



Construction

Submersible motor pumps for deep wells of 4" (DN 100 mm), and 6" (DN 150 mm).

Impellers: - radial impellers 4SD 31,41,45,5,75 - 6SD 7,9,10,15
- mixed flow impellers 4SD 8,10,15 - 6SD 18,19,20

Bocca: screwed connection ISO 228

Delivery casing with built-in non-return valve.

4" pump with stainless steel external jacket, suction lantern and strainer as one piece only.

Applications

For water supply.
For civil and industrial applications.
For fire fighting applications.
For irrigation.

Operating conditions

Liquid temperature up to a 35 °C (25 °C with rewindable motor).
Max. sand quantity into the water: 100 g/m³.
Continuous duty.

6" Rewindable motor CS series

2-pole induction motor, 50 Hz (n = 2900 rpm).
With water wetted winding in rewindable execution.
Sized for connection to the pumps according to NEMA Standards.
Standard voltages:

- three-phase 230 V; 400 V; 230/400 V; 400/690 V.

Voltage tolerance : +6% / -10%.

Recommended type of starting for powers from 7.5 kW:
star/delta, soft start or impedance starting.

Insulation class Y. Protection IP 58.

Liquid temperature up to a 25 °C.

Max. starts per hour: 15 for 6" motors.

Cooling : minimum flow velocity = 16 cm/s for 6" motors.

Cable	Motor 400V - 50Hz	Section	Length
6CS	4 ÷ 30 kW	4 x 6 mm ²	3,5 m

4", 6" motor FK series

2-pole induction motor, 50 Hz (n = 2900 rpm).

Resin impregnated winding.

Sized for connection to the pumps according to NEMA Standards.

Standard voltages:

- single-phase 230 V - up to 2,2 kW

- three-phase 230 V; 400 V; 230/400 V; 400/690 V.

Voltage tolerance : +6% / -10%.

Recommended type of starting for powers from 7.5 kW:
star/delta, soft start or impedance starting.

Insulation class B for 4" motors and class F for 6" motors.

Protection IP 68.

Liquid temperature up to a 35 °C

Max. starts per hour: 20 at regular intervals.

Cooling : minimum flow velocity = 8 cm/s for 4" motors and 16 cm/s for 6" motors.

Cable	Motor 400V - 50Hz	Section	Length
4FK	up to 1,5 kW	4 x 1,5 mm ²	1,5 m
4FK	2,2 ÷ 5,5 kW	4 x 1,5 mm ²	2,5 m
6FK	up to 22 kW	4 x 4 mm ²	4 m
6FK	30 kW	4 x 8,3 mm ²	4 m

Materials

Components	Part Nr.	4SD	6SD	
External jacket	14.02	-	Cr-Ni steel AISI 304	
External jacket with lantern	14.03	Cr-Ni steel AISI 304	-	
Stage casing	25.02	Polycarbonate (Lexan 144 R)	PPO - GF 20 (Noryl)	
Diffuser	26.00			
Impeller	28.00			
Pump	Wear ring	Cr-Ni steel AISI 304		
	Shaft	Cr steel AISI 430 F		
	Delivery casing	Bronze G-Cu Sn 10 UNI 7013		
	Suction lantern	-	Bronze G-Cu Sn 10 UNI 7013	
	Bearing bush	12.03-12.30	Thermoplastic	Rubber
	Strainer	15.50	-	Cr-Ni steel AISI 304
	Screws		Cr-Ni steel AISI 304	
	External frame		Cr-Ni steel AISI 304	
	Shaft		Cr-Ni steel AISI 303	
	Thrust bearing		Oscillation pads	
Bearing bush		Graphite		
FK Motor	External frame	-	Cr-Ni steel AISI 304	
	Shaft	-	Cr steel AISI 420 Hardened and tempered	
	Thrust bearing	-	Oscillation pads	
	Bearing bush	-	Graphite	
CS Motor	External frame	-	Cr-Ni steel AISI 304	
	Shaft	-	Cr steel AISI 420 Hardened and tempered	
	Thrust bearing	-	Oscillation pads	
	Bearing bush	-	Graphite	

Designation

4 SD M 31 / 40

Ø of the well in inches _____

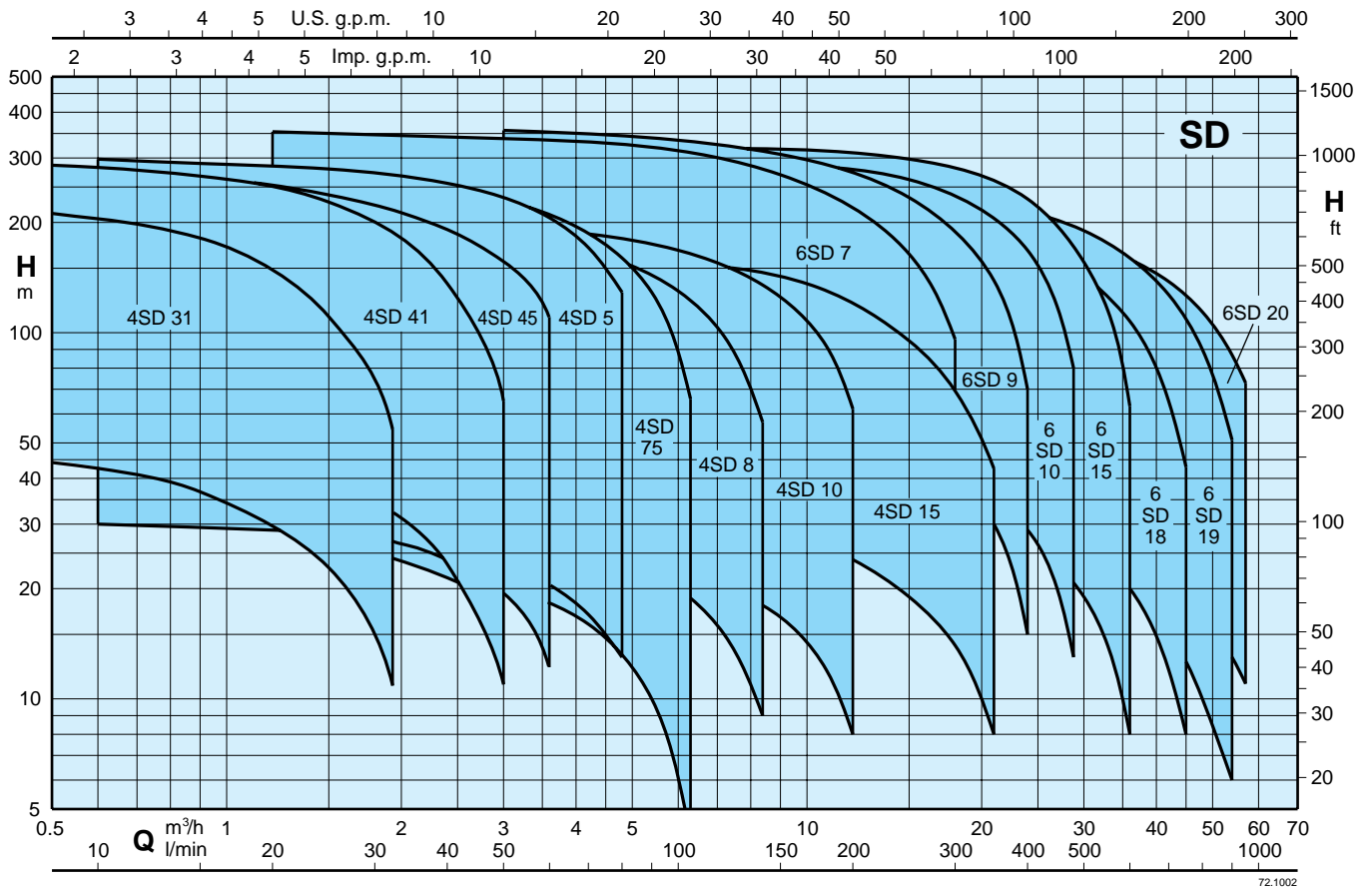
Series _____

Single-phase motor (up to max. 2,2 kW) _____

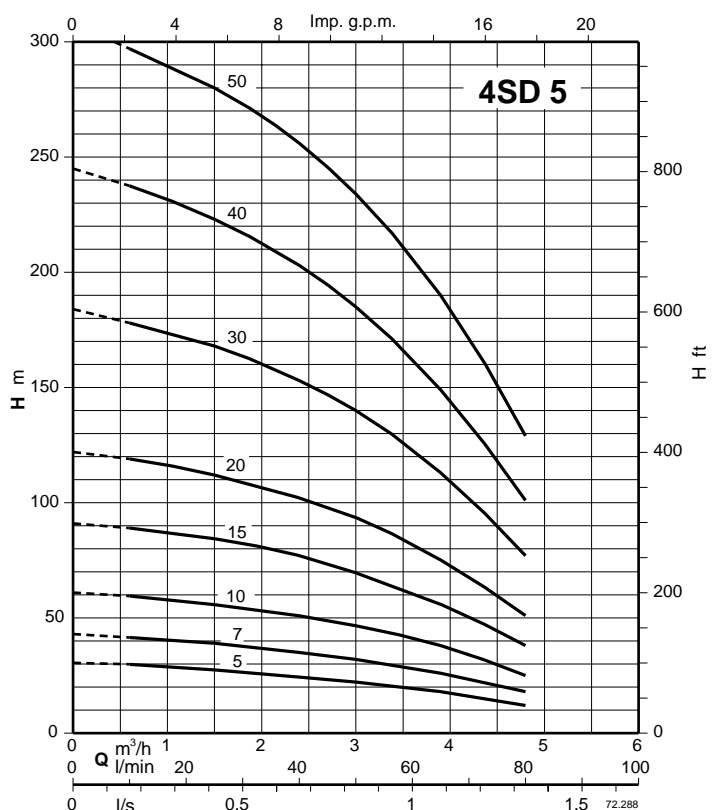
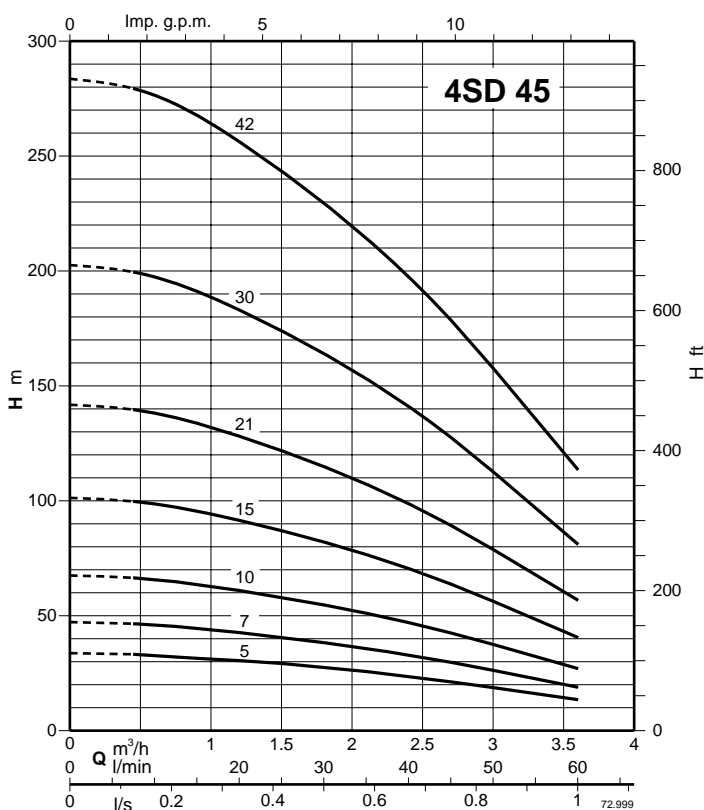
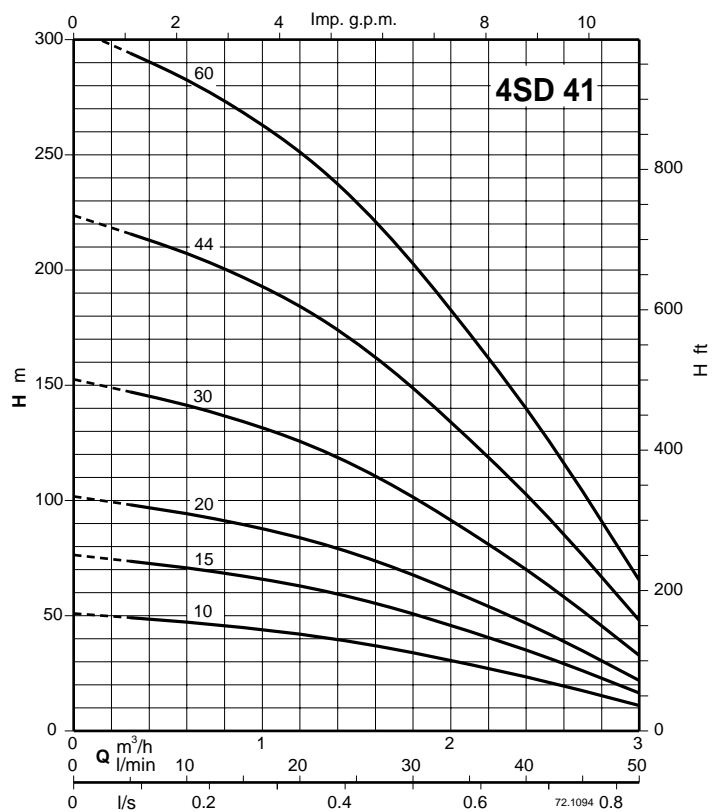
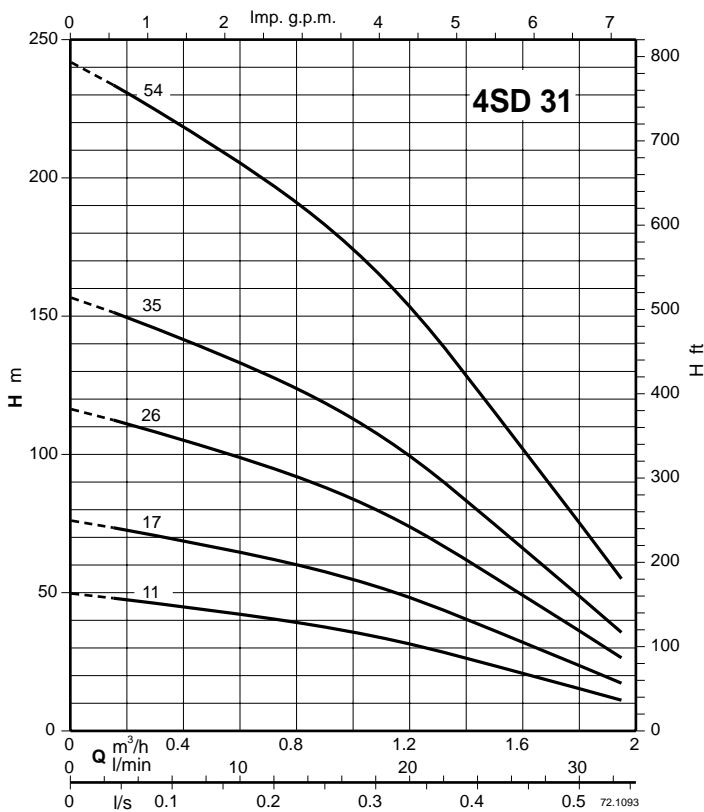
Stage identification _____

Number of stages _____

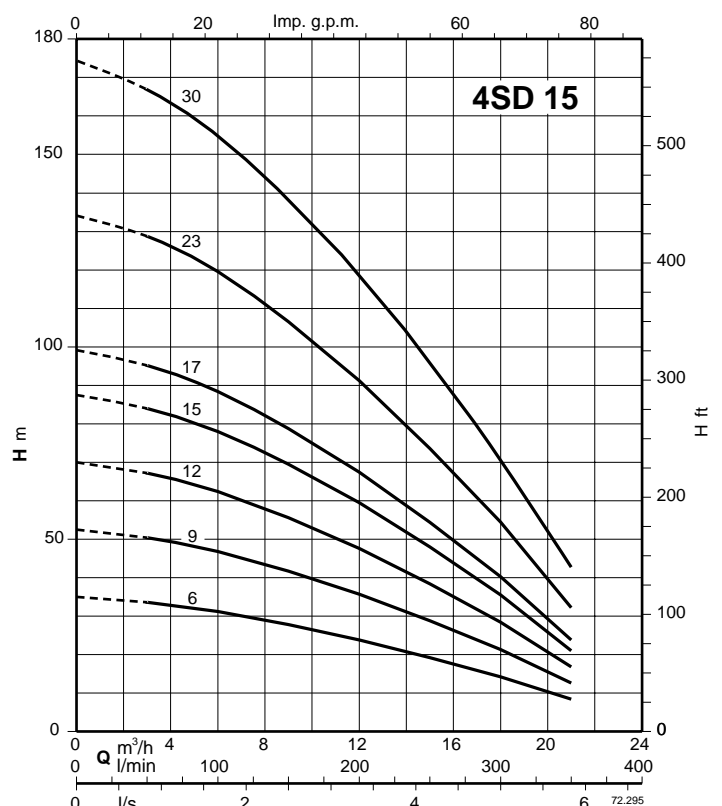
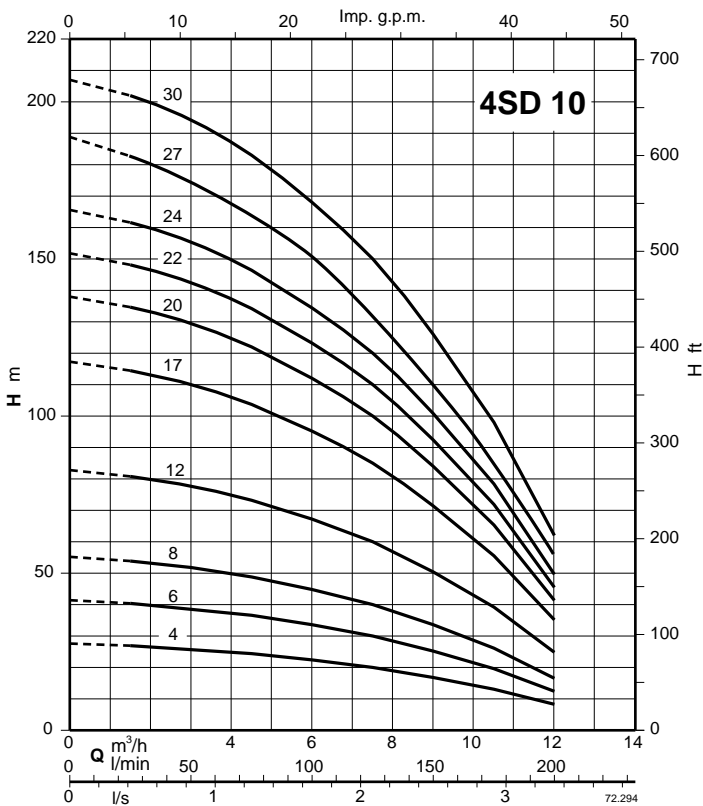
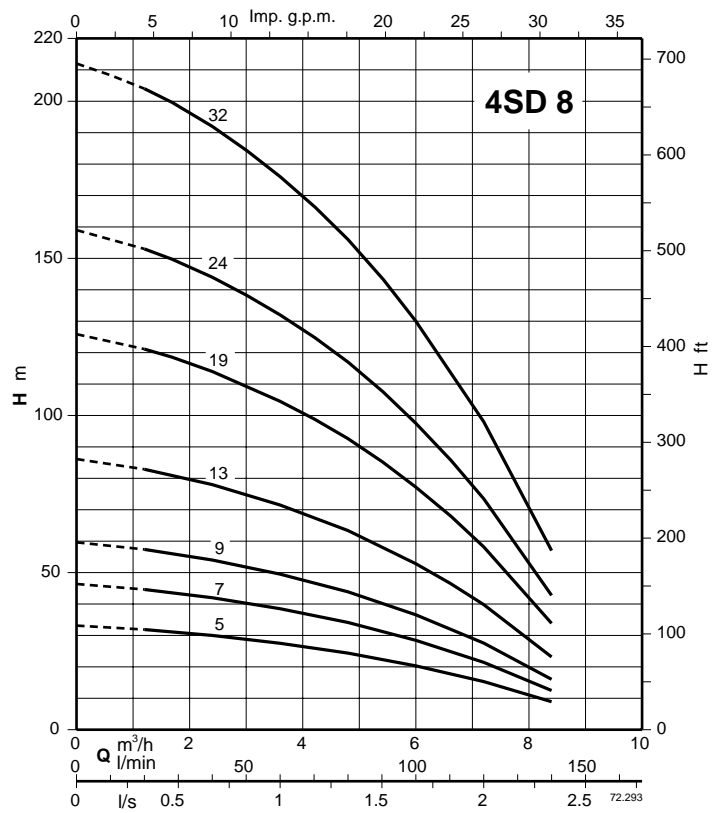
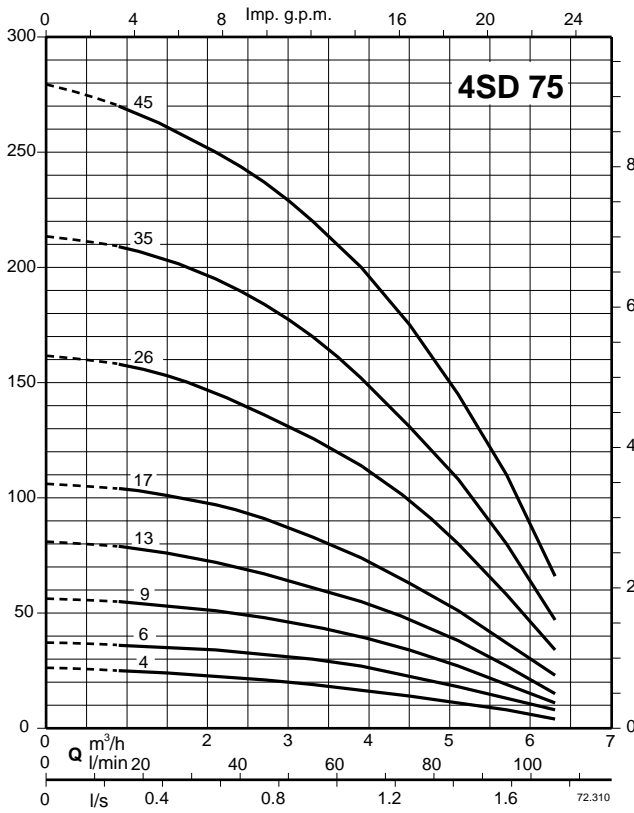
Coverage chart $n \approx 2900$ rpm



Characteristic curves $n \approx 2900$ rpm



Characteristic curves $n \approx 2900$ rpm



Dimensions and weights

3 ~	P ₂ kW	DN ISO 228	L mm	L ₁ mm	kg
4SD 31/11E	0,37	G 1 1/4	696	473	11,4
4SD 31/17E	0,37		764	591	12,4
4SD 31/26E	0,55		1010	768	14,7
4SD 31/35E	0,75		1214	943	17,5
4SD 31/54E	1,1		1660	1362	22
4SD 41/10E	0,37	G 1 1/4	676	453	11,2
4SD 41/15E	0,55		794	552	12,9
4SD 41/20E	0,75		921	650	15,1
4SD 41/30E	1,1		1145	847	17,9
4SD 41/44E	1,5		1447	1120	21,5
4SD 41/60E	2,2	1836	1480	25,8	
4SD 45/5E	0,37	G 1 1/4	623	400	10,8
4SD 45/7E	0,55		697	455	12,3
4SD 45/10E	0,75		811	540	14,3
4SD 45/15E	1,1		976	678	16,8
4SD 45/21E	1,5		1173	846	19,4
4SD 45/30E	2,2	1454	1098	23,6	
4SD 45/42E	3	1857	1434	29,4	
4SD 5/5E	0,37	G 1 1/4	623	400	10,8
4SD 5/7E	0,55		697	455	12,2
4SD 5/10E	0,75		811	540	14,2
4SD 5/15E	1,1		976	678	16,7
4SD 5/20E	1,5		1145	818	19
4SD 5/30E	2,2	1454	1098	23,5	
4SD 5/40E	3	1801	1378	29	
4SD 5/50E	4	2295	1705	39,5	
4SD 75/4E	0,37	G 1 1/4	595	372	10,6
4SD 75/6E	0,55		670	428	12
4SD 75/9E	0,75		784	513	14
4SD 75/13E	1,1		920	623	16,2
4SD 75/17E	1,5		1060	733	17,5
4SD 75/26E	2,2	1344	988	22,5	
4SD 75/35E	3	1658	1235	28	
4SD 75/45E	4	2105	1515	38,2	
4SD 8/5E	0,55	G 2	774	532	12,4
4SD 8/7E	0,75		909	638	14,6
4SD 8/9E	1,1		1041	743	16,9
4SD 8/13E	1,5		1282	955	19,8
4SD 8/19E	2,2		1628	1272	23,9
4SD 8/24E	3	2013	1590	29,2	
4SD 8/32E	4	2605	2015	40,5	
4SD 10/4E	0,75	G 2	751	480	13,3
4SD 10/6E	1,1		883	585	15,4
4SD 10/8E	1,5		1017	690	17,5
4SD 10/12E	2,2		1258	902	20,8
4SD 10/17E	3		1589	1166	25,5
4SD 10/20E	3,7	1932	1380	33,8	
4SD 10/22E	4	2076	1486	35,9	
4SD 10/24E	4	2180	1590	36,7	
4SD 10/27E	5,5	2452	1750	44	
4SD 10/30E	5,5	2612	1908	45	
4SD 15/6E	1,5	G 2	1075	748	17
4SD 15/9E	2,2		1336	980	27,5
4SD 15/12E	3		1637	1214	31
4SD 15/15E	3,7		2069	1517	36,7
4SD 15/17E	4		2263	1673	39,7
4SD 15/23E	5,5	2913	2209	50,5	
4SD 15/30E	7,5	3535	2755	61,2	

1 ~	P ₂ kW	DN ISO 228	L mm	L ₁ mm	kg
4SDM 31/11E	0,37	G 1 1/4	715	473	12,4
4SDM 31/17E	0,37		833	591	13,4
4SDM 31/26E	0,55		1039	768	16,0
4SDM 31/35E	0,75		1241	943	18,7
4SDM 31/54E	1,1		1689	1362	23,3
4SDM 41/10E	0,37	G 1 1/4	695	453	12,2
4SDM 41/15E	0,55		823	552	14,2
4SDM 41/20E	0,75		948	650	16,3
4SDM 41/30E	1,1		1174	847	19,2
4SDM 41/44E	1,5		1476	1120	22,8
4SDM 41/60E	2,2	1940	1480	30,3	
4SDM 45/5E	0,37	G 1 1/4	642	400	11,8
4SDM 45/7E	0,55		726	455	13,6
4SDM 45/10E	0,75		838	540	15,5
4SDM 45/15E	1,1		1005	678	18,1
4SDM 45/21E	1,5		1202	846	20,7
4SDM 45/30E	2,2	1558	1098	28,1	
4SDM 5/5E	0,37	G 1 1/4	642	400	11,8
4SDM 5/7E	0,55		726	455	13,5
4SDM 5/10E	0,75		838	540	15,4
4SDM 5/15E	1,1		1005	678	18
4SDM 5/20E	1,5		1174	818	20,3
4SDM 5/30E	2,2	1558	1098	28	
4SDM 75/4E	0,37	G 1 1/4	614	372	11,6
4SDM 75/6E	0,55		699	428	13,3
4SDM 75/9E	0,75		811	513	15,3
4SDM 75/13E	1,1		950	623	17,4
4SDM 75/17E	1,5		1089	733	19,6
4SDM 75/26E	2,2	1448	988	26,3	
4SDM 8/5E	0,55	G 2	803	532	13,7
4SDM 8/7E	0,75		936	638	15,8
4SDM 8/9E	1,1		1070	743	18,2
4SDM 8/13E	1,5		1311	955	21,1
4SDM 8/19E	2,2		1732	1272	28,4
4SDM 10/4E	0,75	G 2	778	480	14,5
4SDM 10/6E	1,1		912	585	16,7
4SDM 10/8E	1,5		1046	690	18,8
4SDM 10/12E	2,2		1362	902	25,3
4SDM 15/6E	1,5		G 2	1104	748
4SDM 15/9E	2,2	1440		980	32

