



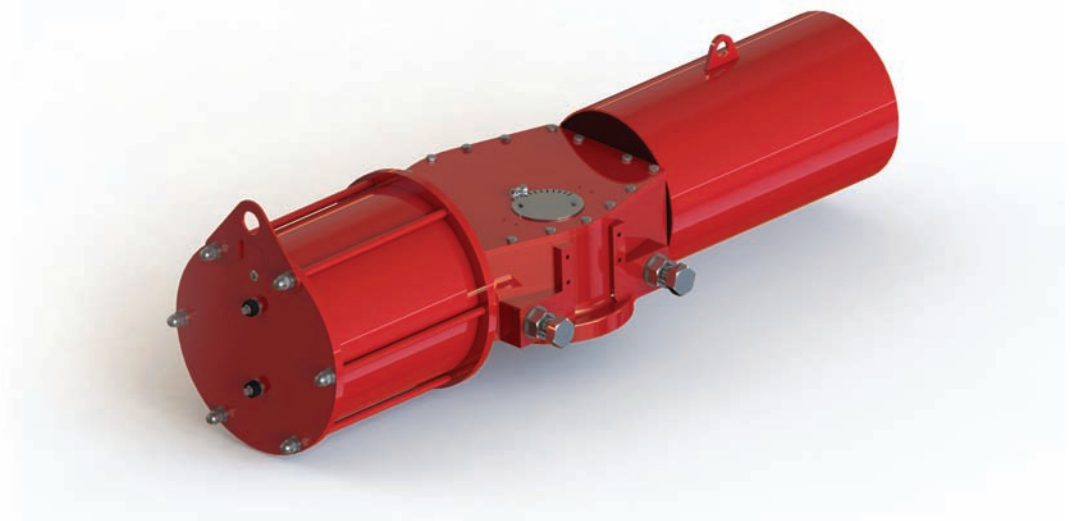
Heavy-Duty Pneumatic Actuator IS & IC Series



INNOBIZ CE
기술혁신형중소기업

Heavy-Duty Pneumatic Actuator IS & IC Series

- *The IS & IC series of Heavy Duty scotch yoke actuators are designed to suit a wide range of valves and damper applications and offer a wide range of torques to enable operation of ball, butterfly, plug valves and dampers or any device that requires a quarter turn operation for on-off or modulating service.*
- *IS series has a symmetrical design yoke that produces maximum torque at both ends of the 90° cycle.*
- *IC series has a canted design yoke that produces maximum torque at either the close or open end.*
- *Both series of actuators have a complete range of options & accessories for control and monitoring, including Manual Handwheel (Jackscrew), Hydraulic Overrides, Declutch Gearboxes, Limit switches, Solenoid Valves, Positioners and other control accessories.*
- *The modular design and construction provides maximum convenience during installation, maintenance and storage.*



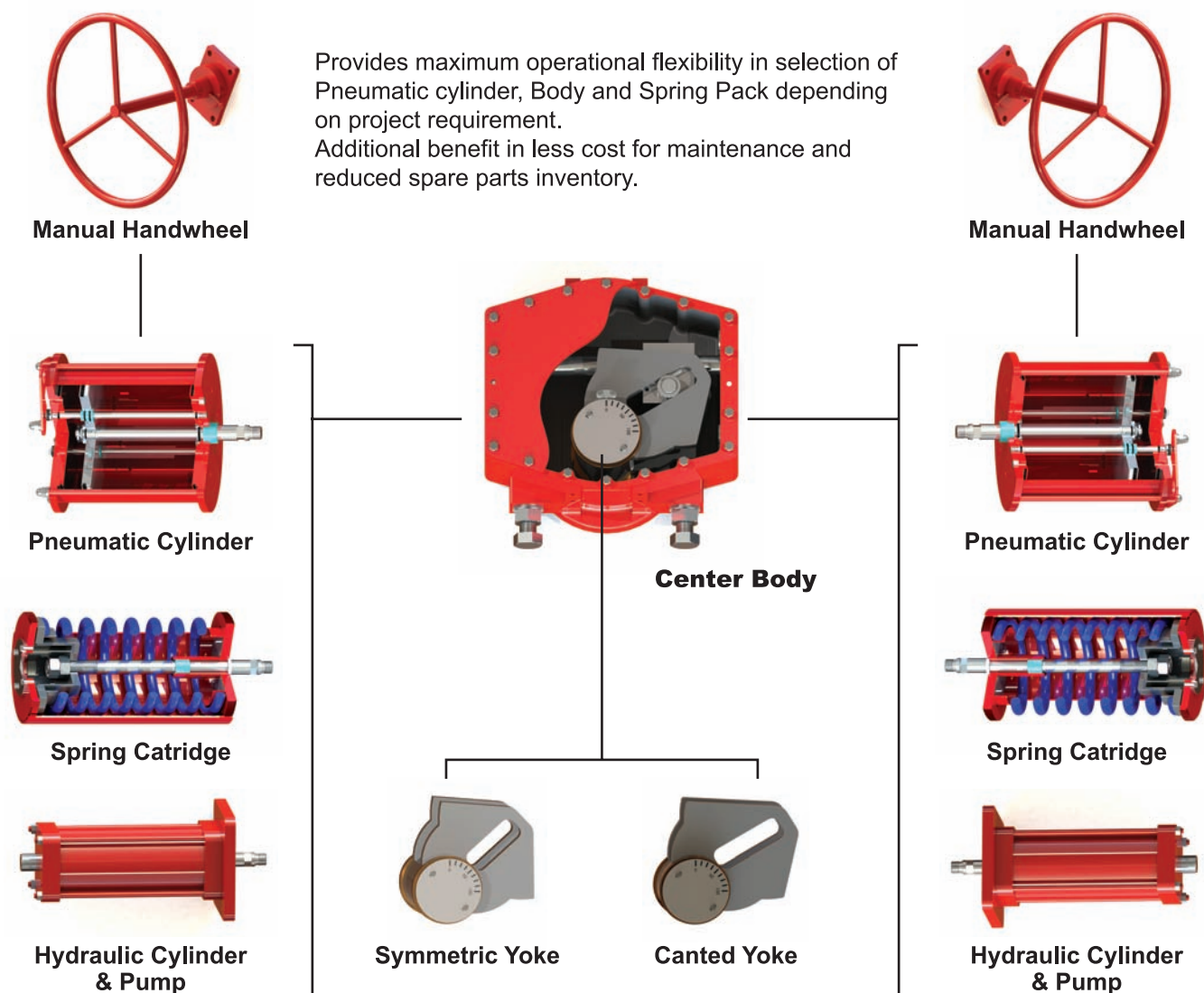
Standard IS & IC series actuator are provided with below features.

- 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

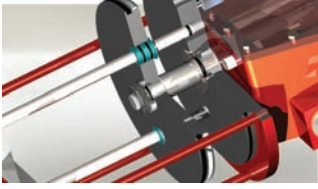
Optional

- 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

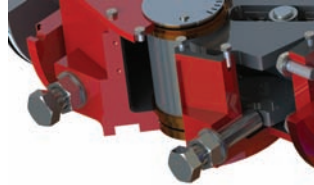


CONSTRUCTION



Guide Bar for Safety Increased

Two piston guide bars provided (Up & Down) preventing piston sag due to abrasion after long life cycle. Engineered plastic bush with long life durability and low abrasion characteristics enables smooth operation at low pressure.



Travel Stop / Adjustment And Indicator

Travel stop/adjustment can be set in the range of -5° ~ $+95^{\circ}$ of stroke ($\pm 5^{\circ}$). The travel stops are designed in the vertical position in order to bear great shock. Indicator with pointer and angle meter for easy determination of actuator position.



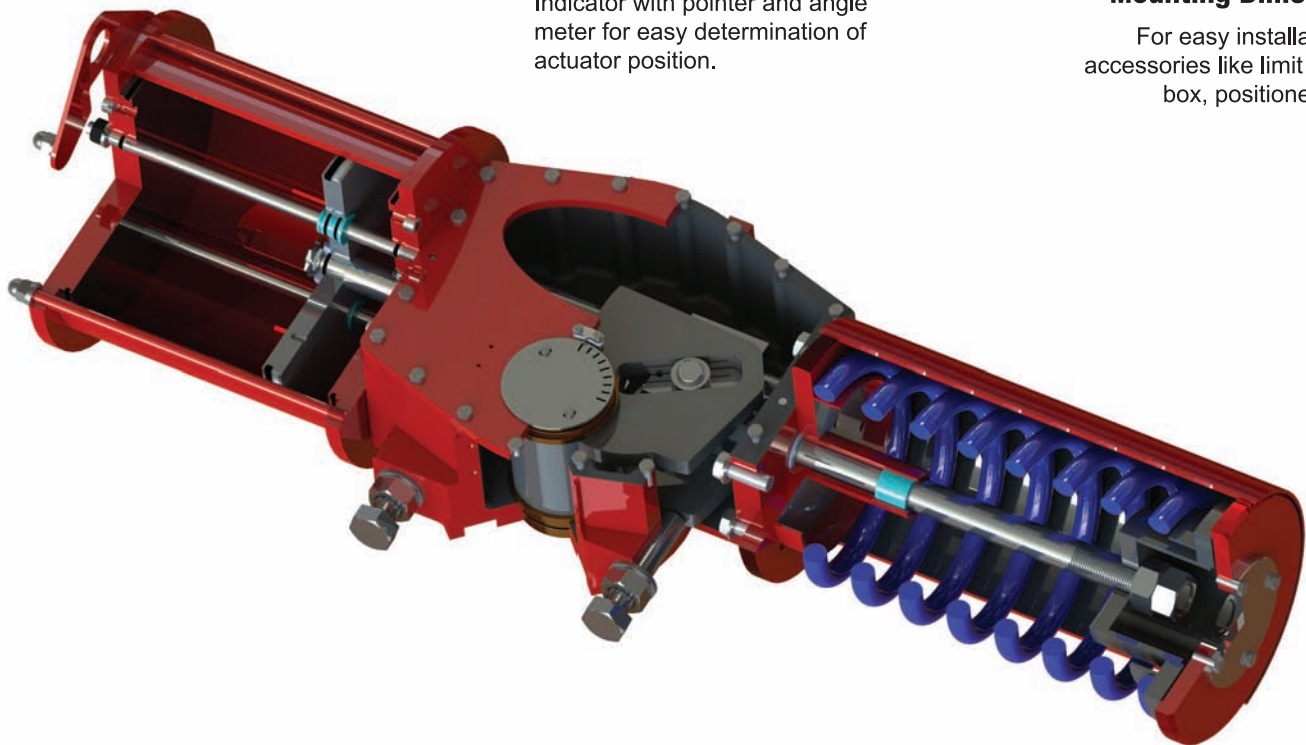
Piston Guide Ring

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



Standard NAMUR Mounting Dimension

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



Replaceable Bearing

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



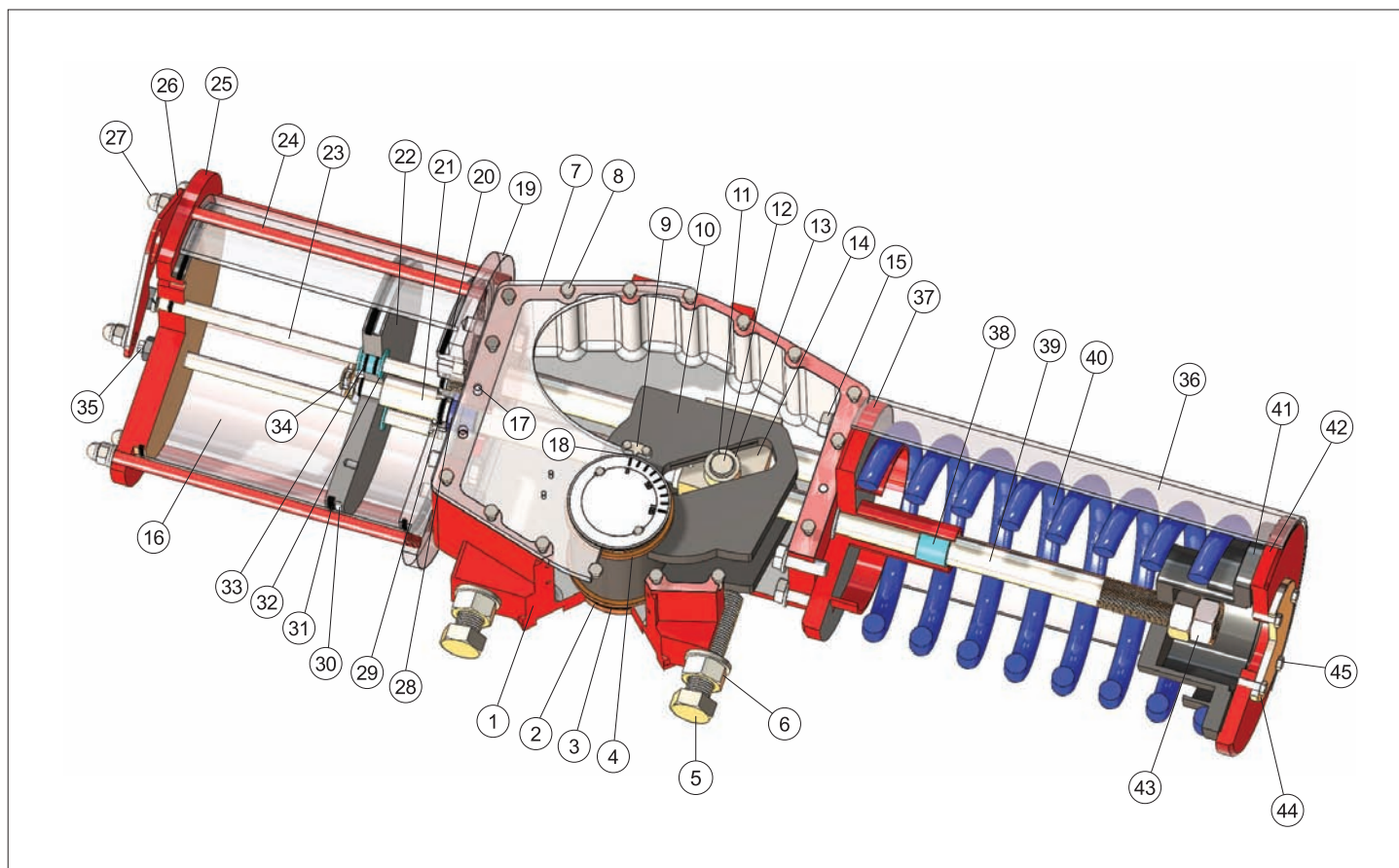
Spring Rod Guide

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

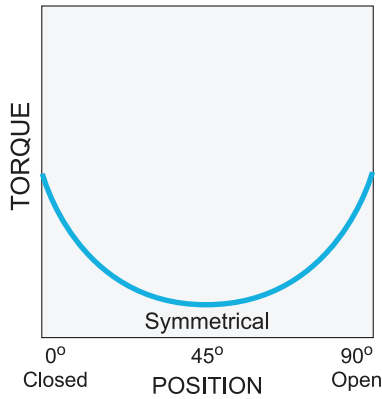


NO	DESCRIPTION	MATERIAL
1	BODY	A395
2	LOWER BUSHING	B139
3	O-RING	NBR
4	UPPER BUSHING	B139
5	STOPPER BOLT	CARBON STEEL
6	STOPPER NUT	CARBON STEEL
7	CENTER BODY COVER	A283
8	CENTER BODY COVER BOLT	CARBON STEEL
9	POINTER	A240
10	YOKE	CARBON STEEL
11	SNAP RING	CARBON STEEL
12	SLIDE PIN	CARBON STEEL
13	SLIDE ROLLER	CARBON STEEL
14	SLIDE BLOCK	CARBON STEEL
15	FRONT COVER BOLT	CARBON STEEL
16	CYLINDER	A53
17	COVER FIXING PIN	CARBON STEEL
18	POSITION INDICATOR	CARBON STEEL
19	CYLINDER FRONT COVER	CARBON STEEL
20	COVER O-RING	NBR
21	PISTON ROD	CARBON STEEL
22	PISTON	CARBON STEEL
23	PISTON GUIDE BAR	CARBON STEEL

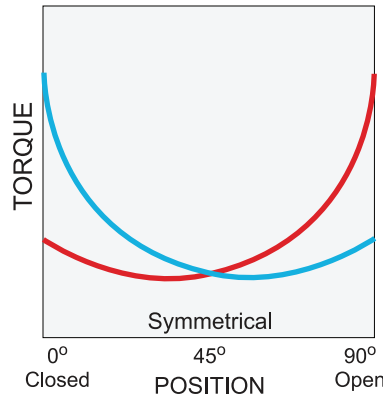
NO	DESCRIPTION	MATERIAL
24	TIE BOLT	CARBON STEEL
25	CYLINDER END COVER	CARBON STEEL
26	LIFTING LUG	CARBON STEEL
27	TIE BOLT NUT	CARBON STEEL
28	FRONT COVER BUSHING	ENGINEERING PLASTIC
29	O-RING	NBR
30	BACK-UP RING	PTFE
31	PISTON O-RING	NBR
32	PISTON GUIDE BUSHING	ENGINEERING PLASTIC
33	PISTON GUIDE BUSHING O-RING	NBR
34	PISTON LOCK BOLT	CARBON STEEL
35	PISTON GUIDE BAR NUT	CARBON STEEL
36	SPRING CASE	A120
37	SPRING CASE FRONT COVER	CARBON STEEL
38	SPRING ROD GUIDE BUSHING	ENGINEERING PLASTIC
39	SPRING ROD	CARBON STEEL
40	SPRING	CARBON STEEL
41	SPRING RETAINER	CARBON STEEL
42	SPRING CASE END COVER	CARBON STEEL
43	SPRING ROD LOCK NUT	CARBON STEEL
44	COVER	CARBON STEEL
45	COVER BOLT	CARBON STEEL

SYMMETRIC TECHNICAL DATA

Double Acting Actuator



Spring Return Actuator



Symmetric Yoke



Torque Curve — Air Torque — Spring Torque

Double Acting

Unit : Nm

MODEL	2.8 Bar			4.2 Bar			5.5 Bar			7 Bar		
	Start	Run	End	Start	Run	End	Start	Run	End	Start	Run	End
ISD 02-20	1,024	636	1,003	1,537	953	1,505	2,012	1,248	1,971	2,561	1,589	2,508
ISD 02-25	1,601	993	1,568	2,401	1,490	2,352	3,144	1,951	3,079	4,002	2,483	3,919
ISD 02-30	2,305	1,430	2,257	3,457	2,145	3,386	4,528	2,809	4,434	5,762	3,575	5,644
ISD 02-35	2,874	1,783	2,815	4,312	2,675	4,222	5,646	3,503	5,529	7,186	4,458	7,037
ISD 03-35	3,381	2,098	3,312	5,072	3,147	4,968	6,642	4,121	6,505	8,454	5,244	8,279
ISD 03-38	4,466	2,771	4,374	6,699	4,156	6,561	8,773	5,442	8,592	11,165	6,927	10,935
ISD 03-43	5,701	3,537	5,584	8,552	5,306	8,376	11,199	6,948	10,968	14,254	8,843	13,960
ISD 04-43	7,412	4,598	7,259	11,118	6,897	10,889	14,559	9,032	14,259	18,530	11,496	18,148
ISD 04-48	9,214	5,716	9,024	13,821	8,574	13,536	18,098	11,228	17,725	23,034	14,290	22,559
ISD 04-53	11,211	6,955	10,980	16,817	10,433	16,470	22,022	13,662	21,568	28,028	17,388	27,451
ISD 05-53	13,799	8,560	13,514	20,698	12,841	20,271	27,104	16,815	26,546	34,497	21,401	33,785
ISD 05-58	16,498	10,235	16,158	24,748	15,353	24,237	32,407	20,105	31,739	41,246	25,588	40,395
ISD 05-63	19,439	12,060	19,038	29,159	18,089	28,557	38,184	23,689	37,397	48,598	30,149	47,596
ISD 06-63	24,299	15,075	23,798	36,448	22,612	35,697	47,730	29,611	46,746	60,747	37,686	59,495
ISD 06-68	28,276	17,542	27,693	42,414	26,313	41,540	55,542	34,457	54,397	70,690	43,855	69,233
ISD 06-73	32,555	20,196	31,883	48,832	30,294	47,825	63,947	39,671	62,628	81,387	50,491	79,709

SYMMETRIC TECHNICAL DATA

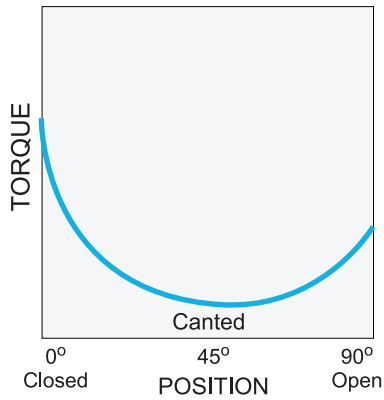
Spring Return (Fail closed or Fail open)

Unit : Nm

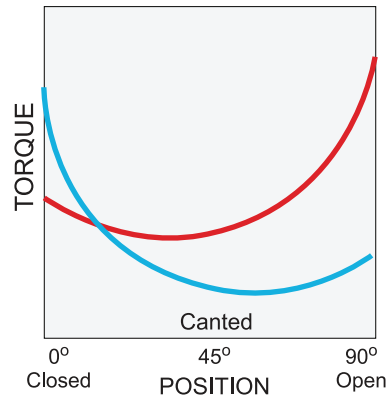
MODEL		Spring Torque			Air Torque : Air Supply Pressure											
					2.8 Bar			4.2 Bar			5.5 Bar			7 Bar		
		Start	Run	End	Start	Run	End	Start	Run	End	Start	Run	End	Start	Run	End
ISR 02-20	4.2 Bar	982	499	609	415	135	21	928	453	523	1,403	747	989			
	5.5 Bar	1,271	644	781				756	308	234	1,231	603	700	1,780	943	1,237
ISR 02-25	4.2 Bar	1,489	757	924	677	235	78	1,477	731	862	2,221	1,191	1,590			
	5.5 Bar	1,993	1,010	1,225				1,176	478	358	1,919	938	1,086	2,777	1,470	1,926
ISR 02-30	4.2 Bar	2,141	1,080	1,301	1,004	348	116	2,156	1,062	1,245	3,226	1,725	2,293			
	5.5 Bar	2,947	1,503	1,841				1,617	640	440	2,687	1,303	1,488	3,922	2,068	2,697
ISR 02-35	4.2 Bar	2,679	1,352	1,628	1,246	429	136	2,683	1,320	1,544	4,018	2,146	2,851			
	5.5 Bar	3,466	1,759	2,140				2,171	912	756	3,506	1,739	2,063	5,046	2,693	3,571
ISR 03-35	4.2 Bar	3,136	1,587	1,921	1,460	508	176	3,151	1,556	1,832	4,721	2,529	3,370			
	5.5 Bar	4,189	2,120	2,566				2,506	1,023	779	4,076	1,996	2,317	5,887	3,118	4,091
ISR 03-38	4.2 Bar	4,007	2,023	2,438	2,028	744	367	4,261	2,128	2,554	6,334	3,413	4,585			
	5.5 Bar	5,391	2,729	3,303				3,397	1,422	1,170	5,470	2,707	3,201	7,863	4,190	5,544
ISR 03-43	4.2 Bar	4,957	2,506	3,028	2,673	1,027	627	5,524	2,793	3,419	8,171	4,433	6,012			
	5.5 Bar	7,223	3,554	4,097				4,455	1,745	1,153	7,102	3,385	3,745	10,156	5,287	6,737
ISR 04-43	4.2 Bar	7,142	3,531	4,106	3,306	1,062	118	7,012	3,358	3,747	10,454	5,490	7,117			
	5.5 Bar	9,352	4,635	5,411				5,707	2,254	1,536	9,148	4,386	4,907	13,119	6,847	8,796
ISR 04-48	4.2 Bar	8,854	4,378	5,090	4,124	1,331	170	8,731	4,186	4,681	13,008	6,836	8,871			
	5.5 Bar	11,372	5,582	6,406				7,414	2,982	2,164	11,692	5,632	6,353	16,628	8,691	11,187
ISR 04-53	4.2 Bar	10,740	5,323	6,214	4,997	1,624	240	10,603	5,098	5,730	15,808	8,323	10,828			
	5.5 Bar	14,234	7,054	8,236				8,581	3,366	2,236	13,787	6,591	7,334	19,793	10,313	13,217
ISR 05-53	4.2 Bar	13,231	6,585	7,745	6,053	1,965	284	12,953	6,240	7,041	19,359	10,210	13,315			
	5.5 Bar	17,431	8,675	10,204				10,494	4,150	2,841	16,901	8,120	9,115	24,293	12,700	16,355
ISR 05-58	4.2 Bar	15,538	7,733	9,096	7,403	2,490	621	15,652	7,601	8,700	23,312	12,348	16,202			
	5.5 Bar	20,710	10,308	12,124				12,624	5,027	3,527	20,284	9,773	11,029	29,122	15,250	19,685
ISR 05-63	4.2 Bar	18,742	9,328	10,971	8,468	2,717	297	18,187	8,740	9,816	27,213	14,332	18,655			
	5.5 Bar	24,132	12,010	14,127				15,032	6,057	4,426	24,057	11,650	13,265	34,471	18,102	23,464
ISR 06-63	4.2 Bar	23,515	11,608	13,456	10,842	3,449	283	22,992	10,977	12,181	34,274	17,967	23,230			
	5.5 Bar	29,704	14,640	16,924				19,524	7,945	5,992	30,806	14,935	17,041	43,823	23,001	29,790
ISR 06-68	4.2 Bar	26,637	13,149	15,243	13,034	4,372	1,056	27,172	13,133	14,903	40,300	21,267	27,760			
	5.5 Bar	35,779	17,662	20,474				21,940	8,620	5,761	35,068	16,755	18,618	50,216	26,141	33,454
ISR 06-73	4.2 Bar	31,134	15,368	17,816	14,739	4,804	750	31,016	14,890	16,692	46,131	24,255	31,495			
	5.5 Bar	40,471	19,978	23,159				25,673	10,280	7,354	40,788	19,646	22,157	58,228	30,452	39,238

CANTED TECHNICAL DATA

Double Acting Actuator



Spring Return Actuator



Canted Yoke



Torque Curve — Air Torque — Spring Torque

Double Acting

Unit : Nm

MODEL	2.8 Bar			4.2 Bar			5.5 Bar			7 Bar		
	Start	Run	End	Start	Run	End	Start	Run	End	Start	Run	End
ICD 02-20	2,194	636	1,106	3,291	953	1,658	4,309	1,248	2,172	5,484	1,589	2,764
ICD 02-25	3,428	993	1,727	5,142	1,490	2,591	6,733	1,951	3,393	8,569	2,483	4,319
ICD 02-30	4,936	1,430	2,487	7,404	2,145	3,731	9,696	2,809	4,886	12,340	3,575	6,219
ICD 02-35	6,155	1,783	3,102	9,232	2,675	4,653	12,090	3,503	6,093	15,387	4,458	7,754
ICD 03-35	7,241	2,098	3,649	10,861	3,147	5,474	14,224	4,121	7,168	18,103	5,244	9,123
ICD 03-38	9,563	2,771	4,820	14,346	4,156	7,230	18,786	5,442	9,467	23,910	6,927	12,049
ICD 03-43	12,209	3,537	6,153	18,314	5,306	9,229	23,983	6,948	12,086	30,523	8,843	15,382
ICD 04-43	15,872	4,598	7,999	23,808	6,897	11,998	31,177	9,032	15,712	39,680	11,496	19,997
ICD 04-48	19,731	5,716	9,943	29,596	8,574	14,915	38,757	11,228	19,531	49,326	14,290	24,858
ICD 04-53	24,008	6,955	12,099	36,013	10,433	18,149	47,159	13,662	23,766	60,021	17,388	30,248
ICD 05-53	29,549	8,560	14,891	44,323	12,841	22,337	58,042	16,815	29,250	73,872	21,401	37,228
ICD 05-58	35,330	10,235	17,805	52,995	15,353	26,707	69,398	20,105	34,973	88,325	25,588	44,511
ICD 05-63	41,628	12,060	20,978	62,441	18,089	31,467	81,768	23,689	41,207	104,069	30,149	52,445
ICD 06-63	52,034	15,075	26,223	78,052	22,612	39,334	102,210	29,611	51,509	130,086	37,686	65,557
ICD 06-68	60,551	17,542	30,515	90,827	26,313	45,772	118,940	34,457	59,940	151,379	43,855	76,287
ICD 06-73	69,714	20,196	35,132	104,571	30,294	52,698	136,938	39,671	69,009	174,284	50,491	87,830

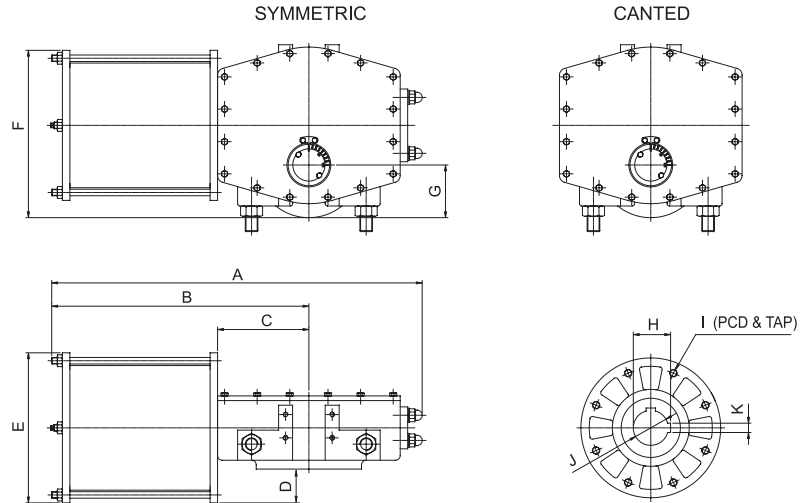
Spring Return (Fail closed or Fail open)

Unit : Nm

MODEL		Spring Torque			Air Torque : Air Supply Pressure											
					2.8 Bar			4.2 Bar			5.5 Bar			7 Bar		
		Start	Run	End	Start	Run	End	Start	Run	End	Start	Run	End	Start	Run	End
ICR 02-20	4.2 Bar	864	459	601	1,591	176	240	2,686	493	792	3,703	788	1,305			
	5.5 Bar	1,122	595	776				2,511	358	534	3,528	652	1,047	4,702	992	1,638
ICR 02-25	4.2 Bar	1,349	713	927	2,497	279	376	4,208	774	1,239	5,798	1,235	2,040			
	5.5 Bar	1,780	942	1,227				3,909	546	808	5,498	1,006	1,609	7,332	1,538	2,533
ICR 02-30	4.2 Bar	1,962	1,035	1,341	3,589	393	523	6,054	1,107	1,765	8,343	1,770	2,918			
	5.5 Bar	2,730	1,445	1,882				5,513	698	996	7,802	1,361	2,150	10,443	2,126	3,481
ICR 02-35	4.2 Bar	2,408	1,247	1,561	4,587	534	690	7,660	1,425	2,239	10,515	2,252	3,677			
	5.5 Bar	3,320	1,750	2,262				6,959	922	1,327	9,813	1,749	2,765	13,107	2,703	4,425
ICR 03-35	4.2 Bar	2,867	1,512	1,960	5,273	583	778	8,889	1,630	2,600	12,247	2,603	4,293			
	5.5 Bar	3,976	2,098	2,718				8,130	1,045	1,491	11,488	2,018	3,183	15,363	3,140	5,136
ICR 03-38	4.2 Bar	3,850	1,973	2,425	7,127	794	963	11,903	2,178	3,370	16,338	3,463	5,605			
	5.5 Bar	5,010	2,643	3,425				10,904	1,508	2,211	15,339	2,793	4,446	20,456	4,275	7,024
ICR 03-43	4.2 Bar	4,632	2,437	3,143	9,051	1,096	1,514	15,149	2,862	4,587	20,810	4,502	7,440			
	5.5 Bar	6,450	3,403	4,409				13,883	1,896	2,768	19,544	3,536	5,621	26,077	5,429	8,913
ICR 04-43	4.2 Bar	6,444	3,327	4,145	11,708	1,266	1,545	19,634	3,562	5,539	26,995	5,695	9,249			
	5.5 Bar	8,332	4,301	5,359				18,420	2,588	3,652	25,781	4,720	7,361	34,273	7,181	11,641
ICR 04-48	4.2 Bar	8,043	4,152	5,174	14,533	1,557	1,888	24,387	4,412	6,854	33,536	7,062	11,465			
	5.5 Bar	10,594	5,469	6,815				22,746	3,095	4,303	31,895	5,745	8,914	42,452	8,804	14,234
ICR 04-53	4.2 Bar	9,693	5,004	6,235	17,745	1,943	2,392	29,735	5,417	8,434	40,868	8,642	14,045			
	5.5 Bar	12,548	6,478	8,071				27,898	3,943	5,579	39,032	7,168	11,190	51,878	10,890	17,664
ICR 05-53	4.2 Bar	11,982	6,213	7,084	21,709	2,337	2,891	36,466	6,612	10,328	50,169	10,582	17,233			
	5.5 Bar	15,883	8,235	10,345				33,926	4,590	6,427	47,628	8,560	13,332	63,439	13,140	21,300
ICR 05-58	4.2 Bar	13,758	7,133	8,960	26,327	3,089	4,025	43,971	8,201	12,917	60,355	12,947	21,173			
	5.5 Bar	19,371	10,044	12,616				40,315	5,290	7,304	56,699	10,037	15,560	75,603	15,513	25,087
ICR 05-63	4.2 Bar	16,640	8,628	10,838	30,740	3,417	4,313	51,529	9,440	14,789	70,833	15,032	24,518			
	5.5 Bar	21,694	11,232	14,069				48,297	6,836	9,735	67,601	12,429	19,464	89,875	18,881	30,688
ICR 06-63	4.2 Bar	20,018	10,292	12,727	39,245	4,764	6,173	65,231	12,293	19,268	89,361	19,283	31,429			
	5.5 Bar	27,853	14,028	16,670				61,288	8,556	11,434	85,418	15,547	23,594	113,260	23,613	37,625
ICR 06-68	4.2 Bar	24,490	12,591	15,570	44,909	4,930	5,988	75,149	13,690	21,227	103,228	21,825	35,377			
	5.5 Bar	32,477	16,357	19,437				71,281	9,924	13,240	99,360	18,059	27,391	131,760	27,445	43,718
ICR 06-73	4.2 Bar	27,638	14,209	17,571	52,059	5,963	7,452	86,874	16,049	24,997	119,203	25,414	41,289			
	5.5 Bar	36,756	18,512	21,998				82,447	11,746	15,879	114,775	21,111	32,171	152,077	31,918	50,969

DIMENSION

< DOUBLE ACTING >

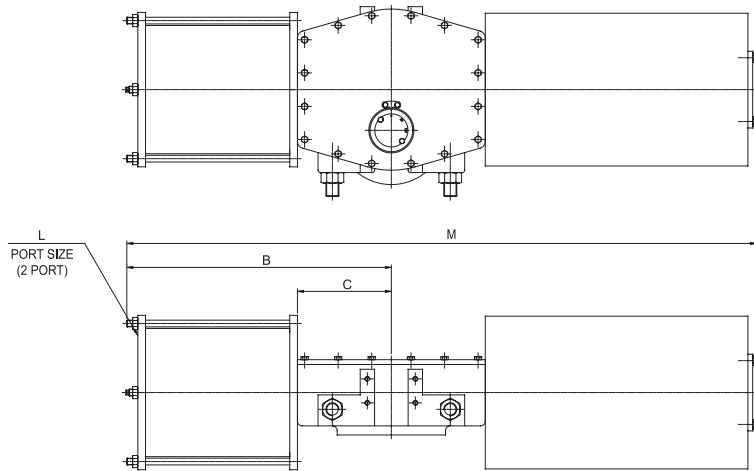


Symmetric IS Series Dimension

MODEL	A	B	C	D	E	F	G
ISD 02-20 (ISR)	755	516	196	48	272	370	145
ISD 02-25 (ISR)	755	516	196	73	322	395	145
ISD 02-30 (ISR)	755	516	196	98	373	420	145
ISD 02-35 (ISR)	755	516	196	117	410	445	145
ISD 03-35 (ISR)	935	653	236	92	410	490	175
ISD 03-38 (ISR)	935	653	236	118	461	505	175
ISD 03-43 (ISR)	935	653	236	143	512	530	175
ISD 04-43 (ISR)	1105	763	287	128	514	640	190
ISD 04-48 (ISR)	1105	763	287	153	564	657	190
ISD 04-53 (ISR)	1105	763	287	184	625	682	190
ISD 05-53 (ISR)	1310	904	343	157	625	710	230
ISD 05-58 (ISR)	1310	904	343	183	675	732	230
ISD 05-63 (ISR)	1310	904	343	210	730	760	230
ISD 06-63 (ISR)	1610	1124	415	192	745	830	260
ISD 06-68 (ISR)	1610	1124	415	217	795	850	260
ISD 06-73 (ISR)	1610	1124	415	243	847	875	260

Canted IC Series Dimension

MODEL	A	B	C	D	E	F	G
ICD 02-20 (ICR)	800	516	196	48	272	370	145
ICD 02-25 (ICR)	800	516	196	73	322	395	145
ICD 02-30 (ICR)	800	516	196	98	373	420	145
ICD 02-35 (ICR)	800	516	196	117	410	445	145
ICD 03-35 (ICR)	985	653	236	92	410	490	175
ICD 03-38 (ICR)	985	653	236	118	461	505	175
ICD 03-43 (ICR)	985	653	236	143	512	530	175
ICD 04-43 (ICR)	1215	763	295	128	514	640	205
ICD 04-48 (ICR)	1215	763	295	153	564	657	205
ICD 04-53 (ICR)	1215	763	295	184	625	682	205
ICD 05-53 (ICR)	1435	904	345	157	625	710	240
ICD 05-58 (ICR)	1435	904	345	183	675	732	240
ICD 05-63 (ICR)	1435	904	345	210	730	760	240
ICD 06-63 (ICR)	1710	1124	415	192	745	830	260
ICD 06-68 (ICR)	1710	1124	415	217	795	850	260
ICD 06-73 (ICR)	1710	1124	415	243	847	875	260



< SPRING RETURN >



H	I		J		K	L	M	
	PCD	TAP/DP	DIA	DP			4.2 Bar	5.5 Bar
54	165	M20/25	50	156	14	1/2" NPT	1280	1280
54	165	M20/25	50	156	14	1/2" NPT	1280	1280
54	165	M20/25	50	156	14	1/2" NPT	1280	1280
54	165	M20/25	50	156	14	1/2" NPT	1280	1280
80/85	254	M16/27	75/80	204	20	1/2" NPT	1475	1475
80/85	254	M16/27	75/80	204	20	1/2" NPT	1475	1475
80/85	254	M16/27	75/80	204	20	1/2" NPT	1475	1475
95.4/105.4	298	M20/34	90/100	234	22	3/4" NPT	1860	1860
95.4/105.4	298	M20/34	90/100	234	22	3/4" NPT	1860	1860
95.4/105.4	298	M20/34	90/100	234	22	3/4" NPT	1860	1860
117.4/127.4/137.4	356	M30/43	110/120/130	279	32	3/4" NPT	2240	2240
117.4/127.4/137.4	356	M30/43	110/120/130	279	32	3/4" NPT	2240	2240
117.4/127.4/137.4	356	M30/43	110/120/130	279	32	3/4" NPT	2240	2240
137.4/147.4/157.4	406	M36/53	130/140/150	326	32	3/4" NPT	2695	2695
137.4/147.4/157.4	406	M36/53	130/140/150	326	32	3/4" NPT	2695	2695
137.4/147.4/157.4	406	M36/53	130/140/150	326	32	3/4" NPT	2695	2695

H	I		J		K	L	M	
	PCD	TAP/DP	DIA	DP			4.2 Bar	5.5 Bar
54	165	M20/25	50	156	14	1/2" NPT	1325	1325
54	165	M20/25	50	156	14	1/2" NPT	1325	1325
54	165	M20/25	50	156	14	1/2" NPT	1325	1325
54	165	M20/25	50	156	14	1/2" NPT	1325	1325
80/85	254	M16/27	75/80	204	20	1/2" NPT	1510	1510
80/85	254	M16/27	75/80	204	20	1/2" NPT	1510	1510
80/85	254	M16/27	75/80	204	20	1/2" NPT	1510	1510
95.4/105.4	298	M20/34	90/100	234	22	3/4" NPT	1935	1935
95.4/105.4	298	M20/34	90/100	234	22	3/4" NPT	1935	1935
95.4/105.4	298	M20/34	90/100	234	22	3/4" NPT	1935	1935
117.4/127.4/137.4	356	M30/43	110/120/130	279	32	3/4" NPT	2320	2320
117.4/127.4/137.4	356	M30/43	110/120/130	279	32	3/4" NPT	2320	2320
117.4/127.4/137.4	356	M30/43	110/120/130	279	32	3/4" NPT	2320	2320
137.4/147.4/157.4	406	M36/53	130/140/150	326	32	3/4" NPT	2750	2750
137.4/147.4/157.4	406	M36/53	130/140/150	326	32	3/4" NPT	2750	2750
137.4/147.4/157.4	406	M36/53	130/140/150	326	32	3/4" NPT	2750	2750

The details of this catalog are subject to change without prior notification.

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