

HYDRAULIC CYLINDERS

HPSA-SERIES

Technical information

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TECHNICAL DATA

Hydraulic Power HPSA cylinder series offer standard set for mechanical engineering industry.

WORKING PRESSURE

210 bar

TEST PRESSURE

250 bar

PISTON ROD

Hard chromium plated
(min 20 µm; Ra 0,2; 20MnV6)

PISTON SPEED

Max. 0,5 m/s

TEMPERATURE RANGE

-25°C ... +80°C

PORTS

ISO 1179-1

MEDIUM

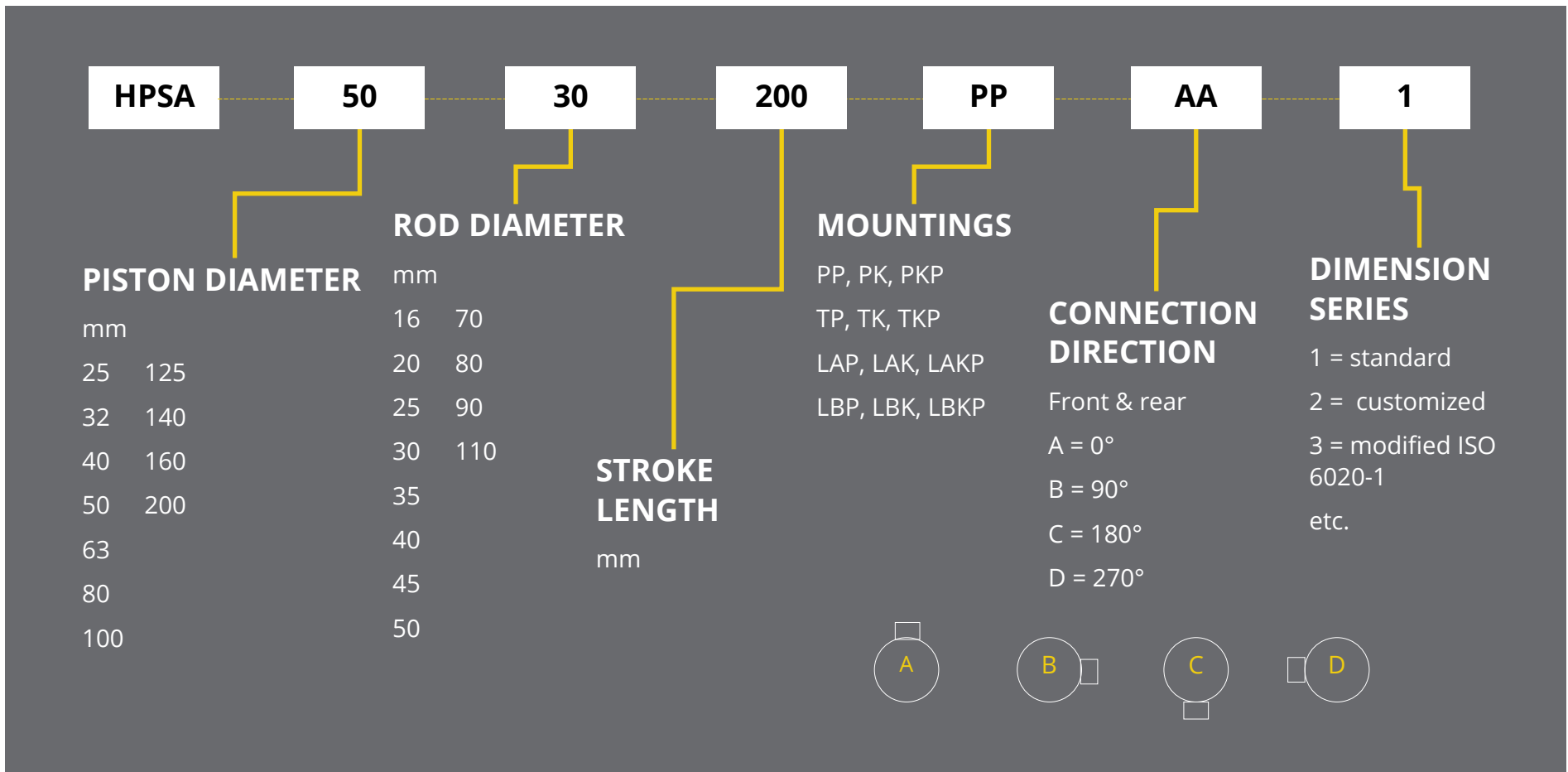
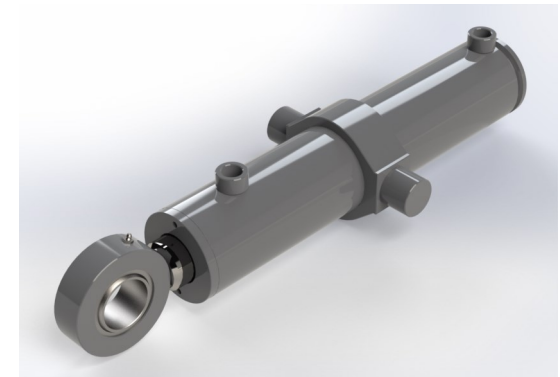
Hydraulic mineral oil

COATING

Standard: epoxy primer + finish (RAL 7005 i.e. mouse grey),
120 µm

Additional coating specifications and different colours are
available upon request.

CODE STRUCTURE



SPECIALTIES

SPECIAL HPSA VERSIONS

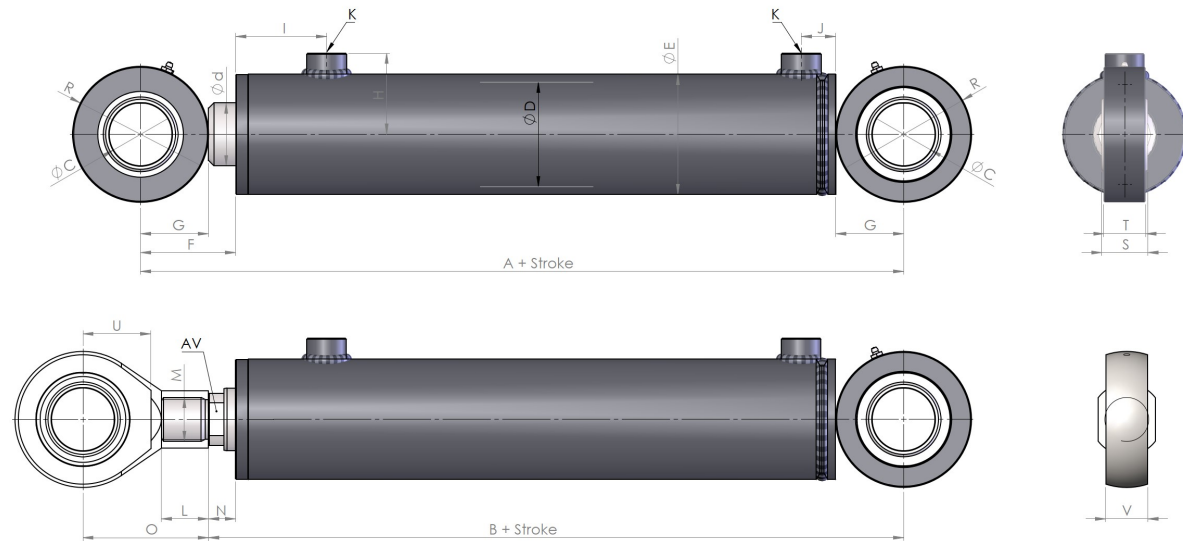
- Air bleeds
- Low friction seals
- High temperature seals
- Stainless steel rods
- Large variety of coating options
- Linear position sensors
- End position inductive limit switches

SPECIAL CYLINDERS

- Plunger cylinders
- Telescopic cylinders
 - ◇ Single acting
 - ◇ Double acting
- Spring cylinders
- Servo cylinders
- Torque actuators
- Cylinders for challenging environments
 - ◇ Corrosive
 - ◇ Low temperatures

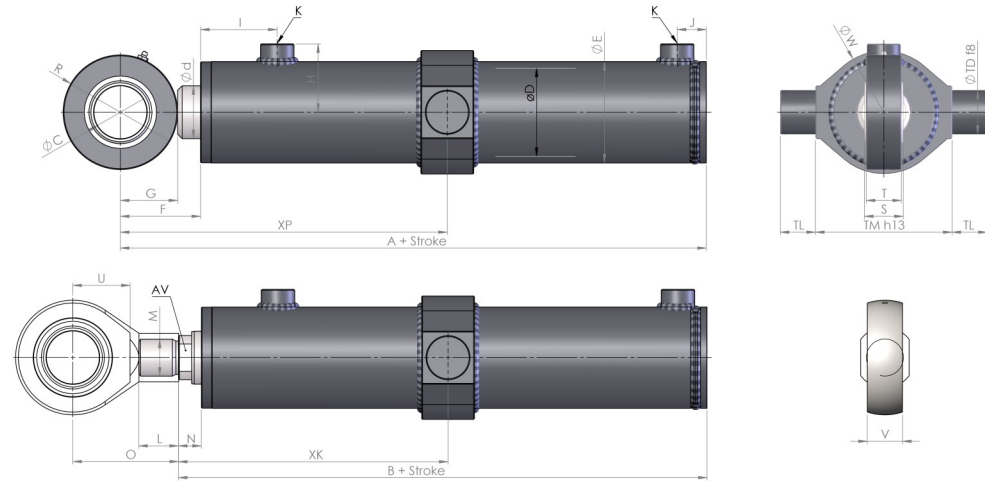
All cylinders are available in stainless steel.

CYLINDER TYPES: PP, PK, PKP



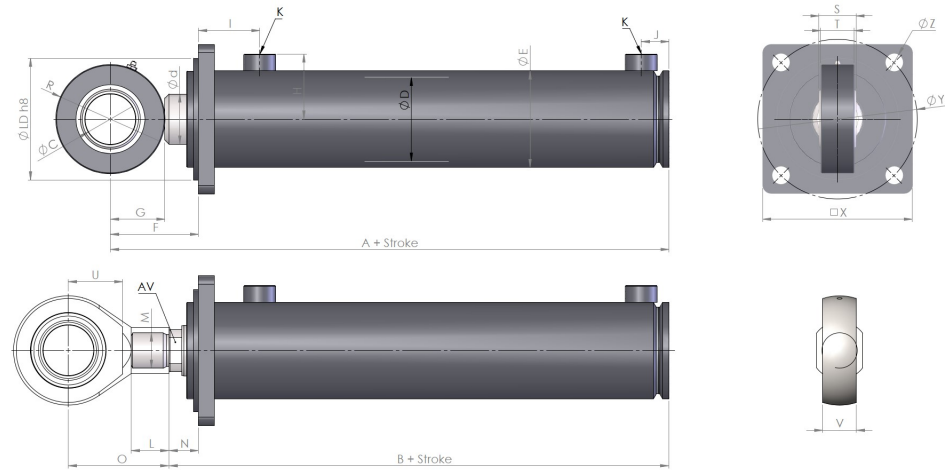
D	25	32	40	50	63	80	100	125	140	160	200
d	16	20	25	30	40	45	60	70	80	90	110
A	160	175	200	215	245	285	335	385	440	495	605
B	135	145	165	175	195	230	265	300	340	385	475
C	15	20	25	30	35	45	60	70	80	90	110
E	35	42	50	60	73	95	115	145	165	185	225
F	44	48	49,5	60	62	80	85	105	120	130	163
G	18	24	34,5	37	40	50	65	75	100	110	130
H	33,5	37	42	47	54,5	65,5	77,5	92,5	107,5	117,5	135
I	38	36	45	45	57	65	87	94	94	105	118
J	14	18	19	22,5	21	29	33	41	41	38	40
K	G1/4"	G3/8"	G3/8"	G3/8"	G1/2"	G1/2"	G3/4"	G3/4"	G1"	G1"	G1 1/4"
L	18	16	16	22	28	40	45	56	56	72	90
M	M10x1,5	M16x1,5	M16x1,5	M22x1,5	M28x1,5	M36x2	M42x3	M56x3	M56x3	M72x3	M90x4
N	9	10	15	15	15	25	26	28	20	20	20
O	40	50	50	60	70	100	120	140	160	185	220
R	20,5	28	34,5	37	40	50	65	75	90	100	115
S	12	16	20	22	25	32	44	49	55	60	70
T	10	13	20	20	22	30	40	44	65	70	80
U	40	25	28	30	38	50	65	75	90	100	115
V	16	19	23	28	30	40	40	60	65	70	80
AV	13	17	22	24	36	41	50	65	75	75	90

CYLINDER TYPES: TP, TK, TKP



D	25	32	40	50	63	80	100	125	140	160	200
d	16	20	25	30	40	45	60	70	80	90	110
A	160	175	200	215	245	285	335	385	440	495	605
B	135	145	165	175	195	230	265	300	340	385	475
C	15	20	25	30	35	45	60	70	80	90	110
E	35	42	50	60	73	95	115	145	165	185	225
F	44	48	49,5	60	62	80	85	105	120	130	163
G	18	24	34,5	37	40	50	65	75	100	110	130
H	33,5	37	42	47	54,5	65,5	77,5	92,5	107,5	117,5	135
I	38	36	45	45	57	65	87	94	94	105	118
J	14	18	19	22,5	21	29	33	41	41	38	40
K	G1/4"	G3/8"	G3/8"	G3/8"	G1/2"	G1/2"	G3/4"	G3/4"	G1"	G1"	G1 1/4"
L	18	16	16	22	28	40	45	56	56	72	90
M	M10x1,5	M16x1,5	M16x1,5	M22x1,5	M28x1,5	M36x2	M42x3	M56x3	M56x3	M72x3	M90x4
N	9	10	15	15	15	25	26	28	20	20	20
O	40	50	50	60	70	100	120	140	160	185	220
R	20,5	28	34,5	37	40	50	65	75	90	100	115
S	12	16	20	22	25	32	44	49	55	60	70
T	10	13	20	20	22	30	40	44	65	70	80
U	40	25	28	30	38	50	65	75	90	100	115
V	16	19	23	28	30	40	40	60	65	70	80
AV	13	17	22	24	36	41	50	65	75	75	90
W	48	55	65	75	95	120	140	170	205	225	275
TD	16	20	25	30	35	40	50	60	65	75	90
TL	14	16	17	18	20	30	40	50	60	65	85
TM	58	66	75	85	105	130	155	190	210	230	280

CYLINDER TYPES: LAP, LAK, LAKP



D	25	32	40	50	63	80	100	125	140	160	200
d	16	20	25	30	40	45	60	70	80	90	110
A	119	128	157	172	199	232	276	326	340	365	450
B	94	98	122	132	149	177	206	241	249	255	320
C	15	20	25	30	35	45	60	70	80	90	110
E	35	42	50	60	73	95	115	145	165	185	225
F	42	45	52	66	78	89	105	124	134	140	165
G	18	24	34,5	37	40	50	65	75	100	110	130
H	33,5	37	42	47	54,5	65,5	77,5	92,5	107,5	117,5	135
I	30	34	39	35	37,5	53	73	91	91	95	113
J	14	18	19	22,5	21	29	33	41	41	38	40
K	G1/4"	G1/4"	G3/8"	G3/8"	G1/2"	G1/2"	G3/4"	G3/4"	G1"	G1"	G1 1/4"
L	18	16	16	22	28	40	45	56	56	72	90
M	M10x1,5	M16x1,5	M16x1,5	M22x1,5	M28x1,5	M36x2	M42x3	M56x3	M56x3	M72x3	M90x4
N	17	15	17	26	28	34	35	39	39	30	35
O	40	50	50	60	70	100	120	140	160	185	220
R	20,5	28	34,5	37	40	50	65	75	90	100	115
S	12	16	20	22	25	32	44	49	55	60	70
T	10	13	20	20	22	30	40	44	65	70	80
U	40	25	28	30	38	50	65	75	90	100	115
V	16	19	23	28	30	40	40	60	65	70	80
AV	13	17	22	24	36	41	50	65	75	75	90
LD	50	60	70	85	100	120	145	170	190	160	200
Y	65	80	95	110	130	170	190	230	250	280	340
X	60x60	76x76	92x92	106x106	128x128	162x162	178x178	214x214	240x240	ø316	ø385
Z	4x ø7	4x ø9	4x ø11	4x ø13	4x ø17	4x ø21	4x ø21	4x ø25	4x ø25	8x ø22	8x ø26

**CYLINDER TYPES:
LBP, LBK, LBKP**

