## भारतीय मानक ब्यूरो

## Bureau of Indian Standards <u>PRODUCTION AND GENERAL ENGINEERING DEPARTMENT</u>

#### हमारे संदर्भ: पीजीडी 36/reaffirmation

13.12.2018

13.12.2018

Our Ref. PGD 36/reaffirmation

Subject: Reaffirmation of Indian Standards pertaining to Fluid Power Systems Sectional Committee, PGD 36

### विषय: भारतीय मानक की पन्:पृष्टि तरल शक्ति सयन्त्र विषय समिति, पीजीडी 36

The Indian Standards given in Annex I, have been reaffirmed by the Fluid Power Systems Sectional Committee, PGD 36 in its third meeting held on 26 November 2018 for a period of 5 years.

अनुबंध 1 में दिये गये भारतीय मानक की पनु:पुष्टि तरल शक्ति सयन्त्र विषय समिति, पीजीडी 36 के द्वारा अपने नियत तारीख से आगामी पांच वर्ष की अवधि के लिए नवम्बर 2018 में की

#### गई है|

Director (Sales)/DPT/Director (Library) may please take suitable action for affirming the year of reaffirmation to the above mentioned standards.

उपरोक्त भारतीय मानको के साल की पनु: पुष्टि के लिये उचित कार्यवाही हेतु निदेशक (बिक्री)/डीपीटी/डी (पीयूबी)/डीएलससी को प्रेषित किया जा रहा है |

> Sd/-(ए रंगराजन/ A Rengarajan) वैगननिक इ /Sc-E & प्रमुख (पीजीडी) Head (PGD)

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# Annex- I

List of Standards reaffirmed in third meeting of Fluid Power Systems Sectional Committee, PGD 36 held on 26.11.2018

Note: Standards @ Sl No 10, 11, 14, 15, and 16 are revised and published in 2018.

S.No	Document	Document Title
	Number	
1.	IS/ISO 3939 :	Fluid Power Systems and Components - Multiple Lip Packing Sets -
	1977	Methods for Measuring Stack Heights
2.	IS 5108 : 1969	Recommendation on nominal rates of flow for oil-hydraulic system
		elements
3.	IS 5109 : 1969	Recommendation on nominal bores for oil-hydraulic system elements
4.	IS 7513 : 1974	Graphical symbols for fluid power systems
5.	IS 7513 : Part 2	Fluid Power Systems and Components Graphic Symbols and Circuit
	: 2002	Diagrams - Part 2 : Circuit Diagrams
6.	IS 8801 : 1978	Male Stud Coupling Body for Oil-hydraulic Couplings
7.	IS 8802 : 1987	Specification for Ferrules for oil hydraulic couplings (First Revision)
8.	IS 8803 : 1987	Coupling nuts for oil hydraulic system
9.	IS 8805 : 2002	General Requirements for Ferrule Type Couplings Used in Oil Hydraulic
		Systems
10.	<b>IS 9387 : Part 1</b>	Specification for Taper Male Stud Elbow Body for Oil- Hydraulic
	: 1979	Couplings - Part I : Made from Forgings
11.	IS 9387 : Part 2	Specification for Taper Male Stud Elbow Body for Oil-hydraulic
	: 1979	Couplings - Part II : Made From Bar Stock
12.	IS 9388 : Part 1	Specification for Equal Elbow Body for Oil-hydraulic Couplings - Part I :
	: 1979	Made from Forgings
13.	IS 9388 : Part 2	Specification for Equal Elbow Body for Oil-hydraulic Couplings - Part 2 :
	: 1979	Made from Bar Stock
14.	<b>IS 9389 : Part 1</b>	Specification for Equal Tee Body for Oil-hydraulic Couplings - Part I :
	: 1979	Tee Body Made from Forgings
15.	IS 9389 : Part 2	Specification for Equal Tee Body for Oil-hydraulic Couplings - Part II
	: 1979	: Made from Bar Stock
16.	IS 9390 : 1980	Specification for Straight Coupling Body for Oil-hydraulic Couplings
17.	IS 9391 : 1980	Specification for Straight Coupling Assemblies for Oil-hydraulic Systems
18.	IS 9392 : 1980	Specification for Taper Male Stud Coupling Body for Oil-Hydraulic
		Couplings
19.	IS 9411 : 1980	Specification for Elbow Coupling Assemblies for Oil-hydraulic Systems
20.	IS 9412 : Part 1	Specification for Male Stud Elbow Body for Oil-hydraulic Couplings - Part
	: 1980	I : Made From Forgings
21.	IS 9412 : Part 2	Specification for Male Stud Elbow Body for Oil-Hydraulic Couplings -
-	: 1980	Part II : Made From Bar Stock
22.		Specification for Taper Male Stud Tee Body (Stud Branch) for Oil-
22.	IS 9724 : Part 1	Specification for Taper Male Stud Tee Body (Stud Branch) for Oil- hydraulic Couplings - Part I : Made from Forgings
22. 23.		Specification for Taper Male Stud Tee Body (Stud Branch) for Oil- hydraulic Couplings - Part I : Made from Forgings Specification for Taper Male Stud Tee Body (Stud Branch) for Oil-

24.	IS 9725 : Part 1	Specification for Male Stud Tee Body (Stud Branch) for Oil-hydraulic
	: 1981	Couplings - Part I : Made from Forgings
25.	IS 9725 : Part 2	Specification For Male Stud Tee Body (Stud Branch) for Oil-hydraulic
	: 1981	Couplings - Part II : Made from Bar Stock
26.	IS 9746 : Part 1	Specification for Equal Cross Body for Oil-hydraulic Coupling - Part I :
	: 1983	Made from Forgings
27.	IS 9746 : Part 2	Specification for Equal Cross Body for Oil-hydraulic Couplings - Part II :
	: 1981	Made from Bar Stock
28.	IS 9757 : Part 1	Specification for Bulkhead Elbow Body for Oil-Hydraulic Couplings - Part
	: 1981	I : Made from Forgings
29.	IS 9757 : Part 2	Bulkhead Elbow Body for Oil-Hydraulic Couplings - Part II : Made from
	: 1983	Bar Stock
30.	IS 9767 : 1981	Specification for Tee Coupling Assemblies for Oil-Hydraulic Systems
31.	IS 9768 : 1995	Bulkhead Straight Body for Oil-hydraulic Couplings - Specification
32.	IS 9769 : 1981	Bulkhead straight coupling assembly for oil hydraulic systems
33.	IS 9770 : 1981	Specification for Bulkhead elbow coupling assembly for oil hydraulic
		systems
34.	IS 10410 : 1983	Lock Nuts for Bulk Head Coupling Assembly for Oil-hydraulic Systems
35.	IS 10411 : 1983	Recommendations on nominal strokes for fluid power cylinder
36.	IS 10416 : 1992	Fluid Power Systems and Components - Vocabulary (First Revision)
37.	IS 10417 : 1983	Equal Cross Coupling Assembly for Oil- Hydraulic Systems
38.	IS 10433 : Part	Specification for Male Stud Tee Body (Stud Run) for Oil- Hydraulic
	1:1983	Coupling - Part I : Made from Forgings
39.	IS 10433 : Part	Male Stud Tee Body (Stud Run) for Oil-Hydraulic Couplings - Part 2 :
4.0	2:2002	Made from Bar Stock - Specification (First Revision)
40.	IS 10453 : Part	Taper Male Stud Tee Body (Stud Run) for Oil-Hydraulic Couplings - Part
4.1	2:1983	II : Made from Bar Stock
41.	IS 10480 : 1983	Specification for Stud Run Tee Coupling Assemblies for Oil-Hydraulic Systems
42.	IS 10481 : 2002	Hydraulic Fluid Power - General Rules Relating to Systems (First
12.	15 10 101 . 2002	Revision)
43.	IS 10585 : 2002	Method of Test for Cylinders for Oil Hydraulic Systems (First Revision)
44.	IS 11146 : 1999	Hydraulic Fluid Power - Cylinders - Bore and Rod Area Ratios (First
	10 111 10 11///	Revision
45.	IS 11337 : 2002	Specification for Purchase Hydraulic Cylinders (First Revision)
46.	IS 12092 : 1987	Method of Test for Hose Assemblies Used in Hydraulic Fluid Power
		Systems
47.	IS 12096 : 1987	Hexagon Socket Screw Plugs with Parallel Screw Threads for Fluid Power
		System
48.	IS 12116 : Part 1	Hexagon Head Taper Plugs for Oil Hydraulic Systems - Part 1 : Made from
	: 1987	Forgings
49.	IS 12498 : 1988	Method of Test for Evaluation of Performance of Air Pressure Regulators
50.	IS 12597 : 1988	Recommendation on Units for Fluid Power System
51.	IS 12723 : 1988	Pneumatic fluid power - Single rod cylinder - 1000 kPa (10 bar) series -
		Bores from 8 mm to 25 mm - Mounting dimensions

52.	IS 12725 : 2002	Pneumatic Fluid Power - General Rules Relating to Systems (First
		Revision)
53.	IS 13053 : 1991	Hydraulic fluid power system - Commissioning and maintenance of
		complete hydraulic systems - Recommendations
54.	IS 13085 : 1991	Hydraulic fluid power - Single rod cylinders, 160 bar (16 MPa) - Medium
		series - Port dimensions
55.	IS 13102 : 1991	Hydraulic fluid power - Single rod cylinders, 250 bar (25 MPa) series -
		Port dimensions
56.	IS 13251 : 1992	Hydraulic Fluid Power - Single Rod Cylinders, 160 Bar (16 MPa) Medium
		and 250 Bar (25 MPa) Series - Mounting Dimensions for Accessories
57.	IS 13336 : 1992	Reducer Coupling Assemblies for Oil Hydraulic System - Specification
58.	IS 13337 : 1992	Straight Reducer Coupling Body for Oil Hydraulic System - Specification
59.	IS 13338 : 1992	Hexagonal Head Screw Plugs with Shoulder and Parallel Screw Threads -
		Specification
60.	IS 13533 : 1992	Fluid power cylinders - Piston rod thread dimensions and types
61.	IS 13569 : 1993	Hydraulic fluid power - Fluid sample containers - Qualifying and
		controlling cleaning methods
62.	IS 13570 : 2000	Hydraulic Fluid Power - Particulate Contamination Analysis - Extraction of
		Fluid Samples from Lines of an Operating System (First Revision)
63.	IS 13571 : 1992	Hydraulic Fluid Power - Calibration of Automatic Count Instruments for
		Particles Suspended in Liquids - Method Using Classified Ac Fine Dust
		Contaminant
64.	IS 13614 : Part	Hydraulic Fluid Power - Quick Action Coupling - Part 1 Dimensions and
	1:1995	Requirements
65.	IS 13614 : Part	Hydraulic Fluid Power - Quick Action Couplings - Part 2 Test Methods
	2:1993	
66.	IS 13617 : 1992	Evaluation of Pressure Drop Versus Flow Characteristics of Pneumatic
		Filters - Method Of Test
67.	IS 13876 : Part	Guide for marking system for fluid power components - Part 1 Cylinders
	1:1993	
68.	IS 13876 : Part	Guide for marking system for fluid power components - Part 2 Valves
10	2:1993	
69.	IS 13876 : Part	Guide for marking systems for fluid power components - Part 3 Pumps and
	3:1993	motors
70.	IS 14423 : 1997	Fluid power systems and components - connectors and associated
71	10 14500 1000	components - Nominal pressures
71.	IS 14528 : 1998	Tube end Straight Reducers for Oil-hydraulic Couplings
72.	IS 14602 : 1999	Installation methods of positive displacement hydraulic pumps and motors
70	10 14 60 4 1000	- Guidelines
73.	IS 14604 : 1998	Proforma for purchase specification for positive displacement pumps and
74	IC 14075 . 2000	motors used in oil hydraulic systems
74.	IS 14875 : 2000	Compressed Air Filters - Evaluation Parameters
75.	IS 14876 : 2000	Compressed Air Lubricators - Evaluation Parameters
76.	IS 15045 : Part	Pneumatic Fluid Power - Five Port Directional Control Valves - Part 1
	1:2001	Mounting Interface Surfaces Without Electrical Connector

77.	IS 15045 : Part	Pneumatic Fluid Power - Five Port Directional Control Valves - Part 2 :
	2:2001	Mounting Interface Surface with Optical Electrical Connector
78.	IS 15045 : Part	Pneumatic Fluid Power - Five Port Directional Control Valves - Part 3 :
	3:2001	Code System for Communication of Valve Functions
79.	IS 15097 : 2002	Pneumatic Fluid Power - Cylindrical Quick-Action Couplings for
		Maximum Working Pressures of 10 bar, 16 bar and 25 bar (1 Mpa, 1.6 Mpa
		and 2.5 Mpa) - Plug Connecting Dimensions, Specifications, Application
		Guidelines
80.	IS 15168 : 2002	Fluid Power Systems and Components - Cylinders - Identification Code for
		Mounting Dimensions and Mounting Types
81.	IS 15178 : 2002	Hydraulic Fluid Power - Fire-Resistant (FR) Fluids - Guidelines For Use
82.	IS 15179 : 2002	Hydraulic Fluid Power Compatibility Between Elastomeric Material and
		Fluids
83.	IS 15181 : Part	Hydraulic Fluid Power - Measurement Techniques - Part 1 : General
	1:2002	Measurement Principles
84.	IS 15181 : Part	Hydraulic Fluid Power Measurement Techniques - Part 2 :
	2:2002	Measurements of Average Steady-State Pressure in Closed Conduit
85.	IS 15276 : 2002	Metallic Tube Connections for Fluid Power and General Use 24° Cone
		Connectors with O-Ring Weld-On Nipples
86.	IS 15277 : 2002	Metallic Tube Connections for Fluid Power and General Use Test Methods
		for Threaded Hydraulic Fluid Power Connections
87.	IS 15331 : 2003	Pneumatic Fluid Power - Identification of Ports and Control Mechanisms
		of Control Valves and Other Components
88.	IS 15332 : 2003	Pneumatic Cylinders for Mechanized Multiple Spot Welding
89.	IS 15432 : 2003	Hydraulic Fluid Power - Sealing Devices - Standard Test Methods to
		Assess the Performance of Seals Used in Oil Hydraulic Reciprocating
		Applications