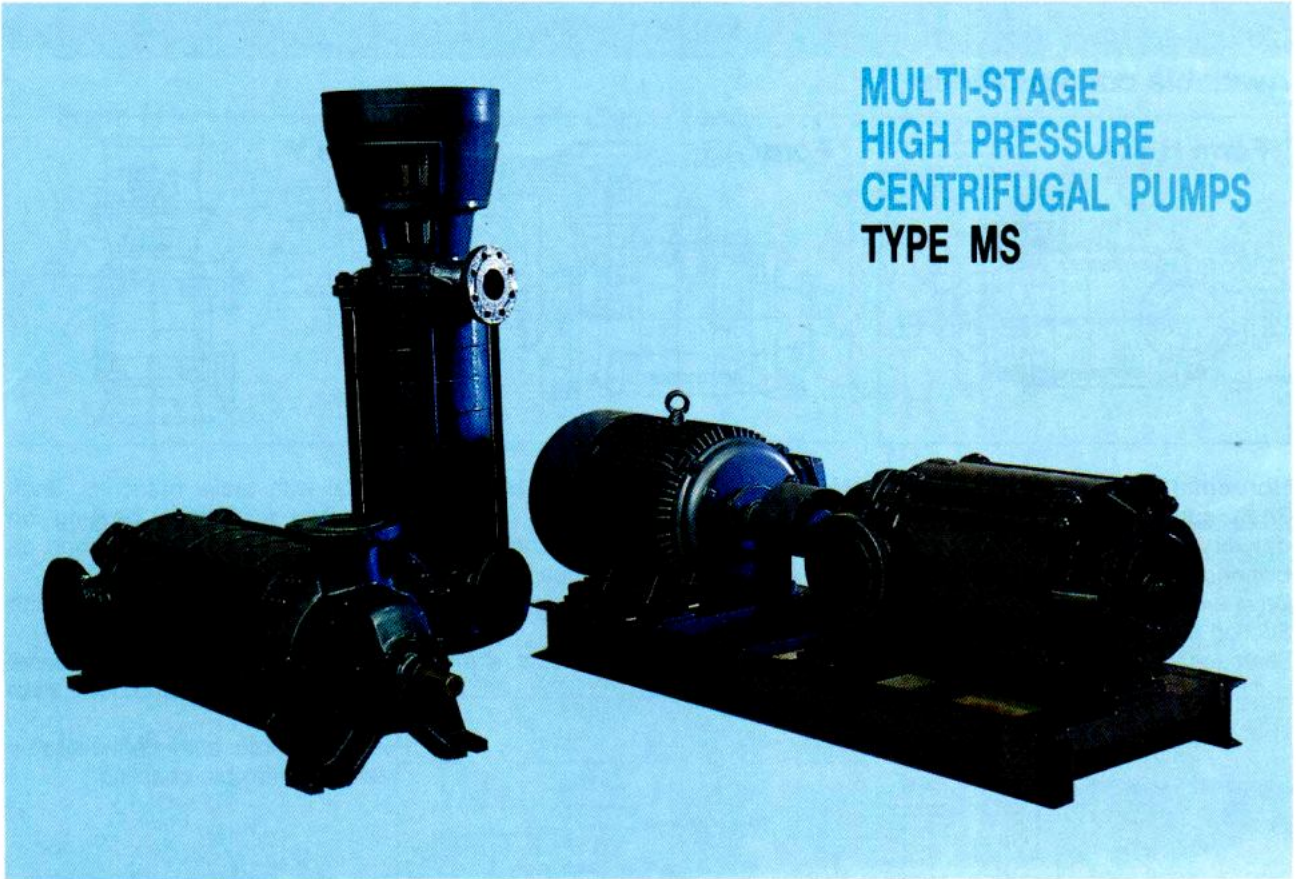


MULTI-STAGE HIGH PRESSURE CENTRIFUGAL PUMPS TYPE MS



Applications

In waterworks, irrigation and sprinkler installations. As a recirculating pump for cooling and heating water and also as a fire-fighting, boiler feed or pressure boosting pump.

The MS type pumps are used for handling clean or only lightly contaminated media, for oils up to 150 mm²/sec (cst) and for non-aggressive liquids.

Hydraulic Data

- Capacity up to 550 m³/h.
- Total head up to 300 m.
- Temperature -20° C to 140° C.
- Max casing pressure 30 bar (suction pressure + shut-of head).

Max. permissible no of stages

Pump models	1450 RPM	2900 RPM
MS 80 L - H, V, AS	9 (6)	2
MS 80 H - H, AS	13 (9)	4
MS 100 H, AS	10 (6)	3
MS 100 V	8	1
MS 125 H, AS	8 (5)	
MS 125 V	6	
MS 150 H, AS	5 (3)	
MS 150 V	3	

The values in the brackets are valid for 60 Hz, 1750 RPM respectively.

Design

The pump casing consists of a number of sectional stages, held together by large - diameter tie bolts. All impellers are balanced. Axial thrust is compensated for by balance holes in each impeller.

The pump shaft is protected against wear by sleeves through the stuffing box.

The pump features bronze wearing rings on both sides of the impellers.

All wear parts such as impellers and shaft sleeves are easily replaceable and the glands are readily accessible.

The by-pass arrangement relieves the pressure on the delivery side stuffing box and provides a perfect water seal in the suction stuffing box, even at maximum suction lift.

Sealing with gland packing or mechanical seal.

Branches: PN 16 DIN 2533

PN 40 DIN 2535

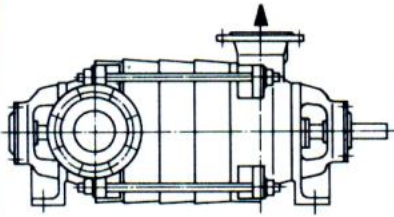


DP DRAKOS-POLEMIS INC
Pump Manufacturers

TECHNICAL DATA

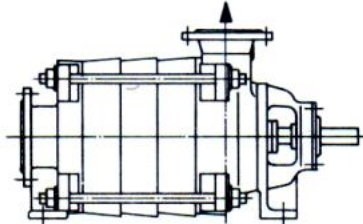
Available configurations

Form H



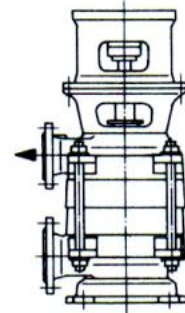
Horizontal with radial branches. Shaft supported on suction and delivery side in roller bearings. Bearing lubrication with grease. Drive end on delivery side standard. Suction side drive end optional. Shaft sealing on both sides.

Form AS



Horizontal with axial suction branch and radial delivery branch. Shaft supported in bronze bearing on suction side and in ball bearings on delivery side. Bearing lubrication with grease. Delivery side drive end and shaft sealing only.

Form V



Vertical with radial branches. Shaft supported in bronze bearing on suction side and in ball bearing on delivery side. Bronze bearing lubrication with pumped liquid. Ball bearing lubrication with grease. Delivery side drive end and shaft sealing only. Pump and motor shaft connected by means of a flexible coupling.

Maximum transmissible power

$$P \text{ (KW)} = a \times N \text{ (RPM)}$$

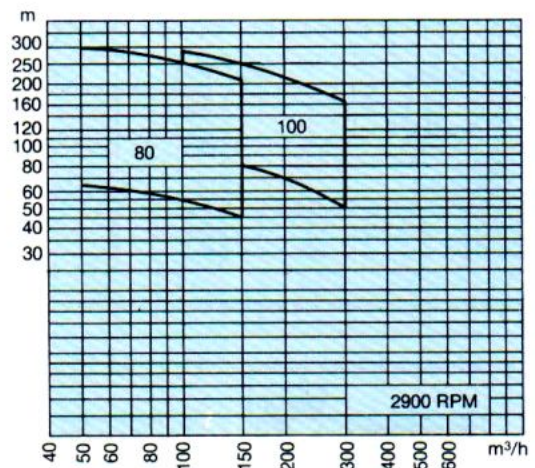
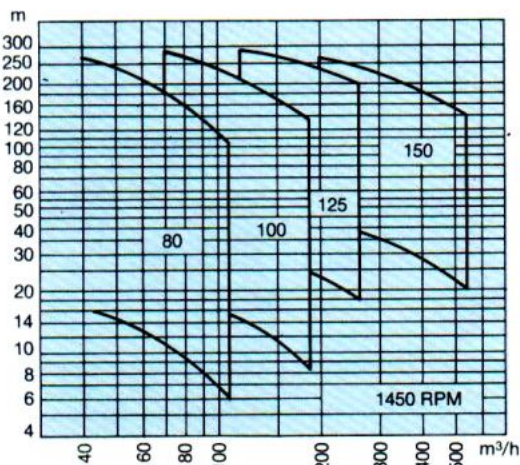
Shaft-end diameter	Coefficient a		
	1.0632	1.4021	1.4401
32		0,044	0,024
35		0,060	0,033
40	0,066	0,095	0,053
42	0,080	0,116	0,064
45	0,094	0,136	0,075
50	0,133	0,190	0,107
60	0,206	0,294	0,165

For diesel engine driver reduce above coefficients by 20%.

Bearing type

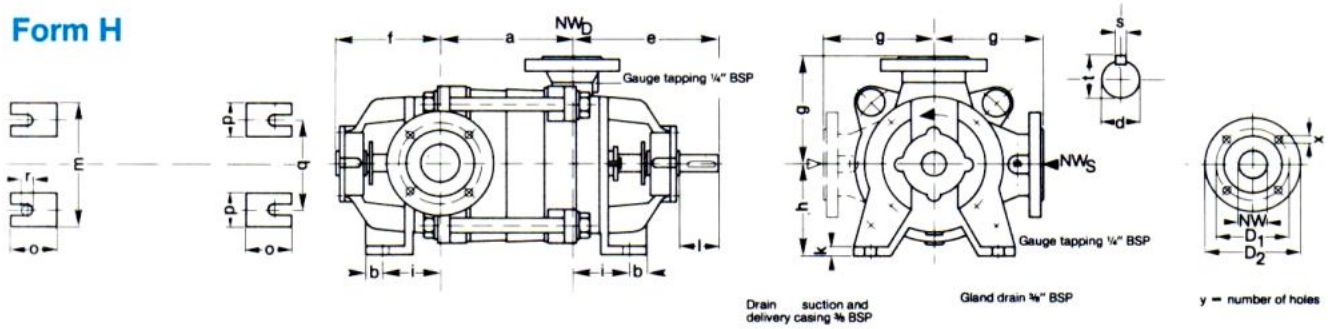
Pump model	Suction side	Delivery side
MS 80 L-H	6407 C3	6407 C3
MS 80 L - AS		6407 C3
MS 80 L - V	2×7308 B.UA	6310 C3
MS 80 H - H		6308 C3
MS 80 H - AS	2×7309 B.UA	2×7308 B.UA
MS 100 H		6309 C3
MS 100 AS, V	2×7311 B.UA	2×7309 B.UA
MS 125 H		6311 C3
MS 125 AS, V	2×7313 B.UA	2×7311 B.UA
MS 150 H		6313 C3
MS 150 AS, V		2×7313 B.UA

Performance range



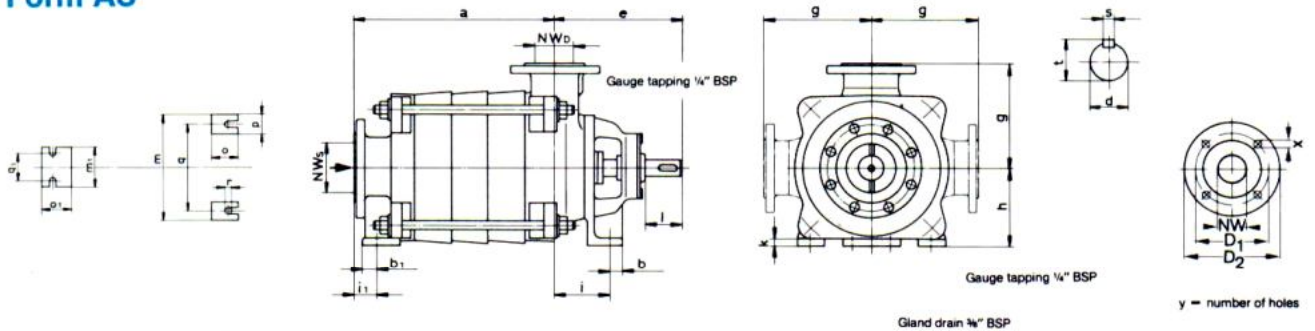
DIMENSIONS

Form H



Type	1 st stage			a for each add'l stage																
	NW _s	NW _d	a	e	f	g	h	i	b	k	m	q	o	p	r	l	d	t	s	
MS 80 L	100	80	140	83	290	205	240	180	123	30	16	330	270	80	60	18	85	35	38	10
MS 80 H	100	80	140	83	337	250	240	180	123	30	16	330	270	80	60	18	100	40	43	12
MS 100	125	100	175	104	397	305	280	225	155	35	20	420	340	100	80	20	110	45	48,5	14
MS 125	150	125	205	130	470	345	340	280	75	40	22	540	420	120	120	25	110	50	53,5	14
MS 150	200	150	235	150	510	395	380	350	85	45	25	640	500	140	140	27	110	60	64	18

Form AS

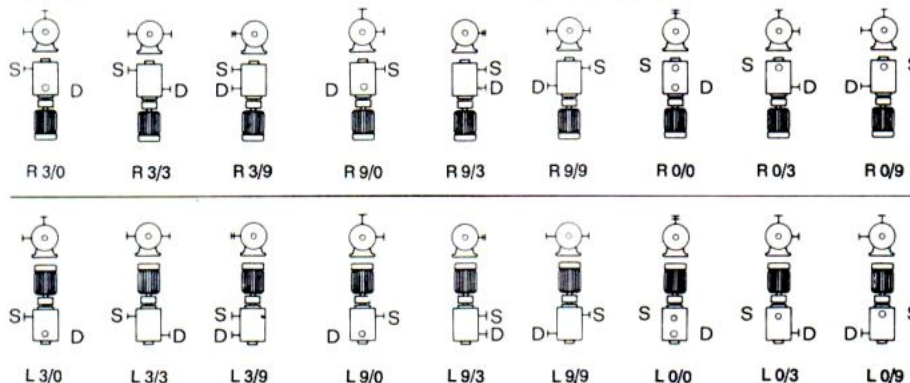


Model	1 st stage			a for each add'l stage																				
	NW _s	NW _d	a	e	g	h	i	b	i1	b1	k	m	q	m1	q1	o	o1	p	r	l	d	t	s	
MS 80 L	125	80	210	83	290	240	180	123	30	50	35	16	330	270	125	85	80	85	60	18	85	35	38	10
MS 80 H	125	80	210	83	337	240	180	123	30	50	35	16	330	270	125	85	80	85	60	18	100	40	43	12
MS 100	150	100	266	104	397	280	225	155	35	75	40	20	420	340	160	120	100	100	80	20	110	42	45	12
MS 125	200	125	295	130	470	340	280	75	40	82	35	22	540	420	160	110	120	100	120	25	110	50	53,5	14
MS 150	200	150	300	150	510	380	350	85	45	75	45	25	640	500	200	140	140	120	140	27	110	60	64	18

Installation

Form H

Pump for clockwise rotation as seen from driver side.



Counter-clockwise rotation as seen from driver side.

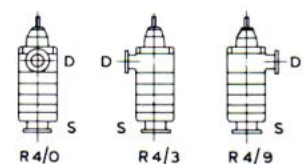
Branch arrangement

Unless otherwise specified, branch arrangement R 3/0 will be supplied.

Branches in parallel on the same side only possible with 2 or more stages.

Form AS

Branch arrangement
Standard construction R4/0

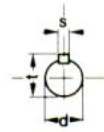
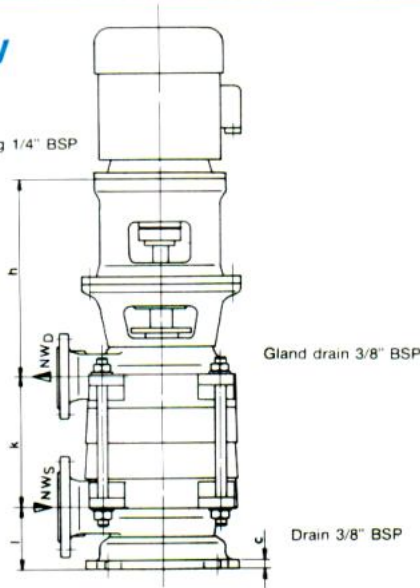


Clockwise rotation as seen from driver side

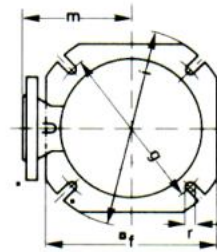
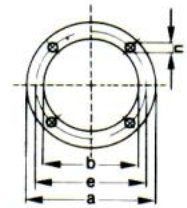
DIMENSIONS

Form V

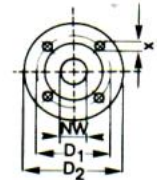
Gauge tapping 1/4" BSP



motor stool flange
DIN 42948



z = number of holes



y = number of holes

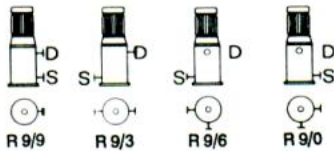
1 st stage k for each add'l stage

Model	NW _S	NW _D	k	f	i	c	l	m	g	r	d	t	s	a	b	e	h	n	z	
MS 80	100	80	140	83	350	400	23	145	240	350	18	32	35	10	350	250	300	465	19	4
															400	300	350	465	19	4
															450	350	400	495	19	8
															550	450	500	495	19	8
MS 100	125	100	175	104	450	510	25	170	280	450	23	42	45	12	350	250	300	465	19	4
															400	300	350	465	19	4
															450	350	400	495	19	8
															550	450	500	495	19	8
															660	550	600	495	22	8
															660	550	600	525	22	8
MS 125	150	125	205	130	600	680	28	205	340	600	27	50	53,5	14	450	350	400	615	19	8
															550	450	500	615	19	8
															660	550	600	645	22	8
MS 150	200	150	235	150	600	680	28	230	380	600	27	60	64	18	550	450	500	655	19	8
															660	550	600	685	22	8

Installation

Form V

Branch arrangement



In the absence of specific instructions pumps are supplied with the following branch arrangements:
1 stage: R 9/3
2 or more stages: R 9/9

Flange Dimensions

PN 16 DIN 2533

NW	80	100	125	150	200
D1	160	180	210	240	295
D2	200	235	270	300	375
x	18	18	18	23	23
y	8	8	8	8	12

PN 40 DIN 2535

NW	80	100	125	150	200
D1	160	190	220	250	320
D2	200	235	270	300	375
x	18	23	27	27	30
y	8	8	8	8	12

The technical data in this brochure are subject to change without prior notice and should not be used for construction without the consent of the manufacturer.

Συγγραμματοδότηση από το Π.Ε.Π. Αττικής



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