

YUCI HYDRAULIC

YUCI SERIES HYDRAULIC CYLINDER (ACCUMULATOR)

Where there are hydraulic transmissions Where there are YUCI products



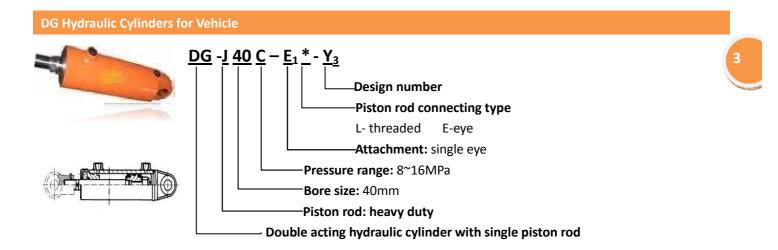
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Note: The all details of the products including drawing and efficiency curve, please contact with us.



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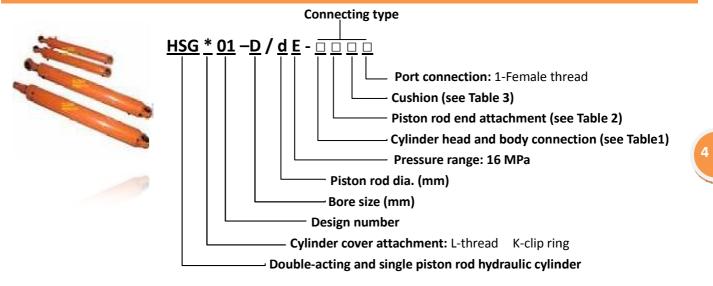
This is a double-acting hydraulic cylinder with single piston rod. Operating pressure is 16MPa, bore from 40 200 mm, stroke ≤ 2000 mm.

			.).			
Model	Bore size	Piston a	irea(cm²)	Thrust(N)	Pull	Max. stroke(mm)
Widdei	(mm)	Piston side	Rod end side	16MPa	16MPa	
DG-J40C-E ₄ *	40	12.57	8.63	20160	13800	1200
DG-J50C-E ₄ *	50	19.64	13.48	31410	21560	1200
DG-J63C-E ₄ *	63	31.17	21.17	49870	33870	1600
DG-J80C-E ₄ *	80	50.27	34.27	80430	54980	1600
DG-J90C-E ₄ *	90	63.62	43.98	101790	70360	2000
DG-J100C-E ₄ *	200	78.54	53.91	125660	86260	2000
DG-J110C-E ₄ *	110	94.99	63.38	151980	101410	2000
DG-J125C-E ₄ *	125	122.72	83.13	196350	133010	2000
DG-J140C-E ₄ *	140	153.86	103.62	246300	165870	2000
DG-J150C-E ₄ *	150	176.72	119.97	282750	191940	2000
DG-J160C-E ₄ *	160	200.96	136.38	321540	218210	2000
DG-J180C-E ₄ *	180	254.34	175.84	406940	281340	2000
DG-J200C-E ₄ *	200	314.16	219.23	502660	350770	2000

Technical Date



HSG*01 Series Hydraulic Cylinder



HSG*01 series cylinder is a double-acting and single rod cylinder which piston rod driven by pressure oil move in two opposite direction and enable other moving parts reciprocating.

Technical Date

					Veloci	ty ratio			Min. stroke of
	Normal	Bore size	1.	33	1.	46	:	2	non-trunnion
Model		D D	Rod	Max.	Rod	Max.	Rod	Max.	attachment
Model	pres. (MPa)	_	dia.	stroke	dia.	stroke	dia.	stroke	cylinder
	(IVIPa)	(mm)	d	S	d	S	d	S	S
			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
HSG*01-40/dE		40	20	320	22	400	25	480	
HSG*01-50/dE		50	25	400	28	500	32	600	
HSG*01-63/dE		63	32	500	35	630	45	750	
HSG*01-80/dE		80	40	640	45	800	55	950	
HSG*01-80/dE		80	40	640	45	800	/	/	30
HSG*01-90/dE		90	45	720	50	900	63	1080	40
HSG*01-100/dE		100	50	800	55	1000	70	1200	40
HSG*01-110/dE	10	110	55	880	63	1100	80	1320	40
HSG*01-125/dE	16	125	63	1000	70	1250	90	1500	35
HSG*01-140/dE		140	70	1120	80	1400	100	1680	45
HSG*01-150/dE		150	75	1200	85	1500	105	1800	50
HSG*01-160/dE		160	80	1280	90	1600	110	1900	40
HSG*01-180/dE		180	90	1450	100	1800	125	2150	45
HSG*01-200/dE		200	100	1600	110	2000	140	2400	45
HSG*01-220/dE		220	110	1760	125	2200	160	2640	50
HSG*01-250/dE		250	125	200	140	2500	180	3000	55



Cylinder Head	and Body Attachment	Table 1
Order	Attachment	Remark
1	Eye attachment with bush	
2	Eye attachment with oscillating bearing	
3	Trunnion attachment	
4	Front flange attachment	For cylinder D≥Ф80
5	Mid-body flange attachment	

+Piston Rod	End Attachments	Table 2
Order	Attachment	Remark
1	Rod end male thread attachment	
2	Rod end female thread attachment	For bore D≥Φ63
3	Rod end male thread and eye with bush	
4	Rod end female thread and eye with bush	For bore D≥Φ63
5	Rod end male thread and eye with oscillating bearing	
6	Rod end female thread and eye with bush	For bore D≥Φ63
7	Integral rod end eye with bush	
8	Integral rod end eye with oscillating bearing	Only for Φ40 and Φ50 cylinders

★Cushioning		Table 3
Order	Location of cushioning	Remark
0	Without cushioning	
1	At both ends of piston rod	Without cushioning doe bores Φ40, Φ50 and Φ63
2	At head of cylinder	At velocity ratio φ =2, only cylinder head has cushioning
3	At end of piston rod	

Note: 1. Velocity φ ratio is ratio of effective area of piston to that of rod chamber

2. Max. stroke:

when φ =1.33, S=8D(bore size)

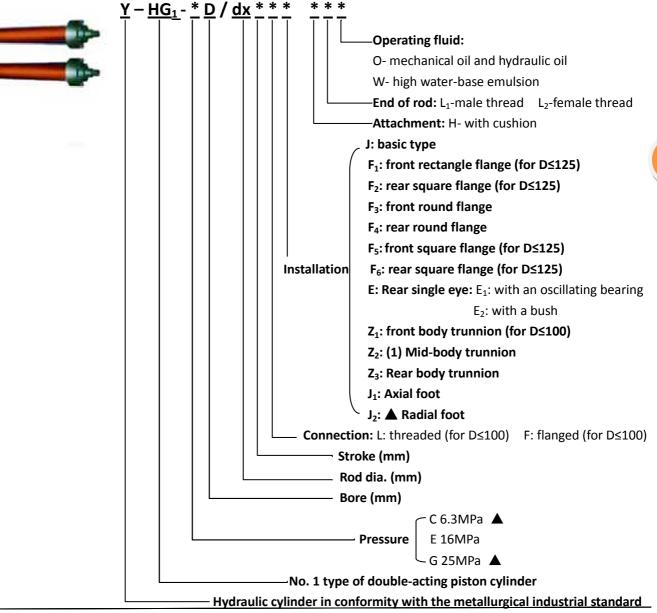
when φ =1.46, S=10D(bore size)

when φ =2, S=12D(bore size)

- 3. For bore size of Φ 63, Φ 80, Φ 100, Φ 125, Φ 150 and Φ 160, when velocity ratio φ 1.46, cylinder cover adopts clip ring attachment.
- 4. If S \geq max. stroke specified in Table is needed, contact with us.
- 5. For min. stroke of cylinder with trunnion attachment, see Table 5,6,7 and 8.
- 6. $\Phi 250^{\sim} \Phi 700$ cylinder can be available



Y-HGI Series Cylinders



This series cylinder is double-acting piston type hydraulic actuator which can push its piston rod to move in both directions so that its piston will drive other working parts to reciprocate in line. With features, as well as integral damper and air bleeder, it is suitable for metallurgical industry and is in conformity with the specification on mounting and connecting ISO 6020/1 - 1981.

Order Procedure:

- 1. If the cylinders of 6.3~16MPa are needed, please fill "E" in your order
- Mounting dimension are according to the codes in the table except that of mid-body trunnion attachment type; For connecting dimensions, refer to tables 5~17
- 3. "H" code represents types with cushioning; omit without cushioning
- 4. For stroke, refer to table 4
- 5. Specify your special requirements for operating fluid, temperature, test, painting and packing.
- 6. End rod eye should be separately ordered.



Technical Date:

Table 1: Bore diameter D and rod diameter d series.

D D D D	40*	50 [*]	63 [*]	80 [*]	90	100 [*]	110	125 [*]	140	150	160 [*]	180	200 [*]	220	250 [*]	280	320 [*]
1.46	22 [*]	28 [*]	36 [*]	45[*]	50	56 [*]	63	70 [*]	80	85	90 [*]	100	110[*]	125	140[*]	160	180[*]
2	28 [*]	36	45 [*]	56 [*]	63	70 [*]	80	90 [*]	100	105	110[*]	125	140[*]	160	180[*]	200	220[*]

Note: "*" indicates bore dia. D and rod dia. d in conformity with that specified ISO 6020/1 standard.

Table 2: Port series.

Table 2: PC	ort series.							(m	imj
Bore dia.	40	50	63	80	90	100	110	125	
Nominal size of port	10	10	15	15	15	15	20	20	
Thread for port	M18 ×1.5	M18 ×1.5	M27 ×2	M27×2	M27×2	M33×2	M33×2	M33×2	
Bore dia.	140	150	160	180	200	220	250	280	320
Nominal size of port	25	25	25	32	32	32	40	40	40
Thread for port	M42×2	M42×2	M42×2	M48×2	M48×2	M48×2			

Note: 1. Port dia. is determined basing on the highest flow velocity (V₀=5mm/sec) at the port.

2. If bore D \geq 250mm, flange for port should be split type.

Max. permissible stroke S of the cylinder at rated pressure for different installation types (see Table 3)

 $\mathsf{S}_1\text{-}\mathsf{front}$ flange or axial foot attachment, rod end with eye

S₂- front flange or axial foot attachment, rod end without eye

S₃-rear flange attachment and rod end with eye

 $\mathsf{S}_{4^{\text{-}}}$ rear flange attachment and rod end without eye

 $S_{\mbox{\scriptsize 5}}\mbox{-rear}$ trunnion or rear single eye attachment and rod end with eye

S₆-front trunnion attachment and rod end with eye

S7-mid-body trunnion and rod end with eys.

Table 3: Stroke series

Chucko	25	50	80	100	125	160	200	250	320	400	500
Stroke	630	800	1000	1250	1600	2000	2500	3150	4000	5000	

This series is in conformity with ISO 4393



	Tab	le 4: M	ax. stro	oke											(mm)			
B	D ore dia.			40		50		63	8	0	9	0	10	0	1	10	:	125
R	d od dia.		22	28	28	36	36	45	45	56	50	63	56	70	63	80	70	90
		S ₁	540	960	730	1360	990	1640	1240	1990	1370	2080	1550	2320	1700	266	0 1850	2980
		S ₂	115	260	180	390	260	490	330	600	370	620	420	700	470	800	520	920
Max at		S ₃	190	420	300	620	430	750	550	920	600	960	680	1070	760	124	0 830	1390
Max. st	оке	S ₄	90	170	130	240	180	300	230	360	250	380	280	420	310	480	340	540
		S ₅	140	290	210	430	290	520	370	640	450	660	470	740	520	860	570	970
		S ₆	350	650	480	920	560	1120	830	1360	910	1420	1040	1580	1140	183	0 1250	2050
14	D	1!	50	16	60	18	80	2	00		220		250		280		32	0
80	100	85	105	90	110	100	125	110	140	125	160	140	180	16	0 2	00	280	220
2150	3130	2280	3160	2330	3210	2560	3610	2780	4120	3240	4660	3590	4860	381	.0 52	210	4600	5800
620	970	660	990	670	1000	740	1110	800	1270	940	1440	1040	1490	110	00 1!	590	1350	1780
970	1460	1030	1500	1050	1510	1160	1680	1250	1920	1470	2180	1630	2270	172	20 24	420	2100	2700
390	560	410	580	420	590	470	650	510	740	590	840	650	880	69	0 9	40	840	1050
670	1020	720	1040	730	1050	800	1170	870	1340	1020	1520	1130	1580	119	0 1	590	1460	1800
1460	2150	1550	2200	1580	2220	1740	2480	1880	2830	2210	3210	2440	3340	258	30 3	570	3130	3980

Note: Figures in the table are max. strokes calculated depending on their stability and that exceeding these values are non-standard ones which stability should be guaranteed by designers themselves.

Configuration:

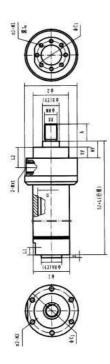




Table 5

(mm)

- Note: 1. Loss caused by pipe resistence and friction in mechanism should be increased by 10% in calculated force when choosing a cylinder
 - 2. When D≤220, threaded connection at oil port should available; when D≥250, the split type port flange should be selected. The dimension in the table is size of oil port.

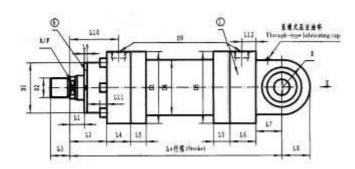
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107	\$	ព	010	007	MI6×1.5	st	5 1 C / IN	2	5	2	22 24	-	-	ţ	5				•		100	9.E	0.111
7	e 4	50		1020	N20 × 1.5	50	ž.	Ŷ	-		-	\$	2	8	ŝ	æ.	4	\$	-	Ê		3.82	0.129
5	¥	200	SIL	2150	M20 × 1.5		A LO SIM	33	-	-			2		2		-	-	.0		1.1	6.74	0.142
2	e4	36		1510	M27 x2	8	C'1 × 010	8	R	2	2	R	\$	2	ş		4	1	2	£	-	6.75	0.14
	¥	36	1001	150	M27 x2	1.1	1	۶	-	-	-	-	-		-	1	-	-		3		w	0.234
2	C4	3	102-	0772	M33 x2	\$	NIC 2 1.0	5	8	3	2	8	3	2	5	2	9	2	2		- 110		0.234
8	¥	53	CUAN S	065	M33 x2	\$	1-1-1		-		-	-			100	\$		-			1	16.82	0.295
8	e 4	8	TAND	4100	W42 x2	8	29.98	8	2	2	2	5	5	ŧ.	ñ	2	R	8	0	2	718-	10.3	0.36
9	#	20	02001	NGO	N42 x 2	8	12.3	1.00	-			-		-	-	-	-				1	19.3	0.41
2	64	3	ornel	5150	N48 × 2	8	7× .74	3	8	2	9NI 771	8	R	a	2	2	2	2	-		- 1.0	23.43	0.37
N.	\$	95	1760	9006	N42 x 2	\$	LATEN	611	8	2	101 091	2	ę		101	110	-	-	-		1	33.1	0.51
-	C4	R	AND I	940	M48 x2	8	e		-		-	-	100		R.	3		10		0	- M.O	31.6	0.48
111	¥.	3	083	1000	M48 x2	8	CALEN		5		144 132	8	-	1.1.1	011	5	-	-	.0	1	1	41.48	0.52
-	-	80	NACT	7160	M48 x 2	3	4	A 44	-	2	_		à	ñ	10	3	2	2		0.0	-	4	0.6
×	1.46	20	0.000	THE	M48 x2	3	en part	No.	-	-				-	1	5	-	-		12	1	15	0.46
1	£4	95		9450	W64 ×5	23	 A 	1.1	2	3		1	à	2	2	3	2	8	0	0	- 110	52.48	0.6
1	1.45	8	TAKAO	1658	V48 x2	3	CAUM	166	8	10.0	700 168	331	11	5	31.0	-	5	-	0		1	64.8	0.79
	-	100	-	13061	M80 x5	3x	ante o a	÷	-	100000		_	5		220	-		-	•	0	0-4-0	-19	0.83
151	1.45	æ	12730	3616[N64 x3	33	C ~ CM1	175.1	1 SOE	12 021	715 190	246	-		1000	-	3	06 30			1.0	81.3	0.89
3	-	92	NIN	14420	W20 x 3	23	1 1 1		-		_			100	-					0	- 10	33.43	0.95
5	1.45	8	00.000	2:990	N64 x3	53	turn un	100	1 011				1000			-	-		ಿಂ			133.25	
3	-	110	NIN.	16960	W80×3	R	14 4 F	2		1	k.	8	Ŧ	8	0.0	2		57 FX	0	2 A.M	07W -	131.69	
	1.45	8	40710	28140	M80×3	82	C A XFW	000	1 011	AC ONI	250 210	DBC 0	1	Sec.	410	z	8	02 17		0.00	nnu	102.66	1.32
-		125		21080	N80×3	S.	¢		-						_	-		-			E	130.94	1.35
1002	1.45	3	09005	33063	M80 x3	R	U A XDM	1310	1001	001	200 206	CR2	¥	ž	1450		1	116 37		a unu		161.75	1.53
	-4	4	-	25630	NICO +3	211	 I 	_	2				1.1	1.1.1.1	-		-	-			F	183.23	1.7
- 044	1	3	00000	41183	ж	12	MdR v 3	1 UFC	F 071	IT OK	ECC OIL	5	¥	8	Val.	5	ž	201	. 0	e) run	A.M.	240	2.15
	-	18		30630	NI00 × 3	112	-						3.00		distant in the	-	-				F.	557	2,33
- 52	1.45	140	UNSOL.	23900	MI00 + 3	112	010	1 08.	7 141	200	240 700	Let 1		8	-		-				1.10	321	2.5
3	~	180	The color	37820	WI25 ×4	2	i.								100	9	200	00 261	-	Wet 12	- 100	406.58	2.5
181	1.45	8	06530	66333	MI25 ×4	2	610	1002	C USI	12 000	270 275	0.00			territe in a	-	_		•		1.11	484.5	2.67
	~	300	MICOL	46253	M125 x4	123	ł	_				7	5	3	3	2	10	2		2	511-1	534.3	2.87
Wit	1.45	180	1794.80	80360	and the	ä	010	0.00	202	210 42	CER VER	027	F	200	-	+ 32	1 10	2001	12	AD-CH		745.5	2.8
1	~	230	-	6213)	M160 x4	160	2		3			Post.		N. S. A.	NAME	-	_	-		N Call	1010-0	C 105	

0	榆次液压有限公司 Yuci Hydraulics Company Limited
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CD250/CG250 CD350/CG350 Heavy Duty	
CD 250 B 100/07	0 – 100A 10/01 C A D M A
	For further details us
approximation and a second second	, contact with us.
	Piston seals
	T=1:sliding ring for low
	friction operation
	A: V Chevron seals
CD-Differential cylinder	M= mineral oils to DIN 51524 and
CG-Constant speed cylinder	51525
	V= phosphate ester; suitable for
Series number:	fluored seals
250 series	
350 series	U=without end position cushioning
For mounting type, contact with us	D=with cushioning at both ends
Please reference the next page	
	G=2: threads for spherical rod eye GA or
1.For series 250	plain rod eye bush SA A= 2: threads for spherical rod eye GAS
2.For series 250 and 350	
3.For piston rod dia. \leq 100	C:CK45(Germany material);hard chrome
4.For piston dia. ≤100 of series 250 and 350	plated
	H=4:CK53(Germany material);hardened and
	hard chrome plated
	L:X22CrNi 17(Germany material);hard
	chrome plated
	Line connections
	01=(BSP threads)
	02=(metric threads system)
	10 series
	10-19:mounting and connection dimensions remain
	the same
	A=screwed construction at both ends of the cylinder
	B=welded construction at the cylinder bottom and screwed
	construction connection at the cylinder head.
	750= stroke length (mm)



The series are single-acting differential cylinder including 14 bore size and 28 specifications combined depending on 4 velocity ratios. Three types of them, front flange mounting, mid-body trunnion and sub-plate mounting type cylinder can be built as double-rod and double-acting constant speed ones. Together with that with or without cushioning at their both ends, total are 28 specifications and 384 kinds of cylinder. The mounting types and dimensions of this series cylinders are in conformity with ISO 3320 and especially suitable for operating under had working and heavy-loading conditions. They are widely used in steel works, foundry, forging and machine -building industries.



ser	ies	Piston	Piston	Area	
250 350	dia.	rod	Ratio		
	350	(mm)	dia.	φ	
		()	(mm)	Ŷ	
٧		40	20	1.3:1	=40/20
٧	٧	-10	28	2:1	=40/28
٧			28	1.4:1	=50/28
		50			
٧	٧		36	2:1	=50/36
٧			36	1.4:1	=63/36
		63			
V	٧		45	2:1	=63/45
٧			45	1.4:1	=80/45
		80			
v	٧		56	2:1	=80/56
٧			56	1.4:1	=100/56
		100			
v	٧		70	2:1	=100/70
v			70	1.4:1	=125/70
		125			
v	٧		90	2:1	=125/90
v			90	1.6:1	=140/90
v	v	140	100	2:1	=140/100
v			100	1.6:1	=160/100
v	v	160	110	2:1	=160/110
v			110	1.6:1	=180/110
v	v	180	125	2:1	=180/125
v			125	1.6:1	=200/125
v	v	200	140	2:1	=200/140
v			140	1.6:1	=220/140
v	v	220	160	2:1	=220/160
v			160	1.6:1	=250/160
v	V	250	180	2:1	=250/180
v			90	1.6:1	=280/180
v	v	280	200	2:1	=280/200
v	+ -		200	1.6:1	=320/200
•		320	200	2:1	=320/200

Technical Data:

Operating pressure	CD/CG250 series:25 CD/CG350 series:35		
Suitable operating fluid	Mineral hydraulic oil, phosphate ester and a water-glycol		
	fluid		
Operating temperature	-30 ~ +100		
Viscosity of operating fluid	2.8~380		
Running speed	0.5(if special seals are used, it could be 15m/s)		
Sealing	Dynamic seal: V seal for type A cylinder at high speed		
	and pressure; sliding seal for type T cylinder at low speed		
	and pressure. Static seal: O ring made in China		
Connecting type of head and body as well as air bleeder	Type A: thread, flange connecting		
	Type B: welded cylinder bottom, threaded cylinder head;		
	with air release plug at end of cylinder.		
Thread for oil connections	For ports of al size cylinders, adopt GB metric fine thread		
	and with worth pipe thread of BSP i.e. cylinder pipe		
	thread G of China		
Mounting type	Five type, A,B,C,D, E and F		
Material of piston rod	High-tensile steel and stainless steel X ₂₂ CrNi17(hard		
	chrome plating surface)		



ZL 30 Hydraulic Cylinder for Loader



These cylinder are mainly used for ZL 30 loaders. Operating pressure: 20MPa. Including for moving arm, for dumping and for steering (right and left). The details contact with us

Hydraulic Cylinder for ZL 50 Loader



These cylinder are mainly used for ZL 30 loaders. Operating pressure: 20MPa. Including for moving arm, for dumping and for steering. The details contact with us

Hydraulic Cylinder for Dumping Car



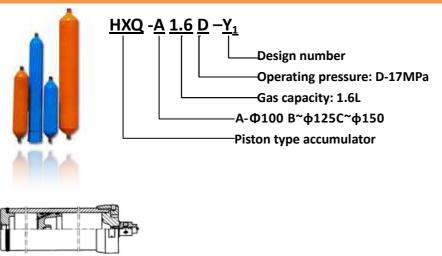
These are mainly used for five or eight Ton dumping –truck and other loading Machines

Technical Data of hydraulic cylinder for 8 T dumping-truck

Cylinder bore/piston rod dia.	Operating pressure(MPa)	Operating stroke	Mounting distance(mm)	Push(T)
150/70	16	806	1151	28.3







HXQ is an separated accumulator in a hydraulic system, which can store energy of the system and release it when it is needed.

Main usage as follows:

- 1. Stabling system pressure by absorbing pulsation of flow and pressure in the system as well as hydraulic shock;
- 2. Acting as a storing and making-up device of hydraulic energy, it can supply the pump with oil deliveried in short Time when flow of the pump is not enough, or periodically unload the pump as well as enable system actuators timely holding pressure;

A smaller accumulator is needed for the former case, the latter must select a proper size of accumulator according to the amount of make-up oil required.

Piston type accumulator features longer service life, less gas leakage and elimating oxidation of oil.

Drawing No.	Model	Rated operating pressure(MPa)	Gas capacity (L)	Weight(kg)	Pressure-resistance (MPa)
	HXQ-A1.0D-Y ₁			18	
	HXQ-A1.6D-Y ₁		1.6	20	
	HXQ-A2.5D-Y ₁		2.5	24	
	HXQ-B4.0D-Y ₁		4.0	44	
H125	HXQ-B6.3D-Y ₁	17	6.3	55	25
	HXQ-B10D-Y ₁		10	73	
	HXQ-C16D-Y ₁		16	126	
H150	HXQ-C25D-Y ₁		25	173	
	HXQ-C39D-Y ₁		39	246	

Technical Data