	3000	58.3	125.5
TL-BTD2250D01	TL-BTD2250I01	25	3/4"	1/2"	200	250	3000	59.5	128
TL-BTD2280D01	TL-BTD2280I01	28	3/4"	1/2"	160	200	3000	62	133
TL-BTD2300D01	TL-BTD2300I01	30	3/4"	1/2"	160	200	3000	63.5	136

# HIGH PRESSURE - pumps

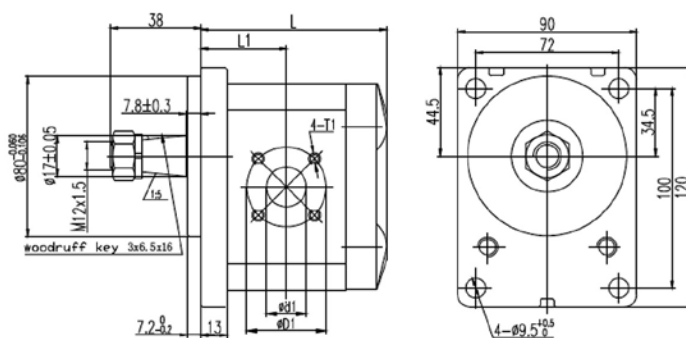
## Gear pumps TRALE

Group 2 - conical 1:8, European cover (Ø 36.5 mm), flanged connections



code		CC [cm <sup>3</sup> /rev.]	inlet [mm]	outlet [mm]	P1 [bar]	P3 [bar]	V [r.p.m.]	L1 [mm]	L [mm]
rotation right	rotation left								
TL-BTD240D02	TL-BTD240I02	4	30	30	250	300	3500	43.3	95.5
TL-BTD260D02	TL-BTD260I02	6	30	30	250	300	3500	45	99
TL-BTD280D02	TL-BTD280I02	8	30	30	250	300	3500	46.5	102
TL-BTD2120D02	TL-BTD2120I02	12	30	30	250	300	3500	49.5	108
TL-BTD2140D02	TL-BTD2140I02	14	40	30	250	300	3500	51	111
TL-BTD2160D02	TL-BTD2160I02	16	40	30	250	280	3500	52.5	114
TL-BTD2200D02	TL-BTD2200I02	20	40	30	250	280	3500	56	121
TL-BTD2230D02	TL-BTD2230I02	23	40	30	200	250	3000	58.3	125.5
TL-BTD2250D02	TL-BTD2250I02	25	40	30	200	250	3000	59.5	128
TL-BTD2280D02	TL-BTD2280I02	28	40	30	160	200	3000	62	133
TL-BTD2300D02	TL-BTD2300I02	30	40	30	160	200	3000	63.5	136

Group 2 - conical 1:5, German cover (Ø 80 mm), flanged connections

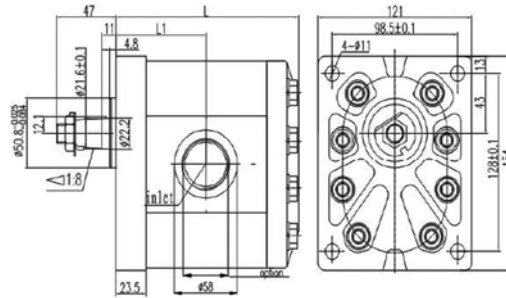


code		CC [cm <sup>3</sup> /rev.]	inlet [mm]	outlet [mm]	P1 [bar]	P3 [bar]	V [r.p.m.]	L1 [mm]	L [mm]
rotation right	rotation left								
TL-BTD260D04	TL-BTD260I04	6	40	35	250	300	3500	45	99
TL-BTD280D04	TL-BTD280I04	8	40	35	250	300	3500	46.5	102
TL-BTD2120D04	TL-BTD2120I04	12	40	35	250	300	3500	49.5	108
TL-BTD2140D04	TL-BTD2140I04	14	40	35	250	300	3500	51	111
TL-BTD2160D04	TL-BTD2160I04	16	40	35	250	300	3500	52.5	114
TL-BTD2200D04	TL-BTD2200I04	20	40	35	250	300	3500	56	121
TL-BTD2230D04	TL-BTD2230I04	23	40	35	200	250	3000	58.3	125.5
TL-BTD2250D04	TL-BTD2250I04	25	40	35	200	250	3000	59.5	128

# HIGH PRESSURE - pumps

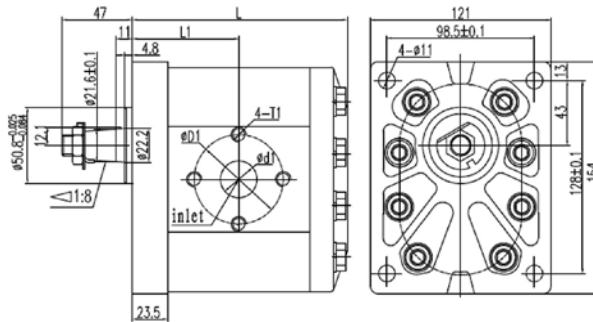
## Gear pumps TRALE

Group 3 - conical 1:8, European cover (Ø 50.8 mm), threaded connections



code		CC [cm <sup>3</sup> /rev.]	inlet [BSP]	outlet [BSP]	P1 [bar]	P3 [bar]	V [r.p.m.]	L1 [mm]	L [mm]
rotation right	rotation left								
TL-BTD3220D01	TL-BTD3220I01	22	3/4"	3/4"	200	250	3000	65.5	128.5
TL-BTD3260D01	TL-BTD3260I01	26	1"	3/4"	200	250	3000	67	131.5
TL-BTD3280D01	TL-BTD3280I01	28	1"	3/4"	200	250	3000	68.5	134
TL-BTD3320D01	TL-BTD3320I01	32	1"	3/4"	200	250	3000	69.8	137
TL-BTD3360D01	TL-BTD3360I01	36	1"	3/4"	200	250	3000	71.8	141
TL-BTD3420D01	TL-BTD3420I01	42	1"	3/4"	200	250	2800	73	143.5
TL-BTD3460D01	TL-BTD3460I01	46	1"	3/4"	200	250	2400	74	146.5
TL-BTD3500D01	TL-BTD3500I01	50	1"	3/4"	200	250	2400	76	149.5
TL-BTD3550D01	TL-BTD3550I01	55	1"	3/4"	200	250	2400	78	152

Group 3 - conical 1:8, European cover (Ø 50.8 mm), flanged connections



code		CC [cm <sup>3</sup> /rev.]	inlet [mm]	outlet [mm]	P1 [bar]	P3 [bar]	V [r.p.m.]	L1 [mm]	L [mm]
rotation right	rotation left								
TL-BTD3220D02	TL-BTD3220I02	22	40	40	200	250	3000	65.5	128.5
TL-BTD3260D02	TL-BTD3260I02	26	40	40	200	250	3000	67	131.5
TL-BTD3280D02	TL-BTD3280I02	28	40	40	200	250	3000	68.5	134
TL-BTD3340D02	TL-BTD3340I02	34	50	40	200	250	3000	69.8	137
TL-BTD3390D02	TL-BTD3390I02	39	50	40	200	250	3000	71.8	141
TL-BTD3430D02	TL-BTD3430I02	43	50	40	200	250	2800	73	143.5
TL-BTD3460D02	TL-BTD3460I02	46	50	40	200	250	2400	74	146.5
TL-BTD3510D02	TL-BTD3510I02	51	50	40	200	250	2400	76	149.5
TL-BTD3550D02	TL-BTD3550I02	55	50	40	200	250	2400	78	152

# HIGH PRESSURE - pumps

## Gear pumps SALAMI

Positive displacement, external gear pumps intended for hydraulic systems of machines and devices. The mounting plates, shafts and connections are compliant with European and German standards. The pumps are available as single or multiple versions. The displacement ranges from 1.4 to 98 cm<sup>3</sup>/r.p.m. at the maximum working pressure 280 bar, however depends on the pump type. Some types are available as hydraulic motors.

pump type	displacement [cm <sup>3</sup> /r.p.m.]	construction
1.5PE*	1.4 ÷ 11	Cast iron mounting plate and rear cover, housing made of aluminium
2PE*	4.5 ÷ 26	Cast iron mounting plate and rear cover, housing made of aluminium
2.5PB*	11.5 ÷ 44	Cast iron mounting plate and rear cover, housing made of aluminium
3PE*	21 ÷ 75	Cast iron mounting plate and rear cover, housing made of aluminium
3.5PC*	55 ÷ 98	Cast iron mounting plate and rear cover, housing made of aluminium
PG331	23 ÷ 80	Mounting plate, housing and rear cover made of spheroidal cast iron

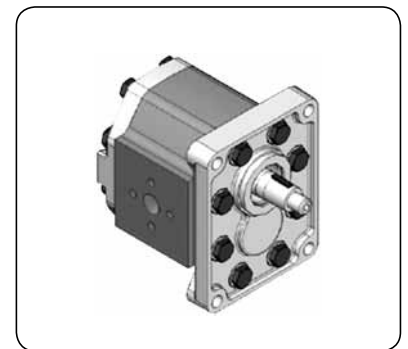
\* - available as hydraulic motors as well



**2PE type**



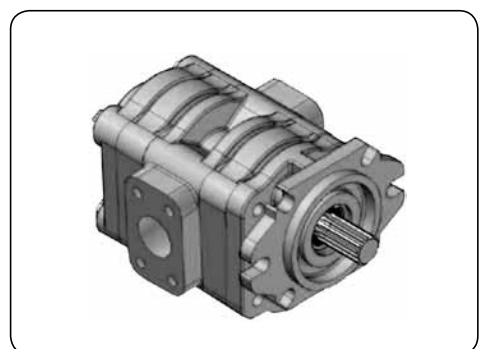
**2.5PB type**



**3PE type**



**3.5PC type**



**PG331 type**

# HIGH PRESSURE - pumps

## Flange connectors

**Material:** Zinc-plated steel (standard), AISI 316L steel (option)

**Working temp.:** From -20°C up to +100°C (NBR seal), from -20°C up to +200°C (Viton seal)

Compact flange connectors with square flange heads, bolt circle diameter from 26 mm up to 72.5 mm with metric and BSP threads used to connect hydraulic pumps. Equipped with a set of bolts, washers and O-rings as a standard.

Flange connector with 4 bolt holes / DIN 2353					
press. [bar]	code	bolt circle diameter [mm]	pipe O.D [mm]	thread size [mm]	bolt size [mm]
315	HK-A-35-10L	35	10	16x1.5	4xM6
	HK-A-35-12L		12	18x1.5	
250	HK-A-35-15L		15	22x1.5	
315	HK-A-35-16S		16	24x1.5	
100	HK-A-40-15L	40	15	22x1.5	
	HK-A-40-18L		18	26x1.5	
250	HK-A-40-20S		20	30x2	
100	HK-A-40-22L		22	30x2	
	HK-A-40-28L	28	36x2		
250	HK-A-55-20S	55	20	30x2	4xM8
	HK-A-55-25S		25	36x2	
	HK-A-55-30S		30	42x2	
100	HK-A-55-35L		35	45x2	

Flange connector with 4 bolt holes / DIN 2353					
press. [bar]	code	bolt circle diameter [mm]	pipe O.D [mm]	thread size [mm]	bolt size [mm]
315	HK-A-90-35-10L	35	10	16x1.5	4xM6
	HK-A-90-35-12L		12	18x1.5	
250	HK-A-90-35-15L		15	22x1.5	
315	HK-A-90-35-16S		16	24x1.5	
100	HK-A-90-40-15L	40	15	22x1.5	
	HK-A-90-40-18L		18	26x1.5	
250	HK-A-90-40-20S		20	30x2	
100	HK-A-90-40-22L		22	30x2	
	HK-A-90-40-28L	28	36x2		
250	HK-A-90-55-20S	55	20	30x2	4xM8
	HK-A-90-55-25S		25	36x2	
	HK-A-90-55-30S		30	42x2	
100	HK-A-90-55-35L		35	45x2	
250	HK-A-90-55-38S	38	52x2		
100	HK-A-90-55-42L	42	52x2		

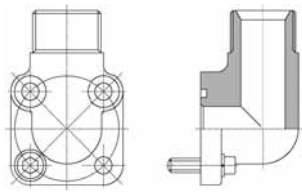
Square flange connector with 4 bolt holes / BSP male thread 60°				
press. [bar]	code	bolt circle diameter [mm]	thread size [inch]	bolt size [mm]
250	HK-A-BZ-30-08	30	1/2	4xM6
	HK-A-BZ-40-12	40	3/4	4xM8
	HK-A-BZ-51-16	51	1	4xM10
	HK-A-BZ-56-16	56	1	

Square flange connector with 4 bolt holes / BSP female thread				
press. [bar]	code	bolt circle diameter [mm]	thread size [inch]	bolt size [mm]
250	HK-A-BW-30-08	30	3/8	4xM6
	HK-A-BW-40-12	40	1/2	4xM8
	HK-A-BW-51-16	51	3/4	4xM10
	HK-A-BW-56-16	56	3/4	

# HIGH PRESSURE - pumps

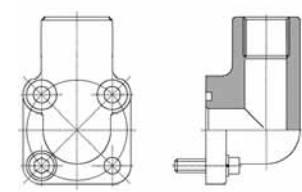
## Flange connectors

90° flange connector with 4 bolt holes / BSP male thread 60°



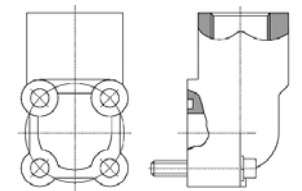
press. [bar]	code	bolt circle diameter [mm]	thread size [inch]	bolt size [mm]	
315	HK-A-BZ-90-35-06	35	3/8	4xM6	
	HK-A-BZ-90-35-08		1/2		
	HK-A-BZ-90-35-12		3/4		
250	HK-A-BZ-90-40-06	40	3/8		
	HK-A-BZ-90-40-08		1/2		
	HK-A-BZ-90-40-12		3/4		
	HK-A-BZ-90-40-16		1		
315	HK-A-BZ-90-55-08	55	1/2		4xM8
	HK-A-BZ-90-55-12		3/4		
	HK-A-BZ-90-55-16		1		

90° flange connector with 4 bolt holes / BSP female thread



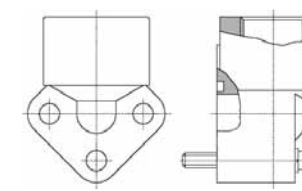
press. [bar]	code	bolt circle diameter [mm]	thread size [inch]	bolt size [mm]
315	HK-A-BW-90-35-06	35	3/8	4xM6
	HK-A-BW-90-35-08		1/2	
250	HK-A-BW-90-40-06	40	3/8	
	HK-A-BW-90-40-08		1/2	
	HK-A-BW-90-40-12		3/4	
315	HK-A-BW-90-55-08	55	1/2	
	HK-A-BW-90-55-12		3/4	
	HK-A-BW-90-55-16		1	

90° flange connector with 4 bolt holes / BSP female (aluminium)



press. [bar]	code	bolt circle diameter [mm]	thread size [inch]	bolt size [mm]
180	HK-A-BW-90-30-06-AL	30	3/8	4xM6
	HK-A-BW-90-30-08-AL		1/2	
	HK-A-BW-90-35-06-AL	35	3/8	
	HK-A-BW-90-35-08-AL		1/2	
	HK-A-BW-90-40-08-AL	40	1/2	3xM8
	HK-A-BW-90-40-12-AL		3/4	
	HK-A-BW-90-55-12-AL	55	3/4	4xM8
	HK-A-BW-90-55-16-AL		1	

90° flange connector with 3 bolt holes / BSP female (aluminium)

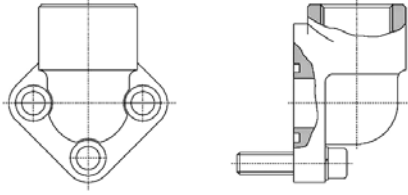


press. [bar]	code	bolt circle diameter [mm]	thread size [inch]	bolt size [mm]
180	HK-B-BW-90-26-06-AL	26	3/8	3xM5
	HK-B-BW-90-26-08-AL		1/2	
	HK-B-BW-90-30-06-AL	30	3/8	3xM6
	HK-B-BW-90-30-08-AL		1/2	
	HK-B-BW-90-40-08-AL	40	1/2	3xM8
	HK-B-BW-90-40-12-AL		3/4	
	HK-B-BW-90-51-12-AL	51	3/4	3xM10
	HK-B-BW-90-51-16-AL		1	

# HIGH PRESSURE - pumps

## Flange connectors

90° flange connector with 3 bolt holes / BSP female thread



press. [bar]	code	bolt circle diameter [mm]	thread size [inch]	bolt size [mm]
300	HK-B-BW-90-26-06	26	3/8	3xM5
	HK-B-BW-90-26-08		1/2	
	HK-B-BW-90-30-06	30	3/8	3xM6
	HK-B-BW-90-30-08		1/2	
	HK-B-BW-90-40-08	40	1/2	3xM8
	HK-B-BW-90-40-12		3/4	
	HK-B-BW-90-51-12	51	3/4	3xM10
	HK-B-BW-90-51-16		1	
	HK-B-BW-90-56-12	56	3/4	
	HK-B-BW-90-56-16		1	
	HK-B-BW-90-62-16	62	1	3xM12
	HK-B-BW-90-62-20		1.1/4	
	HK-B-BW-90-72-20	72.5	1.1/4	
	HK-B-BW-90-72-24		1.1/2	





## HIGH PRESSURE - power units

„POWER PACK” compact hydraulic power units are designed to operate single-acting and double-acting cylinders in simple high pressure hydraulic systems. The power units, in a basic configuration, include an electric motor connected to an oil-immersed hydraulic pump. Depending on application requirements, the power unit can be additionally equipped with, for example: safety valve (system pressure set to the maximum), solenoid valves NO/NC (single-acting cylinder operation), NG6 directional control valve (double-acting cylinder operation), throttle valve (cylinder fall speed control), oil filter, pressure switch, remote control set (emitter - receiver), control module (2 or 4 switches), etc.

Typical applications include: trucks (lift and dump trailer mechanism, tow truck with hydraulic platform), car lift, recycling press, scissor lift, etc.

description	
power	direct current (12V DC, 24V DC), alternating current (230V - 1 phase; 230/400V - 3 phase)
motor	0.5 ÷ 5.5 [kW]
control voltage	12V DC, 24V DC, 115V AC, 230V AC
displacement	1.1 ÷ 9.8 [cm <sup>3</sup> /rev]
working pressure	up to 250 bar
tank volume	1 ÷ 30 liters



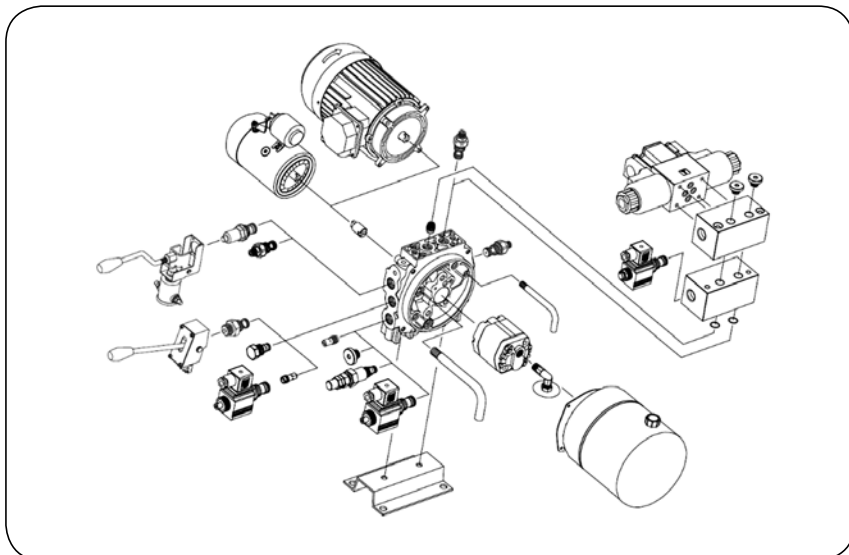
basic hydraulic power unit



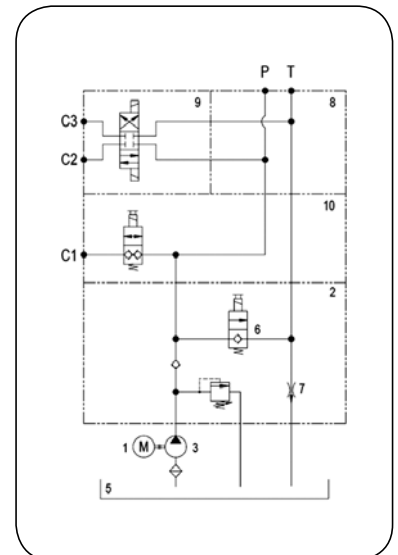
power unit for single-acting cylinder



power unit for double-acting cylinder

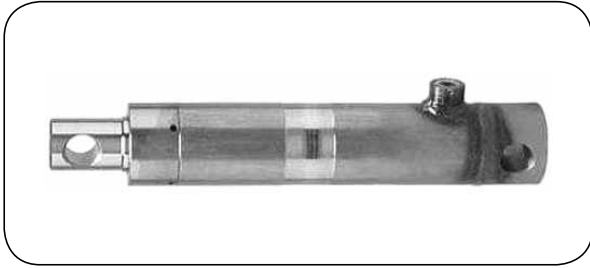


assembly diagram



hydraulic circuit diagram

# HIGH PRESSURE - hydraulic cylinders

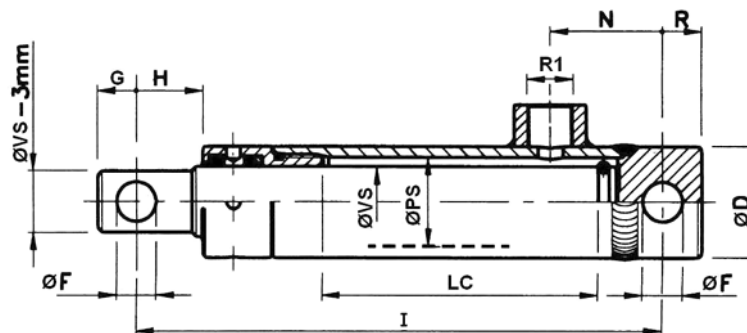


## SE 25, SE 30, SE 40 type

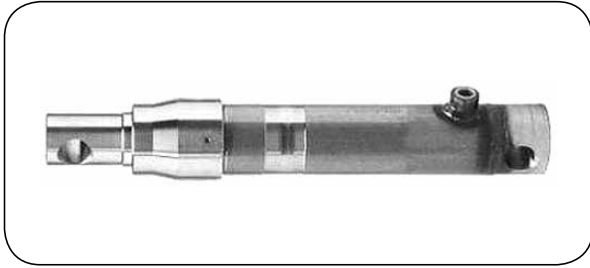
**Body material:** St 52.3 (ISO H9) carbon steel  
**Piston rod material:** CK45 carbon steel  
**Head material:** Cast iron  
**Seal:** PU, NBR  
**Max. working press.:** 210 bar  
**Working temp.:** From -30°C up to +110°C

Single-acting hydraulic cylinder with a threaded head, designed for high pressure hydraulic systems. Depending on application, appropriate cylinder push force (given in kg/100 bar) and stroke (LC) must be selected. Service kits with spare seals for hydraulic cylinders are available to separate order.

code	Ø VS [mm]	Ø PS [mm]	Ø D [mm]	Ø F [mm]	R [mm]	R1 [BSP]	G [mm]	H [mm]	N [mm]	LC [mm]	I [mm]	kg/100 bar	weight [kg]
SE 25 type													
DC-SE25100	25	32	40	14.2	14	3/8"	14	24	40	100	190	490	1.50
DC-SE25150										150	240		2.00
DC-SE25200										200	290		2.50
DC-SE25250										250	340		3.00
DC-SE25300										300	390		3.50
SE 30 type													
DC-SE30150	30	40	50	16.4	15	3/8"	16	26	44	150	250	706	3.50
DC-SE30200										200	300		4.00
DC-SE30250										250	350		4.00
DC-SE30300										300	400		5.50
DC-SE30350										350	450		6.00
DC-SE30400										400	500		6.50
DC-SE30450										450	550		7.00
DC-SE30550										550	650		8.00
DC-SE30700										700	800		10.00
SE 40 type													
DC-SE40200	40	50	60	22.4	22	3/8"	22	32	48	200	330	1250	7.00
DC-SE40250										250	380		7.50
DC-SE40300										300	430		8.00
DC-SE40350										350	480		8.50
DC-SE40400										400	530		10.00
DC-SE40450										450	580		11.00
DC-SE40500										500	630		12.00
DC-SE40550										550	680		12.50
DC-SE40600										600	730		13.50
DC-SE40700										700	830		15.00



# HIGH PRESSURE - hydraulic cylinders

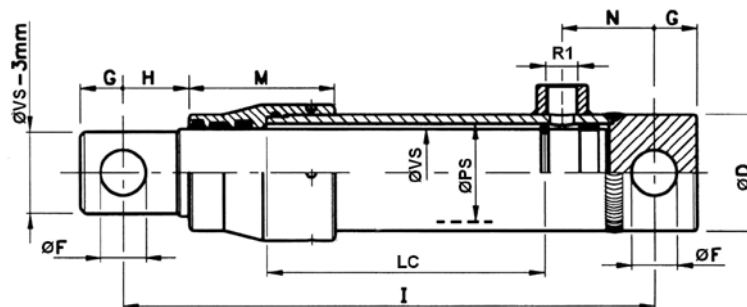


## SE 45, SE 50, SE 55, SE 60 type

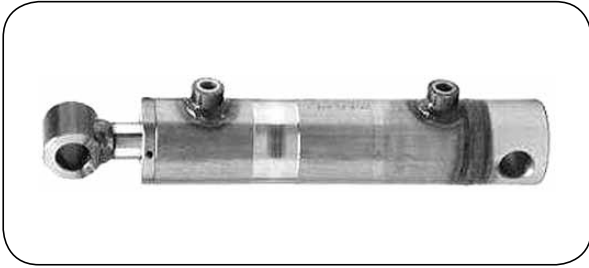
**Body material:** St 52.3 (ISO H9) carbon steel  
**Piston rod material:** CK45 carbon steel  
**Head material:** St 52.3 carbon steel  
**Seal:** PU, POM, NBR  
**Max. working press.:** 210 bar  
**Working temp.:** From -30°C up to +110°C

Single-acting hydraulic cylinder with a threaded head, designed for high pressure hydraulic systems. Depending on application, appropriate cylinder push force (given in kg/100 bar) and stroke (LC) must be selected. Service kits with spare seals for hydraulic cylinders are available to separate order.

code	Ø VS [mm]	Ø PS [mm]	Ø D [mm]	Ø F [mm]	M [mm]	R1 [BSP]	G [mm]	H [mm]	N [mm]	LC [mm]	I [mm]	kg/100 bar	weight [kg]
SE 45 type													
DC-SE45200	45	50	60	23.4	75	3/8"	22	34	47	200	330	1590	8.00
DC-SE45300										300	430		10.00
DC-SE45400										400	530		12.00
DC-SE45550										550	680		15.00
DC-SE45700										700	830		18.00
50 type													
DC-SE50200	50	55	65	25.5	80	3/8"	25	49	50	200	360	1960	11.50
DC-SE50300										300	460		14.00
DC-SE50400										400	560		16.00
DC-SE50550										550	710		19.50
DC-SE50700										700	860		23.00
SE 55 type													
DC-SE55300	55	60	70	25.5	95	3/8"	25	41	50	300	460	2370	15.50
DC-SE55550										550	710		22.50
DC-SE55700										700	860		26.50
SE 60 type													
DC-SE60200	60	65	75	25.5	95	3/8"	25	36	50	200	360	2820	15
DC-SE60300										300	460		18
DC-SE60400										400	560		21
DC-SE60550										550	710		25.5
DC-SE60700										700	860		30



# HIGH PRESSURE - hydraulic cylinders



## DE 20, DE 25, DE 30 DE 40, DE 50, DE 70 type

**Body material:** St 52.3 (ISO H9) carbon steel  
**Piston rod material:** CK45 carbon steel  
**Head material:** Cast iron  
**Seal:** PU, NBR  
**Max. working press.:** 180 bar  
**Working temp.:** From -30°C up to +110°C

Double-acting hydraulic cylinder with a threaded head, designed for high pressure hydraulic systems. Depending on application, appropriate cylinder push force (given in kg/100 bar) and stroke (LC) must be selected. Service kits with spare seals for hydraulic cylinders are available to separate order.

code	Ø VS [mm]	Ø PS [mm]	Ø D [mm]	Ø F [mm]	M [mm]	R1 [BSP]	G [mm]	H [mm]	N [mm]	LC [mm]	I [mm]	kg/100 bar	weight [kg]	
DE 20 type														
DC-DE2032050	20	32	40	16.4	43	1/4"	28	35	38	50	205	800	2.00	
DC-DE2032100										100	255		2.50	
DC-DE2032150										150	305		3.00	
DC-DE2032200										200	355		3.00	
DC-DE2032250										250	405		3.50	
DC-DE2032300										300	455		4.00	
DE 25 type														
DC-DE2540100	25	40	50	20.5	43	3/8"	35	40	45	100	270	1250	3.50	
DC-DE2540150										150	320		4.00	
DC-DE2540200										200	370		4.50	
DC-DE2540250										250	420		5.00	
DC-DE2540300										300	470		5.50	
DC-DE2540400										400	570		6.50	
DC-DE2540500										500	670		7.50	
DE 30 type														
DC-DE3050100	30	50	60	25.5	46	3/8"	45	45	58	100	300	1960	5.50	
DC-DE3050150										150	350		6.00	
DC-DE3050200										200	400		6.50	
DC-DE3050250										250	450		7.50	
DC-DE3050300										300	500		8.00	
DC-DE3050400										400	600		9.00	
DC-DE3050500										500	700		10.50	
DC-DE3050600										600	800		11.50	
DC-DE3050700										700	900		13.00	
DC-DE3050800		800	1000	14.00										
DC-DE3050900		900	1100	15.50										
DC-DE3060100		60	70	51	51	3/8"	45	45	58	58	100	300	2820	6.50
DC-DE3060150											150	350		7.50
DC-DE3060200											200	400		8.00
DC-DE3060250											250	450		8.50
DC-DE3060300											300	500		9.50
DC-DE3060350											350	550		10.00
DC-DE3060400											400	600		11.00
DC-DE3060450											450	650		11.50
DC-DE3060500	500										700	12.00		
DC-DE3060600	600	800	13.50											
DC-DE3060700	700	900	15.00											

# HIGH PRESSURE - hydraulic cylinders

code	Ø VS [mm]	Ø PS [mm]	Ø D [mm]	Ø F [mm]	M [mm]	R1 [BSP]	G [mm]	H [mm]	N [mm]	LC [mm]	I [mm]	kg/100 bar	weight [kg]
DE 40 type													
DC-DE4070200	40	70	80	30.5	51	3/8"	54	55	58	200	410	3840	11.00
DC-DE4070250										250	460		11.50
DC-DE4070300										300	510		12.50
DC-DE4070350										350	560		13.50
DC-DE4070400										400	610		14.50
DC-DE4070450										450	660		15.50
DC-DE4070500										500	710		16.50
DC-DE4070600		600	810	18.50									
DC-DE4070700		700	910	20.50									
DC-DE4080200		80	92	62	62	3/8"	54	55	58	200	410	5020	14.50
DC-DE4080250										250	460		15.50
DC-DE4080300										300	510		17.00
DC-DE4080350										350	560		18.00
DC-DE4080400										400	610		19.50
DC-DE4080500	500									710	21.00		
DC-DE4080600	600									810	23.50		
DC-DE4080700	700	910	26.00										
DE 50 type													
DC-DE50100300	50	100	115	30.5	81	3/8"	54	70	60	300	545	7850	29.00
DC-DE50100400										400	645		32.50
DC-DE50100500										500	745		36.00
DC-DE50100700										700	945		43.00
DC-DE50100900										900	1145		50.00
DE 70 type													
DC-DE70120500	70	120	140	40.5	81	1/2"	70	80	65	500	770	11300	62.00
DC-DE701201000										1000	1270		93.50

