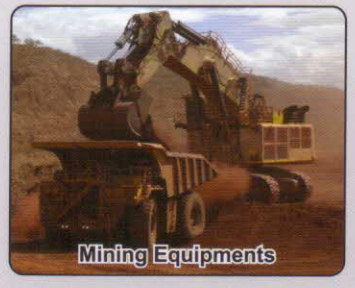
INSAP ENGINEERS PVT. LTD.

QUALITY SYSTEM CERTIFICATION
DNV·GL
ISO 9001:2015

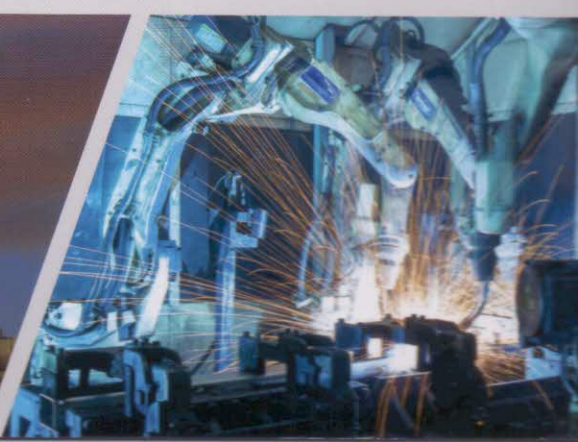
SAFE & RELIABLE FLUID / GAS PASSAGE WITH COMPLETE SOLUTION

CATALOGUE



Experts in Hydraulics, Pneumatics, Utility Services, Gas Cylinder Filling with all International Standards, Chemical Loading & Unloading, Tyre Industries Needs, Aeronatics, Space, Nuclear, Automobile, Earthmoving & Construction, Steel, Cement, Etc.,

Gas cylinder filling hose assemblies provided with safety arrangements to customers' requirements and international standards.



LOW / MEDIUM / HIGH PRESSURE HYDRAULIC APPLICATION HOSES...

EN 853 1SN / SAE100 R1 AT.

Construction :
Tube – NBR Synthetic Rubber.
Reinforcement – One braid steel wire.
Cover – NBR-PVC Synthetic Rubber.
Temp. – 40 to 100° C

Part Number	Hose ID		Hose OD	Working Pressure		Minimum Bend Radius		Approximately Weight		Type of End Fittings
	Inch.	mm	mm	psi	Bar	Inch.	mm	Lbs/Ft.	Kg/m	
INS-R1-6	1/4	6.4	13.4	3250	225	2.0	50	0.15	0.23	METRIC
INS-R1-8	5/16	7.9	16.0	3125	215	2.3	58	0.18	1.27	UNF
INS-R1-10	3/8	9.5	17.4	2600	180	2.5	65	0.22	0.33	BSP / BSPT
INS-R1-12	1/2	12.7	20.7	2325	160	3.5	90	0.30	0.44	NPT / NPS
INS-R1-16	5/8	15.9	23.9	1875	130	4.0	100	0.34	0.50	JIS
INS-R1-20	3/4	19.0	27.8	1525	105	4.8	120	0.46	0.68	ORFS
INS-R1-25	1	25.4	35.8	1275	88	6.0	150	0.63	0.94	KES
INS-R1-32	1.1/4	31.8	44.8	900	63	16.5	420	0.97	1.44	SAE J518
INS-R1-38	1.1/2	38.1	51.0	725	50	20.0	500	1.07	1.59	ANSI
INS-R1-50	2	50.8	64.5	575	40	25.0	630	1.51	2.25	BS / DIN
INS-R1-65	2.1/2	63.5	77.5	362	25	30.0	762	1.86	2.77	ACME
INS-R1-80	3	76.2	94.4	290	20	36.0	915	2.59	3.85	CUSTOMER
INS-R1-100	4	101.6	117.0	145	10	43.5	1005	3.09	4.60	STDs.

EN 853 2SN / SAE100 R2 AT.

Construction :
Tube – NBR Synthetic Rubber.
Reinforcement – Two braid steel wire.
Cover – NBR-PVC Synthetic Rubber.
Temp. – 40 to 100° C

Part Number	Hose ID		Hose OD	Working Pressure		Minimum Bend Radius		Approximately Weight		Type of End Fittings
	Inch.	mm	mm	psi	Bar	Inch.	mm	Lbs/Ft.	Kg/m	
INS-R2-6	1/4	6.4	15.0	5800	400	2.0	50	0.26	0.39	METRIC
INS-R2-8	5/16	7.9	16.6	5000	350	2.2	58	0.29	0.43	UNF
INS-R2-10	3/8	9.5	19.0	4775	330	2.5	65	0.36	0.53	BSP / BSPT
INS-R2-12	1/2	12.7	22.3	4000	275	3.5	90	0.42	0.63	NPT / NPS
INS-R2-16	5/8	15.9	25.5	3600	250	4.0	100	0.50	0.73	JIS
INS-R2-20	3/4	19.0	29.4	3100	215	4.8	120	0.64	0.95	ORFS
INS-R2-25	1	25.4	38.1	2400	165	6.0	150	0.91	1.35	KES
INS-R2-32	1.1/4	31.8	47.5	1800	125	16.5	420	1.52	2.26	SAE J518
INS-R2-38	1.1/2	38.1	54.5	1300	90	20.0	500	1.58	2.35	ANSI
INS-R2-50	2	50.8	67.2	1115	80	25.0	630	1.96	2.92	BS / DIN
INS-R2-65	2.1/2	63.5	82.5	1000	69	30.0	762	2.81	4.18	ACME
INS-R2-80	3	76.2	96.0	650	45	36.0	915	3.18	4.75	CUSTOMER
INS-R2-100	4	101.6	118.5	365	25	43.5	1005	3.56	5.30	STDs.

EN 854 R3 / SAE 100 R3

Construction :
Tube – NBR Synthetic Rubber.
Reinforcement – Two fibre brads.
Cover – NBR-PVC Synthetic Rubber.
Temp. – 40 to 100° C

Part Number	Hose ID		Hose OD	Working Pressure		Minimum Bend Radius		Approximately Weight		Type of End Fittings
	Inch.	mm	mm	psi	Bar	Inch.	mm	Lbs/Ft.	Kg/m	
INS-R3-6	1/4	6.4	14.3	1250	86	3.0	75	0.11	0.17	METRIC
INS-R3-8	5/16	7.9	17.5	1200	83	4.0	100	0.16	0.24	UNF
INS-R3-10	3/8	9.5	19.0	1125	78	4.0	100	0.19	0.28	BSP / BSPT
INS-R3-12	1/2	12.7	23.8	1000	69	4.9	125	0.32	0.47	NPT / NPS
INS-R3-16	5/8	15.9	27.0	875	60	5.5	140	0.37	0.55	JIS
INS-R3-20	3/4	19.0	31.8	750	52	5.9	150	0.42	0.63	ORFS
INS-R3-25	1	25.4	38.1	565	39	8.0	205	0.57	0.85	KES
INS-R3-32	1.1/4	31.8	44.5	375	26	9.8	250	0.74	1.10	SAE J518
INS-R3-38	1.1/2	38.1	50.8	250	17	12.0	306	0.82	1.22	ANSI
INS-R3-50	2	50.8	64.0	215	15	16.1	410	0.91	1.35	BS / DIN
										ACME
										CUSTOMER
										STDs.

EN 100 R4

Construction :
Tube – NBR Synthetic Rubber.
Reinforcement – Multiple layers of fibre briads and one helical wire.
Cover – NBR-PVC Synthetic Rubber.
Temp. – 40 to 100° C

Part Number	Hose ID		Hose OD	Working Pressure		Minimum Bend Radius		Approximately Weight		Type of End Fittings
	Inch.	mm	mm	psi	Bar	Inch.	mm	Lbs/Ft.	Kg/m	
INS-R4-20	3/4	19.0	29.0	305	21	2.5	40	0.32	0.49	METRIC
INS-R4-25	1	25.4	35.0	250	17	3.0	55	0.42	0.62	UNF
INS-R4-32	1.1/4	31.8	42.0	205	14	3.0	70	0.53	0.79	BSP / BSPT
INS-R4-38	1.1/2	38.1	50.0	145	10	3.9	80	0.75	1.12	NPT / NPS
INS-R4-50	2	50.8	62.0	145	10	4.9	100	0.89	1.33	JIS
INS-R4-65	2.1/2	63.5	75.0	145	10	5.9	170	1.21	1.80	ORFS
INS-R4-80	3	76.2	88.0	145	10	9.1	225	1.45	2.15	KES
INS-R4-100	4	101.6	118	145	10	20.1	510	2.50	3.70	SAE J518
										ANSI
										BS / DIN
										ACME
										CUSTOMER
										STDs.

Remarks : High Temperature EN853 1SN / SAE 100R1 AT & EN853 2SN / SAE 100R2 AT hoses are also available (Temperature Range - 40 to 135° C)