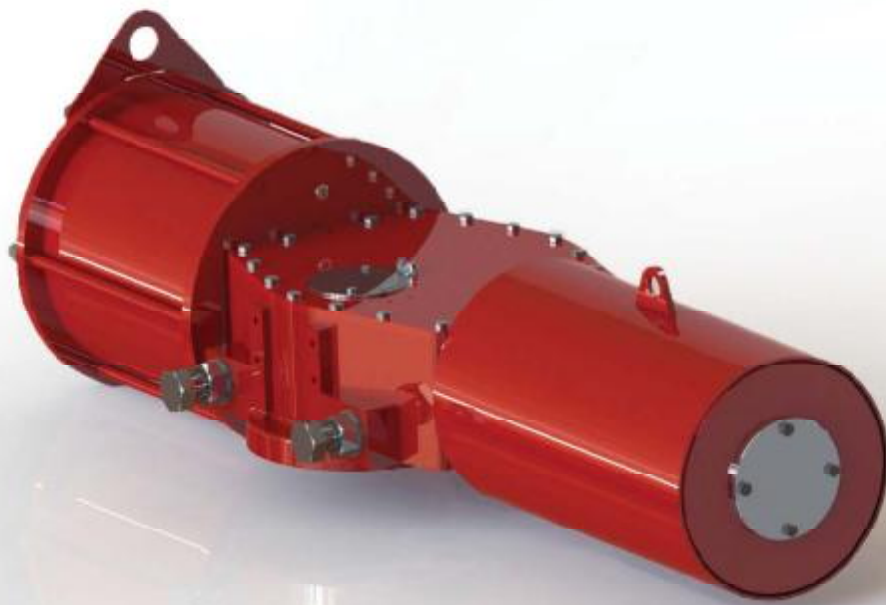




Heavy-Duty Pneumatic Actuator IC & IS Series



INNOBIZ CE
기술혁신형중소기업

Heavy-Duty Pneumatic Actuator IC & IS Series

- *The IS & IC series of heavy duty scotch yoke actuators is designed suitable for general purpose of valves and damper automation and offer a wide range of torques enable to operate ball, butterfly, plug valves, dampers or any device that requires a quarter-turn operation for on-off or modulating service.*
- *IS series is the symmetrical design yoke that produces maximum torque at both ends of the 90° cycle providing travel stops.*
- *IC series is the canted design yoke that max produces torque at either close or open end.*
- *Both series actuators come along with a complete line of controls and monitoring accessories including Manual Handwheel (jackscrew), hydraulic overrides, limit switches, solenoid valves, positioners and other controls accessories.*
- *Its modular design and construction provides maximized convenience during installation, maintenance and storage.*



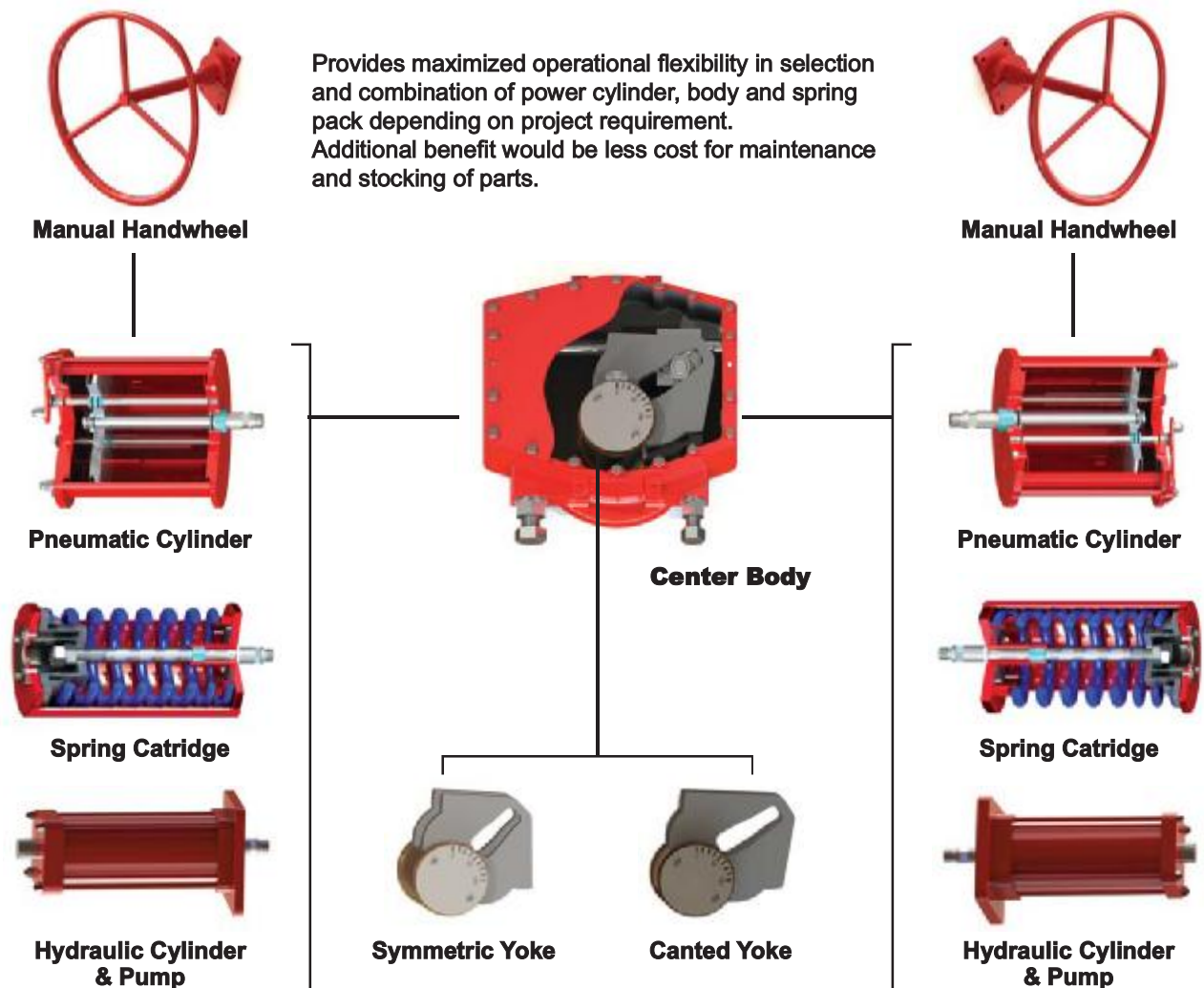
Standard IS & IC series actuator are provided with below features.

- Two years standard warranty.
- IP66 for water ingress protection and corrosion resistance.
- Interchangeable modular construction - an advantage for inventory, service, maintenance
- Standard operating pressure: 40 to 100 PSIG (2.8 to 7 Bar)
- Standard operating temperature: -20°C to $+80^{\circ}\text{C}$ with high and low temperature optional trims available.
- Mounting dimension is to meet with ISO5211

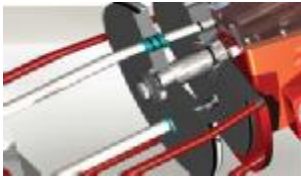
Optional

- Different temperature range : -30°C to 100°C
- Different pressure range: Max. 10 Bar
- Manual operation : Hydraulic or Handwheel (jackscrew), Declutchable gear box
- Different mounting dimension: (MSS-SP101 or others on request)

MODULAR



CONSTRUCTION



Guide Bar for Safety Increased

Provided two piston guide (Up & down) bars preventing piston's droop due to abrasion after a long time of use, and engineering Plastic Bush for the pistons with good durability of abrasion and lubricative characteristic enable to keep smooth operation at low pressure as well.



Travel Stop / Adjustment And Indicator

Travel stop/adjustment can be set in the range of $-5^{\circ} \sim +95^{\circ}$ of stroke and the stoppers are designed in vertical touch in order to bear big shock.

Indicator with pointer & angle meter for easy and convenient use



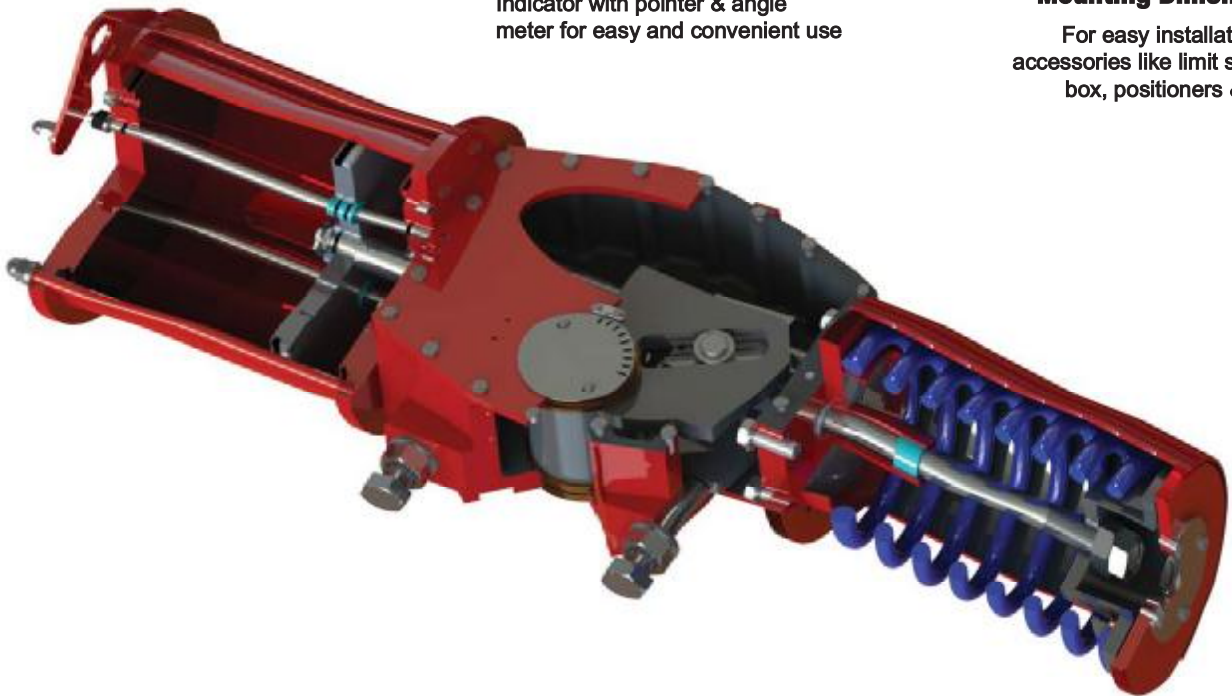
Piston Guide Ring

High quality Back-up Ring preventing any possible leakage and ensure long lifespan.



Standard NAMUR Mounting Dimension

For easy installation of accessories like limit switch box, positioners & etc.



Replceable Bearing

Surface heat-treated Slide Pin, Slide Bearing, and Yoke Slide provides semi-permanent lifespan with strong durability of abrasion.



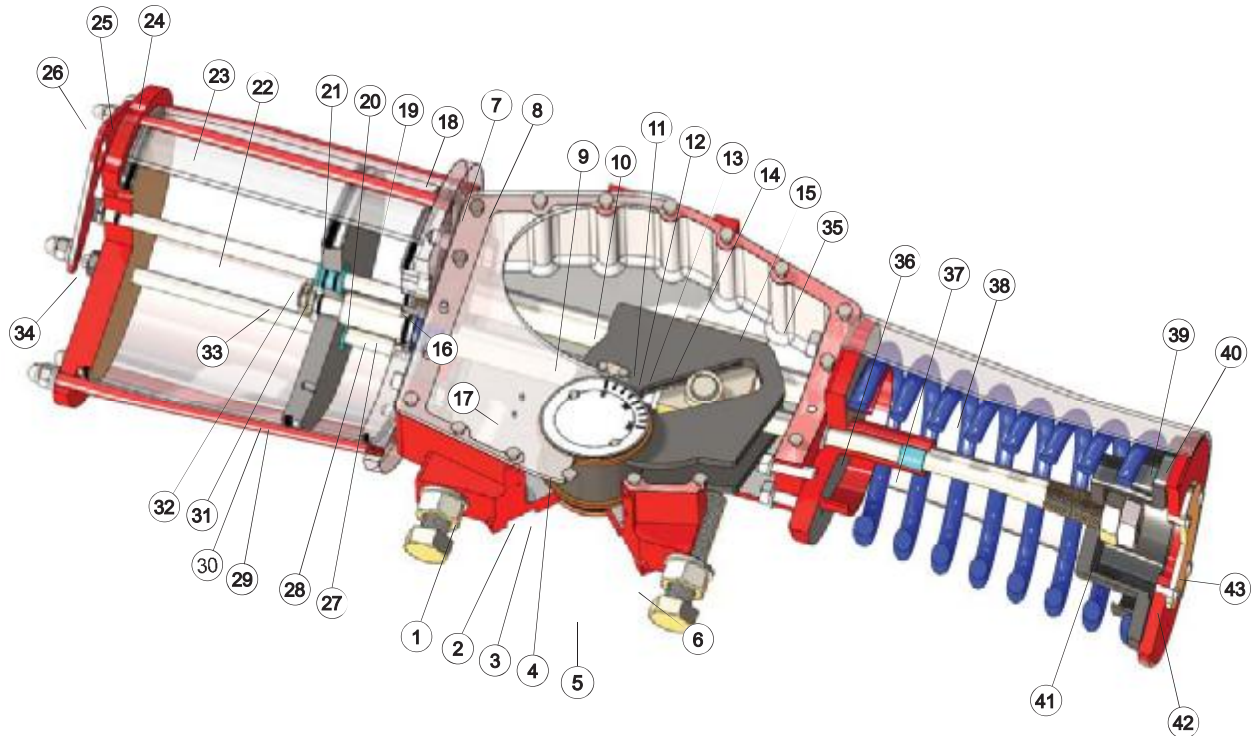
Spring Rod Guide

Hard anodized Aluminum casting and external epoxy powder coated against severe industrial environment.



Adaption

In order for direct mounting valve and actuator without separate coupler and bracket, bore diameter for valve shaft is increased, so that it can accept thicker diameter shaft rather than standard. Mounting flange as per ISO5211

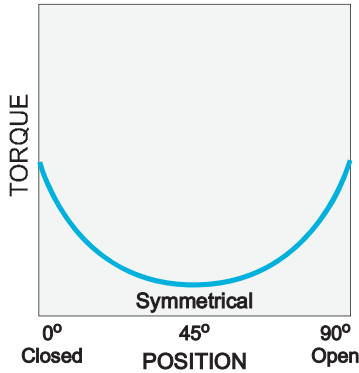


NO	DESCRIPTION	MATERIAL
1	BODY	DUCTILE IRON
2	LOWER BUSHING	BSC
3	BUSHING O-RING	NBR
4	UPPER BUSHING	BSC
5	STOPPER BOLT	ALLOY STEEL
6	STOPPER UNT	ALLOY STEEL
7	BODY COVER	ALLOY STEEL
8	BODY COVER BOLT	ALLOY STEEL
9	POSITION INDICATOR	STS
10	YOKE	ALLOY STEEL
11	SNAP RING	ALLOY STEEL
12	SLIDE PIN	ALLOY STEEL
13	SLIDE ROLLER	ALLOY STEEL
14	SLIDE BLOCK	ALLOY STEEL
15	FRONT COVER BOLT	ALLOY STEEL
16	COVER FIXED PIN	ALLOY STEEL
17	POSITION NEEDLE	ALLOY STEEL
18	CYLINDER FRONT COVER	ALLOY STEEL
19	COVER O-RING	NBR
20	PISTON ROD	ALLOY STEEL
21	PISTON	ALLOY STEEL
22	PISTION GUIDE BAR	ALLOY STEEL

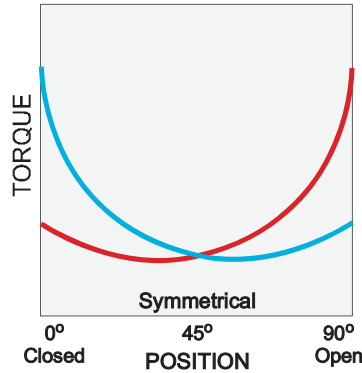
NO	DESCRIPTION	MATERIAL
23	TIE BOLT	ALLOY STEEL
24	CYLINDER END COVER	ALLOY STEEL
25	LIFT PLATE	ALLOY STEEL
26	TIE BOLT NUT	ALLOY STEEL
27	FRONT COVER BUSHING	ENGINEERING PLASTIC
28	O-RING	NBR
29	BACK-UP RING	PTFE
30	PISTON O-RING	NBR
31	PISTON GUIDE BUSHING	ENGINEERING PLASTIC
32	PISTON GUIDE BUSHING O-RING	NBR
33	PISTON LOCK BOLT	ALLOY STEEL
34	PISTON GUIDE BAR NUT	ALLOY STEEL
35	SPRING CASE FRONT COVER	ALLOY STEEL
36	SPRING ROD GUIDE BUSHING	ENGINEERING PLASTIC
37	SPRING ROD	ALLOY STEEL
38	SPRING	ALLOY STEEL
39	SPRING RETAINER	ALLOY STEEL
40	SPRING CASE END COVER	ALLOY STEEL
41	SPRING ROD LOCK NUT	ALLOY STEEL
42	COVER	ALLOY STEEL
43	COVER BOLT	ALLOY STEEL

SYMMETRIC TECHNICAL DATA

Double Acting Actuator



Spring Return Actuator



Symmetric Type



Torque Curve — Air Torque — Spring Torque

Double Acting

Unit : Nm

MODEL	2.8 Bar			4.2 Bar			5.6 Bar			5.6 Bar		
	0°	R	90°	End	R	Start	0°	R	90°	0°	R	90°
ISD 02-20	1,024	635	1,003	1,537	952	1,505	2,049	1,270	2,007	2,561	1,587	2,508
ISD 02-25	1,601	992	1,568	2,401	1,488	2,352	3,201	1,984	3,135	4,002	2,480	3,919
ISD 02-30	2,305	1,428	2,257	3,457	2,142	3,386	4,610	2,857	4,515	5,762	3,571	5,644
ISD 02-35	2,874	1,781	2,815	4,311	2,671	4,222	5,748	3,562	5,630	7,186	4,452	7,037
ISD 03-35	3,381	2,095	3,312	5,072	3,143	4,968	6,763	4,190	6,623	8,454	5,238	8,279
ISD 03-38	4,466	2,767	4,374	6,699	4,151	6,561	8,932	5,535	8,748	11,165	6,918	10,935
ISD 03-43	5,701	3,533	5,584	8,552	5,299	8,376	11,403	7,066	11,168	14,254	8,832	13,960
ISD 04-43	7,412	4,593	7,259	11,118	6,889	10,889	14,824	9,185	14,518	18,530	11,482	18,148
ISD 04-48	9,214	5,709	9,024	13,821	8,564	13,536	18,427	11,418	18,048	23,034	14,273	22,559
ISD 04-53	11,211	6,947	10,980	16,817	10,420	16,470	22,423	13,894	21,960	28,028	17,367	27,451
ISD 05-53	13,799	8,550	13,514	20,698	12,825	20,271	27,597	17,100	27,028	34,497	21,375	33,785
ISD 05-58	16,498	10,223	16,158	24,748	15,334	24,237	32,997	20,446	32,316	41,246	25,557	40,395
ISD 05-63	19,439	12,045	19,038	29,159	18,068	28,557	38,878	24,090	38,077	48,598	30,113	47,596
ISD 06-63	24,299	15,056	23,798	36,448	22,585	35,697	48,598	30,113	47,596	60,747	37,641	59,495
ISD 06-68	28,276	17,521	27,693	42,414	26,281	41,540	56,552	35,042	55,386	70,690	43,802	69,233
ISD 06-73	32,555	20,172	31,883	48,832	30,258	47,825	65,109	40,344	63,767	81,387	50,430	79,709

SYMMETRIC TECHNICAL DATA

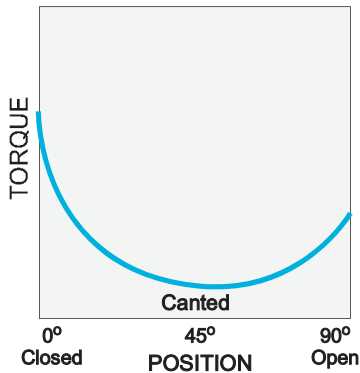
Spring Return (Fail closed or Fail open)

Unit : Nm

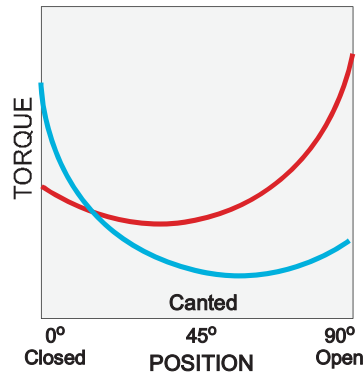
MODEL		Spring Torque			Air Torque : Air Supply Pressure											
					2.8 Bar			4.2 Bar			5.6 Bar			7 Bar		
		End	R	Start	Start	R	End	Start	R	End	Start	R	End	Start	R	End
ISR 02-20	4.2 Bar	602	495	975	422	140	28	934	457	530	1,447	775	1,032			
	5.6 Bar	790	650	1,280				746	302	225	1,259	620	727	1,771	937	1,228
ISR 02-25	4.2 Bar	913	751	1,479	688	241	89	1,488	737	873	2,288	1,234	1,656			
	5.6 Bar	1,239	1,019	2,007				1,162	469	344	1,962	965	1,128	2,763	1,461	1,912
ISR 02-30	4.2 Bar	1,301	1,080	2,141	1,004	348	116	2,156	1,062	1,245	3,309	1,779	2,374			
	5.6 Bar	1,787	1,469	2,894				1,671	673	492	2,823	1,388	1,621	3,976	2,102	2,750
ISR 02-35	4.2 Bar	1,628	1,352	2,679	1,246	429	136	2,683	1,320	1,544	4,120	2,210	2,951			
	5.6 Bar	2,140	1,759	3,466				2,171	912	756	3,608	1,802	2,164	5,046	2,693	3,571
ISR 03-35	4.2 Bar	1,803	1,539	3,098	1,579	557	213	3,269	1,604	1,869	4,960	2,652	3,525			
	5.6 Bar	2,566	2,120	4,189				2,506	1,023	779	4,197	2,070	2,435	5,887	3,118	4,091
ISR 03-38	4.2 Bar	2,480	2,049	4,048	1,986	719	326	4,220	2,102	2,513	6,453	3,486	4,701			
	5.6 Bar	3,303	2,729	5,391				3,397	1,422	1,170	5,630	2,806	3,357	7,863	4,190	5,544
ISR 03-43	4.2 Bar	3,049	2,519	4,977	2,653	1,014	607	5,503	2,780	3,399	8,354	4,547	6,191			
	5.6 Bar	4,097	3,554	7,223				4,455	1,745	1,153	7,306	3,511	3,945	10,156	5,287	6,737
ISR 04-43	4.2 Bar	4,167	3,569	7,202	3,245	1,024	58	6,951	3,320	3,687	10,657	5,616	7,317			
	5.6 Bar	5,436	4,656	9,395				5,682	2,233	1,494	9,388	4,529	5,124	13,094	6,826	8,753
ISR 04-48	4.2 Bar	5,125	4,390	8,857	4,089	1,320	167	8,696	4,174	4,679	13,303	7,029	9,190			
	5.6 Bar	6,406	5,582	11,372				7,414	2,982	2,164	12,021	5,836	6,675	16,628	8,691	11,187
ISR 04-53	4.2 Bar	6,214	5,323	10,745	4,997	1,624	240	10,603	5,098	5,730	16,208	8,571	11,220			
	5.6 Bar	8,236	7,054	14,234				8,581	3,366	2,236	14,187	6,840	7,726	19,793	10,313	13,217
ISR 05-53	4.2 Bar	7,651	6,505	13,070	6,147	2,045	444	13,047	6,320	7,201	19,946	10,595	13,958			
	5.6 Bar	10,204	8,675	17,431				10,494	4,150	2,841	17,393	8,425	9,598	24,293	12,700	16,355
ISR 05-58	4.2 Bar	9,296	7,733	15,538	7,403	2,490	621	15,652	7,601	8,700	23,901	12,713	16,779			
	5.6 Bar	12,124	10,308	20,710				12,624	5,027	3,527	20,873	10,138	11,606	29,122	15,250	19,685
ISR 05-63	4.2 Bar	10,971	9,328	18,742	8,468	2,717	297	18,187	8,740	9,816	27,907	14,762	19,335			
	5.6 Bar	14,127	12,010	24,132				15,032	6,057	4,426	24,752	12,080	13,945	34,471	18,102	23,464
ISR 06-63	4.2 Bar	13,456	11,608	23,515	10,842	3,449	283	22,992	10,977	12,821	35,131	18,506	24,080			
	5.6 Bar	17,092	14,744	29,869				19,356	7,841	5,828	31,506	15,369	17,727	43,655	22,897	29,626
ISR 06-68	4.2 Bar	15,243	13,149	26,637	13,034	4,372	1,056	27,172	13,133	14,903	41,310	21,893	28,749			
	5.6 Bar	20,474	17,662	35,779				21,940	8,620	5,761	36,078	17,380	19,607	50,216	26,141	33,454
ISR 06-73	4.2 Bar	17,816	15,368	31,134	14,739	4,804	750	31,016	14,890	16,692	47,293	24,974	32,633			
	5.6 Bar	23,159	19,978	40,471				25,673	10,280	7,354	41,950	20,366	23,296	58,228	30,452	39,238

CANTED TECHNICAL DATA

Double Acting Actuator



Spring Return Actuator



Canted Type



Torque Curve — Air Torque — Spring Torque

Double Acting

Unit : Nm

MODEL	2.8 Bar			4.2 Bar			5.6 Bar			5.6 Bar		
	0°	R	90°	End	R	Start	0°	R	90°	0°	R	90°
ICD 02-20	1,284	635	895	1,926	952	1,342	2,568	1,270	1,790	3,210	1,587	2,237
ICD 02-25	2,006	992	1,398	3,009	1,488	2,098	4,013	1,984	2,797	5,016	2,480	3,496
ICD 02-30	2,889	1,428	2,014	4,334	2,142	3,020	5,778	2,857	4,027	7,223	3,571	5,034
ICD 02-35	3,602	1,781	2,511	5,404	2,671	3,766	7,205	3,562	5,022	9,006	4,452	6,277
ICD 03-35	4,238	2,095	2,954	6,357	3,143	4,431	8,476	4,190	5,908	10,595	5,238	7,385
ICD 03-38	5,598	2,767	3,902	8,397	4,151	5,852	11,195	5,535	7,803	13,994	6,918	9,754
ICD 03-43	7,146	3,533	4,981	10,719	5,299	7,471	14,292	7,066	9,961	17,865	8,832	12,452
ICD 04-43	9,290	4,593	6,475	13,935	6,889	9,712	18,580	9,185	12,950	23,225	11,482	16,187
ICD 04-48	11,548	5,709	8,049	17,322	8,564	12,073	23,097	11,418	16,098	28,871	14,273	20,122
ICD 04-53	14,052	6,947	9,794	21,078	10,420	14,691	28,104	13,894	19,588	35,130	17,367	24,485
ICD 05-53	17,295	8,550	12,054	25,942	12,825	18,081	34,590	17,100	24,109	43,237	21,375	30,136
ICD 05-58	20,679	10,223	14,413	31,018	15,334	21,619	41,357	20,446	28,825	51,697	25,557	36,032
ICD 05-63	24,365	12,045	16,982	36,547	18,068	25,473	48,729	24,090	33,963	60,911	30,113	42,454
ICD 06-63	30,456	15,056	21,227	45,684	22,585	31,841	60,911	30,113	42,454	76,139	37,641	53,068
ICD 06-68	35,441	17,521	24,702	53,161	26,281	37,052	70,881	35,042	49,403	88,602	43,802	61,754
ICD 06-73	40,803	20,172	28,439	61,205	30,258	42,659	81,607	40,344	56,878	102,008	50,430	71,098

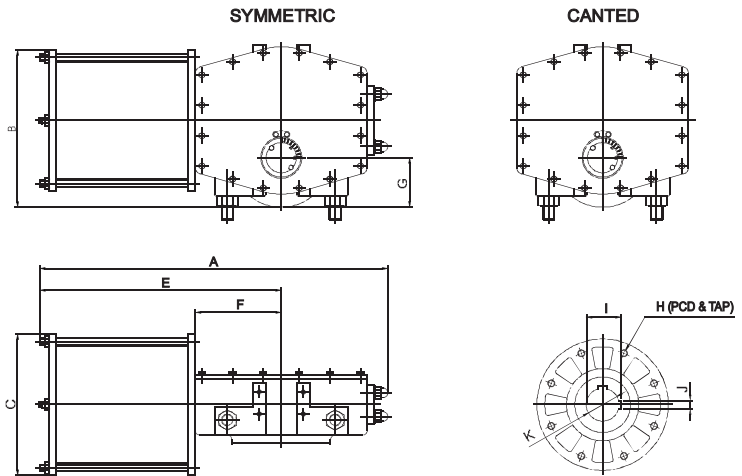
Spring Return (Fail closed or Fail open)

Unit : Nm

MODEL		Spring Torque			Air Torque : Air Supply Pressure											
					2.8 Bar			4.2 Bar			5.6 Bar			7 Bar		
		End	R	Start	Start	R	End	Start	R	End	Start	R	End	Start	R	End
ICR 02-20	4.2 Bar	670	452	808	614	182	87	1,256	500	534	1,898	817	981			
	5.6 Bar	876	591	1,056				1,051	361	286	1,692	678	733	2,334	996	1,181
ICR 02-25	4.2 Bar	1,063	717	1,282	943	275	117	1,946	770	816	2,949	1,266	1,515			
	5.6 Bar	1,396	942	1,683				1,614	546	415	2,617	1,042	1,114	3,620	1,538	1,813
ICR 02-30	4.2 Bar	1,496	1,020	1,834	1,393	408	189	2,838	1,122	1,186	4,282	1,836	2,193			
	5.6 Bar	2,059	1,404	2,524				2,275	765	559	3,719	1,452	1,503	5,164	2,167	2,510
ICR 02-35	4.2 Bar	1,807	1,262	2,299	1,795	519	212	3,596	1,409	1,467	5,397	2,300	2,723			
	5.6 Bar	2,543	1,735	3,118				2,860	937	648	4,662	1,827	1,904	6,463	2,718	3,159
ICR 03-35	4.2 Bar	2,047	1,464	2,700	2,192	632	254	4,311	1,679	1,731	6,430	2,727	3,208			
	5.6 Bar	3,093	2,098	3,759				3,265	1,045	671	5,384	2,093	2,148	7,503	3,140	3,625
ICR 03-38	4.2 Bar	2,759	1,973	3,641	2,838	794	261	5,637	2,178	2,212	8,436	3,561	4,162			
	5.6 Bar	3,913	2,654	4,757				4,484	1,497	1,095	7,282	2,880	3,046	10,081	4,264	4,997
ICR 03-43	4.2 Bar	3,637	2,467	4,421	3,509	1,066	559	7,082	2,832	3,050	10,655	4,599	5,540			
	5.6 Bar	5,017	3,403	6,099				5,702	1,896	1,372	9,275	3,663	3,863	12,848	5,429	6,353
ICR 04-43	4.2 Bar	4,735	3,340	6,118	4,555	1,253	357	9,200	3,549	3,595	13,844	5,845	6,832			
	5.6 Bar	6,098	4,301	7,878				7,837	2,588	1,835	12,482	4,884	5,072	17,127	7,181	8,310
ICR 04-48	4.2 Bar	5,887	4,152	7,605	5,662	1,557	444	11,436	4,412	4,468	17,210	7,266	8,493			
	5.6 Bar	7,754	5,469	10,017				9,579	3,095	2,056	15,343	5,949	6,081	21,117	8,804	10,105
ICR 04-53	4.2 Bar	7,035	4,962	9,088	6,958	1,943	630	14,043	5,458	5,603	21,011	8,890	10,424			
	5.6 Bar	9,217	6,502	11,908				11,861	3,919	2,783	18,887	7,392	7,680	25,913	10,866	12,577
ICR 05-53	4.2 Bar	8,854	6,189	11,286	8,416	2,337	725	17,097	6,636	6,795	25,711	10,887	12,779			
	5.6 Bar	11,770	8,235	15,018				14,173	4,59	3,064	22,820	8,865	9,091	31,467	13,140	15,118
ICR 05-58	4.2 Bar	10,195	7,133	13,008	10,484	3,089	1,404	20,823	8,201	8,611	31,162	13,312	15,817			
	5.6 Bar	14,355	10,044	18,316				16,663	5,290	3,303	27,003	10,402	10,510	34,342	15,513	17,716
ICR 05-63	4.2 Bar	12,292	8,601	15,684	12,034	3,417	1,248	24,255	9,467	9,789	36,398	15,462	18,230			
	5.6 Bar	16,158	11,306	20,617				20,389	6,762	4,856	32,571	12,784	13,347	44,753	18,807	21,837
ICR 06-63	4.2 Bar	14,480	10,292	18,928	15,976	4,764	2,299	31,204	12,293	12,913	46,431	19,821	23,526			
	5.6 Bar	18,967	14,028	26,335				26,717	8,556	5,505	41,945	16,085	16,119	57,173	23,613	26,732
ICR 06-68	4.2 Bar	17,715	12,591	23,156	17,726	4,930	1,545	35,446	13,690	13,896	53,167	22,451	26,247			
	5.6 Bar	22,115	16,357	30,708				31,046	9,924	6,345	48,766	18,685	18,695	66,486	27,445	31,046
ICR 06-73	4.2 Bar	19,992	14,209	26,132	20,812	5,963	2,307	41,214	16,049	16,527	61,615	26,135	30,746			
	5.6 Bar	25,029	18,512	34,753				36,176	11,746	7,905	56,578	21,832	22,125	76,979	31,918	36,345

DIMENSION

< DOUBLE ACTING >

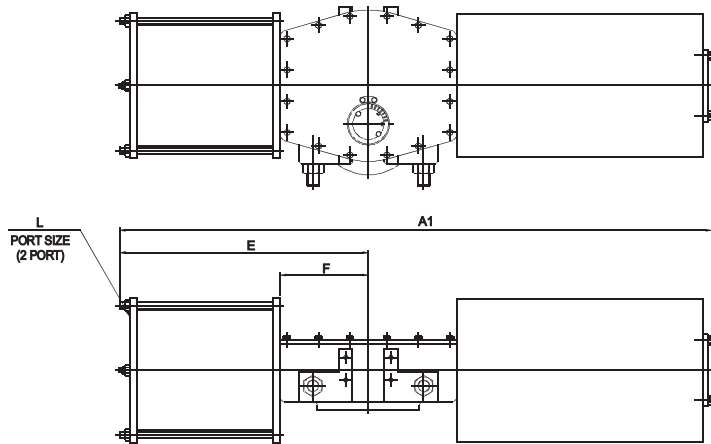


Symmetric IS Series Dimension

MODEL	A	A1		B	C	D	E
		4.2 Bar	5.6 Bar				
ISD 02-20 (ISR)	755	1280	1280	370	272	48	516
ISD 02-25 (ISR)	755	1280	1280	395	322	73	516
ISD 02-30 (ISR)	755	1280	1280	420	373	98	516
ISD 02-35 (ISR)	755	1280	1280	445	410	117	516
ISD 03-35 (ISR)	935	1475	1475	490	410	92	653
ISD 03-38 (ISR)	935	1475	1475	505	461	118	653
ISD 03-43 (ISR)	935	1475	1475	530	512	143	653
ISD 04-43 (ISR)	1105	1860	1860	640	514	128	763
ISD 04-48 (ISR)	1105	1860	1860	657	564	153	763
ISD 04-53 (ISR)	1105	1860	1860	682	625	184	763
ISD 05-53 (ISR)	1310	2240	2240	710	625	157	904
ISD 05-58 (ISR)	1310	2240	2240	732	675	183	904
ISD 05-63 (ISR)	1310	2240	2240	760	730	210	904
ISD 06-63 (ISR)	1610	2695	2695	830	745	192	1124
ISD 06-68 (ISR)	1610	2695	2695	850	795	217	1124
ISD 06-73 (ISR)	1610	2695	2695	875	847	243	1124

Canted IC Series Dimension

MODEL	A	A1		B	C	D	E
		4.2 Bar	5.6 Bar				
ICD 02-20 (ICR)	800	1325	1325	370	272	48	516
ICD 02-25 (ICR)	800	1325	1325	395	322	73	516
ICD 02-30 (ICR)	800	1325	1325	420	373	98	516
ICD 02-35 (ICR)	800	1325	1325	445	410	117	516
ICD 03-35 (ICR)	985	1510	1510	490	410	92	653
ICD 03-38 (ICR)	985	1510	1510	505	461	118	653
ICD 03-43 (ICR)	985	1510	1510	530	512	143	653
ICD 04-43 (ICR)	1215	1935	1935	640	514	128	763
ICD 04-48 (ICR)	1215	1935	1935	657	564	153	763
ICD 04-53 (ICR)	1215	1935	1935	682	625	184	763
ICD 05-53 (ICR)	1435	2320	2320	710	625	157	904
ICD 05-58 (ICR)	1435	2320	2320	732	675	183	904
ICD 05-63 (ICR)	1435	2320	2320	760	730	210	904
ICD 06-63 (ICR)	1710	2750	2750	830	745	192	1124
ICD 06-68 (ICR)	1710	2750	2750	850	795	217	1124
ICD 06-73 (ICR)	1710	2750	2750	875	847	243	1124



< SPRING RETURN >



F	G	H		I	J	K		L
		PCD	TAP/DP			DIA	DP	
196	145	165	M20/25	54	14	50	156	1/2" NPT
196	145	165	M20/25	54	14	50	156	1/2" NPT
196	145	165	M20/25	54	14	50	156	1/2" NPT
196	145	165	M20/25	54	14	50	156	1/2" NPT
236	175	254	M16/27	80	20	75/80	204	1/2" NPT
236	175	254	M16/27	80	20	75/80	204	1/2" NPT
236	175	254	M16/27	80	20	75/80	204	1/2" NPT
287	190	298	M20/34	95.4	22	90/100	234	3/4" NPT
287	190	298	M20/34	95.4	22	90/100	234	3/4" NPT
287	190	298	M20/34	95.4	22	90/100	234	3/4" NPT
343	230	356	M30/43	117.4	32	120/110/130	279	3/4" NPT
343	230	356	M30/43	117.4	32	120/110/130	279	3/4" NPT
343	230	356	M30/43	117.4	32	120/110/130	279	3/4" NPT
415	260	406	M36/53	137.4	32	140/130/150	326	3/4" NPT
415	260	406	M36/53	137.4	32	140/130/150	326	3/4" NPT
415	260	406	M36/53	137.4	32	140/130/150	326	3/4" NPT

F	G	H		I	J	K		L
		PCD	TAP/DP			DIA	DP	
196	145	165	M20/25	54	14	50	156	1/2" NPT
196	145	165	M20/25	54	14	50	156	1/2" NPT
196	145	165	M20/25	54	14	50	156	1/2" NPT
196	145	165	M20/25	54	14	50	156	1/2" NPT
236	175	254	M16/27	80	20	75/80	204	1/2" NPT
236	175	254	M16/27	80	20	75/80	204	1/2" NPT
236	175	254	M16/27	80	20	75/80	204	1/2" NPT
295	205	298	M20/34	95.4	22	90/100	234	3/4" NPT
295	205	298	M20/34	95.4	22	90/100	234	3/4" NPT
295	205	298	M20/34	95.4	22	90/100	234	3/4" NPT
345	240	356	M30/43	117.4	32	120/110/130	279	3/4" NPT
345	240	356	M30/43	117.4	32	120/110/130	279	3/4" NPT
345	240	356	M30/43	117.4	32	120/110/130	279	3/4" NPT
415	260	406	M36/53	137.4	32	140/130/150	326	3/4" NPT
415	260	406	M36/53	137.4	32	140/130/150	326	3/4" NPT
415	260	406	M36/53	137.4	32	140/130/150	326	3/4" NPT

VERSATILITY

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