aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

Drive Controlled Pump

Energy-Efficient Hydraulic System Solutions

Parker

ENGINEERING YOUR SUCCESS.

⚠ WARNING – USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

Please contact your Parker representation for a detailed ”Offer of Sale”.

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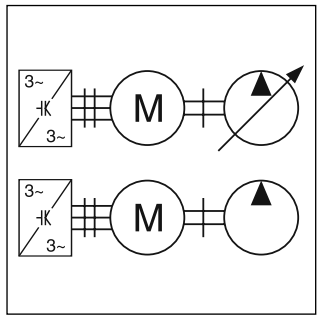
The Drive Controlled Pump system solutions from Parker are variable-speed hydraulic pump systems. They essentially consist of an AC drive unit (frequency controller and electronics), an asynchronous or synchronous motor, as well as a hydraulic pump. They enable the central, regulated hydraulic supply of all drives. Thus they provide the exact power that is required in the cycle at all times.

The controller continuously records target values for the volume flow and/or pressure of the machine control system and compares them to actual pressure value. The drive speed of the electric motor is regulated so that the pump provides the exact amount of oil required to achieve the target value.

With the Drive Controlled Pump, Parker optionally employs vane pumps or axial piston pumps or combinations of both.

The vane pump represents the ideal basis for systems with fixed displacement pumps. Her minimum speed increases from zero proportional to pressure up to 300 rpm at maximum pressure. Thanks to the very wide range of speed up to 3000 rpm and the high operating pressures of up to 320 bar, this system solution can be tuned exactly to a customer's specific requirements. The robust double lip design makes the pump impervious to particle contamination and maintains a high degree of efficiency in the long term.

The axial piston pump is utilized if high peak pressures are introduced or if high pressures must be maintained for long periods. The housings increased rigidity ensures low vibration and therefore reduces the noise level. The reduced pressure and volume flow pulsation also reduces the load on the piping system.



Features

- Suitable for 400 V supply
- Change-over pressure/volume flow control
- Optimum dimensioning of all components using the Parker DriveCreator software
- Standard interfaces for simple conversion of conventional pump systems
- Dual pump systems for larger volume flow possible – also as combination of variable and fixed displacement pump systems
- High precision and dynamic operation for flow and pressure control
- High energy efficiency through optimum adjustment to cycle requirements
- Low noise emissions through optimized pump design and speed adjustment

Recommended fluids

We recommend high-quality mineral hydraulic fluids: HLP oils as per DIN 51524. For general applications, the Brugger value should be at least 30 N/mm²; 50 N/mm² for heavy-duty systems (measured as per DIN 51347-2. Also see document HY30-3248/DE Parker "Hydraulic Fluids").

Under normal conditions, the viscosity should be between 16 and 100 mm²/s /cSt). Maximum start-up viscosity is 800 mm²/s (cSt).

The fluid must have a purity in conformance with ISO 4406:1999. The filter elements must also conform to ISO standards. For systems with maximum service life: purity level 18/16/13 in accordance with ISO 4406:1999; otherwise, purity level 20/18/15 (19/17/14 for vane pumps) in accordance with ISO 4406:1999.

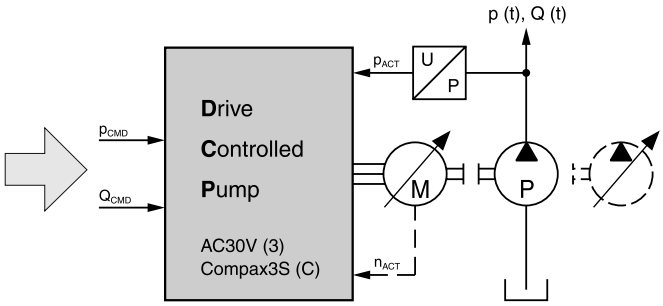
Components of the drive-controlled pump system

1. Motor
- Asynchronous standard motor or
- Synchronous motor, catalogue 192-061011 and 192-061013

2. Pump
- Vane pump T7, catalogue HY29-0110, or
- Axial piston pump PVplus, catalogue HY30-3245, or
- Combination of vane pump and axial piston pump
- Mounting accessories for the motor pump assembly:
  - Coupling
  - Pump bellhousing
  - Pump flange

3. AC Drive Controller
- AC30V, catalogue 192-300022, or Compax3, catalogue 192-120013

4. Accessories that may be required [1)]
- Shield connection
- Power cables
- Sensor cables
- Braking resistor
- Mains filters
- Pressure transducer



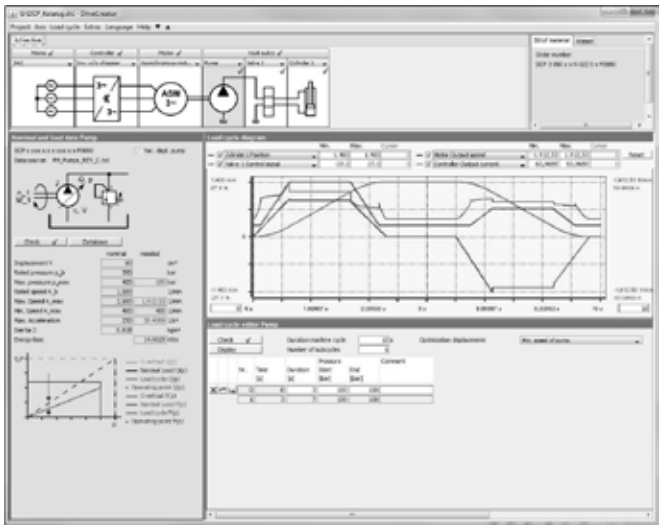
Further combinations in addition to those contained in this catalogue are available upon request. Detailed information on all Parker components can be found in the individual product catalogues (see above).

Parker DriveCreator

For optimum yet simple selection and dimensioning of the components Parker offers a unique software tool: the Parker DriveCreator.

Firstly, the cycle data (cylinder speed and load or pressure and volume flow) is entered. Subsequently, the optimum pump or combination of pumps is selected using this data, and then motor and drive suitable for the power consumption.

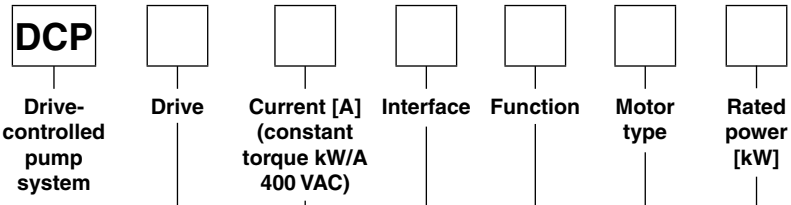
The Parker DriveCreator calculates the best combination of components possible with the highest degree of energy efficiency.



Access to this tool can be obtained via www.parker.com/drivecontrolledpump

[1)] Not included in delivery.

Ordering Code — Drive Controlled Pump



Code	Drive
3	AC30V
C	Compax3

Current			
AC30V		Compax3	
Code	[A]	Code	[A]
3P5	3.5	002	1.5
4P5	4.5	004	3.8
5P5	5.5	008	7.5
7P5	7.5	015	15
012	12	030	30
016	16	050	50
023	23	090	90
032	32	125	125
038	38	155	155
045	45		
060	60		
073	73		
087	87		
105	105		
145	145		
180	180		
205	205		
260	260		
315	315		
380	380		
440	440		
480	480		
520	520		
590	590		

Code	Interface
A	analogue
C [1]	CANopen
D [1]	DeviceNet
E [1]	EtherCAT
P	PROFIBUS
N	PROFINET
T [2]	Ethernet IP

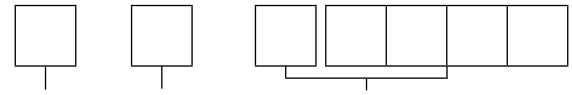
Code	Function
0	Q control
3	p/Q p closed loop control
4	programmable acc. to IEC61131-3
5	LS (load sensing)
6	accumulator loading mode

Code	Motor type [3]
0	omit
N	Standard asynchronous motor
S	Synchronous motor

Rated power			
Norm motor Code N		Servo motor Code S	
Code	[kW]	Code	[kW]
0P5	0.55	1P4	1.35
0P7	0.75	2P5	2.48
1P1	1.10	004	3.99
1P5	1.50	4P1	4.12
2P2	2.20	4P2	4.21
003	3.00	006	5.90
004	4.00	6P6	6.63
006	5.50	008	8.07
008	7.50	009	9.42
011	11.0	013	13.10
015	15.0	016	16.43
019	18.5	019	19.35
022	22.0	027	27.33
030	30.0	045	45.24
037	37.0	058	58.12
045	45.0	068	67.54
055	55.0		
075	75.0		
090	90.0		
110	110.0		
132	132.0		
160	160.0		
200	200.0		
250	250.0		
315	315.0		

Ordering Code

Drive Controlled Pump



Code	Cooling
C [4]	Convection
S [5]	self vented
F	external vented

Code	Mounting position
0	horizontal (B5) with food flange
1	horizontal (B35), motor with stand
2	vertical (V1), motor up, without protective cover

Vane pumps [6]		
Code		[cm³/U]
A	0006	5.8
A	0010	9.8
A	0011	11.0
A	0013	12.8
A	0017	17.2
A	0020	19.8
A	0022	22.5
A	0025	24.9
B	0009	28.0
B	0010	31.8
B	0011	35.0
B	0012	41.0
B	0014	45.0
B	0015	50.0
D	0017	55.0
D	0020	66.0
D	0022	70.3
D	0024	81.1
D	0028	90.0
D	0031	99.2
D	0035	113.4
D	0038	120.6
D	0042	137.5

Axial piston pumps [6]		
Code		[cm³/U]
P	0016	16
P	0020	20
P	0023	23
P	0028	28
P	0032	32
P	0040	40
P	0046	46
P	0063	63
P	0080	80
P	0092	92
P	0140	140
P	0180	180
P	0270	270
P	0360	360

Warning!
The torque of the second pump must not exceed the torque of the first pump!

Double pump [6] vane pumps				
Pump 1			Pump 2	
Code		[cm³/U]	Code	[cm³/U]
J	03	9.8	03	9.8
J	04	12.8	04	12.8
J	05	15.9	05	15.9
J	06	19.8	06	19.8
J	07	22.5	07	22.5
J	08	24.9	08	24.9
J	09	28.0	09	28.0
J	10	31.8	10	31.8
J	11	35.0	11	35.0
J	12	41.0	12	41.0
J	14	45.0	14	45.0
J	15	50.0	15	50.0

Double pump [6] vane pumps				
Pump 1			Pump 2	
Code		[cm³/U]	Code	[cm³/U]
K	17	55.0	03	9.8
K	20	66.0	04	12.8
K	22	70.3	05	15.9
K	24	81.1	06	19.8
K	28	90.0	07	22.5
K	31	99.2	08	24.9
K	35	113.4	09	28.0
K	38	120.6	10	31.8
K	42	137.6	11	35.0
			12	41.0
			14	45.0
			15	50.0

Double pump [6] vane pumps				
Pump 1			Pump 2	
Code		[cm³/U]	Code	[cm³/U]
L	17	55.0	17	55.0
L	20	66.0	20	66.0
L	22	70.3	22	70.3
L	24	81.1	24	81.1
L	28	90.0	28	90.0
L	31	99.2	31	99.2
L	35	113.4	35	113.4
L	38	120.6	38	120.6
L	42	137.6	42	137.6

[1] Compax3 on request
[2] Only for AC30V
[3] Motor Code N only with drive code 3
[4] Not for standard asynchronous motors
[5] Synchronous motors on request
[6] Code build from letter and 4 digit number

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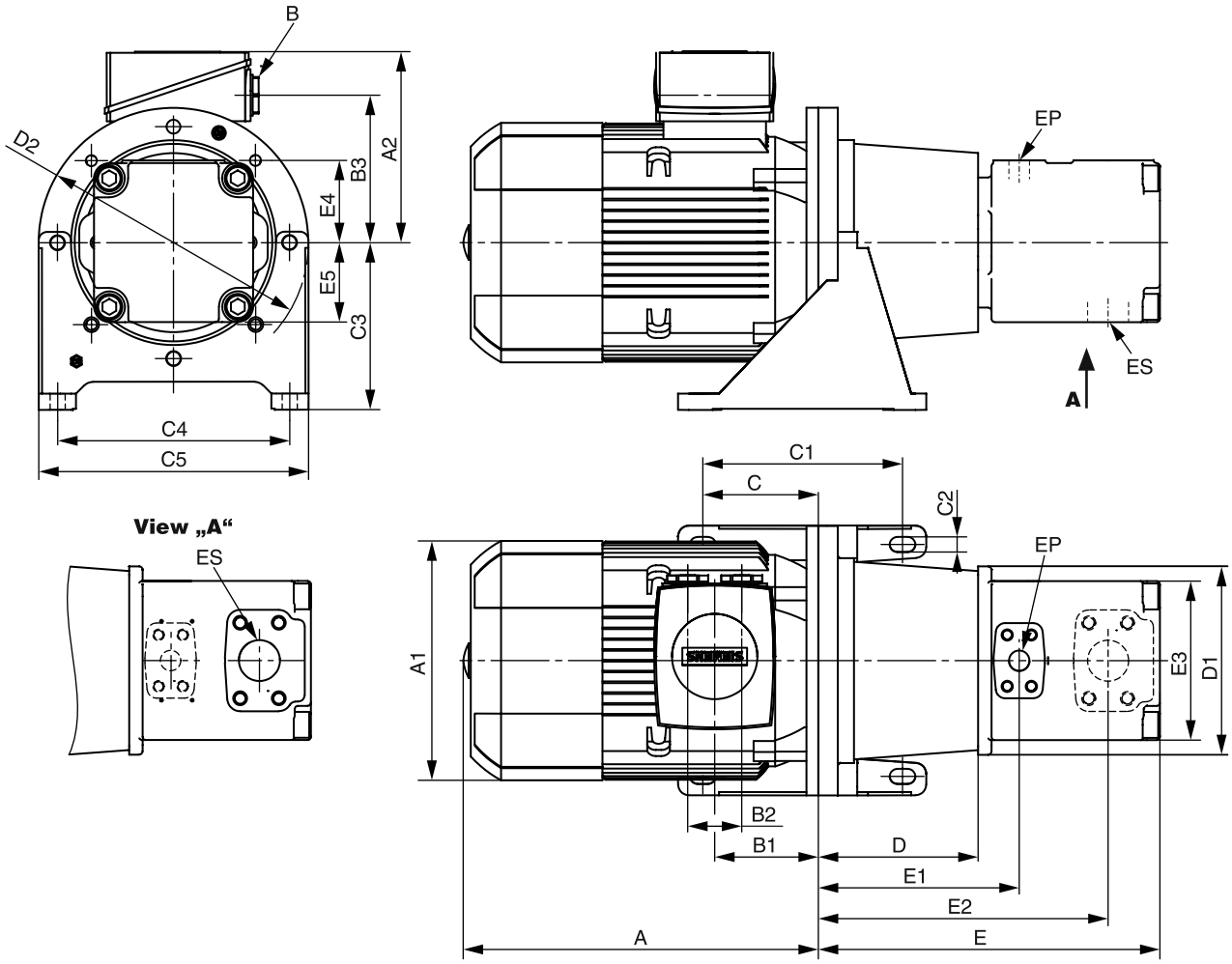
Vane pump with standard asynchronous motor



Motor code	Pump code	Motor size	A [mm]	A1 [mm]	A2 [mm]	B [mm]	B1 [mm]	B2 [mm]	B3 [mm]	C [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
1P5	A0006	90L	297	178	126	1 x M25 x 1.5	78.5	0	101.5	-20	60	11	112	180	210
2P2 - 003	A0006 - 11	100L	328.5	198	193	2 x M32 x 1.5	100.5	48	147	107.5	185	14	155	215	250
004	A0006 - 11	112M	322	222	195	2 x M32 x 1.5	100.5	48	150	107.5	185	14	155	215	250
006 - 008	A0010 - 25	132S/132M	376.5	262	214.5	2 x M32 x 1.5	115.5	48	169	130.5	225	14	185	265	300
008	B0009	132M	376.5	262	214.5	2 x M32 x 1.5	115.5	48	169	130.5	225	14	185	265	300
011 - 015	A0013 - 25	160M/160L	484	314	261	2 x M40 x 1.5	145	60	213	149	265	18	235	300	350
011 - 015	B0009 - 15	160M/160L	484	314	261	2 x M40 x 1.5	145	60	213	149	265	18	235	300	350
015	D0017	160L	484	314	261	2 x M40 x 1.5	145	60	213	149	265	18	235	300	350
019 - 022	B0009 - 15	180M/180L	558	356	286	2 x M40 x 1.5	155	60	234	149	265	18	235	300	350
019 - 022	D0017 - 28	180M/180L	558	356	286	2 x M40 x 1.5	155	60	234	149	265	18	235	300	350
030	B0010 - 15	200L	611	396	315	2 x M50 x 1.5	164	85	259	174	300	18	260	350	400
030	D0020 - 38	200L	611	396	315	2 x M50 x 1.5	164	85	259	174	300	18	260	350	400
037	D0017 - 42	225S	648	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
045	D0020 - 42	225M	708	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
055	D0024 - 42	250M	747	497	410	2 x M63 x 1.5	192	110	322	249	415	18	350	500	550
075	D0028 - 42	280S	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
090	D0042	280M	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550

Motor code	D [mm]	D1 [mm]	D2 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	E5 [mm]	EP	ES
1P5	110	145	200	248.5	226.3	148.2	110	68	63.5	3/4" BSPP	1 1/4" BSPP
2P2 - 003	124	124	250	262.5	240.3	162.2	110	68	63.5	3/4" BSPP	1 1/4" BSPP
004	124	124	250	262.5	240.3	162.2	110	68	63.5	3/4" BSPP	1 1/4" BSPP
006 - 008	144	205	300	282.5	260.3	182.2	110	68	63.5	3/4" BSPP	1 1/4" BSPP
008	168	220	300	336.5	206.1	250.3	140	76.2	76.2	1" ; 4x M10 x 19 deep	1 1/2" ; 4x M12 x 22.4 deep
011 - 015	188	225	350	326.5	304.3	226.2	110	68	63.5	3/4" BSPP	1 1/4" BSPP
011 - 015	204	225	350	372.5	242.1	286.3	140	76.2	76.2	1" ; 4x M10 x 19 deep	1 1/2" ; 4x M12 x 22.4 deep
015	228	248	350	412.9	266.1	315.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep
019 - 022	204	225	350	372.5	242.1	286.3	140	76.2	76.2	1" ; 4x M10 x 19 deep	1 1/2" ; 4x M12 x 22.4 deep
019 - 022	228	248	350	412.9	266.1	315.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep
030	204	230	400	372.5	242.1	286.3	140	76.2	76.2	1" ; 4x M10 x 19 deep	1 1/2" ; 4x M12 x 22.4 deep
030	228	279	400	412.9	266.1	315.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep
037	262	315	450	446.9	300.1	349.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep
045	262	315	450	446.9	300.1	349.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep
055	265	360	550	449.9	303.1	352.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep
075	265	360	550	449.9	303.1	352.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep
090	265	360	550	449.9	303.1	352.4	147.4	82.6	82.6	1 1/4" ; 4x M12 x 22.3 deep	2 1/2" ; 4x M12 x 23.9 deep

[1] Pressure port, BSPP or SAE 4-hole flange - J518 - ISO 6162-1
[2] Suction port, BSPP or SAE 4-hole flange - J518 - ISO 6162-1

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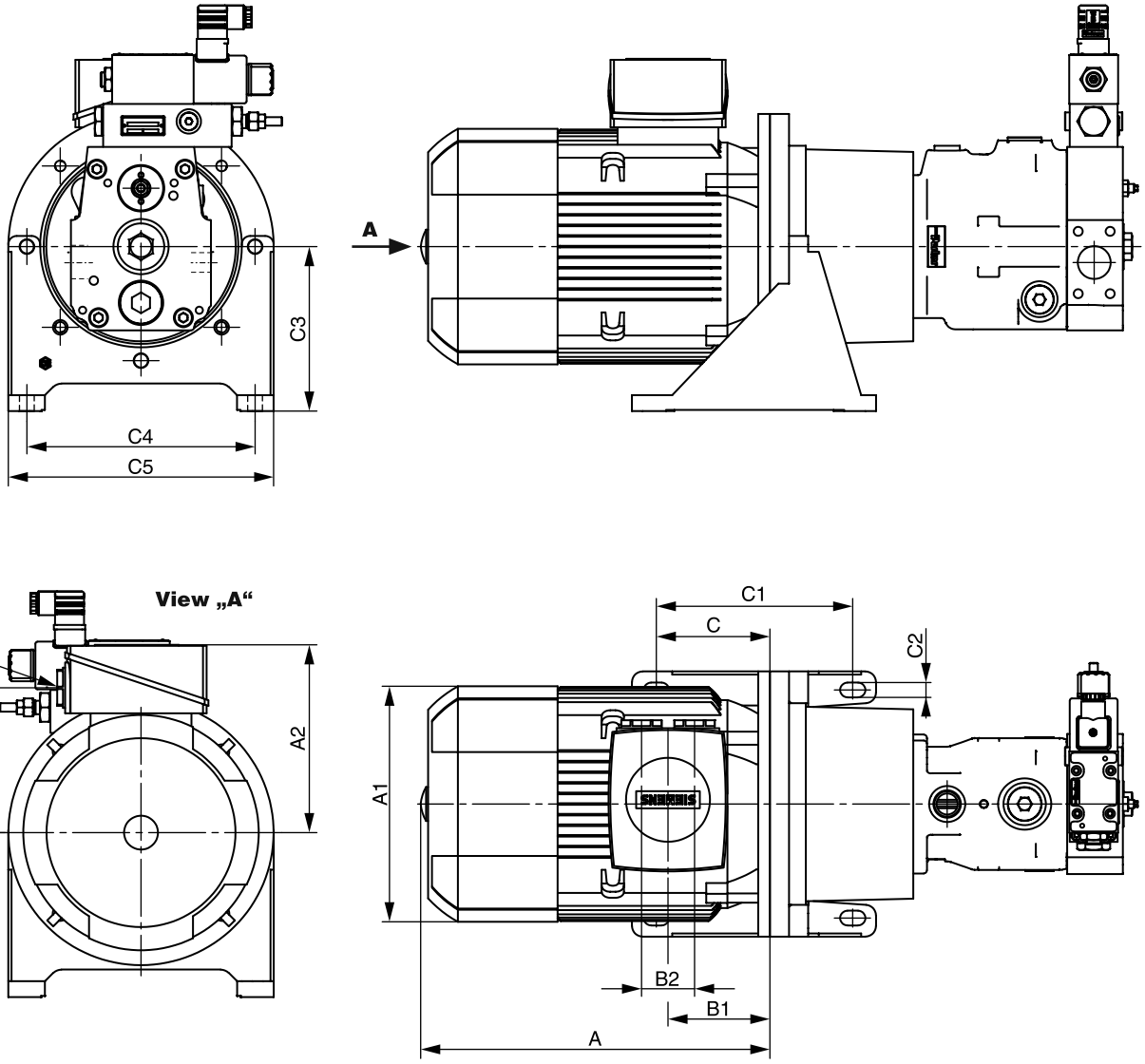
Axial piston pump with standard asynchronous motor



Motor code	Pump code	Motor size	A [mm]	A1 [mm]	A2 [mm]	B [mm]	B1 [mm]	B2 [mm]	B3 [mm]	C [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]
004	P0016	112M	322	222	195	2 x M32 x 1.5	100.5	48	150	107.5	185	14	155	215	250
006 / 008	P0016 - 28	132S / 132M	376.5	262	214.5	2 x M32 x 1.5	115.5	48	169	130.5	225	14	185	265	300
011 / 015	P0016 - 28	160M / 160L	484	314	261	2 x M40 x 1.5	145	60	213	149	265	18	235	300	350
011 / 015	P0032 - 46	160M / 160L	484	314	261	2 x M40 x 1.5	145	60	213	149	265	18	235	300	350
019 / 022	P0020 - 28	180M / 180L	558	356	286	2 x M40 x 1.5	155	60	234	149	265	18	235	300	350
019 / 022	P0032 - 46	180M / 180L	558	356	286	2 x M40 x 1.5	155	60	234	149	265	18	235	300	350
019 / 022	P0063 / 80	180M / 180L	558	356	286	2 x M40 x 1.5	155	60	234	149	265	18	235	300	350
030	P0028	200L	611	396	315	2 x M50 x 1.5	164	85	259	174	300	18	260	350	400
030	P0032 - 46	200L	611	396	315	2 x M50 x 1.5	164	85	259	174	300	18	260	350	400
030	P0063 - 92	200L	611	396	315	2 x M50 x 1.5	164	85	259	174	300	18	260	350	400
037	P0040 - 46	225S	648	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
037	P0063 - 92	225S	648	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
037	P0140	225S	648	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
045	P0046	225M	708	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
045	P0063 - 92	225M	708	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
045	P0140 - 180	225M	708	449	338	2 x M50 x 1.5	164	85	282	199	335	18	295	400	450
055	P0063 - 092	250M	747	497	410	2 x M63 x 1.5	192	110	322	249	415	18	350	500	550
055	P0140 - 180	250M	747	497	410	2 x M63 x 1.5	192	110	322	249	415	18	350	500	550
075	P0080 - 092	280S	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
075	P0140 - 180	280S	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
075	P0270	280S	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
090	P0092	280M	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
090	P0140 - 180	280M	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
090	P0270	280M	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
090	P0360	280M	820	551	433	2 x M63 x 1.5	210	110	345	249	415	18	350	500	550
110	P0140 - 180	315S	912	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
110	P0270	315S	912	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
110	P0360	315S	912	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
132	P0140 - 180	315M	1077	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
132	P0270	315M	1077	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
132	P0360	315M	1077	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
160	P0180	315L	1077	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
160	P0270	315L	1077	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
160	P0360	315L	1077	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
200 - 250	P0270	315L	1232	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
200 - 250	P0360	315L	1232	616	515	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660
315	P0360	315L	1240	710	570	2 x M63 x 1.5	238	110	404	298.5	495	22	380	600	660

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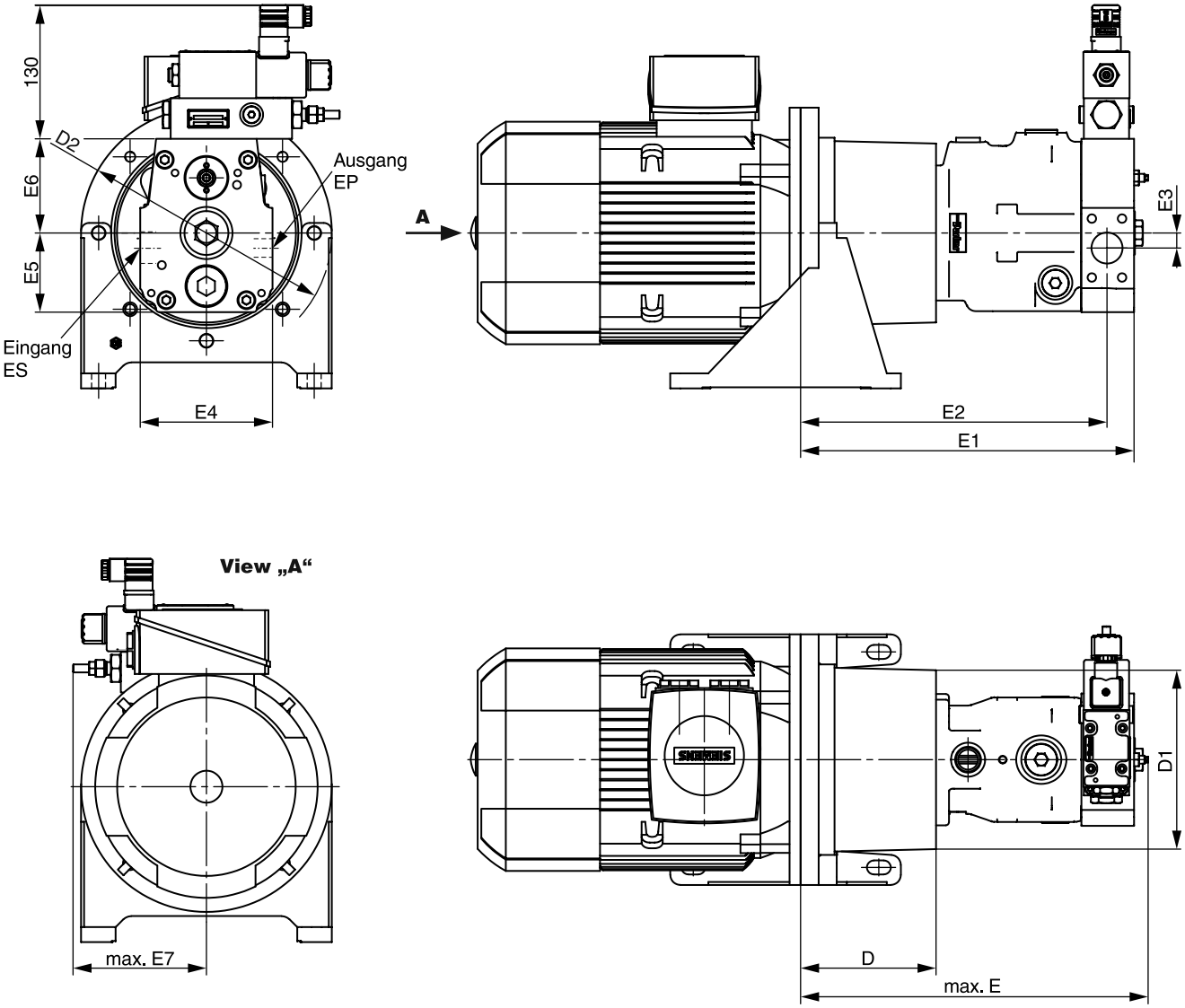
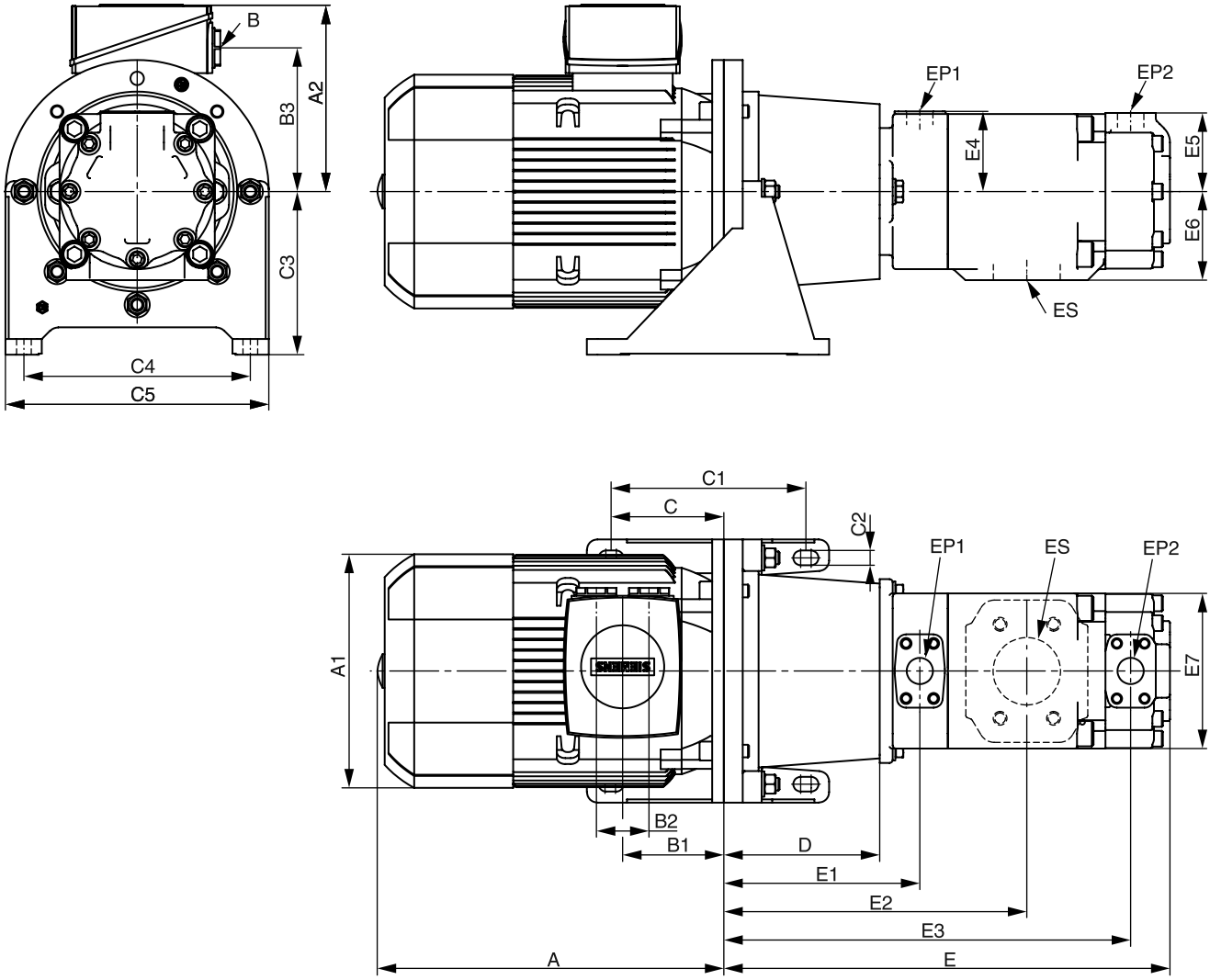
Axial piston pump with standard asynchronous motor



Motor code	Pump code	D [mm]	D1 [mm]	D2 [mm]	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	E5 [mm]	E6 [mm]	E7 [mm]	EP (PN 400 bar)	ES
004	P0016	135	180	250	347	332.5	305.5	15	132	79	94	130	DN19 ; 4xM10x18 deep	DN32 ; PN 250 bar ; 4xM10x18 deep
006 / 008	P0016 - 28	155	205	300	367	352.5	325.5	15	132	79	94	130	DN19 ; 4xM10x18 deep	DN32 ; PN 250 bar ; 4xM10x18 deep
011 / 015	P0016 - 28	188	225	350	400	385.5	358.5	15	132	79	94	130	DN19 ; 4xM10x18 deep	DN32 ; PN 250 bar ; 4xM10x18 deep
011 / 015	P0032 - 46	204	225	350	452	431	401	17	160	97	112.5	130	DN25 ; 4xM12x18 deep	DN38 ; PN 200 bar ; 4xM12x18 deep
019 / 022	P0020 - 28	204	225	350	416	401.5	374.5	15	132	79	94	130	DN19 ; 4xM10x18 deep	DN32 ; PN 250 bar ; 4xM10x18 deep
019 / 022	P0032 - 46	204	225	350	452	431	401	17	160	97	112.5	130	DN25 ; 4xM12x18 deep	DN38 ; PN 200 bar ; 4xM12x18 deep
019 / 022	P0063 / 80	228	248	350	536	515	480	26	200	120	132	133	DN32 ; 4xM12x20 deep	DN51 ; PN 200 bar ; 4xM12x20 deep
030	P0028	204	230	400	416	401.5	374.5	15	132	79	94	130	DN19 ; 4xM10x18 deep	DN32 ; PN 250 bar ; 4xM10x18 deep
030	P0032 - 46	204	230	400	452	431	401	17	160	97	112.5	130	DN25 ; 4xM12x18 deep	DN38 ; PN 200 bar ; 4xM12x18 deep
030	P0063 - 92	228	279	400	536	515	480	26	200	120	132	133	DN32 ; 4xM12x20 deep	DN51 ; PN 200 bar ; 4xM12x20 deep
037	P0040 - 46	234	260	450	482	461	431	17	160	97	112.5	130	DN25 ; 4xM12x18 deep	DN38 ; PN 200 bar ; 4xM12x18 deep
037	P0063 - 92	262	315	450	570	549	514	26	200	120	132	133	DN32 ; 4xM12x20 deep	DN51 ; PN 200 bar ; 4xM12x20 deep
037	P0140	262	315	450	648	612	557 *)	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
045	P0046	234	260	450	482	461	431	17	160	97	112.5	130	DN25 ; 4xM12x18 deep	DN38 ; PN 200 bar ; 4xM12x18 deep
045	P0063 - 92	262	315	450	570	549	514	26	200	120	132	133	DN32 ; 4xM12x20 deep	DN51 ; PN 200 bar ; 4xM12x20 deep
045	P0140 - 180	262	315	450	648	612	557 *)	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
055	P0063 - 92	265	360	550	573	552	517	26	200	120	132	133	DN32 ; 4xM12x20 deep	DN51 ; PN 200 bar ; 4xM12x20 deep
055	P0140 - 180	265	360	550	651	615	560 *)	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
075	P0080 - 92	265	360	550	573	552	517	26	200	120	132	133	DN32 ; 4xM12x20 deep	DN51 ; PN 200 bar ; 4xM12x20 deep
075	P0140 - 180	265	360	550	651	615	560 *)	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
075	P0270	295	360	550	805	767.5	698	0	265	176	184	133	DN38 ; 4xM16x30 deep	DN89 ; PN 35 bar ; 4xM16x30 deep
090	P0092	265	360	550	573	552	517	26	200	120	132	133	DN32 ; 4xM12x20 deep	DN51 ; PN 200 bar ; 4xM12x20 deep
090	P0140 - 180	265	360	550	651	615	560 *)	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
090	P0270	295	360	550	805	767.5	698	0	265	176	184	133	DN38 ; 4xM16x30 deep	DN89 ; PN 35 bar ; 4xM16x30 deep
090	P0360	315	400	550	825	792	723	0	250	176	184	133	DN38 ; 4xM16x30 deep	DN102 ; PN 35 bar ; 4xM16x30 deep
110	P0140 - 180	310	410	660	696	660	605 *)	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
110	P0270	330	400	660	840	802.5	733	0	265	176	184	133	DN38 ; 4xM16x30 deep	DN89 ; PN 35 bar ; 4xM16x30 deep
110	P0360	330	400	660	840	807	738	0	250	176	184	133	DN38 ; 4xM16x30 deep	DN102 ; PN 35 bar ; 4xM16x30 deep
132	P0140 - 180	310	410	660	696	660	605 *)	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
132	P0270	310	410	660	696	660	605	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
132	P0360	330	400	660	840	802.5	733	0	265	176	184	133	DN38 ; 4xM16x30 deep	DN89 ; PN 35 bar ; 4xM16x30 deep
160	P0180	330	400	660	840	807	738 *)	0	250	176	184	133	DN38 ; 4xM16x30 deep	DN102 ; PN 35 bar ; 4xM16x30 deep
160	P0270	330	400	660	716	680	625	0	200	145	158	133	DN32 ; 4xM12x20 deep	DN64 ; PN 160 bar ; 4xM12x20 deep
160	P0360	330	400	660	840	802.5	733	0	265	176	184	133	DN38 ; 4xM16x30 deep	DN89 ; PN 35 bar ; 4xM16x30 deep
200 - 250	P0270	330	400	660	840	802.5	733	0	265	176	184	133	DN38 ; 4xM16x30 deep	DN89 ; PN 35 bar ; 4xM16x30 deep
200 - 250	P0360	330	400	660	840	807	738	0	250	176	184	133	DN38 ; 4xM16x30 deep	DN102 ; PN 35 bar ; 4xM16x30 deep
315	P0360	330	400	660	840	807	738	0	250	176	184	133	DN38 ; 4xM16x30 deep	DN102 ; PN 35 bar ; 4xM16x30 deep

EP: Pressure port, flange acc. to ISO 6162
ES: Suction port, flange acc. to ISO 6162
[1)] Dimension for suction port +10 mm

Double vane pump with standard asynchronous motor



Motor code	Motor size	Pump code	A [mm]	A1 [mm]	A2 [mm]	B [mm]	B1 [mm]	B2 [mm]	B3 [mm]	C [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]	D [mm]	D1 [mm]	D2 [mm]
004	112M	J****	222	100.5	46	382	48	150	195	107.5	185	14	155	215	250	148	166	250
006 - 008	132S/132M	J****	262	115.5	61	456.5	48	169	214.5	130.5	225	14	185	265	300	168	220	300
011 - 015	160M/160L	J****	314	145	96	594	60	213	261	149	265	18	235	300	350	204	225	350
011 - 015	160M/160L	K****	314	145	96	594	60	213	261	149	265	18	235	300	350	228	248	350
015	160L	L****	314	145	96	594	60	213	261	149	265	18	235	300	350	228	248	350
019 - 022	180M/180L	J****	356	155	160	668	60	234	286	149	265	18	235	300	350	204	225	350
019 - 022	180M/180L	K****	356	155	160	668	60	234	286	149	265	18	235	300	350	228	248	350
019 - 022	180M/180L	L****	356	155	160	668	60	234	286	149	265	18	235	300	350	228	248	350
030	200L	J****	396	164	230	721	85	259	315	174	300	18	260	350	400	204	230	400
030	200L	K****	396	164	230	721	85	259	315	174	300	18	260	350	400	228	279	400
030	200L	L****	396	164	230	721	85	259	315	174	300	18	260	350	400	228	279	400
037	225S	J****	449	164	280	788	85	282	338	199	335	18	295	400	450	262	315	450
037	225S	K****	449	164	280	788	85	282	338	199	335	18	295	400	450	262	315	450
037	225S	L****	449	164	280	788	85	282	338	199	335	18	295	400	450	234	260	450
045	225M	J****	449	164	305	848	85	282	338	199	335	18	295	400	450	262	315	450
045	225M	K****	449	164	305	848	85	282	338	199	335	18	295	400	450	262	315	450
045	225M	L****	449	164	305	848	85	282	338	199	335	18	295	400	450	234	260	450
055	250M	J****	497	192	385	887	110	322	410	249	415	18	350	500	550	248	340	550
055	250M	K****	497	192	385	887	110	322	410	249	415	18	350	500	550	265	450	550
055	250M	L****	497	192	385	887	110	322	410	249	415	18	350	500	550	265	450	550
075	280S	J****	551	210	550	960	110	345	433	249	415	18	350	500	550	265	450	550
075 - 090	280S/280M	K****	551	210	550	960	110	345	433	249	415	18	350	500	550	265	450	550
075 - 090	280S/280M	L****	551	210	550	960	110	345	433	249	415	18	350	500	550	265	360	550
110	315S	K****	616	238	760	1082	110	404	515	249	415	18	350	500	550	265	450	550
110	315S	L****	616	238	760	1082	110	404	515	298.5	495	22	380	600	660	310	410	660
132 - 160	315M/315L	L****	616	238	860	1247	110	404	515	298.5	495	22	380	600	660	310	410	660

Motor code	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	E5 [mm]	E6 [mm]	E7 [mm]	EP1	EP2	ES
004	410.4	186.1	287.7	386.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
006 - 008	430.4	206.1	307.7	406.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
011 - 015	466.4	242.1	343.7	442.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
011 - 015	514	266.1	380.4	489.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
015	575.7	266.3	414.6	548.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
019 - 022	466.4	242.1	343.7	442.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
019 - 022	514	266.1	380.4	489.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
019 - 022	575.7	266.3	414.6	548.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
030	466.4	242.1	343.7	442.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
030	514	266.1	380.4	489.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
030	575.7	266.3	414.6	548.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
037	524.4	300.1	401.7	500.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
037	548	300.1	414.4	523.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
037	581.7	272.3	420.6	554.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
045	524.4	300.1	401.7	500.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
045	548	300.1	414.4	523.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
045	581.7	272.3	420.6	554.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
055	510.4	286.1	387.7	486.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
055	551	303.1	417.4	526.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
055	612.7	303.3	451.6	585.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
075	527.4	303.1	404.7	503.3	76.2	74.7	84.1	140	1" ; 4x M10 x 19 deep	1" ; 4x M10 x 19 deep	2 1/2" ; 4x M12x 22.4 deep
075 - 090	551	303.1	417.4	526.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
075 - 090	612.7	303.3	451.6	585.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
110	551	303.1	417.4	526.9	82.6	74.7	88.9	182	1 1/4" ; 4x M12 x 22.3 deep	1" ; 4x M10 x 19 deep	3" ; 4x M16 x 28.4 deep
110	657.7	348.3	496.6	630.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep
132 - 160	657.7	348.3	496.6	630.8	101.6	101.6	114.9	182	1 1/4" ; 4x M12 x 22.3 deep	1 1/4" ; 4x M12 x 24 deep	4" ; 4x M16 x 30 deep

EP* : Pressure ports, SAE 4-hole flange - J518 - ISO 6162-1
ES : Suction ports, SAE 4-hole flange - J518 - ISO 6162-1

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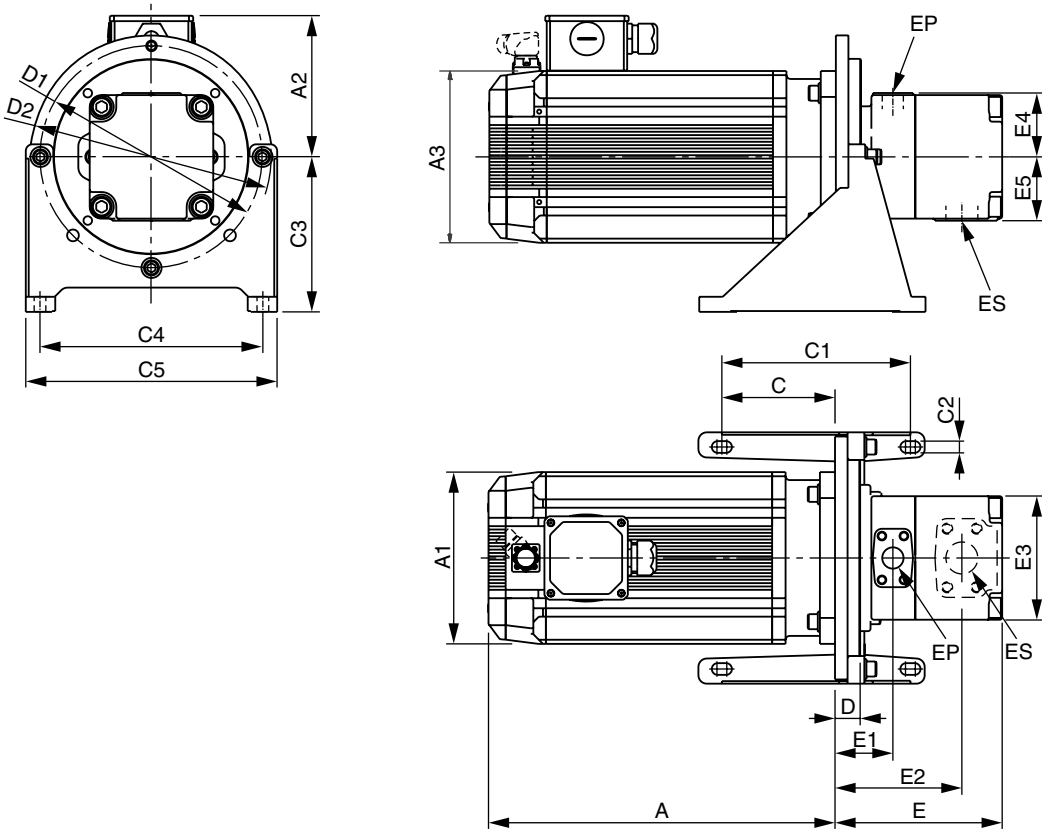
Vane pump with synchronous motor



Motor code	Motor size	Pump code	A [mm]	A1 [mm]	A2 [mm]	A3 [mm]	C [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	C5 [mm]	D [mm]	D1 [mm]	D2 [mm]
004 - 6P6	MH 145	A0006 - A0013	292 - 416	145	125	145	125	185	14	155	215	250	30	215	240
4P2 - 019	MH 205	A0006 - A0025	239 - 480	205	172	205	125	185	14	155	215	250	30	215	240
006 - 019	MH 205	B0009 - B0011	306 - 480	205	172	205	150	225	14	185	265	300	30	265	290
027 - 045	MH 265	A0017 - A0025	340 - 447	265	229	265	150	225	14	185	265	300	30	265	290
027 - 058	MH 265	B0009 - B0015	340 - 554	265	229	265	150	225	14	185	265	300	30	265	290
027 - 068	MH 265	D0017 - D0042	340 - 661	265	229	265	150	225	14	185	265	300	30	265	325

Motor code	E [mm]	E1 [mm]	E2 [mm]	E3 [mm]	E4 [mm]	E5 [mm]	EP	ES
004 - 6P6	168.5	68.2	146.3	110	68	63.5	1 1/4" BSPP	3/4" BSPP
4P2 - 019	168.5	68.2	146.3	110	68	63.5	1 1/4" BSPP	3/4" BSPP
006 - 019	198.5	112.3	68.1	140	76.2	76.2	1 1/2" ; 4x M12 x 22.4 deep	1" ; 4x M10 x 19 deep
027 - 045	168.5	68.2	146.3	110	68	63.5	1 1/4" BSPP	3/4" BSPP
027 - 058	198.5	112.3	68.1	140	76.2	76.2	1 1/2" ; 4x M12 x 22.4 deep	1" ; 4x M10 x 19 deep
027 - 068	214.9	117.4	68.1	147.4	82.6	82.6	2 1/2" ; 4x M12 x 23.9 deep	1 1/4" ; 4x M12 x 22.3 deep

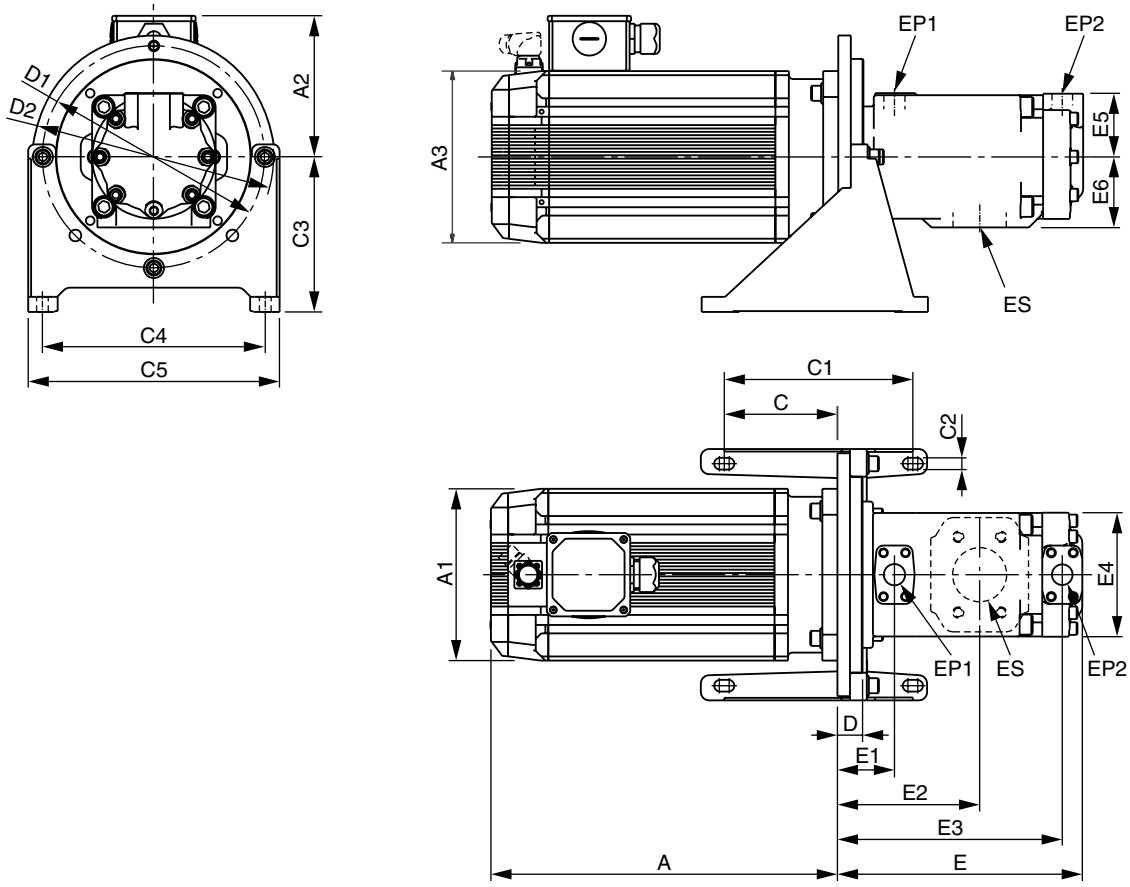
Motor code	Motor size	A [mm]
0P7	MH 105	186
1P1	MH 105	229
1P4	MH 145	200
1P7	MH 105	273
002	MH 105	317
2P5	MH 145	231
004	MH 145	292
4P1	MH 145	354
4P2	MH 205	239
006 [1)]	SMB170	306

Motor code	Motor size	A [mm]
6P6	MH 145	416
008	MH 205	273
009 [1)]	SMB170	409
013	MH 205	342
016	MH 205	411
019	MH 205	480
027	MH 265	340
045	MH 265	447
058	MH 265	554
068	MH 265	661

EP: Pressure ports, BSPP or SAE 4-hole flange - J518 - ISO/DIS6162-1
ES: Suction ports, BSPP or SAE 4-hole flange - J518 - ISO/DIS6162-1

[1)] Connection only via plug, no conduit box, dimensions on request.

Double vane pump with synchronous motor



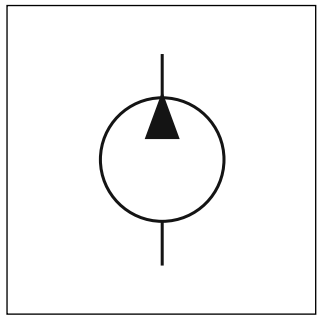
All dimensions on request

Parker vane pumps are especially suited to variable speed applications. They enable very quick changes in pressure at a very high flow rate reproducibility and at a low noise level. Their minimum speed increases from zero proportional to pressure up to 300 rpm at maximum pressure. High operating pressures of up to 320 bar and small dimensions reduce installation costs. Reduced pressure increases life-span.

The vane pump forms a compact unit in combination with flange and e-motor. The design with two opposing pressure chambers prevents lateral forces working on the drive shaft. The pump cartridge design is suitable for drop-in installation. It is particularly modification and service friendly. The wide range of designs (displacement, shaft, connections, etc.) offers the best preconditions for individual solutions tailored to a customer's requirements.

Features

- High volumetric efficiency
- Low noise design
- High mechanical efficiency (generally over 94 %)
- Wide speed range (300–3000 rpm)
- Low pressure pulsation (±2 bar) reduces pipe noise
- Impervious to particle contamination thanks to the double lip design



Temporary maximum pressure

The unit T7 can be operated briefly at higher pressures than the operating pressure recommended for continuous operation if the average pressure per time unit is lower than or equal to the pressure for continuous operation. The calculation formula for the temporary maximum pressure only applies when taking the other parameters into consideration – speed, operating fluid, viscosity and degree of contamination. For a total cycle duration of over 15 minutes, please get in contact with your Parker representative.

Example: B0010

Work cycle
4 mins at 320 bar
1 mins at 35 bar
5 mins at 160 bar

$$\frac{(4 \times 320) + (1 \times 35) + (5 \times 160)}{10} = 211.5 \text{ bar}$$

211.5 bar is lower than the operating pressure of 290 bar permitted for the continuous operation of B0010 with an HLP46 operating medium.

Technical data

Pump code	Displacement [cm³/U]	min. speed [1/min]	max. speed [1/min]	Flow rate (1500 1/min. p 140 bar) [l/min]	max. operating pressure. permanent [bar]	max. operating pressure. temporary [bar]
A0006 - A0022	5.8 - 22.5	300	3000	7.0 - 31.5	300	275
A0025	24.9	300	3000	36	275	240
B0009 - B0010	28 - 31.8	300	3000	40.3 - 46	320[1)]	290
B0011 - B0014	35 - 45	300	3000	50.8 - 65.8	300	275
B0015	50	300	2700	73.3	280	240
D0017 - D0031	55 - 99.2	300	3000	75.9 - 142.2	300	250
D0035 - D0038	113.4 - 120.6	300	3000	163.5 - 174.3	280	250
D0042	137.5	300	2700	199.6	260	230

Internal leakage depending on pressure, speed and pump cartridge. All values applying for standard mineral oil.
For more information see catalogue HY29-0110

[1)] Please consult Parker for applications over 300 bar.

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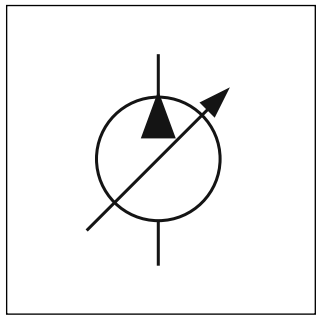
Parker axial piston pumps are particularly characterized by their low noise level based on low pulsation and a rigid housing. Drops in flow that are common when operating a positive displacement pump during the compression phase are reduced by employing a pre-compression volume. In this case, the low-pressure piston is brought to operating pressure prior to entry in the pressure kidney. As soon as the piston is in the pressure range, it connects the system and pre-compression volume and refills the oil required for compressing the next piston.

In addition to significant noise reduction, axial piston pumps offer further advantages such as high efficiency, since the holding down of the pistons works without springs and with a fixed recess. They are also installation and maintenance-friendly.

The axial piston pumps feature a drive shaft for single and multiple pumps.

Features

- Low noise
- Short control response times
- Service friendly
- High self-priming speed
- Compact design
- The drive for 100 % nominal torque

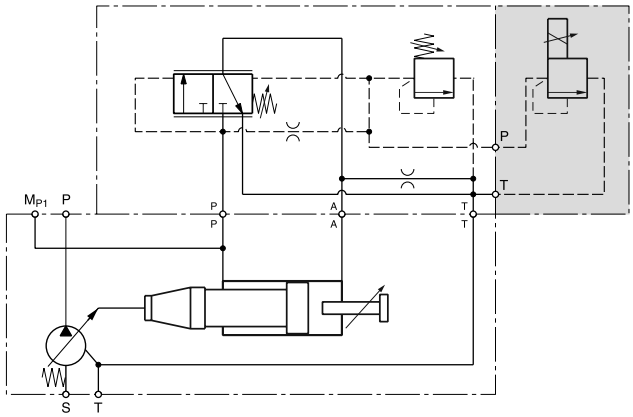


Pressure-regulated pumps with proportional pilot valve

The PVACRE..35-type proportional pilot valve is installed on the top of the controller.

The electronic module PCD00A-400 which is required for operation is included in delivery.

This version enables a variable setting of the regulated pressure between 20 and 350 bar via an electrical signal.



Technical data

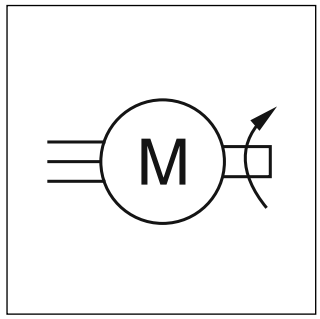
Pump code	Displacement max. [cm³/U]	Flow rate (1500 1/min) [l/min]	Nominal pressure [bar]	Max. pressure p_{max} 20 % of work cycle [bar]	Min. input pressure absolute [bar]	Speed min. [1/min]	Max. speed at input pressure 1 bar absolute [1/min]
PV016	16	24	350	420	0.8	400	3000
PV020	20	30					3000
PV023	23	34.5					3000
PV028	28	42					3000
PV032	32	48					2800
PV040	40	60					2800
PV046	46	69					2800
PV063	63	94.5					2800
PV080	80	120					2500
PV092	92	138					2300
PV140	140	210					2400
PV180	180	270					2200
PV270	270	405					1800
PV360	360	540					1750

For more information see catalogue HY30-3245

HY11-3352UK R3 innen.indd CM 18.05.2015

The standard asynchronous motors are characterized by their versatility, robustness and high efficiency. They fulfill the IE2 efficiency standard (high efficiency), and therefore allow large energy savings and conserve the environment. The design offers maximum flexibility and minimum cost when installing. The comparably low weight also has a positive effect on the overall weight of the assembly.

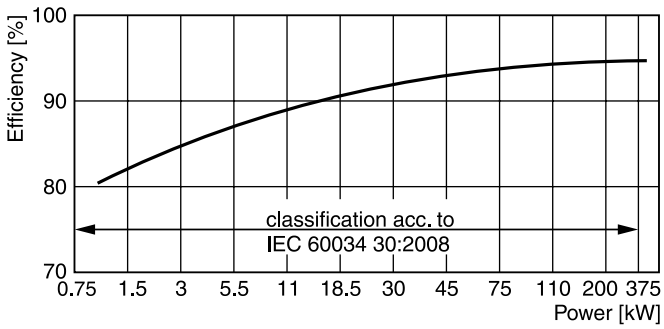
In principal, all motors can be operated on the drive at mains voltages of up to 460 V +10 %. Operating within a power range of 0.55 to 315 kW, the motors have been designed for all markets around the world. In order to achieve the best possible design, a mix of highly conductive materials is used in the rotor. The result is minimized rotor losses and excellent start-up performance.



Features

- Long life-span as a result of the simplicity and robustness of the components
- Thermistor motor protection included
- Longer motor life-span thanks to lower winding temperatures in terms of the rated load and power supply
- High overload reserves in continuous operation
- Low weight

IE2 efficiency 4-pole 50 Hz

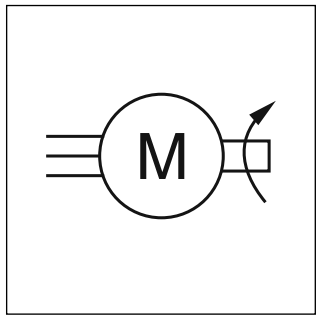


Technical data (nominal voltage 400 VAC / 50 Hz)

Code N	Rated power [kW]	Rated speed [1/min]	Efficiency factor	Rated current [A]	Rated torque [Nm]	Weight [kg]	Max. speed [1/min]	Max. torque [Nm]
0P5	0.55	1440	0.74	1.37	3.7	10	4200	11
0P7	0.75	1440	0.76	1.79	5	11	4200	16
1P1	1.1	1425	0.78	2.5	7.4	13	4200	21
1P5	1.5	1435	0.79	3.3	10	16	4200	34
2P2	2.2	1455	0.81	4.65	14	32	4200	46
003	3	1455	0.82	6.2	20	37	4200	62
004	4	1460	0.81	8.2	26	46	4200	83
006	5.5	1465	0.8	11.3	36	61	4200	104
008	7.5	1465	0.83	14.7	49	75	4200	142
011	11	1470	0.85	21	71	96	4200	198
015	15	1475	0.85	28	97	104	4200	291
019	18.5	1465	0.84	35	121	160	4200	411
022	22	1465	0.84	41.5	143	170	4200	500
030	30	1475	0.85	55	195	225	4200	604
037	37	1470	0.87	66	240	285	4500	720
045	45	1475	0.87	80	291	315	4500	902
055	55	1480	0.85	100	355	390	3700	1065
075	75	1485	0.87	132	482	560	3000	1397
090	90	1486	0.87	159	578	640	2600	1791
110	110	1490	0.86	195	705	750	2600	2115
132	132	1488	0.87	230	847	870	2600	2456
160	160	1488	0.87	280	1027	950	2600	3081
200	200	1490	0.87	350	1282	1120	2600	3974
250	250	1488	0.87	435	1605	1270	2600	5136
315	315	1488	0.86	560	2022	1480	2600	6470

The MH and SMB series of high dynamic, brushless motors from Parker provide generously-sized mechanical components and low inertia. Thanks to the high quality of the Neodymium-Iron-Boron magnets and the encapsulation technique which is used to fasten them to the shaft, these motors can achieve high acceleration and withstand high overload without risking the demagnetization or detachment of the magnets.

Due to the many different shaft and flange sizes available for all models, a suitable motor can be selected for most customer requirements.



Features

- Protection class IP64
- Ambient temperature -10/+40 °C
- Rated torque 4.3 to 268 Nm
- High power density
- Lifetime-lubricated ball bearings
- Convection cooling, fan as option available

Technical data (Nominal voltage 400 VAC / 50 Hz, ambient temperature -10 ... 40 °C)

Code	Rated power [1] [kW]	Rated speed [1/min]	Rated current [1] [A]	Rated torque [1] [Nm]	Max. speed [1/min]	Max. torque [Nm]
1P4	1.35	3000	3	4.3	3300	28
2P5	2.48	3000	4.6	7.9	3300	49
4	3.99	3000	7.1	12.7	3300	86
4P1	4.12	3000	7.3	13.1	3300	117
4P2	4.21	3000	7.7	13.4	3300	69
6	6.00	3000	11.0	19.0	3300	111
6P6	6.63	3000	11.9	21.1	3300	143
8	8.07	3000	17.1	25.7	3300	123
9	9.43	3000	17.9	30.0	3300	190
13	13.1	3000	25.6	41.7	3300	222
16	16.43	3000	32.1	52.3	3300	310
19	19.35	3000	37.8	61.6	3300	398
27	27.33	3000	55.4	87	3300	235
45	45.24	3000	91.7	144	3300	451
58	58.12	3000	117.8	185	3300	657
68	67.54	3000	136.9	215	3300	857

For more information see catalogue 192-061012

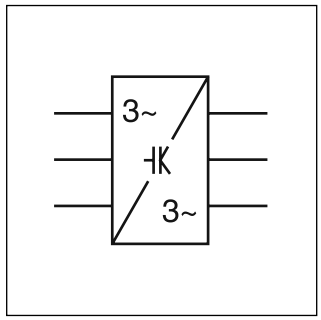
[1] Convection-cooled motors only. For forced air-cooled motors, values increase by 25 %.

HY11-3352UK R3 innen.indd CM 18.05.2015

As a component of the Drive Controlled Pump, the AC30V series covers the entire spectrum of speed-regulated applications for asynchronous and synchronous motors. It has been designed to provide users the optimum control of pump applications with high dynamics and numerous options of control.

The AC30 has been designed with simplicity in mind, but this doesn't compromise its functionality. The flexible and modular deisgn provides a wide range of communication options. E/A-Module can be added easily if required. Modules that are required for the Drive Controlled Pump are equipped ex works.

The setup of the Drive Controlled Pump can be done via graphical key pad or by using the pc software PDQ.



Features

- Integrated hydraulic functions
- Graphical key pad
- Integrated web server
- Sensorless vector control
- Safety torque off
- Software tool for configuration, commissioning, optimisation, programming and maintenance
- Fieldbus communication with open standards:
  - CANopen
  - DeviceNet
  - PROFIBUS
  - PROFINET
  - EtherCAT
  - Ethernet IP

The following operation modes are available:

- Flow control
- Pressure control [1)]
- Alternating flow rate / pressure control (P/Q) [1)]
- Load Sensing [1)]
- Accumulator charging mode [1)]

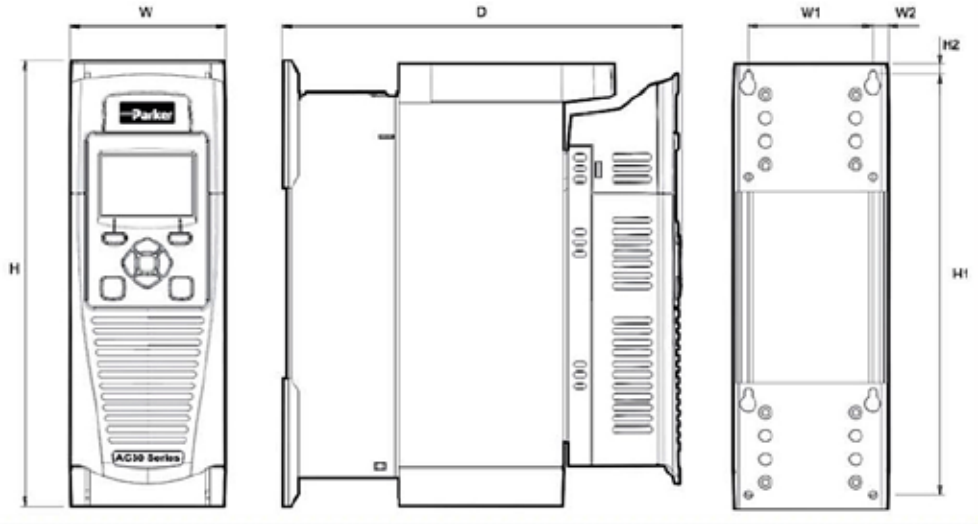
Technical data

Electrical Characteristics		
Rated Input Voltage	[V]	3 x 380...480 ±10 %
Input Frequency	[Hz]	45...65
Maximum Switching Frequency	[kHz]	4...12 max. (acc. derate output)
Overload: Heavy Duty	[%]	150 for 60 s, 180 for 3 s
Overload: Normal Duty	[%]	110 for 60 s, 180 for 3 s heavy duty FLC
Output Frequencies	[Hz]	0...500 at 4 kHz switching frequency
	[Hz]	0...1000 at 8 kHz switching frequency
	[Hz]	0...1500 at 12 kHz switching frequency
Enviromental Characteristics		
Operating Temperature	[°C]	0...+40 (normal duty), 0...+45 (heavy duty) 0...+50 (derate output)
Operating Humidity, max	[%]	85 bei 40 °C
Protection class		IP 20
Altitude	[m]	1000 over NN, derate output by 1 % per 100 m to max. 2000 m
Atmosphere		Non-flammable, non-corrosive and dust free
Climatic conditions		Class 3k3, as defined by EN60721-3-3

[1)] Pressure transducer is required (not included in delivery).

HY11-3352UK R3 innen.indd CM 18.05.2015

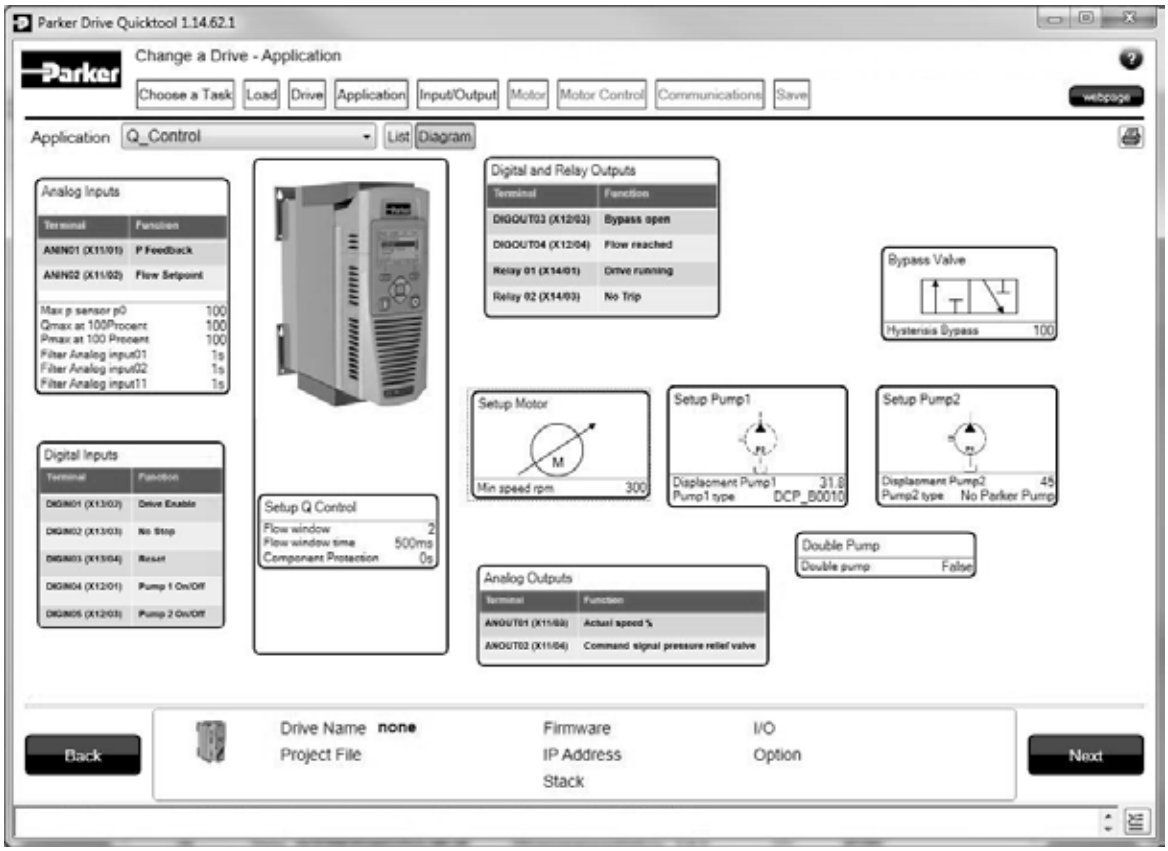
Dimensions



Code	Model	Weight [kg]	Dimensions [mm]							Fixings
			H	H1	H2	W	W1	W2	D	
3P5 - 012	Frame D	4.5	286.0	270.0	6.50	100.0	80.0	10.0	255.0	Slot 4.5 mm wide. Use M4 fixings
016 - 023	Frame E	6.8	333.0	320.0	6.50	125.0	100.0	12.5	255.0	
032 - 038	Frame F	10.0	383.0	370.0	6.50	150.0	125.0	12.5	255.0	
045 - 073	Frame G	22.3	480.0	465.0	7.25	220.0	190.0	13.0	287.0	Slot .0 mm wide. Use M5 fixings
087 - 145	Frame H	TBA	670.0	650.0	10.0	260.0	220.0	20.0	331.0	

Commissioning Software

For the commissioning of the AC30V, Parker offers a simple-to-use software tool for programming, monitoring and diagnostics of the AC drives from Parker with the aid of a graphical user interface. This enables the user to easily create, parameterize and configure user-defined applications.



The AC30V drive can easily be configured and put into operation via graphical key pad or by using the pc software PDQ.

- Select operation mode
- Select the pump via ordering code
- Enter pressure sensor parameters
- Enter motor data provided on the motor rating plate
- Setting of the pressure regulator
- Save/clone the configuration settings via optional SD card is possible

Drive Controlled Pump units consisting of motor and pump are directly ready-for-use since motor and pump parameters are already set ex works.

The following settings for programming functions are possible:

- Accumulator charging mode
- Load Sensing
- Analogue setpoint selection for volume flow and/or pressure
- Setpoint selection for volume flow and/or pressure via CANopen/DeviceNet/PROFIBUS DP/PROFINET etc.

The following diagnostics functions are available:

- Current pressure, volume flow and performance values are on constant display
- Reading or setting digital inputs and outputs
- Graphical presentation with zoom and save functions

For more information see catalogue 190-490323

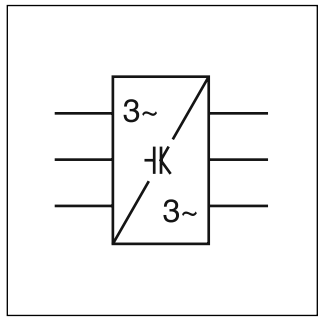
HY11-3352UK R3 innen.indd CM 18.05.2015

Compax3 is Parker's global servo drive. It was developed with the aim of providing maximum openness and flexibility for the widest range of applications. As a component of the Drive Controlled Pump it is used as a drive for synchronous servo motors. A power range of 1 to 110 kVA is available.

The Compax3 offers modern control technology and supports the common fieldbus interfaces PROFIBUS and PROFINET. The open communication standard OPC simplifies integration into the entire system. By using the intuitive "Parker Integrated Engineering Tool" software, the Compax3 can be used easily and efficiently.

The following operation modes are available:

- Flow control
- Pressure control [1)]
- Alternating flow rate / pressure control (P/Q) [1)]
- Load Sensing [1)]
- Accumulator charging mode [1)]



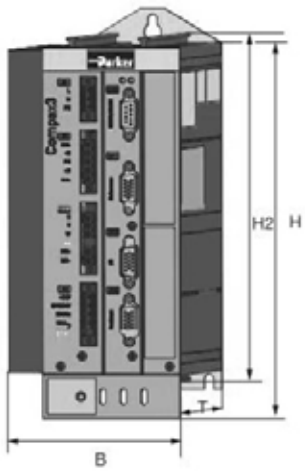
Features

- Power range of 1 to 110 kVA
- 1 encoder input
- 3 analogue inputs -10...10 V (14 bit) or 3 analogue inputs 0...20 mA (14 bit)
- Fieldbus communication with open standards
- Software tool for configuration, commissioning, optimisation, programming and maintenance

Technical data

Code	002	004	008	015	030	050	090	125	155
Compax3	**S015V4**	**S038V4**	**S075V4**	**S150V4**	**S300V4 [1)]**	**H050V4**	**H090V4**	**H125V4**	**H155V4**
Motor power supply									
Supply voltage [V]	3 * 400/480 VAC (80...528 VAC) / 50...60 Hz								
Nom. output current (effectiv) [A]	1.5	3.8	7.5	15	30	50	90	125	155
Peak current (< 5 s) [A]	4.5	9	15	30	60	75	135	187.5	232.5
Power [kVA]	1.25	3.1	6.2	11.5	25	35	70	91	109
Control power supply									
Control voltage [V]	24 VDC ±10 %. ripple <1 Vss								
Current consumption [A]	0.8 (+ digital outputs je 0.1; + motor brake up to 1.6)								

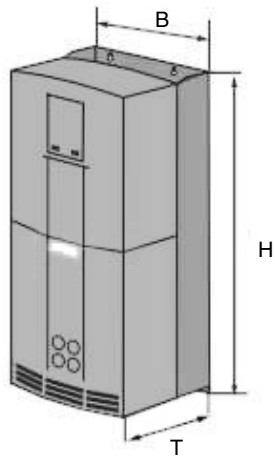
Dimensions Compax3S



Compax3S	Dimensions				Weight
	H	B	T	H2	[kg]
S015V4	273	84	172	259	3.1
S038V4	273	100	172	259	3.5
S075V4	273	115	172	259	4.3
S150V4	273	158	172	259	6.8
S300V4	380	175	172	391	10.9

For more information see catalogue 192-120013

Dimensions Compax3H



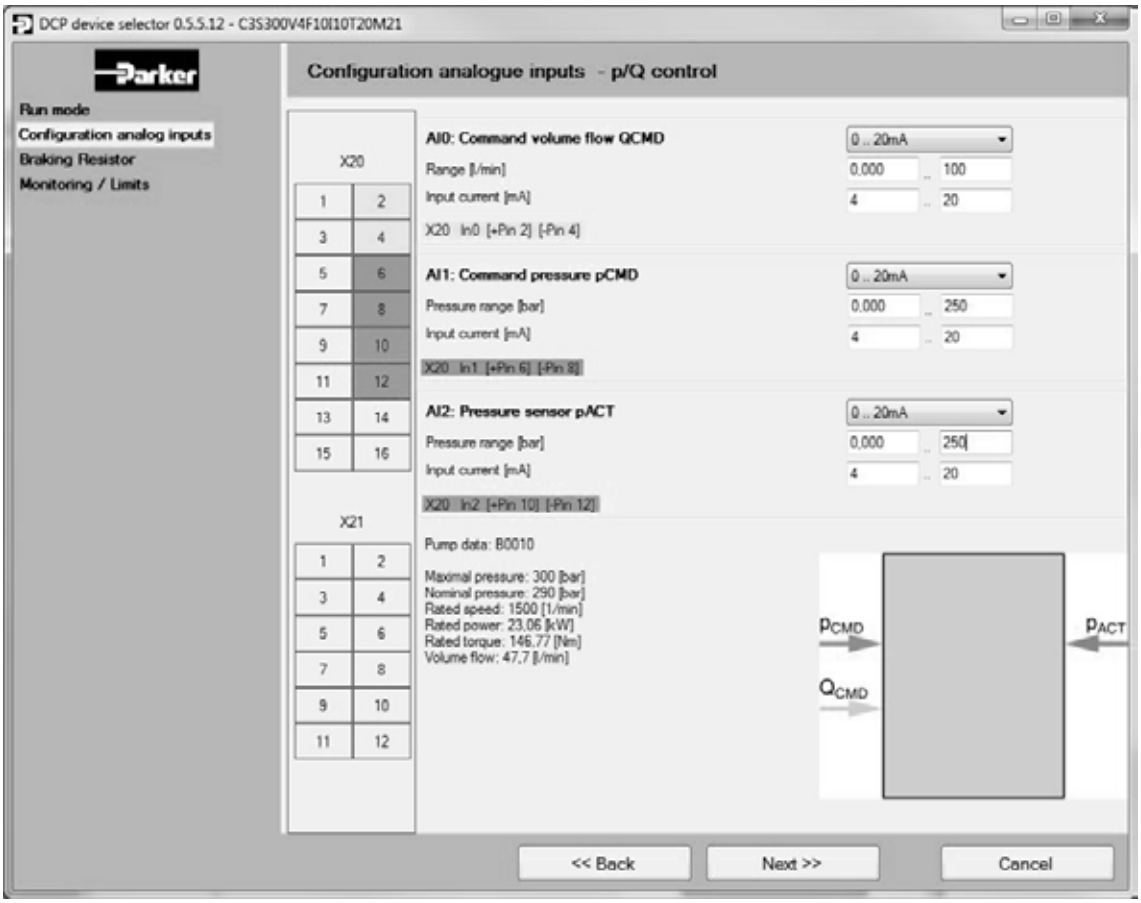
Compax3H	Dimensions			Weight
	H	B	T	[kg]
H050V4	453	252	245	17.4
H090V4	669	257	312	32.5
H125V4	720	257	355	41.0
H155V4	720	257	355	41.0

1) Pressure sensor is required (not included in delivery).
2) Operation with condenser unit module C4.

HY11-3352UK R3 innen.indd CM 18.05.2015

Commissioning Software

For the commissioning of the Compax3, Parker offers a simple-to-use software tool for programming, monitoring and diagnostics of the AC drives from Parker with the aid of a graphical user interface.



This enables the user to easily create, parameterize and configure user-defined applications:

- Select components from the databases available
- Select interfaces
- Select operation and control mode
- Define inputs (see screenshot above)
- Configuration settings are saved in the AC drive
- Setting of the pressure regulator

Drive Controlled Pump units consisting of motor and pump are directly ready-for-use since motor and pump parameters are already set ex works.

The following settings for programming functions are possible:

- Accumulator charging mode
- Load Sensing
- Analogue setpoint selection for volume flow and/or pressure
- Setpoint selection for volume flow and/or pressure via PROFIBUS DP/PROFINET etc.

The following diagnostics functions are available:

- Current pressure, volume flow and performance values are on constant display
- Reading or setting digital inputs and outputs
- 4-channel oscilloscope with zoom and memory function

Parker's Motion & Control Technologies

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 00800 27 27 5374

Aerospace

Key Markets

Aftermarket services
Commercial transports
Engines
General & business aviation
Helicopters
Launch vehicles
Military aircraft
Missiles
Power generation
Regional transports
Unmanned aerial vehicles

Key Products

Control systems & actuation products
Engine systems & components
Fluid conveyance systems & components
Fluid metering, delivery & atomization devices
Fuel systems & components
Fuel tank inerting systems
Hydraulic systems & components
Thermal management
Wheels & brakes

Climate Control

Key Markets

Agriculture
Air conditioning
Construction Machinery
Food & beverage
Industrial machinery
Life sciences
Oil & gas
Precision cooling
Process
Refrigeration
Transportation

Key Products

Accumulators
Advanced actuators
CO_2 controls
Electronic controllers
Filter driers
Hand shut-off valves
Heat exchangers
Hose & fittings
Pressure regulating valves
Refrigerant distributors
Safety relief valves
Smart pumps
Solenoid valves
Thermostatic expansion valves

Electromechanical

Key Markets

Aerospace
Factory automation
Life science & medical
Machine tools
Packaging machinery
Paper machinery
Plastics machinery & converting
Primary metals
Semiconductor & electronics
Textile
Wire & cable

Key Products

AC/DC drives & systems
Electric actuators, gantry robots & slides
Electrohydrostatic actuation systems
Electromechanical actuation systems
Human machine interface
Linear motors
Stepper motors, servo motors, drives & controls
Structural extrusions

Filtration

Key Markets

Aerospace
Food & beverage
Industrial plant & equipment
Life sciences
Marine
Mobile equipment
Oil & gas
Power generation & renewable energy
Process
Transportation
Water Purification

Key Products

Analytical gas generators
Compressed air filters & dryers
Engine air, coolant, fuel & oil filtration systems
Fluid condition monitoring systems
Hydraulic & lubrication filters
Hydrogen, nitrogen & zero air generators
Instrumentation filters
Membrane & fiber filters
Microfiltration
Sterile air filtration
Water desalination & purification filters & systems

Fluid & Gas Handling

Key Markets

Aerial lift
Agriculture
Bulk chemical handling
Construction machinery
Food & beverage
Fuel & gas delivery
Industrial machinery
Life sciences
Marine
Mining
Mobile
Oil & gas
Renewable energy
Transportation

Key Products

Check valves
Connectors for low pressure fluid conveyance
Deep sea umbilicals
Diagnostic equipment
Hose couplings
Industrial hose
Mooring systems & power cables
PTFE hose & tubing
Quick couplings
Rubber & thermoplastic hose
Tube fittings & adapters
Tubing & plastic fittings

Hydraulics

Key Markets

Aerial lift
Agriculture
Alternative energy
Construction machinery
Forestry
Industrial machinery
Machine tools
Marine
Material handling
Mining
Oil & gas
Power generation
Refuse vehicles
Renewable energy
Truck hydraulics
Turf equipment

Key Products

Accumulators
Cartridge valves
Electrohydraulic actuators
Human machine interfaces
Hybrid drives
Hydraulic cylinders
Hydraulic motors & pumps
Hydraulic systems
Hydraulic valves & controls
Hydrostatic steering
Integrated hydraulic circuits
Power take-offs
Power units
Rotary actuators
Sensors

Pneumatics

Key Markets

Aerospace
Conveyor & material handling
Factory automation
Life science & medical
Machine tools
Packaging machinery
Transportation & automotive

Key Products

Air preparation
Brass fittings & valves
Manifolds
Pneumatic accessories
Pneumatic actuators & grippers
Pneumatic valves & controls
Quick disconnects
Rotary actuators
Rubber & thermoplastic hose & couplings
Structural extrusions
Thermoplastic tubing & fittings
Vacuum generators, cups & sensors

Process Control

Key Markets

Alternative fuels
Biopharmaceuticals
Chemical & refining
Food & beverage
Marine & shipbuilding
Medical & dental
Microelectronics
Nuclear Power
Offshore oil exploration
Oil & gas
Pharmaceuticals
Power generation
Pulp & paper
Steel
Water/wastewater

Key Products

Analytical Instruments
Analytical sample conditioning products & systems
Chemical injection fittings & valves
Fluoropolymer chemical delivery fittings, valves & pumps
High purity gas delivery fittings, valves, regulators & digital flow controllers
Industrial mass flow meters/ controllers
Permanent no-weld tube fittings
Precision industrial regulators & flow controllers
Process control double block & bleeds
Process control fittings, valves, regulators & manifold valves

Sealing & Shielding

Key Markets

Aerospace
Chemical processing
Consumer
Fluid power
General industrial
Information technology
Life sciences
Microelectronics
Military
Oil & gas
Power generation
Renewable energy
Telecommunications
Transportation

Key Products

Dynamic seals
Elastomeric o-rings
Electro-medical instrument design & assembly
EMI shielding
Extruded & precision-cut, fabricated elastomeric seals
High temperature metal seals
Homogeneous & inserted elastomeric shapes
Medical device fabrication & assembly
Metal & plastic retained composite seals
Shielded optical windows
Silicone tubing & extrusions
Thermal management
Vibration dampening

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